INSTRUCTION MANUAL

REMS POWER-PRESS SE
REMS POWER-PRESS
REMS POWER-PRESS ACC
REMS AKKU-PRESS
REMS AKKU-PRESS ACC
REMS MINI-PRESS ACC
REMS AX-PRESS 25 ACC
REMS AX-PRESS 25 L ACC
REMS AX-PRESS 40
REMS AKKU-EX-PRESS P
REMS AKKU-EX-PRESS P ACC
REMS AKKU-EX-PRESS CU ACC
REMS POWER-EX-PRESS Q & E ACC
REMS AKKU-EX-PRESS Q & E ACC
b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool’s operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Battery tool use and care
a) Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

b) Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

d) Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

6) Service
a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Safety instructions for presses

WARNING
Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

- Hold the power tool firmly by the housing grip (6) and pistol grip (9) and make sure you are standing firmly when working. The power tool produces a very high pressing force. It is safer to hold the tool with both hands. Therefore be very careful. Keep children and bystanders away while operating the power tool.

- Do not reach into moving parts in the pressing area/expanding area. There is a risk of crushing fingers or hands.

- Never operate radial presses with the tang retaining bolt unlocked (2). There is a risk of fracture and flying parts can cause serious injuries.

- Always position the radial press with pressing tongs, Mini pressing tongs, pressing ring with adapter tongs on the press fitting at a right angle to the pipe axis. If the radial press is positioned askew to the pipe axis, its high drive force will pull it to a right angle to the pipe axis. This could crush hands or other parts of the body and/or there is a risk of fracture whereby flying parts can cause serious injuries.

- Do not start radial presses without pressing tongs, Mini pressing tongs or pressing ring with adapter tongs. Do not start the pressing process except to make a press joint. Unless counter pressure is applied by the press fitting, the drive unit, pressing tongs, Mini pressing tongs, pressing ring and adapter tongs will be needlessly stressed.

- Before using pressing tongs, pressing rings with adapter tongs (pressing jaws, pressing slings with adapter jaws) from other manufacturers, check whether these are suitable for the REMS radial presses. Pressing tongs, pressing rings with adapter tongs of other makes can be used in REMS Power­Press, REMS Power­Press E, REMS Power­Press ACC, REMS Akku­Press and REMS Akku­Press ACC if they are designed for the necessary thrust force of 32 kN, fit mechanically in the REMS drive unit, can be properly locked and break without danger, e.g. without the risk of flying parts of the press jaws, at the end of their life or when overloaded. It is recommended to only use pressing tongs, pressing rings with adapter tongs which are designed with a safety factor ≥ 1.4 against permanent fracture, i.e. withstand a necessary thrust force of 32 kN up to a thrust force of 45 kN. Also read and observe the instruction manuals and safety instructions of the respective manufacturer/supplier of the pressing tongs, pressing rings with adapter tongs and the installation and assembly instructions of the manufacturer. Supplier of the press fitting system to be pressed and observe any restrictions for use that are specified there. Failure to do so could lead to fracture and flying parts can cause serious injuries.

- Always screw expanding heads as far as they will go onto the expander. Failure to do so could lead to fracture and flying parts can cause serious injuries.

- Use only undamaged pressing tongs, Mini pressing tongs, pressing rings, adapter tongs, pressing heads and expanding heads. Damaged pressing tongs, Mini pressing tongs, pressing rings, adapter tongs, pressing heads and expanding heads can jam or fracture and/or the press fitting will be faulty. Do not attempt to repair damaged pressing tongs. Mini pressing tongs, pressing rings, adapter tongs, pressing heads and expanding heads. Failure to do so could lead to fracture and flying parts can cause serious injuries.

- Pull out the plug or remove the battery before assembly/disassembly of pressing tongs, Mini pressing tongs, pressing rings, adapter tongs, pressing heads and expanding heads. There is a risk of injury.

- Comply with the maintenance regulations for the power tool and follow the maintenance instructions for pressing tongs, Mini pressing tongs, pressing rings, adapter tongs, pressing heads and expanding heads.

- Check the accessories and any extension cable of the power tool regularly. Have these renewed by qualified experts or an authorised REMS customer service workshop in case of damage.

- Only allow trained persons to use the power tool. Apprentices may only use the power tool when they are over 16, when they are supervised by a trained operative.

- These power tools are not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the power tool by a person responsible for their safety. Children must be supervised to ensure that they do not play with the power tool.

Judicious application, regular inspection and maintenance of the pressing tools and their accessories are critical to their proper operation. In the event of accidents or failures, these are caused by poorly maintained power tools.

There is a risk of injury.

- Safe hands are well protected from the risk of fracture.

- Any accessory that is not suitable for the tool is dangerous. It is recommended to use accessories which are approved by REMS.

- Only use identical replacement parts. This will ensure that the safety of the power tool is maintained.

- Use eye protection

- Read the operating manual before starting

- Use ear protection
1. Technical Data

Intended use

REM® radial presses are intended for the purpose of making press joints of all
common pressfitting systems.

REM® cropping tongs are intended for the purpose of cropping threaded bars up to
the strength class 4.8 (400 N/mm²).

REM® cable shears are intended for the purpose of cropping electric cables
≤ 300 mm² (Ø 30 mm).

REM® axial presses are intended for the purpose of making compression sleeve
connections.

REM® pipe expanders are intended for the purpose of expanding and calibrating
pipes.

REM® batteries are intended for supplying energy to the REM® cordless drive units
and the REM® cordless LED lamp.

Rapid chargers are intended for charging the REM® batteries.

All other uses are not for the intended purpose and are prohibited.

1.1. Article numbers

Cordless presses/pipe expanders: Drive unit, Li-Ion battery, Li-Ion/Ni-Cd rapid
charger, instruction manual, sheet steel case

Electrical radial presses/pipe expanders: Drive unit, instruction manual, sheet
steel case

1.2. Article numbers

REM® Power-Press SE drive unit 572101
REM® Power-Press drive unit 577001
REM® Power-Press ACC drive unit 576000
REM® Mini-Press ACC drive unit Li-Ion 578001
REM® Akku-Press drive unit Li-Ion 571003
REM® Akku-Press ACC drive unit Li-Ion 571004
REM® Ax-Press 25 ACC drive unit Li-Ion 573000
REM® Ax-Press 25 ACC drive unit Li-Ion 573004
REM® Ax-Press 40 drive unit Li-Ion 573004
REM® Akku-Press Cu ACC drive unit Li-Ion 575006
REM® Akku-Press P drive unit Li-Ion 575009
REM® Akku-Press ACC P drive unit Li-Ion 575000
REM® Akku-Press Q & E ACC drive unit Li-Ion 575005
REM® Power-Press Q & E ACC drive unit Li-Ion 575007
EXPANDING DEVICE Ø 1/0 – 1¼"

1.3. Capacity

REM® Mini-Press ACC radial press for making press joints in all
standard press fitting systems on steel pipes, stainless steel
pipes, copper pipes, plastic pipes, composite pipes
Ø 10 – 40 mm
Ø 3/4 – 1 1/2"

Radial presses REM® Power-Press / Power-Press ACC and
REM® Akku-Press / Akku-Press ACC for making press joints in all
standard press fitting systems on steel pipes, stainless steel
pipes, copper pipes, plastic pipes, composite pipes
Ø 10 – 108 mm
Ø 3/4 – 4"

Axial presses for making compression sleeve joints (sliding
sleeve joints) on stainless steel pipes, steel pipes, copper
pipes, plastic pipes, composite pipes
Ø 12 – 40 mm
Ø 1 1/2 – 2"

REM® Akku-Press Q & E ACC for expanding of
pipes/coll for the system Uponor Quick & Easy
Ø 16 – 40 mm
Ø 3/4 – 1 1/2"

REM® Power-Press Q & E ACC for expanding of
pipes/coll for the System Uponor Quick & Easy
Ø 16 – 63 mm
Ø 3/4 – 2"

REM® Akku-Press Cu ACC for expanding and
calibrating copper pipes
Ø 8 – 42 mm
Ø 3/4 – 1 1/2"

REM® Akku-Press P and REM® Akku-Press P ACC
for widening plastic pipes, composite pipes
Ø 12 – 40 mm

1.4. Thrust

Thrust of radial presses, without Mini radial press
32 kN
Thrust REM® Mini-Press ACC
22 kN
Thrust REM® Akku-Press 25 ACC
20 kN
Thrust REM® Akku-Press 25 L ACC
13 kN
Thrust REM® Ax-Press 40
30 kN
Thrust REM® Akku-Press Cu ACC / P / P ACC / Q & E ACC
20 kN
Thrust REM® Power-Press Q & E ACC
34 kN

The specified forces are nominal forces.

1.5. Electric Data

REM® Power-Press SE
230 V 1~; 50 – 60 Hz; 450 W; 1.8 A
REM® Power-Press
110 V 1~; 50 – 60 Hz; 450 W
REM® Power-Press ACC
S3 20% (AB 2/10 min)
REM® Power-Press Q & E ACC
all-insulated, interference-suppressed
REM® Mini-Press ACC
REM® Akku-Press 25 ACC/25 L ACC
REM® Akku-Press Cu ACC
14.4 V = 1.6 Ah
REM® Akku-Press P
14.4 V = 3.2 Ah
REM® Akku-Press P ACC
REM® Akku-Press Cu ACC
REM® Power-Press Q & E ACC
REM® Akku-Press ACC
14.4 V = 3.2 Ah

Rapid charger Li-Ion/Ni-Cd
Input
230 V—50 – 60 Hz; 65 W
Output
10.8 – 18 V =
100 – 120 V—50 – 60 Hz; 65 W
Output
10.8 – 18 V =

Voltage supply
230 V—50 – 60 Hz
Output
4.4 V = 6 A – 33 A

1.6. Dimensions

REM® Power-Press SE
430×118×85 mm (16.9”×4.6”×3.3”)
REM® Power-Press
365×235×65 mm (14.4”×9.2”×3.3”)
REM® Mini-Press ACC
289×260×80 mm (11.3”×10.2”×3.1”)
REM® Akku-Press, Akku-Press ACC
338×290×85 mm (13.3”×11.4”×3.3”)
REM® Power-Press 25 ACC
295×260×80 mm (11.6”×10.3”×3.1”)
REM® Power-Press 25 L ACC
325×260×80 mm (12.8”×10.3”×3.1”)
REM® Power-Press 40
330×320×85 mm (13”×12.6”×3.3”)
REM® Akku-Press Cu ACC
265×260×80 mm (10.4”×10.3”×3.1”)
REM® Akku-Press P
Akku-Press P ACC
275×260×80 mm (10.8”×10.3”×3.1”)
REM® Akku-Press Q & E ACC
290×260×80 mm (11.4”×10.3”×3.1”)
REM® Power-Press Q & E ACC
420×245×81 mm (16.5”×9.6”×3.2”)

1.7. Weights

REM® Power-Press SE drive unit
7.9 kg (17.3 lb)
REM® Power-Press ACC drive unit
6.6 kg (14.5 lb)
REM® Mini-Press ACC drive unit without battery
2.1 kg (4.5 lb)
REM® Akku-Press / ACC drive unit without battery
3.8 kg (8.3 lb)
REM® Akku-Press Cu ACC drive unit without battery
2.6 kg (5.6 lb)
REM® Akku-Press 25 ACC drive unit without battery
2.8 kg (6.1 lb)
REM® Akku-Press 25 L ACC drive unit without battery
5.4 kg (11.8 lb)
REM® Akku-Press Cu ACC drive unit without battery
2.3 kg (5.0 lb)
REM® Akku-Press P / ACC drive unit without battery
2.0 kg (4.4 lb)
REM® Akku-Press Q & E ACC drive unit without battery
2.0 kg (4.4 lb)
REM® Power-Press Q & E ACC drive unit
5.6 kg (12.2 lb)
REM® battery Li-Ion 14.4 V, 1.6 Ah
0.3 kg (0.6 lb)
REM® battery Li-Ion 14.4 V, 3.2 Ah
0.5 kg (1.1 lb)
Pressing tongs (average)
1.8 kg (3.9 lb)
Pressing tongs Mini (average)
1.2 kg (2.6 lb)
Pressing heads (pair, average)
0.3 kg (0.6 lb)
Expanding head (average)
0.2 kg (0.4 lb)
Adapter tong 22
2.0 kg (4.4 lb)
Adapter tong 24
3.6 kg (8.0 lb)
Adapter tong 25
3.8 kg (8.2 lb)
Pressing ring M54 (PR-3S)
3.1 kg (6.7 lb)
Pressing ring U75 (PR-3B)
2.7 kg (6.0 lb)

1.8. Noise information

Emission at workplace
REM® Power-Press SE
LpA = 76 dB
LWA = 87 dB
K = 3 dB
REM® Power-Press
LpA = 81 dB
LWA = 92 dB
K = 3 dB
REM® Mini-Press ACC
LpA = 74 dB
LWA = 85 dB
K = 3 dB
REM® Akku-Press /ACC
LpA = 74 dB
LWA = 85 dB
K = 3 dB
REM® Akku-Press Cu ACC
LpA = 74 dB
LWA = 85 dB
K = 3 dB
REM® Akku-Press P /ACC
LpA = 73 dB
LWA = 84 dB
K = 3 dB
REM® Akku-Press Q & E ACC
LpA = 73 dB
LWA = 84 dB
K = 3 dB
REM® Power-Press Q & E ACC
LpA = 81 dB
LWA = 92 dB
K = 3 dB

REM® Akku-Press Cu ACC
LpA = 74 dB
LWA = 85 dB
K = 3 dB
REM® Akku-Press P /ACC
LpA = 73 dB
LWA = 84 dB
K = 3 dB
1. Electrical connection

The specified vibration emission value was measured according to a standard test method and can be used for comparison with another power tool. The specified vibration emission value can also be used for an initial estimation of the cut-out.

**CAUTION**
The vibration emission value may differ from the specified value during actual use of the power tool depending on the manner in which the power tool is used. Dependent upon the actual conditions of use (periodic duty) it may be necessary to establish safety precautions for the protection of the operator.

2. Preparations for Use

The respective latest sales literature applies for the use of REMS pressing tongs, REMS Mini pressing tongs, REMS pressing rings with adapter tongs, REMS pressing heads and REMS expanding heads for the different pipe connection systems, see also www.rems.de — Downloads — Product Catalogues, Brochures. If the system manufacturer alters components of pipe connection systems or markets new ones, their current application status must be enquired about at REMS (Fax +49 7151 17 07 - 110 or e-mail info@rems.de). Subject to change and error.

2.1. Electrical connection

**WARNING**
Note the mains voltage! Before connecting the drive unit or the rapid charger, check whether voltage on the rating plate matches the mains voltage. On building sites, in a wet environment or for similar types of application, only operate the power tool on the mains via a 30 mA fault current protection (FI switch). Observe the cross-section necessary for the output of the power tool when using an extension cable.

Rechargeable batteries

**NOTICE**
Always hold the battery (25) upright when inserting it in the drive unit or the rapid charger. If inserted at an angle it can cause damage to the contacts and result in a short circuit which damages the battery.

Total discharging by undervoltage

The Li-Ion batteries may not drop below a minimum voltage because otherwise the battery could be damaged by "total discharge". The cells of the REMS Li-Ion battery are prepared to charged to approx. 40 %. Therefore the Li-Ion batteries must be charged before use and recharged regularly. Failure to observe this regulation of the cell manufacturer can lead to damage to the Li-Ion battery by total discharging.

Total discharging due to storage

If a relatively low charged Li-Ion battery is stored, self discharging can lead to total discharge damage of the battery after longer storage. Li-Ion batteries must therefore be charged before storing and recharged every six months at the latest and charged again before use.

**NOTICE**
Charge the battery before use. Recharge Li-Ion batteries regularly to avoid their total discharge. The rechargeable battery will be damaged by total discharge.

Only use a REMS rapid charger for charging. New Li-Ion batteries and Li-Ion batteries which have not been used for a long time only reach full capacity after several charges. Non-rechargeable batteries may not be charged.

Battery charging status check for all Li-Ion cordless presses

All REMS cordless presses made as of 2011-01-01 are equipped with an electronic battery charging status check with battery charge indication by a 2-coloured green/red LED (23). The LED lights green when the battery is fully or still sufficiently charged. The LED lights red when the battery must be charged. If this condition occurs during pressing and the pressing process is not finished, the pressing must be completed with a fully charged Li-Ion battery. If the drive unit is not used, the LED goes out after approx. 2 hours but comes on again when the drive unit is switched back on.

Rapid charger Li-Ion/NiCd (Art. No. 571560)
The left control lamp lights up and remains green when the mains plug is plugged in. If a battery is inserted in the rapid charger, the green control lamp flashes to indicate that the battery is charging. The green light stops flashing and remains on to signal that the battery is fully charged. If the red control lamp flashes, the battery is defective. If the red control lamp comes on and remains on, this indicates that the temperature of the rapid charger and / or the battery is outside the permissible operating range of the rapid charger of 0°C to +45°C.

**NOTICE**
The rapid chargers are not suitable for outdoor use.

2.2. Installing (changing) the pressing tong, pressing tong Mini (Fig. 1 (1)), pressing tong (4G) (Fig. 14), pressing tong (5) (Fig. 15), the pressing ring (PR-3S) with adapter tong (Fig. 16), the pressing ring (PR-3B) with adapter tong (Fig. 17) in radial presses

Pull out the mains plug or remove the battery. Only use pressing tongs, pressing tong Mini or pressing rings with system-specific pressing contour according to the press fitting system to be pressed. Pressing tongs, pressing tongs Mini or pressing rings have letters on the pressing jaws or pressing segments to identify the pressing contour and a number to identify the size. The adapter tongs are marked by the letter Z and a number which serves for assignment to the permissible pressing ring which carries the same identification. Read and observe the installation and assembly instructions of the manufacturer/supplier of the press fitting system to be pressed. Never use non-matching pressing tong, pressing tong Mini, pressing ring and adapter tong (pressing contour, size). The press joint could be rendered useless and the machine and pressing tong, pressing tong Mini, pressing ring and adapter tong could be damaged.

It is best to place the drive machine on a bench or on the floor. The pressing tong, pressing tong Mini or adapter tong can only be installed (changed) when the press rollers (5) are fully retracted. On REMS Power-Press SE push the rotation direction lever (7) to the left and actuate the safely inching switch (6) if necessary. On REMS Mini-Press, REMS Power-Press / REMS Power-Press ACC and REMS Akku-Press / REMS Akku-Press ACC press the reset button (13) until the press rollers (5) have moved right back.

Open the tong retaining bolt (2). To do this, press the locking pin/bolt (4) and the tong retaining bolt (2) springs out. Insert the chosen pressing tongs, Mini pressing tongs (1), adapter tongs (19). Push the pressing tong retaining bolt (2) forward until the locking pin/bolt (4) snaps in. At the same time, press down the pressure plate/bottom plate (3) directly over the tong retaining bolt (2). Do not start radial presses without pressing tong, pressing tong Mini or pressing ring with adapter tong inserted. Only start the pressing process to make a press joint. Without pressing counterpressure by the press fitting the drive machine or pressing tong, pressing tong Mini, pressing ring and adapter ring will be exposed to unnecessarily high stress.

**CAUTION**
Never operate press when the tongs shank (2) is not locked. Risk of fracture!

2.3. Installing (changing) the pressing heads (14) in axial presses (Figs. 5, 6)

Remove the battery. Only use system-specific pressing heads. REMS pressing heads have a letter to identify the compression sleeve system and a number to identify the size. Read and observe the installation and assembly instructions of the manufacturer/supplier of the used system. Never use non-matching expanding heads (system, size) for expansion work. The joint could be unserviceable, and both the machine and the expanding heads might be damaged. Grease the cone of the expanding mandrel (18) lightly. Screw the selected expanding head as far as it will go onto the expander. Read and observe the installation and assembly instructions of the manufacturer/supplier of the press fitting system to be pressed. Never use non-matching pressing heads (compression sleeve system, size) for pressing work. The press joint could be unserviceable, and both the machine and the pressing heads might be damaged.

Push the selected pressing heads (14) right in, if necessary turning them until they engage (ball catch). Keep the pressing heads and locating hole inside the pressing device clean.

2.4. Installing (changing) the expanding head (16) in REMS Akku-Press Q & E ACC and REMS Power-Ex-Press Q & E ACC (Fig. 6, 7)

Pull out the mains plug or remove the battery. Only use genuine expanding heads for Uponor Quick & Easy. Read and observe the installation and assembly instructions of the manufacturer/supplier of the used system. Never use non-matching expanding heads (system, size) for expansion work. The joint could be unserviceable, and both the machine and the expanding heads might be damaged. Grease the cone of the expanding mandrel (18) lightly. Screw the selected expanding head as far as it will go onto the expander. Read and observe the installation and assembly instructions of the manufacturer/supplier of the used system. REMS expanding heads P and Cu are unsuitable for the REMS Akku-Ex-Press Q & E ACC and REMS Power-Ex-Press Q & E ACC pipe expanders and may therefore not be used.

Changing the expanding device on the REMS Power-Ex-Press Q & E ACC

Pull out the mains plug. Unscrew the expanding device (15) from the REMS Power-Ex-Press Q & E ACC. Screw on the selected expander as far as it will go and tighten by hand.

2.5. Mounting (changing) the expanding head (16) on the REMS Akku-Ex-Press Cu ACC (Fig. 10)

Remove the battery. Grease the cone of the expanding mandrel lightly. Screw the selected expanding head onto the expanding device (15) to the stop. The expanding device must now be set so that the thrust of the drive machine is taken up by the drive machine and not the expanding head at the end of the expanding. Unscrew the expanding device (15) complete with screwed on expanding head from the drive machine for this. Let the feed piston run forward as far as possible without the machine switching into reverse. In this position the expander with screwed-on expanding head must be screwed onto the drive unit until the expanding jaws (17) of the expanding head (16) are fully open. The expanding head must be secured with the locking nut (24) in this position.

2.6. Mounting (changing) the expanding head (16) on the REMS Akku-Ex-Press P, REMS Akku-Ex-Press P ACC (Fig. 9)

Remove the battery. Grease the cone of the expanding mandrel (18) lightly. Screw the selected expanding head onto the expanding device (15) to the stop.
3. Operation

3.1. Radial presses (Figs. 1 to 4 and 14 to 17)

The pressing tongs Mini, pressing tongs, pressing ring and adapter tongs, especially the pressing contour (11, 22) of the pressing jaws (10) or all 3 pressing segments must be checked for damage and wear before every use. Damaged or worn pressing tongs, Mini pressing tongs, pressing rings and adapter tongs may no longer be used. There is otherwise a risk of incorrect pressing or accidents.

A trial pressing with inserted press fitting must be made with the drive unit and the respectively used pressing tongs, Mini pressing tongs and the respectively used pressing ring with adapter tongs before every use. The pressing tongs, Mini pressing tongs (1), the pressing ring (20) with adapter tongs must fit into the drive unit, mechanically and be properly lockable. After completing the pressing check that the pressing jaws (10), pressing rings (20), pressing segments (21) close fully both at their tips (Fig. 1 and Fig. 14 to 17 at “A”) and on the opposite side (Fig. 1 and Fig. 14 to 17 at “B”). Check the tightness of the connection (conform to national specifications and standards, regularity check).

If during closing of the pressing tongs, pressing tongs Mini or pressing rings a marked ridge is created on the compression sleeve, the pressing may be defective or not tight (see 5. Trouble).

**CAUTION**

For preventing damages make sure to avoid operating situations like exemplarily shown in Fig. 13 through 15, that no distortion between pressing tongs, pressing tongs Mini, pressing rings, adapter tongs, fitting and drive unit occurs. **Failure to do so could lead to fracture and flying parts can cause serious injuries.**

3.1.1. Working procedure

Press the pressing tongs, pressing tongs Mini (1) together manually until they can be pushed over the press fitting. Always position the drive unit with the pressing tongs on the press fitting at right angles to the pipe axis. Release the pressing tongs so that they close around the press fitting. Hold the drive unit by the housing grip (6) and the pistol grip (9). Press the pressing ring (20) around the pressing fitting. Insert the pressing tong (19) into the drive unit and lock the tong retaining bolt. Press the pressing tong (19) together with your hand so that the adapter tong can be placed on the pressing ring. Release the drive unit with the adapter tongs so that the radii of the adapter tongs lie firmly on the cylinder rollers of the pressing ring and the pressing ring on the press fitting.

On REMS Power-Press SE push the rotation direction lever (7) to the right (feed) and press the safety inching switch (8). Keep the safety inching switch (8) pressed until the pressing is finished and the pressing tong or pressing ring are closed. Release the safety inching switch immediately. Push the rotation direction lever (7) to the left (return) and press the switch (8) until the press rollers have moved back and the safety slip clutch responds. Release the safety inching switch immediately.

**NOTICE**

Do not needlessly stress the safety slip clutch. Release the safety inching switch immediately after closing the pressing tongs or moving back the pressing rollers. The safety slip clutch is subject to normal wear like any slip clutch. However, if it is needlessly stressed, it wears more quickly and can be destroyed.

In the case of the REMS Power-Press and REMS Akku-Press, keep the safety inching switch (8) pressed until the pressing is finished and the pressing tong or pressing ring is completely closed. This is indicated by an acoustic signal (clicking). Press the reset button (13) until the press rollers (5) are fully retracted.

In the case of the REMS Mini-Press ACC, REMS Akku-Press ACC and REMS Power-Press ACC, keep the safety inching switch (8) pressed until the pressing is finished and the pressing tong or pressing ring is completely closed. After completion of pressing, the drive unit switches automatically to return (forced return). This is indicated by an acoustic signal (click).

Press the pressing tongs, pressing tongs Mini together with your hand so that they can be removed from the press fitting together with the drive unit. Press the adapter tong together with your hand so that they can be removed from the pressing ring together with the drive unit. Open the pressing ring by hand so that it can be pulled off the press fitting.

3.1.2. Operating safety

On REMS Power-Press SE the pressing process is ended by releasing the safety inching switch (8). A torque-dependent safety slip clutch acts additionally in both end positions of the press rollers for the mechanical safety of the drive units. Do not needlessly stress the safety slip clutch. REMS Power-Press SE is equipped with an electronic safety circuit which protects the drive unit against overloadning. The drive unit can be used again afterwards as a rule unless the electronic safety circuit switches the drive unit off repeatedly at the end of the pressing. In this case the drive unit must be inspected/ repaired by an authorised REMS customer service workshop. However, if the drive unit switches off before pressing is completed, the drive unit must be inspected/ repaired immediately by an authorised REMS customer service workshop.

The REMS Power-Press and REMS Akku-Press ends the pressing operation automatically, emitting an acoustic signal (clicking).

The REMS Mini-Press ACC, REMS Akku-Press ACC and REMS Power-Press ACC ends the pressing operation automatically, emitting an acoustic signal (clicking), and returns automatically (forced movement).

**NOTICE**

A perfect pressing is only produced with full closure of the pressing tongs, pressing tongs Mini, pressing ring or pressing segment. Full closure of the pressing jaws (10), pressing rings (20) or pressing segment (21) both at their tips (Fig. 1 and Fig. 14 to 17 at “A”) and on the opposite side (Fig. 1 and Fig. 14 to 17 at “B”) can be observed after completing the pressing. If a double burr is created on the pressing sleeve when closing the pressing tongs, pressing tongs Mini, pressing ring or pressing segment, the pressing may be faulty or leaking (see 5. Trouble).

3.1.3. Working safety

To ensure safe working, the drive units are equipped with a safety inching switch. This permits immediate switching off of the drive units at any time, particularly if a potential hazard arises. The drive units can be switched to the return function in any position.

3.2. Axial presses (Figs. 5, 6)

Note the different working range of the axial presses. The respectively latest REMS sales literature applies, see also www.rems.de → Downloads → Product Catalogues, Brochures. Make sure that the pressing heads (14) are inserted into the drive unit in such a way that the pressing can be made in one stroke if possible. This is not possible in some cases and pre-pressing and finish pressing is necessary. For this, one pressing head or both pressing heads must be inserted turned 180° before the second pressing process so that they are closer together.

3.2.1. REMS Ax-Press 40 (Fig. 5)

Place the preassembled compression sleeve fitting inside the pressing heads (14) and hold the drive unit by the housing grip (6) and the pistol grip (9), and keep the safety inching switch (8) pressed until the compression sleeve is in contact with the collar of the compression sleeve fitting. This is also indicated by an acoustic signal (clicking). Press the reset button (13) until the pressing heads (14) are fully retracted.

If there is a noticeable gap between the compression sleeve and the collar of the compression sleeve connector after closing the compression heads, the pressing may be faulty or leaking (see 5. Faults). Read and observe the installation and assembly instructions of the manufacturer/supplier of the compression sleeve system to be pressed.

**CAUTION**

Danger of crushing! Keep your hands away from the moving pressing heads (14)!

3.2.2. REMS Ax-Press 25 ACC, REMS Ax-Press 25 LACC (Fig. 8)

Insert the pre-assembled pressing sleeve fitting into the pressing heads (14). On the REMS Ax-Press 25 LACC the closer distance of the pressing heads may have to be achieved by moving the outer pressing head into the centre pressing head position. Hold the drive machine either with one hand on the switch handle (9) or two hands on the housing handle (6) and the switch handle (9). Keep the safety inching switch (8) pressed until the compression sleeve is touching the collar of the compression sleeve connector. The drive machine then switches automatically to return (forced return).

If there is a noticeable gap between the compression sleeve and the collar of the compression sleeve connector after closing the compression heads, the pressing may be faulty or leaking (see 5. Faults). Read and observe the installation and assembly instructions of the manufacturer/supplier of the compression sleeve system to be pressed.

With the compression sleeve system IV, various pressing heads are needed for one pipe size. Consult and comply with the instructions for installation and fitting of the system’s manufacturer.

**CAUTION**

Danger of crushing! Keep your hands away from the moving pressing heads (14)!

3.3. Pipe expanders

3.3.1. REMS Akku-Ex-Press Q & E ACC, REMS Power-Ex-Press Q & E ACC (Fig. 6, 7)

Read and observe the installation and assembly instructions of the manufacturer/supplier of the used system. Slide a Q & E ring of appropriate size onto the pipe. Insert the expansion head into the pipe and press the expanding head/ drive unit against the pipe. Switch on the drive unit (8). When the expanding head is locked, the drive unit switches automatically to return and the expanding head is closed again. Keep holding the safety inching switch (8) in the REMS Akku-Ex-Press Q & E ACC and push the expanding head/drive unit further. Turn the pipe slightly. Keep repeating the expansion process until the expanding jaws (17) are slid all the way into the pipe. Release the safety inching switch (8) after every expanding process in the REMS Power-Ex-Press Q & E ACC, wait until the expanding mandrel has moved back completely and then press the inching switch (8) again. Repeat the expanding process until the expanding jaws (17) are pushed into the pipe up to the stop.
3.3.2. REMS Akku-Ex-Press P (Fig. 9)
Push the compression sleeve over the pipe in the REMS Akku-Ex-Press P, insert the expanding head into the pipe up to the stop and press the expanding head/drive unit against the pipe. Switch on the drive unit (8). Make sure that the compression sleeve is far enough away from the expanding head in the expanding process because otherwise the expanding jaws (17) can bend or break. Keep the safety inching switch (8) pressed until the pipe is expanded. This is indicated by an acoustic signal (click). After a short dwell time for stabilising the expanded pipe, press the reset button (13) until the expanding mandrel (18) has been pulled right back. Expand several times if necessary. Turn the pipe slightly. Read and follow the installation and assembly instructions of the system manufacturer.

3.3.3. REMS Akku-Ex-Press P ACC, REMS Akku-Ex-Press Cu ACC (Fig. 9, 10)
Push the compression sleeve over the pipe in the REMS Akku-Ex-Press P ACC, insert the expanding head into the pipe up to the stop and press the expanding head/drive machine against the pipe. Switch on the drive machine (8). Make sure that the compression sleeve is far enough away from the expanding head in the expanding process because otherwise the expanding jaws (17) can bend or break. Keep the safety inching switch (8) pressed until the pipe is expanded. This is indicated by an acoustic signal (click). Expand several times if necessary. Turn the pipe slightly. Read and observe the installation and assembly instructions of the manufacturer/supplier of the used system.

In the REMS Akku-Ex-Press Cu ACC, insert the expanding head into the pipe up to the stop and press the expanding head/drive machine against the pipe. Switch on the drive machine. If the expanding head is open, the drive machine switches automatically to return and the expanding head is closed again. Read and observe the installation and assembly instructions of the manufacturer/supplier of the used system.

3.4. Battery charging status check with complete discharge protection
All REMS cordless presses made as of 2011-01-01 are equipped with an electronic battery charging status check with battery charge indication by a 2-coloured green/red LED (23). The LED lights green when the battery is fully or still sufficiently charged. The LED lights red when the battery must be charged.

If this condition occurs during pressing and the pressing process is not finished, the pressing must be completed with a fully charged Li-Ion battery. If the drive unit is not used, the LED goes out after approx. 2 hours but comes on again when the drive unit is switched back on.

4. Maintenance

WARNING
Notwithstanding the servicing listed below it is recommended to send in the REMS drive units together with all the tools (e.g. pressing tongs, pressing tongs Mini, pressing rings with adapter tongs, compression heads, expanding heads) and accessories (e.g. batteries, rapid chargers) at least once a year to an authorised REMS customer service station for inspection and repeated inspection of electrical equipment in accordance with EN 62638:2010-08 (VDE 0702).

4.1. Servicing

WARNING
Before service work, pull the mains plug or remove the battery! Keep the pressing tongs, pressing tongs Mini, pressing rings, adapter tongs, pressing heads and expanding heads, and particularly their receptacles, clean. Clean heavily soiled metal parts with the REMS CleanM (Art. No. 140119) or a mild soap and a damp cloth. Do not use domestic cleaning agents. These frequently contain chemicals that can attack plastic parts. On no account use petrol, turpentine oil, thinners or similar products to clean plastic parts.

Keep the pressing tongs, pressing tongs Mini, pressing rings, adapter tongs, pressing heads and expanding heads, and particularly their receptacles, clean. Clean heavily soiled metal parts with the REMS CleanM (Art. No. 140119) or a mild soap and a damp cloth. Do not use domestic cleaning agents. These frequently contain chemicals that can attack plastic parts. On no account use petrol, turpentine oil, thinners or similar products to clean plastic parts.

Keep the pressing tongs, pressing tongs Mini, pressing rings, adapter tongs, pressing heads and expanding heads, and particularly their receptacles, clean. Clean heavily soiled metal parts with the REMS CleanM (Art. No. 140119) or a mild soap and a damp cloth. Do not use domestic cleaning agents. These frequently contain chemicals that can attack plastic parts. On no account use petrol, turpentine oil, thinners or similar products to clean plastic parts.

5. Trouble

For preventing damages make sure to avoid operating situations like exemplarily shown in Fig. 11 through 13, that no distortion between pressing tongs, pressing tongs Mini, pressing rings, adapter tongs, fitting and drive unit occurs.

5.1. Fault: Drive unit does not work

Cause:
- Battery depleted or defective (REMS cordless drive units).
- Drive unit defective.

Remedy:
- Have the carbon brushes changed by qualified personnel or an authorised REMS customer service workshop.
- Have it checked/repaired by an authorised REMS customer service workshop.
- Charge the battery with the Li-Ion/Ni-Cd rapid charger or change the battery. Have it checked/repaired by an authorised REMS customer service workshop.

5.2. Fault: Radial press does not finish the pressing, pressing tongs, Mini pressing tongs, pressing ring, adapter tongs do not close fully

Cause:
- Drive unit overheated (REMS Power-Press SE, REMS Power-Press, REMS Power-Press ACC).
- Slip clutch defective (REMS Power-Press SE).
- Battery depleted or defective (REMS cordless drive units).
- Drive unit defective.

Remedy:
- Let the drive unit cool down for about 10 minutes.
- Have the carbon brushes changed by qualified personnel or an authorised REMS customer service workshop.
- Have it checked/repaired by an authorised REMS customer service workshop.
- Charge the battery with the Li-Ion/Ni-Cd rapid charger or change the battery.
- Have it checked/repaired by an authorised REMS customer service workshop.

Make sure that liquids never get inside the power tool. Never immerse the power tool in liquid.
The legal rights of the user, in particular the right to make claims against the user shall be responsible for the cost of shipping and returning the product.

5.3. Fault: REMS Power-Press SE switches of repeatedly at the end of the pressing.

Causes:
- Defective drive unit.

Remedy:
- Have it checked/repaired by an authorised REMS customer service workshop.

5.4. Fault: A prominent burr is produced on the press fitting when closing the pressing tongs, Mini pressing tongs, pressing ring or pressing segments.

Causes:
- Damaged or worn pressing tongs, Mini pressing tongs, pressing ring, pressing segments or pressing contour.
- Wrong pressing tongs, Mini pressing tongs, pressing ring (pressing contour, size) or adapter tongs inserted.
- Unsuitable matching of press fitting, pipe and support sleeve.

Remedy:
- Replace the pressing tongs, Mini pressing tongs, pressing ring with new ones.
- Check the labelling on the pressing tongs, Mini pressing tongs, pressing ring or adapter tongs and change if necessary.
- Check the compatibility of the press fitting, pipe and support sleeve. Observe the installation and assembly instructions of the manufacturer/supplier of the press fitting system to be pressed and contact him if necessary.

5.5. Fault: Pressing jaws close without load on the pressing tongs, Mini pressing tongs offset at “A” and “B” (Fig. 1).

Causes:
- Pressing tongs, Mini pressing tongs fell to the floor, compression spring bent.

Remedy:
- Send the pressing tongs, Mini pressing tongs to an authorised REMS customer service workshop for inspection.

5.6. Fault: The pipe is crushed between the press fitting and the fitting joint in axial pressing.

Causes:
- Expansion too long.
- Pipe pushed too wide onto the support sleeve of the press fitting.
- Wrong expanding head (press fitting system, size) inserted.
- Unsuitable matching of press fitting, pipe and support sleeve.

Remedy:
- Check whether the right expanding head was used. Pipe expanded several times, observe the installation and assembly instructions of the manufacturer/supplier of the press fitting system to be pressed.
- Check whether the right expanding head was used. Pipe expanded several times, observe the installation and assembly instructions of the manufacturer/supplier of the press fitting system to be pressed.
- Change expanding head.
- Charge the battery with the Li-Ion/Ni-Cd rapid charger, change the battery.
- Have it checked/repaired by an authorised REMS customer service workshop.

5.7. Fault: A prominent gap is left between the press fitting and the fitting joint after closing the pressing heads in axial pressing.

Causes:
- Pipe crushed between the compression sleeve and the fitting collar, see 5.5.
- Wrong compression head (compression sleeve system, size) used.
- Battery depleted or defective (REMS cordless drive units).
- Drive unit defective.

Remedy:
- Check whether the right expanding head was used. Pipe expanded several times, observe the installation and assembly instructions of the manufacturer/supplier of the press fitting system to be pressed.
- Change expanding head.
- Charge the battery with the Li-Ion/Ni-Cd rapid charger, change the battery.
- Have it checked/repaired by an authorised REMS customer service workshop.

5.8. Fault: Expander does not complete the expanding, expanding head does not open fully.

Causes:
- Drive unit overheated (REMS Power-Ex-Press Q & E ACC).
- Worn carbon brushes (REMS Power-Ex-Press Q & E ACC).
- Battery depleted or defective (REMS cordless drive units).
- Drive unit defective.
- Wrong expanding head (press fitting system, size) inserted.
- Expanding head stiff or defective.
- Expander set incorrectly (REMS Akku-Ex-Press Cu ACC).
- Distance from the press fitting to the expanding head too small.

Remedy:
- Let the drive unit cool down for about 10 minutes.
- Have the carbon brushes changed by qualified personnel or an authorised REMS customer service workshop.
- Charge the battery with the Li-Ion/Ni-Cd rapid charger or change the battery.
- Have it checked/repaired by an authorised REMS customer service workshop.
- Change expanding head.
- Do not use the expanding head anymore! Clean the expanding head and grease lightly with machine oil or change.
- Reset the expander, see 2.5.
- Increase the distance between the press fitting and the expanding head.

6. Disposal
The drive units, batteries and rapid chargers may not be thrown in the household waste when they are finished with. They must be disposed of properly by law.

7. Manufacturer's Warranty
The warranty period shall be 12 months from delivery of the new product to the first user. The date of delivery shall be documented by the submission of the original purchase documents, which must include the date of purchase and the designation of the product. All functional defects occurring within the warranty period, which are clearly the consequence of defects in production or materials, will be remedied free of charge. The remedy of defects shall not extend or renew the warranty period for the product. Damage attributable to natural wear and tear, incorrect treatment or misuse, failure to observe the operational instructions, unsuitable operating materials, excessive demand, use for unauthorized purposes, interventions by the customer or a third party or other reasons, for which REMS is not responsible, shall be excluded from the warranty.

Services under the warranty may only be provided by customer service stations authorized for this purpose by REMS. Complaints will only be accepted if: the product is returned to a customer service station authorized by REMS without prior interference in an unassembled condition. Replaced products and parts shall become the property of REMS.

The user shall be responsible for the cost of shipping and returning the product.

The legal rights of the user, in particular the right to make claims against the seller under the warranty terms, shall not be affected. This manufacturer's warranty only applies for new products which are purchased in the European Union, in Norway or in Switzerland. This warranty is subject to German law with the exclusion of the United Nations Convention on Contracts for the International Sales of Goods (CISG).

8. Extension of the manufacturer's warranty to 36 months
It is possible to extend the warranty period of the above manufacturer's warranty to 36 months for the drive units listed in these operational instructions which were delivered to the first user on and after 2011-01-01. The condition for this is that the drive unit shall be sent in for a payable inspection by an authorised REMS customer service station at least every 12 months after delivery to the first user and the data on the rating plate are legible. In the annual inspection, the drive unit is dismantled, for example, and wearable parts inspected and usually changed. The repeated inspection of electrical equipment also takes place according to EN 62638:2010-08 (VDE 0702). After inspection, the authorised REMS customer service station issues a detailed test certificate for the drive unit with specification of the machine number. The drive unit is given a test badge. The date of delivery shall be documented by the submission of the original purchase documents, compliance with the inspection intervals shall be documented by the submission of the original test certificates. A quote shall be made before carrying out any necessary repairs.

9. Spare parts lists
For spare parts lists, see www.rems.de → Downloads → Parts lists.