

**DECLARATION CE DE CONFORMITE**  
**AVEC ANNEXE POUR REFERENCE A CERTIFICAT DELIVRE PAR**  
**ORGANISME COMPETENT**  
**EC DECLARATION OF CONFORMITY**  
**WITH ANNEX REFERING TO A CERTIFICATE DELIVERED BY**  
**A COMPETENT BODY**

Fabriquant : AGCO S.A.  
*Manufacturer*

Adresse : Avenue Blaise Pascal, 60026 BEAUVAIS - FRANCE.  
*Address*

Nom du signataire : Jonny Frolli  
*Signatory's name*

Qualité : Directeur  
*Quality*

Description du produit : Tracteur agricole  
*Product description*

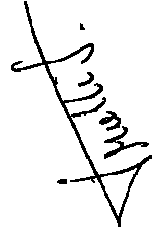
Le produit identifié ci-dessus est déclaré conforme aux dispositions de :  
*The identified product hereover is declared conform to the requirements of*

- La Directive 75/322 modifiée par la Directive 2000/2 du 14 janvier 2000 et la directive 2001/3 du 8 janvier 2001 relative aux tracteurs agricoles ou forestiers à roues.
- Directive 75/322 modifiée by the Directive 2000/2 from 14 January 2000 and the directive 2001/3 from 8 of January 2001 relating to wheeled agricultural or forestry tractors.

en raison de la délivrance par un ORGANISME COMPÉTENT DU CERTIFICAT EN ANNEXE.  
*due to the delivery by a Competent Body of the Certificate in annex.*

Lieu : Beauvais  
*Location*

Signature :  
*Signature*



**ANNEXE A DECLARATION CE DE CONFORMITE**  
**ANNEX TO A EC DECLARATION OF CONFORMITY**

Fabriquant : AGCO S.A.  
*Manufacturer*

Adresse : Avenue Blaise Pascal, 60026 BEAUVAIS - FRANCE.  
*Address*

Identification du produit : Tracteur agricole  
*Product Identification*  
*Agricultural tractor*

La conformité aux exigences de la Directive 2001/3 est reconnue pour le produit identifié ci-dessus par :  
*The Conformity to the requirements of the 2001/3 Directive of the hereover identified product is recognised by:*

- Organisme compétent : UTAC  
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- Adresse : Autodrome de Linas  
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- qui a délivré le certificat dont les références sont :  
*who delivered the certificate which references are*
- Numéro du certificat : UTAC e13\*75/322\*2001/3\*2278  
*Certificate number*
  - Date (Approbation LCIE) : 05/04/04  
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# 1 . TRACTOR IDENTIFICATION

## 1.1 - SERIAL NUMBER

**IMPORTANT: WHEN CONTACTING YOUR DEALER OR AGENT, ALWAYS INDICATE YOUR TRACTOR SERIAL NUMBER.**

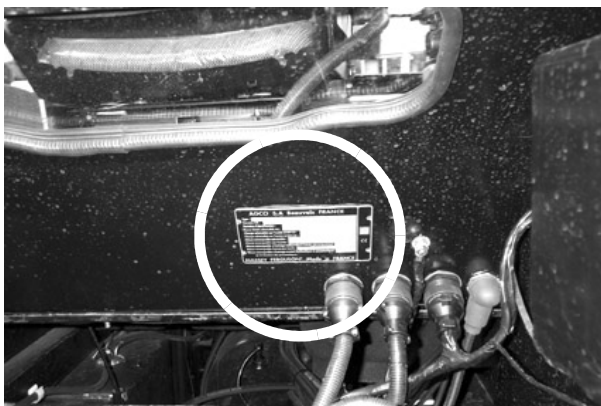
Registration plate (according to country)



Z2-030

Fig. 1

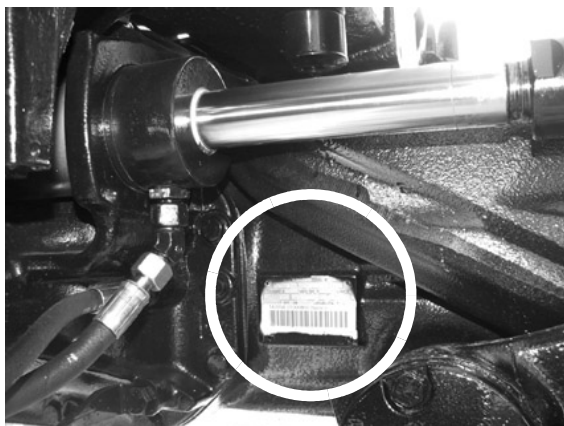
Name plate with serial number (according to country)



Z2-032

Fig. 2

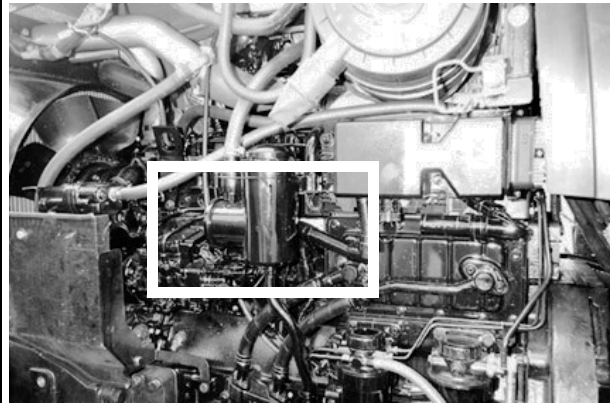
Front axle serial number



Z2-095

Fig. 3

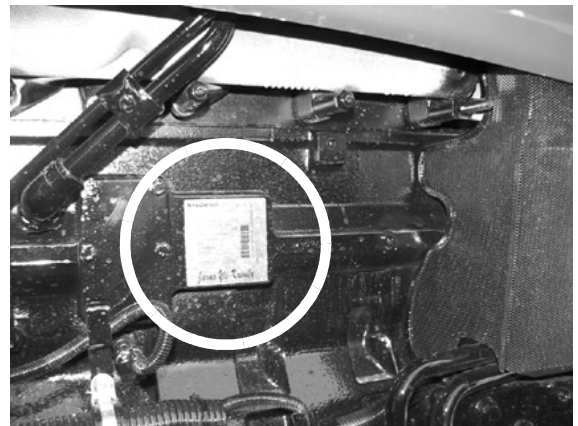
"Perkins" engine serial number



Z2-029

Fig. 4

"Sisu" engine serial number



Z2-132

Fig. 5

Cab serial number



Z2-163

Fig. 6

## 2 . INTRODUCTION - SAFETY INSTRUCTIONS AND WARRANTY

### 2.8.2 - Observe the following instructions

- **DO NOT ALLOW** children or unqualified persons to operate your tractor. Keep others away from the working area.
- Always wear your seat belt securely fastened.
- Where possible, avoid operating the tractor near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and on rough, slippery, or muddy surfaces.
- Stay off slopes too steep for safe operation.
- Watch where you are going, especially at row ends, on roads, and around trees.
- Passenger seat is only intended for short periods of use
- Do not allow children in the passenger seat.
- **DO NOT PERMIT** others to ride on the tractor or the implement unless an approved instructor seat is fitted.
- Only hitch attachments and implements to the drawbar and hitch points recommended, and never above the centre line of the rear axle.
- Operate the tractor smoothly - no jerky turns, starts or stops. When the tractor is stopped, apply the parking brake securely. Lower the implement and remove the ignition key.
- **DO NOT MODIFY OR REMOVE** any part of the equipment and **DO NOT USE** attachments unless they are properly matched to your tractor.

## 2.9 - PROTECTION

### 2.9.1 - Cab

The ROPS (Roll Over Protective Structure) cab has been designed for this tractor series and meets all the safety and sound legal requirements.

The ROPS cab conforms to the various international safety standards. The ROPS cab must **NEVER** be drilled or modified to install attachments or implements. Welding on cab components **IS NOT PERMITTED. DO NOT ATTACH** chains or ropes to the main frame of the cab for pulling purposes.

If additional controls or displays are to be added to the operator's area contact your AGCO dealer for information.

The ROPS cab together with the seat belt is effective in reducing injuries during overturn accidents. Wearing the seat belt is an important part of this protection.

- Always wear your seat belt adjusted snugly.
- Check the seat belt for damage. A damaged seat belt must be replaced (Fig. 1).



Fig. 1

### 2.9.2 - Damage to the ROPS cab

If the ROPS cab has been damaged as a result of tractor rollover or incident, it must be replaced, NOT repaired. DO NOT use the tractor with a damaged ROPS cab.

## 2.10 - PREPARING FOR SAFE OPERATION

### 2.10.1 - Know your equipment

It is important to know the tractor and operation of all its accessories, implements and additional equipment. It is also important to know how to use all the controls, gauges and dials, as well as the rated load capacity, speed range, braking and steering characteristics, turning radius, and operating clearances.

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

*Under poor conditions, slow down and be extra careful, and engage four-wheel drive if fitted.*

Study the **DANGER, WARNING** and **CAUTION** safety symbols on your tractor and the information signs also.

## 2 . INTRODUCTION - SAFETY INSTRUCTIONS AND WARRANTY

---

- When towing a load, start braking sooner than normal and slow down gradually.
- Watch out for overhead obstructions.
- Make sure load does not obscure hazard warning or transport lights.

### 2.14 - SAFETY - AFTER OPERATION

Whenever stopping, bring the tractor to a complete halt, apply the handbrake, and disengage the PTO.

**Dynashift transmission: set the gear shift lever (1-2-3-4) and PowerShuttle lever in neutral position,**

**Dyna-6 transmission: set the PowerShuttle lever in neutral position,**

lower the implement to the ground, stop the engine and remove the starter key **BEFORE** leaving the seat.

*IMPORTANT: Tractors fitted with ParkLock electromechanical brake control (optional): Move lever to locked position (symbol: closed padlock) to engage ParkLock before stopping the engine.*



**DANGER: PowerShuttle: Always place the gear shift lever (Dynashift transmission) and PowerShuttle lever in NEUTRAL position before leaving the seat.**

**Remove ignition key if the tractor is to be left unattended.**

### 3.1.1 - Instrument panel description (Fig. 2)

#### 10. Tachometer.

The tachometer shows the engine speed in hundreds of revolutions per minute.

#### 11. Fuel gauge.

#### 12. Engine coolant temperature gauge.

Stop the engine if the needle moves into the red zone.

#### 13. Right-hand direction indicator light (green).

#### 14. Left-hand direction indicator light (green).

#### 15. Failure warning lights unit.

See details (Fig. 7)

#### 16. Headlight indicator light (blue).

#### 17. Direction indicator light for the first trailer (green).

#### 18. Direction indicator light for the second trailer (green).

#### 19. Control indicator lights for functions in use (see details in Fig. 5).

#### 20. Failure and parking brake control indicator lights (see details in Fig. 6).

if one of the indicator lights remains lit after the engine has started or during normal use, stop the engine and investigate the cause of the problem.

#### 21. Digital display

Displays the speed engaged (forward / reverse), A/B memory (electronic injection engine), Hare / Tortoise range, Dyna-6 transmission ratios.

#### 22. DOT MATRIX screen (see details in paragraph 3.4).

13. Lumbar support adjustment:

Manual adjustment: turn the handle to the left or right to move the lumbar support vertically or horizontally.

Electrical adjustment: there are two available adjustments, each of which can be obtained by the switches (+ or -) ref. 13.

14. Seat heater:

The seat heater is turned on by pressing the switch.



**WARNING:** *Never adjust the seat when tractor is in motion.*

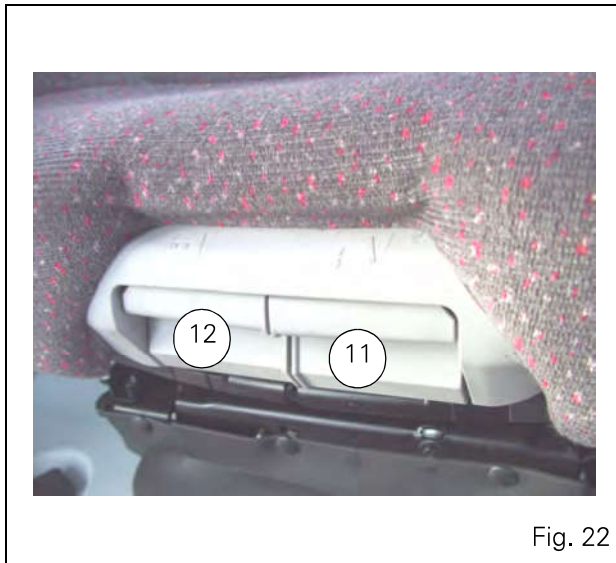


Fig. 22

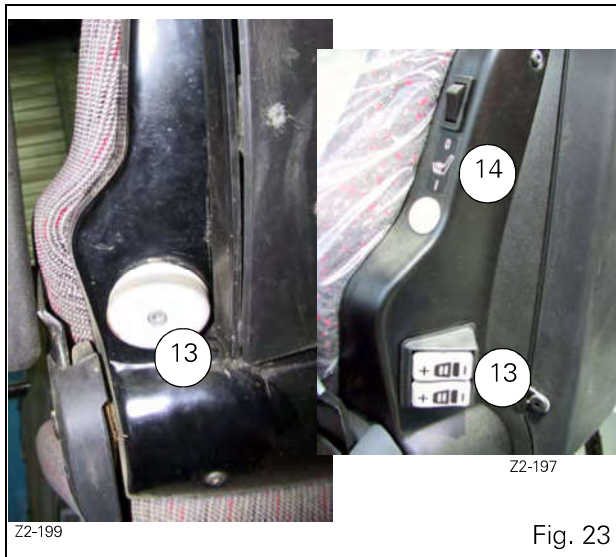


Fig. 23

#### 3.9.1 - Adjusting the multifunction armrest position

The length and height of the multifunction armrest located to the right-hand side of the seat can be adjusted after loosening the thumb wheels on its underside (ref. 1 Fig. 24).

Move the armrest to the required positions and firmly tighten the thumb wheels.

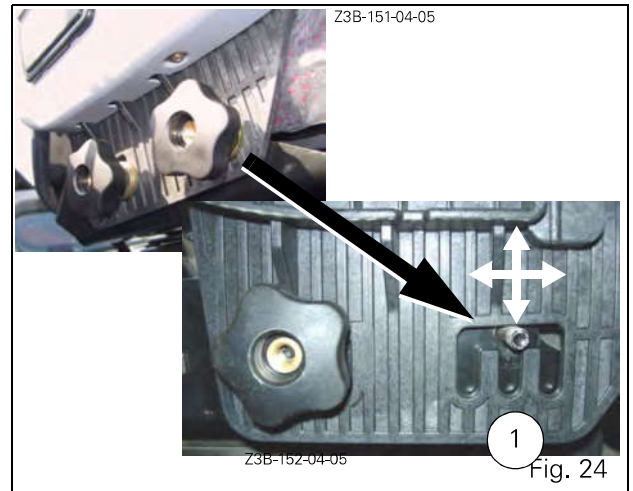


Fig. 24

#### 3.10 - STEERING WHEEL

(Fig. 25)

The steering wheel angle and height can be adjusted (except platform versions). Both adjustments are made by a single lever.

- Ref.1: Height adjustments
- Ref.2: Angle adjustments:



**DANGER:** *Adjustments of the steering wheel must be done with the tractor stopped.*



Fig. 25

### 4.1 - RUNNING IN

#### 4.1.1 - The following precautions should be taken during the running in period

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

### 4.2 - START-UP

**IMPORTANT:** Before starting the tractor, refer to this Operator Instruction Book, chapter 5.



**DANGER:** Before starting, never run the engine in a closed space. Never run the engine unless you are sat at the steering wheel of the tractor.

**IMPORTANT:** After a long standstill, to ensure lubrication of the turbocharger bearings run the engine on the starter for about ten seconds. To prevent the engine from starting, disconnect the wire (Fig. 1) or take out the F32 fuse (models with electronic injection).

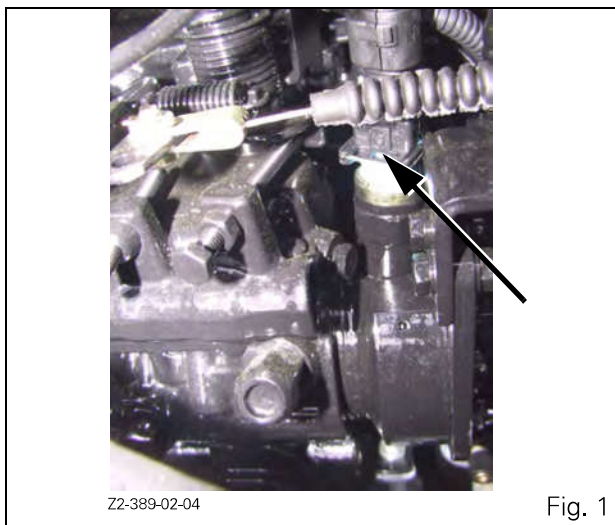


Fig. 1

#### 4.2.1 - Starting the engine

1. Fully press down the clutch pedal and put the gear shift lever and the shuttle lever in neutral position.
2. Put the throttle lever in maximum position.
3. Turn the ignition switch key to position 2. All indicator lights should come on. If one bulb has blown, replace it before starting the tractor.
4. Start the engine and reduce the engine speed once it has started.

#### 4.2.2 - Cold weather starting

**Fig. 2:** A 1000 W heater and connection cable are fitted to help cold weather starting. The heater operates with 220 V and heats the engine coolant in two hours. In extreme cold, it may be required to operate all night.



**WARNING:** DO NOT plug in heating element for testing unless immersed in coolant. It is dangerous to switch on a heating element in the open air, as the heat released can cause injury and the element can explode.

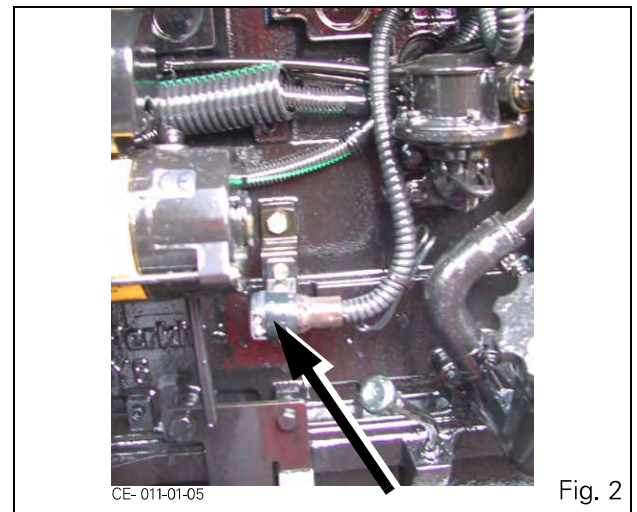


Fig. 2

### 4.3 - STOPPING THE ENGINE

Reduce the engine speed to idling for a few seconds, then turn the ignition key to the "Stop" position.

**IMPORTANT:** Do not stop the turbocharger engine suddenly when the engine is running at high speeds, because the turbine will continue turning on its own but will no longer be lubricated. Slow the engine before stopping it.

**Tractors fitted with wet clutch:** When the engine has stopped, the wet clutch is in declutch position, and it is necessary to tighten the handbrake before leaving the driver's seat.

Move the PTO knob to neutral position before starting the engine.

### 4.5.4 - Automation of Dynashift ratio shifting (Option)

#### General

This system permits automatic ratio shifting under torque during the mechanical changing of both gears and the Hi / Lo ranges. This feature is available on Dynashift models fitted with PowerShuttle.

- Dynashift automation 1 (standard)
- Dynashift automation 2 (option)

The choice of automation is carried out by a switch located on the armrest (ref.1, Fig. 13).

#### Use

- Dynashift automation 1, Fig. 13. Two positions are available on the ON/OFF switch:

**OFF position,** Manual shifting of the Dynashift A/B/C/D ratios, no LED on the switch are lit.

**ON position,** the LED is lit, the ranges under torque are automated when changing mechanical ratio (speed or range) with the gear shift lever. E.g.: when changing from 3rd D to 4th, the Dynashift shifts to C or B; when changing from 4th B to 3rd, the Dynashift shifts to C or D; changing from 4th Low D range to 1st High (Hi), the Dynashift shifts to C or B. The status of Dynashift ratio shifting, as it adapts to momentary drops in engine speed, is displayed on the instrument panel.

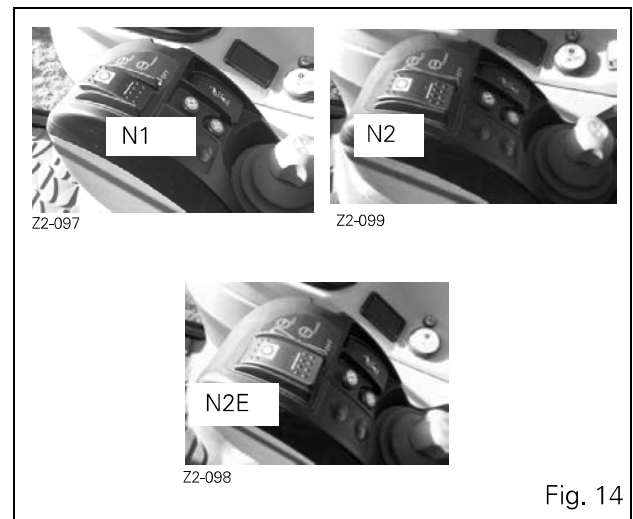


Fig. 14

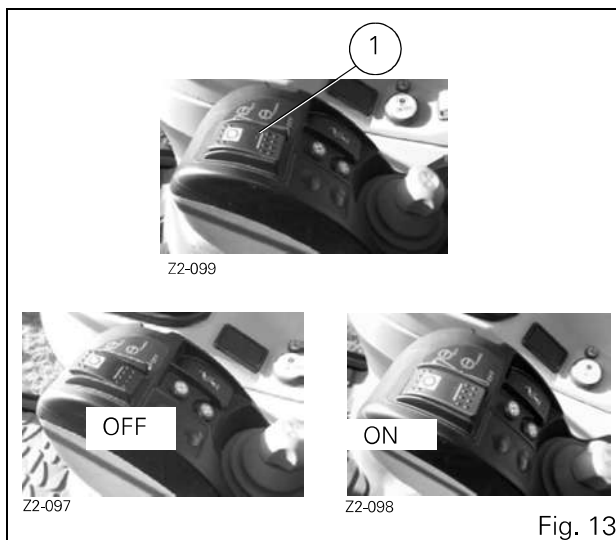


Fig. 13

- Dynashift automation 2, Fig. 14.

Three positions can be selected on the switch:

**Level N1 position.** Identical to the ON position above.

**N2 level position.** Intermediate position, the bar lights up on the switch, automatic ratio shifting is available, the Dynashift A/B/C ratios shift automatically during acceleration (approx. 2100 rpm) or deceleration (approx. 1200 rpm). The range must be manually engaged.

**Level N2E economy position.** The bar and indicator light come on on the switch, automatic ratio shifting is available, the Dynashift A/B/C/D ratios shift automatically during acceleration (approx. 1700 rpm) or deceleration (approx. 1200 rpm).

**NOTE:** The Dynashift steering wheel mounted hand control overrides all the automatic functions.

### 4.10.4 - Shiftable PTO - 540 and 1000 rpm

This type of PTO is suitable for implements requiring different drive speeds for various operations and conditions, for example self-loading trailers.

- Fixed shaft: A single shaft, 35 mm, with 6 splines, gives a rotational speed of 540 rpm or 1000 rpm of the PTO shaft at 2000 rpm of the engine.
- The end of the shaft is interchangeable: 6 or 21 splines at 540 to 1000 rpm at 2000 rpm of the engine (Fig. 37): To change the shaft, position a rod or a cross-tipped screwdriver in the space provided (ref. A), then remove the 6 screws, (ref. B).

Install the new shaft.

Tighten to a torque of 72 Nm minimum to 96 Nm maximum.

Either of the PTO speeds is selected by the lever on the rear left-hand side (Fig. 38) of the centre housing or by the lever in cab.



**CAUTION:** Move the parameter display selector Ref.5, Fig. 36 to the selected PTO speed. PTO must be disengaged during the procedure.

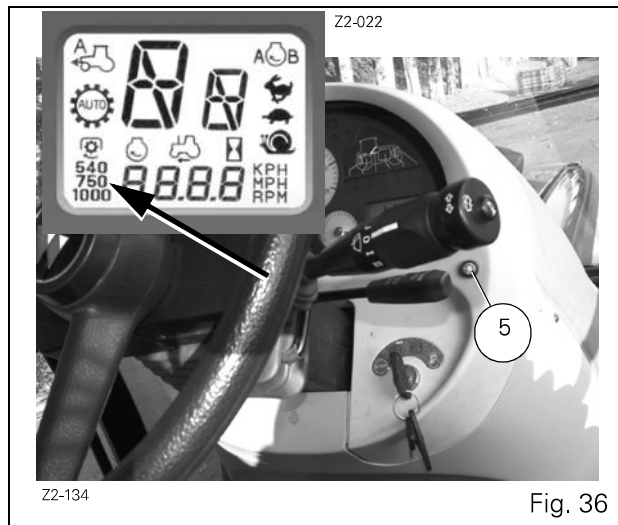


Fig. 36

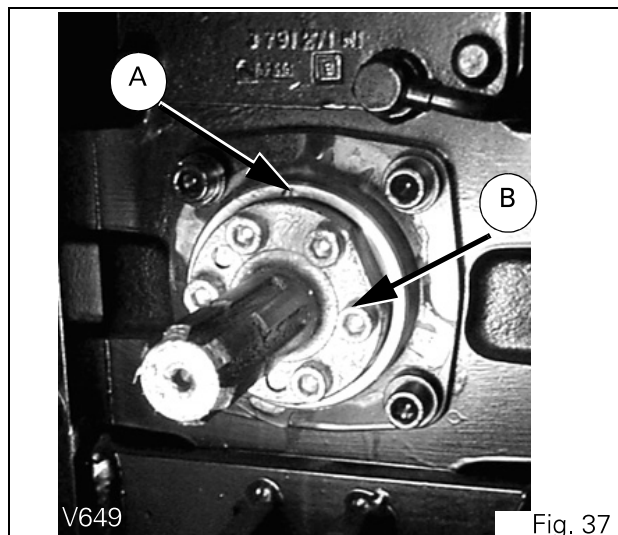
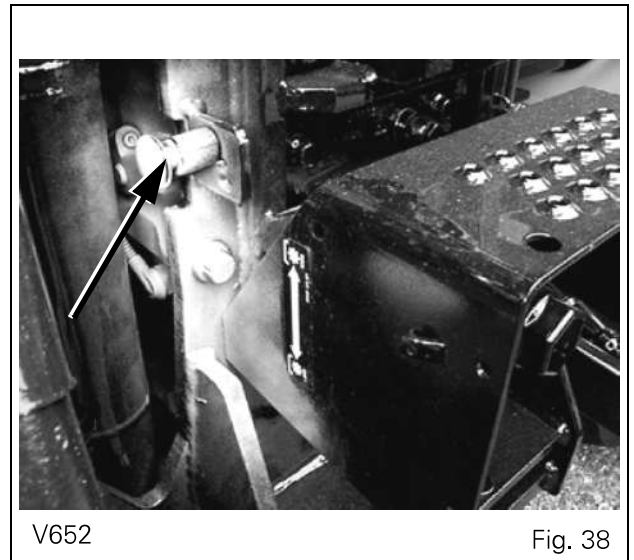


Fig. 37



V652

Fig. 38

### 4.10.5 - Ground Speed PTO

MF 6400 series tractors can be fitted with a ground speed PTO as an optional extra.

According to models the following PTO rpm are obtained for 1 turn of the wheel:

Position	6445/55	6460/70	6465	6475	6475/80
1000 RPM	14,34	15,54	15,84	15,73	15,40

This PTO is engaged by the lever in cab.

PTO must be disengaged during the procedure.

## 4.16.4 - Lift rods

(Fig. 58)

The lift rods have one hole 1 for the high position and a slot 2 for the floating position when the pin 5 is in position 3 (for wide implements or implements with depth wheel).

A fixed low position 4 can be obtained by moving the pin 5. For rods without hole 1, only the floating position 3 and the fixed low position 4 can be obtained.

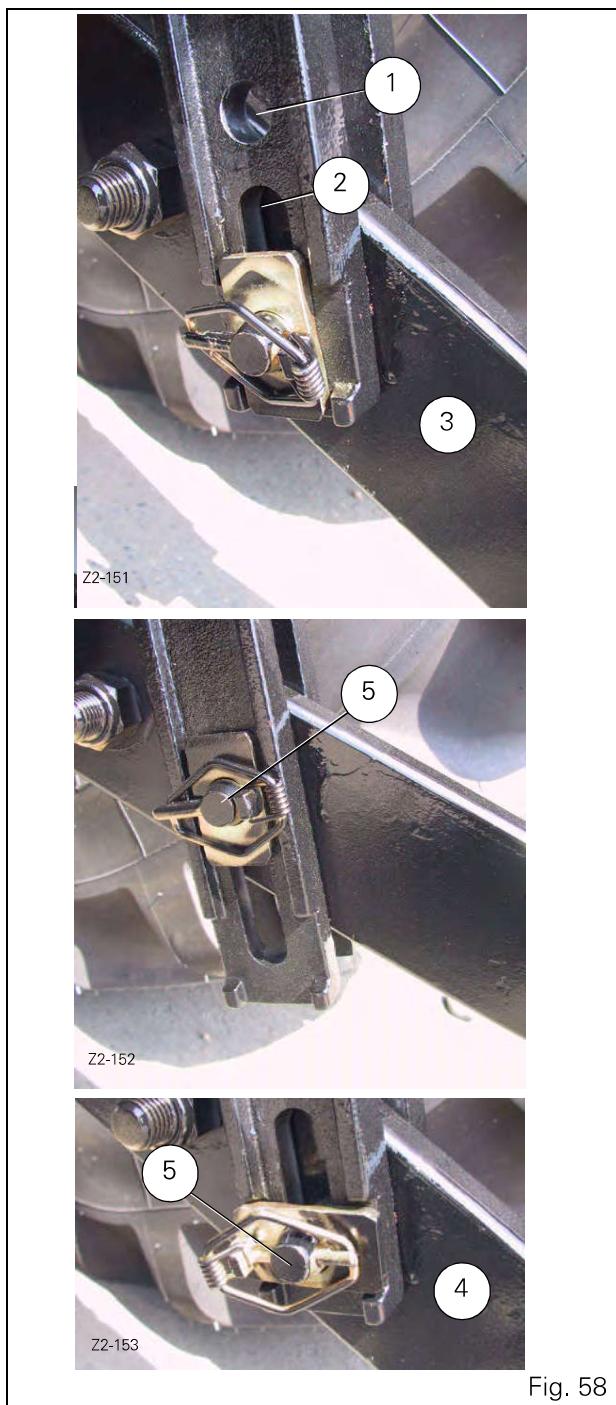


Fig. 58

## 4.16.5 - Stabiliser supports

Stabilisers are used to limit the lateral movement of the lower links.

The stabilisers support has 2 positions (Fig. 59).

- Pos. 1: for constant adjustment of side sway over the entire drawbar vertical travel.
- Pos. 2: for a determined drawbar side sway at "Low" position and automatic side sway lock at "High" position.



**CAUTION: Improper use of this position may result in stabiliser damage.**

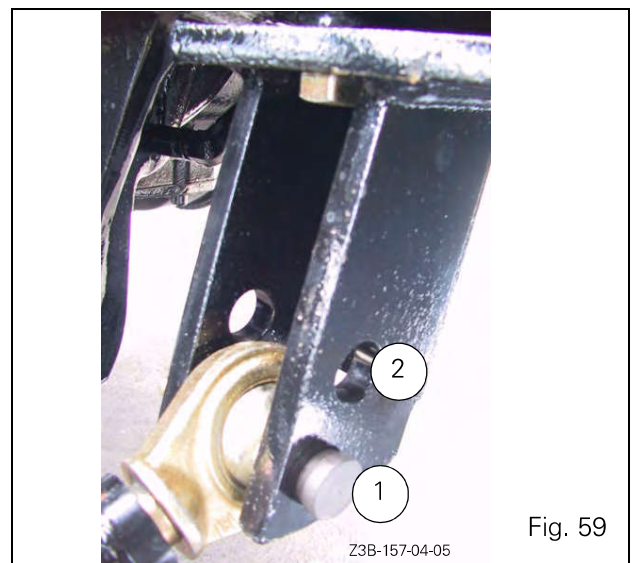


Fig. 59

Example of correct position depending on implement used:

Implement 1	1	2
Plough		•
Chisel		•
Rotavator	•	
Sprayer	•	
Seeder	•	
Subsoiler		•
Beetroot harvester	•	

# 5 . MAINTENANCE AND ADJUSTMENTS

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## 5 . MAINTENANCE AND ADJUSTMENTS

- 11. Front linkage lower arm joints and ball joints
- 12. Lift rams (2x1 lower grease nipples and 2x1 top grease nipples)

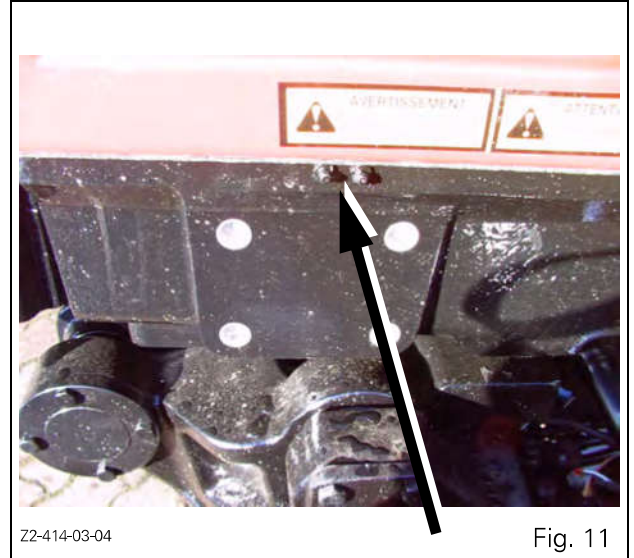
During long storage periods, ram rods should not come into contact with the air (risk of corrosion and consequent leakage). Rams should be fully retracted or greased.



Z2-401-03-04

Fig. 9

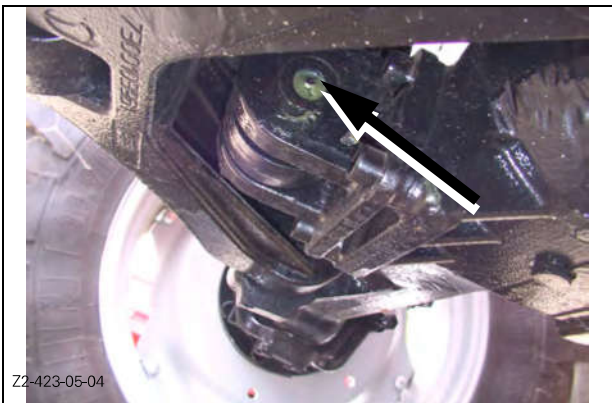
- 15. DANA suspended front axle ram (front and rear bearing, 2 grease nipples)



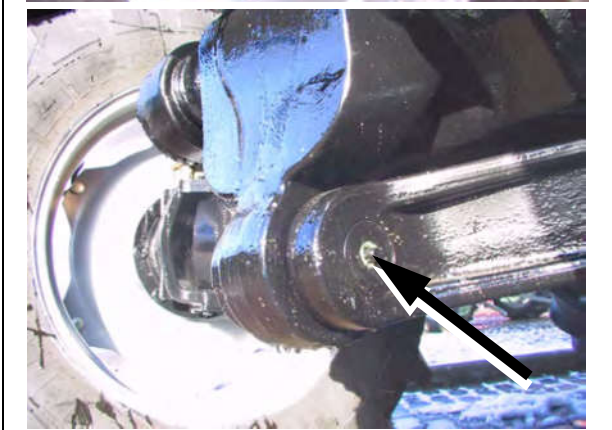
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Fig. 11

- 13. Front linkage 3<sup>rd</sup> point link (threaded part)
- 14. DANA suspended front axle joints (2 grease nipples)



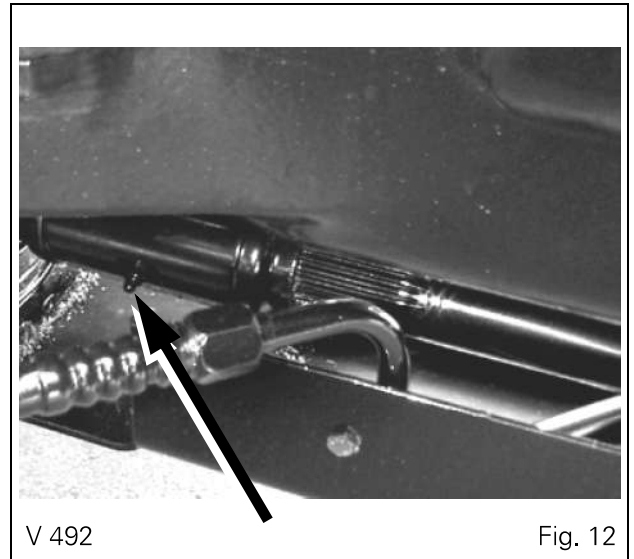
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Fig. 10

- 16. 4WD shaft (rear and front) (2 grease nipples)



V 492

Fig. 12

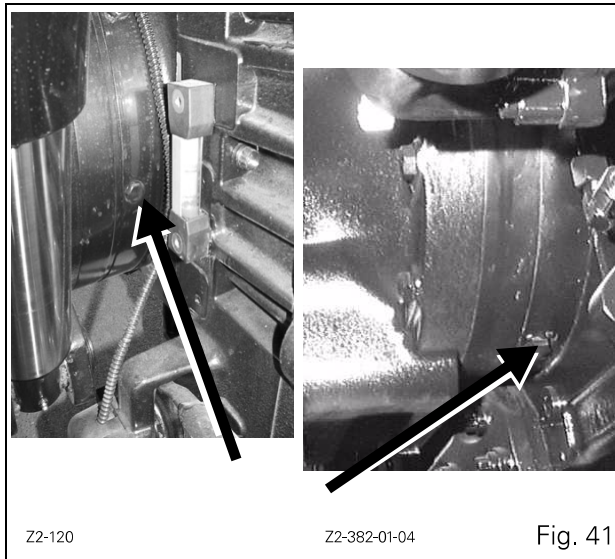
## 5 . MAINTENANCE AND ADJUSTMENTS

### 5.12.3 - Rear axle final drive units (sealed)

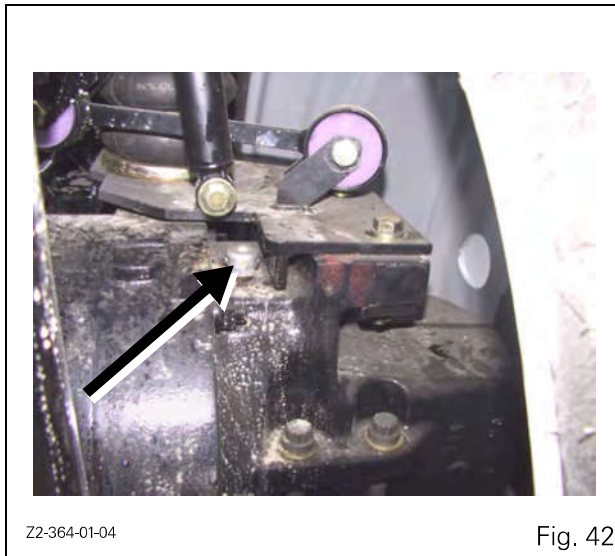
Check the oil level in the rear axle final drive units every 400 hours (Fig. 41).

The oil should be level with the filler cap located to the rear of each trumpet housing.

Drain the oil from the final drive units every 1200 hours or every 800 hours if working in muddy or particularly wet conditions.



**Change the rear axle breather every 1200 hours (Fig. 42, depending on model).**



### 5.12.4 - Transmission oil cooler (depending on version)

**Clean the transmission cooler fins every 400 hours (this interval is flexible).**

### 5.13 - FRONT AXLE -2-WHEEL DRIVE

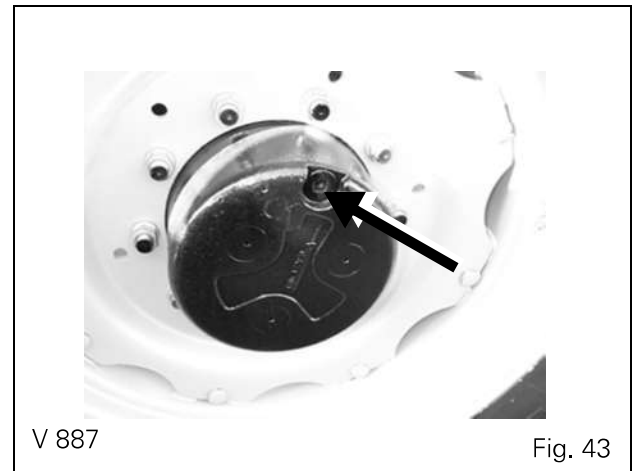
**Check tightness** of front axle screws, nuts, locknuts and bearings from time to time.

### 5.14 - FRONT AXLE - 4-WHEEL DRIVE

#### 5.14.1 - Final drive units

**Check the oil level in the front axle final reduction units every 400 hours (Fig. 43).**

The oil should be level with the filler cap when the cap is in the horizontal position.



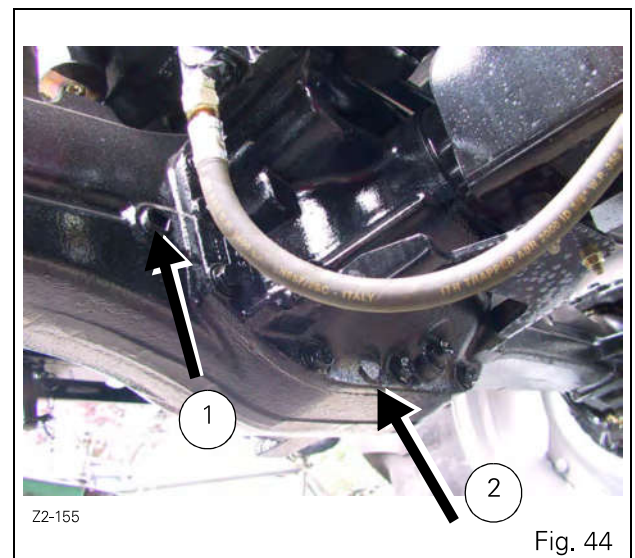
**Drain the oil from the final drive units every 800 hours or every 400 hours when working in muddy, wet or humid conditions.**

Turn the wheel of the tractor to bring the drain, filler and level plug to its required position.

#### 5.14.2 - Front axle

**Check the front axle oil level every 400 hours.** The oil should be level with the refill plug 1 (Fig. 44, Fig. 45 depending on version).

**Drain the oil from the front axle every 800 hours via the drain plug 2 (Fig. 44, Fig. 46).**



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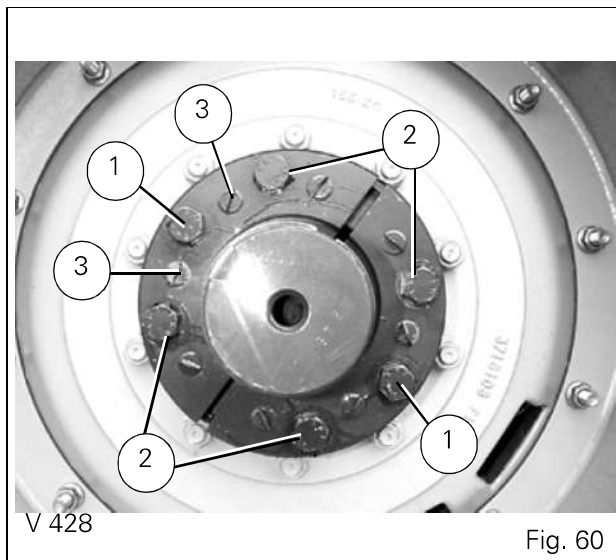
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## 5 . MAINTENANCE AND ADJUSTMENTS

### 5.22.3 - Changing wheel positions

#### Adjustment of wheel position on the shaft (half conical hub) (Fig. 60)

1. Raise the rear of the tractor to lift the wheels from the ground and carefully shim the vehicle.
2. Loosen the attachment screws (1) of the half conical hubs by approximately three turns.
3. Remove the 4 attachment screws (2) and fit into the holes (3).
4. Tighten them alternately until the half conical hubs are free of the fixed hub.
5. Refit the 6 screws (3) in their original holes and retighten, taking care to align the two half cones.
6. Tighten the screws alternately to the correct torque on each half cone (Fig. 59).



#### Long straight shafts

2 possible adjustments:

1. By shifting the wheel assembly on the shaft
2. By adjusting the front axle wheels

#### Fixed cast-iron wheels

2 adjustments:

1. By shifting the wheel assembly on the shaft
2. By correcting the wheel offset.

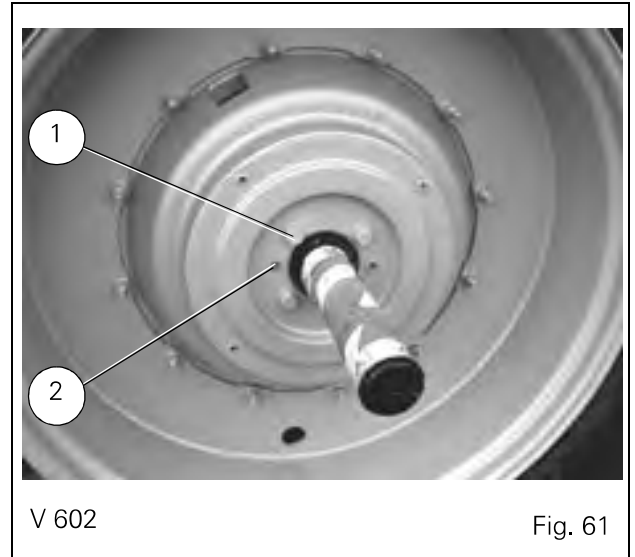
**NOTE:** When correcting wheel offset, it may be necessary to remove the tyres and adjust the inner tubes so that the valves are located in the opposite holes of the rim.

### 5.22.4 - Adjustment of wheel position on the shaft

(Fig. 61)

- Raise the rear of the tractor to lift the wheels from the ground and carefully shim the vehicle. Remove 2 of the 4 bolts (1) attaching the discs to the taper hubs.
- Loosen the 2 other bolts by approximately 5 turns. Clean the thread in the holes (2).
- Grease the two bolts removed previously and screw them into the holes (2). Tighten them until the wheel disc is separated from the hub.

- If the hub does not slide freely, a wedge or chisel can be inserted to open the hub.



**CAUTION:** Never grease the cone faces before positioning the wheels because the weights may break apart when tightening the torque.

**NOTE:** If the hub does not slide freely, a wedge or chisel can be inserted to open the hub.



**CAUTION:** Stay at a safe distance from the hub for this operation because the tool may fly out suddenly.

Remove the 2 bolts used previously to free the wheel from the hub and refit in their original holes.

Tighten to a torque as indicated in the table (Fig. 62).

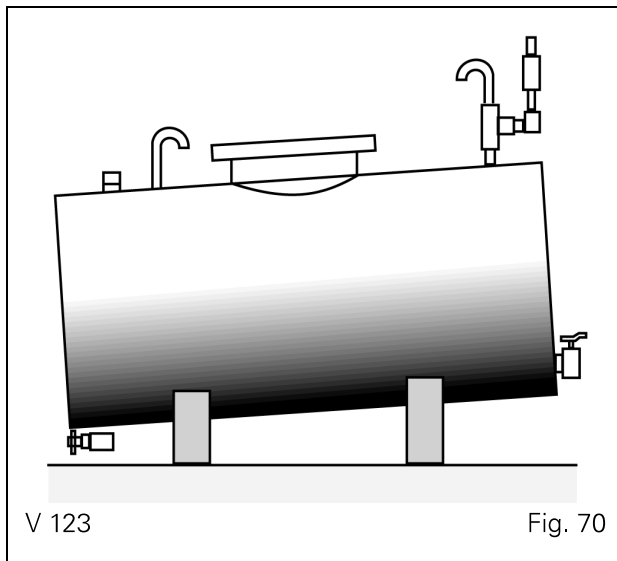
## 5 . MAINTENANCE AND ADJUSTMENTS

### 5.26.2 - Fuel storage conditions

(Fig. 70)

The utmost care must be taken to keep fuel clean.

1. Never clean the inside of containers of other fuel system components with a fluffy cloth.
2. Bulk storage tanks should not be too large: about 10,000 litres.
3. The storage tank should be under cover and supported on a cradle high enough for the tractor fuel tank to be filled by gravity. It should have a suitable manhole to provide access for cleaning. The outlet tap should be about 75 mm above the bottom of the tank to allow water and sludge to settle. It should have a removable strainer. The storage tank should have a fall of about 4 cm per metre towards the rear (drain plug side).
4. Let the fuel settle in the storage tank for 24 hours before use after any maintenance or refilling the tank.
5. Clean out the storage tanks regularly; in general every five years, and more frequently in cold climates.
6. Bleed the tank frequently to drain off any water formed by condensation.
7. Rotate fuel stocks to prevent deterioration of old fuel and the accumulation of water or foreign matter.
8. Do not wait for fuel stocks to be used up before getting in new supplies; refuelling from the bottom of the tank leads to a risk of damage to the fuel system.



### Advice on the use of fuel in cold weather

1. Diesel fuel increases in viscosity and wax particles form in cold weather. This may lead to operating problems if precautions are not taken.
2. Underground storage is preferable.

**IMPORTANT: Protection of the environment - local regulations in force relating to underground storage must be complied with.**

If this is not possible, place the storage tank or drum in a location which is protected from the cold, wind or damp.

3. After filling the storage tank, drain the first 5 litres into a drum before filling the fuel tank. After refuelling the tractor, return the fuel in the drum to the storage tank.
4. Insulate all exposed pipework. Ensure that any pipework is short in length and designed to be disassembled if necessary.
5. Stock "winter" quality fuel during the cold weather season.

Frequently clean the fuel filter sediment bowl.

Do not puncture the fuel filter.

Ensure a spare filter is always available. If a stoppage occurs, due to fuel waxing, in most cases changing the fuel filter will make restarting possible.

### 5.27 - STORING THE TRACTOR

If a tractor is not going to be used for a long time, certain precautions must be taken to protect it. Consult your dealer or agent for further information.

## 6 . SPECIFICATIONS

### 6.2.4 - Ground speed at 2200 rpm. 6445 / 6455 / 6460 / 6465 and 6470 models with 40 kph Dyna-6 transmission, HD final drives, tyres 18.4R38

FORWARD AND REVERSE GROUND SPEEDS (kph), DYNA-6 TRANSMISSION	
Range engaged	PowerShuttle
1 A	1.67
B	2.00
C	2.35 (1.46)
D	2.83
E	3.33
F	4.01
2 A	4.51
B	5.42
C	6.36
D	7.66
E	9.01
F	10.84
3 A	9.16
B	11.01
C	12.93
D	15.55
E	18.29
F	22.01
4 A	19.09
B	22.95
C	26.93
D	32.41
E	38.11*
F	

*NOTE: \*For 6445 and 6455 models (mechanical injection) ratio F cannot be used at maximum speed (electronically limited). On the other models, the speed limit is ensured by the Electronic injection control module (EEM).*

6.22 - DIMENSIONS AND ATTACHMENT POINTS

6.22.1 - Specifications for 6445, 6455, 6460 and 6470 models with Dynashift transmission

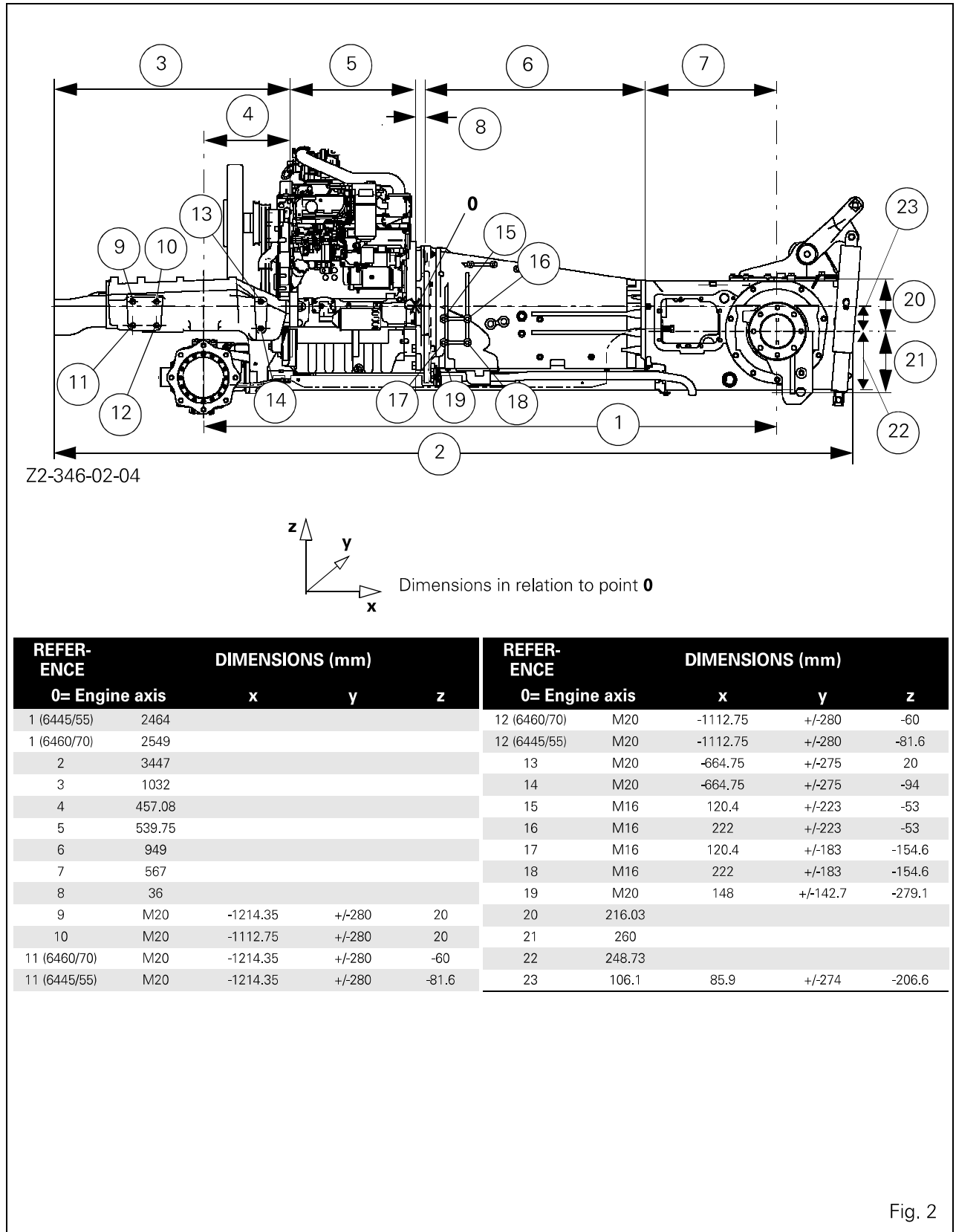


Fig. 2

### 7.1 - ACCESSORIES AND OPTIONS

- Wheel weights
- Front weights: 8/10/12 or 14 x 55 kg
- Centre weight: 100 to 600 kg

**IMPORTANT:** *Removal is not easy and the weight must remain fitted.*

The centre weight is not compatible with the front PTO.

- Linkage (Chapter 4).
- Auxiliary hydraulic spool valves (Chapter 4).
- Rear screen wiper and washer.
- Passenger seat.
- Front fenders.
- Creeper gearbox. PTO - (different types, chapter 4).
- Autotronic transmission control unit (chapter 4).
- Fittings for radio (loudspeakers, aerial and wiring).
- Radio.
- Seat belt
- Batteries main switch.
- "Datatronic 2" onboard computer (section 7.2.).
- "Datatronic 2" Rear Dual control (section 7.3).
- "Datatronic 2" Front Dual control (section 7.5).
- Trailed Implement Control (TIC, section 7.6).
- "Datatronic 3" onboard computer (colour screen, section 7.7.).
- "Datatronic 3" Front Dual control (section 7.12.2).
- "Datatronic 3" Rear Dual control (section 7.12.4).
- Trailed Implement Control (TIC, section 7.13).
- Front linkage 2.5 T, 3.5 T (depending on models) (section 7.14).
- Front power take-off (section 7.15).
- "ZUIDBERG" Front power take-off (section 7.16).

### 7.3.2 - Adjustments

(Fig. 16), e.g.: example given for a 6-furrow single-wheel plough.

#### A to D: Horizontality in HIGH position of the tractor linkage and of the plough depth wheel:

Set the plough horizontal in the high position using the following controls:

- Lowering selector Q, and high position limiter.
- Manual control of the spool valve for the depth wheel part. Store the values by pressing key 10 for each of the windows concerned (B and D):

- A. LINKAGE in high position (display stored).
- B. Setting the required value of the LINKAGE high position.
- C. PLOUGH DEPTH WHEEL in high position (display stored).
- D. Setting the required value of the PLOUGH DEPTH WHEEL high position.

#### E to H: Horizontality in LOW position of the tractor linkage and of the plough depth wheel:

Set the plough horizontal in the low position, if possible with the plough depth wheel ram at the mechanical stop position, using the following controls:

- Lowering selector Q, height/depth setting knob R.
- Manual control of the spool valve for the depth wheel part.

Store the values by pressing key 10 for each of the windows concerned (F and H):

- E. LINKAGE in stored low position.
- F. Setting the required value of the LINKAGE low position.
- G. PLOUGH DEPTH WHEEL in stored low position.
- H. Setting the required value of the PLOUGH DEPTH WHEEL low position.

#### I to L: Plough length and furrow partial lowering settings:

To obtain the correct setting, proceed in stages until the optimum setting is reached, selecting the functions one after another using the keys ref. 6-1 and 6-2 and knob 14, then store using key 10.

- I. DISPLAY of the plough LENGTH value at furrow start (after setting and storage of ref. J).
- J. SETTING of the plough LENGTH at furrow start (set and store).
- K. DISPLAY of the furrow start PARTIAL LOWERING value (after setting and storage of ref. L).
- L. SETTING of the furrow PARTIAL LOWERING value (set and store).

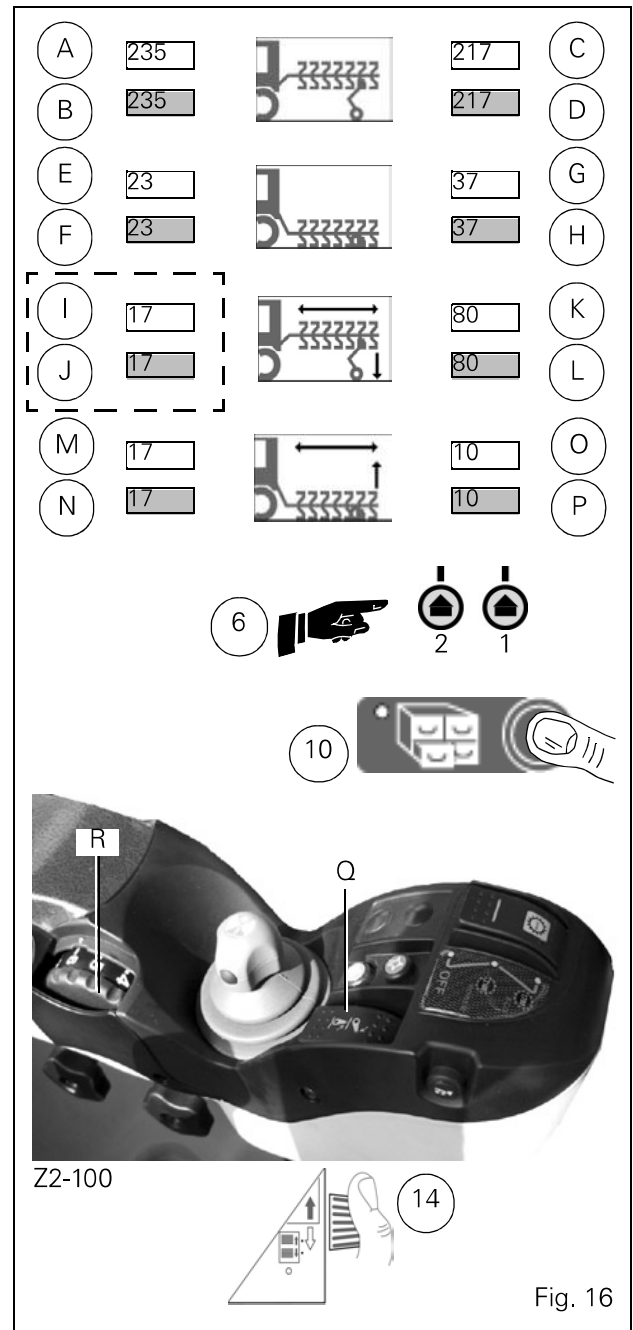
#### M to P: Plough length and furrow END partial lifting settings:


To obtain the correct setting, proceed in the same way as above (I to L).


- M. DISPLAY of the plough LENGTH value at furrow end (after setting and storage of ref. N).
- N. SETTING of the plough LENGTH at furrow end (set and store).
- O. DISPLAY of the furrow end PARTIAL LIFTING value (after setting and storage of ref. P).


P. SETTING of the furrow end PARTIAL LIFTING value (set and store).


**NOTE: Setting steps I to P are very important and determine the performance of the system.**




 Used to measure work accomplished, either manually or automatically by means of a sensor (e.g.: the number of trailers)

 Provides access to the implement width setting menu

 Used to select the event based on which the different values should be measured. (e.g.: as soon as the linkage is lowered)

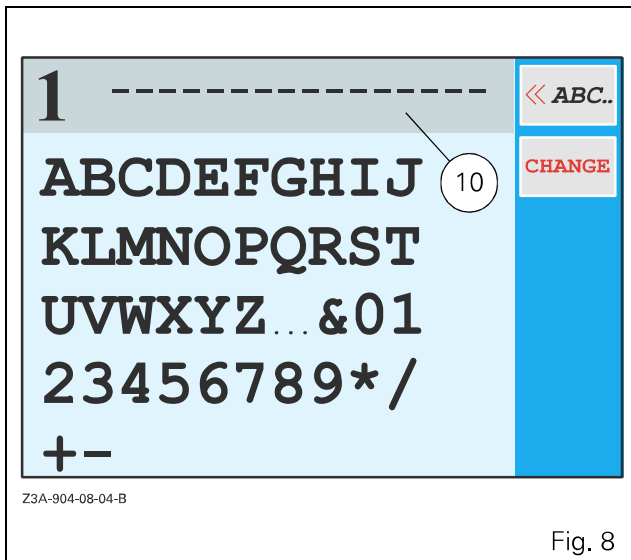
 Activates or deactivates the memory

**NOTE:** If a plough width has been stored previously, the sprayer icon is replaced by a plough icon.

 Provides access to the plough width setting menu

### 7.7.1.2 - Saving an implement name to memory

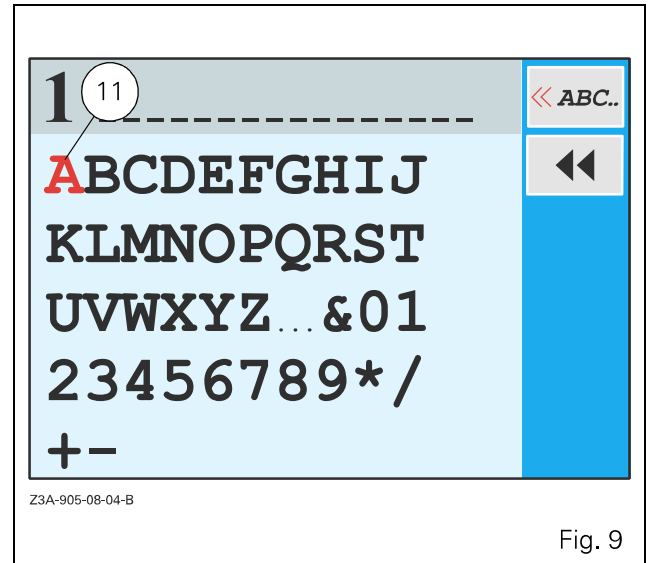
When the window (Fig. 8) is open, press the key <<1 to display the first memory menu. The window (Fig. 9) is displayed.



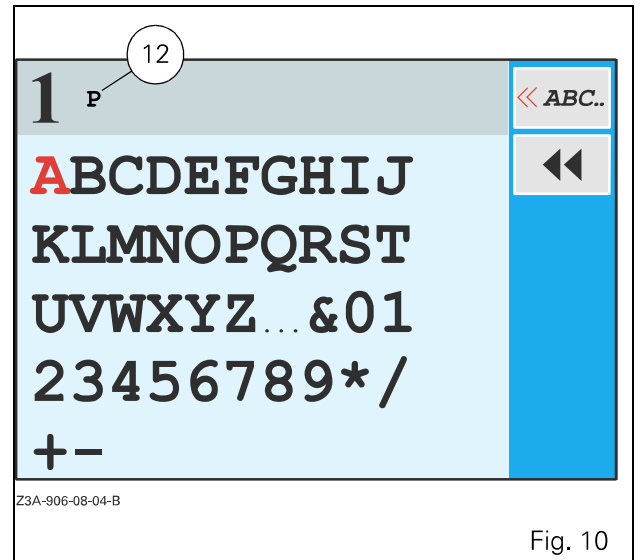
**NOTE:** If no implement name has been saved, a sequence of hyphens is displayed (10 Fig. 8).

#### To enter a new name:

- Press the key <<1. The previously displayed name is erased and the first letter of the alphabet is displayed in red (11 Fig. 9).



- Select the first letter to enter by rotating the encoder (e.g.: the P of PLOUGH).  
 - Validate the letter by pressing the encoder. The letter P is displayed in black (12 Fig. 10).



- Repeat this operation for the remaining letters.  
 - To change a letter, press the key <<2. The letter to change is replaced by a hyphen (13 Fig. 11).

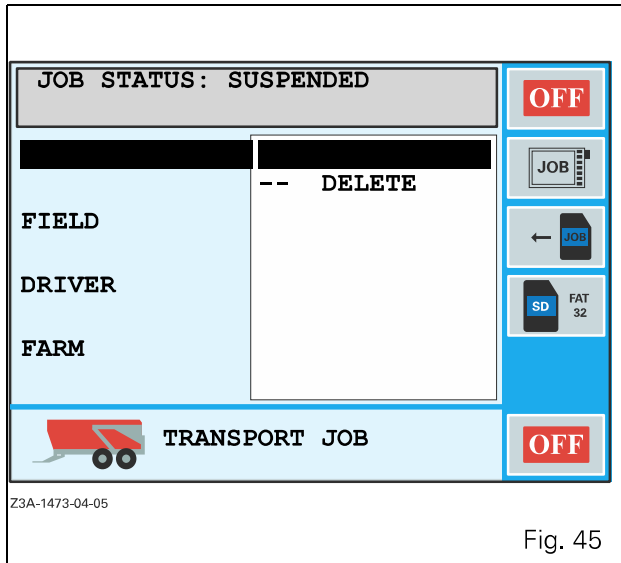


Fig. 45

It is then possible to enter a new name, delete an existing name or use a name that has already been entered.

### 7.7.6.3 - Entering a new name

- When the window (Fig. 45) is open, press the encoder. The window (Fig. 46) is displayed.

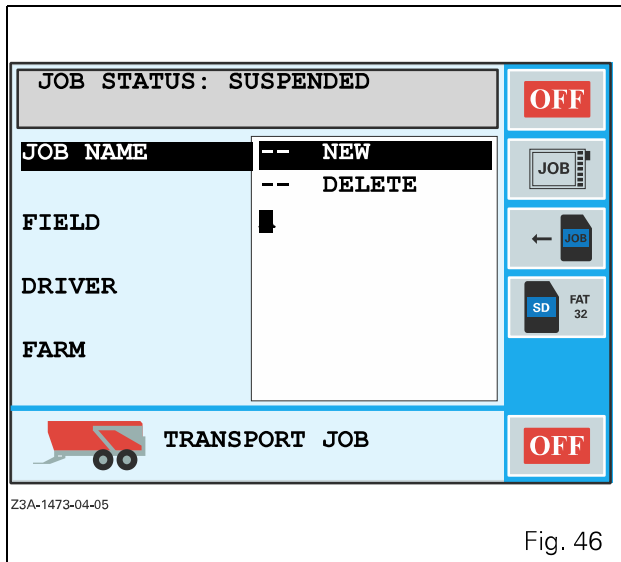


Fig. 46

- Select the letter by rotating the encoder.
- Validate the letter by pressing the encoder.
- Repeat this operation for the remaining letters.
- Press ESC to validate the name. The window (Fig. 47) is displayed.

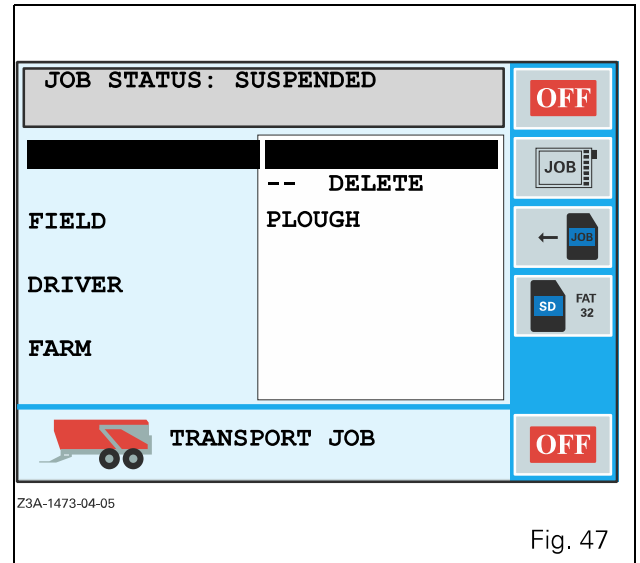


Fig. 47

### 7.7.6.4 - Deleting an existing name

- Select the DELETE line using the encoder when the window (Fig. 45) is open.
- Validate by pressing the encoder. The window (Fig. 48) is displayed.

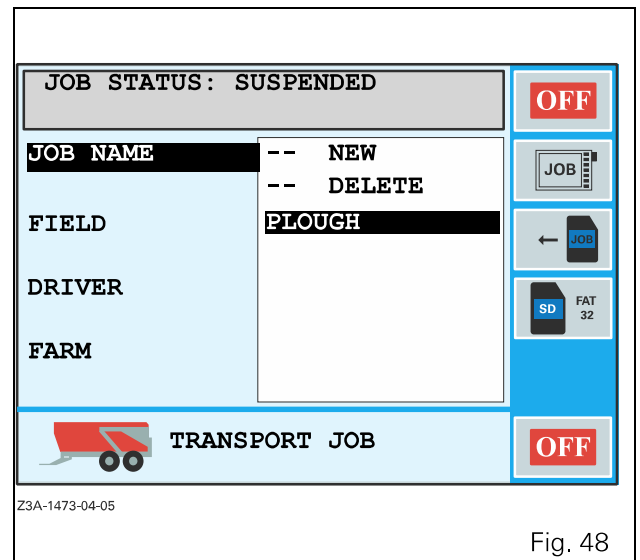


Fig. 48

- Select the name to delete with the encoder.
- Validate by pressing the encoder, and the window is displayed (Fig. 45).

### 7.7.6.5 - Selecting an entered name

- When the window (Fig. 47) is displayed, select a name using the encoder (Fig. 49).

## 7.8.2 - Gearbox settings menu

Displays the GEARBOX SETTINGS menu in the right-hand window (Fig. 83):

This display is used to view the transmission settings.

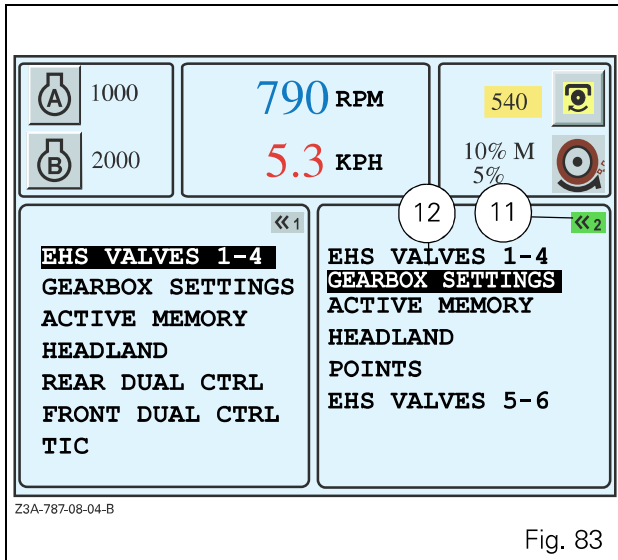


Fig. 83

- To start one of the applications, press the key «1, or the key «2 twice. The first key press selects the window and the second displays the list. The active application is represented by a green button at the top right of the window (ref. 11 Fig. 83).
- To call up the various menus, select the application using the encoder. The selected application is displayed in a black frame (ref. 12 Fig. 83).
- Validate by pressing the encoder or the key «2. The window (Fig. 84) is displayed.

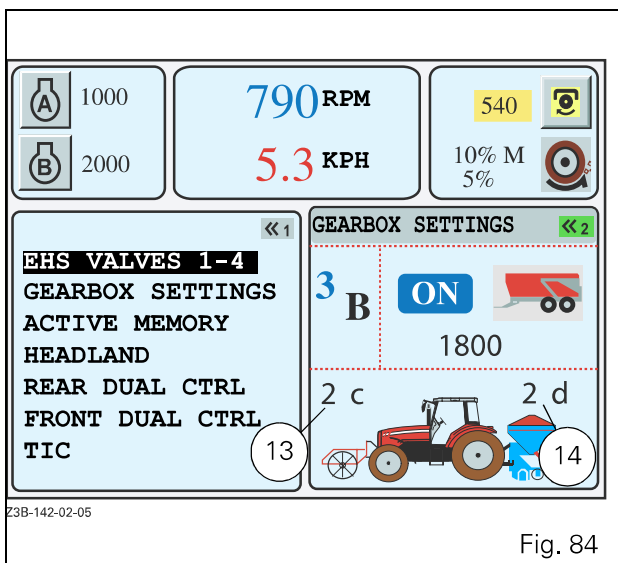


Fig. 84

### Description:

- (13) Forward restart ratio
- (14) Reverse restart ratio

- Manual mode driving
- Automatic mode driving (field mode or road mode)
- Road mode selected
- Field mode selected
- Autodrive speed selected (e.g. 1800)
- Ratio engaged (e.g.: 3B)

*NOTE: If manual mode driving is selected, the "OFF" icon is displayed with the linkage icon. To set parameters, see section 4.7.*

## 7.8.3 - Active memory menu

Displays the ACTIVE MEMORY menu in the left-hand window (Fig. 85):

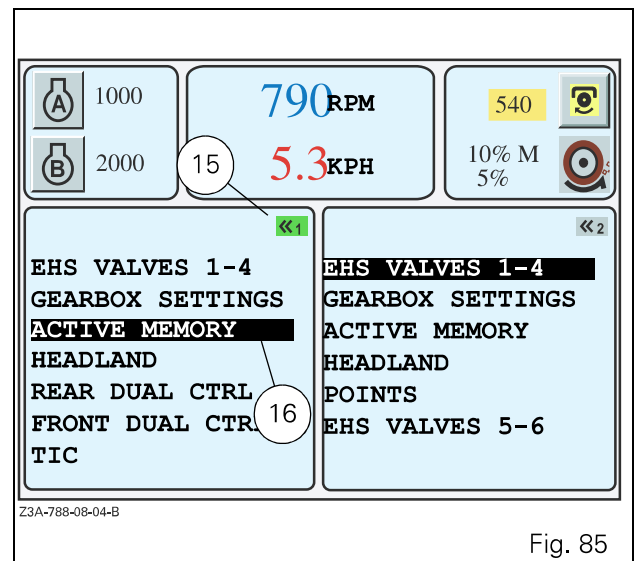


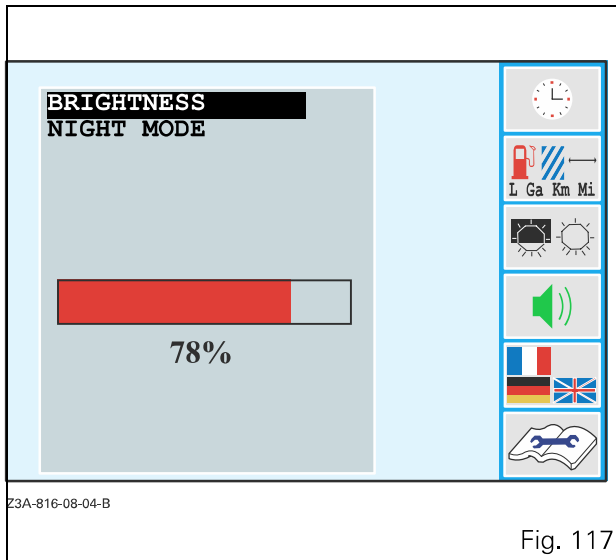
Fig. 85

- To start one of the applications, press the key «1 or «2 twice. The first key press selects the window and the second displays the list. The active application is represented by a green button at the top right of the window (ref. 15 Fig. 85).
- To call up the various menus, select the application using the encoder. The selected application is displayed in a black frame (ref. 16 Fig. 85).
- Validate by pressing the encoder or the key «1. The window (Fig. 86) is displayed.

- Using the encoder, select **BRIGHTNESS** or **NIGHT MODE**.

### 7.9.2.5 - Adjusting the brightness

- Select the **BRIGHTNESS** menu using the encoder (the window Fig. 117 is displayed).

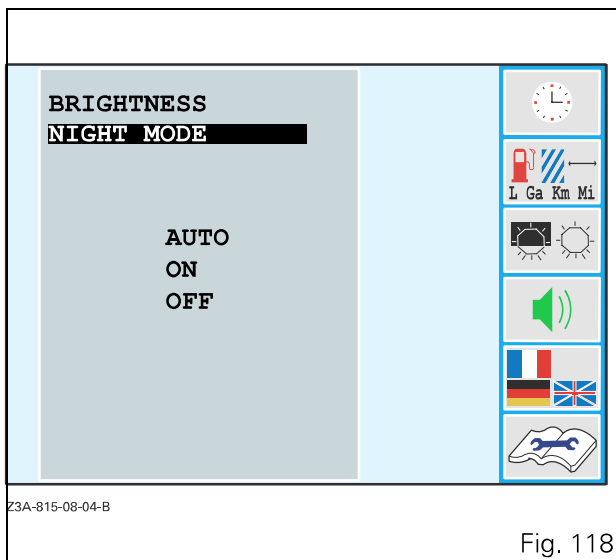


- Adjust the brightness (from 0 to 100%) using the encoder.
- Validate by pressing the encoder. The main menu is displayed.

### 7.9.2.6 - Setting night mode

This mode reduces screen brightness during night time use.

- Select the NIGHT MODE menu using the encoder (the window Fig. 118 is displayed).

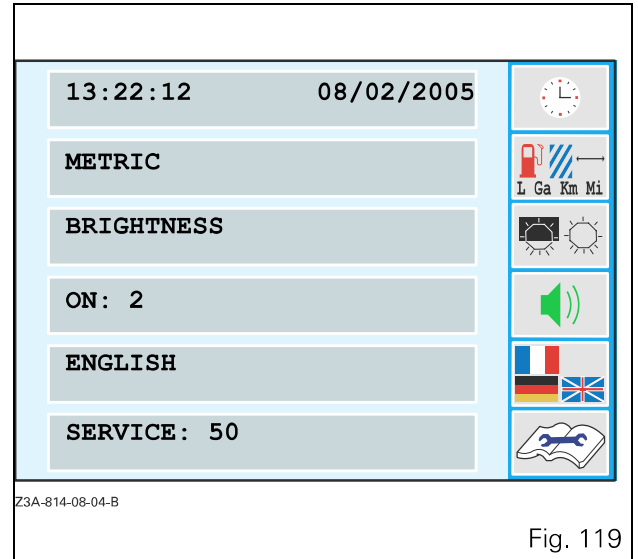


Using the encoder, select one of the 3 following modes:

1. AUTO (night mode is activated when the tractor head-lights are switched on),

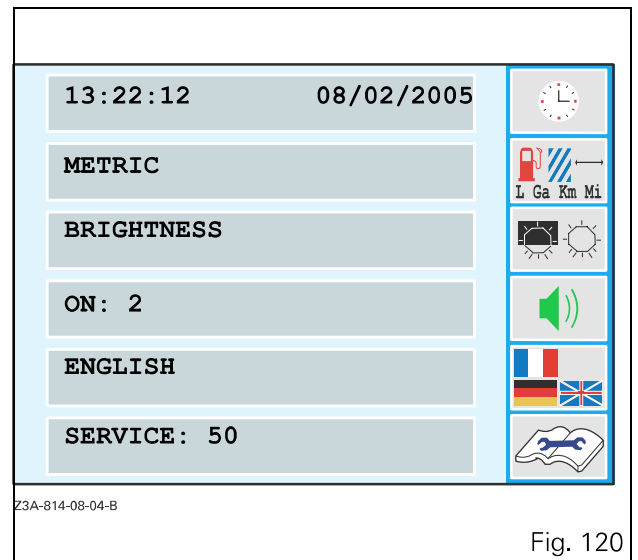
2. ON (night mode is always active and, in this case, the screen goes dark),
3. OFF (night mode is always deactivated).

As soon as one of the modes is validated, the window (Fig. 119) is displayed.



### 7.9.2.7 - Setting the buzzer volume

- Press the key <<4 when the window (Fig. 120) is open. The window (Fig. 121) is displayed.



## 7. ACCESSORIES AND OPTIONS

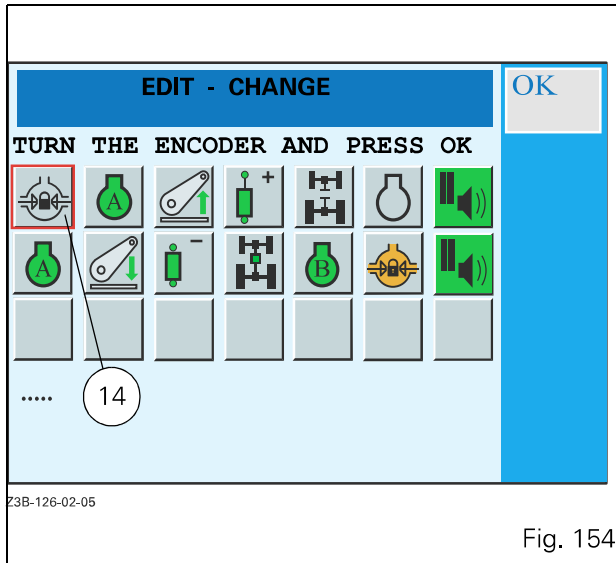


Fig. 154

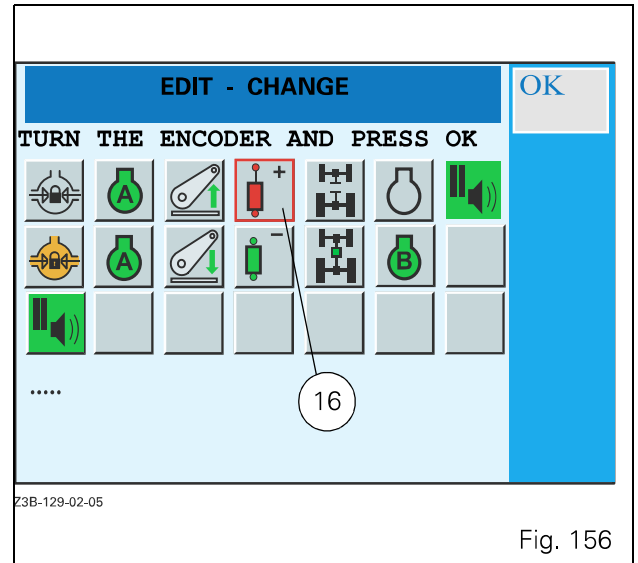


Fig. 156

- Select the action you wish to change by rotating the encoder.
- Validate either by pressing the encoder, or by pressing key  $\llcorner_1$ . The icon to modify is replaced by a question mark (ref. 15 Fig. 155).

- Validate either by pressing the encoder, or by pressing key  $\llcorner_1$ . The window (Fig. 157) is displayed with the changed icon.

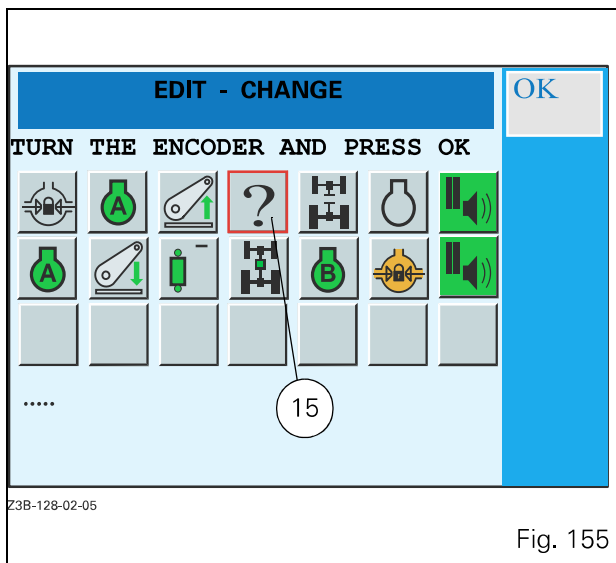


Fig. 155

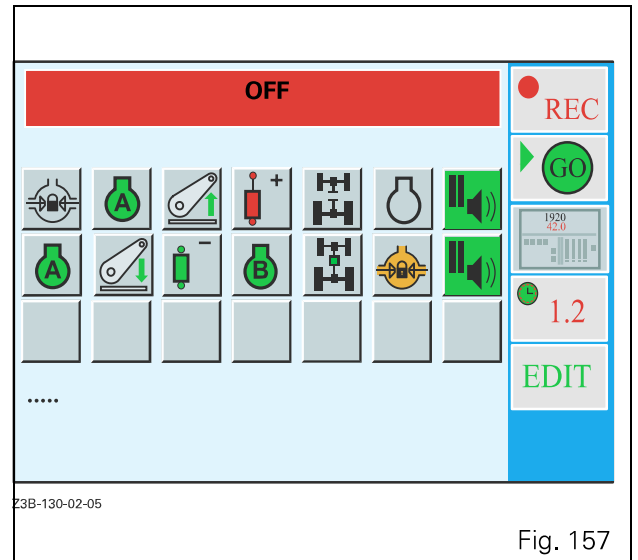


Fig. 157

- Select an action by rotating the encoder. The question mark is replaced by an action. (e.g.: 16 Fig. 156)

- **Inserting an action:**
- Press the key  $\llcorner_3$  when the window (Fig. 158) is open.

- press the encoder when the active function is highlighted by red text and a red rectangle around the icon (the window Fig. 191 is displayed).
- to exit an application, press the **ESC** key (2).

### 7.12.2 - FRONT DUAL CONTROL

**NOTE:** The explanations in the section shall be illustrated with the example of a front roller and a combined rear seeder.

When the window (Fig. 191) is open, press the key «1». The window (Fig. 192) is displayed.

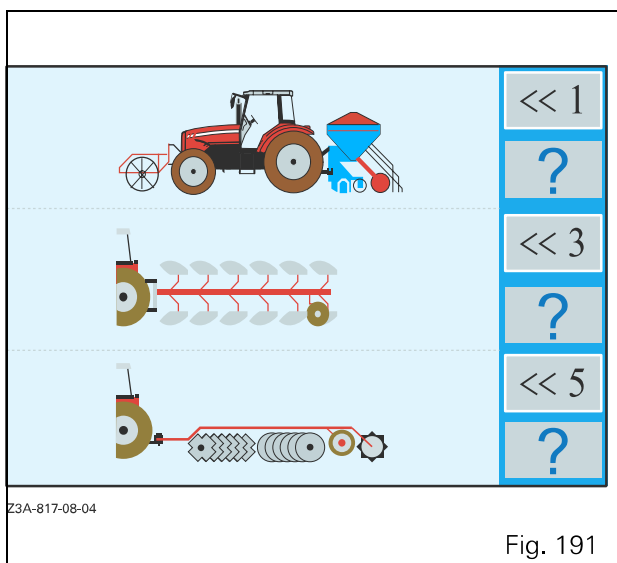


Fig. 191

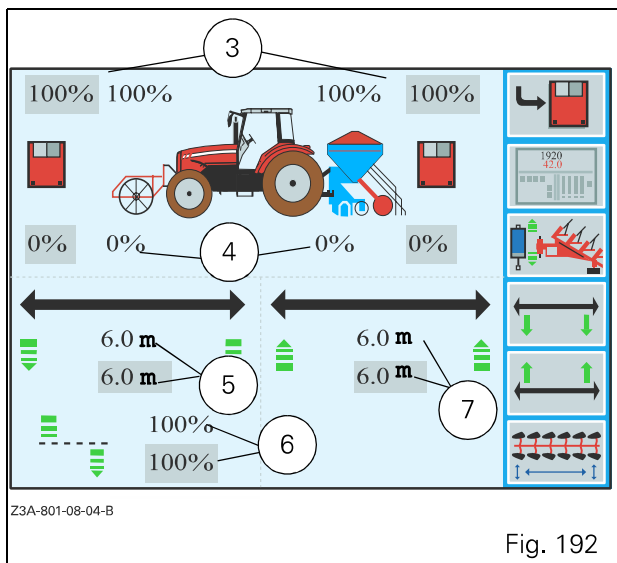


Fig. 192

#### Description:

- Right-hand part of the window:



Memorises high and low implement positions



Displays the FRONT DUAL menu in the work application



Opens the linkage calibration menu



Authorises furrow start setting



Authorises furrow end setting



Activates or deactivates the rear implement depth transfer function

- Left-hand part of the window:



In all greyed boxes, memorised values

**NOTE:** The values that are not in boxes correspond to instant values.

- (3) Linkage high position values
- (4) Linkage low position values
- (5) Furrow start length
- (6) Furrow start front linkage extra-lowering value
- (7) Furrow end length

#### 7.12.2.1 - Front DUAL CONTROL calibration

The FRONT DUAL CONTROL is operated by the Datatronic which receives information from a position sensor located on the front linkage. This must be connected to the rear of the tractor (8 Fig. 193).

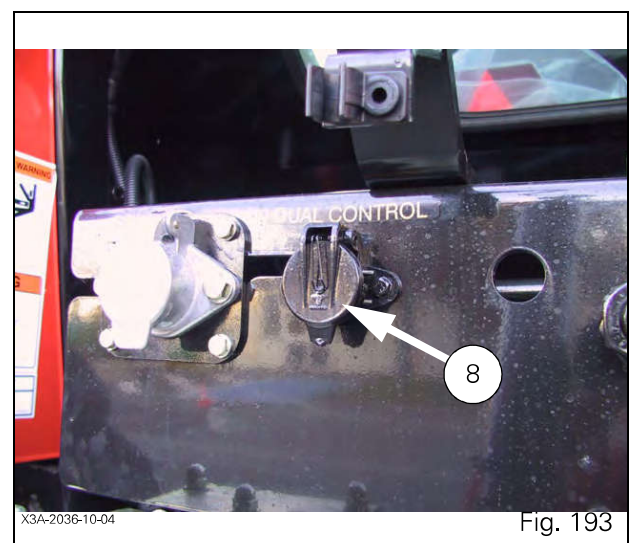
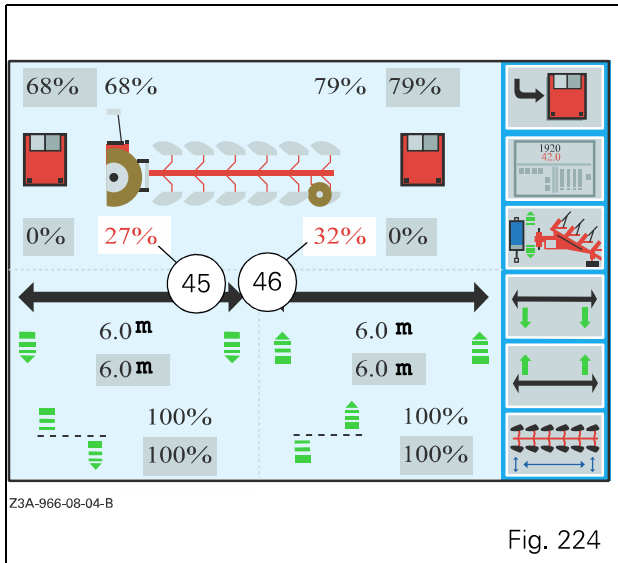


Fig. 193

#### 7.12.2.2 - Conditions required for calibration

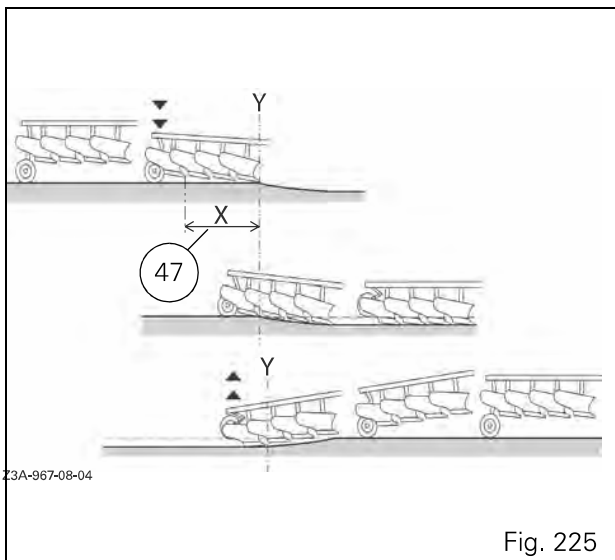
- Joystick control unlocked and plough depth wheel set approximately at mid-travel.
- rear linkage control unlocked and in neutral position (41 Fig. 194),
- engine speed at 1500 rpm,



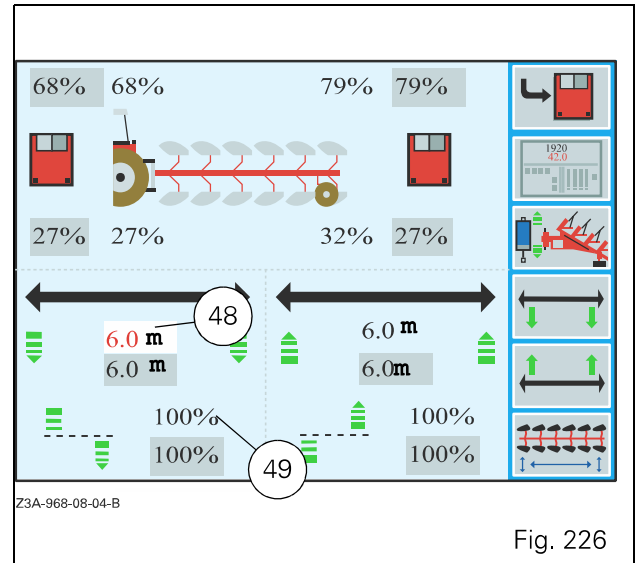
- Memorise the low positions by pressing the key «<sub>1</sub>. The low position values are displayed in the greyed boxes and are memorised.

### 7.12.6.3 - Setting furrow start length

To ensure that the last plough share enters the soil at the same place as the first share (ref. Y Fig. 225), the Datatronic 3 must know the length X between the first and last share (ref. 47 Fig. 225).



- Press the key «<sub>4</sub> when the window (Fig. 226) is open. The furrow start length is displayed in red (ref. 48 Fig. 226).



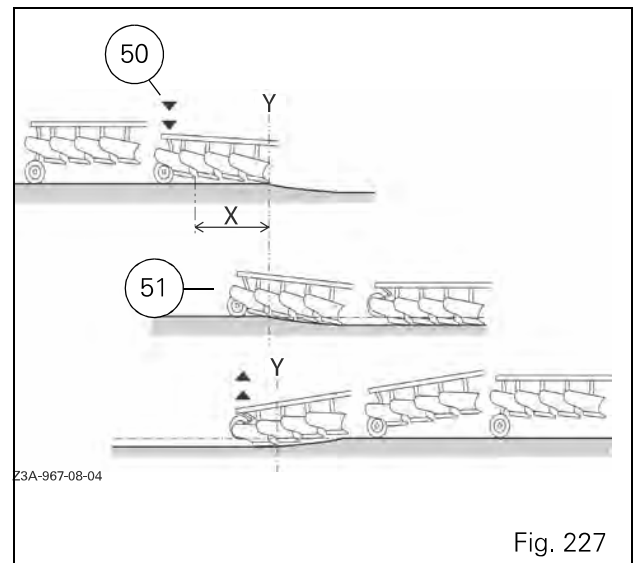
- Adjust the length X by rotating the encoder and validate by pressing the latter. The length is displayed in black inside the white and grey box, and the linkage furrow start height is displayed in red (ref. 49 Fig. 226).

**NOTE:** To return to the previous menu, press the **ESC** key.

### 7.12.6.4 - Setting furrow start depth wheel partial lowering

General

For the plough to enter the soil as rapidly as possible, it must be partially lowered (50 Fig. 227) as soon as the linkage control is actuated.



Next, as soon as distance (ref. X) has been covered, the plough depth wheel is lowered to its working position (ref. 51 Fig. 227).

For this manoeuvre to be performed automatically, the depth wheel partial lowering value must be defined.

## 7 . ACCESSORIES AND OPTIONS

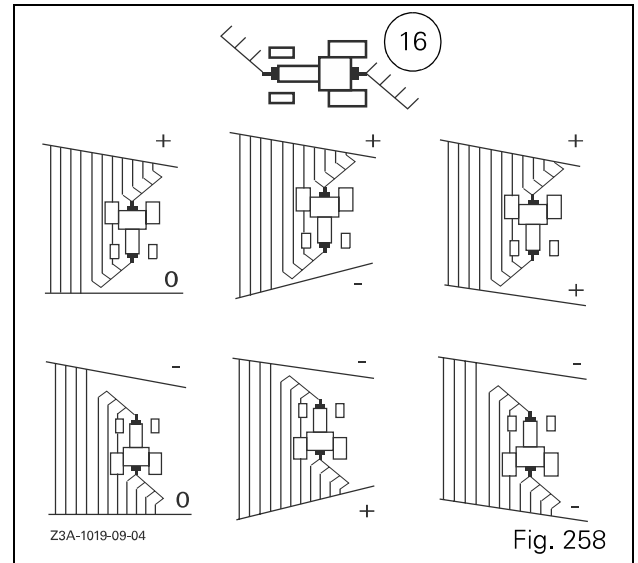
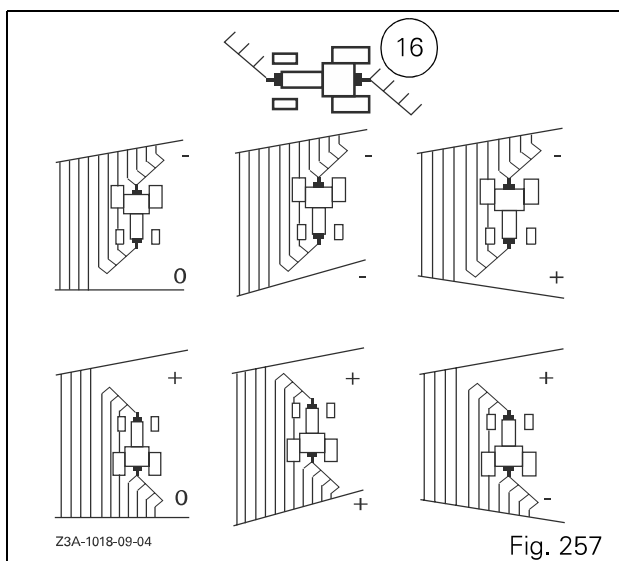
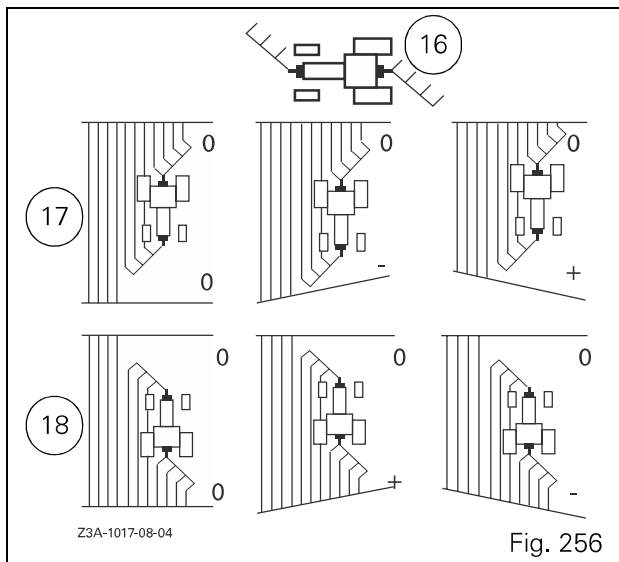
### 7.13.2.2 - Diagram identification

- Method for a figure (Fig. 256)

In each figure, various field shapes are represented. The tractor icon (ref. 16 Fig. 256, Fig. 257, Fig. 258) is in transport position at the top of each window.

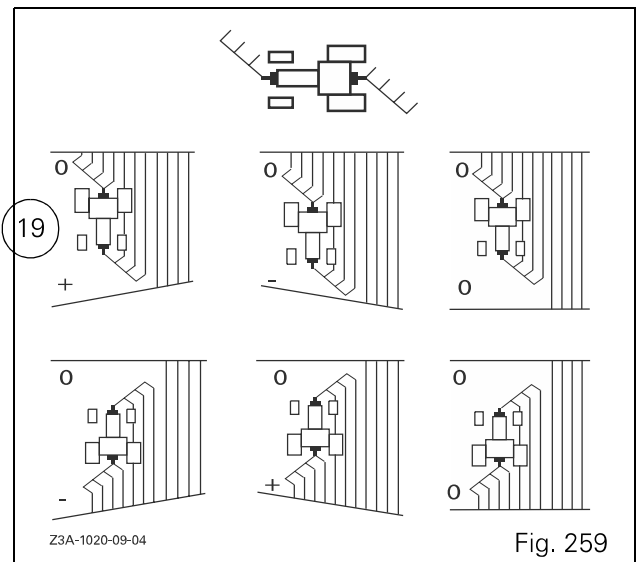
- Select the diagram best adapted to your field. The three top diagrams represent the outward run (17) and the three bottom diagrams represent the return run (18).
- Observe the point length sign (plus (+), minus (-) or zero (0)) of the diagram you are interested in.
- Set the value corresponding to your field in the POINTS menu (Fig. 255).

**IMPORTANT:** To adjust the point lengths, the three top diagrams must be considered (17). The bottom diagrams representing the return trip show that the plus (+), minus (-) or zero (0) values are reversed as soon as the half turn has been made.



**NOTE:** These three figures apply in cases where the ploughed earth is tilled to the right of the tractor on the outward run.

If the ploughed earth is to be tilled to the left of the tractor on the outward run (ref. 19 Fig. 259), adjust the points values until the tractor icon is at the base of the field. 20 Fig. 260). In this case, the transport position must be considered as shown on screen (Fig. 260) and operation will remain identical.



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