CALIFORNIA

Proposition 65 Warning

WARNING: Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. **Wash hands after handling.**

MF 7600 - Operation

Deluxe and Premium versions

MF 7619
MF 7620
MF 7622
MF 7624
MF 7626

Dyna-6

AGCO S.A. - Beauvais - France - RC B562 104 539
MASSEY FERGUSON is a worldwide brand of AGCO

Original Operator's Manual

October 2012
No. 4373985M1
Issue 1
7600 Dyna-6 - NA
English

1.1 Locating serial numbers

1.1.1 Locating serial numbers

T002037

IMPORTANT: *Please quote the serial number of your tractor in all correspondence with your dealer or agent.*

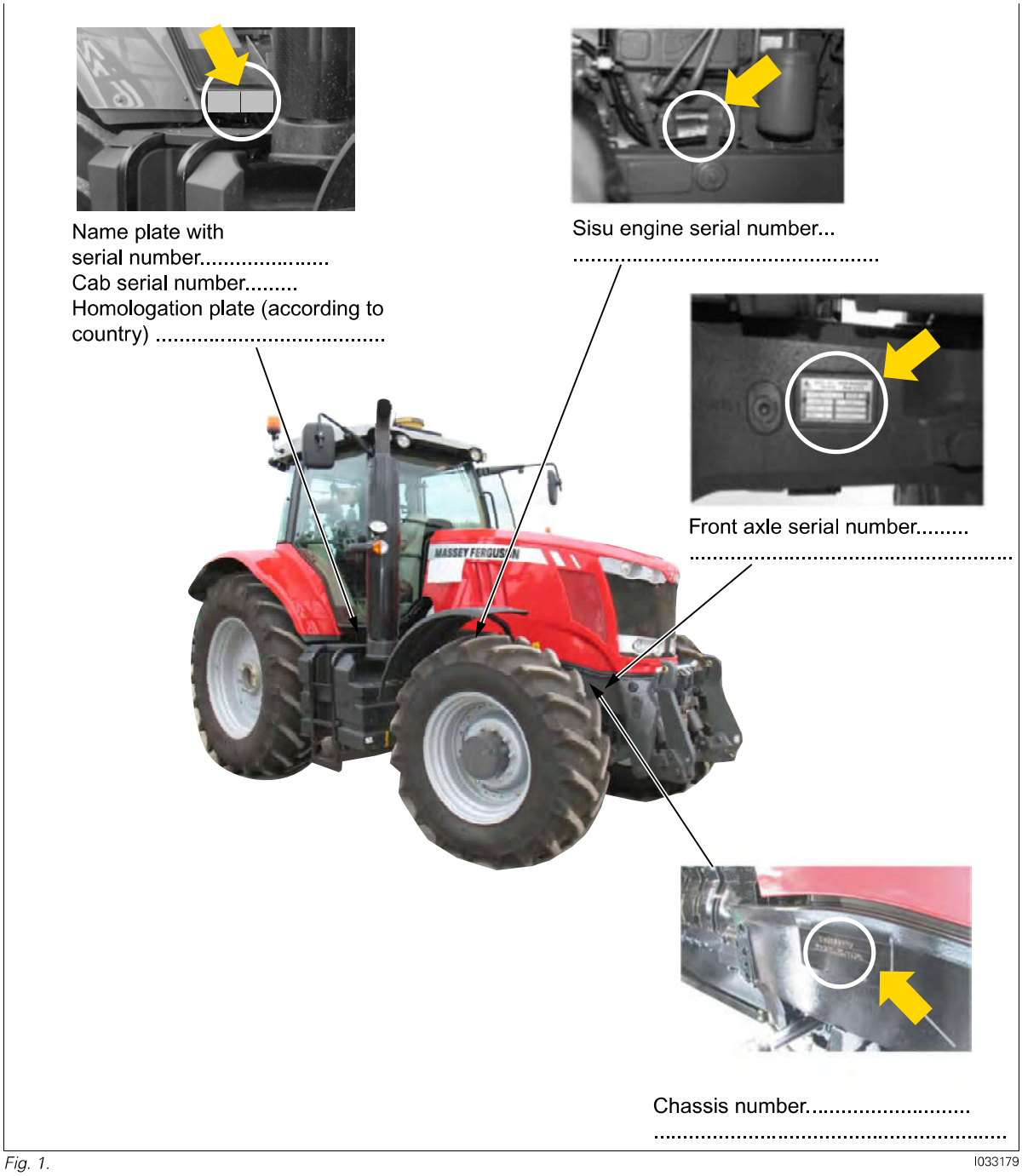
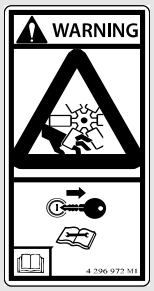
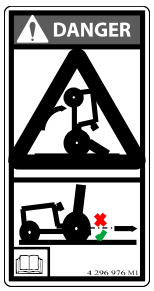


Fig. 1.

I033179

	– **4296959M1** ((P) *fig. 1*) – **WARNING:** Risk of being crushed under tractor in the event of a rollover. Keep seat belt fastened snugly when operating, do not jump if tractor starts to tip.
	– **4296968M1** ((C) *fig. 1*) – **WARNING:** Burn hazard – hot surfaces. Keep away from hot engine components when engine has been running. Shut off engine, remove key, and wait for system to cool before performing maintenance or repair work.
	– **4296970M1** ((M) *fig. 1*) – **WARNING**: Crushing hazard between tractor and implement. Stand outside of tractor tire when using external controls for 3-point hitch. Do not stand between tractor and implement.
	– **4296972M1** ((B) *fig. 1*) – **WARNING:** Shearing hazard – engine fan. Keep your hands away from the fan and the belts when the engine is running. Shut off engine and remove key before performing maintenance or repair work.
	– **4296976M1** ((K) *fig. 1*) – **DANGER:** Rear overturn hazard, which may result in personal injury or death. Pull only from approved drawbar or lower links of 3-point hitch at horizontal position or below. Never pull from above rear axle centerline.
	– **4296978M1** ((L) *fig. 1*) – **DANGER:** Entanglement hazard – PTO driveline. Stand clear of rotating shafts. Keep all driveline, tractor, and equipment guards in place during operation.

– **WARNING:**
Fuel or hydraulic fluid under pressure can penetrate the skin or eyes and cause serious physical injury, blindness or death.
Leaks of pressurized fluid may not be visible. Use a piece of cardboard or wood to detect leaks. DO NOT USE YOUR BARE HANDS. Wear safety goggles for eye protection. If any fluid penetrates the skin, seek medical advice within a few hours from a doctor familiar with this type of injury fig. 3.

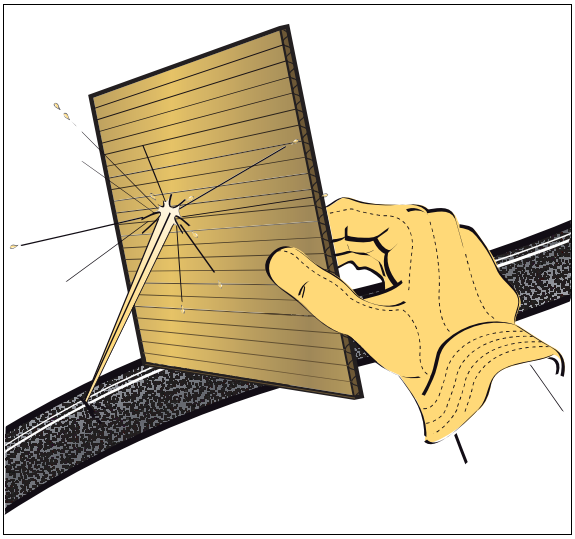


Fig. 3. I002860

WARNING:
Release the pressure of the hydraulic or fuel systems before disconnecting them.

Check the hydraulic system for the tractor and the implement as well as the tractor fuel system: Correct tightening of all the unions; check that there is no damage to the lines, pipes, or hoses; ensure that the hydraulic systems do not cross one another.
Have any leakages or damaged parts repaired or replaced. Do this before each working day

– **WARNING:**
The liquid cooling system builds up pressure as the temperature increases. Stop the engine and let the system cool before removing the radiator cap.

Check the engine cooling system and add coolant if required.

– All maintenance procedures must have been complied with.
– Check that the weight of the tractor/implement assembly is less than the tractor total permissible load.

– When using chemicals, follow the chemical manufacturer's instructions for use, storage and disposal carefully.

– All trailed implements and trailers should be connected to the tractor by a safety chain (1) *fig. 9*.
  Should a trailed implement accidentally become separated from the drawbar during transport, this safety chain will help to retain the trailed implement. Using the appropriate adapter parts, attach the chain to the tractor's drawbar anchor or any other specified anchor point. Leave only enough slack in the chain to allow for maneuvering.
  The safety chain must have a strength equal or greater than the weight of the trailed implement: contact your Massey Ferguson dealer to obtain a suitable chain.

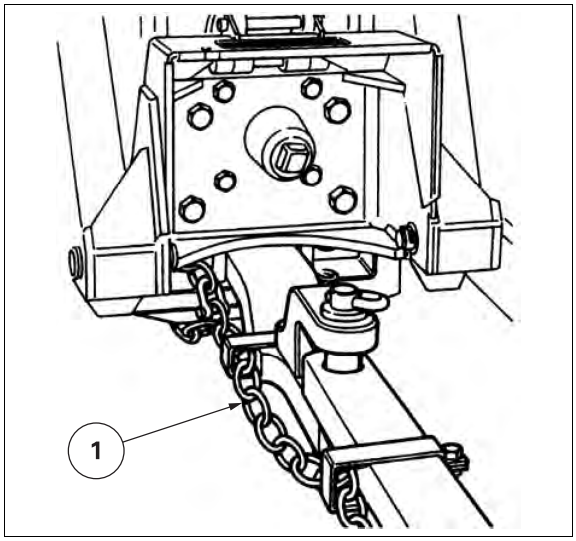


Fig. 9. I002872

– Only tow using the drawbar. Attaching the trailed implement to another location could cause the tractor to overturn.

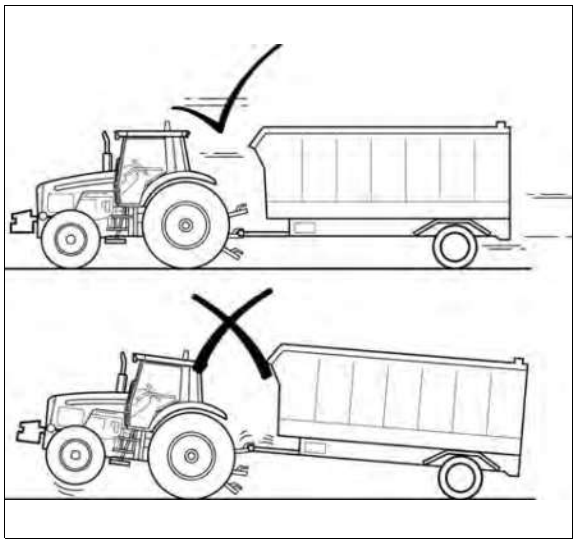


Fig. 10. I002873

Towing: permissible load and speed

WARNING:

The stopping distance increases with the speed and weight of the trailed implements, and also on a slope. Whether they are fitted with a brake system or not, trailed implements that are too heavy for the tractor or that are towed at too high a speed may lead to a loss of control. Take account of the total weight of the trailed implement (including the load).

The maximum permitted trailed weights are indicated on the name plate. In particular, comply with the following loads:

– Trailed weight without brakes: 3000 kg (6614 lb)
– Trailed weight with independent brake system: 6000 kg (13,228 lb)
– Inertia braked trailed weight: 16,000 kg (35,274 lb)
– Trailed weight with braking assistance (hydraulic or pneumatic): 32,700 kg (72,090 lb)

Towed equipment without brakes:

Do not tow equipment that does not have brakes:
– at speeds of more than 32 kph (20 mph); or

d. Repair or replacement of any warranted part under the warranty provisions of this article shall be performed at no charge to the owner at a warranty station.

e. Notwithstanding the provisions of Subsection (4) above, warranty services or repairs shall be provided at all manufacturer distribution centers that are franchised to service the subject engines.

f. The owner shall not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

g. The engine manufacturer shall be liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.

h. Throughout the engine's warranty period defined in Subsection (A)(2), the engine manufacturer shall maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

i. Any replacement part, as defined in Section 1900(b)(13), Title 13, may be used in the performance of any maintenance or repairs and must be provided without charge to the owner. It is not necessary for replacement parts to be the same brand or by the same manufacturer as the original part sold with the engine. Such use shall not reduce the warranty obligations of the engine manufacturer.

j. Add-on or modified parts, as defined in Section 1900(b)(1) and (b)(10), Title 13, that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts shall be grounds for disallowing a warranty claim made in accordance with this article. The engine manufacturer shall not be liable under this article to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

k. The Executive Officer may request and, in such case, the engine manufacturer shall provide, any documents which describe that manufacturer's warranty procedures or policies.

3. Each manufacturer shall include a copy of the following emission warranty parts list with each new engine, using those portions of the list applicable to the engine.

a. Fuel Metering System
(A) Fuel injection system
(B) Air/fuel ratio feedback and control system
(C) Cold start enrichment system

b. Air Induction System
(A) Controlled hot air intake system
(B) Intake manifold
(C) Turbocharger/Supercharger Systems
(D) Charge Air Cooling Systems

c. Catalyst or Thermal Reactor System
(A) Catalytic converter
(B) Diesel Oxydation Catalyst (DOC)
(C) Exhaust manifold

d. Particulate Controls
(A) Smoke Puff Limiters

e. Advanced Oxides of Nitrogen (NOx) Controls
(A) NOx Absorbers
(B) Selective Catalyst Reduction (SCR)
(C) Reluctant (urea/fuel) containers/dispensing systems

f. Positive Crankcase Ventilation (PCV) System
(A) PCV Valve
(B) Oil Filler Cap

g. Miscellaneous items Used in Above Systems
(A) Vacuum, temperature, and time sensitive valves and switches
(B) Electronic control units, sensors, solenoids, and wiring harnesses
(C) Hoses, belts, connectors, assemblies, clamps, fittings, tubing, sealing gaskets or devices, and mounting hardware
(D) Pulleys, belts and idlers
(E) Emission Control Information Labels
(F) Any other part with the primary purpose of reducing emissions or that can increase emissions during failure without significantly degrading engine performance

3

Indicator light panel

(1) Pressure light for brake (ParkLock, depending on model) and pneumatic brake (red).

(2) Engine oil pressure light (red).
This indicator light comes on when the ignition key is in the ON position (3) (see start switch), but should switch off when the engine is started and is running. If the indicator light stays on when the engine is running, stop the engine and determine the cause of the low pressure or consult your dealer.

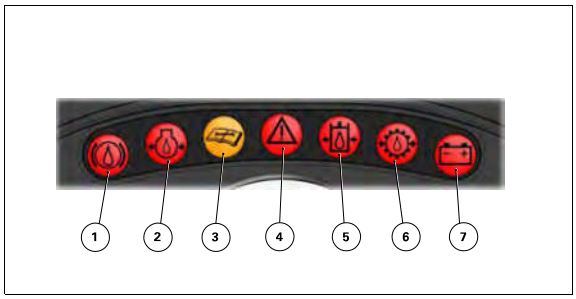
(3) Service indicator light (yellow).
This lights up when a service is due.
NOTE: *To switch off this indicator light, go to the display menu of the Dash Control Center fig. 9 in advanced mode and press the button (15) of the menu access controls for 5 seconds fig. 10*

(4) General failure alert light (red).
This lights up at the same time as the other alert lights (red).

(5) Steering supply pressure (red).

(6) Transmission oil pressure light (red).
If the indicator light comes on during operation, stop the tractor and consult your dealer.

(7) Alternator charge light (red).
If the indicator light comes on or flashes at a speed above 1000 rpm when the engine is running, determine the cause of the failure (see the Maintenance section of the Operator's Manual) or consult your dealer.



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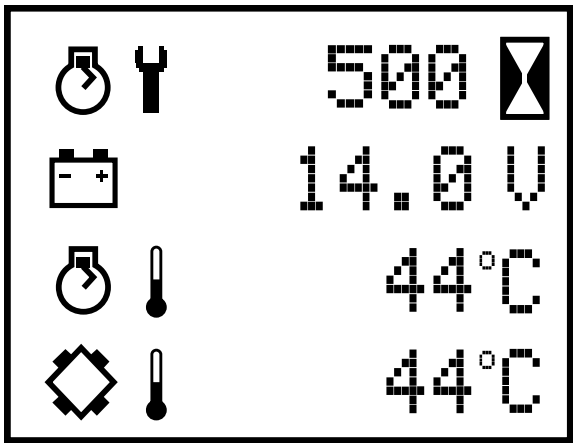

Fig. 3. I034295

Left-hand indicator light panel

(1) Front PTO engaged indicator light (yellow).

(2) Suspended front axle engaged indicator light (green).

(3) 4WD front axle engaged indicator light (green).

(4) High-pressure transmission oil filter blockage indicator light (yellow).

(5) Differential lock indicator light (yellow).

(6) Rear PTO engaged indicator light (yellow).

(7) Left-hand direction indicator light (green).

(8) Direction indicator light for the first trailer (green).

(9) Tractor reverse travel indicator light (red)

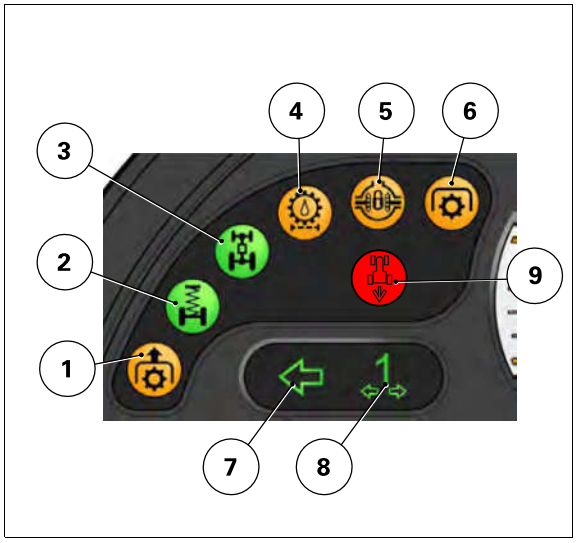

Fig. 4. I031206

3

Version with Multi Function Joystick

(1) PowerShuttle switch
(2) Switch to decrease Dynashift ratios A/B/C/D/E/F.
(3) Switch to increase Dynashift ratios A/B/C/D/E/F.
(4) Switch for hydraulic function or other H3 controls
(5) Switch for hydraulic function or other H4 controls
(6) Transmission shift to neutral switch

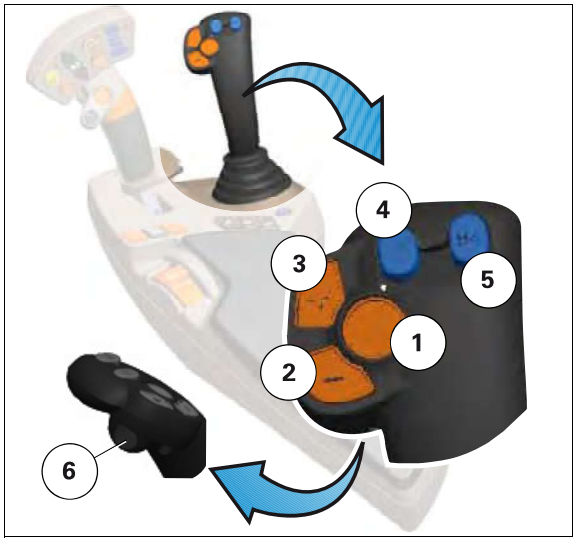

Fig. 18. I033117

Throttle control

(1) Hand throttle

Fig. 19. I033103

Transmission functions, version with T Handle

(1) Stored speed (SV1) switch
(2) Stored engine speed (A) switch
(3) Headland mode switch/SV2/Auto-Guide

NOTE: *The switch can be reassigned in the Dash Control Center in advanced mode via function SV2 with Auto-Guide if no headland sequence is programmed.*
If a headland sequence is programmed by default, the headland switch will be reassigned to its headland function.

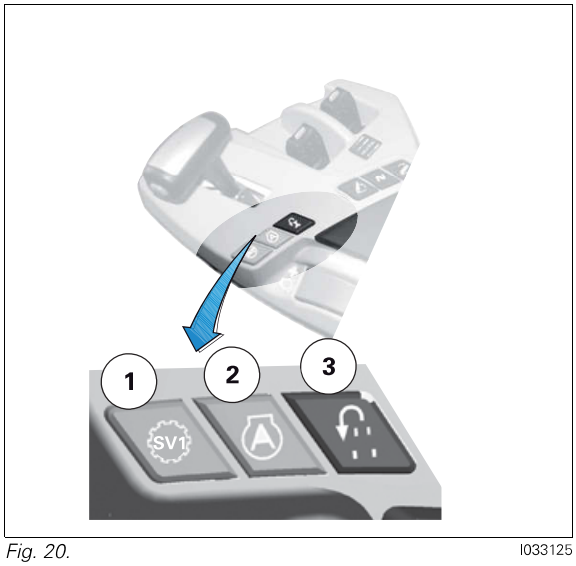

Fig. 20. I033125

3.1.16 Cab safety

T003462

– Available as an option on standard cabs.
– Comes as standard on panoramic cabs.

WARNING:
A hammer specially designed to break the window glass in an emergency is fixed to the front left-hand pillar. It is protected by a lead seal and is connected to a maintenance cable.
Operation: In an emergency, take hold of the hammer and hit the window glass hard with the pointed end of the hammer.

Fig. 42. I009898

3.1.17 Sun visor

T001283

Sun visor for front windshield
The front sun visor is adjustable by notches.

To change its position, pull the visor (1) downwards until the required position is reached *fig. 43*.
To raise the sun visor, pull the cord (2).

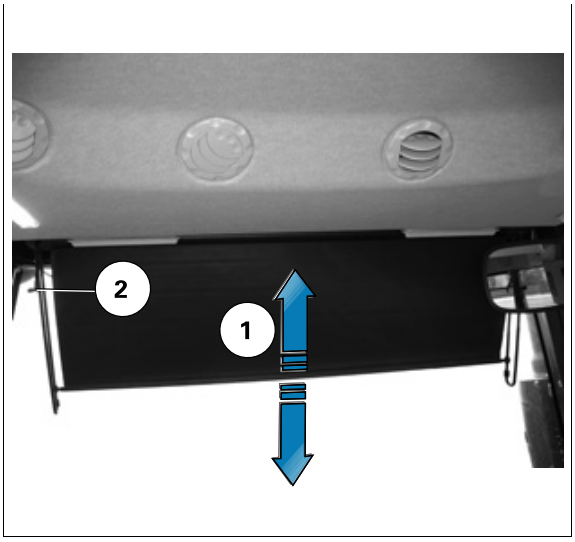

Fig. 43. I032584

Original fitting (A)

1. The step uprights are fitted vertically using the marking (1) as the mounting.

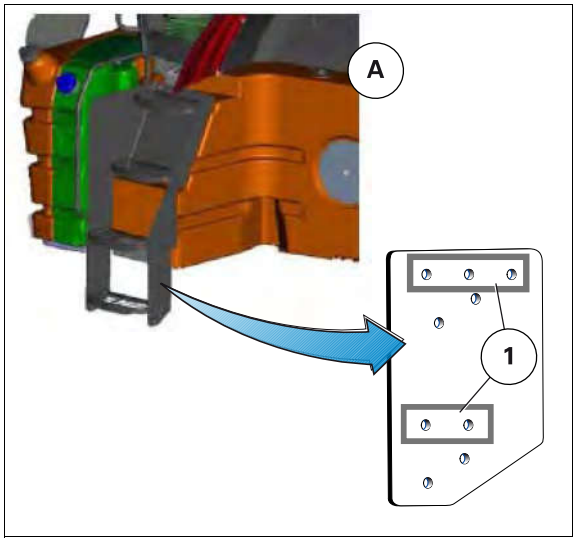

Fig. 6. I027561

Change of position (B)

2. Remove the lower step
3. Remove the step uprights
4. Use the mark (2) to refit the step uprights in the offset position (X)
5. Refit the step
6. Torque tighten the screws.

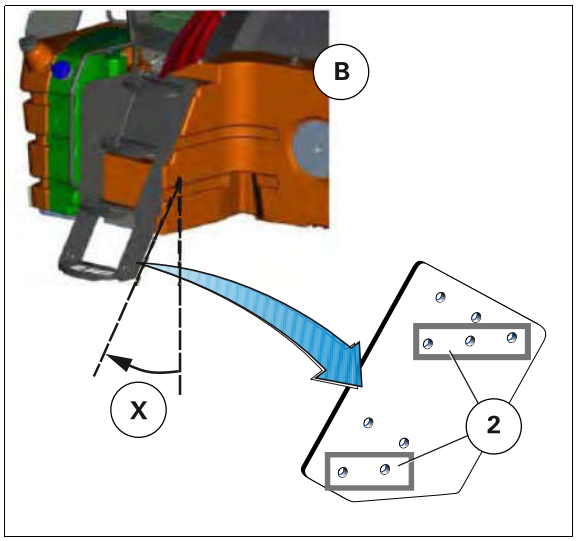

Fig. 7. I027562

2. ***DANGER:***
Never run the tractor engine in an enclosed space unless the exhaust can be ventilated to the outside air.
Never run the engine unless you are sitting at the steering wheel of the tractor.

   Leave the engine running for several seconds at idle speed. This is necessary to allow the turbocharger to reduce speed.

   NOTE: *If the tractor has been operating under a heavy load, allow the engine to run at idle speed for 1 to 2 minutes, depending on the ambient temperature, to allow the turbocharger to cool before stopping the engine.*

3. ***IMPORTANT:*** *Do not stop the engine suddenly when the engine is running at a high speed, because the turbocharger will continue running under its own momentum and will no longer be lubricated. Slow the engine before stopping it.*

   Return the ignition key to the "Stop" position.

3.4.9 Engine speed

T001525

Hand throttle

IMPORTANT: *Protection against engine overspeed: From 2700 rpm, the engine operates in "automatic degraded" mode and downshifting of gears is prevented electronically as long as the engine speed does not drop below 2400 rpm.*

Using the hand throttle allows you to vary the engine speed and to maintain a constant speed. To do this, simply push or pull the lever to select a speed. The lever remains in this position to maintain the selected speed. The lever in rear position corresponds to idle speed.

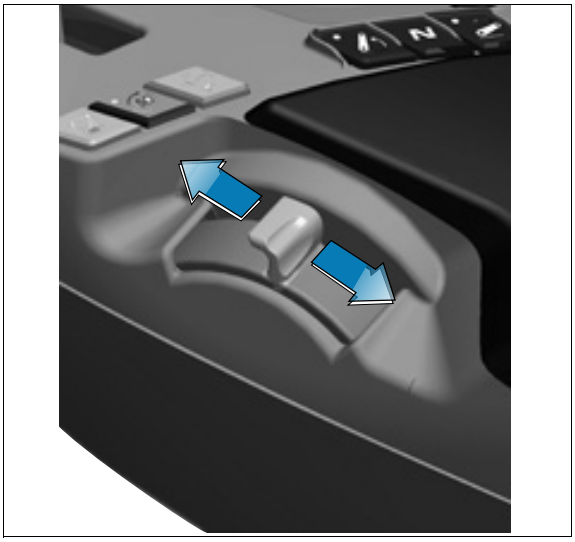

Fig. 11. I031379

Foot throttle

The foot throttle is used to control the engine speed as well as the forward speed. When the pedal is released, the engine rpm returns to that preset by the hand throttle.

CAUTION:

- ***When using the foot throttle, the hand throttle should be placed in the idle position.***
- ***Do not keep your foot on the clutch pedal or keep it halfway engaged.***
- ***Always descend slopes with the tractor in gear and never with the clutch disengaged.***
- ***When turning on headlands with heavy mounted implements, reduce the engine rpm.***
- ***Steering is not power-assisted when the engine is not running.***

Choosing the correct gear ratio

Select the ratio which gives the optimum fuel consumption without overloading the engine and the transmission. Bear in mind that soil conditions can vary within a few yards in the same field. Select a ratio which allows the engine to operate comfortably at about 75% of its maximum power.

3.5.9 Dyna-TM mode

T016768

In this mode, it is possible to adjust the engine's maximum operating range (upper limit) and to adjust the minimum operating range with a trigger. However, if the user wishes, he can interrupt the engine speed using the throttle pedal/hand throttle or a stored A/B speed.
Dyna-TM mode is available in Pedal(AutoDrive) mode.
To access DTM mode, press the corresponding switch *fig. 12*.

IMPORTANT: *All the control screens of the Dash Control Center (see §3.2.2, page 83) must be accessed to make this mode operational*

Fig. 12. I033133

When engaging Dyna-TM mode, an icon is displayed on the Dash Control Center *fig. 13* screen and the settings screen *fig. 14*.

- Maximum engine speed: upper limit selected at (A)
- No trigger events selected: the minimum engine speed is 1000 rpm
- Trigger events selected (C): the minimum engine speed corresponds to the lower limit selected at (B) *fig. 14*

By default, the Dyna-TM mode manages the engine speed between 1000 and 2160 rpm.

NOTE: *If Pedal (AutoDrive) mode is active and the trigger element "Always" (1) is present, then the minimum engine speed is 1000 rpm*
In Pedal (AutoDrive) mode, if the engine speed for shifting transmission ratios is higher than the engine speed upper limit selected at (A) then the engine speed when shifting becomes the engine speed upper limit (A).

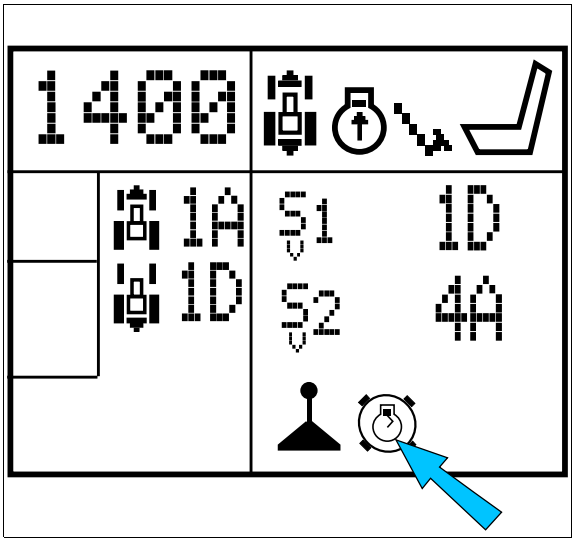

Fig. 13. I033426

Auto-Guide

The system electronically guides the tractor. The operator no longer has to make corrections to the steering while the system is engaged. For more information, consult the Auto-Guide Operator's Manual.

WARNING:

Under no circumstances should the Auto-Guide power-assisted steering system be used to compensate for the operator's lack of concentration.

CAUTION:

When the system is engaged, the operator must remain seated in the operator seat at all times. He must remain vigilant and be ready to take back the controls of his tractor at any time as required.

The system disengages automatically above 20 km/h (12 mile/h)

In the event of a drop in forward speed, the Auto-Guide must be reactivated.

Three ways of engaging and disengaging Auto-Guide:

1. Via the Auto-Guide screen; consult the Auto-Guide manual
2. Via the Control Center Display screen using the Headland Management sequence; consult the Control Center Display manual
3. Using the Headland Management switch on the armrest or the MultiPad (depending on version fitted), after allocating the function in the Dash Control Center screen.

   NOTE: *The Auto-Guide function can only be used when there is no sequence programmed. Otherwise, Headland Management is engaged by default.*

I032680

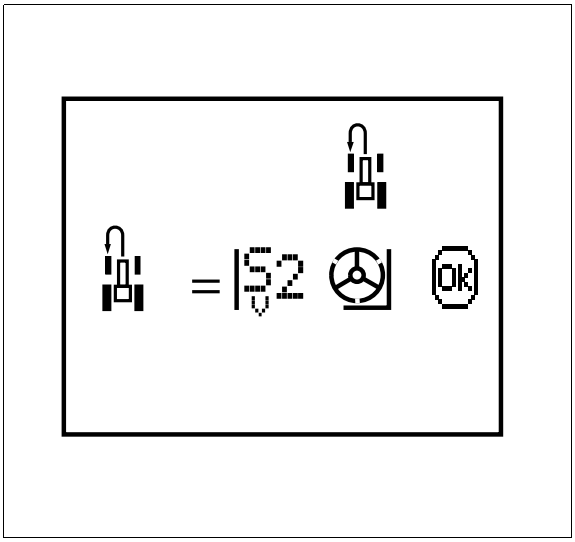

Fig. 2. I035467

3.11 Linkage

3.11.1 Rear linkage electronic controls

T013234

The tractor may be fitted with two linkage systems:
– A rear linkage, which is fully incorporated into the rear axle.
– A front linkage built into the front of the tractor.

The two linkages are electronically controlled and are equipped with their own hydraulic spool valve.

3

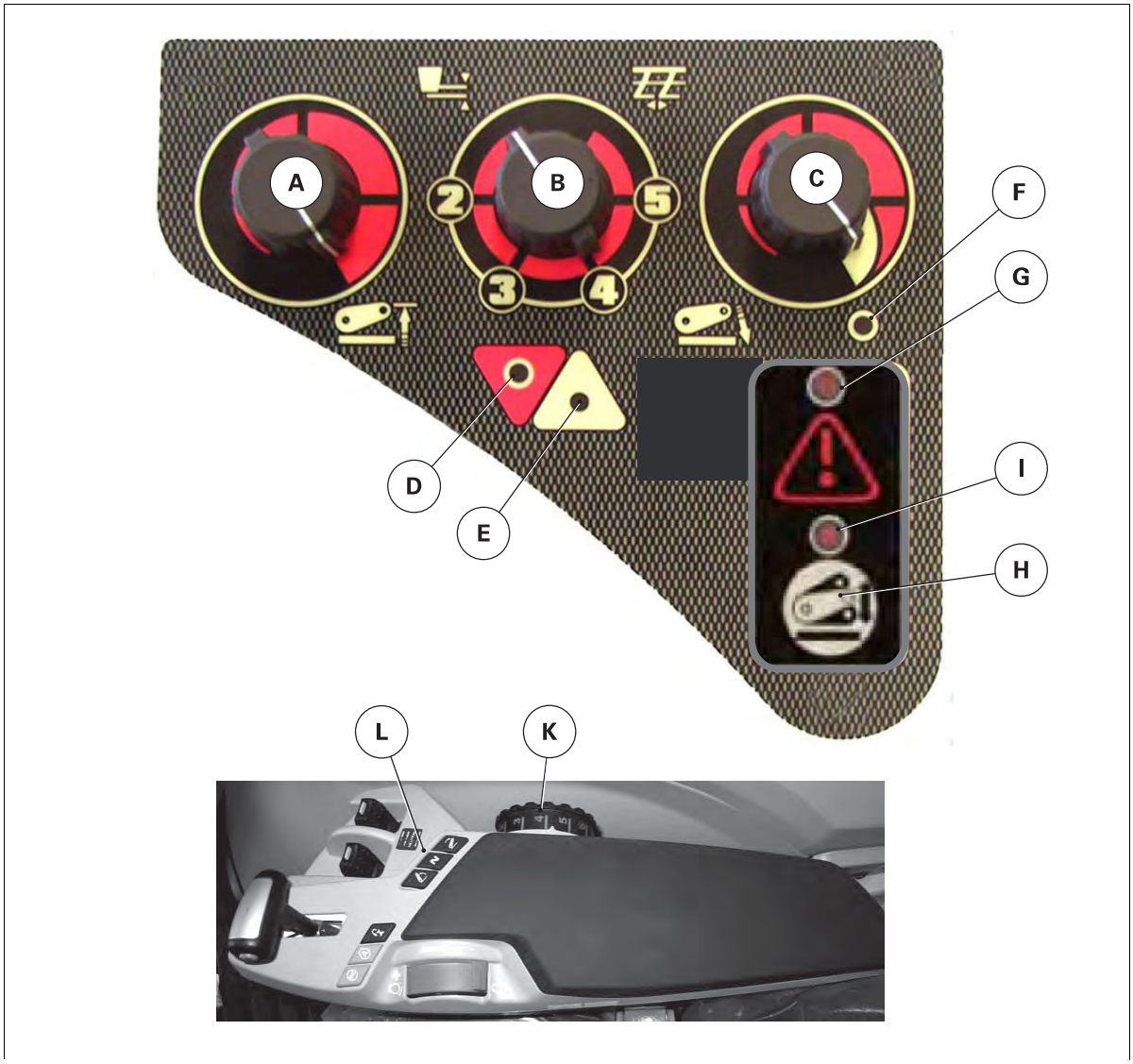

Fig. 1.

I029835

(A) Maximum linkage height adjustment potentiometer.
(B) Intermix potentiometer (draft control and position control).
(C) Potentiometer for manual or automatic adjustment of the lowering speed.
(D) Linkage lowering indicator light
(E) Linkage lifting indicator light
(F) Lowering speed automatic control indicator light
(G) Console locking and operating failure self-diagnostic indicator light
(H) Active transport control system selection button
(I) Active transport control system indicator light
(K) Rear linkage height/depth adjustment thumb wheel
(L) Rear linkage lift/lower and neutral position switches

There are three models:
(1) Automatic stabilizer:
(2) Stabilizer with manual telescopic adjustment.
(3) Stabilizer with shoes

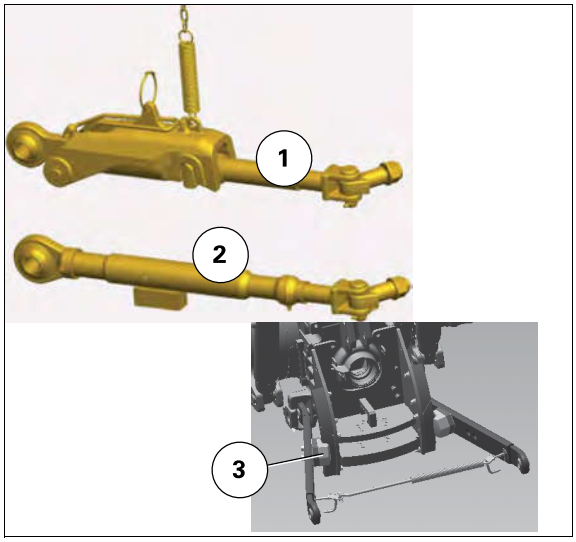

Fig. 3. I031662

Automatic stabilizer adjustment procedure

1. No adjustment required.

Adjustment procedure for stabilizers with manual telescopic adjustment

IMPORTANT: *Do not shorten the lift rods or use the high travel drawbar position once the stabilizers have been adjusted to prevent them from being damaged.*

1. Screw or unscrew the stabilizers to obtain the required oscillation.
2. Start the engine.
3. Press the **Lift** switch and then the **Neutral** switch. Move the adjustment thumb wheel on the armrest to the "Lift" position until the lower links reach the highest position.
4. Turn off engine.
5. Unscrew the stabilizers until the lower links no longer have any side sway and are centralized.
6. Screw both stabilizers in 1 turn.

Adjustment procedure for stabilizers with shoes

1. Disassemble the shoes by removing the screws (1).
2. To move the links, turn the spacer (A) and position as per (B).
3. Carry out the same operation for the other side.
   NOTE: *A shim (2) may be used if necessary to adjust the distance between the lower links according to the implement to be installed.*

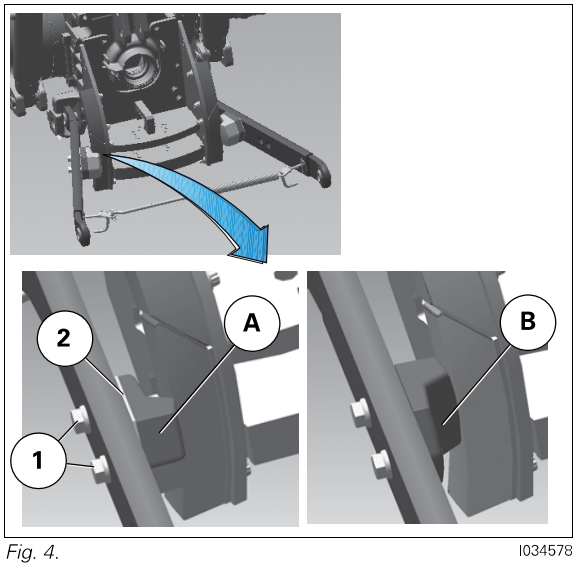

Fig. 4. I034578

Implements fitted with two hydraulic rams and a hydraulic motor at the rear of the tractor

(1) Ram 1
(2) Ram 2
(3) Hydraulic motor
(4) Tank return

NOTE: *If necessary, a hydraulic motor may be supplied by two spool valves (total of the two combined flow rates) as shown in the diagram.*

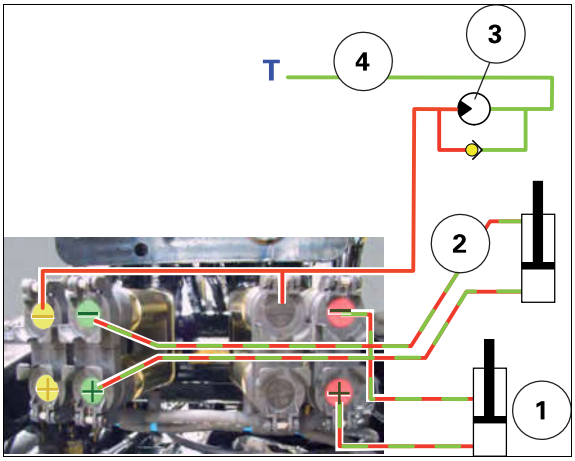

Fig. 5. I005699

Implement fitted with the load sensor

(1) Direct outlet pressure
(2) Tank return
(3) Connection to the load signal (LS)
(4) Control unit on the implement (solenoid valves)

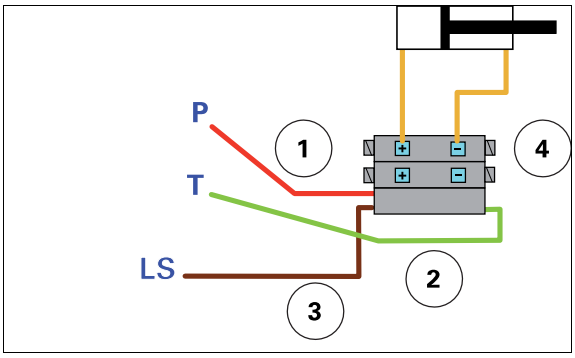

Fig. 6. I005700

Implement not fitted with the load sensor

(1) Direct outlet pressure
(2) Tank return
(3) Connection to the load signal (LS)
(4) Control unit on the implement (solenoid valves)

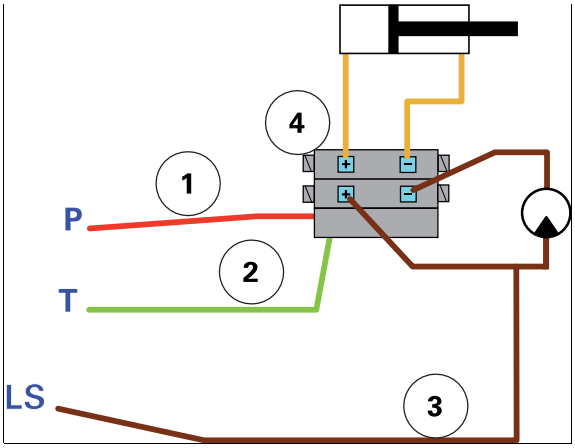

Fig. 7. I005701

Implement with two hydraulic rams not fitted with load sensor

(1) Direct outlet pressure + LS load signal
(2) Tank return
(3) Connection to the load signal (LS)
(4) Control unit on the implement (solenoid valves)

WARNING:
In this example of an assembly, the pressure is at maximum and so the oil will be very hot.

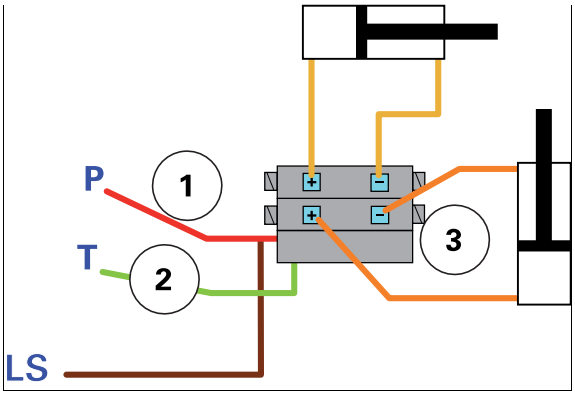

Fig. 8. I005702

Operation

Activate one of the levers on the spool valves by pushing as shown (A) to lower or by pulling as shown (B) to lift.
Stop the engine, then restart it to reactivate the joystick.

NOTE: *It is recommended to insert a pin or screwdriver in the corresponding lever hole to make it easier to move the spool valves.*

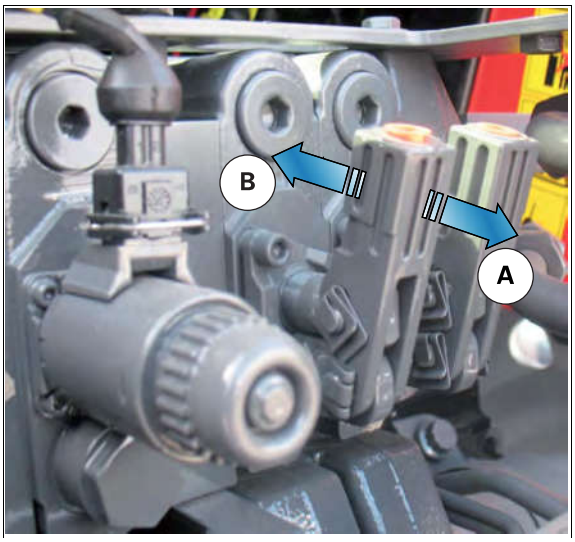

Fig. 30. I036547

Position	Rims with cast iron disc	Distance between front axle flanges (disc offset 100 mm (3.9 in))	Distance between front axle flanges (disc offset 42 mm (1.7 in))
		1892 mm (74.5 in)	1892 mm (74.5 in)
Wheel disc facing inwards	(1)	1548 mm (61.0 in)	1658 mm (65.3 in)
	(2)	1652 mm (65.1 in)	1772 mm (69.8 in)
	(3)	1752 mm (69.0 in)	1826 mm (71.9 in)
	(4)	1856 mm (73.1 in)	1864 mm (73.4 in)
Wheel disc facing outwards	(5)	1948 mm (76.8 in)	1940 mm (76.4 in)
	(6)	2052 mm (80.8 in)	1978 mm (77.9 in)
	(7)	2152 mm (84.8 in)	2032 mm (80.1 in)
	(8)	2256 mm (88.9 in)	2146 mm (84.6 in)

When refitting, gradually tighten the nuts to the torque setting according to the recommendations in the table of tightening torques (see tightening torque in the Maintenance section of the Operator's Manual).

NOTE: *With narrow track widths and with certain tire fittings, the wheels may touch the hood when turning at maximum lock. To prevent this contact, the hubs are fitted with threaded stops (1)fig. 2 that can be adjusted to limit the steering angle.*

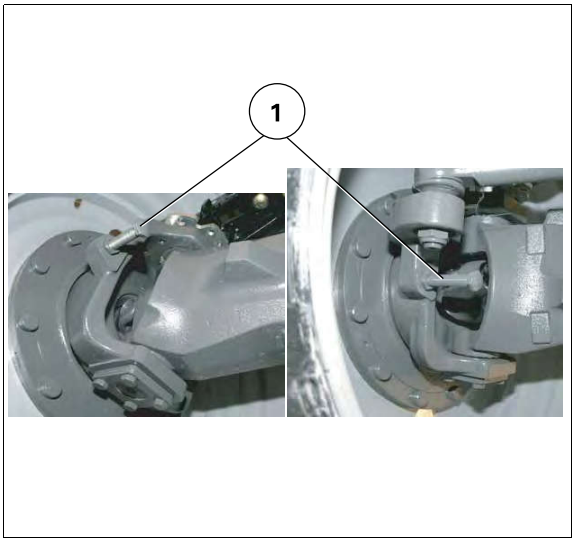

Fig. 2. I006121

NOTE: *The adjustment made in the factory complies with the modification requirements for tractor transport (see §3.17.3, page 171).*

3.17.3 Adjusting the 4WD front axle stops

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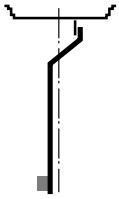
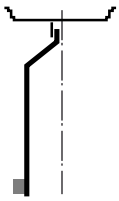
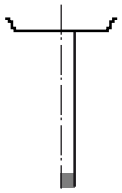
General

Check and, if necessary, adjust the front axle stops each time the front track width is altered or following a wheel and/or tire change.

Theoretical track widths			Minimum	Maximum
Positioning of hubs (D)	Minimum	Maximum		
	Internal wheel 		GPA 41: 1966 mm (77.5 in)	GPA 41: 1968 mm (77.5 in)
			GPA 42: 1906 mm (75.1 in)	GPA 42: 1962 mm (77.3 in)
			GPA44: 1828 mm (72.0 in)	GPA44: 1902 mm (74.9 in)
			GPA45: 1878 mm (74.0 in)	GPA45: 2032 mm (80.1 in)
	Internal wheel 		GPA 41: 2293 mm (90.3 in)	GPA 41: 2294 mm (90.4 in)
			GPA 42: 2232 mm (87.9 in)	GPA 42: 2288 mm (90.1 in)
			GPA44: 2154 mm (84.9 in)	GPA44: 2228 mm (87.8 in) mm
			GPA45: 2204 mm (86.8 in)	GPA45: 2358 mm (92.9 in)
	External wheel 		GPA 41: 3074 mm (121.1 in)	GPA 41: 3076 mm (121.2 in)