FARMALL 65A
FARMALL 75A
FARMALL 85A
FARMALL 95A
FARMALL 105A
FARMALL 115A

Tractor

SERVICE MANUAL

Part number 47445484
English
August 2013
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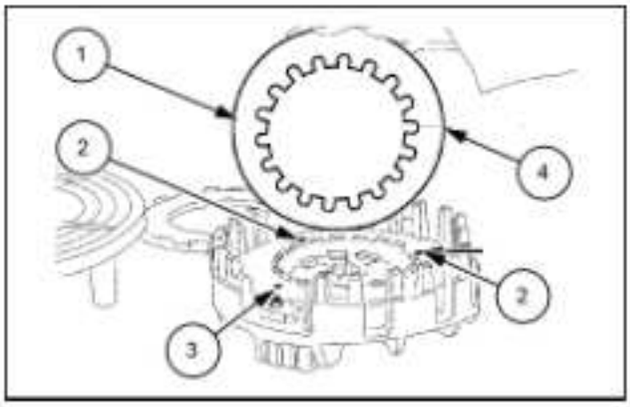
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Problem	Possible Cause	Correction
	Impurities accumulating in fuel lines	Clean fuel lines and replace severely dented pipes. Clean injection pump if necessary
	Incorrect injection pump timing	Adjust injection pump timing
	Crankshaft knocking due to excessive play in one or more main or big-end bearings or excessive endfloat	Re-grind crankshaft journals and crankpins. Fit oversize shell bearings and thrust washers
	Crankshaft out of balance	Check crankshaft alignment and balance; if necessary, replace
	Flywheel bolts loose	Replace any bolts that have worked loose and tighten all bolts to the specified preliminary and angular torque values
	Connecting rod axes not parallel	Straighten connecting rods, check axes parallelism; replace con rods if necessary
	Piston knock due to excessive wear	Rebore cylinder liners and fit oversize pistons
	Noise caused by excessive play of gudgeon pins in small-end and piston bushings, or loose fit of small-end bushing	Fit oversize gudgeon pin, rebore piston seats and small-end bushings. Replace bushings
	Excessive tappet/valve noise	Check for broken springs or excessive play between valve stems and guides, cam followers and bores. Adjust valve clearance
Engine produces excessive black or dark grey smoke	Maximum delivery of injection pump too high	Adjust injection pump on test bench to the values specified in calibration chart
	Injection pump delivery excessively retarded or automatic advance regulator damaged	Adjust injection pump/engine timing or check automatic advance regulator
	Injection pump delivery excessively advanced	Adjust injection pump/engine timing
	Injectors partially or totally obstructed or incorrectly adjusted	Clean and overhaul injectors and adjust pressure setting, replace if necessary
	Air cleaner restricted	Clean air cleaner and replace filter element if necessary
	Loss of engine compression due to: Piston rings sticking Cylinder liner wear Worn or incorrectly adjusted valves	Replace damaged parts or, if necessary, overhaul the engine
	Damaged high-pressure fuel lines	Inspect and replace if necessary
Blue, grey-blue or grey-white smoke	Injection pump delivery excessively retarded or automatic advance regulator damaged	Adjust injection pump/engine timing or check automatic advance regulator
	Injectors obstructed or damaged	Clean and overhaul injectors and adjust pressure setting, replace if necessary
	Oil leaking past piston rings due to sticking rings or cylinder liner wear	Replace damaged parts or, if necessary, overhaul the engine
	Oil leaking through the inlet valve guides due to guide or valve stem wear	Recondition cylinder head
	Engine does not reach correct operating temperature (thermostat faulty)	Replace the thermostat
Engine runs on after switching Off	Engine stop solenoid damaged	Replace solenoid
	All-speed governor damaged	Overhaul injection pump and adjust on test bench to the values specified in calibration table

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- Position the Belleville spring **(1)** correctly on the main clutch pressure plate **(3)**, making the centring dowels **(2)** correspond with the notches **(4)**.
- Adjust the clutch as directed below.

NOTE: *When reassembling, tighten the six bolts fastening the flexible tabs driving the main and PTO clutch pressure plates to the supporting housing to a torque of* ***1.5 N·m (1.1063 lb ft)****.*



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Minimum permissible dimensions after refacing parts subject to wear for valeo clutches

11"/11" dual clutches

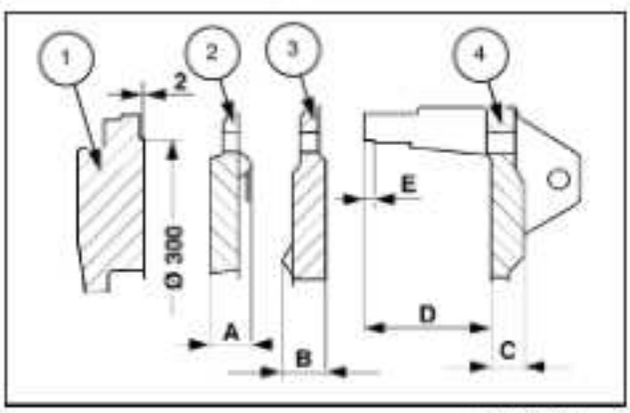
If it is necessary to reface the friction surface on the flywheel, bear in mind that the maximum amount that can be removed in relation to the nominal thickness is **1 mm** (**0.0394 in**).

Once terminated, moreover, the external lowering will need to be restored to **2 mm** (**0.0787 in**) (See Fig. **8**).

11"/11" dual clutch
Mod. Farmall 65A, Farmall 75A, Farmall 85A

A. ≥ **12.50 mm** (**0.4921 in**)
B. ≥ **20.00 mm** (**0.7874 in**)
C. ≥ **18.00 mm** (**0.7087 in**)
D. ≥ **12.50 mm** (**0.4921 in**)
E. ≥ **2.50 mm** (**0.0984 in**)

1. Engine flywheel.
2. PTO clutch pressure plate.
3. Main transmission clutch pressure plate.
4. Supporting housing.

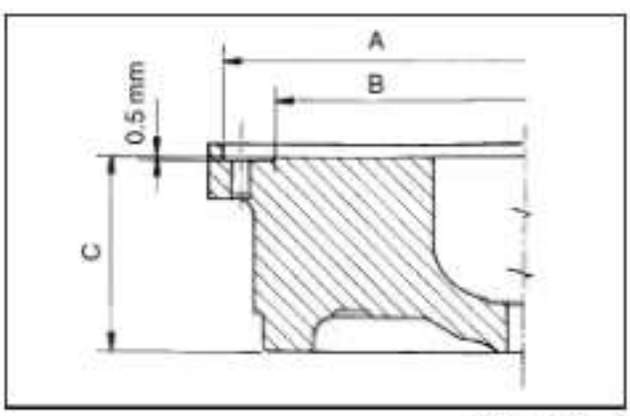


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12"/12" dual clutches

If it is necessary to reface the friction surface on the flywheel, bear inmind that themaximum amount that can be removed in relation to the nominal thickness is **1 mm** (**0.0394 in**).
Once terminated, the external refacing will need to be re-set to **0.5 mm** (**0.0197 in**), as shown in Fig. **9** and **10**.

A. **352 E8 mm** (**13.8583 in**)
B. **313 mm** (**12.3228 in**)
C. **73.5 mm** (**2.8937 in**)



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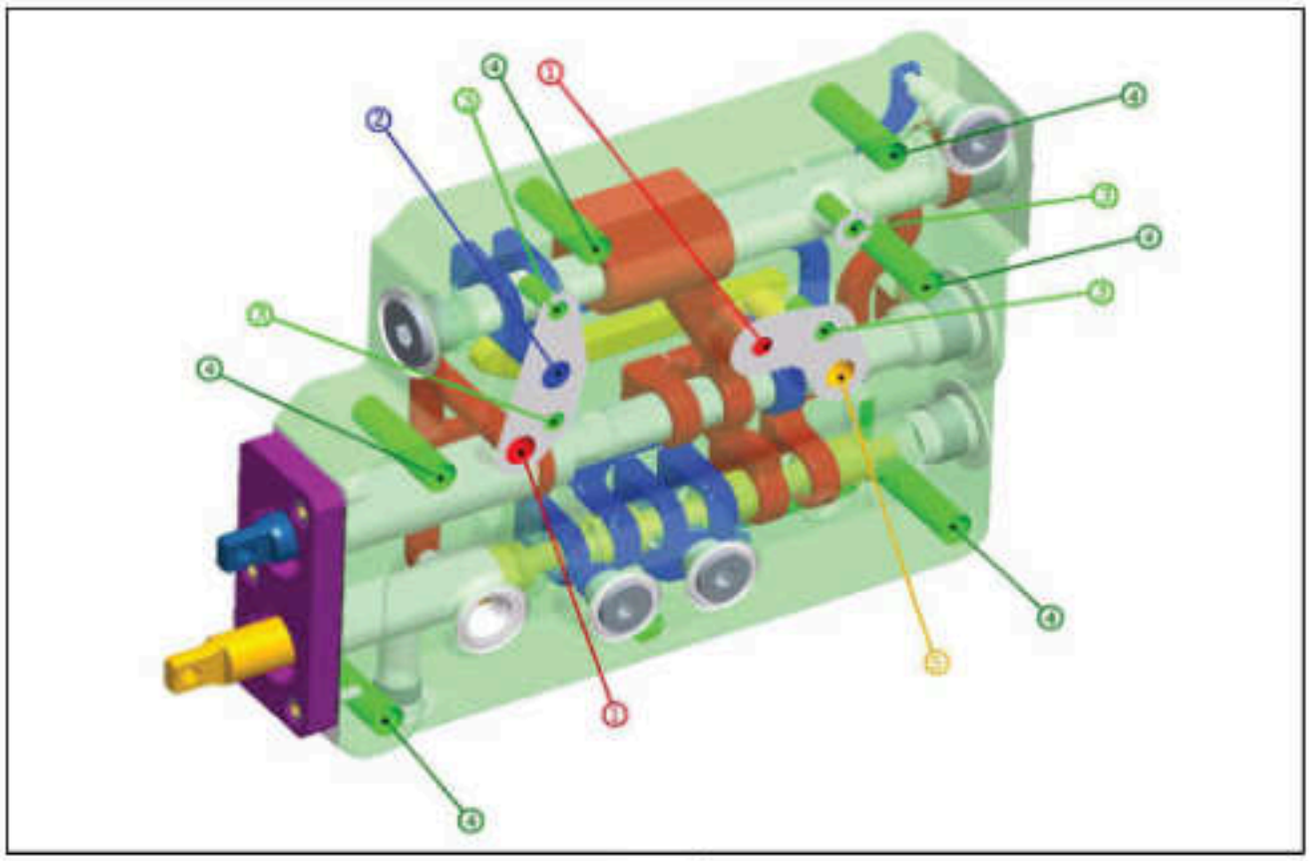
Wire harnesses - Electrical schematic frame 10

FARMALL A

Heating and air-conditioning system circuit (For 8000 series engines)

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5. Pressure regulator valve (**15.7 bar** (**227.65 psi**))
10. Bypass oil cooler valve



NEW IMAGE 2

Cross-sectional view of Power-Shuttle control valve block

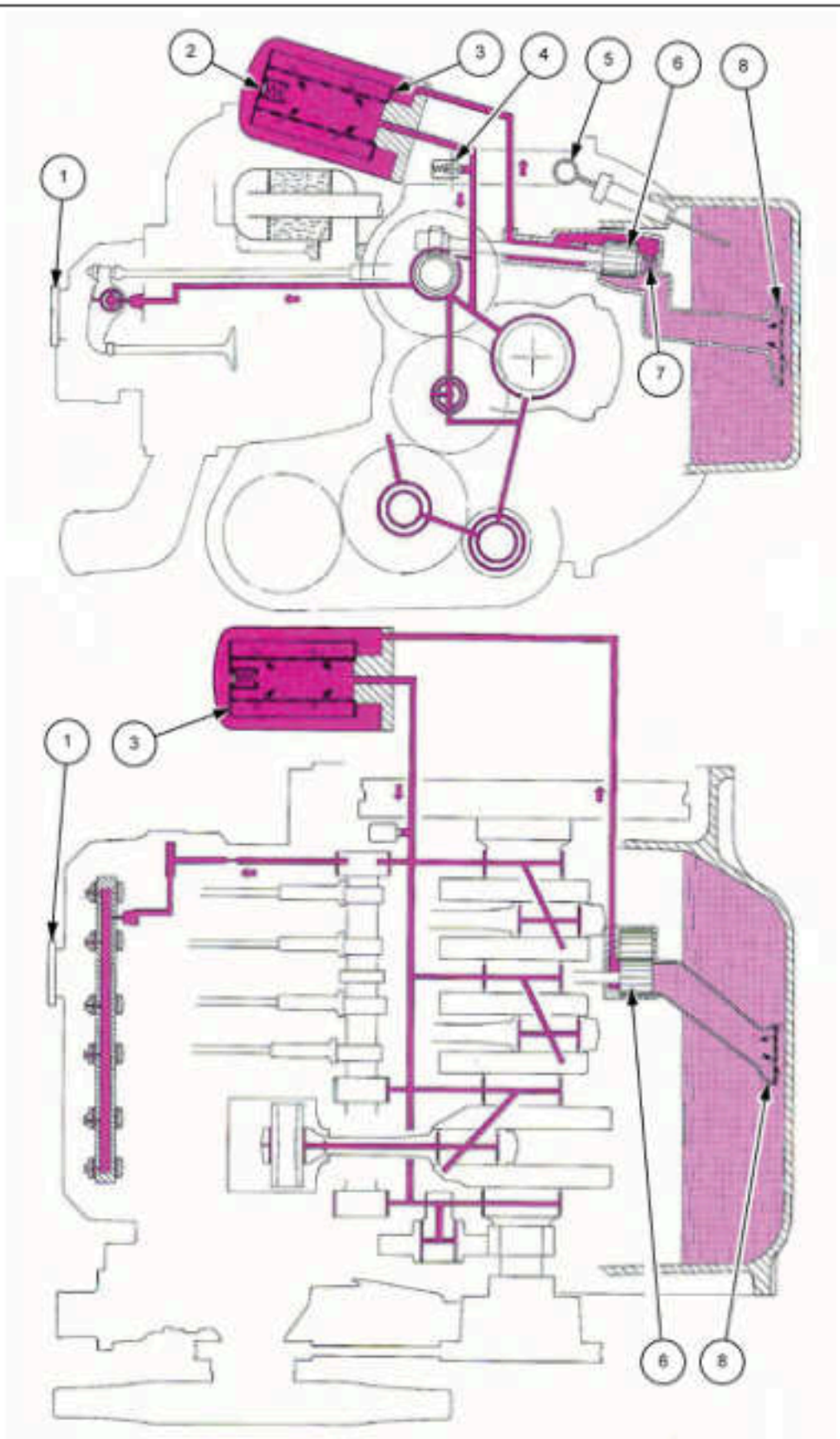
Lubrication oil

Return oil

Pressure oil

1. Return line from pressure control valve block to main valve block
2. Pressure line from pressure control valve block to main valve block
3. Assembly holes of pressure control valve block to main valve block
4. Assembly holes of main valve block to gearbox
5. Lubrication oil passage port

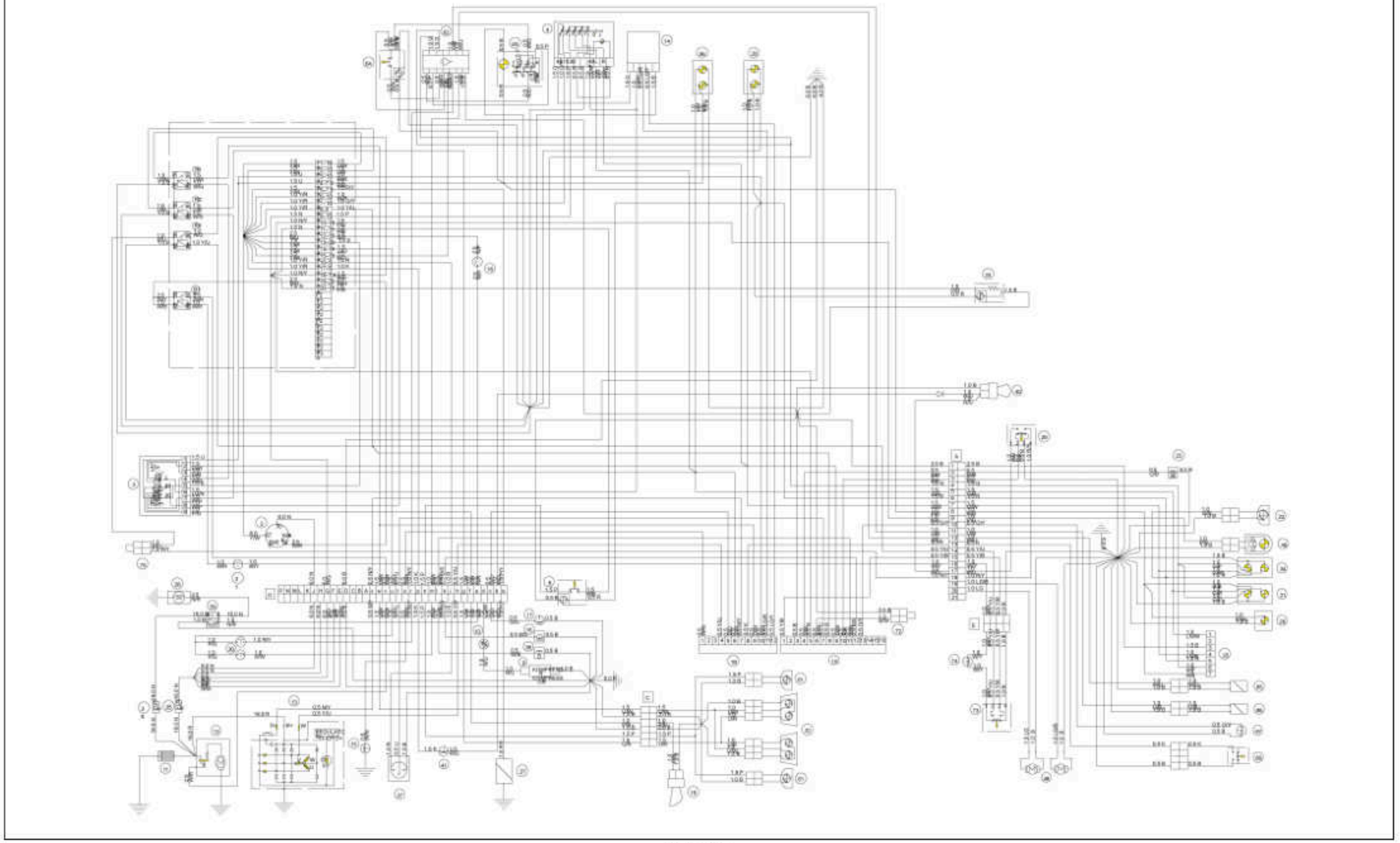
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Lubrication system of normally aspirated 3-cylinder engines

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