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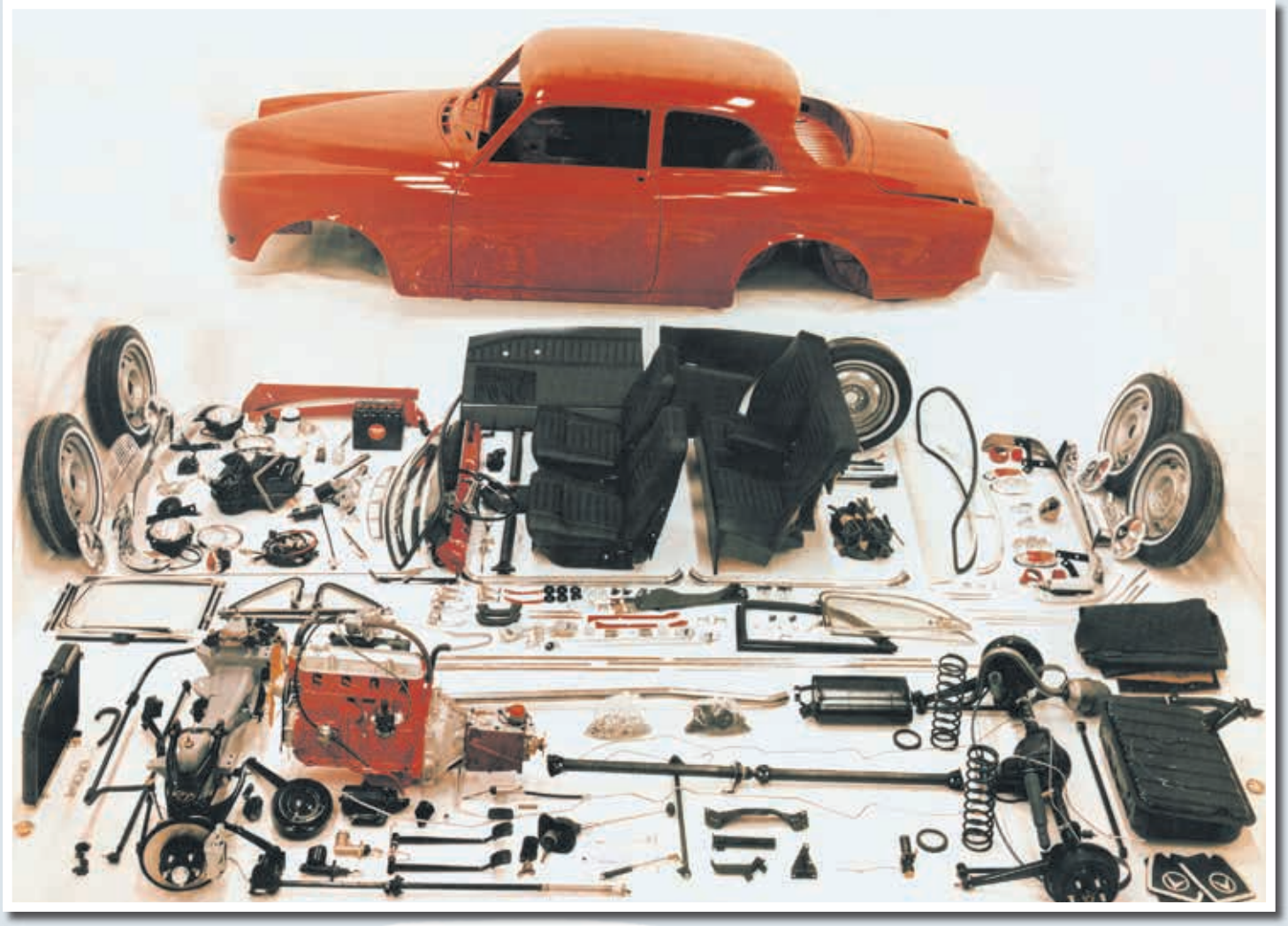

Author: Arve Larsen
Photo: See captions
Translation: Fredrik Lofter

As the reader will understand from this article a lot of reviews and checks are necessary to confirm information and to dismiss rumors and other inaccuracies. Such investigations are not something that can be done singlehandedly, as it requires access to various archives, both private/corporate as well as public. The author would therefore like to extend sincere gratitude to those who have assisted in this and would like to mention the following in particular:

- ***Lars Gerdin*** *who works at Volvo's historical archive at VAK (Volvo's Administrative Office) in Torslanda*
- ***Neville Britto*** *(Volvo Club of British Columbia) who is car historian and specialized in Volvo's Canadian business. He's currently writing a book on Volvo's Halifax plant. He has been an important contributor to this section of the article and also contributed with facts on the production in Canada.*
- ***Stoffel Mulier*** *who has contributed with very important information especially regarding the Coune cabriolets and the Amazon 133GT.*
- ***Gregg Morris*** *(Volvo Club of British Columbia)*
- ***Gustaf Östergren*** *(Volvo Cars Corporation) who has contributed with important information and special stories.*
- ***Volvo Cars*** *and* ***Per-Åke Fröberg*** *at Volvo Cars Heritage who have contributed with invaluable information.*
- ***Guy Vermant*** *who put the author in contact with*
- ***Paul van Vugt****, editor of Volvodrive Magazine.*
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- ***Tommy Joelsson*** *(Swedish Volvo Amazon Club), who has been invaluable support in the archive visits.*
- ***Fredrik Lofter*** *(Volvo Amazon Picture Gallery) and* ***Arnt Willy Aardal*** *(Norwegian Volvo Amazon Club) who have been of very much help along the way, and who have contributed both with important information and pictures.*
- ***Thomas Meacham*** *who has assisted greatly in proofreading this translation.*
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- ***Noel Chua*** *who have contributed with clarifications on the assembly plant in Malaysia.*
- ***Debra NcNabb*** *(Nova Scotia Museum of Industry).*
- ***Stein Christian Husby*** *who has contributed with important information.*
- ***Jo Mæhle*** *who has assisted the author with proofreading.*
- ***Lars E. Kielland*** *who has assisted the author with proofreading.*

The many parts that an Amazon consists of, and which is illustrative of the «package» that assembly plants received.
Source: Volvo's Historical Archive.

Sources

- «Les hommes font l'histoire» – People create history (Volvo Europa N.V.).
- M. Compton and T. J. Gallwey's article on Motor Assemblies Limited.
- «The New Domestic Automakers in the United States and Canada: History, Impacts, and Prospects» (Andrew James Jacobs).
- «Missing the Road: Working Life at Volvo Nova Scotia» (Anders Sandberg).
- «Building a New Nova Scotia: State Intervention, The Auto Industry and the Case of Volvo in Halifax 1963-1998» (Dimitry Anastakis).
- Thanks to Fredrik Lofter for tipping the author on the books on Nova Scotia by A. J. Jacobs, A. Sandberg and D. Anastakis.
- Archive clips from Swedish newspapers Svenska Dagbladet and Dagens Nyheter.

- Own visits and research in Volvo's historical archive.

1 - Preface

A lot has been written and even more has been said, meant, assumed and believed about Volvo's foreign assembly plants throughout the years. While the production plants of today are both well-known and well documented, the history of the assembly plants of earlier days has not been documented and preserved for the future. So called facts in various encyclopedias often contain deficient and also sometimes inaccurate information.

The author has during the course of the past three to four years worked with articles which one by one covers the different model years of the Volvo Amazon, and previously the articles covering model year 1957 up to model year 1961 have been published in the Norwegian Volvo Amazon Club's magazine AmazonPosten. The article on the 1962 model year was put on hold, as new information surfaced during the work with this article.

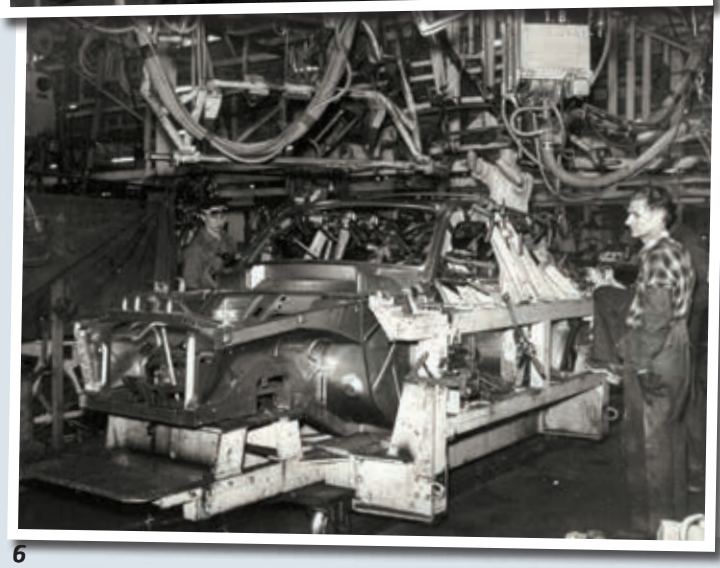
It is not surprising that contradictory information is discovered in the source material, and there is a regular need for more thorough review of both this and that. This is particularly true for the topic of this article, foreign assembly plants where the Volvo Amazon was assembled. Many of these bits of information have been collected from Volvo's historical archive throughout the years, both by authors from different Volvo clubs as well as by employees in the archive. A lot is also based on what has been heard or what has been told, but some things are also based on more or less firm rumors which over time have become established «truths». The archive still contains undiscovered treasures and information that only exist there, and it is a whole project of its own to unveil this information. But the first

➢ Olofströms Bruk, located in Olofström in southern Sweden, is closely linked to Volvo as all metal pressing took place here. Olofström is by no means a backyard workshop but a big workplace, something the aerial photos show. Notice also the railway that runs very close to the factory, a means of transport that was important for the factory for the flow of raw material in and finished car bodies out.

➢ Inside, we see rows of finished PV bodies on the left and the large PV 800 series on the right. The latter went out of production in 1957 when Amazon needed more space on the assembly line. The fact that there was an international environment at Olofström is well illustrated in the lower picture which shows the nationalities of those who worked there.

Source: Volvo's Historical Archive.


Grekland
Lettland
Tyskland
Finland
U.S.A.
Polen
Norge
Frankrike
Danmark
Italien
Rumänien
Estland
Jugoslavien
Litauen
Bulgarien
England
Holland
Ungern
Spanien
Portugal
Sverige



A fun photo showing the 549 body parts that are part of a four-door Amazon model year 1966.

Throughout the factory, all the parts are assembled on smaller workstations, and slowly but surely, a car body is emerging from the myriad of parts. This is before the robots took over and so everything is done by hand. Welding is primarily done by spot welding, and the large welding machines are suspended from the ceiling in order to have good workspace. To ensure that all bodies are identical, all body parts are placed in jigs where they are locked in the correct position before being welded together. Then the bodies move on to the next jig and the process of adding more parts is repeated. A familiar body emerges from the myriad of parts. Along the way, control measures are taken to ensure that the parts have the correct dimensions. If they are outside the allowed tolerances, this is corrected if possible, or at worst, scrapped.
Source: Volvo's Historical Archive.

In parallel with the bodywork, other parts such as the hood, doors and trunk lid are produced. During the process, these are then mounted on before the car bodies are complete and ready for delivery.

Those who worked at Olofström were proud of their jobs and ensured that Volvo's strict tolerance requirements were met. As the pictures show, the working environment may not have been at the forefront and injuries flourished. Long-term effects such as hearing loss was significant in the 1950s.

Major events were duly celebrated, as here when the last Duett was ready for delivery on January 23rd, 1969, the last of 97,304 cars. Many mourned the decision to shut down the production of this practical car, not least the customers who now had no alternative to the high ceiling that only Duett could offer. Amazon Station Wagon, 145 and not least 145 Express had in many ways taken over from Duett, but a small but faithful group of customers agreed that «nothing was like Duett».

Electronic data processing was on the rise in Swedish industry and in the beginning, the punch cards were important as data carriers and not least data storage. These punch cards (or rather photographs of them) are very important today in order to study the details of Amazon production. This article would not have been possible without these punch cards. The picture at the bottom shows southern Sweden's most powerful computer, which was installed in 1963 at Svenska Stålpressning AB in Olofström, later owned by Volvo Cars. Source: Volvo's Historical Archive.

step is to find it.

Tommy Joelsson has visited Volvo's historical archive on several occasions, and it was with the help from Tommy that AmazonPosten's editor Arnt Willy Aardal and the author got the opportunity to visit the archive for the first time in August 2016. The editor and the author had a common goal with the visit in finding material for AmazonPosten. While the editor naturally was searching for «undiscovered» pictures, the author had a «project for extreme nerds» going together with Tommy Joelsson (to use the editor's own words). This «nerd project» was to review the production cards for the Amazon series, and during the course of two long days in the archive a small fraction of the in total 667,791 production cards of the Volvo Amazon that are supposed to be in the archive were reviewed.

2 - The idea of a chronological order

As can be understood from earlier sections, the idea has been to cover the different assembly plants in a chronological order in each model year article. That it was something you had little knowledge or information about was obvious, but at the same time you couldn't imagine how to find the answers to things that «you know is something you know nothing about». Even if Tommy Joelsson and the author had found a lot of clarifying and correcting pieces of information during the research work, it was nevertheless decided that it was important to write an article for updating, and also correcting, previous publications from various forums, not least also to disclose to the public what the actual conditions were about the assembly plants at that time.

This updating-article was ready, proofread and on its way to the editor. Meanwhile, just before the article went to print, a few more important pieces of information surfaced during another visit at Volvo's historical archive during the end of May 2017. The article was therefore put on hold again pending yet another update. As a result of repeated visits to the archive, new releases of an updated article were subsequently released.

3 - The author's competence before and after December 2016

The author's original intention was to incorporate the different assembly plants in the mentioned model year articles. During another two-day archive visit together with Tommy Joelsson in early December 2016, completely unknown information surfaced. It brought even more pieces to the already incomplete puzzle that the author worked on, but it also helped some of the previous pieces

fall into place and, in reality, this was a quantum leap in the effort to find the final context.

4 - The assembly plants are identified

With the knowledge that has gradually been accumulated, it is with certainty that the solitaire game of the assembly plants finished nicely and evenly, and that there are no more unknowns around these. Thus, the factories that assembled the Amazon can be presented in this article in the order that corresponds to the start-up of the different plants, which eventually appears to be the final version. There is little production information, and no exact dates from the final assembly at the various plants that got started first, and the order was basically based on the lowest chassis number found to have been shipped from Sweden

These two photos were taken by Lennart Nilsson who was commissioned to document Statens Järnvägar (SJ) in the 1950s on the occasion of its 100th anniversary. The pictures were taken in 1955-1956 and show the loading of PV bodies at Olofström for transport to Lundby. Lundby is a district in the north of Gothenburg and at the Lundby factory the bodies were fitted with all parts for a complete car.
Source: Järnvägsmuseet (jarnvagsmuseet.se) / Digitalt Museum (digitaltmuseum.se).

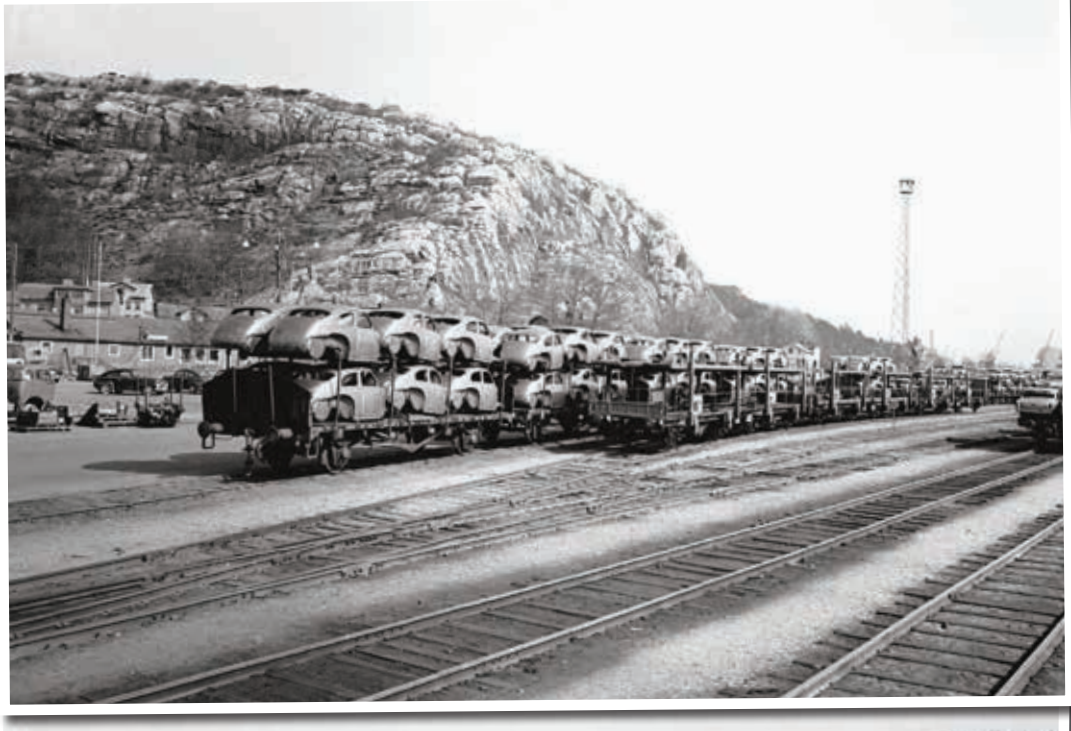
to the different plants. A more in-depth analysis was also needed, which also had to take into account both the distance that the cars were shipped, the time when the cars were reported finished from the factory in Sweden, the dates stated for invoicing and the actual logistics of the various assembly plants.

5 - Why not concentrate on Sweden?

A natural consequence of producing something is to have the goal of selling the produced goods. This is true for Volvo as for everyone else. Some factories may aim to deliver within their own local area, their own district or their own country, while others again need to sell beyond their national borders. Of all the world's car manufacturers, there is hardly a single one who does not aim to export cars in addition to domestic sales. Exporting a car to a country that has its own car production can be problematic when the recipient country wants to protect its own business, or there are trade agreements with other countries, and therefore the mutually agreed conventions have to be followed.

Another obstacle to export is, as in this case, what a Swedish-produced car will cost abroad. In many countries, the car will be too expensive for the public to afford to buy, and in low cost countries a market share will therefore be approximately zero. Here, locally produced cars can be a solution to achieve significantly reduced production costs and retail prices compared to cars produced in Sweden.

Politically, local purchases and local production are good arguments for obtaining the necessary permits from various authorities. Not only do you create new jobs within the country, but also within already existing local industry.



➢ *This photo series was taken in 1964 by Walther Seved and shows freight wagons fully loaded with PV and Amazon car bodies. The bodies were loaded so that the carriages were fully utilized and took 12 PV or 10 Amazon bodies respectively. The landscape looks just as in Gothenburg so presumably the trains are arriving in Lundby and awaiting unloading. This two-step production was not entirely successful, because Olofström could produce more car bodies than Lundby eventually were able to receive and assemble to finished cars. The solution was to have several assembly plants. Having these factories abroad added the benefit of being close to the market and achieved tariff relief by supplying the cars as building sets that was assembled by local labor.*
Source: Järnvägsmuseet (jarnvagsmuseet.se) / Digitalt Museum (digitaltmuseum.se).

Thus, AB Volvo [1]) could not just decide to build a factory abroad, procure a site or a facility and start car production. There was a lot of politics that had to be discussed and agreed on, as well as permits that had to be obtained before getting that far. When Volvo negotiated with various countries' authorities it was therefore a great advantage to have good cards at hand.

[1]) *AB is an abbreviation of the Swedish word* Aktiebolag*, literally meaning* stock company *but better translated with* limited company *or* public company.

An aspect that is not insignificant in this context is product quality. The key to coordinating local assembly and quality is to make sure that all parts have the quality that the Volvo factory requires. This is solved by producing all or most parts in your own factory, and then assembling the parts locally. Semi-finished products you might call this today. Economically, such a method of producing cars is also a way of reducing both import and customs duties, depending on the regulations that prevail in the countries in which they wanted to establish themselves.

In order to achieve a high volume of sold cars, there was absolutely no disadvantage for Volvo to transfer as much work as possible to a country where both production and, not least, labor costs (i.e. wages) were lower, and often much lower than in Sweden. This directly contributed to making the finished product more affordable, and a natural consequence of less expensive cars is an increase in the number of potential buyers.

An increased number of buyers is reflected directly in a larger number of sold cars, which means that the need for parts and service will also increase. In other words, a snowball effect.

Both large volumes and large quantities must be moved, and an extremely important strategy is where to place the various assembly plants. Common denominators in this regard are ships, water, ports and trains. The factory at Torslanda

Behind this anonymous door in Volvo's headquarters is the Volvo Historical Archives. From left: Tommy Joelsson, Lars Gerdin and Arve Larsen.
The week before the VROM meeting in 2016, we visited the archive for the first time. Tommy and Arve sat in front of the microfiche machine and studied microfilms. My main interest in the visit was old photographs, and I came home with a larger number. In a vault in the basement I also saw the huge amount of material awaiting cataloging and digitalization. Photo: Arnt Willy Aardal.

is, as you may know, located by the harbor, and loading was thus an easy task. With perhaps only one exception, the assembly plants were located in a port area by the sea or a channel, and the one known exception was also not very far away from a port area. Transport of finished cars from the factories and on to the dealers was therefore usually done by train instead of by road.

6 - Definitions

In the terminology the terms «KD, CKD and SKD» are found, and these are the terms for a kit containing the necessary parts to assemble the product. It can be cars, bikes, boats, furniture or whatever. This article will only discuss car related production. The term «PKD» has also appeared, but that term has not been observed in any of Volvo's documentation. These terms were not invented by Volvo, but «CKD» can be traced back to articles about assembly plants that existed even before Volvo was founded. In the public domain, «package car» is often used as a term.

For Volvo, the assembly kits were packed in boxes at the factories in Sweden and shipped to assembly plants abroad. This is to be understood so that a car kit was not packed in the same box, but in different packages according to what was most appropriate for further processing.

- *KD – «Knocked Down» (Unit)* – a common term for CKD and SKD. SKD was used as an alternative to CKD, but the term CKD was often used anyway, and you hardly find SKD or KD mentioned anywhere except in internal reports.
- *CKD – «Completely Knocked Down»* – a complete car in parts. All components, including body parts, are packed and shipped to the assembly plant as a kit together with associated assembly instructions.
- *SKD – «Semi Knocked Down»* – a car partially in parts.
- *PKD – «Partly Knocked Down»* – describes the same thing as «SKD».

For the SKD variant, this means that the car body is complete and painted at the main factory and then sent to the assembly plant together with parts to be assembled and associated installation instructions.

- *Final assembly* – A term that is also used to complete KD's is *«final assembly».*

All cars have their own production card, also called a delivery book, where all prior/specific information such as body type, chassis number, color code [1]) engine and gearbox type etc. was noted when the car was planned, i.e. before the car was produced. [2])

[1]) *As far as the color code is concerned, this field was obviously not filled in for CKD cars that were exported unpainted to the assembly plants. Changes could be made along the way, and production cards were then updated with all available information.*

[2]) *However, there are exceptions – and that will be explained along the way in the article.*

- *Foreign assembly plant* – The words «assembly factory» and «final assembly factory» are also used for assembly plant. In this connection, it is important to specify what the term «Volvo's foreign assembly plants» can mean , and it is not «assembly plant» that is the subject of interpretation, but what is meant by «Volvo's».
- *Alternative 1* – «A factory outside Sweden where cars are assembled, *regardless of who owns the factory in question».*
- *Alternative 2* – «A factory outside Sweden where cars are assembled and where *the factory is wholly owned by Volvo».*

In this article, «foreign assemb ly plant» means as described in Alternative 1.

District number can also be referred to as «dealer number» and «importer number», and is simply the number that identifies the recipient of a car, and such a number is applied to all production cards, delivery reports and invoices. In the invoice context, you can also define it as a customer number.

7 - What the digit «9» means

If the fourth digit of the type designation is «9», it means that the car was assembled abroad. The digit «9» was introduced when Volvo introduced new type designations with the model year 1961. The digit «9» is not found on cars that were produced at the factories in Sweden.

8 - General information about assembly plants

The author of the article has been concerned with separating the designations CKD and SKD in cases where it is known that SKD was delivered. Nevertheless, CKD is used as KD generally the article text, as it is done in article context in other forums. On the production cards, there is no distinguishing between a CKD from an SKD either. In addition, an assembly plant could switch from using SKD to CKD, if, for example, a paint shop was completed along the way. An assembly plant may also have received both SKD and CKD during the same period as a step in accelerating the final assembly.

In terms of painting, the bodies were delivered both finished and only with primer. The reason for this is the agreements with the different assembly plants based on both economic factors and, not least, purely political ones. As a result of the above, there is no complete list of paint codes for CKD cars in Volvo's archive. The author has not found any evidence to indicate that complete, completely untreated bodies were sent from the main factory. The bodies that were not finished were covered with a protective coating before the kits were packed in Sweden. The coating should only serve as protection during storage and transport and was naturally removed before final assembly.

Although the definitions are easy to relate to, it is still a truth with some modifications. In reality, it is not true that the kits always contained a complete car in parts, or that the content was a complete car partly in parts. It is all based on the fact that all parts are included in the package from Volvo in Sweden, but there were very large variations in what came with the boxes that were shipped from the Lundby and later Torslanda factories, and what was produced locally at the various assembly plants and their subcontractors.

Local suppliers were used to a greater or lesser extent in all the assembly plants, but in all cases all the body parts (except **MA** – Motor Assemblies in South Africa), as well as the engine and powertrain were supplied from the Volvo factory in Gothenburg.

9 - Foreign assembly before both the Amazon and the KD term

When Jan Wilsgaard had designed the Volvo Amazon, when the X1 and X2 had finally been tested, both Dutch and Belgians had already assembled Volvos in their own home countries for several years. Volvo's history of foreign assembling dates back as far as 1954. Whether Volvo used the term «Knocked Down» at that time is entirely possible, but in the reports from the time that the author has read, the term did not appear before in connection with foreign assembly of the Amazon. However, as previously mentioned in the article, it was a well-known concept and Volvo was, as you have understood, on the wave.

The author has information confirming that the Volvo importer of the time in Morocco, Star Auto, had a local assembly plant in the 1950s. As a result of information in a press release, it must therefore be concluded that Star Auto, despite having its own assembly plant, did not assemble Volvo. Further, the author has read production statistics for assembly plants abroad, and Morocco is not included there.

Even within the Volvo Group, this form of production was quite anonymous, but there were enthusiasts within the company who worked towards this and were really eager for the idea and thoughts of this type of car production. The international organization internally at Volvo had so far not been properly rooted, was constantly a victim of reorganization and lived a «gypsy life» (to use Volvo's own, contemporary terminology) where it was moved around geographically, both in Gothenburg and abroad.

In the years between 1954 and 1960, package cars were sent to importers both in Belgium and the Netherlands, but despite this, there was no manager appointed for this operation at AB Volvo. Rolf Söderhielm, who had been involved in the process from the start, acted as the one with overall responsibility for the area.

At this time Christian Audemard was responsible for marketing in Belgium and the Netherlands, and together with the importers there they coordinated local assembly. According to an internal report, 4,252 cars were produced during this period, divided into five different locations in Belgium and the Netherlands.

While it was the production department at Lundby together with the planning office for service shops that provided what was to be packed for foreign assembly, the actual packing process took place in premises at the truck factory located at Spetsbågen in Lundby. Logically, this can be explained by plenty of space and the fact that trucks were also among the vehicles assembled abroad.

10 - Common knowledge

The fact that Volvo Amazon was assembled at plants outside Sweden is far from a secret, and several of them have been featured in various forums both at home and abroad for several years back in time. Those who have an interest and information about this will nod in recognition when names and/or countries like Motor Assemblies in South Africa, the plants in Halifax in Canada and in Ghent in Belgium are mentioned. The fact that there was also an assembly plant in Arica in Chile is also part of what many know about. This article will also deal with factories not mentioned above, and probably many – or most readers – will be surprised as this article unfolds.

11 - Archive visit brings surprises

Tommy Joelsson and the author searched for information that would confirm the strong suspicion that assembly in South Africa started much earlier than what up until then was regarded as general knowledge. At the same time, we were searching for information on when the first Amazon with type designation for KD – or package car if you want – was produced.

Our search gave «shocking» news – apparently not only for us.

Big was the astonishment – and that's an understatement – when it was discovered that the first produced cars of this kind had chassis numbers as low as in the 50,000s range. That means in plain text that KD production started already with the 1961 model year, and until the author's visit to Volvo's historical archive in December 2016, the type designation for KD was totally unknown, at least for us, in connection with the B16 Amazon. With regard to the term «KD/CKD/SKD» in Volvo's own workshop literature, neither the article author nor any other contributors to this article have seen the use of the term before it appeared in a «Service Bulletin» from 1963.

With this new knowledge, it also became interesting to know whether there was a similar system for type designations that applied to Volvo PV. After some search for help via the Volvo PV clubs, it came to light that Volvo PV 444, which was produced up to and including 1958, as well as for PV 544A (1958-1960), had a digit «2» in the 4th position of the type designation which meant «car packed for foreign assembly». Furthermore, from the PV 544B to the last 544G (B indicates the 1960-1961 models) and for 210, the digit «9» was also used, thus following the same code as for Volvo Amazon, and these were used in parallel during the same period.

However, there should turn out to be more....

12 - A new, big surprise

«To lose speech and sound» is an expression you use, for example, when you are so surprised that you do not get out a single word. This was exactly the opposite of what was the case with Tommy Joelsson and the author when information of the discovery of the Amazon B16 «KD» emerged – to be relatively modest. What could this be? Where were these cars delivered? Were there foreign assembly plants that you didn't know about, etc. Suggestions and theories were launched in quick succession.

In the stack, production cards appeared for KDs exported at the same time as for cars to MA, but where the importer's district code did not belong to Lawson nor MA – or for that matter other recipients in South Africa.

13 - CKD – In Mexico, among others

Who has heard that Volvo had an Amazon assembly plant in Mexico? This had neither Lars Gerdin, Tommy Joelsson nor the author heard of at all, and the need to find more information about this plant was urgent.

Therefore, press releases from that period were reviewed, and in one Volvo press release written in 1960, the «CKD» designation is used, and states: «Volvo will deliver cars CKD (Completely Knocked Down) to Mexico from November 1st this year».

In addition, production cards were discovered for another four importers or recipients that none of those present could identify there and then.

Luckily, Lars Gerdin is very professional, and he knows very well what he is doing. He has spent an incredible number of hours in the archive's various drawers and shelves. Even before the blood pressure of Tommy Joelsson and the author had approached normal levels again after the «Mexico shock«, 5-10kg/10-15lbs of archive material, in folders labeled «Press release», were dumped on the table. Since coffee spills and historical documents are a bad combination, it was time for a well-deserved coffee break at a good distance from the archive material, but the atmosphere surrounding those present was filled with question marks, and as soon as the coffee was consumed the search for new information started, folder by folder, pile by pile, sheet by sheet, line by line.

That time flies when you work on something interesting is certain, and the author of the article cannot say whether it was one or three hours before a wonderfully beautiful and liberating document appeared, and both Lars Gerdin, Tommy Joelsson and the author acquired new knowledge.

14 - Sensational discovery in pile of press releases

As a result of difficulties due to high customs tariffs and other obstacles in several of Volvo's export markets, something had to be done. During 1959, the Organization Office at Volvo compiled an overview of foreign assembly plants, as well as drawing up guidelines for the various functions for such operations. In the same year, a separate group was set up internally in the Order Office, *«Contact with foreign assembly plants»*, which was also given a separate budget with internal department number 2145.

In November 1960, the management of AB Volvo decided to create a new and separate department to handle the assembly of Volvo's products and also which of the individual product details and parts that were to be produced abroad. On December 1st, 1960, *«License manufacturing abroad»* was established, and 1170 became the assigned department number.

The head of this newly created department was chief engineer Carl Richard Thiberg, and he reported directly to the board. On December 12th of the same year, *«Contact with foreign assembly plants»* was incorporated in department 1170, and department 2145 was terminated at the turn of the year 1960/1961.

At the same time as the new department was established, a separate handbook was also prepared containing the company's policy and questions about the business. By May 1963, department 1170 had fourteen employees.

15 - «Foreign Assembly, Coordination, 1170» was founded on October 1st, 1964

Progress continued, and in June 1964, CEO Gunnar Engellau announced the creation of a new separate unit, *«KD operations – VKD»* within AB Volvo in Gothenburg. The main task was to lead and coordinate all of Volvo's overseas production. Department 1170 was incorporated into VKD, and the then Head of Services Rolf Söderhielm was appointed its manager. From October 1st, his title was chief engineer at AB Volvo. Previously mentioned Carl Richard Thiberg was to perform special duties to the management from the same date.

16 - Nomadic life ceases

To use Volvo's own expression, the «gypsy existence» ended for those who worked with foreign production. After a number of reorganizations and relocations of the various departments, it is reported that *«from 1966, all the branches of the overseas production were gathered under one roof in the former premises of the closed cinema «Roxy» at Kyrkebytorget»*. The KD department had moved to Torslanda, to TA in 1962, to TC in 1964, before being relocated again in 1968 to RB. (TA – Torslanda A-building, TC – Torslanda C-building, RB lies next to TA and is the central warehouse).

In 1969, as mentioned above, foreign assembly was in the RB building, and here packing was made to the plants in Belgium, Canada, Malaysia, Australia and South Africa. Preparations and packing for the truck plants in among others Belgium, Morocco, Algeria and Iran was also done here. Rolf Söderhielm was still the head of this unit, now called AB Volvo Overseas. Management and administration were moved to the new head office at Torslanda, which today is called Volvo's Administrative Office, VAK. During this year, the packing activity for Belgium and Canada was transferred from «Overseas» to Volvo Mounting, and eventually ended up at Torslanda TP, at the factory itself.

Much more can be written on this topic as well, but since it is Volvo Amazon that is the subject of the article, the final line is drawn here. Production of Volvo Amazon was at this time decided to be discontinued, although almost 20,000 cars would also be produced as the 1970 model.

17 - Norway is specially mentioned, but not particularly positively

In a 3rd and not dated note, but which probably must have been written relatively late in 1960, the following can be read:

In «other export markets» there has been either consolidation or an increase in sales, except in Norway, where highly progressive car taxes of a discriminatory kind have become an obstacle to car sales.

Further: *«In Switzerland, Volvo has doubled its sales over the previous year.»*

*«**Mexico** also has a steady growing interest, and Volvo will from November 1st this year (1960) deliver CKD's (Completely Knocked Down).» (The production cards state that the cars/kits were reported finished from the Lundby plant on October 21st, 1960. Ergo, they had full control of their own production at that time as well – author's note). «The assembly must therefore take place in Mexico. Volvo has therefore decided that, in collaboration with the importer in Mexico, they should start assembling cars down there.»*

In another note, written in July 1961, the following information appeared:

*«In **Mexico**, to which Volvo began exporting cars in 1959, preparations for assembling cars locally began in 1960.*

Over the course of 1½ years, an annual production of approximately 2,000 cars is estimated. Nevertheless, Volvo will not build its own assembly plant in Mexico but will use the premises of the importer.»

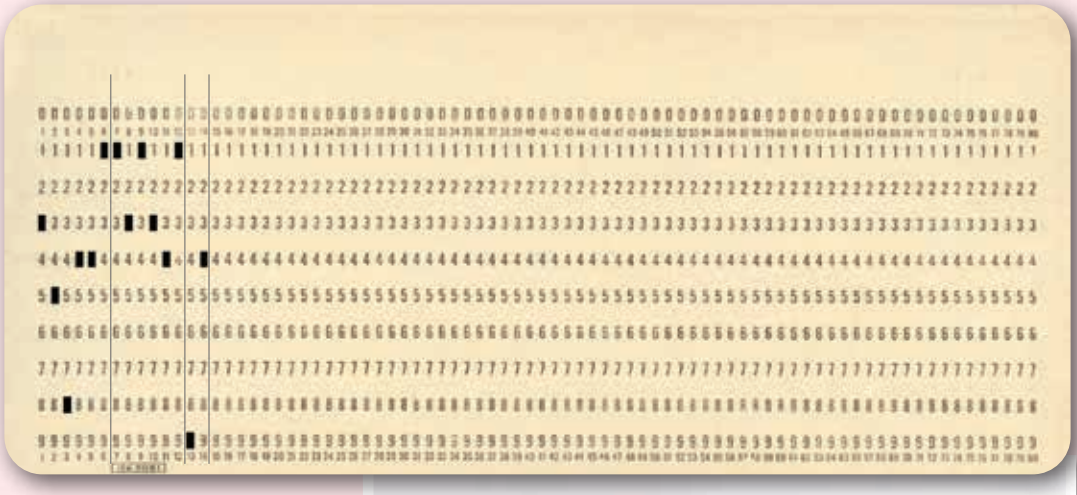
18 - Growing market in South Africa

«In South Africa, sales have picked up following a downturn as a result of the blockade of South African goods. Volvo is now considering completing operations based on the same model as in Mexico.»

Here the words «considering» and «completing» are used. The factory in South Africa also assembled PV, and it is known that many body parts were made locally at the factory there. This was also planned to continue, but the reality was that there were quality problems in the production of Motor Assemblies and their partners. Volvo had no desire to deliver a second-class product and when sales now turned out to be on the rise again, it also opened up an opportunity for changes in the production structure.

With Volvo's sense *of* and demand *for* quality the Mexico solution was clearly the most reasonable, where all body parts were manufactured at the factories in Sweden and complete body parts were shipped

Punch-card and microfilm



In the 1950s and 1960s, large amounts of data were processed and stored on punch cards. Since the production cards in the archive cannot be photographed for security reasons, only an example of a punch card is used here.

If we look at the punch card, the numbers are «0» to «9» in columns, and some of the numbers are cut out (punched), hence the name «punch card». In the columns we can now read the following numbers: 35844113134194 etc. By grouping these numbers, information about a car can be illustrated in this way: The first six digits are the chassis number (358441), the next six are the type designation (131341), the next two are the color code (94), and so on.

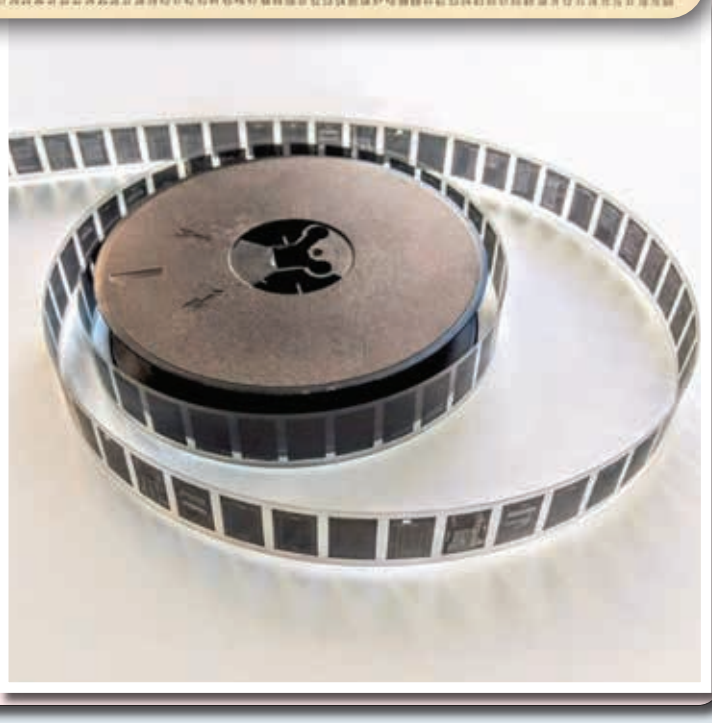
When a new car is ordered, a punch card is created that follows the car through the production line. A two-door body (digits 7 and 8) is assigned chassis number 358441 (digits 1-6), the painter reads that the car must be painted 94 dark green (digits 13 and 14), when the car is to get its engine and gearbox installed it can easily be read on the enclosed punch card that the car should have a B20A engine (1 as digit 9) and an M40 gearbox (4 as digit 11) etc. When the car is completed and approved the card is returned to the administration for archiving.

If the punch cards of all the 667,791 Amazons were to be stacked on top of each other, the stack would be 120m/400ft high and a small truck would be needed to move the nearly 2m³/70ft³ of paper.

To make the data volume more manageable, all the cards were photographed on 16mm microfilm, and now all the films fit neatly into a shoebox. Microfilms are also more durable than paper. The disadvantage is that you need a microfilm reader, and today there are not many such machines around in working condition.

The total amount of data on the cards is just under 40MB, so even the smallest USB memory stick would store the entire register of Volvo Amazon production cards.

There is a great desire to be able to digitalize the register so that searches can be done more easily. Instead of spending hours searching through 50,000 production cards to find all cars sent to Mexico as KD, the same can be done with a few keystrokes and with the result coming back within seconds. It will then also be possible to sit at home in your own living room. As usual, it is a matter of economics when this can become possible.



from there. By dropping local production of body parts, all problems of poor fit and inaccurate assembly could be avoided. It is not known at what time this decision was made, nor is it known from which chassis number it was changed from one to the other solution. Due to the politically conditional agreements, local production was required, but Volvo wanted to adhere to the agreements even though the car bodies, engines and powertrains were manufactured at the factories in Sweden. Basically, all other parts, such as rims, wheel caps, upholsteries, windows, batteries and tires were among what the South Africans themselves had the capacity and knowledge to produce.

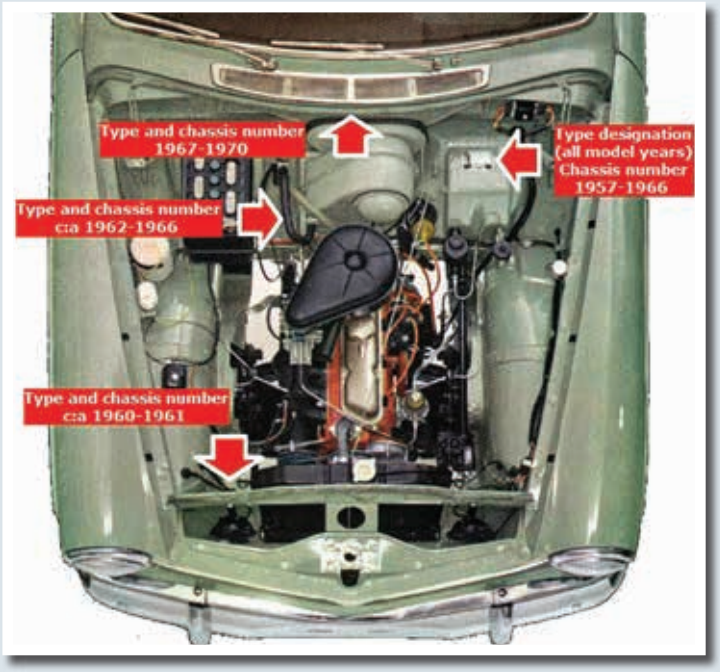
19 - The order

At an early stage in the research job, the factory in Mexico was completely unknown to the «digging journalists». Therefore, it was not at that time important to find out which factory first got assembly started between these two. Deliveries are close to each other in time, and little is known about both transport time and other matters that must be considered here. It was assumed that the first could be the factory in South Africa, which is also a claim in a major article written about MA/Motor Assemblies. District number 955 was believed to belong to the factory in South Africa, because no other alternatives were then known, but that number (955) would later prove to be affiliated with the plant in Mexico. This newly acquired knowledge thus entailed a need to review a plethora of production cards from which notes had already been taken, and additional hours were used for that purpose. But it was well worth it.

According to MA's detailed statistics, it appears that they had assembled their first Amazon in March 1961. The delivery books show that chassis numbers 57080 and 57081 were completed on September 28th, 1960, and then sent to district 901 which at that time had the address of Johannesburg, South Africa. Both were CKDs with type designation 12294HD – which is understood to be 4-door versions of the 122S and with the steering wheel to the right. Volvo Amazon Picture Gallery has pictures of the car with chassis number 57081, and it is clear on a sign from Motor Assemblies that this car is number 2 in the series from MA. It is not at all certain that MA built the cars in ascending order relative to the chassis number, but likely the two above chassis number are the first two CKDs of Volvo Amazon built in South Africa. As a result of the fact that district number 955 belonged to the «newly discovered» factory in Mexico, it should hopefully also be possible to conclude who was the first of the assembly plants in South Africa and in Mexico to assemble Volvo Amazon.

20 - The district numbers changes

Deliveries are close to each other in time, and little is known about both transport time and other matters that must be taken into account here. Volvo was later forced to make changes to its district number system, which did not exactly simplify Tommy Joelsson's and the author's work on mapping the various dealers, quite the contrary. The routine of affixing both the destination and the dealer number to the production cards was discontinued around chassis number 40000 – yet with no definite distinction, and thereafter only the dealer number was written on the production cards. During the same time period, they were also to introduce new series of numbers that replaced previous district numbers. Until then, virtually all numbers had been three-digit, and all Swedish dealers had their own number. In addition, the number of Swedish Volvo dealers was steadily increasing. In Norway and Denmark, importers Norsk Volvo AS and Volvo Danmark each had their own number, but hereafter not only the importers, but also each dealer in Norway and Denmark had their own district numbers. Simply explained, there was a lack of available numbers, and AB Volvo had to extend the dealer number system to also have four-digit numbers. They therefore went to dealers outside Scandinavia.



The arrows show where the chassis number is embossed and the location of the type designation plate. Illustration: Fredrik Lofter.

➢ *Table of digit and letter codes in the Amazon type designation.*

Type designations for model year 1961 to 1970

1st and 2nd digit: P 13235 VD Body variant
- 12: Four door sedan (P120)
- 13: Two door sedan (P130)
- 22: Station wagon (P220)

3rd digit: P 13235 VD Engine alternative
- 1: B16A, B18A, B20A Single Zenith/Stromberg carburetor
- 2: B16B, B18D Dual SU carburetors
- 3: B18B, B20B Dual SU carburetors

4th digit: P 13235 VD Edition
- 2: Standard edition (Favorit)
- 3: Special edition, the most common edition in Scandinavia
- 4: USA edition (export to USA and Canada)
- 9: Package car in parts for foreign assembly

5th digit: P 13235 VD Gearbox alternative
- 1: M30 Three-speed manual (Favorit)
- 2: M30 Three-speed manual (available 1962 and 1963)
- 3: M31 Three-speed manual with overdrive
- 4: M40 Four-speed manual
- 5: M41 Four-speed manual with overdrive
- 6: BW35 Three-speed automatic
- 8: M40RV Four speed manual (M40) with steering wheel lever

6th letter/digit: P 13235 VD Steering wheel placement
- V/1 : Left hand drive
- H/2 : Right hand drive

V- and H-designation up to 1966 model. On 1967 models the letters «V» and «H» were replaced with digits «1» and «2» to indicate LHD or RHD.

7th letter: P 13235 VD Model year

The table shows the letter code for each model year.

Note the different codes for the four door sedan (P120) and the two door (P130) and station wagon (P220).

On the 1967 model year and onwards the letter codes are in synch regardless of body variant (Amazon, Duett, P1800, 140-series and 164).

Table: Letter codes for model years 1961 to 1970.

Year	*Body variant*		
	P120	*P130*	*P220*
1961	D		
1962	E	A	A
1963	F	B	B
1964	G	D	D
1965	K	E	E
1966	L	F	F
1967	M	M	M
1968		P	P
1969		S	S
1970		T	

21 - Dilemma

What created a headache for Joelsson and the author in identifying the various dealers and importers was that there is no complete cross-reference list for the district numbers. As an example of the new challenges we faced, district 955, which had originally belonged to Mexico, was now found again as a Danish dealer. Similarly, 901, which was an early number for South Africa, had also been associated with Denmark. All forms of change, including within one country, contributed to uncertainty and may also be due to importer change, change in importer ownership structure, etc.

22 - International initiative and commitment

AB Volvo were already involved in foreign assembly plants in Belgium and in the Netherlands, but at a relatively modest level. As a result of changing international policy provisions, such as import restrictions, it became imperative to adapt to the different countries' rules and trade agreements. Existing Volvo importers were also affected by stricter import regulations and took their own initiative above AB Volvo for the establishment of assembly plants. This type of industry was necessary for AB Volvo to continue its international expansion, and AB Volvo was in a way forced to step up the offensive outside Sweden. Knowing that there was a large potential sales market in South Africa and in Mexico, AB Volvo decided to increase its focus on KD production. As mentioned in the quote from the press releases, a separate department was formed which was located directly under the corporate management, where Head of Department Carl Richard Thiberg was given responsibility for coordination between Volvo and the main importers in the different countries.

The assembly department, headed by Bengt Darnfors, was commissioned to organize packing and technical preparations. Helge Andersson became head of the project and had this job in the period 1960-1963, when he was succeeded by Rune Larsson who sat in the chair between 1963 and 1965.

23 - Internationally produced P1800

The fact that 6,000 cars of the P1800 were built at Jensen Motors in England during the period 1960-1963 is basically not relevant to this article, but it must nevertheless be mentioned. Volvo had its own managers on site in England, but the contract to build 9,000 cars was canceled due to relatively poor quality of the cars, and production was moved to Gothenburg. The factory in England was not based on KD production and Volvo Amazon was not produced there.

24 - Lars Gerdin is on the alert

Earlier in the article, it was referred to an «update article» and it was understood that it was never printed. In that article, it was written that reservations were made that CKDs may have been assembled earlier than what was found when referring to the plants in South Africa and Mexico. When Tommy Joelsson and the author studied the production cards, as mentioned earlier, a number of district numbers were also discovered which did not match the district numbers in the two countries mentioned above. Initially, it was suspected that the unidentified district numbers could belong to Swedish dealers or factories that built special editions of the cars. There was no record that could tell which dealer, factory or importer the numbers belonged to. It was in other words a pure guessing game, and as far as possible, articles like this should contain definitive facts and not be based on assumptions.

At this time, it was clear that the factories in South Africa and Mexico were only receiving 122S editions, the other four had received Amazon in both the Special and Sport versions, indicating cars for the European market.

It would be a few weeks before a breakthrough was made, and that was when the author received an e-mail from Lars Gerdin. He had found an outline showing the relationship between district numbers and names for two of the four unknown ones.

25 - Brussels – Belgium and The Hague – Holland

One of the district numbers that was found turned out to belong to a recipient in Belgium. It was known that Volvo had an assembly plant in Ghent, but also that this was not opened until several years later, more specifically in 1965. As part of the work of writing articles on the different model years of Amazon, the author had earlier found out that Amazon was assembled in Belgium as a 1963 model. Now it should turn out that the story of Amazon's final assembly in Belgium stretched even further back in time. That plant will be discussed more later in the article. Nevertheless, as early as the 1961 model year, Amazon KD's

were shipped to Brussels. As much news as the now «newly discovered» plant in Mexico.

The second delivery Lars Gerdin identified as the port of The Hague, which is approximately 170km/105mi from Brussels. Now, the author knows that Holland is not a country, but a part of the Netherlands. Nevertheless, the Netherlands was called Holland until 1815, and yet The Hague is located in the province of Zuid-Holland. It should be called the Netherlands in Norwegian, while a number of other countries use the name Holland. In addition, «Holland» is used in a separate section about the plants.

The author of the article was not shocked when *Brussels* appeared in an early assembly plant context, because previously known information about the factory, or rather the *factories*, in Belgium had proven to be both sprawling and inaccurate.

When The Hague emerged as the recipient of KD's, the reaction was different. No sooner had Mexico emerged from nothing when another assembly plant for KD's in a up until now unknown country for production of Volvo Amazon was pulled out of the hat.

In the aftermath, one can say that the feeling you get when you succeed in finding undiscovered treasures of this type is completely indescribable, and it may cause both adrenaline rush, good food, good drinks and sex to fall down the ranking list.

Common to the deliveries to Brussels and The Hague is that the cars were delivered/completed as early as 1960. As early as September 21st, chassis number 56158 is noted ready for Brussels, while chassis number 57632 received the address The Hague just a week later, on September 28th. Both Belgium-produced cars and SKDs were sent to Belgium and Holland during the same period, both in the Special and Sport versions.

26 - Several unknown factors

Tommy Joelsson and the author had, as mentioned, found several production cards that showed two more recipients of KD's in the said

➢ *Top: At SBMA in Forest, the cornerstone was laid for Amazon assembly in Belgium. Volvo importer SBMA in Belgium was involved in the early stages of final assembly of cars, and the story goes all the way back to the mid-1950s and the Volvo PV. It should turn out that SBMA also started with final assembly of the Amazon at an early stage.*
The center and bottom: These pictures were taken in the assembly plant that SBMA (Société Belge de Matériel Automobile) had in Forest and shows the assembly of Volvo PV at around the middle of the 1950s.
Source: Volvo's Historical Archive.

➢ A shipload of KDs has arrived to Alsemberg. After unloading at the port, the crates were trucked to the factory. Complete car bodies in separate crates, while other parts were packed in boxes. With so many pallets to keep track of, logistics became important so that the pallets were at the right workstation at the right time, otherwise production stopped. Source: Volvo's Historical Archive.

period, but at that time we did not succeed in identifying who or where these recipients were. Theoretically, there could be several foreign plants that «no one» had heard of, but we had as little faith in that as we had any idea of where in the world they could be.

Volvo confirms in a report and with pictures that production took place at five different locations in Belgium and in the Netherlands during the period 1954-1960. It is therefore quite possible that the «unknown» KD destinations also have addresses in one or both of these countries. The recipients in Belgium and Holland are otherwise given with city names, Brussels and The Hague, and not as countries, which may strengthen such a theory. Furthermore, pictures of pallets with parts labeled «Volvo Antwerp» have been found, but the pictures were taken at a factory which is not located in Antwerp, so «Antwerp» must here be understood as the port address.

As the necessary information and knowledge of all KD recipients were not available, it was also completely impossible to conclude what plant in which country was the first to assemble a KD Amazon.

Early in this article, it could be read that we managed to «crack a few codes» at the archive visit in May 2017, and this is also where the explanation came. Eventually, we succeeded in finding production cards where both district numbers and recipient names were written on the cards. The routine of writing both name and number had ceased by around chassis number 40000. These cards are handwritten – and all thanks must be addressed to the person who took the time to write the recipient's name in addition to the district number. This was simply a monumentally important form of extra service. Both of the last two numbers were to be found in plants in Belgium – to which three different district numbers had now been found. The reason for this will emerge as the plants are presented later in the article.

The last two pieces of the KD factory puzzle had finally fallen into place.

27 - A lot happened in four hectic weeks

In the period between September 21st and October 21st, 1960 the first assembly kits with cars for as many as four foreign assembly plants were noted as completed at the Lundby factory in Sweden. As already mentioned, the Foreign Department was not established at the time, but that Carl Richard Thiberg was in practice the head of the organization even before he was formally given the position is a reasonable assumption. What is certain, however, was that everyone involved had busy days and a lot of logistics to deal with.

The delivery reports show that SKDs to Brussels were prepared on September 21st, just a week before CKDs to Johannesburg and SKDs to The Hague had also left the production line. Then it took just three weeks before the first KD kits to Mexico were also reported completed.

28 - The order – considered on different terms

Due to the fact that the KD kits were distributed to several different foreign assembly plants at approximately the same time, and to three different continents, there are several circumstances that need to be taken into account, both given information and variables. One way is to present the foreign assembly plants in relation to the chassis numbers of the KD kits that were dispatched from Lundby. Another way is to analyze current information to find out more about when the various assembly plants could have practically completed assembly of their first Volvo Amazon.

The author of the article has chosen to present the foreign assembly plants in the order that it is most realistic to imagine that the cars have left the assembly lines in these plants.

29 - The analysis

SBMA in ***Belgium*** were those who received the KD object with the lowest chassis number (56158) found. The shipping lead time to Antwerp in Belgium was marginally longer than to The Hague in the Netherlands. At SBMA, they had already assembled the PV for several years, and thus both premises and staff were available. Moreover, they were used to dealing with the logistics that such a process entails. In a KD production report from

Volvo, no production is mentioned in Belgium before 1964, but pictures show that PV was assembled at this factory already as a 1954 model. The assembly kits for Belgium consisted of SKD products.

For the assembly plant in ***South Africa***, chassis number 57080 is the lowest found. There are several factors that argue that it was from Motor Assemblies in South Africa that the very first KD Amazon left the plant as a finished car. But the boxes with car kits had a long and time-consuming journey on a ship ahead of them, and in the beginning various body parts were also to be produced locally. Production of upholsteries, various other parts and painting was organized through Motor Assemblies. The building kits for South Africa consisted of CKD units, and the final assembly of these is a bigger job compared to the SKD products. Unlike the other assembly plants during this period, Motor Assemblies had an internal production report describing when the first Amazon was completed, and this helped with the analysis.

Chassis number 57632 is the first one found to have ***Holland*** as destination. The Hague is the port that is closest to Gothenburg by sea. In the previously mentioned Volvo report, Holland is mentioned with KD production in the period 1954-1962. The total number of cars declared in these years is not very high, a total of 1,452 cars from 1954-1959, and 2,800 cars from 1960-1962. Information that appears in a later chapter on the plant in the Netherlands is also included in the analysis. Just as for the shipments to Belgium, the boxes for Holland also contained SKD products.

When it comes to package cars to ***Mexico***, it has been found that chassis number 59366 is the lowest. Just like the port of Johannesburg, there is a long journey by ship there too, but still not as far as South Africa. It is also necessary to interpret Volvo's information that they should use the already available premises of the importer, since KD production already took place there. It is known that KD manufacturers often had more than one car brand to relate to.

Between the lowest chassis number for Belgium and the lowest for Mexico there are only 3,208 cars. As is also understood from the delivery reports, the cars have in principle followed one another as pearls on a necklace out of the factory building in Sweden, and neither the chassis number nor the date of when the kit was reported completed has any impact on the calculation of when the first car was completed at the respective assembly plants.

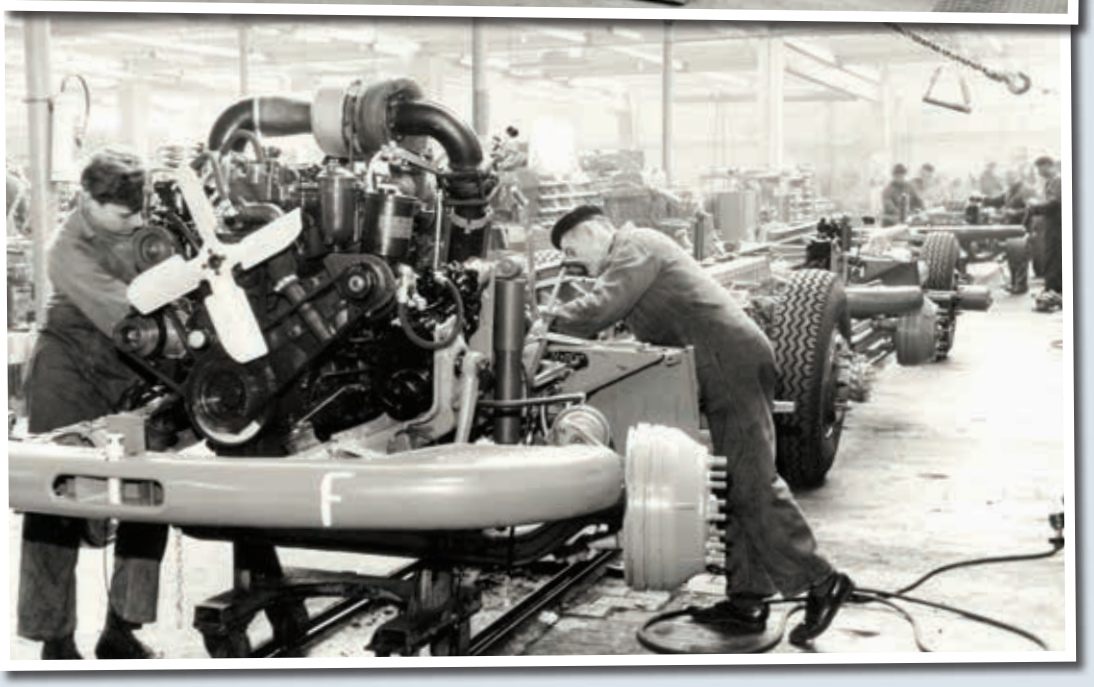
30 - Belgium – Forest or Alsemberg

An independent importer with the well-known name Société Belge de Matériel Automobile (SBMA), both imported and marketed Volvo in Belgium long before it was possible to set up a Volvo factory in the country. SBMA was based in Forest, a town in the Brussels metropolitan area, and was also an importer for Volvo to Luxembourg. On Bagatten Street in Ghent, the company had a workshop that would later become ACG, Automotive Center Ghent.

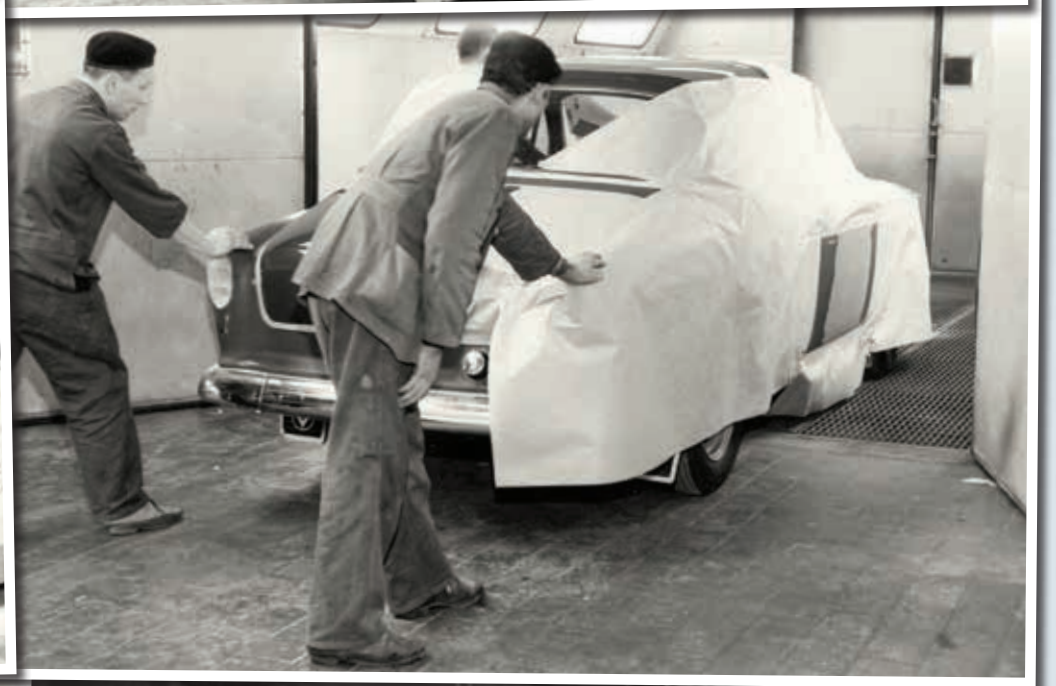
In Forest, SBMA also operated an assembly plant where not only Volvo but also cars of various other brands were assembled, although still on a more modest scale. SMBA was, as mentioned, the country's Volvo importer, and the author has seen pictures from the SMBA factory premises showing assembly of the PV444 as early as the 1954 model.

SBMA thus assembled the PV444 already as a 1954 model, which was the first year Volvo produced KD cars. Without this being checked more accurately, there is no doubt that PV544 was also assembled at SBMA. It is not at all surprising that it was Belgium that was early with assembling Volvo cars outside Sweden. Volvo's history in Belgium began in 1937 when the first Volvo was imported into the country and displayed at the Brussels car showroom – the «Salon de l'Auto de Brussels».

It can be read in the 50th anniversary report from Volvo Cars Ghent that SBMA had rebuilt a textile factory in Alsemberg. In an article in Swedish newspaper Svenska Dagbladet from October 31st, 1963, AB Volvo's subsidiary «Volvo Europa N.V.» is mentioned as being newly established, and the article also states that V.E.N.V. had entered into an agreement to take over a car factory at the turn of the year 1963/1964. Volvo had entered into an agreement to purchase the factory premises owned by importer SBMA in Alsemberg. We can also note that the premises that Volvo Europa N.V. purchased is referred to as a car factory at this time. At one time or another, the said factory changed its status from being a textile factory to becoming a car factory. The question is when this happened and whether it coincided with the time when they would start



➢ *Along the long assembly line, more and more parts were mounted on the car body until it was a complete car. Then a thorough final inspection would determine if the car held Volvo quality. The entire process appears on the next two pages, with a long series of images. Volvo trucks were also delivered as CKD and assembled in Alsemberg. Source: Volvo's Historical Archive.*




OK

SKD production of Volvo Amazon, right at the beginning of 1961.

31 - SBMA in Belgium

On the premises of SBMA in Alsemberg, which was to become Volvo's upcoming bus and truck factory, Amazon had been assembled at an earlier date than AB Volvo indicates as a start-up for its own production. This is what the author of the article has come up with in connection with an upcoming article on the 1963 model year, where this is a very relevant topic.

That the said 1963 models were assembled there is beyond doubt, and these cars must also have been assembled by Volvo's own employees. However, it is difficult to determine whether the assembly was controlled by AB Volvo, Volvo Europa N.V. [1]) or whether the production was managed via SBMA.

Many also indicate that the first load of Amazon in SKD edition ended up in these factory premises, which at this time were owned and operated by SBMA. The other possibility is that the boxes containing Amazons were shipped to the SBMA factory in Forest. Something that still speaks for Forest as a destination is that it is written that SBMA already assembled several other car brands at that plant, and that production took place to a limited extent. However, it is unlikely that it can be confirmed where in Belgium the first Amazon KD kits ended up. Regardless, the cars that had been reported completed from the Lundby factory in Sweden on December 22nd, 1960 were shipped with Brussels as destination and with SBMA as recipient and importer.

[1]) Volvo Europa N.V. is mentioned as «newly established» in Svenska Dagbladet at the end of October 1963, but the actual date for the new establishment is uncertain. Theoretically, it may therefore be that VENV managed the assembly plant at the time that the mentioned 1963 models were built.

Based on the chassis number, the very first Belgian-built Amazon was a 12194VD with chassis number 56158, color code 50 Grey beige

The Amazons that the Belgian car body artist Jacques Coune built were all assembled by SBMA in Alsemberg. At the top, one of the cars is shown at the Salon de l'Auto Brussels in 1963. Notice the station wagon version of Mercedes in the background. This was at a time when Mercedes only built sedans and coupes, and it was a standalone company (like in this case Coune) that built custom variants made to order. In total, Coune built four Amazon convertibles, as well as a two-seated roadster shown at the bottom.
Source: Coune (not confirmed).

with black roof. Easier explained was a 4-door 121, equipped with B16A engine and 4-speed manual transmission. The KD kit was shipped to district 874 – Brussels.

An initial delivery to a new district number 1260, belonging to a Belgian dealer, occurs at 12294VD 69006. It is a 1961 model, and at such an early stage it is most likely that SBMA had been given a new number as a result of the reorganization of the number system – and that 1260 does not apply to Volvo in Alsemberg.

Production cards also show a shipment of Amazons to SBMA on September 7th, 1960, which includes chassis number 56150, but this shipment also includes complete, finished Swedish-built cars. SBMA received both variants, 121 and 122S, and both types also occurred among the assembly sets.

Based on the information available, the article author chooses to award the SBMA plant in Belgium the honor of having assembled the first Volvo Amazon package car.

32 - Holland – from terra incognita to groundbreaking

The delivery reports state The Hague as a destination, and it is certainly correct with regard to the destination of the ship on which the cars were loaded and it was also precisely here that the importer was located. The author has been told that the factory itself, «The Dutch Vehicle Factory Beijnes» was located in a town called Beverwijk.

As previously mentioned, there were five different assembly plants in Belgium and Holland even before the first Volvo Amazon had rolled off the production line. Not only Volvo PV, but also trucks and buses were assembled at these plants. There are pictures that show that PV was also assembled in Beverwijk, but there is little or no production history available about the different locations that can contribute to more solid information.

After much searching and hunting for information that could shed some light on the business in the Netherlands, the author eventually came in contact with Paul van Vugt, chief editor of Volvodrive Magazine. He was the one who made sure that they gained insight into the assembly companies in the country. In an e-mail, the author was told that Volvodrive Magazine had published an article about the factory in Beverwijk, and that he should try to look it

Of the five cars that Coune built in the first half of the 1960s, only two survived. At the top car number two, which today is owned and restored by Stoffel Mulier. In the middle car no four, owned by Peter Ahrens. At the bottom is a replica, owned by Guy Vermant.
Photo: The owners of each car.

up and send it to the author. «Fortunately,» – as van Vugt wrote – «we have a neat archive, and it didn't take long to find the article I hereby send you». A caption in the article about the company Beijnes reveals that Amazon was also assembled at a plant in Katterug. Neither Beverwijk nor Katterug is located in a port area that is common for assembly plants. Katterug is found just over 10km/6mi inland, while Beverwijk is much closer to the sea. The difference in distance between The Hague and Beverwijk is not great compared to The Hague to Katterug. The boxes containing the KDs had to be shipped anyway from the ports in The Hague and to the various assembly plants.

With regard to the Volvo delivery cards, these do not differ between the destination address or district number, and it must be concluded that it was the importer who controlled the deliveries to the factories in Beverwijk and Katterug.

Exactly how many Volvo was built here is unknown, but an estimated 1,500 cars seem likely, a figure that includes both PV and Amazon.

33 - Beijnes creates history – a summary of the article in Volvodrive Magazine

Volvo «Made in Holland» still exists. They come not only from the city of Born, but also from the city of Beverwijk. The factory named the Dutch Vehicle Factory Beijnes not only manufactured train sets, wagons and trams for the railway plant, but also assembled package Volvo's in the late 1950s and early 1960s.

If you thought it was just in Born that Volvo cars rolled off the assembly line, you are thoroughly mistaken. In the 1950s and 1960s Volvo PV544 and Amazon were assembled in the city of Beverwijk. Initially, this may seem strange to a company whose main business was to produce means of transport intended for tramway purposes, and they later developed to become a major supplier of tramway and tramway materials.

The origin of Beijnes can be traced back to the city of Haarlem as far back as 1838, when a factory specialized in the production of vehicles was established. A century – 100 years – later the factory management decided to close the factory, which was located opposite to the city's central station, which was a result of strong pressure from the municipality of Haarlem. A new factory had to be built, and far beyond the city limits of the ever-growing metropolitan city of Haarlem.

They found a suitable and development ready area, both for the needs of the time and for later development in Beverwijk. World War II nevertheless put an effective halt to development for a few years – when all plans for new buildings were put on ice. After the war, everything had to be started from scratch. The Germans had rounded up the old factory in Haarlem and almost all the equipment was gone. Most of the expensive equipment and machinery had been transported to Germany. As the economy recovered after the war, the company also scrambled to its feet. The new factory was started in 1948 and opened for production with a solemn ceremony two years later.

The new factory consisted of two large factory halls and two smaller buildings that served as a workshop and an office. The orders came in and the company Beijnes had a lot of wind in the sails – not least as a result of orders on train sets for the Dutch State Railroad as well as the Intercity trams. In addition, they got to build the trams for the municipal-owned tramway company in Amsterdam.

Towards the end of the 1950s, Dutch Railways decided that all their train sets should be produced in Germany. This naturally led to a financial backlash and some real scratches in the paint for Beijnes, who had previously had a well-filled order book.

34 - Volvo and Beijnes

Beijnes was on a feverish hunt for other clients who could help keep the wheels turning. It was the Swedish car manufacturer Volvo that was to be the rescue. In the late 1950s, Volvo struggled with capacity problems as a result of great success with Volvo PV and the then-launched Volvo Amazon model – which saw a large increase in demand.

Production in Olofström went at full speed, and the final assembly in Gothenburg failed to keep up with the ever-increasing production pressure. Volvo did not want to disappoint their customers or miss out on revenue, so they started looking elsewhere where they could finish their production.

Volvo management assumed that it would be great if the final production of Volvo cars could take place in a country where Volvo could also be purchased, and the Netherlands was just such a country. Apart from this, there were other benefits to the manufacturer of manufacturing abroad. In terms of taxes, it was more profitable to export a building kit and then assemble it rather than exporting finished cars.

Volvo was looking for partners, and Beijnes was not the only or the first candidate to be considered. Several relevant factories were considered, and this also meant that Volvo was assembled in several other locations in the Netherlands. Coenen in Utrecht got to try out a trial series of PV444 models. Coenen reportedly only produced 24 PVs, which was a good distance from expected delivery within a given period of time, and due to long delivery times, Volvo chose another company instead.

Polynorm in Bunchoten, which is still a major player in the production of car parts, was Volvo's second choice. These had a greater capacity to receive the pallets from Sweden and production went fully until the economy in the Netherlands crashed in 1957. This led to Polynorm falling almost all the way to the bottom. In parallel with the transition from PV444 to PV544, Volvo moved production from Polynorm to Beijnes in Beverwijk.

The cars that arrived in the Netherlands were of type «SKD». It can be confirmed that the bodywork came fully painted from Sweden, and like many other assembly plants some parts were delivered locally here as well. Front and rear windows were supplied by the company «Staalglas» and tires and car batteries were supplied by Dutch companies.

Unlike SBMA in Belgium which received KDs which were then painted locally, Beijnes in the Netherlands was sent painted SKDs for final assembly.
This assembly plant was mentioned in an article in the Dutch Volvo magazine VolvoDrive, and the pictures are taken from that article.

➢ *The picture shows an extremely rare car – an Amazon that was assembled at the Beijnes factory located in Beverwijk, Holland. Originally, the factory was designed to build railway cars, but began to assemble PV and Amazon when Volvo needed to establish factories outside Sweden. Capacity problem at the factories in Sweden was one reason, another was the need to establish factories in countries that had unfavorable import conditions and trade agreements.*

The article contains a debatable «conclusion». *«The Beijnes-assembled Volvos are considered easily recognizable»* (and reference is made to the digit «9» in the type designation). *«All the cars had a special chassis number!? where the last number was a 9. This figure indicated that the car was manufactured for assembly abroad.»* Furthermore*: «That is, if you own an original Dutch car, chances are that it was manufactured at Beijnes in Beverwijk. Beijnes assembled Volvo in the period 1958 through 1963, and then all such activity ceased.»*

The author defines it as *«debatable conclusion»* because not everything written is necessarily true. The digit «9» was not introduced until the 1961 model year, and then all foreign assembled cars had this code. Moreover, it was in the type designation and not in the chassis number that the mentioned digit «9» was found. Still, chances are that Dutch-made Volvo Amazons are still on the road – a production that until now was completely unknown to most, at least to those who haven't read the article in Volvodrive Magazine.

Then one must hope that one or more such cars will emerge. There are clues in the form of the digit «9», model year and in particular in the chassis number series.

35 - The assembly process at Beijnes

Unfortunately, there is little knowledge of detailed information about the assembly process, but it is known that lack of capacity in Sweden is not the only reason for the establishment of assembly plants in the Netherlands, although it was stated exactly that. It is more likely that this is all due to pure tax policy and opportunities to establish itself in foreign territory.

The Beijnes factory had to pull all its ace and trump cards out of its sleeves to match the product quality that the Swedish-built cars had, which was a clear requirement from the Volvo board. In the end, Beijnes's internal reorganization became the solution, and then everything went well as planned.

As mentioned, the bodies came fully painted from Sweden, with seven different layers of paint, the latter being cured at 130°C/265°F heat. Before the cars were loaded up in Sweden, the bodies were treated with an external protection layer which was later removed at Beijnes. Just after arriving at the Beverwijk plant, the cars were applied with a rust-protective layer on the chassis and under the wings. Then the car body was placed on a roller conveyor and with the help of hydraulic lifting devices the front and rear axles were mounted. These were axles that were prefabricated in Sweden.

This was done to complete the cars, and the installation of front and rear windows, installation and adjustment of doors, fitting of decorative trims, grills, lights and bumpers was done. Before the wheels were mounted, tires with white tire walls were mounted on the rims, which were then balanced. When the car was eventually considered to be a genuine and quality Volvo, the braking system was subjected to a one-and-a-half-hour-long pressure test to check for any leaks. After the final check of paint, hinges, locks and doors, the car was tested for the first time. The test route was two laps on a 8km/5mi track in the immediate vicinity of the Beverwijk plant. When green light was given that the car was approved by the factory, the car was again given a special exterior protection to protect the paint and chrome before delivery. Then the cars were sent to the importer Niham in the Hague.

➢ *Beijnes was by no means a small company, but on the contrary a large and established business when Volvo came in to the picture.*

Importer Niham did as the importer did in Belgium, importing Swedish-built, complete cars in parallel with receiving SKD products from the assembly plant in the country.

36 - Among the very first

The first package cars to be sent to the Beijnes factory in Beverwijk were reported from the factory in Sweden just a week later than the cars that had the destination Brussels and Johannesburg. There is no information on when the first Dutch-built Volvo Amazon rolled off the assembly line, but if it is assumed that they started with the car that had the lowest chassis number – then it was an Amazon 121, color code 54 Midnight Blue with gray beige roof, type 12194VD with chassis number 57632. The car was reported completed from Lundby on September 28th, 1960. Otherwise, it is confirmed that in the first series of cars, chassis numbers 57632-57667, sent to The Hague there were three different color combinations: Ruby red with gray beige roof (color code 51), Midnight blue with gray beige roof (54) and Olive green (56). As a previous headline in the article suggests, Holland – or the Netherlands – changed status from completely unknown in terms of SKD production of Amazon to becoming almost the very first of its kind. This came as a real surprise to many, including the author of the article.

Many are the ones who have read, been told or «always knew» that Amazon with the B16 engine was only available in two-tone colors – purely except when it came to special orders. Then it is worth noting that among the very first package cars, single-tone color olive green was one of the choices. Both 121 and 122S were now found among the car kits exported to the factory in Beverwijk, and similarly were also exported to Belgium.

Theoretically, a factory in the Netherlands may have been the first to deliver a KD object, but based on the information provided in Volvodrive Magazine where it appears that Volvo had several alternative factories to choose from before deciding, it is unlikely that one of these experiments resulted in a finished product before SBMA managed it, and thus ***Holland became country #2 in the series of KD-producing countries.***

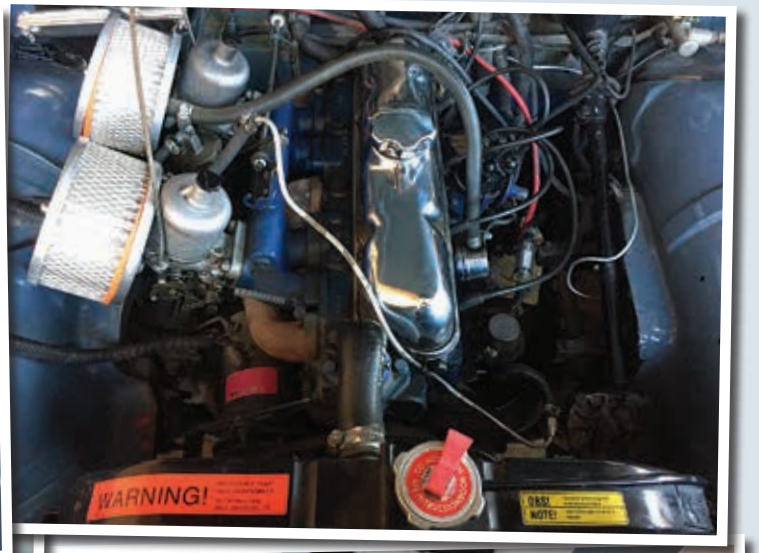
37 - Mexico became #3

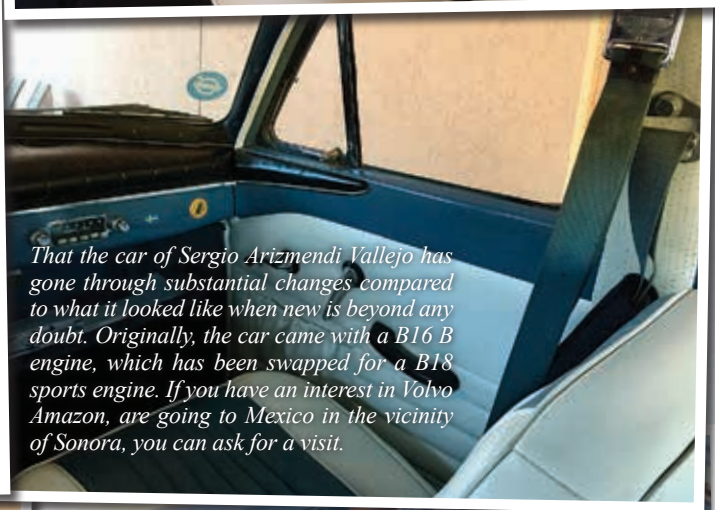
Information about the assembly plant in Mexico is more than sparse, and it is not even known where in Mexico the plant was located. However, it is unlikely that it was located in Mexico City, since it is located in the middle of the country. If you follow Volvo's logic for similar assembly plants, preference is given to port cities and places with good communication facilities. Admittedly, Volvo did not own or operate the factory in Mexico, but the car kits from Sweden were to reach the recipient anyway – preferably without too much handling along the way, and as efficient as possible. That the cargo had to be shipped to a port goes without

Made in Mexico: WEF-55-50, Sergio Arizmendi Vallejo. 12294VD 59978. Photo: Sergio Arizmendi Vallejo.

Special case of a type plate: «Original» or «fraud» is the question that is asked when viewing a type plate like this. Stamped after production, obviously, but when and why? Well – the fact is, according to information found in the archive, that the first CKD delivered to Mexico had ch.no. 59366. Therefore, there was every reason to seek information about what caused this change. It should turn out that the plate from Sweden was initially marked with the wrong chassis number. 55978 does not belong to a 122S, nor was it a car intended for assembly abroad. Probably the error was not detected until the car was on the assembly line in Mexico, and the correction was made there. 59978 matches the production card. Unique – and it is unlikely that one will ever discover a similar case again.

The fact that it is a sedan 1961 model registered for 4 people is also evident from the Mexican type approval plate.





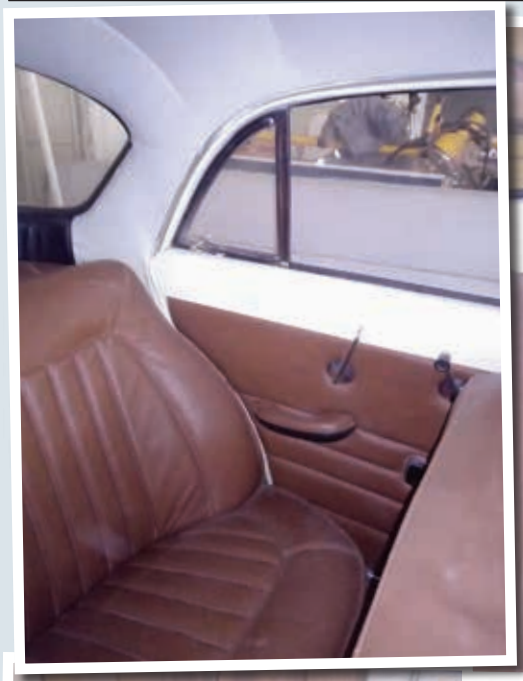
That the car of Sergio Arizmendi Vallejo has gone through substantial changes compared to what it looked like when new is beyond any doubt. Originally, the car came with a B16 B engine, which has been swapped for a B18 sports engine. If you have an interest in Volvo Amazon, are going to Mexico in the vicinity of Sonora, you can ask for a visit.

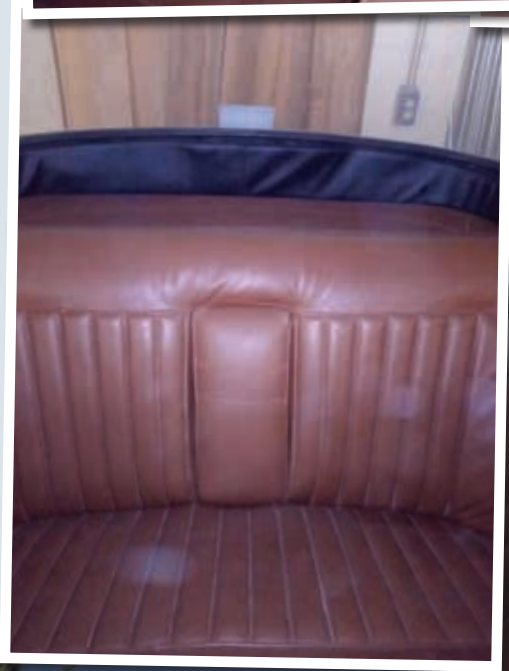
KK-09, Augusto Jiménez Oviedo. Mexico 12294VD 65014.
Photo: Augusto Jiménez Oviedo.

It was a welcome addition to the article when images of a Volvo Amazon that was assembled in Mexico were received, and it was also possible to obtain more information about it.

At an early stage in the search for information about the various assembly plants, the one in Mexico was completely unknown as such. A dealership number – 955 – was associated with the plant in South Africa, at that time SA was the only alternative. When the knowledge that there had been an assembly plant also in Mexico, a situation of doubt arose until this picture appeared. This type plate tells us what we needed to find out. The chassis number and type designation were traced in Volvo's Historical Archive, and that the car was assembled in Mexico is now established. One could argue that the cars in South Africa were right-hand drive and that the cars in Mexico were left-hand drive, and that it should therefore be easy to check on the production cards whether the car was originally shipped for assembly to South Africa or to Mexico. The problem is that the production cards do not contain such information. The type plate clearly shows P12294VD 65014 but the production card for the same car says P12294 65014. Thus in this case missing «V» which means left-hand drive and the year model letter code «D» which means 1961 model. Also note that the color code is missing on the type plate.

If you have attention to detail you quickly notice that on the car of Oviedo the body number – 63650 – is much lower than the chassis number – 65014 – which is anything but ordinary. Also, the body number is not embossed from the back, but punched into the plate from the front. We know that this method was also used at an early stage in the factory in Sweden, and it is therefore not unnatural that this happened in Mexico as well, but there are no similar pictures to compare with.
A larger number of bodies were produced compared to chassis – and the consumption of bodies was on average higher than one per car. The increasing difference is due to the fact that some bodies were rejected and scraped somewhere in production, some damaged cars needed a body change and other bodies were used for training purposes. But every body still had its unique number. It was an easy way both to keep track of the number of bodies produced, and to where they were delivered or sold.
It is natural that cars that were built in Sweden have a closer relationship between body and chassis number, than the cars that came from the body factory to the paint shop and on to the assembly plant. To the factory in Mexico, the cars came packed in boxes that were stacked on top of each other in a storage area, and besides, they were not painted. This meant that all the boxes had to be unpacked long before the actual assembly started, and the engines were stored in one place, rear axles in another and the front suspension in a third, etc. Apart from the chassis number, the type plates were the same, and there is no reason why these were put in the same box until the car was finished and was to be fitted on the car.





Made in Mexico:
KK-09, Augusto Jiménez Oviedo, Mexico 12294VD 65014.
Photo: Augusto Jiménez Oviedo.

Bench type front seat in Amazon is not an everyday sight, and whether this combination with the floor gear lever is how the cars were delivered is uncertain, but in all likelihood, this was the case. The cars assembled in Arica, Chile had requirements from the authorities that locally produced parts should be used, and the interior was a result of that. The Chilean-built cars also had a bench type front seat but, unlike this car, steering wheel gear lever. The fact that the Mexican authorities made demands similar to what they did in Chile is beyond doubt. That it is an easier process to install a bench type front seat instead of two separate seats is also beyond doubt. The car was not originally equipped with a steering wheel gear lever - the type plate tells that the car was supplied with floor mounted gear lever.

saying, as the boxes were shipped by sea freight. If you look at a map and look at the sea route from Gothenburg and to Mexico, there must be a port city on the Gulf of Mexico that was the destination for the vessel. There were probably only three alternatives, Tampico which is closest to Sweden, Veracruz which is approx. 500km/300mi south of Tampico or Coatzacoalcos which is still about 300km/200mi further south. Veracruz both had and has a much larger port than Tampico and today handles ~75% of all port traffic to Mexico. The probability that the cars were unloaded in Veracruz is quite high, but since it is not known where the factory was located, it is unfortunately not possible to conclude which port city was used.

38 - First a contract – then full throttle

After AB Volvo had signed a contract with the assembly plant in Mexico, it was anything but a slow start. A combination of high demand, a lack of production capacity on the domestic front and political import restrictions and agreements were behind the decision to go full speed ahead. This was not only true for Mexico but for other countries as well. It was not an *all or nothing* case since the car kits in the event of a problem at an assembly plant would not disappear. In a worst-case scenario, they could simply be recovered and transported to another assembly plant. Since Volvo's people were anything but amateurs, they had provided for both advance investigations and to organize overseas factories. In addition, they assisted with their own staff present if needed. Such a solution was also a guarantee that the quality of finished products would be in accordance with the Volvo standard – «Volvo's value lasts».

Now that it was known that district 955 belonged to the assembly plant in Mexico, it was also easy to identify the deliveries there. The parcels that were sent to South Africa were, as mentioned, right-hand drive cars, 12294HD. Similar cars were delivered to Mexico – all 122S, but with the steering wheel on the left – and the identity of the very first was 12294VD 59366. This car was reported finished in Lundby on October 21st, 1960. After that, cars on their way to Mexico followed as pearls on a necklace off the production line, and a total of 499 cars were reported completed before the factory workers at Lundby could let Christmas peace settle in 1960. As soon as the New Year celebration of 1960/1961 was over, production was on full speed again and already after two months almost one thousand boxes with Volvo Amazon cars were on their way to Mexico.

More stringent import rules, prohibitions on importing completed cars and requirements for local production are common denominators for several of the assembly plants. In the time before CKD production forced itself into Mexico, they had to import complete cars to the country, cars that were already built in Sweden. Such imports had been taking place since 1959, and a consequence of this was that dealers in Mexico had finished products to show before the locally assembled cars were finished.

The cars were initially painted locally in Mexico, and on the production cards from Sweden, the stated color is mainly only «00» or «09». What these two codes mean exactly is not known. The type plates of cars that were not painted in Sweden do not contain color code information – the field is left blank. But just like before, an exception would emerge – and also a very special case on the same car.

It is stated that the cars to Holland received a rust-protective coating which was removed after arrival at the factory. It may be that the car bodies were not primed at the factory in Sweden, and that it is as simple as «00» was used to indicate that the car body was completely unpainted but applied with a protective coating (as was done on the cars sent to Beverwijk). And that «09» then means that the car body was primed at the factory in Sweden is then logical. Whether the painting was done at the assembly plant or at another local operator is not known.

39 - Type plate of a special kind

After a long search for an image of an Amazon that was assembled in Mexico, one would finally succeed. In fact, images of two different cars appeared. The image of the type plate on one of the cars was very striking, and you immediately noticed that the original embossed chassis number 55978 was crossed over and replaced with another, 59978 which was embossed from the front of the plate. An almost identical number, but what was the reason, and what would it mean for the information already provided in relation to the time of production? The earliest car found in connection with KD production in Mexico had chassis number 59366 and then a type plate appeared on a Mexico KD with a lower number. It was therefore important to sort this out, and again Lars Gerdin was going to prove to be the right man in the right place. Because there were two known chassis numbers, it was now relatively easy to find the much-needed information. It turned out that the number originally printed on the record was neither a 122S nor a KD car sent to Mexico. Chassis number 55978 belongs to a 121 which was delivered to a dealer in Gothenburg. Chassis number 59978, according to the production cards, was sent to Mexico as a KD kit, and also followed what had been defined as the first car there. Regardless, this is the very first case where you see a type plate where the chassis number is changed in such a way.

It can be concluded that the change is not a «fraud», but simply a consequence of incorrect stamping on a type plate. The fact that the type plate was originally minted in Sweden is beyond doubt, and it is likely that the error was not discovered until the car was almost finished in Mexico. If the fault had been discovered at the Lundby factory, a new type plate would most likely have been made, which was not as easy to do in Mexico. How likely it was for this probably unique case to emerge on one of the two cars tracked in Mexico, one can only wonder, but it was anyway a fun discovery.

40 - Color code 42 stated for a Mexican built car

On the type plate of chassis number 59978, the color code is not provided, exactly as expected. The production card, on the other hand, states that the car has color code 42 California white, which is because the car was painted in Sweden before it was shipped to Mexico. On the basis of what has been read about «incorrect marking on the type plate» it will be natural to assume that it is the car belonging to the type plate's incorrect number which has color code 42, but the car with chassis number 55978 has color code 19 and is therefore black. A little mystery, but it has happened that assembly plants that were initially supposed to receive cars for painting locally have also received ready-painted cars. It may be due to a variety of reasons, but probably it was to speed up local assembly. In any case, this is a peculiar case since the color code should then have been stamped on the type plate. One can also ponder about the fact that the production card should not have had a color code at all.

Therefore, since there are pictures of the car, it should be easy to check the color from these. The car has been renovated, and it is now two-tone blue and white, with a blue color that does not appear to be midnight blue. Various e-mail correspondence with the owner of the car did not help to solve anything. The owner was of the opinion that the car was delivered with a B18 engine, 12 Volt electric system and two-tone paint as the car appears today after the renovation. At the time the car left the factory, the B18 engine was not even existing, so a couple of things did not add up here.

41 - No information about the plant in Mexico

When you finally managed to get hold of both pictures of a Mexican built Amazon and at the same time succeeded in getting in touch with the owner of the car, you also saw the opportunity to dig out more information about the final assembly plant in the country. The car owner was absolutely certain that there had never been a factory in Mexico that assembled the Volvo Amazon, and that his car had been fully imported from the factory in Sweden. Consequently, no one became any wiser about the factory in Mexico from this.

42 - From full speed to full stop

Assembly in Mexico ceased after a relatively short time. Volvo's own annual report states that *«a significant number of cars could be delivered to Mexico in 1961, but at the end of the year new restrictions were introduced, preventing this type of Volvo export»*. The last CKD cars to Mexico for which Joelsson and the author have found production cards were chassis number series 81584 – 81643. These were completed at the factory in Sweden on July 3rd, 1961, and delivered on August 3rd, exactly one month later. Thus, the adventure in Mexico was over almost before it had started. According to statistics that the author had access to 1,920 cars were assembled in Mexico, all of them B16 cars.

Each Volvo Amazon has a type plate in the engine compartment, which contains various information about the car in question. One of the fields is reserved for «special codes» or S-codes. Such codes are found on many cars, but far from all. So far, one has not succeeded in finding a complete list from Volvo of what the various S-codes actually means. Nevertheless, many are identified and there are also some codes that are known, but where the meaning is unknown. It is therefore impossible to estimate how many completely unknown S-codes there are. One such code – 5037 – appeared on the delivery report of a Mexican-produced car. It is therefore obvious to assume that this code only applies to cars built for the Mexican market.

43 - Wentworth – South Africa

While what has been written about the factories in Holland and Belgium is a result of newly discovered information, knowledge that the Amazon was assembled in South Africa has circulated in various forums for many years. We have been told through a variety of articles, stories and various forms of publishing that the Amazon was assembled in South Africa. It has been read, «learned» and also gradually «been convinced» that the assembly plant in South Africa

➢ *Motor Assemblies outside Durban in South Africa was also among the very first to assemble the Amazon. At the top and center are pictures of the Volvo assembly plant, and to the left in the top picture are several large crates containing finished car bodies, as they were packed and shipped from Gothenburg. At the bottom is an interior photo from the factory, and presumably there are parts for trucks that we see here.*

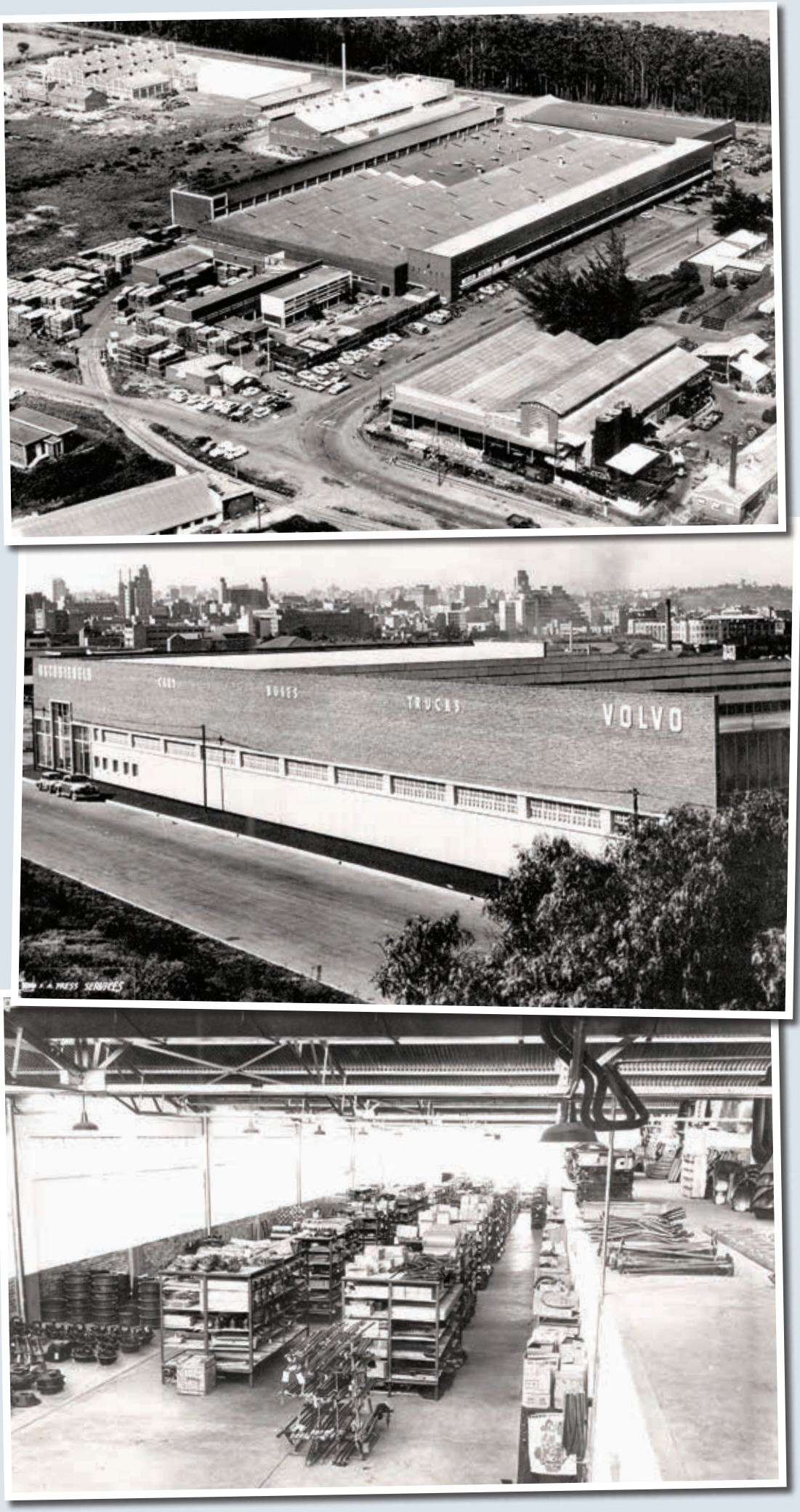
started production of Volvo Amazon in 1966, and that the operator was Motor Assemblies (hereafter referred to as MA), outside Durban – thus a bit down the line of Amazon foreign assembly plants. A number of years ago, the author came across an article that tells a completely different story: AB Volvo had already in 1960 signed a contract with Motor Assemblies in Wentworth outside Durban to assemble cars locally at MA's existing assembly plant. That it would from there take about six years for the final assembly to start is completely unreasonable.

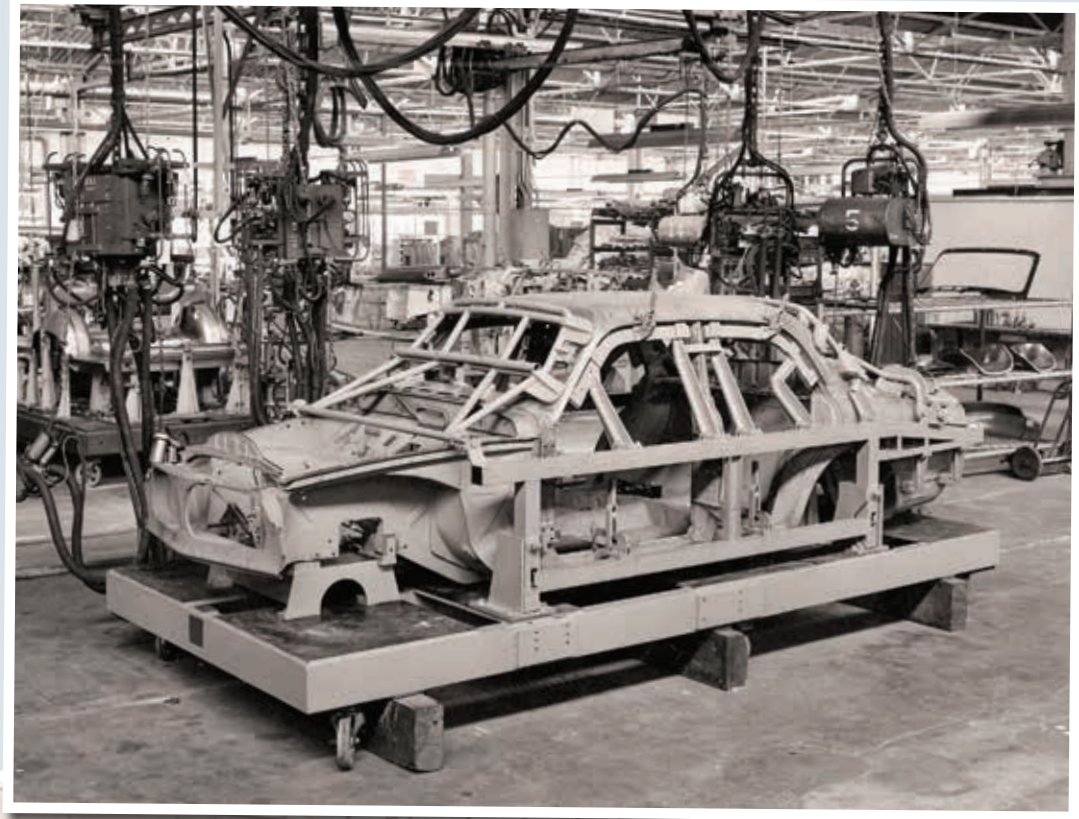
Still, there was something that lingered in the logic around the time since (at that time) there was no evidence that KD operation was being initiated before the model year 1962. Had there been talk of building a factory from scratch, the time period from the time of contact to production start is easily explained, but that was not the case here. Still, it was assumed that it was in 1961, for the model year 1962 that it all started, and that this plant could also be the very first to get started with foreign assembly of the Volvo Amazon.

The article that was written about MA contained very good documentation and statistics regarding both production and production figures, and this reinforced the suspicion that the 1962 year model was not necessarily the answer to the production start. The author had seen pictures from South Africa where a number of B16 cars were depicted, including Volvo PV. It could just as well be complete, fully built cars imported from the Volvo factory at Lundby, or almost complete, and which might have had certain parts, such as the upholstery, factory-fitted and assembled locally upon arrival in South Africa.

As the readers understand, it was impossible to conclude anything at such an early stage. There were too many assumptions, too many possibilities, ifs and whens and on top of that it was also known that earlier established «facts» were wrong. Final assembly of the Amazon in South Africa was an issue in dire need of further review.

A lot can be written about assembly plants in South Africa, whose history started as early as the 1920s. In the context of the arti-





At the top is an interesting picture. In South Africa, the plan was to do some of the work manually – also to more or less assemble the bodies. The jig was used in conjunction with welding the bodywork together – until Volvo found that it was not done good enough. In the middle are a number of cars ready for delivery, both Amazon and PV. The Amazons are obviously B16 models and this proves the claim that MA first started with 1962 models wrong. In the background, the Volvo trucks are probably Viking or Titan. At the bottom, a sales hall in South Africa with the Volvo cars available at the time: PV544, Duett and Amazon. A Porsche 356 can be glimpsed in the background.
Source: Volvo's Historical Archive.

cles on the different model years of Volvo Amazon, most of this is irrelevant, and the author made a summary of what M. Compton and T. J. Gallwey wrote in their article on «Motor Assemblies Limited» in 2009:

In order to meet South African demand, Ford had started assembling cars in Port Elizabeth as early as 1924, and GM (General Motors) followed in 1926.

At that time, these two car manufacturers could rightly claim to be ahead of Volvo – is the article author's comment on that.

There were plans to build several such factories as US automakers had a strong interest in establishing themselves in South Africa, but the Great Depression of the 1930s delayed construction.

Times improved, and in the period before World War II, Chrysler importers in Cape (Atkinson) and Orange Free State (Oates) decided to build an assembly plant in Paarden Eiland outside Cape Town. However, the outbreak of World War II was to delay the project until 1941.

At the same time, Stanley Motors, which imported Hudson and Willys, established a plant near Alberton in Transvaal, later known as National Motor Assemblers. The plant was opened after the war, and also assembled the Austin A40 for a short period of time until it was closed in favor of Peugeot and Rootes products, which Stanley Motors now were the distributor of. The special thing about this plant was that it was built inland and not on the coast. Although the Transvaal area had the largest market for car sales, it was not considered to be particularly cost-saving considering that they worked with imported material. Time was up for changes.

Early in the 1940s, importers of the Chrysler products in Natal, which had Dodge, Chrysler, Plymouth and DeSoto on the program,

An architect's drawing for a proposed sales hall in Hillbrow, Johannesburg in 1963. It shows three of the car brands represented by Lawson; Volvo, Renault and Toyopet. At the pumps are an Amazon and a Renault Dauphine. The Toyota Toyopet was manufactured and marketed as its own brand in South Africa, also after production ended in Japan. Source: Volvo's Historical Archive.

also concluded that if they were to be able to maintain good sales, they needed a separate local assembly plant. Earlier, Atkinson and Oates also became investors in this project, and were granted permission to purchase a plot of just over 2 hectares/5 acres at Lerwick Road in Wentworth. As a result of World War II, however, no one was allowed to build in the area which was then leased to the government. In 1946 it was finally possible to start construction, and the design was accomplished with the help of the Americans. It is understood that this would result in Motor Assemblies Limited, «Nuffield, Standard & Chrysler Products» outside Durban, and the company was registered in 1941.

Not surprisingly, the first manager of the site, Hank Lisseman, was from the United States. His main task was to ensure that all the necessary technology to build a complete assembly plant was put in place. When production started in 1948, it was Chrysler, Dodge and De Soto that first rolled out of the factory, and they achieved a number of 3,418 units produced this first year.

It was the start of a tremendous growth and expansion for the automotive industry, and as early as 1947 a new plant that was designed to assemble Studebaker commenced in Uitenhage north of Port Elizabeth. The first car from there rolled off the assembly line early the same year. In 1949, production of the Austin A40 was moved there, and in 1951 the Volkswagen Beetle was also assembled there. In 1956, the name was changed to the VW distributor's name; South African Motor Assemblers and Distributors (SAMAD).

MA was a significant company, and in May 1957 the company employed 750 people, as well as passing 50,000 manufactured vehicles.

Exporting CKDs was not something the US or UK automotive industry had any exclusive rights to, and other European car makers, who did not have their own dealer network in South Africa at the time, found it interesting to establish themselves in a country where industrial policy was becoming less and less tied up by traditionally strong ties to the United States and the British Commonwealth.

Fiat's newly appointed CEO was now determined to establish the brand in South Africa, and in 1962 they moved production from East London to Motor Assemblies in Durban. By relying on MA as a production plant, they also felt that their own employees had enough experience in producing parts in South Africa, and that they could therefore easily comply with local laws and regulations. Not long after this, Lancia also started assembling CKDs at MA. Volvo, which was imported to South Africa by Lawson Motors in Johannesburg, had accumulated a growing market share in the country, not least thanks to major triumphs in racing and rally sports.

When Volvo made its entry into South Africa and at Motor Assemblies, it was not a newly established company they chose to partner with. As a result of its size, MA had been forced to re-subscribe shares, and had decided to set up assembly plants also a distance from the port area, which necessitated a transfer by train. Lerwick Road, the location of the Jacobs Plant, which was the name of the assembly plant that assembled Volvo, is not far from the harbor either, but a transport leg by train was still needed. This is probably the one plant that confirms the rule – «no rule without exception», since all the other major assembly plants were located in port areas, either by the sea or by a canal.

From the aforementioned MA article, it appears that production started with the PV544, and that it would not be long before the Volvo Amazon 122S, or the Volvo 122S that the cars were called on this edge of the world, came on the program. However, the production overview from MA, which can also be found in that article, tells the opposite; that the production start for PV was in April 1961, and that the assembly of Amazon started as early as March of that year. This is well worth noting, since the Amazon 1962 model at that time had not yet been launched – and consequently the suspicion that KD production started earlier than expected was further strengthened. Now, more knowledge has been acquired – but it is small random information like this that causes a reaction, and which makes it necessary to conduct more thorough investigations in the hope of getting to the bottom of the case.

44 - Not «shot out of a cannon»

Having started out small and with a sober approach, Volvo was inspired by the fact that Mercedes Benz, which had previously been opposed to producing cars locally, had now chosen to focus fully on this type of production. Lawson looked at a larger scheme as a future success, and together AB Volvo and Lawson Motors followed in the footsteps of Mercedes to focus on volume production.

The management of AB Volvo, after discussing the concept with its Swedish engineers, advocated cost-saving measures, and in order to save large tool costs, Volvo had chosen a collaboration with Datsun/Nissan on the steel press tool services so that they could produce body parts locally for Volvo. Also, much of the job was intended to be done manually rather than by machines. As mentioned earlier in the article, the term CKD was somewhat diffuse.

CZC 375 EC. Jaco Heunis, Nelson Mandela Bay, South Africa. Photo: Jaco Heunis.

The brown color – the color code is completely unknown – was supposedly relatively common in South Africa on the 1970 model and perhaps also on the model year before. The owner of the car in the photo, CZC 375 EC, is Jaco Heunis, Nelson Mandela Bay, SA. It should be emphasized that this color must not be confused with the color 72 Fawn brown that was found on, among others, Swedish and Norwegian Volvo Amazon for the 1962 and 1963 model years.

A type plate with almost no information is typical on newer Amazons assembled in South Africa. The plate only contains information «type» that the car is a 2-door sedan with dual carburetors, 4-speed manual gearbox, and that it is a right-hand drive 1970 model. The S-code 5110 is unknown, but so far, the code has only been seen on cars that were assembled in South Africa for the 1968-1970 model years. The special type plate for South Africa also states that it is a 2-door version (P13), and it has a number that must be a form of internal serial number, but it has not been possible to find exactly what the number indicates, on which number it is started or if it began in 0001. An article on Motor Assemblies states a production figure of 5,568 2-door Amazons. 5521 is a high number in that context, and it has to be assumed that the car was assembled towards the end of the Amazon era.

The body number is also high compared to others. The highest chassis number associated with an Amazon is 359918, but as can be read in the article text, the average consumption of car bodies was higher than one per delivered car, so a body number can be slightly higher than 359918. Considering that both Motor Assemblies' own number and the body number are high, one must if not conclude, but at least assume that the car is a late production.

➢ *MZL 837. 133352P 307236. Photo: George Minassian.*

This «Built by Motor Assemblies» plate is in a 1968 model 123GT that is not built neither at Motor Assemblies or anywhere else in South Africa, but in Sweden. The explanation must be that all cars that were delivered within the organization of the importer Lawson Motors and the assembly plant of Motor Assemblies were given a number from which to identify all delivered cars, whether they arrived in South Africa as a construction kit or as a completed car from Sweden. In the article it can be read about Amazons that were fitted with both GT- as well as other equipment as a result of special orders, and South African assembled Station Wagons are mentioned in such a context. These cars, as well as the fact that a 4-door car was «upgraded» to 123GT using GT parts provided by importer Lawson Motors has contributed to claims that the Amazon 123GT was also assembled locally at MA. So far, not a single piece of evidence has been found to support that – and in addition to both Joelsson, Lofter and the author, neither Deon van Loggerenberg of the Volvo Owners Club of South Africa nor Vic Campher of Volvo Cars in Johannesburg have any belief other than that all 123GTs sold in the country were imported finished from Sweden. Van Loggerenberg writes that the claim is probably based more on rumors than on facts. In conclusion, all right-hand drive 123GTs were finished in Torslanda, unlike most other Amazons found in South Africa – who spent part of their lives on the assembly line at Motor Assemblies.

It was not always easy to achieve appropriate cooperation, either politically or between the various importers and car manufacturers. Some large investors, who were completely inexperienced with automotive production, were willing to do exactly what the authorities wanted by following government regulations, as Fiat, Triumph and Datsun/Nissan did. Other players such as Volvo, Mazda and Lancia, who had longer trading time in the industry, did not fully agree with this strategy. Still, there was little to do with it, and one had to follow the line drawn in advance.

There will always be political disagreements and negotiating with government and public authorities is very important, but not always as easy. In South Africa, the racial segregation policy (apartheid) also had to contend with other, more normal, political challenges. The players in the automotive industry had therefore been predictive enough to form their own organization, the

➢ *CL 69014, South Africa, Medium blue.*

NN 11113, Direshen Pillay, South Africa. Photo: Direshen Pillay.

It has not been possible to get verified information on how many Volvo Amazons are still rolling on the roads in South Africa. Pictures and information show that there are quite a few and, moreover, that the cars generally hold a high standard, like this car owned by Direshen Pillay.

NP 40423, Narsing Chutterpaul, SA. Narsing Chutterpaul has owned the car since it was new.

National Association of Automobile Manufacturers of South Africa, NAAMSA. This organization made sure that the automotive and motor industries did not conflict with public regulations on work restrictions, and thus avoided demonstrations as a result of the racial divide. NAAMSA made sure to unite the goals that the government and their own industry had for industrial development, which would not have happened otherwise, and which today contribute to large employment and significant business in the export market.

Although MA had established its own program for Volvo, it came to a point when the management at Lawson Motors felt that they had become too dependent on MA, and therefore employed Alois Rösner to get better control of their own brand. As previously mentioned, Lawson Motors purchased steel press services from Datsun/Nissan. This created a lot of problems for MA's skilled workers, but on the other hand it also gave MA's engineers a lot of valuable experience.

Until 1975, assembly took place at two factories in South Africa, but Volvo's production was shut down as a result of political strife. Now, neither the story nor the statistics tell us how many or what parts of the cars were manufactured locally or assembled at MA when they assembled PV and Amazon there in 1961 and 1962, but the production figures found in the aforementioned article are very detailed, showing that 462 units of Volvo PV were produced during this period.

It has been claimed by several that the Amazon Station Wagon was never manufactured in South Africa, but that is not true. All three body versions of Volvo Amazon were assembled by MA. This is shown both by the production statistics from MA and by the production cards from Volvo.

The first Volvo Amazon assembled under the auspices of Motor Assemblies in Wentworth was 12294HD 57080. The chassis number is lower than the first one found to be sent to Holland and Mexico, but it must be taken into account that body parts should be produced locally, one should perform more manual work locally and that the CKD objects had a more time-consuming transport. Therefore, Motor Assemblies is unlikely to have delivered a car before the plant in Mexico, so ***South Africa has to be ranked number 4 among the KD-producing countries.*** The MA article states that the first Amazon shipped from MA was completed in March 1961.

As previously mentioned, the first KD components for the four foreign assembly plants were produced in a short time span, and in the case of the 4-door Amazon it was the 1961 model year in which the second most cars were produced, namely in 29,900 units.

It is also worth noting that exclusively right-hand drive cars were produced in South Africa.

The detailed MA production overview shows that from March 1961 and until the middle of the year in 1967, 7,382 Volvo Amazon 122S rolled out through the gates at Jacobs Plant in the 4-door edition, the factory that produced Volvo at MA in Wentworth.

From March 1964 to October 1967, 1,008 units of the Amazon Station Wagon were assembled.

In the case of the 2-door sedan, the production figures do not specify that it is 122S. It is called «Volvo 130 2-door», but there is no doubt that all of these were also of the Sport edition. 5,568 cars were produced in the period from May 1967 until the last car rolled by the assembly line in December 1970.

Within the same time period that they manufactured the 2-door Amazon, the factory also built 5,449 Volvo 144 and 1,456 Volvo 164, but they finished production of the 4-door Amazon before starting final assembly of the 2-door edition.

Somewhat later in the history of MA, Volvo decided in 1973 to follow Mercedes, which they had done when they decided to focus on volume production. After having problems with great quality variation, the pressing of body parts, and later also the assembly of the cars was moved to Volkswagen of South

Volvo Owners Club of South Africa
Photo: Deon van Loggerenberg

Africa. As of January 2012, Toyota of South Africa owns MA.

45 - Freeing up production capacity

The 140 series was already launched, and at the Torslanda factory there was no longer room to produce the 4-door Amazon, whose fate was already sealed. Production was destined to cease. An important feature of this was to get rid of all the 4-door versions of Amazon, and that would be solved easily.

The last 480 units of the Amazon in the 120 series, in the chassis number series 234174-234653, were loaded onto five fully loaded ships with destination Durban, and the first charge was shipped to the assembly plant in South Africa on January 13th, 1967. That's how easy Volvo could clean out almost half a thousand cars from Torslanda. The very last unit of Volvo Amazon in the 4-door edition had the identity 123942M 234653, was equipped with a B18B engine, and was billed on March 22nd, 1967. Because the cars were painted locally in South Africa, no color code is stated on its production card.

By the end of the Amazon era, virtually all manufactured cars were exported as KD's, and it was the plant in South Africa that was the recipient of these cars. The Torslanda factory then produced finished Amazons mostly individually and only in small series. From just over halfway into the production of the 1970 models, from chassis number 351088, which was billed to Lawson Motors on April 14th, 1970, nine shiploads were sent to MA with a total of 864 cars.

The highest known chassis number NVAK has in its list of Norwegian registered cars is 359721, but it is known that 359724 was also sent to Norway. The highest chassis number on a Volvo Amazon is 359918. The car was reported finished on September 4th, 1970. All of the last 192 units of the Amazon series, chassis numbers 359727 – 359918 were loaded on two full shiploads and shipped to South Africa.

When it comes to information about 2-door cars that were exported to MA, there is not much available on the production cards. Chassis number is of course stated as this is known when the car leaves the production line also as CKD, but all other information is essentially limited to «130000», and it is known that the first two numbers, in this case «13» means 2-door, and no more information is known about these cars.

46 - From South Africa, via Latin America to North America and back to South America

A natural next step for Volvo was to move on to North America after having established assembly in the two mentioned continents outside Europe. Although Mexico belongs to the North American continent, the factory in Mexico was already closed at this time. When talking about North America in this context, we are north of Mexico and in reality, it is Anglo-America that is the correct term when compared to Latin America, which starts with Mexico in the north and includes the Spanish and Portuguese speaking countries in the south. Nevertheless, there was a great need for new start-ups in South America as well, if Volvo hoped to find a way to continue exporting cars to that part of the world too. An increasing number of countries tightened their import rules which put new sticks in the Volvo wheels. Plans for the establishment of a strategically located assembly plant in North America were running in parallel with similar plans for South Africa and Mexico, but the commissioning process was faster with the latter, using already established factories. In Canada they had to start from scratch, and negotiations and design took longer compared to the others. The need for and a plan for an establishment in Chile came more than a year later, although the first car kits for Chile and Canada were shipped around the same point in time.

47 - Nova Scotia – Canada

When Volvo started assembly at the plants in Holland, Belgium (at this time), South Africa and Mexico, it was literally an away game since they used externally owned factories. In Canada, the situation was different, since Volvo became «its own master».

The factory in Halifax, Canada, is probably the one that is «widely» known to be the first assembly plant for Volvo's part («foreign» the author adds, after all, cars were assembled at the factories in Sweden as well). But the «general knowledge» does not contain the whole and full truth.

The assembly plant in Canada was the first of its kind to be in foreign territory, wholly owned by AB Volvo and the only factory Volvo itself owned on the North American continent. Volvo clearly had a need for assembly plants around the world, and it would not be long after the start of Belgium, Holland, Mexico and South Africa until Canada and Chile were on the map.

48 - Not in Halifax, but in Dartmouth, Nova Scotia

Volvo was introduced in Canada in 1957 through a company in British Columbia that distributed cars throughout the country.

On July 21st, 1959, Volvo Canada was founded and the company had a sales progression where the arrows pointed upwards. During 1959 sales had increased dramatically, which meant that Volvo established its Canadian headquarters in Toronto, and by 1961 Volvo established its own dealer organization. At that time, they were already in 6th place in the number of imported cars (in Canada). Despite a general decline in sales of imported cars in recent years, Volvo was able to show an increase.

During 1960, they had discussed the possibilities of establishing an assembly plant in the country, and at this time in the process, an establishment in Ottawa was also an option. In 1962, after deciding upon Nova Scotia as location, the plans were submitted to the Canadian Minister of Finance, George C. Nowlan. Volvo had already signed a lease contract for the building they were going to use, but obviously needed to obtain the necessary permits before they could take the next step. Agreeing with the Canadian authorities was not done overnight, and after a relatively time-consuming process both at the highest government level and with the government of the province of Nova Scotia, Volvo received the Canadian government's blessing in February 1963. Good arguments used at the negotiating table were the fact that Volvo would be a perfect car for Canadians, because the topography – the landscape conditions – and not least the climate was quite coincident with the Swedish one, and the Volvo cars had proven to master such conditions without problems. In addition, Volvo was already a significant customer for Canadian steel exporters, and a Volvo plant in Canada would thus help increase this export.

The fact that Nova Scotia was preferred was far from a coincidence. Considering that Volvo was shipping its goods from Gothenburg, the port of Halifax fit perfectly. It was large enough to meet the needs AB Volvo had and not least Halifax Harbor was the only ice-free port on Canada's east coast. Nova Scotia is also strategically located in the north of America, where Volvo of North America had its headquarters in Rockleigh, New Jersey. The management of AB Volvo had also noted that port fees in Halifax were lower compared to other areas in Canada where there was a tradition of car production, especially in Ontario. The fact that the wages were also significantly lower also made the Dartmouth/Halifax alternative more interesting. The average hourly wage among Halifax industrial workers was $1.86, while GM's workers in Oshawa outside Toronto earned between $2.16 and $2.29 per hour. It may not seem to be much of a difference, but still made a difference of 16-23%.

For Volvo and the Canadian authorities, the agreement entered into was a win-win situation, perfect for the governing authorities in Canada, as it would create many new jobs in a crowded area that was in dire need of multifaceted industrial activity and higher employment. The residents of Nova Scotia could envision a brighter future, and they were given a welcome opportunity to restore a well-functioning society as a result of Volvo's entry. For its part, Volvo avoided high import duties by choosing a KD solution for Canada.

49 - Robert Lorne Stanfield

In 1956, Conservative Robert L. Stanfield had won the provincial election in Nova Scotia based on election promises on industrial renewal, which also meant effective government intervention in a number of sectors affecting Nova Scotia's economy. As a result of a collapse in the traditional post-war industry, and especially in the coal industry, the economy was steadily declining and unemployment was rising when Stanfield was elected prime minister of Nova Scotia in 1956.

In connection with the election campaign before the 1956 election, Stanfield had proclaimed the creation of a company, the «Nova Scotia Industrial Development Corporation», which was intended to be financed from both the province treasury as well as from stock sales. The provincial development plan, however, took another turn as the government feared that selling shares to the public could lead to unnecessary complications and conflicts between creating jobs and making money for the company. Instead, the government decided to allow the establishment of another main organization, «IEL – Industrial Estates Limited». Briefly, IEL was to assist with financing and lending to companies that would establish themselves in Nova Scotia. IEL was strongly involved in Volvo's settling in Dartmouth and later also at a new establishment in Halifax. Initially, IEL was intended to build industrial parks for rental to the companies, but IEL also built factories for companies that were allowed to buy the premises at bargain prices.

*«**Factory owners!** Let IEL finance and build your facility in Nova Scotia. IEL will develop your network, finance and build the facility, rent it out to you with low rental costs, and if and when you wish, we will sell it to you for the booked cost.»* This was the message from IEL, and as you understand it was very important to get new industry and trade connected to the peninsula in eastern Canada.

In the end, IEL, with $23 million in backing, became a direct lender to companies for both investment projects as well as equipment purchases.

This was an opportunity Volvo knew how to take advantage of, and they were both an early and a long-

The bodies from Sweden arrive in crates which are unloaded on the dock near the Dartmouth factory. The bodies were thus sent from Gothenburg directly to the factory without reloading, a process which not rarely causes damage to the cargo.
Source: Volvo's Historical Archive.

term recipient of IEL's services, both in the form of loans (both with and without interest), support for facilities, special agreements, and also getting subsidized transport as a result of this cooperation.

The lease agreement Volvo had signed in Dartmouth was to last for three years, at a cost of $2 million. The premises on the dock had previously hosted a sugar refinery, but this had already been closed down. The rent of the premises was secured in a favorable contract terms with the help of IEL, and Dartmouth city had contributed with municipal tax relief. The agreement also stipulated that IEL should contribute to the construction of a factory designed for automotive production and according to Volvo's needs.

After the agreement with IEL was well in port, and it was clear that there were good solutions for rail transport, Volvo began a close collaboration with Nova Scotia's Minister of Industry and Commerce E.A. Manson to find potential subcontractors.

Another clause in the agreement with IEL allowed Volvo to receive subsidies of up to $150,000 in connection with cars shipped from Sweden and intended for sale in Toronto and Montreal. Sources say that Volvo received $68,000 over the first three years as a result of this deal. The same source states that Volvo «only» received a few million dollars as a result of IEL's support schemes, and that this was a low amount compared to what others who established similar new business after Volvo achieved.

Thus, Stanfield had promised its voters to get the society back on track, and therefore posted economic strategy, policies and measures in relation to just *that*.

50 - Good stuff for the newspapers

That AB Volvo was to open an assembly plant in Canada was sensational news, something not least Swedish newspapers knew to take advantage of. Considering the position Volvo had gradually achieved in Sweden – and the fact that AB Volvo had successfully managed to establish a factory in North America, this was news that led the average Swede to buy today's newspaper.

In an article in Svenska Dagbladet on February 22nd, 1963, it is stated that the first cars sent to Canada were in principle completely finished cars produced in Sweden, and that the kits sent to Dartmouth in the initial phase thus consisted of almost complete cars

51 - Volvo was a pioneer – also in Nova Scotia

As soon as AB Volvo had signed the new Canada agreement, all parties were ready to get started as soon as possible. One problem in this regard was that Volvo did not have any qualified staff in Canada, but they had a number of newly hired former car and industrial mechanics.

As one has read, Volvo was the first foreign car manufacturer to establish itself on the North American continent, and a number of other companies were soon to follow suit. Nova Scotia experienced a boom of new start-ups in various businesses in the wake of Volvo, both from international and national players, and several other car manufacturers were soon to establish themselves there as well. Given the contractual conditions that required a high proportion of locally produced parts in the cars, it was a natural consequence that national, Canadian and North American companies also seized the opportunities that opened up to expand and develop their own businesses and manufacturing operations.

52 - The first KD cars to Canada

To get started with production in Canada, Volvo was basically allowed to bring in complete cars as «SKD building kits». It was in everyone's interest to get started, and because there were no workers in Nova Scotia who were competent and sufficiently skilled to build an SKD from scratch, they came up with a different solution.

The «parts» were easily obtained by building US specification cars for Canada, and these were taken off the assembly line in Sweden before being fitted with the engine and powertrain. Instead of being completed in Sweden, cars, engines and powertrains were packed separately in boxes, and then exported as «SKD» to Canada. This solution plus a very favorable agreement on duty- and tax-free importation for cars and engines/powertrains meant that the cars could be assembled locally, and not least it was profit-

able, although there was a shortage of trained workers. The necessary and relatively simple tasks in connection with this could be handled by the new employees, and production was slowly but steadily initiated. For Volvo this did not matter. Their main goal was to sell cars, and the agreements entered were maintained while Volvo employees in Canada were employed. The Canadian authorities, for their part, were very comfortable with Nova Scotia working to face a brighter future. So, no one had any reason to complain about the situation such as it was.

Employees at Volvo Canada were sent on a 12-week course to Gothenburg to study and learn production and assembly methods. This staff would then take care of the further training of factory personnel in Canada. Everyone had to undergo a thorough training in the art of producing quality cars. As previously mentioned, none of the employees had any experience in assembling cars, but many of them had mechanic and/or mechanical training and experience from car repair shops and mechanical companies. As part of the signed and comprehensive agreement, Volvo was also to support and safeguard the agreements to employ local labor, and of the first 100 employees, only five were from Sweden.

Eventually, all the wheels began rolling at the factory in Canada, and «normal» package cars were now sent there as well.

In the first year, an estimated 2,000 kits were shipped to Canada. One source says that on average, 15 cars were assembled every day at the Dartmouth plant, but nothing is said about how long after the startup «gradually» was, nor is it specified how many of the approximately 2,000 kits were completed. Essentially, only the Amazon was assembled at the Dartmouth plant, although a few PV 544 were also assembled there at the very beginning. There is no reason to doubt that these PV cars also arrived in Canada in the same knocked-down shape as the Amazons did.

53 - The inauguration – great festivities with a royal touch

It was a large operation that was set in motion in connection with the historical event. It was the Duke of Halland, Prince Bertil, who was given the honorable mission to cut the ribbon during the inauguration. On the big day, things got started with a tour of the Halifax-Dartmouth areas and official visits. Both the governor, the prime minister of Nova Scotia, the mayor of Halifax and Dartmouth as well as other Halifax County officials were participating. After being served lunch, Prince Bertil was transported by a minesweeper from the Canadian Navy to the Volvo factory in Dartmouth. Participating was also Volvo's CEO Gunnar Engellau along with Volvo Canada Ltd.'s director, D. W. «Pat» Samuel, a New Zealander who had been a key figure in the negotiations with federal and local authorities, which in turn resulted in Volvo's establishment in Canada. Previously mentioned Robert Lorne Stanfield, who was the one credited with «New Nova Scotia», was also among the prominent guests.

During the inauguration, Stanfield joked that Nova Scotia (Latin for New Scotland) should hereafter be called Nova Suecia (New Sweden). Volvo's entry into Nova Scotia was proclaimed as an important economic boost, but also as a psychological boost. The people in the Halifax area, Nova Scotia and the port areas again saw light at the other end of the tunnel.

Gunnar Engellau, for his part, stated that the future looked bright with regard to the factory, and that there were no restrictions on further development. Unofficially, it was supposedly said that Volvo was soon coming back with plans for a newly established factory.

54 - Sweden's «Motor Prince»

After giving a speech, Prince Bertil hit the main switch in the factory upon which a siren wailed, the lights were lit and there was life in the production line. A few minutes later, an Amazon rolled to the floor. With a gold-plated screwdriver, Prince Bertil was able to tighten the screws that fastened the registration plates with the inscription «Nova Scotia 00-00-01» on the very first series-produced European car built in North America. Prince Bertil, nicknamed the «motor prince» for

Prince Bertil of Sweden brought some royal glamour to the inauguration of the factory in Dartmouth. Here, an Amazon is being inspected together with Robert Lorne Stanfield. Source: Volvo's Historical Archive.

The first step in the assembly process is to clean the car bodies from the transport protection coating, and then prime and paint them. Here, a buffer with painted bodies is stacked before being retrieved for final assembly. Source: Volvo's Historical Archive.

his keen interest in motorsports, then drove the car out of the factory.

The car that Prince Bertil «completed» is a black, 4-door 1963 model 122S. This very first «Volvo Canadian» was presented to Robert Stanfield, who in turn handed the car over to the government and to Nova Scotia's Minister of Trade and Industry W. S. K. Jones. After being used as a company car until 1967, it was given as a gift to the Nova Scotia Museum of Industry in Stellarton, Nova Scotia, where it is now newly restored and exhibited to the public.

As is customary in a country with two official languages, (in Canada, English and French are both official languages), the Amazon was launched as «Volvo Canadienne» in the French-speaking areas, such as in Québec, where 85% of the population has French as their mother tongue.

At the same time as Stanfield passed on his new car, he proclaimed that he himself would buy his own Nova Scotia-produced Amazon for private use, and at the same time urged the other board members to do the same to set an example. Some took Stanfield on his words, and the Financial Post later wrote that G I Smith, who would eventually become prime minister, ordered a car there and then, stating that «I consider this car to be a genuine Nova Scotia product».

Samuel stated that Nova Scotia was the cradle of Canadian craftsmanship, and the Chronicle-Herald described Samuel as a man of radiant confidence and who set fire to the coals that Volvo had brought to Nova Scotia.

55 - Canadian advantage

Pictures provided by Debra McNabb, Director of the Nova Scotia Museum of Industry, show that the car that Prince Bertil «completed» has chassis number 131400. The car that was sent to Dartmouth is a 12294VF 131400, and the car was completed at the factory in Lundby on March 27th, 1963. It is not fully proven that this is the first built car, but so far, a package car with a lower chassis number that was sent to Nova Scotia has not been found.

Just as for the assembly plants in Belgium, the Netherlands, Mexico and South Africa, where the first KD objects identified were produced within four weeks, the first deliveries to the factories in Canada and Chile were also close to each other in time. It took less than two weeks from the first «Chilean» KD was completed at the factory until the first one shipped to Canada had the same status.

With the information at hand, it is not difficult to reason in what order finished cars may have left the assembly lines in the Arica and Dartmouth factories. The distance from Gothenburg to Arica is considerably longer than that from Gothenburg to Nova Scotia, and in principle, the factory in Canada may have managed to complete its first car before the boxes of cars arrived at the port of Chile, even with the same KD starting point. Something that may have delayed assembly in Chile was that both upholstery and other parts should be manufactured locally in Chile. Since the Amazon was already on sale with the importer in Chile, this opened up the possibility that the aforementioned parts may have been manufactured in advance and that they were therefore in place at the assembly plant already when the first KD cars arrived. There is no detailed production information either from the factory in Chile or from Canada, but besides the already mentioned itinerary there is a crucial factor in this context, namely the object itself. The cars that were initially shipped to the factory in Canada were basically finished cars where only the engine and powertrain were not fitted when the car left Sweden.

There is also no reasonable doubt that Canadians could present their first Volvo Amazon well before the Chileans could do the same.

The factory in Canada was thus the 5th in the series of Volvo's assembly plants abroad.

56 - US edition and «package car»

A car intended for export to the United States was built in accordance with the rules and requirements specified at any given time for the United States.

➢ *Whether the term «well-known» is the right thing to use can certainly be debated, but at least it is no great secret that Sweden's «motor prince» H R H Prince Bertil (pictured in the top photo) was given the honor of inaugurating Volvo's assembly plant in Dartmouth, Nova Scotia in June of 1963 – and the Royal Honorary was also asked to tighten the last two (license plate) screws on the first car delivered from the factory. The car was, as you can read in the article, black and had registration number 0-00-01 on Nova Scotia plates. Something that is not quite so well known is that Volvo's director Gunnar Engellau followed Prince Bertil and fitted the license plates on car number two – which naturally got registration number 0-00-02, as the bottom picture shows. In the caption of Volvo's magazine Ratten you can read the following: «In the upper picture, Prince Bertil inspects the first Canadian-built Volvo Amazon and on the lower one, director Engellau fits the license plate on Amazon no. 2.» Here, the author will comment that the writer of the article in Ratten was probably a little too fast around the corners. We know that the car that Prince Bertil «completed» is black – and that the upper picture shows Prince Bertil at car no. 2, probably at the same moment as Gunnar Engellau worked on fitting the license plate or when the Prince stands next to Robert Lorne Stanfield. Source: Volvo's Historical Archive, Ratten – loan at Kungliga Biblioteket and sent in by Fredrik Lofter.*

➢ *In the sales brochures, Volvo Canadian differs somewhat from the others. The images and layout are essentially identical to those printed for other markets, but for Volvo Canadian, a big point is made of the fact that the cars are being produced in Canada. In the beginning, the brochures had the Canadian maple leaf in a banner with the text «Made in Canada». In later brochures, the banner has been replaced with a logo with the text «Volvo Canadian». Source: Volvo's Historical Archive.*

➢ *The advertisement emphasizes that Volvo in many countries is better than what is needed – and emphasizes all the benefits the car has when the climate is cold and the roads are not dry. Radiator curtain and good insulation are mentioned especially along with safety details such as seat belts, disc brakes and large wheels that make the car easier to drive in the snow. Florida is taken as an example of where cold climate is not an issue – but that the car is ideal for Canada – and that it is ideal for you – even if you live in Florida. «Test drive a Volvo – then try another car brand in the Volvo class. Then sit down calmly – and think about it!»*

VOLVO

THE CAR WITH THE 100,000 MILE REPUTATION

NOW MADE IN CANADA

Volvo Canadian Two-Door Sedan
Volvo Canadian Four-Door Sedan
Volvo Canadian Station Wagon
Volvo 1800 S Touring coupé
Volvo 544 Sports Sedan

The car Prince Bertil «completed» is a black, 4-door 1963 model 122S. This very first «Volvo Canadian» was honored to Robert Stanfield, who in turn handed the car over to the government and to Nova Scotia's Minister of Trade and Industry. After being used as a service car until 1967, it was given as a gift to the Nova Scotia Museum of Industry in Stellarton, Nova Scotia, where it is now newly restored and exhibited to the public.
Source: Nova Scotia Museum of Industry.

A US model therefore got a digit «4» as the fourth digit of the type designation to show that the car was built for export to the United States. At the same time, this digit («4») also showed that the car was built in Sweden – since cars that were assembled abroad had a «9» number in the same position. Cars intended for Canada followed essentially all US specifications.

As already explained, the early KD cars to Canada were taken off the assembly line immediately before the engine and powertrain were fitted.

In other articles on the subject, it has been claimed that the first cars that were sent as assembly kits to Canada were initially planned to be built for export to the United States, which could be a possibility. As you could read in the section on Prince Bertil, the type designation of the very first car was 12294, and not 12244 that it would have had if it was going to the United States. Still, it would be a simple operation to change the type designation to something other than what was originally planned.

The truth is probably that even the first KD cars shipped to Canada were planned as 12294 right from the beginning. There was no time pressure in this case, and those involved with Volvo had plenty of time for both planning and preparation.

Nevertheless, there is a need to look into this more closely. In various contexts it has been «learned» and read that the early KD-built cars from Canada had the digit «4», and not the digit «9» in the type designation, precisely because the cars were basically complete cars with no engine and powertrain fitted when the boxes containing the kits were offloaded on the dock at Halifax harbor. This, as you understand, does not match the fact.

The fact is that completed, Swedish-built cars with the type designation 12244 were also delivered to Canada in parallel with the construction kits, and there is probably the explanation that there has been a confusion regarding the «4» and «9» numbers in both folk and various articles and forums.

57 - Modest local production in the beginning

The floor plans for the premises in Dartmouth were made in January 1963, but it only took three and a half months from the granting of the permit and until the 5,000m²/54,000ft² of floor space had been remodeled and adapted for car production. Volvo was thus able to open its assembly plant in Dartmouth on June 11th, 1963. That the original premises were a modern building with large floor space and high ceilings contributed significantly to the short conversion period. In addition to the existing building, Volvo built a 500m²/5,400ft² office building. Just outside, on one side of the factory,

➢ The assembly line at Dartmouth where the body is lowered to the engine, powertrain and axles. This point in the assembly is called «the wedding», as the car's two halves meet and become one. The working position is not good. You had to work with your arms over your head and this is heavier than if your arms are at waist height. If you work in this way over time, it is highly likely that you will suffer from disorders that you would probably carry with you for the rest of your life. Today we know better!
Source: Volvo's Historical Archive.

➢ Completion of Volvo no. 10,000 was celebrated at the factory. It is uncertain whether the milestone was passed at the Dartmouth or at the Halifax plant. The car is a 1967 model and these were assembled at Dartmouth from August 1966 until the factory moved in March/April 1967 (eight months). Thus, in Halifax, a maximum of three months of Amazon assembly before the summer vacation, or the 140-series, took over (whichever came first). In terms of quantity, it is therefore likely that it was at Dartmouth that the Volvo no. 10,000 was assembled.
Source: Volvo's Historical Archive.

they also built a 160m/175yd long dock, large enough to accommodate Volvo's cargo vessels, and on the other side of the factory was a side track to Canadian National Railways, which in turn opened up very fast deliveries of Volvo cars to the most important markets in Canada.

Although Volvo Canada Ltd. had equipped their new premises with state-of-the-art equipment according to the standards of the time and the paint factory in Dartmouth had the capacity to carry out all the paint job, the bodies came fully assembled and painted from Sweden, like SKD's. In the beginning, i.e. in the period after the mentioned cars that were in principle complete, only some parts were painted locally, such as rims, suspension brakes, front axle traverses etc. This was also done with the parts that were produced locally in Canada.

In 1963, Volvo sold a total of 2,040 Volvo Amazons in Canada and probably also to the United States, of which 1,139 were assembled in Dartmouth and the other 901 vehicles were imported. By 1964, sales figures had risen to 2,683, and statistics show that all these cars were Volvo Canadian, and that parallel import had ceased. Considering that agreements had been concluded that hopefully were meant to be fulfilled, and that it would protect their own, local jobs, it was probably not unnatural that imports of completed cars were no longer a theme.

One must therefore trust that a seemingly correct statistics is accurate, and then it is worth noting that while the factory in Canada produced 3,353 cars during 1965, only 3,156 of these were sold. During the third year, the target of 4,000 produced cars had not even been reached.

No matter how you read the numbers – Volvo had only produced 7,175 cars of the adjusted target which was 17,500 cars, and only 25% of the declared target which was 10,000 cars per year. The above mentioned 10,000 production number was also the benchmark for when taxes and fees were to be normalized – and thus Volvo did not run the risk of a financial

At Dartmouth, the Amazon was built to US specification, for export to the US. As the picture shows, the cars were loaded onto a ship for transport south to the east coast of the United States. At the same time, cars of the same specification were also sent from Sweden to the USA. Source: Volvo's Historical Archive.

tax backlash due to an excessive number of cars produced.

At the Torslanda factory, they benefited from their well-planned and newly built facility where everything was under «the same roof», that is, in a continuous and thus very efficient production line. In Dartmouth, however, it was not as easy. The assembly plant consisted of two parallel production lines, each 57m/62yd long and having twelve workstations. Along the lines there was room for body parts. At Line 1, seals, sound-absorbing material, electrical wiring, moldings, heater, dashboard, roof lining, gas tank, electrical components and steering mechanism were fitted. At the end of Line 1, the bodies were then picked up by an overhead lifting device and moved to the final assembly line, Line 2. Line 2 was the «high line», where the workers had to stand under the car and work. Engine with traverses, gearbox, rear axle,

and suspension with spring and shock absorbers were fitted, and towards the end of the line the car could roll on its own wheels. The car was then brought onto a lift which lowered it to the floor level for adjustment, assembling the remaining components before it went through a final inspection.

58 - Not only roses, honor and praise

The agreement contained conditions and requirements that were intended to safeguard local Canadian industry. According to Canadian law, at least 40% of the car's components were to be supplied by Canadian suppliers and manufacturers, but Volvo managed to negotiate away from this undertaking, temporarily down to 25% but without a specified deadline. Not even after entering into an agreement with Canadian company Hayes on the purchase of rear axles did they come close to the agreed percentage of locally produced parts. At most, Volvo reached 20% in 1970, but that was a long time after the last Amazon had left the assembly line.

In this area much criticism was directed at Volvo. In addition to having repeatedly negotiated renewed special agreements, it is also known that Volvo never paid full corporate tax in Canada. Volvo had taken the time to reach an annual production of 10,000 cars, reaching the peak in 1974 with just over 13,000 cars.

59 - You give and you take

The said Hayes agreement came as a result of the Pearson government announcing that car manufacturers could export more of their own products in exchange for imports of Canadian products for a similar sum. In November 1963, therefore, an agreement was entered which meant that Volvo would buy rear axles worth $100,000 from Hayes Steel Products of Thorold, Ontario. This was traded with the rights to introduce duty-free parts, manufactured in Sweden, worth a similar amount. At this time, there were already 75 Volvo dealerships and service locations in Canada, and the dealer and service organization had to expand even more to cover the entire country.

Originally, the deal was aimed at the US-owned companies in Ontario, which imported quantities of parts from the United States for use at its plants in Canada. Volvo also took advantage of this, in that they bought Hayes rear axles for a sum of $100,000 – and consequently could import Volvo parts duty free for a similar amount.

One has to praise Volvo's progress at the negotiating table since they succeed in renegotiating and extending previously signed agreements on a number of occasions, agreements that in principle had the same content.

60 - High-set goals

In the agreement that Volvo entered with the Canadian authorities at the beginning of 1963, the stated goal was to produce a number of 10,000 cars per year. Until this volume of production was reached, the recently concluded agreement should apply. Thereafter, the level of taxation would be normalized. When the agreement was made public, the Volvo representative stated that the goal was to produce 5,000 cars in the first year and then increase to 7,500 cars the following year. That was not the case at all, as production statistics showed that they had fallen far short of this goal. In the years 1960, 1961 and 1962 Volvo had sold respectively 1,090, 1,949 and 1,959 cars in Canada – and these were, as you understand, cars that were imported finished from Sweden.

61 - Export of Canada-assembled Amazons to the United States

The agreement signed in 1963 meant that Volvo was granted the same terms as in the current Canada-US Free Trade Agreement. In other words, the US import duty on Amazons that were assembled in Canada and exported to the United States was 0%. During the grand inauguration ceremony in Dartmouth, Volvo CEO Gunnar Engellau commented on the plans involving the export of Amazon to the United States. In December

Volvo Canadian, 13296VF 124002. Roy Nairn. 1966 model with automatic transmission. Photo: Roy Nairn.

1963, after Volvo had produced cars in Canada for five months, Volvo Canada Ltd. announced that they would deliver 75 cars to New England.

This is well in line with information that the cars exported from Nova Scotia were transported by ship to ports in districts strategically located relatively close to Nova Scotia, and there were dealers in the Northeastern states, such as Maine, New York, New Hampshire, Massachusetts, Rhode Island, Vermont and Connecticut, which mainly benefited from the short distance to the Volvo plant in Canada. With the exception of New York, all of the above states belong to New England.

At this point in time, Volvo had already sold 18,000 cars in the United States, but that did not

Volvo Canadian – not in Cuba, but in Quebec. C611918 12294VF 138104. Fawn brown 1963 model. Notice the sticker in the rear window – not only the quality of the car, but also the job that was put into it was marketed with pride in Canada. Photo: Volvo Amazon Pictures.

prevent Volvo Canada from looking at opportunities that could support production in Canada, and finding solutions that could benefit from the current Canada and US customs and trade agreements. Another factor was that, at this time, Volvo was unable to deliver enough cars to the US market from the factory in Sweden to meet the demand.

62 - Volvo Canadian was only sold in Canada

The cars that were assembled in Canada for export to the United States were not named Volvo Canadian but were instead given badges and designations on par with US models manufactured in Sweden.

63 - The right of the strongest

In 1965, the governments in Canada and the United States signed a new deal – «Canada-United States Automotive Products Trade Agreement» – or the «Canada-US Auto Pact», which applied to duty-free exports between the two countries. The drivers behind this new coalition were «The Big Three» – Ford, Chrysler and GM – all of whom had great interests and production in Canada, primarily in the province of Ontario. These three car giants did not intend to sit with their hands tied and accept that neither Swedish, German nor Japanese car manufacturers achieved agreements and benefits that would provide them benefits at the expense of their own American car products.

Under the new Auto Pact agreement, the conditions for exporting cars free of duty from Canada to the United States included that at least 50% of the car's components should come from North American manufacturers. Volvo put high demands on their own product quality, and they allowed many locally produced parts through their quality control mechanism but had also through their own agreements ensured that high quality parts were being imported from their factories and suppliers in Sweden.

Since Volvo could not fulfill the terms set by the Auto Pact agreement, they would instead be forced to pay full duty on cars exported from Canada to the United States. Of course, that would be far too costly and as the competitors met the requirements and consequently got full exemption from customs duties, the conditions for such a trade on Volvo's part disappeared. Thus, the plans for a lucrative income in the wake of Canadian-produced Amazons exported to the US crashed, and it ended almost before they could begin. It was only in the period from the end of 1963 until the agreement entered into force in early 1965 that Volvo was allowed to export cars duty-free to the United States. Thus, it is also a given that the number of Amazons exported from Canada to the United States is hardly worth mentioning in the context of serial production of cars.

64 - Volvo was hoist on its own petard

By not complying with the terms of the agreement Volvo put itself in a tight spot in that it brought a halt to its export of Canadian produced cars to the United States. One may ask whether Volvo ever had serious plans to produce such a large percentage of the parts locally as the agreements they entered demanded, or whether they simply relied on position and negotiation capabilities in efforts to circumvent the provisions. Locally in Nova Scotia and in relation to the Canadian authorities, Volvo had «good control» of the contract terms and exceptions, but things would get worse when the Americans signed up for the race. The Big Three had a strong influence on and contributed immensely to the Canadian industry, and consequently they put up strong negotiating cards. That was one side of the matter.

On the other hand, it was an advantage for Volvo who now no longer had to continue to deliver from the plant in Canada. Volvo was of the opinion that the quality of locally produced components did not meet their requirements and that they were too expensive in relation to their quality. The local suppliers, for their part, were of the opinion that Volvo bought too little and that they didn't want to pay enough. That meant the end of exports of Volvo cars from Canada to the US as it was intended from the start, but it must also be kept in mind that Volvo already had a well-functioning import of cars to the US from the factories in Sweden, both from the early factory in Lundby and at this time from Torslanda. Thus, the Auto Pact agreement did not give the management of AB Volvo sleepless nights or more grey hair, since most Canadian-made Volvo Amazons were sold in Canada anyway.

65 - Offensive play and breach of contract

In the cooperation agreement that Volvo signed, it was stated that 500 people should get their mechanic training via Volvo and that at least 400 people should get a job at the new Volvo factory. The agreement was crucial for Volvo to import both car bodies, powertrains and other parts to greatly reduced, and in some cases even completely duty-free, rates.

It should turn out that these estimates were too high. For a long period of time, the maximum number of local employees was 96 out of a total of 101, but this gradually increased to a maximum level of about 300. When the factory closed in 1998, 223 people lost their jobs. That Volvo didn't get any closer to the objective than this is a fact that the authorities in Canada must likely have perceived as fraud. When the first car left the assembly line in Dartmouth, Volvo had 200 employees, and it is stated that annual salary expenses amounted to $2 million. At that time, Volvo PV was also one of the CKD products.

66 - Arica, Chile – South America

Already in 1959, Eduardo Averill, who passed away 89 years old in 2010, had founded a company called «Distribuidora Volvo S.A.», abbreviated to «DiVolvo». As you can see by the name, at least one of the purposes was distribution (sales) of Volvo cars. Averill also established an assembly plant in Arica in his native Chile. Just like the plants in Durban and Belgium, the plant in Arica also assembled other car brands. In any case Dodge, Chevrolet and Simca were represented by Averill. Information from Club Volvo Chile reports that 12,002 cars – which means all these car brands – were assembled at this factory in the period between 1962 and 1973.

Another common denominator for the plants that assembled Volvo at an early stage, in Belgium, the Netherlands, Mexico and South Africa, was that the factory in Chile was also not owned by Volvo. This, on the other hand, was owned by external players. Nevertheless, the Averill factory was built with the help of Volvo.

Very specific information on the topic is mentioned in Norwegian encyclopedias, and must therefore be mentioned in this article: It has been written that the arrangement around DiVolvo was a «Joint Venture» between Volvo and Det Norske Veritas, which is interesting in that case that Norway may have been involved in the final assembly of Volvo cars. However, the author has not succeeded in finding more information that can substantiate this claim, nor with Det Norske Veritas. The same source also reads that the first Amazon assembled at this factory saw the light of day in 1965, which is definitely not right. Therefore, the author generally doubts the credibility of the source.

In an annual report from AB Volvo, it is reported that «Volvo will therefore take measures to be able to finalize cars in Chile during 1963, under the direction of the Volvo importer». The reason for this statement was because sales of Volvo had decreased in 1962 compared to the previous year. This was primarily due to new import restrictions and other trade policy barriers in several Latin American countries. Argentina is especially mentioned as one of the countries where the decline was noticeable. In Mexico, it was completely stopped in 1962, and things didn't look too bright for further exports there. Volvo's imports to Chile also took a hit as a result of measures that not only made it difficult, but which according to Alberto Averill, even put an end to such imports. These new rules set national production requirements, but it was also reported that there was generally an increase of Volvo sales in Latin American countries where imports were not hampered by restrictions.

Arica is a coastal town in the north of Chile, near the border to both Peru and Bolivia, and Argentina is also not far from there. Volvo

Eduardo and Alberto Averill. Eduardo, to the left, founded DiVolvo - Distribuidora Volvo S.A. – in Chile in 1959, and started assembly of Volvo Amazon as 1963 model year. To the right his son Alberto, who was wearing in his children's shoes in his father's factory, and has also contributed with important information to this article. Final assembly of Amazon was finished with the 1966 model year, but sales of cars, parts and wholesale trade within Chile continued until 1975. Then all business was concentrated on buses and trucks.
Photo: Private from Alberto Averill.

The picture shows a type plate from a car that was assembled in Chile. DiVolvo had its own paint shop, and decided on the colors of the cars themselves, but they followed the same colors as Volvo used in Sweden. The color code was therefore not embossed on the type plate in Sweden. In the article you can also read about the unique color code 86 that was painted on a number of cars in Sweden before being sent to Chile. When the image of the type plate appeared at the top, the meaning behind «5148» was uncertain, but based on where the number is placed, one could assume that it is an internal serial number. Club Volvo Chile could not help the author to interpret the meaning. You have to be careful about making hasty assumptions, and in due time another picture of another type plate also appeared – also this was from a car that was assembled by DiVolvo. It should turn out that the numbers «5148» were written on both plates, eliminating the theory that it was a serial number. Similar to what is observed on type plates on cars manufactured in South Africa, 5148 on the type plate has only appeared on cars assembled in Chile, and one must conclude with the simple explanation that 5148 is an S-code that tells the fact that the car is assembled in Chile.

Amazon was imported directly to most Latin American countries, but the fact that there was an assembly plant in the «local area» is one of the reasons why there are still a good number of Volvo Amazon cars in Peru, Bolivia, in Argentina and of course also in Chile.

In the attempt to find out more about this assembly plant, the author had to surf the web a bit, and as usual when trying to find information in this way, it turns out that the various forums often have different and conflicting «facts». This proved to be the case also in connection with the assembly plant in Chile. The author is (supposedly) considered to be a pedant and has as a stated goal to reproduce the truth in the articles. In the endeavor, they eventually succeeded in getting in touch with Alberto Averill, son of DiVolvo founder Eduardo Averill. Averill junior was born on July 31st, 1953 and was raised both with and in his father's factory, which was ready for use in the summer of 1962.

The factory building itself was built in a port area for both practical and economic reasons. This allowed for door-to-door sea transport of the relatively fragile wooden crates in which the CKD cars were sent. Averill writes to the author that the company DiVolvo had no European co-owners. Despite, or perhaps just because Volvo did not own the plant in Chile, Volvo had hired a dedicated engineer at the factory to ensure the quality of its products.

Chile, 12298VL 196175. The car to which the type plate at the bottom left belongs to.
Photo: Club Volvo Chile.

What the author of the article has learned from his contacts in Chile is that in the years between 1962 and 1967, 2,956 Volvo Amazon CKDs were assembled at the Arica factory, while a note signed by Volvo states the number to be 1,400. (The reason for the relatively large difference may be due to a mix of imported cars from Sweden and CKDs. So this is uncertain, but any future manual counting could determine the numbers based on the production cards).

Sources state that the Volvo factory exported 250 cars per shipment, and that the reason for such a relatively modest number was that the capacity of the ship(s) was limited.

By comparison, it is understood from the delivery books that a shipload to South Africa and to Mexico accommodated 96 cars, and therefore the figures given for Arica are far from modest. With this in mind, the author doubts whether a number of 250 can be accurate – and is of the opinion that the shiploads by far could not hold such a number. A delivery report dated October 7th, 1963 confirms that 48 cars belonged to a specific delivery. 48 is also a number that better matches what one assumes a «modest» shipload may contain. The numbers 48 and 96 also belong to what is called the «multiple principle», and Volvo used a dozen – 12 cars – as the standard number for shipping cars. For the author of the article, this was absolutely unknown until Gustaf Östergren, who will be presented later in the article, mentioned it to the undersigned in a «mail exchange». (Author's note)

All of the imported package cars to Chile were 122S (120 series), i.e. 4-door versions, (P12298Vx). All the cars had steering wheel gear lever, which is also seen on the type designation, and all these cars were equipped with a bench type front seat. 122S had been sold in Chile also before the factory started assembly, but these cars were Swedish-made, imported in the «usual» way and with floor gear lever and two separate front seats.

In the type designation «P12298V-» mentioned in the previous section, there is a digit «9». This is as you have understood the numerical code which shows that the car in question is a CKD or a SKD, but the code does not tell anything about the model year or at which foreign plant the car was assembled.

DiVolvo had its own paint factory, and the construction kits sent to Arica were painted there, and not in Sweden [1]). On the type plate of a CKD assembled in Chile, the color code field is empty – not embossed in Sweden – but may have had a

AR 3177, 122341M, Chile. Made in Sweden.
Photo: Club Volvo Chile.

code entered afterwards. About the factory in South Africa, it has been possible to read that MA used its own color scheme, while the factory at DiVolvo used the same color program that was used in Sweden.

[1]) There is a chapter on exactly this a little later in this article – and this also deals with a very special color code.

In connection with research that was done long before it became relevant to visit the Volvo Historical Archive, Alberto Averill wrote to the author that the cars were probably of the model years from 1963 to 1966, but that there theoretically could have been both 1962 and 1967 models also. Averill and Club Volvo Chile had put in a lot of work to document the history of DiVolvo – which had become important to them after the founder's departure. Averill said that his father had left sparse with historical information, but when it came to model years, they had little faith that the 1962 or 1967 models were assembled by DiVolvo.

Tommy Joelsson, who has assisted the author during the archive visits, has read lots of Amazon-related history and has a lot of knowledge on this topic as well. Joelsson's opinion is that the first cars were mainly 1963 and 1964 models. It was therefore natural to conclude that the first cars assembled at this factory were 1963 models.

Long after this was written, documentation was found on the first cars put together in Chile. *«The information is probably in Volvo's historical archive in Gothenburg, but so far Tommy Joelsson and the author of the article have not come so far in their investigations»* could be read in the planned updated article – but today the situation is quite different.

The production cards in the Volvo archive show that the first Amazon shipped to DiVolvo was a 12204 31569, which is a late 1959 model. No information has been found to support that there were other actors involved before Averill and DiVolvo.

The very first package car sent to DiVolvo was, as already mentioned, of type 12298 and it had chassis number 130222. Thus, it was confirmed that the first model year as a package car to Chile was 1963.

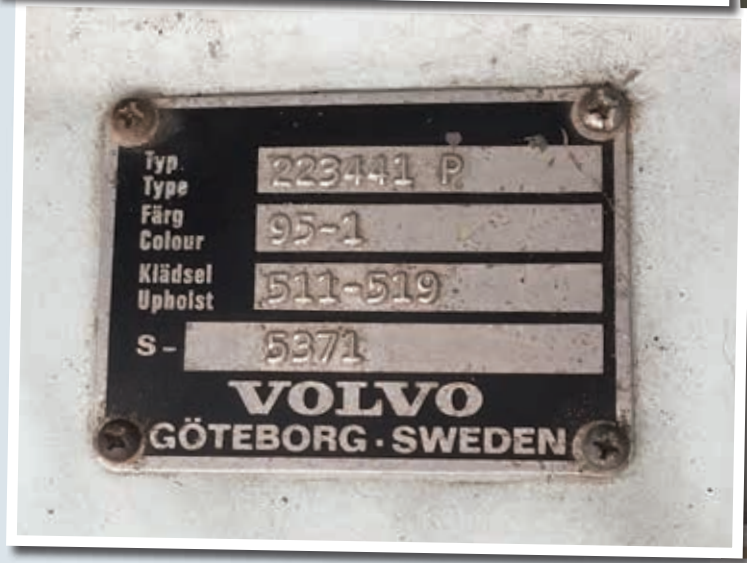
How many Amazons were imported to Chile before DiVolvo started packing cars, or after CKD production ceased, it is difficult to say here and now. Of these, in addition to 2,956 CKD's (see separate comment on this earlier in the article) and imported cars after that time, – in 2015 – there are still about 500 Amazons rolling around Chilean roads the author has learned from Fernando Garetto in Club Volvo Chile. If you want to buy an Amazon over there, prices are between $1,000 and $5,000, depending on the condition of the car.

In the time before and during DiVolvo handled the final assembly, only the 120 Series – 4-door body variant – was available on the Chilean market. Following the discontinuation of CKD operations in Arica, import of the Volvo Amazon from Sweden to Chile started again, as had been done before Averill opened his assembly plant. This new situation also provided a wider selection of Amazons in Chile, and now all three body variants became available, and in addition to the 122S, both 121 and 123GT could be purchased.

While all CKD-produced cars in Chile were delivered with bench type front seat and steering wheel gear lever, the imported cars were equipped as you are most familiar with Amazon. There have also been US models in Chile, naturally with miles indication on the speedometer, but whether these were shipped directly from Sweden or imported from the US is unknown. The last 4-d Amazon exported to Chile was chassis number 233730, type 122341 M, (This was therefore completed at the Torslanda factory). The car had color code 46 Red and was reported finished on November 23rd, 1966, but not invoiced until March 13th, 1967.

Another quote from the planned updated article reads as follows: *«Hopefully, future investigations in Volvo's historical archive can determine exactly when the CKD process started and when it ended at DiVolvo. Of course, this depends on whether it is possible to identify the relationship with the district numbers you have found delivery to, but do not know the «owners» of. It is quite possible that the importer/dealer number that can be linked to Chile may have replaced a previous importer/dealer number, and that therefore cars have been exported to Chile that have not been identified.»*

The author has, as mentioned, been in dialogue with Alberto Averill a number of times over three to four years. As the author's investigations came up with new information, Averill Jr. increased his interest in the project, and at the same time received a hope to know if his father Eduardo was the first to build Amazon in the form of CKD, as Averill Jr. had been told. Averill



considers this important, both for its own part and on behalf of Club Volvo Chile. In January 2017, the author heard from Averill that he had contacted the Chilean authorities in the hope of finding clarifying information in the customs authorities' archives. Averill Jr. will be disappointed because the order of the foreign assembly plants is now finally clarified, but the most important thing for all parties is and has been to find out what is the fact.

Volvo. Till chef för den nyinrättade funktionen produkt och material samt till ställföreträdare för VD, direktör Lars Malmros, vid Volvo Europa NV i Gent, Belgien, har från 1 september utnämnts ingenjör Gustaf Östergren, född 1937. Samtidigt har civilingenjör Ove Lindblad från 1 juli utsetts till fabrikschef för Volvo (Kanada) Ltd i Halifax. Civilingenjör Lindblad är för närvarande chef för avdelningen Utvecklingsprojekt vid Volvo Göteborgsverken. Hr Östergren har innehaft befattningen som fabrikschef i Kanada sedan 1965 och har under denna tid dessutom ansvarat för uppbyggnad och inkörning av den nya fabriken i Halifax. Hr Lindblad är född 1931. Efter civilingenjörsexamen vid Chalmers tekniska högskola i Göteborg anställdes han 1957 vid AB Volvo och är sedan 1966 chef för avdelningen utvecklingsprojekt inom Volvo Göteborgsverken.

G. Östergren och O. Lindblad.

67 - Gustaf Östergren – a good contact

Rarely has an e-mail been as welcomed as after the author sought information both near and far. A little hint, some searches, an electronic address and an explanation of what the case is about, and then the letter or inquiry is sent.

In this connection, contact was established with Gustaf Östergren.

Article from Svenska Dagbladet August 26th, 1968. Gustaf Östergren's various jobs at Volvo meant that he and his family had to move several times. Östergren has told the article author that the last thing he did before the family left Sweden to emigrate to Canada and Halifax was to sell his private SAAB (of all things). It happened the night before Midsummer in 1964, and already in the morning the next day they were leaving.
Sent in by Fredrik Lofter.

Östergren was born in 1937, is an engineer by profession, and has lifelong employment and consequently great knowledge and experience of the Volvo system.

Östergren writes to the author that he had met with Eduardo Averill in Gothenburg, and on the agenda was planning of the assembly plant in Arica. At that time, Östergren was only about 24 years old. Such a meeting was not arranged overnight. It was decided that Östergren would represent Volvo and be the contact person with Averill and DiVolvo in Chile, and that before negotiations could take place, Östergren had to learn Spanish, since Averill did not speak English.

In addition to sitting at the negotiating table, Östergren was also given the task of ensuring that Averill Sr was provided with the necessary equipment to run the assembly plant. Gustaf Östergren writes to the author that Arica was the first factory to assemble CKD's, and that the debut in Arica took place in 1963. Initially Östergren was also to participate in the actual construction of the factory in Chile, but he was instead sent to Nova Scotia for to assist with the impending factory there. Östergren has held senior positions within several of Volvo's foreign assembly plants, and he has been involved in both the planning, construction and operation of these factories. So it can be dangerous for the author to claim that he is wrong.

FE 4786, 223441P. Fernando Garetto, Chile.
The Amazon Station Wagon was not assembled in Chile, but some were imported after the assembly plant was closed. Fernando Garetto received this roof rack as a gift from Averill Jr. for use on his car, and it was one of two found in the shelves from the time when Averill Sr. reigned.
Photo: Fernando Garetto.

Despite what is alleged, the author can confirm that Östergren is not right that Arica was the first foreign assembly plant out of the starting blocks. It is known that DiVolvo started KD assembly from the 1963 model year, which corresponds to what Östergren says, but it is a fact that this plant was actually a couple of steps down in the order of the assembly plants. In the bigger scheme of things this is of course trivial, but for the Amazon nerds this is important to know. ***The plant in Chile was the 6th in the series of foreign assembly plants***, and thus Chile became the last country where

AB Volvo established an assembly plant for the final assembly of Amazon – and not the first.

An undeniable fact is that Gustaf Östergren was a very significant person for AB Volvo and especially within the foreign assembly plants operation, with planning, establishment, building processes – both at the time Amazon was the essential product – and in recent times after Amazon and production of this Volvo model changed status from current to history.

68 - Local production

A «local production» in this context means either that DiVolvo assembled cars within its own factory walls or that DiVolvo used local suppliers. Parts that were delivered and/or manufactured locally in Chile include windows, tires, exhaust systems and batteries. Upholstery was also produced locally. It is known from both cars and pictures from other assembly plants that upholsteries can vary in relation to what one is used to, and the reason why is now understandable. Some chrome trims, without knowing exactly which ones, were also obtained from local manufacturers. It may also be that the bumpers were transported untreated to Chile after the pressing of them in Sweden, and then the chroming was carried out locally.

In addition to Amazon, both the Volvo P1800 and PV 544 were assembled at the Arica plant. It has already been mentioned that DiVolvo, in addition to operating the assembly plant, also sold cars. They also acted as importer of parts and wholesaler to other dealers besides running a service shop. In addition to this, they were also responsible for service and training activities for Volvo in South America. From 1975 all the business was concentrated on trucks and buses for DiVolvo's part.

69 - Volvo Cars in Belgium – before the factory in Ghent

Earlier in the article, it was confirmed that Volvo already had a factory in Alsemberg, and that this was intended for the assembly of trucks and buses. In 2015, Volvo Cars Ghent – the Volvo factory in Ghent – celebrated its 50th anniversary and published a long article called *«Les homme's font l'histoire»* – «people create history» – about their own business. In that article they write that the Alsemberg factory opened in 1964, which is a truth with modifications [1]). It is known that both the Torslanda factory and other factories produced cars before they were officially opened, and the same may have happened in Alsemberg. The report also uses the term «pioneer era» about that phase of history, and it appears that at that time, approximately ten cars and three trucks per day were assembled. Volvo's (Gothenburg) own reports state that the Ghent factory opened in 1964, with no mentioning of Alsemberg at all. Now the distance between the two locations is very small, and the report that comes from Volvo in Gothenburg also does not distinguish between the two factories, but simply calls it (inaccurate) for the factory in Ghent. It is known that the factory in Ghent opened much later than this, but here again it's both possible and likely that some form of production was started before the plant was officially ready.

An article in Svenska Dagbladet dated October 31st, 1963 states that the company Volvo Europa N.V., a newly formed subsidiary of AB Volvo, will take over the factory premises in Alsemberg at the turn of the year 1963/1964. It was no secret that the establishment would act as a door opener on its way into the European Economic Community, the EEC, and that a significant increase in sales was expected within the EEC countries. It was estimated that 75% of Ghent production would be delivered outside Belgium. Lars Malmros was considered the right man to steer this ship and was hired as a director at the factory. Politics and agreements went hand in hand here, and Volvo Europa N.V. in turn, undertook to purchase car parts for both truck and passenger car production within the EEC countries. As you understand, the story repeats itself, and the same pattern was followed for this assembly plant as well.

In addition to bodies and body parts, both engines, gearboxes and certain other parts were still to be manufactured in Sweden, and in accordance with the agreement, these were imposed with 14% in import duties. For AB Volvo, such a solution nevertheless led to positive growth, since production at the engine and gearbox factories in Sweden increased significantly as a result of the package cars. As a result of the final assembly taking place within the EEC, the upcoming 22% high tariff protection could be avoided.

There were thus two Volvo factories in operation not far from each other, both near Brussels. The factory premises in Alsemberg were Volvo's designated target for truck assembly, and the premises were to be rebuilt and adapted accordingly. Production capacity was planned for 3,000 trucks per year, and Volvo counted on employing 150 people. According to the article, production should start as early as January 1964.

[1]) It has been read that SBMA was involved in the final assembly of Amazon on the Alsemberg premises. The fact that SBMA had every opportunity to combine its ownership of the factory premises, its expertise in final assembly and the role of importer makes it likely that SBMA had already assembled Volvos in this car factory – before Volvo bought the plant.

At what time AB Volvo/Volvo Europa N.V. took over the production responsibility from SBMA, the author has not been able to determine from reports he has read and has been published by AB Volvo, but the article in Svenska Dagbladet writes that the transfer should take place at the turn of the year 1963/1964. That time is in accordance with the time AB Volvo – and as previously mentioned this is somewhat inaccurate – uses for start-up in Ghent.

Apparently, these details are not important when it comes to the final assembly in Belgium. Considering what has been read about both the known and the two unknown district or importer numbers applicable to Belgium, it is important to find the connection between the change of district numbers and the fact that Volvo took over responsibility for production. In this way, it is possible to distinguish between which cars were delivered to SBMA and which were delivered to VENV.

Information acquired during one of the archive visits revealed that the former district number – or importer number – was changed on deliveries to Belgium during the period between December 23rd, 1960 and until a new invoice dated February 8th, 1961 was completed. At that time, it was not clear whether this was due to the relocation to the new district number system, or whether Volvo had itself replaced SBMA as an importer.

Based on the stated dates, it must be concluded that it was SBMA that had previously had importer number 874, which subsequently got its 4-digit number 1260. District number 1270 was assigned to Volvo Europa N.V. when they took over after SBMA at the end of 1963.

Despite this, it is uncertain exactly from when Volvo Europa N.V.'s Alsemberg production is to be counted among the assembly plants. You can refer to their own reports that confirm 1964, but you also know that Volvo's own employees assembled 1963 models at an earlier date. Thus, based on this verified information, Volvo Europa N.V. in Alsemberg is in the same era as the factory in Arica.

Nevertheless, it is wrong to count V.E.N.V Alsemberg in the series of newly established assembly plants, as it was the result of an acquisition and change of ownership.

Planning of assembly plants in several continents was already well underway, and the need to assemble a larger number of CKDs also in Europe was rapidly increasing. At this time, the new factory in Ghent was well beyond the planning stage but still far from being complete.

70 - SBMA – a significant player also after selling the factory

SBMA was responsible for the sales of Volvo in Belgium until 1984, when Volvo itself began to increasingly take over the import to its foreign dealers. This was a trend in other countries as well, and independent importers gradually disappeared. Volvo had two importers; Volvo Cars Belgium (now called Volvo Car Belux) and Volvo Trucks Belgium. The factory in Alsemberg produced passenger cars until the new factory opened in Ghent, and heavy trucks until 1990. While a total of 251 employees at the plants in Alsemberg and Ghent produced 2,650 cars in 1964, the number increased to 5,551 in 1965, divided between the two factories. In the initial phase of the new factory, Volvo had its own buses that transported employees between Alsemberg and Ghent.

71 - The last pieces of the puzzle

Today, every Volvo dealer has its own district number – or dealer number, a system that has been introduced in recent times – seen from the «Amazon perspective». At the time when the Amazon was on the assembly lines, it was basically a district number per country/importer (yet there are many exceptions to this «rule» – or practice). When it finally was possible to link the last two district numbers to Belgium, this was confirmed by Tommy Joelsson and the author had finally been able to conclude that all the factories that assembled Amazon outside Sweden were identified and mapped.

72 - From Dartmouth to a new plant in Halifax

On May 31st, 1966, Volvo announced that in connection with the termination of the existing lease in Dartmouth, they had decided to relocate to new premises in Halifax. IEL had subsidized the construction of the new facilities by as much as one million dollars.

In 1967, when the lease for the Dartmouth premises expired after the agreed 3-year period, the Volvo factory moved to Pier 9 in Halifax. These floor space in the new premises amounted to 17,600m²/190,000ft², which is just over three times larger than the 5,000m²/54,000ft² they had available in the premises they moved out of. Despite the considerably larger floor space, however, the factory was not a large factory, compared to other car factories. This new plant was on the opposite side of the harbor compared to the Dartmouth plant and was only a 15-minute drive – a few miles away. Here Volvo got better conditions and better space, and better working conditions were due not least to being able to build the entire car in the same production line, as you could at the Torslanda plant.

Volvo stated that during the initial phase, one third of the floor area was to be used which meant that there were great preconditions for future expansion. The fact that (only) a third was taken into use immediately after moving in must be seen here as they moved all production equipment from Dartmouth, which was only one third the size compared to the new premises at Pier 9. Volvo commented at the same time that the location in the harbor, close to the dock facility opened for a much more efficient handling of both incoming and outgoing goods, to and from the factory.

Directly converted into production, this would result in an annual production of 6,000 cars on a 1-shift schedule and 10,000 cars on 2-shifts.

73 - Moving the plant

As mentioned, the move from Dartmouth to Halifax meant much larger factory premises. But the factory itself – the production equipment – was in principle exactly the same as the one used for three years already. During a 10-day relocation period, the equipment was moved from the old premises into the new ones, fitted and made operational. In addition to expanded capacity, the move to larger premises resulted in a large, practical production advantage. On the Dartmouth production line, the workers were forced to stand under the car and work with their hands over their heads for periods and during certain tasks in the assembly. In the new premises there was room for reversible mounting platforms, and the workers were now able to turn the cars as needed to be able to work in a more comfortable working position.

Incidentally, the factory moved yet again, and this time in 1987, to Bayer's Lake – an industrial area in the outskirts of Halifax. At Bayer's Lake, production took place until 1998 when the adventure was over.

All three different body variants, both 2-, 4- and 5-door, all in the sports edition, were marketed as «Volvo Canadian». Cars belonging to the designation «Volvo Canadian» are the 2- and 4-door versions of the 122S, while the Station Wagon was marketed as «Volvo Canadian Station Wagon». The reason that the cars «only» were available in the sports version was that cars with the A-engine were not considered to have sufficient output power to meet the expectations on the market. Later, the 123GT was also delivered from the same factory, then as the «Volvo Canadian GT». Local suppliers also provided the factory in Canada with tires, batteries and windows. The cars that were sent to Halifax were also SKD's, and the pre-painted bodies were shipped from the Torslanda factory.

Volvo's first manager in the factory in Canada was Alois Rösner, followed by Gustaf Östergren, Ove Lindblad and Gunnar Jennegren. Kaj Nielsen took over in 1990 and was also the one responsible for the closure of the factory in 1998. This forced itself as a result of changes in the customs, import and export regulations. In 1994, the United States, Canada and Mexico had signed a trade agreement, NAFTA (North American Free Trade Association), which thus had consequences for, among other things, Volvo's factory.

74 - Politics

When the agreed period in the lease Volvo had for the premises in Dartmouth was nearing its end, and it was known in advance that it would not be renewed, the closure was both natural and as expected. The premises in Dartmouth were too small, and production capacity struggled. It had gradually reached 5,000 cars produced in a year, and that was the maximum number that could be produced there.

Early on, it became clear that Dartmouth's premises would not meet Volvo's future needs, and IEL worked to provide new premises. Almost immediately, rumors spread that Quebec and Ontario would fight with Nova Scotia to get the new Volvo plant.

In 1966, Volvo relocated its Canadian headquarters, creating a new headquarter in Toronto at a cost of $1.2 million. This set fire to the earlier rumors that Volvo would move away from Nova Scotia, which would result in a significant decline in Nova Scotia's industrial operations. So, Volvo had good cards on hand when they were sitting at the negotiating table again. In the meantime, Volvo had again asked Canadian authorities to postpone the requirement for 40% Canadian and North American components in the cars on the grounds that such requirements would cause Volvo's car production in Canada to be unprofitable.

The negotiations resulted in the Government of Canada deferring the requirements until July 31st, 1969. This, as well as IEL's subsidy on civil construction and a special tax deduction agreement agreed with the Halifax City Council, at that time ensured that Volvo remained in Nova Scotia.

The new agreement meant that instead of paying normal tax, Volvo would pay $6,000 in property taxes, $8,000 in compensation for corporate taxes and $2 for each car produced in the first five years – and with an opportunity to extend the agreement for another five years during the first contract period.

The Halifax plant around 1971. On the dock we see finished Volvo 140s with the front that came on the 1971 model. The plant was just over three times larger than Dartmouth and better suited for car production and also allowed for future expansion. Both the port and the railway were easily accessible.
Volvo's Historical Archive.

Under the same agreement, the requirement was that only 25% of the car's components should come from local production per year per July 31st, 1966 and this would increase by 5% annually until the government's demand for 40% local production should be met on July 31st, 1969. Canadian authorities considered the agreements signed to be an investment in the future, thus ensuring that Volvo would remain in the province for many years to come. Volvo stayed in the province, but this was due to the launch of the safer 140-series, which is a whole different story. Still, the percentage of locally produced parts should not turn out to be greater than 20% in 1970, either, and hints of relocation and negotiations similar to those that had been used in the years that the Amazon was on the assembly line would continue in the time after.

The assembly line consists of two long and parallel lanes where the cars initially stand on carts and are pulled forward by a chain in the middle of the lane. More and more parts are being fitted at the different stations. At the end on the first lane, the cars are lifted, turned and put on the high lane where the engine, powertrain and axles are mounted. Along this lane everything under the car is mounted and the car is then put down on the floor and rolls on its own wheels to the end of the lane, still pulled by the chain.
Source: Volvo's Historical Archive.

75 - The introduction of the 140-series put an end to further assembly of the Amazon

Compared to other car factories, and despite the considerably larger floor space at Pier 9, the Halifax assembly plant was not a large one and it had its clear limitations. Neville Britto, (presented later in the article), says that although production capacity was significantly increased, only one car model was on the assembly line at any given time. This is explained by the fact that there was not enough storage space in and around the production line to be able to produce two different car models at the same time. There are two possible explanations for this. One is that all production was concentrated on the new 140-series and that the final assembly of the Amazon was therefore a saga. The second explanation is that the 140-series was produced at one time, and alternately, during other and shorter periods, the Amazon was assembled in the plant. The fact that the 140-series included both the 142, 144 and 145 models did not contribute to better storage capacity.

Based on the fact that it was still 1967, it is unlikely that Amazon production was terminated at such an early stage as the 1968 models, and so it is reasonable to believe that the Amazon was assembled in Halifax as well in 1968.

The production target set in the new premises was 10,000 units, but even though capacity doubled, this did not result in a particularly large number of Volvo Amazons rolling off the assembly line in Halifax. It was the 140-series that was designated to become the new volume seller, and it is understandable that these were prioritized over Amazon, as AB Volvo at this time fully understood that it was an outgoing model.

76 - The US says no to further import of the Amazon

Export of the Amazon to the United States ceased following the 1968 model year due to the fact that Volvo Amazon no longer satisfied a number of new requirements in the United States, such as stricter emissions requirements.

In 1968, the Johnson administration in the United States introduced the first of a number of strict federal motor vehicle safety standards in the United States – Federal Motor Vehicle Safety Standards (FMVSS). Volvo 144 was already launched and at the same time met (and exceeded) these new requirements, which Volvo Amazon did not. Not all of the new rules were introduced at the same time, and as a result of Volvo making some immediate modifications, Amazon also met the requirements for the 1968 model year, but then it was inevitable. The fate of the Amazon was already sealed at this time, and no effort was made for a continued import of Amazon into the United States. It was now the new and more modern Volvo 144 that was to be Volvo's face outwards. Unfortunately, the exact date of when the import stop was introduced is unknown.

77 - Late US model in Norway

In any case, an Amazon of the special 1968 USA model has found its way to Norway – and the car may be among the last ones delivered there. The car has the modifications and adjustments that needed to be made to be approved in the US. It includes, among other things, a dual circuit braking system with a circuit for each axle, and as you understand it is different from the triangular system that was delivered on the 1969 and 1970 models.

78 - Amazon still popular in the US after importation ended

What to do, when neither the dealer nor the importer can deliver the car you want to buy anymore? Then there are two options. Either find another type of car or solve the problem on your own. The solution for those US citizens who would buy Amazon even in the period after the import stop came into force was to order and buy a car in Canada and then import the car privately to the US. It is probably wrong to use the word «many» in this context, and numbers are not possible to give or to estimate, but some Americans did in fact buy new Amazons this way.

79 - Volvo Canadian – with right-hand steering?

As a result of Fredrik Lofter's investigations, a new question had emerged along the way. What is the reason why it is specifically stated in the parts catalog that something applies to «VST» – left-hand drive – on Canadian cars? Was it true that, contrary to everything you know and have learned – right-hand drive cars were manufactured at the Halifax plant? The answer to that is a definite no.

The factories in Sweden and the assembly plant in South Africa were the only two factories that built right-hand drive cars. The factories in Sweden may have manufactured right-hand drive cars with Canada/(USA) specification also for use outside North America, for example, intended for England/United Kingdom, Cyprus, Malta – or Australia, New Zealand, Malaysia, Hong Kong or Singapore for that matter. Theoretically, the factory in South Africa could also have built cars of this specification, but here the theory is enough.

The fact that the hazard lights basically only fits left-hand drive cars is not so strange, as it has to do with the fit and length of cables.

This Norwegian registered 122S was originally sold new in Vancouver, Canada. However, it was not assembled in Halifax. The car relocated to Bergen as moving goods when the owner, Lloyd Dronen, decided to move there after completing his education in Canada. Despite the name, Lloyd was born of Norwegian parents, who in their time emigrated to British Columbia. Photo: Lloyd Dronen.

The Halifax plant again a few years later, in 1973/1974, and on the dock we can see Volvo 140s of model year 1974 ready for delivery. Small changes around the building can be seen, new buildings being added, and parts of the railway yard have become storage area for car bodies. The ship that lies at the dock has nothing to do with the factory. M/S Koralle was a local ship that run aground in 1969, was recovered but put ashore until 1977 when she went to her last port by her own machine to be scrapped.
Source: Volvo's Historical Archive.

Since Canada is not strategically located near countries practicing left-hand traffic, and even though most of the car's components are the same whether the car is left- or right-hand drive, another production of both types would have caused logistics problems at a factory that already had challenges with the storage capacity of the production line.

80 - The digit «9» disappears on Canadian cars

During the same period as US imports ceased, the «4» number indicating US specification was reintroduced on cars to the Canadian market, and various theories have been pending as to why. The author

A picture from the assembly line, in the same place as the previous picture: This is the first lane where the cars have come to an end and are lifted over to the second lane. These two lanes must keep the same speed, but in the picture there has been a delay on the second lane caused by a car (the yellow one) which has then been lifted off from the lane and placed in the middle to prevent this car from stopping up production. Source: Volvo's Historical Archive.

of the article can easily determine what is the correct explanation but chooses to present a more detailed analysis – which can also help to avoid further discussion on this topic.

Theory #1: There have been doubts as to whether the Amazon was actually built in Canada in the model years 1969 and 1970. Could it be that all Amazons to Canada during this period were built in Sweden and that this was the reason that the digit «9» was replaced with «4»? In this case, the reason is probably that all the production capacity in Halifax was already concentrated on the 140-series at this time. Unfortunately, it is not clear from the delivery reports or production cards whether the individual car exported to Canada was a KD or a finished car if the digit «9» is not in the type designation. It is therefore difficult to find out centrally at Volvo – in the Volvo Historical Archive.

Theory #2: In order to distinguish the US editions, whether they were finished in Sweden or assembled in Canada, from both «ours», Belgium- or South Africa-assembled KDs, the digit «4» was reintroduced. At this time, Amazon was built only in Belgium, Canada, Sweden and in South Africa. Cars produced in Belgium had the digit «9» and left-hand steering, in Canada the digit «4» and left-hand steering, in Sweden the digit «3» and left- and right-hand steering, and in South Africa the digit «9» and right-hand steering. There was now a separate type designation for each manufacturer, and it was very easy to know where a car was built or finally fitted.

Today, all factories have their own code in the VIN number.

A thing that makes theory #2 probable is that the type designation 133441 is linked to Canada production in the foreword in the B20 Amazon parts catalog. Nevertheless, it must be added that there are also Amazon editions that are not listed in the catalog. Another thing to note is that the parts catalog was written and produced a long time before the cars came on the market, and thus it is not to be considered as proof of what was produced or not.

Volvo Amazon Picture Gallery and Fredrik Lofter have searched for evidence that the factory in Halifax assembled 1969 models, but despite all efforts, this has not succeeded, neither for Fredrik Lofter or for the author of the article.

Fredrik Lofter received images of an alleged 1969 model Volvo Canadian a while back, and despite the owner claiming that the car with the type designation 133441S 325065 was assembled in Canada, this can by no means be proven. The car does have a «Volvo Canadian» badge on the trunk lid, but it is quite clear that this did not sit there from when the car was new. Such a badge will nevertheless be no proof of Canadian assembly, and other typical Volvo Canadian characteristics of the car are missing.

So far, it was the status quo – nothing was neither proven nor disproved.

81 - Did Volvo Canadian exist as a 1969 model?

Without evidence, it is difficult to conclude anything – and finding the correct explanation for this mystery has created a lot of headaches. Still, the solution would come one day.

In search of strong, missing evidence for or against, the author contacted Gregg Morris, one of the leaders of the Volvo Club of British Columbia – and it is understood that this is a Volvo club in Canada. He has both owned and owns several Volvo cars himself, and he has never seen a 1969 or for that matter a 1970 model Amazon that was assembled in Canada. In connection with the feedback to the author, he had sent a copy of the e-mail to two colleagues in his club.

One of these was ***Neville Britto,*** who would turn out to know more about the factories in Canada than most people. Here Gregg Morris could tell that Britto had provided his research material on the subject of the Volvo plant in Halifax, and Britto himself writes that he had been researching this and the factories in Canada in general for more than ten years. Britto emphasizes that it is not a «scientific dissertation».

The statement from Neville Britto:

«To answer your question to the absolute best of my knowledge, no there were no 122s (which is the term they generally use on Amazon – author's comment) made in Canada after the 1968 model year. The first Dartmouth plant did build a handful of 544s. I can 100% confirm that the plant was building the cars in 1964 (production may have started in 1963 though, but I am unsure). It is worth mentioning that only a handful were built in Canada.

133441S 325065 122S. **Not** *a Volvo Canadian. The fact that a rare car is more attractive on the sales market is understandable, but it does not hold to retrofit a badge of, for instance, this type for the car to become rare, or even one-of-a-kind. The 1969 model was not assembled in Canada! Photo: Unknown.*

Amazon 122S. 133341 272392. Land of Lincoln, Illinois. Swedish made 1968 model, imported to the USA.

133951M 278032. Volvo Canadian GT.

133951M 278146. Color code 95 Canadian GT for sale.

Volvo was winding down the Lundby plant where the 544s were made and as you know, 1965 was the last year of the 544. There isn't a whole lot of information on Canadian production of the 544s (likely because so few were made). Gregg [Morris] actually has one I believe!

There were three plants in Halifax that Volvo used from 1963-1998. The first plant in Dartmouth was exclusively a 122 plant. They shut that plant down and moved in March 1967 to the Pier 9 facility and built a few more 122s before switching to the 140s a few months later, it's close to impossible to determine which month exactly that shift occurred though.

The 122 was extremely popular in Canada and there is proof that Volvo Canada imported some Swedish made cars into Canada after production at the Halifax facility switched to the 140 series. These models would have been 1969 and possibly even 1970 cars fitted with the bigger B20 motors but retained the «4» in the VIN codes as they were essentially «export» models, they just weren't sold in the USA. As far and VIN codes go, Volvo only gave Canada a manufacturing code for cars specifically built at the Halifax plant. Canada never has its own market code, so all Swedish built cars meant for Canada got a typical North American «4» on the VIN.»

Britto also mentions that only cars assembled in Canada had their own special factory code («9» in the type designation) from Volvo, and that Swedish-built cars exported to Canada received «4», indicating product intended for the North American market. I.e., cars built in Sweden intended for export to Canada should have had their own number code, but not «9» and not «4».

Britto continues:

«You have to keep in mind that the first two Halifax facilities were small, they simply did not have the room or warehouse space to handle both the 122 and 140 series. I've talked to just about everyone I could find that worked at the facility and all agree that they never built two series at the same time. Had Volvo built 122s in Canada after 1968 they would have been very easily identifiable as they would have all been federally mandated to have full amber front turn signals, non-reflecting dash trim (all windshield trim on the 1968s were painted matte black), red and amber non-lighted side signal reflectors like the 140s/P1800s and a 2-circuit brake system. The Swedish made ones were not required to do so.»

Now, there are several of the mentioned details that were common standard equipment also with us on a 1969 model, but that is not relevant in this context.

82 - Gustaf Östergren – another welcome contact

Parallel to Gregg Morris's request, the author also sought contact with Gustaf Östergren. Östergren's very outstanding and significant participation in Volvo's overseas production has been read about in the sections dealing with the factory in Chile.

Perhaps Östergren could also answer the author on the question of whether Amazons of model year 1969 was built at the Halifax plant? Östergren did, and his answer was a short and concise «no». Still, he also mentioned that predetermined number codes did not always match as well as one had previously thought.

Therefore, based on solid and similar responses from two people who have been involved in very different ways in Canada's Amazon related history, it must be concluded that it is theory #1 that is correct, that the Amazon model year 1968 was the last to be assembled in Canada.

83 - The definitive end

Something else interesting to ponder about is the number of Amazons 1968 models that were assembled in Canada. It is obvious that the shift to the new 140-series on the assembly line took place in the fall of 1967 – in addition, the 140-series and the Amazon were not on the assembly line at the same time. That could mean that the factory only had a few weeks to finish assembling Amazon before that era also came to an end. Consequently, there were a limited number of cars they managed to put together in the relatively short space of time. It could also be that the production of Amazon and 140 went on alternately, and that Amazon was finally assembled for short periods even in the first half of 1968.

The last 4-door car exported to Canada had the identity 122941M 232336 and was painted in the color 96 Dark Blue. The car was invoiced on December 7th, 1966.

The assembly plants in Canada only produced left-hand drive cars.

An anniversary for AB Volvo, for Volvo Europa N.V. and for both Swedish and Belgian industries. Prince Bertil officially opens the plant in Ghent on November 3rd, 1965.
Source: Volvo's Historical Archive.

84 - Belgium-produced SKD's in the time before the Ghent factory

Just as the assembly plant *Halifax*, as mentioned earlier in the article, is *widely known t*o be the first factory in North America, the corresponding factory in *Ghent* in Belgium is known to be the first in Europe, outside Sweden. There are several common denominators, one based on *«common knowledge»* is incorrect in that the said cities were not first out, and the other, that both of these factories were fully owned by Volvo, is correct.

With a view to the latter, it can be argued that the statements are not wrong, that both the aforementioned factories are the first, owned by Volvo. Should this interpretation of «foreign assembly plants» be included in the criteria for writing this article, none of the other assembly plants would be mentioned, as only the factories in Canada and Ghent were wholly owned by AB Volvo.

Due to the *«common knowledge»* it is easy to conclude that it was at this time that Volvo started assembling SKD's in Belgium. But Volvo Amazon was assembled in Belgium long before the Ghent factory opened its doors. As mentioned earlier in this article, KDs were shipped to Brussels as early as 1960, and as a result of this information, it could indicate at an earlier stage that the very first completed unit of KD-Amazon saw the light of day here.

The information that CKDs were sent to both Belgium and Holland already in the B16 version is for the article author of a recent date (from December 2016). The author had been researching the model year articles for a couple or three years by that time, and at an early stage had confirmed information from certain sources that the Amazon 1963 model year was assembled in Alsemberg and that the assembly job was carried out by Volvo's own employees. Alsemberg is a small town just 2km/1mi from Brussels. What specific cars are involved and what the reason is why the author has put a lot of energy into exactly that topic will covered in the article on «Amazon – 1963 model» when it comes in print.

85 - Ghent – Belgium

The fact that a new factory was underway in Ghent in Belgium was known, there was no secrecy surrounding that project. *(If you wonder about Gent in this regard, it is explained that there are two different ways of spelling the name for the same city, and not a confusion between two cities – author's comment).* Neither was it a secret that such a factory could not be completed over night. Another aspect was to decide what must, should, can and should be accomplished at this factory. Should

Top: From the opening of the plant in Ghent, from the left Lars Malmros, Prince Bertil, Antoon Spinoy and Gunnar Engellau.

Middle: Brigitte Everaert was a great asset to Volvo. She was not hired to be the flower girl for Prince Bertil, but was employed in the production. She was also hired as a photo model in connection with car commercials, including Amazon. Later, she would also start working in the paint shop.

Bottom right: Brigitte Everaert was told by her manager that it was she who would hand over the flowers to Prince Bertil when the Ghent factory was inaugurated. On this occasion, she was also given an English text, which she was to learn to say and to understand. From the left Brigitte Everaert, Gunnar Englellau and Prince Bertil.

Bottom left: Lars Malmros is known for being the founder of the factory in Ghent, and he was also known for being a perfect manager, a true gentleman and someone who really loved people. Here depicted in a cheerful chat with Brigitte Everaert. Source: Volvo's Historical Archive.

To Ghent, the same kind of crates with bodies arrived that were used also for the other assembly plants.
Director Lars Malmros proudly applauds the very first car leaving the assembly line at the Ghent factory on June 28th, 1965. As the picture shows, the car was not ready for delivery, but at least it was driven out of the plant by its own machine. Source: Volvo's Historical Archive.

the package cars be delivered fully painted from Gothenburg or should the assembly plant be built with the purpose that also the paint job should be done locally?

Furthermore, agreements should be made with implied authorities on what can be imported from the factory in Sweden, what requirements are made regarding parts and equipment. What is required to be produced by various local suppliers, or possibly at the assembly plant itself, are important elements. All such agreements must be made in advance, and it goes without saying that a lot of meeting activity is required and many hours of paperwork before the shovel is put into the ground. But they eventually landed an agreement, which was signed in December 1963.

Not least, this was a major international breakthrough politically. It was no accident that Ghent was just considered a suitable place to build the factory. In addition to having a solid transport infrastructure on site, the factory was geographically located within the EEC, the European Economic Community, which the European Union used to be called. This ensured that Sweden/Volvo Car Corporation got a leg within the union. Sweden did not become a member of EU until 1995, and the fact that Volvo was allowed to operate within the EEC without belonging to one of the member nations opened up great opportunities and also improved Volvo's own import and export strategy.

86 - Amazon was the first car from «Volvo Europa Naamloze Vennootschap» in Ghent

«Naamloze Vennootschap» means «Public Company» which is probably the most commonly used term for an international company. The name is complicated and cumbersome to both spell and pronounce and is hence often shortened to Volvo Europa N.V. or even easier V.E.N.V. On June 28th, 1965 the very first car rolled off the assembly line in the new factory in Ghent. For us Amazon enthusiasts, it was pleasing enough that a Volvo Amazon got this great credit. Photos of the scene show that the car was missing some parts before the production card could be stamped «finished», but at least it was driven out of the factory premises by its own machine.

87 - Celebrity visit

H R H Prince Bertil of Sweden was honored to also declare this new factory officially opened, which he had also done two years earlier when the Dartmouth plant in Nova Scotia in Canada opened. The big event in Ghent took place on November 3rd, 1965. As previously mentioned, this factory was also fully owned by AB Volvo, as was the factory in Canada.

The first car assembled at the factory was a Volvo Amazon. During the period from the opening to the end of the Volvo Amazon era in Ghent in 1969, according to one source, 26,310 cars of this model were assembled. However, the exact number is somewhat uncertain, because in another source the figure is 26,307. Once again, it is not possible to rely entirely on «reliable» sources, not even in cases where there are officially confirmed figures from the Volvo factory, as they are also manually processed. The author guarantees only the numbers that follow a (personal or a new) counting and control of the production cards.

At its opening, the plant in Ghent had a capacity of assembling 14,000 cars annually, and at that time employed about 600 people. Until 1972, this factory was only an assembly plant, and no single Amazon has ever been manufactured from scratch at the Ghent plant – it has exclusively been about assembly of SKD's shipped from Gothenburg. By the way, all versions of the Amazon were assembled in Ghent.

All of the Amazon package cars that were sent to Ghent, as the SKD designation shows, were painted in Sweden. The paint shop in Ghent was not finished until the 1970s.

The last 4-door Amazon sent to Ghent was in the chassis number series 233959-234173. In an effort to gain more spare capacity to produce the 140-series in Sweden, the cars delivered from Torslanda were both 121 and 122S in a blissful mix. For example, the car with chassis number 233662 was a 122941M with B18D engine, and 233748 was a 121941M with standard B18A engine. The first of the cars in this latest series was a 121941M, and the very last, with chassis number 234173, was a 122941M with color code 96 Dark Blue. It was reported finished on December 23rd, 1966 and invoiced on January 3rd, 1967.

All of the 480 4-door cars with higher chassis number than the above were exported to South Africa. In the article published by the Ghent factory in connection with its 50th anniversary, one can

The picture shows a type plate indicating that the car was assembled in Ghent. Ghent exported cars to, among others, Germany, and probably this is a separate type plate for German cars needed to meet local requirements.

read from the production statistics for Volvo Amazon that a milestone was passed in 1965, when the production number passed 5,000 cars. A new milestone was passed already the following year, it was also the year with the highest number of produced Amazon, both in total with 119,000 cars, and over 8,000 of these in Ghent. Subsequently, production figures dropped drastically, but a total of just over 26,000 Volvo Amazon should have left the assembly line in Ghent. How many cars other assembly plants in Belgium assembled are not known and are not included in the production figures referenced above.

The author's last visit to Volvo's Historical Archive was made in August 2018. There was only one day available, and therefore only the opportunity to check little but very important information for use in this article.

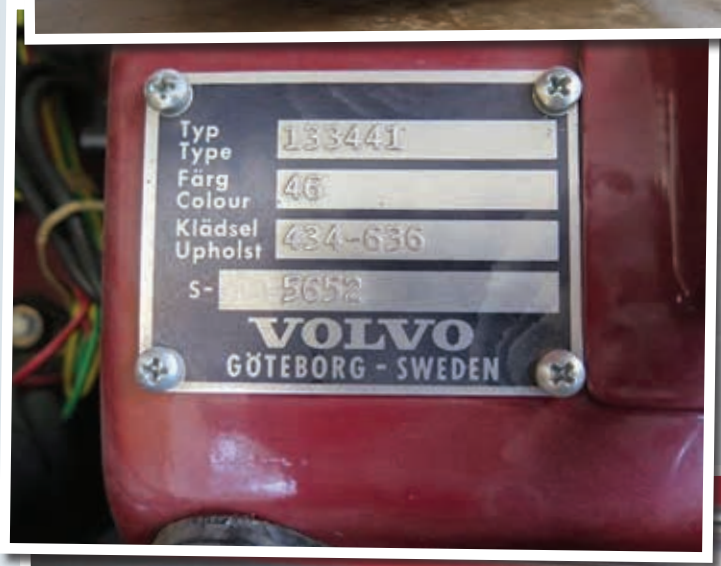
88 - Early end with 4-door from Sweden

In the year 1967, not a single 4-door Amazon was manufactured at the Torslanda factory. The last car of this type that was built in Sweden was finished at the factory on November 29th, 1966. The car was right-hand drive, had VIN number 121342M 233747, painted in color 95 Light blue and was shipped to England on December 23rd, 1966.

89 - 1969 – the last model from Ghent

One question that had come up along the way and that was not found anywhere in the article material was whether the factory in Ghent assembled the 1970 model Amazon. Among the notes available to Joelsson, Lofter and the author, there was no indication that this had happened. A careful examination of the production cards in the hours available at the August 2018 archive visit did not show a single 1970 «KD» sent to

Glimpses from the production at Ghent: There is a buzzing life on the dockside at the port of call and large quantities of goods must be unloaded and put in stock. Along the assembly line, the cars become more and more complete. Finally, the car is ready, and if it passes final inspection, a green «OK» tag is put in the windshield. The car is now ready for transport to customers throughout Europe, or to markets even further away. In parallel with Amazon, 140 was also assembled and in the picture, a finished car rolls off the assembly line. 1969 was the last model of Amazon assembled at Ghent.
Source: Volvo's Historical Archive



➢ *133441T 344316, Thomas E. Meacham. Non-Canadian built 122S. 1970 model Amazon with US specification is very rare, and it was doubtful that it was possible to find evidence that they were actually built. Presumably they were only manufactured to order. For Thomas Meacham, who lives in the US, there was an added hurdle to buying new Amazon. Because Amazon was no longer allowed to be sold new in the United States, Meacham had to buy its car in Canada and import it privately into the United States. The picture shows the type plate on a 1970 model 122S – USA model, also this is without the model year letter. As stated in the article, attempts were made to find a red thread for cars with and without embossed model year letter, and one theory was that US models produced in Sweden had the letter code and that cars assembled in Ghent did not have this code. In that case, one could easily see if a USA model was built in Sweden or assembled in Belgium. As we can read in the article, this car must have been built in Sweden – manufactured for export to Canada – because 1970 models were not built in Belgium. This means that not all Swedish-produced cars were embossed with a model year letter, either on the type plate or on the firewall, as another picture will show. The S-code shows that the car has factory-fitted hazard warning lights. An image of a type plate or a firewall from a US specification car with type designation 133441 or 223441, model year 1969 or 1970, which contains the model year letter has not been traced, and it is doubtful whether the model year letter appeared at all on these cars. In the picture you quickly notice that the model year letter is not embossed into the metal. But if you look more closely you also see that a zero has been entered in front of the six digits in the chassis number, which is not common to see.*

Belgium. Based on that and what one already had a strong suspicion of, it must be concluded that the factory in Ghent did not assemble Volvo Amazon with year model letter «T», for the model year 1970.

90 - Volvo Amazon – towards the definitive end

The model year code letter «T», which states that it is a 1970 model, would be embossed on cars manufactured in only two countries – in Sweden and in South Africa. As the article states, the final assembly of Amazon was phased out at the last of the other factories in the 1969 model year.

This means that a 1970 model Volvo Amazon became unavailable virtually everywhere, especially where it had been assembled in the past. Imports of completed cars from Sweden led to a significant increase

➢ *On February 17th, 1968, the assembly plant in Malaysia was officially opened with great festivity. The picture shows the first Volvo that was assembled at the Batu Tigu factory in Malaysia. The text on the car door can be interpreted in different ways; either that it is the first 144S assembled there, or – which is also the case – that it was the Volvo 144S which was the very first car driven out of the assembly line at the factory. The Amazon was never assembled in Malaysia. Unlike the assembly plants that got the bodies more or less finished from Sweden, this is a factory that buildt the cars from scratch. In the jig, the parts are fixed in the right position and welded together. This is how the bodies grow until they are ready for painting and then finally assembly to a complete car. Amazon shines with its absence, but both 144 and 145 were produced in Malaysia at the start of 1967/1968. Later, 164 were also produced at the factory.*
Source: Volvo's Historical Archive.

in prices in those countries, and the public chose other alternatives.

91 - Rare 1970 USA model

Often, one can read about cars that are presented as very rare, and in some cases it's actually true. Unfortunately, there are also many such claims that have no basis in reality. An example was a 1969 model that is said to be assembled in Canada, which was used as a sales argument, but was not built there at all. Many have cars that are claimed to be original cars, but which were never fully delivered to Volvo specifications.

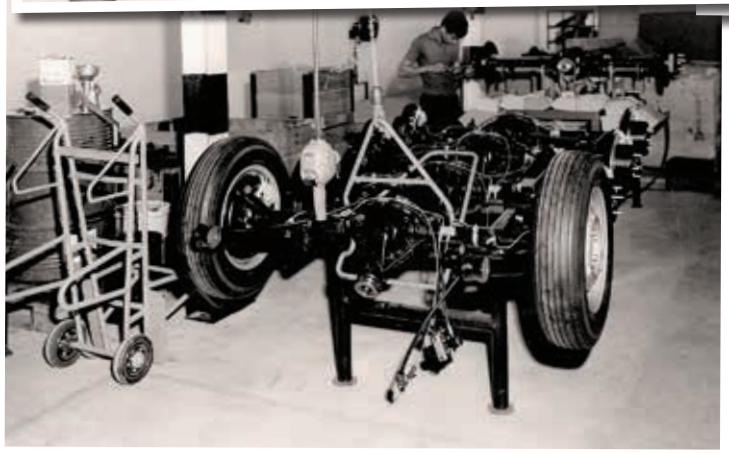
Thomas E. Meacham has a 1970 model US-specified Amazon, a 133441T, but he does not claim that it was built in Canada or that it has any original equipment that does not exist. Meacham himself is quite clear that it was only at the Torslanda plant that such cars were built. Obviously, it is not an ordinary car to see along the roads today, but neither was it in the early 1970s. Not many of these were sold, and they may actually be special orders for those in question.

92 - BatuTigu in Shah Alam – Malaysia

Shah Alam is the capital of the state of Selangor, not far from Malaysia's capital Kuala Lumpur. After the first Volvo was imported to Malaysia in the early 1960s, Volvo conquered Southeast Asia here in 1967 when they as the first European car manufacturer set up an assembly plant in this part of the world as well. Swedish Motor Assemblies (SMA) was a 50/50 collaboration between the local Federal Auto and AB Volvo. It was neither a modest effort nor an uncomplicated process to implement; it was unplowed land,

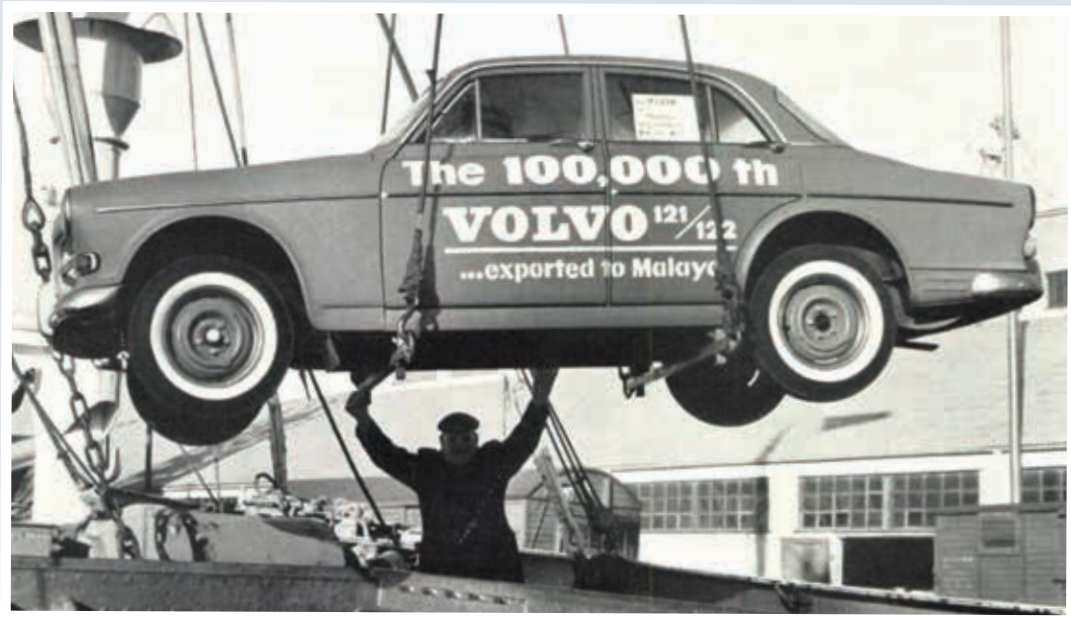

VOLVO


VOLVO 144S
No.1




VOLVO


VOLVO



➢ The Volvo Amazon that got to mark the milestone of being Volvo no. 100,000 to be built was exported to Malaya, an expansive export market in 1962. Malaya, which is now incorporated in Malaysia, once belonged to the Malaya Federation, a federal state on the Malay Peninsula. After World War II, the federation was a British colony until August 31st, 1957, when the country became independent. In 1963, the state was renamed Malaysia. As mentioned in the article, Malaysia has continued its positive development, and today there is a large Volvo environment in the country. Source: Volvo's Historical Archive.

the distances were huge and the risk thereafter. But Volvo felt the importance of having one more leg to stand on, and the bold and predictable Volvo management decided to put all efforts needed in place. From 1999, AB Volvo is the sole owner of the factory that still assembles cars.

The original production capacity of 1,300 cars per year was soon increased to 2,500.

Unfortunately, the author cannot estimate the number of Volvo Amazons available in Malaysia today. Judging from available footage, there is a respectable number, but those from the Volvo environment in Malaysia and that the author has been in contact with have no such information either. As with us, the choice varies between heavy renovation projects and completely untouched cars. Common to all these cars is that they were not built at the assembly plant which was initiated on September 7th, 1966.

The Batu Tigu plant was ready for production in November 1967, and during the remaining weeks of that year, eleven new cars left the assembly line. A movie, produced by Volvo Cars Malaysia for the factory's 50th anniversary shows no pictures of Amazons, but instead images of an assembly line full of 144 models. A photo shows a 144S and a poster on the car door is inscribed «Car #1 produced by Volvo Malaysia». Pictures taken outside the factory show long rows of Volvo 144, and all indications are that the cars that rolled off the Shah Alam assembly line at that time were all in the 140-series. In order to utilize production capacity, a large number of other car brands have also been produced at this Volvo factory. On February 17th, 1968, the factory was officially opened by Dr. Lim Swee Aun, who at that time was Malaysia's Minister of Trade and Industry.

The reason why the factory in Malaysia is included in this article is that it could theoretically have assembled the Amazon, but then that did not happen. If the author had failed to mention the factory in Malaysia, there would have been speculation that it had been forgotten.

More factories were to be founded in more and more countries also later, but not until after the last building kits of Volvo Amazon had left the Torslanda plant and been shipped to South Africa, and not even theory can prove that Amazon was produced at more foreign assembly plants than those discussed in this article. For that reason, these Volvo factories are not devoted to further interest here.

➢ On February 17th, 1968, the assembly plant in Malaysia was officially opened with great festivity. After the speeches, guests were shown the factory and how a Volvo is being built. Unlike the assembly plants that get the car bodies more or less finished from Sweden, this is a factory that builds the cars from scratch. In the jig, the parts are fixed in the right position and welded together. This is how the bodies grow until they are ready for painting and then finally assembly to a complete car. Amazon shines with its absence, but both 144 and 145 were produced in Malaysia at the start of 1967/1968. Later, 164 were also produced at the factory. Source: Volvo's Historical Archive.

93 - The assembly plants have been presented

The fact that there were no other plants that assembled Volvo Amazon outside Sweden than those mentioned in this article is certain. The fact that there may have been yet another workshop that was evaluated in Holland, but that didn't perform what was necessary cannot be ruled out, but will nevertheless not fall under the category assembly plant.

In addition to the factories in Sweden, the factories in Belgium/Alsemberg, Holland, Mexico, South Africa, Canada, Chile and Belgium/Ghent have spread Volvo Amazon to all parts of the world and have contributed to Amazon being an immensely popular model in the same places, 50-60 years later.

94 - Not only the factories have historical interest

Besides the physical presence there are also several other topics about and around the factories. There may be special orders, more or less loose claims and theories that need to be explained, and other interesting issues worth mentioning in such a context.

95 - Lars Malmros, the father of the Ghent factory

Full honor for the factory in Ghent is accredited to Lars Malmros. Malmros is referred to as being far more than «just» the founder of the factory.

Malmros, born in 1927, was a young engineer when he was commissioned by Volvo to find a place within the European Economic Community where a factory could be built and which was also strategically placed. Malmros studied maps with cities, ports and opportunities, from Kiel in the north to Dunkirk in the south to find a place that would suit a Volvo factory. One condition was that the city had to have a port. Malmros did not initially know that Ghent was a port city, and although Ghent was upside down on the map when Malmros eased south, the choice fell on Ghent, right in the heart of the EEC, and in hindsight it can be concluded that it was probably an absolutely perfect choice.

The city council in Ghent, with the port manager and later mayor Geraard van den Daele had heard about Volvo's interest in expanding, and contacted Malmros. The city council sat with both the trump ace and the other aces on hand to get Volvo to settle there. Volvo was offered its own port area with a new dock facility in the factory area and with rail connections, which would facilitate further distribution throughout Europe. All this could be built in a newly developed port facility in full development, not least with regard to excavation and expansion of canals with capacity for ships up to 65,000 tonnes dead weight. There was great access to labor and potential suppliers, in a fascinating medium-sized city with both universities and good schools. During a dinner meeting, van den Daele had asked Malmros how large the area Volvo needed. After dinner, Malmros drew a map at the back of the menu and handed it over to van den Daele, who took a good look at the sketch and answered: «The site will be regulated to fit your needs, this is fine.» That's how easy it was at that time!

The contracts were signed in 1963, and a couple of years of diligent efforts were needed before production started. Malmros not only mastered no less than six languages fluently, but could also in detail describe all the components of a truck. He had lived in Indonesia with his parents until he was 14 years old. Indonesia was a Dutch colony until 1945, and in this way Malmros learned to speak «perfect» Dutch.

He was head of VENV from 1964 to 1969. Between 1969 and 1984 he worked in Sweden, and as Vice President in the Volvo Group he developed Volvo Trucks to become a significant player worldwide. When he returned to Belgium in 1985, Volvo Europa was divided into various parts. Malmros was CEO, CEO of both Volvo Cars Europa N.V. and Volvo Europa Truck N.V., but acted more as a coordinator than what was usual for a man in a central top position.

Much has been written about Lars Malmros, and what is common to all publicity is that it is only positive. He was an authority without seeming dominant, he had to keep a

➢ *DCS 987 (South Africa), Waheed Abdurahman. 133942T (ch.no. 354549).*
Photo: Waheed Abdurahman.

Republic of South Africa — Republiek van Suid-Afrika

CERTIFICATE OF REGISTRATION IN RESPECT OF MOTOR VEHICLE (National Road Traffic Act, 1996)

SERTIFIKAAT VAN REGISTRASIE TEN OPSIGTE VAN MOTORVOERTUIG (Nasionale Padverkeerswet, 1996)

Registering authority	City of Cape Town
Vehicle register number	KCT477A
Vehicle identification number (VIN)	354549
Engine number	17328
Make	VOLVO
Series name	ANDER / OTHER
Vehicle category	Light passenger mv(less than 12 persons)
Driven	Self-propelled / Selfgedrewe
Vehicle description	Sedan (closed top) / Sedan (toe-kap)
Tare (T) kg	1111
Date of liability for first licensing (first year model)	1972-01-01
Vehicle status	Used / Gebruik
Date liable for registration	2017-01-18
Last 3 licence numbers (most recent first, if available)	CY312962 CFM34934 DCS897NW
TITLE HOLDER	
Type of identification	RSA ID document / RSA ID dokument
Identification number	6903235105086
Country of issue	South Africa / Suid-Afrika
Name	ABDURAHMAN W
OWNER	
Type of identification	RSA ID document / RSA ID dokument
Identification number	6903235105086
Country of issue	South Africa / Suid-Afrika
Name	ABDURAHMAN W
Control number	1001056305HS
Issue number	01
Date of issue	2017-01-21
Registering authority at which registered	City of Cape Town
RECEIPT	
Receipt number	100105681CSB
Transaction	Vehicle registration/Voertuigregistrasie
Total amount received	R132.00
Date	2017-01-21
Received by	M MASENI
Method of payment	Multiple adding / Veelvoudige optelling
Number	1001
	2017-01-21 11:26:58

BG 6357750

ISSUED WITHOUT ANY ALTERATIONS OR ERASURES — UITGEREIK SONDER ENIGE VERANDERINGS OF UITKRAPPINGS

On the first Amazons, the chassis number was only stamped on the type plate. Then, from about 1960 up to and including the 1966 model, the chassis number was marked on both the type plate and the body. From the 1967 models, the chassis number information disappeared from the type plates, and then the type designation and chassis number were embossed in the metal in the firewall above the heater unit. That position is also stated in Volvo's original literature. The practice was to emboss both the bodies with type designation and chassis number when the cars were completed from the factory in Sweden, regardless of whether they were cars that were completed in Sweden or cars built for KD production. Without being able to determine exactly when this happened, the routine was changed and it was now up to the assembly plants to do the job. That MA in Durban may not have complied with the new routines is uncertain, but it is certain that they did not follow Volvo's instructions completely. This has been known for many years. In Norway, there are two cars – both 1970 models – which were assembled by MA in South Africa. Both cars have been extensively checked to find chassis numbers, also by the author, but without result. MA had chosen an easy solution, and instead used the body number as the identification number. The plate is, as we know, attached to the left inner wing. Documentation was received from Waheed Abdurahman that allowed the article author to provide proof that the cars were identified with the body number as a replacement for the ID that the vehicle had when it left the factory in Torslanda. On the «Certificate of Registration» – the vehicle card depicted, you can read that the «Vehicle Identification Number» – the VIN number is 354549 – the same number as the body plate shows.
It is also worth noting the date of first registration, which is stated to be January 1st, 1972, but it is also stated that it is not the same as the model year. Abdurahman launches three theories in this regard:
• It is possible that «Volvo South Africa» had a surplus stock and that this car was sold very late.
• It is also possible that the car was a demonstration car in a dealer's ownership for a time before it was registered.
• A third possibility is that the protocols of the South African car authorities were so deficient that they estimated January 1st, 1972 as the date when they created a computerized register.

distance from the employees simply because he was the boss. He used no authoritarian tricks to guide, motivate and inspire his employees. He explained in plain words and with a soft voice what was going on, what needed to be done and why. It was sufficient to get all the staff involved and to pull the load.

Lars Malmros is referred to as civilized, formal and with exceptional manners. A man with the right attitude, he did things the right way, he used the right words, had the right clothes and was the right man in the right place and at the right time. A gentleman and the perfect leader.

Malmros was not only the man behind the factory in Ghent, he was the man behind the development and the modern way Volvo's many factories around the world are operated today.

Lars Malmros retired in 1988, and was allowed to spend 20 years as retired before he passed away in 2008.

96 - Gustaf Östergren – very important also in Ghent

From September 1st, 1968, engineer Gustaf Östergren took over as head of a new department, «Products and Materials» at Volvo Europa N.V. in Ghent, leaving his position as factory manager in Canada. At this time, Gustaf Östergren was only 31 years old, hardly «dry behind the ears», but a man to be trusted in all situations. It was director Lars Malmros who hired Östergren, who was also appointed to be Malmros' deputy.

In an article in Svenska Dagbladet on June 26th, 1968, one could read, among other things, that «Mr. Östergren has held the position of factory manager at the factory in Canada since 1965, and during this time has been responsible for the construction and commissioning of the new factory in Halifax».

The author has received interesting information directly from Gustaf Östergren. Only 31 years old, Östergren took over as CEO, at a time when Volvo Europa N.V. was gaining momentum. It would not be long before the number of employees had increased from 200 to 5,300 and Östergren was at that time head of Volvo's largest foreign operations.

Over a six-year period, an average turnover increase of 43% per year was achieved. Östergren says that such an increase was completely at the limit of what the organization endured without breaking its neck, but that it was after all under control.

Mercedes and BMW were the largest car manufacturers in Germany, and sales figures for Volvo in Germany at that time were poor at 1,500 cars per year. Something had to be done about it, and in order to meet the competition, Östergren set up a deal for Volvo's sales manager in Germany. *«Next year, you will double sales from the current 1,500 cars to 3,000, then to 6,000 the following year, and then a new double to 12,000 cars in the third year. If you can do this, I promise you that I will keep the same factory price on our cars throughout the period.»* They reached 11,600 cars, and Östergren said to the German manager: *«You did not reach the target of 12,000 cars, but it was so close that I will fulfill my part of the agreement anyway, but after that you have to stand on your own legs without having to lean on me.»*

Östergren writes that it was common for training purposes that the assembly plants were sent a number of car bodies to practice assembly on. In this connection, VENV received 400 bodies directly from the factory in Olofström, and the intention was that the bodies should then be scrapped. The result was that the bodies became so good that they built cars of these as well, sold them and made a profit.

«Before we started welding car bodies in Ghent, a whole shipload of untreated body parts was sent to Malaysia and back, packed in containers equipped with humidity and temperature gauges for the purpose of investigating what could be caused by any rust attacks, transport damage, etc. in connection with such transport.

I traveled to communist Budapest at the time and negotiated a deal for the purchase of 600 special containers. The containers were made at a shipyard on the Danube river, and then shipped to Hamburg and loaded onto a waiting Volvo/VENV ship.

DCS 987 (S.A.), Waheed Abdurahman. 133942T (body no 354549). Abdurahman's car is also seen on social media with the license plate BLK SWN - GP.
Photo: Waheed Abdurahman

These were the times – and everything was possible!» – concludes Gustaf Östergren in an e-mail to the author.

97 - Wrong ID series in South Africa

It has been rumored that cars that were assembled in South Africa did not have chassis numbers included in the regular chassis number series, but that they had their own number series. Such a claim is justified by the fact that identification documents have been observed on a car from South Africa which must have had a higher chassis number than 359918.

It has been documented that there is no higher *chassis number* for Amazon than 359918, and if it is true that a car has a higher *ID number,* it may end up in its own ID number series, as has been one theory. However, it seems illogical that one should choose to change an identity that is already registered centrally and for which there is full logistics and control. But there should be an explanation for the discrepancies.

It has even been claimed that cars assembled in South Africa may come in addition to those known in the well-known chassis number series ending for 2-door cars at 359918.

The rumors are not correct, and the theory is probably based on the fact that no stamped or embossed chassis number has been found on the two MA-produced cars that are now in Norway. All cars that have left the factories in Sweden have been given an identity and a chassis number, which is clearly stated in the production cards. That the chassis numbers are not marked in the body of the SA cars may be so. However, the body number is not specified on the production cards, which for the last 1,000 or so cars in the 2-door Amazon series sent to SA have been carefully reviewed and checked.

With some luck, the author succeeded in figuring out what has happened in this context. As described, one has not succeeded in finding neither the type designation nor the chassis number stamped in the body of the two Norwegian South Africa assembled cars. It must be seen as a result of the fact that the Motor Assemblies plant has not bothered to enter the type designation and chassis number in the car bodies. But even in South Africa, the cars had to have an identity in the 1960s.

The author got in touch with a South African Amazon owner, who kindly sent pictures of both the car, its documentation and the car's ID plate. It turned out to be quite clarifying considering the aforementioned theories and ambiguities regarding both production figures and that a South African chassis number was higher than the total number of cars produced.

As is known, there is a plate on the left inner wing marked with the car's body number, and it is this number, and not the real chassis number, that has been used as the ID number. That this is caused by the fact that the employees of the importer Lawson Motores or Motor Assemblies have not followed the textbook as they should is clarified beyond any doubt.

With these evidences at hand, it was appropriate to check if there was a similar identification on the two Norwegian cars imported from South Africa, which should prove to be the case.

Especially for the cars that are assembled at MA there is also a unique Motor Assemblies plate placed above the type plate in the engine compartment. On this plate it says *«Built by Motor Assemblies Ltd, Durban South Africa»*, as well as two numbers of which one is «P12» – which obviously indicates that it is a 4-door car based on the car's body designation. On a similar plate it says «P13» which tells that the car is a 2-door variant. The plates also contain a 4-digit number, which «must» be a form of production number, but there is no documented explanation by Lawson Motor or Motor Assemblies as to what the number indicates.

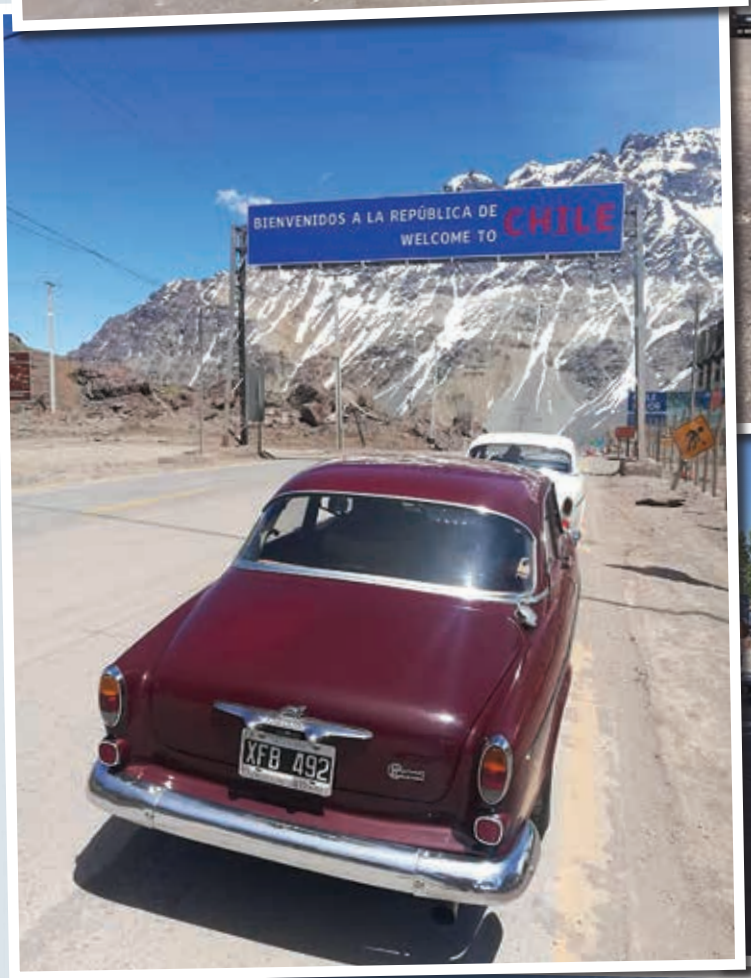
Due to the fact that 2-door cars assembled by Motor Assemblies do not have chassis numbers in the body, combined with the aforementioned 4-digit number, a theory was launched that Lawson Motors or MA had used its own chassis numbering system, independent of the factory in Sweden's identification. As a result of such a theory, it was also speculated whether cars that were assembled at MA came in addition to the number of cars stated in Volvo's production figures.

There is often a gap between theory and reality, and the above theory can be easily dismissed. The reason why the factory chassis number does not appear on MA-produced cars is explained. In addition, we managed to find a picture of a plate with «Built by Motor Assemblies» inscription on a car where the chassis number is stamped on the Volvo type plate, and that and MA's 4-digit number as such have nothing to do with each other.

According to MA's own statistics, no 130-series cars were assembled before the 1967 model year, and probably not until the last of all four-door variants had been assembled. Assuming that the series for 2-door cars started with 1 after the chassis numbers disappeared from the type plates from the 1967 model, then this matches the stated production figures well.

However, there is a picture of a similar type plate, on a car which is built in Sweden and which has the type designation and chassis number entered into the firewall. This indicates that all cars sold in


CH-5021


BIENVENIDOS A LA REPÚBLICA DE
WELCOME TO CHILE
XFB 492


HF-5386

Amazon on tour in Chile and Argentina.
Photo: Guille Willink Moyano.
Distribuidora Volvo S.A, founded by Eduardo Averill in 1959, imported and sold Amazon in Chile even before the assembly plant was built, until Chile imposed import restrictions and local manufacturing requirements. The Olive green car pictured is a 1961 model. The car has not been restored, but as the picture shows it has been very well taken care of for almost 60 years. Most likely it was at DiVolvo that the car was sold new, but it could also be imported more recently. Veteran Volvo enthusiasts from both Chile and Argentina must have had a phenomenal experience when in December 2018 they drove from Santiago, Chile via Los Andes and to Mendoza, Argentina. Among the participants was the Olive green 1961 model. The road they drove goes over the Andes, and Puente del Inca – the Inca Bridge – is along this road. The bridge is not man made but is made by nature. On the road over the mountain you can see the mountain areas around Aconcagua – which reaches 6,962m/22,841ft. The route – one way – between Santiago and Mendoza is just under 400km/250mi, but the total distance was 1200km/750mi during the trip. Fernando Garetto Vives in Volvo Club Chile says that the B16 Amazon had no problem following the newer and more versatile Amazons with B20 engines along the way – not even in the climbing stages over the mountain range, and as Garetto writes – we are not afraid to give a little extra throttle.
Photo ➢: Mendoza Travel

South Africa and where Lawson Motors/Motor Assemblies were in the picture were included in the unique number series. What makes the connection a bit complicated is why a car that was built in Sweden, and which then has nothing to do at an assembly plant, should still have a type plate from MA? Here, one has to take into account that there were very few Amazons that were sold in South Africa and that were not assembled at MA. Besides having to follow their own system with «their» serial or delivery numbers, it is reasonable to assume that the cooperation between importer and factory was very close. The fact that a «Built by Motor Assemblies» plate was attached had no meaning for the parties involved. It was the plate that was available and used.

The most likely explanation for the internal MA numbering is that the number indicates how many cars MA/Lawson Motors have delivered in total, regardless of whether they were imported finished or as an assembly kit from Sweden. Each of the three different body types has its own number series.

Not all bodies have ended up on a chassis – we know that some bodies were sold or delivered to schools for educational and training purposes, other bodies have been rejected on the production line and some have been used in so called bodywork switches. Each produced car body which for some reason has been taken off the production line before it ended up on a chassis has caused the difference between body number and chassis number to have increased by one. Then it is also easy to understand where the aforementioned high «chassis number» originated.

98 - A reflection – two cars with the same identity

Regarding the aforementioned facts about the car identity, it seems natural to make some reflections. In practice, this means that there may be pairs of identical «chassis numbers» or, in other words, two cars with identical identities. If one had access to the South African chassis number register one could have found if that is the case – perhaps a future research topic?

Due to the fact that Motor Assemblies failed to mark the cars with the identity they were produced with, and because the production cards at Volvo have blank fields where the body number should have been listed, the problem is obvious and it is in fact impossible to identify the very last Amazon who at the time left Torslanda with destination Durban. In theory it is possible – but then you have to get an overview showing the link between the invoices sent from AB Volvo and the further handling of the cars either at Motor Assemblies or at the importer Lawson Motors. The invoices from Volvo are specified by chassis number, and somewhere along the way there must necessarily be a cross-reference with the car's body number.

The solution lies in tracking down this nearly 50-year-old outline – or the cross-reference list if you prefer – which makes the challenge of «finding the needle in the haystack» a trifle. The fact that such an overview probably does not exist means that one can conclude that the fate of the Volvo Amazon that was assigned chassis number 359918 will not be announced

99 - Volvo Amazon in Chile

According to Alberto Averill, Volvo had great success with car racing both in Chile and Argentina at the time Amazon was sold in the country. Among others, Gran Premio Argentina (Rally Argentina), a six-day race that stretched a total of 465km/290mi, was won in 1960 with a Volvo PV 544 where Gunnar Andersson was the driver. In that race he maintained an average speed of 116km/h/72mph. The legendary Andersson (1927-2009) almost repeated the feat two years later, this time with an Amazon 122S, but then finished «only» in second place. Such success, of course, helps to increase the popularity of a product.

Club Volvo Chile was founded in the year 2000 on the initiative of a group of Volvo fans. The purpose was to honor the Volvo brand, Chile's car history and the founder Eduardo Averill.

A rather funny and not least special anecdote, which is not directly related to DiVolvo's assembly plant, but which can nevertheless be mentioned: As a consequence of DiVolvo only building 4-door editions and that no other versions of Amazon were imported to Chile during the local assembly era, the 2-door edition became a news for Chilean Volvo customers when Amazon was again imported from Sweden. Suddenly, «all» Amazon owners wanted the 2-door version. Now, it's not just about buying everything you want, and the solution was to rebuild the cars from 4-door to 2-door versions. The grandfather of one of the members of Club Volvo Chile had his own car repair shop and specialized in such remodeling. So theoretically, you could come across a 12298 edition with two doors, steering wheel gear lever and bench type front seat in Chile.

Färgkod 86 - Melding (HTML)

Melding

Svar | Svar til alle | Videresend | Slett | Søppelpost | Kategoriser | Følg opp | Marker som ulest | Søk

Svar | Handlinger | Alternativer

Fra: Gerdin Lars (Consultant)
Sendt: onsdag 24. oktober 2018 14.10
Til: Arve Larsen
Emne: RE: Färgkod 86

Hej Arve,

Chassi nr. 134283-134378 = Chile och färg nr 86!

Modell	Amazon 4-dörrar
Chassi nr.	134328
Typ	298
Färg	86
Motor nr.	54896
Färdig rapp.	9 maj 1963
Distrikt nr. 6480	Chile

Med vänlig hälsning
Lars

From: Arve Larsen [mailto:a.larsen@online.no]
Sent: den 21 oktober 2018 11:40
To: Gerdin Lars (Consultant)
Subject: Färgkod 86

Hej Lars.

Jag har mottagit uppgifter om en bil fotad i Chile 10-15 års tillbaks. Den hade den ovanliga och okända färgkoden 86 – färgkoden Tommy och jag letade efter på grund ut av tips från min kompis, men som på den tiden inte hittade sina övriga notis om bilen. Färgkoden dök upp efter att Tommy och jag givit upp att leta specifikt efter den – och vi hittade kod 86 på dom 50 första KD-bilar som skickades till Chile. Efter det hade alla bilar vi såg produktions-korten på färgkod 00 eller 09 – omålad.
Nu har min kompis hittad sin notis-block, och bilen han såg uppgifter på hade ch.nr. 134328.
Den 1: a CK-bilen skickad till Chile – som Tommy och jag hittade - hade ch.nr. 130222 – vilket betyder att ch.nr. 134328 kommer länge efter dom första 50 bilarna.

Har du möjlighet att kolla på 4-dörrars Amazon med ch.nr. 134328 och mejla mig uppgifterna? Blev bilen byggd i Chile? Blev den målad fk. 86 i Chile – vad för färgkod står på produktions-korten? Till vilket distrikt skickades bilen? Om bilen inte skickades till Chile – till var blev den skickad? Kan det vara möjligt att fk. 86 också används i annat land?
Tommy och jag hittade inga andra bilar med fk. 86 för utom dom nämnda 50.

Color code 86. If this is evidence enough to convince everyone the author will not comment on, but it should be. This is a printout received from Volvo's Historical Archive, and in addition, both Tommy Joelsson and the author have seen production cards with similar information with their own eyes. The card says «type 298». In another column the body variant «12» is highlighted, so that the type designation is 12298 – which is also stated in the article text.

100 - Color code 86 – the unknown color

If you exclude special orders, color code 86 is by far the most rare color on a Volvo Amazon – that's the author's unconditional claim. A well-known acquaintance of the author, and a so-called «reliable source» in the context of Volvo Amazon – said that one of his study buddies had been on holiday in Chile, taking a picture of an Amazon he had observed on the street over there. The student buddy had obviously not failed to understand how important Amazon was, besides that it is a mandatory task to photograph both the car and the type plate in the engine compartment. Now this was at the time when Kodak was a leader in photography and when the result was photos in paper format – and no form of backup. After studying the images and all the details stored in the cerebral cortex, my acquaintance passed on the image to someone who possesses some «hundred thousand» car images. Enough said about that – but we have tried to find the pictures that proves that color code 86 exists, unfortunately without success. The color code is not mentioned anywhere in Volvo's lists or color catalogs – and if proof cannot be submitted, the claim that color code 86 has existed would be considered pure fabrication on the part of the author.

Admittedly, the author found this color code mentioned on an internet chart, but it said «Color-Code 86, Horizon Blue, Model Year 65-66, Amazon, P1800.» Exactly the same was listed for color code 89 – which is well known and which is light blue. There is no possibility that Volvo has supplied two identical colors/color names in two different color codes for the same cars, during the same period. It was more likely that it could all be due to a typo, and that «89» had become «86».

The author's reliable source guaranteed that the image of the type plate he had seen contained color code 86, embossed from the back in the same way as the type plates that we are used to seeing. For this reason, this mystery was not put on ice. It has also been read that the factory in Chile had its own paint shop, and the author has seen with his own eyes a picture of type plates where the color code field was initially empty on the CKD cars that arrived in Chile – and that the color code was either entered on the type plates locally in Arica, or the color code field remained blank. Something didn't add up – that was the only thing that was certain.

There is a lot to check when you visit the Volvo Historical Archive, and unfortunately there is not unlimited time available. No color code 86 was found when it was specifically searched for, and for that reason it was put aside, and the hope of a progression was at the bottom level.

Now it should also be said that none of the author's contacts in Chile, mentioned earlier in the article, had seen or heard anything about color code 86. It was thought that color code 86 would end up as an unconfirmed claim or hypothesis.

For Tommy Joelsson and the author, it was required to find information about 1961 model year KD cars and the work in the archive was concentrated on that task. It has already been written that big treasures were found in the form of new information, and the search for detailed information about which foreign plant could be the first to build CKD was given priority. In parallel, it was noted which chassis number was the first for the various assembly plants. After finding the chassis number of the first car built as KD, a couple of tens of thousands of cards fell short in the period after the chassis number was checked. Eventually, the chassis number of the first KD sent to Chile was also identified, that was 12298VF 130222 – in other words a 1963 model.

101 - The revelation

It was when Tommy Joelsson read this type designation for the author that he said: «Look» – and then become completely silent «for a small eternity». Joelsson could not put words to it but had to show the sensational finding. On the (handwritten) production card he was holding in his hand it was written – blue on white – *«86» in the color code field.* So finally, it was proven that color code 86 existed, and it was also located. It turns out that the first 50 cars exported to Arica in Chile were painted in color code 86, but the color itself is not confirmed. The author's source had stated that from the picture he had seen it was a kind of blue color.

50 cars – reported finished at the Lundby factory on March 14th, 1963, 50 cars sent to the other side of the world – no wonder it's a color that «no one has heard of».

Unfortunately, no photo evidence can be provided, but Joelsson and the author have seen it themselves – and for the author that holds as evidence. The logical explanation for why a very limited number of cars were painted in Sweden while the others were supposed to be painted locally is that both AB Volvo and DiVolvo wanted to start up local assembly as quickly as possible – and that the local paint shop was not functional at that time, or that at that time it did not meet Volvo's quality requirements. Fortunate, it was – and it created a small but special anecdote in the wonderful story of Volvo Amazon.

102 - The reminder note that re-appeared after several years

On October 21st, 2018 – long after most of the chapters in this article were written – the author received an e-mail from «his reliable source». He had found the note he had taken from the picture taken in Chile eleven years earlier. The type plate in the Chilean car contained the following information:

Type: 12298VF
Chassis number: 134328
Color code: 86
Upholstery: 152-229
S-code: 3259

The car had been for sale in Chile. Now, a handwritten note is not a confirmation of anything, regardless of credibility and trust. The picture had been solid evidence, but unfortunately it has not been located.

Still it was the picture, which may no longer exist, which was the reason why an impressive number of hours were spent trying to get to the bottom of the matter. The image also provided the origin of the wonderful memo – and there is information from it that should make sure that this article could provide some kind of proof that color code 86 has existed. That evidence was found in Volvo's Historical Archive. The above information was sent to Lars Gerdin in the archive, and the reply e-mail that came back contained confirmation about color code 86, see picture illustration.

The observant readers have now noticed that chassis number 134328

does not fall into the series Joelsson and the author had found that they were the first 50 cars for the assembly plant in Arica. It was also noted by the article author, and so further investigations were required.

The fastest way to check chassis number 134328 was to contact the archive's always positive Lars Gerdin via e-mail. And as I said, so done, and the answer came shortly.

The car was reported completed by Volvo on May 9th, 1963, painted in color 86 and shipped to Chile. In addition to this, Gerdin was able to state that the car was among a series of cars from chassis number 134283 to 134378, all of which were painted in color code 86 and all with destination Chile. Then it is understood that there were at least 96 cars in addition to the first 50 that have color code 86.

The question that automatically arises is why was a new series of this type of car painted? There is no definitive answer, but one must assume that it was presumptive to help DiVolvo's paint shop out with a capacity problem. A natural choice would be to choose the same color used before, and that was just this one, and because DiVolvo used Volvo's color program, 86 was a color DiVolvo certainly didn't use. The choice of color may also be due to the fact that in the future there would be no doubt whether the car was painted in Sweden or at DiVolvo. Perhaps more similar cases may emerge at a later date – that is not known – or all information is cleared and mapped.

How interesting would it not be to find an Amazon original painted in color code 86? However, the chances are less than small – the Volvo Club in Chile had not heard of, seen or had any knowledge of this color.

103 - Alberto Averill is updated

Averill and his colleagues at Club Volvo Chile have been told about the information that has come to light as a result of the archive visits. They have learned which car was the first in the series of KD cars sent to Arica, and which was a 1963 model. They also learned that the first Amazon exported to Chile was a 1959 model 12204 with chassis number 31569, all important information for a group of enthusiasts to find their own roots.

104 - Volvo Canadian had rust issues

Neville Britto states that in September 2017, he imported a 1968 model 122S from Texas and home to Ontario in Canada. He writes that finding a good and original Canadian-produced Amazon in Ontario is nearly impossible. According to Britto, this is due to the fact that galvanized body parts were not used on the cars that were assembled in Canada and combined with the fact that the roads were applied with huge amounts of salt in the 1960s and 1970s, this has caused most cars to succumb to rust already 20 years ago. One may ask why not all cars were delivered with the same surface treatment from the factory in Sweden, but it is not unlikely that they skipped this process on cars to certain markets. That being said, Britto also writes that he wanted an Amazon with automatic transmission, and he had to look for such a car anyway. Personally, Britto thinks the 1968 model is the finest in terms of US specifications. That already the second car he was looking at was such a car – and also in a phenomenally good condition – he describes as a huge hit, and thus it was the car he ended up with.

105 - Gustaf Östergren – a note on the plant in Malaysia

In the context of studies on the previously mentioned color code 86, Östergren could tell that one person with the overall responsibility at the factory in Malaysia did not at all like Volvo's original red color, and that they themselves composed their own peach-red variant – *«a local color matching»,* as Östergren writes, and further: *«I knew the owner, Chinese Cheng Pung personally and very well. Initially, he was not allowed to use the Volvo name, as in that case Volvo must own at least 50% of the company. Cheng Pung owned 85%, and still used Volvo logos everywhere. In addition, Cheng Pung had copied both floor plan and building layout from Volvo's headquarters in Gothenburg, while at the same time making sure to acquire even more elegant and refined furniture. This was not some cheap furniture, but exclusively custom-designed and fabricated in teak.»*

106 - Ghent – a complete factory

In 1972, all the pieces fell into place in Ghent, when both the bodywork factory and the paint shop were finished. Now they were able to produce cars from beginning to end, and could thereby also call the plant a complete car factory – the last piece of the puzzle was laid.

The factory in Ghent only produced left-hand drive cars, but in different body variants and model types, such as 121, Favorit, 122S, 123GT and the Station Wagon – all are cars we are familiar with.

107 - Volvo 133GT

In addition to the above, a car whose originality is arguably contested was built – but that the car was built at the Volvo factory in Ghent, the author of the article has no doubt whatsoever. The fact that the car is a genuine Volvo Amazon – built from original, mass-produced Amazon parts that could be purchased over the counter, is also an undeniable fact.

Some have heard or read about the Amazon called the Volvo 133GT – or the 122S GT if you like. Most would assume that it all depends on a typo – that «123» has slipped to «133». However, the 122S GT is the most correct term, but then it is a fact that the «GT» is more exclusive and sells better than the «S», which is why the car was advertised as the Volvo 133GT. The name Amazon was as known only to be used in our domestic (i.e. the Scandinavian) market, and not elsewhere in the world. The number combination «133» is taken from the first three digits of the type designation – and it is therefore not difficult to understand why that designation was chosen over something else. Besides, it's a number that differs compared to the real GT.

In what has been written about the assembly plants in Belgium, information has emerged that Volvo bought an already existing assembly plant from the importer SBMA, and that SBMA still had a great influence on everything that was Volvo-related even after the purchase was completed. In addition, SBMA was an importer of Volvo.

The Volvo 123GT was a popular car, and it cost a lot more than what the 122S did. It is a fact that the 123GT had some extra equipment compared to the 122S. This type of equipment was popular and something Amazon owners bought separately over the counter as accessories to retrofit on their cars, whether it was the 121 or 122S models. GT equipment was and is very much in demand, it is even better seen today – where everything that can be called «123GT equipment» is sold for high values. But it is the market that decides – and that was the case also in the 1960s. The big difference is that at that time all GT equipment was available off the shelves in the auto shops.

The Amazon 123GT of the 1969 and 1970 model year was no longer available «in a normal way» in all

VOLVO

131 EN 133 GT
1969 (TOT EINDE EEG-PRODUKTIE)

Volvo 131, 4-5 pers., 2-deurs coach, 1969.

ALGEMEEN

Land van herkomst	Zweden
Modellen	Volvo 131 (met B 20 A-motor) Volvo 133 GT (met B 20 B-motor)
Plaats motornummer	links op motorblok, ter hoogte van stroomverdeler
Plaats chassisnummer	onder motorkap, midden op schutbord
Plaats identificatienummer	links onder de motorkap

PRIJZEN

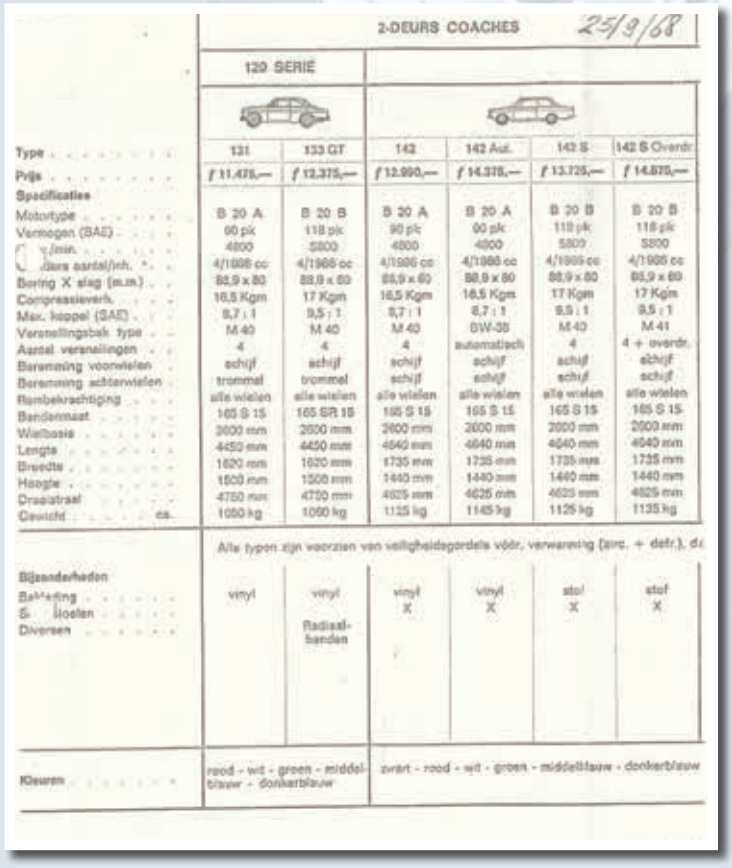
1969			
131	basis f 10 245,54	incl. BTW f 11 475	B.frs. 102 900
133 GT	basis f 11 049,11	incl. BTW f 12 375	B.frs. 114 900

MOTOR

Plaatsing	voor in de wagen
Constructie	viercilinder benzinemotor in lijn met waterkoeling; onderliggende nokkenas

➢ *The picture shows an advertisement for Amazon in the Netherlands in 1969. It uses very unconventional model names such as 131 and 133GT. It lists the cars as end products of the EEC. Worth noting is the description of where the identification number is located (on the left inner wing, which we know is the body number). However, the chassis number is used in the registration documents. Also note that the 122S is not mentioned in this sales ad. Source: Stoffel Mulier.*

122S or 133GT? 133941 S 334999. Photo: Johan Arijs.



2-DEURS COACHES 25/9/68

	129 SERIE					
Type	121	123 GT	142	142 Aut.	142 S	142 S Overdr.
Prijs	f 11.475,—	f 13.375,—	f 12.990,—	f 14.378,—	f 13.725,—	f 14.875,—
Specificaties						
Motortype	B 20 A	B 20 B	B 20 A	B 20 A	B 20 B	B 20 B
Vermogen (SAE)	90 pk	118 pk	90 pk	90 pk	118 pk	118 pk
t/min.	4800	5800	4800	4000	5800	5800
Cilinders aantal/inh.	4/1986 cc	4/1986 cc	4/1986 cc	4/1986 cc	4/1986 cc	4/1986 cc
Boring X slag (m.m.)	88,9 x 80	88,9 x 80	88,9 x 80	88,9 x 80	88,9 x 80	88,9 x 80
Compressieverh.	16,5 Kgm	17 Kgm	16,5 Kgm	16,5 Kgm	17 Kgm	17 Kgm
Max. koppel (SAE)	8,7 : 1	9,5 : 1	8,7 : 1	8,7 : 1	9,5 : 1	9,5 : 1
Versnellingsbak type	M 40	M 40	M 40	BW-35 automatisch	M 40	M 41
Aantal versnellingen	4	4	4	schijf	4	4 + overdr.
Bekrachtiging voorwielen	schijf	schijf	schijf	schijf	schijf	schijf
Bekrachtiging achterwielen	trommel	trommel	schijf	schijf	schijf	schijf
Bandenmaat	alle wielen	alle wielen	alle wielen	alle wielen	alle wielen	alle wielen
Wielbasis	165 S 15	165 SR 15	165 S 15	165 S 15	165 S 15	165 S 15
Lengte	2600 mm	2600 mm	2600 mm	2600 mm	2600 mm	2600 mm
Breedte	4450 mm	4450 mm	4640 mm	4640 mm	4640 mm	4640 mm
Hoogte	1620 mm	1620 mm	1735 mm	1735 mm	1735 mm	1735 mm
Draaicirkel	1500 mm	1500 mm	1440 mm	1440 mm	1440 mm	1440 mm
Gewicht ca.	4750 mm	4750 mm	4625 mm	4625 mm	4625 mm	4625 mm
	1050 kg	1060 kg	1125 kg	1145 kg	1125 kg	1135 kg
	Alle typen zijn voorzien van veiligheidsgordels vóór, verwarming (ventil. + defr.), d					
Bijzonderheden						
Bekleding	vinyl	vinyl	vinyl	vinyl	stof	stof
Stoelen			X	X	X	X
Diversen		Radiaal-banden				
Kleuren	rood - wit - groen - middelblauw - donkerblauw		zwart - rood - wit - groen - middelblauw - donkerblauw			

markets. The model was still manufactured at Torslanda, but only for export (although there may be exceptions) – and most of the 123GTs ended up in Switzerland and Austria, and some in Japan. The 123GT was no longer assembled as «CK» [1]) – and thus a Swedish-produced 123GT would be very expensive to buy in Belgium, Holland and Luxembourg compared to a car that was assembled locally – in Ghent.

[1]) The author of the article finds no listings for CK production of 123GT in the Volvo literature for 1969 and 1970, and has based this claim as a result of that.

The Volvo importer and dealer SBMA knew how to address this – and as a result of a great deal of influence at the factory, they were able to order a number of 122S with a self-defined range of 123GT equipment. It has not been possible to obtain information on how many copies of 133GT were produced. GT equipment that was assembled to convert a 122S to a 133GT are parts that were popular and also eye-catching. GT steering wheel, seat recliners and tachometer are typical such items. Everything that had to do with the car's powertrain remained untouched, and this was due to costs and not least the warranty liability.

Of the 133GT cars coming from the factory, the original 122S parts were naturally replaced with 123GT parts even before the cars came on the assembly line. Thus, the 133GT option turned out more favorable than buying GT parts over the counter for retrofitting, since it was avoided to buy similar parts twice – first a complete car and then the GT parts.

What has been written above is not derived from reports from Volvo – it is not documented from that point – and a natural argument against what the author of the article writes is that SBMA could not decide what the Volvo factory and factory employees should do.

To that, the answer is «yes, that's right» – but that's not what hap-

This is another sales brochure. Also this is written in Dutch, but prices are listed in French francs. From the ad you can read that the colors available are red, white (California white), green, medium blue and dark blue. Color code 97 light yellow is not mentioned, but it is a fact that such cars were also assembled in Ghent as 1969 models. Photo: Johan Arijs.

Volvo Amazon 133GT or 122S GT? A series of such 1969 models was assembled at the Volvo plant in Ghent, commissioned by importer SBMA. The cars are 122S which have been equipped with some, but not all, 123GT parts. When the cars were delivered from the factory, they had the original 122S wing badges. The car in the picture belongs to Stoffel Mulier. As a result of a new national regulations introduced in Belgium in 1968, the type plates got a completely different look than what we are used to. The picture shows the type plate mounted in the Amazon 133GT, but is not unique to these cars. Also note that S-codes are not stated on these type plates.
Photo: Stoffel Mulier.

This GT badge is not a modified original 123GT badge. A separate GT badge was produced for the Amazon 133GT, for placement on the trunk lid.
Photo: Stoffel Mulier.

pened. It has always been possible to make special orders, there are many examples of that. If you wanted an Amazon Station Wagon in color code 67 Slate Blue in 1962 you ordered it. It was obviously not painted in color code 73 Mist green first. (This is not made up – the Station Wagon with chassis number 3 was delivered in color code 65 Gray beige and the Station Wagon with chassis number 15 was painted in 42 California white).

There are still some Amazon 133GTs, and some have also been advertised for sale recently. Certainly, the vast majority of the 133GT appears as a 1969 model, but one is also 1968 model.

Given that SBMA was involved in most of the cars produced in Ghent, any business manager would probably go a long way to fulfill such a large customer and partner's wishes. Furthermore, that there is any unwillingness to build cars according to SBMA's own wishes is also quite unlikely. They built the type of car that the customers wanted. However, it was a problem in this regard; AB Volvo had no such cars in its official sales program, the 133GT was not an official model designation, and did not have its own type designation.

There was a solution to that small problem. It should also be kept in mind that it was SBMA that finally assembled Amazon in Belgium before Volvo took over the factory, and that they put in all the necessary knowledge with regard to warranty liability and what would be covered by Volvo and what they themselves had to be responsible for in relation to a change of specifications.

At the same time, it is noticed that the Belgian-registered 133GT there are pictures of has a unique SBMA type plate, and with a different look than the ones we are used to. The type plate has French text, and it has SBMA information on it. One designation that can be read on the type plate is «PVA», which is a Belgian type approval. Another designation on the plate is «PMA», which deals with the maximum permissible weight.

The question was whether such a type plate was specially manufactured as a result of changes being made that required a separate approval for 133GT, or whether it was a new version of a type plate for Belgian cars. There were no other Belgian-registered package cars of this model year to compare with and so it became necessary to acquire the necessary information externally.

The answer to this little «mystery» came with the help of Guy Vermant and Stoffel Mulier. In March 1968, a new regulation for the approval of Belgian registered cars was introduced, and all cars should have their own type plate where the approval number appears. Whether the vehicle in question was assembled locally or imported didn't matter. As an importer for Volvo, SBMA was responsible for compliance with the regulations and for the new type plates to be mounted on the Volvo cars.

The fact that the new regulations were introduced in the same period that SBMA ordered 133GT is due to a pure coincidence, and that we can find Amazons from one and the same model year with both the type plate we are familiar with and with the new one is because the regulations became applicable during the period.

108 - A badge of its own

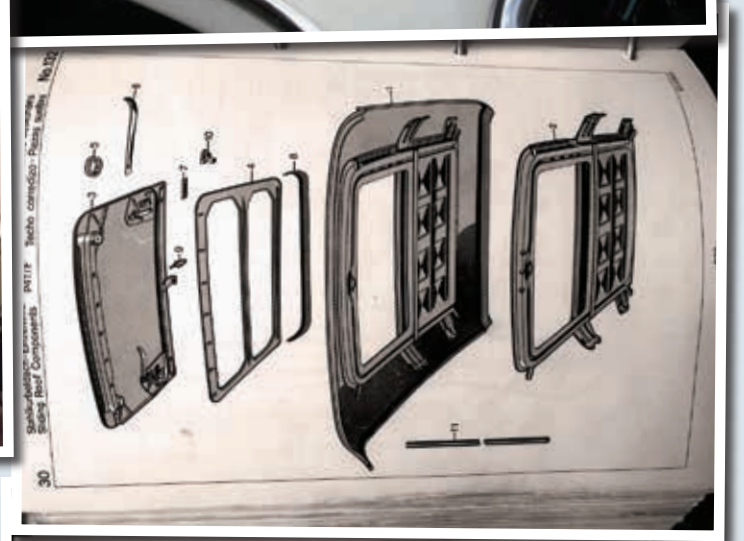
Volvo never produced a special Amazon Favorit badge, but they used the same «121» badges used on the regular Amazon 121.

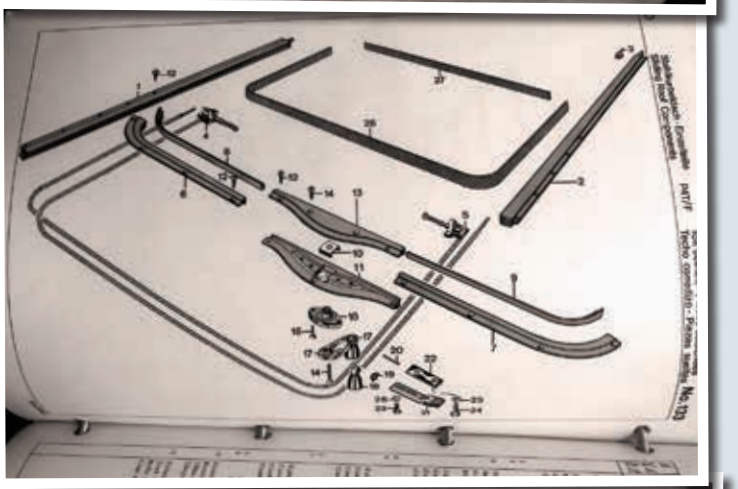
As for the 123GT, they had an badge on the trunk lid with the inscription 123GT. That you could not place such a badge on a 133GT goes without saying. Equally, it should be highlighted that the 133GT was «something more» than a 122S, and that was solved by producing its own badge. In appearance, this badge is identical to «GT» on the original 123GT trunk badge. It is natural to think that this badge is a modified version of the 123GT badge, where the red part with «GT» is retained and the rest removed. However, this is not the case, the badge of the 133GT trunk lid is a specially produced badge for these cars. Naturally, neither image nor article number can be found on this badge in Volvo's parts catalogs.

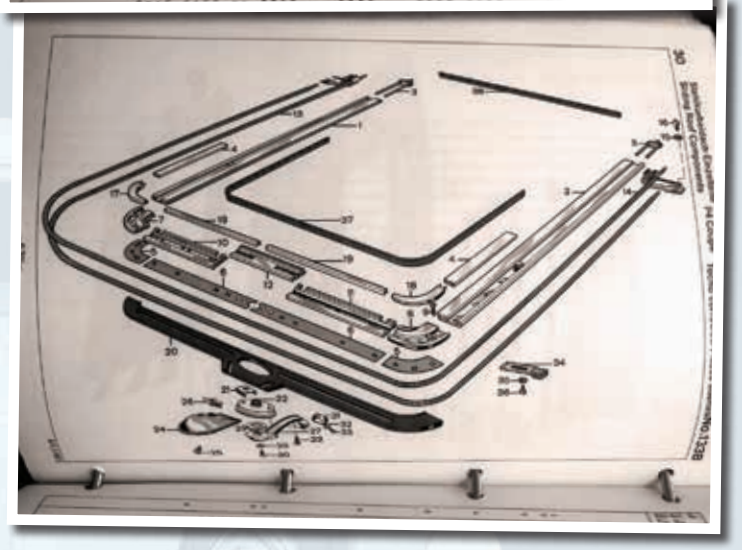
Just as obvious as not to mount a 123GT badge on the trunk lid of what is in fact a modified 122S, you also had to refrain from mounting the 123GT badge on the wings, and here the usual 122S shield badge was used instead.

109 - Sunroof

The Ghent factory has also supplied Amazons with sunroof – also here it is deliveries resulting from special orders, and that it is SBMA who also stands behind this type of order is beyond doubt. As a natural consequence of such a delivery comes the discussion whether the sunroof is original or not.







SBMA was not afraid to invest a little extra in its efforts to sell its products, and installing sunroofs in an Amazon was one of the measures taken. In the capacity of being both importer of Volvo and as well the owner of the assembly plant in Alsemberg until it was sold to Volvo made the connections the very best - and that of course did not reduce the possibility of making special orders and customizations at the factory in Ghent. The pictures are taken in connection with a recent restoration. Getting into the final assembly at an early stage to make changes could save you a lot of work in the form of not having to dismantle something that only just recently had been fitted. When it comes to the sunroofs, we know that the bodywork in Ghent was delivered completely painted from Sweden – and consequently you did not entirely escape double job with this. The wind deflector is of recent vintage – and as such has nothing to do with the car or the sunroof.
Photo: Martin Kouwenberg.

➢ *This exploded view shows a Golde-fabricated sunroof in the period 1962-1966. Sunroofs similar to this one were among those mounted on Amazon.*
Source: Stein Christian Husby.

110 - Not original

To that, the answer is definitely no. Sunroofs – of any type – do not appear in Volvo's Amazon specifications or in the parts catalogs. One could argue that the car left the final assembly in Ghent with a sunroof, but it is just as fully assembled after the car was manufactured – a process that was done before the car was finally reported at the factory in Sweden. By definition, Volvo Amazon was never originally shipped with a sunroof.

Sunroofs were supplied in different types and from different manufacturers. Steel roofs were supplied with both manual and electric opening mechanism, and textile sliding roofs were also supplied.

Golde is one of the sunroof brands that has been mounted on Volvo Amazon, and in Sweden it is known that the Volvo dealer in Malmö mounted some such sunroofs. Golde later became supplier of sunroofs for the 240- and maybe 140-series, and then you could order such as factory accessory.

Webasto has supplied all variants of the three types of sunroof mentioned above. If you search the web for information on sunroofs from Hollandia you will find it, but they are listed under the Webasto brand. Whether that was the case even when the sunroofs were mounted on Amazon is unknown.

The car body company Gebrüder Tüscher from Zurich was founded as early as 1909, and thus has a lot of experience with both sunroofs and other bodywork. Norwegian Erik Joys owns an Amazon 123GT

where the car was delivered new and with locally retrofitted sunroof from Gebrüder Tücher.

The expertise in this area considers it most likely that the sunroof is mostly based on universal parts, and that any other parts are manufactured at, or through, subcontractors for the Tücher brothers' company. The pictures show that both rails and braces differ from the sunroofs found at Golde and Webasto.

Probably there are still a number of cars with sunroofs manufactured and assembled by local workshops. Sunroofs were not a new invention at the time Amazon was in production.

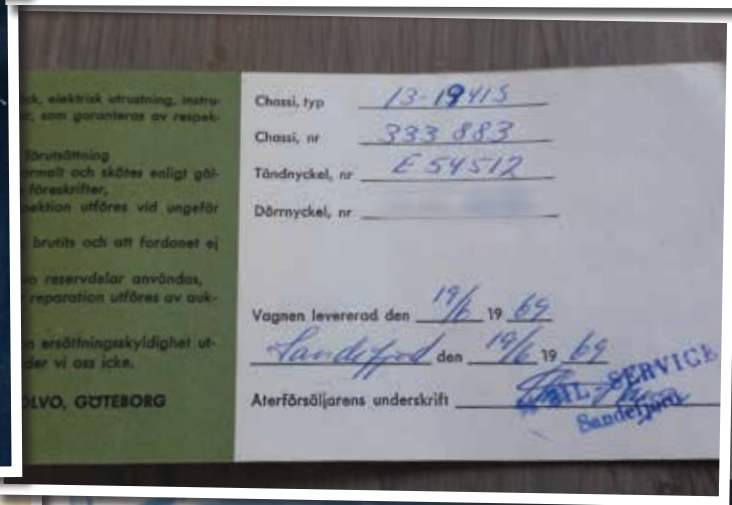
111 - Package cars in Norway

We have «always» known that there are package cars also in Norway, but without checking the history of these cars in depth. It has been automatically assumed that the cars have arrived here as part of private imports.

As a result of the job of updating and completing Norwegian Amazon history, images of type plates appeared that had the now famous digit «9». When this was available at the same time as the information for the first-time registration, the alarm bells started ringing. Moreover, there was not just one such car, but several cars that were proven assembled at a plant outside Sweden, but that were also sold new in Norway. How many such cars were delivered in Norway is uncertain, but the author relatively fast tracked seven cars that are on our roads today. Common to them is that all are 1969 models. Given the number of cars that still exist around 50 years after they left the assembly line, the number must have been more significant than the occasional car.

Eventually, it has also become clear that the cars were assembled at the factory in Ghent. One question that emerged was whether the

➢ *131941S 332841. The pictures are taken from one of the mentioned package cars that were assembled in Ghent, but sold new in Norway. Common to these cars are different color combinations of car and upholstery compared to what we are used to. The normal for dark green 1969 models produced in Sweden is that the cars have beige upholstery, while this one has leather brown upholstery of the same type as the cars had in 1968, except that door pockets and/or the rear seat center armrests are most often removed. On the type plate you see that the font is not the way we are used to, but what is behind this is not known. This may be due to something as simple as a replacement of the machine used to embossed the plates. The Amazon 133GT, which is also a 1969 model, has the same font on its very special type plates.*
Photo: Roy Syversen.



cars had been «pirated». Either by a Volvo dealer or another player who wanted to make money and at the same time be able to sell a solid and popular product.

As the vehicle registration numbers were known, the next step was to contact the Norwegian Public Roads Administration to obtain a copy of the customs cards. With those in hand, it turned out that the importer for all the cars was the importer of Norway, Norsk Volvo AS, and there were cars imported in line with those coming from the factory at Torslanda.

The fact that Amazons that were to be shipped to Norway got the long detour over the factory in Ghent may be due to one of two reasons, or a combination of the two.

• Production at the Torslanda factory was mainly concentrated on building the 142, 144, 145, 164 and 1800 series, and the other capacity of the factory was limited.

• The Ghent factory was constantly developing and had available production capacity.

The extra transport between Sweden and Belgium presented no problem. Those involved were well used to deal with this type of logistics. There was a steady stream of ships from Sweden and to the port in Belgium, and it did not cause any problems to bring finished cars on the return trip.

A document from the Norwegian Public Roads Administration, which is linked to the package cars, should also appear. In a circular from the Norwegian vehicle authorities dated June 3rd, 1969, you can read the following:

112 - Volvo type approvals no. 108, 110, 112/68 T

The above type approvals also apply to cars with type designation 131941S (108/68 T), 1421941S (110/68 T) 1441941S (112/68 T).

The 9 indicates that the vehicle is assembled in Belgium.

The circular is signed The Road Traffic Department after authorization by Odd Schøyen and C. H. Seyffarth. What is understood by the circular is that the type approval for Amazon, 142 and 144 series is extended to cars assembled in Belgium. An immediate reaction to the circular is that the type approval should apply not only to cars assembled in Belgium, but also to cars assembled at other foreign plants. This is basically correct, but besides the factory in Ghent, it was only South Africa that assembled

131941 S 333883.
Lars Torodd Bråthen's car has changed both registration number and color over the years, but originally came with color code 97 Light yellow. That Norwegian dealers were not used to the digit «9» in the type designation is apparent from this service booklet from Bil-Service in Sandefjord. While Swedish-built 97 Light yellow 1969 models came with beige upholstery, Bråthen's car came with leather brown upholstery. The headrests are retrofitted.
Photo: Lars Torodd Bråthen.

131941S 326219. C-502373 belongs to Kjeld Enok Vollestad. The car has color 96 Dark blue, and was fitted with leather brown upholstery, similar to what was delivered on the 46 Red car pictured on the right. With the exception of the color code, the type plates of these two cars are identical – but completely different from what would have been the case if the cars had been built in Sweden. Photo: Lars Erlend Kielland.

131941S 332826. Eilif Gundersen from Ål in Hallingdal owns a red 1969 model Amazon that was assembled in Ghent. It too it has leather brown upholstery with door pockets and no rear seat center armrest. Photo: Eilif Gundersen.

the 1969 models which is the topic, see for instance the letter «S». For the latter assembly plant, the type approval would then have a digit «2» (for right-hand drive) in front of this letter.

113 - Not quite by the book

It was remarkable what was discovered when comparing Swedish-produced cars with those produced in Belgium. It should turn out that neither the upholstery nor the color combinations between car color and upholstery was as one had thought it should be. This type of unusual combinations has obviously led to discussion, that the car does not have the right upholstery – that it is a mix of upholsteries of different cars and of different year models are examples of what has been alleged.

During one of the visits to Volvo's Historical Archive, information was specifically sought on these now known Norwegian but Belgium-assembled package cars. It may seem like a lot has happened a bit randomly, both at one and the other end of the production process. It is known that the cars came to Ghent already painted from the factory in Gothenburg, and that the production cards from there are applied both chassis number, body number and color code. Of the seven cars checked, only a dark green car has a color that matches the production card.

According to the production card, a dark blue car should be medium blue, a white should be red, the light yellow should be red, two dark green should be red, and a red should be California white.

Now, this confusion has not happened at the factory in Torslanda. In similar cases, changes have been made in the course of production where they (in Sweden) have been corrected on the production cards –with handwriting on top of what was originally typed, or possibly on the punch cards. The deviations must have occurred in connection with the chassis numbers being entered at the assembly plant.

It may also seem that the routine of stamping the chassis numbers in the bodywork has changed. While there is evidence that chassis numbers on previously produced cars were made at a time when the car left the production line at the factory in Sweden, it is clear that on later produced cars this was done when the car left the assembly line at the factory which completed the assembly. At the Durban plant, this operation was completely eliminated.

114 - Upholsteries

For 1969 models as we normally know them, the color combinations are such that red, dark green and light yellow cars have beige/off white upholsteries, black and California white cars have red upholsteries, and both dark blue and medium blue cars have blue upholstery. As for the sedan, the cars were not equipped with the center armrests in the rear seat nor with the pockets in the door covers.

The aforementioned Norwegian package cars are as mentioned 1969 models. There is no complete overview of the upholstery colors of the Ghent-produced cars, but of the seven cars mentioned, dark green, dark blue, light yellow and red car have been fitted with leather brown upholstery, while a California white has black upholstery. It is not known whether there are black or medium blue cars in Norway, and which are assembled in Belgium.

When it comes to the upholstery itself, the colors and vinyl are taken from the 1968 model, which can be seen on the upholstery codes. While a 1968 brown upholstery model has code 425-552, these 1969 models have brown upholstery code 425B-552. The same «B» designation is on all the upholstery codes in these cars. There are also differences on the actual design of the upholstery. On the 1969 models on our domestic market, there were neither door pockets nor the center armrests in the back seat. The seven cars mentioned also vary; they are available with door pockets and without the center arm rest, but if they were also supplied with door pockets and with the center arm rest is uncertain.

Similarly, in Belgium, red cars with black upholstery with code 417B-515 exist.

Furthermore, it is known that a light green 1966 model normally has green upholstery, while Ghent-produced such car with black upholstery has been observed.

Also available is the medium blue Ghent-assembled 1969 model with black upholstery. While the mentioned Norwegian light yellow car has brown upholstery, another similar car supposedly got red upholstery.

In addition, there are Ghent-built 1969 models with upholsteries as we are familiar with here at home, cars built in Sweden for the Scandinavian market.

The difference that has been demonstrated between e.g. an upholsteries with codes 425 and 425B is that the welded longitudinal pressings on each side of the perforated parts in the middle, which existed in 1968, do not exist on the upholsteries for 1969 and 1970.

It should also be mentioned that the special upholstery combinations for us are not unique to Ghent-produced cars that were shipped to Norway. Such cars in Belgium have similar color/upholstery combinations.

115 - Exterior

An eye-catching detail that appears on several of the package cars found in Norway is chromed rain gutter lists. What is normal is relative, but as we know Norwegian 1969 models, these were delivered without chromed lists on the rain gutters, while several of the package cars were delivered with these types of lists. At least one of the cars is completely original and untouched, and it is confirmed from the owner who bought the car new that these lists have not been retrofitted.

116 - 4-door package car in Norway

Already in AmazonPosten's first issue in 1994, the then board member Espen Malmin had an article about a Belgian-produced package car. The car was scrapped at the time, but the car had belonged to a club member – Aage Asbjørn Brustad – who had bought the car new from dealer Leif Mathisen in Oslo.

121941M 233823. At the Torslanda plant, production of finished 4-door cars had been completed just before Christmas in 1966. All cars with 120-bodies that left the steel presses after that were packed in crates as SKDs with destination Ghent and as CKDs to Durban. In the article you can read about a 4-door 1967 model that was purchased new in Norway at the time, by the club's long-time member but now deceased Aage Asbjørn Brustad. The car was assembled in Belgium, but unfortunately the car no longer exists and imagery is not available. The B-50000 is owned by Reidar Larssen and is a car similar to the one Brustad had. What was very special about Brustad's car was that it as new was fitted with the steering wheel that came with model year 1968 – and that according to the parts catalogs was never delivered on a 4-door car. The B-50000 is similar to the car Brustad had, except it has the steering wheel that we are used to on a 1967 model.
Photo Reidar Larssen.

The two types of steering wheels that Amazon came with, except the 123GT which had a special GT steering wheel. At the top is the steering wheel in Amazon through the 1967 model year and the bottom the one that came on the 1968 model. The exception is some late 4-door 1967 models that were sent as SKD to Ghent and got the 1968 model steering wheel there.
Source: Volvo's Historical Archive.

The car in question was registered on the 6-digit Oslo number 30-25-59 when it was registered in September 1967. The identity was 121941M 234138. In some sections a little earlier in the article it has been stated that the upholsteries of Belgian produced cars did not fit completely with norm. In the case of 30-25-59 and some other well-known and similar package cars from Belgium, the cars have had the same steering wheel (of the «butterfly type» and which according to the parts catalogs was not fitted on the Amazon before the 1968 model. Ergo this type of steering wheel has basically never been fitted on a brand new 4-door car – «not quite by the book».

In the said article, Malmin also writes that he has discovered the wrong type designation also on some customs cards – that it says 121341 instead of 121941 as it should be on the cars assembled in Belgium.

That a late 4-door Amazon sold new in Norway should prove to be a package car is quite natural – when it is now known that the factory in Sweden stopped production of such already before Christmas in 1966.

117 - Volvo grows in the US, but no factory there

Volvo Import Inc. in the United States, a subsidiary of AB Volvo in Gothenburg, and an importer of Swedish-built Volvo cars, had gone to acquire a 3 hectares/7.5 acres site in Rockleigh, New Jersey. As a result of the arrows pointing upwards in the US market, more than five million kronor was invested to build both a new head office and a new service facility. The total building was 16,500m²/178,000ft² and was ready for occupancy at the turn of the year 1963/1964. The facility was centrally located adjacent to the major highways in northeastern New Jersey and here Volvo Import Inc. brought together both the administration, service and spare parts departments under the same roof. More than 100 people were employed at the facility, and in the 12,500m²/135,000ft² of the service and spare parts departments they were required to maintain a warehouse with parts for at least eight months ahead, in addition to providing training.

The fact that no assembly plant was built in this part of North America is also because the US authorities were unwilling to grant the necessary permits.

118 - Parts catalog «trouble»

All the accumulated experience of Volvo parts catalogs is that they are to be trusted, and that errors that occur in these are microscopic in the bigger scheme of things. Still, what's in the foreword of the catalog for the Amazon B20 has caused headaches.

The B20 parts catalog has content that is contrary to what was the reality. B20 Amazon was not exported to the US – why are there parts for the US market in (also newer versions) of the catalog?

Information obtained from the catalog: From the 1968 model year, cars planned for the North American market were equipped with hazard warning lights. In many cases, you will find that parts you would normally assume to be identical on cars in our home market are actually not on cars made for the US and Canada. This is mainly due to US safety regulations, which put higher demands on safety details in the car's interior and driving environment. For example, the switches required rubber buttons instead of bakelite, and the door handles had to be made of plastic rather than metal. One can say what one wants about this, but an interesting part that followed in the wake of these peculiar, or perhaps even rigid US claims is the «underdash», the padding mounted underneath the dashboard to protect the legs and knees from the metal in case of an accident.

Usually, the US and Canada cars have the same details, and as mentioned, these are often quite unique to cars built for the two markets. The hazard warning flasher was such a unique part, but here the catalog shows that it is not necessarily the same part with the same part number for these two markets.

As a result of hazard warning lights becoming a legal requirement, these were at first retrofitted by the dealers in the United States and Canada. The new requirements were not introduced in all states at the same time, but at around 1965-1966, they were basically a requirement everywhere. A consequence of the fact that it was up to the various dealers to arrange the installation also meant that both the manufacturer of the warning indicator and the position of the switch in the car were individually chosen by the dealers. It has been seen that the switches have been mounted both on the body panel side and on a bracket under the dashboard.

Starting with the 1968 model year, hazard warning lights were factory fitted on cars manufactured for both the US and Canadian markets. According to the spare parts catalog, the warning indicator is located directly above the heater control. Both parts with article number 673380 and location are identical to what Volvo used on the Volvo Amazon that was built for the «police» in Sweden. A similar product but with different part number was sold as an accessory in a set for Amazon, 140 and 1800 series, but with part number 281430.

The catalog shows clear signs that changes were made at the turn of the calendar year 1968/1969, and not at the change of the model year from 1968 to 1969. The 1969 models are in the chassis number series 312500 - 339999.

In the catalog, the part number for both the hazard warning indicator and the related parts is marked as valid for the last chassis number 325590 for the United States. At the same time it says that this type of warning flashes from chassis number 325591 applies to «left-hand drive» cars intended for the Canadian market. It is known that chassis number 324684 was finished on December 19th, 1968, so it must be at the very end of 1968 that chassis number 325590 rolled off the assembly line. As a result, one might suspect that Volvo hoped to deliver B20 Amazon until the turn of the year and float on the type approval it already had – but it should prove that it did not work.

In the parts catalog which includes the B18 models, the hazard warning switch mentioned is unique to the United States models from the beginning of the 1968 models, but another warning light is also stated, and it is not standard equipment but an accessory part.

The Canadian editions were largely similar to an Amazon with US specification, and this was followed by the B20 editions of Canadian cars. The United States had some specific requirements for the specification of the cars, and both the special knobs on the switches, side marker lights, the «underdash» (the padding under the dashboard) – were in place on the Canada cars.

119 - Plans to export to the United States existed

As a result of what can be interpreted from the catalog, Fredrik Lofter at Volvo Amazon Picture Gallery and the author of the article tried to find evidence that «the catalog is right» and that the 1969 model year was delivered to the United States. As explained earlier in the article, there was never any of the US version of Amazon with the B20 engine, but Volvo originally had plans to export the Amazon to the US as a 1969 model is beyond any doubt. So is car historian Neville Britto.

Thus, it is also easy to explain why the parts catalog contains detailed

➢ *The fact that this car has a special color is quickly noticed, and it is easy to see that the car has the steering wheel on the «wrong» side. If you take a closer look, you will find that there are many other details that are also not «quite as normal». The car was assembled in South Africa and privately imported to Norway in the 2000s. Looking at the wheel caps, you will immediately notice that such caps were not delivered on an Amazon, but were so on the 140-series. However, there is a reason why this car is equipped with 140-series caps. Both the car's original rims and wheel caps are similar in appearance to those shown in the picture. The original wheel caps are the same size as the Amazon wheel caps up to the 1964 model, and therefore does not fit rims that were introduced with the 1965 model. Unfortunately, the car's original rims are not usable, and so there are fitted original Amazon rims and wheel caps from a 140-series car – which shows the characteristic of this car.*
Photo: Arve Larsen.


SUPERSONIC


122
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SOUTH AFRICA

information on unique parts intended for the USA also for the model year 1969. Such a catalog is written and printed several months in advance before the cars are delivered. Just because the US edition did not become reality does not matter in catalog context – you do not need parts for a car that does not exist, and there is no need for an edited catalog.

120 - South Africa produced Amazon in Norway

The author of the article has seen with his own eyes that seats and upholstery, door panels, dashboard upholstery, roof covers, rubber mats, etc, mostly and perhaps all of the upholstery, and also that windows, tires, rims, wheel caps and not least the colors deviate from what one normally sees. The author has even experienced having not only one, but two editions of South Africa-produced 1970 model Amazon 122S on a visit to the yard at home. One was painted in a color that may have been golden yellow, while the other was brown. However, it was darker than Fawn brown, and no color code information was available on the type plates in either of the two cars.

It was formerly a board member and leader of the Norwegian Volvo Amazon Club, Stein Christian Husby, who in his time imported the two cars to Norway. The cars have been featured in both Norwegian and Swedish media in different contexts. After Husby sold the cars, other names have been mentioned in connection with who has tracked and bought the cars in South Africa, who has imported them to Norway, etc. All such rumors containing names other than Stein Christian Husby are hereby publicly dismissed. The author was close to the process, and knows that behind these projects, it was Husby alone, and only he and no one else contributed to Volvo Amazon in Norway getting another chapter in the history book.

121 - Amazon model year 1971 – an oversight

One of the people that the author has been in contact with is Deon van Loggerenberg – «Chairman, Volvo Owners Club of SA». Unfortunately, he could not tell more about Amazon production in South Africa than what the author already had knowledge of. But a theme that emerged along the way in the exchanged communications was the claim that there is an Amazon 1971 model in South Africa.

While the author claims it is all due to a misinterpretation, van Loggerenberg maintains his position. However, the cause of the delusion can easily be explained. It has been reasoned that Volvo changed the model year of its cars after the summer holidays, as it normally did, in 1970. It is simply concluded that the same nomenclature applies to Amazon produced in the last half of 1970, and that these cars must therefore be of year model 1971.

The claim is justified by Volvo's year of production from August to July, which in itself is correct. But neither the year model letter nor the chassis number series on the part of the South Africans is taken into account. It is also written that a number of 1,000 Volvo Amazon of the 1971 model year were assembled at MA from August to the end of December 1970. The fact is that 480 cars were billed later than June 29th, 1970.

Here is the logic as the author got it explained: *«In South Africa (not sure if this was the norm in other places, production year ran from August to July, in other words an Amazon than was assembled in August 1968, is a 1969 model ... if it was produced in February 1968 – 1968 model. Hence any Amazon assembled after July 1970 = 1971 model and it is well documented and accepted here in South Africa, they are also listed in the Auto Digest manual we used to print as 1971 models.»*

At the end of Amazon production, the vast majority of cars were exported as KD objects with South Africa as destination. It was both logical and natural, as the production line at Volvo Torslanda was to concentrate on producing the 140, 164 and 1800 series. The latest series of cars shipped to South Africa, which were also the last units of Volvo Amazon, had chassis numbers 359727 - 359918.

«Sorry» Volvo friends in South Africa, but what you write on your website may not be the full and complete truth: *«Probably the most important piece of History across the World is that; did you know that the last 122S in the world was built in South Africa in December 1970 – due to the fact that Volvo production/ model years ran from July to August* (should probably say Augusti to July, author's comment) *this means that the 1971 Volvo 122S was produced in South Africa, and nowhere else less than a 1000 were assembled; and if you own a 1971 122S produced between August 1970 and December 1970 you have ONE unique Volvo! Where is this Volvo??»*

To the South Africans defense, it should be mentioned that there is probably no type or chassis number embossed in the body of the cars that were assembled at MA during this period. But regardless, the chassis number series is known, the 1970 model of Amazon is in the series 340000 - 359918, and the letter «T» in the type designation unconditionally defines it as a 1970 model. So, the claim can be defended but it doesn't make it any more of a *fact* for that reason.


Volvo show

Laaste Volvo 122S is in S.A. gemaak

Skyfremme

Whether the Volvo Owners Club of South Africa is the source of the rumors and which has led to the allegation also being found in several other forums, or whether it happened in the opposite order, is unknown. Who is the source of this oversight is completely uncertain – and completely uninteresting.

An article on Amazon production in South Africa from Wheels24 provides more detailed information. It is mentioned that *«the Swedes seem to have forgotten about the around 300 CKDs that were shipped to South Africa after what they (the Swedes) claim is the latest Amazon produced.»*

«According to the Swedish automaker the last Amazon rolled off the assembly line at Volvo's Torslanda plant on 3 July 1970. This car, a dark blue 122 model, went straight to the car collection that later became the Volvo Museum.»

122 - Last Amazon ever was built in South Africa

However, it seems the Swedes have forgotten about the 300 or so CKD (completely knocked down) kits sent to the Motor Assemblies plant in Durban, South Africa, in that year. This batch, with a T-production number (indicating it was 1970 model year P130 two-door derivatives) and chassis numbers ranging from about 359.700 to 359.918, was the last to leave Torslanda.

That may be the case – the car referred to is the last Amazon to be completed on Torslanda. The Wheels24 article confirms, at least, that the last cars were 1970s models, and not least the correct chassis number on the very last unit. That they state that the car at the Volvo Museum is a 122S can be accepted. All Amazons in South Africa were 122S, and «Amazon» was a name reserved for our home market. The car at the museum is a 121, if there is any doubt about it.

They were assembled in Wentworth from August to December that year, and on 18 December 1970 the last one – a beige two-door 122S model with 1986 cc four-cylinder B20B engine and M40 four-speed manual gearbox – came off the assembly line.

The car was handed over by John Sully, CEO of Motor Assemblies, to Dion Lardner-Burke, marketing director of Lawson Motor group, the importers of Volvo, at the time.

According to Deon van Loggerenberg, chairman of the Volvo Owners Club of South Africa, about 230 of this final batch of right-hand drive 122S models assembled locally were registered as 1971 models, making them very unique.

The last Amazon wasn't sold initially – but was used as a company car by the Lawson Group.

However, it isn't clear what happened to it when the assembly of Volvos in Durban ended in 1973.

Shortly after this (in 1976) Volvo pulled out of the country, and with this all track of the last Amazon was lost.

«Some of the final batch survived, and we have a few examples in the club. But we don't know what happened to the last Amazon, and up until now we haven't been able to locate it,» Van Loggerenberg said.

«This Volvo, wherever it is, or whoever has it, is important within the context of South African motoring history,» he added. «Being the last Amazon ever built, and also being a right-hand drive model, further adds to its value.»

123 - The very last Amazon

Based on the above information, one must assume that the very last Amazon that was built was beige and that it left the assembly line at Motor Assemblies on December 18th, 1970. Nothing is disclosed about the car's ID, but the possibility that the car was the one that had the chassis number 359918 when it left Torslanda as a building set is only theoretically possible. About the last Amazon, Van Loggerenberg confirms that the Volvo Club of South Africa has not been able to find out about the car's fate or where it ultimately ended up.

124 - Rumors are proved wrong

Chassis number 358702 was the first in a series of cars billed to Motor Assemblies on August 13th, 1970. The argument that the MA cars did not have the type designation and that there should/could be a «U» (identifying 1971 model) on the cars does not float, unfortunately for those who might think they own a 1971 model Amazon – in Norway, in South Africa or elsewhere on the globe.

This is not an assumption or a loose claim on the part of the author. It is ratified by the fact that the latest Amazon known within NVAK has chassis number 359721, which is only six numbers before the last two deliveries, with a total of 192 cars in cnassis number series 359727 - 359918, was sent to MA divided onto two shiploads.

On the Norwegian car, all IDs are clearly marked in the body; 131341T 359721, it has year model code «T» on par with all other 1970 models, and removes any doubt about model year, if such doubt has occurred. The cars from MA also have the Swedish type plate mounted, and it is clear that the model year letter is «T». The fact that the type designation and chassis number are not embossed in the metal is another matter and has no bearing on the model year.

125 - Fair distribution

The last three cars produced at the factory in Sweden were fraternally distributed to the three Scandinavian countries. The production cards can tell that the car with chassis number 359724 was shipped to Norway. Unfortunately, no information is available on this car in the club's membership records.

359725 was exported to Denmark and the very last Amazon that was built at the Torslanda plant today stands at the Volvo Museum and has chassis number 359726, and was delivered there on September 8th, 1970.

126 - Amazon – first registered in 1972

The author has received a picture of both a type plate and registration document from Waheed Abdurahman. He is a South African resident and owns an Amazon that was first registered on January 1st, 1972. Now, Abdurahman makes no attempt to assert either that he has a 1972 model, or a late 1971 model Amazon – quite the contrary – and he writes the following to the undersigned: *«It is possible that Volvo South Africa had a surplus stock and that this car was sold very late. It is also possible that the car was a demonstration car in a dealer's ownership for a time before it was registered. A third possibility is that the protocols of the South African car authorities were so deficient that they estimated January 1st, 1972 as the date when they digitized the register.»*

Anyway – Abdurahman's car and the pictures he sent to the author were crucial to this article's explanation, and not least proof of how things connected. First, the registration papers document that it was the body number that was used as the chassis number, rather than the chassis number assigned to the car at the factory in Sweden. In addition, the picture of the type plate shows that cars from South Africa also got a type plate where type designation and year model letter are applied, and that this car also has «T».

127 - Volvo Amazon 223GT - did such a car exist?

That such a car has ever existed is something most people definitely deny – the author included. When asking van Loggerenberg if he knows whether the Amazon Station Wagon was built in South Africa, van Loggerenberg answers affirmative. The author has found that this was done, and in a number of 1,008 units – but has also found information in several places that only the sedan was mounted at MA. Therefore, an attempt was made to find out what is correct, and what is then not correct.

Van Loggerenberg: *«Are you referring to the P220? If so, yes there were some assembled here in South Africa and there were even a few built to 123GT specs! I have never seen one, but I've heard that there were some – **that** would be something to get hold of. I have a 1967 P220 built in South Africa and there are quite few of them around. If you browse our website, you will get a few pictures.»*

Since neither «it is alleged», «have been told» nor «heard» is sufficient evidence that the Amazon 223GT was built, the answer is «no» to the question of whether such a car exists, or has existed, from the factory.

Nevertheless, the author of the article will not in any way claim that the rumors that a number of Station Wagons were built with GT specifications are pure spin – it is only to draw a parallel to the previously mentioned 133GT. The factory in South Africa had access to all the parts needed to build a Station Wagon with GT specifications, a car they would then call 223GT, and as is known, there is rarely any smoke without fire. Most things can be bought, it's usually just a matter of price. The undersigned fully agrees with van Loggerenberg – ***such a car*** would be something to get hold of.

Should such a car show up, the natural consequence will be that the owner will claim it is an original 223GT supplied by Volvo. Yes – built to order from at a Volvo assembly plant, but not really a car officially delivered according to specifications from AB Volvo. *«Such a thing had **really** been something to get hold of,»* but an original 223GT was never produced anyway, so it remains in the dream. If AB Volvo had only a tiny idea of what enormous popularity Volvo Amazon would prove to have half a century later – then it is more than likely that some of us could have been driving around in an Amazon of type 223351 or 223352 – a 223GT.

128 - The hunger for sensation

Considering what this article is about, there are many words that can be used in conjunction with «records», and words that are *first, last, best, least, greatest* and *most* are of great importance to those implicated. Therefore, it is not unexpected that internal or subjective company reports help to highlight one's own success. As long as an assertion remains unchallenged, it is felt that this will eventually be considered to be the correct answer, especially when it may have a historical value. As mentioned, it is certain that Motor Assemblies in South Africa were the ones assembled, not just the last, but the last 192 units of Volvo Amazon.

When that is mentioned, it is also important to point out that in a report from Volvo dated January 22nd, 1971, it is stated that as per week 52/53 1970 there were 22 Volvo Amazon 130-series in stock, of which 9 were in Gothenburg and the other 13 copies were in commission. Unfortunately, it is not stated where the latter cars were located.

129 - Amazon Globetrotter – a car from Motor Assemblies

The author came across an image from the engine bay of an Amazon, where owner Alan Smith had questions about the heater unit on his car, and therefore took a close-up view of it. It turned out that the car was registered in New Zealand, and there is practiced as well as most know – left side driving. In the same picture, the type plate was visible. It was noticed that it did not quite agree with what to expect.

Normally, cars sold to New Zealand and Australia are manufactured in Sweden, but when it comes to Smith's car, the author noted that the type plate contained the digit «9» in the type designation 133942 P, and as it is known, it indicates that the car was assembled at an assembly plant outside Sweden.

➢ *Attention was caught when this image was published on Facebook, in connection with questions about the heater unit. The combination of the two type plates required further investigation, and Alan Smith was contacted. The result was a story about a car that had a nomadic life and moved more around the world than most cars.*
Photo: Alan Smith.

New Zealand registered BIL 122 is a 1968 model and was assembled at Motor Assemblies outside Durban. Alan Smith, who has owned and still has other types of Volvo, bought the car from there in 2016. BIL 122 is a personal sign – in case anyone wonders.
Photo: Alan Smith.

As elements of various kinds have emerged in the research papers of this article, one has learned not to skip anything that may provide new clues. The author considered it to be certain that the car was assembled in South Africa, but could it have been an assembly plant in Australia as well in the Amazon era, or possibly in New Zealand? Bottom line, a bit more thorough research was needed around both the car and the type plate. As so many times before, contact was reached via e-mail and Alan Smith could tell about the car's history.

The author had also been informed that there was no information for either color code or upholstery code on the type plate, besides that there was another plate that was completely unknown. That record contained a VIN number – or at least some form of ID number – and also had the inscription «NZ».

The answer from Smith reads: *«I bought the car in New Zealand in 2016. It had been imported from South Africa in 2008. It also spent time in Zimbabwe (at that time called Rhodesia) I believe it was sent as a kit from Göteborg and assembled in Durban. I'm not sure why there is no colour code or interior code. Possibly as it was assembled overseas. The other plate is the New Zealand VIN code. Every vehicle here must have one but I do not think the numbers mean much. It's my fifth Volvo. I had a 760 GLE and a 340GLE but sold them. Now [1]) I have a 2006 XC90 and a 2014 XC60 but the Amazon is my favourite. It runs ok and I am slowly getting it fixed up. The registration is a personalised plate: BIL 122.»*

[1]) This was in 2016, (author's note).

In the author's reply to the above answer, Smith was explained both about the assembly plant, the type plate which lacks information and that both color and upholstery were determined locally at the assembly plant outside Durban. That not many cars would survive the trips Smith's car had made was also commented on. A «Globetrotter» – transported in a wooden box on a ship from


BIL 122


Typ
Type
133942 P
Färg
Colour
Klädsel
Upholst
S-
5110. 5250
VOLVO
GÖTEBORG - SWEDEN


RHODESIA


BUILT BY
MOTOR ASSEMBLIES LTD.
DURBAN
SOUTH AFRICA

Gothenburg and to Durban, and then moved to Rhodesia, back to South Africa and then at least for the time being, in New Zealand, and that during a period of 50 years. «Volvo's value lasts».

130 - Politics and mutual benefit

Neville Britto could tell that Volvo 164 was never assembled at the Halifax plant. Nor were any of the other, typical luxury cars from Volvo. As a rule, regular cars with 4-cylinder engines were assembled there, except for the 264 and 265 with diesel engines, and later 850 and S/V70 in the 1998 and 1999 model years – cars that were of great demand. This is also justified by fees and agreements, and while Volvo built cars with high sales volume in Canada, it was also easier to obtain import permits for cars with low volumes. Thanks to Volvo producing the 140 and 740 series in Canada, Volvo was allowed to export luxury 164 and 760 cars to Canada. In the case of the 264 and 265 with diesel engines, they never received badges with the designation «264» or «265», but only «Diesel».

131 - Significant need for foreign assembly

The reason for the establishment of the assembly plants outside Sweden was mainly due to different customs and import regulations in the different countries and among the different trade unions. But there were also other factors that came into play.

AB Volvo's annual report for 1963 reports on a new record year for passenger car sales in Sweden, but at the same time the group had not managed to retain the same share of the total increase as the previous year. It was justified that supply or production capacity did not keep up with demand. In order to keep exports at a reasonable level, sales in Sweden were hurt. In another report, it could be read that there was a lack of available work capacity in Sweden, and thus Volvo management had yet another challenge and, as you know, this was solved in a satisfactory way for all parties.

132 - Kelab Volvo Klasik Malaysia

In today's Malaysia, Kelab Volvo Klasik Malaysia is the only club exclusive to Volvo. The club was founded in 1997, and the club's secretary Noel Chua says in an e-mail to the author that the club has approximately 100 members, and the member cars include Amazon with a major emphasis on 4-door editions, Amazon Station Wagon, P1800, 140 and 240 series. Chua himself would very much like to have a PV544, but neither he nor any of the other club members have such a car. They are fully aware of what an Amazon is if the word pops up, but they use 122S and Wagon when talking about these cars.

As in most or all other countries where Amazon has been on the road, many cars have been scrapped over the years, and as far as Chua is aware, there is no record of how many Volvo Amazon has been registered in the country, how many that are scrapped or how many still exist.

Chua also says that Amazon was considered to be a luxury car when it was launched in Malaysia and that not many people could afford to buy such a car at that time. However, the car was a favorite among lawyers, doctors and employees with high positions in government and ministries.

133 - Amazon along the road in Malaysia

It was not unknown to the author that there would be a Volvo and not least an Amazon environment in Malaysia, but also that it was most

➢ The car is a 2-door 1968 model, and when comparing the number on the type plate from Motor Assemblies with similar plates it is noted that the number increases as the cars are newer. MA did not start final assembly of 2-door Amazons until after the last 4-door car had left the factory. One theory, therefore, is that this type of numbering started with the first 2-door car produced, which was assembled well into the series of 1967 models, perhaps not even until the 1968 model. An Amazon who has lived large parts of its life as a nomad. The car was in use for a few years in South Africa after leaving the assembly plant outside Durban. For a subsequent period, it served in Rhodesia – which Zimbabwe was then called – before returning to South Africa. But the rover set out again on a long trip, ending up in New Zealand, and owner Alan Smith claims the car has now found its final whereabouts.
Photo: Alan Smith.

➢ The picture in the middle made the author wonder if there wasn't an early, local final assembly of Amazon in Malaysia after all – despite that all the knowledge at the time indicated that it had not. The type designation is unclear, and what is on the plate to the right? Via Noel Chua in Kelab Volvo Klasik Malaysia, who contacted car owner Joe Miranda, the author succeeded in getting a new and better picture of the type plate (bottom) – which clearly shows that the car is manufactured at the Lundby factory in Sweden, and then exported to Malaysia. The car is a 1961 model, and as the picture shows, the car was originally painted in color 67 Slate blue, while in the picture at the top it is red with white (not grey beige) roof.
Photo: Joe Miranda.

ML 7602, Noel Chua, Malaysian 123GT.
When the Volvo factory in Batu Tigu opened in 1967, the assembly of Volvo Amazon could have been a natural part of production but that did not happen. If they had chosen to also build Amazon locally in Malaysia it would have resulted in many more Amazons there today. The cars in the pictures are not locally produced, but they do well to illustrate the article – to emphasize its spread and how popular Amazon is across most of the world.
Photo: Noel Chua.

The picture illustrates the Amazon environment within Kelab Volvo Klasik Malaysia. An avid bunch of Volvo enthusiasts who love to show off their cars, use them and who are often driving together.
Photo: Joey Casey.

obvious to assume that it would be concentrated mostly around Kuala Lumpur, which is both the capital and also the largest the city in the country. Therefore, there was no hope to meet at an Amazon in the trip to Georgetown on Penang Island some years ago. Now the purpose of the trip was to arrange a new tourist visa to Thailand, but it went on for a couple of days while waiting for the visa – completely without seeing anything that could be reminiscent of an Amazon. With return tickets on the plane that were not possible to rebook, it was all too obvious that the visa processing would be delayed, and there was a relatively stressed group of people sitting in the taxi on the way to the airport after the visa documents were finally returned, just over a day later than agreed. As this is mentioned, this article considered, it is quite obvious that there was an Amazon going in our opposite direction on the way to the airport. There was no way to turn or take a picture of it, but that was the glimpse we got through the car window.

It was clear that the factory in Batu Tigu did not produce Amazon, but previous experiences from the research work for this article had shown that something may have happened at an early stage, a small production, a trial project or something like that. The Internet has been widely used to make contacts, and it was not difficult to find pictures of Amazon in Malaysia, but there were cars of newer model years. After some searching, images of an Amazon appeared, though poorly, but clearly showing a B16 model, which clearly also needed a restoration.

It was therefore interesting to find out more about this car, and via some intermediate contacts, the author came in contact with Noel Chua. He could tell that Amazon was imported with the B16 engine at the beginning of the 1960s, and then it is understood either 1960 or 1961 model year in question. He couldn't say for sure whether Amazon could have been finalized

122342 M 231839, Malaysian 122S, Owner: Mr. Rasiah. Photo: Mr. Rasiah

in the country at an early stage or not. Although there was no evidence that such a production had taken place, it was important to gain certainty. Chua succeeds in getting in touch with the owner of the said B16 car, and a picture of the type plate. Unfortunately, it was not possible to interpret what was on the record – and it could just as well be a 9-figure as a 3-number. Chua was helpful and reconnected with the Amazon owner, who promised to take a clear picture the next time he visited the place where the car was stored. In short, it should turn out that the car was manufactured at Lundby, and the theory that Amazon was assembled locally in Malaysia in the early 1960s was shattered.

Now also the knowledge gained in retrospect supports the conclusion that Amazon was not assembled in Malaysia either before or after the Batu Tigu plant was taken into use.

134 - The documents that almost disappeared

Everyone who has been dealing with archive material in paper format are aware of the fact that it takes up a lot of space, is heavy and generally unmanageable. That a relocation process is a «nice» opportunity to get rid of old archives is also a fact, and tons of important information has been dumped right into containers in this context.

When Volvo moved the factory from Lundby to Torslanda, the archive was a natural part of the overall process, but before physically starting to move out of file cabinets, drawers and shelves, an assessment was made of what to do with all the production cards. Here you talk not only about Amazon, but essentially about everything that was ever produced at Lundby.

The handwritten production cards, which has an overview of 25 cars per page, were moved without anything being done to them. At one point in 1962, the traditional production cards were replaced with modern-day machines with punch cards. The new system saved many hours of work but the solution was not space-saving, as both the handwritten cards and the punch cards occupied many shelves in the archive. It was decided to photograph all the punch cards on microfilm and to provide a lasting storage of the car information in that way – and which took up no more space than a medicine cabinet in a regular household. This was no small job to do either, but it was done and then you could get rid of many hundreds of pounds of paper production cards.

The aforementioned early production cards, as well as AB Volvo's internal control protocols, accounting etc. were taken care of, but much was thrown away without too much thought of posterity and that it could be important to be able to document the history of the company.

Pehr Gustaf Gyllenhammar was the CEO of the Volvo Group, but just as closely followed by what happened in various departments of the company. When Gyllenhammar learned that it had been disposed of with a wealth of old archive material that had been collected over the years, he immediately took action.

He wrote a personal letter to all the dealers around, asking them to send all of the old archives and archives that they had back to Volvo's archives. In this way, documentation that would otherwise sooner or later disappear were now secured into the right hands.

Lars Gerdin says that the archive occasionally receives some boxes of historical material, but now more from private individuals who no longer need what is saved.

PG 8228, 1965 model Malaysian 122S. Owner and photo: unknown. Probably there is nothing to remark on the paintwork even when coming up close. Custom is popular in most car environments. There is nothing to add regarding the cup holders.

Often there are heirs who have cleaned up after someone who has passed away and who are observant enough to realize that it may have value for Volvo.

Pehr G. has been very important to Volvo, and he is actually responsible for that we today know as much as we do about Volvo's car history.

Epilogue

135 - Analysis at an early stage

It is stated early in the article that there for long were unidentified recipients of KD objects, and the fact that these already existed among the first series delivered as KD kits made it impossible to determine in what order the various assembly plants were established and started up.

In other words, the uncertainty about which was first started was noticeable, something that had not been taken into account when the decision to write the article was made.

Fortunately, the dilemma was eliminated along the way and the assembly plants in the countries where Amazon was assembled became as has been explained here.

Given that Volvo PV was assembled overseas as early as the first half of the 1950s, and apparently without a code showing this, one question was whether Amazon may also have been assembled before what is now known, and without having a code showing this.

With the help of the Swedish and Norwegian PV Club as well as Per-Åke Fröberg at Volvo Cars Heritage, information was found that showed that PV actually had a code that indicated whether the production had taken place in Sweden or abroad.

136 - A preliminary line of reasoning

On the basis of the speculations and theories that existed, it was time for a status report. A preliminary revision was made – at a time when two recipients of KD were not yet identified.

An unconditional confirmed response to which *factory* was the first to assemble *Volvo Amazon KD's* overseas was not known at that time. One question that was asked was whether the assemblies in Brussels, The Hague and a couple of more places could be classified as *factories* at that time? *Factory* is synonymous with production company, and with such a high number of cars produced at SBMA and in the Netherlands, as previously mentioned 4,252 copies, the term «factory» cannot be wrong. This production was mainly about the PV 444/544 along with a number of heavier vehicles, and not about Amazon, but still!

Another fact is that Volvo changed a lot on Amazon in the first years of production. The sealing of leaks that caused rust problems, elimination of «childhood diseases» and new designs of both bodywork and chassis made them choose to have full control in their own field and concentrate all production at the Lundby plant at this stage of the era. As one has read, PV had its own code for «kit for assembly abroad» as early as 1954, and that Volvo Amazon should be assembled abroad or have another own code for assembly abroad before the «9» was introduced in 1961 is unthinkable.

As SBMA had been assembling Volvo PV for 5-6 years already when they received the first Volvo Amazon «KD's» in the fall of 1960, it was perhaps unlikely that other assembly plants had previously completed Amazon before SBMA did.

The author's note at the time, «perhaps», is due to a production diagram and an overview that the author got from Volvo in Gothenburg, showing «CKD – SKD Total Production» in the period 1954-2007. (That the CKD/SKD designations are used for figures from 1954 in this regard is due to the reports being of compiled recently). In the overview, *the Netherlands* is listed as the only country as a manufacturer of SKD – CKD products with 1,452 cars produced in the period 1954-1959. Belgium is ***not*** mentioned in that period.

This information does not match with images that the author has seen from SBMA in Brussels. The pictures clearly show a number of Volvo PV444 of the latest 1954 model year in the assembly process. When comparing the previously stated production figure (a total of 4,252 cars) for Belgium and *Holland*, with the 1,452 mentioned in the previous section, 2,800 cars have «disappeared» along the way. All of these are not likely heavier vehicles, and for this reason have disappeared from one overview to the other, but also disappeared from the statistics together with Belgium as a whole.

The overview also lists Belgium as producer in the period ***1964-1969.*** Thus, Volvo's own production reports are not correct, and until it is possible to get a complete overview of all production cards and importers, it is absolutely impossible to come to a definitive conclusion. (However, Volvo's reports are correct for the factory in Ghent).

137 - Analysis at a later stage

The detailed report on Motor Assemblies also shows that Motor Assemblies was the first to assemble the Amazon ***CKD – Completely Knocked Down*** unit. Key here is that the statement comes from a subjective source and that the report is not an official report from Volvo, which in turn has not confirmed neither one or the other.

It is known that CKDs were sent to Mexico and to MA in South Africa, and that SKDs were sent to SBMA in Belgium and to Beverwijk in the Netherlands.

Although separating SKD and CKD, the author will still not support what M. Compton and T. J. Gallwey stated in their report on Motor Assemblies Ltd in 2009; that MA was the first to assemble Amazon as CKD, whereas MA was actually beaten to it by Mexico.

138 - The hunt for information

At the very beginning of the article, you will find an overview of people who have contributed important information, details that are absolutely necessary to be able to write an article like this. Along the way, a lot of e-mails has been sent to different corners of the world – hoping to find out some extra details, or for Tommy Joelsson, Fredrik Lofter or the author of the article completely unknown information. The article explains that the Beverwijk factory was «discovered» as a result of electronic letters.

It can also not to be avoided that in such a context, information is also to be found which does not appear to have any roots in reality. The facts presented in this article have not been derived from an already existing answer – but have emerged as things have added up and the tasks have been solved.

139 - Not quite over the finish line

In spite of all efforts to summarize already known information, to disprove claims that were known to be incorrect, to look for new information and to find answers to a number of questions that emerged along the way – the author must realize that one never quite reaches the finish line. There will always be questions that remain unanswered, but hopefully you have succeeded in identifying and answering the most important questions that can be related to an article like this one.

In an ongoing and relatively time-consuming research period, it was the case that for each question you found the answer to, five new questions appeared along the way. Ergo increased the list of unresolved issues, and it took a long time before the list became so short that you could catch it at a glance – and without scrolling to the next page.

140 - Theory, speculation and questions – based on a small internal memo and a statement

During one of the archive visits, a Volvo note was found which read: «Towards the end of the Amazon production, Canada was also supplied with cars from the Ghent factory.» That was all it said, a short sentence totally free of further information.

Östergren had mentioned to the author that the number codes were not always the way they were supposed to be. We already know something about this, the recently mentioned digit «4» on Swedish-produced cars sent to Canada is an example of deviations from the original and intended norms, since cars with this code were originally going to the US. No strange deviation, but as a result of the visits to the archive, an interesting note from AB Volvo was also discovered – which created more headaches.

Given that car production in Sweden was concentrated more and more around the 140, 164 and 1800 series and with the knowledge that the Halifax assembly plant had already completely converted to the 140 series, such a form of transformation is far from remarkable. Volvo 164, however, was not assembled in Canada. The fact that the cars were built with US specification goes without saying, since Canada was the destination and largely followed US in regulations.

What is more interesting – maybe – is the fact that any Belgian-produced cars with destination Canada would also have the digit «4» in the type designation. That there may be cars that are assembled outside Sweden and which still do not have the digit «9», which denotes foreign assembly.

In that case, it means that in the time after the factory in Canada ended Amazon production, a Volvo Amazon that was sold new in Canada was either imported from Sweden and consequently built at the Torslanda plant, or possibly from Belgium to which they had arrived as CKD. In any case, the cars were built to US specifications, and so the Ghent-produced cars therefore got «4» in the type designation.

Here, there seemed to have been an inconsistency in the definition of what the «4» and «9» digits tell. It was more important for Volvo that a number should inform about the car's equipment level than it should tell about where the car was built – or where it was not built. For Volvo, it was an uncomplicated decision to make – and for the nerds it's easy to understand – if it is correct.

- *Itcould mean that the factory in Belgium also assembled 1968 models for the Canadian market, with the type designation 133441.*
- *It could mean that the factory in Belgium also assembled 1968 models for the US market, with type designation 133441.*
- *It could mean that the factory in Belgium also assembled 1969 models for the Canadian market, with the type designation 133441.*

Three theories that Gerdin, Joelsson, Lofter and the author, despite fiercely attempts, had not found an explanation for. One step in the research was to check the delivery protocols for some 1968 models. Typically, both type designation and model year letter are embossed on the car's type plate, and type designation, model year letter and chassis number are stamped on the torpedo wall.

Along the way, there had been cases where the model year letter was not embossed in the bodywork or on the type plate. There are many examples of that – also in different chassis number series – that one might think it may be due to a neglect or a defect from the factory

that assembled the car. Besides, the letter is also missing on the type plate.Perhaps a red thread could be found where cars withmodel year letters were produced in Gothenburg and those without in Ghent. Several such cases were checked, but it turned out that the procedure varied and that cars produced in Sweden also lacked the model year letter. No explanation for this has been found. It seemed that the article had to end with question marks.

The answer to this did not come until the time of «extreme fato» – last chance – when an e-mail from Östergren appeared who at that time was on vacation in Chile.

- Was 133441P built in Belgium for the United States – Östergren answers a definite «no» to that question.
- Was 133441P built in Belgium for Canada – Östergren answers a definite «no» to that question as well.
- Was 133441S built in Belgium for Canada – Östergren answers a definite «no» to this question as well.

Since Gustaf Östergren was the manager of the factory in Ghent at the time such a production should have occurred, there is no closer answer than what was received from him. It should also be mentioned that apart from the note in a Volvo report, no other evidence or even sign that this actually happened has surfaced. As mentioned, the note from Volvo contains no further specification. Furthermore, it was not possible to find further information on such production during the archive visits.

As an additional information, the assembly plant in Ghent did not export to other countries in neitherNorth-nor South America.On the other hand, Östergren notes that the plant in Ghent for some time sent several shiploads of 140 series cars directly to Jacksonville in the USA. Each shipload had 1,100 cars on board. The single reason for this export was that the Finance Department in Brussels wanted fresh dollars for Belgium.

The chassis number information derives from what was found as a result of the manual search of production cards in Volvo's Historical Archive. With tens of thousands of cards to review, information may have been overlooked, and it is therefore subject to success in finding the lowest numbers of all the foreign assembly plants. However, the fact that the assembly plants are presented in the right order is almost certain to be the case. A future digitization of the archive may help to certify this type of information in the article.

➤ *This and subsequent two pages: In parallel with the assembly plants, Volvo exported cars from Sweden around the world. The picture was taken on December 21st, 1959 in Uddevalla. Photo: Arne Andersson. Source: www.digitalmuseum.se.*
A 1965 model Amazon is hanging in the crane. Source: Volvo's Historical Archive.
PV was exported long before the Amazon was produced. Here from Gothenburg Harbor in 1952. Photo: Erik Liljeroth. Source: www.digitalmuseum.se


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