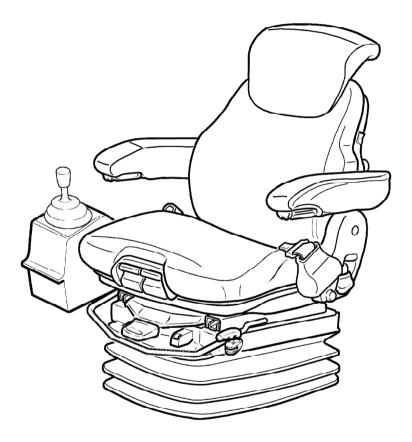
# MSG95





**GRAMMER** AG: Seating comfort for high demands!

You have acquired a GRAMMER seat. Congratulations!

Take your seat please, and enjoy the ultimate in seating comfort and safety. You will be enjoying a driver's seat characterized by user-friendliness and a high degree of adaptability.

With your new seat you are not only preserving your health; you are improving your performance and efficiency as well.

Have a good trip, with best wishes from

your **GRAMMER** Team

Imprint

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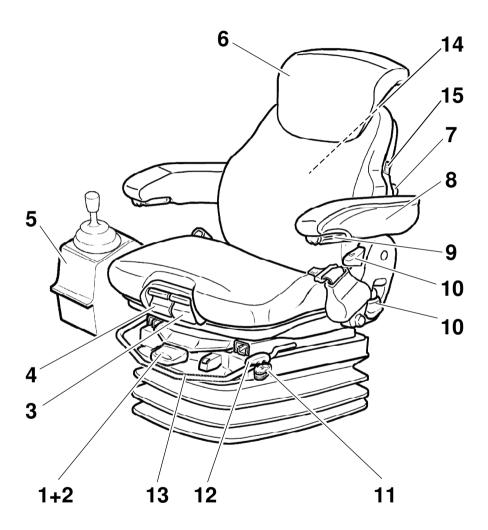
**GRAMMER** AG Postfach 1454 D-92204 Amberg

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Amberg, 10/2010









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# **General instructions**

- The operating instructions must be read in full before use.
- The operating instructions must be kept in the vehicle and always be at hand.
- The driver's seat may only be fitted, serviced and repaired by specialist personnel. The respective national regulations and the vehicle manufacturer's fitting instructions must be observed.

The national fitting regulations can be obtained from **GRAMMER** AG or from agencies of the company, or from the vehicle manufacturer.

 A correctly functioning and individually adjusted driver's seat is essential to your health. Take adequate care of your seat and have it serviced regularly to ensure that it functions correctly.



The functional checks are to be carried out at least as regularly as vehicle services (see maintenance plan for vehicle).

- These operating instructions should always be kept with the driver's seat. If the seat is
  passed on to a third party, it must be accompanied by the relevant operating instructions.
- Subject to modifications serving engineering progress and deviations compared to the standard type seat arising therefrom.



# Safety instructions

- Driver's seats that have been adjusted incorrectly have a smaller moving area. To prevent damage to the driver's back and to the seat, the seat must be adjusted for the driver's weight **before use** and **before every change of driver**.
- To prevent injury, no objects should be placed within the moving area of the driver's seat.
- **Before commissioning** of the driver's seat, possible **packaging material** has to be removed from the seat cushion and the backrest upholstery.
- To eliminate any risk of accident, the settings must be checked to ensure they are correctly engaged **before the vehicle is driven**.
- Adjustments must not be made while driving.
- When the backrest cushion has been removed, the backrest frame must be supported, for example held in place, before the backrest adjuster is operated. If you fail to do so, there is a danger that the backrest frame may jerk forward and cause injury.





- Any changes to the series standard of the seat (for example fitting parts which are not original GRAMMER parts) may impair the safety standard to which it has been tested.
   Functions may be impaired, threatening your safety. For this reason, any change in design of the seat must be approved by GRAMMER AG.
- During the removal and installation of the driver's seat, the corresponding instructions by the specific vehicle manufacturer must be strictly observed!
- Do not hold onto the covers for lifting the driver's seats. If you do so anyway, there is an increased risk of injury due to loosening or breaking covers.
- Before you remove the driver's seat, disconnect all plug-in connections between the seat and the vehicle supply network. When you replace the plug-in connectors, make sure they are tight (dust, water).
- Seatbelts are fitted or can be retrofitted to the driver's seat. Seatbelts may only be fitted on the approval of the vehicle manufacturer, as they increase the load in the seat mounting area.
   Seatbelts must be fitted in accordance with specific national regulations and guidelines,
- Seatbelts must be fastened before driving.
   The seatbelts must be replaced after an accident.
   Where seatbelts are fitted to the driver's seat, the seat and seat mounting must be checked additionally by specialist personnel after an accident has occurred.
- Fasteners must be **checked regularly for tight seat**. If the seat wobbles, there may be loose bolts or other faults.
- If you notice that the seat does not function correctly (for example a defective suspension
  of the driver's seat; improper curvature of the lumbar support or damaged bellows),
  contact a specialist workshop immediately to arrange for repairs to be carried out.
  If you fail to do so, your health may be affected and the risk of accident increased.
- Before the vehicle is used, switches that might be in the seat (for shutting down mechanical equipment when the driver leaves his/her seat) must be checked for proper function.

If malfunctions are detected, the vehicle must not be driven.

- INCREASED RISK OF ACCIDENT -

and must be approved by **GRAMMER** AG.

 Loads must not be placed on seats (e.g. with a built-in switch) except for the driver's weight during normal use, as the vehicle may otherwise start to move by itself.
 – INCREASED RISK OF ACCIDENT –

If you take off the weight from the seat while driving, this will cause the vehicle to stop.

- Do not indent the bellows while there is load on the driver's seat.
   RISK OF CRUSHING -
- Make sure that the interior of the driver's seat remains free of foreign particles or liquids.



# Safety instructions

- The driver's seat is not watertight and must be protected against splashes of water!
- Any conversion or refitting work on a GRAMMER AG driver's seat must be performed exclusively in authorized workshops by trained or suitably qualified personnel and in adherence with the applicable operating, maintenance and installation instructions and in compliance with all relevant national regulations. Improper installation and assembly bear the risk of bodily injury or property damage and the proper function of the driver's seat or mounted parts can no longer be guaranteed.
- Worn parts such as rollers, shock absorbers and the fixation must be checked from time to time.
- Before driving, you must check if all seat settings selected guarantee a safe operation of the vehicle.

# **Connecting data**

 If you need to connect cables to the vehicle supply network, strictly observe the following instructions:

**Before you connect** an **electrical consumer** fitted in the driver's seat (e. g. the seat heater or the seat ventilation), you must obtain the relevant electrical data for the respective vehicle with reference to voltage, protection and the kind of connections from the manufacturer, from **GRAMMER** AG or the company's agencies.

For safety reasons, the installation and connection to the vehicle supply network must be carried out by authorized specialist personnel only.

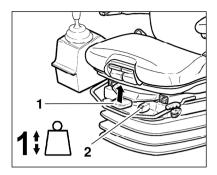
DC	Compressor	Seat heater / compressor
12V	10A	20A
24V	10A	15A

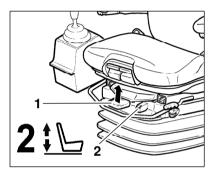
For building an electric connection, select an electric circuit by means of which the electric consumers of the driver's seat are separated from the live network when **the ignition is switched off**.

# **Guarantee and liability**

- **GRAMMER** AG does not disclaim any guarantee or liability for damage resulting from incorrect assembly, use or repair of the seats.
- Further details on the guarantee granted by **GRAMMER** AG are stated in your contractual documents (see invoice or delivery note). Guarantee claims against **GRAMMER** AG beyond the guarantee obligations described there are excluded.







### Weight adjustment

The seat must be adjusted for the driver's weight with the driver sitting on the seat. The adjustment is made by pulling out or pushing in the actuator lever (1) until the green marking is visible in the weight-and-height indicator (2).

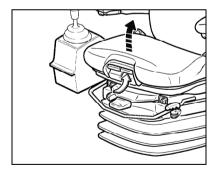
To prevent damage to the health, the setting for the driver's weight must be checked and adjusted as necessary before the vehicle is driven.

#### Height adjustment

The seat height can be altered by fully pulling out or pressing in the actuator lever (1).

 $\ensuremath{\mathfrak{F}}$  The green marking in the weight-and-height indicator (2) must be visible.

In order to avoid damage, do not operate compressor for more than 1 minute.



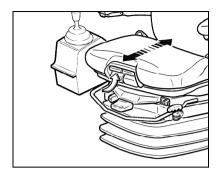
## Seat pan angle adjustment \*

The angle of the seat pan can be individually adjusted.

To adjust the angle of the seat pan, pull the left handle upwards. By exerting pressure on or off the front or rear part of the seat pan it can be moved to the desired angle position.



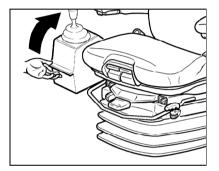




#### Seat depth adjustment \*

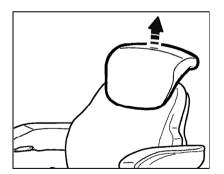
The depth of the seat pan can be individually adjusted.

To adjust the depth of the seat cushion, pull the right handle upwards. By moving the seat cushion backwards or forwards the desired seating position can be reached.



#### Control carrier \* \*\*\*

To improve getting in and out of the seat the left or right box can be tilt up.



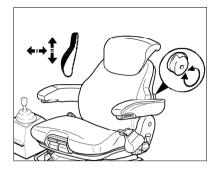
#### Backrest extension \* \*\*

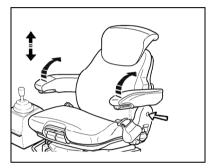
The backrest extension can be individually adjusted for height by pulling it upwards over the various increments up to the end stop.

To remove the backrest extension, pull it over the end stop.









#### Lumbar support \*

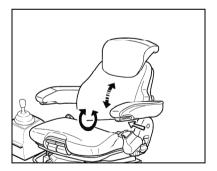
By turning the adjustment knob to the left or right, both the height and curvature of the backrest cushion can be individually adjusted.

This increases both the seating comfort and the performance of the driver.

#### Armrests \* \*\*

The armrests can be folded up if required and the height individually adjusted.

To adjust the armrests for height, seperate the round cap (see arrow) from the cover, loosen the hexagon nut (size 13mm) and adjust the armrest to the desired position and tighten the nut again.

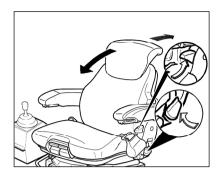


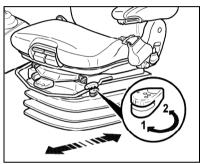
#### Armrest adjustment \*

The inclination of the armrests can be modified by turning the adjustment knob (arrow).









#### Backrest adjustment \*\*\*

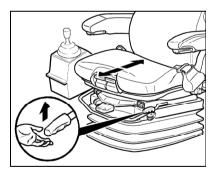
The backrest is adjusted using the locking lever (arrow).

The locking lever must latch into the desired position. It should not be possible to move the backrest into another position when it is locked.

#### Fore/aft isolator

Under certain driving conditions, it is useful to activate the fore/aft isolator. This means that shock impacts in the driving direction can be better absorbed by the driver's seat.

- 1 = fore/aft isolator OFF
- 2 = fore/aft isolator ON



# Fore/aft adjustment without control carrier equipment \*\*\*

The fore/aft adjustment for the driver's seat is released by lifting the locking lever.

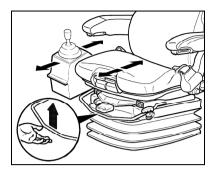


#### WARNING! Risk of accident! Do not operate the locking lever while driving.

After the adjustment, the locking lever must latch into the desired position with an audible click. It should not be possible to move the driver's seat into another position after it has been locked.







# Fore/aft adjustment with control carrier equipment \*

The fore/aft adjustment for the driver's seat and the control carrier equipment is released by lifting the locking lever.



#### WARNING! Risk of accident! Do not operate the locking lever while driving.

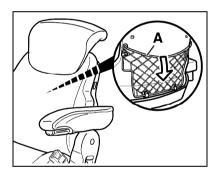
After the adjustment, the locking lever must latch into the desired position with an audible click. It should not be possible to move the driver's seat into another position after it has been locked.

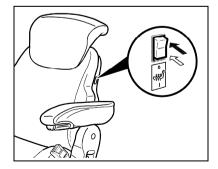
 $\ensuremath{\mathfrak{F}}$  Do not lift the locking lever with your leg or calf.



The storage net is placed on the rear upper side of the backrest.

To open the storage net, pull the upper stretch belt (**A**) backwards.





#### Seat heater \*

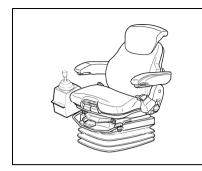
The seat heater can be turned on/off by pressing the switch.

0 = seat heater OFF 1 = seat heater ON





# Maintenance



Dirt can impair the function of the seat, So make sure you keep your seat clean.

Upholstery does not need to be removed from the seat frame for cleaning.



Caution: take care with the backrest - it may jerk forward and cause injury! When cleaning the backrest cushion, the backrest must be held in place when operating the backrest lever.

**ATTENTION**: Do not clean the seat with a pressure washer!

During cleaning the upholstery should not be soaked through.

Use standard commercially available upholstery or plastics cleaning agent. Test first for compatibility on a small, concealed area.



