

NEW HOLLAND TD60 TD70 TD80 TD90 TD95 Straddle Tractor

SERVICE MANUAL

NEW HOLLAND AGRICULTURE

SERVICE

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NEW HOLLAND

Repair Manual–TD Straddle Mount Series Tractors

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Chapter 1 – Engine

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SECTION 18 – CLUTCH

Chapter 1 – Clutch

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GENERAL CHARACTERISTICS 11"/11" CLUTCH

(TD60,TD70, TD80 and TD90 Models)

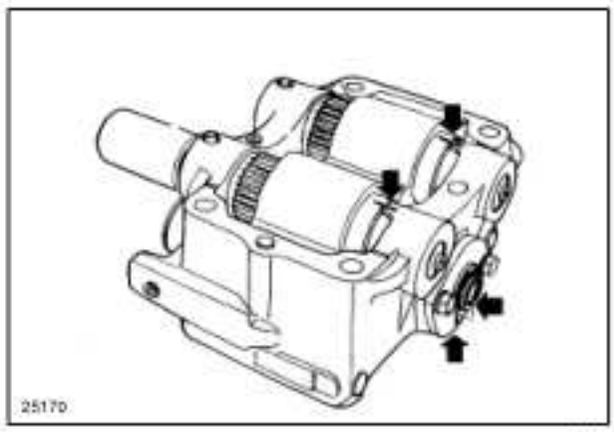
Type		Dual clutch consisting of two single dry plate clutches
Operating		mechanical : pedal operated main clutch; hand lever operated PTO clutch
Engagement and release mechanism		single Belleville spring disc
Driven plate lining material for main clutch (11")		
TD60 and TD70 Models		Organic agglomerate
TD80 and TD90 Models		cerametallic
Driven plate lining material for PTO clutch (11")		
TD60, TD70, TD80 and TD90 Models		Organic agglomerate
Driven plate thickness:		
. main clutch (9, fig. 1)		
. VALEO		
. Organic agglomerate and cerametallic	mm	10.2 to 10.8
. LUK		
. Organic agglomerate and cerametallic	mm	10.2 to 10.8
. PTO clutch (11, fig. 1)		
. VALEO	mm	7.3 to 7.9
. LUK	mm	7.3 to 7.9
. wear limit	-	see pages 18 and 19
Clearance between main clutch release sleeve and housing	mm	0.050 to 0.151
Clearance between PTO clutch release sleeve and housing	mm	0.050 to 0.151
Release lever coplanarity adjustment		see page 22
Clutch control adjustment		see page 23

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REFITTING THE COUNTER–ROTATING WEIGHT BOX TO THE OIL SUMP (Disassembly operation 41)

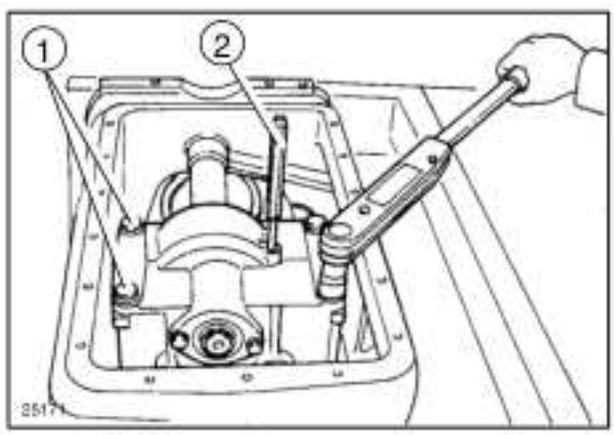
When refitting the counter–rotating weight box, synchronise as follows:

— Bring piston no. 1 to TDC.
— Position the rotating counterweights so that the timing reference marks are aligned as shown in the figure.



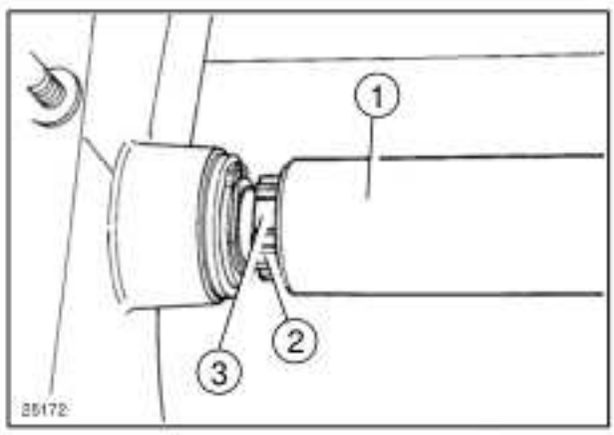
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— Turn the rotating counterweight unit over and insert the locating pin (2) in its hole. The pin serves to hold the counterweights in the correct timing position during installation of the unit.
— Using the hoist and a lifting chain, lower the counterweight unit onto its seating in the sump.



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— Slide the coupling sleeve (1) over the splines of the counterweight drive gear as shown in figure 85.
— Slide the other end of the coupling sleeve (1) over the splined shaft of the counterweight drive gear, so that the master spline in the sleeve coincides with the master spline (3) on the shaft (2).
— Tighten the dynamic balancer housing retaining bolts (1) fig. 129 to the torque specified on page 24.



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CLUTCH TROUBLESHOOTING

Problems	Possible causes	Remedies
Clutch slips	**4.** Worn friction discs (8 and 9, page 3–4), woflywheel pressure plates, and flywheel worn.	Check and compare the data given in the pages indicated; replace any parts which are worn up to or over the limit and adjust levers and clutch control linkage.
	5. Belleville spring disc (1, page 3–4) distorted or otherwise damaged.	Replace the Belleville spring disc.
	6. Friction linings of discs (8 and 9, page 3– 4) disc contaminated with oil and grease.	Replace friction discs; identify and eliminate the source of lubricant inside the clutch housing and thoroughly clean the friction surfaces.
Fierce clutch	**1.** Partial seizure of the external control linkage.	Check linkage pivots and lubricate.
	2. Friction disc (9, page 3–4) distorted.	Replace disc and adjust clutch control lever.
	3. Friction disc (9, page 3–4) with damaged hub springs or loose hub rivets.	Replace friction disc.
	4. Oil or grease contaminating the friction lining of discs (8 and 9, page 3–4)	Replace the discs, identify and eliminate the source of lubricant inside the clutch housing and thoroughly clean the friction surfaces.
Clutch sticks and drags	**1.** Clutch disc friction linings (8 and 9, page 3–4) or disc deformed.	Replace discs and adjust the disks.
	2. Seizure of external control linkage.	Check, replace faulty parts and lubricate.
	3. Controls badly adjusted.	Adjust controls (see page 21).
Clutch noisy when engaged and/or disengaged	**1.** Worn thrust bearing.	Replace bearing.
	2. Friction disc (9, page 3–4) with hub springs damaged.	Replace the friction disc.
Clutch pedal too stiff	**1.** Partial seizure of external control linkages.	Check linkage pivots and lubricate.
	2. Partial seizure of pedal pivot.	Check pivot and lubricate.

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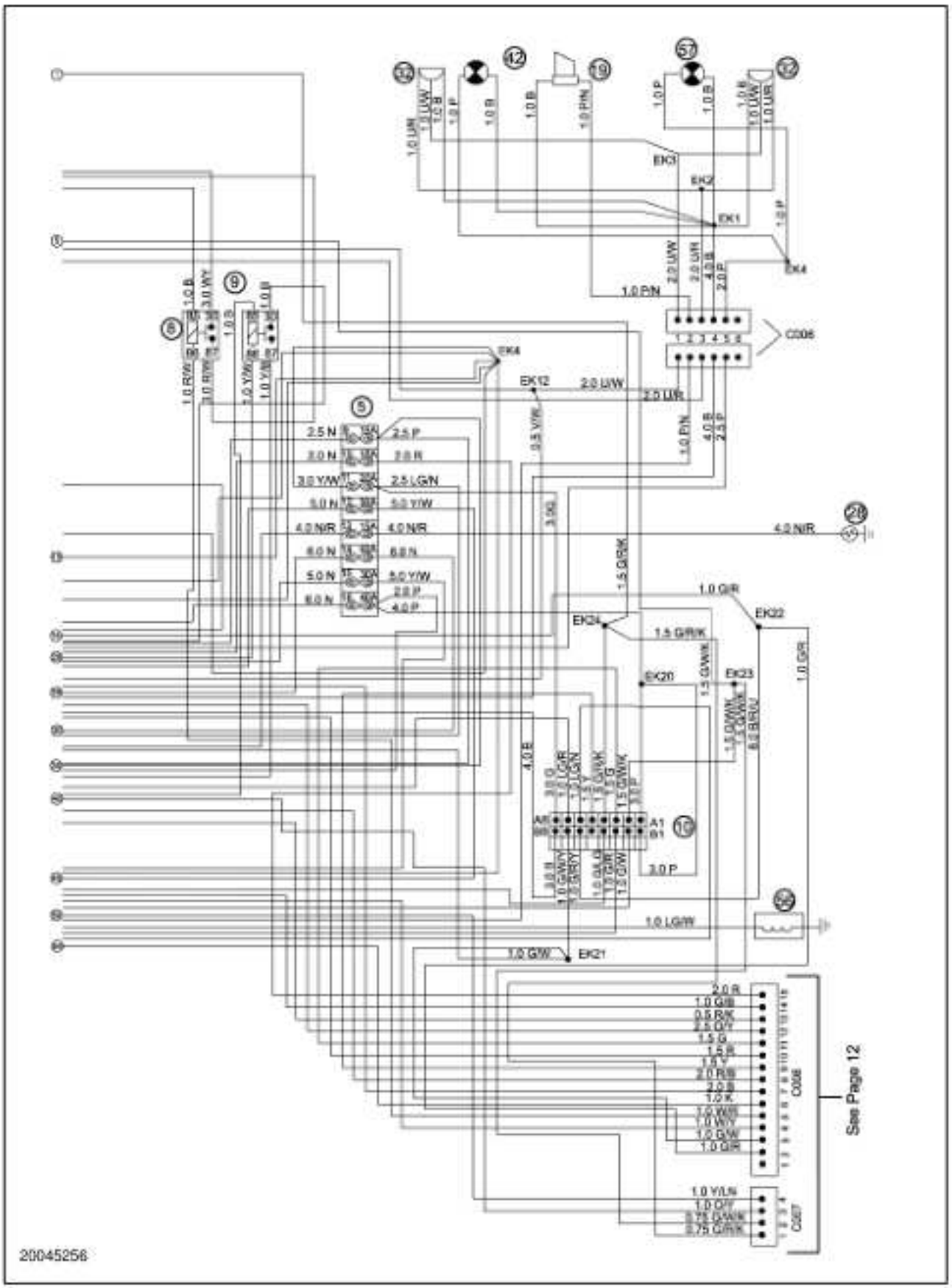
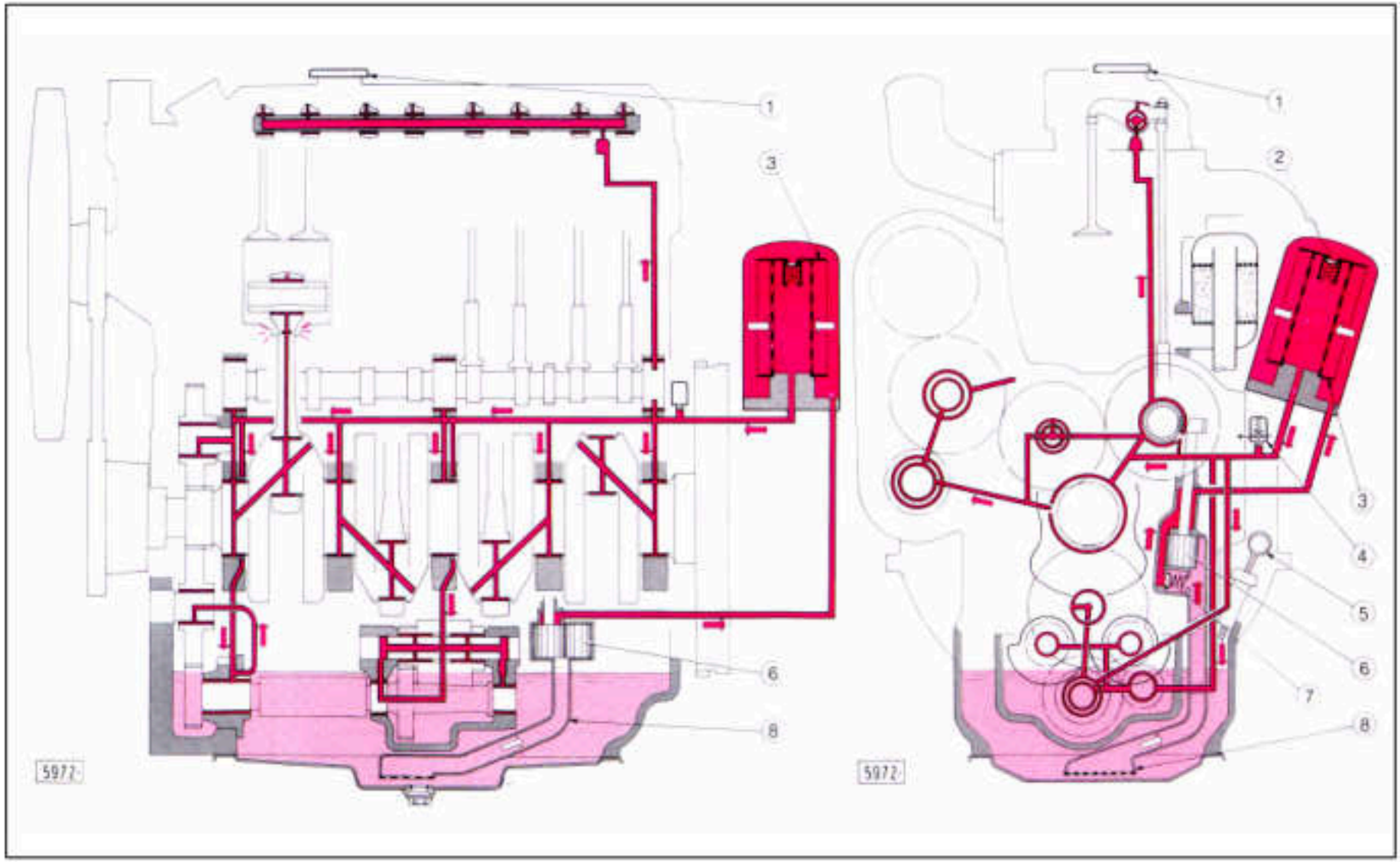


Diagram "A" (Main Harness) (continued)

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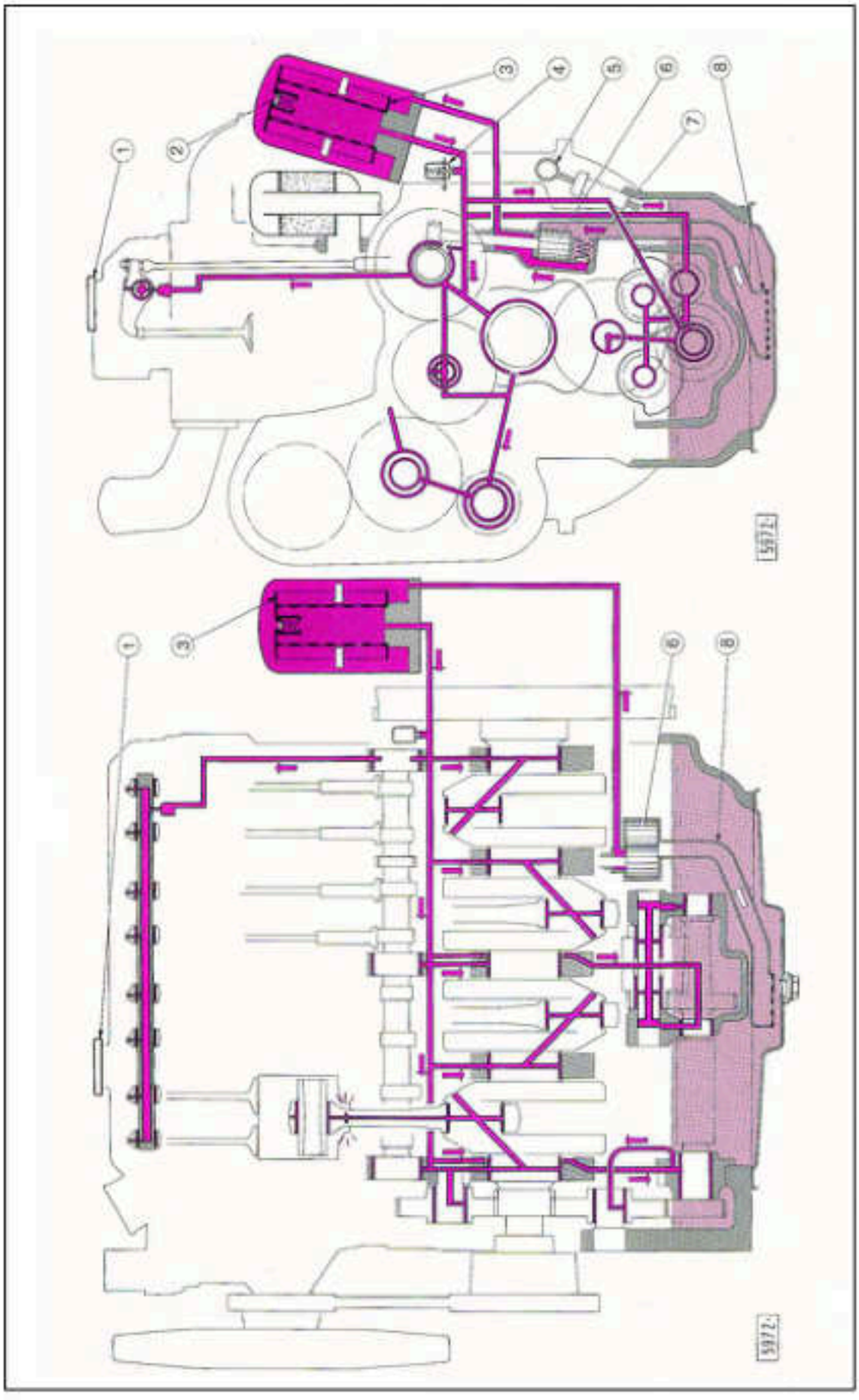


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Lubrification system of 4 – cylinder engine

1. Oil filler cap 2. Filter safety valve (opens when oil pressure at filter inlet exceeds the pressure at the outlet by 1.5 – 1.7 bar/cm^2(21.7 – 24.6 psi) 3. Filter. 4. Switch for low engine oil pressure warning light (on dashboard). 5. Dipstick. 6. Pump. 7. Oil pressure limiting valve. 8. Screen filter on pick–up pipe.

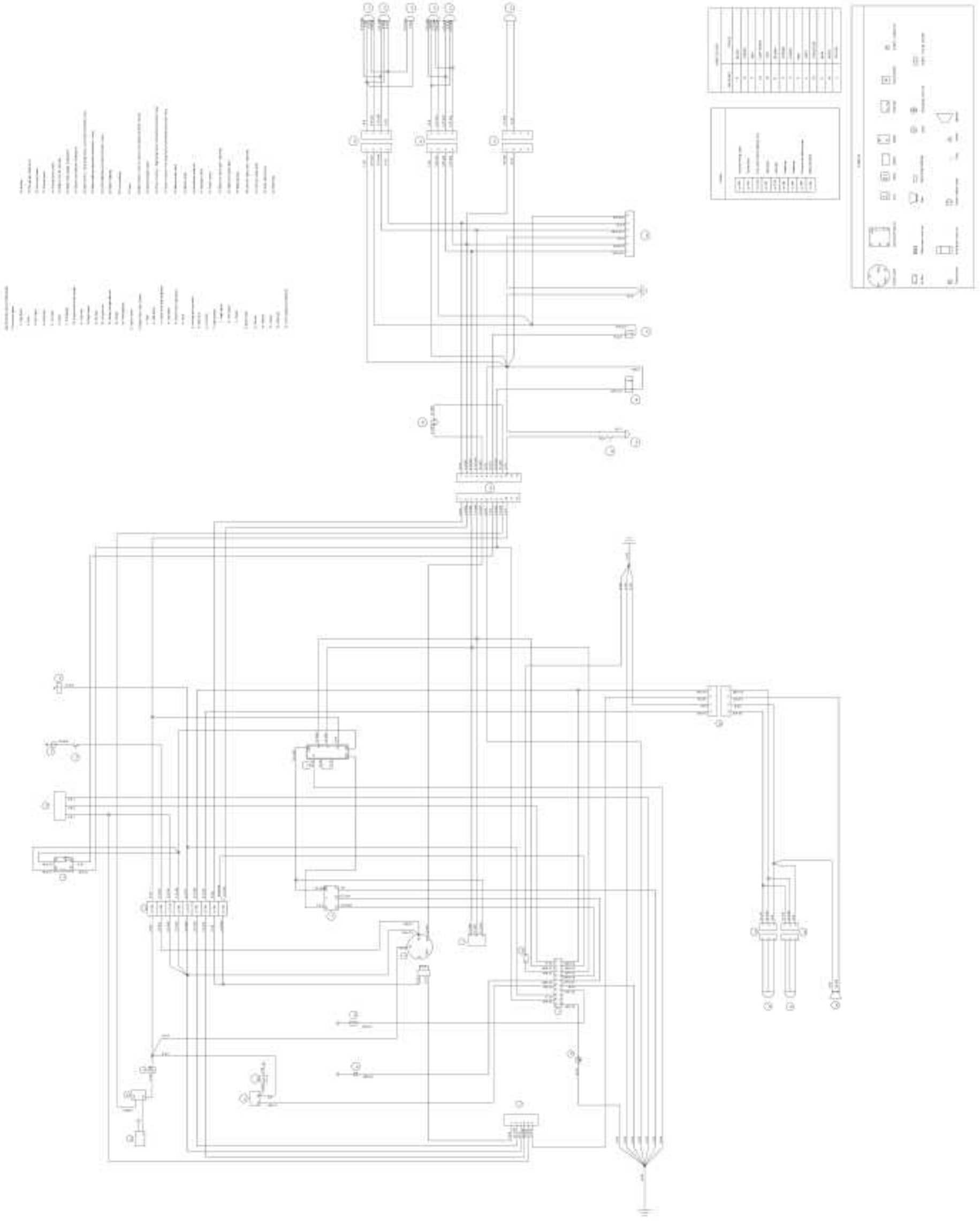
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Lubrication system of normally aspirated 4–cylinder engines

1. Oil filler cap 2. Filter safety valve (opens when oil pressure at filter inlet exceeds the outlet pressure by 1.5–1.7 bar/cm^2)
3. Filter. 4. Switch for low engine oil pressure warning (on dashboard). 5. Dipstick.
6. Pump. 7. Oil pressure limiting valve. 8. Screen filter on pick–up pipe

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