From s/n: 17106
to s/n: 18956

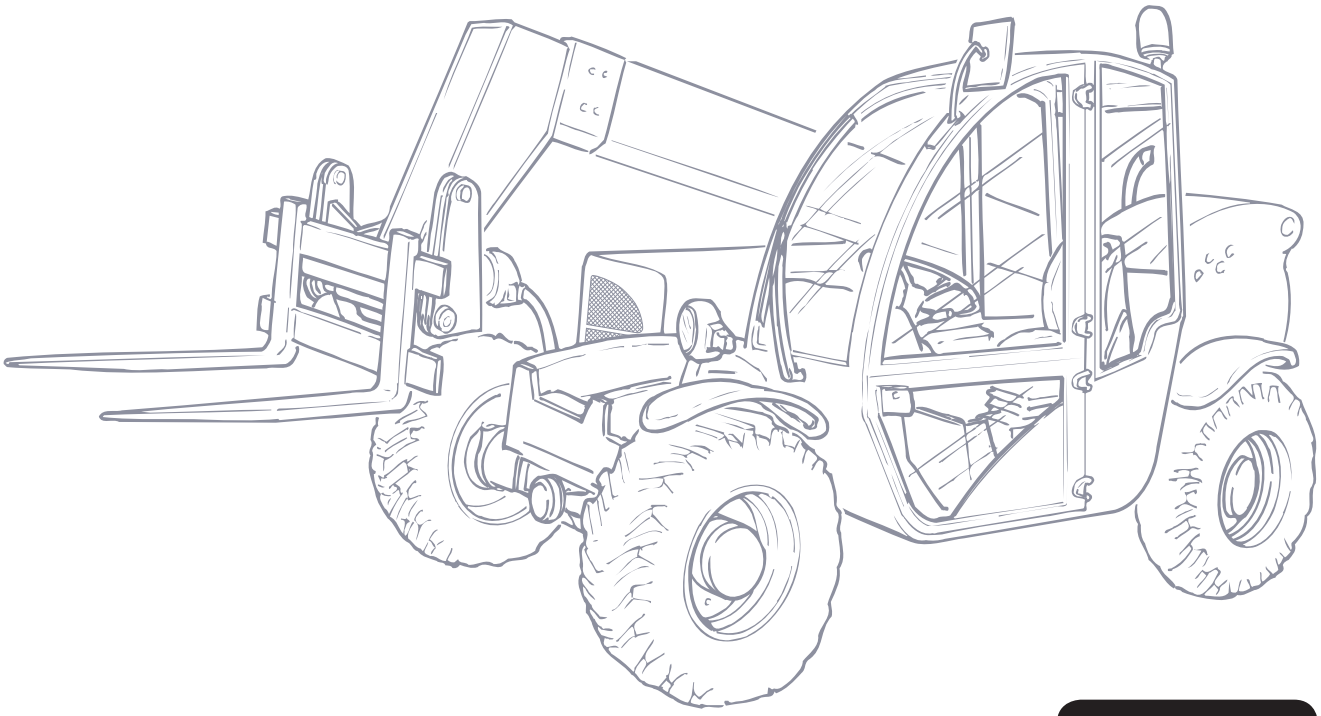
TEREXLIFT

# OPERATOR HANDBOOK

*Cod. 57.0003.4200 - Rev.4A 05/2007*

## *Handler with telescopic boom*

# *AGRILIFT 625*
# *TELELIFT 2506*



**English**
Edition

**CAUTION: THOROUGHLY READ AND UNDERSTAND THIS HANDBOOK BEFORE OPERATING THE MACHINE**

## ■ A-1.2 LABELS AND WARNING PLATES APPLIED ON THE MACHINE

This paragraph lists the labels and warning plates normally applied on standard machines or on special attachments coupled to the machine.

**IMPORTANT**

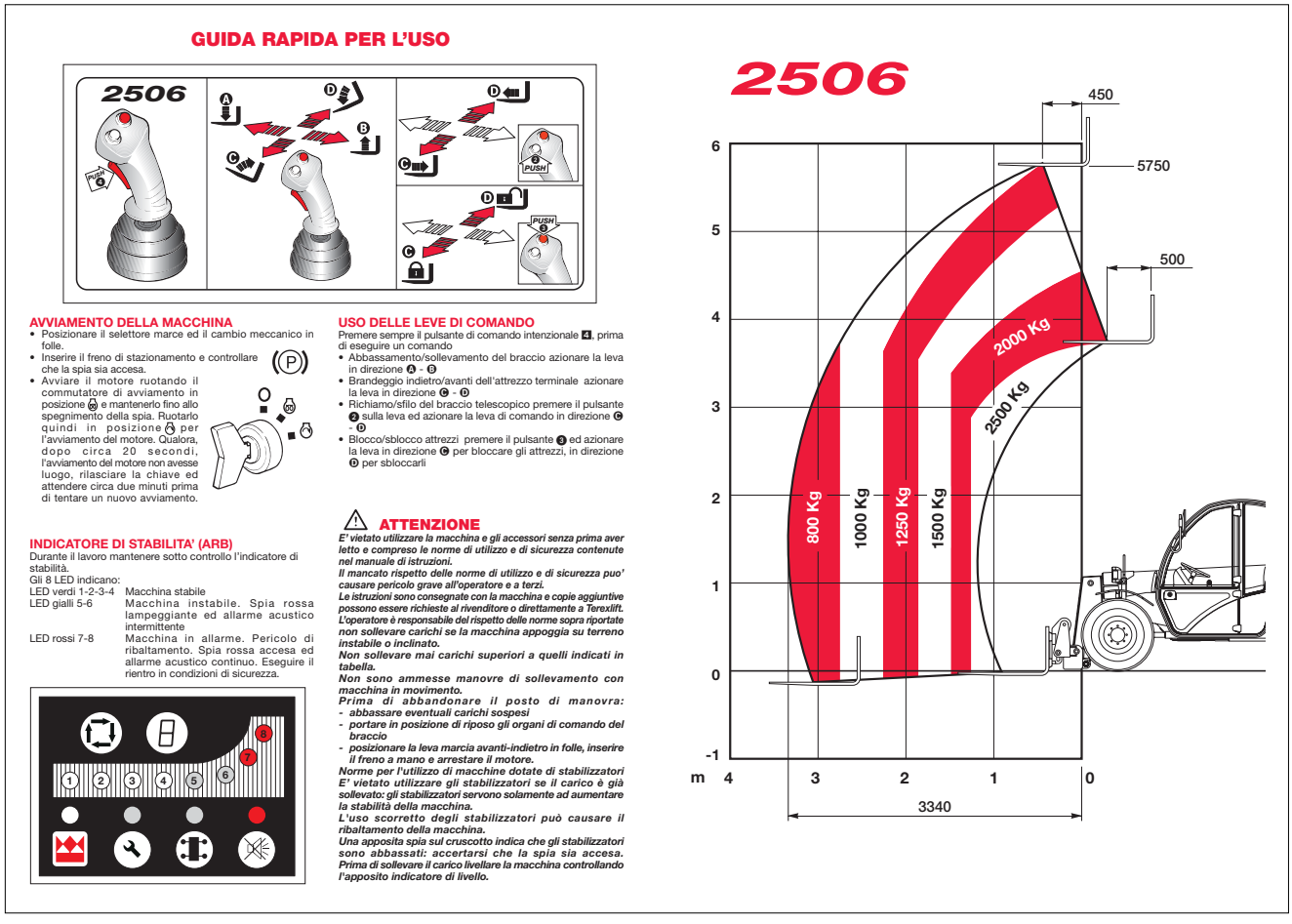
***The familiarisation with these labels is never a waste of time.***
***Make sure they are easy to read. For this purpose, clean them or replace those that become unreadable (either graphic or text).***
***To clean labels, use of a soft cloth, water and soap. Never use solvents, petrol, etc.***
***When a label is applied on a part to be replaced, make sure that the replaced part is already labelled as required or apply a new label.***

**Description:**
Printed on PVC, it guides the operator through the task of learning the main functions of the handler.

**Meaning:**
An overview of the operator's handbook concerning:
- control lever,
- machine starting,
- overload warning system
- main safety precautions,

and including the fork load charts with or without use of the outriggers.

**Location:**
in the cab, fixed to the upright with a magnet.
Not present in the **TCE version**.



## ■ A-3.4 APPLICABLE STANDARDS

For the operator's safety, the following standards were obeyed during the risk assessment of the handler fitted with telescopic boom:

| *Directive* | *Title* |
|---|---|
| 98/37/CE | Machinery Directive |
| 89/336/CEE | Electromagnetic compatibility |
| 2000/14/CE | Environment Acoustic Emissions |

| *Standard* | *Title* |
|---|---|
| EN 1459:1988 | Harmonised standard. Safety of industrial trucks - Self- propelled variable reach trucks. |
| EN 281:1988 | Self-propelled industrial trucks sit- down rider-controlled. Rules for the construction and layout of pedals. |
| EN 1175-2:1998 | Electrical requirements - General requirements of internal combustion engine powered trucks |
| prEN ISO 13564:1996 | Test method for measuring visibility from self-propelled trucks. |
| ISO 2330:1995 | Fork-lift trucks - Fork arms - Technical characteristics and testing. |
| ISO/DIS 3287 | Powered industrial trucks. Pictorial signs. Control symbols. |
| ISO 3449:1992 | Earth-moving machinery - Falling-object protective structures - Laboratory tests and performance requirements. |
| EN 13510: 2002 | Earth-moving machinery - Roll-over protective structures - Laboratory tests and performance requirements. |
| ISO 3776:1989 | Tractors for agriculture - Seat belt anchorages. |
| ISO 3795:1989 | Road vehicles, tractors and machinery for agriculture and forestry - Determination of burning behaviour of interior materials. |
| ISO 5053:1987 | Powered industrial trucks - Terminology. |
| ISO 6292:1996 | Powered industrial trucks and tractors - Brake performance and component strength. |
| EN 13059:2002 | Safety of industrial trucks - Test methods for measuring vibration |
| EN 50081-1: 1997 | Electromagnetic compatibility – Generic requirements on emissions - Part 1 |
| EN 50082-1: 1997 | Electromagnetic compatibility – Generic requirements on immunity - Part 1 |
| EN 60204-1:1998 | Safety of machinery - Electrical equipment of machines - Part 1 |

## ■ B-2.2 REQUISITES OF THE SERVICEMEN

The personnel charged with the machine maintenance shall be qualified, specialised in the maintenance of earth-moving machines, and shall have the following prerequisites:

**physical:**

good eyesight, acute hearing, good co-ordination and ability to carry out all required maintenance operations in a safe way, according to this manual.

**mental:**

ability to understand and apply the enforced rules, regulations and safety precautions. They shall be careful and sensible for their own as well as for the others' safety and shall desire to carry out the work correctly and in a responsible way

**training:**

they shall read and familiarise with this handbook, its enclosed graphs and diagrams, the identification and warning plates. They shall be skilled and trained about the machine functioning.

**IMPORTANT**

***From a technical point of view, the ordinary maintenance of the machine is not a complex intervention and can be carried out by the machine operator, too, provided he has a basic knowledge of mechanics.***

## ■ B-2.3 WORKING CLOTHES

During work, but especially when maintaining or repairing the machine, operators must wear suitable protective clothing:

- Overalls or any other comfortable garments. Operators should wear neither clothes with large sleeves nor objects that can get stuck in moving parts of the machine.
- Protective helmet.
- Protective gloves.
- Working shoes.

**IMPORTANT**

***Use only type-approved working clothing in good condition.***

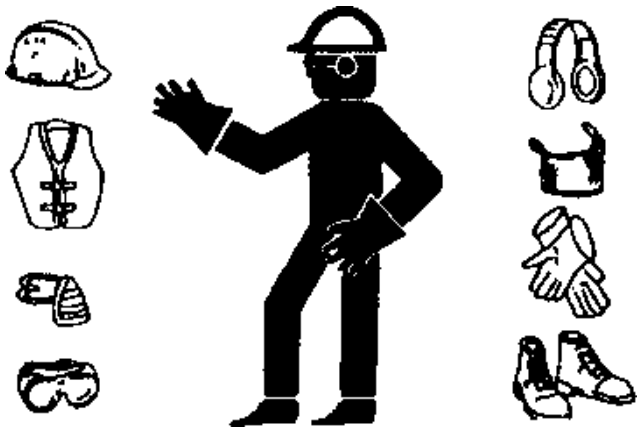
## ■ B-2.4 PERSONAL PROTECTIVE EQUIPMENT

Under special working conditions, the following personal protective equipment should be used:

- Breathing set (or dust mask).
- Ear-protectors or equivalent equipment.
- Goggles or facial masks.

**IMPORTANT**

***Use only type-approved protective equipment in good condition.***



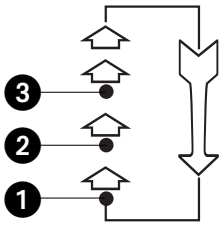
## ■ C-2.2 ADJUSTING THE SEAT

A correct adjustment of the seat ensures the operator a safe and comfortable driving. The handler seat is fitted with devices which allow for the adjustment of the springing, the height and the distance from the controls.

- **Seat distance from the controls**
  The seat is equipped with an adjusting device to slide the same seat forward or back with respect to the steering column.
  To adjust the seat, pull lever **1** outwards and push the seat to the desired direction. Then release the lever and make sure that the seat locks in position.

- **Springing adjustment**
  Rotate lever **2** clockwise or anticlockwise according to the springing degree required. Rotate clockwise/ anticlockwise to increase/reduce the seat springing. To reverse this control, pull out and rotate the lever knob by 180°.

- **Height adjustment**
  Turn knob **3** clockwise to lift the seat; turn it counter-clockwise to lower the seat.

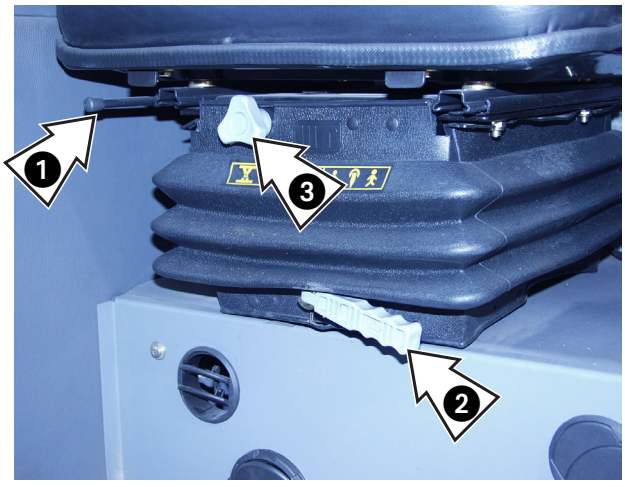


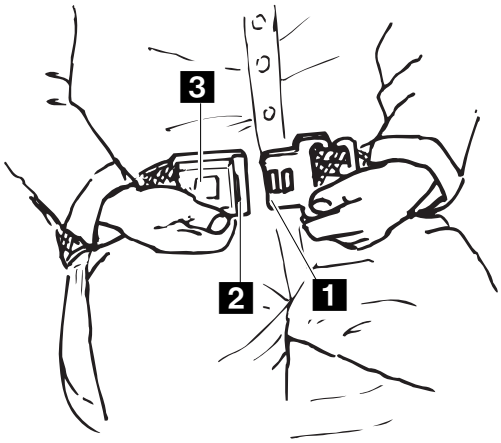

In some seats height can be adjusted to three different positions. Lift the seat until you hear the click signalling that the seat is locked in position. To lower the seat, raise to end of stroke to release the mechanism, then release the seat: it will return to the bottom position.

## ■ C-2.3 FASTENING THE SEAT BELTS

Sit correctly in the driving seat; then:

- The safety belts are equipped with reel retractor. To fasten the belt, pull tab **1** and push it into buckle **2**.
- To release the belt, push button **3** and remove the tab from the buckle.
- Make sure that the buckle is correctly located at the hip point and not on the stomach.
- Operate the end adjusters to reach the length you wish and make sure the buckle is always in the middle.

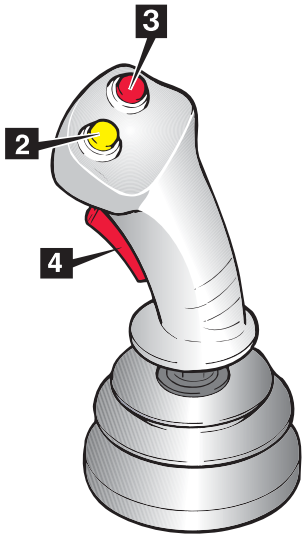


## C-3.4 CONTROL LEVER

Handlers are equipped with an hydraulically driven servo-controlled lever.

The lever is equipped with two buttons for locking/releasing the attachments 3 and for extending/retracting the telescopic boom 2.
When shifted to one of the four directions (right/left, forward/back), it controls the boom lifting/lowering and the forward/back pitching of the attachment frame.
It is also equipped with an intentional control button 4 that must be pressed and held in position until the movement is completed.
If the button is not pressed down, the lever, though operated, does not perform any function.




**IMPORTANT**

***In the TCE version, the intentional control pushbutton 4 is not installed.***
***For the functions of the control lever in the TCE version, please refer to par. C-3.4.1.1.***

**IMPORTANT**

***Seize the control lever correctly and move it gently. The motion speed of the actuators depends on the lever position: a small motion results in a slow motion of the actuators; vice versa, a full range motion of the lever corresponds to the max. speed of the actuator.***

**CAUTION**

***The control lever shall be operated only when correctly seated in the driving place.***

**CAUTION**

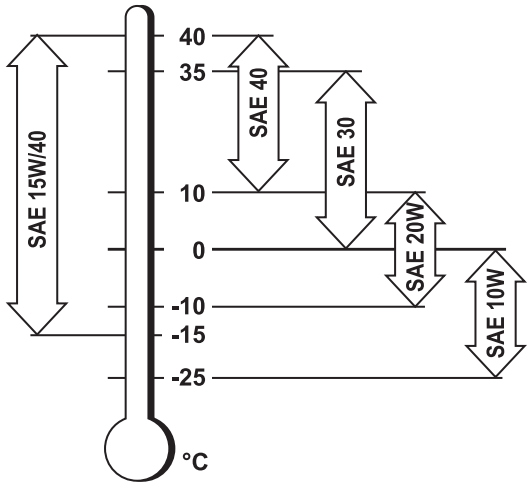
***Before operating the control lever, make sure that nobody is within the working range of the machine.***

## ■ C-4.4 LOW TEMPERATURE STARTING

In case of cold starting, use an oil with a SAE viscosity adequate to the ambient temperature.

Please refer to the DEUTZ engine use and maintenance manual.

The machine is supplied with oil SAE 15W/40.

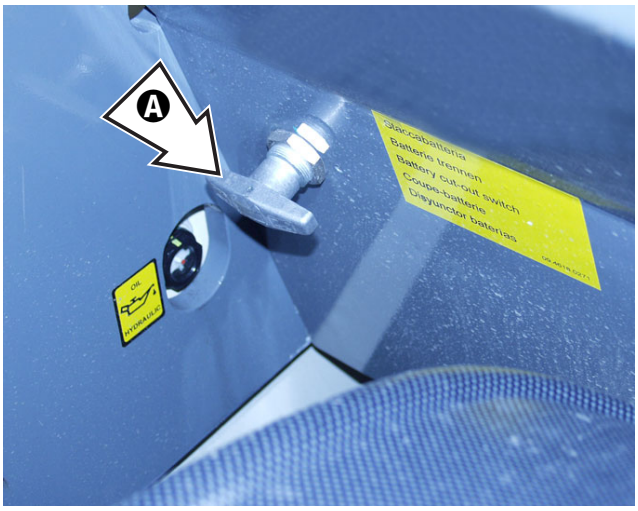



To start the engine from cold, proceed as follows:

- Put the mechanical gear lever to neutral.
- Turn the ignition switch to position and wait until the warning light **28** signalling the glow plugs preheating goes off. Step down on the gas pedal and start the engine turning the ignition switch to . Release as soon as the engine starts.
- Let the engine run at idle for a few seconds before putting a gear; this allows for a gradual warm up of the engine oil and a better lubrication.
- In case of engine jump-starting, remove the booster ables (see chapter C-4.3).

## ■ C-4.5 DISCONNECTING THE BATTERY

During maintenance or repair works, and while welding, turn off the battery main switch Ⓐ, located behind the rear right wheel compartment.




## ■ C-4.6 STARTING THE MACHINE

When the engine reaches the running temperature, ensure all parts are in transfer position and the gearbox lever is in neutral. Then, proceed as follows:

- Select the required steering mode.
- Select the required gear (forward or reverse).
- Release the parking brake pressing button **19** (the warning light on the pushbutton must be off).
- Slowly step on the gas pedal to start moving off.

**CAUTION**

***Do not operate the forward/reverse gear lever when the machine is running. The machine would reverse the running direction abruptly and you could seriously be injured.***

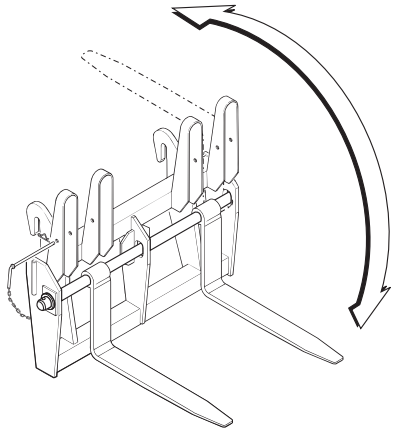
## ■ C-6.2 ROAD OR SITE TRANSFER

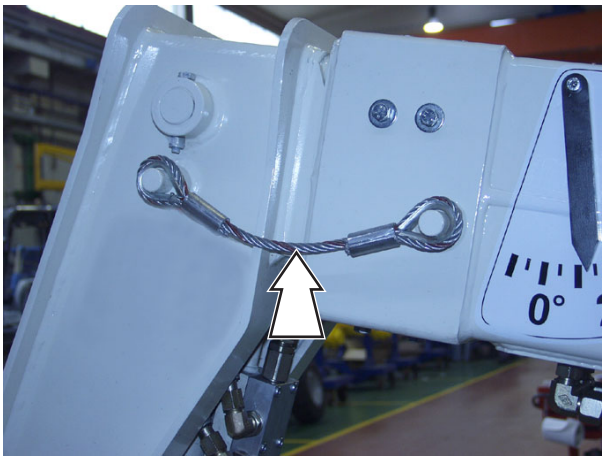
When travelling on public roads, strictly obey the local or national road traffic regulations.

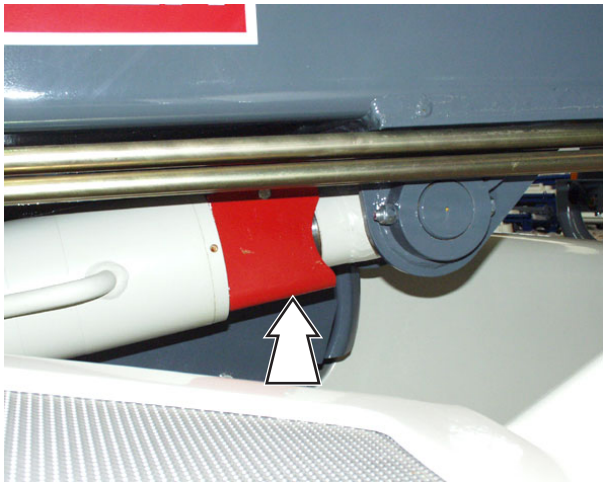
Besides, take into account the following general precautions:

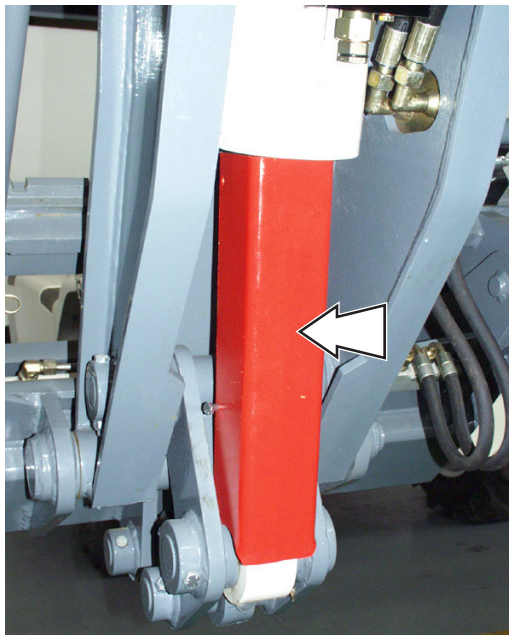
- Align the rear wheels.
- Select the two-wheel steer.
- Set the ROAD-JOBSITE switch **20** to “ROAD” (the light on the pushbutton comes on).
- Lock the machine as indicated in the Registration Card:

  Lock the boom sections, the lifting cylinder, and the attachment rotation cylinder (see photo).
- Cover the teeth of the conventional forks with the special guard; or withdraw the floating forks.







- Retract boom and attachment to transfer position.
- Make sure that lights, horn and turn signals are in working order.
- Start the machine (the beacon will switch on automatically).
- Select the forward or reverse speed.
- The transfer speed of the vehicle will depend on the engine rpm.

**CAUTION**

***Public road circulation is allowed only for transferring an unloaded machine.***

***Do not use the Telelift 2506 for towing purposes.***

## ■ D-3.3 GREASING

**ATTENTION**

***Before injecting grease into the greasers, thoroughly clean them to avoid that mud, dust or other matters can mix with the lubricant and reduce or annihilate the lubrication effect.***
***Remove any old grease with a degreaser from the telescopes before smearing them with new grease.***

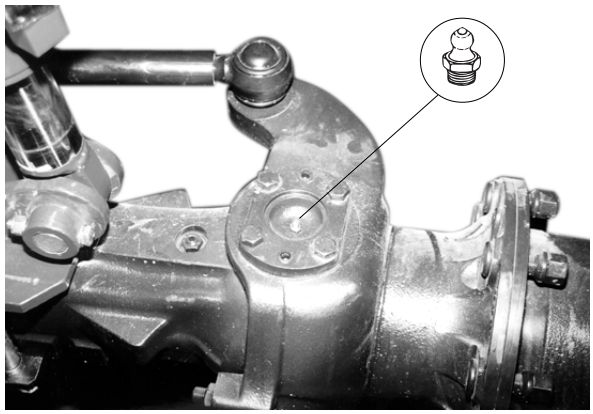
Regularly grease the machine to grant it efficient conditions and a long life.

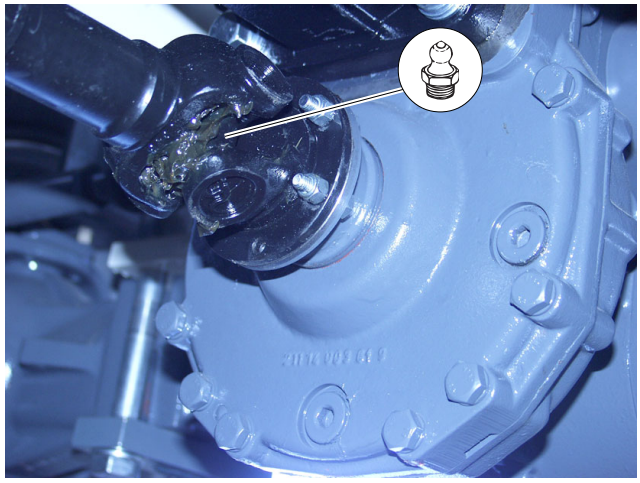
By means of a pump, inject grease into the special greasers.

As the fresh grease comes out, stop the operation.

The greasing points are shown in the following figures:

- the symbol  represents the points to be greased by a pump
- the symbol  represents the points to be greased by a brush.

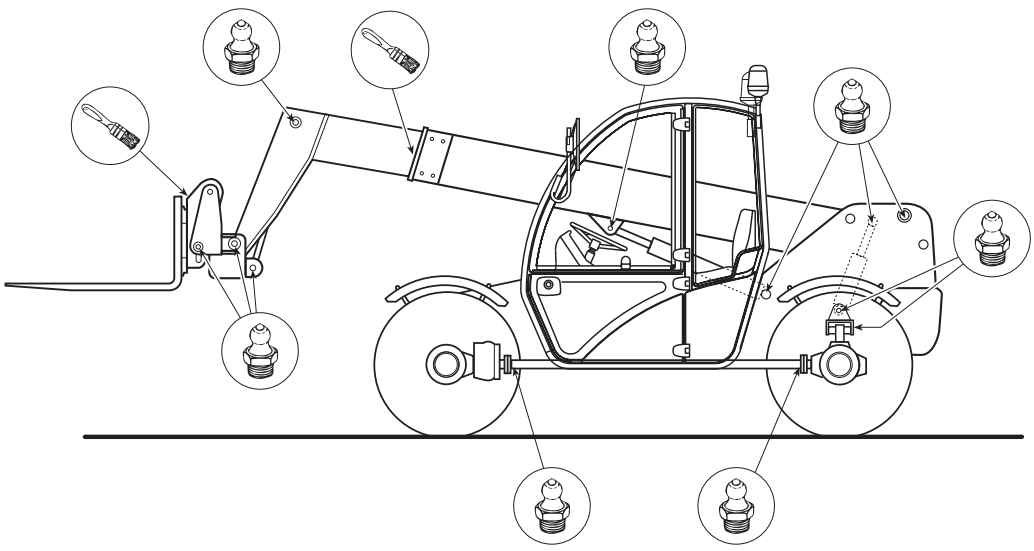




***SERVICE INTERVAL***

Running-in _____ **None**

Ordinary _____ **Every 10 hours**



## D-3.13 SHAFTING ALIGNMENT

During operation, the alignment of the front and rear axles of the machine can be subject to variations. This can depend on an oil blow-by from the steering control circuit, or on a steering of both axles when front and rear wheels are not perfectly aligned.

To fix this problem, rather than checking the alignment visually, follow the procedure below:

**1)** Move to a solid and level ground

**2)** Set the steering selection switch **11** to "***four-wheel steer***" (pos. **2**)

**3)** Rotate the steering up to its stop (either to the right or to the left)

**4)** Set the steering selection switch to "***two-wheel steer***" (pos. **0**)

**5)** Rotate the steering up to its stop (turn in the same direction as above)

**6)** Reset the steering selection switch to "***four-wheel steer***" (pos. **2**)

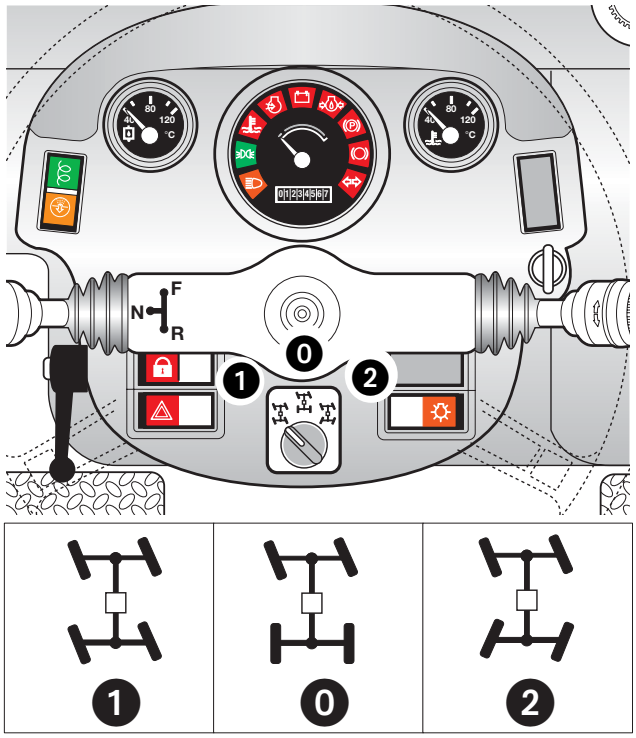
**7)** Rotate the steering (to the side opposite to point **3**) so that the rear axle reaches its stop

**8)** Reset the steering selection switch to "***two-wheel steer***" (pos. **0**)

**9)** Rotate the steering (to the same side as in point **7**) so that the front axle reaches its stop

**10)** Reset the steering selection switch to "***four-wheel steer***" (pos. **2**)

Now the wheels should be re-aligned.




***SERVICE INTERVAL***

Running-in _____ **None**

Ordinary _____ **When necessary**

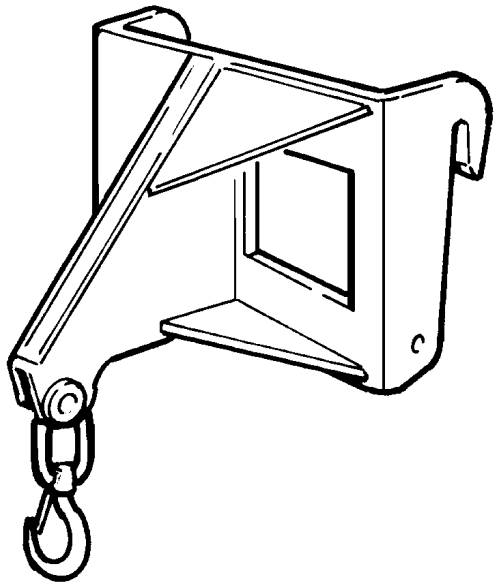
*Section* ***E***

# *FAULTS AND TROUBLESHOOTING*

## TABLE OF CONTENTS

## ■ F-1.3 FIXED HOOK ON PLATE

| *Payload* | *Telelift 2506-Agrilift 625* |
|---|---|
| 2500 kg | 59.0700.0000 |



***Application***
Quick-coupling fitted attachment for lifting loads by means of special slings.

***Safety***
Strictly obey the general safety precautions given in section **B** "SAFETY".
Do not oscillate the load.
Do not drag hooked loads.
Lift the load before extending the boom.

***Operation***
Fork the hook and hold it in position by means of the locking cylinder.
All loads must be bridled with special textile slings or chains in compliance with all pertinent regulations.
To handle the load, raise and rotate the telescopic boom of the handler.

***Maintenance***
Visually check the hook for damage before using it.
Check the safety catch is in good working order.

***Technical data***

| *Payload* | *kg* | *2500* |
|---|---|---|
| Width | mm | 970 |
| Length | mm | 620 |
| Height | mm | 600 |
| Weight | kg | 105 |

**IMPORTANT**

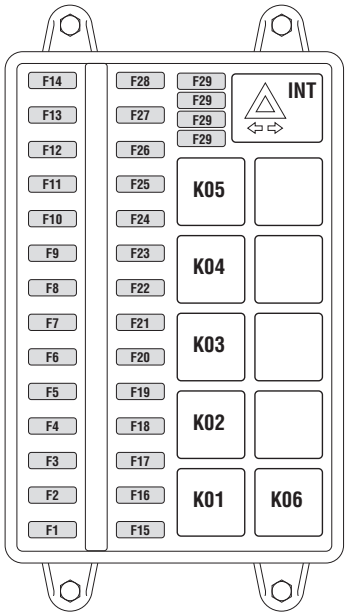
***The fixed hook has been designed to support a load of 2500 kg. The max payload corresponds to the nominal capacity rating of the handler on which it is installed and is indicated on the load charts supplied with the equipment.***

**IMPORTANT**

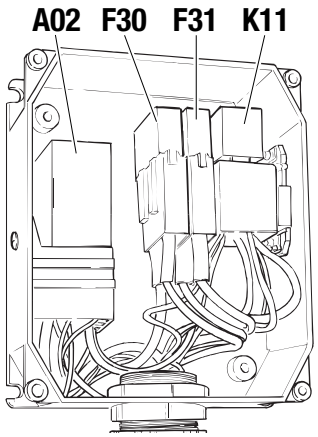
***Make sure this attachment can be used in the destination country of the machine. In Italy, this attachment must be enrolled at ISPESL and submitted to yearly test.***
***Application must be submitted directly by the user.***

## G-3.1 WIRING DIAGRAM - FUSES AND RELAYS

| Ref. | Circuit | Amp. |
|---|---|---|
| **F1** | Power supply: interior lamp, emergency switch, turn signals +30 | 15 |
| **F2** | Power supply: K04 relay | 7,5 |
| **F3** | Optional | 15 |
| **F4** | Front right/rear left position lights, license plate lights, position lights indicator, engine oil temperature indicator | 5 |
| **F5** | Front left/rear right position lights, fuel gauge-hourmeter-warning lamps lighting, engine oil cooling temperature indicator light, fan switch, lights selection switch | 5 |
| **F6** | Right low beam | 7,5 |
| **F7** | Left low beam | 7,5 |
| **F8** | Right high beam | 10 |
| **F9** | Left high beam, High beam warning lamp | 10 |
| **F10** | Horn | 15 |
| **F11** | Windscreen washer kit | 10 |
| **F12** | Optional | - |
| **F13** | Optional | - |
| **F14** | Optional | - |
| **F15** | Preheating control unit power supply | 5 |
| **F16** | Power supply: hydraulic stop, fuel gauge-hourmeter-warning lamps indicator, engine oil cooling temperature indicator, engine oil temperature indicator K04 relay pickup, air filter warning light, preheating warning light, road safety switch | 5 |
| **F17** | Power supply: hazard warning light and turn signals switch +15 | 15 |
| **F18** | Power supply: light switch - windscreen washer switch, windscreen washer motor | 15 |
| **F19** | Heating system fan power supply | 15 |
| **F20** | Road safety switch power supply | 7,5 |
| **F21** | Power supply: beacon | 10 |
| **F22** | Engine stop mushroom-head button power supply | 10 |
| **F23** | Relay K02/Relay K05 power supply | 7,5 |
| **F24** | Relay K06 power supply | 5 |
| **F25** | Parking brake switch power supply | 10 |
| **F26** | Optional | - |
| **F27** | Optional | - |
| **F28** | Optional | - |
| **F29** | Spare fuses | |




| Ref. | Circuit | Amp. |
|---|---|---|
| **F30** | Preheating control unit maxifuse | **50** |
| **F31** | System protection fuse | **50** |
| **K11** | Start relay | |
| **A02** | Preheating control unit | |




### RELAYS

| Ref. | Circuit |
|---|---|
| **K01** | Starting enabling command |
| **K02** | Forward speed enabling command |
| **K03** | Inhibition with brake pedal stepped down |
| **K04** | Overload warning system control unit enabling command |
| **K05** | Reverse speed enabling command |
| **K06** | Overload warning system solenoid valve enabling command |

| Sheet 9/9 | |
|---|---|
| From serial no. | xxxxx |
| To serial no. | 10739 |