

triscan•news

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TRISCAN WINS THE AWARD AS SUPPLIER OF THE YEAR AT THE AUTO AWARDS 2017

WHEN ERROR CODES ARE NOT CLEAR IT IS OFTEN THE SPARE PART THAT IS BLAMED



MICHAEL JUUL HANSEN: WITH GREAT PLEASURE...

IN-HOUSE QUALITY ASSURANCE: FOR QUICK ANSWERS AND GOOD SERVICE



NEWS: Mounting kit with special bolts for Ford, Mazda & Volvo track control arms

- SOLO - the road to increased profits and customer satisfaction
- New belt tensioner design for VAG 1.2, 1.6 og 2.0 TDI engines
- How to avoid corrosion damages on the cars thermostat
- ABS-sensors: widest programme & lowest warranty claim rate
- The Danish Tax Minister visits Triscan
- and much more ...

Who are we - and what can we do?

Triscan is a 100% Danish company who has gained a strong position in the Scandinavian market and achieved heavily increasing sales in the rest of Europe. This position has been reached through creation of concepts, marketing and distribution of automotive spare parts for the professional free aftermarket.

- Fast delivery of the right parts
- Spare parts for 52 car makes
- 50,000 references
- 25 product groups
- Complete delivery
- Online catalogue

When you buy spare parts from Triscan you will not only get a product of high and uniform quality but also a complete product supplied with all the necessary mounting parts in a user-friendly packaging with mounting instructions, reference number, application guide etc.

“Improved sales and earnings, increased efficiency, higher delivery rate, reduced stock value and greater customer satisfaction”



Every day goods are delivered from Triscan's 4 distribution centers in Brabrand, Glostrup as well as Iserlohn and Saarbrücken in Germany - to 35 markets in Europe.



Brabrand, DK



Glostrup, DK



Iserlohn, D



Saarbrücken, D

4



20



WITH GREAT PLEASURE • 4

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“With solid sales growth in 2017 and a significant expansion of our warehouses in Denmark and Germany, Triscan has the right foundation to meet the future challenges of the industry.”



WITH GREAT PLEASURE...

Starting in a new job at a new company is always accompanied by many expectations and ideas about the corporate culture that one will be part of in the future, as well as new colleagues and customers. It was no different for me on the 1st of May, when I got to take a seat in the "director's chair" at Triscan. As the replacement of John Iversen, who was the driving force behind Triscan's great development for many years, I have some very large shoes to fill. I approach this task with great joy, but also with humility.

"As the replacement of John Iversen, who was the driving force behind Triscan's great development for many years, I have some very large shoes to fill. I approach this task with great joy, but also with humility"

- Michael Juul Hansen, CEO Triscan



After 7 months in my new job I must say that it is a great pleasure to experience the drive and commitment of my 120 new colleagues. It's great to see the positive and dedicated approach everyone has to uncompromisingly servicing our many customers. Moreover, it is a pleasure to feel the corporate culture – Triscan's DNA – which is based on the most important thing – our customers – who form the basis of our existence and are our main focus.

Triscan is on an exciting journey and has managed to evolve and adapt to the industry as well as outside forces. The strategy has continuously been adapted and new concepts and complete product groups have been launched. In recent years, our wide range within sensors has rapidly grown to be a significant business area. Triscan's journey has also brought with it a steady expansion and revenue growth, today we deliver to more than 35 countries.

The development of our industry has for some time been marked by consolidations of wholesalers and other players throughout Europe. Mergers and acquisitions will remain a big part of the industry's development. Simultaneously, digitization has become the focus in all areas of our industry. "Connected Cars, Autonomous Driving, Remote Diagnostics and Predictive Maintenance" are just a few of the new concepts that all links in the spare parts supply chain will have to adjust to. Furthermore, it appears that electric and hybrid cars will have their breakthrough in the next 5-7 years and will soon make up a significant part of newly registered cars. We will make sure that our new product launches, initiatives and investments will be based on these developments, so our solutions continue to add value and drive growth for our customers.

With solid sales growth in 2017 and a significant expansion of our warehouses in Denmark and Germany, Triscan has the right foundation to meet the future challenges of the industry. In 2018 we will extend our product range with new exciting product groups. Furthermore, we are working on other big projects for 2018, that we cannot yet reveal.

After 7 months on "the director's chair" the biggest pleasure for me is that I have become part of this team. It is with humility that I am looking forward to participating in our further development together with my new colleagues and our clients.

THE DANISH TAX MINISTER VISITS TRISCAN



Left to right: Karsten Lauritzen, Jakob Ellemann-Jensen and John B. Iversen

On Tuesday, June 20, Denmark's Tax Minister Karsten Lauritzen had found time in the calendar to pay Triscan headquarter in Brabrand a visit.

The Tax Minister was joined by Jacob Ellemann-Jensen, member of the parliament and political spokesman of the Left, Laura Uggla, political leader of the Left in Aarhus and his special advisor, Thomas le Dous.

Following a brief business presentation, by Triscan's chairman, John B. Iversen, there was time for a debate about the future division of the Danish Customs and Tax Administration, social responsibility, future perspectives and the challenges and benefits that Triscan sees in running an international company from Denmark.

The visit was completed with a company tour, guided by Triscan's Logistics and IT Director, Morten Hallum.



Left to right: Morten Hallum, Thomas le Dous and Karsten Lauritzen

TRISCAN WINS THE AWARD AS SUPPLIER OF THE YEAR AT THE AUTO AWARDS 2017

On November 28, 2017, this year's Auto Awards show took place. It was with tremendous joy that we heard the host announce that Triscan was voted 'Supplier of the Year'.

"We are honored to receive this award as 'Supplier of the Year' and accept it with pride but also humility," says Michael Juul Hansen on behalf of the Triscan management team, which was present in its entirety at the event. "We receive the award on behalf of all our colleagues who earn us this award with their daily dedication. Finally, we thank our customers, who help us through their input and good cooperation to continuously develop our concept and business," concludes Michael Juul Hansen.

The Auto Awards were founded in 2015, where the prestigious statuettes were first awarded. The aim and purpose of the Auto Awards is to honor those players in the Danish auto industry who make a significant difference, set a high standard and inspire the industry.

In the category "Supplier of the Year", the nomination criteria included quality, innovation, service, delivery, support, availability, product range, creativity and cooperation. In other words, a supplier who contributes in every way to the added value for the trade, the workshops and the end user.



EGR VALVE CONTINUES TO COST VAG CAR OWNERS, REPAIR

Many repair shops and wholesalers have gradually become acquainted with the frequently used EGR-valve that applies to diesel engines of the types 1.4, 1.6, 1.9 and 2.0 TDIs. Despite several attempts, VAG or other aftermarket actors have not succeeded in solving the problem. Based on our own technical studies, we in this article unveil why the EGR valve stops working too quickly.



Triscan EGR valve 8813 29102 / VAG OE-no. O3L131512DQ

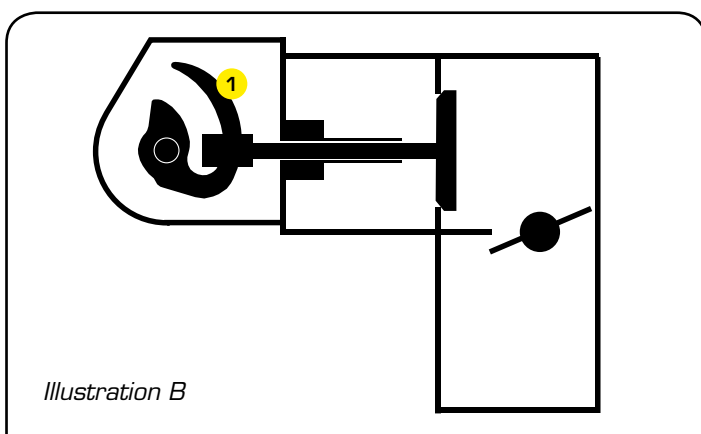
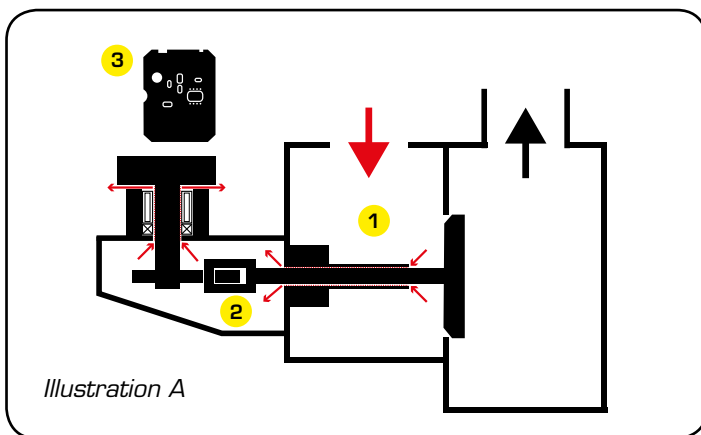
The fundamental cause of the problem with the EGR valve (latest OE number: O3L131512DQ) is inappropriateness in its design as well as choice of components around the valve and its control mechanism. The design allows exhaust gas to penetrate parts of the valve's mechanical and electronic control.

When the EGR valve is closed and does not lead exhaust gas into the intake manifold, pressure is built on the back of the valve (the side of the valve where the exhaust gas supply takes place). The tolerance between the valve and the valve control sleeve results in the exhaust gas being directed into the adjacent chamber (see illustration A, position 1).

In the chamber, where the gas has found its way to, the valve control is connected to the control mechanism valve positioning hook (see illustration B, position 1). The valve positioning is controlled by rotating the hook by means of an electric motor and the two components are connected to each other via an axle. The hook and the electronics for controlling the electric motor are located in separate compartments (see illustration A, position 2 and 3). The exhaust gas utilizes the shaft seal and the needle bearing to find its way from one chamber to another.

The penetrating exhaust gas has several negative impacts, which over time will lead the EGR-valve not to work properly or to fail.

1. The needle bearing is soiled with soot, which means that the function of the bearing is reduced.
2. Condensation is formed, which means that the needle bearing begins to corrode. Over time, the function of the bearing reduces and eventually fails completely.
3. For the electric motor, the consequences of a defective needle bearing are that the electric motor is unable to rotate the shaft and thereby activate the valve.
4. And for the electric circuit the soot formation can over time cause the electric circuit to fail.



AIR SHOPS AND WHOLESALERS ANNOYANCE AND MONEY

VAG software update after the dieselgate scandal also has an influence on the EGR valve

Many of the cars equipped with this type of EGR valve are part of the dieselgate scandal. VAG has offered the owners a software update for the engine control which should solve the emission-related issues, especially nitrogen oxides (NOx). It is therefore also important to mention that a software update has a major impact on the EGR valve. After an update, the EGR valve will be activated much more often and thus be subjected to increased wear.

Whats next?

As mentioned – and for the time being – there is no solution to the problem, we can only explain why it's going wrong. As a workshop or wholesaler, it is important to know the background and to be able to explain the problem. It doesn't matter to what garage the car owner will take the car to get it fixed – the problem is the same – also at a VAG-certified garage. At Triscan we keep up to date with the latest development, have a close dialogue with our manufacturers and will disclose any relevant information as soon as news is released.



The image clearly shows how the exhaust gas has penetrated and melanised the chamber and the parts included in the valve control mechanism



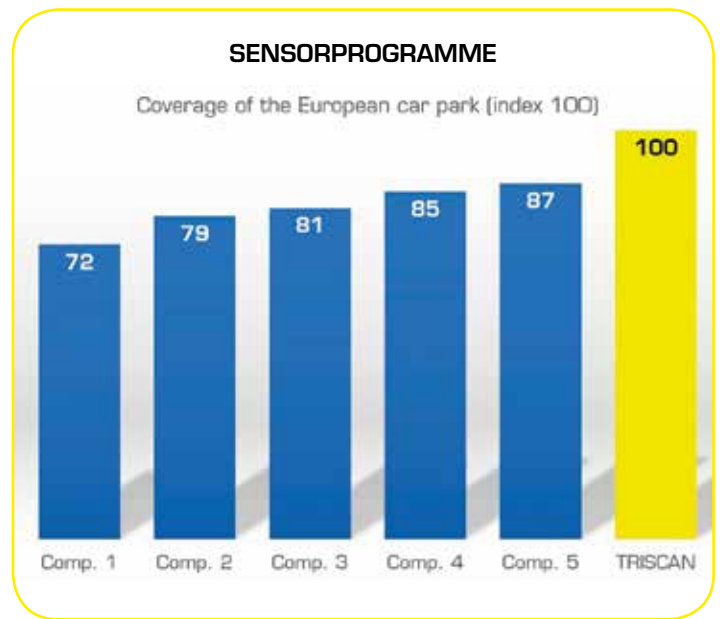
In this picture you can see clearly how the permeated exhaust fumes have sooted the circuit board and its components.

ABS-SENSORS: THE WIDEST PROGRAMME ON THE MARKET, WITH PROBABLY THE LOWEST WARRANTY CLAIM RATE

In all modesty we have to say that we are quite happy about the development of our sensor programme. Since the introduction of the first three product groups just over two years ago - the programme today includes 11 different product groups – and has reached the 3rd place in terms of sales figures. One of the most popular product group is the ABS sensors – how come?



*ABS-sensors of the Hall-type are packed in antistatic bags



Triscan has the widest programme on the market

Part of the explanation is probably that we have been able to reach agreements with more than 23 different manufacturers. This allows us to offer more than 1,300 references. With a coverage of 85,7% of the European car park, Triscan's ABS sensor range has the widest coverage on the market. "For our customers, we have made managing a very complex product group simple, efficient and time-saving. With only one data set to manage and the ability to get a broad programme with competitive pricing and high deliverability from one supplier, the benefits are easily identifiable to many wholesalers - regardless if Triscan serves as the main supplier, emergency supplier or gap filler," says Steen Ray Pedersen, Sales and Marketing Manager at Triscan.

The second part of the explanation may be the high quality of the ABS sensors, which is directly related to the very low warranty claim rate. Like all our products, the ABS sensors are manufactured to OE specifications. The production of all our sensors is subject to the strict quality standard of the automotive industry ISO TS 16949 - in addition, as part of the quality assurance, a functional test of each individual sensor is performed. Triscan's warranty claim statistics include all warranty claims received, whether they prove justified or not. For errors in the ABS system, where the source of error often turns out to be something other than the ABS sensor, a 0.5% complaint rate is no cause for concern.

Subsequent tests of the returned ABS sensors show that they work flawlessly in most cases, so the actual complaint rate is only 0.09%. However, this number also includes ABS sensors of the Hall type. The chips built into these sensors are not only very sensitive to static electricity, but can be damaged by it. Therefore, such sensors are protected by an antistatic bag. "In cases where the seal on the bag has been broken the sensor has most likely been removed from the bag. This means that there is a high risk of it having been exposed to - and damaged by - static electricity," Asger Thybo Geertsen, Product Manager at Triscan, explains and continues: "A wrong selection of shoes in combination with highly synthetic garments, for example, can be enough to make such a sensor malfunction".

"Unfortunately, we often see that the seal of the returned ABS sensor bag is broken. This is most likely because the ABS sensor was fitted/connected to the wiring harness, as part of a problem-solving process that shows that the problem is not the ABS-sensor, but a defective ABS ring or a malfunction in the wiring harness," concludes Asger Thybo Geertsen.

For more information about our sensor programme, we refer to our new brochure - read more on page 16-17 ...

**MORE THAN 1.300 DIFFERENT
ABS-SENSORS IN STOCK...**

ABS

10

**1/min
x 100**

“ Triscan sensors are manufactured to OE specifications, and the production is subject to the strict quality standard of the automotive industry ISO TS 16949.

Furthermore a 100% function test is carried out on each sensor,”

**TRISCAN OFFERS A WIDE PROGRAMME IN
SUMMER AND WINTER THERMOSTATS...**



“ *Mixing of different coolants can cause corrosion - therefore avoid mixing different types of coolant together. Moreover, avoid the use of tap water* **”**



HOW TO AVOID CORROSION DAMAGES ON CAR THERMOSTATS

When a engine starts to overheat or can not reach operating temperature, it is most likely due to a fault in the cooling system. In addition to the water pump, the cooler and the fan, the thermostat plays a central role. Even the slightest malfunction of the thermostat - eg. due to corrosion – effects the engine performance immediately.

Corrosion occurs, among other things if a wrong coolant is used. The corrosion attacks the thermostats aluminum parts that almost “etch away” (see figures 1 and 2). But also mixing of different coolants can cause corrosion. Therefore avoid mixing different types of coolant together.



Figure 1
MAP controlled thermostat with clear signs of corrosion (Photo credit: Mahle)



Figure 2
Thermostat with coolant/additive not approved by the manufacturer. This has led to that the aluminum is “etched” away (Photo credit: Mahle)



Figure 3
You should check that the ground cable is intact and properly connected (Photo credit: Mahle)

Also, be sure to use only coolant approved by the car manufacturer and be aware of using the correct mixing ratio of coolant to water. Some car manufacturers prescribe that only distilled water and not tap water is added, as it may also have a negative effect due to its content of minerals - including limescale. We recommend avoiding tap water at all times.

Also check that the ground cable between the engine and body of the car is properly mounted and intact (figure 3) - thereby compensating for the occurrence of static electricity between the fuel supply system and the car body. A defective earth cable or a bad connection can speed up the damage due to electrolysis.

IMPORTANT:

Coolant loses its corrosion-preventing ability over time, and therefore replacement of the coolant is part of the regular service inspection. It is recommended to replace the coolant every two years. Be sure to always follow the manufacturer's recommendations.





Sales Opportunities and Logistic Optimisation

800 meters further ahead

“ *The benefits are many and the results can be seen directly at the bottom line.
Would you like to know how much extra revenue you can earn?* **”**

SOLO

- the road to increased profits and customer satisfaction

There are many factors which affect a company's ability to generate profit, e.g. interest rates, stock value, contribution margin, programme coverage of the car park, order fill rate, time of delivery, purchase frequency, use of resources, cost prices, etc.

The SOLO concept (Sales Opportunities and Logistic Optimisation) covers a complex method of calculation involving the above parameters, and based on the information from your company, it is possible to calculate the earning capacity (the effect on the profit) when replacing one or more suppliers with Triscan.

The SOLO calculation tool has proven to be beneficial for Triscan's customers for several years. The results achieved have - in all modesty - been rather impressive.

Customers, who have changed to Triscan because of the results from the SOLO calculations, have achieved:

- Increased turnover
- Increased order fill rate
- Increased stock rotation
- Improved sales revenue and profit margin
- Reduction of inventory value and administrative costs

The above results are achieved by improving the customer's product offer based on Triscan's wide-ranging programmes and quick delivery service. The sales will increase as it becomes possible to stock a wider programme for a small investment.

In addition to this, Triscan provides an updated programme so that spare parts for even the latest car models are constantly available as well as all the relevant data, support for inventory optimization and technical instructions and manuals.

One of the most successful customers who changed to Triscan cables achieved a 48% growth in just one year, and the following quote certainly speaks for itself: "...Coming back to business, the biggest performance of our company in terms of growth has been with the brand Triscan; our purchase turnover will nearly double this year".

Of course we would also like to show you how much you can expect to improve your profitability with Triscan. Please contact the Triscan sales representative in your area or Mr. Steen Ray Pedersen, Sales and Marketing Director, on +45 87 43 33 33 in order to make an appointment.

“ One of the most successful customers who changed to Triscan cables achieved a 48% growth in just one year... ”

1 Increased profitability

2 More competitive power

3 Customer satisfaction

- Higher availability
- Optimisation of resources
- Purchasing efficiency
- Reduced stock value
- Higher stock rotation
- Cash flow & working capital
- Focus on core products

GET AN OVERVIEW OF OUR COMPREHENSIVE NEW BROCHURE

The new 24-page sensor brochure gives you a quick and easy overview of our wide-covering sensor programme. The brochure contains useful information about the function, design, fitting and common error codes.

Since the introduction of the first 3 sensor groups just over 2 years ago, another 8 have been added. The programme now has 11 product groups and we can assure that more will follow. As we can see the interest and demand for sensors

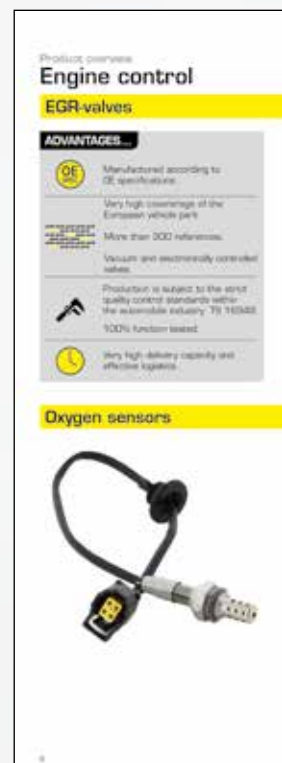
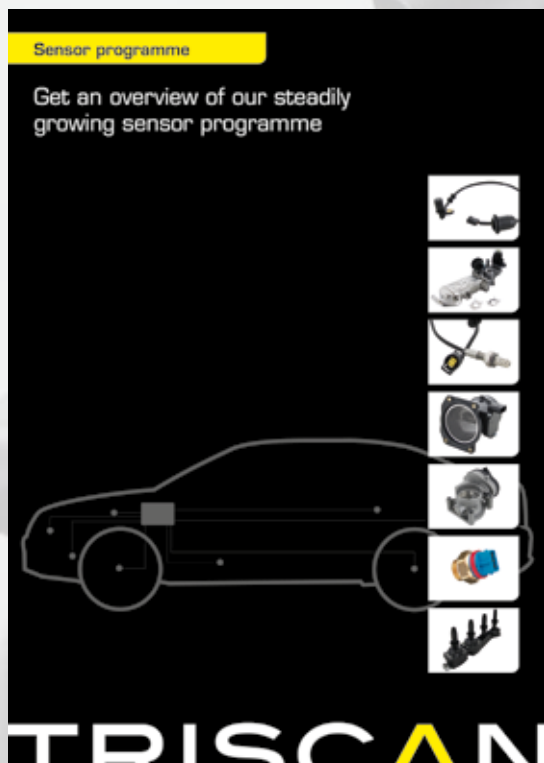
rise continuously, we find that it is time to present our current programme in a brochure that gives readers a quick and easy overview of the broad product range.

The brochure is divided into two parts - the first part contains sales information while the second part provides relevant technical information:



- **SENSORS FOR THE BRAKE SYSTEM**
ABS sensors, wear sensors
- **SENSORS FOR THE ENGINE MANAGEMENT**
EGR valves, lambda sensors, air mass meters, throttle bodies, water temperature sensors, thermal switches, camshaft sensors, crankshaft sensors and ignition
- **TECHNICAL INFORMATION**
Important technical information about the different sensor types – illustrated and explained in detail

The new sensor brochure is available in 4 languages: English, German, Danish and Swedish - and can be downloaded from our website www.triscan.com/en/products/engine-control (under Product Information), be requested from your Triscan sales representative or by contacting our customer service at +454 8743 3333.



EXTENSIVE SENSOR PROGRAMME WITH OUR



...further languages will follow

ADVANTAGES

- Manufactured according to OE specifications.
- Very high coverage of the European vehicle park.
- More than 1.000 references.
- "Plug & Play" oxygen sensors included.
- Production is subject to the strict quality control standards within the automotive industry (TS 16949).
- 100% function tested.
- Very high delivery capacity and effective logistic.

trivels.triscan.com

Tip for a trouble-free installation: **smartrep.info**

we make it easy to get it right.

For products with this label we have prepared tips for unusual technical details and information on special tools, if required. It takes only 2 simple steps:

- Simply type www.smartrep.info into your Internet browser or scan the QR code with your smartphone or tablet.
- On the smartrep.info website you simply enter the article number and you will get tips in form of text and pictures (see example) or videos.

Try it out:
 ☎ 00 10 27410 (picture)
 ☎ 0140 151072
 ☎ 8001 30800
 ☎ 0140 200100

TRISCA

Technical information

Engine control

Oxygen sensors

Measures the percentage of O₂ (oxygen) in the exhaust system. The measurement is used to control the mixing ratio of air and fuel.

On the first cars with oxygen sensors, measuring/regulating was solely based on the measurement of a single oxygen sensor, which was located just before catalytic in the exhaust system. Newer car models are also fitted with an oxygen sensor located after the catalytic, whose job is simply to verify that the regulating of the mixing ratio is carried out properly.

Structure diagram:

Design:

Types:

Zirconia and Titania (sensor core, where the zirconia type is the most common) 2-, 3-, 4- and 5-conductor (BaroC)

Mounting:

MUST be mounted with ceramic grease. These oxygen sensors are either pre-greased or a bag of grease is supplied. NEVER use pneumatic tools for mounting oxygen sensors.

we make it easy to get it right. read more on [triscan.com](http://www.triscan.com)

WHEN ERROR CODES ARE NOT CLEAR IT I

It is not always certain that error codes give a true and precise view of which parts should be replaced to solve a problem. And all too often, this leads to questioning of the quality of the replaced part, which, logically, does not solve the real problem.

Two examples of this are error codes on OPEL models with 1.8 petrol engines from 1997-2004 and the first OPEL and SAAB models with 1.9 CDTI / TiD engines. Both examples are supported by the experience that Elektro Partner, providing hotline and technical solutions for car repair shops in Denmark, Norway and Sweden (Autodata, TEXA, Delphi and Nextech) has made. Here, CEO and owner Frank Donslund says: "For the petrol engine, the problem is in fact a high sensitivity to deviations in air mass measurement. An error of just 0.1 volts at full load may suffice to trigger a luminous engine lamp in the dashboard".

The error codes will typically be one or more of the following:

- PO130 - Oxygen sensor circuit failure function
- PO170 - Fuel trim malfunction
- PO171 - Fuel trim lean
- PO300 - Random fault ignition detected

At the 1.8 gasoline engine, the lambda sensor (Triscan 8812 24003) will most often be replaced, but soon the engine lamp will light up again. Often, the lambda sensor is returned as a complaint, while the true cause of the problem is the air mass meter (Triscan 8812 24003) or a missing software update of the engine control system.

The air mass meter used by GM in the 1.8 gasoline engines is used in 37 different car models with 1.8 and 2.2 liter engines, respectively, in the years 1994-2015, but also SAAB 9-3.

Make	Model
OPEL	ASTRA G
OPEL	ASTRA H
OPEL	CORSA C
OPEL	MERIVA A
OPEL	OMEGA B
OPEL	SIGNUM
OPEL	TIGRA TwinTop
OPEL	VECTRA B
OPEL	VECTRA C
OPEL	ZAFIRA A
SAAB	9-3

At the 1.9 CDTI / TiD engines used by OPEL and SAAB in the period 2004-2012, there is also reason to be extra aware when one of the following error codes are displayed after an illuminating engine lamp:

- P2280 - Airflow limited, leakage between air filter and airflow meter
- P1909 - Particle filter

For the error code P2280 you should first check the following possible causes:

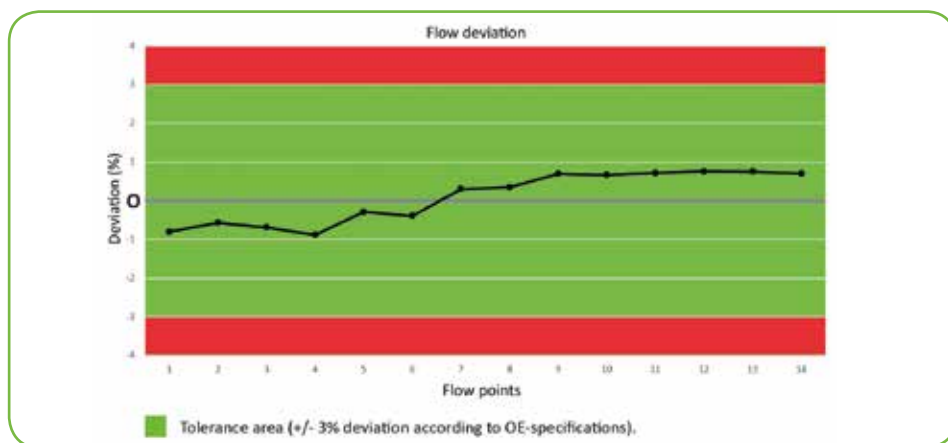
- 1 Air filter for clogging
- 2 Turbo hose and intercooler for leaks
- 3 Flap in the intake manifold

If there is no fault here, an inaccurate air mass signal due to a defective air mass meter (Triscan 8812 10010) may be the culprit. It is worth noting that a disturbed air flow in the intake or inaccurate air mass measurement will often cause clogging of the particle filter and a P1909 error code. When replacing it is important to make sure that the airflow meter is in OE quality. Unfortunately, there are a lot of airflow meters that are not in OE quality, which often causes the error to occur again after relative short-term operation.

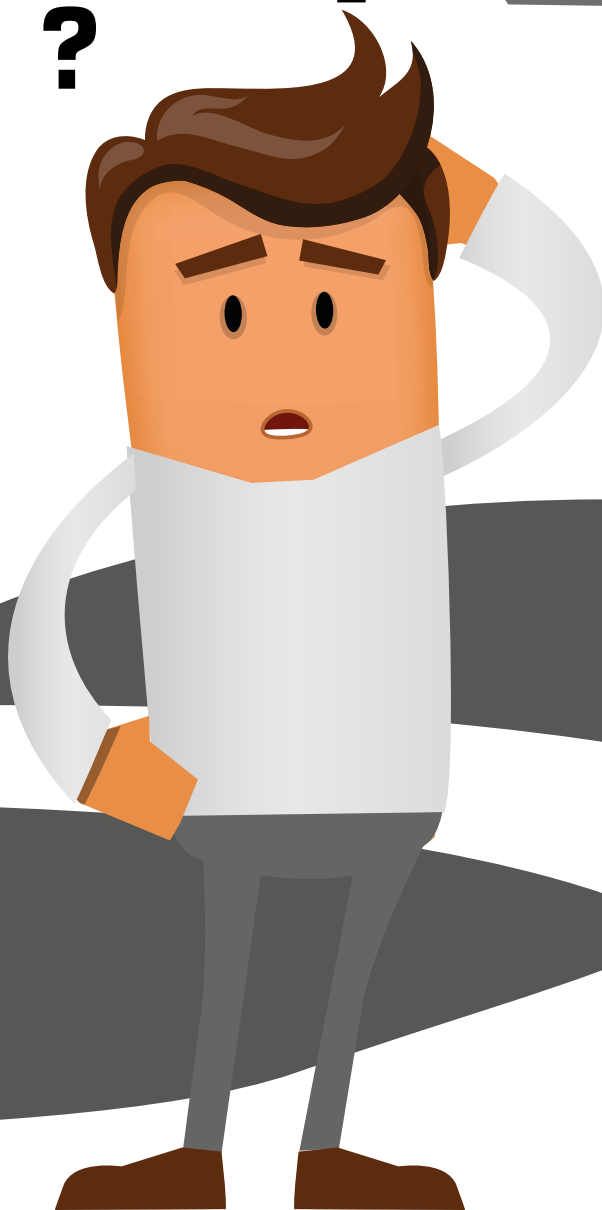
Car models in the period 2004-2012 that are covered by the problem

Make	Model
OPEL	ASTRA H
OPEL	ASTRA H
OPEL	SIGNUM
OPEL	VECTRA C
SAAB	9-3
SAAB	9-5

1.9 The CDTI engine is also found in several Alfa Romeo (JTD) and Fiat (Multijet) models, however, here the problem does not occur. The reason is probably that the engine management software used is not the same, but the car manufacturer's own. The way in which the software's individual parameters play together are tightly tuned to each car model. So even though the engine and components are the same, the same problems may not occur at the intersection of car brands and models.



S OFTEN THE SPARE PART THAT IS BLAMED



PO130 - Oxygen sensor circuit failure function

PO170 - Fuel trim malfunction

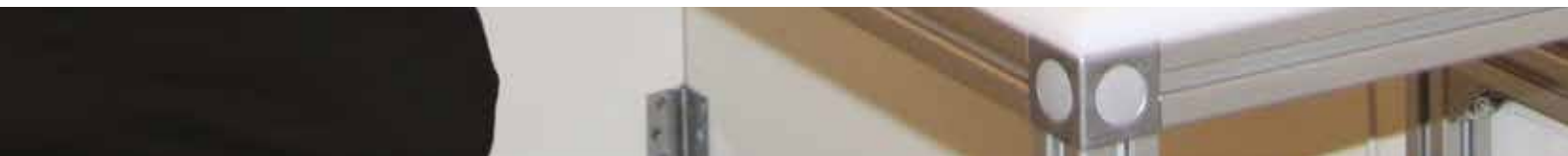
PO171 - Fuel trim lean

PO300 - Random fault ignition detected



**ABS TESTER AND SALT SPRAY CHAMBER
ARE THE NEWEST TESTING EQUIPMENT**

**“Quality has high priority - therefore we conduct extensive, internal tests
of both our own and competitors products”**

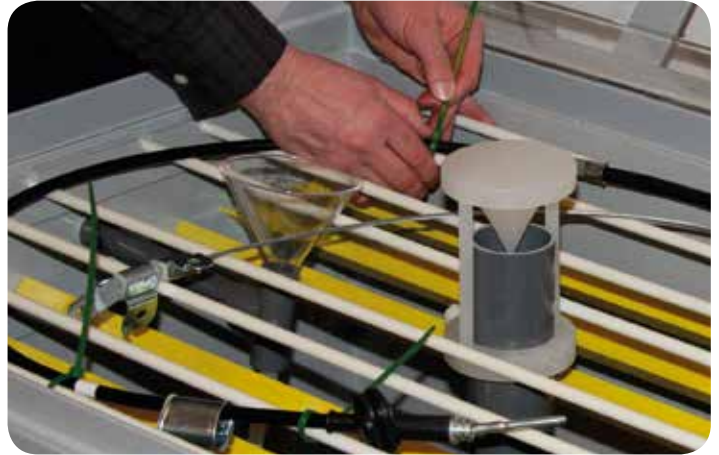


IN-HOUSE QUALITY ASSURANCE: FOR QUICK ANSWERS AND GOOD SERVICE

Here at Triscan quality has priority. Therefore, producers are visited regularly and spot checking is carried out on products when they arrive at our central warehouse. Furthermore, we carry out extensive tests internally, both on our own and the products of our competitors. Two recent examples have once again proven why in-house testing is important and why we consider it essential to expand in this area.



Triscans new salt spray chamber - for accelerated lifetime testing of corrosion protection



A handbrake cable is prepared for a test of corrosion protection

There are several reasons to why we believe it is important to be able to facilitate in-house testing. First, it allows us to test new products from potential new manufacturers quickly. Secondly, we can complete complaint cases very quickly. Lastly, it allows us to test the products of competitors. Recently, our product team manager Asger Thybo Geertsen made a surprising discovery during a competitor test of the c.v. boot of an established and recognized premium brand.

In connection with conducting a comparative test, we acquired five randomly selected references from one of our competitors. During the visual inspection that we performed, and to our great surprise, we found that one of the five references already showed clear signs of cracks in the rubber. After an accelerated aging test in our ozone chamber, all five references showed clear signs of cracking. These very negative test results were very unexpected for us. "The rubber composition is extremely critical, and changes in just one parameter can have fatal consequences," says product chief Asger Thybo Geertsen, adding, "The same thing can happen with incorrect storage and handling of the various materials contained in the rubber composition."

I remember another example where a customer tells us he can buy brake hoses from a premium brand at our purchase price. Since I was convinced that brake hoses in premium quality cannot be produced at such prices, we decided to test the said products ourselves. After a first in-house test gave reason to doubt the authenticity of the hose, we sent test samples of the brake hose to the Technological Institute in Aarhus for further tests. The hose in question was provided with a proper well-known brand name, as well as the J1401 quality seal of SAE International. However, it turned out that it was a counterfeit hose that did not meet the specified quality standards in any way. Especially with a safety product like this the consequences can be fatal".

Careful selection and control of suppliers

To ensure that we deliver a consistent, high quality standard, suppliers must be carefully selected. Therefore, visiting potential as well as existing cooperation partners is an important part of our work. Before we start a new cooperation, we visit the potential supplier in their production facility. There, we get an idea of how the products are made and clarify important questions - such as why the production process looks the way it does, what kind of tests are conducted during the production process, and how the gathered information is utilized. I like to talk about all the details of the process, as a tech nerd I enjoy doing that," concludes Asger Thybo Geertsen with a smile.

Currently, the following machines are available in our internal "Triscan Test Center":

- Tensile testing machine: For testing of brake hoses, cables, gas springs, hose clamps, etc.
- Ozon Climate Chamber: For accelerated aging testing all types of rubber
- Brake Discs run-outs: Checks parallelism and flatness of brake discs
- ABS Camshaft and Crankshaft Position Sensors Tester
- Thermostat tester
- Salt spray chamber: For accelerated aging tests/simulation of environmental conditions

Due to highly positive experiences with our internal testing facilities, we will continue to build on our expertise in this area. This, of course, requires investments and we are certain that the increased service and possibilities are worth it.

EXPANSION IN TRISCAN'S GAS SPRING PROGRAMME

Triscan's already extensive programme of gas springs now includes more than 1,465 OE-quality references. With the expansion of the programme, we can offer an almost 100% coverage of the European car park. No matter which gas spring you are looking for, you can be close to certain that Triscan can deliver it.



One of the newest gas springs in our programme is for the Opel Insignia station wagon (# 871024236)

A gas spring loses its pressure over time - in the cold winter months, this pressure loss is amplified by the low temperatures. That's why it is during winter that car owners are most likely to notice that something is wrong with the gas springs and an exchange is necessary.

Gas springs are virtually maintenance-free, but...

All parts of the gas fields should be kept free of rust and dirt at all times. This is especially true for the piston rod, which could otherwise damage the gas spring gasket - causing it to leak and lose its pressure and thereby function. Also avoid straining or bending the gas spring sideways.

Always replace gas springs in pairs

DID YOU KNOW...

That Triscan produces its own gas springs?

That Triscan also offers a very wide range of universal gas springs?

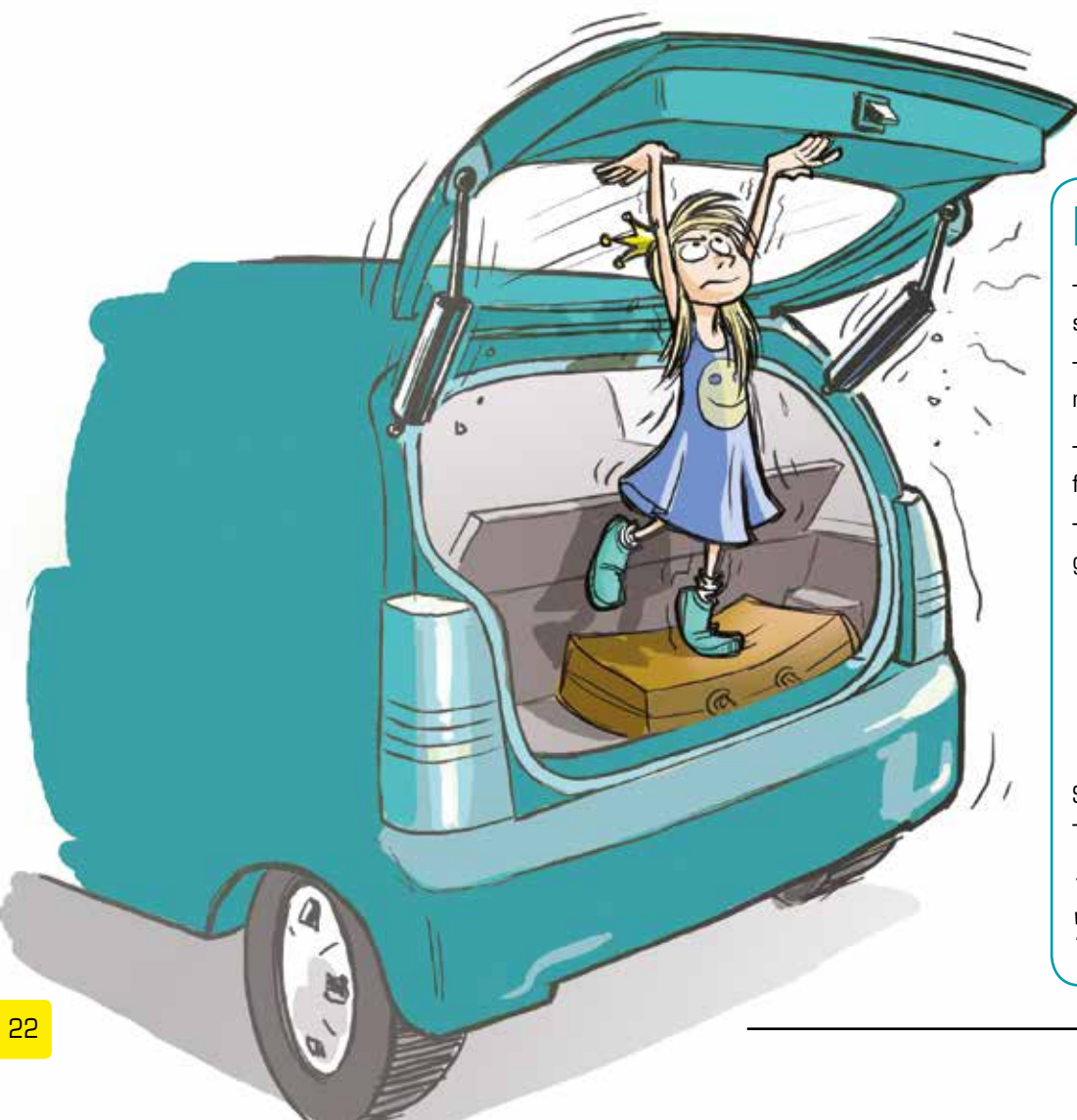
That the 254 gas springs and 41 fittings offer many combinations.

That Triscan also produce customized gas springs?



Special needs require special solutions - these can also be found at Triscan.

You can find the catalogue on our website under "Products" and then "Product Information".





“ A gas spring loses its pressure over time - in the cold winter months, this pressure loss is amplified by the low temperatures ”

MOUNTING KIT WITH SPECIAL BOLTS FOR FORD, MAZDA AND VOLVO TCA'S



We have observed a steep rise in demand for kits with special bolts for 9 track control arms for Ford, Mazda and Volvo. The underlying reason is that the bolts must always be replaced because they are locking bolts that cannot be reused. Additionally, when the bolts are affected by corrosion, which is often the case, the mechanic must cut them when replacing the track control arm.

The mounting kit - Triscan # 8500 16400 - is the same for all 9 track control arms and is sold as a separate item/kit. It fits the rear track control arm of these very popular car models amongst others:

Reference	Make/model
8500105003	FORD C-MAX (DM2)
	FORD FOCUS C-MAX
	FORD FOCUS II (DA_)
	FORD FOCUS II Cabriolet
	FORD FOCUS II Sedan (DA_)
	MAZDA 3 (BK)
	MAZDA 3 (BK) Sedan
	VOLVO C30
	VOLVO CS40 II (MS)
	VOLVO V50 (MW)
8500165019	FORD C-MAX II (DXA/CB7, DXA/CEU)
	FORD FOCUS III
	FORD FOCUS III Kasse/hatchback
	FORD FOCUS III Sedan
8500165020	FORD KUGA II (DM2)
	FORD KUGA II Van
8500165029	FORD GRAND C-MAX (2011)
850016517	FORD KUGA I
850016571	FORD C-MAX (DM2)
	FORD FOCUS I (DAW, DBW)
	FORD FOCUS I kombi (DNW)
	FORD FOCUS I Sedan (DFW)
850016584	FORD C-MAX (DM2)
	FORD FOCUS C-MAX
	FORD FOCUS II (DA_)
	FORD FOCUS II Sedan (DA_)
850016585	FORD FOCUS II kombi (DA_)
850016598	FORD C-MAX II (DXA/CB7, DXA/CEU)
	FORD C-MAX II Van
	FORD FOCUS III
	FORD FOCUS III Kasse/hatchback
	FORD FOCUS III Kombi
	FORD FOCUS III Sedan
	VOLVO V40 hatchback



The new mounting kit with special bolts fits some of the most popular models from Ford, Mazda and Volvo



Track control arm with the correct position of the bolts



“ The mounting kit with special bolts fits a total of 9 track control arms for some of the most popular models from Ford, Mazda and Volvo ”



FITTING INSTRUCTIONS AND INFORMATION ON SPECIAL TOOLS REQUIRED FOR GATES STRETCH FIT BELTS

In the first quarter of 2017, we launched our service smartrep.info under the motto “We make it easy to get it right”. The service has been designed for workshops / mechanics and focuses on spare parts that have been proven to require special attention during fitting. Smartrep.info is by definition an ongoing process, now 16 of Gates’ stretch-fit belts are also covered by smartrep.info, due to the requirement of the using special tools when mounting them.

This is how it works

Spare parts that require special attention during assembly are marked with a clear sticker on the packaging. On the label there is a red warning triangle and underneath a website address - www.smartrep.info - and a QR code. When the QR code is scanned, it leads directly to the website. On the Home screen, type the article number that you can read from the label. It will then display all information, such as mounting information or special tools that you need to utilize for this specific product.

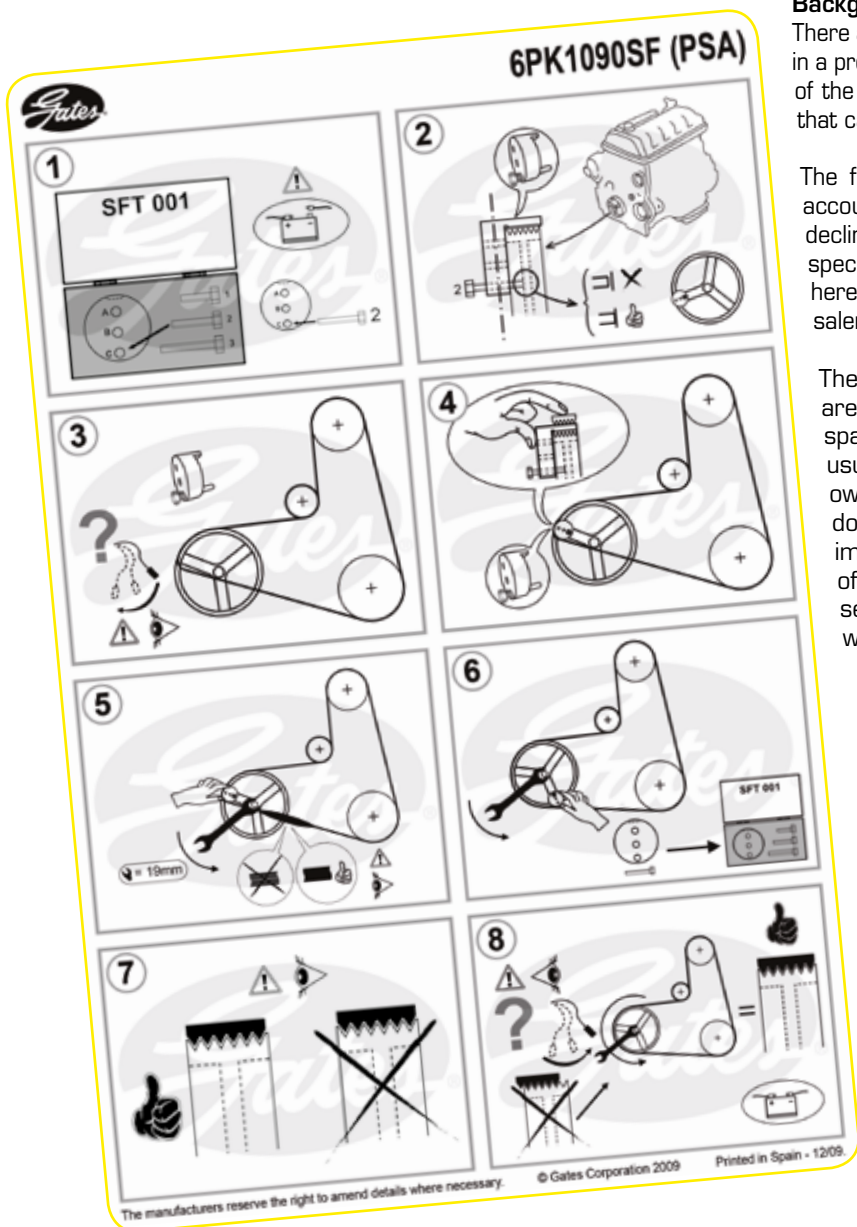
An example of this is # 8640 601090SF for PSA 1.4 and 1.6 HDI engines (2005-2007). Here it is necessary to use the special tool 8640 SFT001 and fit the belt in a specific order on the belt tensioner and pulleys.

Background

There are relatively few - and very often it's the same spare parts with- in a product group - that make up most of the complaints. The causes of the complaints are typically divided into two main categories: one that can be influenced and one that is very hard to influence.

The first category, which is easy to influence (but unfortunately accounts for the clear majority of the reasons why claims are being declined) are parts where either special attention or the use of special tools must be taken into account when fitting the part. But here we can do something together - the mechanic, the wholesaler and Triscan - and that is precisely the goal of smartrep.info.

The second category that is difficult to deal with is parts that are badly designed by automakers. Since Triscan delivers spare parts in OE quality, parts that fall within this category will usually have the same weaknesses as the car manufacturers’ own aftermarket parts and be known by the workshops. This does not apply to spare parts where it is possible to make improvements without changing the basic design. Examples of parts improved by Triscan are water pumps where the seal and bearings have been reworked or track control arms where the rubber bushings have been improved.



TRISCAN'S WIDE PRODUCT PROGRAMME

All Triscan's products are manufactured in OE quality. Our product programme covers more than 97% of the European car parc. If you choose a product group from Triscan, you can do with just one supplier.

ENGINE

- Air flow meters
- Camshaft position sensors
- Crankshaft position sensors
- Diesel
 - Common rail injectors
 - Common rail pumps
 - Pump and nozzle units
- Engine gaskets
 - Cylinder head gaskets
 - Gasket kits
 - Gasket kits w/o cyl. head gasket
 - Oil-pan gaskets
 - Valve cover gaskets
- Engine parts
 - Camshaft kits
 - Lifters
 - Top bolts
- Exhaust
 - Clamps
 - Flexible connectors
- Fuel hoses
- Ignition coils
- Ignition wire sets
- Micro-V belts, kits
 - Alternator pulleys
 - Belt tensioner units
 - Idlers
 - Micro-V belts
 - Pulleys
 - Stretch fit V-belts
 - V-belts
 - Vibration dampers
- Oil plugs & gaskets
- Oxygen sensors
- Timing belt kits
 - Belt tensioners
 - Idlers
 - Micro-V belts
 - Oil seals
 - Timing belts
 - Vibration dampers
- Timing belts, Water pump kits
- Timing chain kits
- Throttle bodies
- Vacuum hoses
- Waterpumps + Timing belt kits

TRANSMISSION

- Accelerator cables
- Anti-friction spray
- Bolt kits, flywheels
- Bonnet cables
- Boot kits
- Choke cables
- Clutches/clutch kits
 - Clutch cylinders
 - Clutch grease
 - Clutch hoses
 - Clutch release bearings
 - Guide bearings
 - Guide bushings, clutch bearings
 - Hydraulic release bearings
 - Oil seals
- Clutch cables
- Clutches, various
- C.V. joints
- Drive shafts
- Grease
- Oetiker clamps
- Propeller shaft support
- Shift cable
- Speedometer cables
- Trailer cables
- Tripod joints
- Tools
- U-joint
- Universal clamps

BODY

- Gas springs
- Refills for BOSCH flatblade
- Steering dampers
- Universal gas springs
- Universal wiper refills
- Washer pumps
- Wiper refills

COOLING SYSTEM

- ALU-flex duct hoses
- Flushing tools - cooling system
- Heater hoses
- Radiator caps
- Radiator hoses
- Thermostats
- Thermo switches
- Waterpumps
- Water temperature sensors

STEERING & SUSPENSION

- Boots
 - Mounting kits
 - Protection kits
- Bushings
- Coil springs
- Grease
- Leaf springs
- Power steering pumps
- Rack and pinions
- Shock absorbers
- Spheres - suspension
- Stabilizer rods
- Standard bearings
- Steering columns
- Steering parts
- Strut bearing kits
- Strut bearings
- U-bolts
- Wheel bearing kits
- Wheel hubs

BRAKE SYSTEM

- Accessory kits
- ABS-rings
- ABS sensors
- Bleed screws
- Brake cables
- Brake calipers
 - Guide tube kits, brake calipers
 - Pistons
 - Rep. kits
- Brake discs
- Brake drums
- Brake hoses
 - Banjo bolts
 - Clips for brake hoses
- Brake pads
- Brake pipes
 - Idlers
- Brake shoes
- Pressure regulators
- Wear indicators
- Wheel cylinders

MISCELLANEOUS

- Ear clamps
- Flashers
- Hose clamps
- Standard bearings
- Trailer cables
- Universal gas springs

TRISCAN
s m a r t p a r t s

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