WORKSHOP MANUAL

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DORADO 55 ***DORADO 60***

DORADO 65 ***DORADO 70***

DORADO 75 ***DORADO 85***

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introduction

This publication is intended for the trained technician who must operate on our tractors.

It contains all general information relating to our tractor range, and in particular it highlights the inspection, overhauling and adjustment procedures as well as the main instructions for dismantling and reassembling operations.

The workshop manual is a natural summary for the mechanic who has attended the vocational training and specialization courses, which are held every year at our Service School, to permit him to perform a precise and qualified work on tractor.

Its contents are therefore an exhaustive reference book for the experienced mechanic who desires to refresh his memory on the sequence of the operations to be done. It is then good practice for every authorized dealer mechanic to have at his disposal this publication, so that it may be consulted quickly when necessary.

We wish to thank in advance for the cooperation all thos people, who will let us have their suggestions in order to make this publication more complete.

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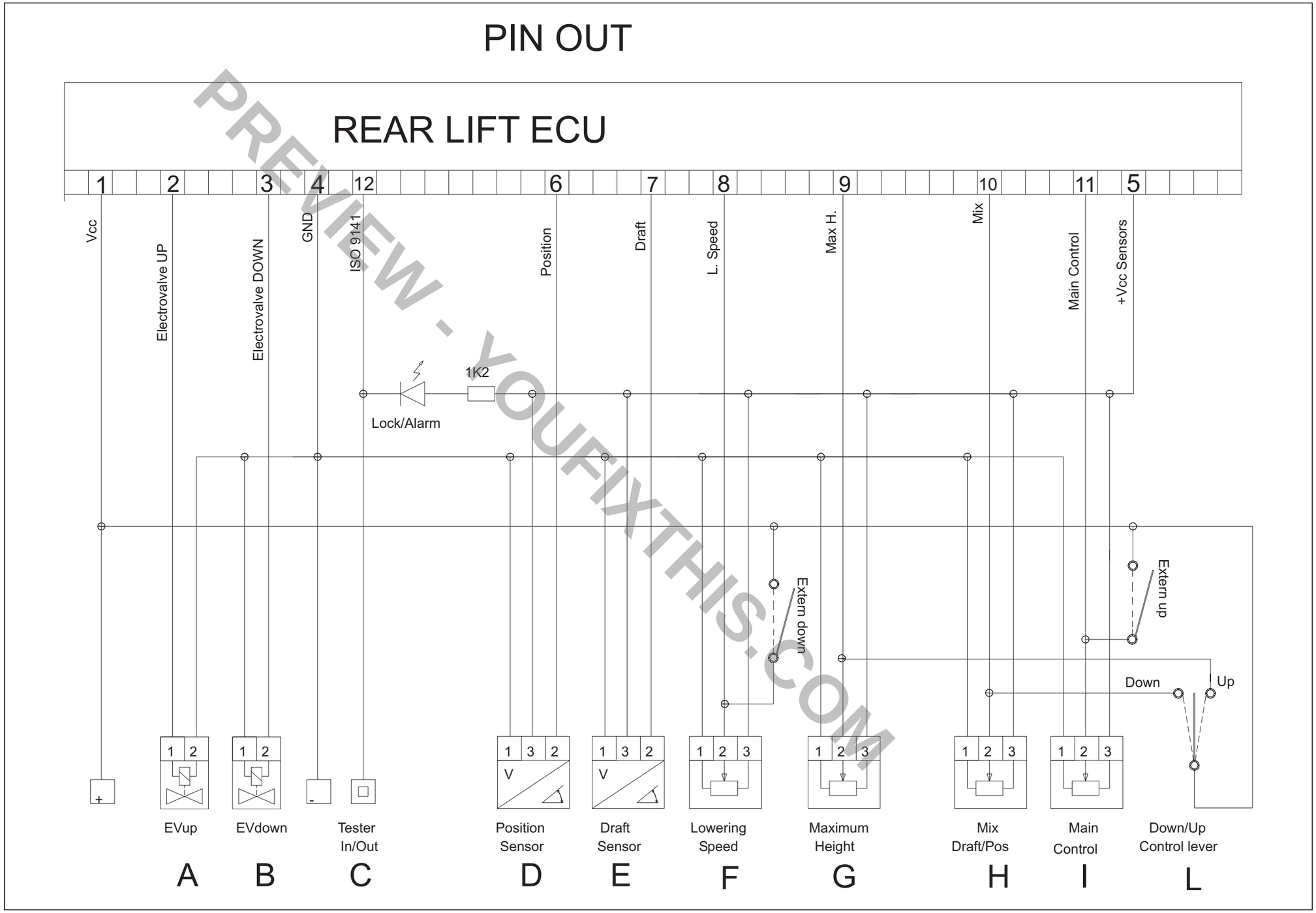
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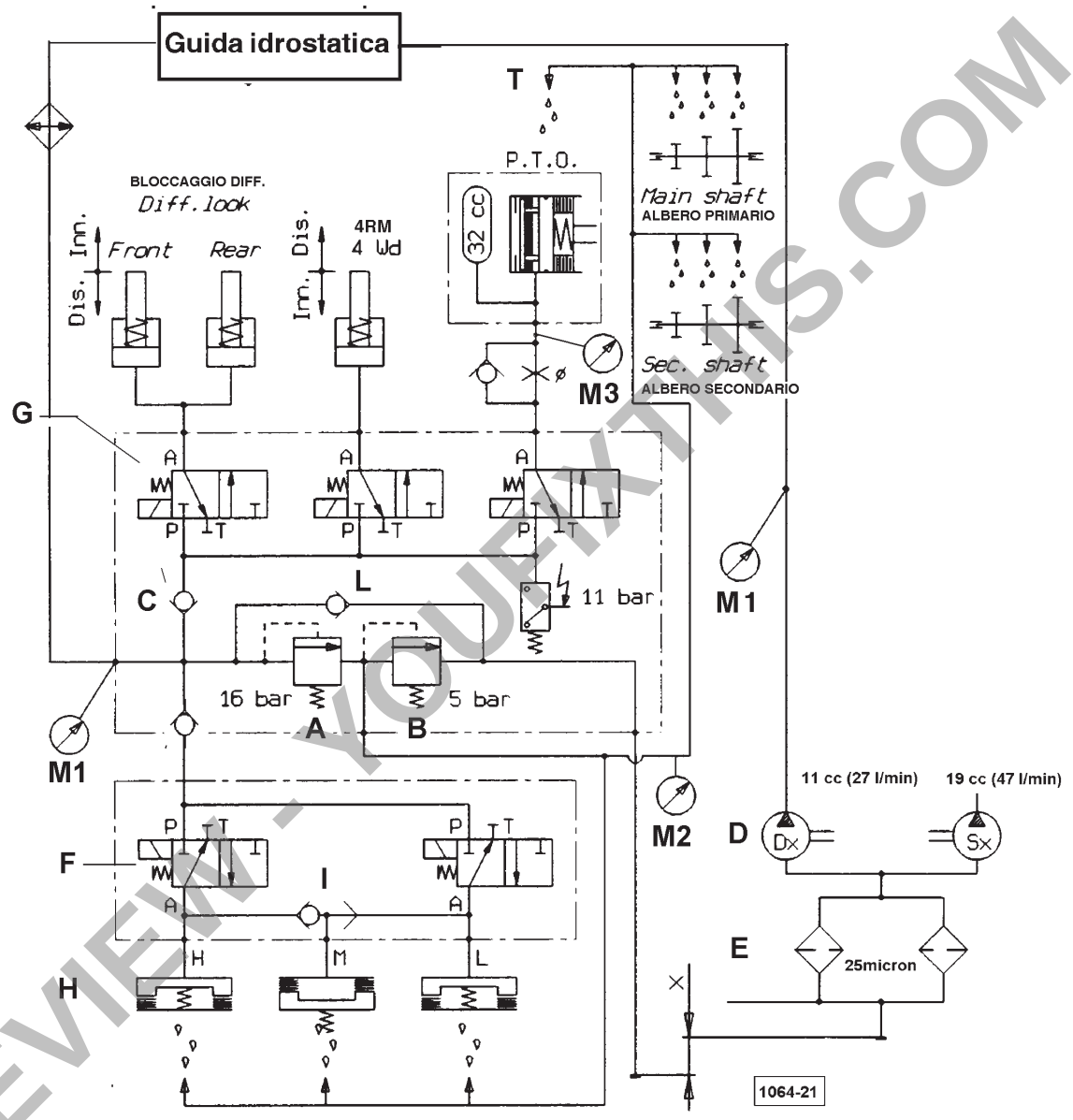
Electronic circuit diagram of the ECU

1 – Vdc
2 –UP solenoid valve
3 - DOWN solenoid valve
4 – GND
5 – Sensor Vdc
6 – Position
7 – Draft
8 – Lowering speed
9 – Maximum height
10 – Mix
11 – Main control
12 – ISO 9141

A UP solenoid valve
B DOWN solenoid valve
C Tester IN/OUT
D Position sensor
E Draft sensor
F Lowering speed
G Maximum height
H DRAFT/POSITION mix control
I Main control
L DOWN/UP control



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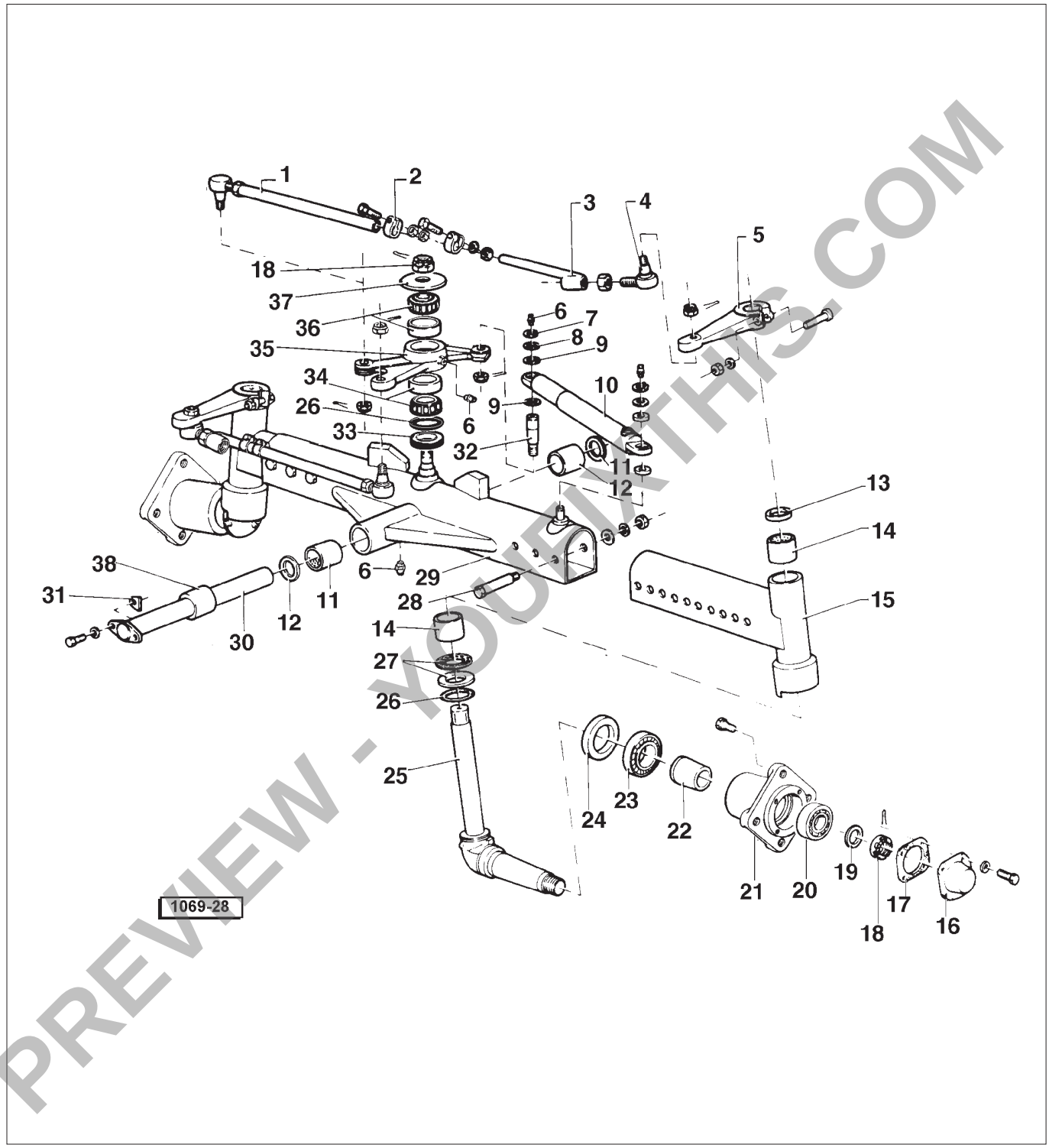


A - pressure regulator valve (operating pressure 16 bar)
B - gearbox lubrication oil pressure setting valve (setting 5 bar)
C - anticavitation valve for safety steering (30 l/min.)
D - oil pump (capacity 10 to 27 l/min.)
E - suction filter (25 micron)
F - solenoid control valves
G - electro-hydraulic control unit
H - anticavitation valve for safety steering
I - bistable valve
L - safety steering valve
M1 - pressure gauge with scale 0 - 40 bar
M2 - pressure gauge with scale 0 - 40 bar
M3 - pressure gauge with scale 0 - 10 bar
T - lubrication

Fig. 85 - Hydraulic diagram illustrating operation.

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Fig. 2 - Front axle assembly parts.

1 steering track rod
2 clamp
3 sleeve
4 ball-and-socket joint
5 external steering lever
6 ubricating nipple
7 snap ring
8 thrust ring
9 seal ring
10 power steering cylinder
11 shoulder ring
12 bushing
13 seal ring
14 bushing
15 side LH axle
16 cover
17 seal ring
18 castellated nut
19 shoulder ring
20 external bearing
21 wheel hub
22 spacer ring
23 internal bearing
24 retaining ring
25 wheel shaft
26 O.ring
27 axial bearing
28 pin
29 centre axle
30 axle securing pin
31 shims
32 pin
33 disk
34 lower taper roller bearing
35 centre steering lever
36 upper taper roller bearing
37 cover
38 spacer ring

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Engine air filter

If a blocked air filter indicator switch is to be replaced, make sure the new switch to be installed has same setting specifications checking the reference stamped on it.
Aspirated engine blocked air filter indicator switch setting is 0.94-0.93 bar.

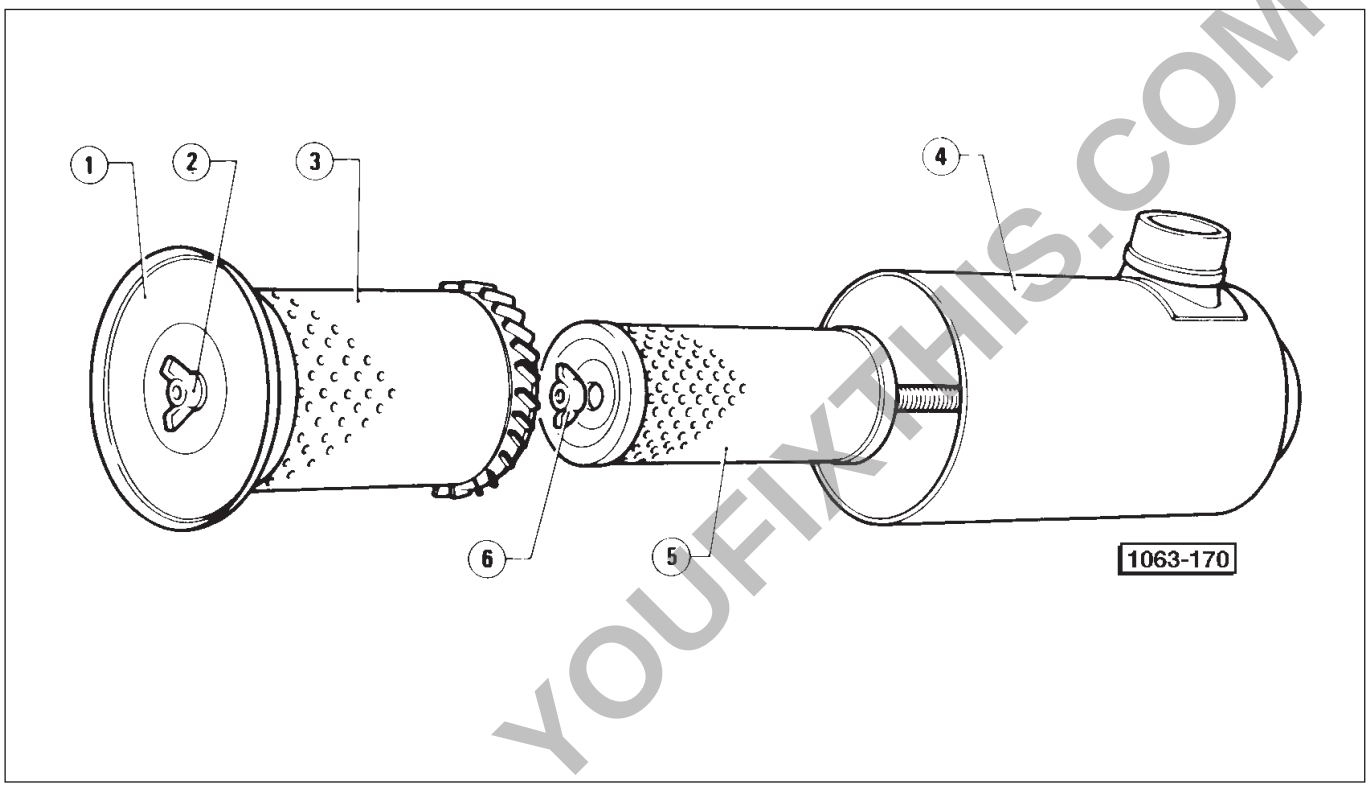


Fig. 10 - Engine air filter.

Tightening torques

Before tightening all screws should be degreased, cleaned and lubricated with engine oil.

	Kgm	Nm
engine flywheel securing screws	11	108
rocker arm support securing screws	4	39
injection nozzle bracket fixing nuts	4	39
inejction pipe fixing nuts	2,5 ÷ 3	24 ÷ 29
securing bolts for pressed steel rocker cover	0,5	5
counterweight housing securing screws (4-cylinder engines)	8	78
front pulley securing screws	34 ÷ 36	315 ÷ 350
oil pump securing screws	4	39
oil pan securing screws	3	30
rear oil seal cover retaining bolts	2,5	24,5
front casing retaining bolts	2,5	24,5
main bearing cap bolts	see page 36	
big-end bearing cap bolts	see page 38	
tightening the cylinder head bolts	see page 53	
engine flange retaining bolts	12	120

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Appendix

Engine electronic control unit

Tester alarm messages and possible causes of malfunction

N°	Tester message	Possible cause of fault	ECU action	lampeggi
1	Overspeed	RPM OVER 3200.	ACTUATOR CONTROL REMOVED. RESTART ENGINE.	1
2	Actuator O.C.	ACTUATOR NOT CONNECTED. WIRING ERROR. CHECK PINS 46 47	ACTUATOR NOT CONTROLLED. RESTART ENGINE.	2
3	Actuator S.C.	ACTUATOR FAULTY. WIRING ERROR CHECK PINS 46 47	ACTUATOR CONTROL REMOVED. RESTART ENGINE	2
4	RPM sensor O.C.	PICKUP NOT CONNECTED. CHECK PIN 10	ACTUATOR CONTROL REMOVED. RESTART ENGINE.	4
5	RPM sensor interm.	PICKUP FAULTY. POOR CONTACT. CHECK PIN 10.	ACTUATOR CONTROL REMOVED. RESTART ENGINE.	4
6	Hand throt. S.C.	Hand throttle potentiometer short circuit. WIRING ERROR. CHECK PIN 6	Loss of hand throttle function.	8
7	Acc. manuale C.A.	Hand throttle potentiometer not connected. Wiring error. CHECK PIN 6.	Loss of hand throttle function.	8
8	Acc. pedal S.C.	Accelerator pedal potentiometer short circuit. Wiring error. CHECK PIN 5.	Loss of accelerator pedal function.	3
9	Acc. pedal O.C.	Accelerator pedal potentiometer not connected. Wiring error. CHECK PIN 5.	Loss of accelerator pedal function.	3
10	Hold lamp O.C.	Lamp disconnected. Lamp faulty. Check pin 61.	No limitations.	-
11	Speed sens. O.C.	Wheel speed sensor disconnected. Sensor faulty. Check pin 11.	Speed limited.	6
12	Speed sens. interm.	Sensor faulty. Poor contact. Check pin 11.	Speed limited.	6
13	Glowplug rel. O.C.	Electrical system fault. Relay faulty. ECU faulty. Check pin 56.	Preheating system operation limited.	13
14	Glowplug O.C.	Electrical system fault. Glow plug faulty. ECU faulty. Check pin 68.	Preheating system operation limited.	-
15	Glowplug rel. fault	Electrical system fault. Relay faulty. ECU faulty. Check pin 68.	Preheating system operation limited.	-

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Crankshaft removal procedure

— Remove engine from tractor and install on no. 5.9030.002.0 traveling stand for transfer on no. 5.9030.491.4 swivel bench.
— Remove the oil pan and the oil pump suction rose.
— After detaching the pulley belt take the pulley from the crankshaft along with the pulley hub.
— Dismount engine front case, rear flywheel, engine-to-gearbox connecting flange and sealing ring holding flange. (In 4-cylinder engines also the counterweight assembly is to be removed).
— Remove big end caps and related bronze bushings.
— Remove main bearing caps and related bronze bushings.
— Remove the crankshaft and take the upper bronze bushings.

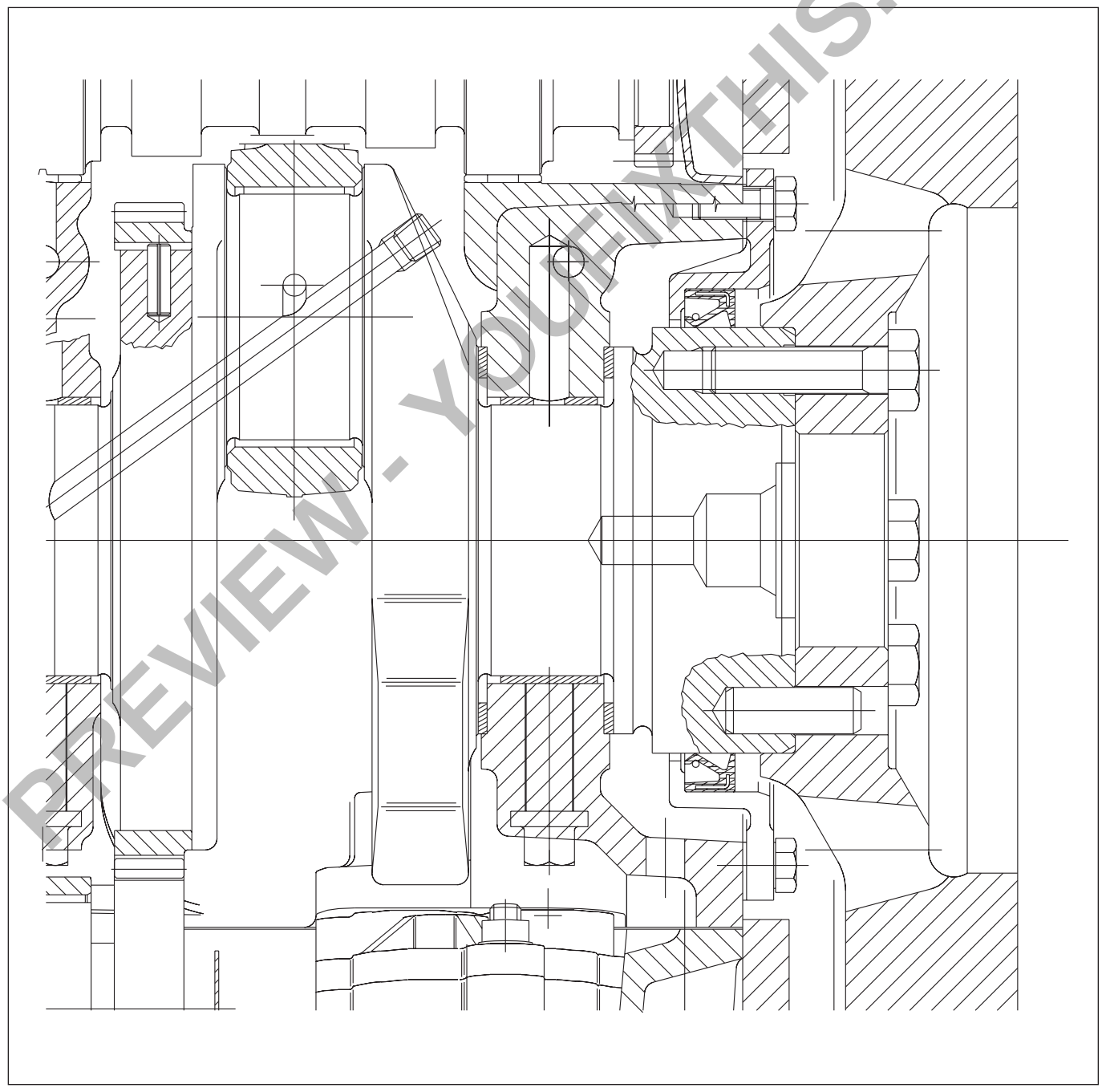


Fig. 47 - Rear flange cross-section.

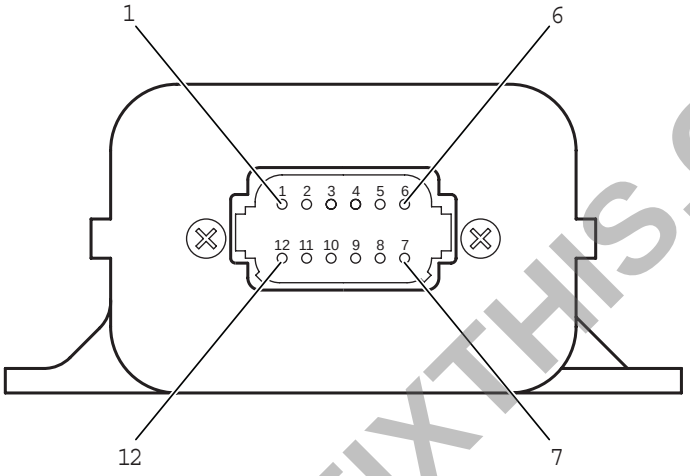
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3.3 PINOUTS AND DESCRIPTIONS OF ELECTRONIC CONTROL UNITS

3.3.1 HML CONTROL UNIT

CONNECTOR X72



Pin	Volts.	Abbreviation	Description
1	0V		Battery negative
2			"M" warning light output
3	+12V		Power (+) commmon for "H-M-L" solenoid valves
4	0V		Configuration pin
5			Not utilised
6			Digital signal - range downshift pushbutton
7			Digital signal - range upshift pushbutton
8	0V		Range switch common
9			Power for "L" solenoid valve
10			Power for "M" solenoid valve
11			Power for "H" solenoid valve
12	+12V		Battery positive

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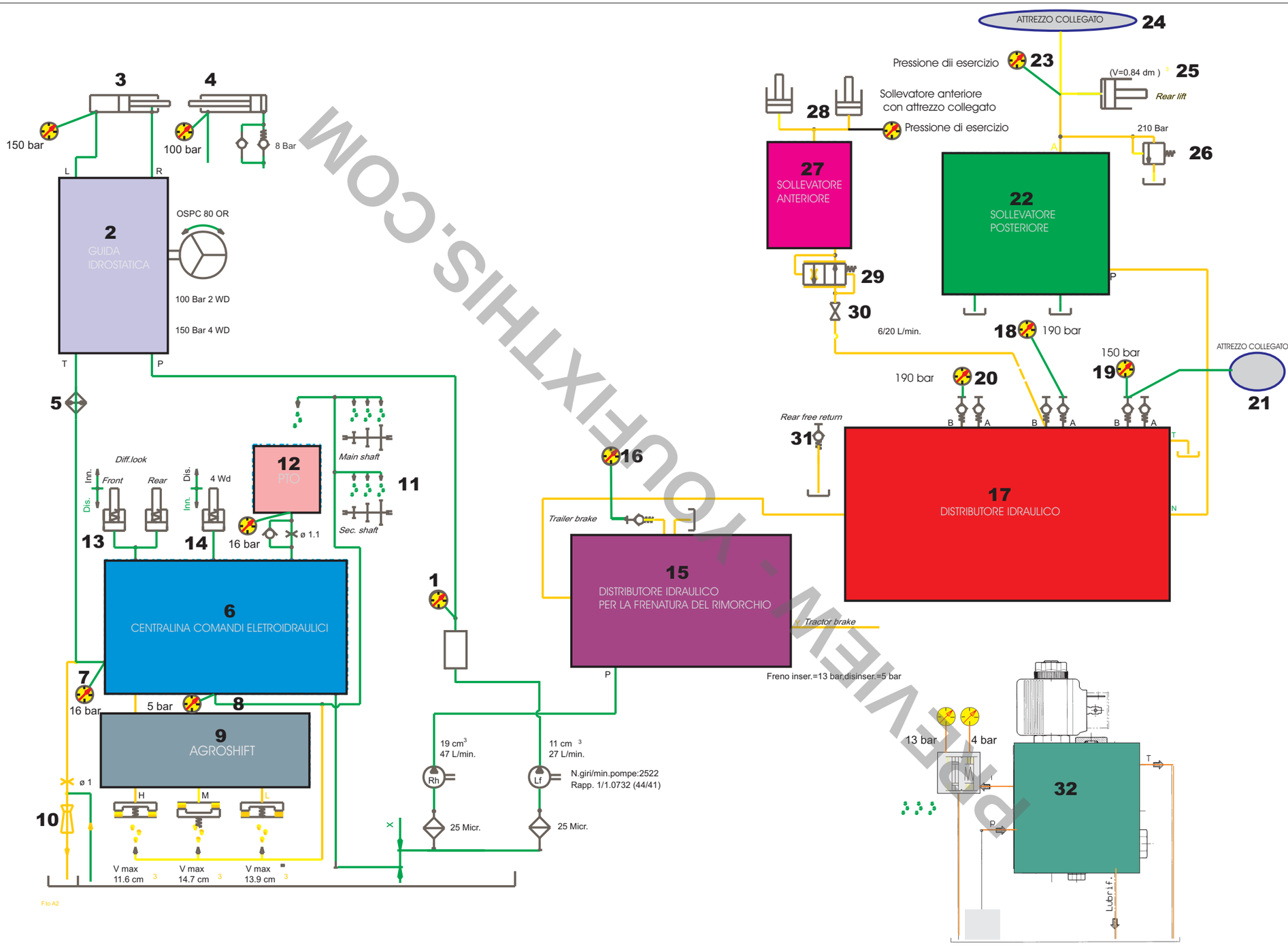


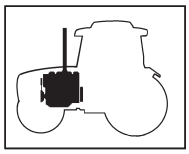
Fig. 1 - Points provided for measurement of oil pressures in the tractor's hydraulic system (see references on page 340).

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engine won't run when started	check battery charge	charged battery	battery terminals oxidized	clean battery contacts and tighten terminals
		discharged battery	recharge battery	
	starter failure	consult a motor vehicle electrician for having the defective parts replaced		
engine difficult to start or won't restart after a stop	check fuel level	top up fuel level in tank		
		inspect fuel filter for cleanliness	clean filter, replace if necessary	
	inefficient injection system	a metal noise is heard when engine idles	out-of-adjustment pumps, excessive advance	recalibrate the pumps
		air in the fuel system	perform air bleeding	
		out-of-calibration injection nozzles	defective fuel pump or pump control	replace defective parts
			calibrate	
	Check thermostarter	clean or replace		
	Insufficient compression	check clearance between valves and rockers	restore correct backlash	grind or replace valves, cylinder head gaskets and piston rings
			check valves for efficient operating conditions	replace pistons and cylinders
clear exhaust smoke	check injection pump setting	perform a new setting	check piston rings and cylinders for wear	replace worn-out parts
		make sure there is no excessive clearance between valves and valve guides	replace worn-out parts	
	check injectors for proper cleanliness	clean scrupulously		

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1 Engine

General information

		DORADO 55 DORADO 60	DORADO 65	DORADO 70	DORADO 75	DORADO 85
Engine						
Type		1000.3-A7 (55HP) 1000.3-A5 (60HP)	1000.3-AT2	1000.4-A5	1000.4-A6	1000.4-AT3
Ciyle		diesel	diesel	diesel	diesel	diesel
Strokes		4	4	4	4	4
Turbocharging		-	turbo	-	-	turbo
Injection		direct	direct	direct	direct	direct
Cylinder No		3	3	4	4	4
Cylinder arrangement		in line	in line	in line	in line	in line
Bore and stroke	mm	105 x 115,5	105 x 115,5	105 x 115,5	105 x 115,5	105 x 115,5
Stroke / bore ratio		1,1	1,1	1,1	1,1	1,1
Displacement	cm	3000,44	3000,44	4000,44	4000,44	4000,44
Compression ratio		17:1	16:1	17:1	17:1	16:1
Max. output						
- for DORADO 55	cv CUNA	56	-	-	-	-
	Kw	41,2	-	-	-	-
- for DORADO 60	cv CUNA	60	-	-	-	-
	Kw	44	-	-	-	-
- for DORADO 65-70-75-85	cv CUNA-	-	62,5	70	75	85
	Kw	-	46	51	55	63
Peack horsepower speed	r.p.m.	2350	2350	2350	2350	2350
Max. torque						
- for DORADO 55	Nm	197,1	-	-	-	-
	kgm	20,1	-	-	-	-
- for DORADO 60	Nm	204	-	-	-	-
	kgm	20,8	-	-	-	-
- for DORADO 65-70-75-85	Nm	-	225	243	274,2	314,7
	kgm	-	22,9	24,8	28	32,1
Max. torque speed	r.p.m.	1400	1450	1400	1400	1450
Specific horsepower						
- for DORADO 55	cv/l	18,4	-	-	-	-
- for DORADO 60	cv/l	20	-	-	-	-
- for DORADO 65-70-75-85	cv/l	-	20,1	17,5	18,7	21,2
Cooling		air/oil	air/oil	air/oil	air/oil	air/oil
Low idling speed	giri/min	650/700	650/700	650/700	650/700	650/700
Peak speed						
- for DORADO 55	r.p.m.	2520-2550	-	-	-	-
- for DORADO 60	r.p.m.	2470-2490	-	-	-	-
- for DORADO 65	r.p.m.	-	2470-2490	-	-	-
- for DORADO 70	r.p.m.	-	-	2510-2530	-	-
- for DORADO 75	r.p.m.	-	-	-	2520-2550	-
- for DORADO 85	r.p.m.	-	-	-	-	2520-2550
minimum lubricating oil pressure						
low idling speed (hot oil)	bar	≥0,5	≥ 0,5	≥0,5	≥0,5	≥0,5
high idling speed (hot oil)	bar	≥3,5	≥ 3,5	≥ 3,5	≥ 3,5	≥ 3,5
Oil filter with replaceable cartrige						
	n.	1	1	1	1	1
Filtering capacity	µ	15	15	15	15	15
Fuel filter		replaceable cartridge				
Valve arrangement		vertical in-line				

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Positioning governor lever M
Operate travel stop rod **O** with an Allen wrench until the distance between the lower casing edge and the travel stop rod head corner is about 2 mm, as shown in figure 13.
Connect the upper to the lower casing, first positioning the automatic extra fuel supply unit spring **P** on coupling **N**.

Calibrating engine governor

Engine governor calibration is very easy and requires no special equipment. The procedure recommended permits all lever plays produced during engine running to be removed, since this adjustment can be performed with engine governor assembled and engine running.
This setting is to be effected when external operations which may involve engine governor, injection pump or injection pump control rack replacement are performed.
Important - Whenever the governor is removed from engine, the cable connected to the battery positive pole should be disconnected so that a sudden engine start may be prevented.
Observe the following procedure:
— start the engine and then bring to a 2000æ100 r.p.m. by means of the hand throttle (avoid subjecting the engine to dragging loads and ensure it is not hunting).
— Using an Allen wrench (fig. 16) loosen the fuel maximum delivery adjusting screw (turn it anticlockwise) until the engine is about to stop (or keeps on running through the automatic operation of the extra fuel supply unit stabilizing at 300 to 500 r.p.m.).

Warning: locating this condition requires most accuracy and meticulous operating procedure and namely:
— locate approximately the point where the engine r.p.m. starts drooping;
— screw in the adjusting screw of about 3 turns to permit the engine to be stabilized at 2000 r.p.m.;
— loosen first the adjusting screw two full turns and then continue loosening by about 30° movements at a time and wait 2 - 3 seconds after each screw movement until the engine stop point is located.
With the engine stopped, place the contact point of a dial gauge on the head of screw **A** (fig. 16), zero the gauge, then screw in the screw the number of turns indicated in the table, to obtain the gauge reading indicated below:

ENGINE TYPE	R.P.M.	HP	TURNS OF THE NO OF TIGHTENING ADJUSTING SCREW
1000.3 A7	2350	55	6,75
1000.3 A5	2350	60	7
1000.3 AT2	2350	62,5	4
1000.4 A5	2350	70	5
1000.4 A3	2350	75	6,75
1000.4 AT3	2350	85	7,1

NOTE: This adjustment can be performed at an engine oil temperture not less than 80°C.

Tighten the lock nut.

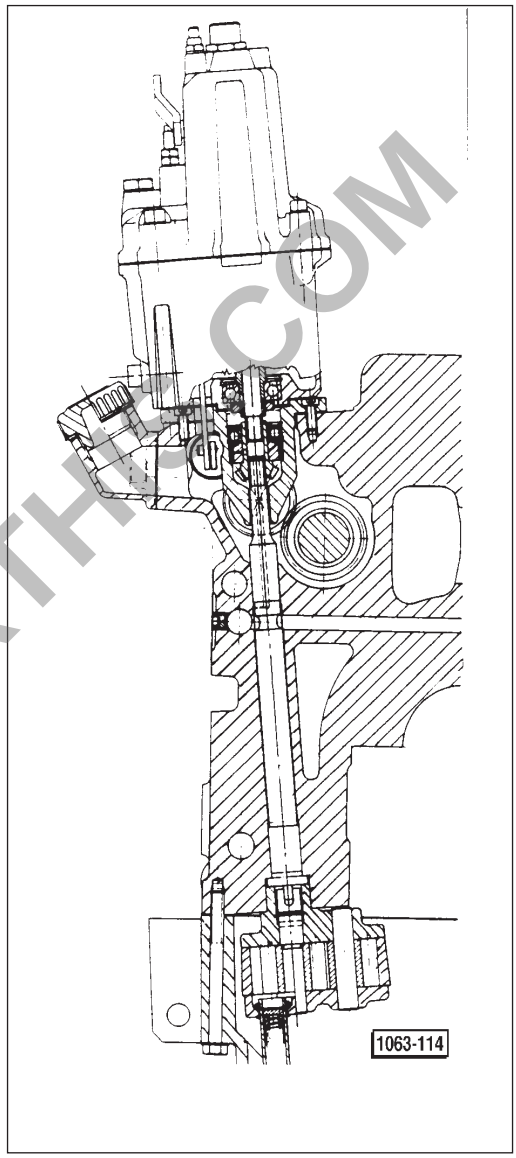


Fig. 14 - Engine-mounted governor unit. (For engine 4-cylinders with governor mechanical type).

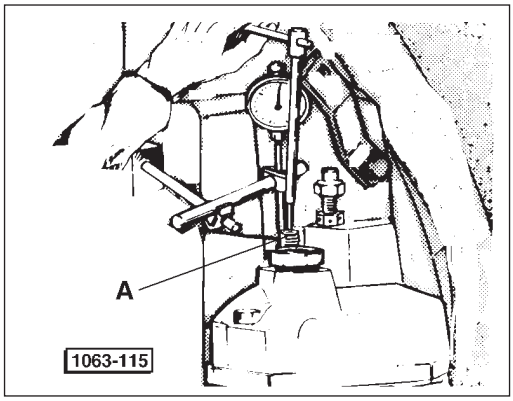


Fig. 15 - Tractor-installed engine governor unit.

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2 - Monitor menu

2 - Draft menu

From this menu you can display the following values:

- Pwm Base Up
- PWM Base Down
- PWM Max Up
- PWM Max Down
- Gain Up
- GainDown

The menu displayed on the ART is as follows:

			D	r	a	f	t								
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	P	W	M	B	a	s	e	U	p			x	x	x
2	-	P	W	M	B	a	s	e	D	o	w	n	x	x	x
3	-	P	W	M	M	a	x		U	p			x	x	x
4	-	P	W	M	M	a	x		D	o	w	n	x	x	x
5	-	G	a	i	n		U	p						x	x
6	-	G	a	i	n		D	o	w	n				x	X
		[	E	]		E	X	I	T						

These are the characteristic values of the electronic lift control system.

The default values are as follows:

Values	10N	10S
PWM BaseUp	390	360
PWM BaseDown	400	420
PWM MaxUp	600	600
PWM MaxDown	600	600
Gain Up	25	18
Gain Down	45	35

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Using the following equipment:

5.9030.627.0 centesimal dial gauge;
5.9030.433.0 dial gauge base;
5.9030.631.4/10 cylinder pressing tool,

Ensure the piston crown at T.D.C. recesses from the head gasket bearing surface (see Fig. 6).

Move the dial gauge base until the gauge feeler lies on the cylinder surface and take reading from the dial.

Reset the dial gauge.

Place the base so that the gauge feeler lies on the piston head at T.D.C. and take reading.

Choose the gasket to be fitted according to reading taken (also refer to item **D** in the table here below).

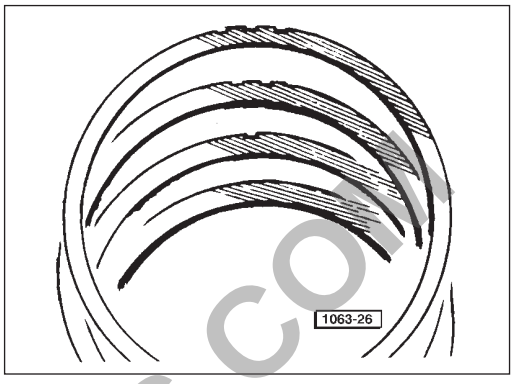


Fig. 5 - Cylinder head gasket.

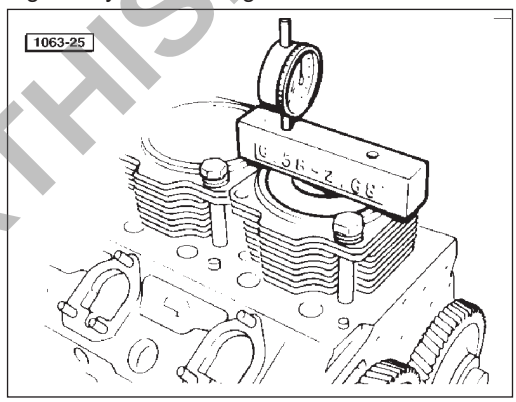


Fig. 6 - Checking piston position at T.D.C.

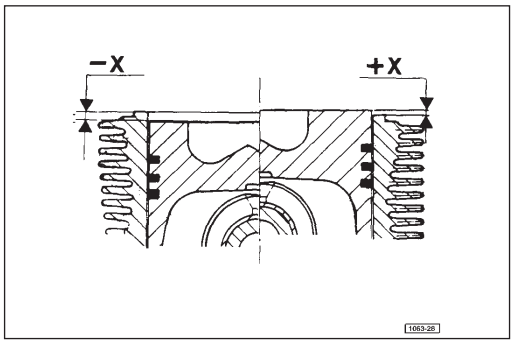


Fig. 7 - Determining the engine cylinder head gasket thickness.

		mm	Ø machining	Ø max wear
A	inside diam. measured half-way along the cylinder	mm	105,000 $^{-0}_{+0,022}$	105,100
B	roundness error	mm	0,020	0,080
C	piston recess from the head gasket bearing face on cylinder	mm	0,30 ÷ 0,40	
D	determination of head gasket		thickness **X** reading	gasket thickness
	gasket ref. code 0.085.1450.0	mm	-0,562 ÷ -0,30	0,5 without locating notches
	gasket ref. code 0.085.1451.0	mm	-0,290 ÷ -0,11	0,7 with 1 locating notch
	gasket ref. code 0.085.1453.0	mm	-0,100 ÷ +0,02	0,8 with 3 locating notch
	gasket ref. code 0.085.1452.0	mm	-0,030 ÷ +0,178	1 with 2 locating notch

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Adjusting the lift (Fig. 6)

Warning: before adjustment, attach a weight of approx. 200 kg to the 3-point hitch.

Adjust the forks of the external tie-rods of the lift control linkage so that the yellow lever and the green lever are free to move the entire length of the control slot.

Adjusting the lift travel - YELLOW LEVER -

Start the engine, and move the yellow lever to the maximum lift position and move the green lever to position 12 in its control slot.

Adjust screw **E** (fig. 6), so that it is up against its stop when the reference marks on the right-hand side of the lift housing and the lift arm coincide.

If necessary, also adjust fork **B** of tie-rod **A**.

Adjusting the GREEN LEVER

Move the yellow lever to the position **CONTR** of its control slot, and check that when the green lever is moved from position **12** towards **0**, the lifting action commences when the lever is in correspondence with position **4**.

If not, adjust fork **D** of tie-rod **C**.

Checking operation of the safety stop.

Move the green lever to the maximum lift position (position **0**). The lift arms will be raised, rotating through a further angle of approx. 4° (corresponding to a movement of the notch on the lift arm of 6 mm).

Checking balance.

With the yellow lever in the **CONTR** position, move the green lever from position **12** to **4** to find the point of balance (before the lifting action begins); check that when the counterweight applied to the lift arms is pulled upwards, the lift raises the arms, and that when the counterweight is pushed downwards, the lift lowers the arms.

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Mechanical controls

Given the constructional simplicity of these controls, we present a series of figures illustrating the individual components of the controls.
Only some of these controls require adjustment; for instructions for these adjustments, refer to the chapter dealing with corresponding unit.

Fig. 1 - Gearbox inversor control
Fig. 2 - Gear-change control
Fig. 3 - Gearbox reduction unit control
Fig. 4 - Synchronised P.T.O. control
Fig. 5 - Hand throttle control
Fig. 6 - Accelerator pedal control
Fig. 7 - Lift controls
Fig. 8 - Ground-operated lift controls
Fig. 9 - Auxiliary control valve controls

N.B.: For P.T.O. controls see instructions on page 178.

WARNING: It is important that those tie-rods fitted with adjustable forks are adjusted so that their respective control levers can be moved through their entire range from min. to max. without obstruction.

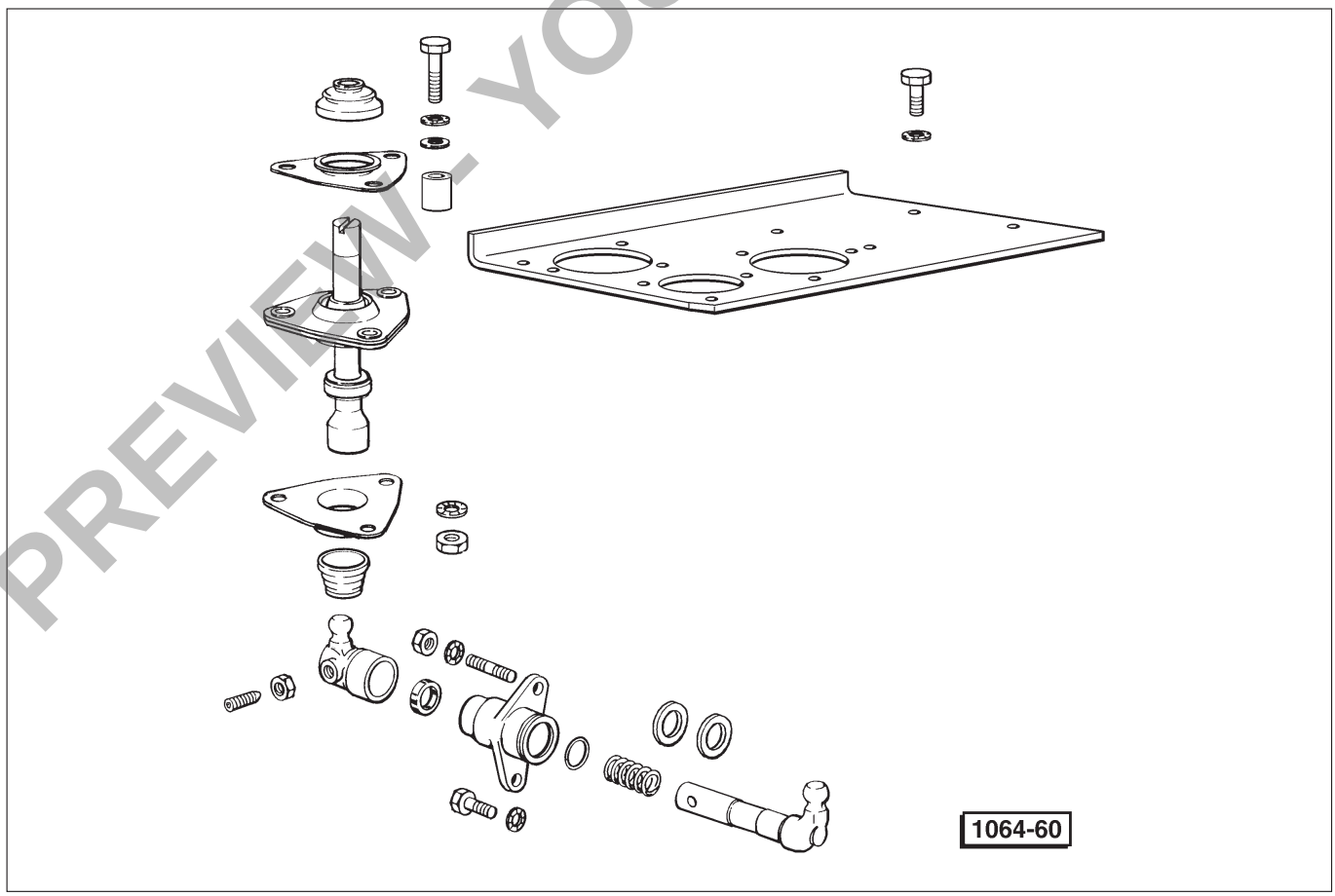


Fig. 1 - Gearbox inversor control

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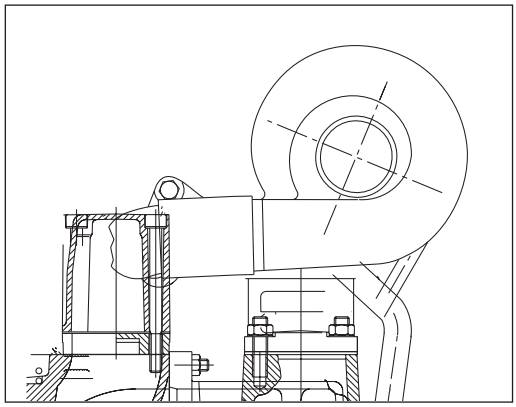


Fig.1 - Turbocharger.

Turbocharging DORADO 65 - 85

The turbocharger assembly covers the function of forcing more air into the cylinders. This also allows the diesel fuel delivery capacity to be proportionally increased.

Mixture increase is necessary to obtain greater engine power.

The turbocharger assembly is an extremely simple and rational design and consists of a turbine and a compressor.

The turbine is operated by the exhaust gases from the engine (in this way, a part of the gases' kinetic energy which otherwise would be wasted is recovered). The turbine drives the compressor, which compresses the air sucked in the cylinder intake duct through the filter.

Tests

A precise test on turbocharger efficiency can only be performed on a test bed.

Tests performed with turbocharger mounted on engine can only give approximate results.

Before starting checking operations make sure the engine fuel supply system is operating correctly.

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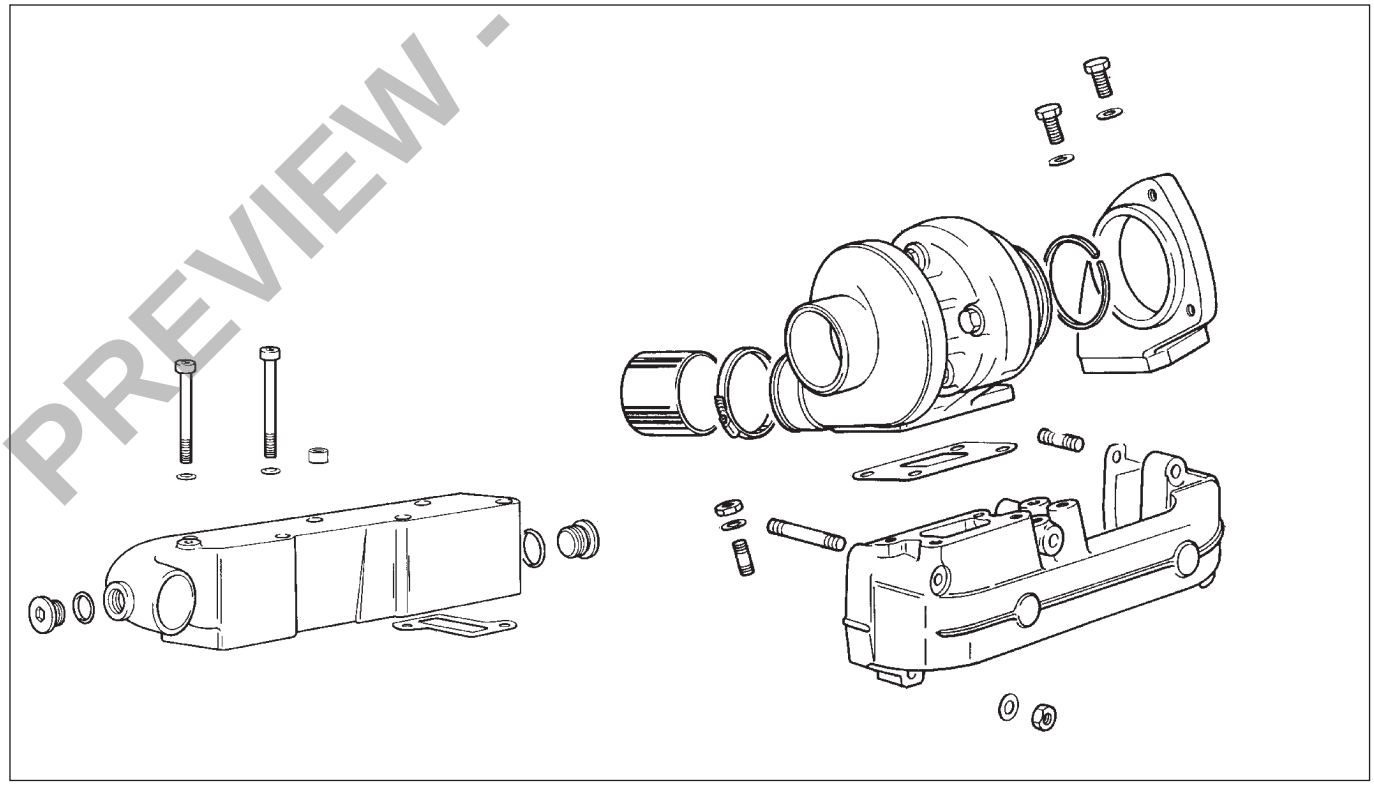


Fig. 2 - Turbocharger and exhaust manifolds

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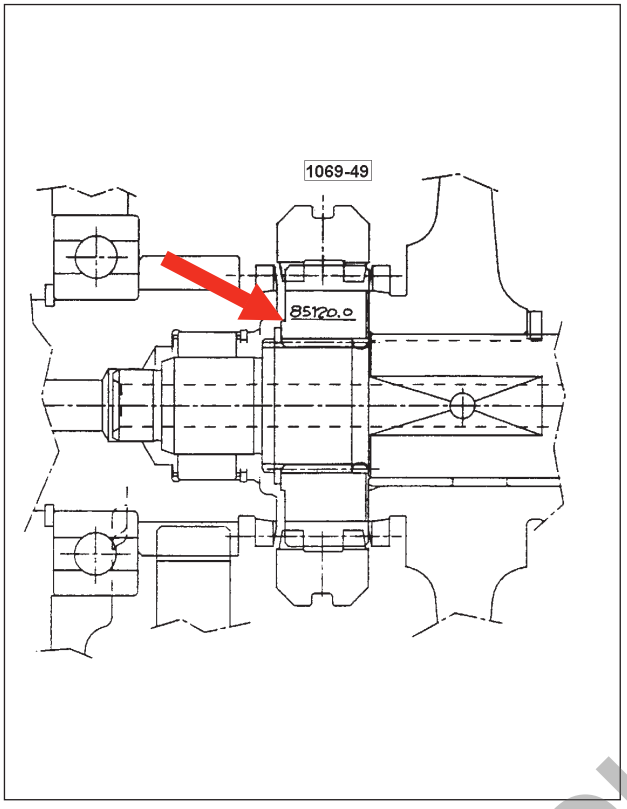


Fig. 47 - Range gearbox synchronizer.

Range gearbox synchronizer.
Warning: the synchronizer hub must installed so that the indicated by the arrow is positioned as shown in the figure.

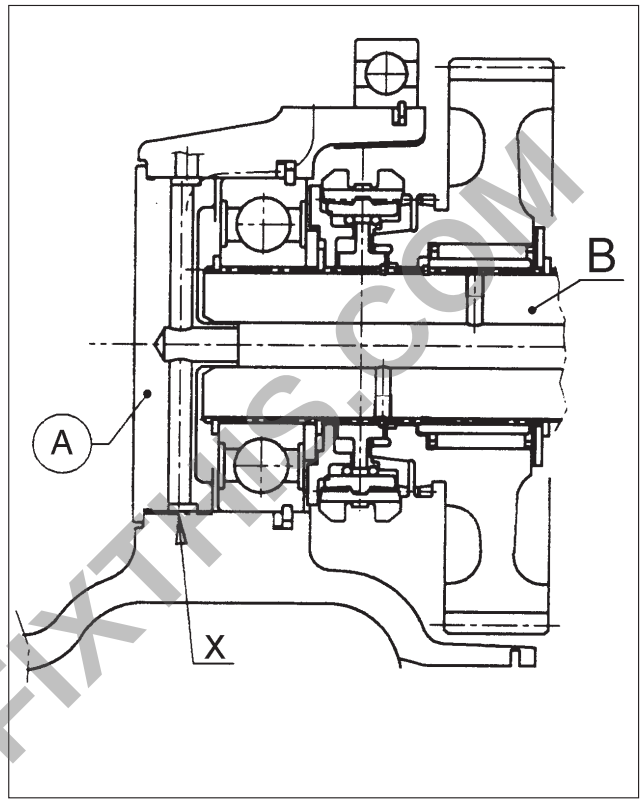


Fig. 48 - Secondary shaft cover plate

Fitting the secondary shaft cover plate. Fit the cover **A** applying LOCTITE 601 around the hole of the front gearbox casing indicated **X** in the figure.
B - secondary shaft

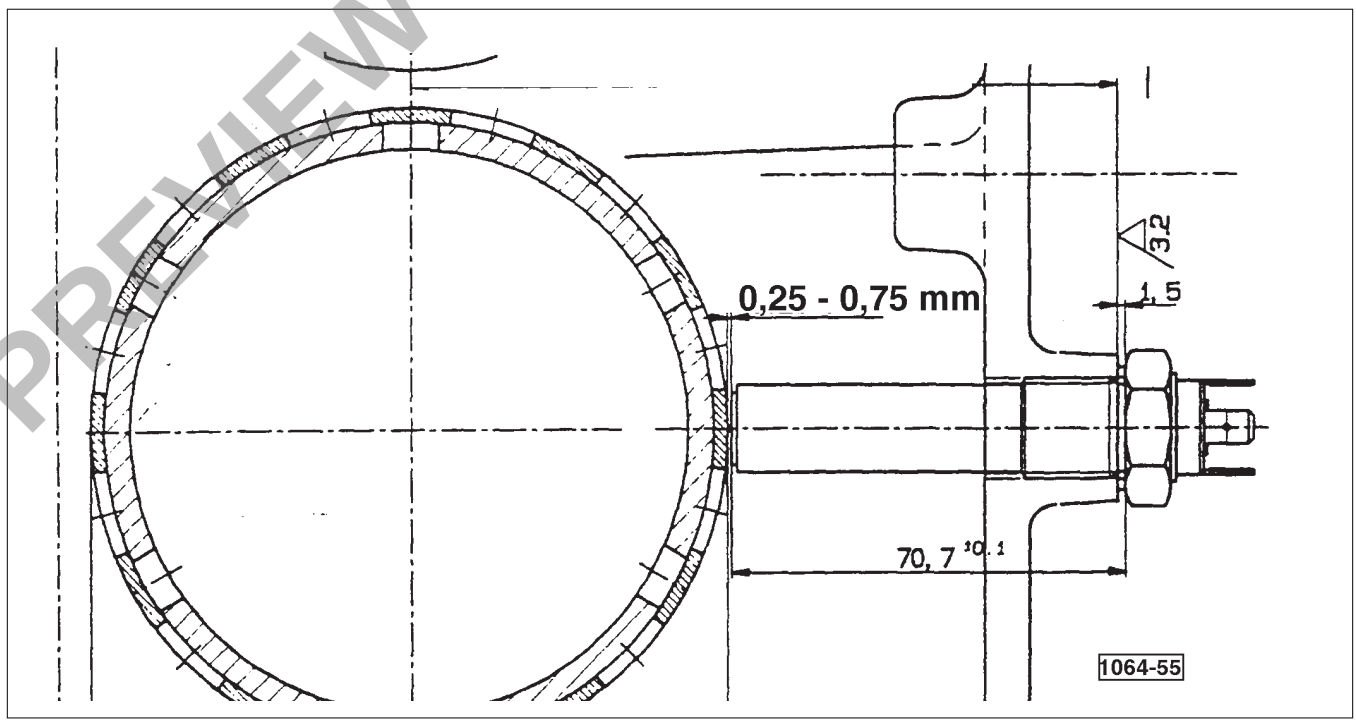


Fig. 49 - Fitting the transmission speed sensor pickup.

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Remote pushbuttons for lift operation from ground

Two remote pushbuttons are located on the rear fender.

To enable these pushbuttons it is first necessary to release the lift control system.

Operation of the manual controls overrides any current lift functions and places the control unit in STOP condition, awaiting new control signals.

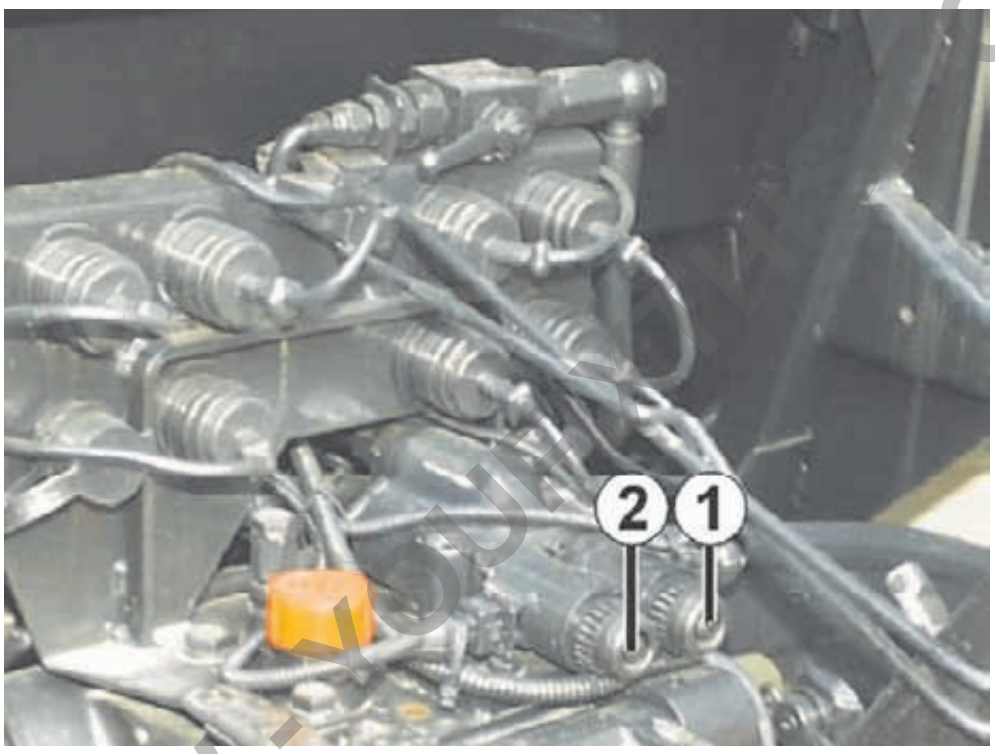


Fig. 3 - Lift control pushbuttons ***1 - Up*** ***2 - Down***

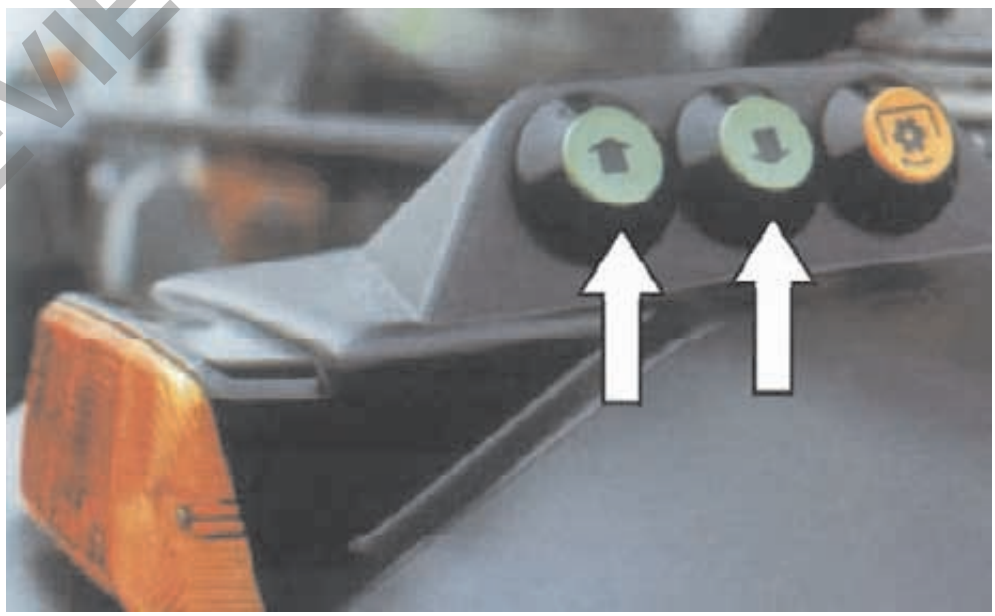


Fig. 4 - Ground-operated lift controls.

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Oil filters

The oil filters are mounted to the rigth hand side of the transmission at the rear end, and are easily replaced.
Filters must be replaced whenever the blockage indicator lights up at the instrument panel.
The filter blockage pressure switch is set at 0.5 bar, and must be replaced with another of identical specifications if faulty.
Ensure that the replacement is stamped with the correct 0.5 bar setting.
Whenever the transmission is stripped down for servicing or overhaul, clean the mesh strainer fitted to the bottom of the housing.

CAUTION - Operate the lift system and auxiliary spool valves only when the blockage indicator is no longer alight.

IMPORTANT - If during normal operation of the machine the clogging filter indicator should light up, remplace the filter.

Hydraulic pumps

The hydraulic pumps require no servicing or adjustment even after a long period of operation, although the splines of the pump shaft must be inspected with care: there must be no signs of wear or damage.

Checking the relief valves of the hydraulic lift system
Using tool 5.9030.520.4, check that the circuit pressure relief valve incorporated into the auxiliary spool valves is set at 190 bar and the system pressure shock valve at 210 bar.
Remember that for the lift to function correctly, operating pressure in the circuit should not exceed 150 bar.
The operating pressure can be measured by coupling a gauge to the oil pressure line between the directional control valve and the lift; for machines with assistor cylinders, the gauge can be coupled to the pressure line connecting with the assistors.

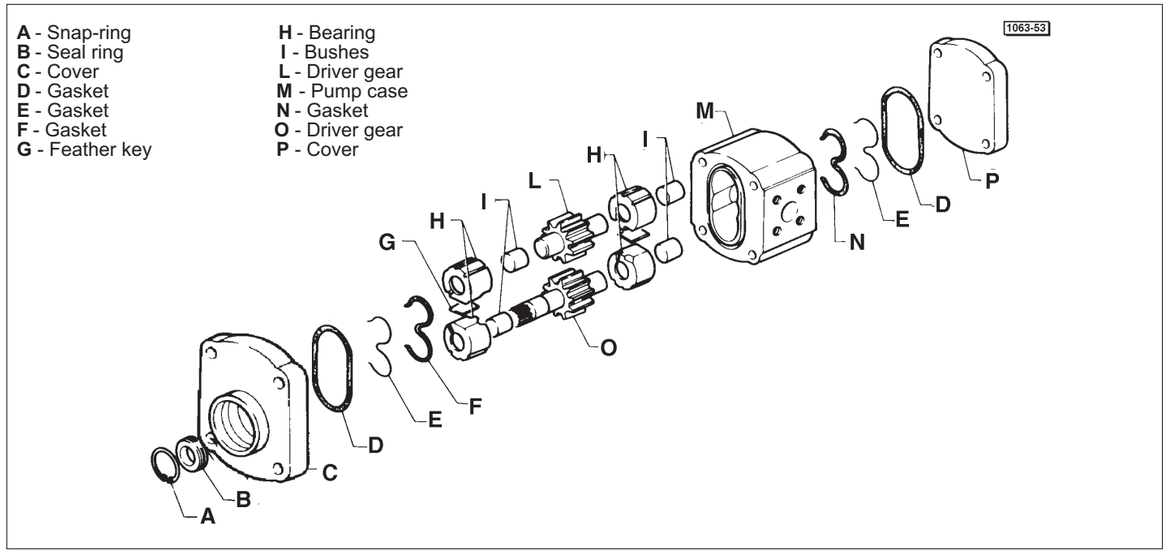


Fig. 2 - Component parts of the hydraulic pump assembly

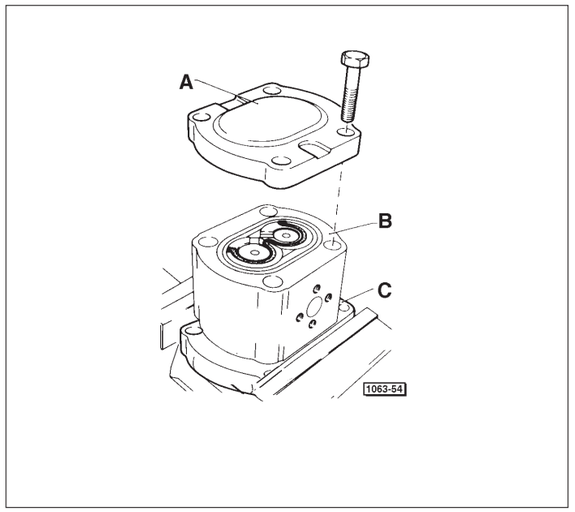


Fig. 3 - Pump assembly cover.
A - Cover
B - Pump case
C - Base

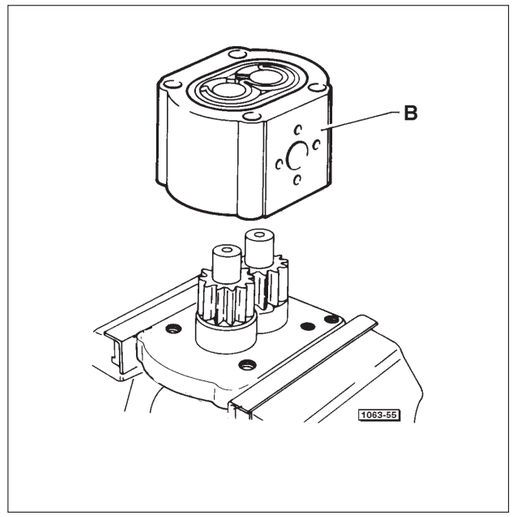


Fig. 4 - Pump case.
B - Pump case.

Stripping the hydraulic pump

Removal

The pump is secured to the tractor by 2 of the 4 bolts holding the pump assembly together. These two bolts are diagonally opposite.
Having removed the pump from the vehicle, the components are freed by unscrewing the two remaining bolts which keep the cover **A** (see fig 3) clamped to the frame **C** and the pump body **B**; this done, remove the washers and then the cover.
Using a proper pointed tool remove gasket **E** (Fig. 6 pag. 343), mark with a reference the position of the bearings with respect to the pump case and then take the bearings from their seats by pushing from inside outwards and being careful the connecting pin neither be lost nor damaged.

Block the pump case in a vice as shown in figure and then remove snap ring **F**.

Remove the seal ring.

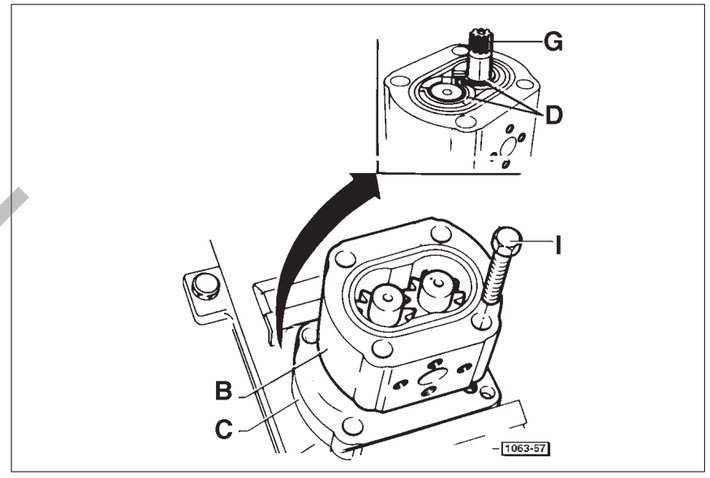
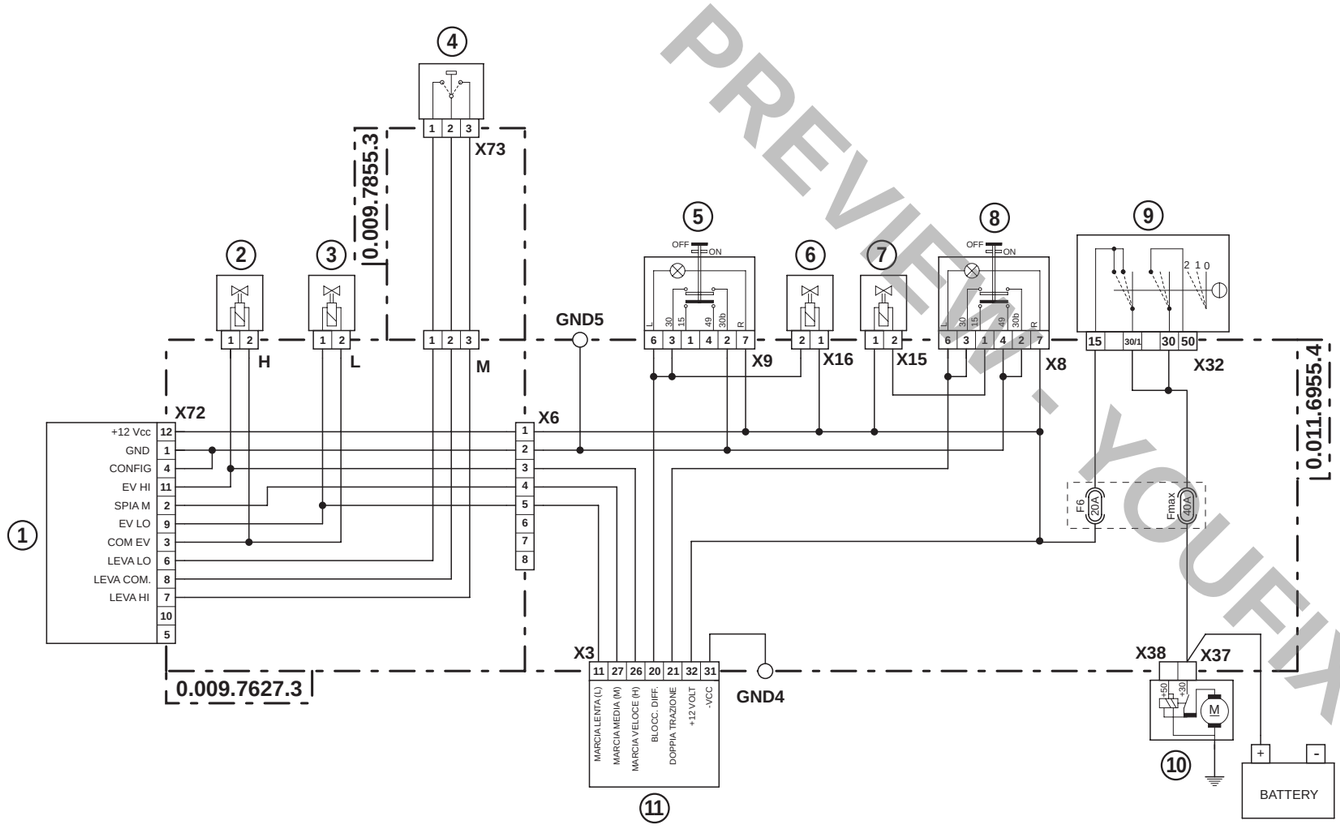


Fig. 5 - Pump disassembly.

B - Pump case
C - Base
D - Bearings
G - Gears
I - Screw

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4.19 HML TRANSMISSION (VERSION WITH MECHANICAL GOVERNOR)

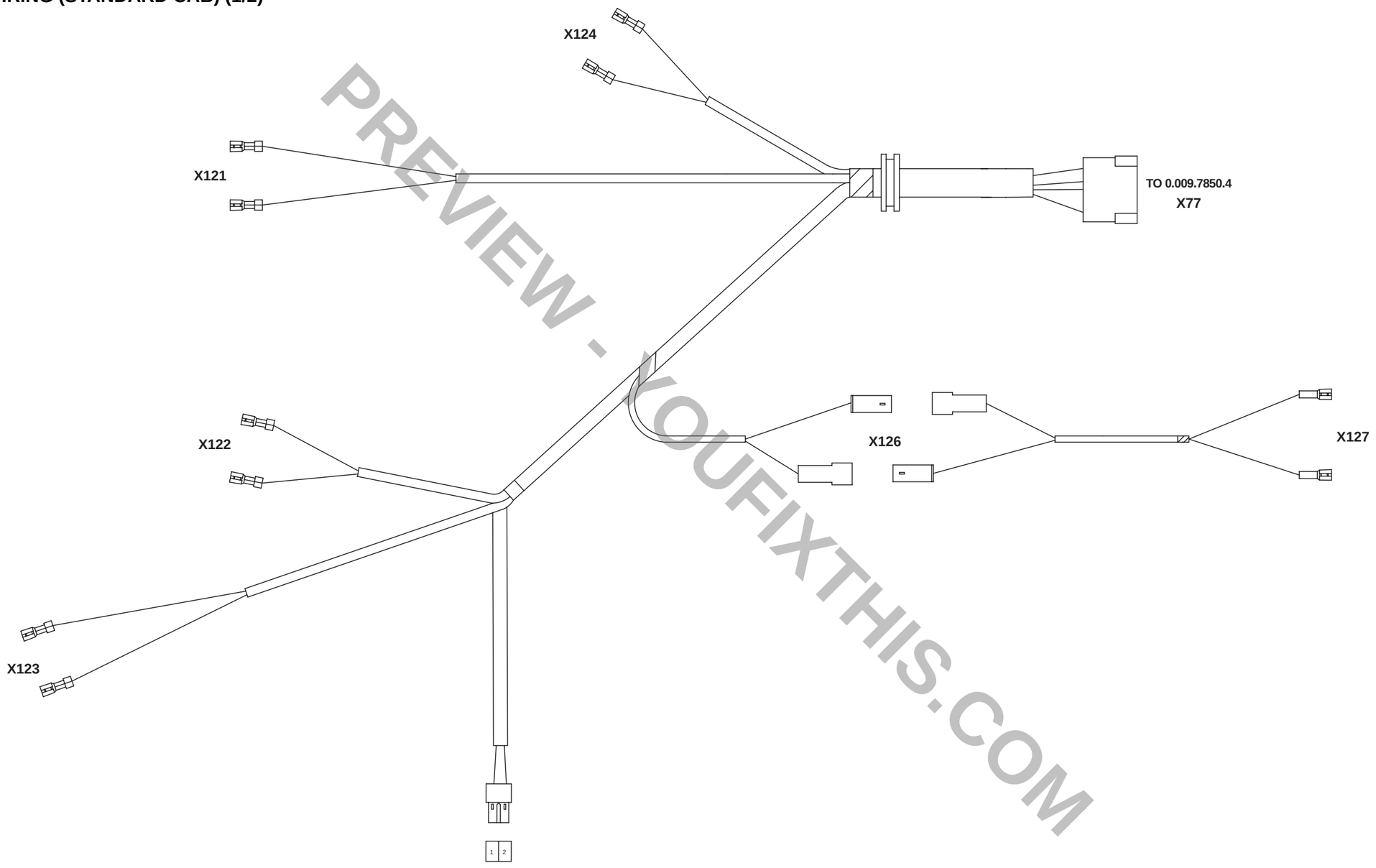


1 HML control unit
2 Solenoid valve for High range control (HI)
3 Solenoid valve for Low range control (LO)
4 HML control pushbutton
5 DF control switch
6 Differential lock control solenoid valve (DF)
7 4WD control solenoid valve (DT)
8 4WD control switch
9 Starter switch
10 Starter motor
11 Instrument panel

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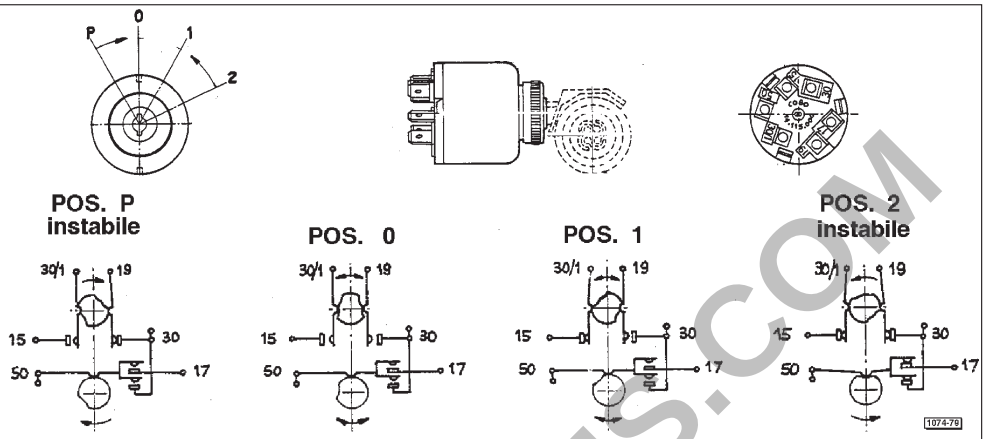
WORKLIGHTS WIRING (STANDARD CAB) (1/2)



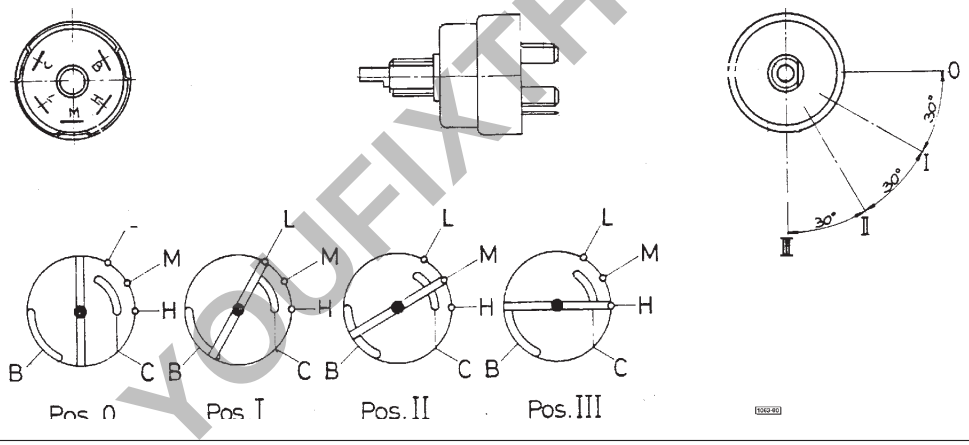
X77 To roof wiring
X121 Front left worklight
X122 Rear left worklight
X123 Rear right worklight
X124 Front right worklight
X125 Rear screen wiper motor
X126 Connector
X127 Rotating beacon

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IGNITION KEY
code 2.7659.127.0



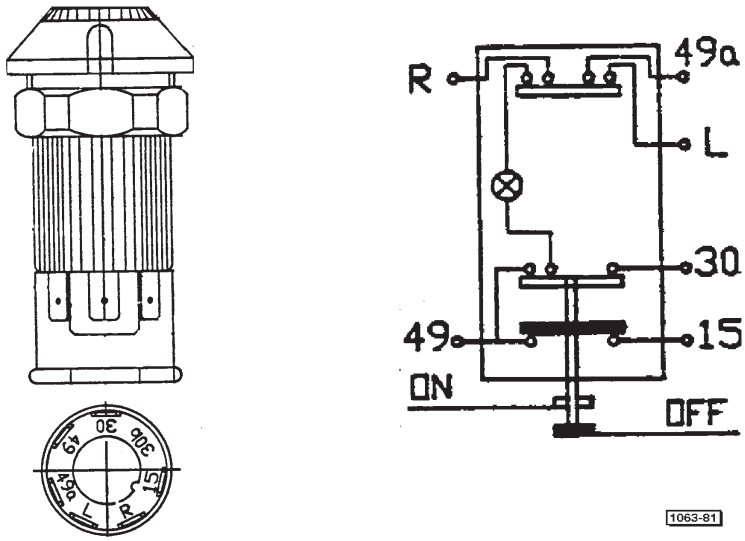
VENTILATION CONTROL
code 009.4743.1
for tractors equipped with standard cab



PUSH BUTTON CONTROL

code 2.7659.110.0

HAZARD WARNING LIGHTS



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