



JX60 – JX70 – JX80 – JX90 – JX95 MODEL TRACTORS SERVICE MANUAL

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S E R V I C E



Repair Manual - JX Series Tractors

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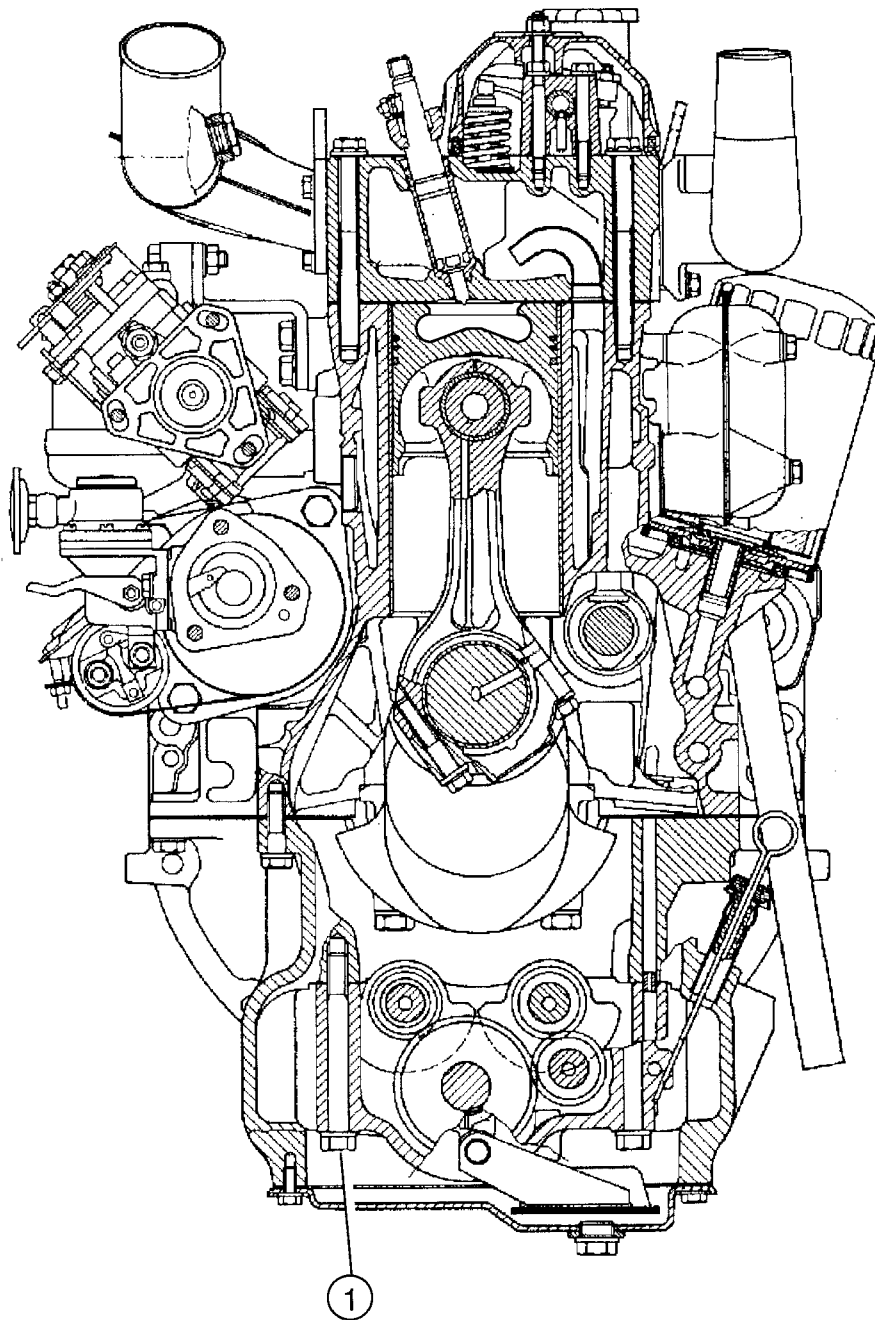
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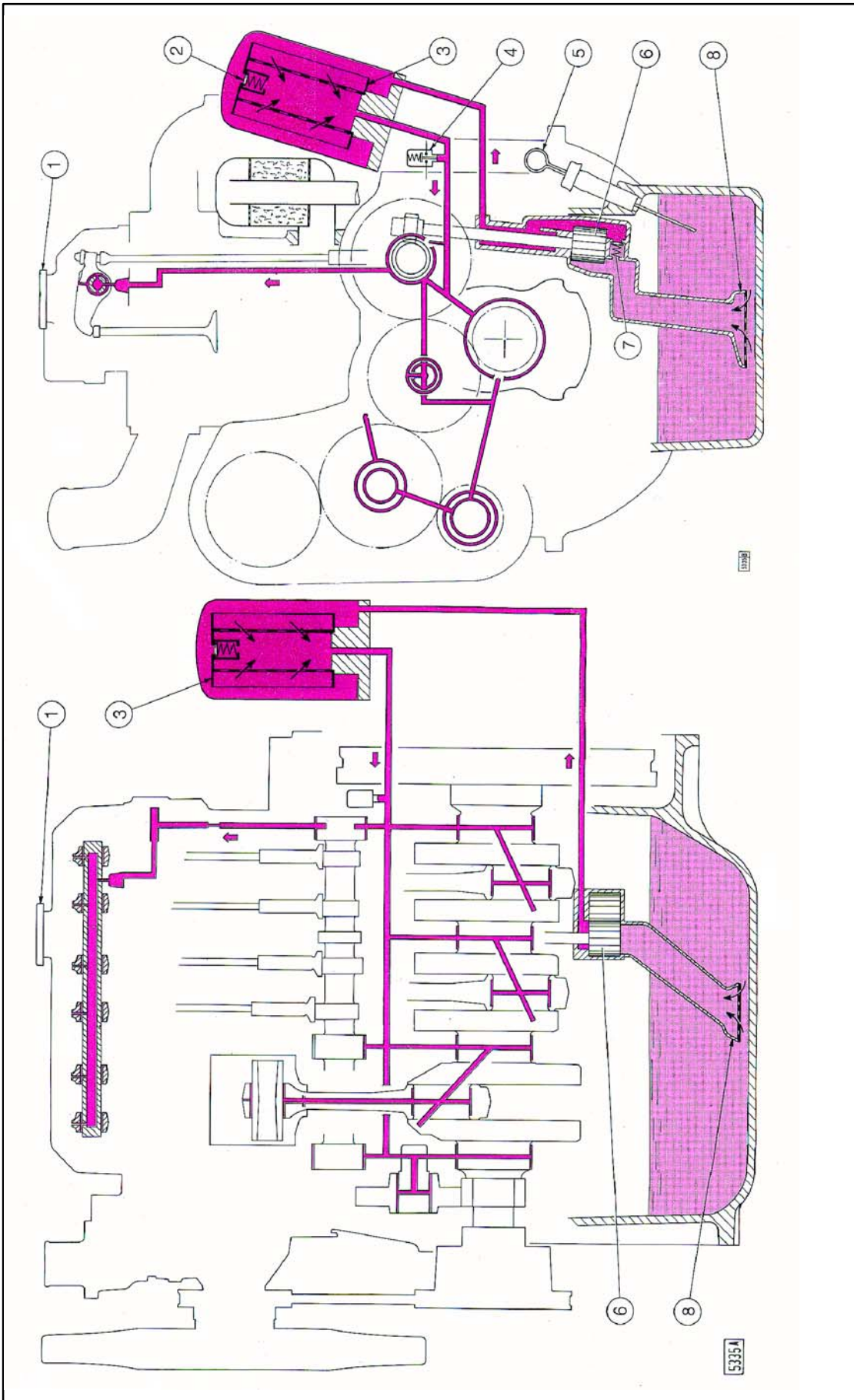


MIG0494A

Cross-section of 4-cylinder model JX80, JX90 and JX95

6

1. Counterweight retaining bolts



7

Lubrication system of normally aspirated 3-cylinder engines

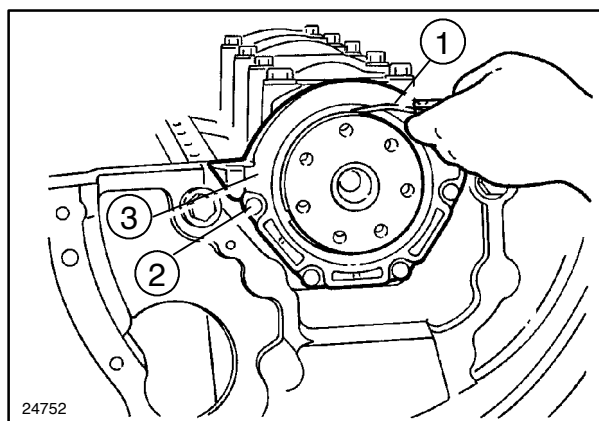
1. Oil filler cap 2. Filter safety valve (opens when oil pressure at filter inlet exceeds the outlet pressure by 1.5–1.7 bar/cm² (140.355– 159.068 psi/in²) 3. Filter. 4. Switch for low engine oil pressure warning (on dashboard). 5. Dipstick.

6. Pump. 7. Oil pressure limiting valve. 8. Screen filter on pick-up pipe

INSTALLING THE REAR COVER WITH SEAL, AND ENGINE FLYWHEEL (Disassembly operation 62)

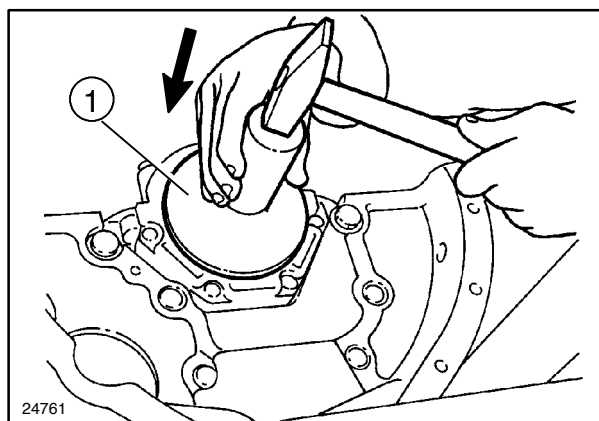
Proceed as follows:

- Fit the rear oil seal carrier (3) with the outer seal. Tighten retaining bolts (2) to the torque specified on page 24. Using a feeler gauge (1), check that the crankshaft flange is coaxial with the carrier.



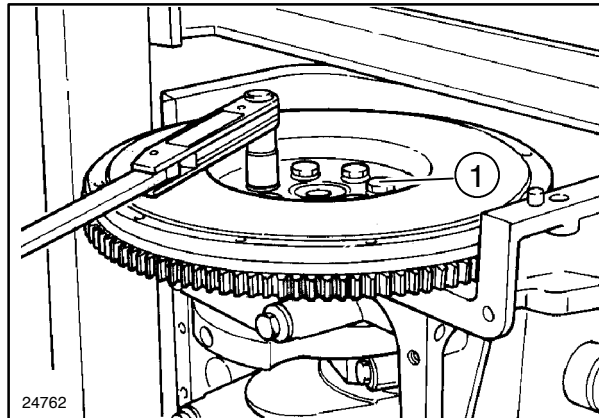
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- Fit the inner rear oil seal using installer and hand grip 50139 (1).



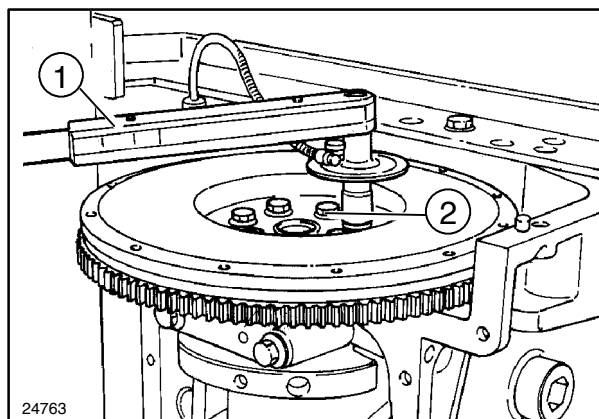
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- Fit the flywheel and tighten the retaining bolts (1) to a torque of 40 Nm (4.1 kgm).



119

- Using tool 380000304 (1), tighten each flywheel bolt (2) through a further 60°.



120

If the voltmeter reading is higher than 14 V or 14.4 V, for Magneti Marelli or Bosch alternators respectively, the alternator regulator must be changed, as described in this section. (After installing a new regulator, carry out tests 4 and 5).

If the voltmeter reading is less than 13.6 V, there is either a faulty component in the alternator or a failure due to excessive resistance in the external charging system connections.

If the ammeter reads zero amps, then one of the alternator components is malfunctioning. Turn the engine off and carry out the alternator component test, as described in this chapter.

3. CHARGING CIRCUIT VOLTAGE DROP TESTS

(a) Insulated side voltage drop test

See figure 7.

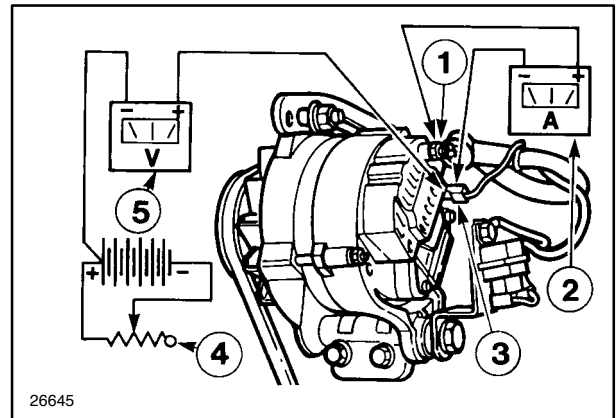
Check the ignition key is in OFF position.

1. Disconnect the negative battery cable and the B+ alternator wire (1).
2. Connect a millivoltmeter (5) between the positive battery terminal clamp and D+ wire (3) (positive side of the wire).
3. Connect an ammeter (2) between the B+ alternator terminal and the D+ wire (negative side of the wire).
4. Reconnect the negative battery cable and connect a varying load resistance (4) with cursor in minimum current absorption position (maximum resistance) through the battery terminal clamps.
5. Start the engine and increase speed to 2000 rev/min.
6. Decrease resistance charging load (decreasing resistance) slowly until the ammeter reads 45 or 65 A, according to the type of alternator.
7. Note the reading on the millivoltmeter. This must not be higher than 400 millivolts.

A reading higher than 400 millivolts indicates malfunctioning due to excessive resistance in the external circuits.

If the alternator does not output required power and the millivoltmeter reading is less than 400 millivolts, there is a malfunctioning component in the alternator. Carry out the alternator component tests, as described in this section.

8. Stop the engine.



7

The diagram illustrates a complex electrical wiring system, likely for a vehicle's engine control or lighting. It features a central power distribution unit (labeled 'C') with multiple output lines. These lines are connected to various components, including relays (e.g., 1.5 P/W, 1.0 B, 1.5 U/W), switches (e.g., 1.5 R, 1.0 R/W, 1.5 Y/W), and sensors (e.g., 1.5 G, 1.0 R). The components are organized into several groups, with some labeled with circled numbers (e.g., 6, 7, 8, 19, 32, 57, 24, 12, 14, 10, 4, 17, 15, 27, 31, 25). A large pink rectangular area is present in the center of the diagram, possibly indicating a redacted section or a specific area of interest. The diagram also shows ground connections and various electrical symbols (e.g., diodes, transistors, relays).