PART NO. WCFA-E-00

HITACHI

Workshop Manual

ZX
145W-3
Wheeled Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOCFA-E
Technical Manual (Troubleshooting)	: Vol. No.TTCFA-E
Workshop Manual	: Vol. No.WCFA-E

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SECTION 1
GENERAL

— CONTENTS —

Group 1 Precautions for Disassembling and Assembling

Precautions for Disassembling and Assembling W1-1-1

Maintenance Standard Terminology W1-1-7

Group 2 Tightening

Tightening Torque Specifications W1-2-1

Torque Chart W1-2-4

Piping Joint W1-2-7

Periodic Replacement of Parts W1-2-12

Group 3 Painting

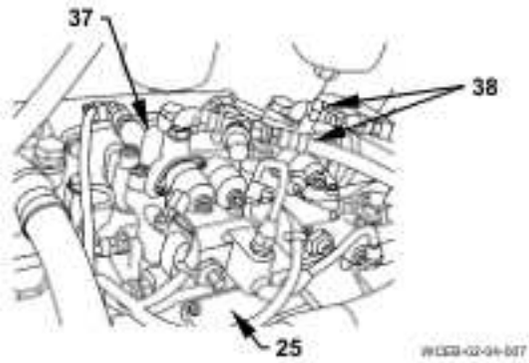
Painting W1-3-1

Group 4 Bleeding Air from Hydraulic Oil Tank

Bleeding Air from Hydraulic Oil tank W1-4-1

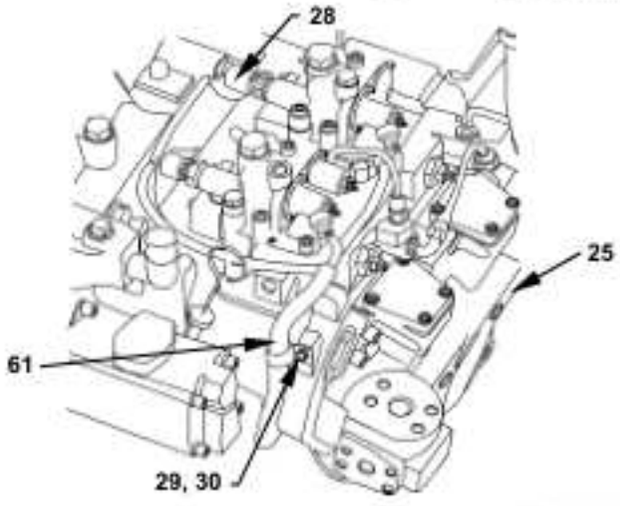
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12. Connect hoses (38) (2 used) to regulators (37) (2 used).
    : 19 mm
    : 30 N·m (3 kgf·m, 22 lbf·ft)



13. Connect connectors (28) (7 used) to pump device (25).

14. Secure harness (61) (2 used) to pump device (25) with clips (29) (2 used) and bolts (30) (2 used).
    : 10 mm
    : 3 to 4 N·m (0.3 to 0.4 kgf·m,2 to 3 lbf·ft)



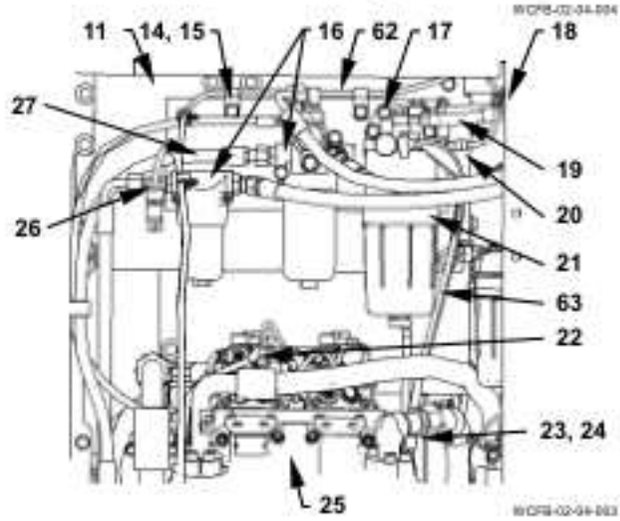
15. Install filter (21) to cover (11) with bolts (17) (3 used).
    : 17 mm
    : 50 N·m (5 kgf·m, 37 lbf·ft)

16. Secure hose (63) to pump device (25) with clip (23) and bolt (24).
    : 10 mm
    : 3 to 4 N·m (0.3 to 0.4 kgf·m,2 to 3 lbf·ft)

17. Connect connector (20) and hoses (19) (2 used) to filter.

18. Connect hoses (13) (7 used) to filters (14) (2 used).
    : 17 mm
    : 25 N·m (2.5 kgf·m, 19 lbf·ft)
    : 19 mm
    : 30 N·m (3 kgf·m, 22 lbf·ft)
    : 27 mm
    : 80 N·m (8 kgf·m, 58 lbf·ft)

19. Secure harness (62) to cover (11) and support (19) with sems bolt (15) (3 used).
    : 17 mm
    : 50 N·m (5 kgf·m, 37 lbf·ft)



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Assembly of Travel Pilot Valve

- Clean not to confuse the parts. Arrange the parts by port in order.

1. Install bushings (4) (2 used) to cover (11).

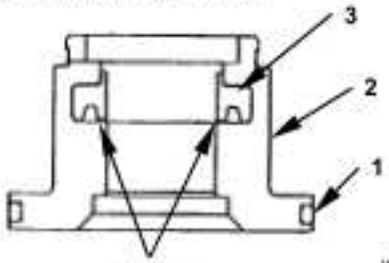
IMPORTANT: Install shim (17) as its thickness becomes same before disassembling.

2. Install washers (16) (2 used), shims (17) (2 used), springs (18) (2 used), and spring guides (19) (2 used) to spools (15) (2 used) in this order.

IMPORTANT: Install the spool (15) assembly into the same hole before disassembling.

3. Install springs (14) (2 used) to casing (21). Install the spool (15) assemblies (2 used) to casing (21).

4. Install O-rings (1) (2 used) and packings (3) (2 used) to bushings (2) (2 used).



5. Install pushers (20) (2 used) to the bushing (2) assemblies (2 used). Install the pusher (20) assemblies (2 used) to casing (21).

6. Secure casing (21) in a vise. Install cover (11) to casing (21) with socket bolts (6) (2 used).
   : 23.5 N·m (2.4 kgf·m, 17 lbf·ft)

7. Install cam (9) to cover (11). Secure cam (9) to cover (11) with pin (10).

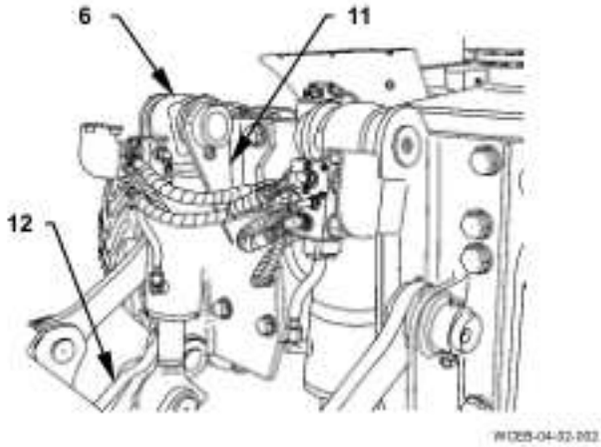
8. Apply LOCTITE #241 onto set screw (8). Secure cam (9) to pin (10) with set screw (8).
   : 5 N·m (0.5 kgf·m, 41 lbf·ft)

9. Install boot (7) to cover (11).

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CAUTION: Blade cylinder (6) weight: 50 kg (110 lb)

6. Remove blade cylinder (6) from bracket (11) and link (12).



Installation of Blade Cylinder

CAUTION: Blade cylinder (6) weight: 50 kg (110 lb)

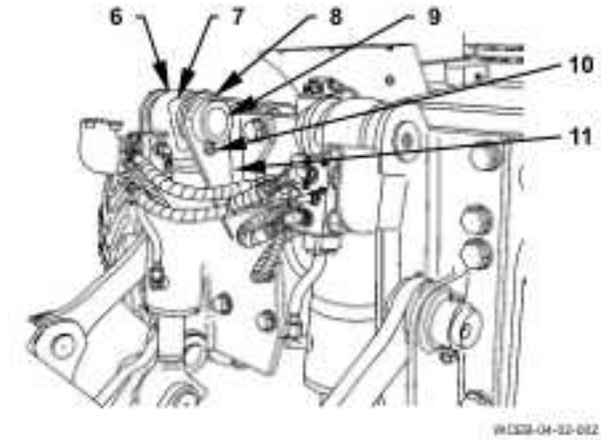
1. Attach a nylon sling onto blade cylinder (6). Hoist blade cylinder (6). Align the bottom and rod parts of blade cylinder (6) with the mounting holes on bracket (11) and link (12).

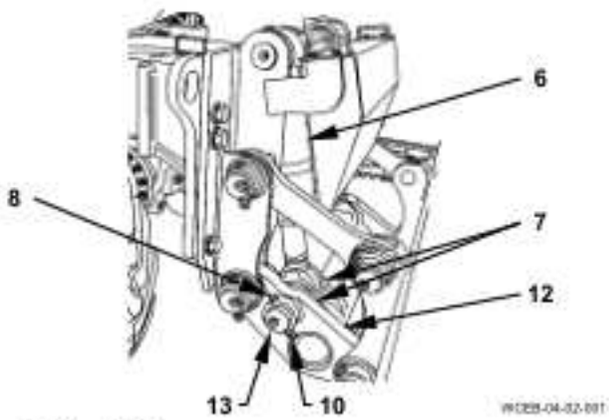
CAUTION: Metal fragments may fly off when a hammer is used. Wear necessary protection, such as goggles, helmets, etc in order to prevent personal injury.

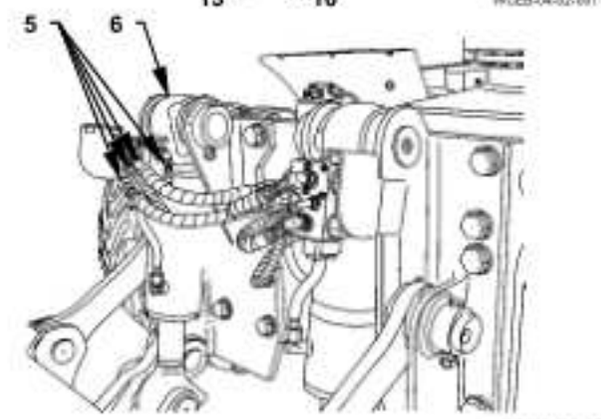
2. Install thrust plates (7) (6 used) to the bottom and rod parts of blade cylinder (6). Install blade cylinder (6) to bracket (11) and link (12) with pins (9, 13).

3. Secure pins (9, 13) to bracket (11) and link (12) with bolts (8) (2 used) and nuts (10) (4 used).
   - : 24 mm
   - : 210 N·m (21 kgf·m, 155 lbf·ft)

4. Connect hoses (5) (4 used) to blade cylinder (6).
   - : 19 mm
   - : 30 N·m (3 kgf·m, 22 lbf·ft)
   - : 27 mm
   - : 80 N·m (8 kgf·m, 58 lbf·ft)







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Attach to Vol. No.: TTCEB-E-00, TTCFA-E-00, TTCGB-E-00, TTCJB-E-00

ZAXIS140W-3/145W-3/170W-3/190W-3/210W-3/220W-3 ELECTRICAL CIRCUIT DIAGRAM (STANDARD)

⚠CAUTION: Parts numbers on the drawing are provided only for reference purpose.
To order parts on the drawing,be sure to consult the Parts Catalog.

(ZX140W-3: Serial No.002748 and up/ ZX140W-3-AMS: Serial No.021418 and up)
(ZX145W-3: Serial No.010339 and up/ ZX145W-3-AMS: Serial No.020118 and up)
(ZX170W-3: Serial No.003827 and up/ ZX170W-3-AMS: Serial No.020817 and up)
(ZX190W-3: Serial No.002536 and up/ ZX190W-3-AMS: Serial No.020272 and up/ZX190W-3M: Serial No.031129 and up/ZX190W-3DH: Serial No.002532 and up)
(ZX210W-3: Serial No.002540 and up/ ZX210W-3-AMS: Serial No.020141 and up/ZX220W-3M: Serial No.041129 and up/ ZX220W-3DH: Serial No.001111 and up)

