ARES 816
ARES 826
ARES 836

Use and Maintenance

SAFETY

FOREWORD

CLAAS Tractors are designed and built to give you optimum service over many years. They are designed to provide the most comfortable and safe working conditions.

However, accidents can easily happen in agricultural work. It is important to know the dangers and how to avoid them.

We respectively draw your attention to certain aspects that merit constant attention (non exhaustive list).

PRECAUTIONS BEFORE STARTING

Caution is the best guarantee against any risk of accident.

The driver must be fully familiar with the tractor and must understand all the controls, their position and their purpose. This manual must be read carefully.

If the tractor is used by anybody other than the owner, he must be given all explanations required to allow him to work safely.

The driving position must be clean (instrument panel, steering wheel, floor and pedals).

Footsteps must be clean (no mud) to avoid slipping when climbing or descending.

Use the steps and handles provided when getting into or out of the tractor.

Before starting the engine, make sure that all controls are in the neutral position, particularly the power take-off lever.

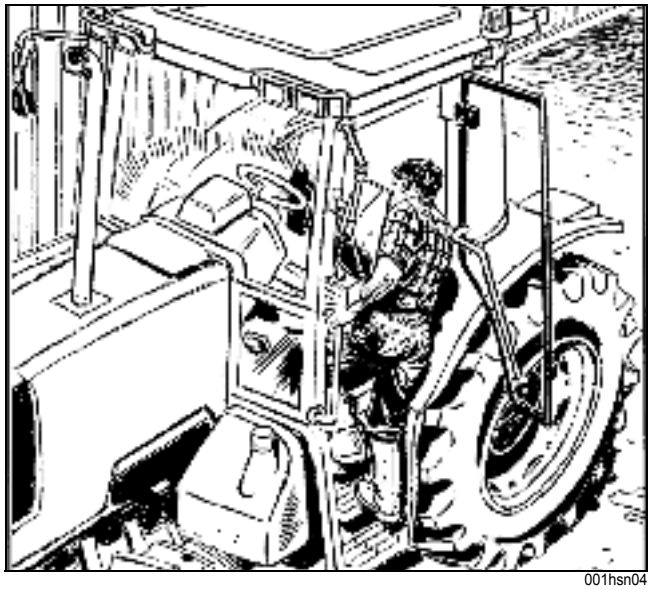
Only run the engine in well ventilated areas.

Make sure there is nobody nearby before starting the tractor.

Fully release the handbrake before starting.

Do not start work if the tractor is not working properly.

001hsn03



001hsn04

E - WARNING: This tractor must not travel at a speed greater than 30 km/h on public roads.

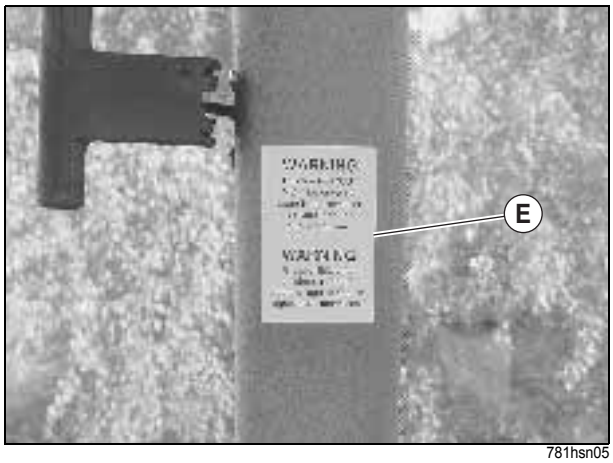
WARNING: It is forbidden to transport a child under 13 years of age on farm machinery.

F - WARNING:

- This tractor's air conditioning is charged with freon R 134 A, which is a toxic gas when exposed to the open air.
- Do not discharge the system without the appropriate equipment.

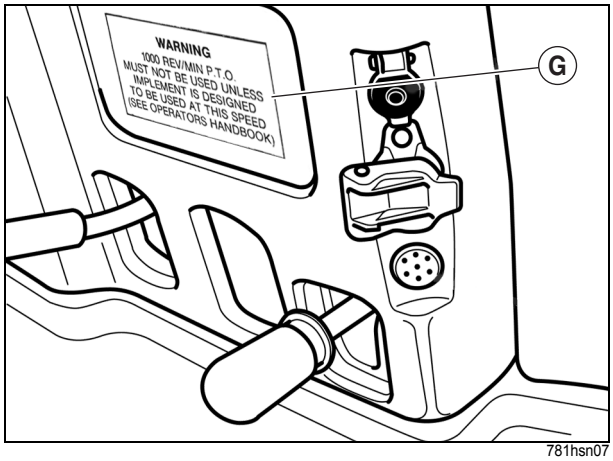
G - WARNING: The power take-off must not be used at 1000 rpm unless the implement is designed to run at this speed (see the user's manual).

H - WARNING: To prevent accidents. Disconnect the hydraulic hoses (of the grab hook) from the distributors immediately after locking on the implement.



781hsn05

781hsn06



781hsn07

781hsn08

BATTERY STATE WARNING LIGHT (8)

This light comes on when the battery voltage is below 10,5. Low voltage causes some malfunctions. Have the battery and the electrical circuit checked by your approved CLAAS dealer. The Drivetronic controls the correct operation of the transmission. The state of the diagnostic indicator (8) can indicate 3 cases of anomalies:

1. Diagnostic indicator flashes slowly

When the defect appears, the tractor reacts jerkily during operations. In spite of this, work can continue. This defect can make it impossible to change direction.

2. Diagnostic indicator flashes rapidly + alarm

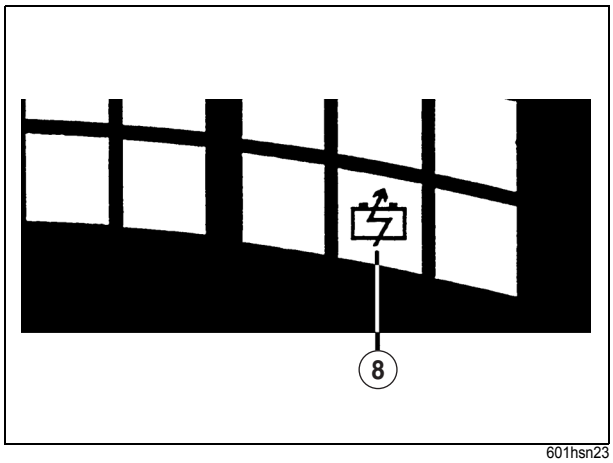
In this situation, do not place the reverser lever (F) in neutral (II), or declutch to change gear with the lever (F) or switch (H) located on the gear lever (A) because you risk completely immobilising the tractor. If you have to stop, use only the clutch pedal (G).

You can only travel in one direction, the one engaged when the defect appeared. If you have to move the tractor, take all necessary precautions, remembering that no reversal of direction will be possible.

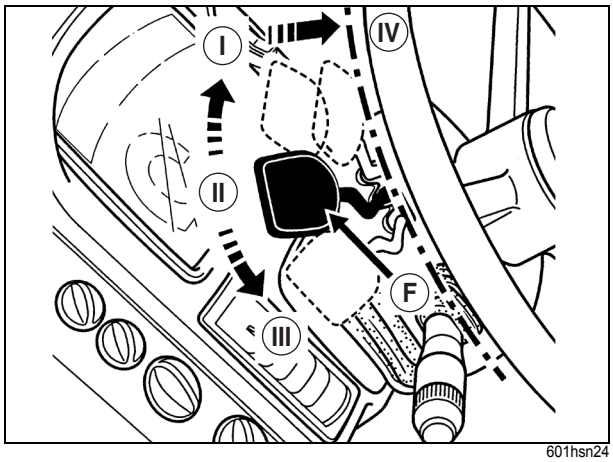
3. Diagnostic indicator on permanently + alarm

In this situation, the tractor is immobilized and the neutral indicator is steady on. This state is the transmission being placed in safety by the Drivetonic.

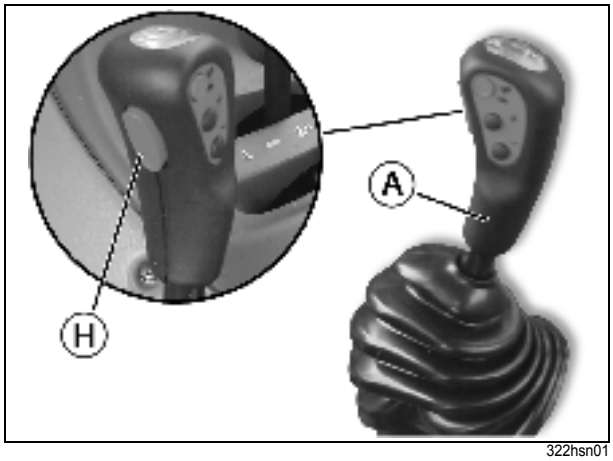
Important: If one of the defects described above occurs during tractor operation, consult your CLAAS approved repair agant.



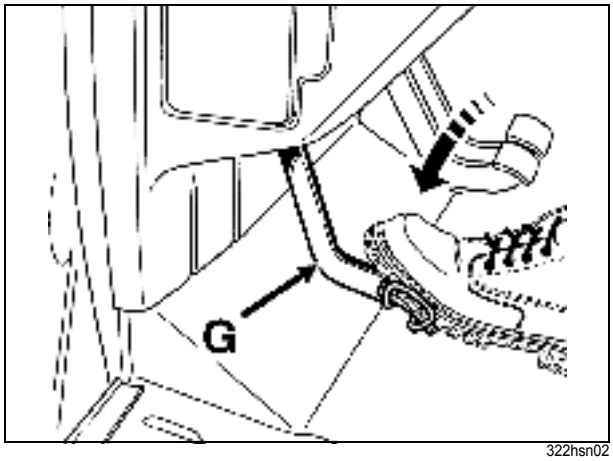
601hsn23



601hsn24



322hsn01



322hsn02

PNEUMATIC SEAT

1 - Longitudinal adjustment: Lift lever (1) to release the lock. At the chosen position, release the lever and check the lock is engaged.

2 - Horizontal damper: To be used to absorb longitudinal accelerations due to the use of the tractor on tracks and, generally, for all work at more than 7 Km/h.

3 - Height adjustment: Pull the handle (3) once to adjust the weight. Wait for calibration to be completed, then pull the handle up or down to adjust the seat height.

4 - Backrest angle adjustment.

5 - Armrest angle adjustment.

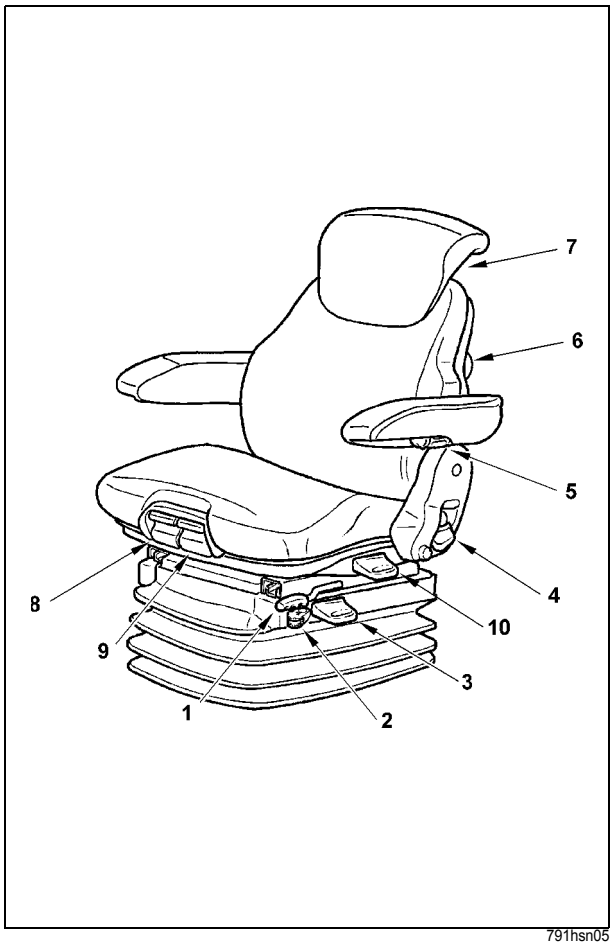
6 - Low backrest adjustment: Turn the handle to the left or to the right to obtain low back support in height or depth.

7 - Adjustable headrest.

8 - Seat depth adjustment.

9 - Seat angle adjustment.

10 - Seat swivelling adjustment: Pull the handle (10) up to allow seat rotation around its vertical axis.



791hsn05

PASSENGER SEAT

Positioned on the left of the driver it is essential for carrying a passenger.

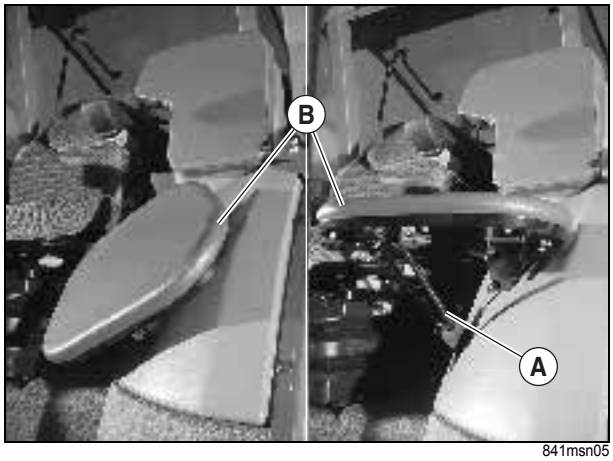
To unfold the passenger seat:

1 - Raise seat (B).

2 - Position the holding rod (A) on its support.

When carrying a passenger it is obligatory to travel with the doors correctly closed.

Never leave a child (or animal) in your vehicle with the key in the ignition. A child or animal could start the engine or operate electrical or hydraulic equipment.



841msn05

FUSES AND RELAYS

Important: If a fuse blows, replace it with a new one of the same rating. If it blows again, find the cause and remedy it. Do not use a fuse of a higher rating. Contact your approved CLAAS repairer.

REMOVABLE FUSE

The reserve fuse is next to the battery in the compartment on the right front of the cab.

Ref	Designation	Current
1	Pre-heating	70 A

601hpn22

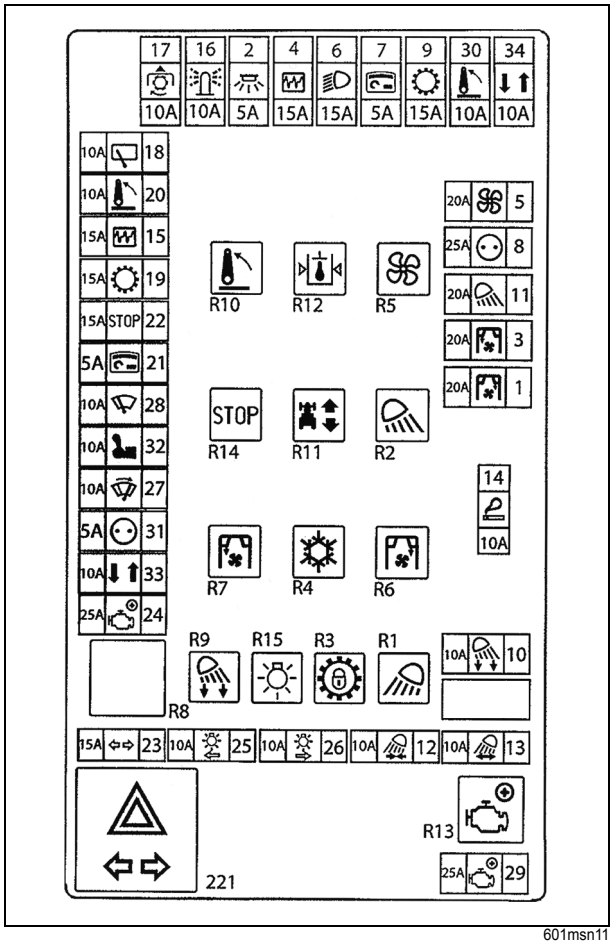
FUSE BOX

The fuse box is located on the left hand side of the dashboard. Open flap (2) of the dashboard to access the fuses and relays.

601hpn02

RELAY ALLOCATION:

R1 Front work lights.
R2 Rear work lights.
R3 Locking the automatic hand brake.
R4 Air conditioning.
R5 Heating fan.
R6 Cooler fan (right side).
R7 Cooler fan (left side).
R8 Not in use.
R9 Rear work lights.
R10 Electronic lift.
R11 Reverser under torque.
R12 Hydraulic pressure.
R13 Start.
R14 Stop lights.



601msn11

FUEL

GENERAL

The presence of impurities, even if only a few microns in size, is enough to cause very serious damage to the injection system.

Important: Supply the injection system with diesel that is free from all impurities and any trace of water.

QUALITY REQUIREMENT

High fuel quality is vital for both engine performance and durability. Only use diesel fuel that satisfies the quality requirement of the EN 590 standard. Consult your fuel supplier to confirm that the diesel fuel meets this standard. Diesel biofuels can only be used if they comply with the DIN 51606 standard. The biofuel must only be used mixed with diesel, at 5 % maximum.

Important: Untreated vegetable oils must not be used in any concentration whatsoever.

Apart from the notion of "quality" standard, the fuel must correspond to standard ISO 12156.2 in terms of lubricating power.

Important: Any blend of diesel with fuels other than biofuel is prohibited. When operating at negative temperatures, use a diesel of the "very cold weather" type available from your supplier.

FILLING THE TANK

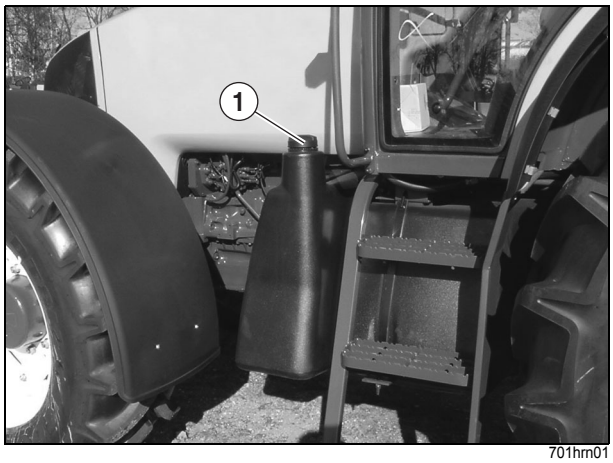
It is best to fill the tank in the evening to avoid water condensation in the tank.

1 - Clean the area around the diesel filler cap.

2 - Remove the filler cap (1) and put it in a clean dry place.

3 - After refuelling, replace and tighten the filler cap.

Note: It is recommended to filter the fuel when filling the tank.



701hrn01

HANDLING THE FUEL

Important: When transporting fuel, use containers intended for this purpose. Your container must only be used for this purpose. The mixture, even in minute quantities, of chemicals (treatment product, other fuel, etc.) with your fuel will damage the engine injection system.

Important: The fuel tank cap includes a vent system. Poor functioning of this system causes inadequate supply to the engine which can adversely affect the operation or distort the tank.

GEAR LEVER

GEAR SELECTION (A)

Lever (A) can be used when the tractor is moving. To do this, release the accelerator pedal, press the clutch pedal, engage the selected gear, clutch gradually, and accelerate.

SELECTION OF THE "HARE" ROAD AND "TORTOISE" FIELD RANGES (B)

The road and field ranges are hydraulically controlled: the range can be changed only with the engine running. To select the desired range, bring the gearshift lever (A) back to neutral, then press the range button (B). The change of range can be observed on the display (the hare (2) or tortoise (1) symbol lights up). A change of range can be performed with the tractor in motion provided:

- Switching from the road range to the field range takes place at a forward speed less than 8 km/h ;
- Switching from the field range to the road range takes place at a forward speed less than 10 km/h.

Note: When the engine is started, the range gear is the same as that engaged when the engine was stopped.

SELECTION OF SPEED (C)

The speed is changed using the 2 impulse buttons (C), placed on the gear lever (A) or on the right side post.

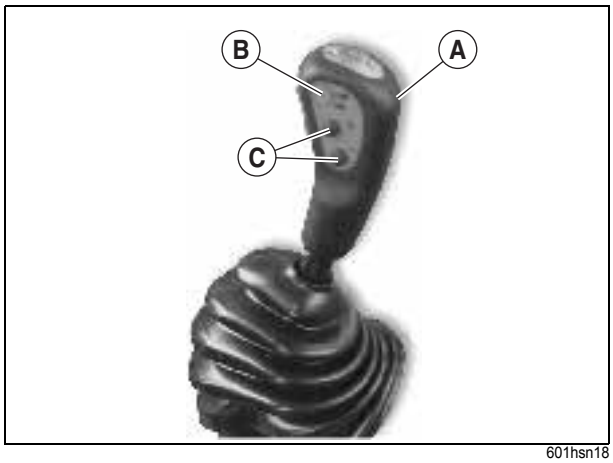
The function of the QUADRISHIFT is to reduce or increase the forward speed during work, without affecting the traction force, thanks to changing under torque.

Activate one of the impulse buttons (C):

- Upper (+)impulse button to increase speed ;
- Lower (-) impulse button to decrease speed.

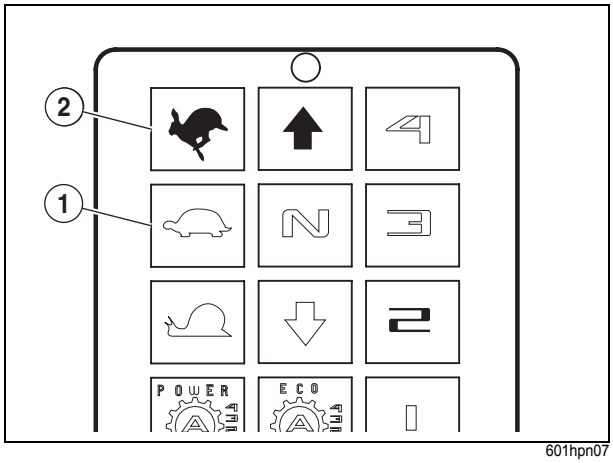
The speed selected is shown on the display. If the driver presses button (C) several times, the request is memorised. You have to change through speeds 2 and 3.

Note: When the engine is started up, it is still in the last speed selected when the engine stopped.



601hsn18

601hsn30



601hpn07

HITCHING IMPLEMENTS TO THE POWER TAKE-OFF

Do not wear loose clothing which could catch in moving parts.

The engine must be stopped before coupling or uncoupling the attachment's universal joint shaft.

All guards must be fitted when working.

When repairing, adjusting or lubricating an attachment in the field, always set the PTO lever to neutral and stop the engine.

Put the power take-off controls in neutral if they are not being used.

Only remove the protective sleeve (O) to connect an attachment driven by the PTO. Replace the sleeve as soon as the attachment is disconnected.

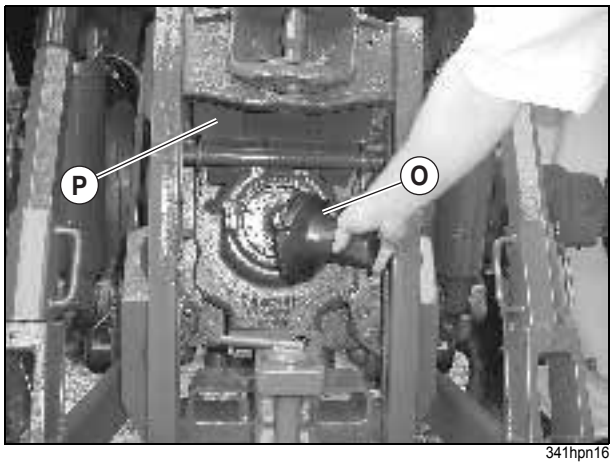
To attach or remove an implement driven by the rear power take-off, remove the safety cover (P) upwards. To release the cover, pull it sideways to the right, then hinge it fully upwards.

When the power take-off is not in use, the safety cover (P) must be in place. Never use the power take off if the safety cover is not in place.

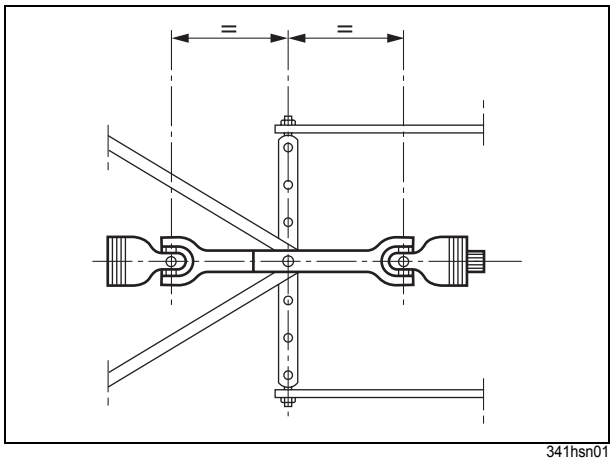
The universal joint shaft must always be aligned with the tractor - tool axis.

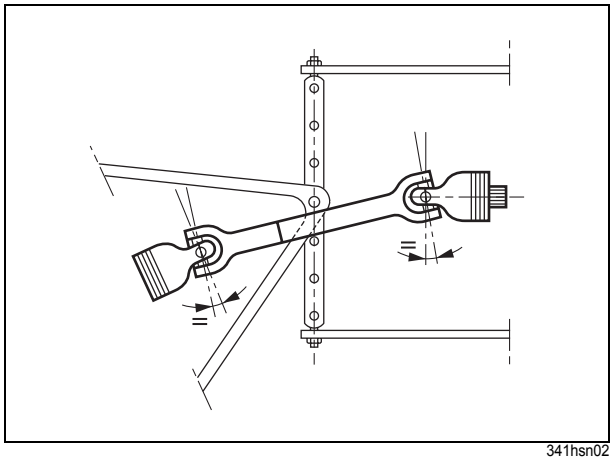
The 2 universal joints must be at an equal distance from the rotation point, so in a bend the angles formed by the shaft joints will be equal.

If this configuration cannot be achieved, use a constant velocity joint.



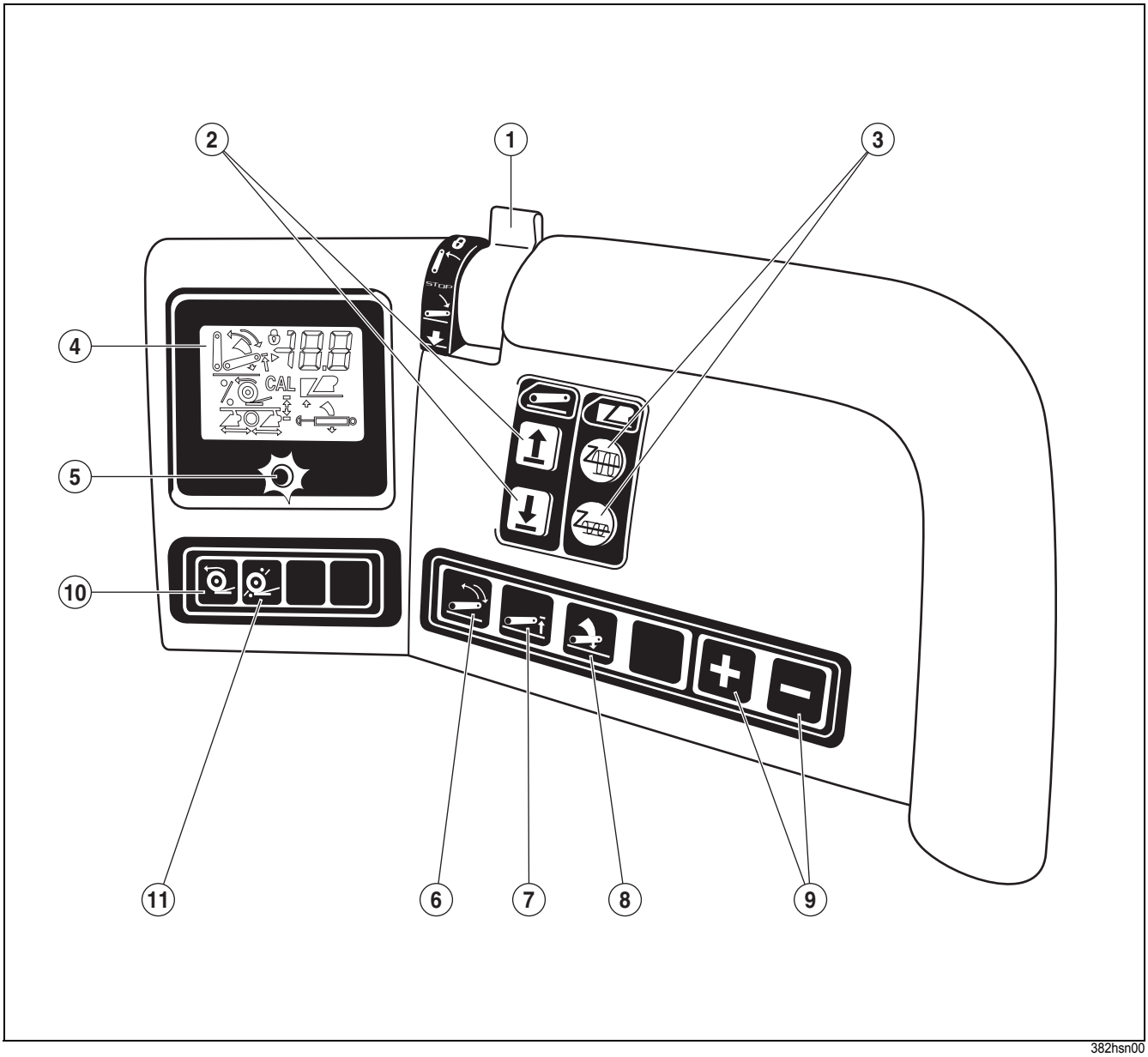
341hpn16


341hsn01


341hsn02

REAR LINKAGE TCE 15-25 (ELECTRONIC TRACTO CONTROL)

DESCRIPTION OF CONTROL PANEL



382hsn00

1 - Mode selector.
2 - Position display adjustment keys (working depth adjustment).
3 - Power sensitivity control adjustment keys.
4 - Display.
5 - Control box safety indicator light.
6 - Key to activate transport damping mode.
7 - Key to adjust top limit.
8 - Key to adjust rate of descent.
9 - Adjusting keys "+" (increase) "-" (decrease).
10 - Key to activate wheel slip management*.
11 - Instant wheel slip display key*.

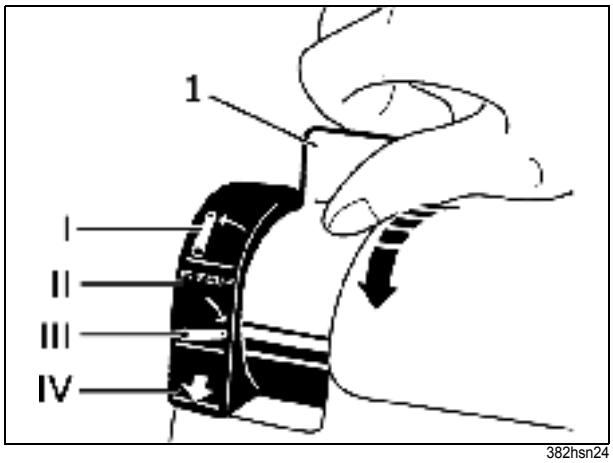
** TCE 25.*

UPPER LIMIT

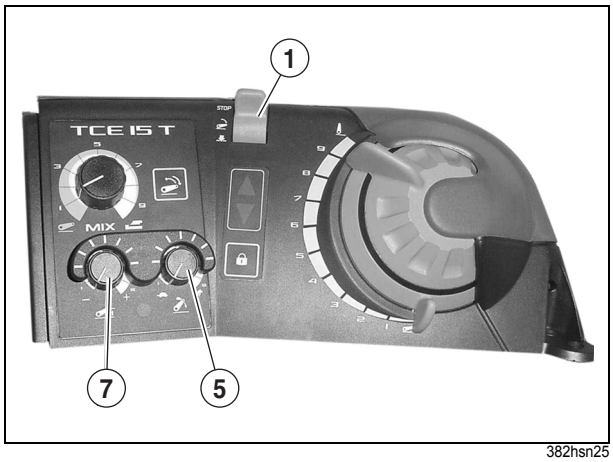
This limits the top part of the linkage travel to prevent large implements touching the cab or while shaft-driven implements are being used.

- Place button (7) of top stop in minimum position towards the marker "-".
- Set the mode selector (1) to high position (I).
- Then adjust the top position as required, using button (7).
- Turning the button to the right (clockwise) will increase the height of the linkage arms at top limit.
- Turning the button to the left (counterclockwise) will decrease the height of the linkage arms at top limit.
- Adjustment is to be carried out at the top section of linkage travel.

Note: The top limit position will never be exceeded by another linkage command (position, force or external controls).



382hsn24



382hsn25

LOWERING SPEED

1 - Set the selector (1) to high position (I).

2 - Using button (5), select the minimum lowering speed.

3 - Set the selector (1) to low position  .

Repeat operations 1 to 3 and modify the lowering speed using button (5):

- Turning to the right (clockwise) increases linkage arm descent rate.
- Turning the button to the left (counterclockwise) will decrease the height of the linkage arms.

Important: Before lowering any heavy implement to a hard surface, set button (5) on the tortoise position.

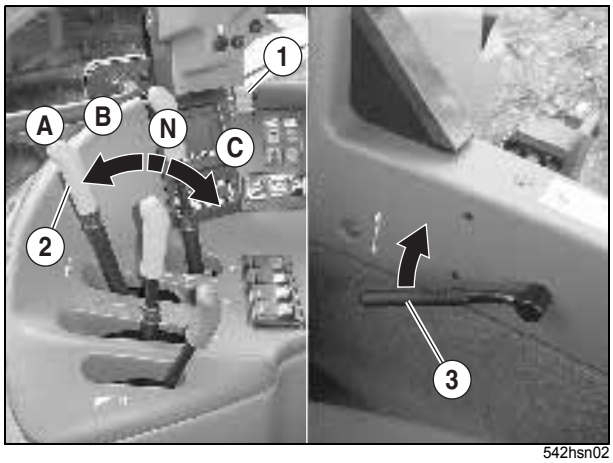
PICKER HOOK

COUPLING AN IMPLEMENT

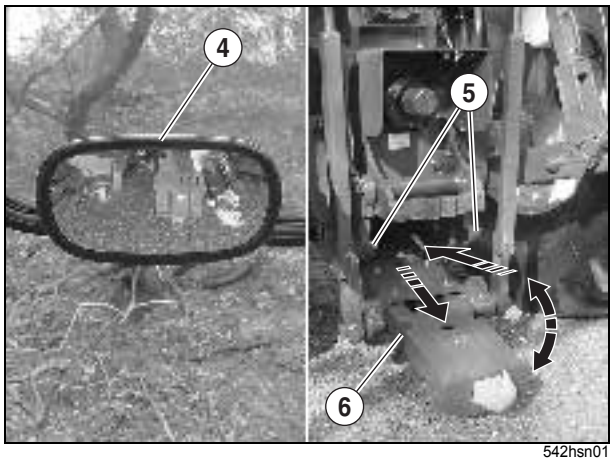
- From the driving position, raise the linkage bars fully using (1) in the high position.
- Activate the spool valve (2), in floating position (A).
- Activate lever (3) to free the lock couplings.
- Lower the linkage arms to bring the coupling to the desired height.
- Carefully reverse the tractor making sure that the coupling does not sink into the ground.
- Activate spool valve (2):
  - Position (A): Floating, uncoupling;
  - Position (B): Coupling outlet;
  - Position (N): Neutral;
  - Position (C): Coupling return.

Use the rear window rear-view mirror (4) to engage the coupling in the trailor eyelet. Raise the linkage bars fully using (1) in high position. The hitch is locked in high position by the couplings (5). Activate the spool valve (2) in position (C), until lengthwise locking (6) of the lower frame.

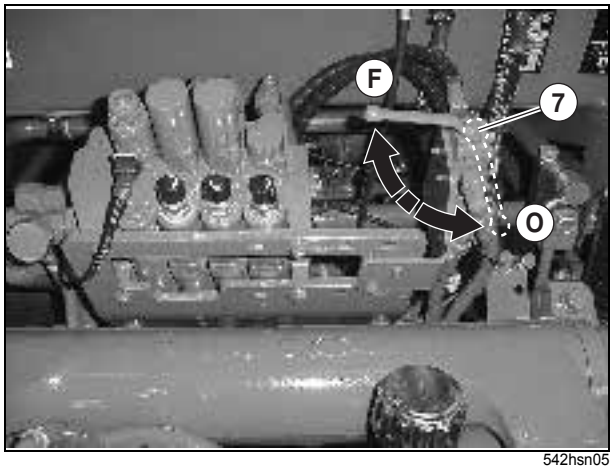
- Lower the linkage bars so that the weight of the equipment is carried by the hitch frame and not by the lift rods.
- Make sure that the equipment is hitched correctly and safely locked in position.
- Get out of the tractor, then turn the valve (7) to position (F), for travel.
- Position (O) is reserved during hitching and unhitching.



542hsn02

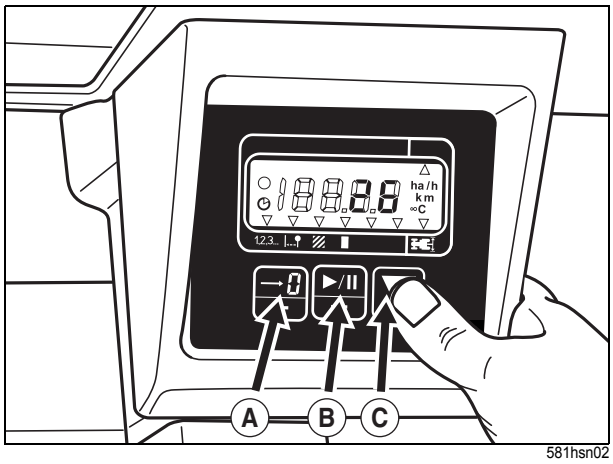


542hsn01



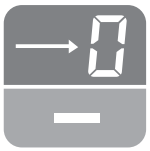
542hsn05

DESCRIPTION (CONT)



581hsn02

KEY (A)



Counter resetting.

Key "-" when programming tool width.

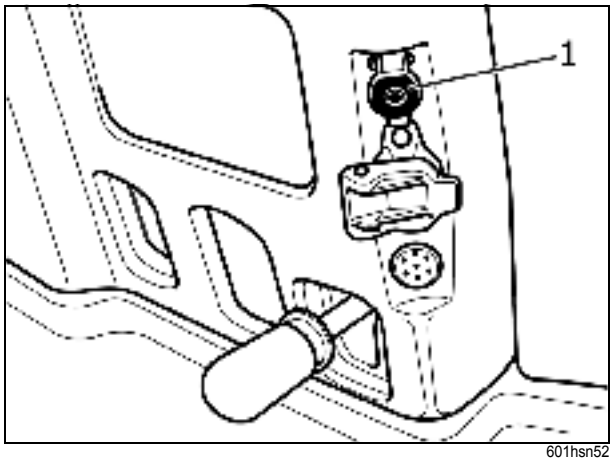
KEY (B)

Counter "on/off" key.

Key "+" when programming tool width.

KEY (C)

Display mode selection and function scroll key: Total or partial.



601hsn52

POSITIONING OF CONNECTIONS TO IMPLEMENTS EVENT COUNTER

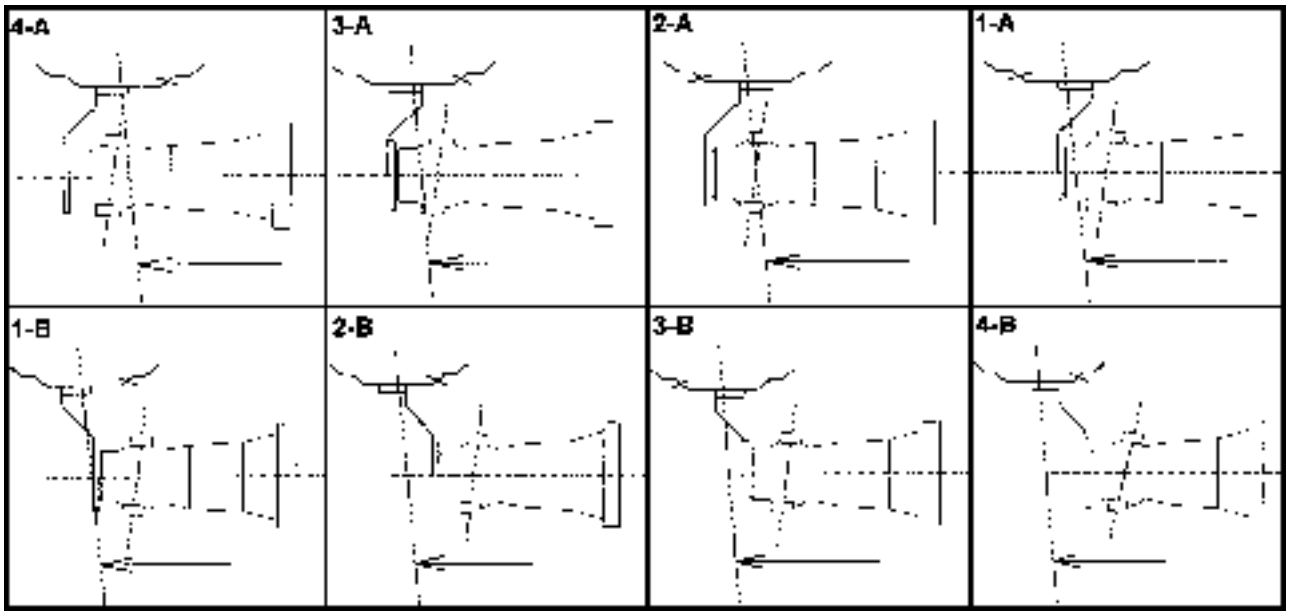
Event counter connector

This connector (1) is located beside the right console, close to plug 25 A.

To install the contactor on the implement (example: round bail press), consult your approved CLAAS repair station.

Important: All repairs (or modifications) of the electrical circuit must be performed by your CLAAS qualified repairer, as an incorrect connection may lead to the deterioration of the electrical installation (wiring, units and in a particular the alternator), futhermore he will have the necessary parts of the adaptation.

TABLES OF FRONT TRACKS



511hsn07

Type of front axle: 20.43										
ARES 816-826-836 PROACTIV Front Axle and ARES 826-836 Normal front axle										
Rims with connector bars or welded circle										
Front tracks (in mm)										
Tyres	**Type**	**Make**	**4-A**	**3-A**	**2-A**	**1-A**	**1-B**	**2-B**	**3-B**	**4-B**
14.9R28	W 12-28	a		1721	1813	1927	1907	**2021**	2113	2228
14.9R28	W 12-28	b		1697	1817	1931	1904	**2017**	2137	2251
16.9R28	W 15L-28	a	1616	1816	1716	1916	1916	2116	**2016**	2216
16.9R28	W 15L-28	b	1616	1816	1716	1916	1916	2116	**2016**	2216
16.9R30	W 15L-30	a	1565	1765	1665	1865	1965	2165	**2065**	2265
16.9R30	W 15L-30	b	1673	1786	1876	1990	1841	1954	**2044**	2158
380/85R28	W 12-28	a		1721	1813	1927	1907	**2021**	2113	2228
380/85R28	W 12-28	b		1697	1817	1931	1904	**2017**	2137	2251
420/70R28	W 12-28	a		1721	1813	1927	1907	**2021**	2113	2227
420/70R28	W 12-28	b		1697	1817	1931	1904	**2017**	2137	2251
420/85R28	W 15L-28	a	1616	1816	1716	1916	1916	2116	**2016**	2216
420/85R28	W 15L-28	b	1616	1816	1716	1916	1916	2116	**2016**	2216
420/85R30	W 15L-30	a	1565	1765	1665	1865	1965	2165	**2065**	2265
420/85R30	W 15L-30	b	1673	1786	1876	1990	1841	1954	**2044**	2158
480/65R28	W 12-28	a		1721	1813	1927	1907	**2021**	2113	2227
480/65R28	W 12-28	b		1697	1817	1931	1904	**2017**	2137	2251
480/70R28	W 15L-28	a	1616	1816	1716	1916	1916	2116	**2016**	2216
480/70R28	W 15L-28	b	1616	1816	1716	1916	1916	2116	**2016**	2216
480/70R30	W 15L-30	a	1565	1765	1665	1865	1965	2165	**2065**	2265
480/70R30	W 15L-30	b	1672	1786	1876	**1989**	1840	1954	2044	2157
540/65R28	W 15L-28	a	1616	1816	1716	1916	1916	2116	**2016**	2216
540/65R28	W 15L-28	b	1616	1816	1716	1916	1916	2116	**2016**	2216
540/65R30	W 15L-30	a	1565	1765	1665	1865	1965	2165	**2065**	2265
540/65R30	W 15L-30	b	1672	1786	1876	**1989**	1840	1954	2044	2157
600/65R28	W 18L-28	a	1614	1814	1694	1894	1934	2134	**2014**	2214
600/65R28	W 18L-28	b	1614	1814	1714	1914	1914	2114	**2014**	2214

a: Titan France.
b: Titan Italy or Titan.

Delivery track in bold.

K - DIMENSIONS, WEIGHTS, CAPACITIES AND BALLAST

Operation n° 9

BLEED AIR FROM THE PNEUMATIC BRAKING: CHECK

The aim of this operation is to eliminate water from the pneumatic circuit. It must be carried out just after the engine stops, when the circuit is still under pressure.

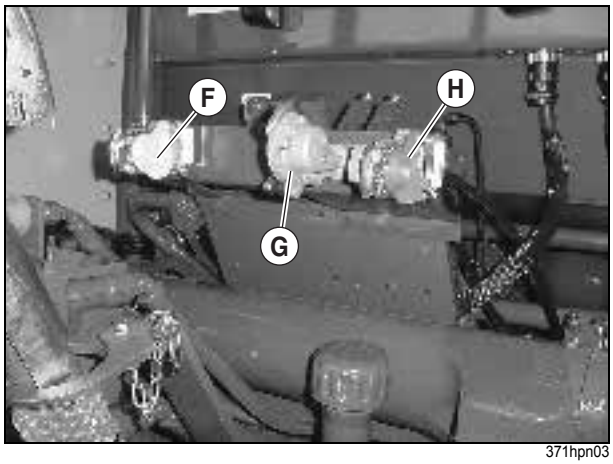
Press the drain valve (E) until all the air is eliminated.

371hpn02

Operation n° 10

PNEUMATIC BRAKING CONNECTORS: CHECK - GREASING

- Check the condition of connectors (F), (G) et (H), then have them replaced by your approved CLAAS agent if necessary.
- Grease the connectors regularly to prolong the life of the seals.



371hpn03

Operation n° 11

HYDRAULIC FLUID LEVEL: CHECK

Note: Before checking the fluid level, the engine must have been stopped for a minimum of 5 minutes and the linkage arms must be in the low position.

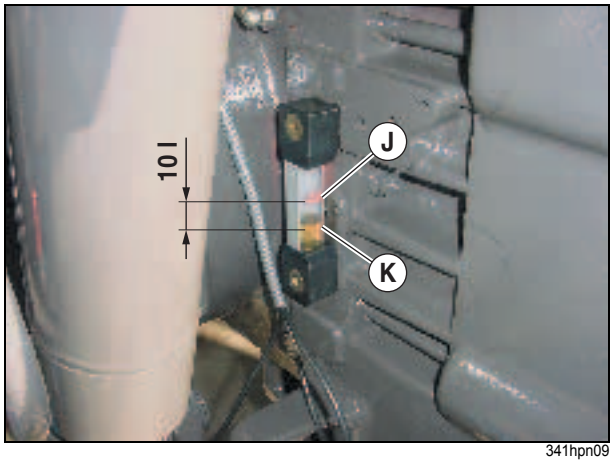
- Position the tractor on a flat horizontal surface.
- Check the oil level with the indicator located on the side of the rear axle.

Mark (K): Minimum level.

Mark (J): Maximum level.

Important:
- The oil level must never fall below the lower mark (K).
- If hydraulic tools which draw a large quantity of oil from the transmission are used (e.g. hydraulic motors or large capacity rams) top the oil up to near the upper mark (J). The quantity of oil necessary between mark (K) and mark (J) is about 10 l.
- Failure to carry out these instructions can in some circumstances cause considerable damage to the power transmission.

The oil is topped up via cap (L).



341hpn09

341hpn13

Operation n° 33

BELTS: CHECK - CHANGE

CHECK

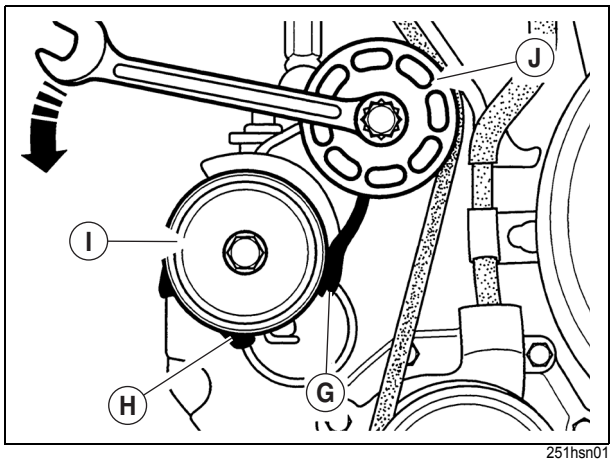
- Inspect the moulded end pieces (G) and (H) on the belt tensioner (I).
- If end stop (G) of the pivoting tensioner arm hits the fixed end stop (H), check the state of the different belt pulleys. If the pulleys seem normal, replace the belt.

REPLACEMENT

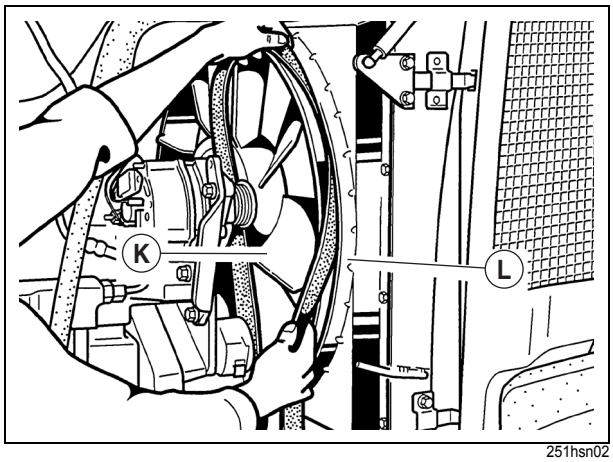
- Release the belt tension using a wrench on pulley (J).
- Remove the old belt from the pulleys.
- Slip the new belt between fan (K) and the cooling nozzle (L).
- Assemble the new belt taking care to follow the correct path over the different pulleys (see "Positioning the belt").
- Tighten the belt with the tensioner (J). Remove the wrench.

POSITION OF BELT

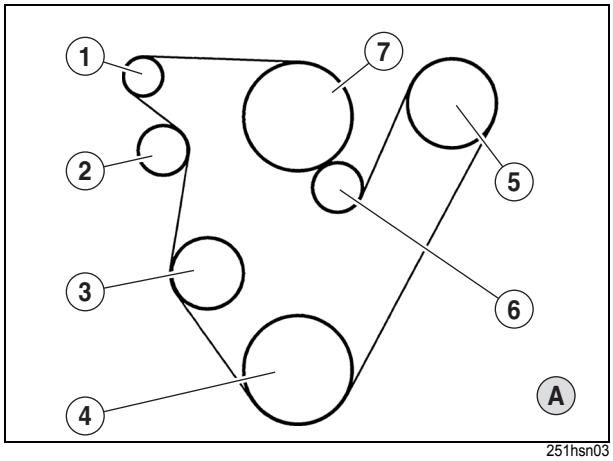
1 - Alternator.
2 - Tensioner roller.
3 - Water pump.
4 - Crankshaft.
5 - Cooling compressor.
6 - Return roller.
7 - Fan pulley.
8 - Pneumatic braking compressor:
A - Equipment without pneumatic braking.
B - Equipment with pneumatic braking.



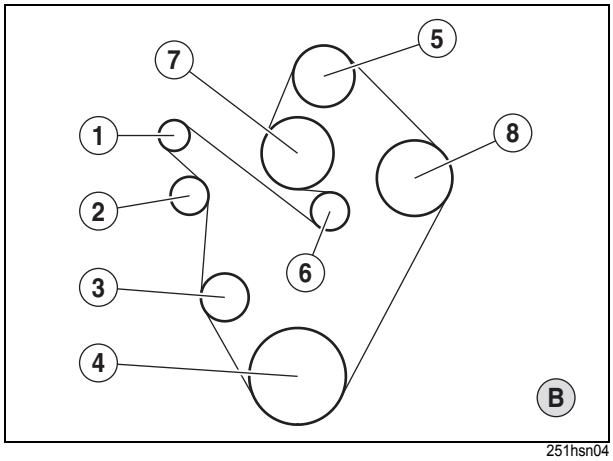
251hsn01



251hsn02



251hsn03



251hsn04