REPAIR MANUAL

NEW HOLLAND
TC54
TC56
AL59



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SPECIFICATIONS

DESCRIPTION	TC54		TC56		TC56+
	Mechanical drive	Hydrostatic drive	Mechanical drive	Hydrostatic drive	Hydrostatic drive
Type	675T/WN	675T/WP		675TA/YA	675TA/VJ
Gross power (ISO TR1436)	99 kW	125 kW		136 kW	168 kW
Governor	Mechanical				
Rated speed	2100 rpm				
Low idle speed	1300 rpm				
High idle speed	2205 rpm				
Injection pump	DP203 (rotary)			"A" in line	"P" in line
Displacement	7500 cc				
Bore	112 mm				
Stroke	127 mm				
Water pump speed	2815 rpm				
Ventilator speed	1762 rpm	2188 rpm		1601 rpm	
Air compressor speed	-				2677 rpm
Crankcase capacity (with filter)	23 litres				
Battery	2 x 12 V - 92 Ah				
Starter motor	12 V - 3.6 kW				
Alternator type	100 A (12V)			135 A (12V)	
Alternator speed	5794 rpm				
Rotary screen speed	443 rpm			436 rpm	
AC compressor speed	3173 rpm				
Fuel tank	300 litres				400 litres

DESCRIPTION	TC54		TC56		TC56+
	Mechanical drive	Hydrostatic drive	Mechanical drive	Hydrostatic drive	Hydrostatic drive
Type	-	675TA/HJ		675TA/CD	-
Gross power (ISO TR14396)	-	125 kW		150 kW	-
Governor	Mechanical				
Rated speed	2100 rpm				
Low idle speed	1300 rpm				
High idle speed	2205 rpm				
Injection pump	-	Rotary		"P" in line	-
Displacement	-	7500 cc			
Bore	-	112 mm			
Stroke	-	127 mm			
Water pump speed	-	2815 rpm		3859 rpm	-
Ventilator speed	-	1762 rpm		1601 rpm	-
Air compressor speed	-	-	-	2677 rpm	-
Crankcase capacity (with filter)	-	23 litres			-
Battery	-	2 x 12 V - 92 Ah			-
Starter motor	-	12 V - 3.6 kW			-
Alternator type	-	100 A (12V)		135 A (12V)	-
Alternator speed	-	5794		5426 rpm	-
Rotary screen speed	-	443 rpm		436 rpm	-
AC compressor speed	-	3173 rpm			-
Fuel tank	-	300 litres			-

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9. Too much moisture in the system - noisy expansion valve, low intake pressure.
10. Noisy fan – excessively worn motor.

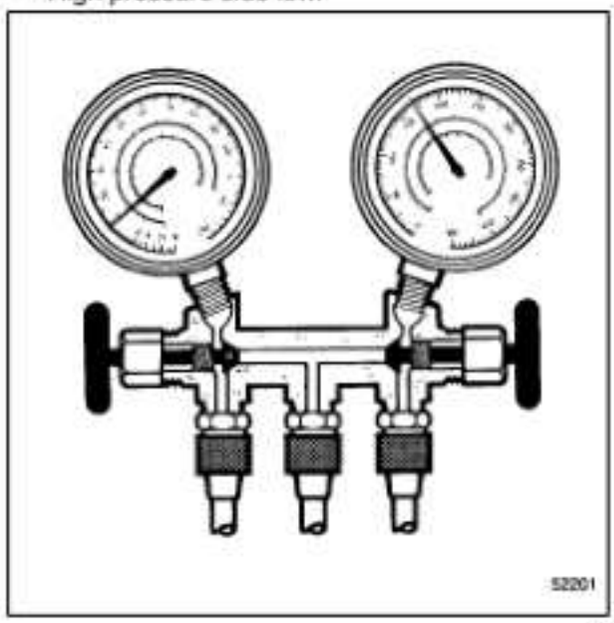
For an easier troubleshooting of the A/C system, the following pages make a synthesis of the main causes for a bad cooling. For each condition, the remedies are suggested.

During troubleshooting, to determine the individual conditions for each fault, proceed as follows:

1. connect the manifold pressure gauge.
2. Operate the A/C system.
3. Carry out the operation test and compare the measured values with those shown in the paragraph "Conditions".
4. Consider the problems listed in the paragraph "Diagnosis" and carry out additional tests according to the description.
5. Carry out the repair works described in "Actions".
6. The high pressure values apply for an ambient temperature of 35°C. If the temperature of the testing room is not the same, refer to the paragraph "Pressure-temperature relationship".

NO COOLING:

- low pressure side low.
- High pressure side low.



12

Conditions:

- Low pressure side too low. The reading must range from 1 to 2 bar.
- High pressure side too low. The reading must range from 13 to 14 bar.
- Bubbles in the sight glass.
- Air coming from the cooler is not cold.

Diagnosis:

- insufficient quantity of coolant in the system; this condition could be due to a small leak.

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22 MACHINE LEVELLING SYSTEM
AL59 9262 > .....

Code	Description		Line
A42.	Printed circuit - Machine levelling system alarm box		8030
F20.	25A	Levelling system	7830
F51.	10A	Machine transverse levelling	7880
F52.	10A	Machine longitudinal levelling	7850
F53.	10A	Switches	7830
H51.	Machine levelling transverse limit led		8090
H52.	Machine levelling longitudinal limit led		8110
H53.	Transverse levelling alarm led		8090
H54.	Longitudinal levelling alarm led		8110
K111.	Machine longitudinal levelling override		7850
S101.	Machine longitudinal levelling override		7950
S102.	Automatic machine levelling		8030
S103.	Machine automatic longitudinal levelling system		7910
S104.	Machine automatic transverse levelling system		7960

Line: 7820 - 8150

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HYDRAULIC PUMP

PUMP ASSEMBLY AND DISASSEMBLY

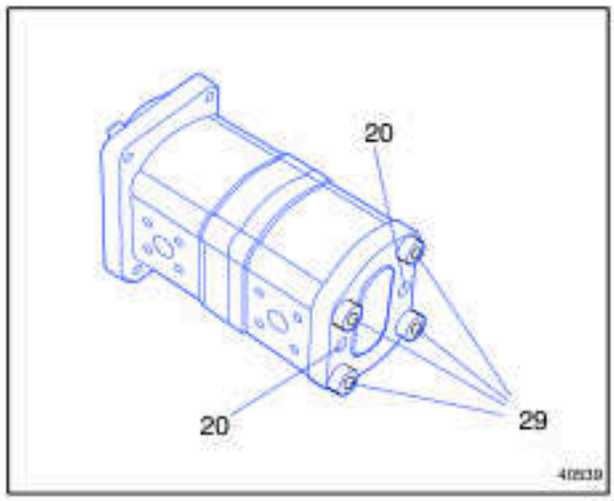
Figures from 7 to 10

1. Remove the four socket screws (29), so that the pump can be split in two parts, figure 8.
2. To split the two pump halves, remove the cylinder screws (20).
3. In this way, the fitting (27) is released.
4. Remove the slip ring (17).
5. Replace all seals (12), (14) and (15).
6. For the assembly, proceed in the reverse order of disassembly.

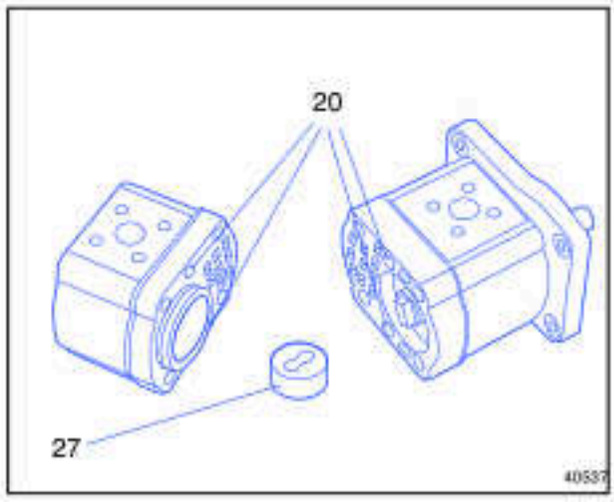
IMPORTANT: *The seals (12), (14) and (15) must be fitted so that the oil flow follows the direction of the arrow. If the mark on the pump housing is in the upper part, the pump drive shaft is at the bottom.*

HYDRAULIC PUMP - fig. 7 - 11

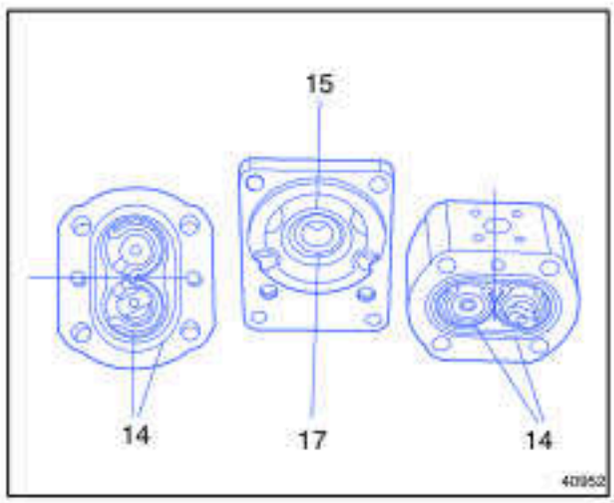
1	Pump housing
2	Bearing cover
3	Housing cover
4	Gear
5	Gear
6	Bearing shell
7	Bearing shell
8	Cylinder pin
9	Cylinder pin
10	Plug
11	Protection plug
12	Flat seal ring
13	Supporting ring
14	Seal ring
15	Shaft seal ring
16	Toothed ring
17	Slip ring
18	Snap ring
19	Hexagonal nut
20	Cylinder screw
21	-
22	Pump housing
23	Cover
24	Housing cover
25	Gear
26	O-ring
27	Drive pawls
28	-
29	Long cylinder screw



7



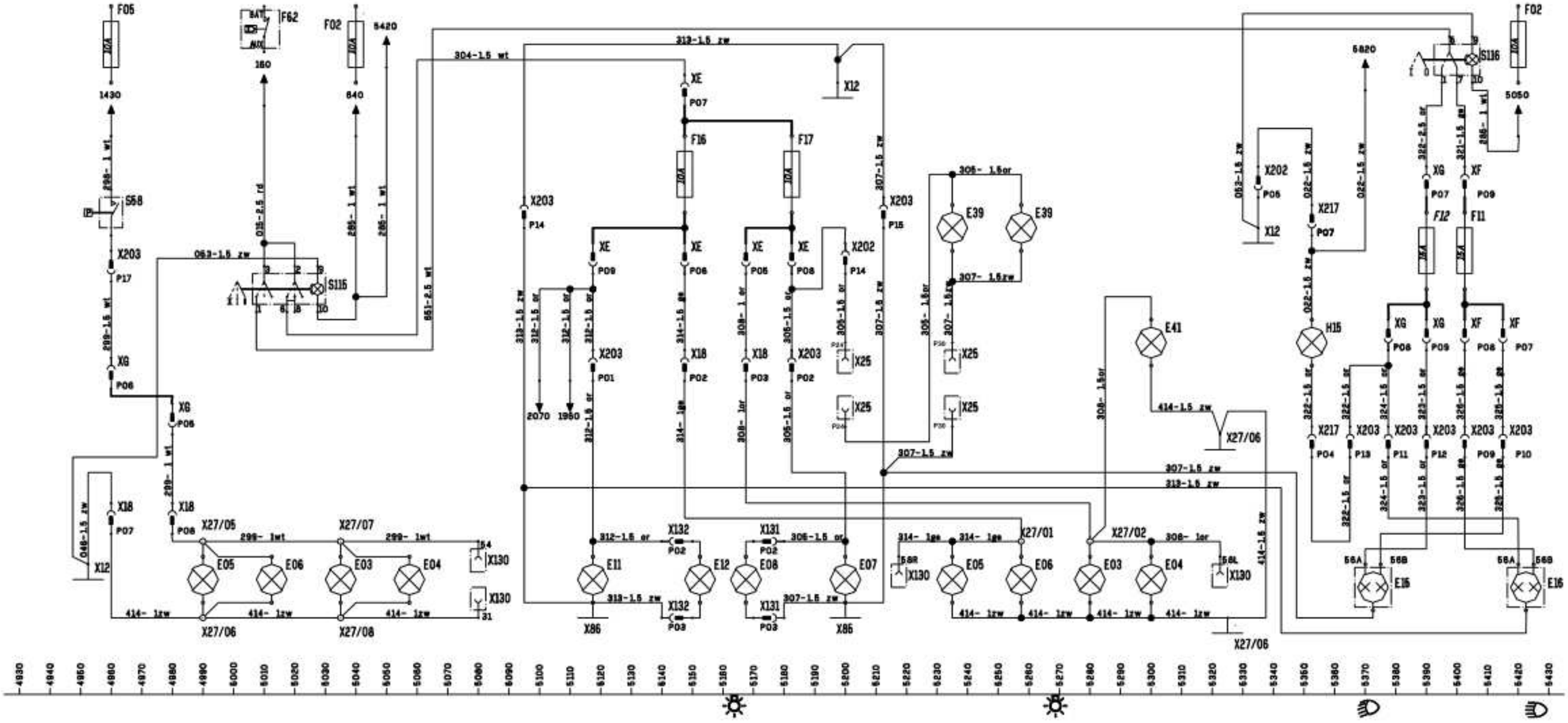
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LIGHTING
TC54 9262 > ..... TC56 9262 > ..... AL59 9262 > .....



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