

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.

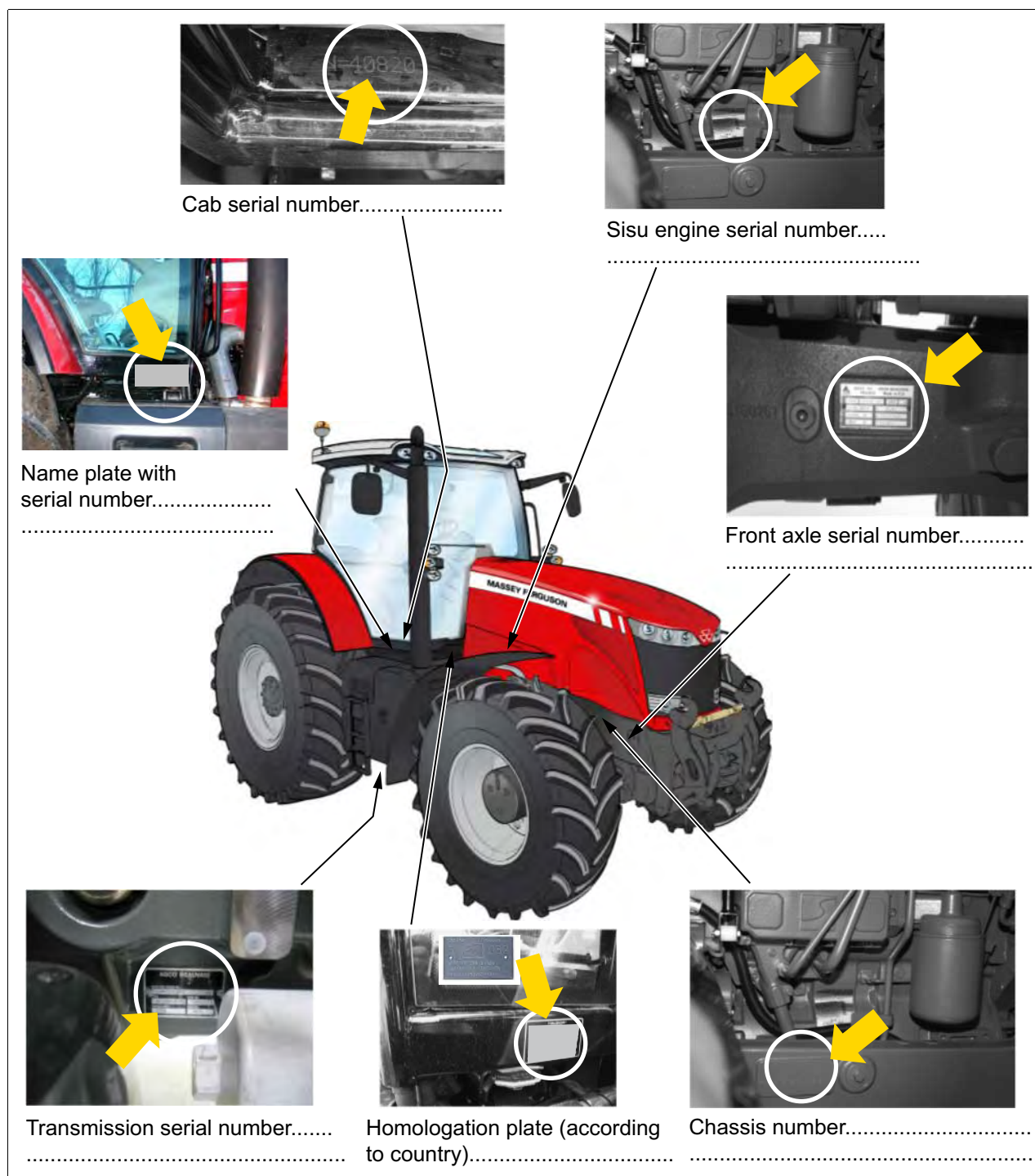


Fig. 1.

I006204

- **WARNING:**
In poor conditions, slow down and be extra careful, and engage 4-wheel drive if fitted.

It is important to have good knowledge of the operation of the tractor as well as all of its accessories and attached implements.

Remember that rain, snow, ice, loose gravel or soft ground can change the performance of the tractor.

2.4.3 Filling the fuel tank

T001555

- Always switch off the engine before filling up.
- Do not smoke while refuelling the tractor. Keep away from naked flames [fig. 2](#).



Fig. 2.

I005000

Filling with AdBlue/DEF

Avoid all contact with the eyes, skin and clothing.

- If swallowed. If large quantities of this product are swallowed, seek medical advice immediately. Do NOT induce vomiting unless indicated to do so by medical staff. Do not administer liquid to a person who is unconscious.
- In case of contact with skin, rinse with plenty of water and remove contaminated clothing.
- In case of contact with the eyes, rinse immediately under running water. In the event of irritation, seek medical advice.
- If fumes are inhaled, breathe in fresh air and seek medical advice, if necessary.
- Prevent AdBlue/DEF from coming into contact with other chemical products.
- Urea spillages must not be discharged into the drains.



Fig. 3.

I006195

3.1 Cab

3.1.1 Steering console

T001269



Fig. 1.

I004626

- | | |
|--|--|
| <p>(1) Instrument panel see §3.1.2, page 52</p> <p>(2) Control unit see §3.1.3, page 56
This assembly controls the direction indicator, windscreen wiper, front and rear windscreen washer and horn.</p> | <p>(3) Steering wheel adjustment see §3.1.6, page 58</p> <p>(4) Access controls to menusDash Control Center</p> <p>(5) Power Shuttle control and ParkLock electro-mechanical brake</p> |
|--|--|

3. Operation

Access controls to Dash Control Center menu

- (11) Up scrolling key
- (12) Down scrolling key
- (13) Left scrolling key.
- (14) Right scrolling key.
- (15) Confirmation key
- (16) Cancel key.
- (17) Parameter display selector.

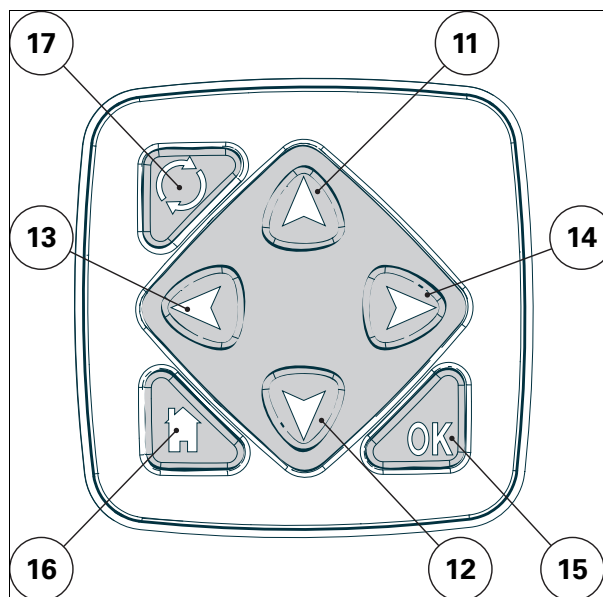


Fig. 10.

1004852

3.1.3 Control unit

T001274

- (1) Windscreen wiper
 - J. Intermittent
 - 0. Stop
 - I. First speed
 - II. Second speed
- (2) Left-hand indicator:
 - (A): momentary. Cancels once it is released.
 - (B): locked. Cancels when the steering wheel returns to the centre (straight line). It is the left-hand indicators that flash.
- (3) Right-hand indicator:
 - (A): momentary. Cancels once it is released.
 - (B): locked. Cancels when the steering wheel returns to the centre (straight line). It is the right-hand indicators that flash.
- (4) Horn
- (5) Headlights flash
- (6) Headlights position (after engaging main lighting) [see §3.1.8, page 63](#).
- (7) Front and rear windscreen washer

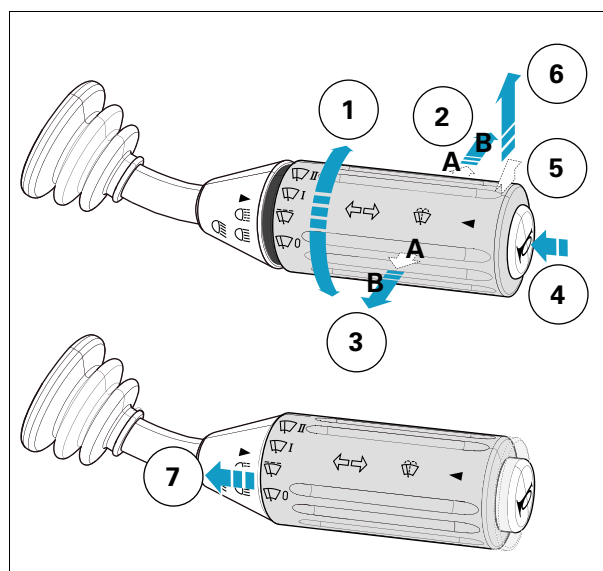


Fig. 11.

1004676

3. Operation

3

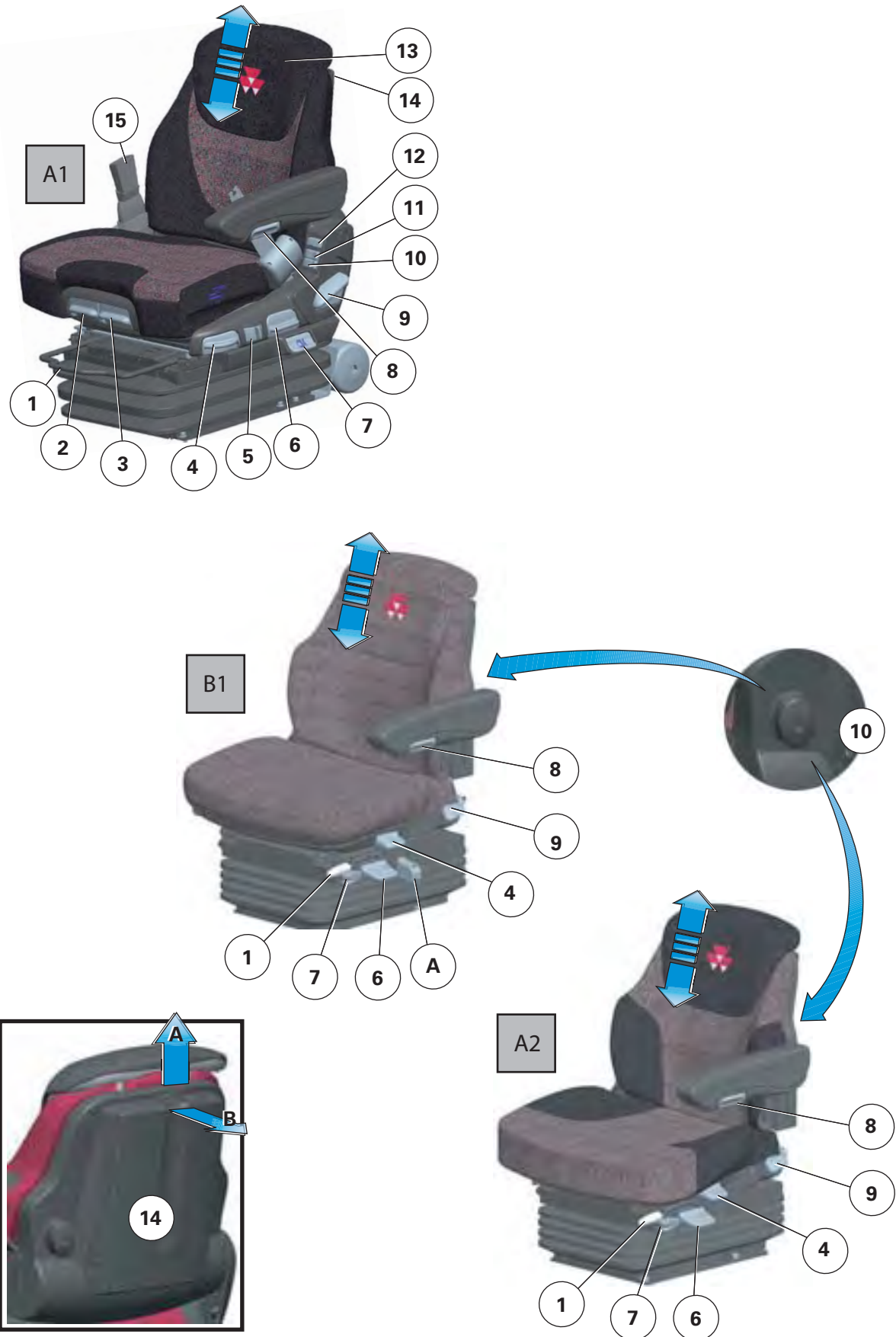


Fig. 15.

1004797

3.1.8 Right-hand console

T001279

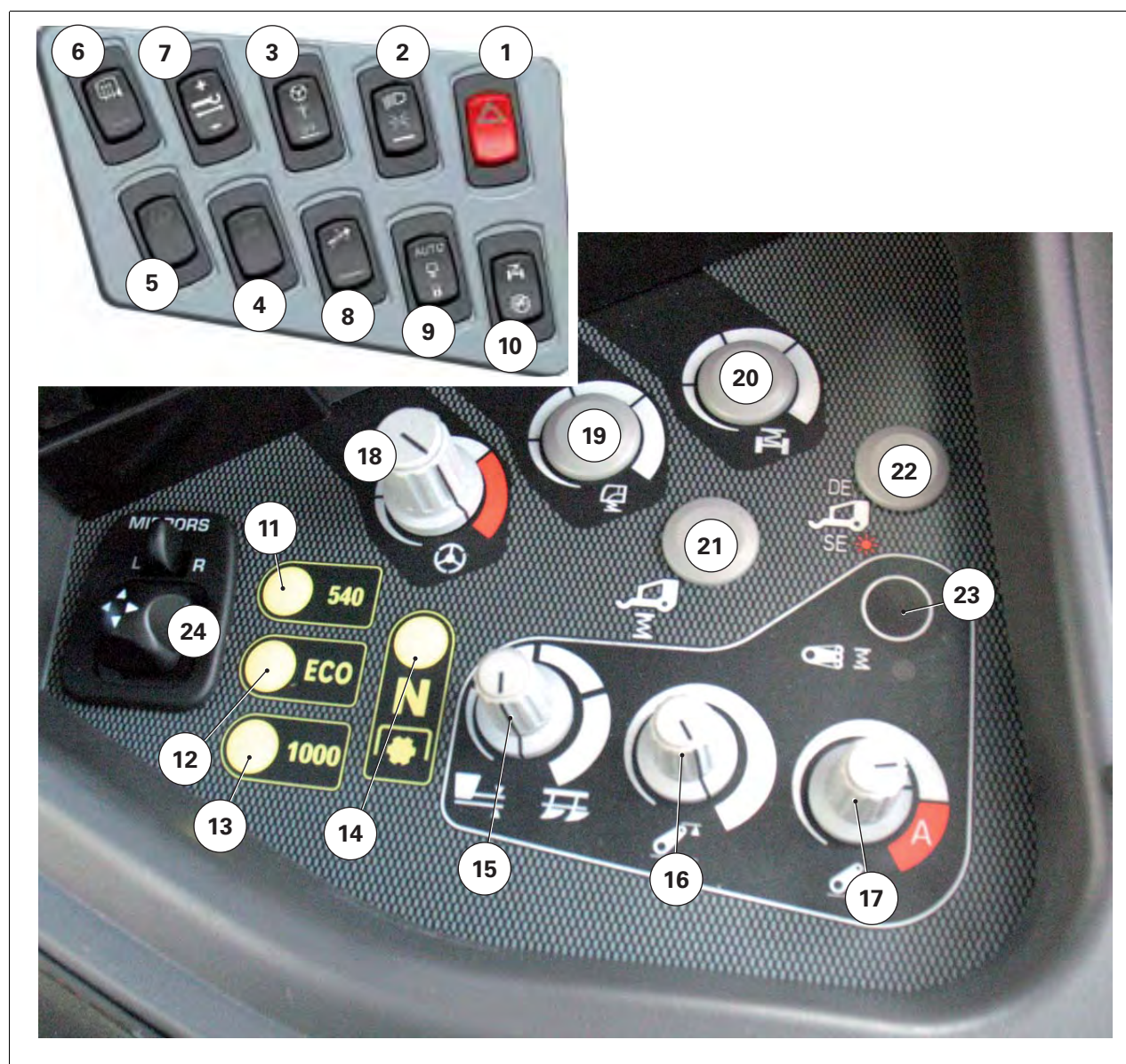


Fig. 16.

1004397

- | | |
|--|---|
| (1) Hazard warning lights indicator light and switch | (15) Draft control and position control knob (Inter-mix) |
| (2) Main lighting, sidelight/dipped light activation switch | (16) Linkage height control knob |
| (3) Variable steering switch (with the Auto-Guide option fitted) | (17) Linkage lowering speed control knob |
| (4) Front axle engagement switch | (18) Quick steering setting potentiometer (SpeedSteer) |
| (5) Differential lock switch | (19) Cab suspension setting potentiometer (if option fitted) |
| (6) External rear-view mirror defroster switch | (20) Front axle suspension setting potentiometer (if option fitted) |
| (7) Auto-hitch extension and retraction switch | (21) Front linkage active transport control system indicator light and switch |
| (8) Quick steering switch (SpeedSteer) | (22) Front linkage single/double acting indicator light and switch |
| (9) Cab suspension switch. | (23) Rear linkage active transport control system indicator light and switch |
| (10) Front axle suspension switch. | (24) Right and left-hand rear-view mirror electrical adjustment |
| (11) 540 rpm rear power take-off switch | |
| (12) Economy rear power take-off switch | |
| (13) 1000 rpm rear power take-off switch | |
| (14) Power take-off neutral position (N) switch | |

(34) Onboard computer

3.1.10 Work lights module

T001483

Controlling the headlights

A keyboard on the right-hand pillar of the cab is used to control the various tractor headlights and rotary beacon.

- (1) Switch and indicator light for main beams on hand rails (available as an option, depending on the country) (maximum power 2x55 W).
- (2) Switch and indicator light for work lights on grille (maximum power 6x55 W).
- (3) Front accessory connection socket (maximum power 2x55 W).
- (4) Switch and indicator light for rear work lights on fenders (maximum power 2x55 W).
- (5) Switch and indicator light for work lights at rear of roof (maximum power 4x55 W).
- (6) Switch and indicator light for front work lights on hand rails (maximum power 2x55 W).
- (7) Switch and indicator light for work lights at front of roof (maximum power 4x55 W).
- (8) Switch and indicator light for rotary beacon (maximum power 3x70 W).

The rotary beacon may be activated automatically at 30 km/h (19 mile/h (mph)).

To set the automatic activation, the switch must be pressed until the indicator light goes out (approximately 30 seconds). The rotary beacon comes on as soon as the speed exceeds 30 km/h (19 mile/h (mph)), but does not switch off if the speed drops.

To deactivate the automatic activation, the switch must be pressed until the indicator light comes on (approximately 30 seconds).

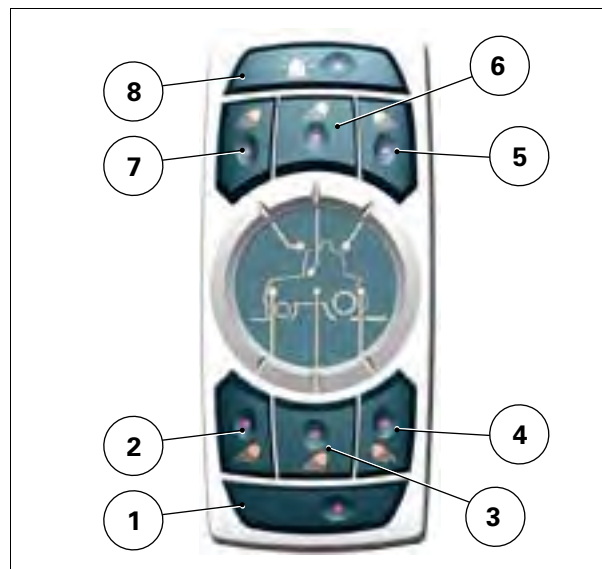


Fig. 18.

I004678

Module operation

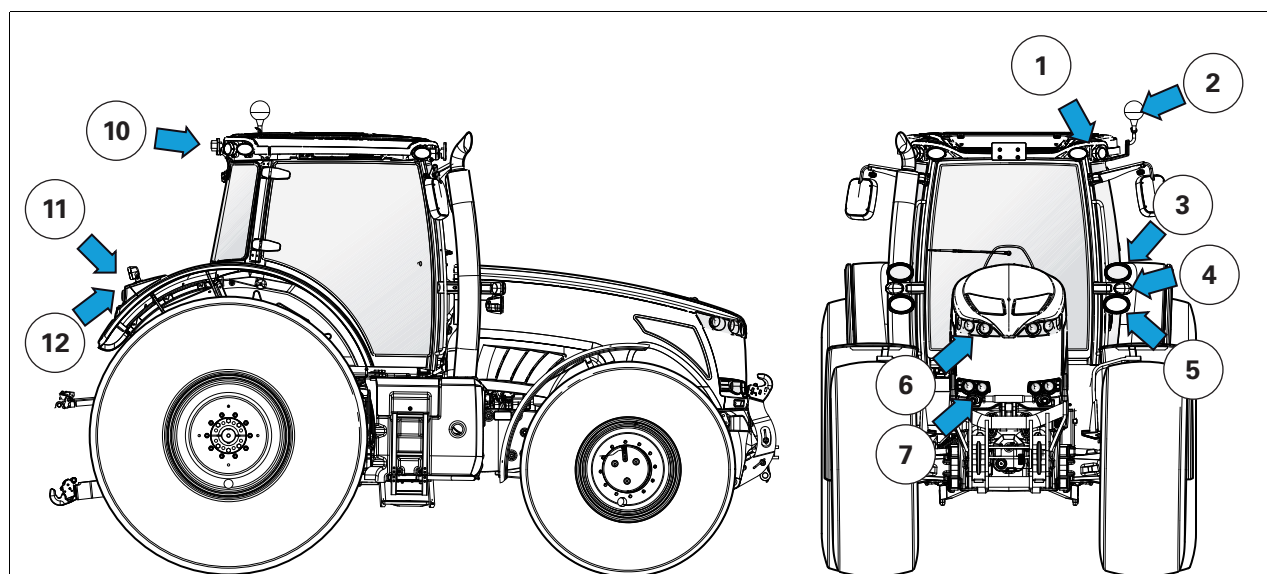


Fig. 19.

I016016

- Work lights (1, 5, 10 and 11): These only operate after the side lights have been activated. Their status is saved when + ignition on is switched off or when the side lights are switched off.

3. Operation

Automatic air conditioning

- (1) Manual/automatic fan control
- (2) Digital display (LCD)
- (3) Compressor ON/OFF button
- (4) Defroster button
- (5) Recirculation button
- (6) Temperature control knob
- (7) Left-hand side fan ON/OFF switch

Using the main fan

The temperature inside the cab is controlled automatically by the air conditioning system, which controls the air temperature at the air vents, fan speed, recirculation and compressor operation.

The "HI" and "LO" displays and tractor icon indicate the recirculation status.

Using the left-hand side fan (according to country)

Pressing the switch ((7)) activates the left-hand side fan only. The orange indicator light comes on.

The procedure to adjust the temperature is the same as the method used to adjust the temperature of the main fan.

Operation when the engine is stopped

When the tractor is started, all manual actions carried out before stopping the vehicle are stored and are suggested at successive start-ups; except for the defrosting function.

Pre-selecting the cab temperature

Preselect the required temperature using knob (6). The preselected value is shown on the LCD display (2).

Changing the display from Celsius to Fahrenheit

1. Switch off the engine ignition
2. Move fan switch (1) to OFF position.
3. Move temperature knob (6) to maximum heat position (red)
4. Switch on ignition and, within 5 seconds, press defroster button (4) and recirculation button (5) simultaneously.
5. The temperature symbol (°C or °F) will appear on the LCD screen.
When there is a problem or error, an "E" symbol is displayed to warn the user (contact your dealer to determine the cause of the problem).
6. Turn the fan control knob (1) to the AUTO position.
7. Turn the knob ((6)) to adjust the temperature and confirm the unit of measurement.

NOTE: When there is a problem or error, an "E" symbol is displayed to warn the user (contact your dealer to determine the cause of the problem).



Fig. 28.

I004684

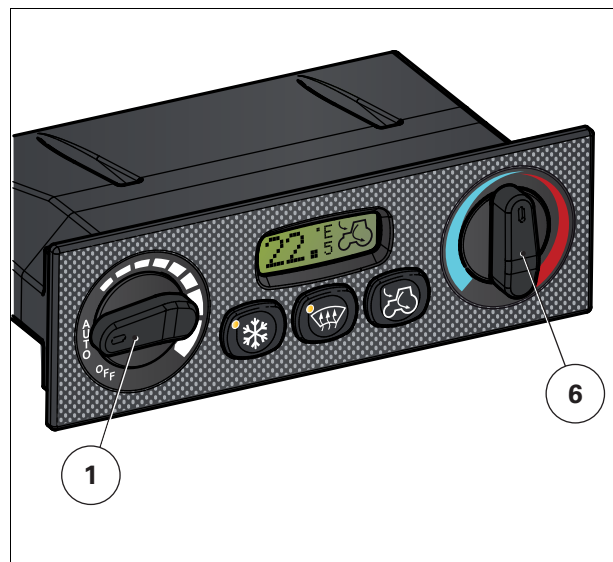


Fig. 29.

I013144

3. Operation

3.4 Engine

3.4.1 Running-in

T000953

- Experience has shown that the first 50 hours of tractor operation have a significant effect on the performance and life of the engine.
- From the first operation, the tractor must run with the engine at full load. The engine should be allowed to reach a temperature of 60 °C before being subjected to full load.
- It is quite normal for oil consumption to be relatively high during the running-in period. Therefore, during running-in, the engine oil level must be checked twice a day during the first 50 hours of operation to avoid the risk of lubrication failure.
- During running-in, check the tightness of all nuts, bolts and screws frequently. The wheel nuts must be retightened daily until their torque has stabilised (see chapter 5).

3.4.2 Filling with fuel

T001741

Before filling, ensure that the fuel and additives being used are in compliance with applicable regulations, [see §4.3.2, page 176](#) and [see §4.3.4, page 179](#).


WARNING:

***Always switch off the engine before filling up.
Do not smoke while refuelling the tractor.
Keep away from naked flames .
Wear suitable gloves when filling up.***

Diesel fuel

The filler port is located on the left-hand side of the tractor.

The tank is filled after removing the BLACK plug ((1)).

Fuel quality: [see §4.3.2, page 176](#)

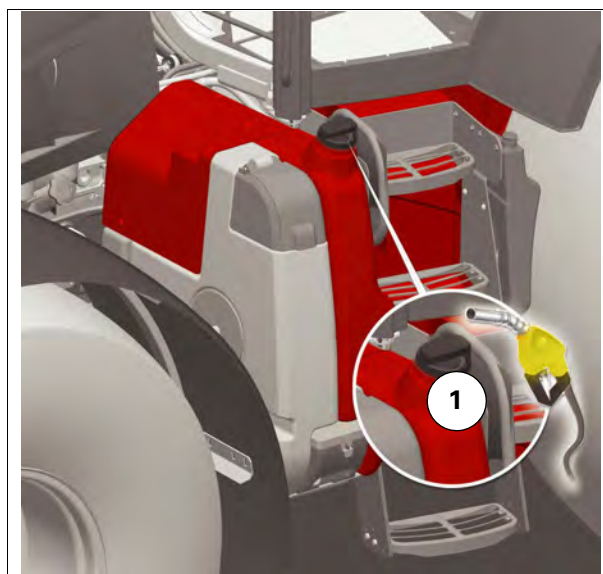


Fig. 1.

I005725

Biodiesel

Compatibility with biodiesel, [see §4.3.3, page 178](#)

5. **⚠ DANGER:**
The ParkLock parking brake will not operate once its screws have been loosened.
Before loosening, chock the tractor to prevent the wheels from drifting.

Release the ParkLock parking brake by loosening the right and left-hand brake fittings ((1)) located on the top of the rear axle until the hard point is felt (approximately 9 turns)

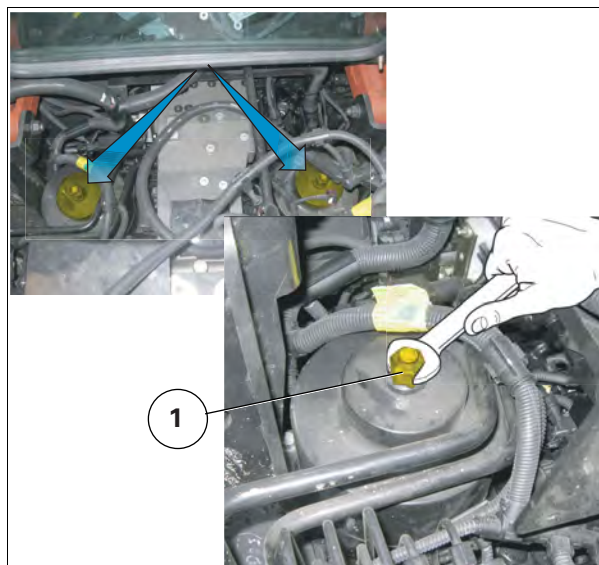


Fig. 27.

I007381

Limp home mode

If the transmission ratio control is not possible due to a breakdown, the tractor can be driven mechanically using a limp home lever.

Maximum speed in the high speed range is 34 km/h in forward travel and 25 km/h in reverse travel.

Maximum speed in the low speed range is 15 km/h in forward travel and 11 km/h in reverse travel.

IMPORTANT: When the tractor is stopped, the speed range must be in neutral position (middle position) and the brake must be engaged.

- ⚠ CAUTION:**
Once the engine has been started, the transmission is in full working order once a range (high or low) is engaged!
The clutch pedal must be engaged with care because any transmission ratio can be preselected.

1. Stop the engine if it is running.
2. Open the cover plate located on the cab floor (right-hand side).
3. Remove the protective plate.
4. **IMPORTANT:** When shifting range, only use the limp home lever supplied with the tractor because the coupling mechanism in the control unit may be damaged (max. permissible torque: 10 Nm).

Place the limp home lever on the range control and select the limp home range :

- clockwise direction, low speed range (tor-toise)
- anti-clockwise direction, high speed range (hare)

NOTE: It is important not to change range when travelling in limp home mode

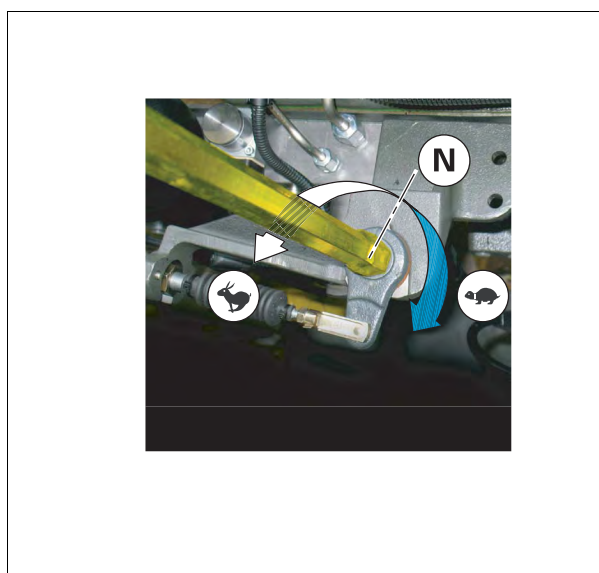


Fig. 28.

I007380

3. Operation

3.13 Auxiliary hydraulics

3.13.1 General

T001314

8600 series tractors are available with the 200 l/min, 200 bar hydraulic system

The tractor may be fitted with a maximum of 6 spool valves, each delivering 100 l/min. It may be fitted with up to 6 pairs of couplers at the rear and 2 pairs of couplers at the front.

In this case, the spool valves 1 and 2 are used for the rear couplers and the respective front couplers 1 and 2, via the front/rear valve selection function.

The spool valve controls are grouped together on the armrest.

IMPORTANT: Do not operate the hydraulics unless the oil is warm. If necessary, allow the engine to run for several minutes before use.

In the event of the hydraulics overheating, stop the tractor immediately.

3.13.2 Description and use of the couplers

T001945

Depending on the configuration of the tractor, the tractor is fitted with rear couplers and front couplers.

These couplers provide a fast and sealed connection of the hoses for the implement being connected.

NOTE: Before connecting an implement to the tractor, check to ensure that the connections are clean. Also check that the oil inside the implement system is not contaminated to ensure that it does not contaminate the tractor hydraulic functions.

Description of the rear couplers

The rear couplers are fitted with oil recovery units, which are located on the rear right-hand and rear left-hand trumpet housings. It is recommended that these recovery units are checked and drained at regular intervals and under conditions that respect the environment.

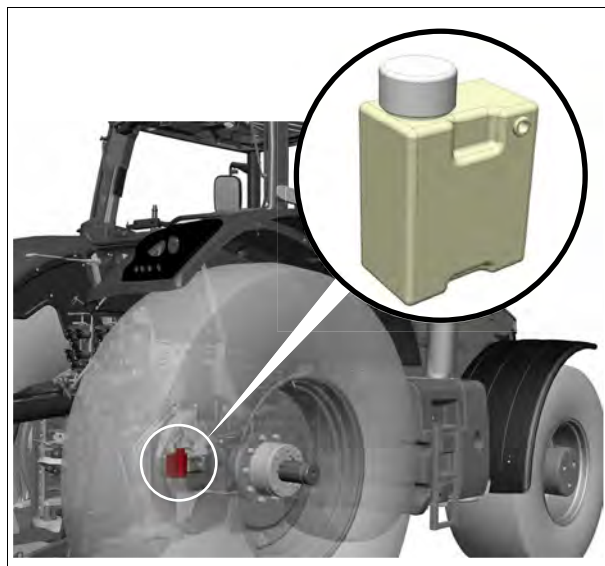


Fig. 1.

I006124



4. Maintenance

Service guide	50 hrs	400 hrs	800 hrs	1200 hrs	2000 hrs	Every day
Check the operation of the injectors.					°	
Change the main urea filter (E3 engine with AdBlue/DEF technology).		4000 hours or every 2 years				
Change the urea inlet prefilter (E3 engine with AdBlue/DEF technology)		8000 hours or every 2 years				
Change the filter inside the metering module E3 engine with AdBlue/DEF technology		If blocked by impurities				
Check/clean the dry air filter elements.						°
Change the dry air filter elements.				°		
Check the radiator coolant level.						°
Drain, flush and refill the radiator with coolant.				°		
Check/clean the radiator/cooler fins.						°
Check/clean the air conditioning condenser.						°
Change the air conditioning dryer.				°		
Check the tension and condition of the alternator/fan/air conditioning compressor belts.	°°	°				
Change the alternator/fan/air conditioning compressor belts.				°		
Transmission and Auxiliary hydraulics						
Check the transmission oil level.						°
Check the auxiliary hydraulics oil level						°
Change the rear axle/transmission oil.					°(1)	
Change the transmission suction strainer.					°(1)	
Change the transmission high-pressure filter.	°°		°			
Check the oil in the rear final drive units.		°				
Change the oil in the rear final drive units.	°°				°	
Change the auxiliary hydraulic system return filter.	°°	°				
Change the auxiliary hydraulic system strainer.				°		
Change the auxiliary hydraulic system oil.				°		
Change the auxiliary hydraulic system breather.				°		
Check/lubricate the linkage shaft and only top up if not properly sealed.	°°				°	
Check all hydraulic systems for correct operation.	°°	°				
Check the clutch pedal and transmission for correct operation.	°°	°				
Check the clutch fluid level.	°°	°				
Change the clutch fluid, bleed the system.					°	
Brakes						
Check the condition of the brake pipes/compressed air tank.	°°			°		
Bleed the brakes.				°		
Replace the ParkLock brake pots.	After 9 to 10 manual releases of the ParkLock emergency release system					
Check the trailer brake valve for correct operation.	°°			°		
Check the operation of the emergency hand brake.						°
Check the operation of the ParkLock.						°

4. Maintenance

4.4 Transmission

4.4.1 Recommended products

T001563

IMPORTANT: The warranty remains valid only as long as the lubricants used comply with the following classifications, and no other products are used.

Transmission

SAE 15W40 oil complying with MF specifications CMS M1145.

Hydraulic clutch.

Pentosin CHS 11S oil.

Rear final drives

Models 8650/8660: SAE 85W90

Models 8670/8680/8690: SAE 85W140

4.4.2 Checking the transmission oil level

T001409

Frequency

Check the transmission oil level every day.

Procedure

1. Stand the tractor on level ground, with the front axle suspension disengaged.
Stop the engine
2. Check that the level is between the minimum and maximum marks on the dipstick .
3. Top up if necessary.

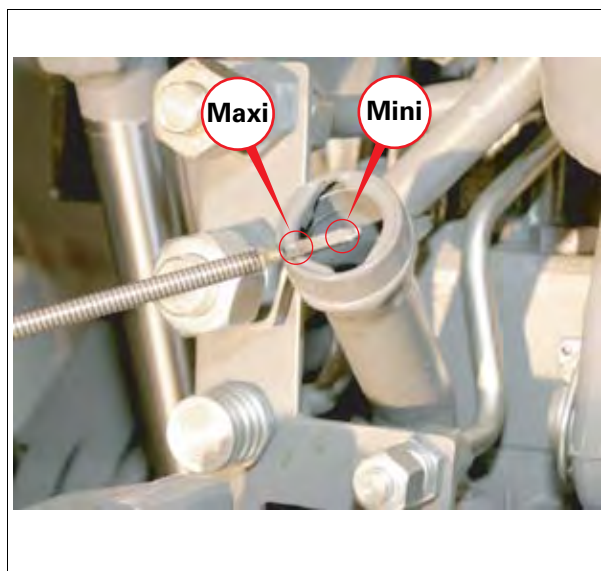


Fig. 1.

I004133

4.4.3 Draining the transmission oil

T001411

Frequency

Drain and replace the transmission oil every 2000 hours.

4.11 Electrical equipment

4.11.1 Batteries

T001066

The tractor's electrical circuit operates on 12 V. The negative terminal is the earth.

Wipe the battery top and smear the terminals with liquid paraffin every 400 hours.



WARNING:

Batteries produce explosive gases. Sparks, flames, lit cigarettes or any flammable source must be kept at a distance. Wear suitable safety goggles when working near batteries.

4.11.2 Alternator

T001498

Ask your dealer or agent to check the alternator every 1200 hours or once a year.

IMPORTANT: The alternator wiring must be disconnected before any arc welding is carried out on the tractor or on an implement which is attached to it.

Do not disconnect or reconnect the battery cables when the engine is running.

Never operate the engine when the cable linking the alternator and battery is disconnected.

Do not attempt to connect any additional electrical equipment, as this may damage components of the existing electrical circuit.

4.11.3 Power socket (ISO)

T001447

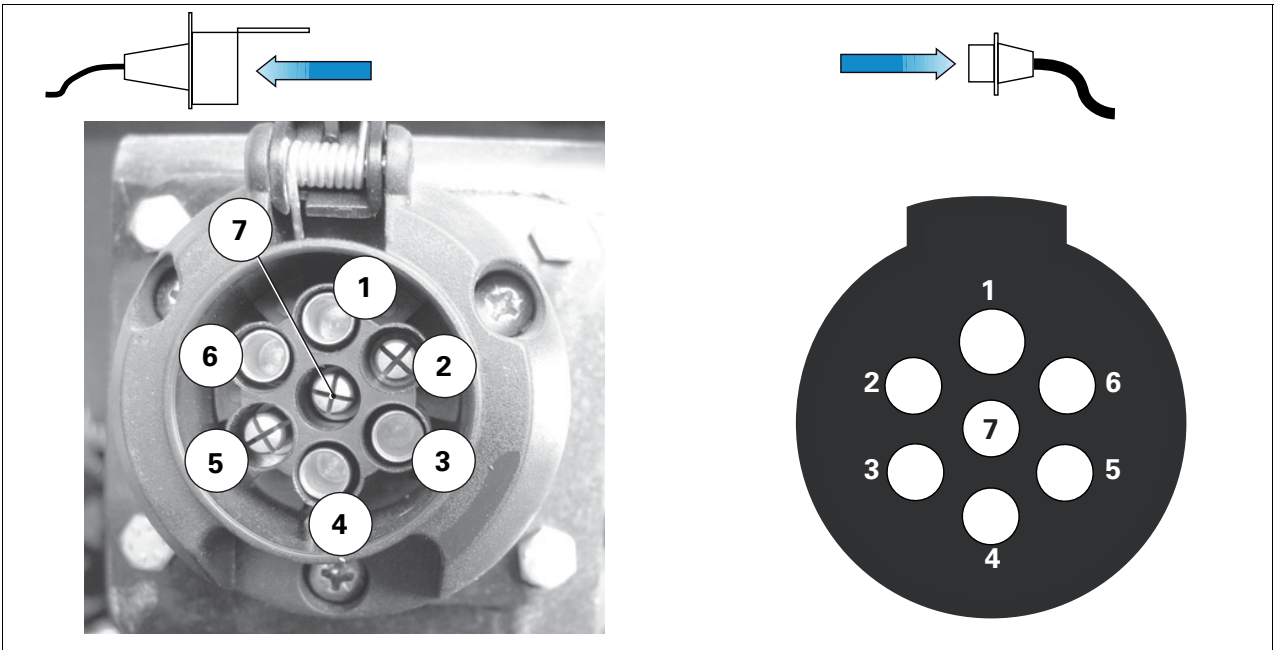


Fig. 1.

I004140

Reference	ISO circuit	Maximum electrical charge
(1-)	Left-hand indicator and hazard warning light	4x 21 W
(2)	Reversing light	Not known
(3)	Earth	-
(4)	Right-hand indicator and hazard warning light	4x 21 W
(5)	Right-hand side lights and number plate lights	4x 6 W
(6)	Stop lights	Not known
(7)	Left-hand side lights	20 A

4.11.5 Fuses

T001913

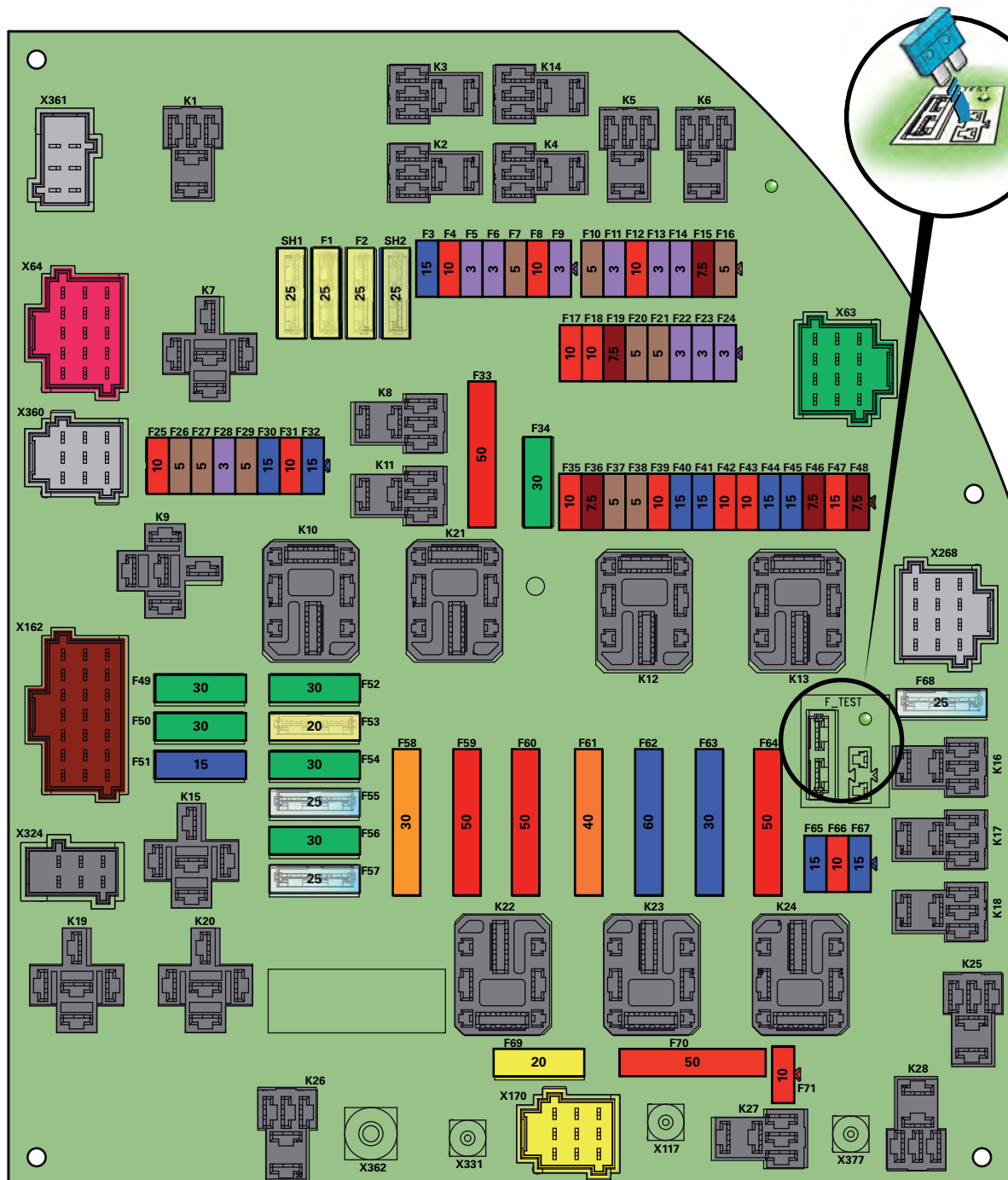


Fig. 3.

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