## 4 Start-up

# 4.1 Starting the diesel engine

- (1) Pull the hand lever of parking brake (Ill.16/7).
- (2) Put steering arm switch (Il1.16/1) in "0"-position.
- (3) Insert the driving key in the ignition-light switch (II1.16/23) and turn to the right in position "1" (charging control lamp and warning light for oil pressure light up).
- (4) Press the accelerator (II1.16/4) totally down.
- (5) Operate push-button "start" (with aircooled engine Ill. 1/20). Release push-button as soon as engine starts.

Pull the pull-knob (with watercooled engine II1.17/20) till to the end stop. Release pull-knob as soon as engine starts.

## 4.1.1 Cold start of the diesel engine

If there are low outside temperatures following has to be done:

- aircooled engine: pull the choke (II1. 16/10) and release it (don't hold).
- watercooled engine: pull the preheat switch (II1.17/20) to the first catch and hold it for 10 to 20 seconds before you pull it to the end stop.

### NOTE!

The diesel engine cannot be started by towing the loader excavator.

## 4.2 Heating installation

## 4.2.1 Standard heating

## Actuating:

- (1) Open hot air outlet (II1. 17/22)
- (2) Bring pull-knob (II1.22/1)
   in "winter position"
   (pull knob upwards)

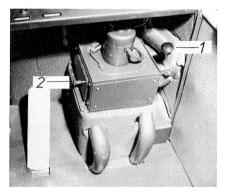
#### NOTE

The shut off valve in the warm water line has to be openend with watercooled engine.

(3) If the foot area shall be heated open the lid (II1. 22/2) (swing the lid to the left).

### ATTENTION!

The blower in the heating installation runs with air-cooled engine also in summer operation, don't switch off.



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## 4.2.2 Auxilliary heating- and ventilation installation

#### Technical datas:

- Eberspächer D 1 L
- diesel fuel approx. 0,21 1/h
- voltage 12 V
- heating capacity 1700 W

The installation can be used as heating as well as fresh air unit.



Actuating:

Turn rotary switch (II1.23)

Position = fresh air

Position = blower with (red) heater

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The telltale lamp in the rotary switch (arrow) lights in both positions.

The warm air resp. fresh air can be led either only to the front window or at the same time to the front window and foot area.

Malfunctions at the heating- resp. fresh air unit can be cleared by repeating the actuating procedure, as described above.

Does the heating not ignite check the fuse at the heating unit unter the protecting cap and replace respectively.

### Switching off

The switching off takes place by turning the rotary switch (II1.23) to "0".

#### NOTE!

Leave the current flow from battery to heater for 3 minutes more after switching off. Don't interrupt current current flow.

#### WARNING!

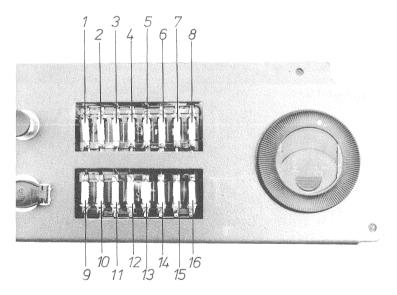
Do not actuate and use the heating in closed rooms and during the refuelling.

## 4.3 Light installation

The light installation will be switched with the ignition key which is inserted in the ignition-light switch (II1.17/23).

Position "1" - Ignition system switched on Position "2" - Parking light switched on Position "3" - Head light switched on Position "4" - Bright light switched on

#### Electrical fuses



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- 1 Bright light, right
- 2 Bright light, left
- 3 Anti-dazzle light, right
- 4 Anti-dazzle light, left
- 5 Boundary light, right
- 6 Boundary light, left
- 7 Tail lamp, right
- 8 Tail lamp, left

- 9 Vehicular hazard warning signal flasher
- 10 Blinker light
- 11 Drive
- 12 Signal horn
- 13 Instrumentation lights and indicator lights
- 14 Standard heating
- 15 Windshield wiper
- 16 Brake light

## 4.4 Activities during driving the loader excavator

- (1) Release parking brake (I11. 16/7),
- (2) Preselect operation gear resp. transport gear (Ill.16/1),
- (3) Preselect driving direction (II1.16/1),
- (4) Operate accelerator (Ill.16/4).

Loader excavator starts. Driving speed and braking retardation is determined by accelerator position. The brake pedal will be pressed down only for full stop or for holding the loader on a slope.

### NOTE!

Actuation of the direction switch can be done also during driving, but avoid it at high driving speed because of strong braking effect.

## 4.5 Activities during working with the loader excavator

Driving with the loader excavator is no problem. The loader -excavator can be used both in operation gear and in road gear from Zero to max. speed. Selection of gear depends on working conditions.

#### NOTE!

Switching from operation gear to road gear, or reversed, can also be done during driving. It is advised not to switch from road gear to operation gear during high driving speed.

Driving speed resp. propulsive force will be changed in the selected gear only by pressing the accelerator. When driving on a slope the speed decreases in favour of the propulsive force even in full throttle. Max. propulsive force will be reached in the operation gear with a driving speed of almost "0 km/h".

Propulsive forces and driving speeds are "forward" and "backward" the same.

### Driving with load

In order to use the full driving ability of the loader excavator, the filled bucket resp. the attachment will be hold close to the ground during driving.

### Scraping/Levelling

Lower the shovel arm totally for scraping. The bucket position will be adjusted by the driver acc. to size of tyres and to ground conditions.

Scraping and levelling can be done both in operation gear and in road gear. Levelling will be done generally in backward motion with suitable bucket position.

## Bucket size/Payload

Never exceed operating capacity independent on the bucket size and bucket design.