

# SHOP MANUAL

## KOMATSU

### PC210, 210LC-6K PC240, 240LC, PC240NLC-6K

MACHINE MODEL

SERIAL NUMBER

PC210, 210LC-6K

K30001 and up

PC240, 240LC, 240NLC-6K

K30001 and up

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.
- PC210, 210LC-6 mount the S6D102L-1 engine;  
PC240, 240LC-6 mount the SA6D102L-1 engine.  
For details of the engine, see the 102 Service Engine Shop Manual.



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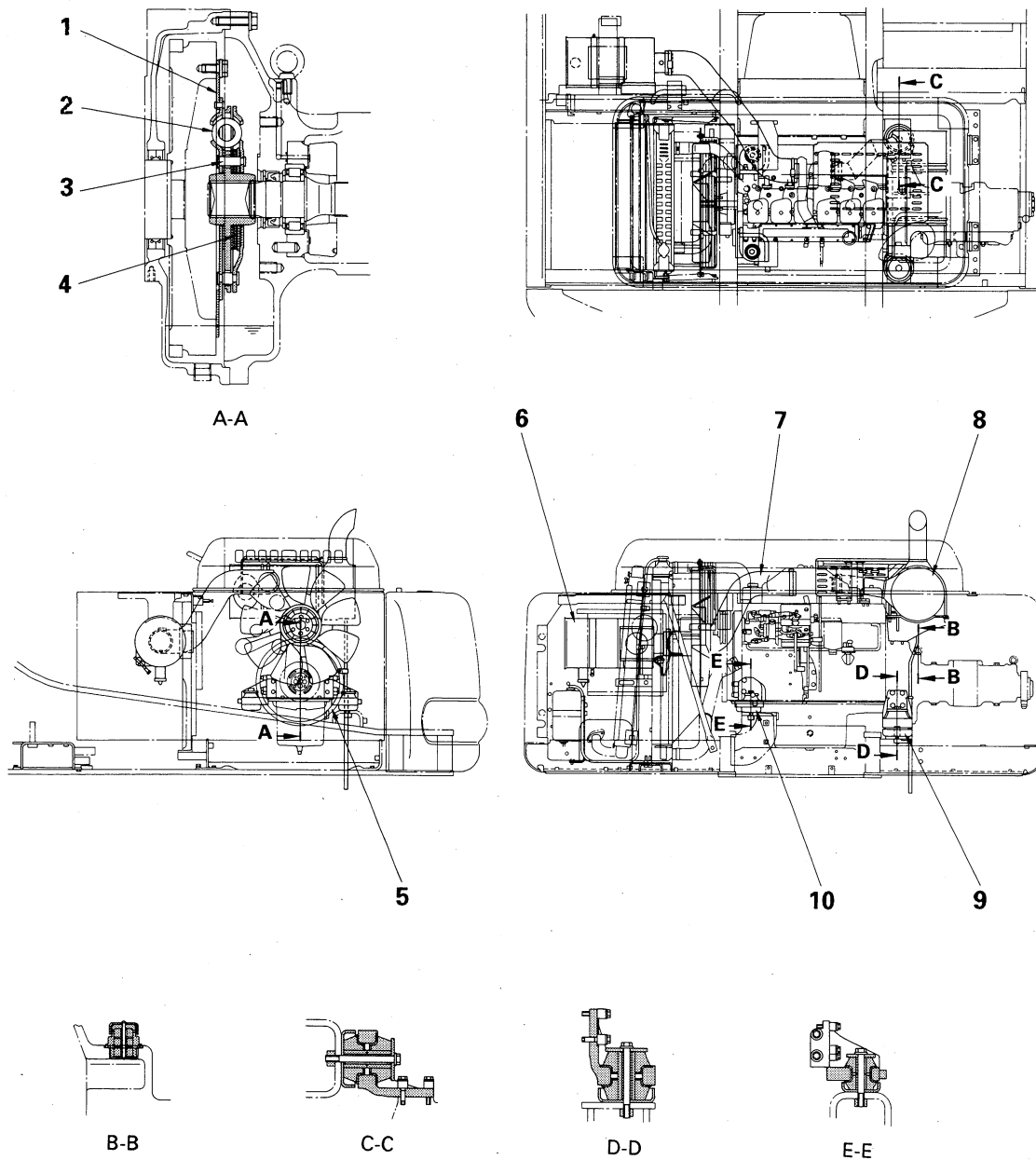
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ENGINE RELATED PARTS



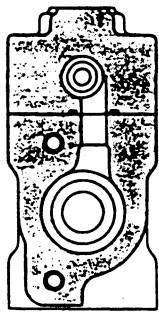
- 1. Drive plate
- 2. Torsion spring
- 3. Stopper pin
- 4. Friction plate
- 5. Damper assembly

**OUTLINE**

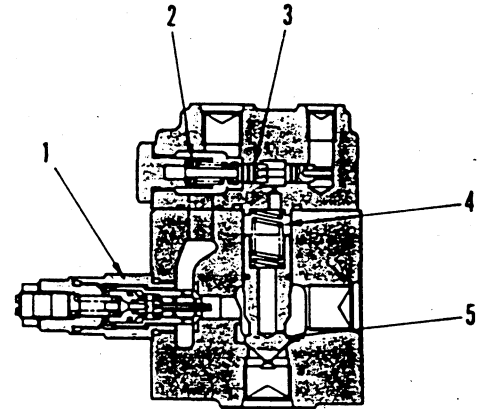
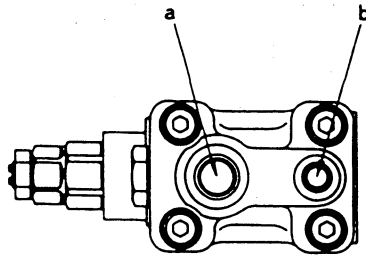
- The damper assembly is a wet type.  
Oil capacity: 0.75ℓ



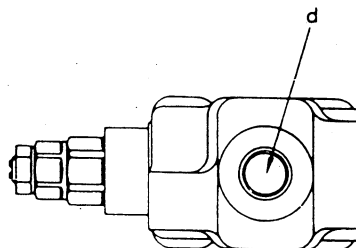
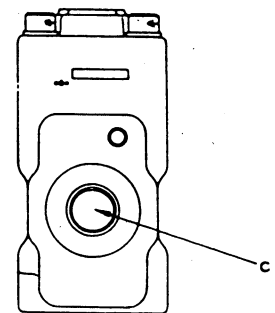
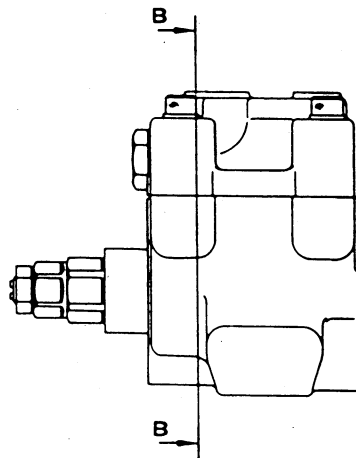
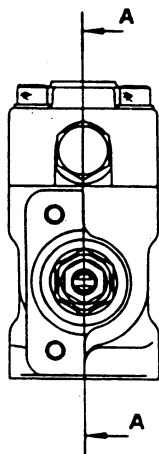
2ND BOOM HOLDING VALVE



B-B



A-A

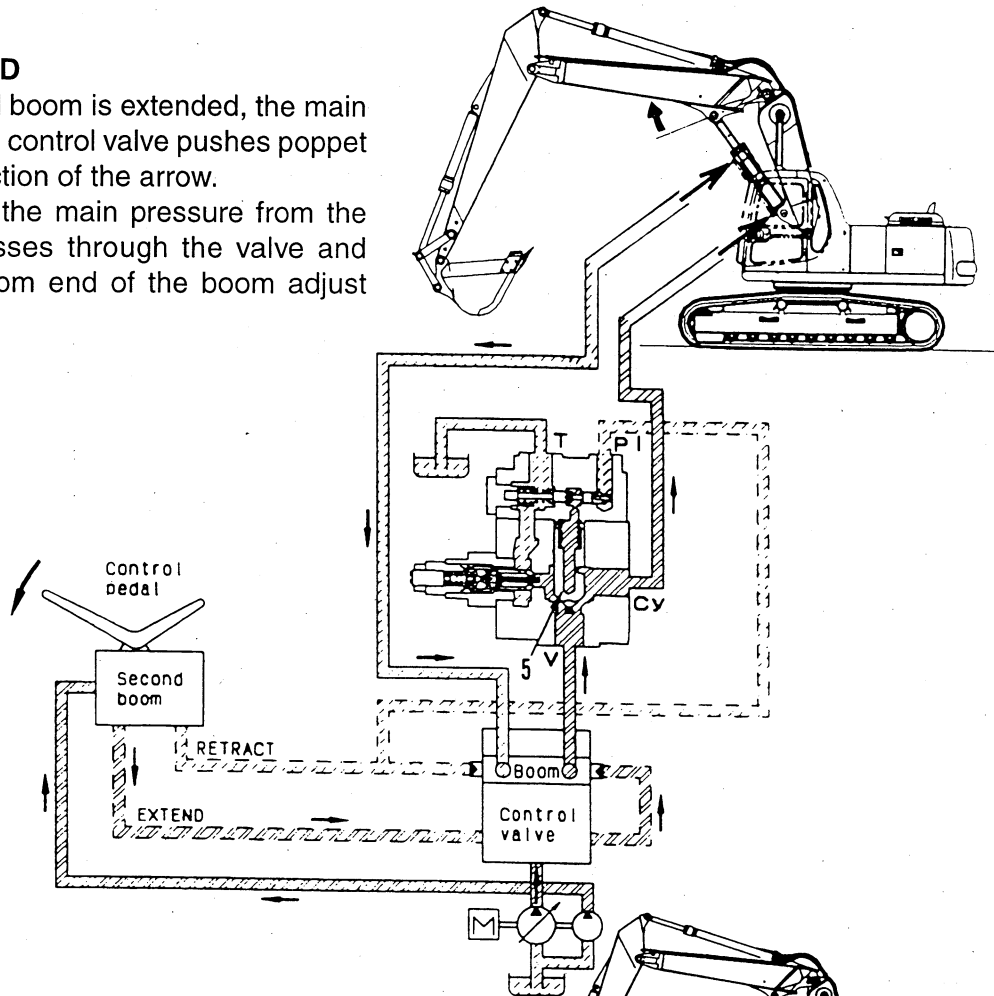


- |  |                         |
|--|-------------------------|
| a. Port T (to tank)                    | 1. Safety-suction valve |
| b. Port Pi (from boom LOWER PPC valve) | 2. Pilot spring         |
| c. Port Cy (to boom cylinder bottom)   | 3. Pilot spool          |
| d. Port V (from boom control valve)    | 4. Poppet spring        |
|  | 5. Poppet               |

Operation

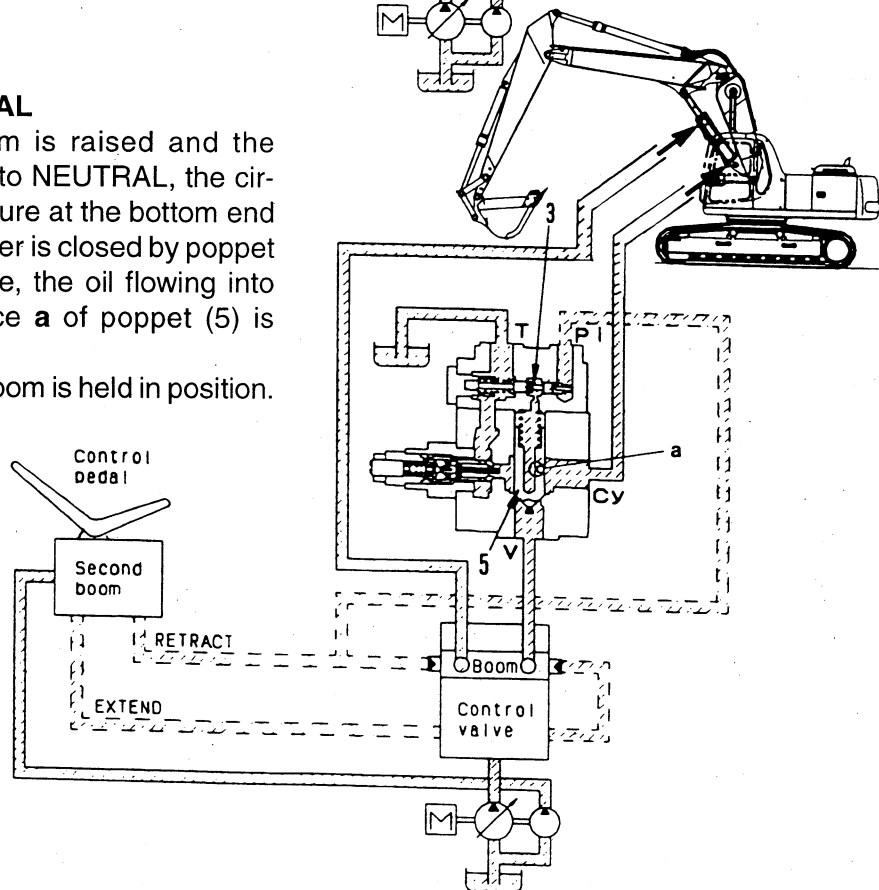
1) At boom EXTEND

When the second boom is extended, the main pressure from the control valve pushes poppet (5) up in the direction of the arrow. Because of this, the main pressure from the control valve passes through the valve and flows to the bottom end of the boom adjust cylinder.



2) Boom pedal at NEUTRAL

When the second boom is raised and the control lever is returned to NEUTRAL, the circuit for the holding pressure at the bottom end of the boom adjust cylinder is closed by poppet (5) and at the same time, the oil flowing into poppet (5) through orifice a of poppet (5) is closed by pilot spool (3). As a result, the second boom is held in position.

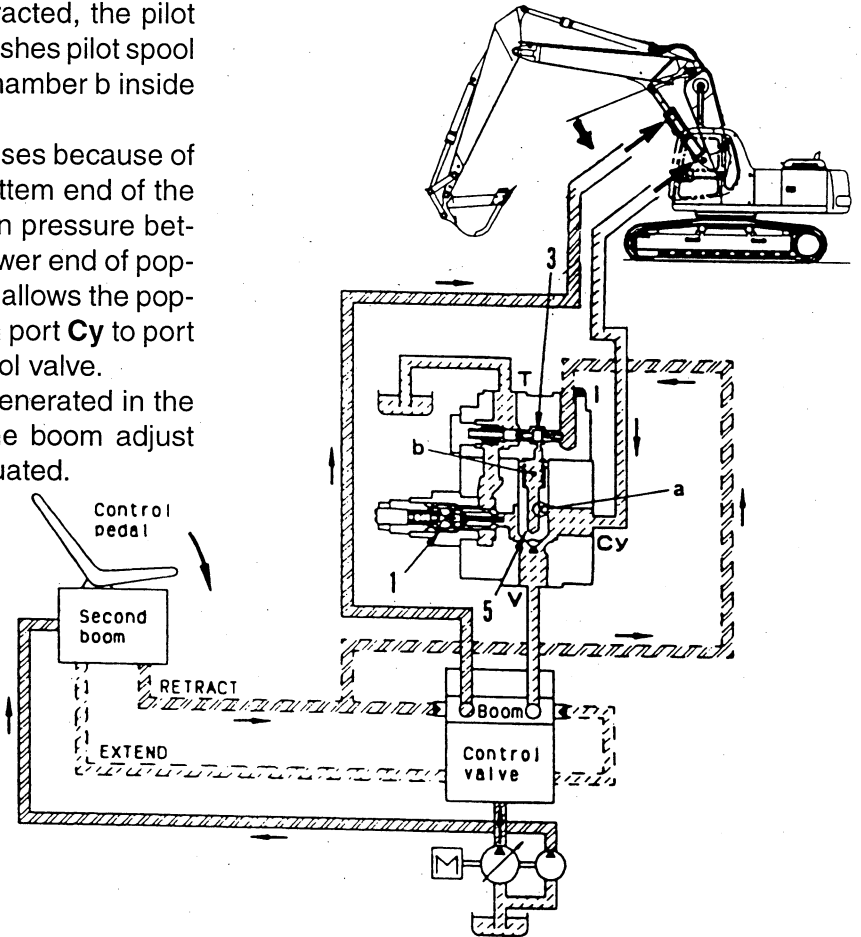


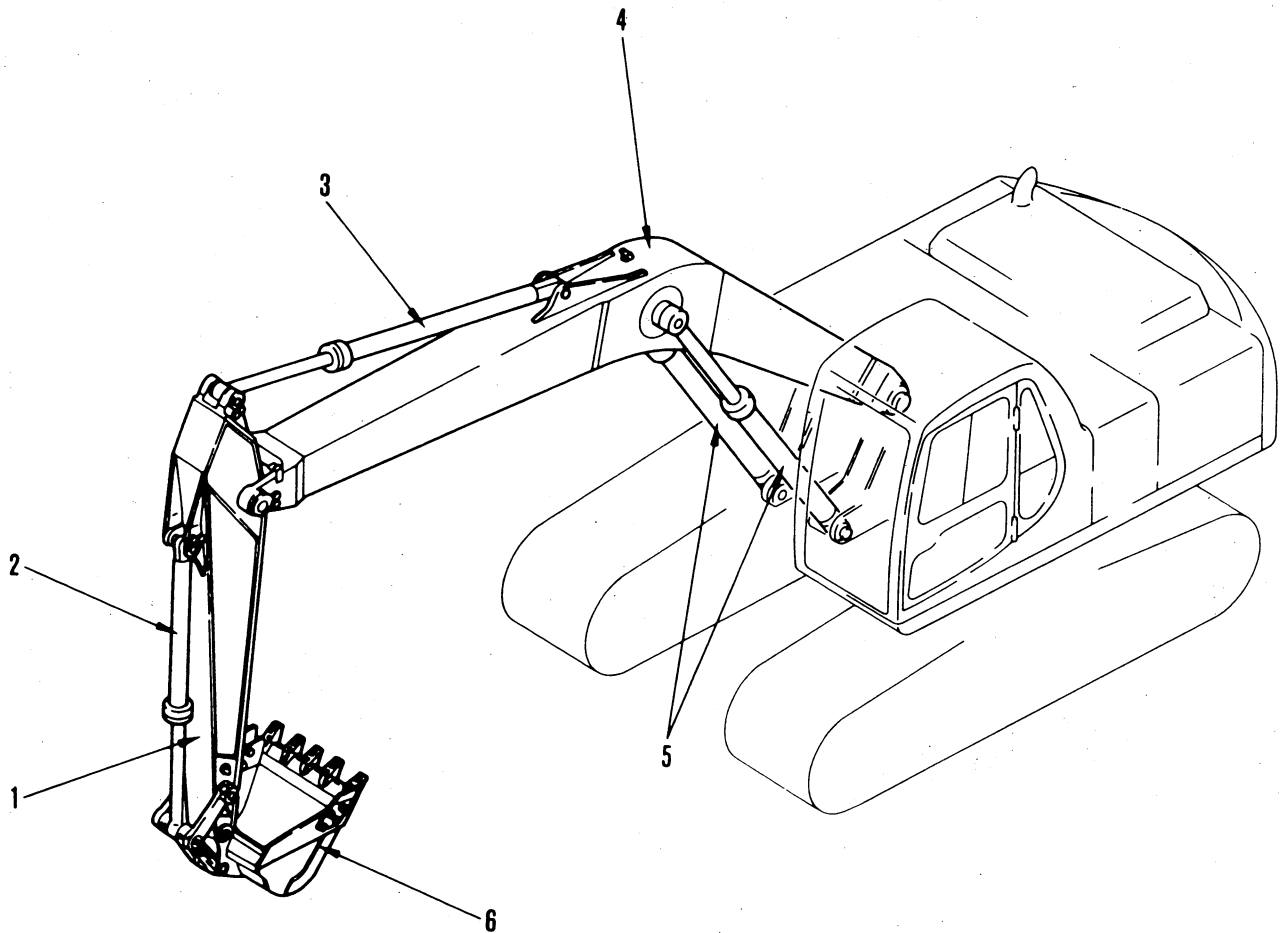
3) At boom RETRACT

When the second boom is retracted, the pilot pressure from the PPC valve pushes pilot spool (3) and the pressurised oil in chamber b inside the poppet is drained.

When the pressure at port **Cy** rises because of the pressurised oil from the bottom end of the boom adjust cylinder, the difference in pressure between the oil surrounding the lower end of poppet (5) and the oil in chamber b allows the poppet to rise allowing flow from port **Cy** to port **V** which then flows to the control valve.

If any abnormal pressure is generated in the circuit at the bottom end of the boom adjust cylinder, safety valve (1) is actuated.





205F06123

- 1. Arm
- 2. Bucket cylinder
- 3. Arm cylinder
- 4. Boom
- 5. Boom cylinder
- 6. Bucket

# SHOP

# MANUAL

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# PC210, 210LC-6K

# PC240, 240LC, PC240NLC-6K

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**SERIAL NUMBER**

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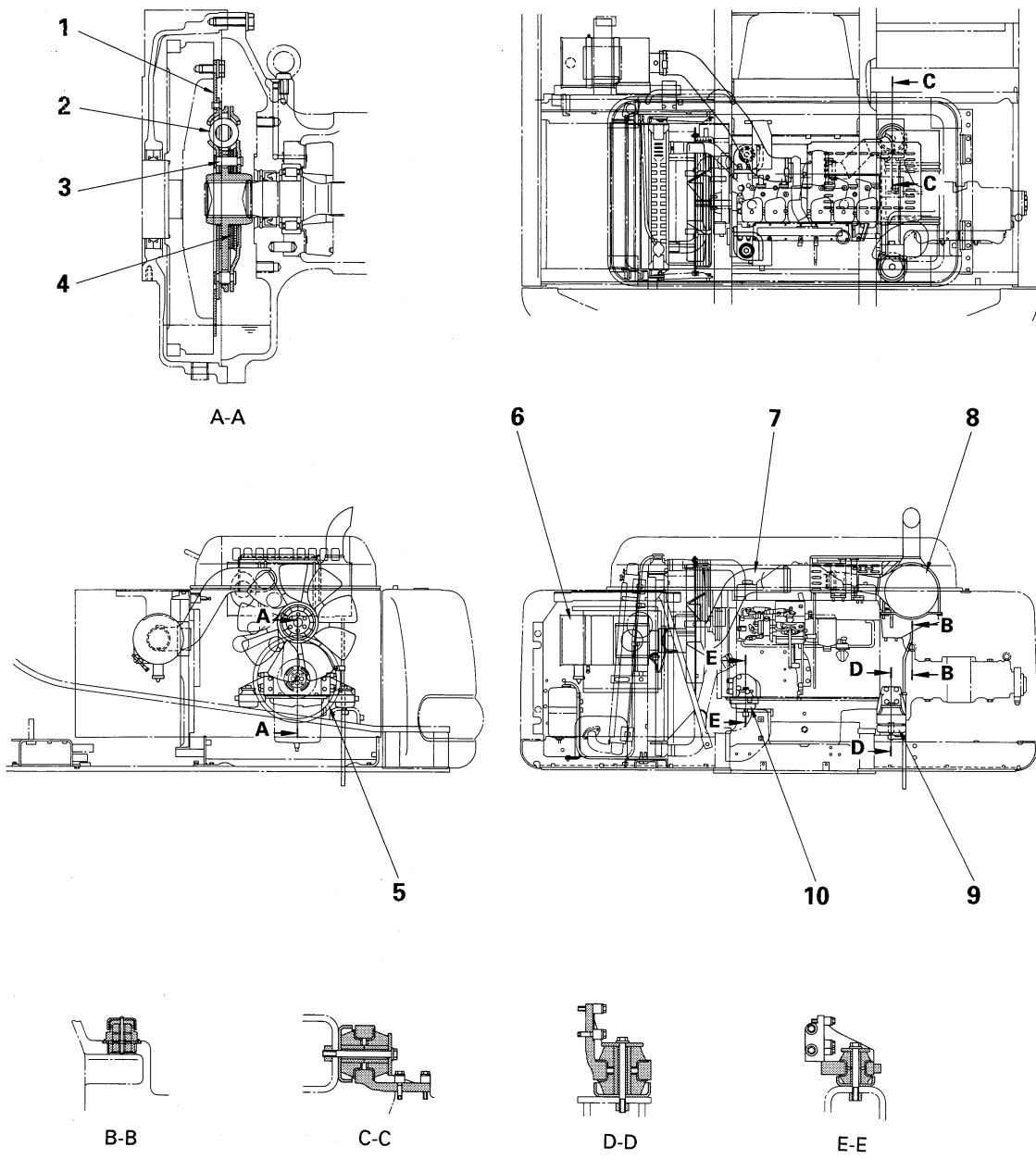
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# ENGINE RELATED PARTS



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1. Drive plate
2. Torsion spring
3. Stopper pin
4. Friction plate
5. Damper assembly
6. Air cleaner
7. Intake connector
8. Muffler
9. Rear engine mount
10. Front engine mount

**OUTLINE**

- The damper assembly is a wet type.  
Oil capacity: 0.75ℓ