

E Operation

1 Safety Regulations for the Operation of Fork Lift Trucks

Driver Authorisation: The forklift truck may only be used by suitable persons who have been trained to drive the truck, who have proved to the owner or his representative that they can drive and handle loads and have been authorised to operate the truck by such owner or his representative.

Driver's Rights, Responsibilities and Regulations: The driver must be informed of his duties and responsibilities and be instructed in the operation of the truck and shall be made familiar with the contents of the present Operator Manual. He must be afforded all his due rights.

Safety shoes must be worn when operating pedestrian lift trucks.

Unauthorised Use of Truck: The driver is responsible for the forklift during the time it is in use. He shall prevent unauthorised persons from driving or operating the truck. It is forbidden to carry or hoist persons.

Damage and Complaints: Damage or any complaints regarding the forklift truck or its attachments shall immediately be reported to a supervisor. Machines not safe for operation shall not be used until they are deemed fit for use following authorised repair and commissioning.

Repairs: The driver must not carry out any repairs or alterations to the forklift truck without the necessary training and authorisation to do so. On no account shall he adjust or render unusable safety equipment or switches.

Danger Areas: A danger area is defined as the area in which a person is at risk due to truck movement, lifting operations, load lifting parts (e.g. forks or ancillary equipment) or the load itself. This also includes areas which can be reached by falling loads or lowering mechanical devices.



Unauthorised persons must be kept away from the danger area. Where there is danger to persons a warning shall be given in good time. If unauthorised persons are still within the danger area then the truck shall be brought to rest immediately.

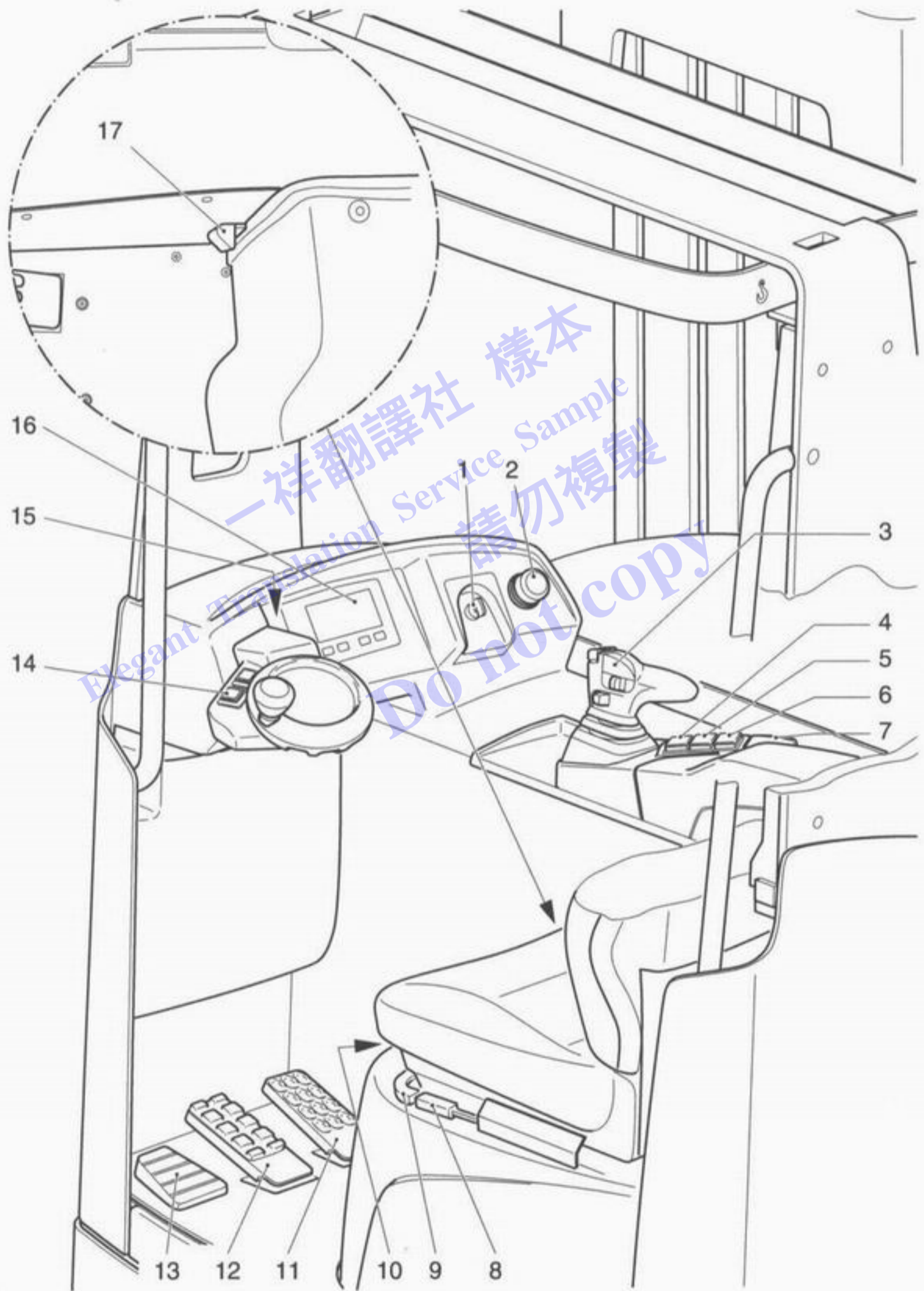
Safety Devices and Warning Signs: Safety devices, warning signs and warning instructions shall be strictly observed.

2 Description of Operating and Display Elements

Item.	Operating or Display Element		Function
1	key switch	●	Switches current on and off. By removing the switch the truck cannot be switched on by unauthorised persons.
	Keypad (CANCODE)	○	Sets the code and switches on the truck
2	EMERGENCY DISCONNECT switch	●	The supply current is interrupted, all electrical functions are switched off and the truck brakes are applied automatically.
3	Multi-Pilot	●	Function operation: <ul style="list-style-type: none"> – Travel forward / reverse – Lift/lower load pickup – Extend / retract mast holder – Tilt hoist fram forward or backward, fork tilt – Sideshift left / right – Horn button – Auxiliary hydraulics (HF5) (○)
4	Steering angle switch	●	Change steering range from 180° or 360°
5	Sideshift centre position switch	○	Sideshift positioned in centre
6	Forks horizontal switch	○	Forks set to horizontal position (fork tilter only)
7	Lock for arm rest	●	Longitudinal displacement of arm rest
8	Driver's seat lock	●	The driver's seat can be adjusted horizontally
9	Driver's seat weight adjustment	●	Adjusting driver's weight for optimal seat cushioning
10	Backrest adjustment	●	The driver's seat backrest can be adjusted
11	Accelerator	●	The traction speed is infinitely variable
12	Brake Pedal	●	Brake applied to truck
13	Dead man pedal	●	<ul style="list-style-type: none"> – Not Activated: Travel inhibited, truck brought to rest. – Activated : Travel released

● = Series Equipment

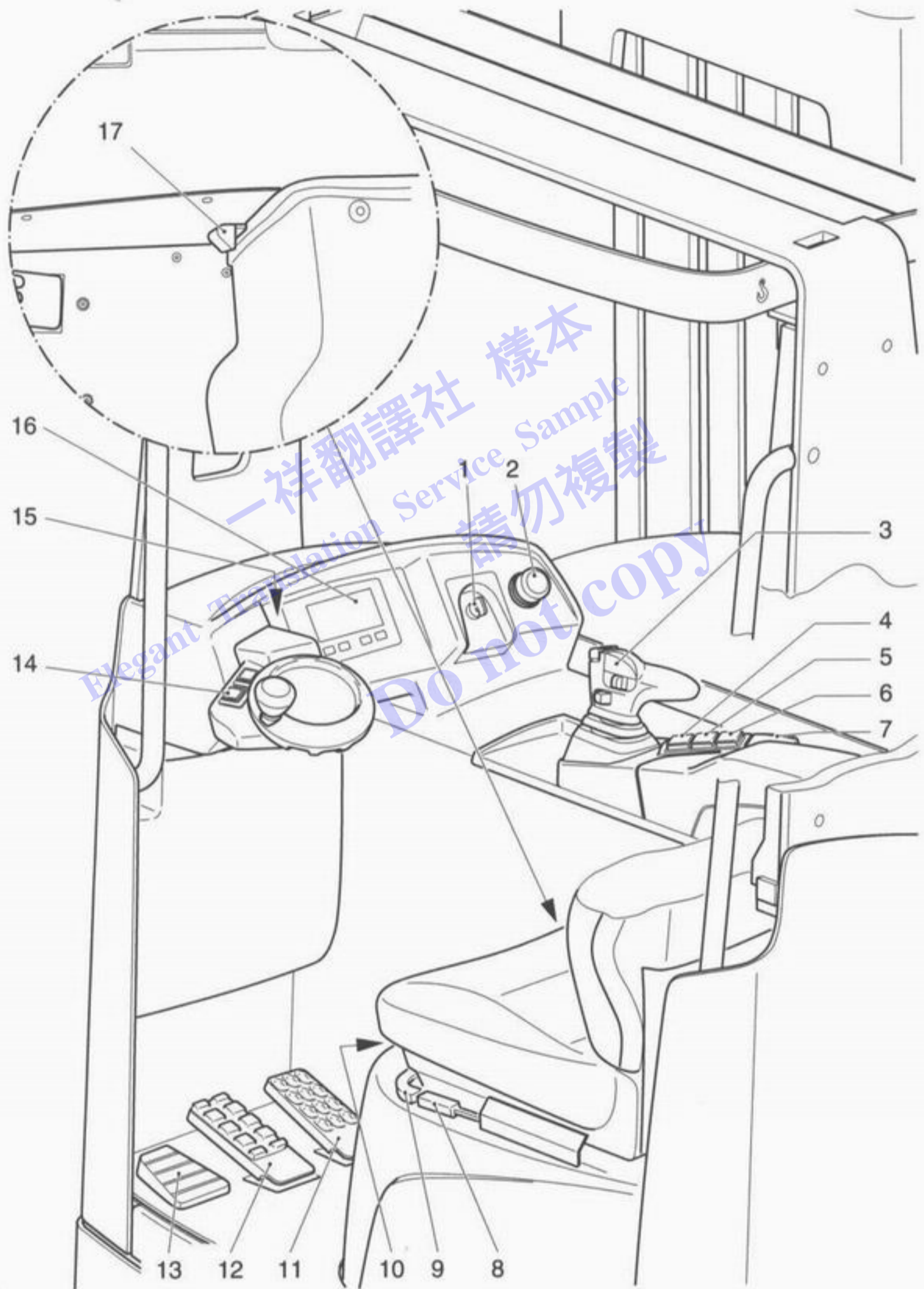
○ = Auxliary Equipment



Item.	Operating or Display Element		Function
14	Override switch	<input type="radio"/>	Prevents damage to the truck or load near the outriggers.
15	Steering column adjustment	<input checked="" type="radio"/>	Sets steering column distance and height.
16	Driver's display	<input checked="" type="radio"/>	Displays important travel and lift parameters, selection and display of steering modes, warnings, incorrect operation notes and service displays (see Section 6).
	On board computer	<input type="radio"/>	Replaces the keyswitch. Switches control voltage on and off. Releases truck functions via PIN code.
17	Battery trolley unlatch pedal	<input checked="" type="radio"/>	Unlocks the battery trolley.

<input checked="" type="radio"/> = Series Equipment	<input type="radio"/> = Auxliary Equipment
---	--

一洋翻譯社
 Elegant Translation Service Sample
 請勿複製
 Do not copy



3 Starting the Truck



Before the truck is started, operated or a load unit raised, the driver must ensure that there is no one standing in the danger area.

Daily tests and procedures before commencing work

- The entire truck (particularly wheels and lifting devices) to be inspected for damage.
- Check whether the load chains are evenly tensioned
- Visibly check battery and cable connections

Adjusting the driver's seat



To achieve optimal seat cushioning the driver's seat must be adjusted according to the driver's weight.

The driver's seat must not be occupied when being adjusted driver's weight.

To adjust the driver's weight :

- Pull the lever (9) in the direction of the arrow and return.

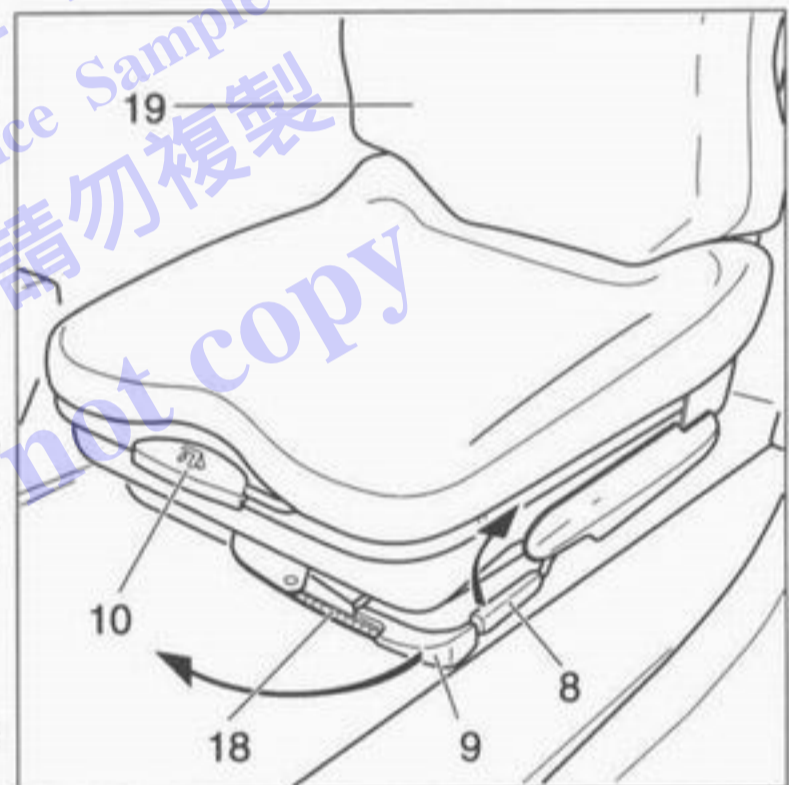


The previous weight setting is reset to the minimum value
Setting range of seat suspension from 50 kg to 130 kg

- Move lever (9) again in the direction of the arrow until the corresponding weight mark on scale (18) is reached. Then finally return lever.
- Sit on the driver's seat



From the driver's seat do not reach out to the side wall / roof of cab.



Adjusting the backrest

- Lift up locking lever (10) and adjust the tilt of the backrest (19).
- Release locking lever, the backrest is set

Adjusting the sitting position:

- Pull up the locking lever to locate the driver's seat (8) in the direction of the arrow and push the seat forwards or backwards to the desired position.
- Re-engage locking lever (8).



The driver's seat must be securely located in the desired position. The position of the driver's seat must not be altered when driving.



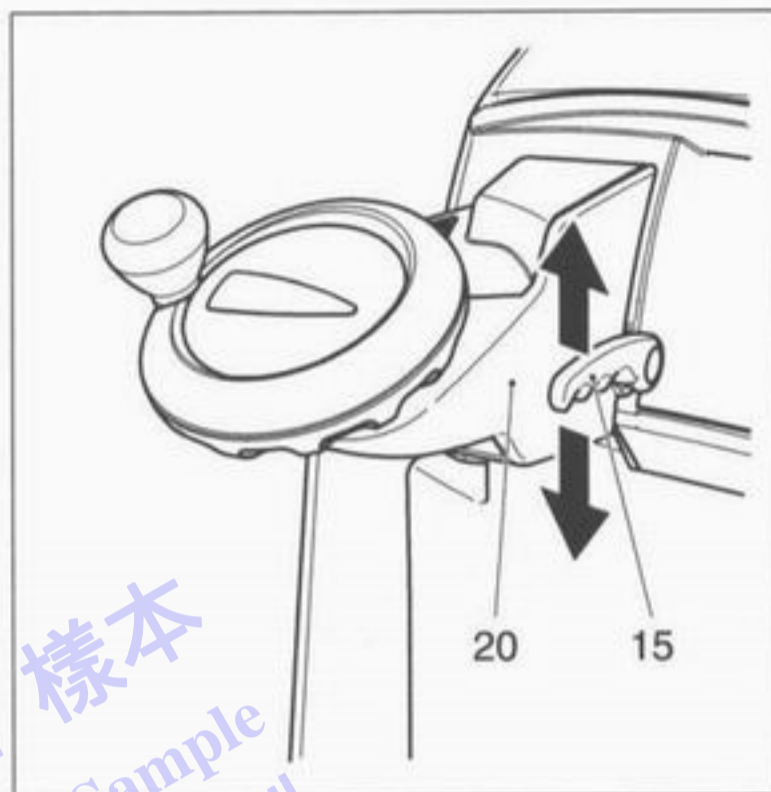
The seat adjustment refers to series standard design. For other designs refer to the manufacturer's adjustment instructions.

When adjusting ensure that all controls are within reach

Adjusting the steering column

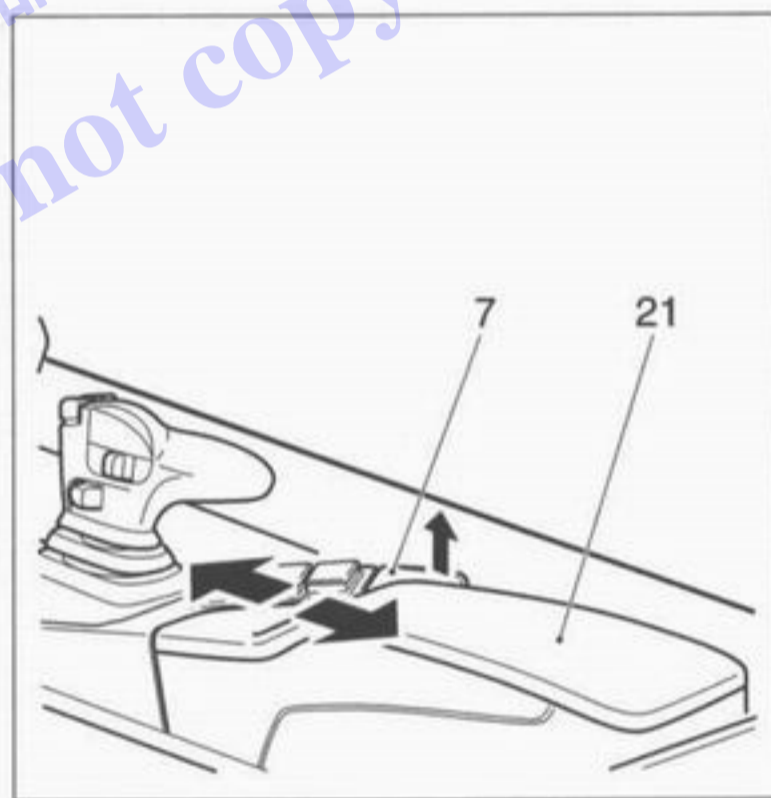
- Slacken the steering column stop (15) and set the steering head (20) to the required position horizontally and vertically.

Re-tighten the steering column stop.



Adjusting the arm rest

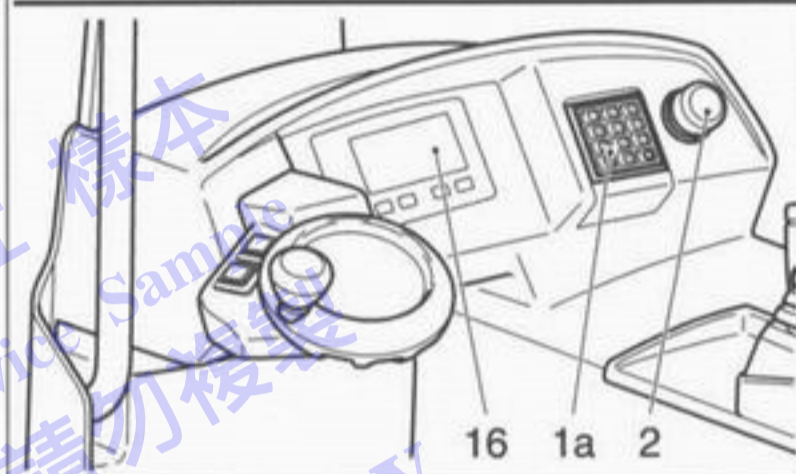
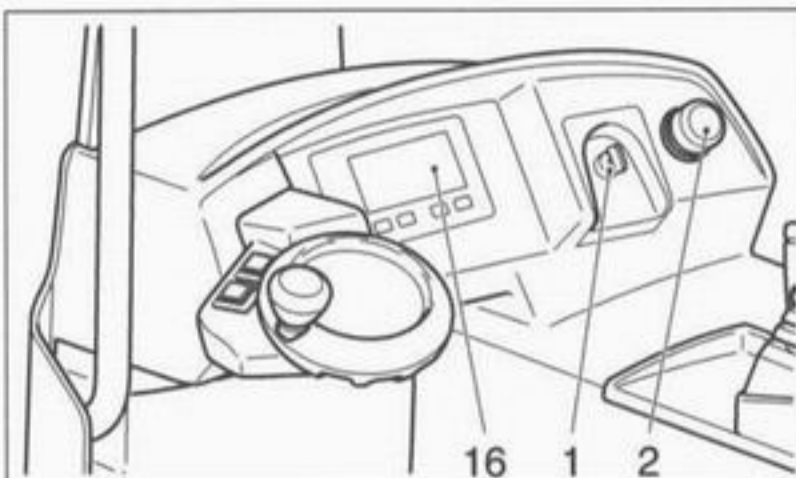
- Lift the arm rest (7) lock and set the arm rest (21) to the desired position (longitudinally).
- Release the arm rest lock (7)



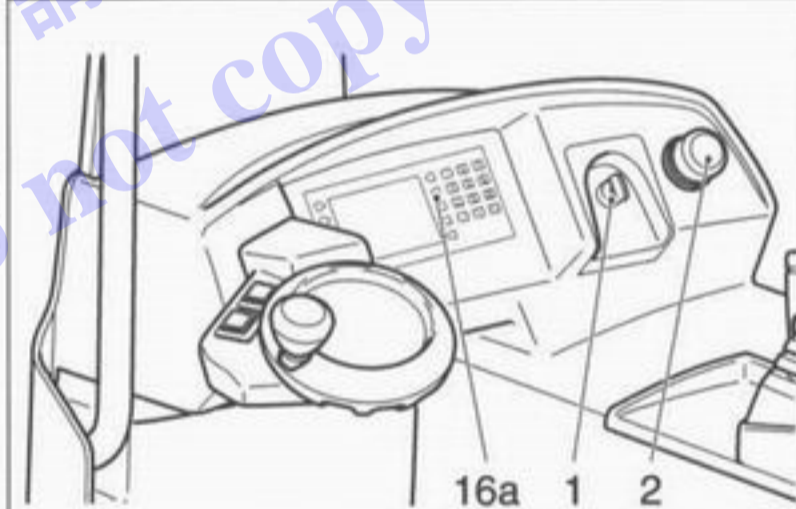
3.1 Preparation for Use

- Remove the EMERGENCY DISCONNECT switch (2).
- Insert the key in the key switch and turn to the right to position "I" or:
- for trucks without a key switch enter the free switch code via CANCODE (1a), or via the on board computer.

With CANCODE (○), the start PIN 2580 is inserted via the control panel (1a) and confirmed by the set key.



- For the on board computer (16a) (○), enter the start PIN 14016 and confirm with OK.



- Check the horn operation.

The truck is now ready for use. The battery charge monitor shows the battery capacity available.

- Check the brake and handbrake operation (see Section 4.2).
- On starting the dead man pedal must be activated.
- Select the travel direction.

- Apply the parking brake with the brake switch (22/22a).

The truck is operational.

3.2 Emergency Stop Device



The truck is equipped with an emergency stop device. After switching on the EMERGENCY DISCONNECT switch (2) and the keyswitch (1) or entering the Pin code there follows an automatic safety prompt.

Emergency Stop Display

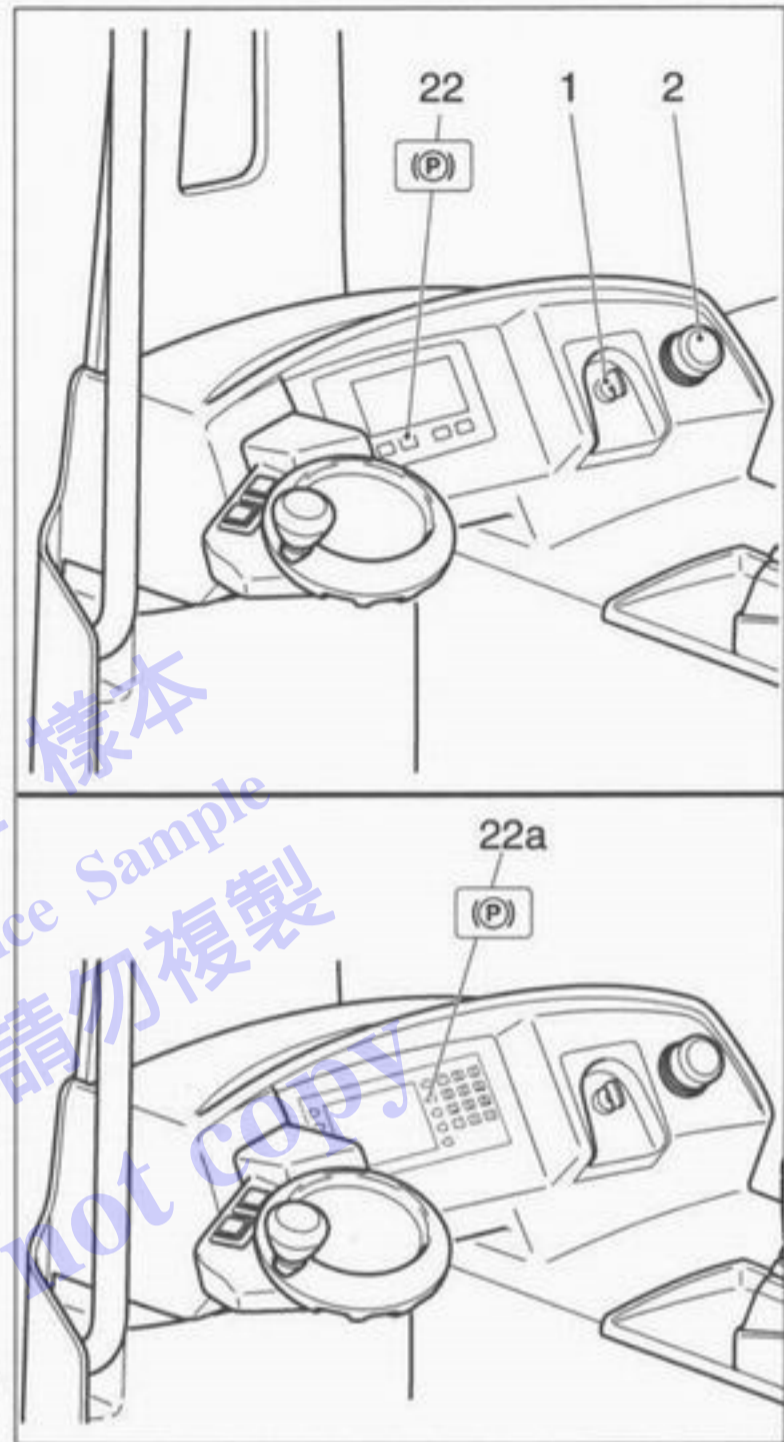
If a fault is detected on the steering or brake systems, a display will appear on the driver display panel (●) (16) or on the board computer (○) (16a).

Emergency Stop Activation

If a fault occurs in the steering system during travel which impairs the safety of the operator there will be a controlled braking of the truck until it comes to rest.

Emergency Stop Re-Set.

- Turn the EMERGENCY DISCONNECT switch and the keyswitch off and on again.



If the emergency stop display appears on the driver's display (●) or the on-board computer (○) after repeatedly resetting the emergency stop, inform the manufacturer's service department.



If, after the emergency stop has been activated, the truck is in a hazardous area or aisle, it can only be operated with the steering crank for recovery purposes (see Section 5, Truck Recovery).

4 Operating the Forklift Truck

4.1 Safety Rules when Driving

Routes and Work Areas: The truck may only be driven on routes specifically designated for traffic. Unauthorised persons must not enter the working area. Loads must only be deposited at the designated places

Travel Procedure: The driver must adjust the speed of the truck to suit local conditions. He must drive slowly into curves and also when approaching and driving in narrow gangways, when traveling through swing doors and approaching blind areas. He must always keep a safe braking distance to the truck ahead and keep the truck under control. Sudden stopping (except in case of danger) fast turning, overtaking at dangerous or blind spots is not permitted. It is not permitted to lean or reach out of the working and operating area.

Visibility when Driving: The driver must look in the direction in which he is travelling and shall always maintain a clear view of the road ahead. If a load is being transported which impairs his view then the load must be carried on the trailing end of the truck. If this is not possible, a guard shall be posted who shall walk ahead of the truck.

Negotiating Inclines or Dips: Negotiating inclines or dips 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 that truck. During such operations the load shall always be carried on the incline side of the truck. Turning, traversing and parking of the forklift is not allowed on inclines or dips. Driving downhill may only be permitted with reduced speed and where the brake can be applied instantly.

Elevators and Docks: Elevators or docks may only be entered if they are sufficiently robust to carry the load, are suitable for traffic and are authorised by the owner for operation. This must be checked before traffic is allowed onto them. The forklift must be driven into the elevator with the load leading and be positioned such that the truck does not come into contact with the shaft sidings.

Persons riding in the elevator may only enter when the truck is secure and must vacate the lift before the truck.

Composition of the transported load: Loads may only be transported whose safety has been ensured in accordance with safety regulations. Never transport loads which have been stacked higher than top of the fork carriage or the load guard.

Towing Trailers: The maximum trailing load for a forklift truck towing unbraked or braked trailers shall not be exceeded. The trailer load must be secured in accordance with regulations and must not exceed the dimensions permitted for that roadway. After coupling and before starting the driver shall ensure that the trailer coupling cannot become detached. Forklift trucks towing a load must be driven so that the trailing truck is safe and can be stopped under any conditions.

4.2 Driving, Steering, Braking

Emergency Stop

- Press the EMERGENCY DISCONNECT switch (2) down.

All electrical functions are switched off. The operation of the switch must not be affected by any objects placed in its way.

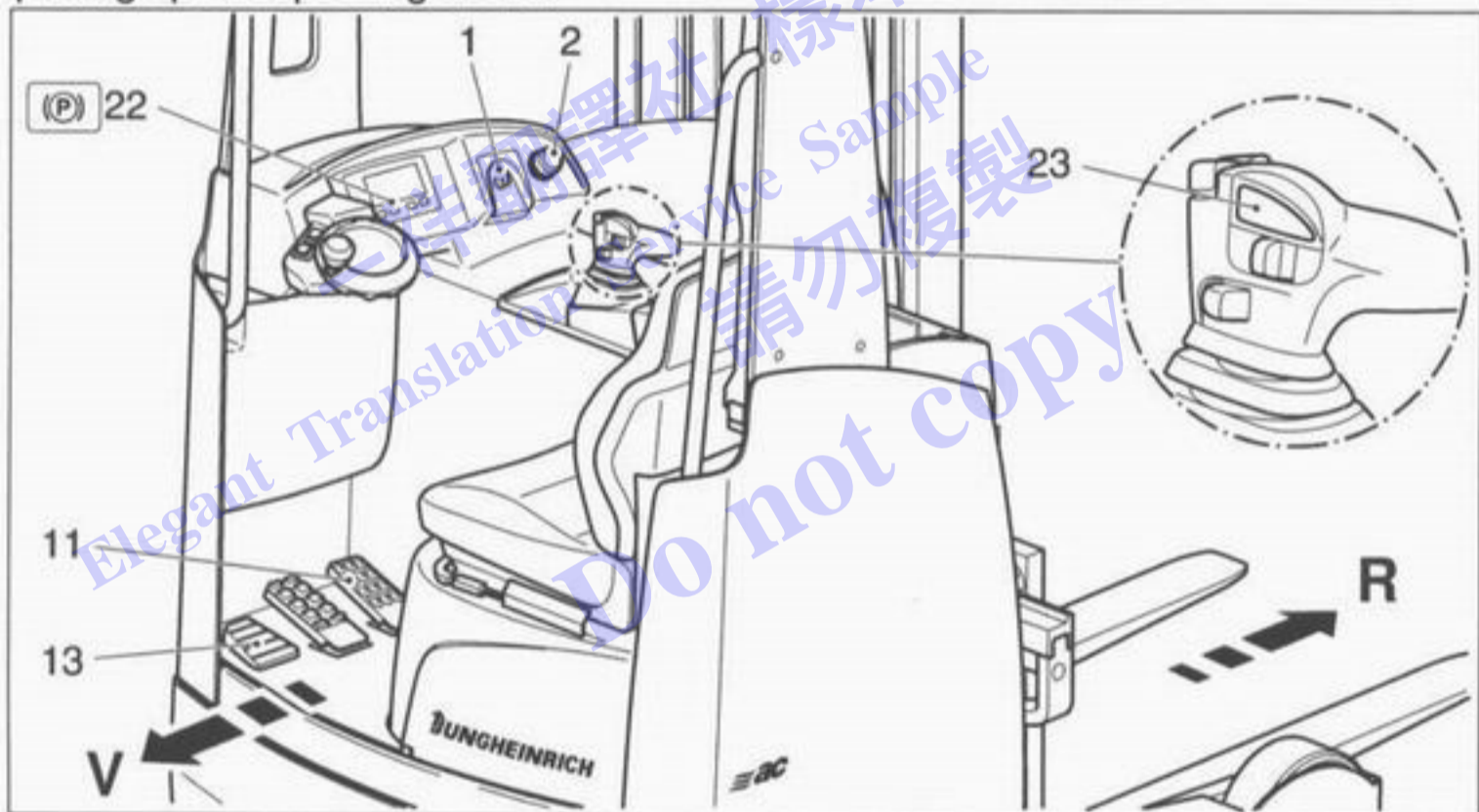
Driving



Only drive the truck with closed and properly locked hoods. The main travel direction is the drive direction (V). Pay extra attention when travelling in the load direction (R).



Travelling in the load direction should only be undertaken whilst manoeuvring and picking up or depositing a load.



- Prepare truck for use (see Section 3.1).
- Release parking brake via brake switch (22).



When the truck is ready for use no travel direction is selected. The truck can only be driven after the required direction has been selected.

- When the truck is ready for use press the travel direction switch (23) in the direction of the arrow to select required direction (R). Continually pressing the direction switch will change the direction.
- Press the dead man pedal (13) and the accelerator (11). The truck will start in the desired direction.



The dead man pedal ensures that the driver's feet do not extend outside the truck. When operated all electrical functions are cut out except the steering, the driver display panel and the horn. The truck rolls to a stop in accordance with the "Rollout Brake" parameter.



The travel speed is controlled by the accelerator (11).

Steering

Reverse Steering (●)

When travelling forward travel (drive direction) steer left into a left hand bend and right into a right hand bend. The position of the drive wheel will be shown on the driver display panel or the on board computer.

Synchronous Steering (○)

- When travelling forward travel (drive direction) steer to the left for a right hand bend and steer to the right for a left hand bend. The position of the drive wheel will be shown on the driver display panel or the on board computer.



Braking



The braking pattern of the truck depends essentially upon the ground conditions. The driver must take this into account when driving the truck.

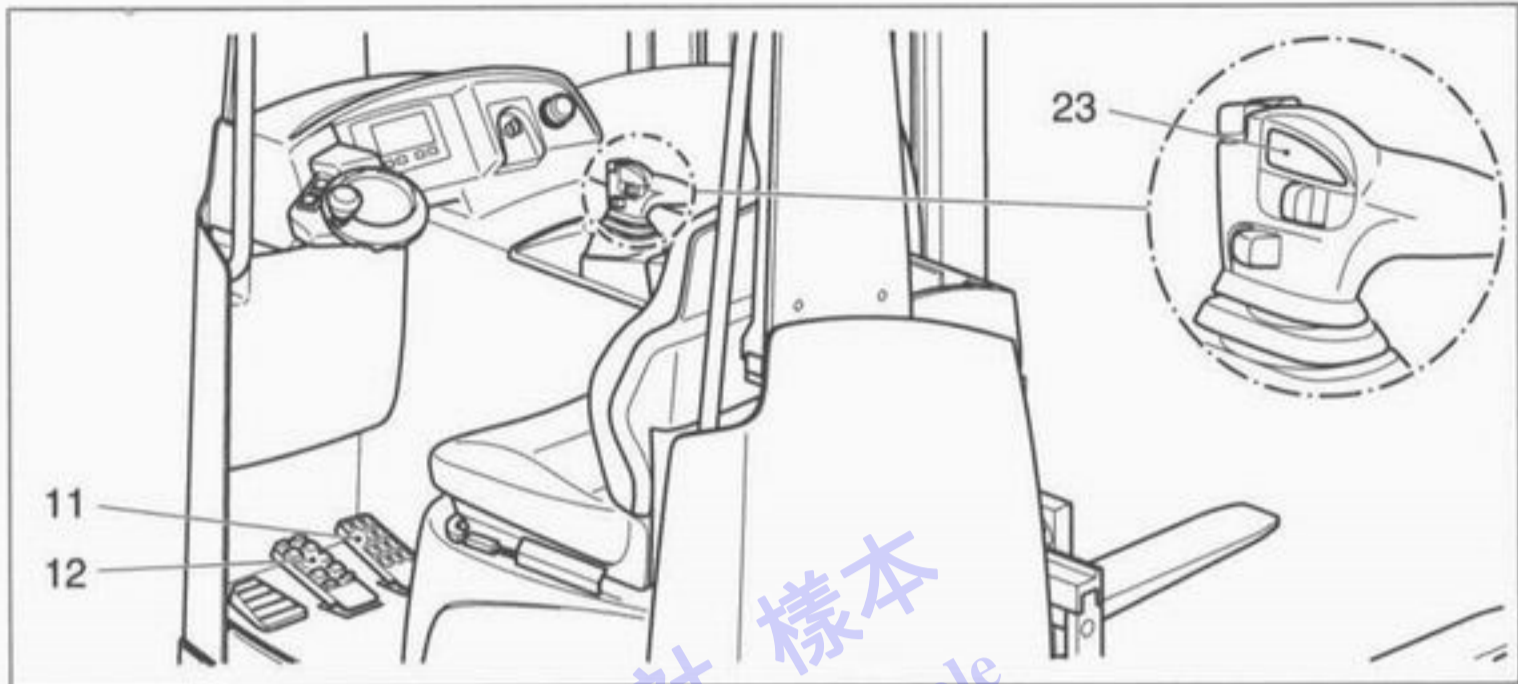
The truck can be braked in three ways:

- with the reversing brake
- with the rollout brake
- with the service brake



If the truck is operated by several drivers (e.g. multi-shift working) attention must be paid to the individual parameter settings for different braking and driving patterns. When the truck is started up again check how the truck reacts!

Braking with the Reversing Brake:



- Press the direction switch (23) during travel. The direction of travel will be reversed and the brakes applied by the traction current controller until the truck travels in the opposite direction.



This type of operation reduces energy consumption. There will be a regeneration of energy, governed by the traction current controller. The driver display panel or the on board computer will indicate energy recovery.

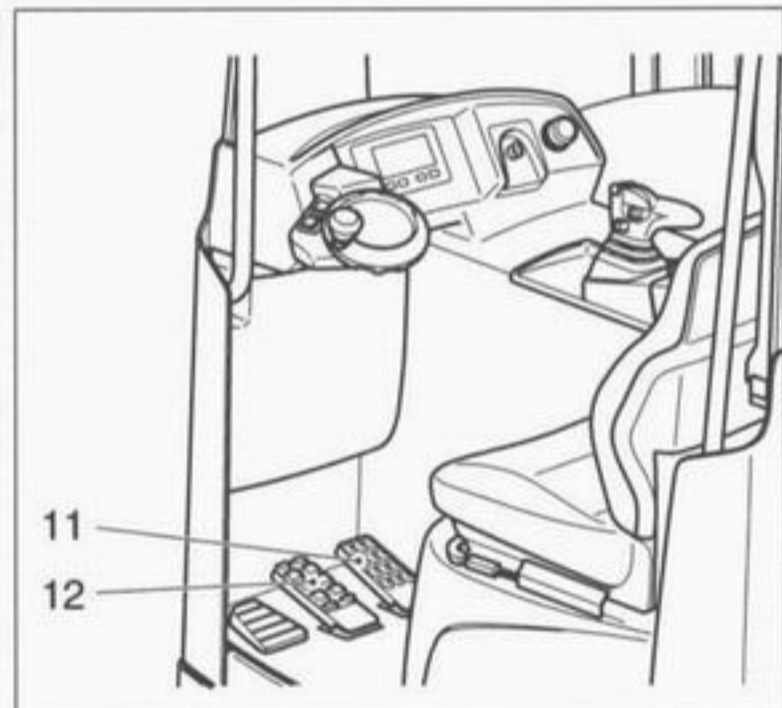
Braking with the Rollout Brake:

- Release accelerator during travel; the brake will be applied by the traction current controller according to the position of the accelerator.

Braking with the Service Brake:

- Press the accelerator (12).

The vehicle will be braked by the reverse current in the traction motor and where necessary by the electric load wheel brakes.

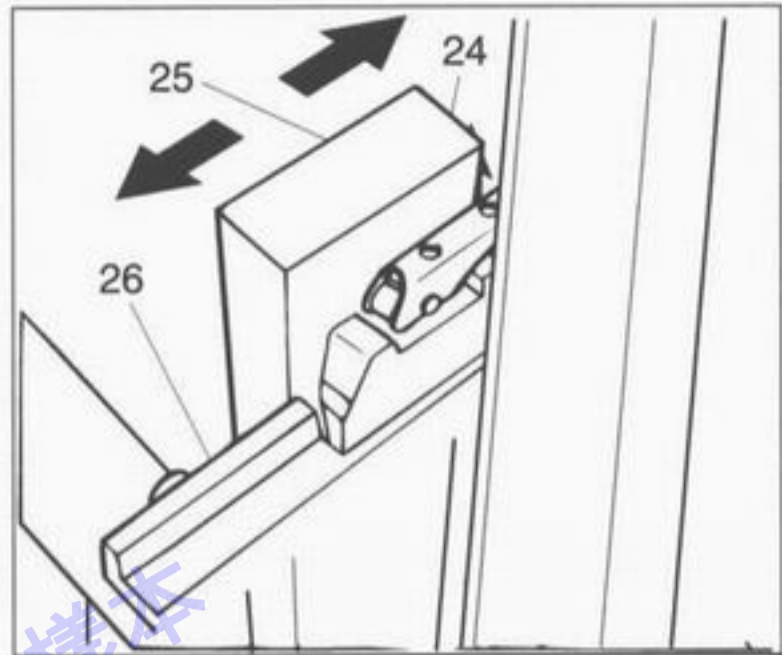


4.3 Fork Adjustment



In order to securely position a load the forks should be set as far as possible apart from each other and centrally aligned with the truck. The load centre of gravity must lie between the forks.

- Tilt the locating lever (24) up.
- Push the forks (25) to the correct position on the fork carriage (26).
- Tilt the locating lever down until the locating pin engages in a slot.



4.4 Picking Up and Depositing a Load



Before a load is lifted the driver must ensure that it is arranged on the pallet in accordance with regulations and the truck capacity is not exceeded.

- Position the forks as far as possible underneath the load.



Elegant Translation Service Sample
Do not copy

Lifting



Do not allow anybody to stand underneath a load that is being raised.

– Pull Multi-Pilot (3) in direction (H).

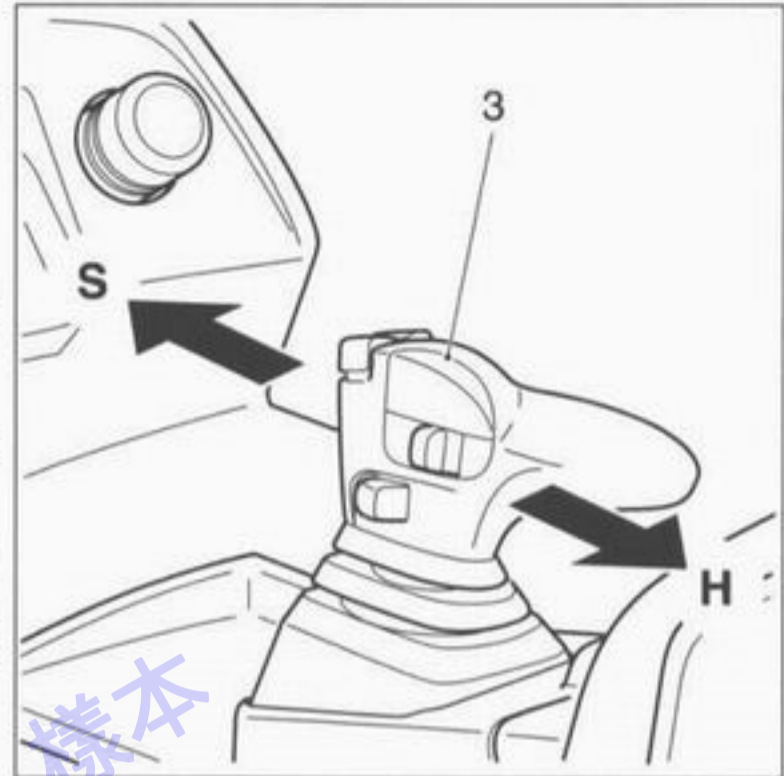


The angle of the control lever determines the lift speed.

– Operate the Multi-Pilot until the desired height is reached.



When the end stop is reached (there will be a noise from the pressure relief valve) return the control lever immediately to the start position.



Safety Switch ○

The safety switch installed is an active accident prevention device which protects the truck against accidental acceleration with a raised load outside the free lift range.



After the safety switch has been applied, the truck can only operate at **crawl speed**.

– Lower the load lifting device and set the accelerator pedal to the zero (home) position.

This deactivates the safety switch and releases **normal travel**.

Lowering

– Press Multi-Pilot (3) in direction (S).



The angle of the Multi-Pilot determines the lowering speed.



Avoid dropping the load unit heavily in order to protect the load and the rack surface.

4.5 Emergency Lowering



Do not allow anyone in the danger area when performing emergency lowering.

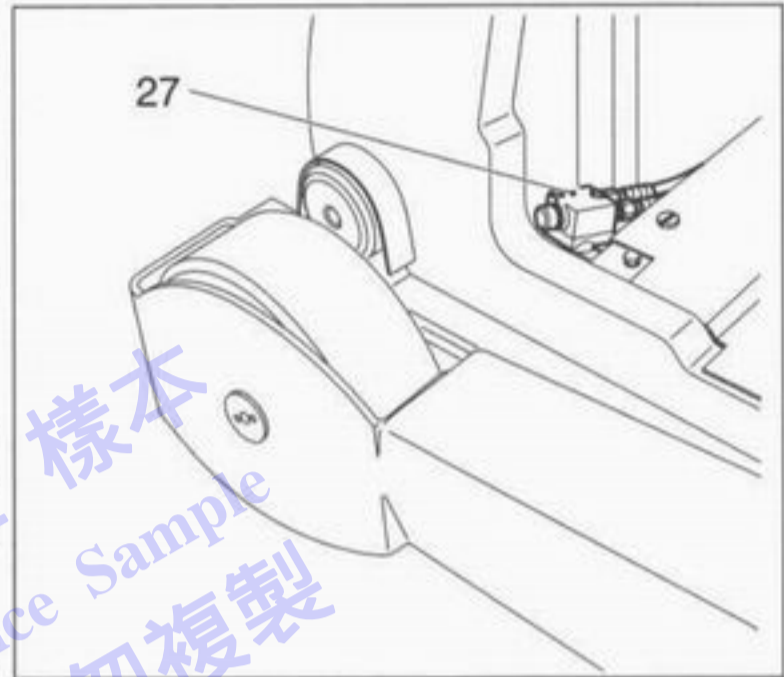
If the hoist frame does not lower due to a fault in the lift controller the emergency lowering valve (27) located on the back of the mast holder must be applied.



Only operate the emergency lowering valve when you are standing next to the truck!

Never reach through the hoist frame!
Do not walk underneath the load!

- Turn the EMERGENCY DISCONNECT switch and keyswitch off.
- Withdraw battery connector.
- Press the red valve head downwards using a suitable extension and hold in this position. Lower the hoist frame and load pickup device slowly.



Only operate the truck when the fault has been rectified.

Mast Holder Reach



Do not reach between the mast and the battery cover.

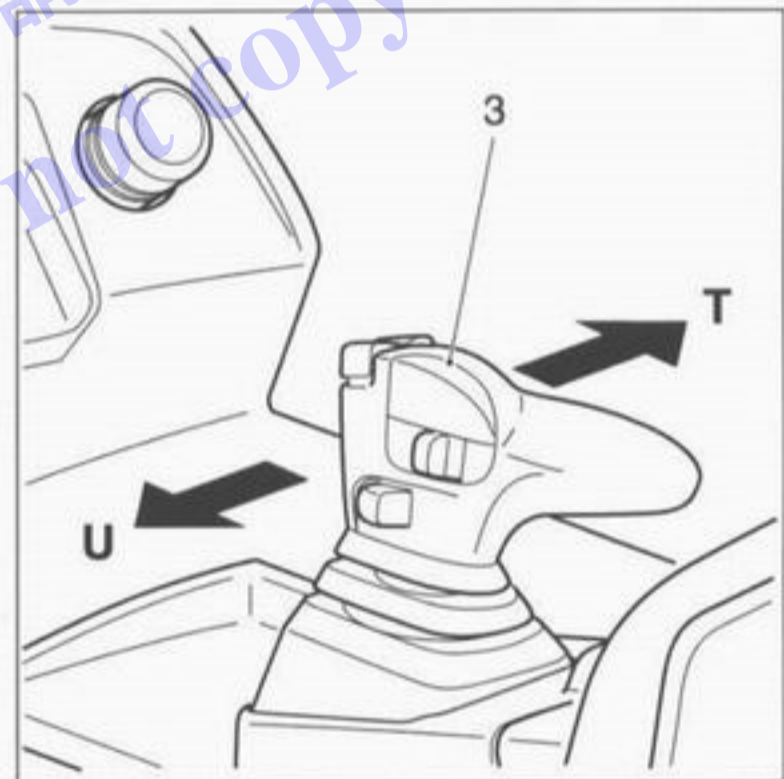
- Tilt the Multi-Pilot (3) in direction (T) to extend the mast holder and in direction (U) to retract it.



The angle of the Multi-Pilot determines the reach speed.

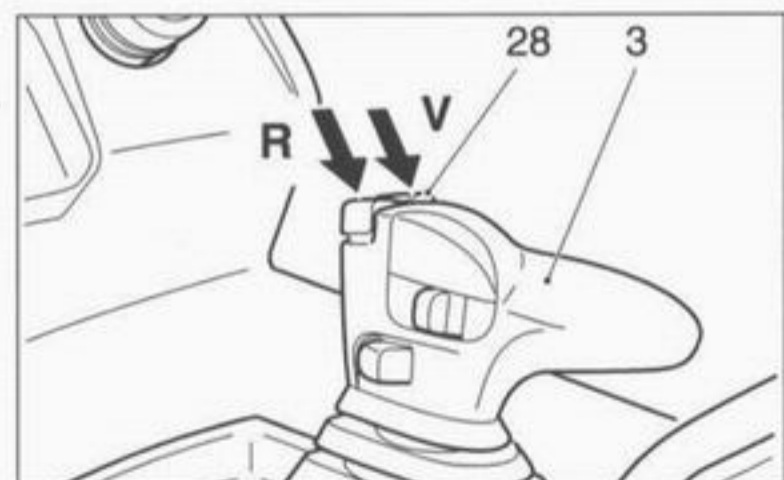
○ Mast Reach Damping

Hydraulic damping of the mast holder reach is automatically activated above the free lift.



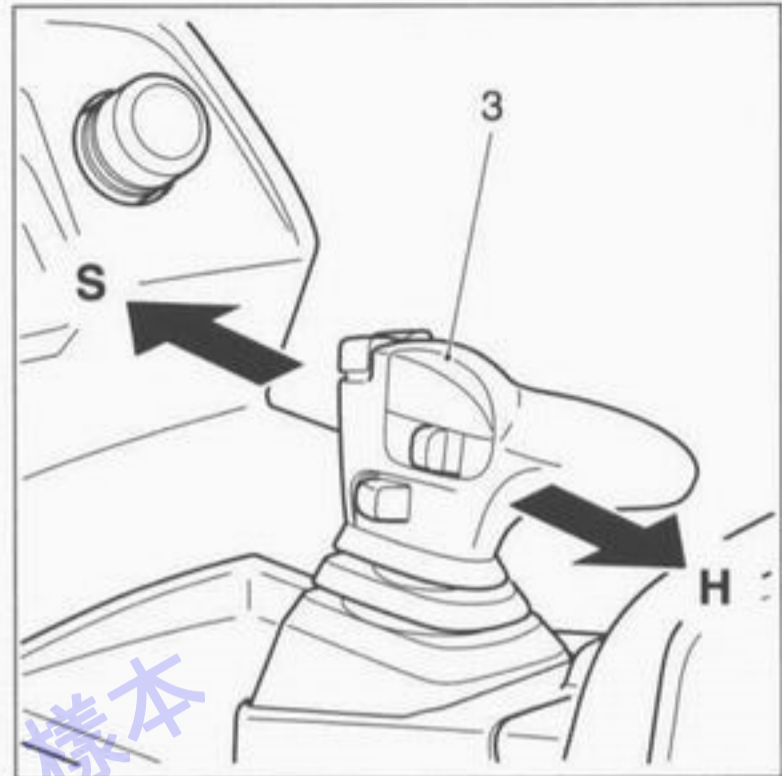
● Mast Tilt/ ○ Fork Tilt

- For forward tilt press rocker (V), rocker switch (28).
- For reverse tilt press rocker (R).



Placing, Lifting and Transporting Load Units

- Set forks to the horizontal position: Press rocker switch (28), rocker (V) or (R).
- Approach the load unit
- Extend the mast holder. Tilt Multi-Pilot (3) in direction (T).
- Lift fork prongs to correct level: Pull Multi-Pilot (3) in direction (H).
- Position forks under the load
- Lift load freely: Pull Multi-Pilot (3) in direction (H).
- To retract mast holder: Tilt Multi-Pilot in direction (U).



Only transport the truck with or without a load when the mast holder is retracted, the lifting frame tilted back and the load pickup device lowered.

- Lower load unit in the transport position: Press Multi-Pilot (3) in direction (S).
- Tilt the load unit back: Press rocker switch (28), rocker (R).
- Transport load unit.
- Position the load horizontally: Press rocker switch (28), rocker (V).
- Set the load to correct height: Pull Multi-Pilot (3) in direction (H) and if necessary tilt the Multi-Pilot in direction (T) to extend the mast holder.
- To lower the load: Press Multi-Pilot (3) in direction (S).
- To retract the mast holder: Tilt Multi-Pilot (3) in direction (U).

4.6 Operating Attachments

Integrated Sideshift

→ The directions left and right refer to the load when viewed from the operator's seat

Moving the sideshift to the left (from driver's view):

- Set key (28) to direction (X1)

Moving the sideshift to the right (from driver's view):

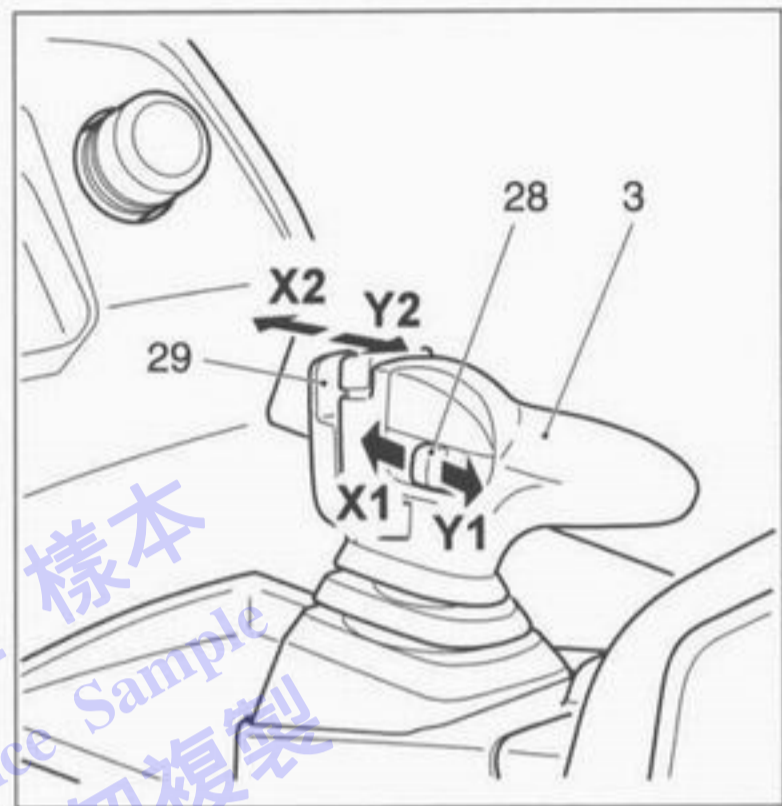
- Set key (28) to direction (Y1).

STOP When extended be aware of reduced capacity. (See Chapter B).

○ Hydraulic attachments

The control lever (29) has functions (X2) and (Y2) to operate a hydraulic attachment (HF5). (Refer to manufacturer's Operator Manual)

STOP Note capacity of the attachment.



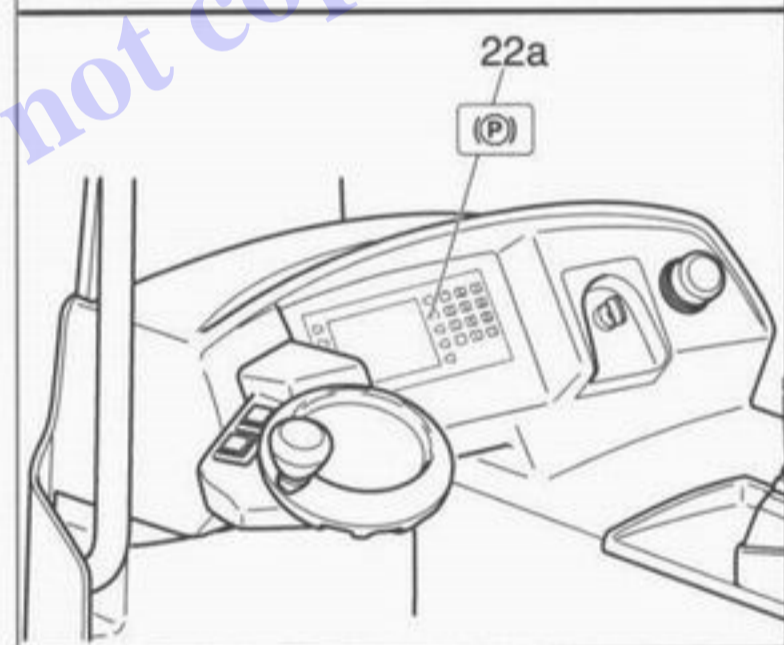
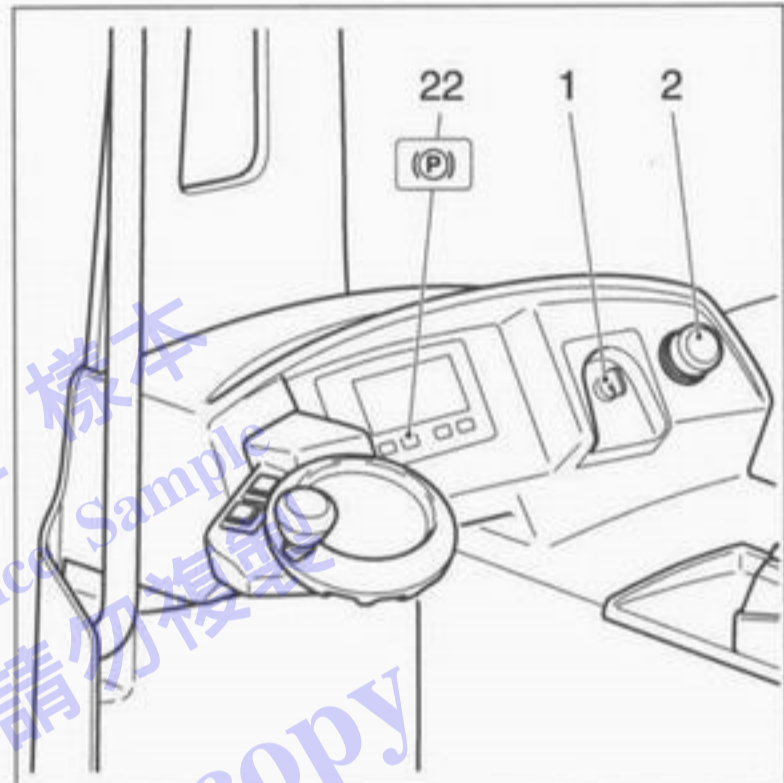
4.7 Parking the truck safely

If it is necessary to leave the truck ensure that it is parked safely even if it is left for only a short period.



Do not park the truck on a slope! The load pickup device must always be fully lowered.

- Activate the parking brake by pressing the brake switch (22/22a).
- Lower the load pickup device fully and set it horizontally.
- Completely retract the mast holder
- Set the EMERGENCY DISCONNECT switch (2) OFF.
- Turn key switch (1) to the "0" position and remove the key.



5 Truck recovery in the event of electric steering failure

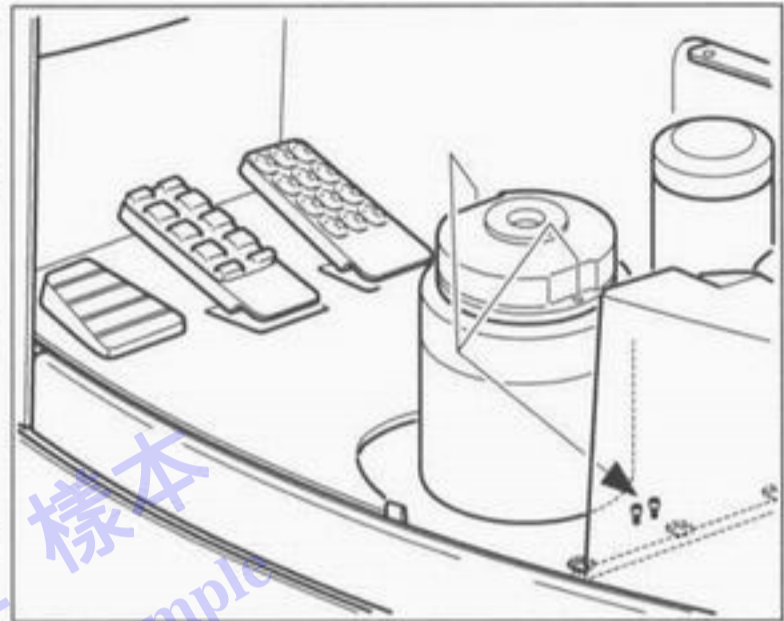


Recovery must only be implemented by maintenance personnel who have been trained to operate the system.

- Turn the EMERGENCY DISCONNECT switch and keyswitch off.
- Ensure that the truck cannot roll away.
- Push the seat from the guide towards the steering wheel.
- Disconnect the system.
- Remove the cover above the seat by removing three fixing screws.

Release the magnetic brake by:

- Disconnecting the two-pin connector from the magnetic brake.
- Unscrewing the brake release screws from the drive plate and inserting them in the magnetic brake holes.
- Removing the protective cap from over the centre screw.

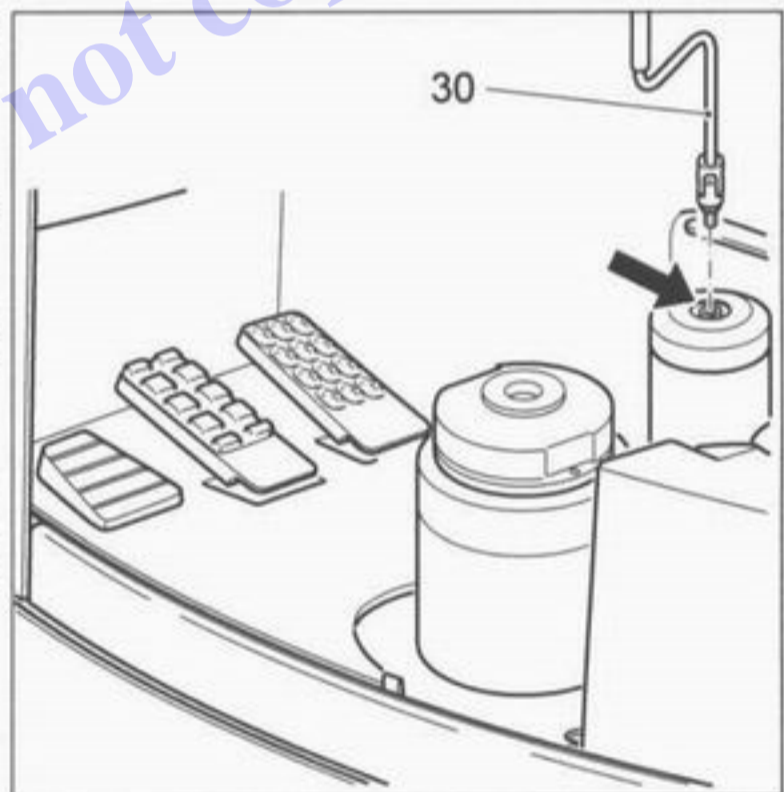


Before recovering the truck the drive wheel can be turned to the required position via the centre bolt of the steering motor by using a crank handle.



Steering the truck when idle tensions the drive wheel tyre. By releasing the crank, this can create a correcting moment.

- Assemble the crank handle (30) as indicated in the tool set table.
- Fit handle to steering drive and turn the drive wheel to the desired steering position.



When the truck reaches its destination, restore the brake system to its operating condition. The truck must not be parked with the brake released.

○ Crank Handle Tool Set (30)

Item.	Part	Order No.	Description
1	1	95 600 230	Box spanner 8 mm 1/2 " DIN 3120
2	1	95 608 130	Crank
3	1	27 636 010	Cardan joint



When the truck has reached a safe position return the brake system to operational condition! The truck must not be parked with the brakes released.

- Remove the Allen screw from the engine.
- Refit the protective cap.
- Remove the locking bolts for the magnetic brake and screw into the drive plate.
- Assemble seat hood (3) (3 fixing screws)
- Restore the plug connections.
- Push driver's seat along the guide and position it.

一祥翻譯社 樣本
Elegant Translation Service Sample
請勿複製
Do not copy

6 Driver's Display (●)

The driver display unit is the user interface to the truck. It is both a display and operating unit for the operator and service engineers.

Press the 4 short stroke keys (55, 56, 57, 58) to operate the driver display and the truck. The LEDs of the 11 lights (36 – 44, 59, 60) can indicate three conditions: active, flashing or off.

All displays are shown in plain text or as symbols. The significance of the individual symbols is explained in Section 6.

The contrasting display provides information on the direction of travel, the selected steering angle, the battery charge condition and other selected truck parameters.

Setting the Clock:

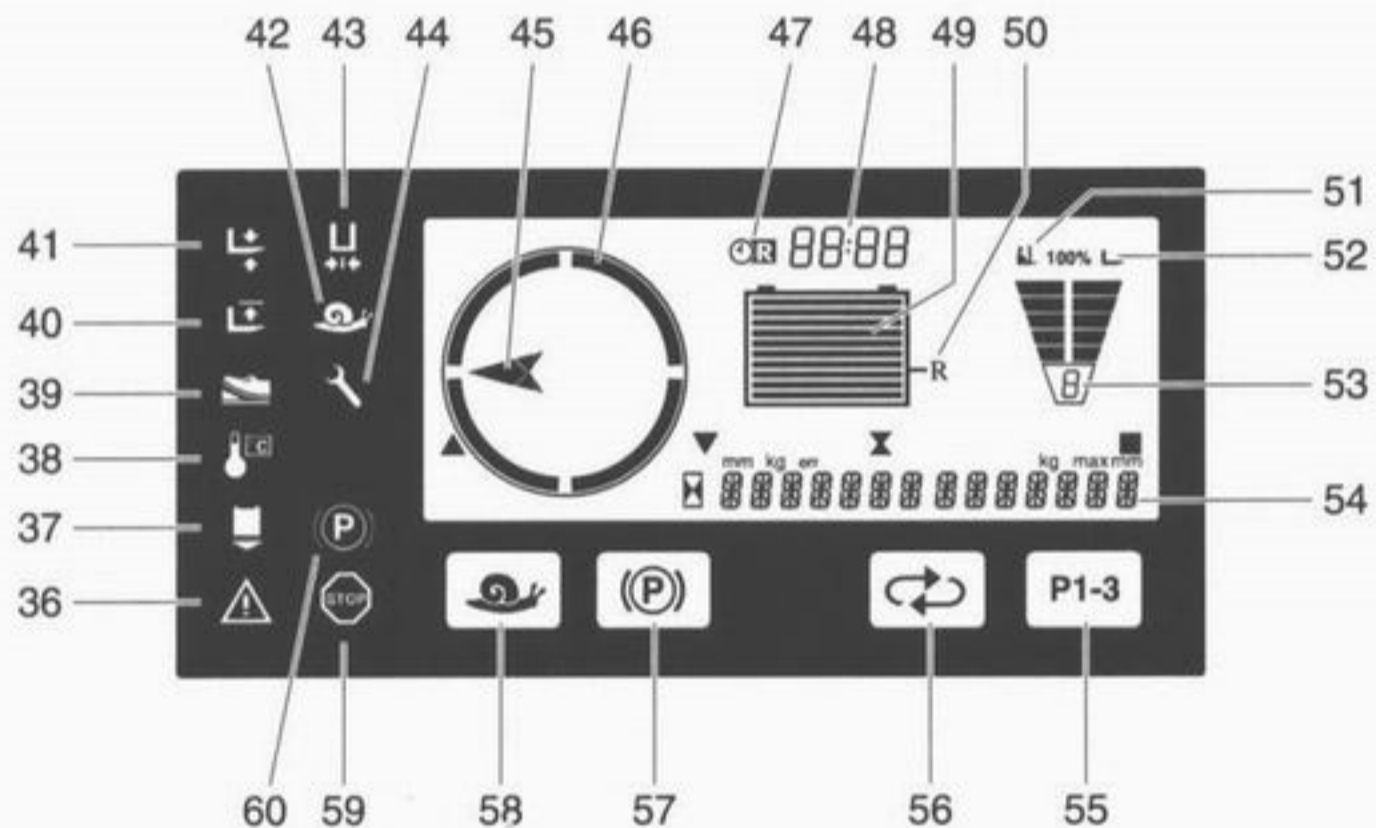
- Press the shift key for 3 secs.

The display (48) above the battery shows the actual time. It switches between actual time and time remaining.

- Press the shift key for 8 secs. until menu "Set Clock Time" is displayed.
- Set the hours using the "Up" (58) and "Down" (57) keys.
- Confirm with the shift key.
- Set the minutes using the "Up" (56) and the "Down" (57) keys.
- Press the shift key or the profile key to return to normal operating mode.



Either the 24 hour or the 12 hour system can be used to set the time.



Item.	Description
36	Warning, warning triangle (red graphic symbol),
37	Battery is unlocked (red graphic symbol),
38	Overtemperature (red graphic symbol)
39	Dead man pedal not activated (yellow graphic symbol)
40	Lift limit reached (yellow graphic symbol)
41	Forks in horizontal position (green graphic symbol),
42	Slow travel (green graphic symbol),
43	Sideshift in central position (green graphic symbol)
44	Service mode active (yellow graphic symbol), Service interval expired (graphic symbol flashes)
45	Steering angle in 30° increments as arrow
46	Steering mode 180 or 360° by display of 2 or 4 circular segments.
47	Remaining time display with in-built battery in the form of hours: minutes
48	Time in form of hours: minutes
49	Battery discharge status in 10% bars (0 – 100%) and energy recovery (●) display
50	Discharge Display
51	Set speed (drive direction) of current profile. (bars 1 to 5).
52	Set speed (lifting) of current profile (bars 1 to 5).
53	Profile number (drive / lift profile 1, 2 or 3)
54	Warning and error messages as text (14 segment display) and data registration.
55	Profile switch to select drive and lift mode
56	Shift key (to alternate between display and access to service mode)
57	Brake switch to apply / release handbrake
58	Slow drive switch to throttle travel speed
59	Fault, STOP sign (red graphic symbol),
60	Parking brake applied (red graphic symbol)

You can use the four short stroke keys (55-58) to:

- regulate travel speed (slow travel switch),
- apply or release the handbrake (brake switch),
- change display to service mode (shift key) and
- select between travel and lift mode.

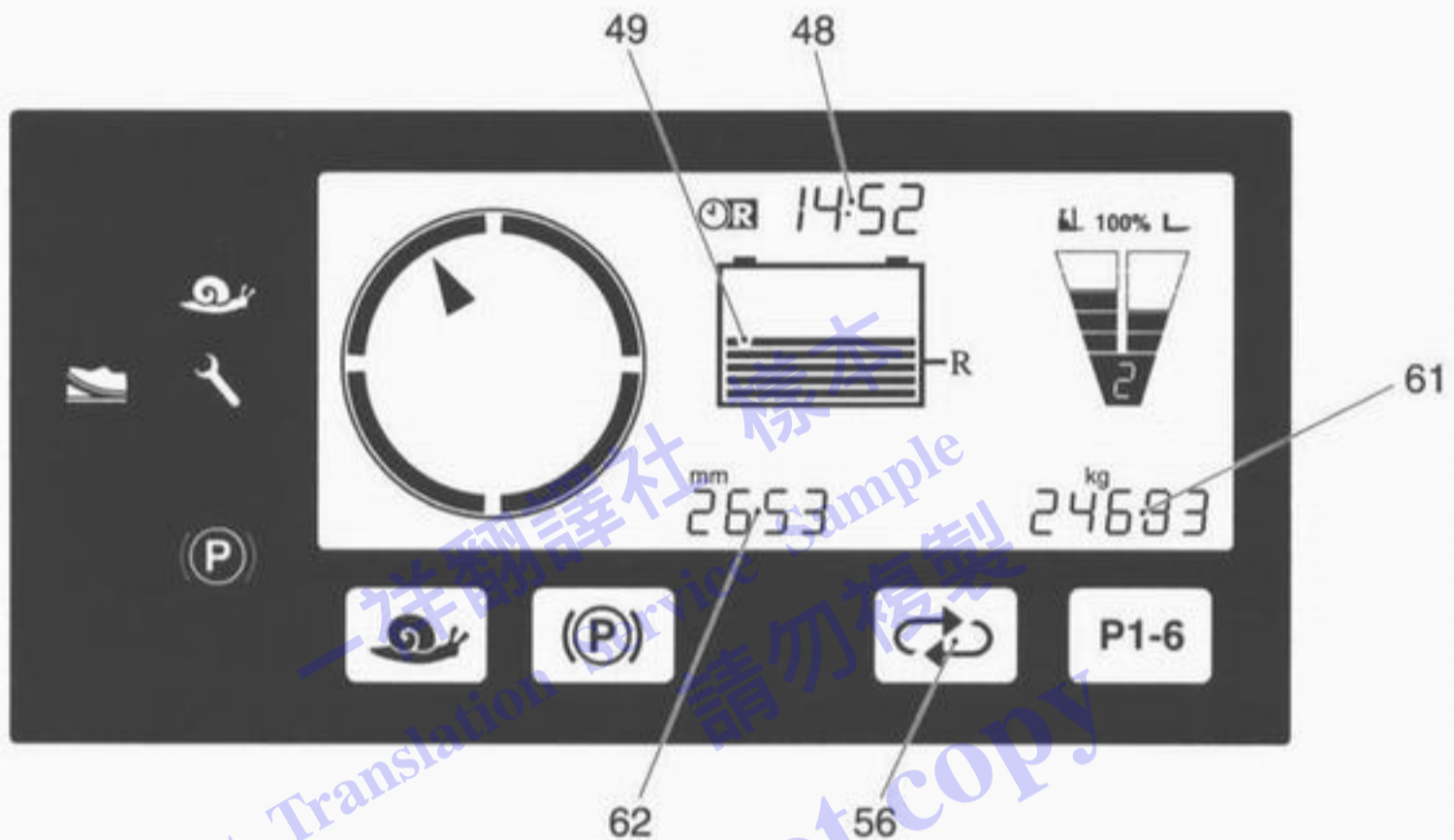
The display shows:

- Steering angle in 30° increments (as arrow)
- Steering mode of 180° or 360° (2 or 4 segments are shown,)
- Drive or lift profile (as 1, 2 or 3),
- The set speed (drive direction) of current profile (bars 1 to 5),
- The set speed (lift) of the current profile (bars 1 to 5,
- The discharge status of the battery in 10% increments (0 – 100%),
- Battery discharge warning (flashing battery symbol and buzzing tone),
- Operating hours : complete hours)
- Time (hours: minutes),
- Lift height in mm (5 digit) (○),
- Maximum lift height in mm (5 digit) (○),
- Load weight in kg (4 digit) (○),
- The time remaining for built in battery (hours: minutes),
- Warning and fault messages as text (14 segment display),
- Service mode parameters
- Service mode diagnostics.

Battery Discharge Indicator: The charge status of the battery (49) is displayed in 10% increments on the driver's display.



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



When the battery residual capacitance reaches 20% for standard batteries or 40% for maintenance free batteries the battery must be recharged.

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 70% charged.

Residual time display: It displays the residual time required to reach a 20% residual capacity (40% for maintenance-free batteries).

To display the residual time, the 7 segment display can be switched via the battery (48) by holding down the Shift key (56) for three seconds.



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

Hourmeter: Press the Shift key (56) briefly to change the layout of the display fields (61 and 62). If the lift height, max. lift height and load weight are not available, the corresponding line will be bypassed.

Display field 1 (62)	Display field 2 (61)
Service hours	Load weight
Service hours	Lift height
Service hours	Max. lift height
Lift height	Load weight
Lift height	Max. lift height
Load weight	Lift height
Load weight	Max. lift height

→ If neither the lift height, the max. lift height or the load weight are available, display field 2 remains empty.

“Energy recovery” display for regenerative lowering and braking












During the “energy recovery” state, the discharge indicator on the driver’s display changes, and the bars in the battery container fill from 0% to 100% (i.e. from bottom to top).






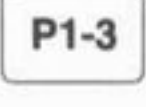
This takes place cyclically and irrespective of the battery’s charge status (full or partially discharged).

→ The display goes out once energy recovery is complete.

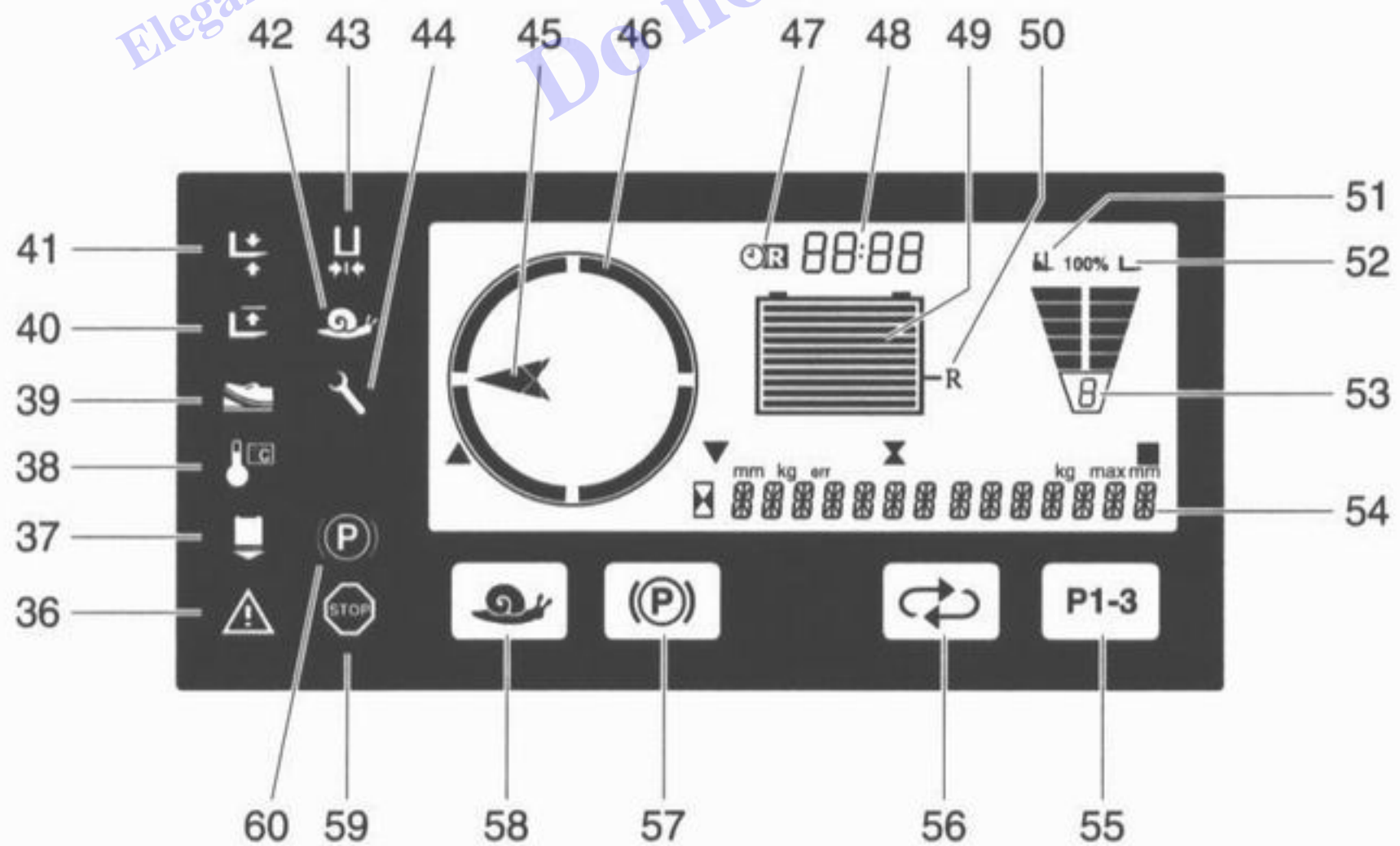
6.1 Driver display lights

	SYMBOL Forks in horizontal position (green graphic symbol),
	SYMBOL Sideshift central position (green graphic symbol),
	SYMBOL Lift limit reached (yellow graphic symbol),
	SYMBOL Slow travel (green graphic symbol),
	SYMBOL Dead man pedal not activated (yellow graphic symbol),
	SYMBOL Service mode active (yellow graphic symbol),
	SYMBOL Overtemperature (red graphic symbol),
	SYMBOL Battery unlocked (red graphic symbol),
	SYMBOL Parking brake applied (red graphic symbol),
	SYMBOL Warning, warning triangle (red graphic symbol),
	SYMBOL Fault, STOP sign (red graphic symbol),

6.2 Driver Display Keys

	Travel speed throttled (slow travel switch),
	Hand brake applied or released (brake switch),
	Change of display to service mode (shift key)
	Selection of travel and lift modes

6.3 Driver display warning messages



Display	Other action	Meaning
INFO 01	SITZSCHALTER-OFFEN	Seat switch not closed
INFO 02	FAHRTRICHTUNG FEHLT	No travel direction selected
INFO 03	FAHRTFREIGABE_FEHLT	No travel release
INFO 04	SOLLWERT_FEHLT	No nominal value
INFO 05	HUBABSCHALTUNG	Battery empty, main lift cutout
INFO 06	TOTMANN_OFFEN	Safety switch not pressed
INFO 07	START-FALSCH	At least 1 control not in home position when system starts
INFO 08	HANDBREMSE	Handbrake not applied
INFO 09	LANGSAM	Crawl speed applied or compelled by battery latching
INFO 10	TEMP_FAHR_MOTOR	Drive motor overtemperature
INFO 11	TEMP_HUB_MOTOR	Lift motor overtemperature
INFO 12	TEMP_LENK_MOTOR	Steer motor overtemperature
INFO 13	KOHLEBUERSTEN_FAHR_MOTOR	Drive motor carbon brush wear
INFO 14	KOHLEBUERSTEN_HUB_MOTOR	Lift motor carbon brush wear
INFO 15	KOHLEBUERSTEN_LENK_MOTOR	Steer motor carbon brush wear
INFO 16	FAHRSTROMABSCHALTUNG	Travel current cutout (EFG-DF special function)
INFO 17	HUBENDE	Lift limit reached
INFO 18	SICHERHEITSHOEHE	Safety height not reached
INFO 19	SCHRANKE_OFFEN	Safety gate not closed
INFO 20	GANGBETRIEB	Truck travels in aisle
INFO 21	NOTLENKBETRIEB	Steering failure, truck operates in emergency steering mode
INFO 22	LENKUNG_FEHLT	Traction controller does not recognise electric steering
INFO 23	DIAGNOSE_MODUS	Controller set to diagnostic mode
INFO 24	BITTE_AUSSCHALTEN	Switch truck voltage off/on
INFO 25	TEMP_FAHREN	Traction controller overtemperature
INFO 26	TEMP_HEBEN	Lift controller overtemperature

Display	Other action	Meaning
INFO_27	TEMP_LENKEN	Steering controller overtemperature
INFO 28	RESERVE_1	Dummy for later use
INFO 29	ANZEIGE	Display switches external buzzer on
INFO 30	DOPPELPEDAL BEIDE BET 變 IGT	
INFO 31	KEINE RUHELAGE	
INFO 32	KEINE SCHUBREFERENZ BEIM EINSCHALTEN	
INFO 54	FAHRZEUGTYP_SETZEN	
HEATING	None, driver's display warm-up phase	Driver's display warm-up phase, as the LCD cannot be read at excessively low temperatures

一祥翻譯社
Elegant Translation Service
請勿複製
Do not copy

Driver's display error messages

Error	Error text	Explanation	Remedy
1	LOW VOLTAGE	Low voltage	Check battery voltage, charge battery
2	HIGH VOLTAGE	Overvoltage	Check battery voltage
3	TEMPERAT CONTR	CONTROLLER TEMPERATURE	Allow the controllers to cool
4	VOLTAGE SUPPLY	Travel potentiometer wire breakage	Switch off and on again, call service department
5	ELECTR SYSTEM	Overvoltage	Switch off and on again, call service department
6	ACCELERATOR	2 travel directions simultaneously	Switch off and on again, call service department
7	TURN OFF KEY	Key switch	Switch off and on again, call service department
8	ELECTR SYSTEM	2 travel directions simultaneously	Switch off and on again, call service department
9	ELECTR SYSTEM	Operator protection switch faulty	Switch off and on again, call service department
10	MAIN CONTACTOR	Main contactor faulty	Switch off and on again, call service department
11-19	CONTROLLER	Controller error	Switch off and on again, call service department
20	ELECTR SYSTEM	Armature incorrectly onnected	Switch off and on again, call service department
21-22	CONTROLLER	Controller error	Switch off and on again, call service department
23	CONTROLLER CAN	Controller error	Switch off and on again
24	CONTROLLER	Controller error	Switch off and on again, call service department
25	INTERFACE/CAN	No report from interface	Switch off and on again
26	LIFT SENSOR	Lift potentiometer wire breakage	Switch off and on again, call service department
27	STEER ANGLE	Steer potentiometer wire breakage	Switch off and on again, call service department
28	SETPOINT ANGLE	Steering sensor wire breakage	Switch off and on again, call service department
29	SHIFT SENSOR	Reach potentiometer wire breakage	Switch off and on again, call service department

Error	Error text	Explanation	Remedy
30	TILT SENSOR	Tilt potentiometer wire breakage	Switch off and on again, call service department
31	SIDESHIFT SENS	ZH1 potentiometer wire breakage	Switch off and on again, call service department
32	MULTIP SENSOR	ZH2 potentiometer wire breakage	Switch off and on again, call service department
33	MULTIP SENSOR	ZH3 potentiometer wire breakage	Switch off and on again, call service department
34	CAN BUS	CANBus damaged	Switch off and on again, call service department
35	ZERO DRIVE SEN	No travel zero position	Deadman and accelerator pedal not depressed when truck powered up
36	ZERO LIFT SENS	No lift zero position	Do not press nominal value transmitter on power up
37	CONTROLLER/ CAN	No steering angle nominal value	Switch off and on again, call service department
38	CONTROLLER/ CAN	Component does not log on	Switch off and on again, call service department
39	TRUCK TYPE	Improbable truck type	Switch off and on again, call service department
40	TEMPERAT MOTOR	Motor overtemperature	Allow the motor to cool down
41	BREAKMAGNET	Brake magnet potentiometer	Call service department
42	BREAKMAGNET	Brake magnet modulation	Call service department
43	ADJUST BREAK	Adjust brake	Call service department
44	BREAK DEFECT	Adjust brake	Call service department
45	STEERING WHEEL	Too many pulses from steering nominal value transmitter	Call service department
46	STEERING WHEEL	Steering nominal value transmitter incorrectly connected	Call service department
47	STEERING WHEEL	No pulses from steering nominal value transmitter	Call service department
48	STEERING TYPE	Does not match "steering type" parameter	Call service department

Error	Error text	Explanation	Remedy
49	CAN BUS	CAN supply interrupted;	Switch off and on again, call service department
50	SENSOR HORIZON	Multipilot wire breakage horizontal tilter	Switch off and on again, call service department
51	TEACH IN WRONG	Teach-In: steering actual value potentiometer	Switch off and on again, call service department
52	TEACH IN WRONG	Teach-In: Brake magnet potentiometer	Switch off and on again, call service department
53	TEACH IN WRONG	Teach-In: Steering nominal value potentiometer	Switch off and on again, call service department
54	CABEL MOTOR	Motor wire breakage	Switch off and on again, call service department
55	SHORTCIRCUIT M	Motor short circuit	Switch off and on again, call service department
56	CONNECTION MOTO	Motor short circuit	Switch off and on again, call service department
57	STEER CONTROL	Motor does not turn	Switch off and on again, call service department
58	STEER ANGLE	Steering angle actual value fluctuates	Switch off and on again, call service department
59	SHAFT POTI	Steering angle nominal value fluctuates	Switch off and on again, call service department
60	STEER CONTROL	Swivelling bolster does not follow steering wheel directions	Switch off and on again, call service department
61-62	CONTROLLER	Controller end stage error	Switch off and on again, call service department
63	CONTROLLER	Sensor power supply outside range	Switch off and on again, call service department
64	CONTROLLER	Software version differs	Switch off and on again, call service department
65	SWITCH MIDDLE	Multipilot wire breakage centre shifter	Switch off and on again, call service department
66	SWITCH 180-360	Multipilot wire breakage 180? 360? steering change	Switch off and on again, call service department
67	DRIVEDIRECTION	Multipilot nominal value transmitter travel direction switch jams	Switch off and on again, call service department
68	DEADMAN KEY	Safety switch wire breakage	Switch off and on again, call service department

Error	Error text	Explanation	Remedy
69	LIFT/LOWER SW	Both lift and lower requirement simultaneously	Switch off and on again, call service department
70	SELFTEST	Component fails to respond or responds incorrectly to self test	Switch off and on again, call service department
71	LOWER POT1	Lower potentiometer wire breakage	Switch off and on again, call service department
72	NEUTR POS LOW	No lowering zero position	Switch off and on again, call service department
73	VALVE OUTPUT	Interface valve output faulty	Switch off and on again, call service department
74	INTERFACE DEF	Proportional valve does not draw any current	Switch off and on again, call service department
75-76	PROPVALVE	Proportional valve short circuit	Switch off and on again, call service department
77	CAB PART TRAC	Interface3 switch wire breakage	Switch off and on again, call service department
78	KEY/CONTROLLER	Switch and travel switch pressed simultaneously	Switch off and on again, call service department
79	KEY / DEAD MAN	Switch and deadman switch pressed simultaneously	Switch off and on again, call service department
80	ELECTR SYSTEM	2 travel directions simultaneously	Switch off and on again, call service department
81	MOTORS	Different parameters for the two traction controllers	Switch off and on again, call service department
82	ELECTR SYSTEM	Sensor wire breakage	Switch off and on again, call service department
83	ELECTR SYSTEM	2 identical components	Switch off and on again, call service department
84	RPM SENSOR	Faulty speed sensor	Switch off and on again, call service department
85	ELECTRIC DRIVE	Power release low voltage	Switch off and on again, call service department
86	RPM IN PLAUS	Improbable speed	Switch off and on again, call service department
87	ELECTR SYSTEM	Sensor line interrupted	Switch off and on again, call service department

Error	Error text	Explanation	Remedy
88	RPM SENS LIFT	Hydraulic speed sensor faulty	Switch off and on again, call service department
89	ELECTR SYSTEM	Low voltage for hydraulics power release	Switch off and on again, call service department
90	ELECTR SYSTEM	Travel against handbrake	Switch off and on again, call service department
91	ELECTR SYSTEM	Voltage beyond tolerance limits	Switch off and on again, call service department
92	ELECTR SYSTEM	Wrong component logs on	Switch off and on again, call service department
93	ELECTR SYSTEM	Capacitors not charged	Switch off and on again, call service department
94	SDO ERROR	SDO error	Switch off and on again, call service department
95	PINCODE	Pin code error	Switch off and on again, call service department
96	ZERO HYDRAULIC	No zero position for hydraulics	Do not press nominal value transmitter on power up
97	STEER CONTROL	Segment beyond tolerance limits	Switch off and on again, call service department
98	STEER CONTROL	Sensor bearing and proximity switch (segment) positions differ	Switch off and on again, call service department
99	CAN BUS	CANBus damaged	Switch off and on again, call service department
100	MULTIP SOFTW	Software versions in Multipilot not compatible	Switch off and on again, call service department
101	JUBES IO	Jubes input/output error	Switch off and on again, call service department
102	JUBES INTERN	Jubes internal error	Switch off and on again, call service department
103	JUBES PARAM	Jubes parameter error	Switch off and on again, call service department
104		Sensor bearing provides no pulses on system start up	Switch off and on again, call service department
105	CABEL TEMP MOT	Motor temperature gauge provides incorrect values	Switch off and on again, call service department

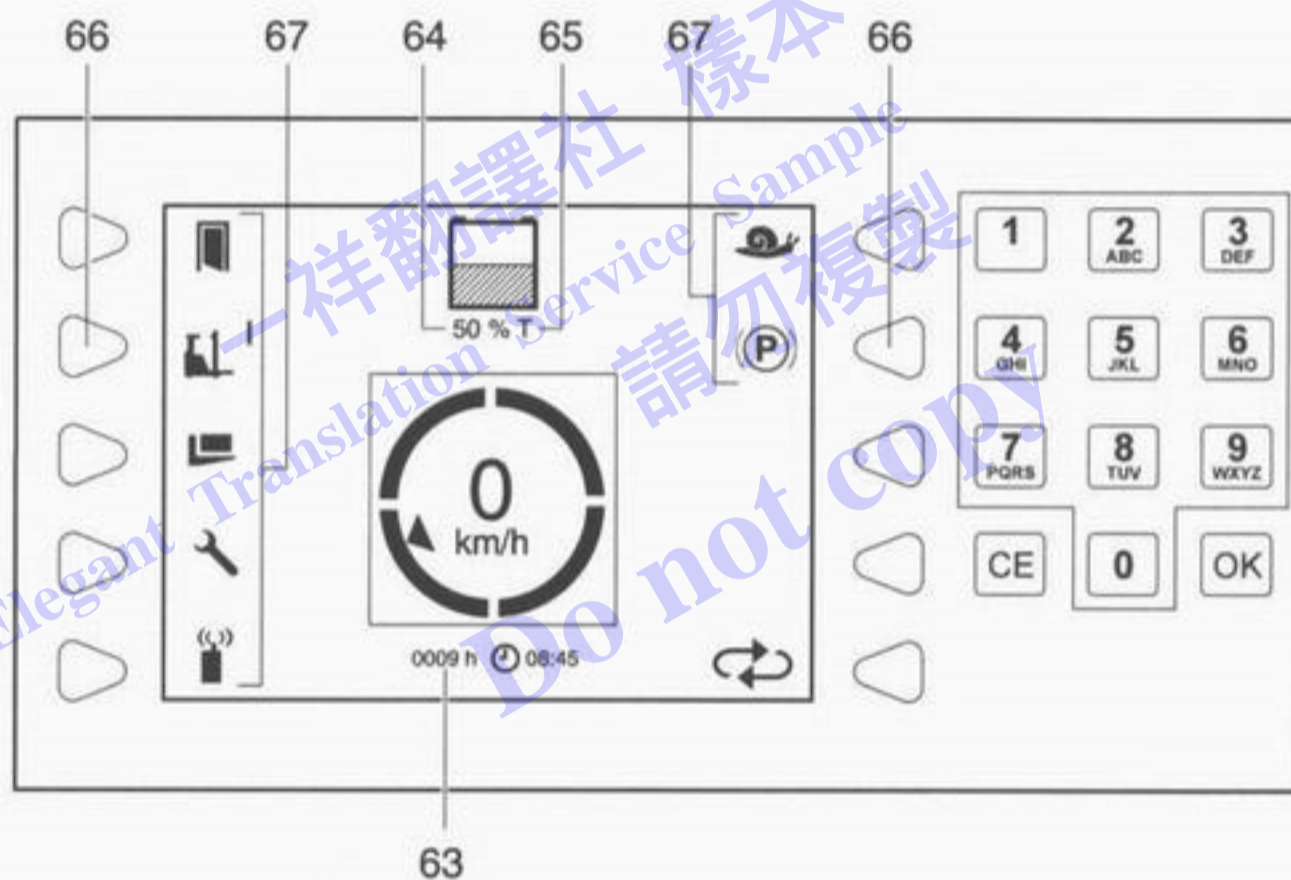
Error	Error text	Explanation	Remedy
106	CABEL TEMP CON	Controller temperature gauge provides incorrect values	Switch off and on again, call service department
107	ELECTR SYSTEM	Key switch Voltage outside range	Check battery voltage, charge battery
108		Controller calibration value incorrect	Switch off and on again, call service department
109	BREAK PEDAL	Brake pedal faulty	Switch off and on again, call service department
110	CONTROLLER	Current output multi-function controller faulty	Switch off and on again, call service department
111	CHECK STEER	Traction controller does not receive telegrams from steering controller	Switch off and on again, call service department
112			Switch off and on again, call service department
113	CHECK LIFT	Lift controller does not send lift telegrams	Switch off and on again, call service department
114	SHIFT POSITION	No reach distance reference on power up	Switch off and on again, extend and retract fully
115		Main contactor improbable	Switch off and on again, call service department
201	SENSOR	Height sensor faulty	Switch off and on again, call service department
202	TEACHIN WRONG	Too many reference points on height sensor	Switch off and on again, call service department
203	SENSOR	Height sensor evaluation improbable	Switch off and on again, call service department
204	CONTROLLER	Error when reading EEPROM height select	Switch off and on again, call service department
205	MP MISSING	No Multipilot in truck	Switch off and on again, call service department
240	CONTROLLER	No height actual value on job input	Switch off and on again, call service department
250		The height is invalid for the warehouse level entered	Make correct entry
252		Wrong height select entry	Make correct entry

7 On Board Computer (○)

The on board computer represents the operator's interface to the truck. It acts as a display and control unit for the operator as well service engineers. By pressing different keys (softkeys (66)) a range of menus (67) can be selected. Menu (67) shows three conditions: Active, inactive and not available for selection (grey background).















All displays are shown as plain text or in symbol form for easy identification. The significance of the individual symbols is explained in Section 7.1.

A colour contrasting display gives information on direction of travel, steering angle, battery condition and many other selected truck parameters.



Item.	Description
63	Operating Hours
64	Battery Charge as %
65	"T" for full discharge protection on maintenance free batteries.
66	Softkeys
67	Menus

7.1 Display Symbol for On Board Computer

	ESCAPE Goes to a higher level
	TRAVEL PROFILE 1 Creep travel
	TRAVEL PROFILE 2 Normal travel Acceleration, speed etc. Can be adjusted to the driver's requirements.
	TRAVEL PROFILE 3 Fast travel
	LIFT MENU Parameters/Diagnosis/ Error logbook
	SERVICE MENU / PARAMETER MENU
	DATA FUNCTION MENU
	SCROLL UP Scroll up
	SCROLL DOWN Scroll down
	PAGE UP Page up
	PAGE DOWN Page down
	BATTERY CHARGE STATUS Ready for operation
	BATTERY CHARGE STATUS Ready for operation, warning status
	BATTERY CHARGE STATUS Ready for operation, warning status critical Lifting is inhibited

Display Symbols

	TIME
0009 h	OPERATING HOURS DISPLAY
	PARAMETER SELECTION Parameters: acceleration, rollout brake, reverse brake, travel direction speed and fork direction speed.
	PARAMETER SELECTION Lift speed parameters
	STEERING ANGLE DISPLAY 360°
	STEERING ANGLE DISPLAY 180°
	TABULATOR To next input field
	WARNING SYMBOL Battery not interlocked!
	WARNING SYMBOL Parking brake applied
	SYMBOL Sideshift in central position
	CREEP
	PIN INPUT Inputted PIN / Variable of current field / Variable PIN input
	Toggle switch

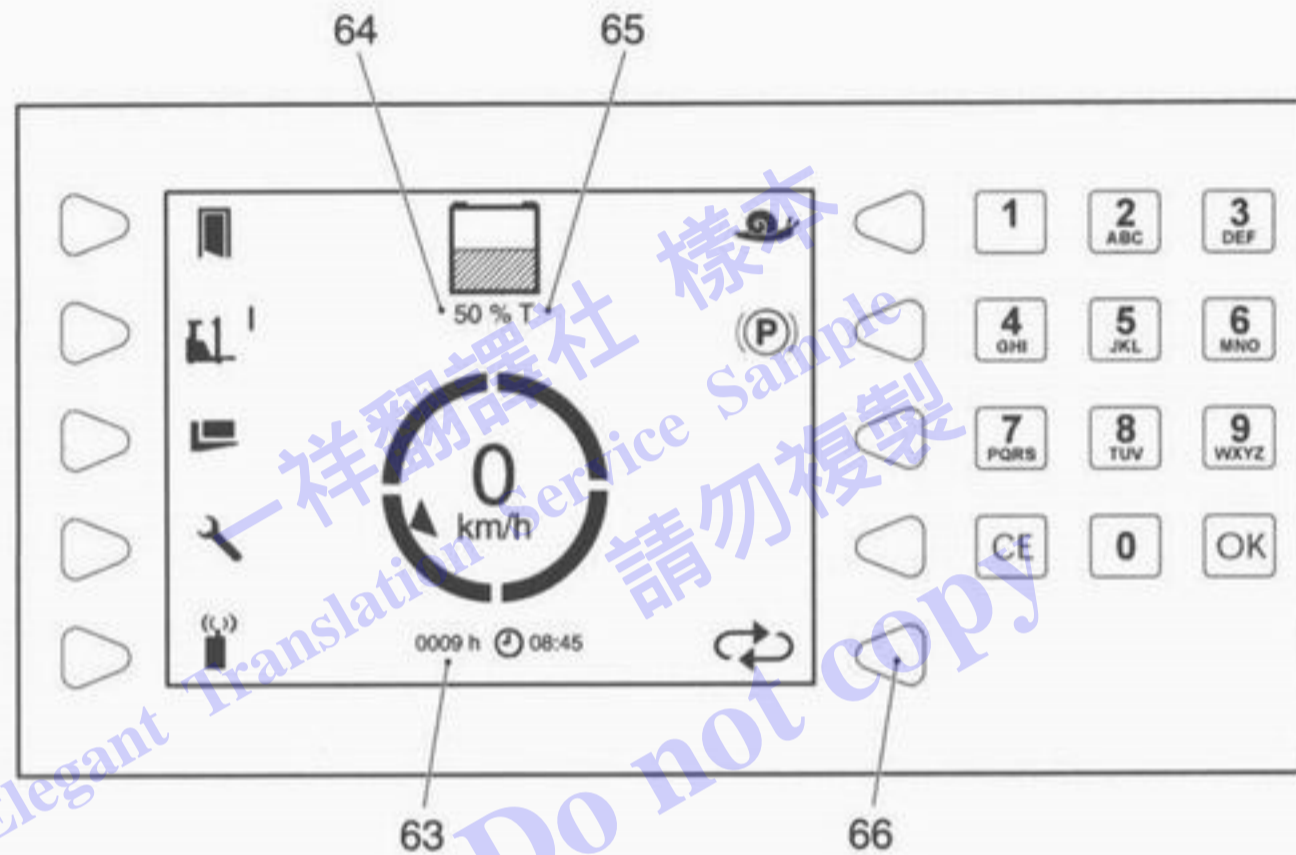
Battery Discharge Indicator: The charge status of the battery (64) is displayed in 10% increments on the display unit.



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

When using maintenance free batteries the display must be set such that the symbol (T) (65) appears after the percentage figure. If this adjustment is not made the battery may become damaged through excessive depletion.

This instrument should only be adjusted by the manufacturer's service department.



When the battery residual capacitance reaches 20% for standard batteries or 40% for maintenance free batteries the battery must be recharged.

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 70% charged.

Residual time display: The battery residual time display is an option that can be activated via a parameter in service mode.

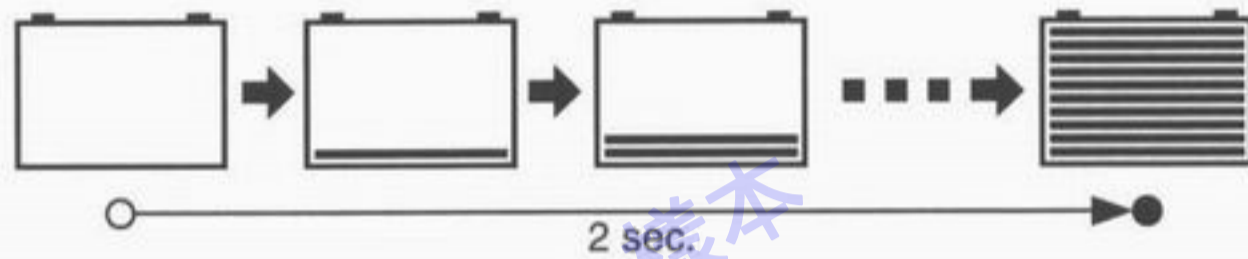
It displays the residual time required to reach a 20% residual capacity (40% for maintenance-free batteries).

The battery residual display is shown as an alternative to the percentage figure (63) below the battery symbol (format R 00:00).

Hourmeter: The service hours are displayed alongside the time. The hourmeter (63) shows the overall travel and lifting time.

“Energy recovery” display for regenerative lowering and braking

During the “energy recovery” state, the discharge indicator on the driver’s display unit changes, and the bars in the battery container fill from 0% to 100% (i.e. from bottom to top).

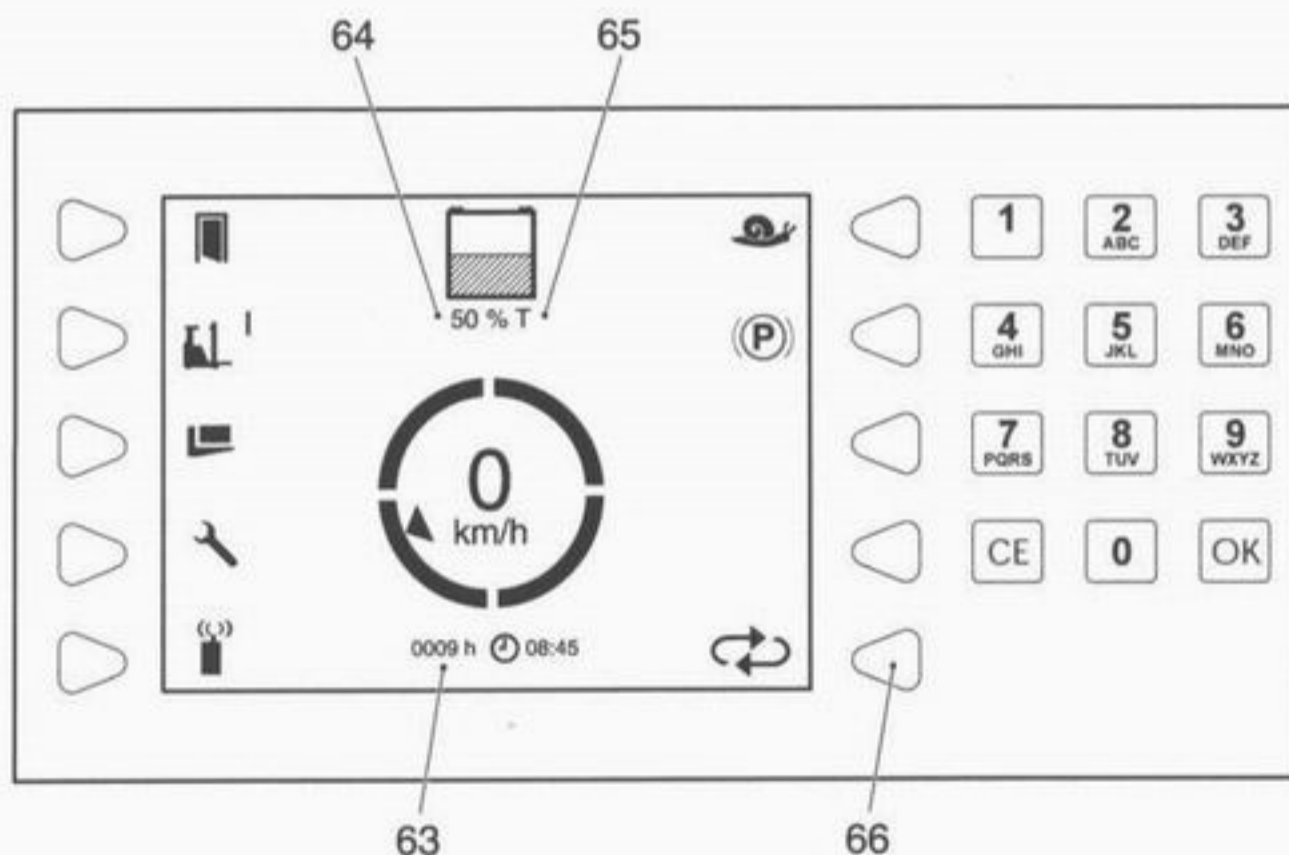


This takes place cyclically and irrespective of the battery’s charge status (full or partially discharged).

→ The display goes out once energy recovery is complete.

Lift height display (○)

In conjunction with the on-board computer, the toggle switch (66) can be used to change the display (63) from service hours to lift height and vice versa. When the truck is switched on, service hours are displayed.



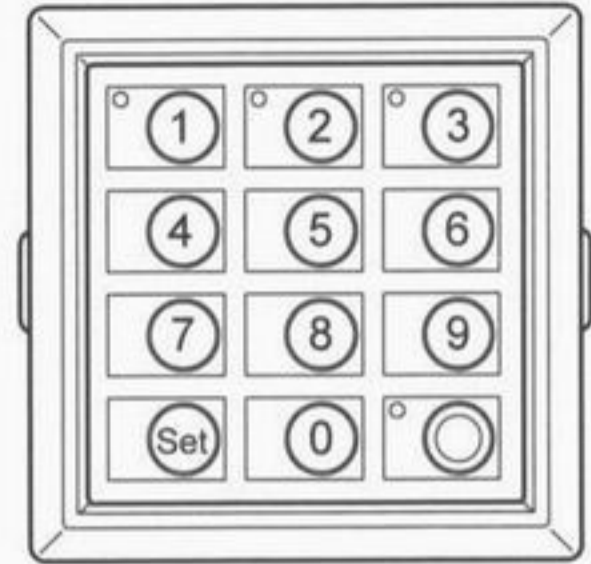
8 Operator Keypad (CANCODE) (○)

The keypad consists of 10 digit keys, one set key and one extra key ○.

The ○ key indicates the operational status via a red/ green LED.

It has the following functions:

- Code key function (starting the truck).



8.1 Code Key

After entering the correct code the truck is ready for use. It is possible to allocate an individual code to each truck, driver or group of drivers.

→ When delivered from the factory the operational codes are shown on the driver display unit and CANCODE (○) (factory setting 2-5-8-0) or for the on board computer (○) (factory setting (1-4-0-3-7) on a sticker.

⚠ When using the truck for the first time change the mast and operator code!

Starting

After switching on the EMERGENCY DISCONNECT switch and if necessary the key-switch, the LED (68) turns red.

On entering the correct operating code LED (67) shows green.

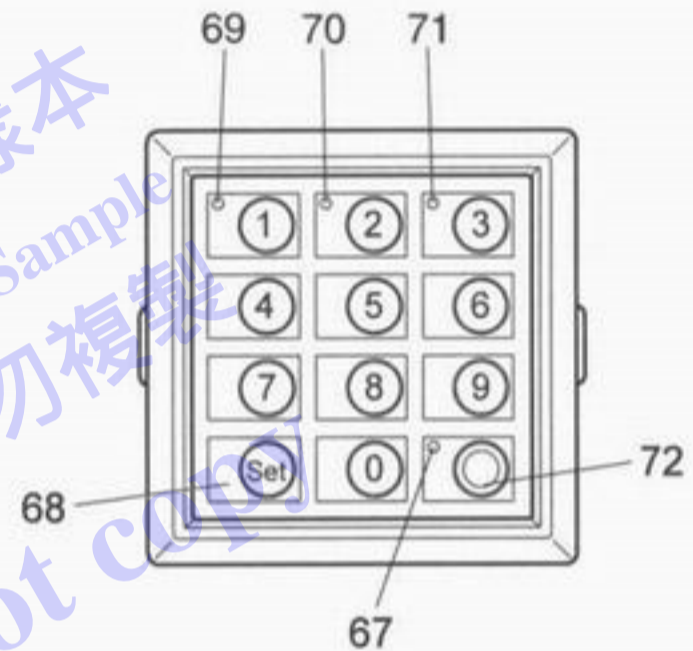
If the wrong code is entered LED (67) flashes red for two seconds. Then the correct code can be entered.

- The Set key (68) has no function in the operating mode

Switching off

The truck can be switched off by pressing the switch (72).

- The truck can be switched off automatically after a pre-set time. To do this the appropriate code keyparameters must be entered (see Section 8.3).



8.2 Parameters

The code key functions can be adjusted in the programming mode via the keypad.

Parameter Groups

The parameter number consists of three digits. The first digit refers to the parameter group as in Table 1. The second and third digits are progressively numbered from 00 to 99.

No.	Parameter Group
0xx	Code Key Setting (Codes, travel program release, automatic cut out, etc.)

8.3 Parameter Settings

The master code must be entered to change the truck setting.



The factory setting for the master code is 7-2-9-5.



Change the master code when starting the truck for the first time (see Section 8.1).

Entering the master code:

- Press the \bigcirc key
- Enter the master code

Code Key Parameters

Setting procedure for truck:

- Enter the three digit parameter number, confirm with the Set key (68).
- Enter the set value according to parameter list or change and confirm with Set key (68).



If an unauthorised number is entered the LED (67) of the \bigcirc switch (72) will flash red. When the parameter number is entered again the set value can be entered or changed.

Repeat the procedure to enter additional parameters. When input is complete press the \bigcirc key (72).

The following parameters may be entered.

Code Key Parameter List

No.	Function	Setting Range	Standard Setting	Comments Workflow
Code Key				
000	Changes the Master Code The length (4-6 digits) of the master code also pre-determines the length of the operator code. (4-6 digits). As long as operator codes are programmed only a code of the same length can be entered. If the code length is changed then all operator codes should be deleted beforehand.	0000 - 9999 or 00000 - 99999 or 000000 - 999999	7295	(LED 69 flashes) Input of current code confirm (Set) (LED 70 flashes) Input of new code confirm (Set) (LED 71 flashes) Repeat new code confirm (Set)
001	Add operator code (max. 600)	0000 - 9999 or 00000 - 99999 or 000000 - 999999	2580	(LED 70 flashes) Input of Code confirm (Set) (LED 71 flashes) Repeat Input of Code confirm (Set)

No.	Function	Setting Range	Standard Setting	Comments Workflow
Code Key				
002	Change operator code	0000 - 9999 or 00000 - 99999 or 000000 - 999999		(LED 69 flashes) Input of current code confirm (Set) (LED 70 flashes) Input of new code confirm (Set) (LED 71 flashes) Repeat Input of Code confirm
003	Delete operator code	0000 - 9999 or 00000 - 99999 or 000000 - 999999		(LED 70 flashes) Input of Code confirm (Set) (LED 71 flashes) Repeat Input of Code confirm (Set)
004	Delete code memory (Deletes all user codes)	3265		3265 = delete other inputs= do not delete
010	Automatic time cutout	00 - 31	00	00 = no Switch off 01 to 30 = Switch off time in Minutes 31 = Switch off after 10 seconds

LEDs 69-71 are located in key fields 1-3 (see Section 8).

Keypad Fault Messages

The following faults are shown by the LED (67) flashing red:

- New master code is already the operator code
- New operator code is already the master code
- There is no operator code to be altered.
- Operator code to be changed to another operating code which already exists.
- No operator code to delete.
- Code memory full

9 Changing Truck Parameters



Changing the truck parameters affects the travel pattern of the truck. This must be taken into account when starting the truck again. Parameters may only be changed when truck is standing and no lifting operations are in progress.

With the driver display (●) or the on board computer (○) it is also possible to change certain truck parameters and hence the truck behaviour (acceleration, rollout brake, reverse brake, drive direction travel speed, fork direction travel speed and lift speed).

● Trucks with driver's display and keyswitch

For trucks with a keyswitch, use the grey service spanner to access the travel and lift parameters.

○ Trucks with driver display and CANCODE or on board computer



Before entering the SERVICE MENU / PARAMETER MENU you will be asked for your PIN. Trucks with CANCODE (○) are factory set with PIN 2580 or if they have an on board computer (○) PIN 14037.

To switch the truck on enter the allocated PIN. You will then not be requested to produce the PIN before entering the SERVICE MENU / PARAMETER MENU. The parameter settings are saved in the PIN memory.

It is possible to have 15 individually programmable parameter settings (truck or programme change). In order to select other programme settings the truck must be logged off and on logged on again or switched on and off. Enter next PIN.



Changes to the service mode may only be undertaken by the manufacturer's authorised service engineers!

10 Troubleshooting

All faults or consequences of incorrect operation are shown on the driver display unit. Follow the instructions shown on the display.

It may be necessary to start up the truck again. Turn the EMERGENCY DISCONNECT switch off and on again.

If the truck will not start consider the following:

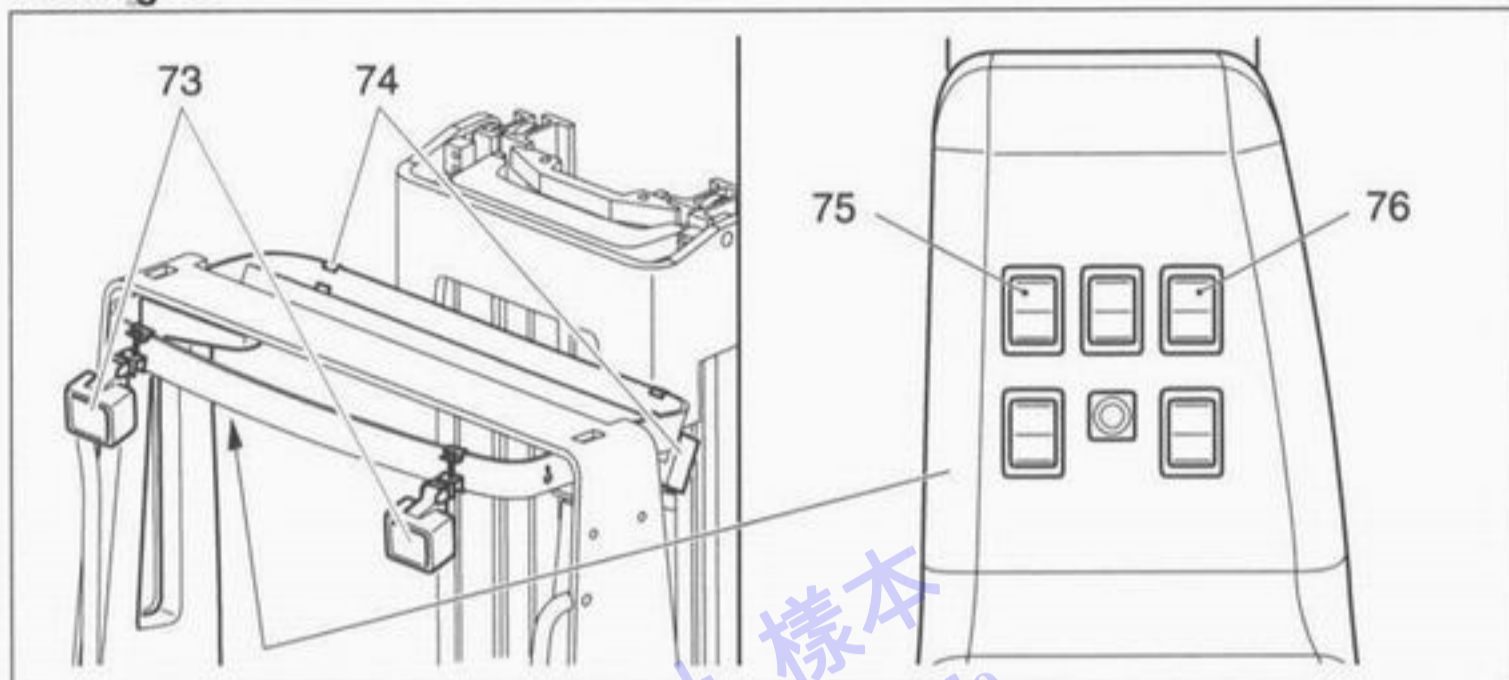
Fault	Possible Causes	Action
Truck cannot be switched on	Battery connector not inserted / battery cable detached.	Check battery connector, insert if necessary / test cable.
	EMERGENCY DISCONNECT switch pressed.	Unlock the EMERGENCY DISCONNECT switch.
	Key switch in position "0".	Set key switch to "I" position.
	Faulty fuse.	Check fuses.



If the fault persists, after having carried out the instructions shown on the driver display panel and in the troubleshooting section, inform the manufacturer's service department. The fault can only be rectified by trained and qualified service engineers.

11 Auxiliary Electrical System

11.1 Headlights

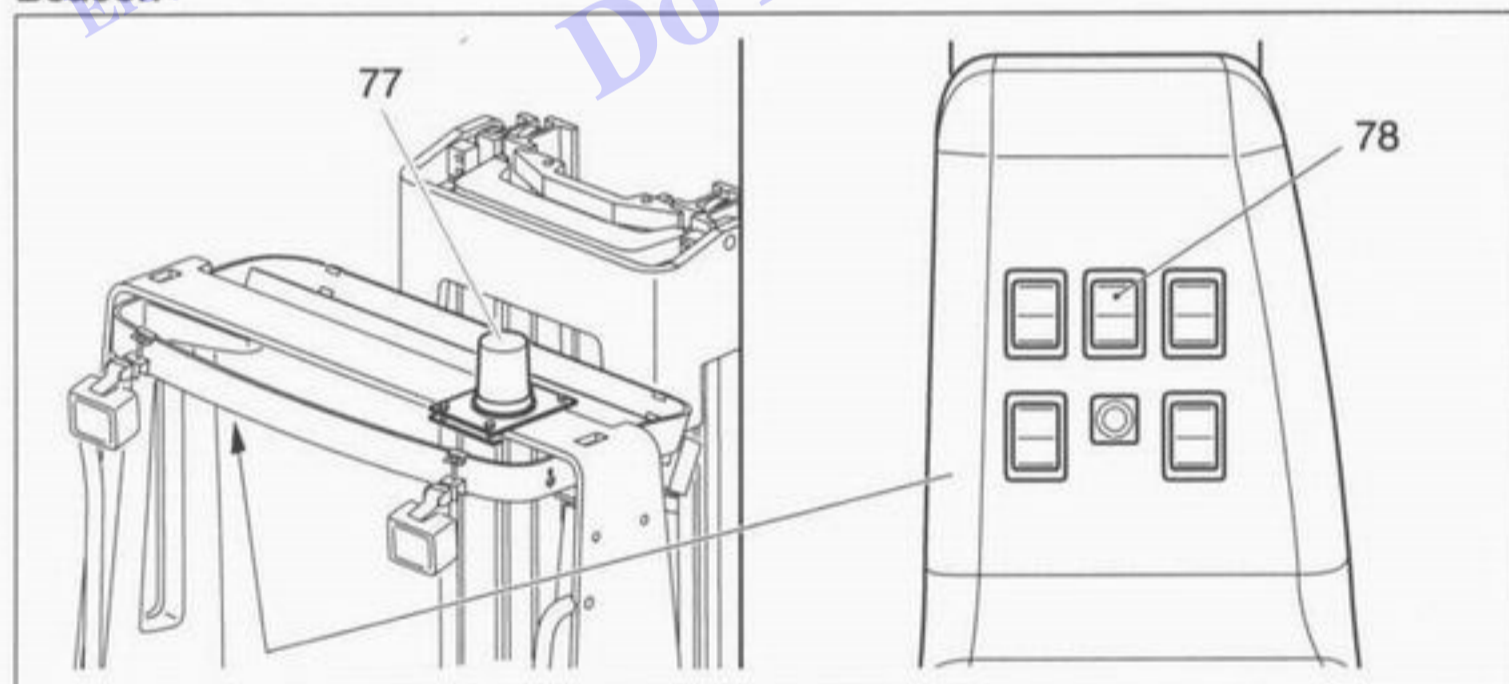


Item.	Description
73	<input type="radio"/> Searchlight
74	<input type="radio"/> Searchlight
75	<input type="radio"/> Headlight switch ON / OFF for (Item 73)
76	<input type="radio"/> Headlight switch ON / OFF for (Item 74)



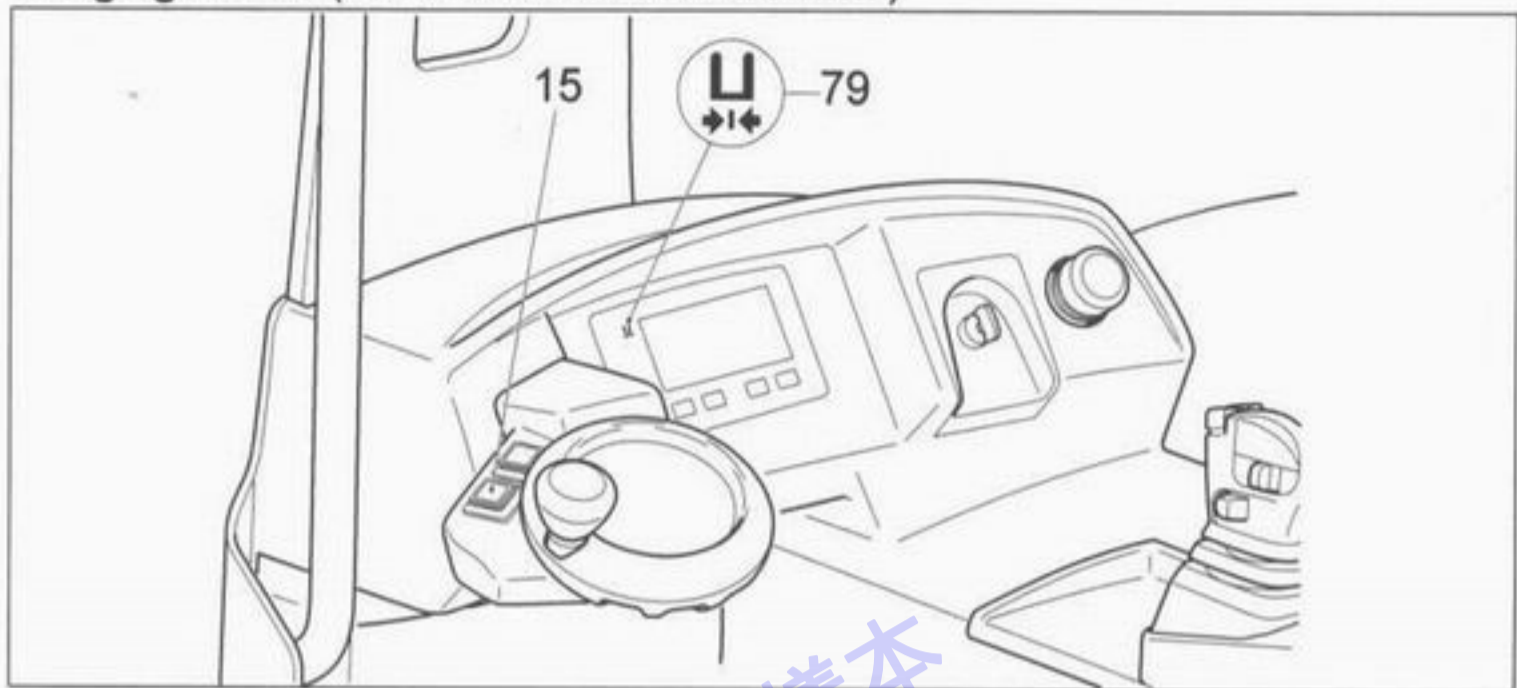
The headlight is equipped with a 360° swivel link.

11.2 Beacon



Item.	Description
77	<input type="radio"/> Beacon
78	<input type="radio"/> Beacon switch ON/OFF

11.3 Bridging Switch (ESA / electrical lift limit switch)



Item.	Description
15	○ Bridging switch
79	○ Sideshift in central position symbol display

○ Bridging switch ESA 1

ESA stands for End-Schalter-Anlage / 1 (Lift Switching System)

The function of the ESA 1 is to prevent damage to the truck and/or the load by the outriggers due to incorrect operation.

ESA 1 can only be supplied for trucks with an integrated sideshift. The function can be described as follows:

- Functions are only released when the mast is extended or the fork carriage is above the outriggers.
- In the outrigger height range (i.e. below a lift height of 500 – 600 mm) sideshift and other hydraulic functions except lift and tilt (forward / reverse) are inhibited if the mast is not extended.

Automatic centring release allows

- Mast reach automatically to be released in the outrigger range when the sideshift is in the central position
- Lowering to the ground when the sideshift is central
- Other hydraulic functions however remain interrupted
- The central position on the driver display to be indicated via a control display (79)

○ **Bridging switch ESA 2**

ESA stands for End-Schalter-Anlage / 2 (Lift Switching System)

The function of the lift cut out mechanism is to prevent damage to the truck and/or the load by the outriggers due to incorrect operation.

This also applies to trucks with equipment such as:

- Various attachments such as e.g. tine adjustment devices, bale tongs
- Hoist frames with integrated sideshift
- Particularly sensitive loads

Functions are only released when the mast is extended or the fork carriage is above the outriggers.

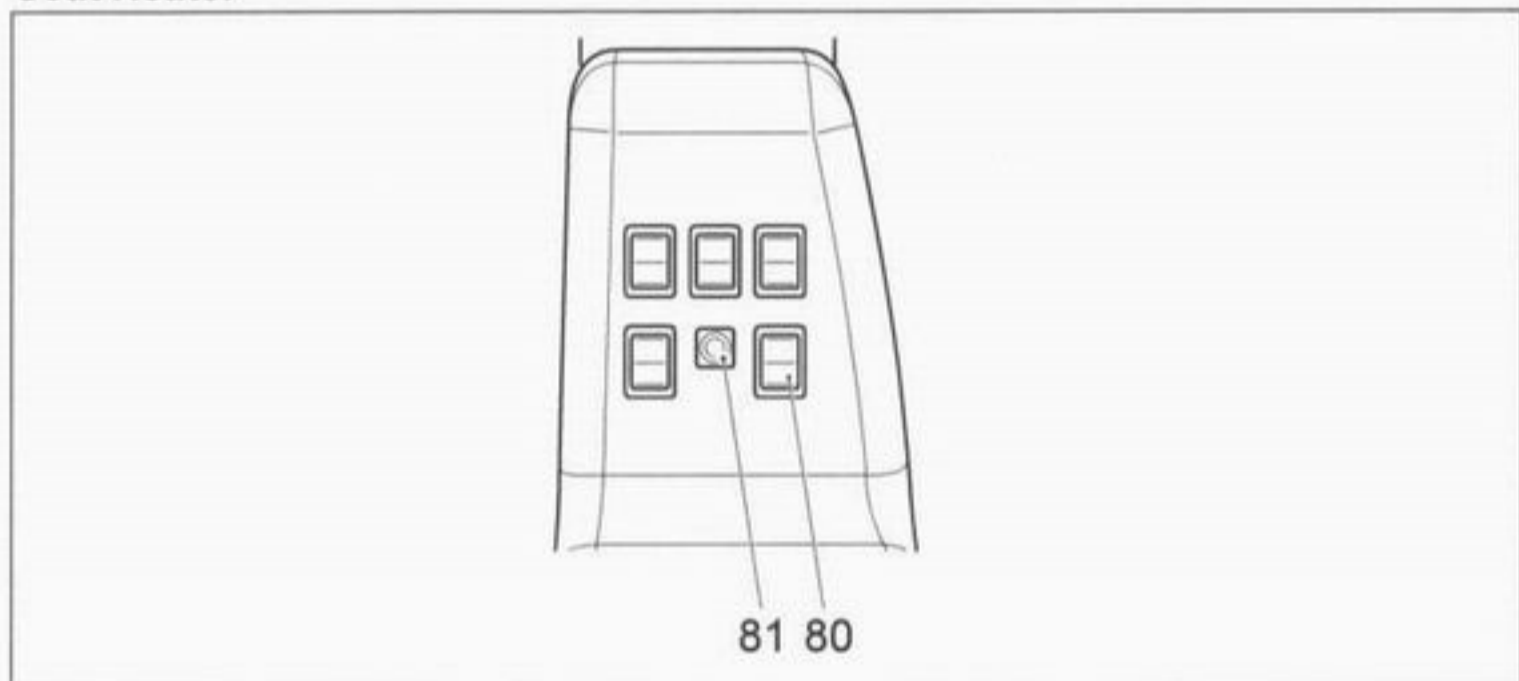
In the outrigger height range (i.e. below a lift height of 500 – 600 mm) sideshift and other hydraulic functions except lift and tilt (forward / reverse) are inhibited if the mast is not extended.

On the ETM/V 214-325 the facility to lower the load in this range is cut out.

Bridging switch

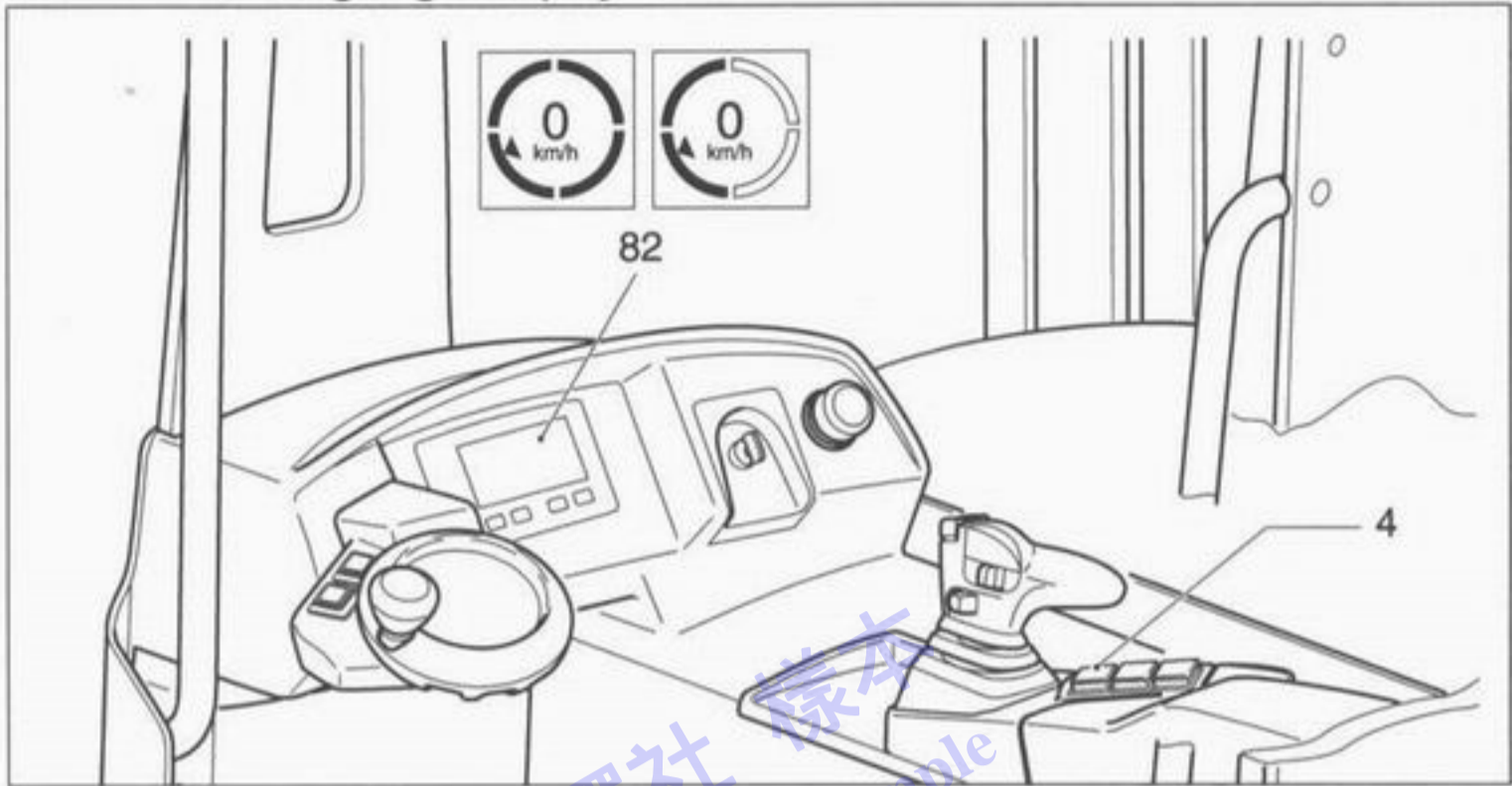
The bridging switch (15) is located above the steering head and releases all functions when activated.

11.4 Seat Heater



Item.	Description
80	○ Seat Heater Switch
81	○ Seat Heater Indicator

11.5 180°/360° steering angle display

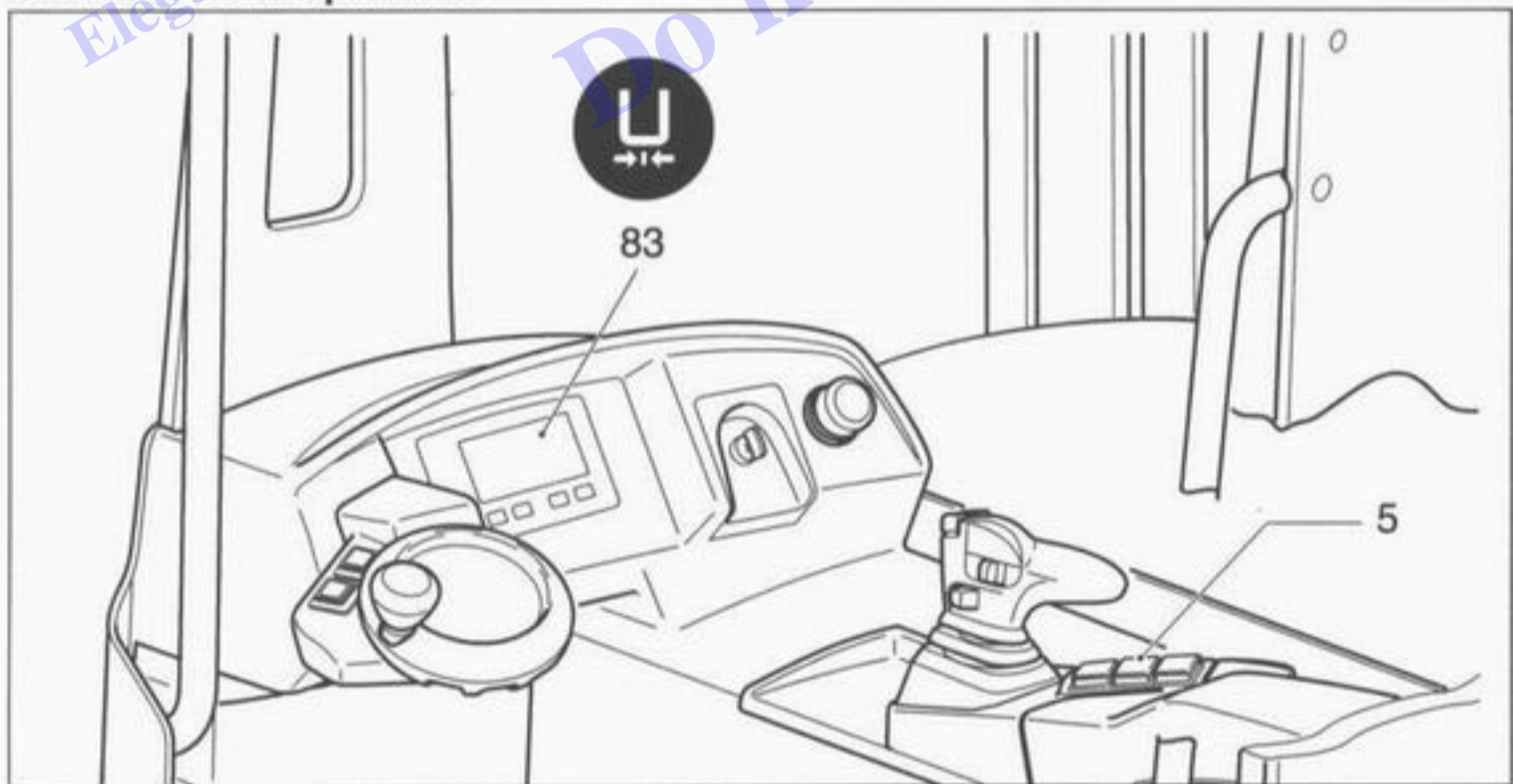


Item	Description
4	● 180°/360° steering switch
82	● 180°/360° steering switch



Press the "180°/360° steering" switch (4) to change from 180° to 360° steering. The set range is shown in the display (82).

11.6 Sideshift centre position

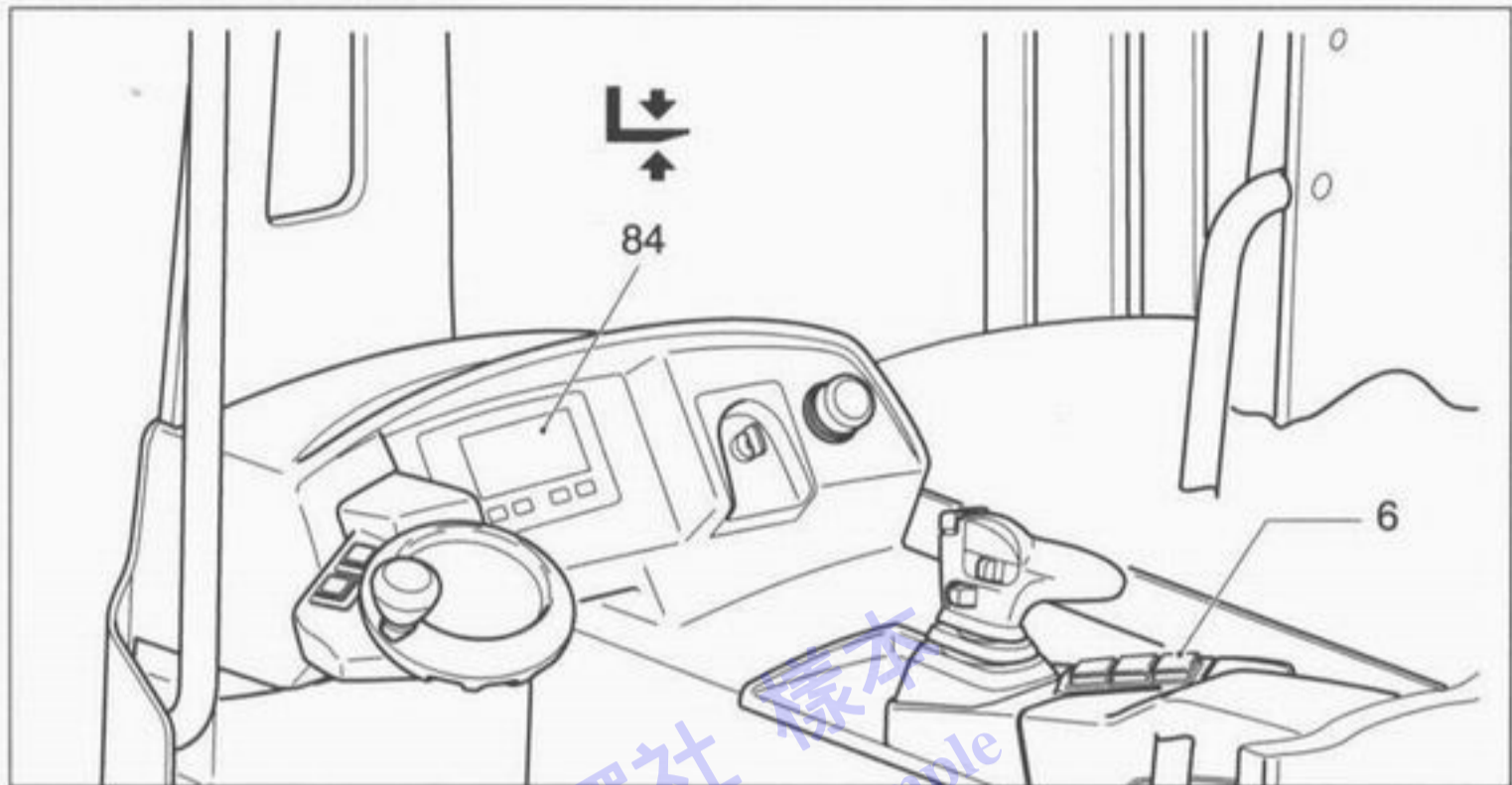


Item	Description
5	○ Sideshift centre position switch
83	○ Sideshift centre position switch



Pressing the "sideshift centre position" switch (5) locks all other hydraulic functions until the switch is no longer applied or the sideshift is in the target position.

11.7 Forks horizontal switch



Item	Description
6	○ Forks horizontal switch
84	○ Forks horizontal display

- ➔ Pressing the “forks horizontal” switch (6) locks all other hydraulic functions until the switch is no longer applied or the forks are in the horizontal target position.