PART NO. W18J-E-00

HITACHI

# Workshop Manual

# EX 1200-6
## Hydraulic Excavator

Service Manual consists of the following separate Part No.

| | |
|---|---|
| Technical Manual (Operational Principle) | : Vol. No.TO18J-E |
| Technical Manual (Troubleshooting) | : Vol. No.TT18J-E |
| Workshop Manual | : Vol. No.W18J-E |

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# SECTION 1
# GENERAL



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### Disassembly of Pump Transmission

**CAUTION: The pump transmission assembly weight: 530 kg (1170 lb)**

1. Place the pump transmission on a wooden block with the pump side up.
2. Remove level gauge (24) from pipe (22).
3. Remove socket bolts (21) (4 used) from pipe (22). Disconnect pipe (22) from casing (11). Remove O-ring (20).
   : 10 mm
4. Disconnect pipe (12) from casing (11).
   : 24 mm
5. Remove air breather (13), reducers (14, 15), pipe (16), and elbow (17) from casing (11).
   : 23 mm, 46 mm

**CAUTION: The cartridge (33) assembly weight: 55 kg (130 lb)**

6. Remove socket bolts (34) (12 used) from cartridge (33).
   : 17 mm
7. Install eyebolts (M20, Pitch 2.5 mm) (6 used) to cartridges (33) (3 used). Attach nylon slings onto the eyebolts (6 used). Hoist and hold cartridges (33) (3 used).

**CAUTION: The cartridge (33) assembly weight: 55 kg (130 lb)**

8. Remove cartridges (33) (6 used) from casing (11) by using a plastic hammer.

**CAUTION: Cartridge (33) weight: 25 kg (55 lb)**
**Cover (30) weight: 21 kg (46 lb)**

9. Remove ball bearings (29) (3 used), gears (30) (3 used), and ball bearings (31) (3 used) from cartridges (33) (3 used).
10. Remove O-rings (32) (3 used) from cartridges (33) (3 used).

**CAUTION: Gear (30) weight: 21 kg (46 lb)**

11. Remove retaining rings (27) (3 used) and spacers (28) (3 used) from gears (30) (3 used).
12. Remove nozzles (26) (3 used) from casing (11).
    : 14 mm



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**Assembly of Swing Device**

1. Install needle bearings (13) (3 used) to first stage planetary gears (14) (3 used).

**IMPORTANT: Install thrust plate (8) with the oil groove up.**

2. Install thrust plate (8) to first stage carrier (10).

**IMPORTANT: Install thrust plate (12) with the oil groove facing the planetary gear (14) side.**

3. Install first stage planetary gears (14) (3 used) and thrust plates (12) (6 used) to first stage carrier (10).

4. Fit to the spring pin holes on first stage carrier (22) and install pins (9) (3 used).

**IMPORTANT: Install spring pin (11) with the slit of spring pin (11) facing the end of pin (9).**

5. Install spring pins (11) (3 used) to first stage carrier (10) and pins (7) (3 used).




6. Install spacers (23) (4 used) and needle bearings (22) (8 used) to second stage planetary gears (24) (4 used).

7. Install thrust plate (17) to second stage carrier (19) with the oil groove up.

8. Install second stage planetary gears (24) (4 used) and thrust plates (21) (4 used) to second stage carrier (19) with the oil groove up.

9. Fit to the spring pin holes on second stage carrier (19) and install pins (18) (4 used).

10. Install second stage carrier (19) to pins (18) (4 used) with spring pins (20) (4 used) facing the end.

11. Apply LOCTITE #262 onto screws (32) (4 used). Install magnets (33) (4 used) to sleeve (34) with screws (32) (4 used).

12. Apply grease onto O-ring (35). Install O-ring (35) to sleeve (34).

13. Apply THREEBOND #1215 onto the oil seal (36) mounting surface of cover (31). Install oil seals (36) (2 used) to cover (31). Apply grease onto the lip part of oil seals (36) (2 used).

14. Install sleeve (34) to shaft (37).

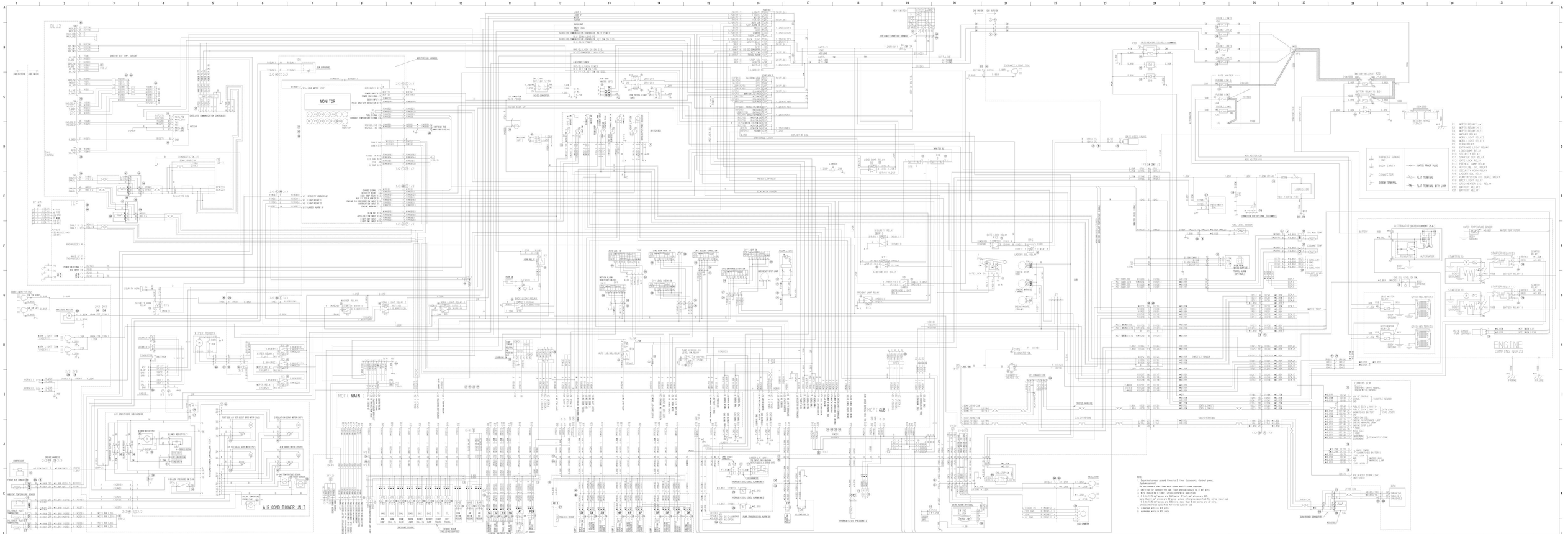
15. Warm up bearing (30) to about 110°C (230°F) in an oil bath. Install bearing (30) to shaft (37) by using the special tool (ST 5082) and a press.






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# EX1200-6 ELECTRICAL CIRCUIT DIAGRAM






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