PART NO. W97C5-E-02

HITACHI

Reliable solutions

Workshop Manual

ZW370

Wheel Loader

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TO97C5-E
Technical Manual (Troubleshooting)	: Vol. No.TT97C5-E
Workshop Manual	: Vol. No.W97C5-E

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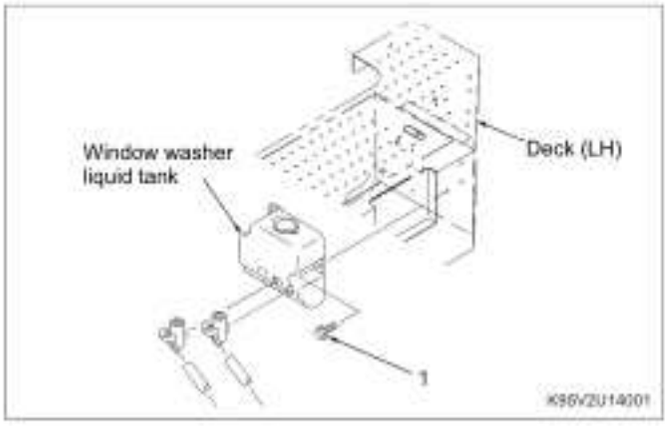
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⚠ WARNING

Unexpected movement of the machine could cause an accident resulting in injury or death. Be sure to observe the following items before starting deck removal:
- Position the machine on level ground, and apply the parking brake.
- Lower the attachment onto the ground, and block the tires with chocks, etc. to prevent them from moving.
- Remove the engine key, and hang a "DO NOT START ENGINE!" tag on the steering wheel.



1. Remove bolt (1) to remove the window washer liquid tank from deck (LH)(5).
2. Remove bolt (2).

   : Bolt (2): 94 N-m (9.6 kgf-m) (69 lb-ft)
3. Attach sling to handrails (3) and remove bolts (4). Lift deck (5) with the handrails.

   : Bolt (4): 94 N-m (9.6 kgf-m) (69 lb-ft)
   : Deck (5) (with handrails): 80 kg (180 lbs)
4. Remove bolt (6).

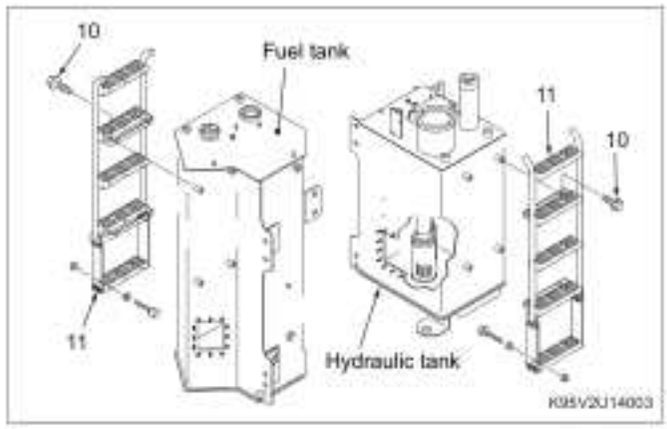
   : Bolt (6): 94 N-m (9.6 kgf-m) (69 lb-ft)
5. Attach sling to handrails (7) and remove bolts (8). Lift deck (9) or (12) with the handrails.

   : Bolt (8): 94 N-m (9.6 kgf-m) (69 lb-ft)
   : Deck (9)(12) (with handrails): 60 kg (130 lbs)

Note

On machines S/N 9158 and thereafter, the RH decks are separated as shown.
Attach sling to handrail (13) and remove bolt (14) to remove deck (15).

: Deck (15) (with handrails): 20 kg (44 lbs)



1. Remove bolt (10) to remove ladder (11).

   : Bolt (10): 53 N-m (5.4 kgf-m) (39 lb-ft)
   : Ladder: 12 kg (25 lbs)

Deck installing

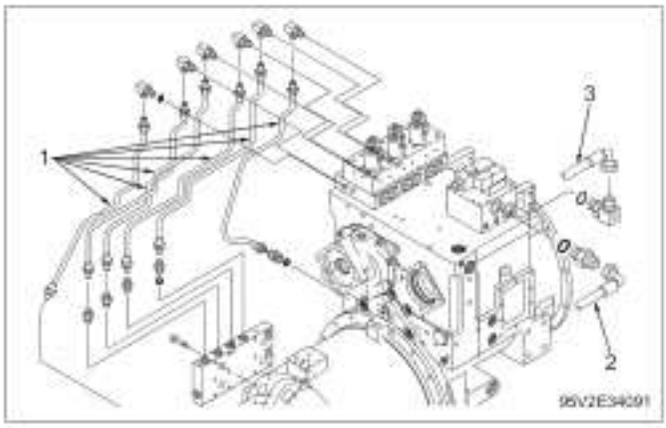
For reinstallation, follow the above procedure in reverse order.

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Control Valve Assembly

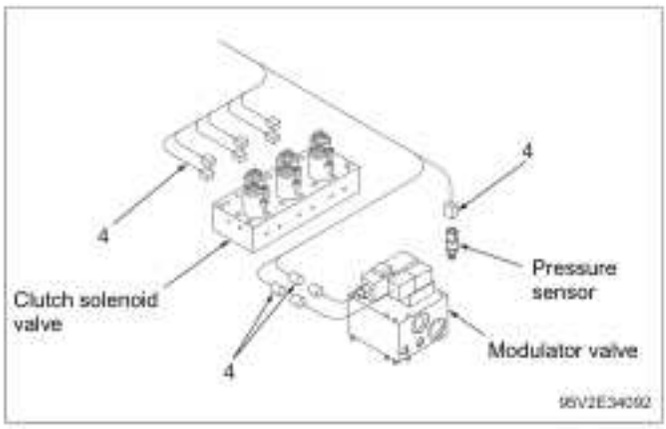
Control valve assembly removing and installing

Control valve assembly removing



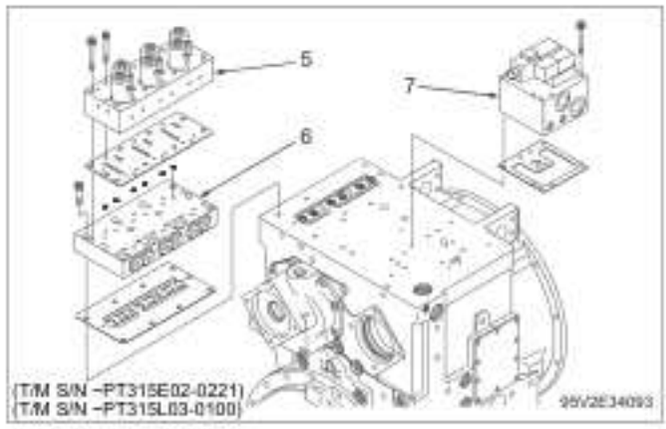
1. Clean the area carefully. Remove pipes (1) and hoses(2)(3).

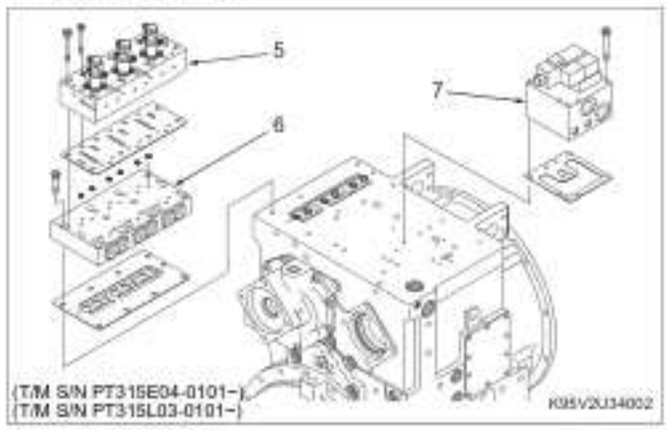
Note
Cover disconnected hoses with vinyl, plugs, or caps to protect them from dust, water, and dirt.



2. Disconnect all wire harness couplers (4).

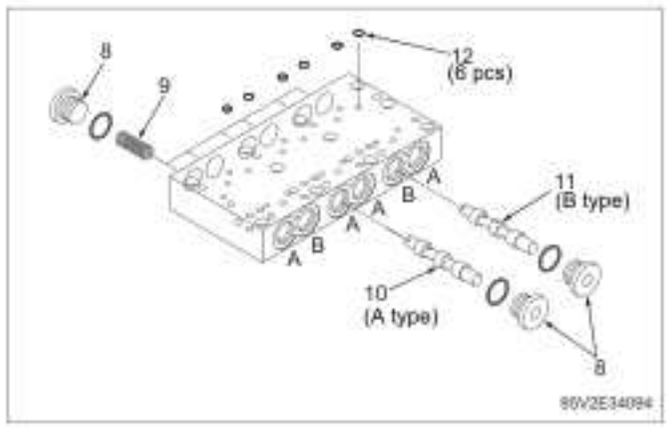
Note
Put matchmarks on them to avoid incorrect wiring connection when reassembling.





3. Remove clutch solenoid valve (5), clutch valve (6) and modulator valve (7).

: Bolt (M8): 38 N-m (3.85 kgf-m) (28 lb-ft)
(M10): 73.6 N-m (7.50 kgf-m) (54 lb-ft)



4. Remove plugs (8), springs (9), spools (10)(11) and O-rings (12).

: Plug (8): 90.0 N-m (9.0 kgf-m) (66 lb-ft)

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Hydraulic pump assembly disassembling and assembling

IMPORTANT

Before disassembly or reassembly, read and understand the aforementioned "Hydraulic Parts Disassembly and Assembly Cautions" page 44-3.

IMPORTANT

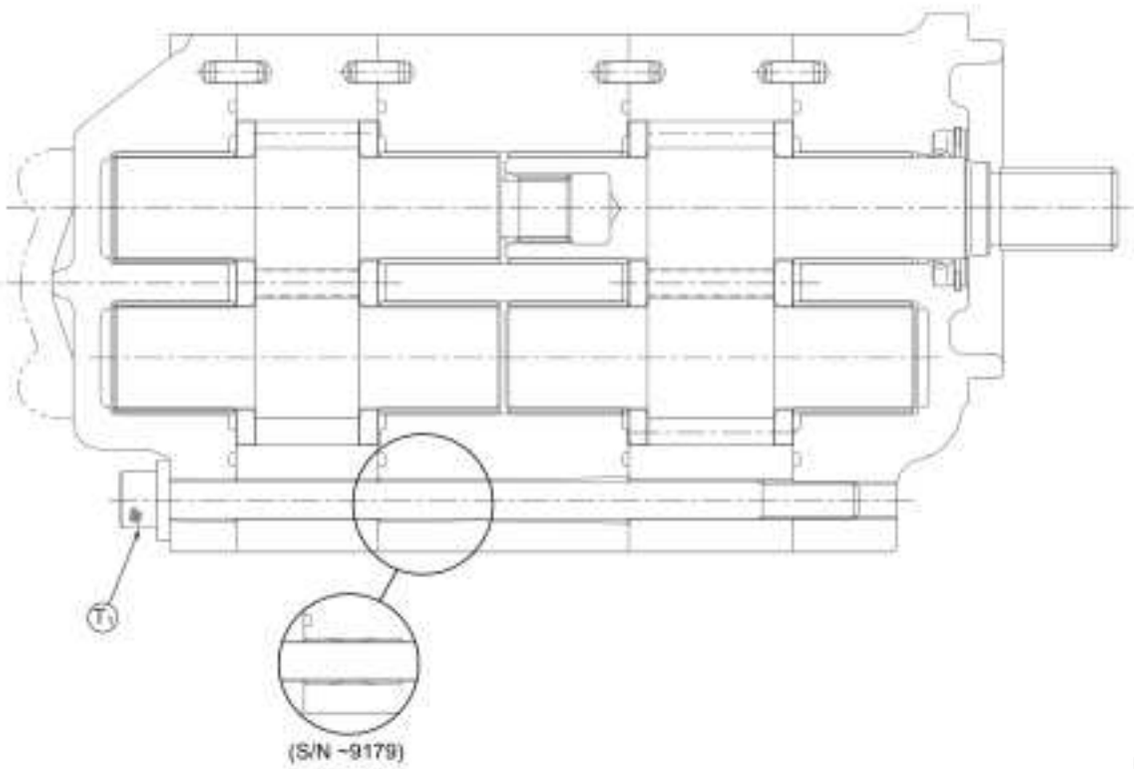
- Handle pumps carefully.
- In case hydraulic system breaks down, do not disassemble the pump first.
  Check the whole hydraulic circuit and find its cause. Confirm the cause, then repair.
- When the pump is broken down, not only fix or replace it but also inspect the failure cause to prevent recurrence.

⚠ WARNING

Do not attempt to disassemble the pump assembly unless otherwise required, as it should significantly affect the pump performance or may cause secondary problems.

Hydraulic pump assembly cross section and tightening torque

Loading and pilot and brake pump / Steering pump



:
T_1: 177 N-m (18 kgf-m) (130 lb-ft)

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