WK 6

Brake service equipment and tools





Test and inspection equipment	5
Bleeding equipment	25
Disposal equipment	45
Special tools for brakes	51
Bleeding unit adapters	99
Spare part lists	129

All rights reserved, including complete or partial reproduction and any form of duplication, translation and transmission. Specifications and design are subject to change without prior notice. No claims relating to the specifications appearing in this catalog will be accepted. Images may differ from the articles.

An

®2014 Continental Aftermarket GmbH

Test and inspection equipment



3rd generation AST sensor tester



Order no: 03.9301-0110.4 Short order no.: 760132



The ATE 3rd generation AST sensor tester is used for testing virtually all ABS wheel sensors, the ATE ESP sensors (in conjunction with the ESP testing set 03.9301-0113.2 /760137) and other ABS sensors. During diagnosis of the active and passive wheel speed sensors and their sensor wheels, the ATE AST sensor tester automatically recognizes which type of sensor is being diagnosed. The function of the sensors - the sensor signal - as well as the "number of teeth" of the pulsegenerating wheel are checked and displayed. The ESP testing set (03.9301-0113.2 /760137) allows the ATE ESP sensors (yaw rate, acceleration, pressure) to be tested. It is also possible to test other sensors if the rated values are known. Users are guided through the testing process step-by-step, so they need no operating instructions when working on site. A universal connection adapter is included so that the unit can be connected to the various wheel sensors. For the power supply (12 Volt), two adapters are included, one for the cigarette lighter and one for the battery. Its state-of-the-art flash technology make the ATE AST sensor tester updatable and thus perfectly prepared for

Benefits:

the future.

- Simple to use, reliable
- Inexpensive diagnosis option

Package contents:

- Complete unit
- Set of test cables with pincer clips
- Power supply adapter for cigarette lighter
- Power supply adapter for battery
- Operating instructions
- Robust case

Dimensions: H x W x D	217 x 113 x 38 mm
Voltage requirements:	9 - 16 Volt DC
Power consumption:	170 mA

ESP testing set



The ATE ESP testing set is an accessory for the ATE 3rd generation AST sensor tester. The ATE ESP testing set extends the range of application of the ATE AST sensor tester by providing the possibility of testing ATE ESP sensors (yaw rate, acceleration and pressure sensors).

Benefits:

provids the possibility of testing ATE ESP sensors effetive connection to all kind of ATE ESP sensors (non car specific)

Package contents:

- 3 testing cables
- 1 pincer clip

Order no: 03.9301-0113.2 Short order no.: 760137

Test card for magnetic sensor wheels



Order no: 03.9301-0200.1 Short order no.: 760130

The new active wheel speed sensors work with magnetic sensor wheels, which are integrated in the rubber sealing ring of the wheel bearing. For this, the rubber is enriched with iron dust and then given magnetic fields which are highly sensitive. It is not possible the check the magnetic sensor wheels visually.

Before a new wheel bearing is installed, it is therefore absolutely necessary that the wheels be checked. The part could be faulty, and the direction of installation must be determined. But when checking errors in the ABS it may also be necessary in the case of sensor errors to check the magnetic sensor wheels.

With the ATE test card for magnetic sensor wheels, these tests can be carried out reliably, easily and inexpensively. The magnetic fields of the sensor wheel are shown visually in the display window of the ATE test card, making it possible to check them.

The ATE test card for magnetic sensor wheels comes with an integrated protective case.

Benefits:

Fast, simple and inexpensive.

Package contents:

Test card with integrated protective case, with brief operating instructions.







Brake fluid test unit BFT 320



Order no: 03.9311-0080.4 Short order no.: 730071

Brake fluid is hygroscopic, which means that it absorbs water over the course of time, thus causing the boiling point to drop (risk of vapor lock). That is why it needs to be checked regularly and, if necessary, replaced. The particularly inexpensive ATE BFT 320 allows measurement of the boiling points of all glycol-based brake fluids (DOT 3, DOT 4, DOT 5.1) with the same precision as in a laboratory.

The ATE BFT 320 is an extremely practical tester with a 12-Volt power supply.

This means that it is simple to perform the measurement at the expansion tank in the vehicle. A specimen vial and a pipette are supplied to allow measurements to be performed away from the vehicle.

The simple menu guidance for users is a highlight of the ATE BFT 320. Measurement takes only around 30

seconds and the measured value is shown on a digital display. A recommendation as to whether to replace the brake fluid is then shown. This means that it is no longer necessary to change brake fluid merely on suspicion.

Benefits:

- The immersion heater method is the only one that provides exact measurements, regardless of the brake fluid type
- Menu guidance makes it extremely simple to use (D, GB, F, I, E, P, PL, CZ, SK)
- Digital display of the boiling point and recommendation as to whether to change the brake fluid (D, GB, F, I, E, P, PL, CZ, SK)
- Practical tester, measurement can be performed in the expansion tank
- 12 Volt power supply
- Suitable for brake fluids with boiling points up to 320 °C

Package contents:

- Complete test unit
- Specimen vial and pipette
- Operating instructions
- Robust case

Accuracy:	
at 100-180° C:	+/- 3%
> 180° C:	+/- 5%
Measuring time:	approx. 30 seconds
Power supply:	12 Volt



Brake fluid tester BFT 320P



display followed by a recommendation to replace the brake fluid, if required Replacing the brake fluid 'just in case' thus is a thing of the past. Brake fluid tester ATE BFT 320P is easy to manage, features a 12 Volt connector, and is a very convenient means of measuring the brake fluid's boiling point directly in the vehicle's expansion tank. The sampling beaker and pipette from the package allow measurements to be made outside the vehicle.

Use the thermal printer to produce a hard copy of the reading and measurement for customer and garage use. A bracket lets you easily attach the printer to the brake fluid tester to automatically print two copies of the measuring result together with a recommendation to replace the brake fluid.

Order no: 03.9311-0085.4 Short order no.: 730077



Brake fluid is hygroscopic, i.e. it absorbs a lot of water in the course of time. This will lower its boiling point and increase the risk of vapour lock. You should therefore have a garage check and replace the brake fluid as appropriate.

ATE's BFT 320P takes laboratory-scale boiling point readings of all Glycol brake fluids (DOT 3, DOT 4, DOT 5.1). It applies the boiling method which is the only way of finding the exact boiling point of any type of brake fluid.

ATE BFT 320P heats the brake fluid to its boiling point. Then it displays the temperature reading and outputs it to the printer. A measuring cycle only takes about 30 seconds. Its easily readable digital result appears on the

Benefits:

- The boiling method is the only method that produces exact results for any type of brake fluid
- Easy to use navigation menu (D, GB, F, I, E, P, PL, CZ, SK)
- Display of digital boiling point reading and recommendation to replace the brake fluid (D, GB, F, I, E, P, PL, CZ, SK)
- Supports measuring inside the expansion tank
- Designed for high boiling point brake fluids (up to 320 °C)
- Two hard copies of the result for customer and garage use

Package contents:

- Complete tester
- Thermal printer and bracket
- Sampling beaker and pipette
- Operating instructions
- Robust case

Accuracy:	
at 100-180° C:	+/- 3%
> 180° C:	+/- 5%
Measuring time:	approx. 30 seconds
Power supply:	12 Volt

Sampling set BFT 320(P)



The disposal pipette is used to extract the brake fluid being tested from the vehicle and fill it into the disposable specimen vial so that the boiling point can be determined with the ATE BFT 320

Package contents:

- 10 disposable pipettes
- 10 disposable specimen vials

Hint:

Every time a measurement is taken, it is recommended that both anew pipette and a new secimen vial are used, so as to avoid falsifying the results

Order no: 03.9311-0093.3 Short order no.: 730076

Rolls of printer paper

Spare rolls of thermal printer paper for brake fluid tester BFT 320P

Package contents:

4 rolls of printer paper



Order no: 03.9311-0096.3 Short order no.: 730079

Cable repair set BFT 320



If the brakefluid tester ATE BFT 320 will not show any funktion after connecting to 12 volt, it is possible, that the connectig cable is broken near to the clamps.

With the cable repair set BFT 320 the malfunction could be repaired quickly.

Package contents:

two clamps with cables and connectors

Order no: 03.9311-0090.3 Short order no.: 730075

Brake fluid test equipment BFCS 300



Order no: 03.9311-0070.4 Short order no.: 730060

Brake fluid is hygroscopic, which means that it absorbs water over the course of time, thus causing the boiling point to drop (vapor lock). That is why it needs to be checked regularly and, if necessary, replaced. The ATE BFCS 300 allows rapid measurement of the in-service boiling points of all glycol-based brake fluids (DOT 3, DOT 4, DOT 5.1) with the same precision as in a laboratory.

This is done by taking a sample (10 ml) with a disposable pipette (ATE sampling set) transferring it to a disposable specimen vial (ATE sampling set) and bringing it to boiling point in the ATE BFCS (immersion heater method). Measurement takes only around 20 seconds and the measured value is shown on a digital display. This means that it is no longer necessary to change brake fluid merely on suspicion. The number of measurements carried out can be determined using an integrated short-term and long-term counter.

Benefits:

- The immersion heater method is the only one that provides exact measurements, regardless of the brake fluid type
- Extremely easy to use
- Suitable for brake fluids with boling points up to 300 °C

Package contents:

- Unit
- 1 disposable pipette
- 1 disposable specimen vial
- Operating instructions

Approval mark: CE

Hint:

Never use the equipment without a specimen.

Accuracy:	
at 150-200 °C	+/-4 to +/- 6 °C
at 200-280 °C	+/- 7 to +/- 9.5 °C
at 280-300 °C	+/- 10 to +/- 15 °C
Measuring time:	15 to 35 seconds
Power consumption:	during measurement 170 VA
	on standby 33 VA
Dimensions: H x W x D	180 x 225 x 225 mm
Weight:	5.4 kg

Sampling set BFCS 300



The disposable pipette is used to extract the brake fluid being tested from the vehicle and fill it into the disposable specimen vial so that the boiling point can be determined with the ATE BFCS 300.

Package contents:

- 50 disposable pipettes
- 50 disposable specimen vials

Hint:

Every time a measurement is taken, it is recommended that both a new pipette and a new specimen vial are used, so as to avoid falsifying the results.

Order no: 03.9311-0019.2 Short order no.: 730066

Sensor head



If the ATE BFCS 300 is no longer able to bring the brake fluid sample to boiling point, the reason is often that the heating coil is damaged. This is located in the sensor head and can easily be replaced.

Work flow:

Prior to any work on the unit, disconnect the unit from the electric power supply. Remove the sensor head carefully in a downward direction, and do not twist it. Align the new sensor head as indicated by the two arrow markings, and, without twisting it, push it into its mounting. The sensor head clicks into place. Now test that the unit operates correctly, preferably with new brake fluid.

Order no: 03.9311-0072.1 Short order no.: 730061

Pressure gauge unit



Order no: 03.9305-1020.4 Short order no.: 730032



The ATE pressure gauge unit is extremely versatile. It allows measurement of all pressures throughout the hydraulic brake system and in the vacuum system (brake power assist unit etc.). Thanks to two measuring circuits with high-pressure manometers, the pressure in both brake circuits can be measured simultaneously, allowing simple comparison. This is the only way to check or adjust the regulators.

One of the measuring circuits also has a low-pressure manometer that is switched off at approx. 9.5 bar. This allows both low-pressure and high-pressure leakage tests to be carried out. The unit is connected to the hydraulic system by means of an adapter instead of bleeder valves as well as plug-and-socket connectors and low-stretch mini-hoses. Suitable adapters for connection to the test connectors are also supplied with the unit. The vacuum manometer allows the vacuum system to be tested for leaks and correct operation. Suitable adapters for connecting the unit are also supplied. All accessories are stored in appropriate holders inside the unit.

Benefits:

- Robust construction
- Measurement of directly applied pressure /vacuum
- The use of mini-hoses avoids hose stretching, thus providing high measuring accuracy
- Connection fittings are also supplied and are stored in the unit

Package contents:

- Unit complete with connecting hoses
- 2 sets of connection nipples (7 items M 6 to M 12 x 1.5)
- 2 test connection adapters
- 2 plug-on nipples (male)
- 4 vacuum connecting sleeves
- 1 elbow connection complete (banjo screw, ring support)
- Operating instructions

Low-pressure measuring range	0 to 9.5 bar
High-pressure measuring range	0 to 250 bar
Vacuum measuring range	0 to -1.0 bar
Automatic cutoff of the low-pressure manometer at	approx. 9.5 bar
Length of connecting hose:	3.0 m
Length of vacuum hose:	2.0 m
Dimensions: H x W x D	420 x 350 x 220 mm
Weight:	10 kg

Pressure gauge



Order no: 03.9305-0200.4 Short order no.: 730029

The ATE pressure gauge allows all pressures to be measured in one brake circuit of the hydraulic brake system.

The measuring circuit consists of a high-pressure and low-pressure manometer that cuts off automatically at approx. 9.5 bar. This allows both low-pressure and highpressure leakage tests to be carried out. The unit is connected to the hydraulic system by means of an adapter instead of bleeder valves as well as plug-andsocket connectors and low-stretch mini-hoses. All accessories are stored in the unit in suitable holders.

Benefits:

- Robust construction
- Measurement of directly applied hydraulic pressure
- The use of mini-hoses avoids hose stretching, thus providing high measuring accuracy
- Connection fittings are also supplied with the unit

Package contents:

- Unit complete with connection hose
- 1 coupling head
- 7 connector nipples (M 6 to M 12x 1.5)
- Operation instructions

Technical data:

Low-pressure measurement range	0 to 9.5 bar
High-pressure measurement range	0 to 250 bar
Automatic shutoff of the low-pressure manometer at	approx. 9.5 bar
Length of connecting hose:	1.5 m
Dimensions: H x W x D	320 x 230 x 160 mm
Weight:	5.5 kg

Extension hose



With the ATE extension hoses, each of the connecting hoses on the pressure gauge unit (3.9305-1020.4 /730032) can be lengthened by 5 meters.

Benefits:

If 2 extension hoses are used on the pressure-gauge unit, a total hose length of 16.0 m can be achieved.

Technical data:

Length:

5.0 m

Order no: 03.9305-1042.2 Short order no.: 730043

Pedal arrester



When carrying out leakage checks on the hydraulic brake system it is necessary to maintain a constant brakepedal pressure over a long period. Constant brake-pedal pressure is also needed to check and adjust brakepressure regulators or limiters. The ATE pedal arrester is ideal for this purpose. The soft support plate is placed against the driver's seat

The soft support plate is placed against the driver's seat and the serrated side against the brake pedal. The required pressure can be set using the handwheel, that operates on a toothed rack. A catch locks the unit at the required value.

Benefits:

The required pressure can be set precisely with the handwheel and toothed rack.

Order no: 03.9312-0100.4 Short order no.: 760032



Digital brake disk caliper gauge



Order no: 03.9314-0011.3 Short order no.: 760174



The digital ATE brake disk caliper gauge is an indispensable tool for precisely determining brake disk wear. It enables quick and easy measurement of brake disk thickness, i.e., the degree of wear. The measuring range is 125 mm and the length of the measuring jaws is 85 mm. The design of the measuring jaws permits exact measurement even if the disc has a ridge.

Work with the digital ATE brake disc caliper gauge couldn't be easier. After the measuring jaws have been positioned on the brake disk, the result of measurement is shown in figures on the display. The reading is saved by briefly pressing the hold button. The caliper gauge then can be opened and removed from the brake disk. The reading remains saved until the hold button is pressed again. This is a big advantage especially if accessibility is a problem or poor lighting conditions in the wheel well impede reading. The result of measurement thus can be conveniently read and compared with the desired value.

If required, null balancing of the gauge can be quickly initiated at the push of a button. The user can freely choose between 'mm' and 'inch' as units of measure.

The big advantage of the digital ATE brake disk caliper gauge is that no special know-how is required for taking readings. The digital reading display is self-explanatory even to laypersons and can be nicely used for sales talks with the customer.

Benefits:

- Convenient, reliable reading of measurements
- Easy saving of readings
- Measuring jaw design permits accurate measurement even if a brake disk has a ridge
- Sturdy design suited for workshop use

- Complete instrument in sturdy plastic box
- Substitute battery
- Operating instructions





Digital brake disk caliper gauge with certificate



Order no: 03.9314-0012.3 Short order no.: 760175





The digital ATE brake disk caliper gauge is an indispensable tool for precisely determining brake disk wear. It enables quick and easy measurement of brake disk thickness, i.e., the degree of wear. The measuring range is 125 mm and the length of the measuring jaws is 85 mm. The design of the measuring jaws permits exact measurement even if the disc has a ridge.

Work with the digital ATE brake disc caliper gauge couldn't be easier. After the measuring jaws have been positioned on the brake disk, the result of measurement is shown in figures on the display. The reading is saved by briefly pressing the hold button. The caliper gauge then can be opened and removed from the brake disk. The reading remains saved until the hold button is pressed again. This is a big advantage especially if accessibility is a problem or poor lighting conditions in the wheel well impede reading. The result of measurement thus can be conveniently read and compared with the desired value.

If required, null balancing of the gauge can be quickly initiated at the push of a button. The user can freely choose between 'mm' and 'inch' as units of measure.

The big advantage of the digital ATE brake disk caliper gauge is that no special know-how is required for taking readings. The digital reading display is self-explanatory even to laypersons and can be nicely used for sales talks with the customer.

The digital ATE brake disk caliper gauge is tested and delivered with a certificate.

Benefits:

- Convenient, reliable reading of measurements
- Easy saving of readings
- Measuring jaw design permits accurate measurement even if a brake disk has a ridge
- Sturdy design suited for workshop use
- Tested caliper gauge with certificate

- Complete instrument in durable plastic box
- Substitute battery
- Operating manual
- Certificate

Digital brake drum caliper



Order no: 03-9309-0100.3 Short order no.: 760178



The digital ATE brake drum caliper gauge is an indispensable instrument for precisely determining the wear condition of the brake drums. It enables fast and simple measurement of the brake drum diameter or the amount of wear. The measurement range is 400 mm. The design of the measurement arm allows for exact measurement regardless of burrs in the brake drum.

Working with the digital ATE brake drum caliper gauge is very simple. After switching it on and placing the measurement arm in the brake drum, the measurement result is shown on the display as a number. By briefly pressing the Hold button, the determined measured value is saved. Afterward the caliper gauge can be opened and removed from the brake drum. The measurement result remains saved until the Hold button is pressed again. Thus the measurement result can be read easily and compared with the target value.

If required, a quick zeroing of the measurement instrument can be done by pushing a button. The user can choose between the units "mm" and "inch".

The big advantage of the digital ATE brake drum caliper gauge is that no special knowledge is required to read the measured value. The digitally displayed measured value is also understandable for non-specialists and can thus be used well in discussions with the customer.

Benefits:

- Easy and reliable reading of the measured value
- Simple saving of the measured value
- The design of the measurement arm allows for exact measurement regardless of burrs in the brake drum
- Sturdy design

- Complete instrument in durable plastic box
- Substitude battery
- Operating manual

Digital brake drum caliper gauge with certificate



Order no: 03.9309-0101.3 Short order no.: 760179



The digital ATE brake drum caliper gauge is an indispensable instrument for precisely determining the wear condition of the brake drums. It enables fast and simple measurement of the brake drum diameter or the amount of wear. The measurement range is 400 mm. The design of the measurement arm allows for exact measurement regardless of burrs in the brake drum. Working with the digital ATE brake drum caliper gauge is very simple. After switching it on and placing the measurement arm in the brake drum, the measurement result is shown on the display as a number. By briefly pressing the Hold button, the determined measured value is saved. Afterward the caliper gauge can be opened and removed from the brake drum. The measurement result remains saved until the Hold button is pressed again. Thus the measurement result can be read easily and compared with the target value. If required, a quick zeroing of the measurement instrument can be done by pushing a button. The user can choose between the units "mm" and "inch". The big advantage of the digital ATE brake drum caliper gauge is that no special knowledge is required to read the measured value. The digitally displayed measured value is also understandable for non-specialists and can thus be used well in discussions with the customer. The digital ATE brake drum caliper gauge is tested and delivered with a certificate.

Benefits:

- Easy and reliable reading of the measured value
- Simple saving of the measured value
- The design of the measurement arm allows for exact
- measurement regardless of burrs in the brake drum
- Sturdy design
- Tested caliper gauge with certificate

- Complete instrument in durable plastic box
- Substitute battery
- Operating manual
- Certificate

Dial gauge with large measuring range



Order no: 03.9304-0034.2 Short order no.: 760093 The ATE dial gauge with 1/100 mm reading accuracy is used to measure brake disks and wheel hubs. If measurement is to be carried out in situ on the vehicle, an ATE dial-gauge holder is required. The 8 mm clamping shaft diameter of the ATE dial gauge is standardized. The long probe allows measurement of a wheel hub despite wheel studs. The special exchangeable ball-shaped probe allows easy measurement of brake disks such as the ATE Power

Disc. The knurled, rotatable outer ring with 360° tick scale allows pointer zero adjustment and makes the ATE dial gauge easy to read. Two adjustable tolerance marks make it easy to take an accurate reading.

Benefits:

- Wheel hub can be measured despite wheel studs
- With exchangeable ball-shaped probe

- Dial gauge with probe
- Special ball-shaped probe

Magnetic dial-gauge holder



Order no: 03.9314-0019.2 Short order no.: 760092 The ATE magnetic dial-gauge holder, used in conjunction with the ATE dial gauge, enables lateral and radial runout measurements to be taken on brake disks and wheel hubs. Its 70 movable steel pins provide a perfect fit on uneven surfaces. This means that the 60 N strong magnet adheres optimally. The three swivel arms can be secured by means of a clamping screw and allow the ATE dial gauge to be aligned with any measuring point. A fine adjustment mechanism at the clamp of the dialgauge permits precise zero point calibration of the ATE dial gauge.

Benefits:

- 70 flexible steel segments adapt perfectly to any shape surface
- Constant securing force of 60 N
- One clamping screw fixes all three swivel arms at the same time
- Fine tuning via a knurled screw

Package contents:

Supplied without dial gauge







Straight edge



Before a brake disk is mounted, the wheel hub should be checked for flatness (distortion). This is easily done with the ATE straight edge, and the light gap method. Its length of 200 mm allows even larger surfaces to be easily checked.

Benefits:

quick and easy and universal use with the light gap method

- ATE straight edge
- handy case to protect the straight edge

Order no: 03.9314-0022.1 Short order no.: 760094





Brake disk measurement equipment



Order no: 03.9304-0100.4 Short order no.: 730072



The ATE brake disk measurement equipment allows precise measurement of the lateral run-out and thickness tolerance of brake disks which have been removed from the vehicle (without bearing seat). Brake disks of diameters up to 360 mm can be measured. Precise measurement of the brake disk is ensured by the no-play bearing and the polished contact surface of the support cups. The brake disk to be measured is centered precisely using a cone. The exchangeable support cups mean that there is a small support area available for measuring small brake disks.

A dial gauge (with a 0.1 mm scale) is included with the unit. When combined with the ball-shaped probe, measurements can be carried out on all types of brake disks (e.g. ATE Power Disc).

Benefits:

- Extremely simple to use
- Lateral run-out and thickness measured with one tool
- Measurements read on a single dial gauge

Package contents:

- Complete brake disk measurement equipment with large and small support cup
- Dial gauge with probe
- Ball-shaped probe
- Operating instructions

Accuracy:	1/100 mm
Dimensions: L x W x H	300 x 170 x 230 mm
Weight:	6.85 kg

Bleeding equipment



5 liter electrical brake bleeding unit - FB 5e



Order no: 03.9302-1500.4 Short order no.: 740295



The ATE FB 5e is a particularly easy to operate, robust and economical brake bleeding unit. It fulfils all the requirements for filling, flushing and bleeding of modern electronic braking systems. Two pressure stages are available: 1.0 and 2.0 bar. This corresponds to the stipulations of leading automobile manufacturers and avoids faulty settings of the working pressure. The working pressures are set using a rocker switch. Checking with a pressure gauge is not necessary because of the predetermined pressure. The current lowviscosity brake fluids set stringent standards for the safe operation of a brake filling and bleeding unit, and these were taken into account particularly in the development of the ATE FB 5e. A special pump creates a pulsing fluid flow which supports the complete flushing and bleeding of the braking system. The ATE FB 5e works directly from the 5 litre ATE can, which is securely fixed in the unit with a clamping strap. It is no longer necessary to carry out time-consuming transfer of the brake fluid. The suction lance is held securely in the container with a screwed fitting. When the brake fluid container being used is empty, the float lever close the intake port of the suction lance. This ensures that air can never be directed into the braking system.

Practical features are the holders mounted on the side of the ATE FB 5e for the filling hose and the mains cable, and the mountings for three bleeding spigots at the rear of the unit. The large handle can be used for carrying the unit. All materials used on the ATE FB 5e are absolutely resistant to brake fluid.

The ATE FB 5e is fitted with a bleeding spigot No.: 20 (Europe spigot).

Benefits:

- economical
- particularly robust
- easy to operate
- two pressure stages, avoids incorrect settings
- suitable for low-viscosity brake fluids
- pulsing brake fluid flow

Package contents:

- complete unit
- Operating instructions
- Bleeding spigot No.: 20 (Europe spigot)

Approval mark:

CE

Technical data:

Brake fluid capacity:	5 liters
Power supply:	230 V ~ , 50 - 60 Hz
Delivery rate of pump:	approx. 12 l/h at 2 bar pressure
Automatic cut-off of pump:	at approx. 9mm remaining fluid level in the can
Length of connecting cable:	4.2 m
Filling hose length:	3.5 m
Dimensions: H x W x D:	530 x 270 x 250 mm
Weight:	8.5 kg

26

5-liter pneumatically operated brake bleeding unit FB 5p



Order no: 03.9302-1350.4 Short order no.: 740230

The ATE FB 5p is a pneumatically operated bleeding unit for 5 liters of brake fluid. With the wide range of ATE accessories, all hydraulic clutch and brake systems including ABS, EDS or ESP - can be filled, flushed and bled. A low-pressure leakage test of a brake or clutch system can also be easily carried out. Only one person is needed to operate the ATE FB 5p.

A particular advantage of the ATE FB 5p is that, once it has been topped up with compressed air, it can be used anywhere, so it is ideal for "off-premises" work. The ATE FB 5p works according to the principle of medium separation, i.e. the brake fluid is separated from the compressed air by a diaphragm, so that air can never enter the brake system. One single filling of compressed air is sufficient to drain 5 liters of brake fluid. The working pressure (the pressure with which the new brake fluid is fed into the brake system) is adjustable and can be seen on the working-pressure manometer. At 3.5 meters, the length of the filling hose is sufficient for all requirements. It goes without saying that all materials used on the FB 5p are completely resistant to brake fluid.

The ATE FB 5p is fitted with a bleeding spigot No.: 20 (Europe spigot).

Benefits:

- Particularly robust unit
- Once topped up, the unit is mobile and can be used anywhere

- Unit complete
- Operating instructions
- Bleeding spigot No.: 20 (Europe spigot)

Technical data:	
Brake fluid capacity:	5 liters
Working pressure (compressed air):	6.5 bar
Operating pressure (brake fluid):	2 bar (0 to 3 bar adjustable)
Filling hose length:	3.5 m
Total height:	510 mm
Diameter:	310 mm
Weight:	10 kg

15 liter electrical brake bleeding unit - FB 15



Order no: 03.9302-1650.4 Short order no.: 740229

The new ATE FB 15 is an electrically operated bleeder with a capacity of 15 liters of brake fluid. It has a particularly robust construction. With the wide range of ATE accessories, all hydraulic clutch and brake systems including ABS, EDS or ESP - can be filled, flushed and bled. The pump of the ATE FB 15 is sufficiently powerful to be used on truck transmission control systems. A lowpressure leakage test of a brake or clutch system can be easily carried out with the ATE FB 15. Only one person is needed to operate the ATE FB 15.

Its large casters and the convenient steering handle allow it to be moved easily. Practical holders are provided on the unit for the filling hose, the power cable and for four ATE bleeding unit adapters. The clearly-arranged control elements make the ATE FB 15 easy to operate. The fluidlevel indicator allows you to check the amount remaining in the brake fluid tank. If it is necessary to top up the brake fluid, this can be done while the unit is running, because the ATE FB15 does not need to be bled again. If there is insufficient brake fluid in the unit, the pump is automatically switched off, a clear warning signal sounds, and no air can be drawn in. The working pressure can be adjusted by a pressure regulator that is protected against inadvertent adjustment and can be monitored with the working-pressure manometer. At 3.5 meters, the length of the filling hose is sufficient for all requirements.

It goes without saying that all materials used on the FB 15 are completely resistant to brake fluid.

The ATE FB 15 is fitted with a bleeding spigot No.: 20 (Europe spigot).

Benefits:

Well-proven, particularly robust unit for workshop use

Package contents:

- Unit complete
- Operating instructions
- Bleeding spigot No.: 20 (Europe spigot)

Approval mark:

CE

Brake fluid capacity:	15 liters
Power supply:	230 V ~ , 50-60 Hz
Delivery rate of pump:	1.3 l/min
Working pressure:	2 bar (0 to 3 bar adjustable)
Automatic cut-off of pump:	at approx. 9 mm remaining fluid level
Length of connecting cable:	4.20m
Filling hose length:	3.5 m
Dimensions: H x W x D :	745 x 380 x 705 mm
Weight:	20.5 kg

15 liter electrical brake bleeding unit - FB 15 for mineral oil



Order no: 03.9302-1660.4 Short order no.: 740231

The new ATE FB 15 in the version for use with mineral oil is an electrically operated bleeding unit with a tank capacity of 15 liters. It has a particularly robust construction. The powerful pump allows all hydraulic clutch and brake systems, including ABS, EDS or ESP, can be filled, flushed and bled and also permits use on transmission control systems and other hydraulic systems. A low-pressure leakage test of a brake or clutch system can be easily carried out with the ATE FB 15. An ATE accessory set is available for the mineral oil version of the ATE FB 15. Only one person is needed to operate the ATE FB 15.

Its large casters and the convenient steering handle allow it to be moved easily. Practical holders are provided on the unit for the filling hose, the power cable and for four ATE bleeding unit adapters. The clearly-arranged control elements make the ATE FB 15 easy to operate. The fluidlevel indicator allows you to check the amount remaining in the brake fluid tank. If it is necessary to top up the brake fluid, this can be done while the the unit is running, because the ATE FB15 does not need to be bled again. If there is insufficient brake fluid in the unit, the pump is automatically switched off, a clear warning signal sounds, and no air can be drawn in. The working pressure can be adjusted by a pressure regulator that is protected against inadvertant adjustment and can be monitored with the working-pressure manometer. At 3.5 meters, the length of the filling hose is sufficient for all requirements.

It goes without saying that all materials used on the FB 15 are completely resistant to mineral oil.

Benefits:

Well-proven, particularly robust unit for workshop use

Package contents:

- Unit complete
- Adapters for connecting the unit must be ordered separately
- Operating instructions

Approval mark:

CE Typ:

For mineral oil

Brake fluid capacity:	15 liters
Power supply:	230V ~ , 50-60 Hz
Delivery rate of pump:	1.3 l/min
Working pressure:	2 bar (0 to 3 bar adjustable)
Automatic cut-off of pump:	at approx. 9 mm remaining fluid level
Length of connecting cable:	4.20m
Filling hose length:	3.5 m
Dimensions: H x W x D :	745 x 380 x 705 mm
Weight:	20.5 kg

30-liter electric brake bleeding unit FB 30 EDR



Order no: 03.9302-3000.4 Short order no.: 740273

The ATE FB 30 EDR is an electrically operated bleeding unit using ATE brake fluid cans of 5, 12, 20 or 30 liters capacity. The cans are mounted directly in the unit. The wide range of ATE accessories makes it possible to fill, flush and bleed all hydraulic clutch and brake systems including ABS, EDS, ESP and SBC.

The ATE FB 30 EDR is fitted with an electronic pressure control facility (EDR) with preset pressure levels of 0.4 bar, 1.0 bar and 2.2 bar (suitable for all applications). The selected pressure is maintained at a constant level under all operating conditions by the electronic control system, this can be checked with the integrated manometer. The brake fluid level in the can is monitored by a float switch. If the level falls too low, the float switch switches off the pump and a clear acoustic signal is sounded. This means that no air is drawn in and the user is informed when the can is empty.

The ATE FB 30 EDR also allows modern, low-viscosity brake fluids to be used (in particular ESP brake fluids). All the operating and monitoring controls are clearly and ergonomically arranged on the tilted front panel of the unit.

To allow it to be moved easily, the ATE FB 30 EDR has large wheels and a convenient steering handle. Holders for the filling hose and power cable are provided on the sides of the unit. The ATE FB 30 EDR also features a practical storage tray for small components. It goes without saying that all materials used on the FB 30 EDR are completely resistant to brake fluid. The most up-to-date technology means that the ATE FB 30 EDR is ideally equipped for today's and tomorrow's fields of application.

The ATE FB 30 EDR is fitted with a bleeding spigot No.: 20 (Europe spigot).

Benefits:

- Brake fluid container can be used directly without being refilled
- Versatile, suitable for various container sizes /shapes from 5-30 liters
- Absolutely constant working pressure thanks to electronic pressure control (EDR)
- Automatic cut-off with acoustic warning if the can is empty
- Suitable for low-viscosity brake fluids

Package contents:

- Complete unit (without brake fluid cans)
- Operating instructions
- Bleeding spigot No.: 20 (Europe spigot)

Approval mark:

Brake fluid capacity:	5 to 30 liters
Power supply:	100 - 240 V ~ , 50 - 60 Hz
Delivery rate of pump:	1.1 l/min
Electronic pressure control system (EDR), pressure levels:	pressure-less /0.4 bar /1.0 bar and 2.2 bar
Automatic cut-off of pump:	at approx. 9 mm remaining fluid level in the can
Length of connecting cable:	4.2 m
Filling hose length:	3.5 m
Dimensions: H x W x D:	915 x 440 x 365 mm
Weight:	15.9 kg

FB 30 S - 30-litre electric brake bleeding unit with integrated suction device



Order no: 03.9302-3010.4 Short order no.: 740288



Changing the brake fluid and filling or bleeding the brake systems on current vehicles with their electronic brake systems and also where low-viscosity brake fluid is involved requires modern service equipment. A professional brake fluid change includes cleaning the reservoir. The old, contaminated brake fluid must therefore be extracted from the reservoir. The innovative technology of "Electronic Pressure Regulation" with preset pressure steps together with the new, integrated suction device for used brake fluid make the new ATE FB 30 S the benchmark for the future among brake filling and bleeding units. With just one centrally located rotary switch on the new ATE FB 30 S, it is possible to select between extracting brake fluid and filling or bleeding the brake system with preset pressure steps. Corresponding signal lights indicate that the selected working range is operating correctly. An integrated, independent and especially robust pump is used for extracting the used brake fluid. Even difficultto-access reservoirs are easy to empty with the approximately 3 metre long extendable coiled hose and long suction lance. A filter integrated into the suction hose protects the pump from coarse dirt particles. The extracted brake fluid is collected in a transparent

drain bottle which has a capacity of one litre. This is connected to the ATE FB 30 S by means of a quickrelease coupling. It is easy to uncouple the drain bottle and, using a further quick-release coupling in its base, empty it into the ATE disposal system. Conventional emptying is also possible via the screw cap. There are four pressure steps available for filling, flushing and bleeding the brake system: unpressurised /0.4 /1.0 /2.2 bar. These are selected by means of the central rotary switch. The "Electronic Pressure Regulation" holds the preset operating pressure constant - this can be checked on the gauge. The rotary switch, the check gauge and the signal lights

are located on the ergonomically designed sloping operating panel. Present day low viscosity brake fluids place stringent demands on the safe operation of a brake filling and bleeding unit, and particular emphasis was placed on this aspect during the development of the ATE FB 30 S.

The new ATE FB 30 S enables you to fill, flush and bleed all modern electronically controlled and also conventional brake and clutch systems without problems. The ATE FB 30 S brake filling and bleeding unit works directly from 5, 20 and 30 litre brake fluid containers, which are securely fixed to the unit by means of a retainer. There is no need for time-consuming decanting of the brake fluid. Other common containers can also be used in addition to the ATE brake fluid canisters. Special brackets provide secure seating for the suction lance with the rubber sealing cone in the container. If the container of fluid in use becomes empty, the ATE FB 30 S will be shut off automatically. This ensures that air can never enter the brake system. A clearly audible signal and a third signal light prompt replacement of the container.

The ATE FB 30 S has convenient brackets for the filling hose and mains cable located at the side, as well as a storage tray on the unit. The large wheels, ergonomic handle and favourable position of its centre of gravity mean that the ATE FB 30 S can be moved around comfortably and safely. The ATE FB 5e is fitted with a bleeding spigot No.: 20 (Europe spigot).

Brake fluid capacity:	5 to 30 liters
Power supply:	230 V ~ , 50 - 60 Hz
Delivery rate of pressure pump:	approx. 1.1 l/min
Suction pump delivery rate:	approx. 1.0 l/min
Electronic pressure control system (EDR), pressure level:	pressure-less /0.4 bar /1.0 bar /2.2 bar
Automatic cut-off of pump:	at approx. 9mm remaining fluid level in the can
Length of connecting cable:	4.2 m
Filling hose length	3.5 m
Dimensions: H x W x D:	915 mm x 475 mm x 380 mm
Weight:	16.8 kg

FB 30 S - 30-litre electric brake bleeding unit with integrated suction device



Order no: 03.9302-3010.4 Short order no.: 740288

Benefits:

- quick and effective operation
- suitable for all standard brake and clutch systems
- extraction of used brake fluid
- constant operating pressure due to electronic pressure regulation, EPR
- particularly suitable for low viscosity brake fluids
- various brake fluid containers can be used directly without decanting
- automatic shutdown with warning sound when the container is empty
- three signal lights for the respective operating conditions

- complete unit incl. drain bottle (but without new fluid container)
- operating instructions
- Bleeding spigot No.: 20 (Europe spigot)

30 I brake bleeding unit FB 30 SR with integrated extractor unit



Order no: 03.9302-3020.4 Short order no.: 740297



Brake fluid changes, topping up or bleeding the brake systems of current vehicles with electronic brake systems, but also low-viscosity brake fluids require stateof-the-art service devices.

Professional brake fluid changes also include cleaning of the reservoir. This involves extracting the old and contaminated brake fluid from the expansion reservoir. With its innovative "Electronic Pressure Control" technology with pre-selectable pressure settings according to the vehicle manufacturer's specifications and an integrated extractor unit for used brake fluid, the new ATE FB 30 SR sets the standard for future brake filling and bleeding units.

The new FB 30 SR features a switched-mode power supply. Its country-specific power cable firmly connects to the device by a kettle plug for non-heating devices and makes the new FB 30 SR fit for use with any of the world's standard supply voltages.

ATE's new FB 30 SR has just one central rotary switch to select between brake fluid extraction and filling or bleeding the brake system at defined pressure stages. A

pressure gauge provides added control. Three signal lights indicate proper device function. All controls are clearly and ergonomically arranged on the unit's tilted "control panel".

To extract used brake fluid, the unit features an integrated, standalone and very robust pump. Even difficult-to-reach expansion reservoirs are easy to empty using the long suction lance attached to a spiral hose that extends to approx. 3 metres. A filter in the hose protects the extraction pump from coarse contaminants. The extracted brake fluid is collected in a transparent approx. 2.2-litre bottle which is a component of and easily empties into the ATE disposal system. Conventional emptying is also possible via the screw cap.

There are four pressure stages for filling, flushing and bleeding the brake system, i.e. unpressurised, 0.4, 1.0 and 2.2 bar

When designing the ATE FB 30 SR, special attention was paid to the tough reliability requirements of brake filling and extracting units for use with today's low-viscosity brake fluids.

With our new ATE FB 30 SR, you can easily fill, flush and bleed all modern electronic and conventional brake and clutch systems. The ATE FB 30 SR brake filling and bleeding unit works with 5, 20 and 30 litre containers which are firmly attached to the unit by a bracket. There is no time-consuming brake fluid transfer. In addition to the ATE brake fluid containers, it is also possible to use other standard tanks. Special brackets ensure the fill pipe with rubber cone securely seals the container. Designed in conformity with the vehicle manufacturer's specifications, a special bleeding valve in the rubber sealing cone allows air to enter the container only if brake fluid is withdrawn. This prevents atmospheric humidity from entering the container uncontrollably, thus causing premature aging of the brake fluid.

If there is insufficient brake fluid in the can, the ATE FB 30 SR is automatically shut off to prevent air from being drawn into the brake system. A clear acoustic signal and a signal light inform tell the operator that the can has to be replaced. A special base plate prevents unsightly scratches caused by the brake fluid cans. Practical features of the ATE FB 30 SR are the filling hose and power cable holders on the side, holders for three bleeder adapters on each side of the device and a practical storage tray for small components and tools.

Large front wheels, swivel casters at the rear and the ergonomic handle make manoeuvring the ATE FB 30 SR safe and easy even when loaded with a full 30-litre container.

The ATE FB 30 SR is delivered with a bleeding spigot no. 20 (Europe spigot).

Package contents:

- Complete device with collection bottle (without new fluid can)
- Operating manual
- Power cable with shockproof plug
- Bleeding spigot no. 20 (Europe spigot)

Approval mark:

CE

30 I brake bleeding unit FB 30 SR with integrated extractor unit



Order no: 03.9302-3020.4 Short order no.: 740297

Benefits:

- Fast and effective work
- Suitable for all commercially available brake and clutch systems
- Extraction of used brake fluid
- Runs on all standard supply voltages
- Various country-specific power cables available
- Electronic pressure control (EPC) provides a constant working pressure
- Especially suited for low-viscosity brake fluids
- Various brake fluid container sizes can be used directly without being refilled; a special base plate offers protection against scratches
- Empty can provokes automatic switch-off and acoustic alert

Three signal lights indicate the unit's current operating mode

 Holder for power cable, filling hose and six bleeder adapters

Package contents:

- Complete device with collection bottle (without new fluid can)
- Operating manual
- Power cable with shockproof plug
- Bleeding spigot no. 20 (Europe spigot)

Technical data:

Brake fluid capacity:	5 to 30 liters
Power supply:	100-240 V ~ , 50 - 60 Hz
Delivery rate of pump:	approx. 1.1 l/min
Suction pump delivery rate:	approx. 1.0 l/min
Electronic pressure control system (EDR), pressure level:	pressure-less /0.4 bar /1.0 bar /2.2 bar
Automatic cut-off of pump:	at approx. 9mm remaining fluid level in the can
Length of connecting cable:	ca. 4,2 m
Filling hose lengt:	3,5 m
Dimensions: H x W x D:	915 x 440 x 365 mm
Weight:	16,9 kg

Standard power cable



The power cable is equipped with a plug according to CEE 7/4 (shockproof plug) and a socket according to IEC-60320 C13. The shockproof plug fits all shockproof sockets commercially available in Europe.

The IEC socket is equipped with a safety mechanism, which locks the socket after inserting the non-heating device plug. This effectively prevents unintentional detachment.

Technical data:

Length of cable:

4,5 m

Order no: 03.9302-9201.2 Short order no.: 740298

Power cable, Switzerland



The power cable is equipped with a plug according to SEV 1011 and a socket according to IEC-60320 C13. The plug fits all sockets commercially available in Switzerland.

The IEC socket is equipped with a safety mechanism, which locks the socket after inserting the non-heating device plug. This effectively prevents unintentional detachment.

Technical data:

Length of cable:

4,5 m

Order no: 03.9302-9202.2 Short order no.: 740299

Power cable, UK



The power cable is equipped with a plug according to BS 1363 and a socket according to IEC-60320 C 13. The plug fits all sockets commercially available in the United Kingdom.

The IEC socket is equipped with a safety mechanism, which locks the socket after inserting the non-heating device plug. This effectively prevents unintentional detachment.

4.5 m

Technical data:

Length of cable:

Order no: 03.9302-9203.2 Short order no.: 740300

Power cable, AUS



The power cable is equipped with a plug according to AS 3112 and a socket according to IEC-60320 C 13. The plug fits all sockets commercially available in Australia and New Zealand.

The IEC socket is equipped with a safety mechanism, which locks the socket after inserting the non-heating device plug. This effectively prevents unintentional detachment.

4,5 m

Technical data:

Length of cable:

Order no: 03.9302-9205.2 Short order no.: 740302

Set of bleeding unit adapters (standard)



Order no: 03.9302-0800.3 Short order no.: 740271 Set of two the most common standard bleeding unit adapters, the auxiliary hose and thefiilimg gun in a handy plastic case.

Benefits:

- set of the most common accessories to fill and bleed brake systms
- clearly arranged

- Plastic case
- Bleeding unit adapters : no. 50S = 03.9302-0927.2 /740120 no. 55A = 03.9302-0906.2 /740097
- Auxiliary hose: no. 67 = 03.9302-0704.2 /740012
- Filling gun: 03.9302-0795.2 /740085

Set of bleeding unit adapters "PLUS"



Order no: 03.9302-0802.3 Short order no.: 740296 Set of four of the most common standard bleeding unit adapters for Asian vehicles and a cap screws for fluid reservoir in a handy plastic case.

Benefits:

- set of the most common standard bleeding unit adapters for Asian vhicles
- included cap screws for fluid reservoir
- clearly arranged

Package contents:

- Plastic case
- Bleeding unit adapters:
 - Nr. 31A = 03.9302-0935.2 /740285 Nr. 61A = 03.9302-0923.2 /740116
 - Nr. 77A = 03.9302-0938.2 /740220
 - Nr. 86A = 03.9302-0946.2 /740235
- Cap screws for fluid reservoir: Nr. 67 = 03.9302-0784.2 /740071

Mineral oil accessory set



Order no: 03.9302-0720.3 Short order no.: 740232 The mineral oil accessory set is required for bleeding and filling systems with mineral oil using the bleeding unit 03.9302-1660.4. It has been specially designed to be completely resistant to mineral oil for this purpose. The bleeding unit adapter has a 45-mm diameter buttress thread.

The auxiliary hose allows the bleeding unit to be connected to one of the bleed valves in the system. The filling gun permits easy refilling without spillage. Spare seals for the bleeding unit adapter and the filling gun are included in the set.

Package contents:

- Bleeding unit adapter with 45-mm buttress thread
- Filling gun
- Auxiliary hose
- Spare seal for bleeding unit adapter
- Spare seal for auxiliary hose

Auxiliary hose

To connect the bleeding units to a bleed valve of the brake or clutch system.



Order no: 03.9302-0704.2 Short order no.: 740012

Filling gun



Order no: 03.9302-0795.2 Short order no.: 740085 The filling gun is used to fill fluid reservoirs using a bleeding unit.

Benefits:

Easy-to-use lever for actuates the valve, allowing precise dosage of the fluid.

Collection bottle



The ATE collection bottle is connected to the bleeder valves of a hydraulic brake system via its silicon hose to collect the used brake fluid when the system is bled or the brake fluid is changed. The ATE collection is transparent, allowing the brake fluid to be checked thoroughly.

Technical data:

Capacity:

2,2 liters

Order no: 03.9302-1424.2 Short order no.: 740151

Bleed hose



The ATE bleed hose is a spare part for the ATE collection bottle 03.9302-1424.2 and the ATE collection container 03.9302-0516.2

Technical data:

length:

700 mm

Order no: 03.9302-0538.1 Short order no.: 750008

Suction bellows



The ATE suction bellows is used to draw off brake fluid from the fluid reservoir.

Before the brake fluid is changed or a hydraulic brake system is bled, the old contaminated brake fluid should be drained from the fluid reservoir to prevent any contaminants being distributed throughout the entire brake system. After the brake fluid has been changed or the system has been bled, the brake fluid level should be reduced to the MAX mark using the suction bellows.

Order no: 03.9314-5900.3 Short order no.: 760068

Suction bottle



The ATE suction bottle is used to draw off brake fluid from the fluid reservoir. Before the brake fluid is changed or a hydraulic brake system is bled, the old contaminated brake fluid should be drained from the fluid reservoir to prevent any contaminants being distributed throughout the entire brake system. After the brake fluid has been changed or the system has been bled, the brake fluid level should be reduced to the MAX mark using the suction bottle.

Technical data:

Capacity:

0.5 liters

Order no: 03.9314-5910.3 Short order no.: 760069

Set of bleed wrenches



ATE bleeder wrenches can be used to open and close all common bleed valves easily and without damage thanks to the internal hexagon of the ring end that is angled by 10°.

Benefits:

Ring end is designed as an internal hexagon wrench. **Package contents:** 6 wrenches in a case, sizes: 7, 8, 9,11, 12, 14 mm

Order no: 03.9314-1500.3 Short order no.: 760041

Set of special bleed wrenches



The special ATE bleed wrenches are ring wrenches with an internal hexagonal head to prevent the damage of bleed valves. Thanks to a long offset and a short offset, they can be used without removing the wheel.

Benefits:

- Hexagonal head
- Can be used witout removing the wheel

Package contents:

5 wrenches, sizes: 7, 8, 9,10, 11mm

Order no: 03.9314-1510.3 Short order no.: 760103



Pouring spout

With the ATE pouring spout, the ATE bleeding units can be filled precisely and without spilling from 5, 12 and 20 liter ATE brake fluid cans.

Benefits:

There is no need for any other equipment, such as funnels etc.

Order no: 03.9314-5940.3 Short order no.: 760070

Barrel outlet valve



The ATE barrel outlet valve allows brake fluid to be filled into the ATE bleeding units from ATE 30 and 60-liter barrels without spilling, using a 700 mm outlet hose.

Order no: 03.9314-5950.3 Short order no.: 760071

Can outlet valve

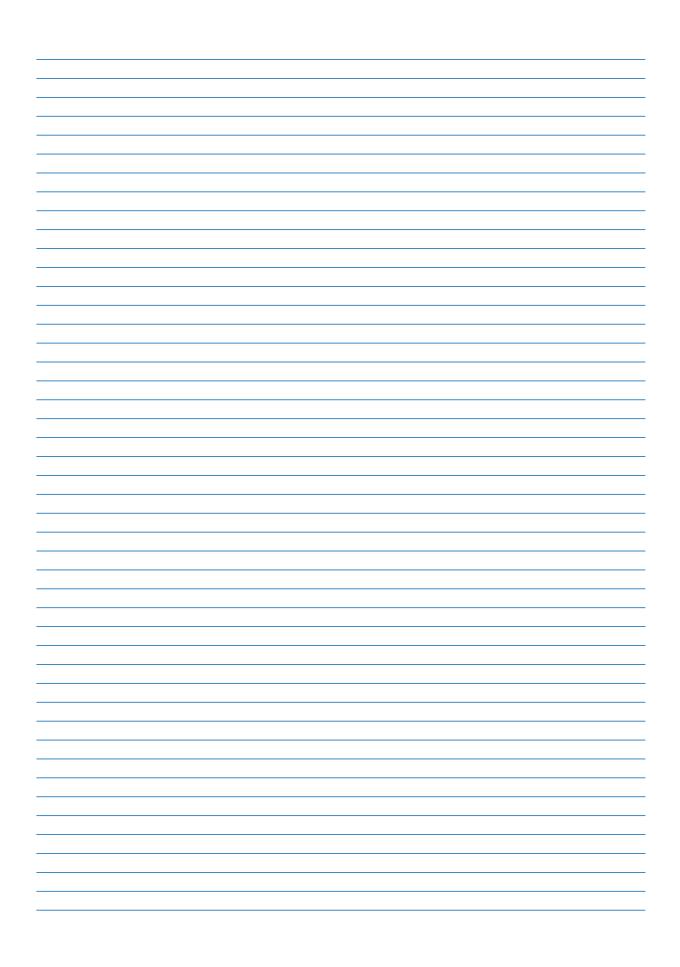


Order no: 03.9314-5960.3 Short order no.: 760153



The ATE can outlet valve enables the clean and precise pouring of brake fluid from ATE 5 I and ATE 20 I brake fluid containers. As a result, the bleeder devices can be easily filled. The stop valve guarantees a secure and dripfree closing of the container after removing brake fluid.

Ale



Au

Disposal equipment



Brake fluid disposal unit System 220



Order no: 03.9302-0504.3 Short order no.: 750001

Brake fluid disposal unit System 222



Order no: 03.9302-0506.3 Short order no.: 750002 Used brake fluid is a recyclable material, provided it is collected properly segregated in a closed system. This can be achieved with the ATE System 220. Segregated used brake fluid is considerably less expensive to dispose of.

The ATE System 220 consists of the 2,2-liter collection container and the 220-liter storage container. The collection container is connected to the bleed valve with a long-life silicon hose. When it is full, it is connected to the 220-liter storage container to be drained with a quick-release coupling. When the 220-liter storage container is full, the segregated used brake fluid can be picked up by a local waste disposal specialist.

Benefits:

- Used brake fluid is an asset whose components can be recycled
- Reduction of disposal costs
- Protection of the environment

Package contents:

- 220-liter storage container
- 2.2-liter collection container

Used brake fluid is a recyclable material, provided it is collected properly segregated in a closed system. This can be achieved with the ATE System 222. Segregated used brake fluid is considerably less expensive to dispose of. The ATE System 222 consists of two 2,2-liter collection containers and the 220-liter storage container with two couplings. The collection container is connected to the bleed valve with a long-life silicon hose. When it is full, it is connected to the 220-liter storage container to be drained with a quick-release coupling. The 2-liter capacity of the collection container allows several changes of brake fluid or bleeding operations. When the 220-liter storage container is full, the segregated used brake fluid can be picked up by a local waste disposal specialist. Because two collection containers are available, it is possible to work on two vehicles at the same time.

Benefits:

- Used brake fluid is an asset whose components can be recycled
- Reduction of disposal costs
- Protection of the environment

Package contents:

- 220-liter storage container
- 2 collection containers, each holding 2,2 liters
- dual drainage connector

Brake fluid disposal unit System 224



Order no: 03.9302-0508.3 Short order no.: 750003 Used brake fluid is a recyclable material, provided it is collected properly segregated in a closed system. This can be achieved with the ATE System 224. Segregated used brake fluid is considerably less expensive to dispose of. The ATE System 224 consists of four 2,2-liter collection containers and the 220-liter storage container with four couplings. The collection container is connected to the bleed valve with a long-life silicon hose. When it is full, it is connected to the 220-liter storage container to be drained with a quick-release coupling. The 2,2-liter capacity of the collection container allows several changes of brake fluid or bleeding operations. When the 220-liter storage container is full, the segregated used brake fluid can be picked up by a local waste disposal specialist. Because four collection containers are available, it is possible to work on four vehicles at the same time.

Benefits:

- Used brake fluid is an asset whose components can be recycled
- Reduction of disposal costs
- Protection of the environment

Package contents:

- 220-liter storage container
- 4 collection containers, each holding 2.2 liters
- Quadruple drainage connector

Dual drainage connector



Order no: 03.9302-0521.2 Short order no.: 750007 Spare part for ATE brake fluid disposal system 222 Upgrading a System 220 to four collection containers

Benefits:

2 collection containers can be connected to the 220 liter storage container at the same time and drained.

Quadruple drainage connector



Order no: 03.9302-0520.2 Short order no.: 750006

2,2-liter collection container



Spare part for all ATE brake fluid disposal systems

Spare part for ATE brake fluid disposal system 224

4 collection containers can be connected to the 220 liter

Upgrading a System 220 or 222 to four collection

storage container at the same time and drained.

Technical data:

Capacity:

containers Benefits:

2,2 liters

Order no: 03.9302-0516.2 Short order no.: 750005

220-liter storage container



Spare part for all ATE brake fluid disposal systems

Technical data:	
Capacity: 22	0 liters

Order no: 03.9302-0514.2 Short order no.: 750004

Bleeding valve disposal unit



The ATE bleeding valve bleed the brake fluid disposal unit.

37,5 mm

Benefits:

Quick and easy mounting

Package contents:

Bleeding valve

Technical data:

Outside diameter:

Order no: 03.9302-0523.1 Short order no.: 750012

Disposal unit plug with connector



Order no: 03.9302-0522.1 Short order no.: 750011 The ATE Disposal unit plug with connector allow the adaption of the dual and quadruple drainage connector on top of the brake fluid disposal unit.

Benefits:

Quick and easy mounting

Package contents:

Disposal unit plug with connector

Technical data:

Outside diameter:

69,5 mm

Special tools for brakes



Pneumatic piston return device set





Order no: 03.9314-4960.3 Short order no.: 760177







In order not to destroy the automatic adjustment mechanism of floating calipers with integrated parking brake (combi caliper), the piston must be pressed and turned at the same time when resetting. The Pneumatic Piston Return Device Set is well suited for this job. Due to the infinitely variable pneumatic return of the piston, the device is well suited for brake callipers with righthand and left-hand return. With the two universal adapters is almost only an application adapter for all vehicles required. The two exchangeable universal adapters fit all conventional vehicle models. The pin spacing can be pre-set by turning the top plate. The precise pin spacing of the turn plate adapts automatically to the holes of the brake piston by turning the base device. With the accessory adapter 03.9314-4990.1, the pistons of normal floating callipers can also be reset.

Benefits:

- Easy and fast work due to pneumatic support
- Universal use
- Suitable for right-hand and left-hand thread resetting
- Automatic compensation of different thread pitches
- Two universal adapters for all conventional calliper designs
- Rotational movement done manually
- Optimum hold using rubberised counter bearing plate

Package contents:

- Pneumatic resetting device
- Universal Adapter 2 Pin
- Universal Adapter 3 Pin

Technical data:

Universal Adapter	2 Pin	3 Pin
Pin diameter:	4 mm	4 mm
Pin height:	3 mm	3 mm
Pin distance min:	11,2 mm	9 mm
Pin distance max:	29,7 mm	25,3 mm
Housing diameter:	47 mm	47 mm
Housing height:	10,5 mm	13,5 mm

Piston return tool set





With floating calipers with an integrated parking brake (combined calipers), the piston must not simply be pushed back, as this would destroy the automatic adjustment mechanism in the caliper. In many cases the piston must be turned and pressed. This can be done using the ATE piston return tool set. With its right- and left threaded spindle and its 9 interchangeable adapters, it can be used for all common vehicles. It can also be used to return pistons in standard floating calipers.

Benefits:

9 assorted adapters for all common caliper types, including ATE and older Lucas calipers **Package contents:**

- Metal case
- Right threaded spindle
- Left threaded spindle
- spacer sleeve and pressure plate
- 9 adapters

Order no: 03.9314-4999.4 Short order no.: 760133



Spindle left

For returning combination calipers with left thread return for piston return set 03.9314-4980.4 /760102.



Order no: 03.9314-4994.2 Short order no.: 760135

Piston return device



Order no: 03.9314-4950.3 Short order no.: 760049 The ATE piston return device returns the pistons in the disk brake calipers. It avoids damage to the pistons and brake disks.

Benefits:

Parallel running ensures that the piston movement cannot cause damage and cannot jam. **Hint:** Do not use tire levers /large screwdrivers!



Piston turning tool



The ATE piston turning tool is used to turn pistons with a shoulder to the correct postition in the caliper. The ATE 20° piston gauge is also needed for this operation.

The ATE piston turning tool has hardened teeth to allow the piston to be gripped tightly. Its size can be adjusted using the three stop notches.

Benefits: Size adjustable via 3 stop notches

Order no: 03.9314-5700.3 Short order no.: 760064

20° piston gauge



Adjustment and testing gauge for 20° piston adjustment in the brake caliper in combination with the ATE piston turning tool.

Technical data:

For piston diameter

35 - 38 mm

Order no: 03.9314-1700.1 Short order no.: 760044

20° piston gauge



Adjustment and testing gauge for 20° piston adjustment in the brake caliper in combination with the ATE piston turning tool.

Technical data:

For piston diameter

42 - 48 mm

Order no: 03.9314-0900.1 Short order no.: 760037

20° piston gauge



Adjustment and testing gauge for 20° piston adjustment in the brake caliper in combination with the ATE piston turning tool.

Technical data:

For piston diameter

52 - 57 mm

Order no: 03.9314-0600.1 Short order no.: 760036

20° piston gauge



Adjustment and testing gauge for 20° piston adjustment in the brake caliper in combination with the ATE piston turning tool.

Technical data:

For piston diameter

60 mm

Order no: 03.9314-5300.1 Short order no.: 760058

Brake pad withdrawal tool



The ATE brake pad withdrawal tool removes firmly seated disk brake pads with retaining holed from fixed calipers. It prevents damage to brake calipers and disks. The fact that the pulling rod is integrated into the sliding weight means that there is no risk of injury.

Benefits:

Pulling rod integrated in the sliding weight, so that there is no risk of injury

Technical data:

Pulling pin diameter: 5.0 mm

Order no: 03.9314-6100.3 Short order no.: 760073

Brake caliper guide file



The ATE brake caliper guide file allows the brake pad guide surfaces on brake calipers and holders to be filed to a bright finish. Single-sided cutting ensures that no damage is caused to the dust cap. The special coarse teeth mean that the work is completed quickly and cleanly.

Benefits:

Special single-sided cut causes no damage to the dust cap.

Order no: 03.9314-1300.3 Short order no.: 760038





Au

Special wire brush



The ATE special wire brush is used to remove slight soiling on the brake pad guide surfaces of brake calipers and holders.

Hint:

Wire brushes whose strands are seriously out of shape may cause damage to rubber protective caps. In this event, always use a new brush!

Order no: 03.9314-1320.3 Short order no.: 760039





Au

Honing Brush "ATE"



Order no: 03.9314-1395.1 Short order no.: 760154



After some time of operation it may be useful to replace the (rubber) guide bushes in ATE floating calipers. The mounting hole in the caliper housing is often corroded to a greater or lesser degree. This will cause the guide bushing to be squashed and the guide pins may become jammed in them. This will restrict brake caliper movements which may lead to other braking problems.

After removing the old guide bushes, use the ATE honing brush to polish the mounting holes in the brake caliper housing to a bright metal surface. Best to use is a battery-powered screwdriver running at a maximum speed of 500 rpm in clockwise direction (to the right) only. After cleaning the holes in the caliper housing, thinly spread ATE Plastilube over them. This will prevent new corrosion and make the new guide bushes install with more ease.

Hint:

Attention: Never grease the inside of the guide sleeves or the guide pins. These sliding surfaces must remain dry.

Safety note:

- Maximum speed: 500 rpm
- Run clockwise only



Honing brush "LUCAS"



Order no: 03.9314-1396.1 Short order no.: 760169



Lubricated guide pins are used to hold the "LUCAS" floating calipers in place. Rubber bellows provide the pin seal. Damaged bellows will make the guide bushes inside the brake caliper holder corrode. This will restrict caliper guide movements and may lead to additional braking problems.

Use the ATE honing brush "LUCAS" to clean the guide sleeves to the bare metal. Due to the accurate diameter, the bore size remains accurate. This is best done with a battery-powered screwdriver at a maximum speed of 500 rpm and only in clockwise direction. The cleaning process takes only a few seconds.

Benefits:

- Customized diameter
- Clean and true-to-size metal guide bush surface
- Significant time savings

Hint:

- Degrease the guide bushes prior to using the ATE honing brush
- ATE Plastilube is ideally suited for the permanent lubrication of cleaned guide bushes.

Safety note:

- Maximum speed: 500 rpm
- Clockwise operation only

Wheel hub cleaning set 1



Order no: 03.9314-1330.4 Short order no.: 760109



The ATE wheel hub cleaning set 1 for standard wheel hubs allows you to clean the wheel hub quickly, safely and at low cost, before the brake disks are fitted. The mounting face for the brake disks on the wheel hub must be bright before the disk is mounted to ensure that it lies fully flush. Only then can it be guaranteed that the installation tolerances of the brake disks can be adhered to.

The cleaning process does not normally take more than 10 seconds per hub. The hole in the cleaning disk provides firm guidance and ensures that the disk does not slip off the hub. The fact that the entire surface of the disk is used ensures a lifetime of approx. 400 cleaning operations.

Benefits:

- clean the wheel hub quickly
- safe and easy working

Package contents:

- 1 holder
- 3 disks

Technical data:

Disk external diameter	160 mm
Hole diameter	60 mm

Spare disks, Set 1



Order no: 03.9314-1331.1 Short order no.: 760125 spare part

Package contents:

3 disks

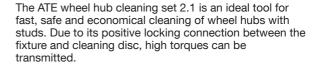
Technical data:	
Disk external diameter	160 mm
Hole diameter	60 mm

Wheel hub cleaning set 2.1



Order no: 03.9314-1343.4 Short order no.: 760182





Before mounting the brake disc, the contact surface of the wheel hub must be cleaned metallically bright. Only in this manner can the installation tolerances be maintained and brake judder prevented. The ATE wheel hub cleaning set 2.1 consists of an aluminium mounting plate in which the drill is clamped. The cleaning discs, which are also included in the set in two sizes, are held in the fixture with a Velcro fastener. The transmission of force from the fixture to the cleaning disc takes place via an octagonal positive locking connection, through which high torques can be transmitted. The cleaning disc is guided through the centre hole securely on the wheel stud. This prevents slipping and ensures optimum work around the studs.

The cleaning process itself does not last more than 10 seconds per wheel stud. Thanks to full contact on the wheel hub, the service life of a cleaning disc is around 400 uses.

Benefits:

- Fast cleaning of the wheel hub contact surface
- High torque transmission possible
- Safe and easy work
 - High lifetime of the cleaning discs

Package contents:

- Mounting plate
- 5 small cleaning discs
- 6 large cleaning discs

Technical data:

Diameter large:	53 mm
Diameter small:	40 mm





Spare disks small Set 2.1



Spare part

Package contents:

5 small cleaning disks

Technical data:		
Disk diameter outside:	40 mm	
Disk diameter inside:	13 mm	

Order no: 03.9314-1344.1 Short order no.: 760183

Spare disks large Set 2.1



Spare part

Package contents: 5 large cleaning disks

Technical data:	
Disk diameter outside:	53 mm
Disk diameter inside:	13 mm

Order no: 03.9314-1345.1 Short order no.: 760184

Spare disks small, Set 2



Order no: 03.9314-1341.1 Short order no.: 760126

spare part

Package contents:

5 disks small

Technical data:

Disk small, external diameter	40 mm
Disk small, hole diameter	13 mm

Spare disks large, Set 2



spare part

Package contents:

5 disks large

Technical data:	
Disk large, external diameter	53 mm
Disk large, hole diameter	13 mm

Order no: 03.9314-1342.1 Short order no.: 760127

Wheel hub cleaning set 3



Order no: 03.9314-1350.4 Short order no.: 760111 The ATE wheel hub cleaning set 3 for large wheel hubs or wheel hubs with a large clooar (e.g. Transporters and BMW vehicles) allows you to clean the wheel hub quickly, safely and at low cost, before the brake disks are fitted. The mounting face for the brake disks on the wheel hub must be bright before the disk is mounted to ensure that it lies fully flush. Only then can it be guaranteed that the installation tolerances of the brake disks can be adhered to.

The cleaning process does not normally take more than 10 seconds per hub. The hole in the cleaning disk provides firm guidance and ensures that the disk does not slip off the hub. The fact that the entire surface of the disk is used ensures a lifetime of approx. 400 cleaning operations.

Benefits:

- clean the wheel hub quickly
- safe and easy working

Package contents:

- 1 holder
- 2 disks

Technical data:	
Disk external diameter	200 mm
Hole diameter	85 mm

Spare disks, Set 3



spare part

Package contents:

2 disks

Technical data:	
Disk external diameter	200 mm
Hole diameter	85 mm

Wheel hub cleaning set 4



Order no: 03.9314-1370.4 Short order no.: 760156



ATE's wheel hub cleaning set 4 is an ideal tool that allows you to clean heavily soiled or slightly rusting wheel hubs quickly, safely and at low cost. Before installing a new brake disc the hub mounting face must be cleaned to bare metal. This is the only way of complying with mounting tolerances and avoiding brake judder. ATE's wheel hub cleaning set 4 consists of a compressed air angle grinder, 2 white cleaning brushes (small grain) and 2 purple cleaning disks (large grain). The cleaning brushes are fixed in a thread in the back-up pad of the compressed air angle grinder. The high speed of the angle grinder (up to 15,000 rpm) ensures thorough cleaning of the wheel hub.

The small-grain brushes and the high speed add up to cleaning each wheel hub within seconds.

To extend the range of applications of compressed air angle grinders (e.g. car body) it is also possible to use cleaning brushes in different grain sizes. For this application, we recommend the body set (03.9314-1371.3), which comprises 4 green cleaning brushes (medium grain) and 4 purple cleaning brushes (large grain).

Benefits:

- Quick cleaning of the wheel hub mounting face
- Safe and simple handling

Package contents:

- Compressed air angle grinder
- 2 cleaning brushes white (small grain)
- 2 cleaning disk (50 mm) purple (large grain)

Technical data:

Air consumption:	250l/min
Working pressure:	6,2bar

Car body extension set



To extend the applicability of wheel hub cleaning set 4 (e. g. car body), you can use it with cleaning brushes in different grain sizes. If you do, consider the car body set which comprises 4 green cleaning brushes (medium grain) and 4 purple cleaning brushes (large grain).

Package contents:

- 4 green cleaning brushes (medium grain)
- 4 purple cleaning brushes (large grain)

Order no: 03.9314-1371.3 Short order no.: 760157

Spare brush (fine grain)



4 white spare brushes (small grain) for wheel hub cleaning set 4

Package contents:

4 white spare brushes (small grain)

Order no: 03.9314-1372.3 Short order no.: 760158

Spare brush (medium grain)



 $4\ green \ spare \ brushes$ (medium grain) for wheel hub cleaning set 4

Package contents:

4 green cleaning brushes (medium grain)

Order no: 03.9314-1373.3 Short order no.: 760159

Spare brush (large grain)



Order no: 03.9314-1374.3 Short order no.: 760160

Cleaning disc 50 mm black

00

4 purple spare brushes (large grain) for wheel hub cleaning set 4

Package contents:

4 purple spare brushes (large grain)

4 black cleaning discs (large grain) for wheel hub cleaning set 4

Package contents:

4 black cleaning discs (large grain)

Technical data:

Disc diameter:

50 mm

Order no: 03.9314-1375.3 Short order no.: 760165



Cleaning disc 75 mm black



4 black cleaning discs (large grain) for wheel hub cleaning set 4

Package contents:

4 black cleaning discs (large grain)

Technical data:

Disc diameter:

75 mm

Order no: 03.9314-1376.3 Short order no.: 760166

Cleaning disc 50 mm purple

4 purple cleaning discs (very large grain) for wheel hub cleaning set 4

Package contents:

4 purple cleaning discs (very large grain)

Technical data:

Disc diameter:

50 mm

Order no: 03.9314-1377.3 Short order no.: 760167

Cleaning disc 75 mm purple



4 purple cleaning discs (very large grain) for wheel hub cleaning set 4

Package contents:

4 purple cleaning discs (very large grain)



Technical data:

Disc diameter:

75 mm

Order no: 03.9314-1378.3 Short order no.: 760168

Compressed Air Drill



Order no: 03.9314-1390.2 Short order no.: 760180

The ATE compressed air drill is excellently suited for our wheel hub cleaning sets, thanks to its high torque. The compressed air drill is a noise dampened device for manual use. The compressed air drill enables fast, reliable and comfortable work. our hone brushes can also be driven with the compressed air drill. The device has a right/left-handed rotation and is equipped with a quick release chuck adjustable from 1.5 to 13 mm. The compressed air connection takes place via a quick coupling.

Benefits:

- Easy-to-handle device for anti-fatigue work
- Ergonomically shaped grip for comfortable and antifatigue work with practical reversing lever (left/right)
- Exhaust air guide through the hand grip downwards
- With quick release drill chuck span from 1.5 to 13 mm
- Very powerful, therefore ideal for work with cleaning grinding discs, etchers, etc.
- With infinitely variable speed control
- Hand grip for two-hand operation, rotates 360° and is lockable
- Lightweight housing made of durable 2-K plastic

Package contents:

- Compressed air drill
- Quick release chuck
- 1/4" coupling plug
- Hand grip

Technical data:

Drill chuck:	3/8"
Weight:	1,85 Kg
Length:	230 mm
Connecting thread:	1/4"
Luftverbrauch:	200 L/min
	500 U/min
Working pressure:	6,3 bar
Noise level:	80 dBA

Quick release chuck



Order no: 03.9314-1391.1 Short order no.: 760185

Spare part

Package contents:

Quick release chuck

3/8"
0,311 Kg
65 mm
43 mm
1,5 - 13 mm

Ale

Hexagon socket bit set with ring ratchet spanner



Order no: 03.9314-0100.3 Short order no.: 760171



Space is often at a premium around the brake calipers. Conventional tools are hard put to loosen and tighten the guide pins.

ATE's hexagon socket bit set is ideally suited for tightening and loosening floating caliper guide pins. With socket sizes 6 mm, 7 mm, 8 mm and 9 mm, it comprises all sizes required in the workshop. The pivot-head ring ratchet spanner is part of the set. The short socket design and the pivot-head ring ratchet spanner provide for convenient working even in restricted work areas.

Benefits:

- Finely toothed pivot-head ring ratchet spanner
- Ideal for working in confined spaces
- Optimised bit length for handling brake caliper guide pins

Package contents:

- Ring ratchet spanner
- 4 bits for 6 mm, 7 mm, 8 mm, 9 mm hexagon socket screws

Technical data:

Hexagon ratchet:

13 mm



Hexagon socket wrench 7 mm, short



The short 7 mm hexagon socket wrench is used to screw in/unscrew the guide studs on floating calipers.

Technical data:	
Width across flats:	7 mm
Blade length (short):	38 mm
Square drive:	3/8"

Order no: 03.9314-0030.1 Short order no.: 760095

Hexagon socket wrench 7 mm, long

The long 7 mm hexagon socket wrench is used to screw in/unscrew the guide studs on floating calipers.

Technical data:	
Width across flats:	7 mm
Length (long):	62 mm
Square drive:	1/2"

Order no: 03.9314-0031.1 Short order no.: 760096

Brake caliper wrench



The ATE brake caliper wrench allows simple loosening or tightening of the rear-axle brake caliper retaining bolts on the Opel Vectra B. It is a sharply cranked 19 mm hexagon wrench with a 1/2" square drive for a socket driver.

Benefits:

- It is thus no problem to tighten and loosen bolts hidden by other components.
- Bolts can be tightened up to the correct torque

Order no: 03.9314-0024.1 Short order no.: 760097

Protective cap driver



The ATE protective cap driver is used to drive on the external protective caps of the bushes on GMF floating calipers for the following types of vehicle: Opel Corsa A/B, Tigra, Kadett D/E, Ascona C, Vectra A, Calibra, Omega A/B, Senator B.

Benefits:

damageles and tight drive on external protective caps

Order no: 03.9314-0028.1 Short order no.: 760099

Dust boot mounting sleeve



Order no: Short order no.:

The new ATE dust boot mounting sleeves are absolutely mandatory for the current ATE caliper generation for safe pressing on of the S-shaped dust boots. The mounting sleeves are equipped with a special profile that is matched exactly to the S-shaped dust boot. The ATE dust boot mounting sleeves are used with the ATE piston retaining appliance (03.9314-4950.3). **Benefits:**

- Damage-free installation of the S-shaped dust boot
- Easy to use
- Fast and safe mounting

Package contents:

1 pcs. dust boot mounting sleeve

Typ:

Order no.: 03.9314-4910.1 /760186

- Diameter, outside: 47.4 mm
- Diameter, inside: 42.8 mm
- Height: 19.6 mm

Order no.: 03.9314-4911.1 /760187

- Diameter, outside: 52.6 mm
- Diameter, inside: 48.0 mm
- Height: 19.6 mm

Order no.: 03.9314-4912.1 /760188

- Diameter, outside: 53.6 mm
- Diameter, inside: 49.0 mmHeight: 19.6 mm

Order no.: 03.9314-4913.1 /760189

- Diameter, outside: 57.6 mm
- Diameter, inside: 53.2 mm
- Height: 19.6 mm

Order no.: 03.9314-4914.1 /760190

- Diameter, outside: 61.6 mm
- Diameter. inside: 56.8 mm
- Height: 19.6 mm

Order no.: 03.9314-4915.1 /760191

- Diameter, outside: 63.6 mm
- Diameter, inside: 58.9 mm
- Height: 19.6 mm

Order no.: 03.9314-4916.1 /760192

- Diameter, outside: 69.6 mm
- Diameter, inside: 64.8 mm
- Height: 19.6 mm

Order no.: 03.9314-4917.1 /760193

- Diameter, outside: 72.6 mm
- Diameter, inside: 67.7 mm
- Height: 19.6 mm

Order no.: 03.9314-4918.1 /760194

- Diameter, outside: 75.5 mm
- Diameter, inside: 70.8 mm
- Height: 19.6 mm

Order no.: 03.9314-4919.1 /760195

- Diameter, outside: 81.6 mm
- Diameter, inside: 76.9 mm
- Height: 19,6 mm

Parking brake cable spring pliers

The ATE parking brake cable spring pliers allow simple and safe attachment of the parking brake cable to the brake shoe lever on drum brakes. It is particularly useful for mounting the ATE top kit.



Order no: 03.9309-0080.3 Short order no.: 760087



Brake-spring pliers (small)



The ATE brake-spring pliers (small) allow the brake shoe return springs on drum brakes to be removed and mounted very easily and safely. The small swiveling support plate has a fine, sharp, diamond-cut surface which means that it gives firm support on narrow brake lining surfaces. The double-sided delicate hooks for attaching the springs allow springs to be attached to the feft or right with no difficulty.

Technical data:

Span approx.:

80 mm

Order no: 03.9309-0030.3 Short order no.: 760003

Brake-spring pliers (mediumsize)



The ATE brake-spring pliers (small) allow the brake shoe return springs on drum brakes to be removed and mounted very easily and safely. The swiveling support plate has sharp claws to provide firm support on the brake lining surface. The hook allows the springs to be attached safely.

Technical data:

Span approx.:

100 mm

Order no: 03.9314-5750.3 Short order no.: 760067



Spring mounting pliers



The ATE spring mounting pliers allow safe and problemfree mounting and removal of the drum-brake shoe retaining spring system from Lucas, e.g. on the Mercedes A class. Without the ATE spring mounting pliers it is virtually impossible to deal with the retaining spring.

Benefits:

The retaining spring can only be mounted and removed quickly and safely with the help of the ATE spring mounting pliers.

Order no: 03.9309-0090.3 Short order no.: 760105

Spring mounting tool

The ATE spring mounting tool is used for the safe and problem-free removal and mounting of the retaining plates of brake-shoe retaining springs. Two different size seating bells safely accommodate large and small spring plates of the brake-shoe retaining springs.



Order no: 03.9309-0051.3 Short order no.: 760104



Au

78

Spring mounting tool AP Lockheed

The ATE spring mounting tool is used for the safe and problem-free removal and mounting of brake-shoe retaining springs on AP-Lockheed drum brakes.



Order no: 03.9309-0040.3 Short order no.: 760004



Spring mounting tool Bosch-Bendix

The ATE spring mounting tool is used for the safe and problem-free removal and mounting of brake-shoe retaining springs on Bosch-Bendix drum brakes.



Order no: 03.9309-0060.3 Short order no.: 760006



An

Handheld pipe flaring tool



Order no: 03.9310-0016.4 Short order no.: 760155

ATE's handheld pipe flaring unit is a low-cost piece of equipment for the quick and uncomplicated flaring of 4.75 mm, 5 mm and 6 mm diameter brake pipes to Shapes É and F in conformity with DIN 74234 /ISO 4038. The thrust pieces mount on a bracket which just needs to be placed in the flaring tool. The clamping jaws are smooth (not serrated) to ensure that the brake pipe is reliably held without taking damage. The brake pipe surface will be undamaged when flaring is done. Brake pipe flaring as such is quick and easy by simply screwing in the spindle holding the correct flaring head. A sturdy handle allows you to use the flaring tool underneath the vehicle. To facilitate flaring at the workbench, you can also place the tool in a vice. Repairing and joining brake pipes (4.75 mm) is made quick and uncomplicated by using the 5 adapters and 10 male fittings from the package. Package contents:

- Hand-held pipe flaring tool, complete
- Vices for brake line diameters 4.75, 5 and 6 mm
- Clamping jaws for flaring to DIN types E and F



Professional dual pipe-flaring tool



Order no: 03.9310-0001.4 Short order no.: 760012



The ATE professional pipe flaring tool allows brake pipes with diameters of 4.75, 6, 8 and 10 mm to be flared easily to shapes E and F (DIN 74 234 /ISO 4038). The thrust members which rotate within the revolver system and operation by means of an eccentric lever ensure that the flaring operation is completed quickly and safely. One particular feature is the smooth (non-serrated) jaws that clamp the brake pipe securely without damaging the surface.

Benefits:

- for brake pipe diameters of 4.75, 6, 8 and 10 mm
- thrust members which rotate within the revolver system
- smooth jaws
- no damage to the surface of the brake pipe
- clearly stowed in a plastic case

Package contents:

- Plastic case with shaped insert
- Eccentric lever press with interlock clamping device and revolving toothed rim
- 4 different jaws
- 4 different thrust members for flaring

Miniature pipe cutter



The small dimensions of the ATE mini-pipe cutter allow brake pipes with diameters from 3 to 16 mm to be cut to length in situ on the vehicle.

Benefits:

Thanks to its compact size, it can be used in situ on the vehicle

Order no: 03.9310-0010.3 Short order no.: 760023

ATE pipe deburring tool



Order no: 03.9310-0021.3 Short order no.: 760181 The ATE pipe deburring tool is a practical combination tool that facilitates both internal and external deburring of brake tubes. The three blades ensure a fast and simple work flow. Brake lines must be thoroughly deburred before flanging. After application, the cutter can lower into the grip, which significantly minimises the risk of injury.

Benefits:

- Very easy to handle and suitable for universal use
- Tips made of alloyed steel can be completely retracted
- Three cutting dies made of HSS steel for exterior deburring

Package contents:

Pipe deburring tool

Technical data:	
Housing length:	145 mm
Housing material:	Aluminium
Blade material:	HSS steel
Brake pipe inside Ø:	3 mm - 12 mm
Brake pipe outside Ø:	4 mm - 14 mm

Pipe bending device

The ATE pipe bending tool permits easy bending of brake pipes with diameters of 4.75mm (3/16) and 6mm (1/4") even in situ on the vehicle, without reducing the cross-section.



Order no: 03.9310-0030.3 Short order no.: 760025

Pipe bending pliers



The ATE pipe bending pliers provide practical assistance for bending and mounting brake pipes with a diameter of 4.75 mm (3/16).

Benefits:

- Bending of the brake pipe in a confined space
- Bending up to 90° is possible without causing damage
- Aligninment of the pipe screw connections
- Holding the brake pipe while it is being cut

Order no: 03.9310-0040.3 Short order no.: 760026

Brake pipe bending tool

The ATE brake pipe bending tool is a simple yet very practical aid for bending brake pipes with diameters of 4.75mm, 5.0mm or 3/16.



Benefits:

- Small handy tool
- Can be used in situ on the car and allows very small bending radii.

Order no: 03.9310-0010.1 Short order no.: 760101

Brake pipe wrench set



The reinforced open ring wrench heads of the ATE brake pipe wrench set with hexagon heads hold the brake pipe screw joints firmly so that even tight joints can easily be loosened. The heads angled by 15 degrees.

Package contents:

- 6 double ring wrenches in a tool bag
- 8 + 10, 10 + 11, 11 + 13, 12 + 14 mm,
- 3/8" + 7/16", 1/2" + 9/16"

Order no: 03.9310-0050.3 Short order no.: 760027

ATE spezial grip pliers



Order no: 03.9310-0055.4 Short order no.: 760173



The ATE special grip pliers is the ideal pliers for loosening damaged screw/bolt heads, nuts and studs. Due to their special ground plier shaft, the teeth grip into the screw/bolt or nut to be loosened. With the ATE special grip pliers, loosening "rounded" retaining screws on brake lines or bleeder screws is easy. Thanks to the possibility of adjusting the joint, the pliers are suitable for screws/bolts and nuts up to a 20 mm diameter.

Benefits:

- Easy-to-handle device for anti-fatigue work
- Ergonomically shaped grip
- Special C1080 carbon steel for high performance
- Galvanised for ultimate rust protection
- Specially developed jaws, ideal for round surfaces
- Extremely durable
- Quick adjustment, no slipping of the joint
- Hardened teeth for better and longer hold

Package contents:

ATE spezial grip pliers

Technical data:

Overall length:	175 mm
Length:	11,5 mm
Height:	7,5 mm
Weight:	180 g

10 mm reamer for ABS sensor mount



Order no: 03.9301-0005.3 Short order no.: 760162







Before the installation of a new ABS wheel speed sensor the mounting hole must be cleaned and returned to nominal size. The ATE reamer is the ideal tool for this.

Some VAG vehicles require use of the 10 mm reamer and a special 8 mm drill bit with stop collar due to limited clearance at the sensor mounting position.

When removing the old sensor it often breaks leaving part of the sensor in the mounting hole, the 8 mm drill bit with adjustable locking collar allows the broken sensor to be removed without damaging the sensor ring. The 10mm reamer can then be used to thoroughly clean out the sensor mounting hole and restore it to nominal size.

The reamer accurately cleans the 10 mm ABS wheel speed sensor mounting hole without making the hole bigger and without damaging the sensor wheel. This guarantees correct re-installation of the wheel speed sensor.

The ratchet spanner is finely toothed. The handle pivots in small steps. This way, the mounting hole can be cleaned effectively and easily even in restricted work areas.

Benefits:

- Adapted drill bit with adjustable colar
- No damage to mounting hole or sensor wheel
- Very finely toothed ratchet spanner
- Pivoting handle
- Ease of use in limited space

Package contents:

- 8 mm drill bit, excess length with stop collar (with Allen wrench)
- 10 mm reamer, special length

Hint:

11 mm reamer for ABS sensor mount



Order no: 03.9301-0008.3 Short order no.: 760176



Before installing a new ABS wheel speed sensor, this fixture hole must be thoroughly cleaned and brought back to nominal dimension. The ATE reamer is the ideal tool for this.

The reamer enables precise cleaning of the fixture hole with an 11 mm diameter for the ABS wheel speed sensor, without expanding the diameter of the hole or damaging the sensor wheel.

This ensures correct reinstallation of the wheel speed sensor. The 11 mm reamer is tuned for use on vehicles of the VAG Group, e.g., Golf 6/7, Audi A3, Skoda Oktavia and Seat Leon. The drive ratchet has very fine toothing. The grip swivels in small stops. As a result, effective cleaning of the fixture hole is no problem, even in tight spaces.

Benefits:

- Time saving
- Swivel grip with very fine toothing
- Easy to use, even with limited space
- No damage to the fixture hole and the sensor wheel
- No damage to the new sensor when mounting
- Guarantee of precise measured values

Package contents:

11 mm reamer

Hint:

To prevent corrosion in the mounting hole, it is advisable to thinly spread ATE Plastilube over it.

Technical data:

Diameter:

11 mm

15 x 23 mm reamer for ABS sensor mount



Order no: 03.9301-0006.3 Short order no.: 760163



Before the installation of a new ABS wheel speed sensor the mounting hole must be cleaned and returned to nominal size. The ATE reamer is the ideal tool for this.

The reamer accurately cleans the 15 mm ABS wheel speed sensor mounting hole without making the hole bigger and without damaging the sensor wheel. This guarantees correct re-installation of the wheel speed sensor.

The ratchet spanner is finely toothed. The handle pivots in small steps. This way, the mounting hole can be cleaned effectively and easily even in restricted work areas.

Benefits:

- Very finely toothed ratchet spanner
- Pivoting handle
- Ease of use in limited space
- No damage to mounting hole or sensor wheel

Hint:

18 x 23 mm reamer for ABS sensor mount



Order no: 03.9301-0007.3 Short order no.: 760164

The reamer accurately cleans the 18 mm ABS wheel speed sensor mounting hole without making the hole bigger and without damaging the sensor wheel. This

> The ratchet spanner is finely toothed. The handle pivots in small steps. This way, the mounting hole can be cleaned effectively and easily even in restricted spaces..

Before the installation of a new ABS wheel speed sensor

the mounting hole must be cleaned and returned to

nominal size. The ATE reamer is the ideal tool for this.

guarantees correct re-installation of the wheel speed

Benefits:

sensor.

- Very finely toothed ratchet spanner
- Pivoting handle
- Ease of use in limited space
- No damage to mounting hole or sensor wheel

Hint:



Reamer 18 x 34 mm for ABS sensor mount, special length for VAG vehicles



Order no: 03.9301-0004.3 Short order no.: 760161



Before the installation of a new ABS wheel speed sensor the mounting hole must be cleaned and returned to nominal size. The ATE reamer is the ideal tool for this.

The reamer accurately cleans the 18 mm ABS wheel speed sensor mounting hole without making the hole bigger and without damaging the sensor wheel. This guarantees correct re-installation of the wheel speed sensor. The length of 34 mm is specifically designed for a number of VAG vehicles.

The ratchet spanner is finely toothed. The handle pivots in small steps. This way, the mounting hole can be cleaned effectively and easily even in restricted work areas.

Benefits:

- Very finely toothed ratchet spanner
- Pivoting handle
- Ease of use in limited space
- No damage to mounting hole or sensor wheel

Hint:

Manual impact screwdriver set



Order no: 03.9314-0050.3 Short order no.: 760170



Often the retaining screws of the brake discs are seized due to corrosion. Loosening such screws with a screwdriver can be very difficult.

ATE's manual impact screwdriver with bits for the most common types of cross head screws, hexagon socket screws and TORX screws ensures damage-free, easy loosening of the retaining screws. Striking the impact screwdriver firmly pushes the bit into the screw head while the angular movement generated detatches the crew from it's mounting. The manual impact screwdriver and bits are made of high-strength, industry-grade chromium vanadium steel.

Benefits:

- 10 bits for all standard brake disc retaining screws
- Compact design
- Industry-grade chromium vanadium steel

Package contents:

- Manual impact screwdriver
- 10 bits
- Hexagon socket: SW 5, 6, 10 mm
- Cross head. PZ3, PH3, PH4
- TORX: T-30, T-40, T-45, T-50

Safety note:

Always wear protective goggles and gloves when using the manual impact screwdriver.

Mounting sleeve set



Order no: 03.9314-3000.3 Short order no.: 760172

Vehicles with wheel bearings integrated in the brake disc or drum are increasingly being sold. During installation, such bearings might twist on the axle journal. When trying to pull the disc or drum off the axle journal, the wheel bearings disintegrate beyond repair.

ATE's mounting sleeve set safely prevents such twisting.

From the set, select the mounting sleeve that fits the diameter and insert it into the integrated bearing. This pre-aligns the two inner bearing rings. Now use the mounting sleeve to slip the brake disc or drum over the threaded section of the (slightly lubricated) axle journal. It will now easily push up to the stop without twisting.

Benefits:

- No damage to the integrated wheel bearings
- Quick and secure mounting
- For all current applications
- Also suitable for other brake manufacturers

Package contents:

- 8 mounting sleeves
- Convenient rigid-foam inlay for equipment storage

Chassis tester



Order no: 03.9314-5971.3 Short order no.: 760200



The chassis tester is a simple but very effective aid for localising bearing play in the area of the vehicle axles.

Under chassis load, bearing play on the strut bearings, silent bearings, ball joints, tie rod ends, coupling rods, wheel bearings, axial joints, steering gears, etc. can be quickly and easily localised with the aid of the chassis tester.

Much time can be saved during troubleshooting and diagnostics with the aid of the chassis tester.

This tester is suitable for all passenger cars up to 3.5 t.

Made of special steel, this tester is guaranteed a long service life in daily workshop use. The special plastic reliably prevents the tester from slipping during use on the vehicle.

Areas of application: Strut bearings, silent bearings, ball joints, tie rod ends, wheel bearings, axial joints, steering gears, stabilisers, etc.

Benefits:

- For localisation of bearing play in the area of vehicle axles
- Play testing under load as in driving condition
- Especially economical test method
- Simple handling one-person operation
- High time savings during troubleshooting
- Suitable for all passenger cars up to 3.5 t

Package contents:

Chassis tester

Technical data:

Length 1:	400 mm
Length 2:	400 mm
Tube diameter:	32 mm
Test suface diameter:	51 mm

Brake pad adhesive film



Order no: 13.0460-0400.2 Short order no.: 610400

The adhesive film for the back plate of the brake pad is a simple, but very effective aid for removing clacking noises from brake pads in older vehicles with higher milage.

The adhesive film, which is fit beforehand, adheres to both sides and is first adhered to the cleaned/degreased back plate of the brake pad. Afterwards the brake pad can be glued in the brake calliper. By gluing the brake pad, the clacking and rattling noises are effectively prevented.

Area of application: Older vehicles with higher milage

Benefits:

Effective suppression of rattling /clacking noises of the brake pad in older vehicles

Universal use

Package contents:

4 films for one vehicle axle

ATE knee pad



Order no: 03.9314-5970.3 Short order no.: 760199

The ATE knee pad relieves the body when working in a kneeling position on the floor and near the floor, by distributing point loads on the knee over a wide area and thus significantly reducing pressure on the knees.

The ATE knee pad is tough, thermally insulated and washable. It offers protection against hard, cold and moist foundations.

Thanks to the carrying handle, it allows for quick and practical handling.

Benefits:

- Versatile use in the workshop.
- The grip recess ensures practical handling and can be used for hanging up.
- Washable
- Offers protection against cold, hard, dirty and moist foundations when kneeling during work.

Package contents: ATE knee pad

Technical data:

Length:	475 mm
Width:	310 mm
Height:	30 mm
Weight:	200 g

Brake hose clamp



Order no: 03.9310-0060.3 Short order no.: 760028

The ATE brake hose clamp is used to clamp brake hoses during brake repairs or troubleshooting. This prevents the brake system from draining while repairs are underway. During troubleshooting, an individual wheel brake can be disabled.

Benefits:

The round shape of the clamping arms (diameter 10 mm) prevents damage to the brake hose. Safety note:

Always use the hose clamp in the middle of the brake hose.

When work is complete, make sure that you remove the hose clamp!

Cap screws for fluid reservoir



The ATE aluminum fluid reservoir cap screws, without bleeder holes for a 45-mm buttress thread allow the fluid reservoir to be completely sealed. This prevents any water entering the reservour during engine cleaning. The brake system cannot drain during assembly work.

Hint:

When the work has been completed, replace the cap screws with the original connectors!

Order no: 03.9302-0784.2 Short order no.: 740071

ATE brake cylinder paste (in tube)



ATE brake cylinder paste is used for repair, assembly and conservation of hydraulic brake components It is applied thinly and evenly to cylinder sleeves, pistons and seals.

Benefits: compatible with DOT 3, DOT 4 and DOT 5.1 brake fluids

Package contents:

180 g tube.

Safety note:

Safety note:No mineral greases or oils may be used in places that come into contact with brake fluid.

Technical data:

Contents:

180 g

Order no: 03.9902-0501.2 Short order no.: 700009

ATE Plastilube 35 ml



Order no: 03.9902-1001.2 Short order no.: 700014

ATE Plastilube 75 ml



Order no: 03.9902-1002.2 Short order no.: 700015 ATE Plastilube lubricates and provides protection against corrosion for the guide surfaces of brake calipers and brake pads. To prevent squealing, ATE Plastilube is applied to the backing plates of the brake pads.

Benefits:

- Free from metal soaps and fatty acids, so it is not corrosive.
- Long-lasting, hence reduced maintenance frequency.
- Insoluble in water and outstanding resistance to leaching.
- Versatile as it is compatible with all metals and most O-ring materials.

Package contents:

24 tubes each holding 35 ml

Hint:

Caution: Do not apply on brake pad friction surfaces

Technical data:

Contents:

35 ml

ATE Plastilube lubricates and provides protection against corrosion for the guide surfaces of brake calipers and brake pads. To prevent squealing, ATE Plastilube is applied to the backing plates of the brake pads.

Benefits:

- Free from metal soaps and fatty acids, so it is not corrosive.
- Long-lasting, hence reduced maintenance frequency.
- Insoluble in water and outstanding resistance to leaching.
- Versatile as it is compatible with all metals and most O-ring materials.

Package contents:

12 tubes each holding 75 ml in display package

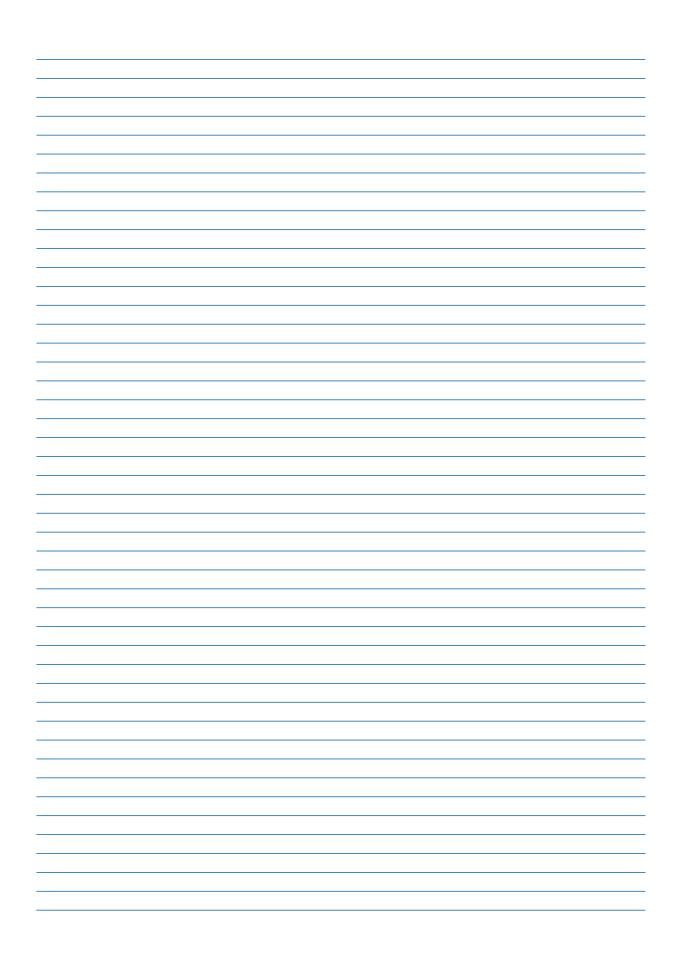
Hint:

Caution: Do not apply on brake pad friction surfaces

Technical data:

Contents:

75 ml



1

Bleeding unit adapters





	23				۲
Seville SLS + STS	1996-	03.9302-0923.2/02	61A		
SRX	2003-	03.9302-0923.2/02	61A		
XLR	2003-	03.9302-0923.2/02	61A		
CHEVROLET					
All passenger cars		03.9302-0923.2/02	61A		
Alero	1999-	03.9302-0923.2/02	61A		
Aveo	2007-2010	03.9302-0702.2/02	20		
Aveo	2011-	03.9302-0923.2/02	61A		
Blazer	1996-1998	03.9302-0931.2/02	13		
Blazer	1999-	03.9302-0923.2/02	61A		
Camaro	1999-	03.9302-0923.2/02	61A		
Captiva	2007-	03.9302-0923.2/02	61A		
Corvette	1996	03.9302-0923.2/02	61A		
Cruze	2009-	03.9302-0702.2/02	20		
HHR	2007-	03.9302-0923.2/02	61A		
Hummer H2 + H3	2003-	03.9302-0923.2/02	61A		
Kalos	2007-	03.9302-0702.2/02	20		
Lacetti	2007-	03.9302-0702.2/02	20		
Malibu	2012-	03.9302-0702.2/02	20		
Matiz	2007-	03.9302-0916.2/02	35		
Nubira	2007-	03.9302-0702.2/02	20		
Orlando	2011-	03.9302-0702.2/02	20		
S10 Pick up 2WD+4WD	1996	03.9302-0931.2/02	13		
Tahoe	2003-	03.9302-0923.2/02	61A		
Trail Blazer	2001-	03.9302-0923.2/02	61A		
Trans Sport	1999-	03.9302-0923.2/02	61A		
Trax	2013-	03.9302-0923.2/02	61A		
Volt	2011-	03.9302-0923.2/02	61A		
CHRYSLER					
All passenger cars	1988-	03.9302-0901.3/02	22+22/1		
Crossfire	2003-	03.9302-0702.2/02	20		
300M 2.7 Executive	1999-	03.9302-0914.2/02	77		
300C Touring + Sedan	2005-	03.9301-0902.2/02	22		
Reservoir in cast iron	-1996	03.9302-0931.2/02	13		
Neon Sport 16V	1996-	03.9302-0914.2/02	77		
Neon LE 1,6	2001-	03.9302-0902.2/02	22	03.9302-0702.2/02	20
New Yorker		03.9302-0914.2/02	77		
PT Cruiser	2001-	03.9302-0902.2/02	22	03.9302-0702.2/02	20
Sebring	2001-2009	03.9302-0914.2/02	77		
Sebring	2010-	03.9302-0902.2/02	22		

Au

	23			S	۲
Stratus	1999-	03.9302-0914.2/02	77		
Vision		03.9302-0728.2/02	61A		
Viper	2003-	03.9302-0902.2/02	22		
Vision		03.9302-0923.2/02	61A		
Grand Voyager	1999-2001	03.9302-0914.2/02	77		
Grand Voyager	2002	03.9302-0902.2/02	22		
Voyager LE	1996 -	03.9302-0902.2/02	22		
Voyager SE	1994-	03.9302-0901.3/02	22+22/1		
Voyager SE 2,4	2001-	03.9302-0902.2/02	22	03.9302-0925.2/02	31
Voyager LX 2,5	2001-	03.9302-0902.2/02	22	03.9302-0925.2/02	31
CITROEN					
All passenger cars		03.9302-0927.2/02	50S		
2CV		03.9302-0702.2/02	20		
2CV4 drum brake (front)		03.9302-0787.2/02	54A		
Ami 6/8		03.9302-0787.2/02	54A		
AX		03.9302-0702.2/02	20		
Berlingo	1996-1998	03.9302-0702.2/02	20		
Berlingo	1998-	03.9302-0740.2/02	38A		
Convertible	2013-	03.9302-0702.2/02	20		
C1	2005-	03.9302-0927.2/02	50S		
C2	2003-	03.9302-0702.2/02	20		
C3 + Picasso	2002-2010	03.9302-0702.2/02	20		
C3 + Picasso	2011-	03.9302-0948.2/02	20S		
C4 Aircross	2012-	03.9302-0914.2/02	77		
C4 + Picasso	2004-	03.9302-0702.2/02	20		
C5 + Tourer	2001-	03.9302-0702.2/02	20		
C6	2005-	03.9302-0702.2/02	20		
C8	2002-	03.9302-0927.2/02	50S		
C-Crosser	2007-	03.9302-0914.2/02	77		
DS 3	2009-	03.9302-0702.2/02	20		
DS 4	2011-	03.9302-0702.2/02	20		
DS 5	2012-	03.9302-0702.2/02	20		
Dyane drum brake (front)		03.9302-0787.2/02	54A		
Evasion	1994-2002	03.9302-0702.2/02	20		
Jumper	1998-	03.9302-0927.2/02	50S		
Jumpy	1998-	03.9302-0702.2/02	20		
Saxo	1996-2004	03.9302-0702.2/02	20		
Visa	1978-1988	03.9302-0702.2/02	20		
Xsara	1997-	03.9302-0740.2/02	38A		
ZX	1991-1998	03.9302-0702.2/02	20		













DACIA

All passenger cars		03.9302-0702.2/02	20		
DAEWOO					
Aveo	2005-	03.9302-0702.2/02	20		
Espero		03.9302-0702.2/02	20	03.9302-0704.2/02	67
Evanda	2003-	03.9302-0923.2/02	61A		
Kalos	2003-	03.9302-0702.2/02	20		
Lacetti	2003-	03.9302-0702.2/02	20		
Lanos		03.9302-0702.2/02	20		
Leganza	1999-	03.9302-0916.2/02	35		
Matiz + ABS	1999-	03.9302-0916.2/02	35		
Nexia		03.9302-0702.2/02	20	03.9302-0704.2/02	67
Nubira	1999-2001	03.9302-0702.2/02	20		
Nubira	2001-2006	03.9302-0923.2/02	61A		
Nubria WTCC R+	2005-	03.9302-0702.2/02	20		
Rezzo CDX	2001-	03.9302-0703.2/02	27	03.9302-0703.2/02	27
DAF					
45 Serie = 150 /160 /180 /210	1998-			03.9302-0740.2/02	38A
65-85CF Serie	1998-	03.9302-0740.2/02	38A		
95 + F Serie	1998-			03.9302-0740.2/02	38A
CF + XF				03.9302-0740.2/02	38A
Passenger car type 45		03.9302-0702.2/02	20		
DAIHATSU					
Applause	1989-2000	03.9302-0909.2/02	79		
Applause (A101)	1995-2000	03.9302-0737.2/02	73		
Charade	-1987	03.9302-0787.2/02	54A		
Charade G100	1989-1994	03.9302-0909.2/02	79		
Charade G 200	1994-2000	03.9302-0737.2/02	73		
Charmant	1974-1984	03.9302-0787.2/02	54A		
Copen	2002-2007	03.9302-0912.2/02	82		
Cuore L 55 /60	1980-1986	03.9302-0787.2/02	54A		
Cuore L 80	1986-1991	03.9302-0909.2/02	79		
Cuore L 201	1991-1995	03.9302-0909.2/02	79		
Cuore L 501	1995-1999	03.9302-0737.2/02	73		
Cuore L 7 (Europa)	1999-2003	03.9302-0945.2/02	85		
Cuore L 275	2007-	03.9302-0935.2/02	31A		
Feroza	1990-1997	03.9302-0737.2/02	73		
Hijet 4WD /Sta.Wag.	1989-	03.9302-0737.2/02	73		
Hijet 4WD /Sta.Wag. Hijet S 86	1989- 1995-	03.9302-0737.2/02 03.9302-0737.2/02	73 73		

14

	23			S	٢
Move L 600	1987-1999	03.9302-0737.2/02	73		
Move	2001-2003	03.9302-0945.2/02	85		
Move L 901	1999-2001	03.9302-0787.2/02	54A		
Gran Move G 303	1997-1999	03.9302-0737.2/02	73		
Gran Move G 301	1999-2003	03.9302-0906.2/02	55A		
Rocky EX 4WD	1984-1997	03.9302-0737.2/02	73		
Rocky Mod. F75/78	1995-	03.9302-0737.2/02	73		
Sirion	1998-	03.9302-0737.2/02	73		
Sirion (M100, M101)		03.9302-0787.2/02	54A		
Sirion (M101)	2001-2010	03.9302-0945.2/02	85		
Terios	1997-2007	03.9302-0909.2/02	79		
Terios	2007-	03.9302-0925.2/02	31		
Terios (J102)		03.9302-0909.2/02	79	03.9302-0925.2/02	31
YRV (M201)		03.9302-0787.2/02	54A		
YRV (M201)	2001-2006	03.9302-0945.2/02	85		
DODGE					
All passenger cars	2011-	03.9302-0902.2/02	22		
FERRARI					
All passenger cars		03.9302-0702.2/02	20		
FIAT					
All passenger cars		03.9302-0702.2/02	20	03.9302-0702.2/02	20
127	1971-1982	03.9302-0703.2/02	27		
126 + Argenta	1980-1984	03.9302-0734.2/02	76		
Barchetta Coupe	1995-2005	03.9302-0734.2/02	76		
Cinquecento	1991-1997	03.9302-0734.2/02	76		
Daily 45 mm diameter		03.9302-0703.2/02	27		
Daily 26.5 mm diameter		03.9302-0731.2/02	71		
Ducato II	1993-	03.9302-0927.2/02	50S		
Freemont	2011-	03.9302-0948.2/02	22		
Multipla	1998-	03.9302-0703.2/02	27		
Punto + ABS	1993-1998	03.9302-0734.2/02	76		
Seicento	1998-2006	03.9302-0734.2/02	76		
Ulysse	2002-	03.9302-0927.2/02	50S		
FORD					
All passenger cars		03.9302-0702.2/02	20		
B-Max	2012-	03.9302-0923.2/02	61A		
Exlorer	1993-2001	03.9302-0914.2/02	77		
Fiesta	2009-	03.9302-0923.2/02	61A		
Fiesta Focus II		03.9302-0923.2/02 03.9302-0927.2/02	61A 50S		

	23			Contraction of the second seco	۲
Galaxy II	2005-	03.9302-0927.2/02	50S		
Grand C-Max	2011-	03.9302-0927.2/02	50S		
Maverick + Ranger	1993-	03.9302-0914.2/02	77	03.9302-0774.2/02	43
Mustang	2004-2009	03.9302-0923.2/02	61A		
Navigator (USA)	2001-	03.9302-0914.2/02	77		
Probe	1989-1992	03.9302-0910.2/02	72		
Ranger	1999-	03.9302-0746.2/02	49	03.9302-0702.2/02	20
Transit Van	1971-1981	03.9302-0731.2/02	71		
Windstar	1995-2003	03.9302-0938.2/02	77A		
GENERAL MOTORS					
Vehicles with ITT ABS MkIV		03.9302-0923.2/02	61A		
HONDA					
Accord	1976-1983	03.9302-0767.2/02	47		
Accord	2002-2003	03.9302-0946.2/02	86	03.9302-0703.2/02	27
Accord	2003-	03.9302-0946.2/02	86	03.9302-0799.2/02	17
Civi Shuttle		03.9302-0787.2/02	54A		
Civic	1976-1983	03.9302-0767.2/02	47		
Civic	1984-1995	03.9302-0918.2/02	81		
Civic	1995-1999	03.9302-0918.2/02	81	03.9302-0925.2/02	31
Civic	1999-2001	03.9302-0918.2/02	81	03.9302-0767.2/02	47
Civic	2001-2011	03.9302-0946.2/02	86	03.9302-0799.2/02	17
Civic	2012-	03.9302-0946.2/02	86		
Concerto	1989-1994	03.9302-0918.2/02	81		
CRV	1996-2001	03.9302-0918.2/02	81		
CRX 1,6	1983-1992	03.9302-0787.2/02	54A		
CRX 1,6	1992-1998	03.9302-0918.2/02	81	03.9302-0767.2/02	47
CRV	1996-2001	03.9302-0918.2/02	81		
CRV	2001-2011	03.9302-0946.2/02	86	03.9302-0703.2/02	17
CRV	2012-	03.9302-0946.2/02	86		
CRX	1983-1992	03.9302-0787.2/02	54A		
CRX	1992-1998	03.9302-0918.2/02	81	03.9302-0767.2/02	47
CR-Z	2009-	03.9302-0946.2/02	86	03.9302-0703.2/02	17
FCX	2013-	03.9302-0946.2/02	86		
FR-V	2005-	03.9302-0946.2/02	86		
HR-V	1999-	03.9302-0918.2/02	81	03.9302-0767.2/02	47
Insight	1999-2006	03.9302-0918.2/02	81		
Insight	2009-	03.9302-0946.2/02	86		
Jazz	2003-	03.9302-0946.2/02	86	03.9302-0799.2/02	17
Legend	1986-1988	03.9302-0918.2/02	81		
Legend	1989-1991	03.9302-0740.2/02	38A		

				P	
	23	E.		5	
				20	
Legend	1991-	03.9302-0946.2/02	86		
Logo	1999-2001	03.9302-0918.2/02	81		
NSX-T (1981- =DOT3)				03.9302-0767.2/02	47
Odyssey (US-Minivan)	1999-	03.9302-0918.2/02	81		
Prelude	1992-	03.9302-0918.2/02	81		
Prelude 2,0		03.9302-0906.2/02	55A		
S 2000	1999-2001	03.9302-0918.2/02	81	03.9302-0767.2/02	47
S 2000	2001-	03.9302-0946.2/02	86		
Stream	2000-	03.9302-0946.2/02	86	03.9302-0799.2/02	17
HYUNDAI					
All passenger cars		03.9302-0914.2/02	77	03.9302-0774.2/02	43
Getz	2003-	03.9302-0943.2/02	90		
H100	1995-1996	03.9302-0904.2/02	14A		
H100	1996-	03.9302-0934.2/02	63		
i 10	2009-	03.9302-0938.2/02	77A		
i 20	2009-	03.9302-0938.2/02	77A		
ix20	2009-	03.9302-0938.2/02	77A		
i 30	2012-	03.9302-0938.2/02	77A		
Matrix	2001-	03.9302-0943.2/02	90		
Trajet	1999-	03.9302-0938.2/02	77A		
INFINITI					
All passenger cars	2009-	03.9302-0914.2/02	77		
ISUZU					
Frontera	1989-2003	03.9302-0912.2/02	82	03.9302-0704.2/02	67
Gemini	1974-2000	03.9302-0737.2/02	73		
Midi		03.9302-0913.2/02	24		
Monterey	1992-1999	03.9302-0912.2/02	82	03.9302-0704.2/02	67
MU Wizard /Rodeo	1989-2003	03.9302-0912.2/02	82	03.9302-0704.2/02	67
NPR 65+69	1998-	03.9302-0774.2/02	43		
NQR 70	1998-	03.9302-0774.2/02	43		
Trooper	-1989	03.9302-0787.2/02	54A		
Trooper	1989-	03.9302-0912.2/02	82	03.9302-0704.2/02	67
IVECO					
Daily 30.8-35.8		03.9302-0702.2/02	20		
Euro-Cargo ML8015		03.9302-0736.2/02	37		
All Euro-Cargo models		03.9302-0919.2/02	32	03.9302-0702.2/02	20
M series 155.14-175.24		03.9302-0702.2/02	20		
MK 75.9		03.9302-0702.2/02	20		
Type 30.8-49.10		03.9302-0702.2/02	20		
Type 80.13-130.13		03.9302-0702.2/02	20		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					

Turber 12, 39: 39: 12, 38: 1003.3930: 0702.20237JAGUARJAGUARJaguar XJ 0 1987: 19803.9300: 0702.20238.4XF03.9300: 0702.20237Jaguar XJ 12 Serielli03.9300: 0702.20237Jaguar XJ 6 Serielli03.9300: 0702.20267Jaguar XJ 6 Serielli03.9300: 0702.20262Jaguar XJ 6 Serielli03.9300: 0702.20262Jaguar XJR199903.9300: 0702.20220Jaguar XJR199903.9300: 0702.20220Jaguar XJR199903.9302: 0702.20220Jaguar XJR199903.9302: 0702.20220Jaguar XJR199903.9302: 0702.20220Jaguar XJR199903.9302: 0702.20220Jaguar XJR199903.9302: 0702.20220Jaguar XJR199903.9302: 0702.20221Jaguar XJR199903.9302: 0702.20222Jaguar XJR199903.9302: 0702.20222Jaguar XJR199903.9302: 0702.20222Jaguar XJR199903.9302: 0702.20222Jaguar XJR199703.9302		23		۲		۲
JAGUAR Jaguar Daimler Super V8 03.9302-0702.2/02 20	Turbo-Daily 59-12, 35-10, 49-12, 35-12, 30-8		03.9302-0702.2/02	20		
Jaguar Zu 40 + Xu61987 - 199403.9302 -0702.2/0220Jaguar Xu 40 + Xu61987 - 199403.9302 -0702.2/0238AXF2009-03.9302 -0702.2/0220Jaguar Xu 12 Serielli03.9302 -0702.0/0257Jaguar Xu 6 Serielli2005-03.9302 -0702.2/0257Jaguar XU 702005-03.9302 -0702.2/0220Jaguar XXR2005-03.9302 -0702.2/0220XL 12009-03.9302 -0702.2/0220Jaguar XXR1999-03.9302 -0702.2/0220Jaguar XXR2009-03.9302 -0702.2/0220Jaguar XXR2009-03.9302 -0702.2/0220Jaguar XXR1999-03.9302 -0702.2/0220Jaguar Sureing 1.0003.9302 -0902.2/0222Jaguar Sureing 1.0003.9302 -0902.2/0222Jaguar Sureing 1.0003.9302 -0902.2/0222Jaguar Sureing 1.0003.9302 -0902.2/0222Jaguar Sureing 1.0003.9302 -0902.2/0222	Zeta 50.9 109.14		03.9302-0736.2/02	37		
Jaguar XJ 40 + XJ6 1987-1994 03.9302-0740.202 38A XF 2009- 03.9302-0702.202 57 Jaguar XJ 12 Serielli 03.9302-0790.202 57 Jaguar XJ 6 Serielli 03.9302-0790.202 57 Jaguar XJ Twin TD 2005- 03.9302-0702.202 20 XI L 2009- 03.9302-0702.202 20 Jaguar XI R 1999- 03.9302-0702.202 20 Jaguar XIR 1999- 03.9302-0702.202 20 Jaguar XIR 1999- 03.9302-0702.202 20 Jaguar SVIR 1999- 03.9302-0702.202 20 Jaguar SVIP N 1999- 03.9302-0702.202 20 Jaguar SVIP R 2003- 03.9302-0902.202 22 Jeep Cherokee 1997 03.9302-0902.202 22 20 Jeep Wangler	JAGUAR					
xF 2009- 0.3.9302-0702.2/02 20 Jaguar XJ 12 Seriell 03.9302-0790.2/02 57 Jaguar XJ 6 Seriell 03.9302-0790.2/02 57 Jaguar XJ Twin TD 2005- 03.9302-0702.2/02 20 XI L 2009- 03.9302-0702.2/02 20 XI L 2009- 03.9302-0702.2/02 20 Jaguar XR 1999- 03.9302-0702.2/02 20 Jaguar XR 1999- 03.9302-0702.2/02 20 Jaguar SAR 1999- 03.9302-0702.2/02 20 Jaguar SAR 1999- 03.9302-0702.2/02 20 Jaguar SAPiype V8 1999- 03.9302-0702.2/02 20 Jaguar S-Type V8 1999- 03.9302-0702.2/02 20 Jaguar X-Type 2003- 03.9302-0702.2/02 20 Jaguar S-Type V8 1999- 03.9302-0702.2/02 20 Jaguar X-Type 2003- 03.9302-0902.2/02 22 Jaguar X-Type N 03.9302-0902.2/02 22 1 Jeep Cherokee 1997-<	Jaguar Daimler Super V8		03.9302-0702.2/02	20		
Jaguar XJ 12 Serielli 03.9302-0790.2/02 57 Jaguar XJS 2005- 03.9302-0790.2/02 57 Jaguar XJ Twin TD 2005- 03.9302-0702.2/02 20 Jaguar XJ Twin TD 2005- 03.9302-0702.2/02 20 Jaguar XJ Twin TD 2005- 03.9302-0702.2/02 20 Jaguar XKR 1995- 03.9302-0702.2/02 20 Jaguar XJR 1995- 03.9302-0702.2/02 20 Jaguar SJR 1995- 03.9302-0702.2/02 20 Jaguar SJW 0905- 03.9302-0702.2/02 20 Jaguar SJW 1995- 03.9302-0702.2/02 20 Jaguar S-Type V8 1999- 03.9302-0902.2/02 22 Jaguar S-Type V8 1997- 03.9302-0902.2/02 22 Jeep Cherokee 1997- 03.9302-0902.2/02 22	Jaguar XJ 40 + XJ6	1987-1994	03.9302-0740.2/02	38A		
Jaguar XJ 6 Serielli 03.9302-0790.2/02 57 Jaguar XJS 2005- 03.9302-0702.2/02 20 XJ L 2009- 03.9302-0702.2/02 20 Jaguar XJR 1999- 03.9302-0702.2/02 20 Jaguar XJR 1999- 03.9302-0702.2/02 20 Jaguar SVR 2009- 03.9302-0702.2/02 20 Jaguar Souvereign 4.0 011 03.9302-0902.2/02 22 Jeep Chronkee 1997- 03.9302-0902.2/02 22 20	XF	2009-	03.9302-0702.2/02	20		
Jaguar XJS 2005- 0.3.9302-0790.2/02 20 Jaguar XJ Twin TD 2005- 0.3.9302-0702.2/02 20 XJ L 2009- 0.3.9302-0702.2/02 20 Jaguar XKR 1999- 0.3.9302-0702.2/02 20 Jaguar XKR 2009- 0.3.9302-0702.2/02 20 Jaguar SVR 2009- 0.3.9302-0702.2/02 20 Jaguar Souvereign 4.0 0.3.9302-0702.2/02 20	Jaguar XJ 12 SeriellI		03.9302-0790.2/02	57		
Jaguar XJ Twin TD 2005- 03.9302-0702.2/02 20 XJ L 2009- 03.9302-0702.2/02 20 Jaguar XKR 1999- 03.9302-0702.2/02 20 XK 2009- 03.9302-0702.2/02 20 Jaguar XJR 1999- 03.9302-0702.2/02 20 Jaguar Souvereign 4.0 - 03.9302-0702.2/02 20 Jaguar S-Type R 2003- 03.9302-0702.2/02 20 Jaguar S-Type R 2003- 03.9302-0702.2/02 20 Jaguar S-Type R 2003- 03.9302-0702.2/02 20 Jaguar X-Type O 2003- 03.9302-0702.2/02 20 Jaguar X-Type R 2003- 03.9302-0702.2/02 20 Jeep Cherokee 1997- 03.9302-0702.2/02 20	Jaguar XJ 6 SeriellI		03.9302-0790.2/02	57		
Xi L 2009- 03.9302-0702-2/02 20 Jaguar XKR 1999- 03.9302-0702-2/02 20 Jaguar XJR 1999- 03.9302-0702-2/02 20 Jaguar SQuvereign 4.0 03.9302-0702-2/02 20	Jaguar XJS	2005-	03.9302-0790.2/02	57		
Jaguar XKR 1999- 03.9302-0702.2/02 20 XK 2009- 03.9302-0702.2/02 20	Jaguar XJ Twin TD	2005-	03.9302-0702.2/02	20		
XK 2009-0 33.9302-0702.2/02 20 Jaguar XJR 1999-0 3.9302-0702.2/02 20	XJ L	2009-	03.9302-0702.2/02	20		
Jaguar XJR 1999- 03.9302-0702.2/02 20 Jaguar Souvereign 4.0 03.9302-0702.2/02 20	Jaguar XKR	1999-	03.9302-0702.2/02	20		
Jaguar Souvereign 4.0 03.9302-0702.2/02 20 Jaguar S-Type V8 1999- 03.9302-0702.2/02 20 Jaguar S-Type R 2003- 03.9302-0702.2/02 20 Jaguar S-Type R 2001- 03.9302-0702.2/02 20 Jaguar S-Type R 2001- 03.9302-0702.2/02 20 Jepe N Urtyp 03.9302-0922.2/02 15	ХК	2009-	03.9302-0702.2/02	20		
Jaguar S-Type N81999-0.3.8302-0914.2/0277Jaguar S-Type R2003-0.3.9302-0702.2/0220Jaguar X-Type2001-0.3.9302-0702.2/0220Jaguar X-Type2001-0.3.9302-0702.2/0220JEEPJeepUrtyp0.3.9302-0922.2/0215Jeep Cherokee-19970.3.9302-0902.2/0222Jeep Cherokee1997-20010.3.9302-0902.2/0222Jeep Wrangler1996-0.3.9302-0902.2/0222Jeep Wrangler1996-0.3.9302-0902.2/0222Jeep Grand Cherokee1993-19980.3.9302-0902.2/0222Jeep Grand Cherokee1993-19980.3.9302-0902.2/0222Jeep Grand Cherokee2003-0.3.9302-0902.2/0222Jeep Commander2006-0.3.9302-0902.2/0222Jeep Compass2007-0.3.9302-0902.2/0222Jeep Patriot2007-0.3.9302-0902.2/0222Jeep Compass2007-0.3.9302-0902.2/0222Jeep Compas2007-0.3.9302-0902.2/0222Jeep Compas2007-0.3.9302-0902.2/0222Jeep Compas1997-0.3.9302-0902.2/0222Jeep Compas2007-0.3.9302-0902.2/0222Jeep Compas2007-0.3.9302-0902.2/0222Jeep Compas1999-0.3.9302-0902.2/0222Jeep Compas1999-0.3.9302-0902.2/0222Jeep Compas1999-0.3.9302-0902.2/0222Jeep Compas<	Jaguar XJR	1999-	03.9302-0702.2/02	20		
Jaguar S-Type R2003-03.9302-0702.2/0220Jaguar X-Type2001-03.9302-0702.2/0220JEEPJeepUrtyp03.9302-0922.2/0215Jeep Cherokee-199703.9302-092.2/0222Jeep Cherokee1997-200103.9302-0902.2/0222Jeep Wrangler1996-03.9302-0902.2/0222Jeep Wrangler Sport1999-03.9302-0902.2/0222Jeep Grand Cherokee1993-109803.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2011-03.9302-0902.2/0222Jeep Commander2006-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Festa1997-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Jeep Commander1997-03.9302-0902.2/0222Jeep Commander2007-03.9302-0902.2/0222Jeep Commander2007-03.9302-0902.2/0222Jeep Commander1997-03.9302-0902.2/0222Jeep Commander2007-03.9302-0902.2/0222Jeep Commander1999-03.9302-0902.2/0222Jeep Commander1999-03.9302-0914.2/0277Carens1999-03.9302-092.2/0220Carens1999-03.9302-0938.2/0277ACarens2007-03.9	Jaguar Souvereign 4.0		03.9302-0702.2/02	20		
Jaguar X-Type 2001- 03.9302-0702.2/02 20 JEEP Jeep Urtyp 03.9302-0922.2/02 15 Jeep Cherokee -1997 03.9302-0914.2/02 77 Jeep Cherokee 1997-2001 03.9302-0902.2/02 22 Jeep Cherokee 1997-2001 03.9302-0902.2/02 22 Jeep Cherokee 1996- 03.9302-0902.2/02 22+22/1 Jeep Wrangler 1996- 03.9302-0902.2/02 22 Jeep Wrangler 2003- 03.9302-0902.2/02 22 Jeep Wrangler 2003- 03.9302-0902.2/02 22 Jeep Grand Cherokee 1993-1998 03.9302-0902.2/02 22 Jeep Grand Cherokee 2003- 03.9302-0902.2/02 22 Jeep Grand Cherokee 2003- 03.9302-0902.2/02 22 Jeep Grand Cherokee 2003- 03.9302-0902.2/02 22 Jeep Compasition Jeep Compasition Jeep Compasition 30.9302-0902.2/02 22 Jeep Compasition Jeep Comp Comp Compasition Jeep Compasition	Jaguar S-Type V8	1999-	03.9302-0914.2/02	77		
JEEPJeep Urtyp03.9302-0922.2/0215Jeep Cherokee-199703.9302-0914.2/0277Jeep Cherokee1997-200103.9302-0902.2/0222Jeep Wrangler1996-03.9302-0902.2/0222+22/1Jeep Wrangler Sport1999-03.9302-0902.2/0222Jeep Grand Cherokee1933-199803.9302-0902.2/0222Jeep Grand Cherokee1933-199803.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Commander2006-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Jeep Carnas1997-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Carnas1997-03.9302-0902.2/0222Jeep Carnas1999-03.9302-0912.2/0222Jeep Carnas1999-03.9302-0912.2/0222Jeep Carnas1999-03.9302-0912.2/0222Jeep Carnas1999-03.9302-0912.2/0222Jeep Carnas1999-03.9302-0912.2/0222Jeep Carnas1999-03.9302-0912.2/0222Jeep Carnas1999-03.9302-0912.2/0277Carens1999-03.9302-0912.2/0277Jeep Carnas1999-<	Jaguar S-Type R	2003-	03.9302-0702.2/02	20		
JeepUrtyp03.9302-0922.2/0215Jeep Cherokee-199703.9302-0914.2/0277Jeep Cherokee1997-200103.9302-0902.2/0222Jeep Wrangler1996-03.9302-0902.2/0222+22/1Jeep Wrangler Sport1999-03.9302-0902.2/0222Jeep Grand Cherokee1993-03.9302-0902.2/0222Jeep Grand Cherokee1993-03.9302-0902.2/0222Jeep Grand Cherokee1993-03.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Commander2006-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Jeep Carens1997-03.9302-0902.2/0222Jeep Carens1997-03.9302-0902.2/0222Jeep Carens1999-03.9302-0702.2/0222Jeep Carens1999-03.9302-0702.2/0222Jeep Carens1999-03.9302-0702.2/0222Jeep Carens1999-03.9302-0702.2/0222Jeep Carens1999-03.9302-0702.2/0220Carens2007-03.9302-0702.2/0220Carens2007-03.9302-0938.2/0277ACarens2007-03.9302-0938.2/0277ACarens2007-03.9302-0938.2/0277A <td>Jaguar X-Type</td> <td>2001-</td> <td>03.9302-0702.2/02</td> <td>20</td> <td></td> <td></td>	Jaguar X-Type	2001-	03.9302-0702.2/02	20		
Jeep Cherokee -1997 03.9302-0914.2/02 77 Jeep Cherokee 1997-2001 03.9302-0902.2/02 22 Jeep Wrangler 1996- 03.9302-0902.2/02 22+22/1 Jeep Wrangler Sport 1999- 03.9302-0902.2/02 22 03.9302-0702.2/02 20 Jeep Wrangler 2003- 03.9302-0902.2/02 22 03.9302-0702.2/02 20 Jeep Grand Cherokee 1993-1998 03.9302-0902.2/02 22 03.9302-0702.2/02 20 Jeep Grand Cherokee 2003- 03.9302-0902.2/02 22	JEEP					
Jeep Cherokee1997-200103.9302-0902.2/0222Jeep Wrangler1996-03.9302-0902.2/0222+22/1Jeep Wrangler Sport1999-03.9302-0902.2/0222Jeep Wrangler2003-03.9302-0902.2/0222Jeep Grand Cherokee1993-199803.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2010-03.9302-0902.2/0222Jeep Grand Cherokee2011-03.9302-0902.2/0222Jeep Commander2006-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Sesta1997-03.9302-0902.2/0222Carens1999-03.9302-0902.2/0217Carens1999-03.9302-0914.2/0277Carens1999-03.9302-0938.2/0277ACarinval1999-03.9302-0914.2/0277Carinval1999-03.9302-0914.2/0277Cee'd201-201103.9302-0914.2/0277	Jeep	Urtyp	03.9302-0922.2/02	15		
Jeep Wrangler1996-03.9302-0901.3/0222+22/1Jeep Wrangler Sport1999-03.9302-0902.2/0222Jeep Wrangler2003-03.9302-0902.2/022203.9302-0702.2/0220Jeep Grand Cherokee1993-199803.9302-0902.2/0222	Jeep Cherokee	-1997	03.9302-0914.2/02	77		
Jeep Wrangler Sport1999-03.9302-0902.2/022203.9302-0702.2/0220Jeep Wrangler2003-03.9302-0902.2/02222220Jeep Grand Cherokee1993-199803.9302-0902.2/022222Jeep Grand Cherokee2003-03.9302-0902.2/022222Jeep Grand Cherokee2011-03.9302-0902.2/022222Jeep Commander2006-03.9302-0902.2/022222Jeep Compass2007-03.9302-0902.2/022222Jeep Patriot2007-03.9302-0902.2/022222KIABesta1997-03.9302-0799.2/0217Carens-199903.9302-0799.2/0277-Carens1999-200703.9302-0914.2/0277-Carens2007-03.9302-0914.2/0277-Carenival1999-03.9302-0914.2/0277-Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0914.2/0277	Jeep Cherokee	1997-2001	03.9302-0902.2/02	22		
Jeep Wrangler2003-03.9302-0902.2/022203.9302-0702.2/0220Jeep Grand Cherokee1993-199803.9302-0902.2/02222211Jeep Grand Cherokee2003-03.9302-0902.2/02222211Jeep Grand Cherokee2011-03.9302-0902.2/0222111Jeep Commander2006-03.9302-0902.2/0222111Jeep Compass2007-03.9302-0902.2/0222111Jeep Patriot2007-03.9302-0902.2/0222111Besta1997-03.9302-0792.2/0217111Carens199903.9302-0914.2/0277111Carens2007-03.9302-0938.2/0277A111Carenival1999-03.9302-0914.2/0277111Cee'd2001-201103.9302-0914.2/0277111Cee'd2012-03.9302-0914.2/0277111Cee'd2012-03.9302-0914.2/0277111Cee'd2012-03.9302-0914.2/0277111Cee'd2012-03.9302-0914.2/0277111Cee'd2012-03.9302-0914.2/0277111Cee'd2012-03.9302-0938.2/0277A111Cee'd2012-03.9302-0938.2/0277A <td>Jeep Wrangler</td> <td>1996-</td> <td>03.9302-0901.3/02</td> <td>22+22/1</td> <td></td> <td></td>	Jeep Wrangler	1996-	03.9302-0901.3/02	22+22/1		
Jeep Grand Cherokee1993-199803.9302-0902.2/0222Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2011-03.9302-0902.2/0222Jeep Commander2006-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222KIABesta1997-03.9302-0799.2/0217Carens-199903.9302-0791.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0702.2/0277Carens1999-200703.9302-0702.2/0277Carens2007-03.9302-0702.2/0277Carens2007-03.9302-0702.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd201-201103.9302-0938.2/0277A	Jeep Wrangler Sport	1999-	03.9302-0902.2/02	22		
Jeep Grand Cherokee2003-03.9302-0902.2/0222Jeep Grand Cherokee2011-03.9302-0902.2/0222Jeep Commander2006-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222KIA1997-03.9302-0799.2/0217Carens199903.9302-0799.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0702.2/0220Carens1999-200703.9302-0702.2/0277Carens1999-03.9302-0702.2/0277Carens2007-03.9302-0938.2/0277Carens2007-03.9302-0914.2/0277Carens2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277	Jeep Wrangler	2003-	03.9302-0902.2/02	22	03.9302-0702.2/02	20
Jeep Grand Cherokee2011-03.9302-0902.2/0222Jeep Commander2006-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222KIABesta1997-03.9302-0799.2/0217Carens-199903.9302-0799.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0702.2/0220Carens1999-200703.9302-0938.2/0277ACarens2007-03.9302-0914.2/0277Cee'd201-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	Jeep Grand Cherokee	1993-1998	03.9302-0902.2/02	22		
Jeep Commander2006-03.9302-0902.2/0222Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222KIA1997-03.9302-0799.2/0217Carens-199903.9302-0714.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0702.2/0220Carens1999-200703.9302-0914.2/0277ACarens2007-03.9302-0914.2/0277ACarens1999-03.9302-0914.2/0277ACee'd2001-201103.9302-0914.2/0277ACee'd2012-03.9302-0938.2/0277A	Jeep Grand Cherokee	2003-	03.9302-0902.2/02	22		
Jeep Compass2007-03.9302-0902.2/0222Jeep Patriot2007-03.9302-0902.2/0222KIABesta1997-03.9302-0799.2/0217Carens-199903.9302-0794.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0702.2/0220Carens2007-03.9302-0938.2/0277ACarnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	Jeep Grand Cherokee	2011-	03.9302-0902.2/02	22		
Jeep Patriot2007-03.9302-0902.2/0222KIABesta1997-03.9302-0799.2/0217Carens-199903.9302-0914.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0938.2/0277ACarnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0914.2/0277A	Jeep Commander	2006-	03.9302-0902.2/02	22		
KIABesta1997-03.9302-0799.2/0217Carens-199903.9302-0914.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0938.2/0277ACarnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	Jeep Compass	2007-	03.9302-0902.2/02	22		
Besta1997-03.9302-0799.2/0217Carens-199903.9302-0914.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0938.2/0277ACarnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277ACee'd2012-03.9302-0938.2/0277A	Jeep Patriot	2007-	03.9302-0902.2/02	22		
Carens-199903.9302-0914.2/0277Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0938.2/0277ACarnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	KIA					
Carens1999-200703.9302-0702.2/0220Carens2007-03.9302-0938.2/0277ACarnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	Besta	1997-	03.9302-0799.2/02	17		
Carens2007-03.9302-0938.2/0277ACarnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	Carens	-1999	03.9302-0914.2/02	77		
Carnival1999-03.9302-0914.2/0277Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	Carens	1999-2007	03.9302-0702.2/02	20		
Cee'd2001-201103.9302-0914.2/0277Cee'd2012-03.9302-0938.2/0277A	Carens	2007-	03.9302-0938.2/02	77A		
Cee'd 2012- 03.9302-0938.2/02 77A	Carnival	1999-	03.9302-0914.2/02	77		
	Cee'd	2001-2011	03.9302-0914.2/02	77		
Cee'd SW 2011-2012 03.9302-0914.2/02 77	Cee'd	2012-	03.9302-0938.2/02	77A		
	Cee'd SW	2011-2012	03.9302-0914.2/02	77		

Au

	23				
Cee´d SW	2013	03.9302-0938.2/02	77A		
Cerato	2004-	03.9302-0914.2/02	77		
Clarus	1997-2001	03.9302-0702.2/02	20		
Joice	1999-2003	03.9302-0914.2/02	77		
K2500	2012-	03.9302-0799.2/02	17		
Magentis	2001-	03.9302-0914.2/02	77	03.9302-0774.2/02	43
Opirius	2003-	03.9302-0702.2/02	20		
Optima	2012-	03.9302-0914.2/02	77		
Picanto	2004-	03.9302-0914.2/02	77		
Picanto	2011-	03.9302-0938.2/02	77A		
Pregio	1997-	03.9302-0922.2/02	15		
Pride	1991-2000	03.9302-0906.2/02	55A		
pro cee'd	2007-	03.9302-0914.2/02	77		
Rio	2000-2003	03.9302-0906.2/02	55A		
Rio	2003-2010	03.9302-0914.2/02	77		
Rio	2011-	03.9302-0938.2/02	77A		
Picanto	2004-2010	03.9302-0914.2/02	77		
Picanto	2011-	03.9302-0938.2/02	77A		
Pregio	1997-	03.9302-0922.2/02	15		
Pride	1991-2000	03.9302-0906.2/02	55A		
Sephia	1994-1999	03.9302-0702.2/02	20		
Shuma	1999-2004	03.9302-0702.2/02	20		
Sorento	2002-2009	03.9302-0702.2/02	20		
Sorento	2010-	03.9302-0914.2/02	77		
Soul	2009-	03.9302-0914.2/02	77		
Sportage	1994-2002	03.9302-0702.2/02	20		
Sportage	2005-	03.9302-0914.2/02	77		
Venga	2010-	03.9302-0943.2/02	90		
LADA					
All passenger cars	1985-	03.9302-0703.2/02	27	03.9302-0734.2/02	76
Тур 2110, 2111, 2112		03.9302-0740.2/02	38A		
Тур 1118		03.9302-0740.2/02	38A		
LAMBORGHINI					
All passenger cars		03.9302-0702.2/02	20		
LANCIA					
All passenger cars	-1991	03.9302-0702.2/02	20		
A 112	1968-1984	03.9302-0734.2/02	76		
Flavia	2011-	03.9302-0902.2/02	22		
Phetra	2005-	03.9302-0927.2/02	50S		
Thema	1983-1993	03.9302-0703.2/02	27		

	23				۲
Thema	2012-	03.9302-0902.2/02	22		
Voyager	2011-	03.9302-0902.2/02	22		
LAND ROVER					
All passenger cars 1995-		03.9302-0702.2/02	20		
Land-Rover Discovery XS	2001-	03.9302-0926.2/02	28		
Land-Rover Freelander	1999-	03.9302-0926.2/02	28		
LEXUS					
All passenger cars	1990-	03.9302-0925.2/02	31	03.9302-0925.2/02	31
CT 200h	2011-	03.9302-0935.2/02	31A		
Lotus					
All passenger cars		03.9302-0702.2/02	20		
MASERATI					
3200 GT	1999-	03.9302-0702.2/02	20		
Ghibli	2014	03.9302-0702.2/02	20		
Gran Turismo	2007-	03.9302-0927.2/02	50S		
Quattroporte	1999-	03.9302-0702.2/02	20		
Spyder Cambiocorsa	2001-	03.9302-0927.2/02	50S		
MAZDA					
2	2003-2006	03.9302-0702.2/02	20		
2	2007-	03.9302-0923.2/02	61A		
3	2003-	03.9302-0702.2/02	20		
3 MPS	2007-	03.9302-0702.2/02	20		
3V	2014	03.9302-0923.2/02	61A		
5	2005-	03.9302-0702.2/02	20		
6	2002-	03.9302-0923.2/02	61A		
121	1988-2003	03.9302-0914.2/02	77		
121 LX		03.9302-0787.2/02	54A		
323	1977-2003	03.9302-0746.2/02	49		
626	1979-2002	03.9302-0746.2/02	49		
626 GD	1991-	03.9302-0910.2/02	72		
626 GE	1992-	03.9302-0746.2/02	49		
626 station wagon	1998-	03.9302-0746.2/02	49		
626 LX /GLX		03.9302-0787.2/02	54A		
929	1973-1992	03.9302-0746.2/02	49		
B2500 PickUp 4WD	1998-	03.9302-0702.2/02	20	03.9302-0702.2/02	20
B2500		03.9302-0746.2/02	49		
B series 2.5L TD	1994-1999	03.9302-0702.2/02	20		
B series 2.5L TD	2000-2006	03.9302-0746.2/02	49		
BT 50	2009-	03.9302-0702.2/02	20		
CX-5	2012-	03.9302-0923.2/02	61A		

	23				۲
CX-7	2007-	03.9302-0702.2/02	20		
Demio	1998-	03.9302-0906.2/02	55A		
E2000 + E2200 mini van	1984-	03.9302-0799.2/02	17		
E2200 Transporter	1998-	03.9302-0799.2/02	17		
MPV	1989-1998	03.9302-0746.2/02	49		
MPV	1999-2000	03.9302-0914.2/02	77		
MPV	2001-2005	03.9302-0923.2/02	61A		
MX-3	1991-1998	03.9302-0746.2/02	49		
MX-5	1989-1994	03.9302-0746.2/02	49		
MX-5	1995-1998	03.9302-0910.2/02	72	03.9302-0702.2/02	20
MX-5	1999-2001	03.9302-0914.2/02	77		
MX-5	2001-2005	03.9302-0906.2/02	55A	03.9302-0746.2/02	49
MX-5	2005-	03.9302-0702.2/02	20		
MX-6	1987-1997	03.9302-0746.2/02	49		
Premacy	1999-2005	03.9302-0923.2/02	61A		
RX 7-Turbo		03.9302-0746.2/02	49		
RX 8	2003-	03.9302-0923.2/02	61A		
Tribute	2001-2006	03.9302-0914.2/02	77		
Xedos-6	1992-1999	03.9302-0746.2/02	49		
Xedos-9	1993-2002	03.9302-0746.2/02	49		
MERCEDES BENZ					
All passenger cars	1970-	03.9302-0702.2/02	20		
207 /209 /310 /609 Van		03.9302-0702.2/02	20		
G-Modell		03.9302-0703.2/02	27	03.9302-0703.2/02	27
Type 1814 truck				03.9302-0740.2/02	38A
Unimog (with twin hose)		03.9302-0740.2/02	2x38A		
Sprinter		03.9302-0740.2/02	38A		
Vaneo		03.9302-0702.2/02	20		
MINI					
All passenger cars	2001-	03.9302-0702.2/02	20		
MITSUBISHI					
All passenger cars	1990-	03.9302-0736.2/02	37	03.9302-0774.2/02	43
ASX	2009-	03.9302-0914.2/02	77		
Canter	1996-	03.9302-0936.2/02	69		
Carisma	1995-2004	03.9302-0928.2/02	34		
Carisma Fastback	1999-2004	03.9302-0736.2/02	37	03.9302-0774.2	43
Colt	2004-	03.9302-0740.2/02	38A		
Colt	2010-	03.9302-0927.2/02	50S		
Eclipse GS	1990-1995	03.9302-0736.2/02	37		
Galant	1984-1988	03.9302-0786.2/02	41		

Shahr GY, GLSI / GLS		23				
Galopper1981-200003.9302-0914.20207703.9302-0774.20243Grandis2004-03.9302-0937.2020844343L2001986-200103.9302-0938.202062A4153.9302-0774.20243L300 Space Gaer1986-0003.9302-0934.20262A5454Lancer1986-03.9302-0914.202775454Lancer Sportback201403.9302-0914.202775454Lancer Turbo1977-198003.9302-0914.202775454Outlander1987-198003.9302-0914.2027753.9302-0914.20243Pajero Sport (Montero)1997-198003.9302-0914.2027703.9302-0714.20243Pajero Sport (Montero)1997-19003.9302-0914.2027703.9302-0714.20243Pajero Sport (Montero)1997-19003.9302-0914.2027703.9302-0714.20243Spaporo1987-19003.9302-0914.2027703.9302-0714.20243Spaporo1987-19003.9302-0914.2027703.9302-0714.20243Spaporo1987-19003.9302-0914.2027703.9302-0714.20243Spapor (Monter)1991-20003.9302-0914.202775455Spapor (Monter)1991-20003.9302-0914.202775455Spapor (Monter)1991-20003.9302-0914.202745455Spapor (Monter)1991-20003.9302-0914.202745455 <trr< td=""><td></td><td></td><td>03.9302-0736.2/02</td><td>37</td><td></td><td></td></trr<>			03.9302-0736.2/02	37		
Grandia2004-03.9302-078.2/028443L2001996-200103.9302-078.2/024103.9302-0774.2/0243L400 Space Gear1996-200303.9302-078.2/0241Lancer03.9302-078.2/0241Lancer03.9302-078.2/0241Lancer Sportback2011-03.9302-078.2/0241Lancer Turbo1971-19003.9302-078.2/0241Pajero Sportback203-03.9302-078.2/024103.9302-074.2/0243Pajero Sport (Mortor)1997-03.9302-078.2/024103.9302-074.2/0243Pajero Sport (Mortor)1997-03.9302-074.2/0243Pajero Sport (Mortor)1997-03.9302-074.2/0243Space Gear1991-190003.9302-074.2/0243Space Star1991-190003.9302-074.2/0262Space Star1991-190003.9302-074.2/0262Space Star1991-190003.9302-074.2/0262Space Star1991-190003.9302-074.2/0262Space Star1991-190003.9302-074.2/0262Space Star1991-190003.9302-074.2/0262Space Star1991-190003.9302-076.2/0262- <t< td=""><td>Galant</td><td>1997-2003</td><td>03.9302-0786.2/02</td><td>41</td><td>03.9302-0774.2/02</td><td>43</td></t<>	Galant	1997-2003	03.9302-0786.2/02	41	03.9302-0774.2/02	43
L2001986-20010.3.9302-0786.202410.3.9302-0747.20243L300 Kleinbus1986-10900.3.9302-093.2.0262A <t< td=""><td>Galopper</td><td>1991-2003</td><td>03.9302-0914.2/02</td><td>77</td><td>03.9302-0774.2/02</td><td>43</td></t<>	Galopper	1991-2003	03.9302-0914.2/02	77	03.9302-0774.2/02	43
L300 Kleinbus1980-199903.3930-0904.20214AIL400 Space Gear1985-0003.3930-0786.20241ILancer003-003.3930-0914.20277IILancer Sportback2011-003.3930-0766.20241IIDutlander030303.3930-0766.20241IIPajero Sport (Montero)1987-19003.3930-0766.2024103.3930-0744.20243Pajero Sport (Montero)1997-003.3930-0766.20241IIPajero Sport (Montero)1997-003.3930-0914.2027703.3930-0744.20243Pajero Sport (Montero)1997-003.3930-0914.2027703.3930-0744.20243SantamoI03.3930-0914.2027703.3930-0744.20243Sapporo1987-19003.3930-0914.20277IISpace Gear1991-190003.3930-0914.20277IISpace Star1991-20003.3930-0914.20277IISpace Runner1991-20003.3930-0914.20277IISpace Runner1991-20003.3930-0914.20277IISpace Runner1991-20003.3930-0914.20277IISpace Runner1991-20003.3930-0914.20277IISpace Runner1991-20003.3930-0914.20277IISpace Magon (GhU)1981-20003.3930-0914.20277IISpace Magon (GhU) </td <td>Grandis</td> <td>2004-</td> <td>03.9302-0947.2/02</td> <td>89</td> <td></td> <td></td>	Grandis	2004-	03.9302-0947.2/02	89		
L400 Space Gear198-20030.39302-0933.2/262A	L200	1996-2001	03.9302-0786.2/02	41	03.9302-0774.2/02	43
Lancer1985-03.9302-0786.20241	L300 Kleinbus	1980-1999	03.9302-0904.2/02	14A		
Laneer2003-003.302-0914.20277	L400 Space Gear	1996-2003	03.9302-0933.2/02	62A		
Inner Sportback 2011-1 03.3020-0786.2/02 77 Lancer Turbo 1977-1980 03.3030-0914.2/02 77	Lancer	1985-	03.9302-0786.2/02	41		
Lancer Turbo1977-19800.3.9302-0786.2/0241Outlander2003-0.3.9302-0786.2/02410.3.9302-074.2/0243Pajero Sport (Montero)1997-00.3.9302-0786.2/02410.3.9302-074.2/0243Pajero Sport (Montero)1990-20050.3.9302-0714.2/02470.3.9302-074.2/0243Pajero Pinin199-20050.3.9302-0714.2/024343Santamo10.3.9302-0714.2/024343Santamo1991-20050.3.9302-0714.2/0243Saporo1987-19900.3.9302-0786.2/02411Signa Case1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1991-20050.3.9302-0786.2/02411Space Raume1992-20050.3.9302-0786.2/0271Space Raume1992-20050.3.9302-0786.2/02631Space Raume10.9.9.9.2/020.3.9.9.9.1.2/031 <td< td=""><td>Lancer</td><td>2003-</td><td>03.9302-0914.2/02</td><td>77</td><td></td><td></td></td<>	Lancer	2003-	03.9302-0914.2/02	77		
Outlander 2003- 03.9302-0914.2/02 77 Pajero 1982-1990 03.9302-0786.2/02 41 03.9302-074.2/02 43 Pajero Sport (Montero) 1997- 03.9302-0746.2/02 77 03.9302-074.2/02 43 Pajero Sport (Montero) 1999-2005 03.9302-0914.2/02 77 03.9302-074.2/02 43 Santamo 1999-2005 03.9302-0768.2/02 77 03.9302-0774.2/02 43 Sapporo 1991-1990 03.9302-0768.2/02 41	Lancer Sportback	2011-	03.9302-0914.2/02	77		
Pajero 1882-1990 03.9302-0786.2/02 41 Pajero Sport (Montero) 1997-0 03.9302-0786.2/02 41 03.9302-074.2/02 43 Pajero 3.2 2001- 03.9302-0914.2/02 77 03.9302-074.2/02 43 Pajero Pinin 199-2005 03.9302-0914.2/02 77 03.9302-0774.2/02 43 Santamo - 03.9302-0766.2/02 41 - - - Sigma 1987-1990 03.9302-0766.2/02 41 - - - Sigma 1981-1980 03.9302-0766.2/02 41 - - - Sigma 1991-1980 03.9302-0766.2/02 41 - - - Space Gear 1991-2000 03.9302-0768.2/02 41 - - - Space Magon (GD) 1991-2000 03.9302-0768.2/02 41 - - - Staftor Magon 2003- 03.9302-0768.2/02 7 - - - Space Magon (GD) 1998-200 03	Lancer Turbo	1977-1980	03.9302-0786.2/02	41		
Pajero Sport (Montero)199703.9302-0786.2/024103.9302-074.2/0243Pajero 3.22001-03.9302-0914.2/027703.9302-074.2/0243Pajero Pinin1992.00503.9302-0768.2/027703.9302-0774.2/0243Santaro1987-198003.9302-0768.2/0241	Outlander	2003-	03.9302-0914.2/02	77		
Pajero 3.22001-03.9302-0914.2027703.9302-0944.20284Pajero Pinin199-200503.9302-0714.20243Santamo1987-190003.9302-0766.20241-Sigma1991-190003.9302-0766.20241Signa1991-200003.9302-0766.20262Space Gear1991-200003.9302-0914.20277Space Star1991-200003.9302-0928.20234Space Star1991-200003.9302-0914.20274Space Star1991-200003.9302-0914.20274Space Star1991-200003.9302-0914.20274Space Magon (GD)1982-00403.9302-0914.20274Station Wagon2003-03.9302-0914.20274Station Wagon2009-03.9302-0914.20276MERGAN2009-03.9302-0914.20276Station Yagon190-03.9302-0914.20276Station Same190-03.9302-0914.20276Station Same190-03.9302-0914.20276Station Same193-03.9302-0914.20255AStation Same193-03.9302-0914.20255A </td <td>Pajero</td> <td>1982-1990</td> <td>03.9302-0786.2/02</td> <td>41</td> <td></td> <td></td>	Pajero	1982-1990	03.9302-0786.2/02	41		
Pajero Pinin 1999-2005 03.9302-0914.2/02 77 03.9302-0774.2/02 43 Santamo 1987-1990 03.9302-0766.2/02 41	Pajero Sport (Montero)	1997-	03.9302-0786.2/02	41	03.9302-0774.2/02	43
Santamo93,902-0914.2/02770.9,302-0774.2/0243Sapporo1987-1900.3,902-0786.2/02411Sigma1991-10000.3,902-0932.0/0262ASpace Gear199-20000.3,902-0932.0/0262ASpace Star199-20000.3,902-0932.0/0262ASpace Magon198-20000.3,902-0932.0/0262A </td <td>Pajero 3,2</td> <td>2001-</td> <td>03.9302-0914.2/02</td> <td>77</td> <td>03.9302-0944.2/02</td> <td>84</td>	Pajero 3,2	2001-	03.9302-0914.2/02	77	03.9302-0944.2/02	84
Sapporo 1987-1990 03.9302-0786.2/02 41 Image: Constraint of the second of the s	Pajero Pinin	1999-2005	03.9302-0914.2/02	77	03.9302-0774.2/02	43
Normal Matrix Number of the second matrix Number of th	Santamo		03.9302-0914.2/02	77	03.9302-0774.2/02	43
Space Gear 1996-2003 03.9302-0933.2/02 62A Space Runner 1991-2000 03.9302-0914.2/02 77	Sapporo	1987-1990	03.9302-0786.2/02	41		
Space Runner 1991-2000 03.9302-0914.2/02 77 Space Star 1999-2000 03.9302-0928.2/02 34	Sigma	1991-1996	03.9302-0786.2/02	41		
Space Star1999-200003.9302-0928.2/0234Space Wagon (GDI)1983-199203.9302-0786.2/0241Space Wagon (GDI)1998-200403.9302-0914.2/0277Station Wagon2003-03.9302-0914.2/0277 MORGAN TTRoadster Aero2009-003.9302-0927.2/0250S MOSKVICH 3.9302-0927.2/0250SStation Vagon2009-003.9302-0927.2/0260MSSNNT3.9302-0927.2/0262NISSANSSAll passenger cars1990-003.9302-0914.2/027103.9302-0914.2/02770.39302-0774.2/0243200 NX1993-003.9302-0914.2/0255A200 NX1993-003.9302-0906.2/0255ASluebird 2,0 SLX/Hatchbarg13.9302-0906.2/0255ACherry03.9302-0906.2/0255ASSluebird 2,0 SLX/Hatchbarg03.9302-0906.2/0255ACherry03.9302-0906.2/0255ASSluebird 2,0 SLX/Hatchbarg03.9302-0906.2/0255ACherry03.9302-0906.2/0255ASSluebird 2,0 SLX/Hatchbarg03.9302-0906.2/0255ACherry03.9302-0906.2/0255ASSluebird 2,0 SLX/Hatchbarg03.9302-0906.2/0255ACherry03.9302-0702.2/0255ASSluebird 2,0 SLX03.9302-0702.2/0255ASluebird 2,0 SLX03.9302-0702.2/0255ASluebird 2,0 SLX03.9302-0702.2/02 <td>Space Gear</td> <td>1996-2003</td> <td>03.9302-0933.2/02</td> <td>62A</td> <td></td> <td></td>	Space Gear	1996-2003	03.9302-0933.2/02	62A		
Space Wagon1983-199203.9302-0786.2/0241Space Wagon (GD)1998-204003.9302-0914.2/0277Station Wagon2003-03.9302-0914.2/0277MORGAN50MORGAN03.9302-0927.2/0250SMOSKVICH03.9302-0972.2/0260S2140 /214103.9302-09702.2/0220All passenger cars1990-03.9302-0914.2/027103.9302-0914.2/027703.9302-074.2/0243200 NX1993-03.9302-0906.2/0255A200 SX - Turbo Maxima 3,103.9302-0906.2/0255ASlebeird 2,0 SLX/Hatchbae03.9302-0906.2/0255ASlebeird 2,0 SLX/Hatchbae03.9302-0906.2/0255ACherry03.9302-0906.2/0255ASlebeird 2,0 SLX/Hatchbae03.9302-0906.2/0255ASlebeird 2,0 SLX/Hatchbae03.9302-0906.2/0255ASlebeird 2,0 SLX/Hatchbae03.9302-0906.2/0255ASlebeird 2,0 SLX/Hatchbae03.9302-0906.2/0255ASlebeird 2,0 SLX/Hatchbae03.9302-0702.2/0245Slebeird 2,0 SLX/Hatchbae03.9302-0702.2/0245Slebeird 2,0 SLX205-03.9302-0702.2/0220Slebeird 2,0 SLX205-03.9302-0702.2/0220Juke206-03.9302-0702.2/0220	Space Runner	1991-2000	03.9302-0914.2/02	77		
Space Wagon (GD) 1998-2004 03.9302-0914.2/02 77 Station Wagon 2003- 03.9302-0914.2/02 77 MORGAN T T Roadster Aero 2009- 03.9302-0927.2/02 50S T MORGAN 2009- 03.9302-0927.2/02 50S T T MORGAN 1900- 03.9302-0927.2/02 50S T T T MORGAN 1900- 03.9302-0927.2/02 50S T	Space Star	1999-2000	03.9302-0928.2/02	34		
Station Wagon2003-03.9302-0914.2/0277MORGANRoadster Aero2009-03.9302-0927.2/0250SMOSKVICH2140 /214103.9302-0702.2/0220NISSANAll passenger cars1990-03.9302-0906.2/0255A200 XX1993-03.9302-0906.2/0255ABluebird 2,0 SLX/HatchbackV55ACab Star03.9302-0906.2/0255ACherry03.9302-0906.2/0255AInter Star X702005-03.9302-0902.2/02Juke2012-03.9302-0702.2/0220Juke2012-03.9302-0702.2/0220Juke2012-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-03.9302-0702.2/0220Juke2006-20.9302-0702.2/0220Juke2006-20.9302-0702.2/0220Juke2006-20.9302-0702.2/0220Juke2006-20.9302-0702.2/0220Juke2006-20.9302-0702.2/0220Juke2006-20.9302-0702.2/0220Juke2006-20.9302-0702.2/0220 </td <td>Space Wagon</td> <td>1983-1992</td> <td>03.9302-0786.2/02</td> <td>41</td> <td></td> <td></td>	Space Wagon	1983-1992	03.9302-0786.2/02	41		
MORGANRoadster Aero2009-3.9302-0927.2/0250SMOSKVICH2140 /214103.9302-0702.2/0220NISSANAll passenger cars190-03.9302-0914.2/027103.9302-0774.2/0243200 NX199-03.9302-0906.2/0255A200 SX - Turbo Maxima 3./03.9302-0906.2/0255ABluebird 2.0 SLX/Hatchback03.9302-0906.2/0255ACherry03.9302-0906.2/0255A <td>Space Wagon (GDI)</td> <td>1998-2004</td> <td>03.9302-0914.2/02</td> <td>77</td> <td></td> <td></td>	Space Wagon (GDI)	1998-2004	03.9302-0914.2/02	77		
Roadster Aero2009-0.3,9302-0927.2/0250S MOSKVICH 53,9302-0702.2/02202140 /21410.3,9302-0702.2/0220 NISSAN 54All passenger cars190-0.3,9302-0914.2/02710.3,9302-0774.2/0243200 NX1993-0.3,9302-0906.2/0255ABluebird 2,0 SLX/Hatchback0.3,9302-0906.2/0255AGab Star1030.3,9302-0906.2/0255ACherry0.3,9302-0906.2/0255ACherry0.3,9302-0906.2/0211AInter Star X702005-0.3,9302-0702.2/020Juke012-0.3,9302-0702.2/020Juke2005-0.3,9302-0702.2/020Juke2005-0.3,9302-0702.2/020Juke2005-0.3,9302-0702.2/020Juke2005-0.3,9302-0702.2/020200Juke2005-0.3,9302-0702.2/020200Juke2005-0.3,9302-0702.2/020200Juke2005-0.3,9302-0702.2/020200Juke2005-0.3,9302-0702.2/02200-200-200 <th< td=""><td>Station Wagon</td><td>2003-</td><td>03.9302-0914.2/02</td><td>77</td><td></td><td></td></th<>	Station Wagon	2003-	03.9302-0914.2/02	77		
MOSKVICH 03.9302-0702.2/02 20 2140 /2141 03.9302-0702.2/02 20 NISSAN 1990- 03.9302-0914.2/02 77 03.9302-0774.2/02 43 200 NX 1993- 03.9302-0906.2/02 55A 1 1 200 NX 1993- 03.9302-0906.2/02 55A 1 1 200 NX 1993- 03.9302-0906.2/02 55A 1 1 200 SX - Turbo Maxima 3,0 03.9302-0906.2/02 55A 1 1 Bluebird 2,0 SLX/Hatchback 03.9302-0906.2/02 55A 1 1 Cab Star 03.9302-0906.2/02 55A 1 1 Cherry 03.9302-0766.2/02 11A 1 1 Inter Star X 70 2005- 03.9302-0702.2/02 20 1 1 Juke 2012- 03.9302-0702.2/02 20 1 1 Juke 2006- 03.9302-0702.2/02 20 1 1	MORGAN					
2140 / 2141 0.39302-0702.202 0.202 NISSAN 190- 0.39302-0914.202 7.0 0.39302-0774.202 4.3 200 NX 1993- 0.39302-0906.202 55A 5.4 200 SX - Turbo Maxima 3.7 0.39302-0906.202 5.5 Bluebird 2,0 SLX/Hatchback 10.39302-0906.202 5.5 Bluebird 2,0 SLX/Hatchback 10.39302-0906.202 5.5 Cab Star 10.4 1.5 Cab Star 10.4 1.5 Cherry 10.5 1.5 Cherry 10.5 Cherry	Roadster Aero	2009-	03.9302-0927.2/02	50S		
NISSAN All passenger cars 190-0 03.9302-0914.2/02 77 03.9302-0774.2/02 43 200 NX 199-0 03.9302-0906.2/02 55A - - 200 SX - Turbo Maxima 3,0 V 03.9302-0906.2/02 55A - - Bluebird 2,0 SLX/Hatchback 03.9302-0906.2/02 55A - - - - Cab Star 03.9302-0906.2/02 55A -	MOSKVICH					
All passenger cars 1990- 03.9302-0914.2/02 77 03.9302-0774.2/02 43 200 NX 1993- 03.9302-0906.2/02 55A 1 200 SX - Turbo Maxima 3,0 - 03.9302-0906.2/02 55A - - Bluebird 2,0 SLX/Hatchback - 03.9302-0906.2/02 55A - - - - Cab Star 03.9302-0906.2/02 55A -	2140 /2141		03.9302-0702.2/02	20		
200 NX 1993- 03.9302-0906.2/02 55A 200 SX - Turbo Maxima 3,0 03.9302-0906.2/02 55A Bluebird 2,0 SLX/Hatchback 03.9302-0906.2/02 55A Cab Star 03.9302-0906.2/02 11A Cherry 03.9302-0766.2/02 45 Inter Star X 70 2005- 03.9302-0702.2/02 20 Juke 2012- 03.9302-0702.2/02 20 Kubi Star X 76 2006- 03.9302-0702.2/02 20	NISSAN					
200 SX - Turbo Maxima 3,0 03.9302-0906.2/02 55A Bluebird 2,0 SLX/Hatchback 03.9302-0906.2/02 55A Cab Star 03.9302-0921.2/02 11A Cherry 03.9302-0766.2/02 45 Inter Star X 70 2005- 03.9302-0702.2/02 20 Juke 2012- 03.9302-0702.2/02 20 Kubi Star X 76 2006- 03.9302-0702.2/02 20	All passenger cars	1990-	03.9302-0914.2/02	77	03.9302-0774.2/02	43
Bluebird 2,0 SLX/Hatchback 03.9302-0906.2/02 55A Cab Star 03.9302-0921.2/02 11A Cherry 03.9302-0766.2/02 45 Inter Star X 70 2005- 03.9302-0702.2/02 20 Juke 2012- 03.9302-0702.2/02 20 Kubi Star X 76 2006- 03.9302-0702.2/02 20	200 NX	1993-	03.9302-0906.2/02	55A		
Cab Star 03.9302-0921.2/02 11A Cherry 03.9302-0766.2/02 45 Inter Star X 70 2005- 03.9302-0702.2/02 20 Juke 2012- 03.9302-0702.2/02 20 Kubi Star X 76 2006- 03.9302-0702.2/02 20	200 SX - Turbo Maxima 3,0		03.9302-0906.2/02	55A		
Cherry 03.9302-0766.2/02 45 Inter Star X 70 2005- 03.9302-0702.2/02 20 Juke 2012- 03.9302-0702.2/02 20 Kubi Star X 76 2006- 03.9302-0702.2/02 20	Bluebird 2,0 SLX/Hatchback		03.9302-0906.2/02	55A		
Inter Star X 70 2005- 03.9302-0702.2/02 20 Juke 2012- 03.9302-0702.2/02 20 Kubi Star X 76 2006- 03.9302-0702.2/02 20	Cab Star		03.9302-0921.2/02	11A		
Juke2012-03.9302-0702.2/0220Kubi Star X 762006-03.9302-0702.2/0220	Cherry		03.9302-0766.2/02	45		
Kubi Star X 76 2006- 03.9302-0702.2/02 20	Inter Star X 70	2005-	03.9302-0702.2/02	20		
	Juke	2012-	03.9302-0702.2/02	20		
Leav 2011- 03.9302-0921.2/02 11A	Kubi Star X 76	2006-	03.9302-0702.2/02	20		
	Leav	2011-	03.9302-0921.2/02	11A		

	23			S	۲
Micra GL + LX		03.9302-0787.2/02	54A		
Micra	2011-	03.9302-0921.2/02	11A		
Navara D 40	2006-	03.9302-0702.2/02	20		
Note E 11	2006-2013	03.9302-0702.2/02	20		
Note E11	2014-	03.9302-0921.2/02	11A		
Patrol Turbo D		03.9302-0787.2/02	54A	03.9302-0766.2/02	45
Pick Up		03.9302-0906.2/02	55A	03.9302-0774.2/02	43
Pixo	2009-	03.9302-0939.2/02	83		
Prima Star X86	2006-	03.9302-0702.2/02	20		
Qashqai	2007-	03.9302-0938.2/02	77A		
Sunny GTI	1989-	03.9302-0787.2/02	54A	03.9302-0774.2/02	43
Sunny SLX /Coupe SLX + 1,3 LX		03.9302-0787.2/02	54A		
Terrano	1989-1992	03.9302-0766.2/02	45		
Terrano	1993-	03.9302-0906.2/02	55A		
Urvan		03.9302-0921.2/02	11A		
OPEL					
All passenger cars	1980-	03.9302-0702.2/02	20		
Ascona A + B	1971-1981	03.9302-0703.2/02	27		
Agila A	2001-2007	03.9302-0740.2/02	38A	03.9302-0704.2/02	67
Ampera	2011-	03.9302.0923.2/02	61A		
Antara	2007-	03.9302.0923.2/02	61A		
Arena	1998-2000	03.9302-0740.2/02	38A		
Campo	1987-2001	03.9302-0912.2/02	82	03.9302-0907.2/02	26
Frontera	1992-2005	03.9302-0912.2/02	82	03.9302-0907.2/02	26
GT	1968-1973	03.9302-0703.2/02	27		
Kadett A + B + C	-1979	03.9302-0703.2/02	27		
Manta	1971-1988	03.9302-0703.2/02	27		
Meriva	2012-	03.9302-0740.2/02	38A		
Mokka	2012-	03.9302-0923.2/02	61A		
Monterey	1993-1999	03.9302-0912.2/02	82	03.9302-0907.2/02	26
OPC Turbo	2003-	03.9302-0927.2/02	50S		
Sintra	1997-2000	03.9302-0923.2/02	61A	03.9302-0702.2/02	20
Zafira	2000-	03.9302-0740.2/02	38A		
PEUGEOT					
All passenger cars	1980-	03.9302-0702.2/02	20		
204 + 504	1965-1979	03.9302-0737.2/02	73		
304 S	1969-1976	03.9302-0744.2/02	73A		
107	2005-	03.9302-0927.2/02	50S		
108	2014-	03.9302-0927.2/02	50S		
807	2002-	03.9302-0927.2/02	50S		

	23				۲
4007	2006-	03.9302-0914.2/02	77		
4008	2012-	03.9302-0914.2/02	77		
Boxer	1993-	03.9302-0740.2/02	38A		
PONTIAC					
Firebird + Cabrio		03.9302-0923.2/02	61A		
Trans Sport		03.9302-0923.2/02	61A		
PORSCHE					
All passenger cars	-1976	03.9302-0703.2/02	27		
All passenger cars	1977-	03.9302-0702.2/02	20		
PROTON					
315 GLSI	1999-	03.9302-0786.2/02	41		
316 GLSI	1999-	03.9302-0928.2/02	34	03.9302-0774.2/02	43
318 GLSI	1999-	03.9302-0736.2/02	37	03.9302-0774.2/02	43
413 GLSI	1999-	03.9302-0736.2/02	37		
415 GLI	1995-	03.9302-0736.2/02	37		
415 GLSI	1999-	03.9302-0786.2/02	41		
416 GLSI	1999-	03.9302-0736.2/02	37	03.9302-0774.2/02	43
Carmony Plus	1997-	03.9302-0736.2/02	37		
QOROS					
Station wagon	2013	03.9302-0948.2/02	20		
Sedan	2013	03.9302-0948.2/02	20		
3	2014	03.9302-0948.2/02	20		
RENAULT					
All passenger cars	1980-	03.9302-0702.2/02	20	03.9302-0703.2/02	29
Espace	1994-	03.9302-0740.2/02	38A		
Megane	2012-	03.9302-0948.2/02	20S		
Modus	2003-	03.9302-0927.2/02	50S		
Koleos	2009-	03.9302-0914.2/02	77A		
Scenic	2002-	03.9302-0740.2/02	38A		
Tracer		03.9302-0702.2/02	20	03.9302-0702.2/02	20
Traffic	1981-	03.9302-0740.2/02	38A		
Twingo	2012-	03.9302-0740.2/02	38A		
Wind	2009-	03.9302-0948.2/02	20S		
ROVER					
Mini + 1300 Special	-1988	03.9302-0729.2/02	65	03.9302-0731.2/02	71
Mini Special	1988-	03.9302-0702.2/02	20	03.9302-0731.2/02	71
Mini Cooper	1999-	03.9302-0702.2/02	20	03.9302-0731.2/02	71
Maestro		03.9302-0702.2/02	20		
Montego		03.9302-0702.2/02	20		

	23			S	۲
MG F-Steptronic	1999-	03.9302-0926.2/02	28		
MG ZR 160	1000	03.9302-0926.2/02	28		
MG IVVC	1999-	03.9302-0926.2/02	28		
25	1999-2005	03.9302-0926.2/02	28		
75 + Tourer	1998-	03.9302-0702.2/02	20		
800 /820 /825 /827	1000	03.9302-0740.2/02	38A		
420 /600		00.0002 01 10.2,02	00/1	03.9302-0925.2/02	31
200 /214 /800	1995-	03.9302-0926.2/02	28	00.0002 0020.2/02	01
SAAB	1000	00.0002 0020.2/02	20		
All passenger cars	1980-	03.9302-0702.2/02	20		
SCANIA	1900-	03.9302-0702.2/02	20		
				02 0202 0702 0/02	20
Modell P, R, T				03.9302-0702.2/02	20
Modell 93 /13 /143			e	03.9302-0702.2/02	20
only be obtained via Scan	e bled with spe ia. The bleeding	cial connection fittings g can be done using a n	from bottor ormal press	n to top. Special connection sure-release brake bleeder.	n fittings can
SEAT					
All passenger cars	1993-	03.9302-0702.2/02	20		
Alhambra	2003-	03.9302-0948.2/02	20S		
Leon	2011-	03.9302-0948.2/02	20S		
SKODA					
All passenger cars	1991-	03.9302-0702.2/02	20		
120 L		03.9302-0764.2/02	39		
Yeti	2014-	03.9302-0948.2/02	20S		
135 L Favorit		03.9302-0764.2/02	39		
SMART MCC					
Smart		03.9302-0702.2/02	20		
Smart ForFour		03.9302-0740.2/02	38A		
SSANG YOUNG					
All passenger cars	2001-	03.9302-0914.2/02	77		
Korando	1997-2002	03.9302-0923.2/02	61A	03.9302-0766.2/02	45
Musso		03.9302-0923.2/02	61A	03.9302-0766.2/02	45
STEYR					
Tractors		03.9302-0728.2/02	64A		
SUBARU					
All passenger cars	1989-	03.9302-0914.2/02	77	03.9302-0774.2/02	43
Coupe 1800	1988-	03.9302-0786.2/02	41		
Forester II	2002-	03.9302-0914.2/02	77	03.9302-0916.2/02	35
Impreza 1,8GL		03.9302-0786.2/02	41		
Impreza WRX	2001-	03.9302-0914.2/02	77	03.9302-0916.2/02	35
Justy	1995-	03.9302-0736.2/02	37		

	23		۲		۲
Justy IV	2007-	03.9302-0912.2/02	82		
Legacy	1995-	03.9302-0915.2/02	78		
Legacy + station wagon	1999-	03.9302-0914.2/02	77	03.9302-0916.2/02	35
Legacy Sedan 1800		03.9302-0915.2/02	78		
Legacy Sedan 2200		03.9302-0915.2/02	78		
Libero E10 + E12 mini van	1988-	03.9302-0916.2/02	35		
Outback	1989-	03.9302-0914.2/02	77	03.9302-0916.2/02	35
Sedan 1800 4WD		03.9302-0786.2/02	41		
Station Wagon 1800	1988-	03.9302-0786.2/02	41		
Super Justy	1988-	03.9302-0786.2/02	41		
Turismo	1983-	03.9302-0766.2/02	45		
SUZUKI					
Alto	1996-	03.9302-0939.2/02	83		
Alto GA/GL	-1989	03.9302-0766.2/02	45		
Alto	2009-	03.9302-0939.2/02	83		
Baleno	1995-	03.9302-0746.2/02	49		
Baleno ABS +1.3GS + GL	1996-	03.9302-0914.2/02	77		
Baleno Holiday	1999-	03.9302-0914.2/02	77		
Ignis + Sport	2001-	03.9302-0916.2/02	35		
Ignis	2003-	03.9302-0702.2/02	20		
Jimny	1998-	03.9302-0917.2/02	60	03.9302-0774.2/02	43
JLX	1996-	03.9302-0917.2/02	60		
Liana	2001-			03.9302-0774.2/02	43
Maruti		03.9302-0916.2/02	35		
SA 310 + SA 413	1988-	03.9302-0765.2/02	46		
Samurei	1993-	03.9302-0702.2/02	20		
Samurei Van	1989-	03.9302-0906.2/02	55A		
Samurei Van + Pick Up	1999-	03.9302-0702.2/02	20		
SJ Samurei + SJ 413	1985-	03.9302-0906.2/02	55A		
Splash	2007-	03.9302-0702.2/02	20		
Swift 1,0GA + 1,3GL	1986-1989	03.9302-0702.2/02	20		
Swift EA	1991-1995	03.9302-0917.2/02	60		
Swift	1996-2004	03.9302-0786.2/02	41		
Swift MA	1996-2004	03.9302-0702.2/02	20		
Swift MZ + EZ	2005-	03.9302-0702.2/02	20		
Swift Sport	2012-	03.9302-0702.2/02	20		
SX 4	2006-2009	03.9302-0702.2/02	20		
SX 4	2009-	03.9302-0939.2/02	83		
SX 4	2012-	03.9302-0702.2/02	20		
SX4 S-Cross	2014-	03.9302-0702.2/02	20		

		-	A	and the second second	P
	23	E .		S	
Vitara	1989-	03.9302-0787.2/02	54A	25	
Vitara	1989-	03.9302-0917.2/02	60		
Vitara + Grand + 2.0	1999-2004	03.9302-0917.2/02	60	03.9302-0774.2/02	43
Vitara + Grand + XL7	2001-	03.9302-0914.2/02	77	03.9302-0774.2/02	43
Wagon R+	1999-	03.9302-0939.2/02	83	05.5502-0114.2/02	40
Wagon R+	2003-	03.9302-0939.2/02	20		
	2003-	03.9302-0702.2/02	20		
	2011-	02 0202 0702 2/02	20		
Aria Storme		03.9302-0702.2/02			
	2009-	03.9302-0702.2/02	20		
		03.9302-0702.2/02	20		
ΤΟΥΟΤΑ	1000		04		
4-Runner	1996-	03.9302-0925.2/02	31		
Avensis	1997-2003	03.9302-0702.2/02	20	03.9302-0767.2/02	47
Avensis Verso	2001-2005	03.9302-0935.2/02	31A		
Auris	2008-2010	03.9302-0927.2/02	50S		
Auris	2011-	03.9302-0935.2/02	31A		
Аудо	2005-	03.9302-0740.2/02	38A		
Camry	1993-	03.9302-0925.2/02	31		
Camry		03.9302-0937.2/02	70	03.9302-0767.2/02	47
Carina	1993-	03.9302-0925.2/02	31		
Carina II /2,0 GLI /16V		03.9302-0937.2/02	70	03.9302-0767.2/02	47
Celica 4WD		03.9302-0767.2/02	47	03.9302-0767.2/02	47
Celica GT 2,0 /GT 1600		03.9302-0767.2/02	47	03.9302-0767.2/02	47
Celica GT 2,0 /GT 1600	2001-	03.9302-0925.2/02	31		
Celica CS	2003-	03.9302-0925.2/02	31		
Corolla		03.9302-0937.2/02	70	03.9302-0767.2/02	47
Corolla E11		03.9302-0925.2/02	31	03.9302-0925.2/02	31
Corolla	1993-	03.9302-0925.2/02	31		
Corolla	1996-	03.9302-0767.2/02	47		
Corolla	2003-	03.9302-0702.2/02	20		
Cressida	1977-1981	03.9302-0765.2/02	46		
Crown	1985-	03.9302-0906.2/02	55A		
GT 86	2012-	03.9302-0914.2/02	77		
Hiace	1996-	03.9302-0767.2/02	47		
Hiace mini van		03.9302-0905.2/02	16A		
Hilux		03.9302-0767.2/02	47	03.9302-0767.2/02	47
Hilax	2005-	03.9302-0925.2/02	31		
HSD	2009-	03.9302-0925.2/02	31		
iQ	2009-	03.9302-0935.2/02	31A		
Landcruiser		03.9302-0765.2/02	46	03.9302-0767.2/02	47

	23				۲
Landcruiser HJ100		03.9302-0925.2/02	31		
Landcruiser	2003-	03.9302-0925.2/02	31		
Liteace		03.9302-0905.2/02	16A		
MR 2	2003-	03.9302-0925.2/02	31		
Picnic	1999-	03.9302-0935.2/02	31A		
Previa		03.9302-0905.2/02	16A		
Prius	2001-2010	03.9302-0925.2/02	31		
Prius /Prius+	2011-	03.9302-0935.2/02	31A		
RAV 4	1996-2009	03.9302-0767.2/02	47	03.9302-0767.2/02	47
RAV 4	2009-	03.9302-0925.2/02	31		
Starlet		03.9302-0937.2/02	70	03.9302-0767.2/02	47
Tercel		03.9302-0937.2/02	70	03.9302-0767.2/02	47
Urban Cruiser	2009-	03.9302-0925.2/02	31A		
Verso	1999-2002	03.9302-0925.2/02	31		
Verso	2009-	03.9302-0702.2/02	20		
Yaris		03.9302-0925.2/02	31		
Yaris (special model)		03.9302-0702.2/02	20		
Yaris	2006-	03.9302-0740.2/02	38A		
Yaris Hybrid	2014-	03.9302-0927.2/02	50S		
VOLVO					
All passenger cars		03.9302-0702.2/02	20		
S 40 /V 40	1995-2003	03.9302-0928.2/02	34		
VOLKSWAGEN					
All passenger cars	-1973	03.9302-0728.2/02	64A		
All passenger cars	1973-	03.9302-0702.2/02	20		
Caddy + Maxi	2005-	03.9302-0948.2/02	220S		
EOS	2005-	03.9302-0948.2/02	20S		
Lupo		03.9302-0927.2/02	50S		
New Beetle	1998-2002	03.9302-0740.2/02	38A		
New Beetle	2003-	03.9302-0948.2/02	20S		
Passat	2011-	03.9302-0948.2/02	20S		
Polo	2014-	03.9302-0948.2/02	20S		
Sharan		03.9302-0948.2/02	20S		
Taro		03.9302-0767.2/02	47	03.9302-0767.2/02	47
Touran	2005-	03.9302-0948.2/02	20S		
Transporter (Type 2) (diameter 28mm)		03.9302-0728.2/02	64A		
LT 28		03.9302-0728.2/02	64A		
LT 31		03.9302-0728.2/02	64A		
LT 35		03.9302-0728.2/02	64A		
WARTBURG					

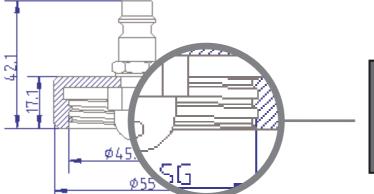
Zetor

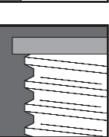
All passenger cars



39

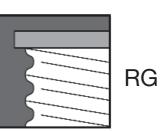
03.9302-0764.2/02

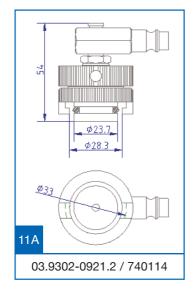


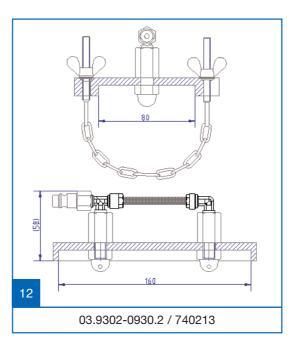


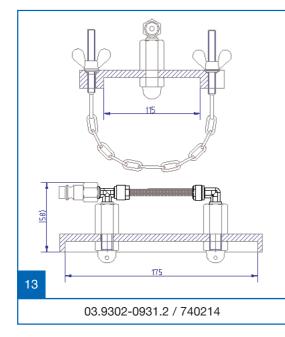
SG

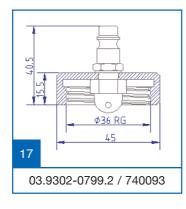
ΤG

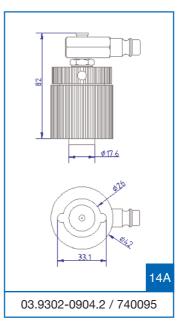


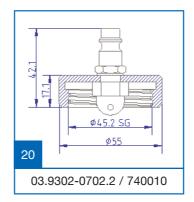


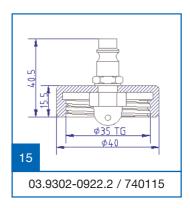


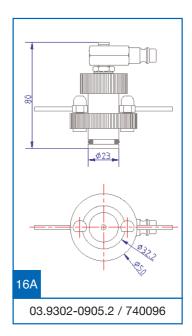


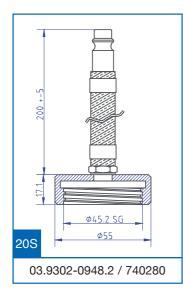


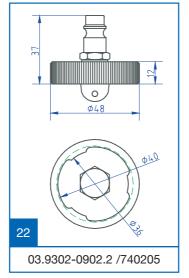


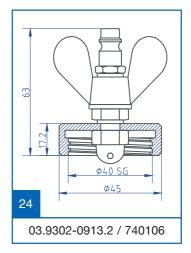


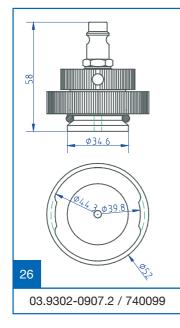


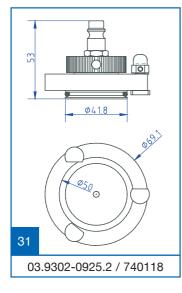


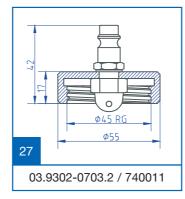


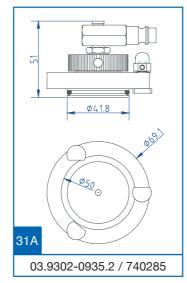


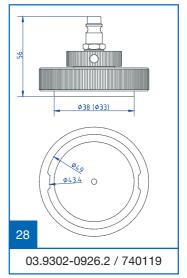








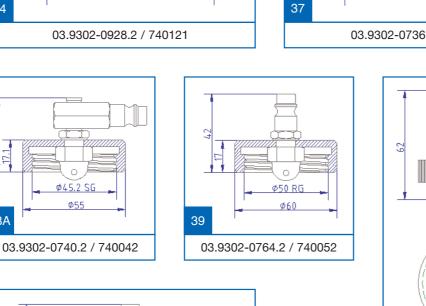


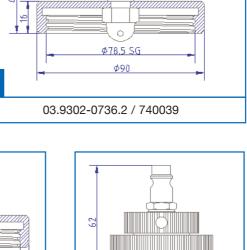


A

Ğ,



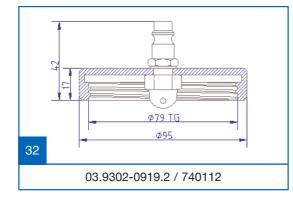




¢33.7

03.9302-0932.2 / 740215

Ø41



Q

Ø79 TG

Ø90

Ó ¢79 SG *\$*90

03.9302-0786.2 / 740073

9

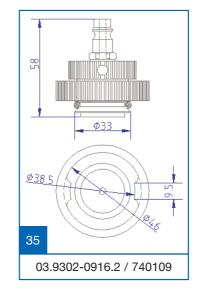
34

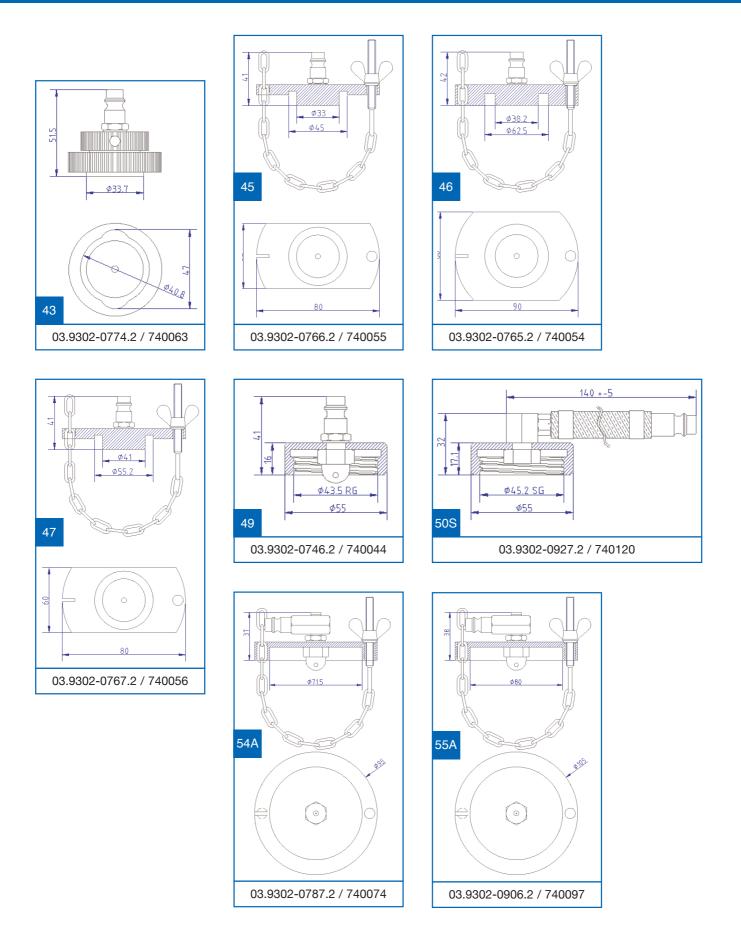
È

38A

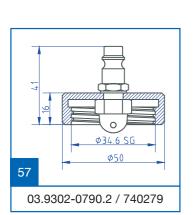
41

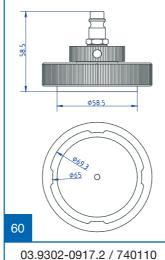
122



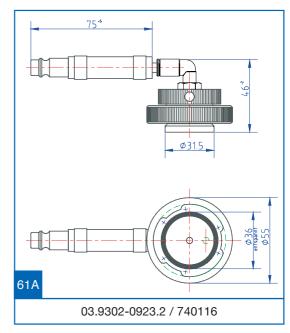


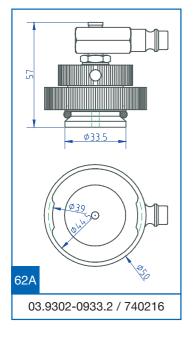
An

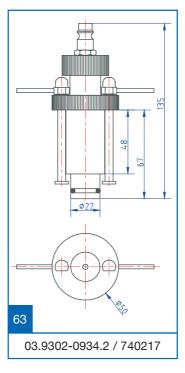


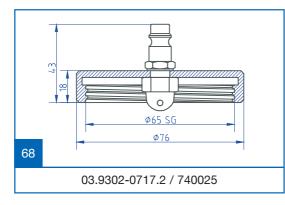


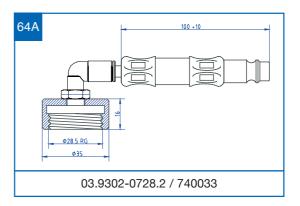


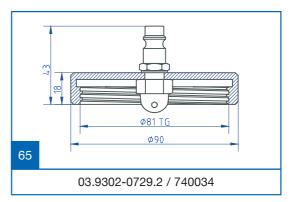




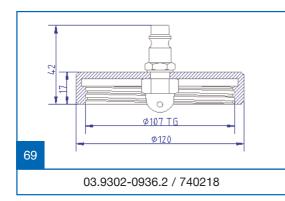


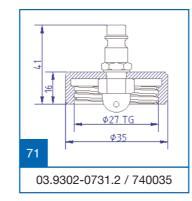


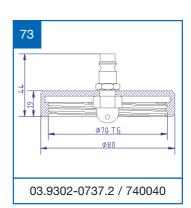


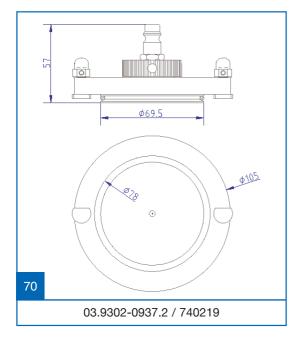


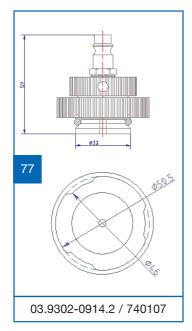
Au

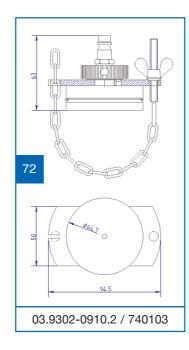


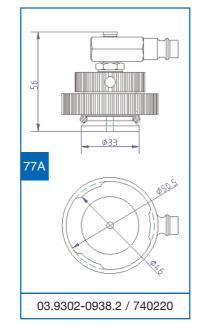


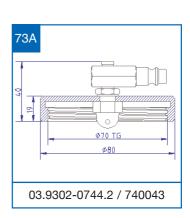


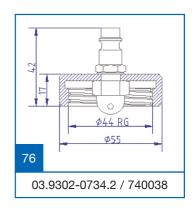


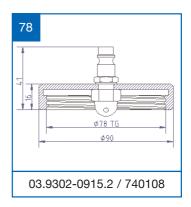


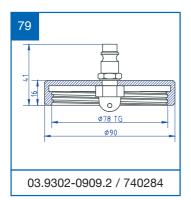


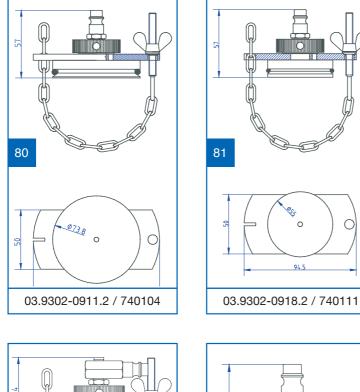


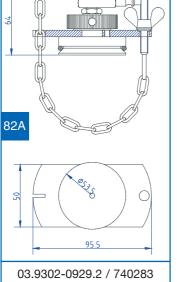


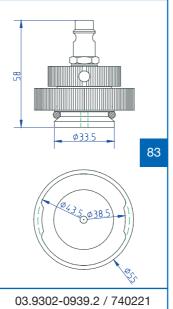










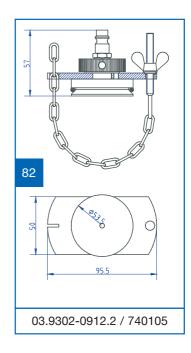


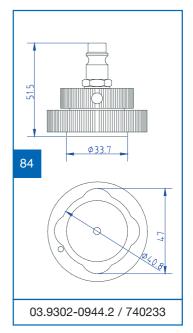
Ç,

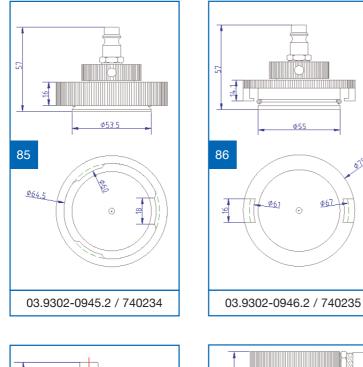
0

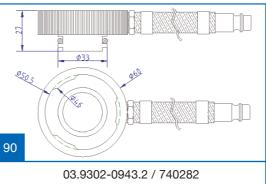
94.5

 \bigcirc

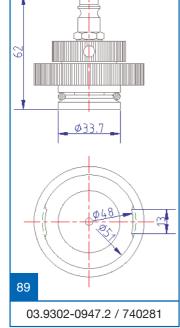




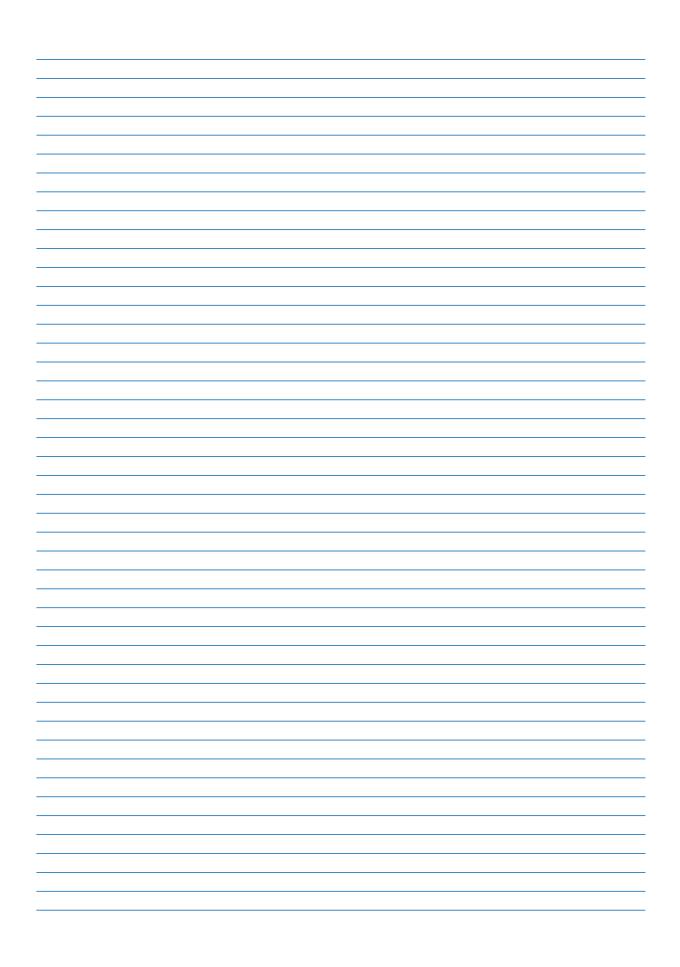




075



An



Spare part lists

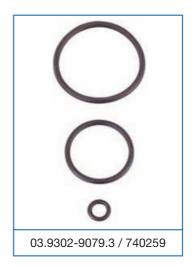




































An





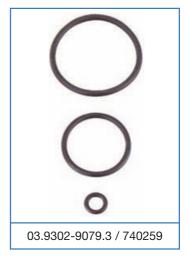














Au

FB 5e













FB 5p



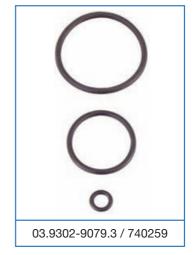














Au























An

FB 15-BF





















FB 15-M









03.9302-9402.3 / 740269













Au







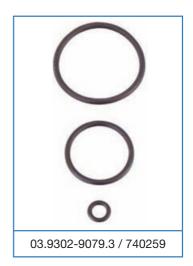












FB 20











An







03.9302-1900.4 / 740203



03.9302-9401.3 / 740268









FB 60











03.9302-9019.2 / 740241









03.9302-9403.3 / 740270









03.9302-9003.3 / 740238

FB 30





03.9302-9200.2 / 740264







03.9302-9251.3 / 740307

An









03.9302-9402.3 / 740269

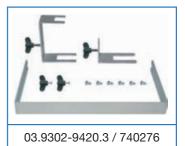




03.9302-9240.3 / 740306



03.9302-9105.3 / 740274





FB 30 S/SR



03.9302-9213.3 / 740293



03.9302-9230.3 / 740304













03.9302-3020.4 / 740297

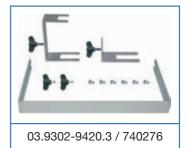




03.9302-9240.3 / 740306



03.9302-9105.3 / 740274





FB 30 S/SR











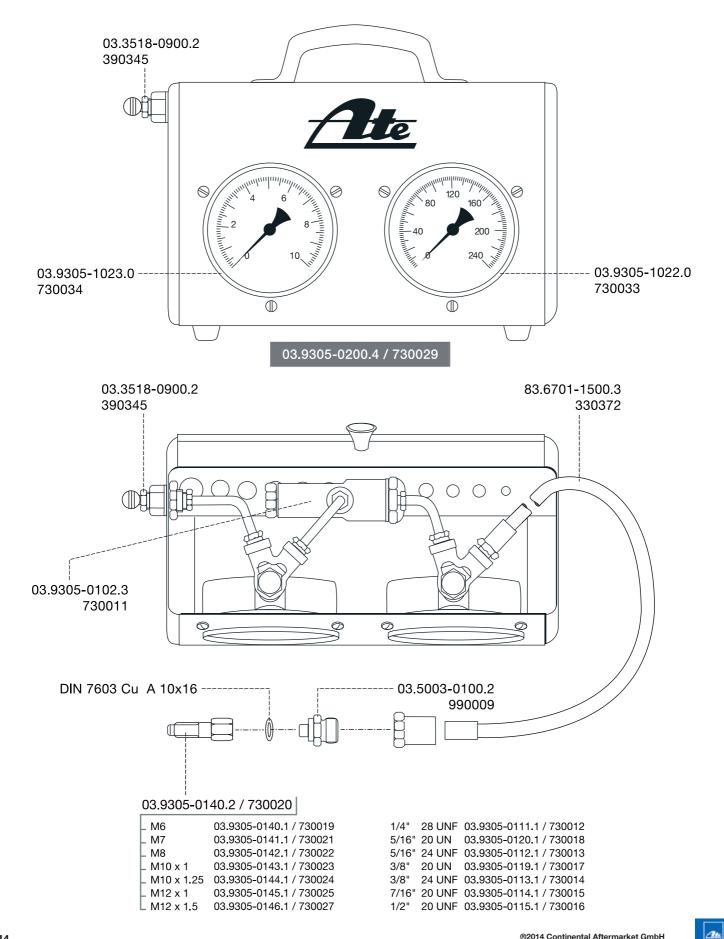


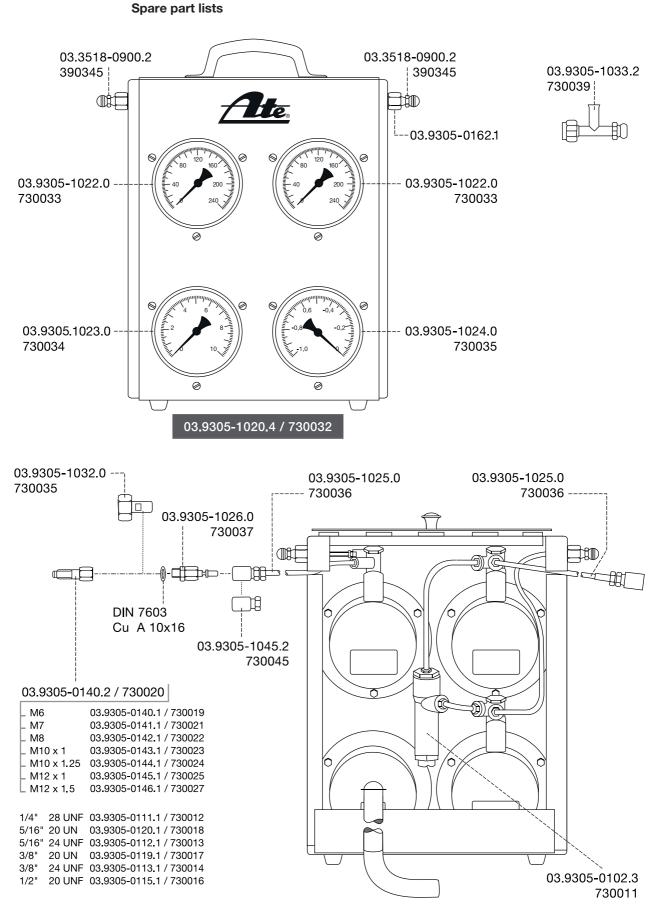
03.9302-9200.2 / 740264



03.9302-9402.3 / 740269

An





03.9314-4982.1 / 760113	03.9314-4999	4 / 760133	© 03.9314-4981.2 / 760112 03.9314-4994.2 / 760135
000	080	9	0
03.9314-4983.1 / 760114	03.9314-4984.1 / 760115	03.9314-4985.1 / 760116	03.9314-4986.1 / 760117
SW 13 Ø 30,6 mm	Ø 47,7 mm	Ø 54 mm	Ø 63,5 mm
· 4 · 0	GO	070	3
03.9314-4987.1 / 760118	03.9314-4988.1 / 760119	03.9314-4989.1 / 760120	03.9314-4990.1 / 760121
Ø 32 mm	Ø 32 mm	Ø 42 mm	Ø 55,5 mm
	0 Z C	O A O	
03.9314-4991.1 / 760122	03.9314-4992.1 / 760123	03.9314-4993.1 / 760124	
Ø 50,8 mm	Ø 30 mm	Ø 32 mm]



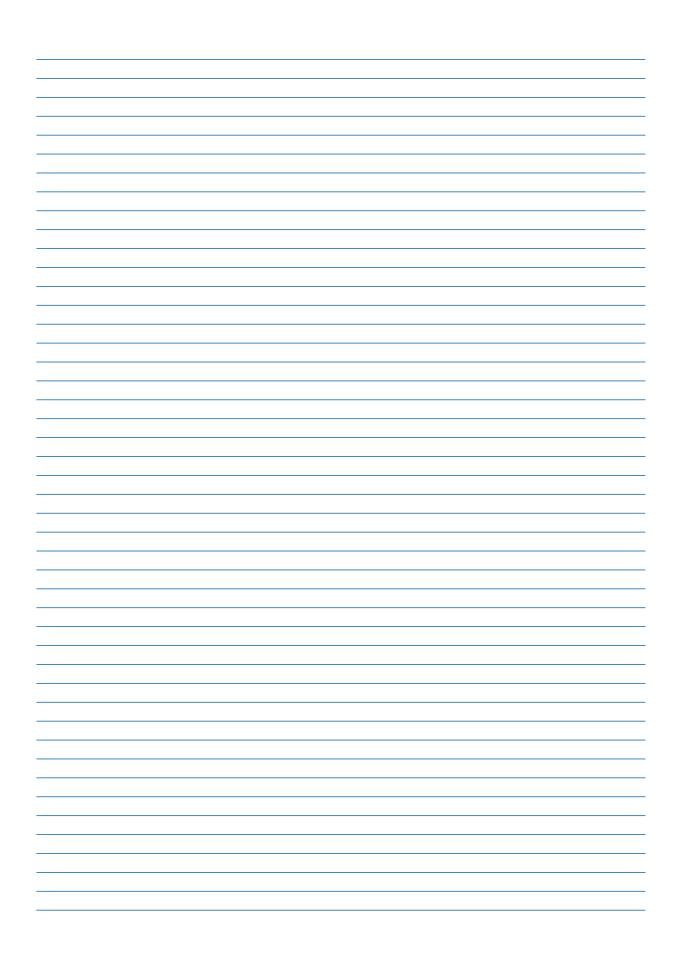
Ø	C.	Ĥ	Ĥ
4,75 mm	03.9310-0010.2 / 760077	03.9310-0005.1 / 760019	03.9310-0006.1 / 760021
6,00 mm	03.9310-0011.2 / 760078	03.9310-0002.1 / 760013	03.9310-0006.1 / 760021
8,00 mm	03.9310-0012.2 / 760079	03.9310-0003.1 / 760015	03.9310-0007.1 / 760022
10,00 mm	03.9310-0013.2 / 760080	03.9310-0004.1 / 760017	03.9310-0007.1 / 760022
3/16" mm	03.9310-0010.2 / 760077	03.9310-0001.1 / 760010	03.9310-0006.1 / 760021

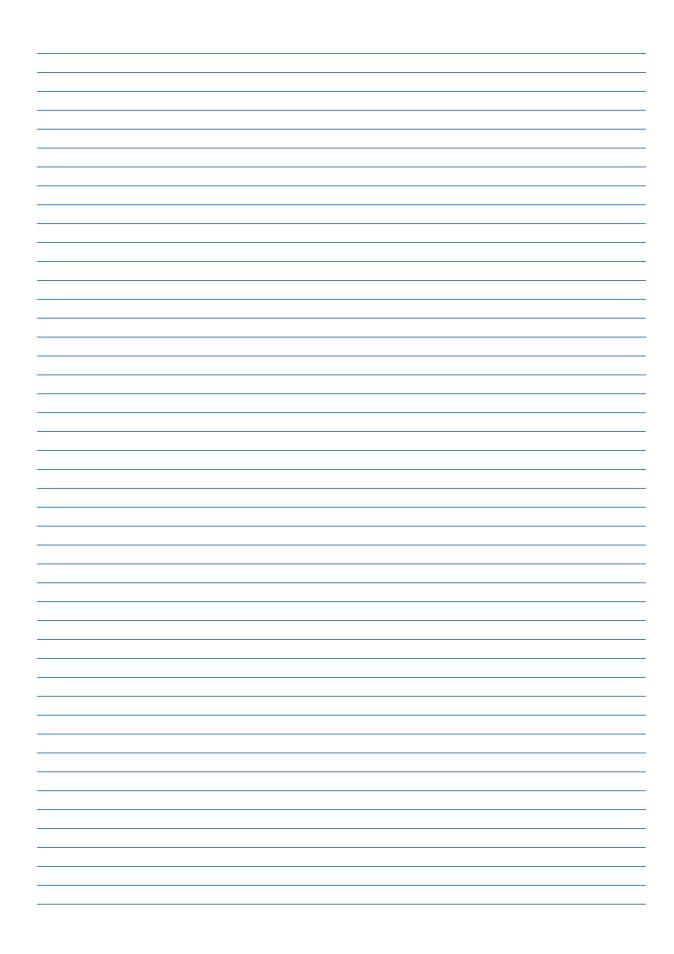
L_ DIN F

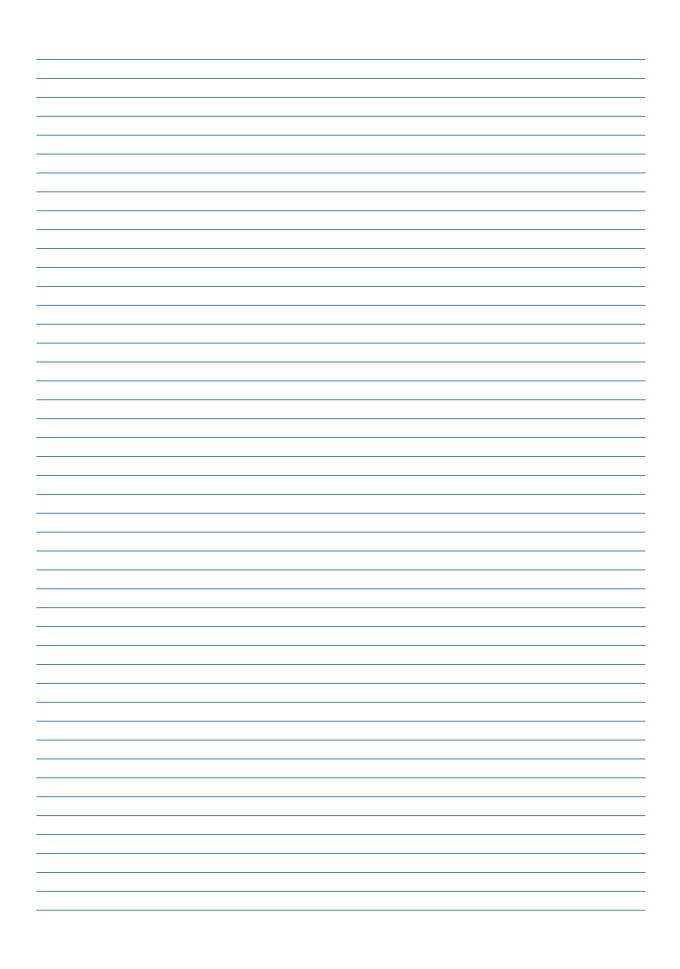
Ø	45	Ĥ
4,75 mm	03.9310-0010.2 / 760077	03.9310-0005.1 / 760019
6,00 mm	03.9310-0011.2 / 760078	03.9310-0002.1 / 760013
8,00 mm	03.9310-0012.2 / 760079	03.9310-0003.1 / 760015
10,00 mm	03.9310-0013.2 / 760080	03.9310-0004.1 / 760017
3/16" mm	03.9310-0010.2 / 760077	03.9310-0001.1 / 760010

DIN F

2	Ø	-	
F	4,75 mm	03.9310-0014.2 / 760081	03.9310-0005.1 / 760019







ATE — A trademark of the Continental Corporation

Continental Aftermarket GmbH Guerickestraße 7 · D-60411 Frankfurt a. M. Phone +49 69 76 03-1 · Fax +49 69 761061

