BRAKE SERVICE EQUIPMENT AND TOOLS
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Test and inspection equipment
Brake fluid test equipment
BFCS 300

Brake fluid is hygroscopic, which means that it absorbs water over the course of time. This causes the boiling point to drop and the risk of vapor bubble formation increases. This is why the brake fluid needs to be checked regularly in the workshop and replaced if necessary.

The brake fluid test equipment ATE BFCS 300 allows the boiling point of all standard glycol-based brake fluids (DOT3, DOT 4, DOT 5.1) to be measured. It works using the principle of immersion heating, the only way to determine the exact boiling point no matter which brake fluid is used.

For the test process, a disposable pipette is used to take a sample of the brake fluid from the fluid reservoir and place this in a disposable sampling vial. Both the pipette and the vial are included in the ATE sampling set. Then the brake fluid sample is heated in the ATE BFCS 300 to boiling. The temperature value determined (up to 300°C) is shown digitally on the front of the equipment and can be documented using the printer which is optionally available. The measuring process itself only takes approx. 30 seconds.

An integrated short and long-term counter saves the number of measurements carried out. The last 10 measurements can be retrieved via the modern membrane keyboard and printed using the optional printer. The wide range power adapter provides options for voltage supplies from 90 – 250V. The ATE BFCS 300 has the CE test mark.

Benefits:
- Precise determination of the boiling point using the immersion heater method
- Can be used for all brake fluid types on a glycol-basis with a boiling temperature of up to 300 °C
- Extremely easy to use

Shipment:
- Complete unit
- Five disposable pipettes and five disposable sampling vials
- Operating manual

Qualitymark: CE

Hint: Never use the equipment without a sample.

Technical data:

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: 1.6 kg

Sensor head replacement

Order no: 03.9311-0072.1
Short order no: 730061

Order no: 03.9311-0073.4
Short order no: 730085
Printer BFCS 300

Using the printer for the BFCS 300 you can print out the boiling temperature recorded quickly and easily with just one push of a button. The documented temperature values can then be saved in the respective file.

**Shipment:**
- Printer
- Mounting bracket

**Rolls of printer paper**

<table>
<thead>
<tr>
<th>Order no</th>
<th>03.9311-0096.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short order no</td>
<td>730079</td>
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</table>

Order no: 03.9311-0074.2
Short order no: 730084

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.

**Shipment:**
- 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
Brake fluid test unit BFT 320

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

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

Technical data:

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<th>Parameter</th>
<th>Specification</th>
</tr>
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<tr>
<td>Accuracy</td>
<td>+/- 3%</td>
</tr>
<tr>
<td>Measuring time</td>
<td>approx. 30 seconds</td>
</tr>
<tr>
<td>Power supply</td>
<td>12 Volt</td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td>at 100-180°C</td>
<td>+/- 3%</td>
</tr>
<tr>
<td>&gt; 180°C</td>
<td>+/- 5%</td>
</tr>
</tbody>
</table>
Brake fluid tester BFT 320P

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.

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

Shipment:

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

Technical data:

Accuracy:

- at 100-180° C: +/- 3%
- >180° C: +/- 5%

Measuring time: approx. 30 seconds

Power supply: 12 Volt

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 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.
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.

Shipment:
- 10 disposable pipettes
- 10 disposable specimen vials

Hint: Every time a measurement is taken, it is recommended that both anew pipette and a new specimen 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 / BFCS 300

Shipment:
- 4 rolls of printer paper

Order no: 03.9311-0096.3
Short order no: 730079
Test card for magnetic sensor wheels

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.

Shipment:
- Test card with integrated protective case, with brief operating instructions.
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:**

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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 brake-pedal pressure over a long period. Constant brake-pedal pressure is also needed to check and adjust brake-pressure regulators or limiters. The ATE pedal arrester is ideal for this purpose. 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.

**Technical data:**

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<tr>
<td>Length</td>
<td>450-650 mm</td>
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</table>

Order no: 03.9312-0100.4  
Short order no: 760032
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

**Shipment:**
- ATE straight edge
- handy case to protect the straight edge
Digital brake disk caliper gauge

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

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

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 85 mm and the length of the measuring jaws is 55 mm. The design of the measuring jaws permits exact measurement even if the disc has a ridge.
Magnetic dial-gauge holder

The ATE magnetic dial-gauge holder, used in conjunction with the ATE dial gauge, enables lateral and radial run-out 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 dial-gauge 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

Shipment: Supplied without dial gauge

Order no: 03.9314-0019.2
Short order no: 760092

Dial gauge with large measuring range

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

Shipment:
- Dial gauge with probe
- Special ball-shaped probe

Order no: 03.9304-0034.2
Short order no: 760093
Spacer disc set

The ATE spacer discs make fast and secure fastening of the brake disc on the wheel hub possible. Using original wheel bolts or nuts up to M14 with spherical or tapered collar, the brake disc is fastened professionally on the hub and prepared for the measurement of axial and radial run-out.

**Benefits:**
- Large vehicle cover
- Suitable for tapered or spherical collar
- A practical order system keeps everything together and in its place

**Shipment:** 5 pieces spacer discs

**Technical data:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside diameter:</td>
<td>32 mm</td>
</tr>
<tr>
<td>Hole diameter</td>
<td>14.2 mm</td>
</tr>
<tr>
<td>Height</td>
<td>15 mm</td>
</tr>
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</table>
Brake disk measurement equipment

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 350 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

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

Technical data:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
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<td>Accuracy:</td>
<td>1/100 mm</td>
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<tr>
<td>Dimensions: L x W x H</td>
<td>300 x 170 x 230 mm</td>
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<tr>
<td>Weight:</td>
<td>6.85 kg</td>
</tr>
</tbody>
</table>
Bleeding equipment
The ATE FB 5e is a particularly easy to operate, robust and economical brake bleeding unit. It fulfills all the requirements for filling, flushing and bleeding of modern electronic brake systems. Two pressure stages are available for this: 1.0 and 2.0 bar. This corresponds to the stipulations of leading car manufacturers and avoids faulty setting of the working pressure. The working pressures are set using a rocker switch. Checking with a pressure gage is not necessary because of the predetermined pressure. The current low-viscosity brake fluids set stringent standards for the safe operation of a brake filling and bleeding unit, and these were taken into particular account during 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 ATE 5 Liter can, which is securely fixed in the unit using a clamping strap. There is no longer any need for the time-consuming transfer of brake fluid. The suction lance is held securely in the can by a screwed fitting. When the brake fluid can being used is empty, the float lever closes the intake port of the suction lance. This ensures that air can never be pumped 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 as well as for holders for the three bleeding spigots on the rear of the unit. The large handle can be used for carrying the unit comfortably. All materials used on the ATE FB 5e are resistant to brake fluid.

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

**Benefits:**
- Economical
- Particularly sturdy
- Easy to operate
- Two pressure stages, avoids incorrect settings
- Suitable for low-viscosity brake fluids
- Pulsing brake fluid flow

**Shipment:**
- Complete unit
- Operating manual
- Bleeding spigot no.: 20 (Europe spigot)

**Qualitymark:** CE

**Technical data:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Brake fluid capacity</td>
<td>5 liters</td>
</tr>
<tr>
<td>Power supply</td>
<td>230 V ~ , 50 - 60 Hz</td>
</tr>
<tr>
<td>Delivery rate of pump</td>
<td>approx. 12 l/h at 2 bar pressure</td>
</tr>
<tr>
<td>Length of connecting cable</td>
<td>4.2 m</td>
</tr>
<tr>
<td>Filling hose length</td>
<td>3.5 m</td>
</tr>
<tr>
<td>Dimensions: HxWxD</td>
<td>530 x 270 x 250 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>8.5 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>68 dB(A)</td>
</tr>
</tbody>
</table>
5 liter electrical brake bleeding unit FB 5ev

The ATE FB 5ev is a particularly compact and sturdy 5 liter brake bleeding unit. It fulfills all requirements related to the filling, flushing and bleeding of modern electronic brake systems. The variable pressure setting is available in a range from 0.4 to 3.5 bar and thus meets all pressure ranges of leading vehicle manufacturers. The working pressures are set to the working pressure required using a rotary controller and can be checked using a class 1.6 manometer.

Today’s modern low-viscosity brake fluids make high demands on the safe function of a brake filling and bleeding unit. Special attention was paid to this during development of the ATE FB 5ev. A special pump generates a pulsating fluid flow which supports the complete flushing and bleeding of the brake system. The ATE FB 5ev works directly out of the ATE 5 liter canister, which is fixed securely in the unit using a stable fixture. This means time-consuming brake fluid transfer is no longer necessary. The suction lance is held safely in the container by a rubber sealing cone.

Thanks to the permanent pressure monitoring, the pump is switched off when the can is empty, preventing air being pumped into the brake system. A practical feature of the ATE FB 5ev are the filling hose and power cable holders on the side and the three bleeder adapters on each side of the unit.

The power cable is connected to the unit by a non-heating device plug (IEC 60320) and thus allows the power cable to be exchanged quickly in the event of damage or for use with other country-specific cables. The large carrying handle supports the unit’s mobility.

The ATE FB 5ev is delivered with a bleeder adapter no.: 20.

Benefits:
- Variable pressure setting 0.4-3.5 bar
- Compact design
- Especially sturdy
- Simple to operate
- Suitable for low-viscosity brake fluids
- Pulsating brake fluid flow

Shipment:
- Complete unit
- Operating instructions
- Bleeding adapter no.: 20

Qualitymark: CE

Technical data:

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<th>Parameter</th>
<th>Specification</th>
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<td>Brake fluid capacity</td>
<td>5 liters</td>
</tr>
<tr>
<td>Power supply</td>
<td>230 V ~, 50 - 60 Hz</td>
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<tr>
<td>Delivery rate of pump</td>
<td>approx. 24 l/h at 2 bar pressure</td>
</tr>
<tr>
<td>Working pressure</td>
<td>0.4-3.5 bar</td>
</tr>
<tr>
<td>Automatic cut-off of pump</td>
<td>at approx. 9mm remaining fluid level in the can</td>
</tr>
<tr>
<td>Length of connecting cable</td>
<td>5 m IEC</td>
</tr>
<tr>
<td>Filling hose length</td>
<td>3.5 m</td>
</tr>
<tr>
<td>Dimensions H x W x D</td>
<td>530 x 285 x 250 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>8.6 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>66 dB(A)</td>
</tr>
</tbody>
</table>
15 liter electrical brake bleeding unit - FB 15

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 low-pressure 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 fluid-level 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

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

Qualitymark: CE

Order no: 03.9302-1650.4
Short order no: 740229

Technical data:

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<tr>
<td>Power supply</td>
<td>230 V ~ , 50-60 Hz</td>
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<tr>
<td>Delivery rate of pump</td>
<td>1.3 l/min</td>
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<tr>
<td>Working pressure</td>
<td>2 bar (0 to 3 bar adjustable)</td>
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<tr>
<td>Automatic cut-off of pump</td>
<td>at approx. 9 mm remaining fluid level</td>
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<tr>
<td>Length of connecting cable</td>
<td>4.20 m</td>
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<tr>
<td>Filling hose length</td>
<td>3.5 m</td>
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<tr>
<td>Dimensions: H x W x D</td>
<td>745 x 380 x 705 mm</td>
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<td>Weight</td>
<td>20.5 kg</td>
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<tr>
<td>Noise level</td>
<td>66 dB(A)</td>
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</table>
15 liter electrical brake bleeding unit - FB 15 for mineral oil

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 fluid-level 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 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 mineral oil.

For mineral oil!

Benefits:

- Well-proven, particularly robust unit for workshop use

Shipment:

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

Qualitymark: CE

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, to 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.

Technical data:

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<tr>
<td>Power supply</td>
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<tr>
<td>Delivery rate of pump</td>
<td>1.3 l/min</td>
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<tr>
<td>Working pressure</td>
<td>2 bar (0 to 3 bar adjustable)</td>
</tr>
<tr>
<td>Automatic cut-off of pump</td>
<td>at approx. 9 mm remaining fluid level</td>
</tr>
<tr>
<td>Length of connecting cable</td>
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<tr>
<td>Filling hose length</td>
<td>3.5 m</td>
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<tr>
<td>Dimensions: H x W x D</td>
<td>745 x 380 x 705 mm</td>
</tr>
<tr>
<td>Weight</td>
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<tr>
<td>Noise level</td>
<td>66 dB(A)</td>
</tr>
</tbody>
</table>
30-liter electric brake bleeding unit
FB 30 EDR

Modern service units are required for changing the brake fluid on modern vehicles with electronic brake systems. Thanks to its innovative technology of “electronic pressure control” (EDR) with variable and preset pressure stages, the new ATE FB 30 is the benchmark for brake filling and bleeding units. With its central ergonomic operating panel the new ATE FB 30 is controlled between the variable and preset pressure stages. Signal lamps show the function selected. All functions are arranged clearly on the operating panel.

There are three pressure stages available for filling, flushing and bleeding the brake system: 0.4/1.0/2.2 bar. There is also a variable pressure setting of 0.4–3.5 bar available. A manometer enables the pressure selected to be checked. The modern low-viscosity brake fluids available make great demands on the safe function of a brake filling and bleeding unit. During development of the ATE FB 30, great value was placed on the safe function with all standard DOT3 and DOT4 brake fluids. The ATE FB 30 brake filling and bleeding unit works directly from brake fluid cans with 5, 20 and 30 liters capacity which are secured in the unit by means of a retainer. There is no longer any need for the time-consuming transfer of brake fluid. Alongside the ATE brake fluid cans, other cans available from retailers can also be used. A special holder ensures that the suction lance is fitted firmly in the can. There is a special bleeding valve integrated in the rubber sealing cone which only allows air to enter the can when brake fluid is being removed. This prevents air being drawn into the can in an uncontrolled way. If the brake fluid can becomes empty, the ATE FB 30 is switched off automatically in order to guarantee that no air gets into the brake system. A clear acoustic signal and signal lamp indicate that the can needs changing. Practical features include the holders for the filling hose and power cable attached to the side of the ATE FB 30, as well as three outlets for bleeding spigots. There is a practical storage tray on the unit for depositing small parts or tools. Large wheels at the rear combined with the ergonomic handle make convenient and safe maneuvering of the ATE FB 30 possible. The ATE FB 30 is delivered with bleeding spigot no. 20 (Europe spigot).
Benefits:
- Fast and effective work through fixed pressure stages
- Manual selection of pressure between 0.4 - 3.5 bar depending on the application
- Suitable for all common brake and clutch systems
- Can be operated with all standard mains voltages
- Different country-specific power cables available
- Constant working pressure thanks to electronic pressure control EDR
- Suitable for low-viscosity brake fluids
- Different brake fluid cans can be used
- Automatic switch-off and acoustic warning signal when can is empty
- Signal lamps for the respective operating states
- Holders for power cable, filling hose and six bleeding spigots

Shipment
- Complete unit (without fluid can)
- Mains cable with Schuko plug
- Operating manual
- Bleeding pipe no.: 20 (Europe pipe)

Qualitätsmark: CE

<table>
<thead>
<tr>
<th>Technical data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brake fluid capacity:</td>
</tr>
<tr>
<td>5 to 30 liters</td>
</tr>
<tr>
<td>Power supply:</td>
</tr>
<tr>
<td>100 - 240 V - , 50 - 60 Hz</td>
</tr>
<tr>
<td>Delivery rate of pump:</td>
</tr>
<tr>
<td>1.1 l/min</td>
</tr>
<tr>
<td>Electronic pressure control system (EDR), pressure levels:</td>
</tr>
<tr>
<td>pressure-less / 0.4 bar / 1.0 bar and 2.2 bar</td>
</tr>
<tr>
<td>Automatic cut-off of pump:</td>
</tr>
<tr>
<td>at approx. 9 mm remaining fluid level in the can</td>
</tr>
<tr>
<td>Length of connecting cable:</td>
</tr>
<tr>
<td>5 m</td>
</tr>
<tr>
<td>Filling hose length:</td>
</tr>
<tr>
<td>3.5 m</td>
</tr>
<tr>
<td>Dimensions: H x W x D:</td>
</tr>
<tr>
<td>915 x 440 x 365 mm</td>
</tr>
<tr>
<td>Weight:</td>
</tr>
<tr>
<td>16 kg</td>
</tr>
<tr>
<td>Noise level</td>
</tr>
<tr>
<td>66 dB(A)</td>
</tr>
</tbody>
</table>
FB 30 S - 30-liter electric brake bleeding unit with integrated suction device

Modern service units are required for changing the brake fluid on modern vehicles with electronic brake systems. Thanks to its innovative technology of "Electronic pressure control" with variable and preset pressure stages, as well as the integrated suction device, the new ATE FB 30S is the benchmark for brake filling and bleeding units.

With its central ergonomic operating panel the new ATE FB 30S is controlled between the functions suction as well as filling/bleeding. Signal lamps show the function selected. All functions are arranged clearly on the operating panel.

There are three pressure stages available for filling, flushing and bleeding the brake system: 0.4/1.0/2.2 bar. There is also a variable pressure setting of 0.4–3.5 bar available. A manometer enables the pressure selected to be checked.

Modern low-viscosity brake fluids available make great demands on the safe function of a brake filling and bleeding unit. During development of the ATE FB 30S, great value was placed on the safe function with all standard DOT3 and DOT4 brake fluids. The ATE FB 30S brake filling and bleeding unit works directly from brake fluid cans with 5, 20 and 30 liters capacity which are secured in the unit by means of a retainer. There is no longer any need for the time-consuming transfer of brake fluid. Alongside the ATE brake fluid cans, other cans available from retailers can also be used. A special holder ensures that the suction lance is fitted firmly in the can. There is a special bleeding valve integrated in the rubber sealing cone which only allows air to enter the can when brake fluid is being removed. This prevents air being drawn into the can in an uncontrolled way. If the brake fluid can becomes empty, the ATE FB 30S is switched off automatically in order to guarantee that no air gets into the brake system. A clear acoustic signal and signal lamp indicate that the can needs changing.

Order no: 03.9302-3015.4
Short order no: 740313
Professional brake fluid changing also includes cleaning the fluid reservoir. For this, the old and soiled brake fluid is extracted from the fluid reservoir. An integrated, independent and especially robust pump is used for extracting the used brake fluid. Even difficult-to-access reservoirs are easy to empty using the extendable coil hose (around 3 meters long). 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 about 2.2 liters. This is matched to the ATE disposal system and can be emptied easily. Conventional emptying is also possible via the screw cap.

Practical features of the ATE FB 30 SR are the filling hose and power cable holders on the side, as well as holders for three bleeding spigots. There is a practical storage tray on the unit for depositing small parts or tools. Large wheels at the rear combined with the ergonomic handle make convenient and safe maneuvering of the ATE FB 30S possible.

**Benefits:**
- Fast and effective work through fixed pressure stages
- Manual selection of pressure between 0.4 - 3.5 bar depending on the application
- Suitable for all common brake and clutch systems
- Extraction of used brake fluid
- Can be operated with all standard mains voltages
- Different country-specific power cables available
- Constant working pressure thanks to electronic pressure control EDR
- Suitable for low-viscosity brake fluids
- Different brake fluid cans can be used
- Automatic switch-off and acoustic warning signal when can is empty
- Signal lamps for the respective operating states
- Holders for power cable, filling hose and six bleeding spigots

**Shipment:**
- Complete unit incl. collecting bottle (without new fluid can)
- Operating manual
- Bleeding spigot no.: 20 (Europe spigot)

**Quality mark:** CE

**Technical data:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brake fluid capacity</td>
<td>5 to 30 liters</td>
</tr>
<tr>
<td>Power supply</td>
<td>100 - 240 V ~ , 50 - 60 Hz</td>
</tr>
<tr>
<td>Delivery rate of pressure pump</td>
<td>approx. 1.1 l/min</td>
</tr>
<tr>
<td>Suction pump delivery rate</td>
<td>approx. 1.0 l/min - 230 V ~ , 50-60 Hz</td>
</tr>
<tr>
<td>Electronic pressure control system (EDR), pressure level</td>
<td>pressure-less / 0.4 bar / 1.0 bar / 2.2 bar</td>
</tr>
<tr>
<td>Automatic cut-off of pump</td>
<td>at approx. 9mm remaining fluid level in the can</td>
</tr>
<tr>
<td>Length of connecting cable</td>
<td>4.2 m</td>
</tr>
<tr>
<td>Filling hose length</td>
<td>3.5 m</td>
</tr>
<tr>
<td>Dimensions: H x W x D</td>
<td>915 mm x 475 mm x 380 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>16.8 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>66 dB(A)</td>
</tr>
</tbody>
</table>
30 l brake bleeding unit FB
30 SR with integrated extractor unit

Modern service units are required for changing the brake fluid on modern vehicles with electronic brake systems. Thanks to its innovative technology of “Electronic pressure control” with variable and preset pressure stages, as well as the integrated suction device, the new ATE FB 30 SR is the benchmark for brake filling and bleeding units.

With its central ergonomic operating panel the new ATE FB 30 SR is controlled between the functions suction as well as filling/bleeding. The signal lamps show the function selected. All functions are arranged clearly on the operating panel.

There are three pressure stages available for filling, flushing and bleeding the brake system: 0.4/1.0/2.2 bar. There is also a variable pressure setting of 0.4–3.5 bar available. A manometer enables the pressure selected to be checked.

Modern low-viscosity brake fluids available make great demands on the safe function of a brake filling and bleeding unit. During development of the ATE FB 30 SR, great value was placed on the safe function with all standard DOT3 and DOT4 brake fluids. The ATE FB 30 SR brake filling and bleeding unit works directly from brake fluid cans with 5, 20 and 30 liters capacity which are secured in the unit by means of a retainer. There is no longer any need for the time-consuming transfer of brake fluid. Alongside the ATE brake fluid cans, other cans available from retailers can also be used. A special holder ensures that the suction lance is fitted firmly in the can. There is a special bleeding valve integrated in the rubber sealing cone which only allows air to enter the can when brake fluid is being removed. This prevents air being drawn into the can in an uncontrolled way. If the brake fluid can should become empty, the ATE FB 30 SR is switched off automatically in order to guarantee that no air gets into the brake system. A clear acoustic signal and signal lamp indicate that the can needs changing.
Professional brake fluid changing also includes cleaning the fluid reservoir. For this, the old and soiled brake fluid is extracted from the fluid reservoir. An integrated, independent and especially robust pump is used for extracting the used brake fluid. Even difficult-to-access reservoirs are easy to empty using the extendable coil hose (around 3 meters long). 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 about 2.2 liters. This is matched to the ATE disposal system and can be emptied easily. Conventional emptying is also possible via the screw cap.

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, as well as holders for three bleeding spigots. There is a practical storage tray on the unit for depositing small parts or tools. Large wheels at the front and swivel casters at the rear combined with the ergonomic handle make convenient and safe maneuvering of the ATE FB 30 SR possible even with a full 30 liter can. The ATE FB 30 SR is delivered with bleeding spigot no. 20 (Europe spigot).

Benefits:
- Fast and effective work through fixed pressure stages
- Manual selection of pressure between 0.4 - 3.5 bar depending on the application
- Suitable for all common brake and clutch systems
- Extraction of used brake fluid
- Can be operated with all standard mains voltages
- Different country-specific power cables available
- Constant working pressure thanks to electronic pressure control EDR
- Suitable for low-viscosity brake fluids
- Different brake fluid cans can be used
- Base plate protects against scratches
- Automatic switch-off and acoustic warning signal when can is empty
- Signal lamps for the respective operating states
- Holders for power cable, filling hose and six bleeding spigots
- Four wheels, two of which are swivel casters

**Shipment:**
- Complete unit including collection bottle (without new fluid can)
- Operating manual
- Power cable with shockproof plug
- Bleeding spigot no.: 20 (Europe spigot)

**Qualitymark:** CE

**Technical data:**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brake fluid capacity</td>
<td>5 to 30 liters</td>
</tr>
<tr>
<td>Power supply</td>
<td>100-240 V ~, 50 - 60 Hz</td>
</tr>
<tr>
<td>Delivery rate of pump</td>
<td>approx. 1.1 l/min</td>
</tr>
<tr>
<td>Suction pump delivery rate</td>
<td>approx. 1.0 l/min - 230 V ~, 50-60 Hz</td>
</tr>
<tr>
<td>Electronic pressure control system (EDR), pressure level</td>
<td>pressure-less / 0.4 bar / 1.0 bar / 2.2 bar</td>
</tr>
<tr>
<td>Automatic cut-off of pump</td>
<td>at approx. 9mm remaining fluid level in the can</td>
</tr>
<tr>
<td>Length of connecting cable</td>
<td>5 m</td>
</tr>
<tr>
<td>Filling hose length</td>
<td>3.5 m</td>
</tr>
<tr>
<td>Dimensions: H x W x D</td>
<td>915 x 475 x 380 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>16.9 kg</td>
</tr>
<tr>
<td>Noise level</td>
<td>66 dB(A)</td>
</tr>
</tbody>
</table>
5-liter pneumatically operated brake bleeding unit FB 5p

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

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

### Technical data:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<td>Brake fluid capacity</td>
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<tr>
<td>Working pressure (compressed air)</td>
<td>6.5 bar</td>
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<tr>
<td>Operating pressure (brake fluid)</td>
<td>2 bar (0 to 3 bar adjustable)</td>
</tr>
<tr>
<td>Filling hose length</td>
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<tr>
<td>Total height</td>
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</tr>
<tr>
<td>Diameter</td>
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<tr>
<td>Weight</td>
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</tbody>
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Order no: 03.9302-1350.4
Short order no: 740230
Standard power cable

Order no: 03.9302-9201.2
Short order no: 740288

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:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Length of cable</td>
<td>4,5 m</td>
</tr>
</tbody>
</table>

Power cable, Switzerland

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of cable</td>
<td>4,5 m</td>
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<tr>
<td>Order no</td>
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</tr>
<tr>
<td>Short order no</td>
<td>740299</td>
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</tbody>
</table>

Power cable, UK

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Length of cable</td>
<td>4,5 m</td>
</tr>
<tr>
<td>Order no</td>
<td>03.9302-9203.2</td>
</tr>
<tr>
<td>Short order no</td>
<td>740300</td>
</tr>
</tbody>
</table>

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 the filling gun in a handy plastic case.

Benefits:

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

Shipment:

- Plastic case
- Bleeding unit adapters:
  - no. 50S = 03.9302-0927.2 / 740120
  - no. 55A = 03.9302-0906.2 / 740097
- Filling gun = 03.9302-0792.2 / 740323
- Auxiliary hose = 03.9302-0704.2 / 740012
Set of bleeding unit adapters "PLUS"

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 vehicles
- included cap screws for fluid reservoir
- clearly arranged

**Shipment:**
- 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

Order no: 03.9302-0802.3
Short order no: 740296

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Set of bleeding unit adapters "E-Mobility"

The ATE set of bleeding unit adapters "E-Mobility" includes four selected bleeding unit adapters. It covers the majority of current electric and hybrid vehicles on the European car market. The bleeding unit adapters are well arranged in a stable plastic case to be readily to hand. You can use the QR code on the case to access the latest vehicle applications. The bleeding unit adapters were selected to especially cover the most frequently registered vehicles, such as: Renault Zoe, VW e-Golf / ID3 / ID4, Tesla Model 3 / Model S, Hyundai Kona, Nissan Leaf, BMW i3 and many more.

**Benefits:**
- Well arranged in a plastic case
- Collection of the most important bleeding unit adapters for most electric and hybrid vehicles

**Shipment:**
- Plastic case
- Bleeding unit adapters:
  - No. 11A = 03.9302-0921.2 / 740114
  - No. 38A = 03.9302-0740.2 / 740042
  - No. 61A = 03.9302-0923.2 / 740116
  - No. 77A = 03.9302-0938.2 / 740220

Order no: 03.9302-0803.3
Short order no: 740336
Mineral oil accessory set

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.

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

Order no: 03.9302-0720.3
Short order no: 740232

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
ATE 90° adapter with bleeding hose

Order no: 03.9302-0541.3
Short order no: 750014

The ATE 90° bleeding hose is a helpful accessory for bleeding in tight spaces. Thanks to its short design, the adapter is only 19 mm in size and allows brake fluid to be removed in spots which are difficult to access.

Benefits: No bending of the hose

Shipment: Adapter with 2-ear pinch clamp and hose - completely assembled.

ATE 90° adapter spare part

<table>
<thead>
<tr>
<th>Order no</th>
<th>03.9302-0540.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short order no</td>
<td>750013</td>
</tr>
</tbody>
</table>

Bleed hose

Order no: 03.9302-0538.1
Short order no: 750008

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 |
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

Filling gun

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.

Order no: 03.9302-0792.2
Short order no: 740323
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

La botella de aspiración ATE se usa para aspirar el líquido de frenos del depósito de compensación. Antes de cambiar el líquido de frenos o de purgar el sistema de frenos hidráulico debe aspirarse el líquido de frenos viejo sin depurar el depósito de compensación para que las impurezas no se dispersen por todo el sistema de frenos. Después del cambio de líquido de frenos o del proceso de purga de aire debe bajarse el nivel de líquido de frenos hasta la marca MAX con la ayuda de la botella de aspiración.

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.

Shipment: 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 without removing the wheel

Shipment: 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 and 20 liter ATE brake fluid cans.

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

Order no: 03.9314-5840.3
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, 60 and 200-liter barrels without spilling, using a 700 mm outlet hose.

Order no: 03.9314-5950.3
Short order no: 760071
Disposal equipment
Brake fluid disposal unit
System 220

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

**Shipment:**
- 220-liter storage container
- 2.2-liter collection container

Order no: 03.9302-0504.3
Short order no: 750001

Disposal unit plug with connector

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.

**Technical data:**

| Outside diameter: | 69.5 mm |

Order no: 03.9302-0522.1
Short order no: 750011
Brake fluid disposal unit
System 222

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

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

Order no: 03.9302-0506.3
Short order no: 750002

Dual drainage connector

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.

Order no: 03.9302-0521.2
Short order no: 750007
Brake fluid disposal unit
System 224

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

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

Order no: 03.9302-0508.3
Short order no: 750003

Quadruple drainage connector

Spare part for ATE brake fluid disposal system 224
Upgrading a System 220 or 222 to four collection containers

Benefits: 4 collection containers can be connected to the 220 liter storage container at the same time and drained.

Order no: 03.9302-0520.2
Short order no: 750006
2,2-liter collection container

Spare part for all ATE brake fluid disposal systems

**Technical data:**

| Capacity | 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:**

<table>
<thead>
<tr>
<th>Capacity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>220 liters</td>
</tr>
</tbody>
</table>

Order no: 03.9302-0514.2
Short order no: 750004
Special tools for brakes
Workshop cart

Order no: 03.9314-4940.4
Short order no: 760201

With the new ATE workshop cart, all the important tools for professional brake servicing are on hand immediately. The cart has 7 drawers, five of which are equipped with ATE brake tools, while two are available for the storage of further tools. For fast work, the tools are organized in the individual drawers thematically according to their function: cleaning, resetting, flanging of the brake line and measuring/assembly. The ATE tools are held in place ready for access by means of the soft foam inserts. Another advantage of these inserts is that you notice immediately if a tool is missing. The stable working surface of the cart allows smaller jobs to be done directly at the vehicle.
**Shipment.** System inlay drawer 1
- 03.9314-3000.3 Mounting sleeve set
- 03.9310-0016.4 Manual flaring device
- 03.9310-0010.3 Mini tube cutter
- 03.9310-0021.3 ATE tube deburrer
- 03.9310-0010.1 Brake tube bending tool
- 03.9314-0050.3 Drive screw set
- 03.9314-0100.3 Hexagon socket bit set with ring ratchet spanner
- 03.9314-5972.3 ATE LED worklight
- 03.9314-4941.1 Inlay empty 342x519x35 mm

System inlay drawer 2
- 03.9310-0060.3 Brake hose clip
- 03.9314-4950.3 Piston resetting tool
- 03.9314-4960.3 Pneumatic piston resetting tool set (Comprising: Pneumatic piston resetting tool
  03.9314-4961.2, Universal adapter 2 pin
  03.9314-4962.2, Universal adapter 3 pin
  03.9314-4963.2)
- 03.9314-4942.1 Inlay empty 342x519x35 mm

System inlay drawer 3
- 03.9314-1320.3 Special wire brush
- 03.9314-1395.1 Honing brush ATE
- 03.9314-1396.1 Honing brush Lucas
- 03.9314-1300.3 Brake caliper shaft file
- 03.9314-1343.4 Wheel hub cleaning set 2.1
- 03.9314-1370.4 Wheel hub cleaning set 4
- 03.9314-4943.1 Inlay empty 342x519x35 mm

System inlay drawer 4
- 03.9301-0200.1 Test card for magnetic sensor wheels
- 03.9314-0011.3 Digital brake disc vernier
- 03.9304-0034.2 Dial gauge
- 03.9314-0019.2 Magnetic dial gauge bracket
- 03.9314-0022.1 Straight edge
- 03.9314-5750.3 Brake spring pliers
- 03.9309-0080.3 Locking brake cable spring pliers
- 03.9309-0090.3 Spring assembly pliers
- 03.9314-4944.1 Inlay empty 342x519x35 mm

System inlay drawer 5
- 03.9309-0051.3 Spring fitting tool
- 03.9310-0050.3 Brake line key set
- 03.9314-1500.3 Bleeding key set
- 03.9312-0100.4 Pedal arresting device
- 03.9314-4945.1 Inlay empty 342x519x35 mm

---

**ATE service trolley system inlay 1**

![ATE service trolley system inlay 1](image)

Order no: 03.9314-4941.2
Short order no: 760215

This system inlay keeps all the important tools you need for flaring brake tubes on hand. The ATE tools are held in place ready to use by the soft foam inlays. Another advantage of the inlays is that you notice immediately if a tool is missing.

**Shipment:**
- 03.9314-3000.3 Mounting sleeve set
- 03.9310-0016.4 Manual flaring device
- 03.9310-0010.3 Mini tube cutter
- 03.9310-0021.3 ATE tube deburrer
- 03.9310-0010.1 Brake tube bending tool
- 03.9314-0050.3 Drive screw set
- 03.9314-0100.3 Hexagon socket bit set with ring ratchet spanner
- 03.9314-5972.3 ATE LED worklight
- 03.9314-4941.1 Inlay empty 342x519x35 mm
ATE service trolley system inlay 2

This system inlay keeps all the important tools you need for resetting on hand. The ATE tools are held in place ready to use by the soft foam inlays. Another advantage of the inlays is that you notice immediately if a tool is missing.

**Shipment:**
- 03.9310-0060.3 Brake hose clip
- 03.9314-4950.3 Piston resetting tool
- 03.9314-4960.3 Pneumatic piston resetting tool set
  (Comprising: Pneumatic piston resetting tool
  03.9314-4961.2, Universal adapter 2 pin
  03.9314-4962.2, Universal adapter 3 pin
  03.9314-4963.2)
- 03.9314-4942.1 Inlay empty 342x519x35 mm

Order no: 03.9314-4942.2
Short order no: 760216

ATE service trolley system inlay 3

This system inlay keeps all the important tools you need for cleaning on hand. The ATE tools are held in place ready to use by the soft foam inlays. Another advantage of the inlays is that you notice immediately if a tool is missing.

**Shipment:**
- 03-9314-1320-3 Special wire brush
- 03.9314-1395.1 Honing brush ATE
- 03.9314-1396.1 Honing brush Lucas
- 03-9314-1300-3 Brake caliper shaft file
- 03.9314-1343.4 Wheel hub cleaning set 2.1
- 03.9314-1370.4 Wheel hub cleaning set 4
- 03.9314-4943.1 Inlay empty 342x519x35 mm

Order no: 03.9314-4943.2
Short order no: 760217
ATE service trolley system inlay 4

This system inlay keeps all the important tools you need for measurement on hand. The ATE tools are held in place ready to use by the soft foam inlays. Another advantage of the inlays is that you notice immediately if a tool is missing.

**Shipment:**
- 03.9301-0200.1 Test card for magnetic sensor wheels
- 03.9314-0011.3 Digital brake disc vernier
- 03.9304-0034.2 Dial gauge
- 03.9314-0019.2 Magnetic dial gauge bracket
- 03.9314-0022.1 Straight edge
- 03.9314-6750.3 Brake spring pliers
- 03.9309-0080.3 Locking brake cable spring pliers
- 03.9309-0090.3 Spring assembly pliers
- 03.9314-4944.1 Inlay empty 342x519x35 mm

Order no: 03.9314-4944.2  
Short order no: 760218

ATE service trolley system inlay 5

This system inlay keeps all the important tools you need for fitting on hand. The ATE tools are held in place ready to use by the soft foam inlays. Another advantage of the inlays is that you notice immediately if a tool is missing.

**Shipment:**
- 03.9309-0051.3 Spring fitting tool
- 03.9310-0050.3 Brake line key set
- 03.9314-1500.3 Bleeding key set
- 03.9312-0100.4 Pedal arresting device
- 03.9314-4945.1 Inlay empty 342x519x35 mm

Order no: 03.9314-4945.2  
Short order no: 760218
Pneumatic piston return device set

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 right-hand 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 preset 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

Shipment:
- Pneumatic resetting device (03.9314-4961.3)
- Universal Adapter 2 Pin (03.9314-4962.2)
- Universal Adapter 3 Pin (03.9314-4963.2)

**Technical data:**

<table>
<thead>
<tr>
<th>Universal Adapter: 2 Pin</th>
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</thead>
<tbody>
<tr>
<td>Pin diameter: 4 mm</td>
</tr>
<tr>
<td>Pin height: 3 mm</td>
</tr>
<tr>
<td>Pin distance min: 11.2 mm</td>
</tr>
<tr>
<td>Pin distance max: 29.7 mm</td>
</tr>
<tr>
<td>Housing diameter: 47 mm</td>
</tr>
<tr>
<td>Housing height: 10.5 mm</td>
</tr>
</tbody>
</table>
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

Shipment:
- 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

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!

Order no: 03.9314-4960.3
Short order no: 760049

Piston turning tool

The ATE piston turning tool is used to turn pistons with a shoulder to the correct position 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: 03.9314-6700.3
Short order no: 760064
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

Technical data:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length 1</td>
<td>150 mm</td>
</tr>
<tr>
<td>Length 2</td>
<td>260 mm</td>
</tr>
<tr>
<td>Wide</td>
<td>12 mm</td>
</tr>
<tr>
<td>Height</td>
<td>6 mm</td>
</tr>
</tbody>
</table>
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.

Benefits:
- For cleaning brake calipers
- High cleaning capacity due to strong wire bristles
- Narrow construction for narrow brake caliper cylinders
- Length 225 mm

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

Special brass wire brush

Before new brake pads are installed, the pad contact surfaces on the brake calipers and mounts must be polished bare. Soiling on aluminum brake calipers can be removed using the ATE special brass wire brush.

Benefits:
- For cleaning aluminum brake calipers
- Soft brass bristles means work goes easy on the material
- Slim version for tight brake caliper shafts
- Length 225 mm

Order no: 03.9314-1321.3
Short order no: 760214
**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

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**Honing brush "LUCAS"**

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 700 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 Plastiube is ideally suited for the permanent lubrication of cleaned guide bushes.

**Security:**
- Maximum speed: 350-700 rpm
- Clockwise operation only
Honing Brush "ATE"

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 700 rpm in clockwise direction (to the right) only. After cleaning the holes in the caliper housing, thinly spread ATE brake cylinder paste 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.

Security:
- Maximum speed: 350-700 rpm
- Run clockwise 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

Shipment:
- 1 holder
- 3 disks

Technical data:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk external diameter</td>
<td>160 mm</td>
</tr>
<tr>
<td>Hole diameter</td>
<td>60 mm</td>
</tr>
</tbody>
</table>

Spare disks, Set 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk external diameter</td>
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<tr>
<td>Hole diameter</td>
<td>60 mm</td>
</tr>
<tr>
<td>Shipments</td>
<td>3 disks</td>
</tr>
</tbody>
</table>

Order no: 03.9314-1331.1  
Short order no: 760125
Wheel hub cleaning set 2.1

The ATE wheel hub cleaning set 2.1 is an ideal tool for fast, safe and economical cleaning of wheel hubs with studs. Due to its positive locking connection between the fixture and cleaning disc, high torques can be transmitted.

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

**Shipment:**
- 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**

| Disk diameter outside: | 40 mm |
| Disk diameter inside: | 13 mm |
| Shipment: | 5 disks |
| Order no | 03.9314-1344.1 |
| Short order no | 760183 |

**Spare disks large Set 2.1**

| Disk diameter outside: | 53 mm |
| Disk diameter inside: | 13 mm |
| Shipment: | 5 disks |
| Order no | 03.9314-1345.1 |
| Short order no | 760184 |
Wheel hub cleaning set 3

The ATE wheel hub cleaning set 3 for large wheel hubs or wheel hubs with a large clooor (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.

Order no: 03.9314-1350.4
Short order no: 760111

Benefits:
- clean the wheel hub quickly
- safe and easy working

Shipment:
- 1 holder
- 2 disks

Technical data:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tr>
<td>Hole diameter</td>
<td>85 mm</td>
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Spare disks, Set 3

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tr>
<td>Disk external diameter</td>
<td>200 mm</td>
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<tr>
<td>Hole diameter</td>
<td>85 mm</td>
</tr>
</tbody>
</table>

Shipment: 2 disks
Order no: 03.9314-1351.1
Short order no: 760128
Wheel hub cleaning set 4

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

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

Technical data:

<table>
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<th>Parameter</th>
<th>Value</th>
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<tr>
<td>Working pressure</td>
<td>6.2 bar</td>
</tr>
<tr>
<td>Noise level</td>
<td>85 dB(A)</td>
</tr>
</tbody>
</table>

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).

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

Car body extension set

Order no: 03.9314-1371.3
Short order no: 760167
Spare brush (fine grain)

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

**Shipment:**
- 4 white spare brushes (small grain)

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

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Spare brush (medium grain)

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

**Shipment:**
- 4 green cleaning brushes (medium grain)

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

---

Spare brush (large grain)

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

**Shipment:**
- 4 purple spare brushes (large grain)

**Order no:** 03.9314-1374.3  
**Short order no:** 760160
Cleaning disc 50 mm black

Order no: 03.9314-1375.3  
Short order no: 760165

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

Technical data:
- Disc diameter: 50 mm

Cleaning disc 75 mm black

Shipment: 4 black cleaning discs (large grain)

Order no 03.9314-1376.3
Short order no 760166

Cleaning disc 50 mm purple

Order no: 03.9314-1377.3  
Short order no: 760167

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

Technical data:
- Disc diameter: 50 mm

Cleaning disc 75 mm purple

Shipment: 4 purple cleaning discs (very large grain)

Order no 03.9314-1378.3
Short order no 760168
Wheel rim flange cleaning set 5

The ATE wheel rim flange cleaning set is an ideal tool that allows you to clean rim contact surfaces quickly, safely and at low cost. It is advisable to clean the contact surface between the wheel rim and the brake disc before fitting. This is the only way to maintain the tight tolerances between wheel rim and brake disc.

The ATE set comprises a backing disc which has been designed for standard drills and a cleaning disc. It can be connected quickly and easily with the backing disc using a Velcro fastening. The cleaning disc has a long service life and can be positioned safely on the wheel rim thanks to the central guide. The cleaning procedure itself only takes a few seconds, depending on the degree of soiling.

**Benefits:**
- Fast cleaning of the wheel rim flange
- Safe and effective work
- Full-surface contact
- Very good cleaning performance
- Pin guide

**Shipment:**
- One backing disc
- One cleaning disc

**Technical data:**

<table>
<thead>
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<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk external diameter</td>
<td>160 mm</td>
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<tr>
<td>Hole diameter</td>
<td>50 mm</td>
</tr>
</tbody>
</table>

**Spare glass set 5**

<table>
<thead>
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<tbody>
<tr>
<td>Shipment</td>
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</tr>
<tr>
<td>Short order no</td>
<td>760222</td>
</tr>
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</table>
Wheel hub cleaning set 6

The wheel hub cleaning set 6 is an ideal tool that allows you to clean wheel hubs with all-round groove quickly, safely and at low cost. Before the brake disc is fitted, not only the contact surface of the wheel hub but also the all-round groove should be cleaned down to the bare metal. This is the only way of complying with mounting tolerances and avoiding brake judder. The wheel hub cleaning set 6 comprises a backing disc which is clamped in the drill and a cleaning disc which is fastened in the backing disc with the aid of a Velcro fastening. The friction ring is adapted precisely to the different wheel hub grooves and allows a fast cleaning procedure thanks to orbital movements. In the next work step, the contact surfaces of the wheel hubs must be cleaned; the suitable wheel hub cleaning set must be used for this, depending on the diameter of the wheel hub groove. The cleaning procedure itself takes only a few seconds per wheel hub. Thanks to the full-surface contact on the wheel hub, the cleaning disc has a long service life.

**Benefits:**
- Fast cleaning of the wheel hub groove
- Safe and simple handling
- Full-surface contact
- Very good cleaning performance
- One tool for all wheel hubs with groove

**Shipment:**
- One backing disc
- One cleaning disc

**Technical data:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk external diameter</td>
<td>160 mm</td>
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<tr>
<td>Hole diameter</td>
<td>95 mm</td>
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<tr>
<td>Outside diameter</td>
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</tbody>
</table>

**Spare glass set 6**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
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<tr>
<td>Order no</td>
<td>03.9314-1335.1</td>
</tr>
<tr>
<td>Short order no</td>
<td>760241</td>
</tr>
</tbody>
</table>
Wheel hub cleaning set 7 (1/2")

Clean the brake disc mounting face on the wheel hub down to the bare metal before mounting the disc. This is the only way of complying with mounting tolerances and avoiding discomfort. ATE’s wheel hub cleaning set 7 is comprised of a back-up pad driven by a customary 1/2" (12.5 mm) impact wrench. A Velcro® strip provides a form-fit link between the cleaning discs and the back-up pad. A special torque trunnion transfers the cleaning forces continuously, at no loss and without slipping through. A centring mechanism fastens the tool on the wheel hub to prevent the tool from slipping off the hub.

The actual cleaning process takes just a couple of seconds per wheel hub, depending on how soiled the hub is. Owing to their full-faced contact and the sturdy friction material, the cleaning discs are extremely durable for their entire long service life.

Benefits:
- Velcro® strip and torque trunnion for fast and safe use of the abrasive wheel
- 12.5 mm (1/2 inch) inner square holding element for pneumatic, battery or mains operated impact wrenches and other tools
- Open-pored abrasive and dish-shaped grinding discs for minimum dust emissions
- No flying sparks

Shipment:
- One back-up pad
- One cleaning disc with torque trunnion

Technical data:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk external diameter</td>
<td>160 mm</td>
</tr>
<tr>
<td>Hole diameter</td>
<td>75 mm</td>
</tr>
</tbody>
</table>

ATE’s wheel hub cleaning set 7 is an ideal tool that allows you to clean the wheel hub of passenger cars efficiently, safely and at low cost.
Wheel hub cleaning set 8

The ATE wheel hub cleaning set 8 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

Shipment:
- 1 holder
- 3 disks

Technical data:

<table>
<thead>
<tr>
<th>Disk external diameter</th>
<th>160 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hole diameter</td>
<td>75 mm</td>
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</table>

Spare disks, Set 8

<table>
<thead>
<tr>
<th>Disk external diameter</th>
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<tr>
<td>Hole diameter</td>
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<tr>
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<td>Order no</td>
<td>03.9314-1339.3</td>
</tr>
<tr>
<td>Short order no</td>
<td>760255</td>
</tr>
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</table>
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 hose 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 anti-fatigue 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

Shipment:
- Compressed air drill
- Quick release chuck
- 1/4” coupling plug
- Hand grip

Technical data:

<table>
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<tr>
<th>Specification</th>
<th>Value</th>
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<tr>
<td>Drill chuck:</td>
<td>3/8&quot;</td>
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<tr>
<td>Weight:</td>
<td>1.85 Kg</td>
</tr>
<tr>
<td>Length:</td>
<td>230 mm</td>
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<tr>
<td>Connecting thread:</td>
<td>1/4&quot;</td>
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<tr>
<td>Air consumption:</td>
<td>200 L/min</td>
</tr>
<tr>
<td></td>
<td>500 L/min</td>
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<tr>
<td>Working pressure:</td>
<td>6.3 bar</td>
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<tr>
<td>Noise level:</td>
<td>80 dB(A)</td>
</tr>
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</table>
Hexagon socket bit set with ring ratchet spanner

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, 9 mm and 11 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

Shipment:
- Ring ratchet spanner
- 4 bits for 6 mm, 7 mm, 8 mm, 9 mm, 11 mm hexagon socket screws

Order no: 03.9314-0101.3
Short order no: 760245

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.

Order no: 03.9314-0030.1
Short order no: 760095

Technical data:

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

<table>
<thead>
<tr>
<th>Technical data</th>
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</thead>
<tbody>
<tr>
<td>Width across flats:</td>
<td>7 mm</td>
</tr>
<tr>
<td>Length (long):</td>
<td>60 mm</td>
</tr>
<tr>
<td>Square drive:</td>
<td>1/2&quot;</td>
</tr>
</tbody>
</table>

Order no: 03.9314-0031.1
Short order no: 760096
Dust boot mounting sleeve

Order no.: 03.9314-4910.1 / 760186
Short order no: 760186

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).

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 mm
- Height: 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

Benefits:
- Damage-free installation of the S-shaped dust boot
- Easy to use
- Fast and safe mounting
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 left or right with no difficulty.

Technical data:

| Span approx.: | 80 mm |

Order no: 03.9309-0030.3
Short order no: 760003
Brake-spring pliers
(medium-size)

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

Spring mounting pliers

The ATE spring mounting pliers allow safe and problem-free 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.
Spring hook

The ATE spring hook is the ideal tool for the straightforward removal and fitting of brake pad retaining springs.

Benefits:
- Makes the fitting and removal of brake pad retaining springs easier
- Ergonomic shape
- Sturdy design
- Reduces work effort
- Simple to operate

Shipment: 1 piece

Order no: 03.9309-0052.3
Short order no: 760242

Technical data:

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<th></th>
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<td>200 mm</td>
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<tr>
<td>Width</td>
<td>90 mm</td>
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</table>

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
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
ATE brake tube straightening tool 4.75 mm (3/16)

The ATE brake tube straightening tool is the ideal tool for straightening brake tube lines with a diameter of 4.75 mm (3/16). The brake tube line is generally delivered by the meter on a roll. Thanks to the brake tube straightening tool, the brake tube line can be prepared efficiently for laying. Vehicle contours can be transmitted more easily on the basis of a straight brake tube line. The tool is extremely easy to use; the curved brake tube line is simply routed through the tool. The result is a straightened brake tube line which can be adapted perfectly to vehicle characteristics.

Benefits:
- Makes the installation of brake tube lines easier and reduces the amount of work involved
- Simple to use
- Professional result
- Less material consumption and waste

Order no: 03.9310-0035.3  
Short order no: 760213

ATE brake tube straightening tool 6 mm

The ATE brake tube straightening tool is the ideal tool for straightening brake tube lines with a diameter of 6 mm. The brake tube line is generally delivered by the meter on a roll. Thanks to the brake tube straightening tool, the brake tube line can be prepared efficiently for laying. Vehicle contours can be transmitted more easily on the basis of a straight brake tube line. The tool is extremely easy to use; the curved brake tube line is simply routed through the tool. The result is a straightened brake tube line which can be adapted perfectly to vehicle characteristics.

Benefits:
- Makes the installation of brake tube lines easier and reduces the amount of work involved
- Simple to use
- Professional result
- Less material consumption and waste

Order no: 03.9310-0036.3  
Short order no: 760239
Handheld pipe flaring tool

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 E 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.

Shipment:
- 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

Order no: 03.9310-0016.4
Short order no: 760165

Professional dual pipe-flaring tool

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

Shipment:
- 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

Order no: 03.9310-0001.4
Short order no: 760012
Ratchet pipe cutter 4.75mm

The ATE ratchet pipe cutter is an ideal tool for professionally cutting brake pipes with a diameter of 4.75 mm. Thanks to its compact design and ratchet function, it can be used directly at the vehicle even where space is very tight. The automatic readjustment function means there is no need to retighten the cutting wheel during the cutting process. Only a little force is necessary thanks to the additional leverage provided by the handle length.

Benefits:
- Automatically readjusting pipe cutter with ratchet
- Ideal where space is tight
- Little force required thanks to lever effect
- Ergonomically shaped handle

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
ATE pipe deburring tool

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.

Order no: 03.9310-0021.3
Short order no: 760181

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

Shipment: Pipe deburring tool

<table>
<thead>
<tr>
<th>Technical data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing length:</td>
</tr>
<tr>
<td>Housing material:</td>
</tr>
<tr>
<td>Blade material:</td>
</tr>
<tr>
<td>Brake pipe inside Ø:</td>
</tr>
<tr>
<td>Brake pipe outside Ø:</td>
</tr>
</tbody>
</table>

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
- Alignment of the pipe screw connections
- Holding the brake pipe while it is being cut

Order no: 03.9310-0040.3
Short order no: 760028
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

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
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.

Shipment:
- 6 double ring wrenches
- 8 + 10, 10 + 11, 11 + 13, 12 + 14 mm,
- 3/8" + 7/16", 1/2" + 9/16"  

Order no: 03.9310-0060.3  
Short order no: 760027

ATE spezial grip pliers

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

Shipment: ATE spezial grip pliers

<table>
<thead>
<tr>
<th>Technical data:</th>
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<tbody>
<tr>
<td>Overall length:</td>
<td>175 mm</td>
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<tr>
<td>Length:</td>
<td>11,5 mm</td>
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<tr>
<td>Height:</td>
<td>7,5 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>180 g</td>
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</tbody>
</table>
10 mm reamer for ABS sensor mount

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

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

Hint. To prevent corrosion in the mounting hole, it is advisable to thinly spread ATE Plastilube over it.
11 mm reamer for ABS sensor mount

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 Octavia 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

Shipment: 11 mm reamer

Hint: To prevent corrosion in the mounting hole, it is advisable to thinly spread ATE Plastilube over it.
15 x 23 mm reamer for ABS sensor mount

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

Order no: 03.9301-0006.3
Short order no: 760163
18 x 23 mm reamer for ABS sensor mount

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 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.

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

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

Order no: 03.9301-0007.3
Short order no: 760164
Reamer 18 x 34 mm for ABS sensor mount, special length for VAG vehicles

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:** To prevent corrosion in the mounting hole, it is advisable to thinly spread ATE Plastilube over it.
Manual impact screwdriver set

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 detaches 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

Shipment: 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

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

Mounting sleeve set

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

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

Order no: 03.9314-0050.3
Short order no: 760170

Order no: 03.9314-3000.3
Short order no: 760172

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

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 Caliper repair case

Order no: 11.0109-9001.3
Short order no: 250158

The brake caliper repair case is intended for repair and maintenance of guide elements on the ATE brake caliper. The case contains all 118 ATE original parts and is sufficient for the repair of up to 20 brake calipers. The parts for brake caliper repairs are arranged in an assortment case and thus kept handy for caliper repairs. The labeling of the individual case compartments simplifies re-ordering of the components parts. The case is delivered with 2 honing brushes (ATE and Lucas) for guideway cleaning. The repair parts can be used for all motor vehicles with ATE sliding calipers.

Shipment initial set

Guide pin
8 x 11.8171-0067.1
16 x 11.8171-0069.1 (replaces -0008.1)
4 x 11.8171-0072.1
4 x 11.8171-0096.1
2 x 11.0103-0001.2 (repair set)
2 x 11.0103-0002.2 (repair set)

Protective caps
10 x 11.8190-0067.1
10 x 11.8190-0157.2
10 x 11.8190-0751.1

Guide bushes
8 x 11.8171-0015.2
8 x 11.8171-0022.1
8 x 11.8171-0061.2
4 x 11.8171-0065.2
8 x 11.8171-0068.1
8 x 11.8171-0073.2
8 x 11.8171-0082.1

Honing brushes
1 x 03.9314-1395.1
1 x 03.9314-1396.1

Hint: For ATE part numbers see product information in the lid of the case. Use these numbers for component reordering. In order to facilitate finding the vehicle type in the catalog, the product information also lists the repair set item number for each component part. This way the case can be used universally.
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

Shipment:
- Chassis tester

Technical data:

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<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Length 1:</td>
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<td>Test surface diameter:</td>
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Brake pad adhesive film

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 mileage.

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 mileage

**Benefits:**
- Effective suppression of rattling / clacking noises of the brake pad in older vehicles
- Universal use

**Shipment:**
- 4 films for one vehicle axle

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ATE magnetic cup set

The ATE magnetic cup set is a practical helper for the workshop. With a 80 mm rubber-coated magnet and a holding force of approx. 2.5 kg, the magnetic cups are ideal for storing consumables directly at the workstation e.g. on workshop trolleys and lifting platforms. The magnet not only holds the cups in place, it also keeps magnetic consumables in place in the cup. The bevelled housing shape also makes the storage of non-magnetic parts possible. The generous housing opening enables good visibility and easy removal of parts.

**Benefits:**
- Durable plastic
- Holding force approx. 2.5 kg for attachment on workshop trolleys, lifting platforms etc.
- Housing opening enables good visibility and easy removal of parts
- Optimised, bevelled housing shape
- Diameter: 150 mm

**Shipment:**
- 2 pcs. magnetic cups

**Hint:**

**Technical data:**

<p>| | |</p>
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<tr>
<td><strong>Weight:</strong></td>
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<td><strong>Diameter:</strong></td>
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ATE knee pad

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.

Order no: 03.9314-5970.3
Short order no: 760199

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 reservoir 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
Brake hose clamp

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 12 mm) prevents damage to the brake hose.
- Stainless Steel

Security:
- Always use the hose clamp in the middle of the brake hose.
- When work is complete, make sure that you remove the hose clamp!

Order no: 03.9310-0060.3
Short order no: 760028

ATE flexible hook set

The ATE flexible hook is a great help in many situations. You can use the ATE flexible hook during brake repairs, for example, to fix the calliper safely to the strut. This takes the pressure off the brake tube and prevents damage. Thanks to its clear signal colour, the tool will not be forgotten after repairs have been finished either. In addition, holders and supports can be bent easily thanks to the flexible design.

Benefits:
- Universal use
- Flexible design
- Signal colour
- Relieves pressure on the brake hose
- Simple to use

Order no: 03.9314-5974.1
Short order no: 760243

Shipment: 2 pcs. flexible hook
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

**Shipment:** 180 g tube.

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

<table>
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<td>Contents: 180 g</td>
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Order no: 03.9902-0510.2  
Short order no: 700019

ATE Plastilube 75 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.

**Shipment:** 12 tubes each holding 75 ml in display package

**Hint:** Caution: Do not apply on brake pad friction surfaces

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Order no: 03.9902-1002.2  
Short order no: 700015

ATE Plastilube 35 ml

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Bleeding unit adapters list
ate-info.de
Spare parts list
ate-info.de