JX1060C, JX1070C, JX1075C, JX1085C, JX1095C, Tractors

Repair Manual

87393636

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The following pages are the collation of the contents pages from each section and chapter of the JXC Series Repair manual. Complete Repair part # 87393635.

The sections used through out all Case IH product Repair manuals may not be used for each product. Each Repair manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Repair manual and which sections are in each book.

The sections listed above are the sections utilized for the JXC Series Tractors.

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SECTION 00 - GENERAL

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Chapter 1 - General

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SECTION 10 - ENGINE

BOOK 1 - 87393636

Chapter 1 - Engine (Three-Cylinder)

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FAULT CODE 21 – CHASSIS HARNESS

(NOT USED JX1060C, JX1070C AND JX1075C MODELS)

NOTE: *The 32x16 transmission will use this FAULT CODE for F/R Synchronizer circuit and dump circuit. The 16x16 & 8x8 transmissions will use this FAULT CODE for just the dump circuit.*

NOTE: *Power Shuttle ECM to PS ECM Harness connected at CN1 and CN2, located under the instrument panel. PS ECM Harness to PS Transmission Side Harness connected at CN 9 A-D or CN 9 (24 pins), located under the hood on engine side of firewall. PS Transmission Side Harness to Dump Solenoid and F/R Synchronizer Position Sensors located on left side of transmission by the Power Shuttle Control Valve.*

Conditions:

- While tractor is being driven or in neutral, open circuit between Power Shuttle ECM Harness and Power Shuttle Transmission Side Harness hinders communication.

Causes:

- Faulty wiring; connector between PS ECM Harness and PS Transmission Side Harness disconnected, (at firewall). Connector between Dump Solenoid and Transmission Side Harness is disconnected. Connector between F/R Synchronizer Position Sensors and Transmission Side Harness is disconnected. Connector between F/R Synchronizer Solenoids and Transmission Side Harness is disconnected. Connectors and pins are pinched, loose, or corroded.

Tests:

- H9, channels related to the dump solenoid, F/R Synchronizer Position Sensors, and F/R Synchronizer Solenoids will not display the correct count.
- H5, related to the dump solenoid, F/R Synchronizer Position Sensors, and F/R Synchronizer Solenoids doesn't display the correct transition between d0 and the corresponding d value.
- HF, would display open circuit FAULT CODEs related to the dump solenoid, F/R Synchronizer Position Sensors, and F/R Synchronizer Solenoids.

Effects:

- Transmission is critically disabled; but can be re-enabled by cycling the Ignition Switch, (shutting off the tractor).

Recovery:

- Cause must be resolved and error must be cleared using the CDU or EST, HF Menu.

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⚠ WARNING ⚠

During these operations, follow the safety instructions and instructions for use described at the start of Section 50.
Handle all parts with great care, always use safety goggles, gloves and shoes.

REFRIGERANT RECOVERY-RECYCLING AND EVACUATION-CHARGING STATIONS

⚠ WARNING ⚠

Do not use recovery/recycling and system emptying/charging machines which are designed for use with a refrigerant type other than that used in the system. Different types of refrigerant have different chemical compositions and are incompatible.

Connecting the piping to the stations

When connecting the stations to the system service valves, always connect the low pressure blue pipes (11, fig. 17, or 17, fig. 18) to the service valve on the suction side of the compressor (S-Suction), and the high pressure red pipes (12, fig. 17, or 15, fig. 18) to the service valve on the discharge side of the compressor (D-Discharge).

Important: check the seals in the pipe unions (11, 12, 16, fig. 17), or (15, 17, 24, fig. 18) and replace if faulty.
Remember that pipe fittings with seals must be hand-tightened only without forcing, otherwise the seal may be damaged.

RECOVERY AND RECYCLING STATION (380000315)

Description (Refer to figure 17)

The machine is designed to recover and recycle the refrigerant used in air conditioning systems.

Recovered refrigerant is first subjected to an evaporation process in a special chamber to remove any oil.

In the filter section, the acidity is neutralized, moisture is absorbed and solid particles are screened out.

The decontaminated refrigerant is then stored in the metering cylinder.

TECHNICAL CHARACTERISTICS

Recovery compressor equipped with oil level sight glass, discharge valve and service valve.

Anti-acid decontaminating filter (3), with high moisture absorption capacity.

Refrigerant/oil distillation cylinder (4) with heating element, automatic device for return of oil to the recovery station compressor and automatic flow control valve for refrigerant entering the station.

Graduated cylinder (19) for recovered refrigerant, 2.2 kg (4.8 lbs.) capacity, with heater and a safety valve.

2-way pressure gauge unit, with refrigerant flow indicator and pressure gauges (1 and 2) controlling the pressure in the cylinder and at the inlet.

Humidity indicator (15), for checking the decontaminated refrigerant.

Low pressure switch for automatic compressor switch on/off.

Graduated container for discharge of recovered contaminated oil.

Switch (5) 1-0-2 for recovery and cylinder heating.

Operation indicator lights.

Flexible service pipes (11, 12 and 16) with safety cocks.

Recovery capacity:	200 grams/minute.
Power supply requirements:	220V (50 Hz).

Maintenance

Replacement of refrigerant decontamination filter (3)

Refer to figure 18, proceed as follows:

⚠ WARNING ⚠

Replace the filter (3) every 12 months, or earlier if the humidity indicator (15) becomes yellow (and remains this color) during the recovery/recirculation phase.

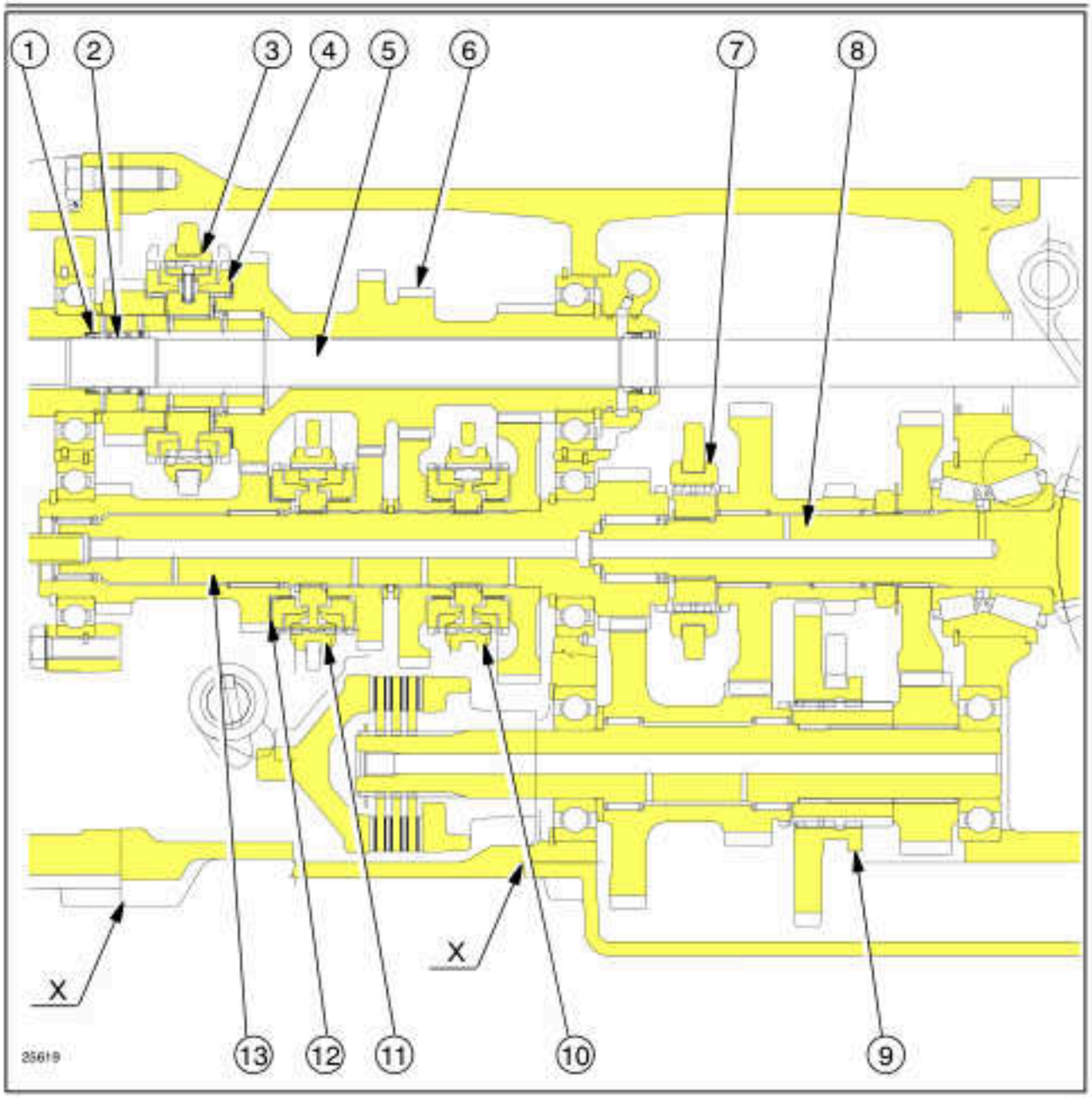
1. Close all the valves including the yellow service valve (9) installed below the distillation cylinder (4).
2. If refrigerant is present in the circuit set push button (5) to position "1" and carry out the refrigerant recovery operation. The compressor will stop automatically when the pressure gauge (2) drops to -0.3 bar (-4.35 psi).
3. Remove and replace the contaminated filter (3).
4. Carry out a normal evacuation operation for approx. 30 minutes, using the evacuation/charging system **(380000315)** proceeding as follows:
   connect the pipe (17, fig. 18) to the service valve (14, fig. 17), open the cock on the pipe and cocks (4, 9 and 10, fig. 18).
   On completion of the evacuation operation, close cocks (4, 9 and 10), the cock fitted on the pipe (17) and disconnect pipe (17).

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ELECTRICAL CIRCUIT CONNECTORS/COMPONENT CONNECTORS

1		Battery
2		Steering sensor
3		Air conditioning dehydration filter
4		Front RH headlamp
5		RH front swivel light
6		Trailer brake safety switch
7		Horn
8		Air conditioning system compressor (only for versions with cab)
10		Starter motor
11		Engine stop electromagnet
12		Thermostarter (3-Cylinder engines)
13		Brake lights switches
15		Brake fluid level switch
16		RH front direction indicator and side light
28		Working depth adjustment control panel and rear electronic lift indicator lights
30		Air conditioner relay
32		Cab overhead lighting
34		RH speaker
35		Heater/fan unit connection
37		Radio connections
38		Windscreen wiper motor
41		Rear windscreen wiper motor
43		LH speaker
45	(C29)	Rotating beacon power socket
47		Seven-pole socket
48		Number plate light
50		LH tail light
51		Electronic lift raise/lower switch on LH mudguard
52		Rear windscreen washer motor pump
53		Windscreen washer electric pump
55		Handbrake indicator switch
56		Side lights and LH front direction indicator
57		Trailer brake solenoid valves
58		Trailer brake "ON" indicator switch
59		Fuel level transmitter
60		Shuttle mode position sensor
61		Speed sensor
62		Differential lock solenoid valve
63		MFD solenoid
64		MFD indicator pressure switch
65		Shuttle mode solenoid valve

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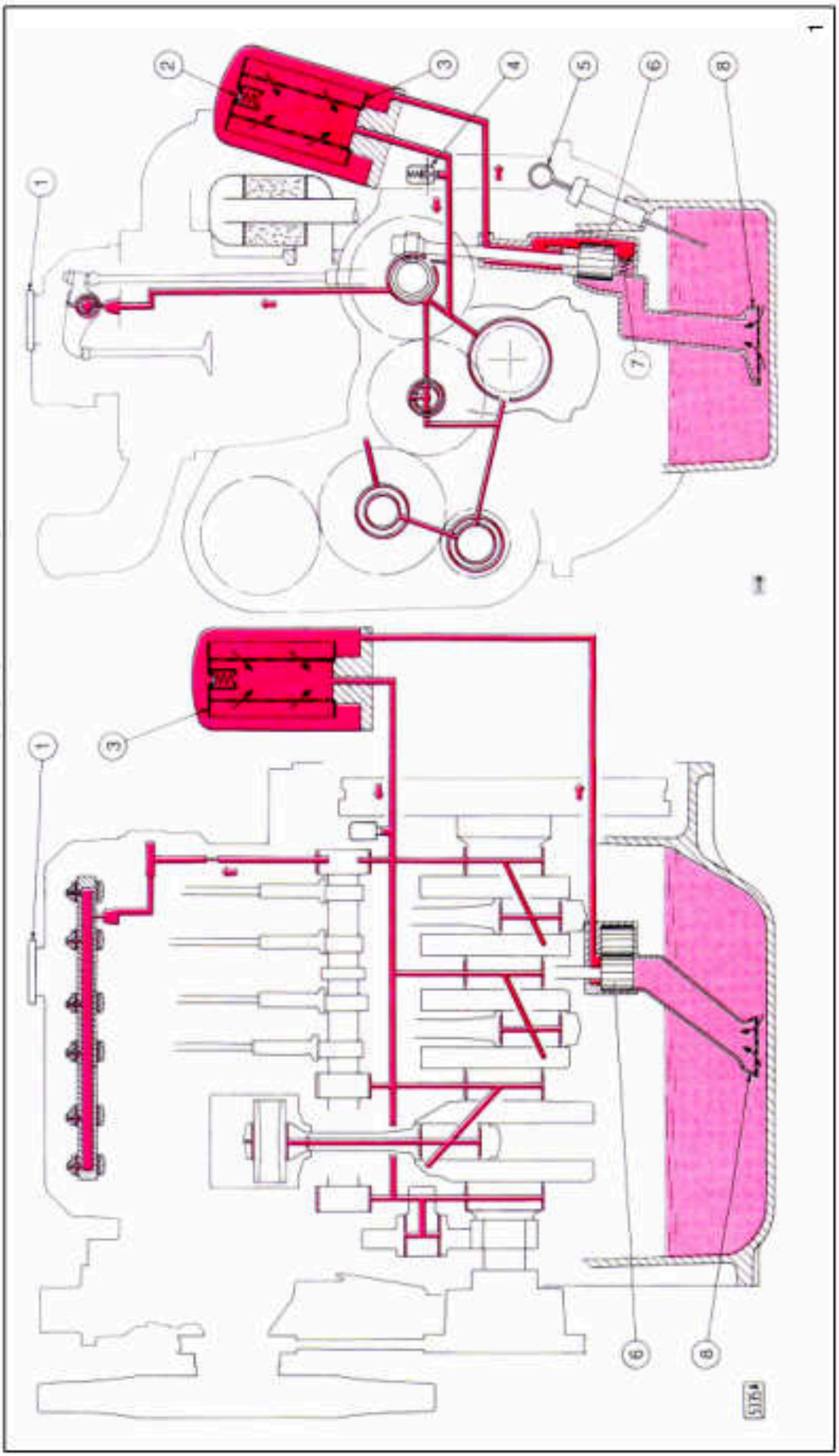
Longitudinal cross-sectional view of gearbox and gear range (16 + 16 with Synchronized Mechanical Shuttle)

1. Seal.
2. Power take-off shaft support roller bearings.
3. Shuttle control synchronizer.
4. Gearbox driving gear clearance adjusting thickness.
5. Power take-off shaft.
6. Gearbox driving gear.
7. Selector sleeve for high or medium-low speeds.
8. Bevel pinion shaft.
9. Selector sleeve for low or medium-high speeds.
10. Synchronizer for 1st and 2nd speed.
11. Synchronizer for 3rd and 4th speed.
12. Gearbox driven shaft gear clearance adjusting thickness.
13. Gearbox driven shaft.

NOTE: *On assembly apply sealing compound to surfaces* ***X*** *as shown on page 30.*

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SECTIONAL VIEWS

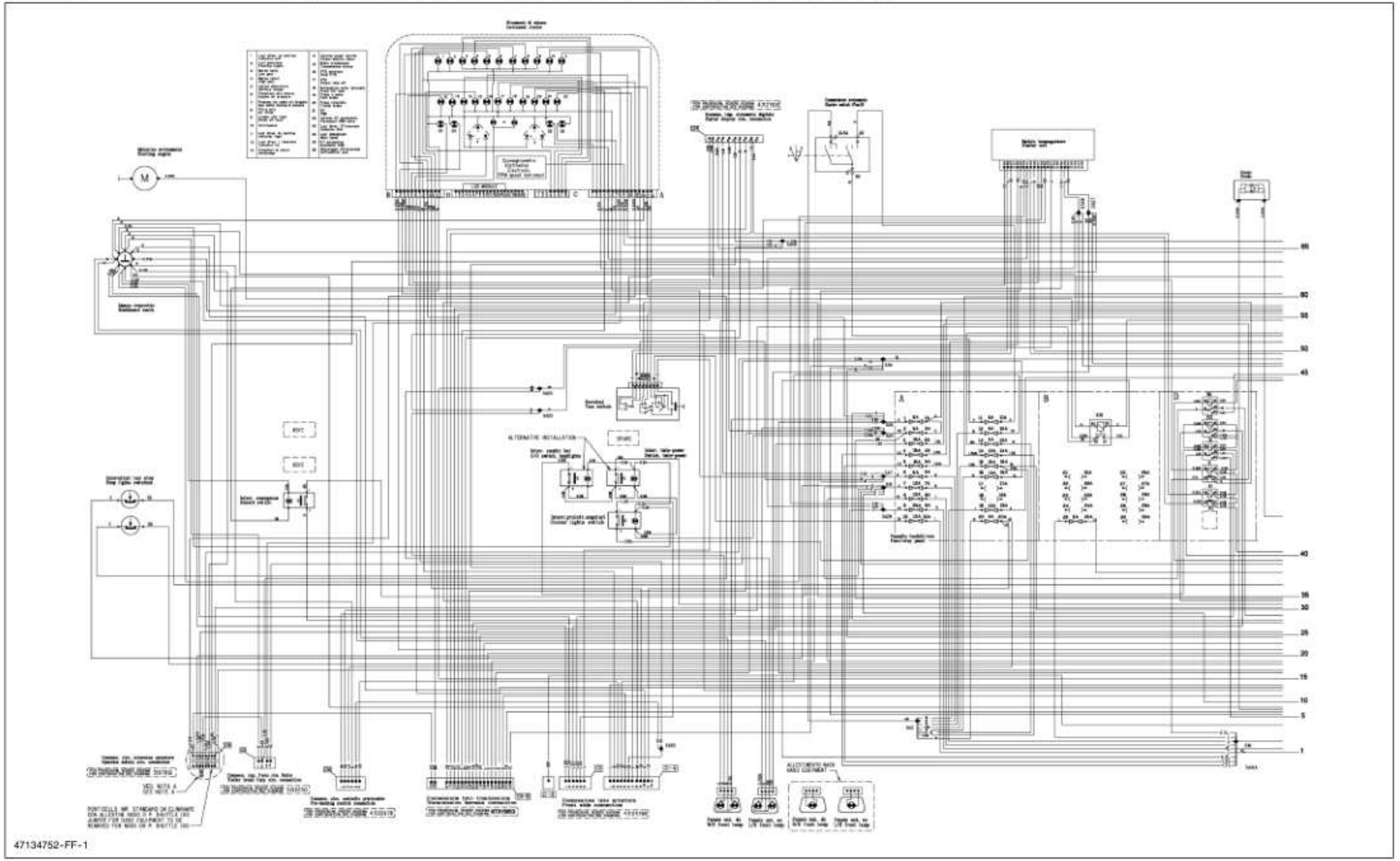


Engine Lubrication System (non-turbo engine shown)

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/cm²)
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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DIAGRAM FF-1 **ELECTRO-HYDRAULIC MFD / MECHANICAL LIFT / WITH CAB / 4-CYLINDER / MAIN HARNESS**



47134752-FF-1

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