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Cab identification - Fig. 7

The cab type plate is located in the bottom left corner of the operator seat, under the concave opening levers.

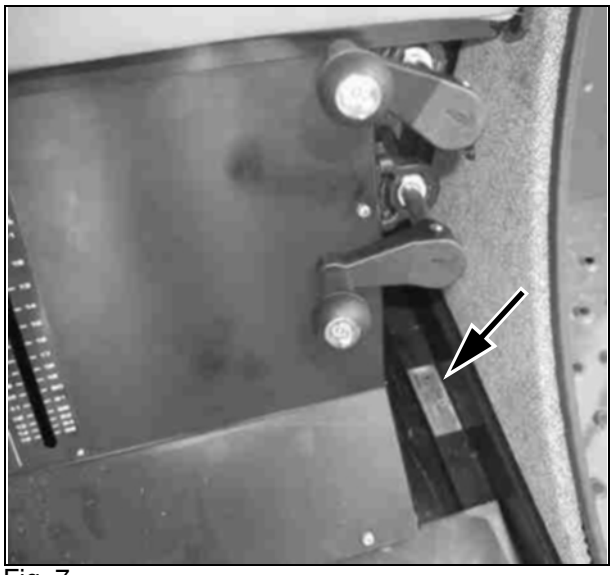


Fig. 7

Hydrostatic pump identification

Fig. 8

The type plate is located on the front part of the pump.

Fig. 8

Hydrostatic motor identification

Fig. 9

The type plate is located on the lower part of the motor.

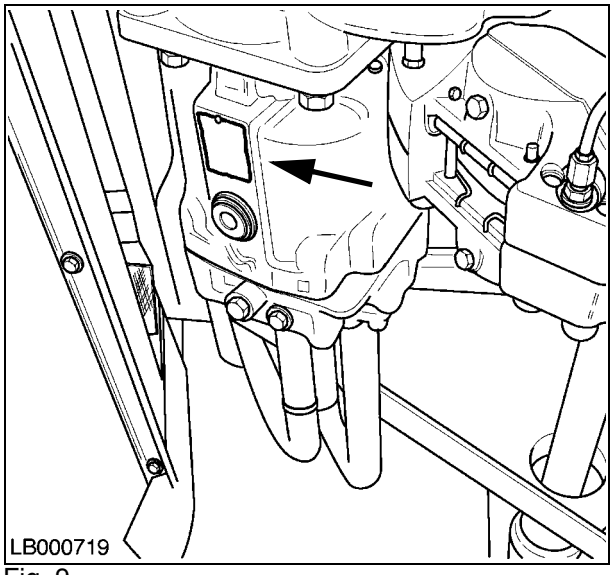
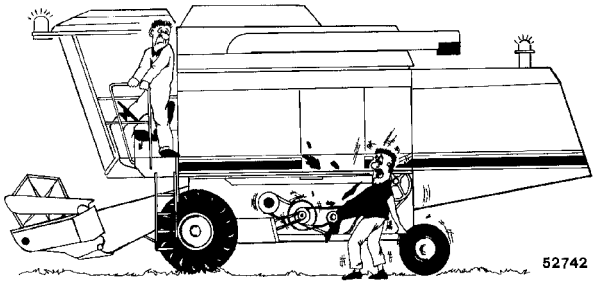


Fig. 9

***DANGER**: Risk of getting trapped.*

17.) Never work on the machine wearing loose clothing that could get caught in a moving part. Check that all rotating parts are protected with safety guards.



18.) Keep clear of all moving parts on the machine and particularly on the table.

19.) After any lubrication, adjustment or repair work, always refit all safety guards. Replace or repair missing or damaged safety guards immediately.

***DANGER**: Risk of falling.*

20.) Do not step onto the grain tank cover or cab roof.

21.) While operating the combine, pay special attention to correct function and the efficiency of the braking system, checking the oil level in the tank and replacing friction pads before they wear out completely.

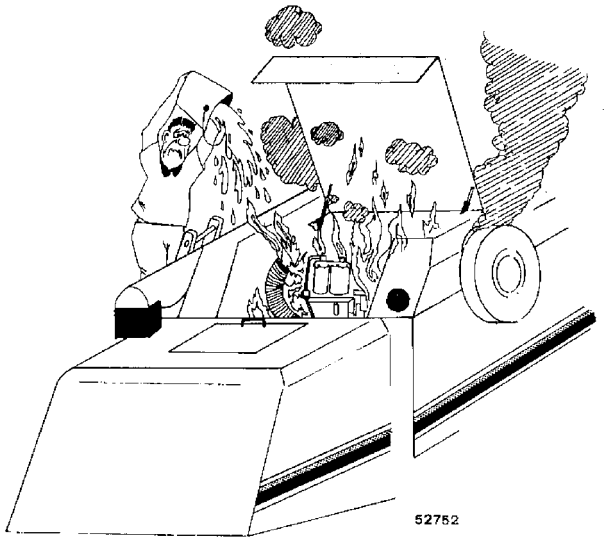
***DANGER**: Risk of explosion.*

22.) It is strictly forbidden to modify a hydraulic accumulator by mechanical machining, welding, etc. For the accumulator inspection or replacement, refer to your local Dealer.

Engine

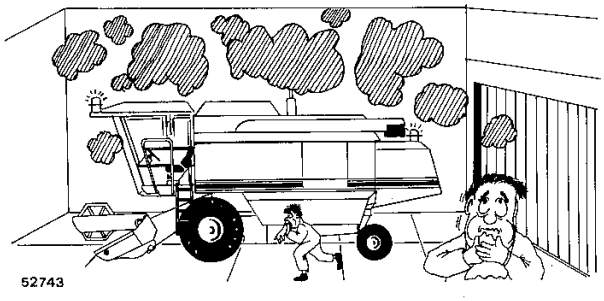
1.) Never start the engine if battery recharging equipment is connected to the machine.

2.) Always keep the engine and the engine compartment clean. Dust, diesel oil, oil and accumulated straw are highly flammable. For the same reason, also keep the transmission housing and the brake system clean.



***DANGER**: Risk of breathing in toxic gases.*

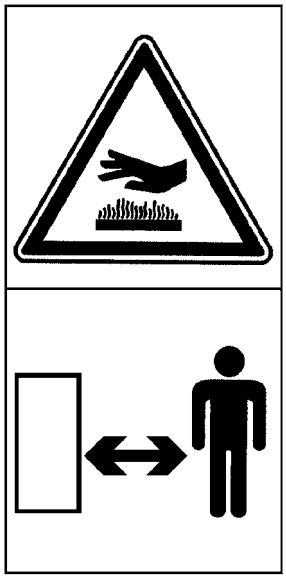
3.) Never operate the engine in an enclosed area without ensuring proper ventilation, since highly toxic exhaust gases are generated.



(341000009)

Decal 7

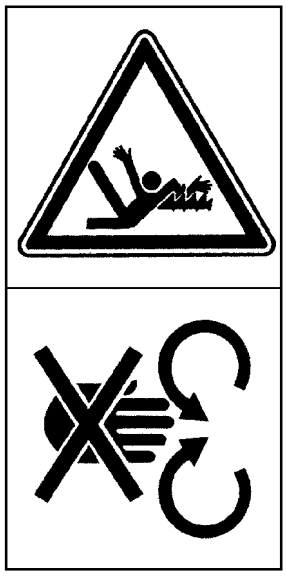
Do not enter the grain tank when the engine is running.



(341000010)

Decal 8

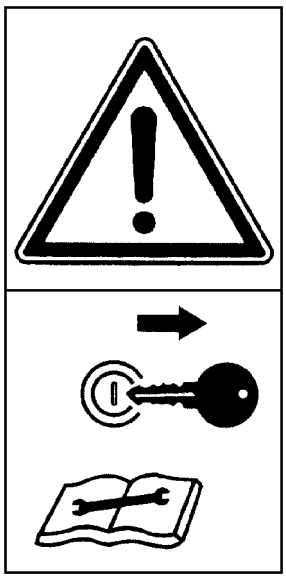
Stay clear of hot surfaces.



(341000011)

Decal 9

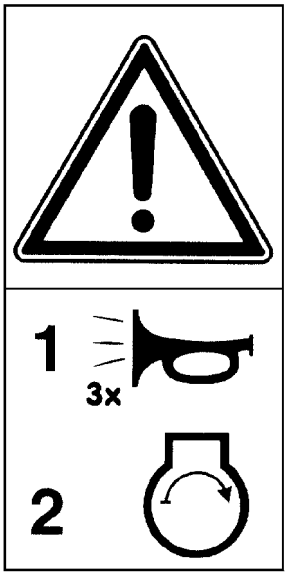
Do not enter the straw walkers when the engine is running.



(341000018)

Decal 10

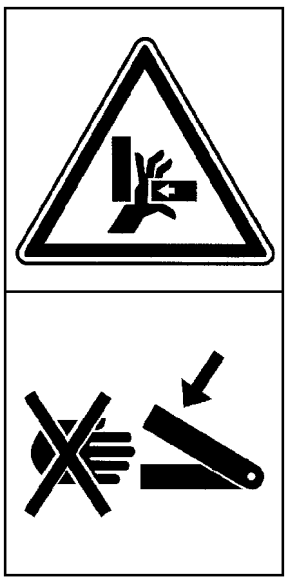
Switch off the engine and remove the ignition key before carrying out any maintenance or repair work and before leaving the machine unattended.



(341000017)

Decal 11

Always sound the horn three times to warn persons nearby of your intention to start the engine.



(341000016)

Decal 12

Do not reach into this area with hands or other parts of the body: Reciprocally moving parts may cause severe crushing injuries or wounds. Before approaching, switch off the engine and wait until all moving parts have come to a complete stop.

Trailer hitch - Fig. 29 and Fig. 30

The combine is always equipped with a hitch for table trailer.

Two types of trailer hitch are available:

- Standard (1)
- Rockinger (2).

The horizontal and vertical loading capacity of the hitches is specified on the decal (3).

The hitch is capable of towing a horizontal load of approx. 3000 kg.

The vertical load on the hitch and the load applied by the trailer eyebolt is max. 200 kg.

This max. vertical load that can be supported by the tyres but not by the eyebolt may be limited by the max. permissible load on the tyres combined with any ballast weights mounted on the rear axle. Such limits are described in the combine registration papers (depending on country).

***CAUTION**: Both trailer hitches can be moved rearwards using a specific support; this option reduces the risk of interference between the trailer draw bar and the rear wheels. Using the Rockinger hitch with additional support, it is not possible to turn more than 75° (angle between the combine axle and the trailer draw bar).*

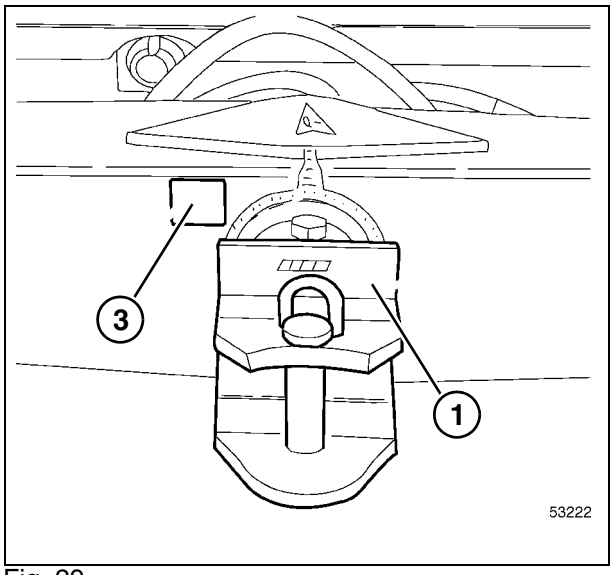


Fig. 29

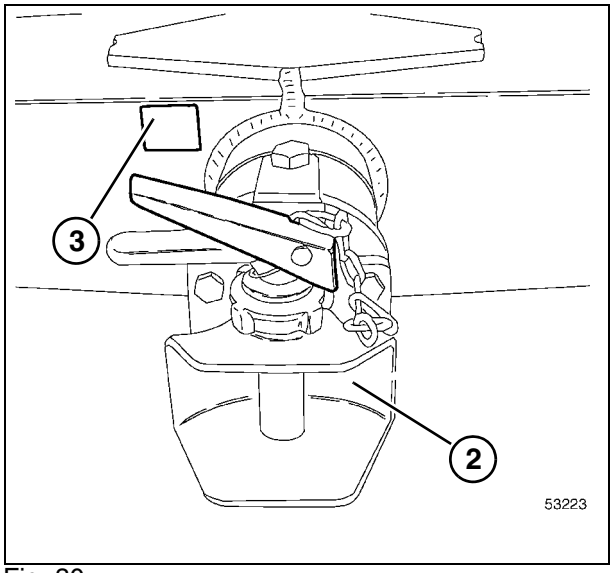


Fig. 30

Driving downhill - Fig. 31

***CAUTION:** Combines are usually driven both on public roads that are periodically maintained and on uneven country roads with variable gradients. When driving downhill, the combine must be in gear. Do not under any circumstances change into neutral. Before driving downhill, select a suitable gear; please see table opposite.*

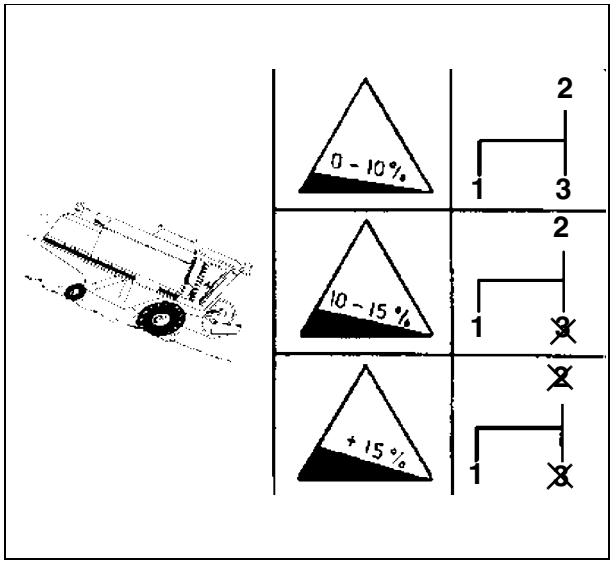


Fig. 31

Using the Computer

When the ignition key is turned to position 1, the computer carries out a short internal test and shows all the display segments for about 3 seconds. The display then shows the following start-up information (3 seconds for each indication):

- Battery voltage (15)
- Engine operating hours (16) (an "h" appears on the right)
- Scheduled service inspection hours (17) (flashing "S" on the left, permanent "h" on the right).

Finally, the display changes to the forward speed function (8) (indicated by the arrow (18)).

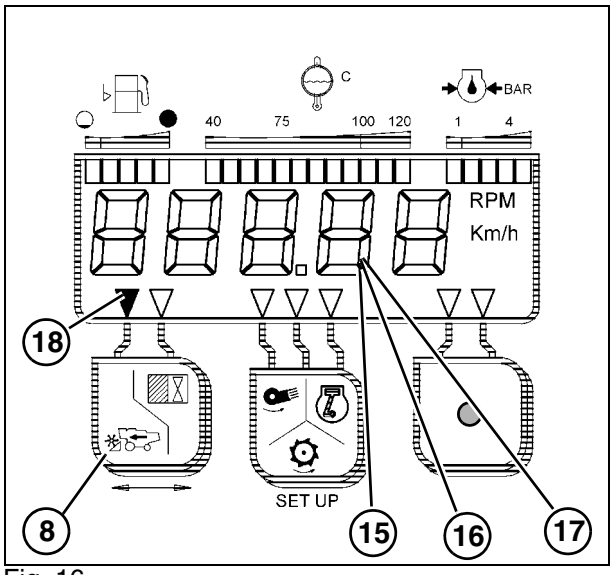


Fig. 16

Scheduled service inspection hours

The display provides information on the number of operating hours elapsed in the current scheduled service inspection cycle (total 450 hours).

The service inspection intervals are stored in the computer.

During functional test and machine data reading at startup, if one of these intervals has been reached, the display will show (along with a flashing "S" on the left) alternately the hours until the scheduled service inspection is due, and a letter identifying the type of inspection to be carried out (a, b or c). This alternating display continues for 5 minutes if the service inspection has not yet been carried out. The display can be cancelled by pressing any key.

Service inspection intervals:

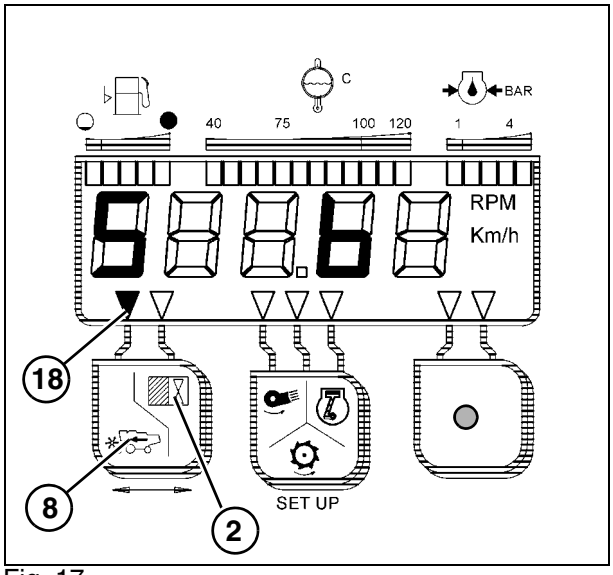


Fig. 17

Interval (hours)	For service after (hours)	Type
65	75	a
130	150	b + a
215	225	a
280	300	b + a
365	375	a
420	450	c + b + a

Recording the performed service inspections

- Select forward speed (8).
- Press the key (2) again; after 3 seconds the arrow (18) above the key starts to flash and after further 5 seconds a beep indicates that recording is complete.

NOTE: *The performed service inspection can be recorded only between the start and end of the envisaged time interval. If the service inspection cycle has to be reset before 450 hours, press the right- and left-hand keys together for six seconds.*

3.3 CUTTING TABLE

Refer to the Operator's Manual corresponding to the type of cutting table installed on the machine.

***DANGER**: Do not climb under the cutting table unless the safety stops on the lifting rams have been engaged; the safety stops must also be engaged during road transport.*

ATTACHMENT OF CUTTING TABLE

Fig. 4 – Fig. 9

ATTACHMENT

Preparatory operations:

1.) Set the table control system to manual.

2.) Place the cutting table on flat ground, or as level as possible. If it is placed on the trailer, release it from the transport hooks.

3.) Ensure that the lever (1) for positioning the table bottom locking hooks is shifted backward.

***NOTE:** The right- and left-hand hooks are coupled by a shaft, which means that there is only one lever on the left-hand side.*

To attach the cutting table, proceed as follows:

1.) Slowly move the machine towards the cutting table, being careful to centre the main crop elevator on the table inlet.

2.) Lower the main crop elevator so that the latch pins (2) can pass under the fastening hooks (3).

3.) When the pins are next to the hooks, stop the machine and lift the main crop elevator, ensuring the latch pins catch the hooks.

4.) Switch off the engine, engage a gear and apply the parking brake.

5.) Get down from the machine, close the table bottom locking hooks, turning the lever (1) forward; lock the lever (1) using the catch (4).

6.) Connect the PTO shaft to the drive shaft of the main crop elevator and secure the protection stop chain in the hole (5).

***IMPORTANT:** For easier connection of the PTO shaft, the main crop elevator drive shaft can be rotated using the wrench placed on the left-hand side of elevator housing.*

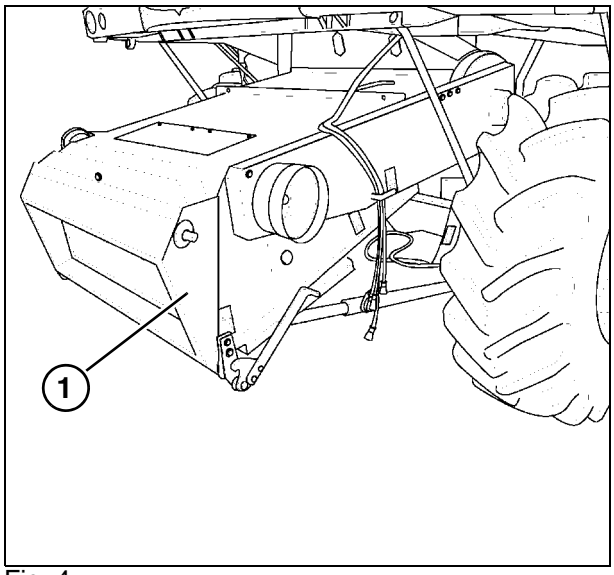


Fig. 4

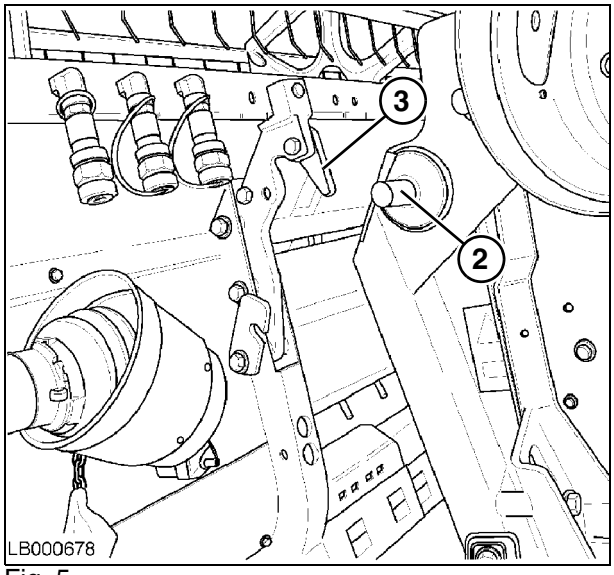


Fig. 5

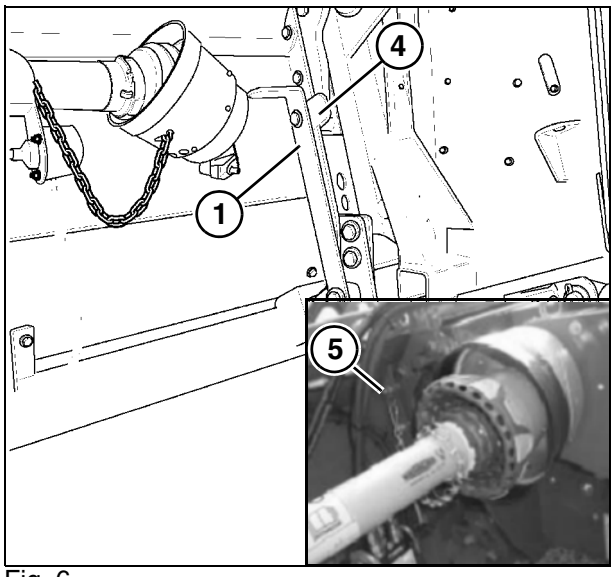


Fig. 6

4.2 PRELIMINARY SERVICE INSPECTION

When the machine is new, after the first 50 hours in operation, your Dealer is required to carry out the following tasks:

COMPONENT	OPERATION
1.) Engine	**Change of engine oil and filters is compulsory** (page 4-27).
2.) Fuel and cooling circuits	Check that both circuits are perfectly closed.
3.) Cooling fan belts	Check tension (page 5-11).
4.) Engine suspension	Check screw tightening: 206 Nm - 21 kgm.
5.) Hydraulic brakes	Check fluid level in the tank (page 4-8).
6.) Parking brake	Adjust travel, if required (page 4-16).
7.) Gearbox	Check oil level (page 4-16).
8.) Final drives	Check oil level (page 4-16). Check tightening of axle fastening screws: 275 Nm - 28 kgm.
9.) Front axle, cylinder housing and cross bar	Check tightening of fixing bolts on frame: 88 Nm - 9 kgm.
10.) Front wheels	Check nut tightening: 550 Nm - 56 kgm.
11.) Rear wheels	Check screw tightening: 304 Nm - 31 kgm.
12.) Main Crop Elevator	Check tightening of fastening screws for cylinder housing: 598 Nm - 61 kgm.
13.) Belts and chains	Check tension (section 5 "Adjustments").
14.) Hydraulics system	Check tension of pump drive belt. Check for leaks at the pipe connections for pump/control valve. **Change of filter is compulsory** (page 4-25).
15.) Hydrostatic system	Check belt tension (page 5-5). Check for oil leaks at pump and motor. **Change of filter is compulsory** (page 4-24).

23.) Cab Condenser - Fig. 30

Clean the condenser with a jet of air.
Check whether the fins are distorted, and straighten them if required.
For easier cleaning of the condenser, it can be turned out after loosening the screws (1). Having completed the cleaning, reinstall the condenser in its correct position and tighten the screws (1).

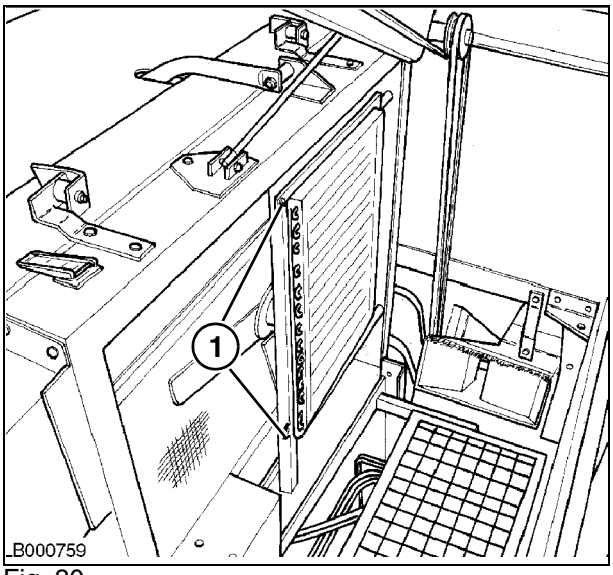


Fig. 30

24.) Radiator - Fig. 31 and Fig. 32

***WARNING**: Always wear eye protection and a dust mask when cleaning the radiator.*

To access the radiator, proceed as follows:

a) Open the two hooks (1).

b) Turn up the cover (2) with the rotary screen (3).

c) Clean the radiator core with a jet of air. Also clean the brush (4).

d) Ensure that the cooling fins of the radiator elements are not distorted.

e) Ensure that the aspirator hose for cleaning the rotary screen is not deformed or clogged, even partially, by straw, dust, leaves, etc.

f) Check that the rotary screen is free to rotate without rubbing against the dust aspirator.

The radiator is equipped with three heat exchangers, one at the top for reducing the temperature of air entering the engine cylinders, one in the middle for engine coolant and one at the bottom for cooling hydrostatic oil.

An idle two-vane fan ensures an even flow of air towards each exchanger. The fan is rotated by the air flow generated by the radiator fan (on the engine side).

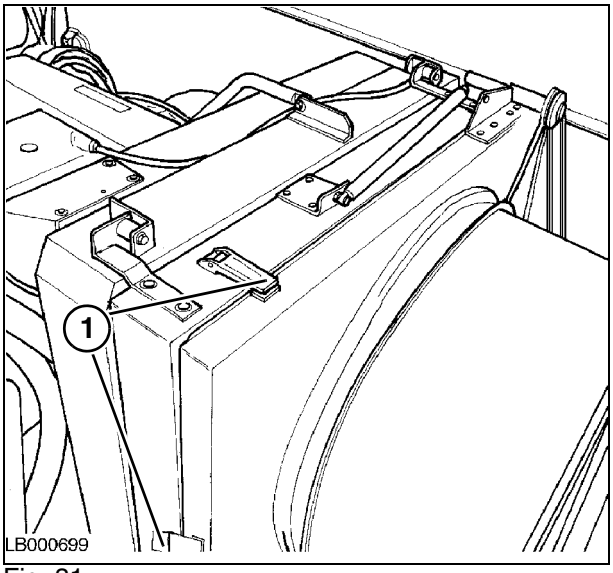


Fig. 31

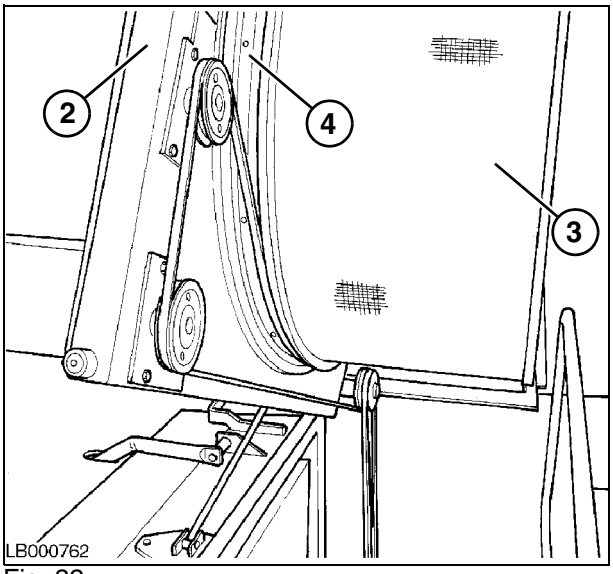


Fig. 32

65.) Oil, Auxiliary Hydraulics - Fig. 60 and Fig. 61

NOTE: *The line for draining the hydraulic oil reservoir is marked with the following decal:*

To change oil, proceed as follows:

1) Clean the plug (1) and surrounding area.
2) Drain oil from the hose (2), ensuring the oil is not hot, but always wear rubber gloves. Collect the oil in a suitable container and do not let it percolate into the ground.
3) Top up the tank and check the oil level at the sight glass (3).
   The oil level is correct when, at ambient temperature, with the table lifting rams fully retracted, the oil reaches 5 cm into the sight glass (3).
   Use **Fendt Extra Hyd 68**oil.

The whole system on this model contains 31 litres of oil, the tank alone holding 20 litres (normal level).

66.) Filter, Auxiliary Hydraulics Fig. 62

If the light and sound alarm for filter clogging on the control panel switches on, the filter must be changed prematurely. To change the filter, proceed as follows:

WARNING*: Wear rubber gloves when changing the filter.*

1) Clean the area around the filter thoroughly (if possible by compressed air).
2) Loosen the four screws (1) and remove the cover (2).

NOTE: *Take care not to lose the spring placed between the cover and the filter.*

3) Remove the filter element with its metallic housing.
4) Clean the container and change the filter.
5) Reassemble all components and mount the cover (2).

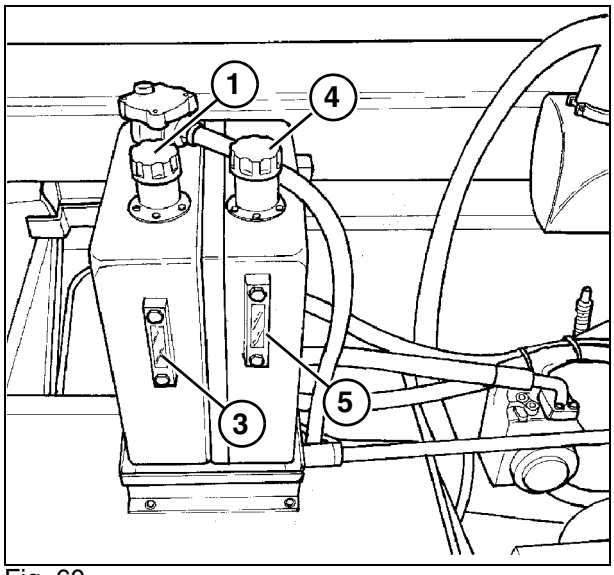


Fig. 60

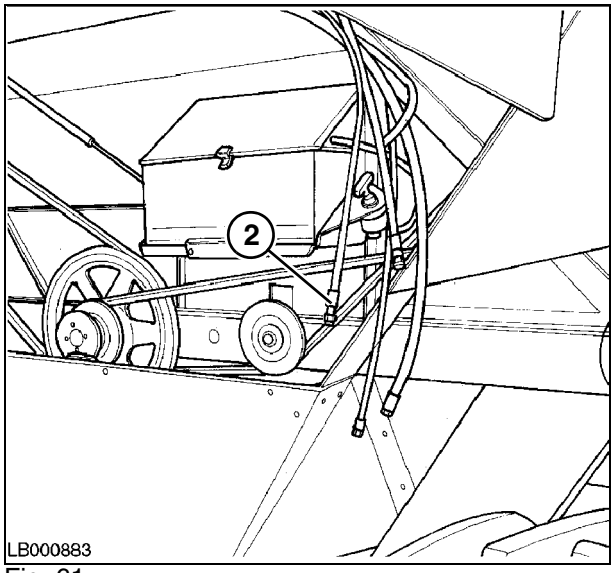


Fig. 61

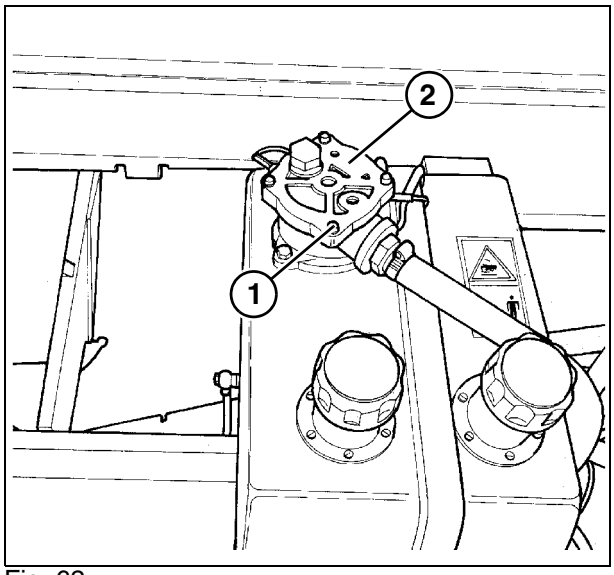


Fig. 62

4.) Belt Drive for Unloading Auger - Fig. 5

The length of the spring (1) must be 63-66 mm with the drive engaged. To restore the tension, loosen the nut (3), adjust the pin (4) and then retighten the nut (3).

Due to frequent engagements under load, the belt may stretch. Check the spring length, particularly during the first operating hours.

The belt must allow the pulley to be released which means that the belt guide must be adjusted as illustrated when the belt is tensioned.

ATTENTION: *When the unloading auger belt tensioner is in released position, ensure that the belt is not too slack on the engine belt pulley, to prevent it from coming out. Adjust with the screw (2).*

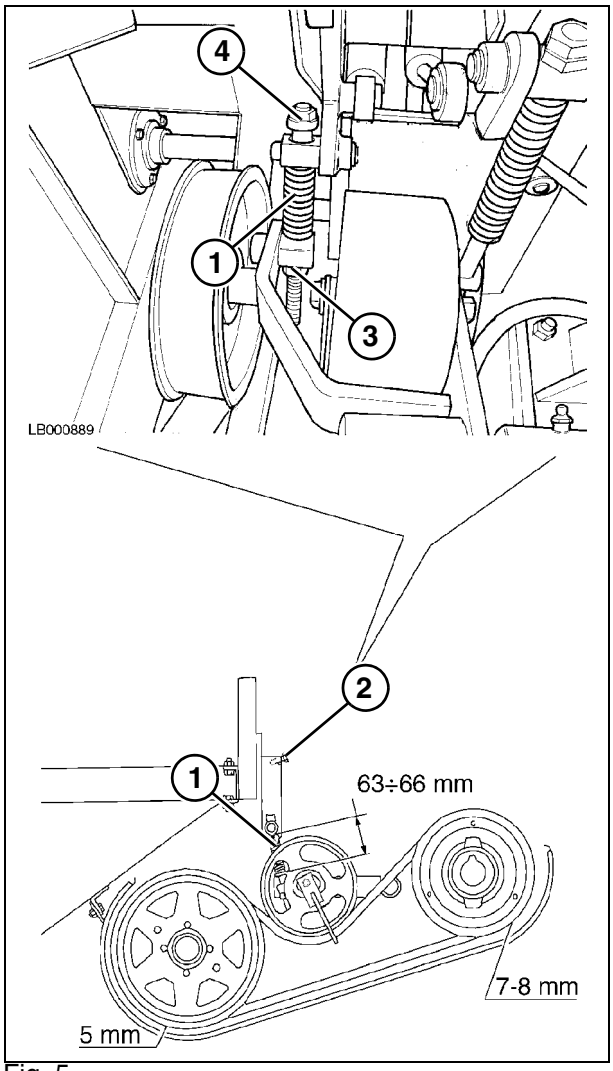


Fig. 5

5.) Belt Drive for Auxiliary Hydraulic Pump - Fig. 6

This belt drives the triple pump (table, power steering and auxiliary hydraulics). The belt is tensioned by shifting the pump body.

To restore the correct tension, proceed as follows:

- Loosen the nut (1) in the pump body.
- Tighten the nut (2) to compress the spring (3) to a length corresponding to gauge (4).

NOTE: *Do not tension the belt more than prescribed, to avoid overloading and damage to the pump bearings.*

- Tighten the nut (1) in the pump body.

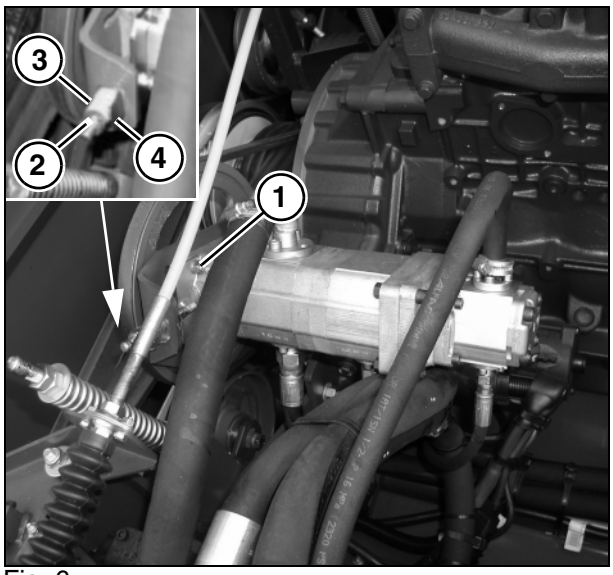


Fig. 6

5.7 REAR AXLE

TOE-IN SETTING - Fig. 47

The rear wheels toe-in must be correctly adjusted to prevent early wear of the tyres and to ease road travelling.

The clearance between the rear wheels must be smaller in front than the clearance measured at the back (viewed in the travelling direction).

To check and adjust the toe-in, proceed as follows:

1.) Apply the handbrake and lift the rear axle, so that the wheels are clear of the ground.

2.) Align the rear wheels using the steering wheel, so that the measurement C is equal to measurement D.

3.) Place two rods on the outside of the two tyres, in the central line.

4.) Measurement A between the tyres must be 5mm less than measurement B, measured at a distance of 1000 mm behind the tyres. If necessary, adjust the tie rod (1).

***CAUTION**: Use suitable supports firmly fixed under the rear end of the machine, when adjusting the toe-in.*

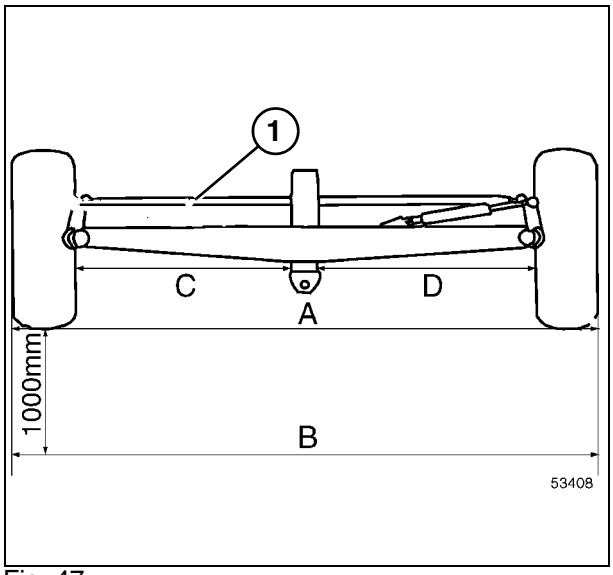


Fig. 47

STEERING RAM BALL JOINTS

Fig. 48

Check the steering ram ball joint clearance every 450 hours in operation. If for some reason the joints have been disassembled, the nut tightening torque must be:

- Tie rod ball joints - 180 Nm.
- Steering ram ball joints - 180 Nm.

The width of the adjustable axle is variable (P1 or P2), depending on the position of the telescopic links in relation to the fixed central part.

The width to be set depends on the type of front tyres used (see page 9-2).

The rear tyres must be aligned with the front tyres.

At a full steering deflection of the wheels a clearance must be left between wheel and machine frame.

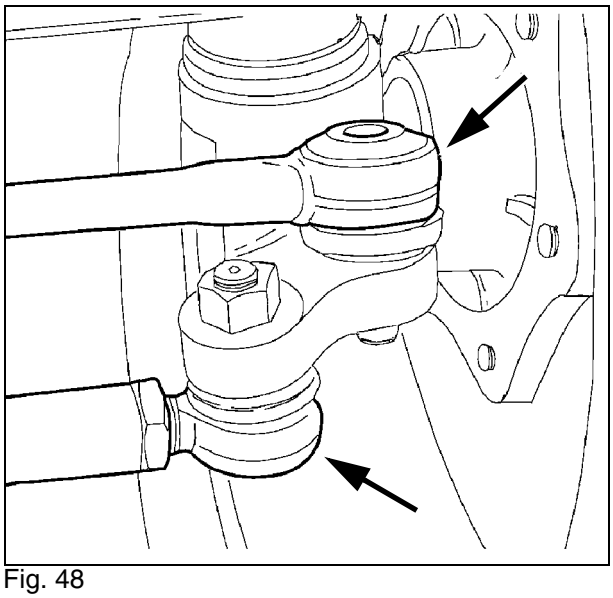


Fig. 48

Pos.	Fuse or diode	DESCRIPTION/USE
24		Not used
25	Diode 1 A	Indicator light and buzzer for high hydrostatic circuit oil temperature.
26	Diode 1 A	Indicator light and buzzer for low hydrostatic circuit supply pressure.
27	Diode 1 A	Audible alarm (horn) for straw walker blockage and straw chopper spreading hood in turned up position.
28	Diode 1 A	Audible alarm (horn) for engaged parking brake.
29	25 A	General functions of fuses 30, 31, 32, 33, 34, 35, 36, 37 and 38.
30	15 A	Engine started, functions of fuse 4 and reel up/down movement authorisation.
31	10 A	Not used
32	15 A	On-Board Computer.
33	3 A	Not used
34	7.5 A	Not used
35	10 A	Relays for rotating yellow beacons (with full grain tank) and horn (blocked straw walkers or applied parking brake), light indicators on control panel, indicator light simultaneous flashing (on switch) and buzzer.
36	3 A	Alarm unit and push buttons on multifunction lever for table up/down, reel up/down, reel fore/aft, reel speed variator and unloading auger positioning.
37	3 A	Power supply to cylinder revolution, fanning mill revolution, odometer and straw chopper revolution sensors
38	7.5 A	Auxiliary relay coils and stop light relay; cab blower, push button lighting in the cab and engine stopping.
39	25 A	General functions of fuses 40, 41 and 42.
40	15 A	Rotating yellow beacons.
41	7.5 A	Combine and trailer direction flashers.
42	7.5 A	Horn.
43	25 A	General functions of fuses 44, 45, 46, 47, 48, 49 and 50.
44	7.5A	Front right position light and rear left position light, indicator light and instrument lighting.
45	7.5A	Front left position light and rear right position light, cab air conditioning unit lighting and multiple light indicator.
46	7.5A	Right-hand low beam.
47	7.5A	Left-hand low beam.
48	7.5A	Right-hand high beam and high beam indicator lamp on main control panel.
49	7.5A	Left-hand high beam.
50	10 A	Stop lights.
51	25 A	General functions of fuses 52, 53, 54 and 55.
52	10 A	Auxiliary connectors and front work lights.
53	10 A	Reversing light and buzzer.
54	15 A	Light in grain tank.
55	15 A	Auxiliary connector.
56	3 A	Engine starting relay coil.
57	-	Available additional fuses.

WATER BALLASTING (For TUBELESS tyres)

Fig. 19 and Fig. 20

IMPORTANT: *In countries where it is permitted (e.g. Italy), use this type of ballast weight as a partial or total alternative to the previously described solutions.*

To fill the tyres:

WARNING*: Wear rubber gloves when changing the filter.*

- Lift the wheel from the ground and place the inflating valve in the uppermost position.

DANGER*: Support the lifted part of the rear axle using a stand with a carrying capacity of at least 2500 kg.*

- Loosen the inner element of the valve and wait until the tyre deflates completely.

NOTE: *If a new tyre or rim is fitted, it is advisable to partially inflate the tyre to ensure the tyre bead is seated correctly in the rim.*

- Tighten the fitting No. 327700400 on the valve housing and connect the water hose to the fitting (1). Be sure to remove this hose to drain air while the tyre inflates.

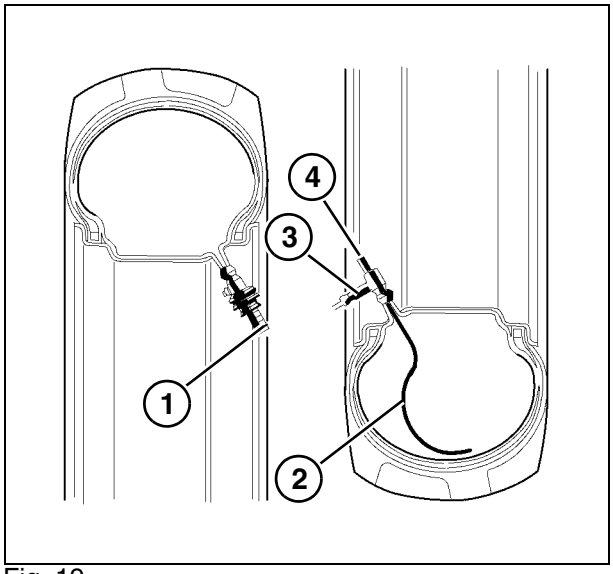


Fig. 19

- The tyre is 75% filled when water escapes from the fitting (1). If less water is required, i.e. if a lighter weight should be added, move the wheel to place the valve in a lower position.
- Remove the fitting (1), retighten the tyre valve and inflate with air to the prescribed pressure.

WARNING*: The pressure of the added water may never exceed 4 bar (kg/cm2).*

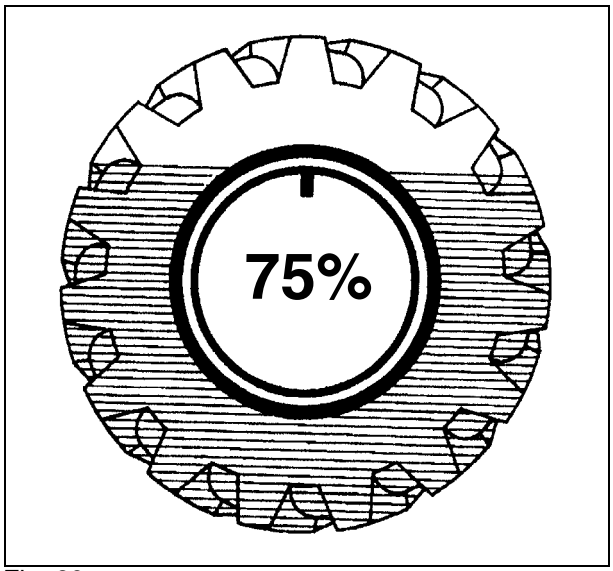


Fig. 20

To drain the tyres:

- Lift the wheel from the ground and place the valve in the lowest position.
- Loosen the sealing element in the valve housing and drain the water.
- Tighten the fitting No. 327700450 on the valve housing, the pipes (2) and (4) being in the bottom part of the tyre.
- Add pressurised air at the fitting (3) to remove residual water through the pipes (2) and (4).
- Dismount the fitting, replace it by the valve sealing element and inflate the tyre to the prescribed pressure.