OPERATION AND MAINTENANCE Serie CLUSTER 06381045 Edition 04 (English)

MANUFACTURER



Tecnologia per passione.

Sede legale e stabilimento GOLDONI S.p.A.

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EN Inglese MANUFACTURER

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GENERAL INFORMATION

INTRODUCTION

The confidence you have shown in our company by choosing equipment carrying our trademark will be amply repaid by the excellent service it will give you over the years.

Correct use and normal routine maintenance will generously rewarded in performance, output and savings.

MODELS AND VERSIONS



Cluster 65 RS

Cluster 65 SN

Cluster 75 RS

Cluster 75 SN

Cluster 75 RS VARIANT

Cluster 75 RS REV

Cluster 75 RS REV VARIANT

Key to versions

RS = machine with steering wheels.

SN = machine pivoted at the center.

REV = machine with reversible cockpit.

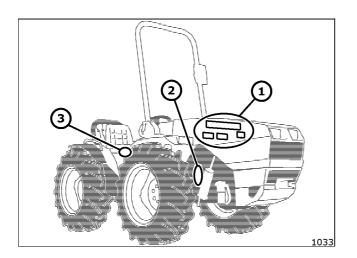
VARIANT = commercial specification.

EN Inglese 3 GENERAL INFORMATION

MACHINE IDENTIFICATION



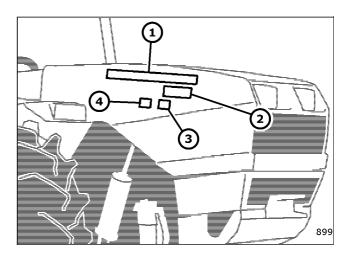
Identification criteria



The machine is identified in three different ways:

- 1 With decals.
- 2 Punch marks on chassis.
- 3 With a metal plate.

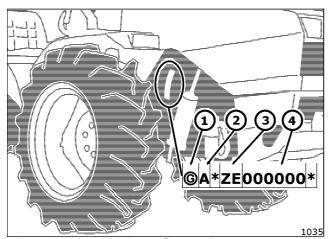
Decals



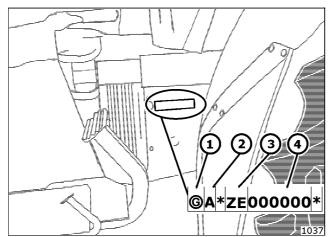
The decals affixed to the bonnet indicate:

- 1 Make.
- 2 Series.
- (3) Model.
- 4 Version.

Punch marks on chassis



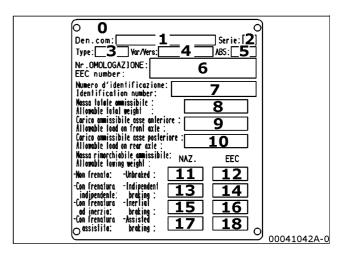
Indications valid for RS versions Indications valid for REV versions



Indications valid for SN versions

- 1 Manufacturer's code.
- 2 Production series.
- (3) Type of machine.
- (4) Identification number (serial number).

Metal plate



The metal plate gives the following information:

- 0 Manufacturer's name and address
- 1 Commercial denomination
- 2 Production series
- 3 Type of machine
- 4 Variant
- 5 ABS coefficient
- 6 Approval number
- 7 Identification number (serial number)
- 8 Total permissible weight (KG)
- 9 Permissible load on front axle (KG)
- 10 Permissible load on rear axle (KG)
- **11** Non-braked permissible towed weight (in Italy) (KG)
- **12** Non-braked permissible towed weight (European) (KG)
- **13** Permissible towed weight with independent braking (in Italy) (KG)
- **14** Permissible towed weight with independent braking (European) (KG)
- **15** Permissible towed weight with overrunning braking (in Italy) (KG)
- **16** Permissible towed weight with overrunning braking (European) (KG)
- **17** Permissible towed weight with power braking (in Italy) (KG)
- **18** Permissible towed weight with power braking (European) (KG)

IDENTIFICATION OF THE COMPONENTS

The machine consists of a series of main components which are each identified by a metal data plate and/or by punch marks.

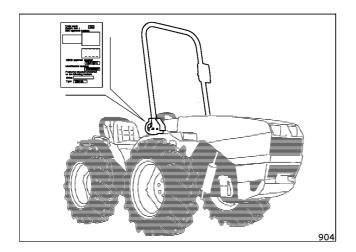
Engine

Metal data plate and punched code number.



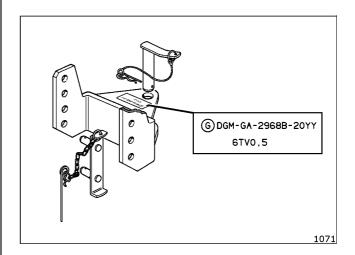
See engine's operation and maintenance manual.

Safety frame



Decal with the Type of safety frame.

Towing attachments (optional)



Code punched on device:

- Make
- Type of device

AFTER SALES

Warranty

Engine: conditions and terms established by the

manufacturer

Tractor: within the terms laid down by our

Certificate of Warranty.

Assistance

Contact the AUTHORIZED sales network



The Assistance Service provides specialized personnel able to work on our products. It is the only Service authorized to work on products covered by the warranty.

Use of Genuine Spare Parts and correct maintenance will preserve the qualities of the machine over time and will entitle you to the WARRANTY that covers the product throughout the established period.

Spares



To order spares: Contact our Spares Assistance centres with the following information: model, series and serial number of the machine, punched on the data plate.

HOW TO READ THE MANUAL



Certain sections of this manual containing information of particular importance in relation to safety or operation, are highlighted in the following way:



DANGER

Failure to comply with the instructions could lead to serious danger and serious personal injuries or harm to third parties.



WARNING

Failure to comply with the instructions could cause personal injuries or harm third parties.



IMPORTANT

The information is given with the intention of preventing damage to the machine or causing damage.

This manual is your operation and maintenance guide.

You are advised to strictly comply with the instructions herein and to consider the manual as an integral part of the product: it must be kept near the machine and consigned to all future users.

The illustrations, descriptions and specifications in this manual are not binding.

Our Company reserves the right to make any modifications dictated by technical commercial requirements at any moment considered necessary.

Consult the specific manuals for safe operation and maintenance instructions about those parts of the machine manufactured by third parties.



All indications as to the "front", "rear", "right" and "left" parts of the machine refer to the operator seated on the machine.

A series of symbols have been make to make the texts easier to understand. Their meanings are described below:



Warning



Environment



Recycling



Legislation



i Information



Instructions



Check



Clean with compressed



Adjustment



ubrication.



→ Greasing



Fluid changes

Standard symbols

Standard symbols have been used to ensure the machine is used in the best way.

	Hydraulic circuit filter		Driving beam	\Diamond	Oil
	Dipped beam	\Diamond	Transmission	Q;	Field light
	Differential lock	P÷	Parking light	\\$	Power take-off
<u> </u>	Side lights.		Power take-off rotation		Hazard lights
+	Clutch	崇	Indicator light	(P)	Parking brake
4 4	Turn indicator	ÞΞ	Four-wheel drive	\$	Trailer turn indicator
5	Guard lowered	þ	Horn	← ⊏∂	Forward direction
- +	Battery charger	•	Low speeds		Safety belts
\boxtimes	Work hours	*	Normal speeds		Idle
Þ ∏ Ĵ	Fuel level	P	Fast speeds	\bigcirc	Clockwise rotation
圓	Fuel filter	Z	Idle		Counter-clockwise rotation
	Engine preheating	←∘→	Direction reverser	88	Air ventilation
	Engine air filter	\Diamond	Rotational accelerator	$ \widetilde{\approx} $	Air heating
	Engine oil pressure		Linear accelerator	**	Air conditioning
	Engine oil filter		Power lift	P	Windscreen wiper
	Engine coolant temperature		Power lift - Up	$\langle \! \hat{\nabla} \! \rangle$	Windscreen wiper and window washer
🔪	Air valve	7	Power lift - Down	\Box	Rear window wiper
	Hydraulic circuit		Power lift – Floating mode	$\tilde{\mathbb{Q}}$	Rear window wiper and window washer

SAFETY

SAFETY REGULATIONS



DANGER

There is no substitute for prudence to make your work safer and to prevent accidents.

The following recommendations are important for all users of our machines:



IMPORTANT

Failure to follow the regulations relieves our firm from all liability.



DANGER

Do not go downhill with the clutch disengaged or the gear shift in neutral. Use the engine to brake the machine. If you find you are using the brake a lot when going downhill, shift to a lower gear.



DANGER

Check to make sure that all revolving parts on the machines (PTO, cardan couplings, pulleys etc.) are fully guarded.



DANGER

Do not wear clothing which could be caught up in any part of the machine or implement.



DANGER

∆Do not leave the engine running in an closed room: the exhaust fumes are poisonous.



DANGER

Do not leave the malchine with engine running near flammable substances.



DANGER

After any maintenance work, grease and remove the grease from the engine to prevent the risk of a fire.



DANGER

Keep hands and other parts of the body away from holes or leaks in the hydraulic system: the hydrualic fluid that spurts from the leak is under pressure and can cause serious injuries.



DANGER

Do not carry persons or equipment on the tractor beyond the number allowed by the Certificate of Approval or provided as standard equipment.



DANGER

Do not get on or off the machine while it is moving.



WARNING

Do not tamper with the machine or the implements in any way.



WARNING

Before starting the engine make sure that the gear shift and the PTO are in neutral.



WARNING

Engage the clutch gradually to prevent the machine from pitching up at the front.



WARNING

Do not service, repair or make any kind of adjustment to the tractor or to the implements hitched to it without having first turned off the engine, removed the ignition key and lowered the implement to the ground.



WARNING

Always park the tractor so that its stability is guaranteed by applying the parking brake and engaging a gear (1st gear uphill abd reverse downhill)and applying the parking brake. Use a chock for greater safety.



WARNING

Before driving the machine, check to be sure that there are no bystanders or animals within its range of action.



WARNING

Do not leave the machine unattended with the engine running and/or the key in the ignition.



WARNING

Whenever the PTO is in use, the drive shaft must be covered by the special guard.



WARNING

The operator must check to make sure that all parts of the tractor, especially the safety devices, are in a good working condition and that they always comform to the purpose for which they were designed. They should be kept in a perfectly efficient condition. If you note any defects or faults, fix or repair them in good time. If necessary contact your nearest Assistance Centre.



IMPORTANT

Follow the traffic code when driving on the roads.



IMPORTANT

Check the nuts and bolts of the wheels and safety frame from time to time, always with the engine shut off.



IMPORTANT

Do not use the differential lock near or in bends and avoid using it in fast gears or with engine running at a high rate.



IMPORTANT

Avoid tight steering angles when towed implements are mounted and the drive shaft is under strain since the coupling could be damaged.



IMPORTANT

Do not use the power lift's third-point as a towing hitch.



IMPORTANT

Adjust the hitch to its lowest possible positions to prevent the machine from pitching up at the front.



IMPORTANT

Keep the chains taut and the power lift raised when driving the machine with implements coupled to the three-point linkage.



IMPORTANT

Only use the front tow hook for towing the machine in an emergency.

SAFETY DEVICES

Safety frame



WARNING

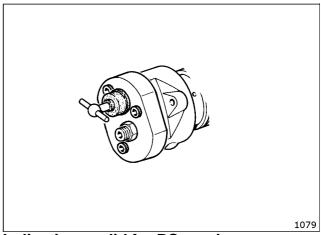
When in the horizontal position, the safety frame will provide no protection if the tractor tips up. When working in these conditions, it is of the utmost importance for the operator to pay the greatest attention when manoeuvring the machine.



WARNING

Raise the safety frame again as soon as the machine is able to operate in normal conditions.

Power lift lock

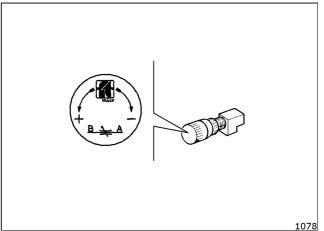


Indications valid for RS versions Indications valid for REV versions



IMPORTANT

Fully tighten the adjuster to lock the implement in its raised position. This acts as a safety device when implements are transported on the road.



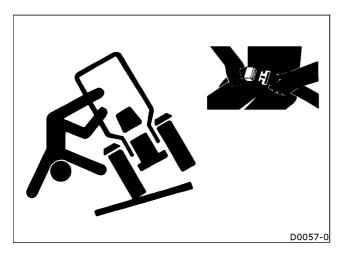
Indications valid for SN versions
Indications valid for REV versions



IMPORTANT

Fully screw-in the adjuster to lock the implement in both the raised and lowered position. This provides a safety function when implements are transported on the roads.

Safety belts (optional)





DANGER

Wear the safety belts when you use the machine with the safety frame (roll-bar or ROPS) to reduce the risk of accidents if the tractor tips up.

DANGER

Do not wear the seat belt if you use the machine with the roll-bar in the horizontal position.

SAFETY DECALS



DANGER

Safety decals have been affixed to various parts of the machine. They indicate potential dangers.



IMPORTANT

The decals must be kept clean and legible. If damaged, they must be replaced.



IMPORTANT

Some of the machine components can be equipped with the manufacturer's specific safety decals.

NOISE

Table of maximum noise levels

Model	Variant/version	Type-approval N°	Maximum noise level perceived at driver's seat dB (A) Chapter II
Cluster 65 RS	ZS 6100	e1*2003/37*0314*00	86
Cluster 65 SN	ZA 6100	e1*2003/37*0311*00	86
Cluster 75 RS	ZE 8	e13*74/150*2000/25*0059*03	85
Cluster 75 SN	ZE 9	e13*74/150*2000/25*0060*03	85
Cluster 75 RS VARIANT	ZE 8	e13*74/150*2000/25*0059*03	85
Cluster 75 RS REV	ZER 8	e13*74/150*2000/25*0059*03	85
Cluster 75 RS REV VARIANT	ZER 8	e13*74/150*2000/25*0059*03	85

Noise level information



The values of the noise produced by the tractors described in the **Operation and Maintenance Manual**, are given in compliance with Law Decree N° 277 of 15/08/1991.



Since it is impossible for the manufacturer to foresee the normal working conditions in which the agricultural tractor will be operated by the user, the noise levels have been defined in accordance with the methods and conditions described in annex 8 of Presidential Decree N° 212 of 10/02/1981, which conforms to Directive 77/311/EEC concerning noise levels perceived by the driver of wheeled agricultural tractors.

Recommendations for the user





Remember that the agricultural tractor may be employed in different ways, and may be connected to an infinite number of implements. In order to ensure that drivers are protected against risks deriving from exposure to noise. entire the tractorimplement group be must considered.





In view of the above-mentioned noise levels and the consequent health risk, the user must adopt the appropriate precautionary measures, as described in Article IV of Law Decree N° 277 of 15/08/1991.

ECOLOGY



It is of fundamental importance to safeguard the environment. Incorrect waste disposal can alter the environment and the ecological system.



Do not discard fluids like fuels, lubricants, coolants or other, in the environment.



Do not use food or dink containers, which could lead to mistakes, to drain off fluids like fuels, lubricants, coolants or other.



Do not dispose of parts of the cooling system (such as radiators, fluids, tanks, etc.) in the environment.



Contact an authorized organization or ask your dealer for advice about how to recycle or dispose of waste products in the correct way.

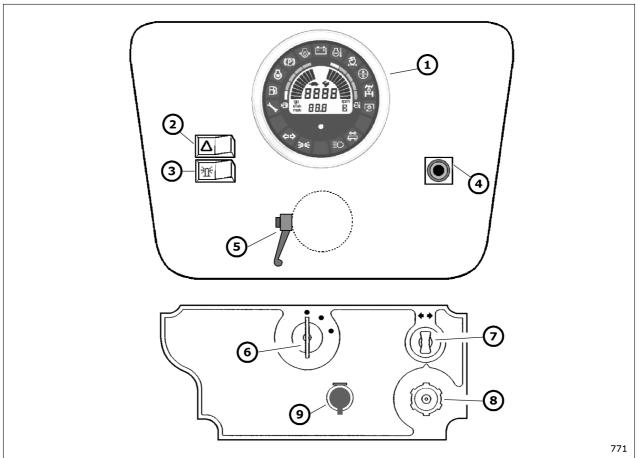


ALWAYS place a vessel under the drain hole so as to collect the fluid when draining a tank or reservoir.

OPERATING INSTRUCTIONS

CONTROLS AND INSTRUMENTS

Dashboard

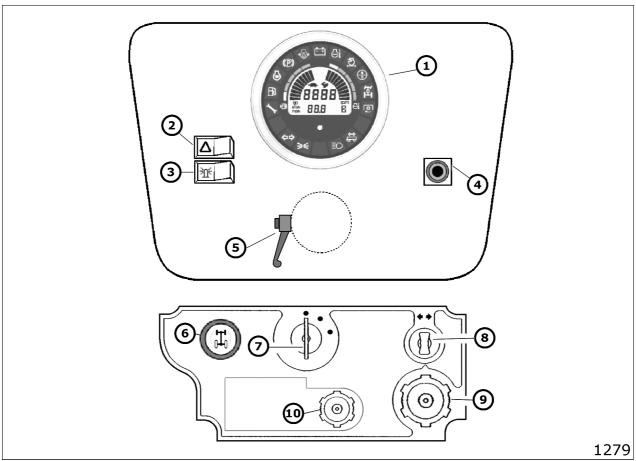


Indications valid for RS versions Indications valid for SN versions

- Multifunction digital instrument
- **Emergency switch**
- Revolving beacon switch
- Button to change display / reset.
- Steering wheel height adjuster lever
- Ignition switch
- Turn indicator
- 123456780 Light switch and horn
- 1-pin socket

CONTROLS AND INSTRUMENTS

Dashboard



Indications valid for REV versions

- Multifunction digital instrument
- **Emergency switch**
- Revolving beacon switch
- 1234567899 Button to change display / reset.
- Steering wheel height adjuster lever
- Front/rear differential lock button
- Ignition switch
- Turn indicator
- Light switch and horn
- PTO electrohydraulic clutch control knob

Multifunction digital instrument



Multifunction instrument indicators

- + Battery charge indicator - red.

Low engine oil pressure indicator - red.

→

Clogged engine air filter indicator - red.

Clogged oil filter indicator - red.

(P) Hand brake engaged indicator - red.

Engine coolant temperature indicator -

PTO engaged indicator - yellow.

Fuel reserve indicator - yellow.

Engine warm-up indicator - yellow.

4WD engaged indicator - yellow.

Servicing indicator - yellow.

← → Tractor direction indicators - green.

Trailer direction indicators - green.

=D 0= Side light indicators - green.

Driving beam indicator - blue.

Digital indicators of the LCD display



Initial check-up

All the display segments must come on for 1 second when the panel is powered

Fuel level gauge



The green section shows how much fuel there is in the tank. The yellow fuel reserve light comes on when the indicators light up in the red section.

Engine coolant temperature indicator



Excessively hot engine coolant is indicated by:

- Graduated scale with red full-scale.
- Red engine coolant temperature indicator.
- Buzzer.



Immediately stop the engine if these indicators come on.

Carry out the following operations:

• Check the level of the cooling fluid.



WARNING

Never open the radiator's expansion tank whilst the engine is hot since the cooling fluid could cause burns as it is under pressure and very hot.

- Clean the radiator core.
- Check the tension of the cooling fan belt.

Total hour counter



The hour counter is situated in the lower part of the display. The machine's total number of work hours are displayed for 7 seconds after the hours still remaining before maintenance is required have been displayed.

The following symbols will light up:

- The hourglass symbol.
- The number of hours.

Engine RPM indicator



The engine rate is shown by the 4 central figures on the display.

The following symbols will light up:

- The initials RPM (revolutions per minute).
 - The rate.

PTO speed indicator



Press the external button .

The speed in RPM will appear in the central part of the display.

The following symbols will light up:

- The initials RPM (revolutions per minute).
- The PTO symbol.
- The hare symbol (optional for the 750 RPM PTO).
- The tortoise symbol (for the 540 RPM PTO).
- The rate.

Servicing indicator



To remind the operator that maintenance is required, the dashboard instrument displays:

- Servicing hour counter.
- Servicing indicator yellow.

The hours before the next servicing operations are required are displayed for 3 seconds when the engine is started.

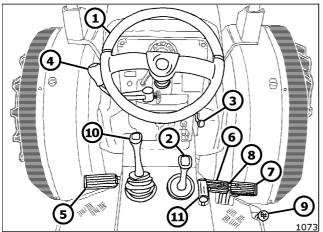
The yellow maintenance indicator will begin to flash when the maintenance date approaches.

If you go beyond the time required for maintenance, the number of hours is shown with the minus sign (-). The yellow maintenance indicator remains permanently on when the number of hours becomes negative.

Contact an authorized workshop when maintenance is required.

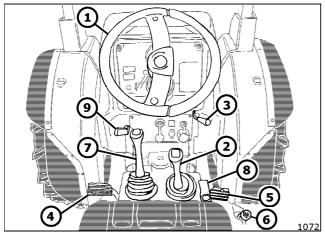
All adjustments and settings must be carried out by an authorized workshop.

Controls in front part



Indications valid for RS versions

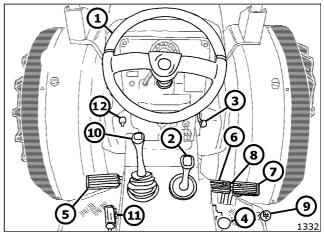
- 1 Steering wheel.
- (2) Gearshift lever.
- (3) Hand throttle.
- Reverse shuttle lever: forward, reverse selection.
- (5) Clutch pedal.
- 6 LH brake pedal.
- 7 RH brake pedal.
- 8 Brake pedal latch.
- Accelerator pedal.
- (10) Final drive lever.
- 11 Parking brake lever



Indications valid for SN versions

- 1 Steering wheel.
- (2) Gearshift lever.
- (3) Hand throttle.

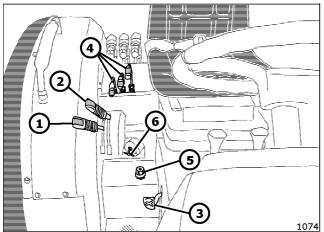
- 4 Clutch pedal.
- (5) Brake pedal.
- 6 Accelerator pedal.
- 7 Final drive lever.
- (8) Parking brake lever
- (9) Front differential locking lever.



Indications valid for REV versions

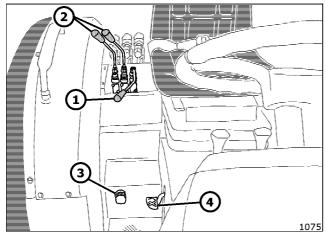
- 1 Steering wheel.
- (2) Gearshift lever.
- (3) Hand throttle.
- Reverse shuttle lever: forward, reverse selection.
- (5) Clutch pedal.
- 6 LH brake pedal.
- 7 RH brake pedal.
- 8 Brake pedal latch.
- Accelerator pedal.
- (10) Final drive lever.
- 11 Parking brake lever
- 12) 1-pin socket

Controls on rh side



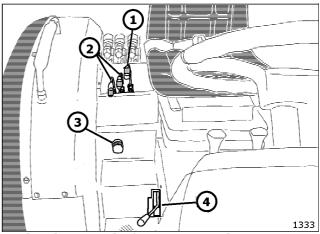
Indications valid for RS versions

- (1) Rear power lift position control lever.
- (2) Lever for the rear power lift's draft control.
- 3 Diff lock pedal.
- Rear supplementary spool valve lever.
- (5) PTO electrohydraulic clutch control knob
- (6) Power lift lock adjuster



Indications valid for SN versions

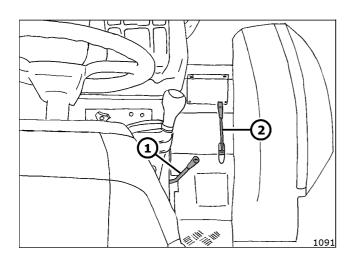
- (1) Rear power lift position control lever.
- 2 Rear supplementary spool valve lever.
- (3) Power lift lock adjuster
- 4 Diff lock pedal.



Indications valid for REV versions

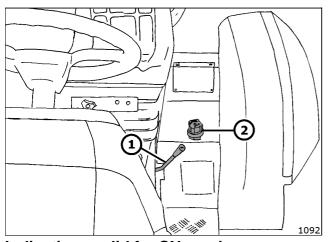
- (1) Rear power lift position control lever.
- 2 Rear supplementary spool valve lever.
- (3) Power lift lock adjuster
- Lever for selecting the independent or synchronized rear PTO.

Controls on Ih side



Indications valid for RS versions

- 1 Lever for selecting the independent or synchronized rear PTO.
- 2 Front differential locking lever.



Indications valid for SN versions

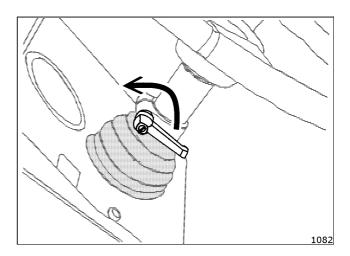
- 1 Lever for selecting the independent or synchronized rear PTO.
- 2 PTO electrohydraulic clutch control knob

Seat controls



- 1 Distance of seat from controls.
- Seat height adjustment.
- (3) Adjustment of springs.

Steering wheel



The steering wheel can be adjusted in height. Using the lever:

- Release the safety retainer.
- · Adjust the height.
- · Lock the safety retainer.

Reversibility



WARNING

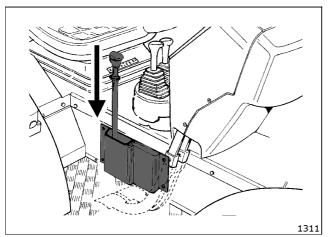
Only reverse the cockpit when the machine is at a standstill, with the engine off and the parking brake engaged.

The main feature of the machine is the reversible cockpit.

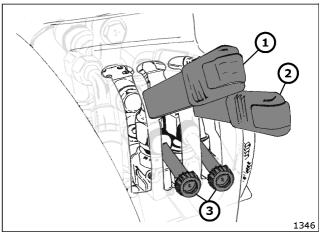
Just a few operations allow the machine to function with the driver's seat, pedal board and relative controls in the opposite direction to that of normal use. This enables the user to get the most out of the hydraulic power lift's performance, with ample visibility when using implements.

Comply with the following instructions to reverse the cockpit:

- · Stop the machine.
- Switch off the engine.
- · Apply the parking brake.
- Move the gearshift lever to the idle position.
- Move the final drive lever to the neutral position.

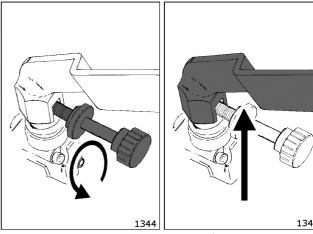


- Move the reverse shuttle lever to the neutral position.
- Completely lower the reverse shuttle lever.

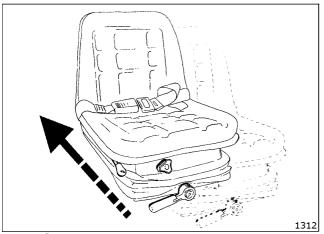


- (1) Rear supplementary spool valve lever.
- (2) Rear power lift position control lever.
- (3) Knurled knob of the threaded pin.

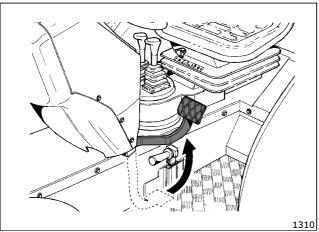
Disassemble the rear power lift's position control lever and the lever that controls the auxiliary control valves:



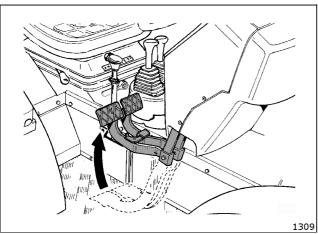
- Turn the knurled knobs of the threaded pins in the anti-clockwise direction until the lever releases (do not unscrew them completely).
- Remove the lever from its seat in the valve.



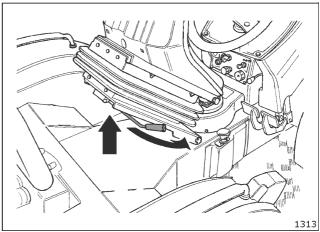
 Slide the seat completely back by means of the distance adjuster lever.



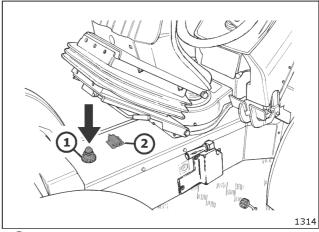
Raise the clutch pedal.



Raise the brake pedals.



 Release the seat and lift it with the coupling lever.



- 1 Seat coupling pin
- 2 Hydraulic flow reversing switch
 - Turn the control odule in the clockwise direction until the cockpit has beren completely reversed.
 - Lower the seat until it locks on the coupling pin and on the hydraulic flow reversing switch.
 - Move the pedal board and reverse shuttle lever to their original positions.
 - Assemble the rear power lift's position control lever and the lever that controls the rear auxiliary control valve by tightening the knurled knob of the threaded pin until the levers lock.

The flows in the hydraulic circuits of the power steering and braking systems are automatically reversed by an electrohydraulic valve, thus ensuring that the steering action matches the way the steering wheel is turned and that the braking action matches the action on the relative pedal.

To switch the cockpit back to its original position, repeat the operations described above but turn the control module in the anti-clockwise direction.

STARTING AND STOPPING THE ENGINE

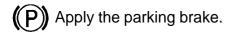
How to start the engine



See engine's operation and maintenance manual.

Before starting the engine

Indications for machines without electrohydraulically controlled double clutch:



Move the **final drive** lever to the neutral position.

Move the lever used to select the independent or synchronized rear PTO to the neutral position.

Move the lever used to select the PTO speed to the neutral position.

Depress the clutch pedal.

The safety device "Push And Start "will prevent the engine from starting unless the clutch pedal is fully depressed.

Indications for machines with electrohydraulically controlled double clutch:

(P) Apply the parking brake.

Move the **final drive** lever to the neutral position.

Move the rear PTO lever to the independent position.

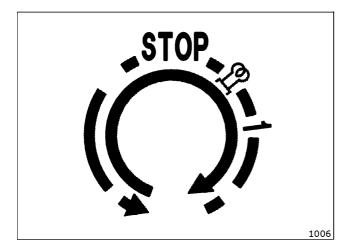
Move the lever used to select the PTO speed to the neutral position.



Depress the clutch pedal.

The safety device "Push And Start "will prevent the engine from starting unless the clutch pedal is fully depressed.

Ignition switch



 Insert the key and turn it as described below:

STOP No circuit powered.



Glow plug preheating. Keep the key in this position for 8-10 seconds.

For machines equipped with glow plug preheater indicator: wait until the indicator light goes out.

Engine starts.
Depress and turn the key.

Each starting attempt should last for just a few seconds. Make a second attempt after a minute so as not to run down the battery.

After the engine has started:

- Release the key. It will automatically return to the operating position
- · Release the clutch pedal
- · Check the warning lights and instruments

As soon as the engine starts, the electronic device that automatically controls the fuel enrichment accelerates the engine until it reaches the best rate for ignition. Do not press the accelerator pedal during this phase.

How to stop the engine

M

WARNING

The steering action of the power steering system will be reduced if the engine accidentally stops. Depress the main brake to allow the machine to come to a full stop.

Λ

WARNING

Do not leave the tractor unattended with the ignition key inserted.

- Allow the engine to idle.
- Depress the clutch pedal.
- Move the **final drive** lever to the neutral position.
- Move the lever used to select the independent or synchronized rear PTO to the neutral position.
- Move the lever used to select the PTO speed to the neutral position.
- (P) Apply the parking brake.
 - Turn the ignition key to position STOP.
 - Remove the key and put it away in a safe place.

HOW TO START AND STOP THE MACHINE

Safety frame



DANGER

The machine is equipped with a folding safety frame. Always keep the safety frame assembled in the correct vertical position during work.



DANGER

Never ever modify the structural components of the safety frame by welding on additional parts, making holes, grinding, etc. Failure to comply with these instructions could impair the rigidity of the frame and reduce the level of protection provided by the original equipment.



WARNING

If the tractor tips up or the safety frame or cab are damaged (e.g. owing to a collision), all the damaged structural components must be replaced in order to guarantee the original degree of safety.



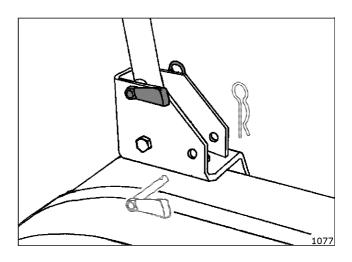
WARNING

When in the horizontal position, the safety frame will provide no protection if the tractor tips up. When working in these conditions, it is of the utmost importance for the operator to pay the greatest attention when manoeuvring the machine.



WARNING

Raise the safety frame again as soon as the machine is able to operate in normal conditions.



To lower the safety frame, on both sides:

- · Remove the safety pin.
- · Remove the plug.
- · Lower the safety frame
- Fit the plug into the second hole.
- Re-position the safety pin.

How to start the machine



DANGER

The machine could respond in a dangerous way if the clutch pedal is suddenly released.



WARNING

Make sure that the brakes are efficient before moving off.



IMPORTANT

Before starting the machine, make sure you become familiar with its main controls: brakes, transmission, PTO, diff lock and how to stop the engine.



Depress the clutch pedal.

- Select the transmission ratio (consult the Gearbox chapter).
- (P) Disengage the parking brake.



· Gradually accelerate the engine.

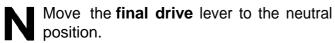
How to stop the machine

• Allow the engine to idle.



Depress the clutch pedal.

Stop the machine.



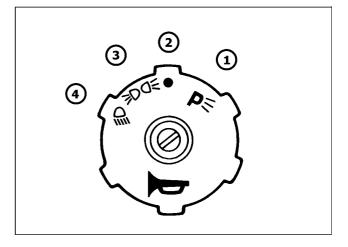
Move the gearshift lever to the idle position.

Remember to disengage the PTO if used.



Apply the parking brake.

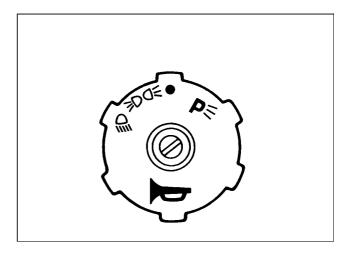
Light switch



- 1 Parking lights. P

 €
- (2) Lights off OFF
- 3 Side lights. ⇒ •

Horn



Press the control.

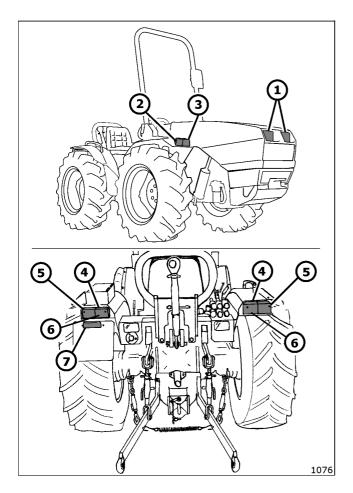
Lights



If the tractor must be annual public highways, the headlights must be be annual public highway. Code If the tractor must be driven on the comply with the Highway Code regulations in force in the country of use.



Use of driving beams is governed by the Highway Code in force in the country of use.



- (1) Headlight in dipped/driving positions.
- Front turn indicator.
- 3 Front side light.
- (4) Rear side light.
- Rear turn indicator.
- 6 Rear brake light.
- (7) License plate light.

TRANSMISSION

Main clutch



WARNING

NEVER attempt to drive up or down slopes with the clutch disengaged.



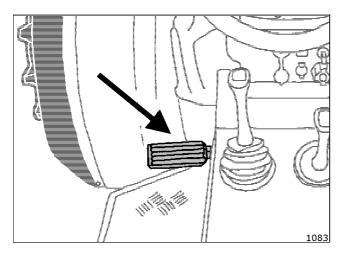
IMPORTANT

Remove your foot from the clutch pedal when not required. Do not ride the clutch.



IMPORTANT

Lengthy clutch disengagements could wear out the thrust bearing.



Transmits drive from the engine to the transmission.

Pedal up = clutch engaged (drive is transmitted). Pedal down = clutch disengaged (drive not transmitted).

Gearbox

The machine's transmission comprises a gearbox, final drive and synchronized reverse shuttle, each controlled by its own lever.

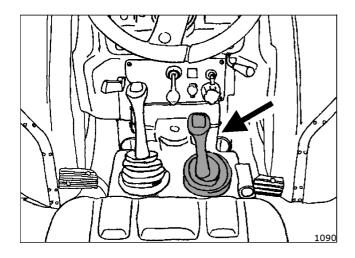
The speed at which you drive the machine must be chosen to suit:

- The work required.
- The implement used.
- The type of ground.

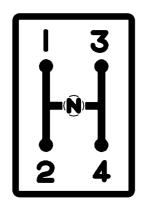


Consult the TECHNICAL SPECIFICATIONS

Gearshift lever







The lever can be moved in four positions (plus neutral):

1 First speed gear.

2 Second speed gear.

Neutral.

3 Third speed gear.

4 Fourth speed gear.

The speed gear selections are synchronized. To shift gear:

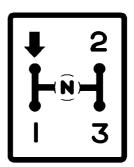
• Depress the clutch pedal.

Select the required range.

Gradually release the clutch pedal.

Use the **REVERSE SHUTTLE** command to select the **reverse**

EEI Indications valid for SN versions



The lever can be moved in four positions (plus neutral):

Reverse speeds (REV)

1 First speed gear.

Neutral.

2 Second speed gear.

3 Third speed gear.

The speed gear selections are synchronized. To shift gear:

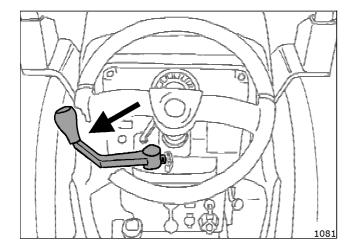
• Depress the clutch pedal.

Select the required range.

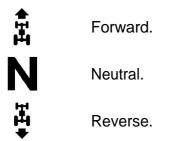
Gradually release the clutch pedal.

Reverse shuttle lever

Indications valid for RS versions



The lever has two positions (plus neutral):

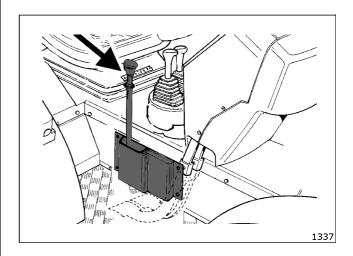


The speed gear selections are synchronized. Even though selection is synchronized, proceed as described below to select the forward or reverse speeds:

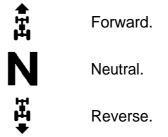
- Stop the machine.
- Depress the clutch pedal.
- Select the forward or reverse speed.

Gradually release the clutch pedal.

Indications valid for REV versions



The lever has two positions (plus neutral):

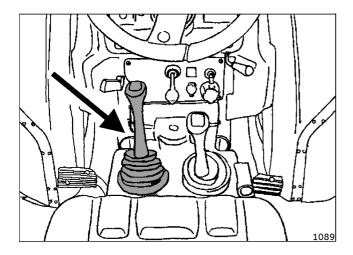


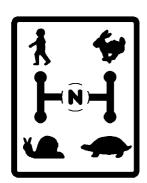
The speed gear selections are synchronized. Even though selection is synchronized, proceed as described below to select the forward or reverse speeds:

- Stop the machine.
- Depress the clutch pedal.
- Select the forward or reverse speed.

Gradually release the clutch pedal.

Final drive lever





The lever can be moved in four positions (plus neutral):



Standard speeds (Man)



Slow (Snail)





High speeds (Hare)



Low speeds (Tortoise)

Selection is not synchronized.

To shift gear:

- Stop the machine.
- Depress the clutch pedal.
- Select the required range.

Gradually release the clutch pedal.

Front differential lock

 \triangle

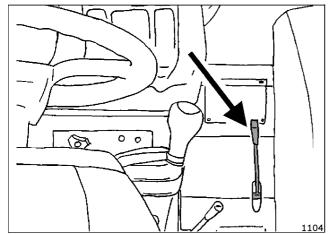
DANGER

When the differential lock is engaged, the tractor cannot be steered.

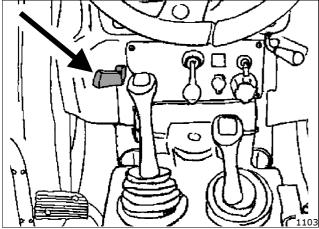


IMPORTANT

Do not use the differential lock near or in bends and avoid using it in fast gears or with engine running at a high rate.



Indications valid for RS versions



Indications valid for SN versions

The tractor is equipped with a front differential lock.

Use recommended for ploughing work or if one of the two driving wheels possesses insufficient grip owing to muddy, rugged or slippery ground.

The front diff lock is mechanically controlled by means of the lever. It is unlocked by releasing the lever.

To get the most out of the device, engage the differential lock before the wheels begin to slip. Do not engage the lock while one wheel is already slipping.

If the diff lock fails to release, reduce the engine rate, stop the machine and release it by moving the steering wheel.

Rear diff lock



DANGER

When the differential lock is engaged, the tractor cannot be steered.



IMPORTANT

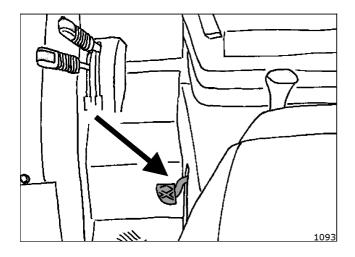
Do not use the differential lock near or in bends and avoid using it in fast gears or with engine running at a high rate.



Indications valid for RS versions



丹Indications valid for SN versions



The tractor is equipped with a rear diff lock. Use recommended for ploughing work or if one of the two driving wheels possesses insufficient grip owing to muddy, rugged or slippery ground.

The diff lock is controlled mechanically with the pedal. It is disengaged by releasing the pedal.

To get the most out of the device, engage the differential lock before the wheels begin to slip. Do not engage the lock while one wheel is already slipping.

If the diff lock fails to release, reduce the engine rate, stop the machine and release it by moving the steering wheel.

Front and rear differential lock



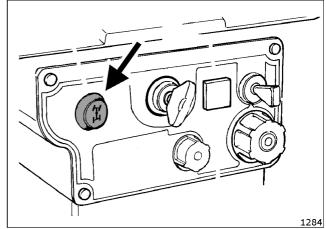
DANGER

When the differential lock is engaged, the tractor cannot be steered.



IMPORTANT

Do not use the differential lock near or in bends and avoid using it in fast gears or with engine running at a high rate.



Indications valid for REV versions

The tractor is equipped with an electrohydraulic diff lock that acts on both axles.

Use recommended for ploughing work or if one of the two driving wheels possesses insufficient grip owing to muddy, rugged or slippery ground.

The diff lock is operated by pressing button. The diff lock disengages automatically when the button is released.

To get the most out of the device, engage the differential lock before the wheels begin to slip. Do not engage the lock while one wheel is already slipping.

If the diff lock fails to release, reduce the engine rate, stop the machine and release it by moving the steering wheel.

POWER TAKE-OFF

Rear power take-off (PTO)



WARNING

when the PTO is not used, move the mode selector lever to the Neutral or Independent position (depending on the model or version). This prevents the shaft of the PTO and other spinning components from accidentally turning.



WARNING

Do not remove or damage the protective plate



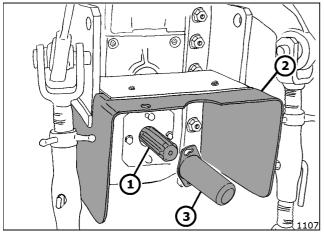
WARNING

Cover the PTO shaft with the guard when not in use.



IMPORTANT

If implements that develop a high degree of inertia are connected to the (such PTO lawn mowers. as brushwood choppers, etc.), it is advisable to use a cardan-shaft transmission with "free wheel" device. This device prevents the implement from transmitting drive to the machine and allows it to stop as soon as the clutch is depressed. It also prevents hydraulic clutch from subjected to early wear.



- 1) Power take-off.
- 2 Metal plate protection.

3 PTO shaft guard.

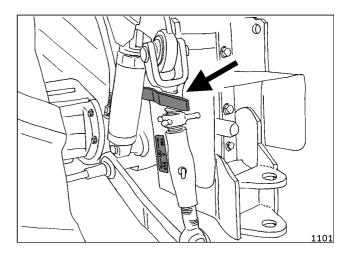
The tractor is equipped with a rear PTO that can operate in two ways:

- Independent.
- · Synchronised.

Both can have two speeds:

- Slow.
- Fast.

Turning direction: clockwise (in synchronised mode, turning direction is clockwise with forward drive).



The lever that controls the PTO's gearbox is installed at the rear of the machine, near the lh cylinder that operates the power lift.

Independent power take-off



WARNING

To prevent injuries:

the safety device will prevent the engine from starting when the PTO mode selector lever is in the Synchronized position.



IMPORTANT

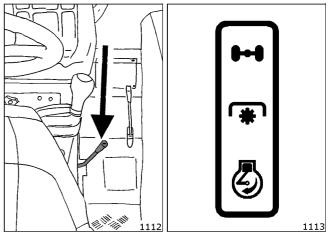
the safety device will prevent the engine from starting when the knob that operates the PTO's electrohydraulic control is in the Engaged position.



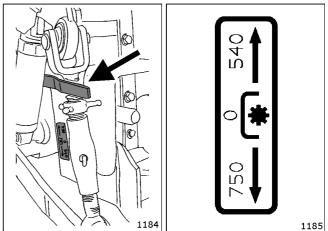
It does not depend on the ground speed of the machine and can be operated when this is either at a standstill or on the move.

Indications valid for RS versions

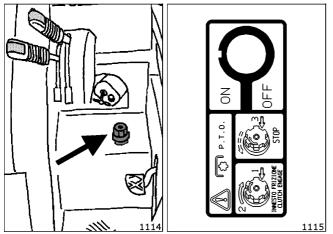
All the machines are equipped with a electrohydraulically controlled double clutch.



• The PTO mode selector lever must be in the **Independente** position.



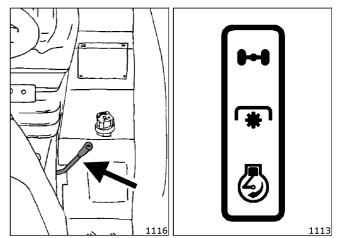
 Use the gearshift lever of the PTO to select the best rate.



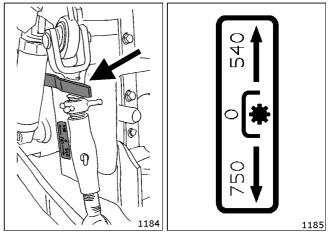
• Engage the PTO with the knob that operates the electrohydraulic control.



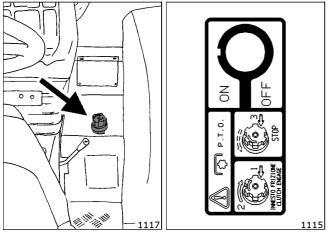
」Indications valid for SN versions
Machines with electrohydraulically controlled double clutch.



• The PTO mode selector lever must be in the **Independente** position.



 Use the gearshift lever of the PTO to select the best rate.



• Engage the PTO with the knob that operates the electrohydraulic control.

Use of the machine's clutch pedal shuts off the drive transmitted by the PTO's shaft even when enabled by the electrohydraulic engaging command of the PTO.

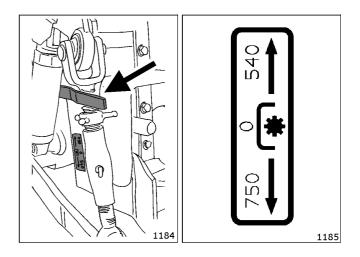


☐ Indications valid for SN versions
☐ Machines without electrohydraulically controlled double clutch.

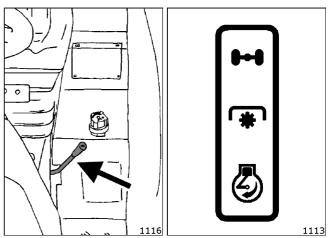
\\\T

DANGER

The machine could respond in a dangerous way if the clutch pedal is suddenly released.



- Use the gearshift lever of the PTO to select the best rate.
- Depress the clutch pedal.



 Move the PTO mode selector lever from the Neutral (Idle) position to the Independent position.

Gradually release the clutch pedal.

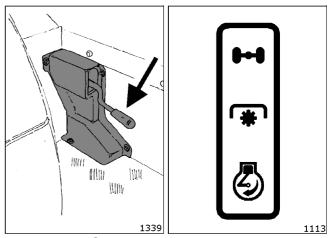
 Having finished work, remember to move the PTO's mode selector lever back to the Neutral (Idle) position.



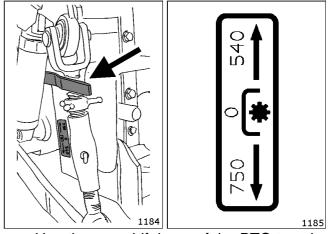
Use of the machine's clutch pedal shuts off the drive transmitted by the PTO's shaft even when enabled by the electrohydraulic engaging command of the PTO.

Indications valid for REV versions

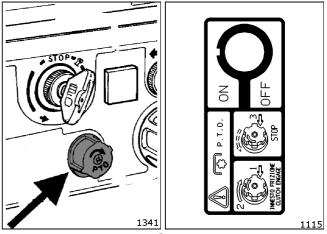
All the machines are equipped with electrohydraulically controlled double clutch.



The PTO mode selector lever must be in the **Independente** position.



• Use the gearshift lever of the PTO to select the best rate.



Engage the PTO with the knob that operates thge electrohydraulic control.

Synchronized power take-off



DANGER

The machine could respond in a dangerous way if the clutch pedal is suddenly released.



WARNING

To prevent injuries:

the safety device will prevent the engine from starting when the PTO mode selector lever is in the Synchronized position.



IMPORTANT

the safety device will prevent the engine from starting when the knob that operates the PTO's electrohydraulic control is in the Engaged position.



IMPORTANT

Do not use the synchronized PTO with the fast speeds in machines with double electrohydraulic clutches.



IMPORTANT

Do not use the synchronized power take-off near or round very tight bends.



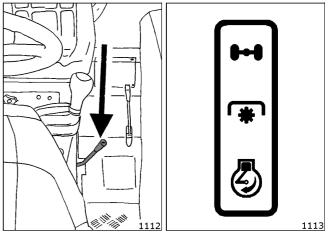
Synchronised with all gears.

This PTO is used for trailers with driving wheels.

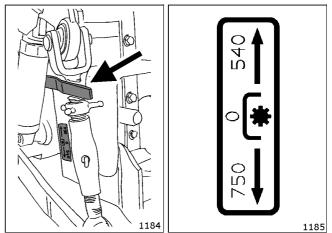
Used in difficult operating conditions (steep slopes, muddy or slippery ground).

Indications valid for RS versions

All the machines are equipped with a electrohydraulically controlled double clutch.



 Move the PTO mode selector lever to the Synchronized position.



• Use the gearshift lever of the PTO to select the best rate.

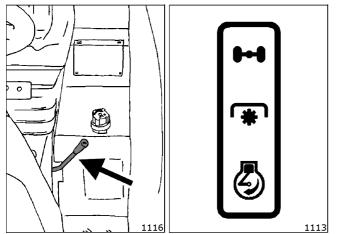


WARNING

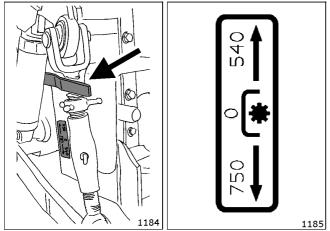
when the PTO is not used, move the mode selector lever to the Neutral or Independent position (depending on the model or version). This prevents the shaft of the PTO and other spinning components from accidentally turning.



ூ Indications valid for SN versions Machines with electrohydraulically controlled double clutch.



Move the PTO mode selector lever to the Synchronized position.



Use the gearshift lever of the PTO to select the best rate.



WARNING

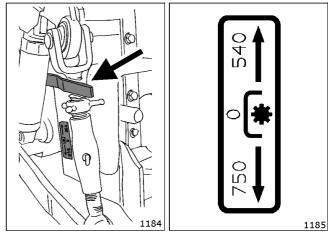
when the PTO is not used, move the mode selector lever to the Neutral or Independent position (depending on the model or version). This prevents the shaft of the PTO and other spinning components from accidentally turning.



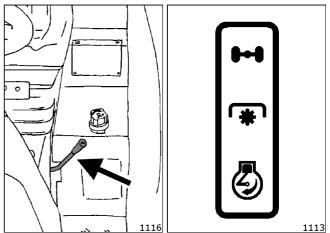
□ Indications valid for SN versions Machines without electrohydraulically controlled double clutch.

DANGER

lacksquare The machine could respond in a dangerous way if the clutch pedal is suddenly released.



- Use the gearshift lever of the PTO to select the best rate.
- Depress the clutch pedal.



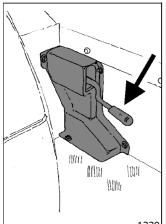
Move the PTO mode selector lever from the **Neutral** position the (Idle) to Synchronized position.

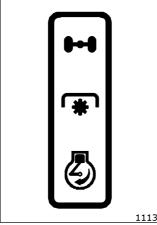
Gradually release the clutch pedal.

· Having finished work, remember to move the PTO's mode selector lever back to the Neutral (Idle) position.

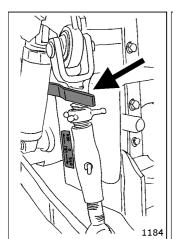


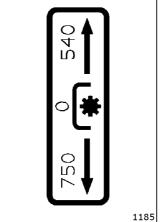
All the machines are equipped with a electrohydraulically controlled double clutch.





 Move the PTO mode selector lever to the Synchronized position.





• Use the gearshift lever of the PTO to select the best rate.

₩ WAF

WARNING

when the PTO is not used, move the mode selector lever to the Neutral or Independent position (depending on the model or version). This prevents the shaft of the PTO and other spinning components from accidentally turning.

REAR POWER LIFT

The following conditions of use are available:



Indications valid for RS versions



Indications valid for REV versions

- Up-down
- **Position control**
- **Draft control**
- Floating mode
- Mixed regulation



 Ξ Indications valid for SN versions

- **Up-down**
- Floating mode

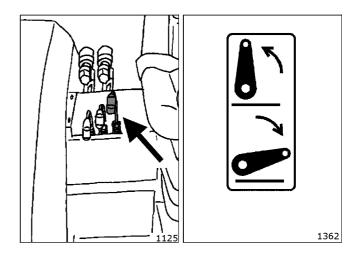
Up-down



Indications valid for RS versions



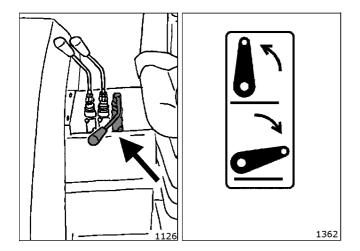
Indications valid for REV versions



It is a 3-point rear hydraulic power lift controlled by means of the valve system.

- Lever back = Implement lifted.
- Lever forward = Implement lowered (floating mode for implements that must follow the contours of the ground).
- Lever in intermediate position = Locks the implement at various heights.

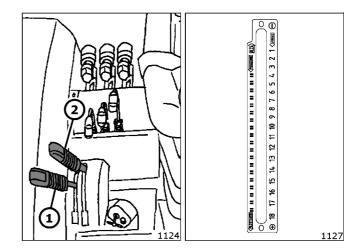
[Indications valid for SN versions



It is a 3-point rear hydraulic power lift controlled by means of the valve system.

- Lever back = Implement lifted.
- Lever forward = Implement lowered (floating mode for implements that must follow the contours of the ground).
- Lever in intermediate position = Locks the implement at various heights.

Position control

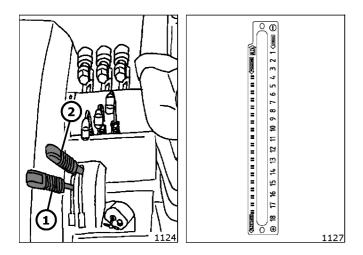


- (1) Rear power lift position control lever.
- (2) Lever for the rear power lift's draft control.

Ideal for jobs where the implement must remain in the same position (drills, scraper, mounted fertilizer spreader, etc.).

- Move the draft control lever to the end of its forward travel.
- Use the power lift's position control lever to lift or lower the power lift. The power lift's position is proportional to the action on the lever.

Draft control



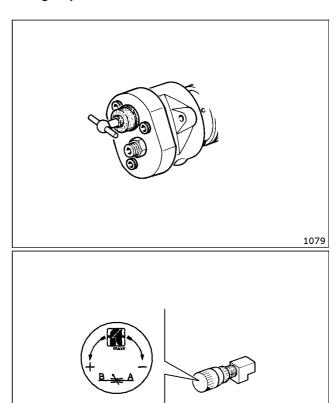
- 1 Rear power lift position control lever.
- 2 Lever for the rear power lift's draft control.

Automatically maintains the lugging power the machine must provide at a steady level, thus preventing slippage (ploughs, cultivators, etc.).

- Move the power lift's position control lever to the end of its forward travel.
- Use the draft control lever to regulate the degree of draft required.
- Use the power lift's position control lever to lift and lower the power lift.

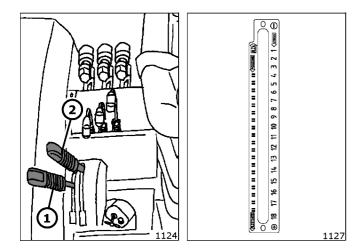
Power lift sensitivity adjustment

When the machine is used in the draft control mode, the speed at which the power lift lowers can be regulated by means of the power lift's locking adjuster:



1078

Floating mode

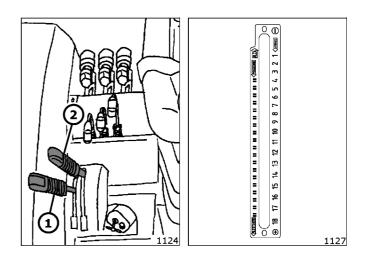


- 1 Rear power lift position control lever.
- 2 Lever for the rear power lift's draft control.

Ideal when the implement must be free to follow the contours of the ground (cultivators, ridgers, scrapers, etc.).

- Move the draft control lever to the end of its forward travel.
- Move the power lift's position control lever to the end of its forward travel.

Mixed draft and position mode adjustment



- 1 Rear power lift position control lever.
- 2 Lever for the rear power lift's draft control.

This operating mode is ideal for jobs carried out in the draft control mode on irregular ground when the implement is liable to dig too deeply into the soil.

Dig the implement into the ground down to the desired depth as described for the draft control mode:

- Move the power lift's position control lever to the end of its forward travel.
- Use the draft control lever to regulate the degree of draft required.
- Use the power lift's position control lever to lift and lower the power lift.

Having reached the required depth, gradually move the position control lever back until power lift's links begin to lift.

The power lift will operate in the draft control mode but will stop the implement from digging too deeply into the soil if it encounters softer ground.

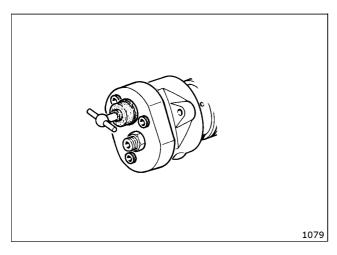
Only use the power lift's position control lever to lift the implement and dig it into the ground.

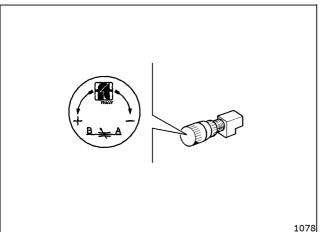
Power lift speed and sensitivity adjustment



IMPORTANT

Fully tighten the adjuster to lock the implement in its raised position. This acts as a safety device when implements are transported on the road.





Screw out this regulator to increase lift lowering speed.

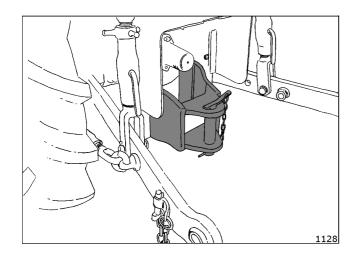
3-point hitch sensitivity can be further increased by attaching it to one of the lower tractor hitch holes.

TOWING ATTACHMENTS

<u>^</u>

WARNING

The machine could jack up if the towing device is used in the highest position.



The machine can be equipped rear tow hook of the "CLASS C CUNA" type for towing trailers with one or two axles.



Choose the towing attachment to suit the type of trailer or implement towed, in compliance with the current laws in force.

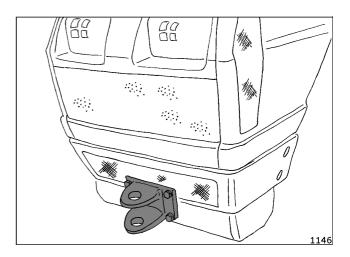


The ease with which the machine can be driven also depends on the correct use and successive height adjustment of the towing device.

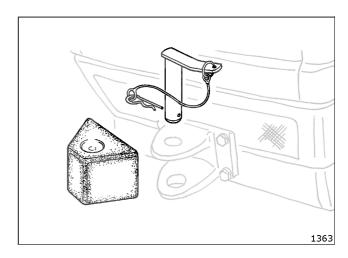


Keep the drawbar as horizontal as possible when using a trailer with synchronized drive.

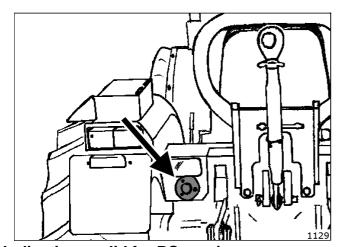
Front tow hook



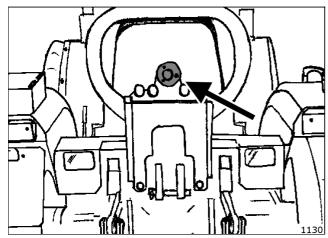
The machine is equipped with a front tow hook allowing emergency trailer manoeuvres to be made or for towing the machine if necessary.



Seven-pin trailer socket



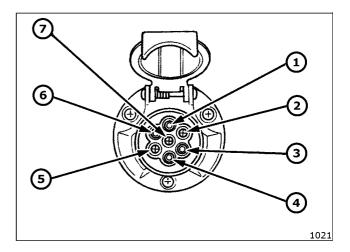
Indications valid for RS versions Indications valid for REV versions



Indications valid for SN versions

This socket is used to connect lights, turn indicators and other electrical devices for a trailer or implement.

Supplementary lights must be used if an implement obscures the turn indicators or other lights at the rear of the machine.



Terminal functions:

- 1 Lh turn indicator.
- (2) Vacant.
- (3) Ground.
- (4) Rh turn indicator.
- (5) Rh rear light.
- 6 Brake lights.
- (7) Lh rear light.

BALLAST

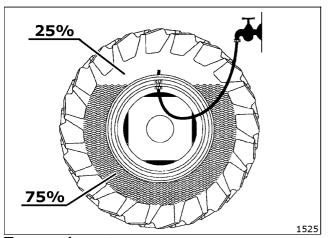
Wheel ballasting by filling the tyres with fluid

The driving wheels are ballasted by pouring water into the tyres.

Note: it is preferable to use wheels with air chambers.

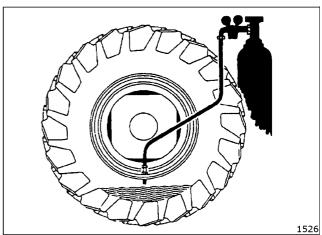
Note: if wheels with tubeless tyres are used, ask your dealer how to correctly lubricate the disc so as to prevent it from rusting.

Note: add antifreeze to the water in cold weather (the manufacturers recommend neutral calcium chloride -CaCl2-).



To pour in water:

- Move the valve to the top.
- Unscrew the mobile valve union.
- Pour in water through a normal hose.
- Stop filling every so often, so as to allow the air to escape.
- Stop filling altogether when water spills from the valve.
- The filling level must equal 75% of water.
- Tighten the mobile valve union.
- Inflate with air until the normal operating pressure is obtained.



How to drain out the water:

- Move the valve to the bottom.
- Unscrew the mobile valve union.
- · Allow the water to drain out.
- Finish emptying with a union and draw pipe.
- Inflate with air until the water has been completely emptied out.
- Tighten the mobile valve union.
- Inflate with air until the normal operating pressure is obtained.

WHEELS

Tyres



WARNING

The tyres must only be changed by competent persons in possession of the necessary equipment and technical know-how.



DANGER

!\tag{!} It is absolutely essential to avoid:

- Improper use.
- Overloads (even localized).
- Unsuitable pressure.
- · Unsuitable rim and tyre couplings.

Tyre life and performance depends on use of the correct operating pressure: if the pressure is too low, the tyre will quickly wear out while an excessive pressure will reduce the lugging power and make the wheels more liable to slip.

A correct tyre pressure depends on various factors:

- The operating conditions.
- · Machine load.
- Machine model.
- The tyre make.
- The tyre size.

You are therefore advised to consult your dealer or the tyre manufacturer.

The values given below are only approximate as they depend on the conditions described above:

Table of tyre inflation pressures



Tyre	Bar	KPa	Position
8.25 x 16"	2,0	200	Front and Rear
250/80 x 18"	3,0	300	Front and Rear
300/70 x 20"	2,0	200	Front and Rear
300/65 x 18"	2,0	200	Front and Rear
31 x 15.50 x 15"	2,0	200	Front and Rear

Table of tyre inflation pressures



Tyre	Bar	KPa	Position
8.25 x 16"	2,0	200	Front and Rear
250/80 x 18"	3,0	300	Front and Rear
280/70 x 18"	2,0	200	Front and Rear
300/70 x 20"	2,0	200	Front and Rear
340/65 x 20"	2,0	200	Front and Rear
31 x 15.50 x 15"	2,0	200	Front and Rear

Table of tyre inflation pressures



Tyre	Bar	KPa	Position
8.25 x 16"	2,0	200	Front and Rear
250/80 x 18"	3,0	300	Front and Rear
300/70 x 20"	2,0	200	Front and Rear
300/65 x 18"	2,0	200	Front and Rear
31 x 15.50 x 15"	2,0	200	Front and Rear

Table of tyre inflation pressures



Tyre	Bar	KPa	Position
9.5/20"	2,0	200	Rear
7.50/16"	3,0	300	Front
11.2/20"	2,0	200	Rear
8.25 x 16"	2,0	200	Front
320/70/20"	2,0	200	Rear
250/80/16"	3,7	370	Front
300/70 x 20"	2,0	200	Rear
280/70/16"	2,0	200	Front
340/65 x 20"	2,0	200	Rear
300/65/16"	2,0	200	Front

MAINTENANCE

Routine maintenance chart

	\boxtimes	8	50	150	300	400	800			Note:	
\Box	Engine	See engine's operation and maintenance manual.									
			1		ee en	gine s	opei	ation a	and ma	lintenance manual.	
	Fuel tank										
									₽ ∐ }		
	Dry air filter	A									
	Cooling system									Ogni 2 Anni We recommend FL Selenia fluid: PARAFLU 11	
	Clutch		0							Ogni 2 Anni We recommend Arbor oil by FL Selenia: ARBOR MTA	

		8	50	150	300	400	800		Note:
\Diamond	Gearbox housing, re differential, power lift	ear	©						We recommend Arbor oil by FL Selenia: ARBOR UNIVERSAL 15W-40
	Front different	al	©						We recommend Arbor oil by FL Selenia: ARBOR TRW 90
	Wheel fir drives	nal	©						We recommend Arbor oil by FL Selenia: ARBOR TRW 90
	Axial		~~ 1						It is advisable to use Arbor all-purpose grease by FL Selenia: ARBOR MP EXTRA
	Central steerin	g	~~ 1						It is advisable to use Arbor all-purpose grease by FL Selenia: ARBOR MP EXTRA
- +	Battery	©							



WARNING

Check the levels:

- . Before using the machine
- · With the machine at a standstill and the engine off (for at least the past hour).
- · On a flat surface.

This table briefly outlines the routine maintenance jobs. Consult the following pages for more details about routine maintenance or information about the variable servicing work required.

A series of symbols have been make to make the texts easier to understand. Their meanings are described below:



Instructions





Clean with compressed



Adjustment



Lubrication



Greasing



Fluid changes



Part replacements



Set intervals



Vork hours



hen necessary.



DANGER

Do not wear clothing which could be caught up in any part of the machine or implement.



DANGER

Do not leave the engine running in an closed room: the exhaust fumes are poisonous.



DANGER

Do not leave the malchine with engine running near flammable substances.



DANGER

After any maintenance work, grease and remove the grease from the engine to prevent the risk of a fire.



DANGER

Keep hands and other parts of the body away from holes or leaks in the hydraulic system: the hydrualic fluid that spurts from the leak is under pressure and can cause serious injuries.



WARNING

Do not tamper with the machine or the implements in any way.



WARNING

∆Do not service, repair or make any kind of adjustment to the tractor or to the implements hitched to it without having first turned off the engine, removed the ignition key and lowered the implement to the ground.



WARNING

Always park the tractor so that its stability is guaranteed by applying the parking brake and engaging a gear (1st gear uphill abd reverse downhill)and applying the parking brake. Use a chock for greater safety.



WARNING

Before driving the machine, check to be sure that there are no bystanders or animals within its range of action.



WARNING

Do not leave the machine unattended with the engine running and/or the key in the ignition.



WARNING

The operator must check to make sure that all parts of the tractor, especially the safety devices, are in a good working condition and that they always comform to the purpose for which they were designed. They should be kept in a perfectly efficient condition. If you note any defects or faults, fix or repair them in good time. If necessary contact your nearest Assistance Centre.



IMPORTANT

Check the nuts and bolts of the wheels and safety frame from time to time, always with the engine shut off.



DANGER

Safety decals have been affixed to various parts of the machine. They indicate potential dangers.



IMPORTANT

The decals must be kept clean and legible. If damaged, they must be replaced.



WARNING

Always disconnect the battery's ground cable (negative pole with the "" symbol) before working on the electrical system.



WARNING

Work on the battery requires particular care: battery acid is corrosive and the gases released are inflammable.



It is of fundamental importance to safeguard the environment. Incorrect waste disposal can alter the environment and the ecological system.



Do not discard fluids like fuels, lubricants, coolants or other, in the environment.



Do not use food or dink containers, which could lead to mistakes, to drain off fluids like fuels, lubricants, coolants or other.



Contact an authorized organization or ask your dealer for advice about how to recycle or dispose of waste products in the correct way.



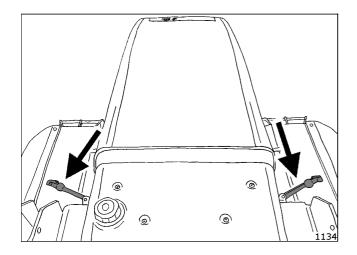
Do not dispose of parts of the cooling system (such as radiators, fluids, tanks, etc.) in the environment.



ALWAYS place a vessel under the drain hole so as to collect the fluid when draining a tank or reservoir.

ENGINE ASSEMBLY

How to open the bonnet



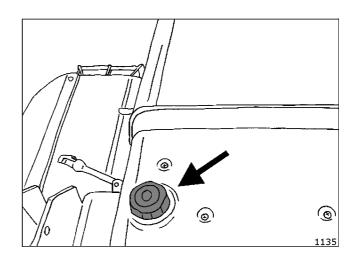
Release the rubber rods and lift the bonnet.

Engine



Consult the specific manual for the safety notes and operation and maintenance instructions for certain of the components manufactured by other companies.

Fuel tank



OCheck



Check:

- To make sure that there is sufficient fuel for the whole job.
- To make sure that there are no dents or abrasions on the tank.





Clean the zone surrounding the tank plug.





Use good quality fuel with the technical specifications described in the engine's operation and maintenance manual.



WARNING

Top up the fuel level when the engine is off and not overheated. Do not smoke near fuel or when the tank is being filled.





Replace the fuel plug with a genuine spare if it is missing or damaged.

Replace the tank with a genuine spare if it has been damaged by scratches, abrasions or dents.



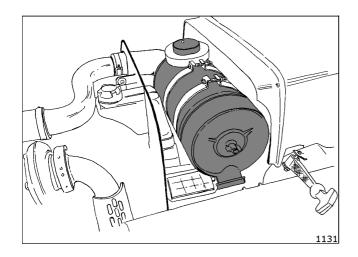
Do not discard fluids like fuels, lubricants, coolants or other, in the environment.

Dry air filter

\triangle

WARNING

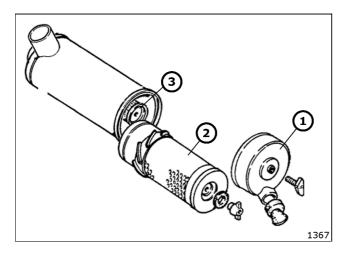
Stop the engine and wait until it has cooled down before proceeding with any servicing operations.







Clean drain valve when required, or at least once a week.



- 1 Cover.
- External filter.
- (3) Internal safety filter.

Clean the filter whenever the warning light comes on or when necessary, after evaluating the environmental conditions in which the machine works (dusty, dry, etc.). Proceed as described below:

- Release and remove the cover.
- Remove the external filter.
- Blow a jet of compressed air (maximum pressure 3 BAR) from the inside towards the outside.
- Fit the filter back into its housing.
- Close with the cover, with the drain valve in the lowest position.

DO NOT remove the internal safety filter (it must neither be cleaned nor damaged).





150

Replace the external filter when required, or at least after every 150 h service.

Replace the internal safety filter when required, or at least once a year.

(The internal filter changes colour when dirty)

Cooling system



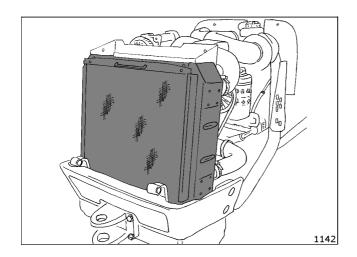
WARNING

Stop the engine and wait until it has cooled down before proceeding with any servicing operations.



WARNING

Never open the radiator's expansion tank whilst the engine is hot since the cooling fluid could cause burns as it is under pressure and very hot.







8

- Check the level of the cooling fluid.
- Make sure that the radiator guard is clean.
- Check the belt tension (see engine's operation and maintenance manual).
- Every so often, check to make sure that all the pipe clamps are well tightened.

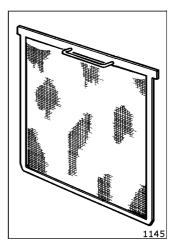




Change the cooling fluid every two years. Contact an authorized workshop when maintenance is required. Clean

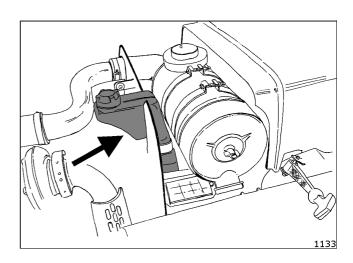


8



Clean the radiator guard when necessary, or at least once a week:

- Remove the guard from its housing.
- Blow a jet of compressed air (maximum pressure 3 BAR) from the inside towards the outside.







Top up the level of the cooling fluid when required:

- Remove the plug from the reservoir.
- Top up the level.
- Screw the plug back on and tighten it fully.

We recommend FL Selenia fluid: **PARAFLU 11** It is also advisable to use antifreeze solutions, complying with the specifications given on the relative package.



Do not discard fluids like fuels, lubricants, coolants or other, in the environment.

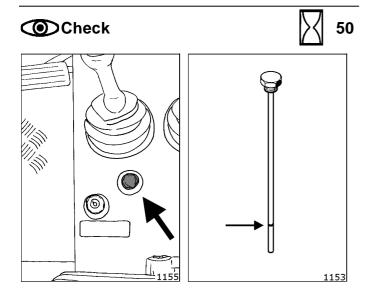


ALWAYS place a vessel under the drain hole so as to collect the fluid when draining a tank or reservoir.

TRANSMISSION ASSEMBLY

Gearbox housing, rear differential, power lift

These parts of the tractor all use the same oil.



Check the oil level by means of the dipstick.

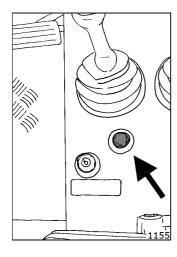
If necessary, top up with oil of the recommended type.

We recommend Arbor oil by FL Selenia: ARBOR UNIVERSAL 15W-40

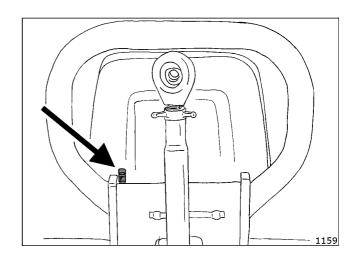




Keep the following parts clean:

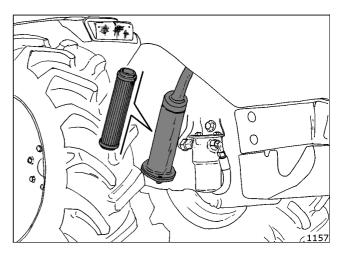


The zone surrounding the plug with the dipstick.



• The oil breather that plugs the pipe held with a clamp around the roll-bar behind the seat.





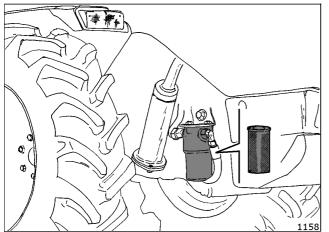
Clean the transmission oil filter:

- After the first 50 hours service.
- Whenever the oil is changed.
- After every 400 hours service.
- When the red clogged oil filter indicator light comes on.

To clean the filter:

- Unscrew the bolts that fix the cover.
- Remove the filter.
- Wash with gasoline or diesel fuel.
- Dry with compressed air.
- Fit the cover back on and close it.





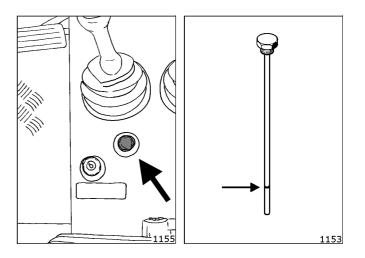
Replace the intermal cartridge of the transmission oil filter on the delivery:

- After every 400 hours service.
- When the red clogged oil filter indicator light comes on.

Proceed as described below to change the filter cartridge:

- Unscrew the lower part of the filter.
- Remove the internal cartridge and replace it with an original spare.

Top up level



Check the oil level by means of the dipstick.

If necessary, top up with oil of the recommended type.

We recommend Arbor oil by FL Selenia: ARBOR UNIVERSAL 15W-40

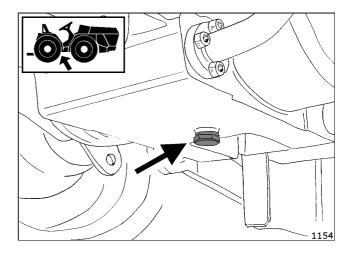




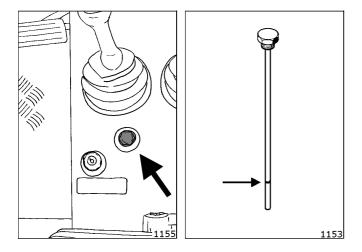
800

Change the transmission oil with 18 litres of new oil.

We recommend Arbor oil by FL Selenia: ARBOR UNIVERSAL 15W-40



Drain out the oil through the plug.



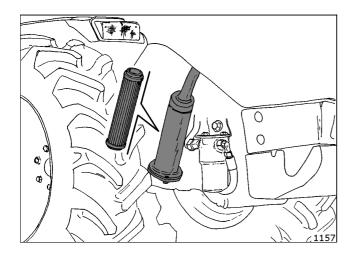
Oil filling: by means of the dipstick.

Allow the oil to settle before checking the new level.

Change the transmission oil filter as necessary.

Comply with the following instructions whenever the transmission oil is changed:

- Clean the transmission oil filter on the intake.
- Replace the intermal cartridge of the transmission oil filter on the delivery.

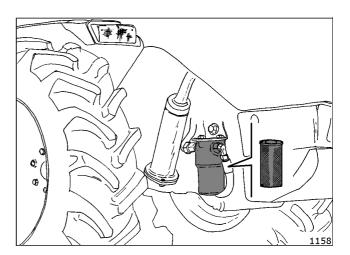


Clean the transmission oil filter:

Whenever the oil is changed.

To clean the filter:

- Unscrew the bolts that fix the cover.
- · Remove the filter.
- · Wash with gasoline or diesel fuel.
- Dry with compressed air.
- Fit the cover back on and close it.



Replace the intermal cartridge of the transmission oil filter on the delivery:

· Whenever the oil is changed.

Proceed as described below to change the filter cartridge:

- Unscrew the lower part of the filter.
- Remove the internal cartridge and replace it with an original spare.
- Fit the lower part of the filter back in place and screw it in as far as it will go.

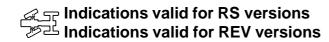


ALWAYS place a vessel under the drain hole so as to collect the fluid when draining a tank or reservoir.



Do not discard fluids like fuels, lubricants, coolants or other, in the environment.

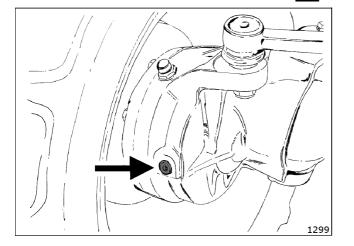
Front differential







50



Check the oil level by means of the oil level plug. The oil must reach the lower edge of the hole. If necessary, top up with oil of the recommended type.

We recommend Arbor oil by FL Selenia: ARBOR TRW 90



Clean



Keep the following parts clean:

• The areas surrounding the oil level, drain and fill plugs.

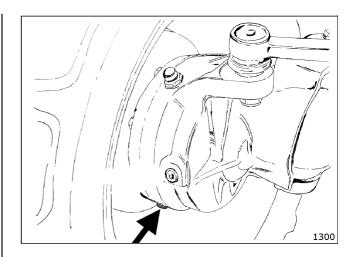




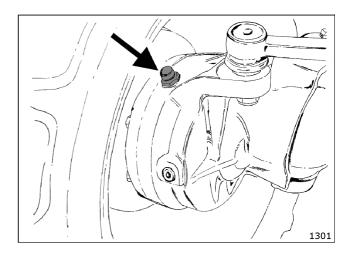
800

eplace the oil in the final drive, which requires 0.7 liters of fluid.

We recommend Arbor oil by FL Selenia: ARBOR TRW 90



Drain the oil through the drain plug in the lower part of the final drive.



Pour in the oil through the plug used to top up the level.

Allow the oil to settle before checking the new level.



ALWAYS place a vessel under the drain hole so as to collect the fluid when draining a tank or reservoir.



Do not discard fluids like fuels, lubricants, coolants or other, in the environment.

Indications valid for SN versions

Check the oil level by means of the dipstick. If necessary, top up with oil of the recommended type.



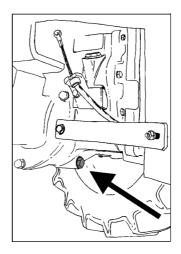
Keep the following parts clean:

The zone surrounding the plug with the dipstick.

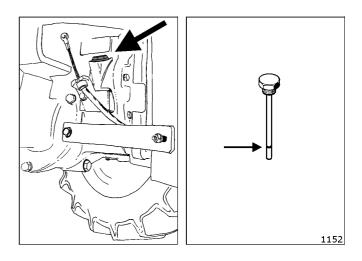


Change the transmission oil with 9.5 litres of new oil.

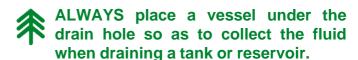
We recommend Arbor oil by FL Selenia: ARBOR TRW 90



Drain out the oil through the plug.



Oil filling: by means of the dipstick. Allow the oil to settle before checking the new level.





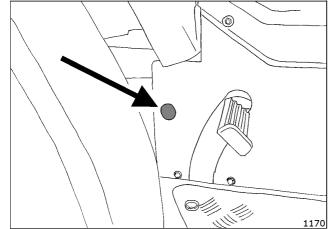
Central pivot

- Greasing

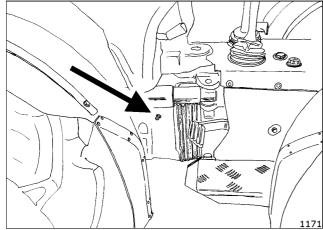


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Axial



Indications valid for RS versions

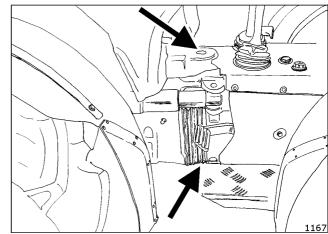


Indications valid for SN versions

Grease:

It is advisable to use Arbor all-purpose grease by FL Selenia: **ARBOR MP EXTRA**

Central steering

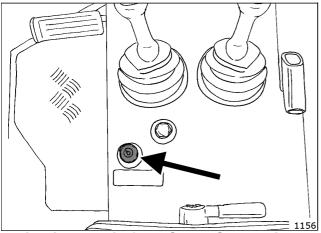


Indications valid for SN versions

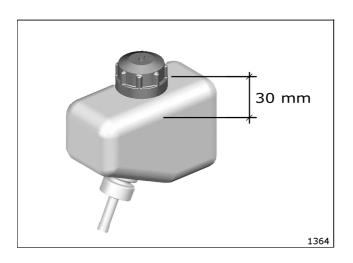
Grease:

It is advisable to use Arbor all-purpose grease by FL Selenia: **ARBOR MP EXTRA**

Clutch



Indications valid for RS and SN versions



Check



150

Check the level of hydraulic oil in the reservoir. The level must reach about 30 mm from the upper edge of the fill hole.

We recommend Arbor oil by FL Selenia: **ARBOR MTA**



Replace



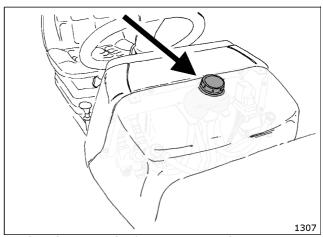
The oil in the hydraulic circuit must be changed every **2 years**.



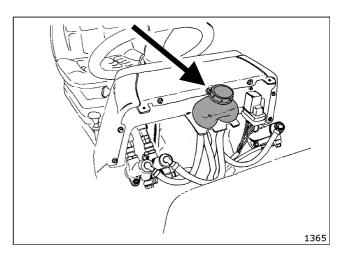
Replace



If necessary, have the clutch assembly replaced by an authorized workshop. Only use a genuine spare.



Indications valid for REV versions



Check



150

Check the level of hydraulic oil in the reservoir. The tank must be completely full.

We recommend Arbor oil by FL Selenia: ARBOR MTA





The oil in the hydraulic circuit must be changed every **2 years**.

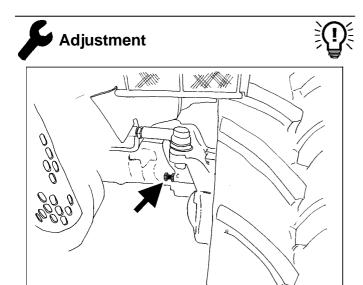


Replace



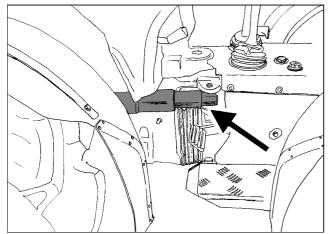
If necessary, have the clutch assembly replaced by an authorized workshop. Only use a genuine spare.

Steering



Indications valid for RS versions Indications valid for REV versions

Use the adjuster screws to regulate the steering radius



Indications valid for SN versions

Comply with the following instructions if the steering radius has to be increased (for example, if wider wheels are mounted):

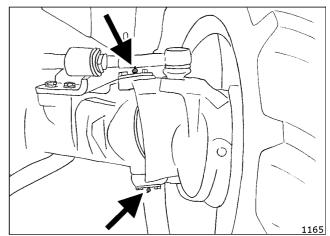
- Remove the pivot pin from the steering cylinder.
- Remove the rod from steering cylinder. Slacken off tube to facilitate this operation.
- Fix the spacer with the screw supplied. Use Loctite on the threads to lock the screw.
- Fit the rod back in the cylinder.

Carry out this operation for both steering cylinders: right and left.

──¹ Greasing



50



Indications valid for RS versions
Indications valid for REV versions

Grease:

It is advisable to use Arbor all-purpose grease by FL Selenia: **ARBOR MP EXTRA**

Brakes





Adjust the brakes if brake pedal travel becomes excessive or when one of the wheels brakes in a different way.



IMPORTANT

Only your dealer or specialized personnel GOLDONI s.p.a. may adjust the braking system.

ELECTRICAL SYSTEM



WARNING

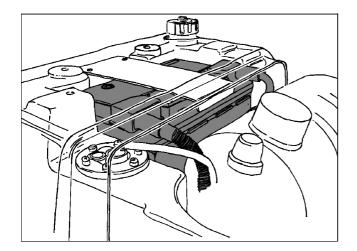
Always disconnect the battery's ground cable (negative pole with the "" symbol) before working on the electrical system.

Battery



WARNING

Work on the battery requires particular care: battery acid is corrosive and the gases released are inflammable.



OCheck



50

Make sure that the battery is firmly fixed to the machine.



Clean

Keep the battery clean with a damp, antistatic cloth.

Keep the battery poles and cable terminals clean.

- Greasing



Lightly grease the poles and terminals when necessary.

Use Vaseline-based grease, not normal grease.

├____ Top up level



Check the level of the battery acid and keep it topped up so that the battery elements are always covered. Add distilled water with the engine off and well away from naked flames.



Idle periods

If the machine remains idle for a long period of time:

- Charge the battery as indicated by the manufacturer.
- Disconnect both the cables.
- Store the battery in a cool, dry, well ventilated place.

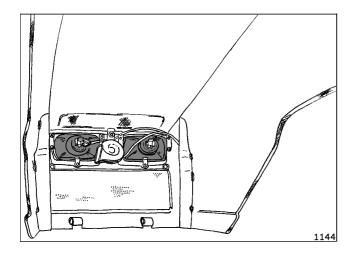


Replace



If the battery must be replaced, make sure the new one possesses identical technical specifications (the values are given on the actual battery itself).

Headlights





If the tractor must be driven on the public highways, the headlights must comply with the Highway Code regulations in force in the country of use.



Adjustment



Consult specialized personnel in possession of the specific tools required in order to have the headlights adjusted correctly.

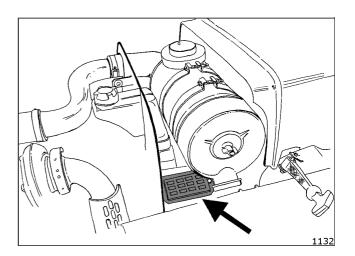


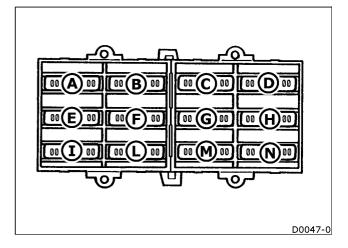


Replace burnt-out light bulbs with others if identical technical characteristics (see indications on the bulbs themselves).

Consult specialized personnel if in doubt.

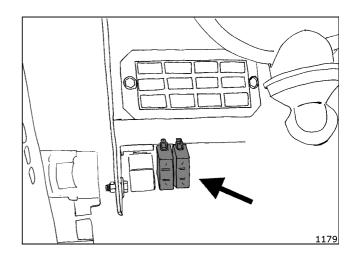
Fuses





The electrical system is protected by fuses against short circuits or abnormal power draw.

The machine is equipped with **main fuses**. These fuses protect the entire electric system.







Before changing a fuse, find and eliminate the short circuit that caused it to blow.

Replace the burnt-out fuses with others possessing the same technical characteristics (see indications on the actual fuse itself). Consult specialized personnel if in doubt.

Fuse functions:

Indications for machines with electrohydraulically controlled double clutch:

(A) ⋒15A

Power supply of motor stop solenoid.

B ⋒10A

Multifunction digital instrument PTO indicator relay. 7-pin socket.

(C) ⋒5A

Lh front side light. Rh rear light. 7-pin socket.

(D) ⋒5A

Rh front side light.
Multifunction digital instrument
Lh rear light.
7-pin socket.
License plate light.

E ⋒10A

Rear draft energizing connection. Drainage selector switch.

(F) ⋒10A

Revolving beacon switch Parking brake switch power supply.

(G) ⋒5A

Lh driving beam.

(H) ⋒ 5A

Rh driving beam.

Power supply of turn indicator hazard light switch (+15).

(L) 🖟 15A

1-pin socket power supply.

Power supply of turn indicator hazard light switch (+30).

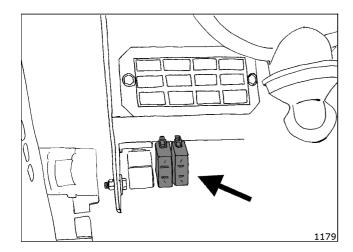
M 🖟 15A

Headlight connector.

Horn.

N 🕅 15A

Front light connector.
Rh and Lh driving beams.
Multifunction digital instrument
Driving beam indicator.



Main fuse

⋒50A

General protection of electrical system.

Fuse functions:

Indications for machines without electrohydraulically controlled double clutch:

(A) ⋒15A

Power supply of motor stop solenoid.

(B) ⋒10A

Multifunction digital instrument PTO indicator relay. 7-pin socket.

(C) ⋒5A

Lh front side light. Rh rear light. 7-pin socket.

Rh front side light.
Multifunction digital instrument
Lh rear light.
7-pin socket.
License plate light.

E ⋒10A

Rear draft ELX connection. PTO selector switch.

(F) 🖟 10A

Revolving beacon switch Parking brake switch power supply.

G ⋒5A

Lh driving beam.

⊕ 🖟 5A

Rh driving beam.

1 🖟 15A

Power supply of turn indicator hazard light switch (+15).

Ū 🖟 15A

1-pin socket power supply.

Power supply of turn indicator hazard light switch (+30).

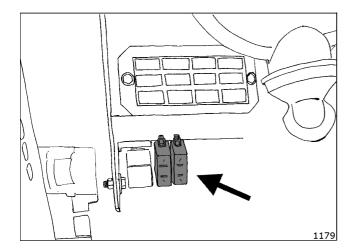
M 🖟 15A

Headlight connector.

Horn.



Front light connector.
Rh and Lh driving beams.
Multifunction digital instrument
Driving beam indicator.



Main fuse



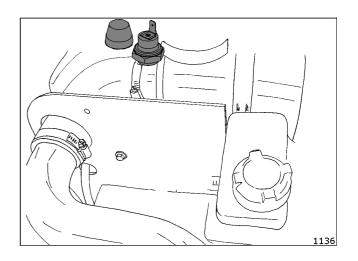
General protection of electrical system.

Engine air filter clogging sensor



IMPORTANT

If the protection is positioned incorrectly, this could cause serious damage to the engine's air intake circuit.



OCheck

Make sure that the engine air filter's clogging gauge is in the correct position and, if maintenance sork is carried out, that it is correctly assembled and protected against the outdoor weather conditions.

It is essential for the cable connecting to the electrical system of the machine to come out of the lower part of the actual gauge itself.

BODYWORK



WARNING

If you use jets of pressurized water for cleaning, direct the jet well away from:

- Tyres.
- · Hydraulic pipes.
- Radiator.
- Electrical components.
- Soundproofing seals.
- Other components that could be damaged by the pressure of the water.



Periodically check the condition of the bodywork. To ensure long life, have abrasions and deep scratches repaired by specialized personnel. Make sure that water does not remain in hidden parts of the bodywork.



Clean

Clean the bodywork with a normal solution of water and a specific shampoo:

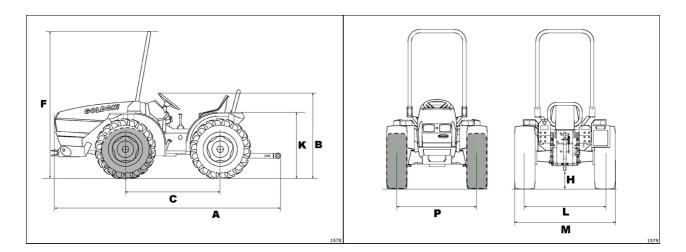
- When needed if the tractor is used in a normal environment.
- Frequently if it is used in places near the sea.
- Immediately after using organic substances or chemicals.



Do not discard fluids like fuels, lubricants, coolants or other, in the environment.

TECHNICAL SPECIFICATIONS

DIMENSIONS AND WEIGHTS



Engine

For the engine weights and dimensions:



engine's operation and maintenance See manual.

Table of Machine Dimensions and Weights



Indications valid for RS versions

Dimensions and Weights (1)

Α	Max length	mm	3000
M	Min - max width	mm	1340 - 1800 (3)
F	Height to chassis	mm	2110
В	Max height to steering wheel	mm	1220
Н	Ground clearance	mm	295
С	Wheelbase	mm	1372
Р	Front track	mm	1060
L	Rear track	mm	1060
/	Minimum turning radius without brakes	mt	3,4 (4)
/	Weight with safety frame	Kg	1840

- (1) The values are calculated with 280/70/18 front and rear wheels (equal-wheel version) and with 300/70/20 rear and 280/70/16 front wheels (Variant version)
- (2) 995 mm with 8.25x16" tyres
- (3) 1200 mm with 8.25x16" tyres
- (4) 3.1 m with 8.25x16" tyres
- (5) 3.4 m with 8.25x16" tyres
- (6) 2.9 m with 9.5R20 rear and 7.50x16" front
- (7) 3.1 m with 9.5R20 rear and 7.50x16" front tyres

Dimensions and Weights (1)

Α	Max length	mm	3000
M	Min - max width	mm	1390 - 1800
F	Height to chassis	mm	2090
В	Max height to steering wheel	mm	1250
Η	Ground clearance	mm	335
С	Wheelbase	mm	1375
P	Front track	mm	/
L	Rear track	mm	1080
/	Minimum turning radius without brakes	mt	3,2 (6)
/	Weight with safety frame	Kg	1820

- (1) The values are calculated with 280/70/18 front and rear wheels (equal-wheel version) and with 300/70/20 rear and 280/70/16 front wheels (Variant version)
- (2) 995 mm with 8.25x16" tyres
- (3) 1200 mm with 8.25x16" tyres
- (4) 3.1 m with 8.25x16" tyres
- (5) 3.4 m with 8.25x16" tyres
- (6) 2.9 m with 9.5R20 rear and 7.50x16" front
- (7) 3.1 m with 9.5R20 rear and 7.50x16" front tyres



[Indications valid for SN versions

Dimensions and Weights (1)

A	Max length	mm	3000
M	Min - max width	mm	1160 - 1560 (2)
F	Height to chassis	mm	2110
В	Max height to steering wheel	mm	1185
Н	Ground clearance	mm	280
C	Wheelbase	mm	1372
P	Front track	mm	880
L	Rear track	mm	880
/	Minimum turning radius without brakes	mt	2,38
/	Weight with safety frame	Kg	1820

- (1) The values are calculated with 280/70/18 front and rear wheels (equal-wheel version) and with 300/70/20 rear and 280/70/16 front wheels (Variant version)
- (2) 995 mm with 8.25x16" tyres
- (3) 1200 mm with 8.25x16" tyres
- (4) 3.1 m with 8.25x16" tyres
- (5) 3.4 m with 8.25x16" tyres
- (6) 2.9 m with 9.5R20 rear and 7.50x16" front
- (7) 3.1 m with 9.5R20 rear and 7.50x16" front tyres

Indications valid for REV versions

Dimensions and Weights (1)

Α	Max length	mm	3000
M	Min - max width	mm	1340 - 1800 (3)
F	Height to chassis	mm	2110
В	Max height to steering wheel	mm	1220
Н	Ground clearance	mm	295
С	Wheelbase	mm	1552
P	Front track	mm	1060
L	Rear track	mm	1060
/	Minimum turning radius without brakes	mt	3,8 (5)
/	Weight with safety frame	Kg	1900

- (1) The values are calculated with 280/70/18 front and rear wheels (equal-wheel version) and with 300/70/20 rear and 280/70/16 front wheels (Variant version)
- (2) 995 mm with 8.25x16" tyres
- (3) 1200 mm with 8.25x16" tyres
- (4) 3.1 m with 8.25x16" tyres
- (5) 3.4 m with 8.25x16" tyres
- (6) 2.9 m with 9.5R20 rear and 7.50x16" front tyres
- (7) 3.1 m with 9.5R20 rear and 7.50x16" front tyres

Indications valid for REV VARIANT versions

Dimensions and Weights (1)

A	Max length	mm	3000
M	Min - max width	mm	1390 - 1800
F	Height to chassis	mm	2090
В	Max height to steering wheel	mm	1250
H	Ground clearance	mm	335
C	Wheelbase	mm	1552
P	Front track	mm	/
L	Rear track	mm	1080
/	Minimum turning radius without brakes	mt	3,4 (7)
/	Weight with safety frame	Kg	1900

- (1) The values are calculated with 280/70/18 front and rear wheels (equal-wheel version) and with 300/70/20 rear and 280/70/16 front wheels (Variant version)
- (2) 995 mm with 8.25x16" tyres
- (3) 1200 mm with 8.25x16" tyres
- (4) 3.1 m with 8.25x16" tyres
- (5) 3.4 m with 8.25x16" tyres
- (6) 2.9 m with 9.5R20 rear and 7.50x16" front tyres
- (7) 3.1 m with 9.5R20 rear and 7.50x16" front tyres

Maximum load per axle



For information about the maximum loads per axle, refer to the **certificates of conformity** supplied with the machine

SPEEDS

Speed Chart



Indications valid for RS versions



Indications valid for REV versions

In kph with engine at 2600 Rpm and 250/80x18 wheels (Speeds are purely indicative)

	Reverse speed		
0.90	1st Slow	0.65	
1.26	2nd Slow	0.90	
1.98	3rd Slow	1.41	
2.76	4th Slow	1.98	
3.15	1st Medium Slow	2.25	
3.68	1st Medium Fast	2.64	
4.36	2nd Medium Slow	3.12	
5.10	2nd Medium Fast	3.65	
6.84	3rd Medium Slow	4.90	
8.00	3rd Medium Fast	5.74	
9.54	4th Medium Slow	6.84	
9.56	1st Fast	6.85	
11.16	4th Medium Fast	8.00	
13.20	2nd Fast	9.47	
20.69	3rd Fast	14.84	
	0.90 1.26 1.98 2.76 3.15 3.68 4.36 5.10 6.84 8.00 9.54 9.56 11.16 13.20	0.90 1st Slow 1.26 2nd Slow 1.98 3rd Slow 2.76 4th Slow 3.15 1st Medium Slow 3.68 1st Medium Fast 4.36 2nd Medium Slow 5.10 2nd Medium Fast 6.84 3rd Medium Slow 8.00 3rd Medium Fast 9.54 4th Medium Slow 9.56 1st Fast	



In kph with engine at 2600 Rpm and 250/80x18 wheels (Speeds are purely indicative)

Forward			Reverse speed		
1st Slow		1.26	Slow Reverse		1.93
2nd SI	OW	1.98	Medium Reverse	Slow	6.66
3rd Slo	ow	2.76	Medium Reverse	Fast	7.80
1st Slow	Medium	4.36	Fast Reverse		20.18
1st Fast	Medium	5.10			
2nd Slow	Medium	6.84			
2nd Fast	Medium	8.00			
3rd Slow	Medium	9.54			
3rd Fast	Medium	11.16			
1st Fa	st	13.20			
2nd Fast		20.69			
3rd Fa	ıst	28.88			

RECOMMENDED LUBRICANTS AND FLUIDS

Original lubricants

Genuine Lubricants ARBOR by FL SELENIA

If non-genuine products are used, lubricants with minimal performances in rela-tion to the following specifications are accepted but optimal performance is not guaranteed in this case.

ARBOR UNIVERSAL 15W-40 oil

- Viscosity at 40° C (mm2/s) 110
- Viscosity at 100° C (mm2/s) 14
- Viscosity at -15° C (mPa.s) 3450
- Index of viscosity 135
- Flash point V.A. (°C) 220
- Pour point (°C) -36
- Mass Volume at 15 °C (kg/l) 0.886

ARBOR TRW 90 oil

- Viscosity at 40° C (mm2/s) 135
- Viscosity at 100° C (mm2/s) 14.3
- Viscosity at -26° C (mPa.s) 108000
- Index of viscosity 104
- Flash point V.A. (°C) 220
- Pour point (°C) -27
- Mass Volume at 15 °C (kg/l) 0.89

ARBOR MTA oil

- Viscosity at -40° C (mPa.s) 28000
- Viscosity at 40° C (mm2/s) 35.5
- Viscosity at 100° C (mm2/s) 7.5
- Index of viscosity 160
- Flash point V.A. (°C) 200
- Pour point (°C) -40
- Mass Volume at 15 °C (kg/l) 0.870
- Colour red

ARBOR MP Extra grease

- NLGI grade 2
- Manipulated penetration (60)(dmm) 285
- Dropping point (°C) 190
- 4 weld load balls (kg) 300
- Basic oil viscosity at 40°C (mm2/s) 200

Original protective fluids

ARBOR original protective fluids by FL SELENIA

If non-original products are used, protective fluids able to provide the minimum performance indicated in the following specifications are acceptable but in this case, optimum performance is not guaranteed.

PARAFLU 11 antifreeze fluid

- Density at 15°C (g/cc) 1.135
- pH (dil. 50%) 7,7
- Alkaline reserve (ml HCl 0.1 N) 16
- Boiling point (dil. 50%) (°C) 108
- Graining point (dil. 50%) (°C) -38
- Foam at 88°C (cc) 50

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