

E Operation

1 Safety Regulations for the Operation of Forklift Trucks

Driver authorisation: The forklift truck may only be used by suitably trained personnel, who have demonstrated to the proprietor or his representative that they can drive and handle loads and have been authorised to operate the truck by the proprietor or his representative.

Driver's rights, obligations and responsibilities: The driver must be informed of his duties and responsibilities and be instructed in the operation of the truck and shall be familiar with the operator manual. The driver shall be afforded all due rights. Safety shoes must be worn for pedestrian operated trucks.

Unauthorised use of truck: The driver is responsible for the truck during the time it is in use. The driver must prevent unauthorised persons from driving or operating the truck. Do not carry passengers or lift other people.

Damage and faults: The supervisor must be immediately informed of any damage or faults to the forklift truck or attachment. Trucks which are unsafe for operation (e.g. wheel or brake problems) must not be used until they have been rectified.

Repairs: The driver must not carry out any repairs or alterations to the industrial truck without the necessary training and authorisation to do so. The driver must never disable or adjust safety mechanisms or switches.

Hazardous area: A hazardous area is defined as the area in which a person is at risk due to truck movement, lifting operations, the load handler (e.g. forks or attachments) or the load itself. This also includes areas which can be reached by falling loads or lowering operating equipment.

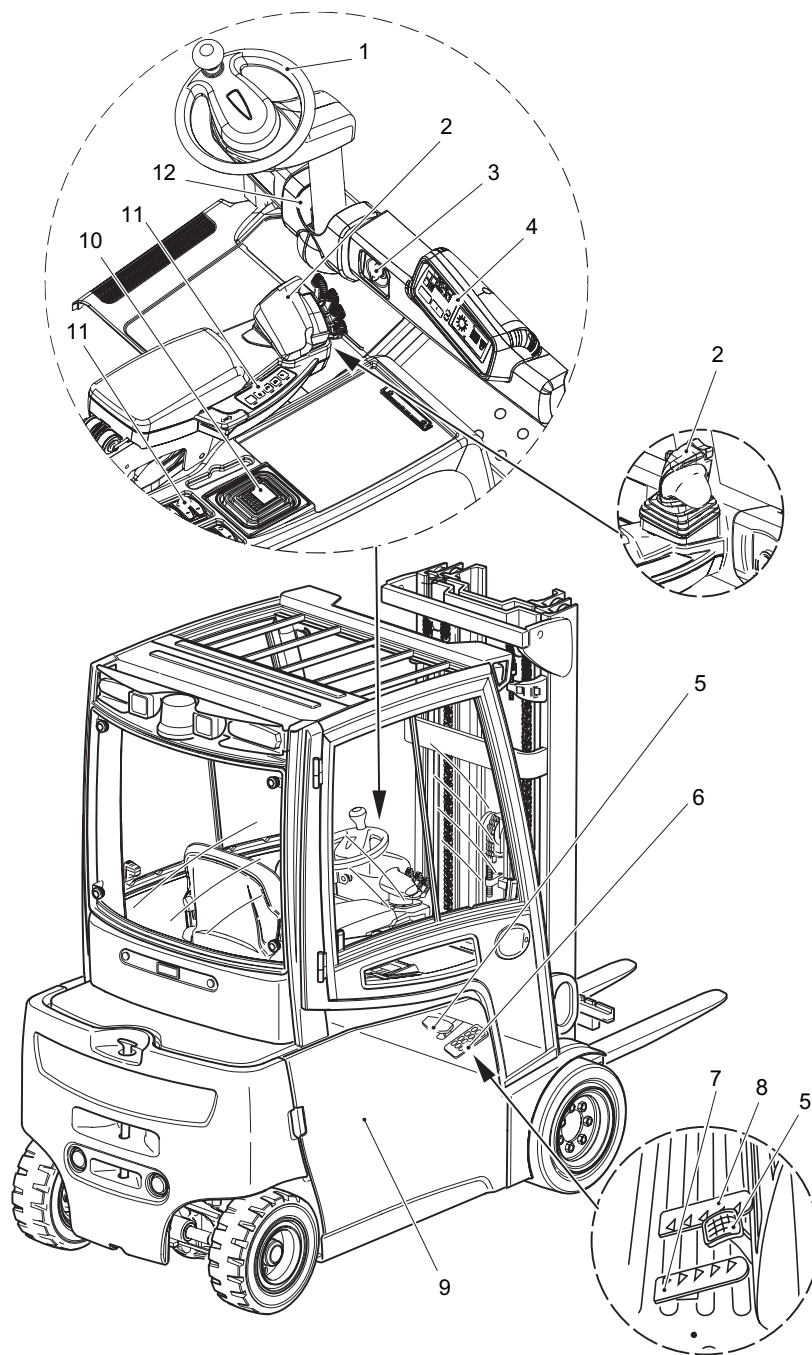


Unauthorised persons must be kept away from the hazardous area. Where there is danger to personnel, a warning must be sounded with sufficient notice. If unauthorised personnel are still within the hazardous area the truck shall be brought to a halt immediately.

Safety devices and warning signs: Safety devices, warning signs and warning instructions shall be strictly observed.

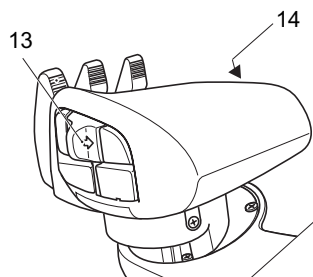
2 Controls and Displays

Item	Control / Display		Function
1	Steering wheel	●	Steers the truck.
2	SOLOPILOT MULTIPILOT	● ○	Operating the functions: – Forward / reverse travel direction – Lift/lower load handler – Mast forward / reverse tilt – Horn switch – Side shift left / right (○) – Aux. hydraulics (○)
3	Key switch	●	Switches control current on and off. Removing the key prevents the truck from being switched on by unauthorised personnel.
	ISM Access Module	○	Powers up the truck.
4	Dashboard control panel	●	Displays the battery capacity, service hours, errors, key warning indicators, wheel position and travel direction.
5	Brake pedal single pedal control	●	Provides infinitely variable braking control.
	Brake pedal twin pedal control	○	
6	Accelerator pedal	●	Provides infinite control of travel speed.
7	Twin pedal control "Forward" accelerator pedal	○	Truck travels forward when actuated. The travel speed is infinitely controlled.
8	Twin pedal control "Reverse" accelerator pedal	○	Truck reverses when actuated. The travel speed is infinitely controlled.
9	On-board charger	○	Charges the truck.
10	EMERGENCY DISCONNECT switch	●	Switches power supply on and off.
11	Armrest / side pocket control panel	○	Options
12	Steering column stop	●	Adjusts and fixes the steering column at the required distance and height.
● = Standard equipment ○ = Optional equipment			

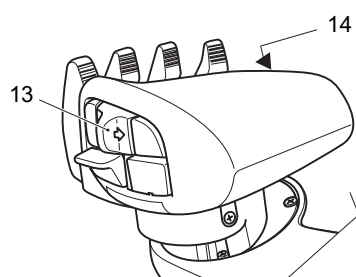


2.1 SOLOPILOT / MULTIPILOT

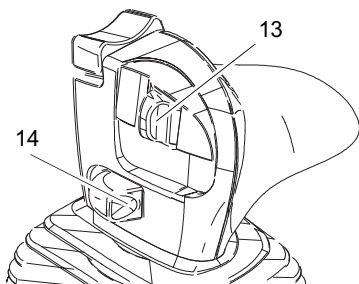
SOLOPILOT (●)



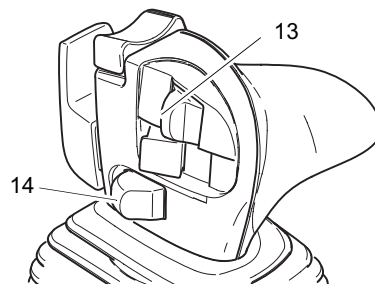
SOLOPILOT (○)



MULTIPILOT (○)



MULTIPILOT with ZH1-ZH3(○)



Item	Control / Display	Function
13	Travel direction switch	Selects travel direction / neutral position
14	Horn	Activates the horn

● Travel direction switch

- To select forward gear, push the direction switch (13) forward.
- To select reverse gear, push the direction switch (13) backward.

- If a travel direction has been pre-selected before the truck starts, set the truck first to neutral and then in the required direction. Otherwise, travel will be inhibited.

● Horn

- Press the horn button (14) to sound the horn.

2.2 Armrest control panel switch (○)

	Function
	Work lights
	Front windscreen wipers – Press 1x > intermittent, – 2x > fast, – 3x > off – Hold down on the button > Switch on the windscreen washing system
	Rear windscreen wiper – Press 1x > intermittent, – 2x > fast, – 3x > off – Hold down on the button > Switch on the windscreen washing system
	Sideshift centre position
	Lift cutout override

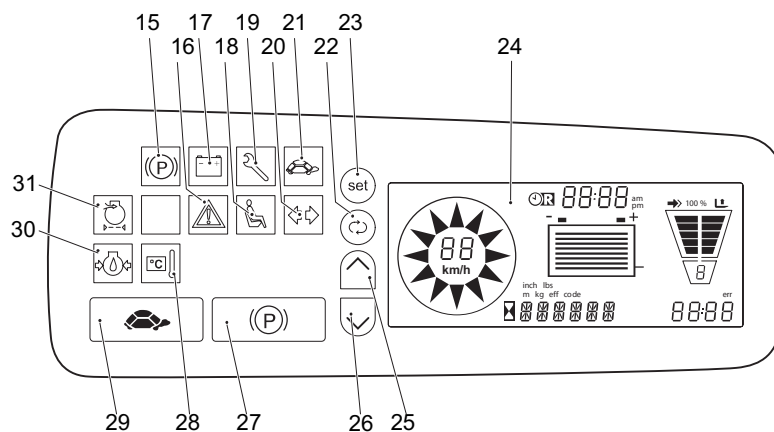
2.3 Side pocket control panel switch (○)

	Function
	Rear window heating
	Beacon
	Truck lighting
	Warning indicator
	Parking light
	Lift cutout override

2.4 Dashboard control panel and driver's display

The control panel display shows the operating data, the battery charge, the service hours and error details and information. Pictograms in the left top section of the dashboard control panel act as warning indicators.

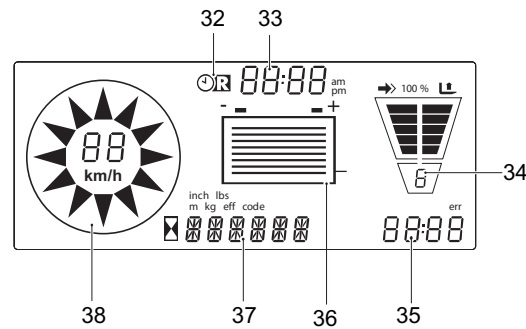
Pictograms



Item	Control / Display	Function
15	(P)	Parking brake indicator ● Parking brake active – Truck operational, parking brake active
16	⚠	WARNING ● – Lights up to indicate error – Flashes when battery capacity is less than 10%
17	🔋	Battery indicator ● – Electrolyte level too low – Battery cells faulty – Battery temperature too high ○ On-board charger on radio network
18	👤	Seat switch indicator ● – Truck operational but driver's seat not occupied
	🚗	Seat belt lock indicator (flashing symbol) ○ – Truck operational, belt lock not closed

Item		Control / Display	Function
19		Service display	● Service interval exceeded (1000 service hours) or annual UVV test due (flashing indicator).
20		Flashing indicator	○ Function of right/left flashing indicators (○)
21		Crawl speed indicator	● Crawl speed activated
22		Toggle button	● Changes the display
23		SET button	● Confirms entries
24		Driver's display	● Shows the operating data, see displays.
25		Program selector	● Selects the travel program (moves up a ○ level in the travel program list.)
26		Program selector	● Selects the travel program (moves down a level in the travel program list.)
27		Parking brake button	● Button for applying / releasing the parking brake
28		Control and motor overtemperature indicator	● – Lights up when the controllers and motor overheat. – Performance continually reduces with respect to the temperature.
29		Inching button	Travel speed max. 6 km/h (adjustable).
30			No function
31			No function

Displays



Item	Function
32	Residual time display with on-board battery (hours : minutes) Residual charging time (○)
33	Time display (hours : minutes)
34	Travel program display – Displays the travel program in use
35	Error display: – If an error (Err) or a warning (Inf) occurs, the error or info code is displayed. – If several errors occur they are displayed alternately at intervals of 1.5 seconds. A warning is sounded.
36	Battery capacity display – Battery discharge status – Charge status display for on-board charger (○)
37	Hourmeter display
38	Travel direction, speed and wheel position display – Indicates the pre-selected travel direction (forward or reverse) or the position of the steered wheels. – Flashing direction arrow = no travel direction selected

Driver's display information messages

The information messages have a four-digit code. The first digit refers to the functional assembly, the remaining three digits designate the error.

Function group	Meaning
0	General message
1	General message
2	Travel
3	Steering
4	Lift
5	Battery management

Display	Meaning
1901	Accelerator pedal pressed during power-up
1904	No travel direction selected when travel switch applied.
1908	Seat switch not closed – Truck operational, but driver's seat not occupied
1909	Accelerator pressed while parking brake applied
5915	Truck not operational but battery door open (○)
1917	Accelerator pedal and brake pedal pressed simultaneously.
1918	Truck operational but cabin door open (○)
2951	Hydraulic function applied during power-up
5990	Electrolyte level too low (○)

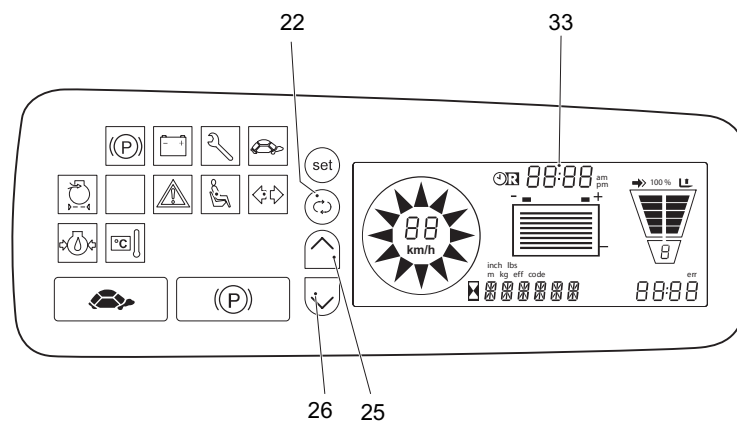
Set time:

- Press the toggle button (22) for 3 seconds.

The display (33) via the battery shows the current time. This allows you to toggle the display between the time and the residual time.

- Press toggle button (22) for 8 seconds until the "Set Time" menu is displayed.
- Set the hours with the "Up" (25) & "Down" (26) keys.
- Confirm with the toggle button (22).
- Set the minutes with the "Up" (25) & "Down" (26) keys.
- Press the toggle button (22) to return to the normal operating mode.

Keep pressing the Up and Down keys to set the time and to change between 24 hour and 12 display (SET HOUR 24 H <-> SET HOUR 12 H).



2.5 Battery Discharge Indicator, Battery Discharge Monitor, Hourmeter

Battery Discharge Indicator: The charge status of the battery (36) is shown on the driver's display. The lower section of the battery symbol is shown as being empty. It indicates the residual capacity of the battery which cannot be used to avoid damaging the battery.



The standard setting for the battery discharge indicator / discharge monitor is based on standard batteries.

If using maintenance-free batteries, the display must be re-set. This setting must be carried out by the service department. If this adjustment is not made the battery may become damaged through excessive depletion.

When a battery is discharged to the permissible discharge level, the battery symbol is displayed empty.

Battery Discharge Monitor: If the residual capacity falls below the required level, lifting is inhibited. A message will be indicated on the driver's display unit.



Lifting is only released when the battery connected is at least 40% charged.

To complete the lifting operation, turn the key switch off and on again. You can then continue to raise for another 30 - 40 seconds.

Residual time display: The time remaining to reach the residual capacity is displayed.

To display the residual time (residual charge time ) the display above the battery can be switched by holding down the toggle button (22) for three seconds.



This allows you to toggle the display between the time and the residual time.

Hourmeter: The service hours are counted when the truck is switched on **and** the seat switch is closed.

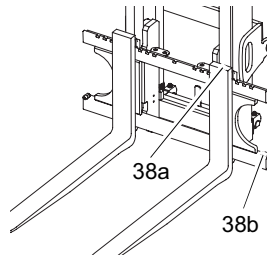
3 Starting up the truck



Before the truck can be started, operated or a load lifted, the driver must ensure that there is nobody within the hazardous area.

3.1 Checks and operations to be performed before starting daily operation

- The entire truck (in particular wheels and load handler) must be inspected for damage.
- Make sure the load chains are evenly tensioned.
- Visually inspect the battery attachment and cable connections.
- Test the seat belt.
- Test the seat switch.
- Test the Drive-Control (○), the truck should travel slowly when the load is raised.
- Check the fork stop (38a) and fork retainer (38b).



3.2 Adjusting the driver's seat



To avoid risk to health and property, check and adjust the individual driver's seat setting before starting up the truck.

The driver's seat must be occupied in order to adjust to the driver's weight.

Adjusting the driver's weight:

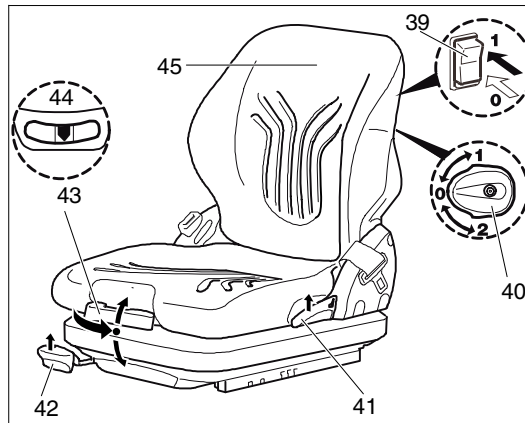
- Move the lever (43) as far as it will go in the arrow direction. To adjust, move the lever up or down and then restore it to its home position.
- Move the lever up and down to set the seat to a higher weight.
- Move the lever down and up to set the seat to a lower weight.



The driver's weight is correct if the arrow is in the middle of the display window (44).

The min. or max. weight setting is reached when you can feel a return stroke on the lever.

- After adjusting the weight, move the lever back fully until it engages.



Adjusting the backrest:



The backrest must be securely engaged in the set position. The backrest setting must not be changed during travel!

- Lift up the locking lever (41) and adjust the incline of the backrest.
- Release locking lever (41) to lock the backrest in position.

Adjusting the seat position:



Hold the locking lever (42) only in the recess, do not reach through underneath the lever.

The driver's seat must be securely engaged in the set position. The driver's seat setting must not be changed during travel!

Do not lift the locking lever with your leg or thighs!

- Pull up the locking lever (42) of the driver's seat lock in the direction of the arrow and push the seat forwards or backwards to the desired position.
- Engage locking lever (42) in position again.

Seat heating (○):

Apply the switch (39): **1** = seat heating ON; **0** = seat heating OFF

Lumbar vertebrae support (○):

Hand wheel (40) in position **0** = no bending in lumbar vertebrae area.

Turn hand wheel (40) to position **1** = Increased bending in upper lumbar vertebrae area.

Turn hand wheel (40) to position **2** = Increased bending in lower lumbar vertebrae area.

3.3 Safety restraint belt



Fit the safety restraint belt each time before starting the industrial truck.
The belt protects you from serious injury!

Protect the belt from contamination (e.g. cover it when the truck is idle) and clean it regularly. Frozen belt locks or pulleys must be thawed out and dried to prevent them from freezing up again.



The dry temperature of the warm air should not exceed +60°C!



Do not alter the belt setting!
This will increase the risk of malfunctioning.

- Always replace the safety restraint belt after an accident.
- Only original spare parts must be used for retrofits or repairs.



Damaged or non-operational belts must only be replaced by contractual dealers or branches.

Starting the industrial truck on steep slopes

The automatic blocking system locks the belt in the retractor when the truck is positioned on a steep slope. This prevents the belt from being pulled out of the retractor.



Carefully drive the truck off the slope and then put on the belt.

Hazardous situations



If the truck is about to tip over, do not undo the restraint belt and try to jump out.
This will only increase the risk of injury!

Correct procedure:

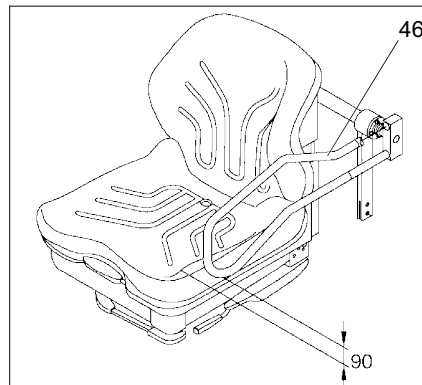
- Lean your upper body over the steering wheel.
- Grip the steering wheel with both hands and brace feet.
- Tilt your body in the opposite direction of fall.

3.4 Mechanical safety restraint system (○)



Test the restraint system before starting the truck.

- Never use the truck with a non-functional restraint system.
 - After an accident, have the restraint system system checked by specialist personnel from the manufacturer's service department.
 - Do not alter the restraint system.
 - When the driver's seat is occupied, maintain a 90 mm gap between the gate (46) and the seat to ensure safety.
- Push the safety gate out and lift it up.
- When the gate has been released, it automatically drops down and locks.



Hazardous situations



If the truck is in danger of tipping over, do not try to jump out. This will only increase the risk of injury.

Correct procedure

- Lean your upper body over the steering wheel.
- Grip the steering wheel with both hands and brace feet.
- Tilt your body in the opposite direction of fall.

3.5 Adjusting the steering column

- Release the steering column lock (12) and set the steering wheel to the required position (height and tilt).
- Now fix the steering column lock again.

3.6 To prepare the truck for operation

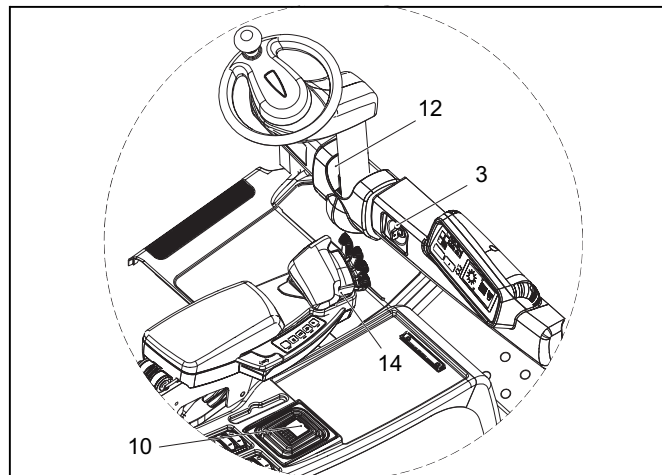
- Unlock the EMERGENCY DISCONNECT switch (10).
To do this:
Press the rocker in (↓) and pull it up until you feel the EMERGENCY DISCONNECT engaging.
- Insert the key in the key switch (3) and turn it clockwise as far as it will go to the “I” position.
- Test the horn (14).



Test the brake pedal and parking brake.



When you have pulled the EMERGENCY DISCONNECT and turned the key switch to the right, the truck carries out a self test for approx. 3-4 seconds (tests the controllers and motors). During this time the truck cannot move or lift. If the accelerator or a control lever is applied during this time, an information message will be displayed.



4 Industrial Truck Operation

4.1 Safety regulations for truck operation

Travel routes and work areas: Only use lanes and routes specifically designated for truck traffic. Unauthorised third parties must stay away from work areas. Loads must only be stored in places specially designated for this purpose.

Travel conduct: The driver must adapt the travel speed to local conditions. The truck must be driven at slow speed when negotiating bends or narrow passageways, when passing through swing doors and at blind spots. The driver must always observe an adequate braking distance between the forklift truck and the vehicle in front and must be in control of the truck at all times. Abrupt stopping (except in emergencies), rapid U turns and overtaking at dangerous or blind spots are not permitted. Do not lean out or reach beyond the working and operating area.

Travel visibility: The driver must look in the direction of travel and must always have a clear view of the route ahead. Loads that affect visibility must be positioned at the rear of the truck. If this is not possible, a second person must walk in front of the truck as a lookout.

Negotiating slopes and inclines: Negotiating slopes or inclines is only permitted if such roads are clean and have a non-slip surface and providing such journeys are safely undertaken in accordance with the technical specifications for the truck in question. The truck must always be driven with the load unit facing uphill. The industrial truck must not be turned, operated at an angle or parked on inclines or slopes. Inclines must only be negotiated at slow speed, with the driver ready to brake at any moment.

Negotiating lifts and docks: Lifts and docks must only be used if they have sufficient capacity, are suitable for driving on and authorised for truck traffic by the owner. The driver must satisfy himself of the above before entering these areas. The truck must enter lifts with the load in front and must take up a position which does not allow it to come into contact with the walls of the lift shaft. People travelling in the lift with the forklift truck must only enter the lift after the truck has come to a halt and must exit the lift before the truck.

Type of loads to be carried: The operator must make sure that the load is in a satisfactory condition. Only carry loads that are positioned safely and carefully. Use suitable precautions to prevent parts of the load from tipping or falling down.

Towing trailers or the truck itself being towed are only permitted occasionally, on secure, level routes, with a maximum deviation of +/- 1% and at a max. speed of 5 km/h. The truck must not be permanently used with trailers.

There must be no load on the forks when the truck is being pulled.

Do not exceed the maximum trailer load specified for the forklift truck for trailers with or without brakes. The specified trailer load only applies for the auxiliary coupling in the counterbalance of the forklift. If a different trailer coupling is used on the truck, the instructions of the coupling manufacturer must be observed.

After coupling and before starting the driver shall ensure that the trailer coupling cannot become detached.

Trucks pulling a load must be operated in such a manner that the trailing vehicle is driven safely and can be stopped at all times.

4.2 Travel, steering, braking

4.2.1 Emergency Disconnect

- Press the EMERGENCY DISCONNECT switch (10) down.

All electrical functions are deactivated.



The operation of the EMERGENCY DISCONNECT switch must not be affected by any objects placed in its way.

4.2.2 Travel

Safety switch, driver's seat



If the driver's seat is not occupied (seat belt (○) not closed) travel is inhibited by the seat switch.



Do not drive the truck unless the panels and doors are closed and properly locked. Travel routes must be free of obstacles.

Adapt the travel speed to the conditions of the travel lane, the work area and the load.

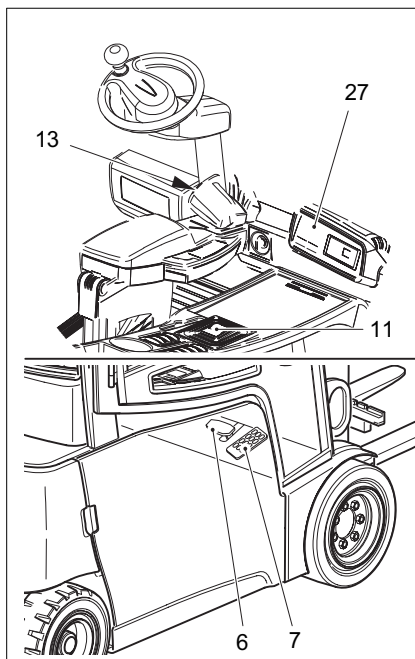
- Set the travel direction switch (13) to neutral.
- Raise the fork carriage approx. 200 mm so that the fork tines are clear of the ground.
- Tilt the mast fully backward.

Travelling with a single pedal ●



Make sure that the travel area is clear.

- Release the parking brake (27).
- Apply the travel direction switch (13).
- Slowly apply the accelerator pedal (7) until you reach the required travel speed.



Forward travel (twin pedal ○)

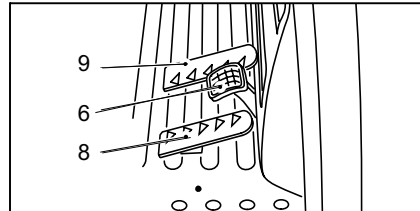


Make sure that the travel area is clear.

- Release the parking brake (27)
- Slowly apply the accelerator pedal (8)



There is no travel direction switch on trucks with a twin pedal.



4.2.3 Steering



Very minimal steering effort is required for the electric steering, therefore turn the steering wheel sensitively.

Negotiating right hand bends

- Turn the steering wheel clockwise according to the required steering radius.

Negotiating left hand bends

- Turn the steering wheel anti-clockwise according to the required steering radius.

4.2.4 Braking



The braking pattern depends largely on the ground conditions. The driver must take this into consideration when handling the truck. Brake with care to prevent the load from slipping.

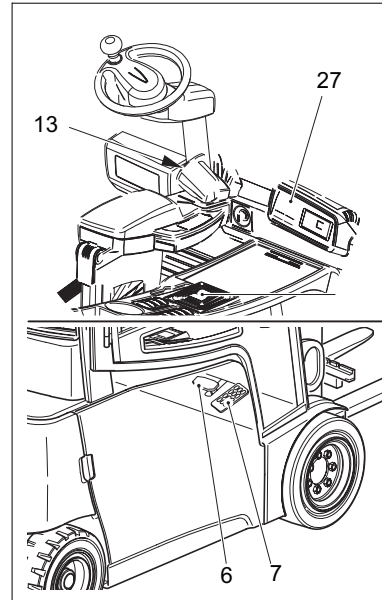
If you are travelling with an attached load you must increase the braking distance.

There are four ways of braking:

- Service brake
- Coasting brake
- Reversing brake
- Parking brake

Service brake:

- Depress the brake pedal (6) until you feel the brake pressure.

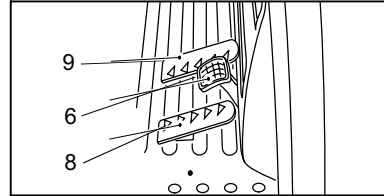


Coasting brake:

- Take your foot off the accelerator pedal (7) (8/9). The truck brakes regeneratively via the traction controller.



This method saves energy.



Reversing brake (single pedal):

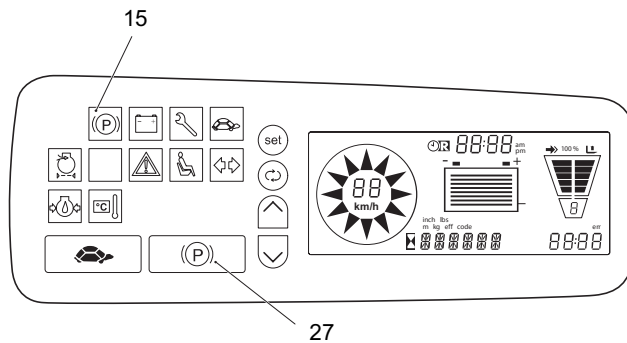
- Set the travel direction button (13) to the opposite direction while travelling. The truck brakes regeneratively via the traction controller until the truck starts to travel in the opposite direction.

Parking brake:

- Apply the parking brake (27).



You cannot travel against the parking brake; the parking brake indicator (15) will be displayed.



The parking brake applies approx. 5 seconds (adjustable) after the truck has come to rest.

When you stop on the ramp the truck is held electrically until the parking brake applies.

When you set off, before the parking brake is released, a torque builds up on the drive motor to prevent the truck from rolling back.



The parking brake will hold the truck with maximum load, on a clean ground surface, on inclines of up to 15%.

4.3 Operating the lift mechanism and attachments (SOLOPILOT ●)



Do not lift other people with the lifting mechanism and do not allow anyone to stand under a raised load.

The SOLOPILOT must only be operated from the driver's seat. The driver must be trained to handle the lift mechanism and the attachments.

Lifting

– Pull the control lever (47) in direction (H).

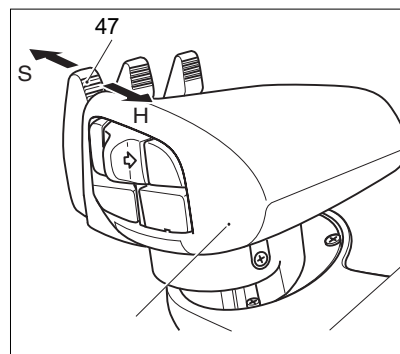


The lift speed is determined by the inclination of the control lever.

– Activate the control lever until the desired height is reached.



When the limit position is reached (there will be a noise from the pressure relief valve) set the control lever back to its starting position.



Lowering

– Push the control lever (47) in direction (S).



The lift speed is determined by the inclination of the control lever.



Avoid dropping the load abruptly, in order to protect the load and the rack surface.

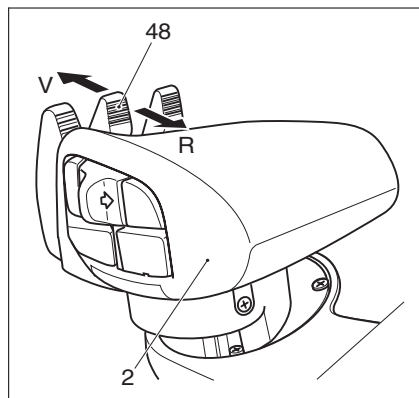
Tilting the mast forward / backward



When tilting the mast back, keep all parts of your body from between the mast and the front wall.

– Push the control lever (48) in direction (V) to tilt forward.

– To tilt back, pull the control lever (48) in direction (R).



Operating attachments (○)



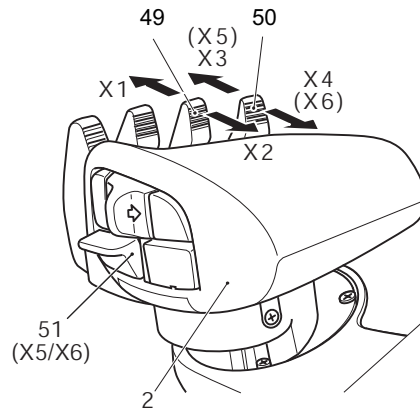
Note the manufacturer's operating instructions and the capacity of the attachment.

The control levers (49 and 50) are used to operate auxiliary hydraulics I and II. Auxiliary hydraulics III are operated by control lever (50) in conjunction with button (51). The integrated sideshift (ISS) is operated with control lever (49) as described below.

Operating the integrated sideshift (ISS)



The references to left and right are based on the load handler as viewed from the operator's position.



Sideshift left (from driver's position):

- Push the control lever (49) in direction (X1).

Sideshift right (from driver's position):

- Pull the control lever (49) in direction (X2).

4.4 Operating the lift mechanism and attachments (MULTIPILOT ○)



Do not lift other people with the lifting mechanism and do not allow anyone to stand under a raised load.

The MULTIPILOT must only be operated from the driver's seat. The driver must be instructed in how to handle the lift mechanism and the attachments!

Lifting

– Pull the MULTIPILOT (2) in direction (H).



The lift speed is determined by the inclination of the control lever.

– Activate the control lever until the desired height is reached.



When the limit position is reached (there will be a noise from the pressure relief valve) set the control lever back to its starting position.

Lowering

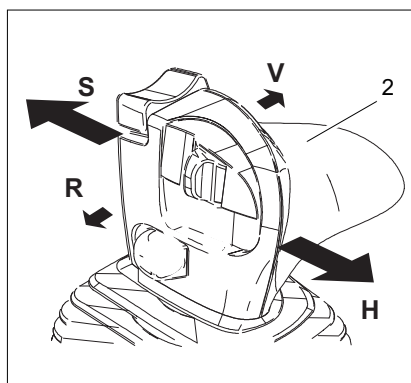
– Push the MULTIPILOT (2) in direction (S).



The lowering speed is determined by the inclination of the control lever.



Avoid dropping the load abruptly, in order to protect the load and the rack surface.



Tilting the mast forward / backward



When tilting the mast back, keep all parts of your body from between the mast and the front wall.

– To tilt forward, push the MULTIPILOT (2) in direction (V).

– To tilt back, pull the MULTIPILOT (2) in direction (R).

Operating the integrated sideshift (ISS)



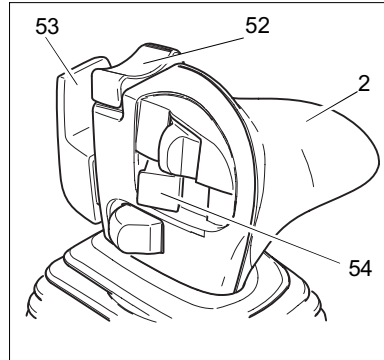
The references to left and right are based on the load handler as viewed from the operator's position.

Sideshift left (from driver's position):

- Press the left button (52).

Sideshift right (from driver's position):

- Press the right button (52).



Aux. hydraulics II



Note the manufacturer's operating instructions and the capacity of the attachment.

- Pull or push the button (53) to control the attachment.

Auxiliary hydraulics III

- Using button (54) change to auxiliary hydraulics III.
- Pull or push the button (53) to control the auxiliary hydraulic function.

Controlling the speed of the lifting device

Tilting the MULTIPLOT controls the speed of the hydraulic cylinder.

When the control lever is released it automatically reverts to neutral and the lifting device remains in the position it has reached.



Always apply the control lever sensitively, never with a sudden jerk. Release the MULTIPLOT as soon as the lifting device reaches the limit position.

4.5 Emergency lowering



Keep all personnel out of the hazardous area when applying emergency lowering.

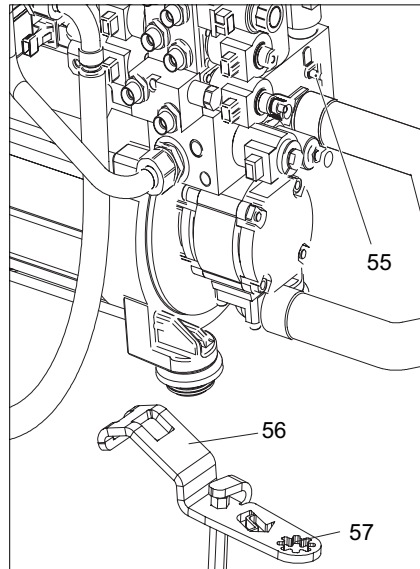
If the mast does not lower due to a fault in the lift controller, apply the emergency lowering valve (55) on the valve block below the floor board.



Never reach through the mast!
Do not stand underneath the load.

- Turn the EMERGENCY DISCONNECT switch and key switch off.
- Disconnect the battery connector.
- Place the auxiliary tool (56) on the emergency lowering valve (55) with the recess 57 (Jungheinrich symbol visible).
- Release the emergency lowering valve (55) in the forks direction.
- The mast and load handler will lower.
- If necessary the load can be stopped by closing the valve.

Do not operate the truck until the fault has been rectified.

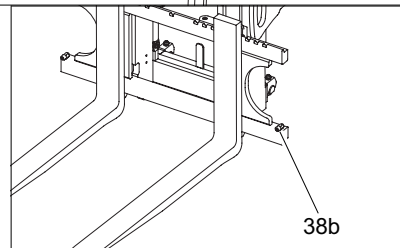


4.6 Adjusting the forks



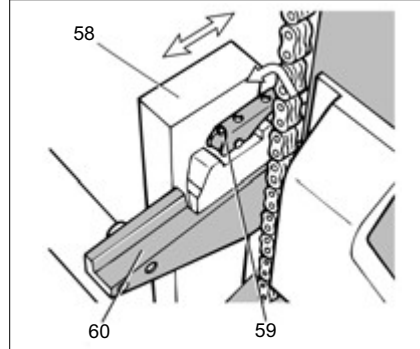
Unsecured and incorrectly adjusted forks can cause accidents

Before adjusting the forks make sure the retaining bolts (38b) are fitted.



Adjust the fork tines in such a way that both are equally distanced from the outer edge of the fork carriage and the load centre of gravity lies in the middle of the fork tines.

- Raise the locking lever (59).
- Push the forks (58) into the correct position on the fork carriage (60).
- Turn the locking lever down and move the fork tine until it engages in a slot.



4.7 Collecting, Lifting and Transporting Loads.



Only move the truck with or without a load when the mast is tilted back and the load handler lowered.

Do not exceed the capacity of the truck.

Note the load chart!

Do not lift other people with the lifting mechanism and do not allow anyone to stand under a raised load.

- Approach the load with care.
- Set the travel direction switch (13) to neutral.
- Set the mast vertical.
- Raise the forks to the correct height for the load unit.
- Set the travel direction switch to forward travel.
- Insert the forks under the load
- Set the travel direction switch (13) to neutral.
- Lift the load unit clear.
- Set the travel direction switch to reverse.



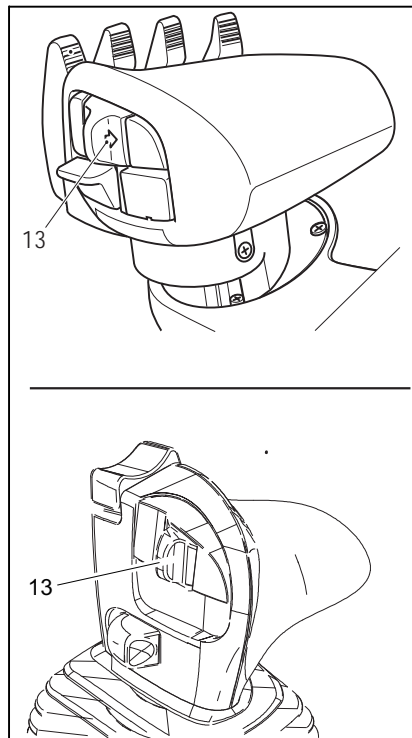
Make sure you have enough space to reverse into.

- Reverse carefully and slowly until the load unit is outside the storage area.



Never reach through the mast!

- Tilt the mast fully backward.
- Bring the load unit into the transport position (approx. 150...200 mm).
- Transport the load unit.
- Set the travel direction switch (13) to neutral.
- Set the mast vertical.
- Position the load unit at the correct height
- Set the travel direction switch (13) to forward.
- Carefully enter the storage area.
- Slowly lower the load unit until the forks are free.



4.8 Parking the truck safely



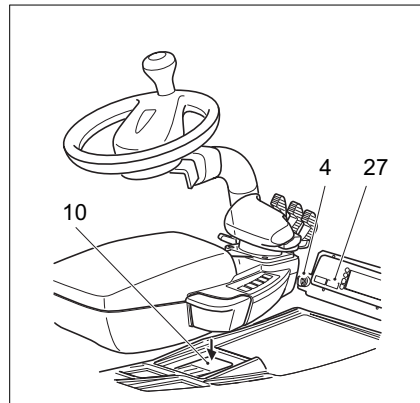
When you leave the truck it must be securely parked even if you only intend to leave it for a short time.

- Drive the truck onto a level surface.
- Apply the parking brake button (27).
- Fully lower the load forks and tilt the mast forward.



Never park and abandon a truck with a raised load.

- Turn the key in the key switch (4) to "0".
- Remove the key from the key switch (4).
- Press the EMERGENCY DISCONNECT switch (10) down.



4.9 Towing trailers

The truck can occasionally be used to tow a light trailer on a dry, level and well maintained surface.



The max. tow load is the capacity indicated on the capacity data plate (see decals diagram in chapter B).

The tow load consists of the weight of the trailer and the stated capacity.

If a load is transported on the forks, the tow load must be reduced by the same amount.

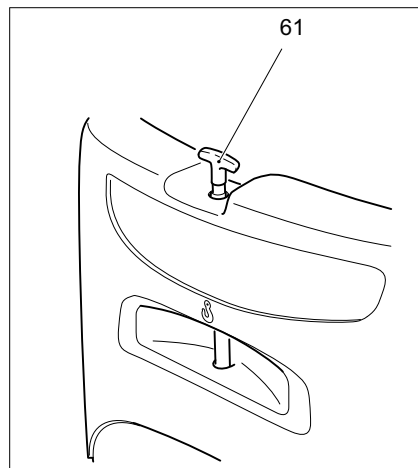


Important notes for safe towing

- A truck must not be continually operated with trailers.
- No supporting loads are permitted.
- The maximum speed is 5km/h.
- Towing must only be performed on level, secure travel routes.
- Follow the instructions of the coupling manufacturer if using special trailer couplings.
- The owner must test trailer operation with the permissible tow load by means of a trial run under the applicable operating conditions on site.

Attaching the trailer

- Push the tow pin (61) down and turn it 90 degrees.
- Pull the tow pin up and insert the tiller of the trailer vehicle into the opening.
- Insert the tow pin, push it down, turn it 90 degrees and engage it.



5 Troubleshooting

This chapter allows the user to identify and rectify basic faults or the effects of incorrect operation. When trying to locate a fault, proceed in the order shown in the table.

Fault	Probable Cause	Action
Truck does not start	– Battery connector not plugged in – EMERGENCY DISCONNECT pressed. – Key switch in "0" position. – Battery charge too low – Battery door open / on-board charger active – Faulty fuse	– Check battery plug and plug in if necessary. – Unlock the EMERGENCY DISCONNECT – Set key switch to "I" – Check battery charge, charge battery if necessary – Finish charge / close door – Check fuses
Load cannot be lifted	– Truck not operational – Hydraulic oil level too low – Faulty fuse	– Carry out all measures listed under "Truck does not move" – Check hydraulic oil level – Check fuses
Error message displayed	– Truck not operational	– Press the EMERGENCY DISCONNECT isolator or turn key switch to 0, after approx. 3 seconds try to perform the desired operation again



If the fault cannot be rectified after carrying out the above procedures, notify the manufacturer's service department, as further troubleshooting can only be performed by specially trained and qualified service personnel.

5.1 Temperature control

If a temperature switch applies the power is reduced. This operates as a function of the temperature:

for crawl speed,
for the "half lift speed" hydraulic function,
for the "continual power deactivation" controllers.