PART NO. W1NG-E-00

HITACHI

Workshop Manual

ZX
40U-3 class
40U-3 · 40U-3F
50U-3 class
50U-3 · 50U-3F
Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual	: Vol. No.T1NG-E
Workshop Manual	: Vol. No.W1NG-E

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- Bleeding Air from Hydraulic Circuit

  - After refilling hydraulic oil, start the engine. While operating each cylinder, swing motor and travel motor evenly, operate the machine under light loads for 10 to 15 minutes. Slowly start each operation (never fully stroke the cylinders during initial operation stage). As the pilot oil circuit has an air bleed device, air trapped in the pilot oil circuit will be bled while performing the above operation for approx. 5 minutes.
  - Reposition the front attachment to check hydraulic oil level.
  - Stop the engine. Recheck hydraulic oil level. Replenish oil as necessary.

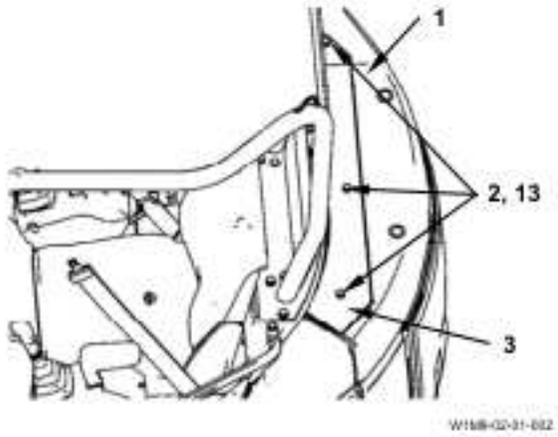
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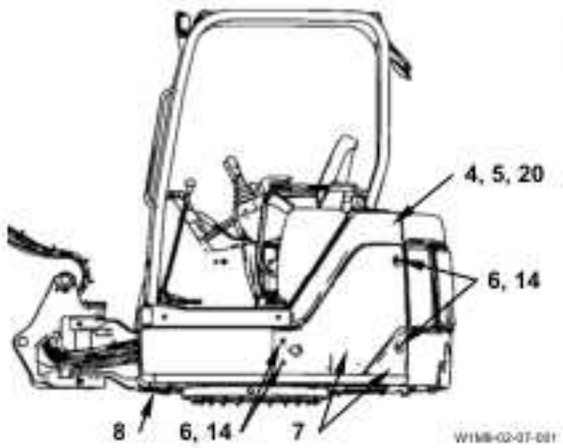
REMOVAL AND INSTALLATION OF COUNTERWEIGHT

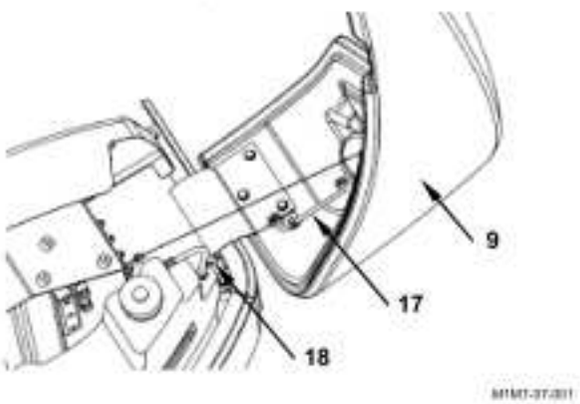
Before removing and installing the counterweight, the canopy should be tilted up first. (Refer to FLOOR-TILTING DEVICE OPERATION PROCEDURE on W1-5-1.)
Therefore, the procedure starts on the premise that the canopy has already been tilted up.

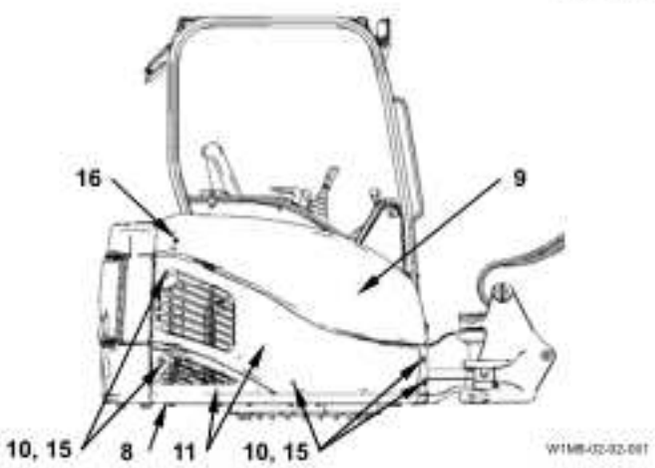
Removal

1. Remove bolts (2) (3 used) and washers (13) (3 used). Remove cover (3) from counterweight (1).
   : 17 mm
2. Remove bolts (5) (2 used) and washers (20) (2 used). Remove cover (4) from main frame (8).
   : 13 mm
3. Remove bolts (6) (4 used) and washers (14) (4 used). Remove covers (7) (2 used) from main fame (8).
   : 17 mm
4. Insert a key into button (16) and unlock cover (9).
5. Press button (16) and open cover (9). Turn and insert lock bar (17) into hole (18).
6. Remove bolts (10) (5 used). Remove covers (11) (2 used) from main fame (8).
   : 17 mm









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REMOVAL AND INSTALLATION OF FRONT ATTACHMENT

Removal

1. Remove bolt (5), washer (16), and spring washer (17). Remove cover (3) from boom cylinder (2).
   : 19 mm

CAUTION: Boom cylinder (2) weight:
ZX40U-3 class: 55 kg (110 lb)
ZX50U-3 class: 60 kg (130 lb)

CAUTION: Metal fragments may fly off when a hammer is used. Wear necessary protection, such as goggles and hard hats in order to prevent personal injury.

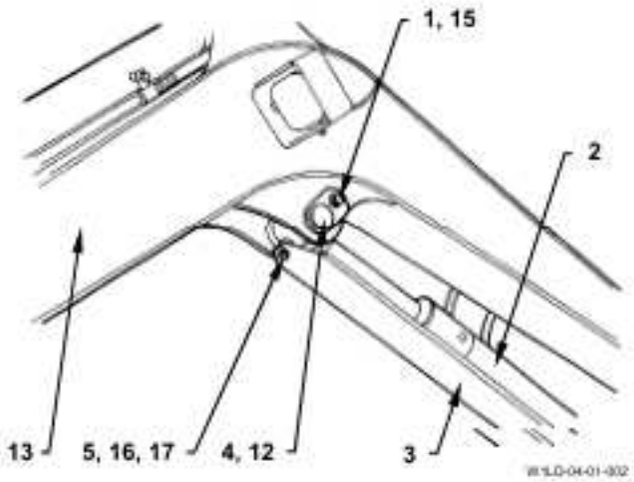
2. Attach a nylon sling onto boom cylinder (2). Hold boom cylinder (2).
   Remove bolt (1) and spring washer (15). Remove pin (4). Remove shims (12) between boom (13) and boom cylinder (2).
   : 22 mm

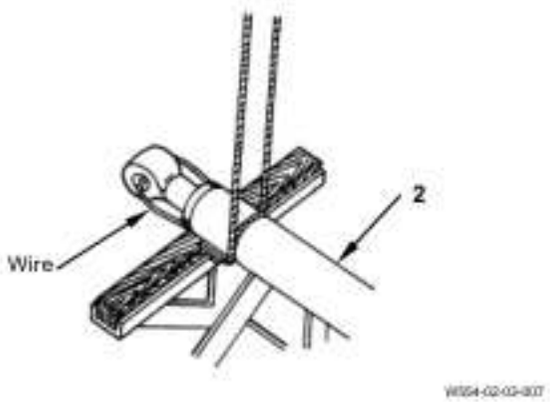
NOTE: When pin (1) cannot be removed, start the engine and operate the boom lever. Adjust the rod end pin hole of boom cylinder (2).

3. Place the boom cylinder (2) tube end on the support.

NOTE: Height of support: 700 mm (27.6 in) or more

4. Start the engine. Operate the boom lever and retract boom cylinder (2). In order not to extend the rod, pass a wire through the rod hole and secure the rod to the cylinder tube.





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