PART NO. W1J1-E-00

HITACHI

Workshop Manual

ZAXIS

450-3
450LC-3
470H-3
470LCH-3
500LC-3
520LCH-3

Hydraulic Excavator

Service Manual consists of the following separate Part No;

Technical Manual (Operational Principle)	: Vol. No.TO1J1-E
Technical Manual (Troubleshooting)	: Vol. No.TT1J1-E
Workshop Manual	: Vol. No.W1J1-E

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GENERAL



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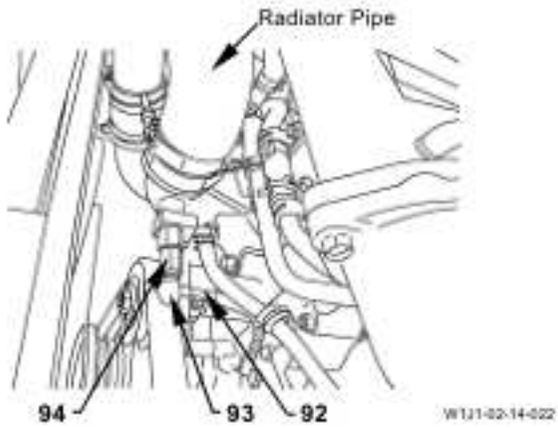
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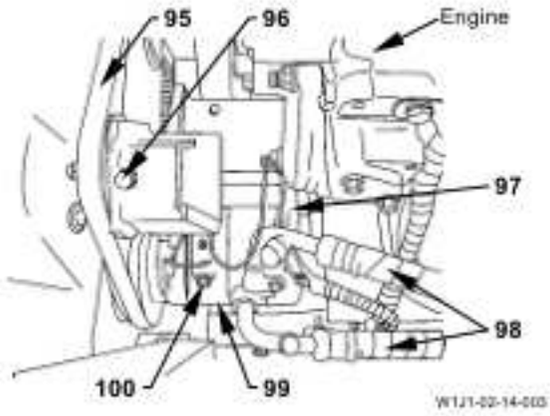
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28. Remove nut (93). Remove harness (92) from overheat switch (94).
    : 6.6 mm

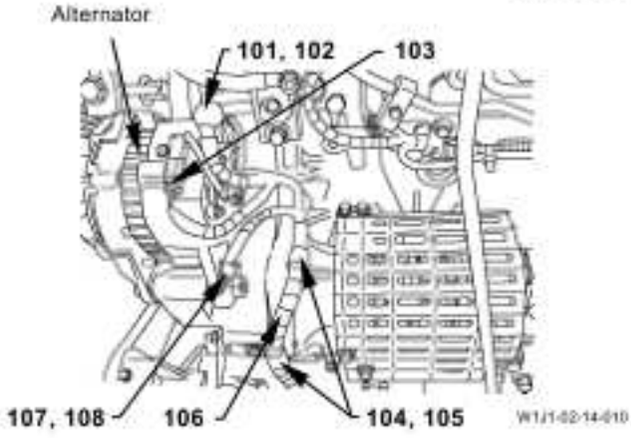


29. Disconnect connector (97). Attach a nylon sling to air compressor (99) and hold air compressor (99). Loosen bolt (96) fully. Remove bolts (100) (4 used). Remove air compressor (99) from the engine.
    : 12 mm, 13 mm

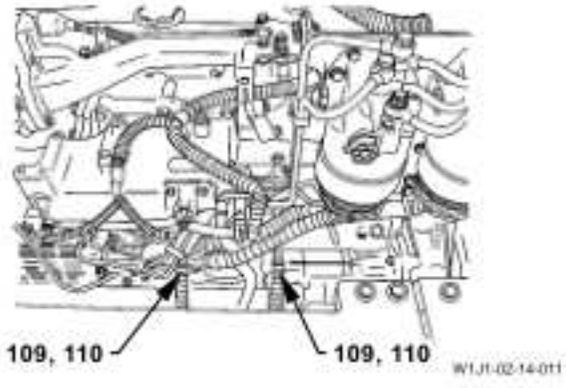
NOTE: Remove and install the engine with air compressor (99) hoisted inside the machine. Do not remove hose (98).



30. Remove terminal covers (101, 107). Remove nut (102) and screw (108) from the terminal in alternator. Disconnect connector (103). Remove bolts (104) (2 used) from clamps (105) (2 used) in harness (106). Remove harness (106).
    : 12 mm, 13 mm, 17 mm



31. Loosen bands (109) (2 used). Close the cock in fuel pipe. Remove fuel hoses (110) (2 used) from the pipe in engine. Cap the open ends of hose and pipe.



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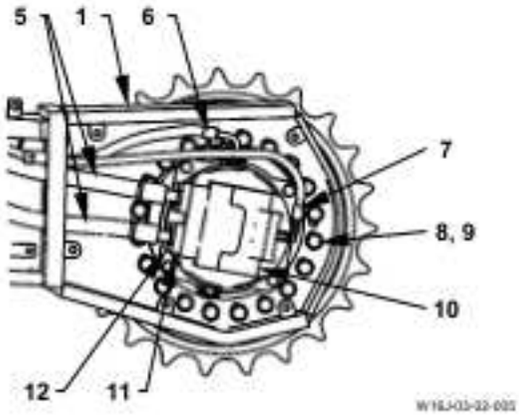
Installation

CAUTION: Travel device (10) weight:
ZAXIS450-3, 450LC-3, 470H-3, 470LCH-3:
671 kg (1480 lb)
ZAXIS500LC-3, 520LCH-3: 855 kg (1885 lb)

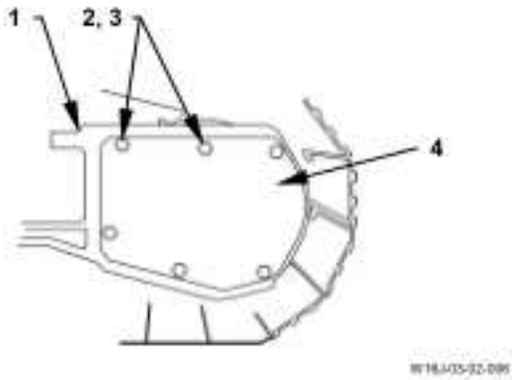
IMPORTANT: Align the matching marks made when disassembling. If the matching marks are not aligned, it is difficult to install hoses (6, 7).

1. Install travel device (10) to track frame (1) with bolts (8) and washers (9).
   : 32 mm
   : 750 N·m (76.5 kgf·m, 550 lbf·ft)

   Bolts (8) and washers (9)
   ZAXIS450-3, 450LC-3, 470H-3, 470LCH-3:
   20 used
   ZAXIS500LC-3, 520LCH-3: 24 used



2. Install hoses (5) (2 used) to travel device (10) with split flanges (11) (4 used) and socket bolts (12) (8 used).
   : 10 mm
   : 90 N·m (9 kgf·m, 66 lbf·ft)



3. Install hoses (6, 7) to travel device (10).
   : 22 mm
   : 39 N·m (4 kgf·m, 29 lbf·ft)
   : 27 mm
   : 78 N·m (8 kgf·m, 58 lbf·ft)

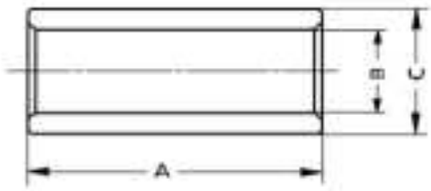
CAUTION: Cover (4) weight:
ZAXIS450-3, 450LC-3, 470H-3, 470LCH-3:
32 kg (71 lb)
ZAXIS500LC-3, 520LCH-3: 40 kg (88 lb)

4. Install cover (4) to track frame (1) with bolts (2) (6 used) and washers (3) (6 used).
   : 24 mm
   : 210 N·m (21 kgf·m, 155 lbf·ft)

IMPORTANT: After completing the work, check the oil level. Start the engine and check for any oil leaks.
In order to prevent the travel motor from seizing, perform the break in operation after installation.

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Master Bushing



W105-03-07-023

ZAXIS450-3, 450LC-3, 470H-3, 470LCH-3 Unit: mm (in)

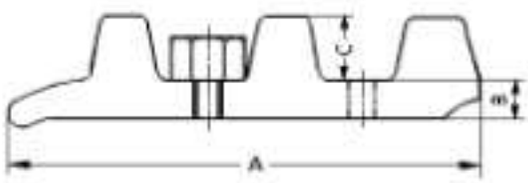
	Standard	Allowable Limit	Remedy
A	160.8 (6.3)	-	Replace
B	47.9 (1.89)	[59.9 (2.36)]	
C	71.35 (2.81)	[66.4 (2.61)]	

ZAXIS500LC-3, 520LCH-3

	Standard	Allowable Limit	Remedy
A	181.4 (7.1)	-	Replace
B	49.2 (1.94)	[52.2 (2.06)]	
C	79.0 (3.11)	[74.0 (2.91)]	

[ ] : Reference

Grouser Shoe



W105-03-07-024

ZAXIS450-3, 450LC-3, 470H-3, 470LCH-3 Unit: mm (in)

	Standard	Allowable Limit	Remedy
A	247 (9.7)	-	Replace
B	15 (0.6)	-	
C	36 (1.4)	24 (0.9)	

ZAXIS500LC-3, 520LCH-3

	Standard	Allowable Limit	Remedy
A	254.5 (10)	-	Replace
B	18 (0.7)	-	
C	37 (1.5)	24 (0.9)	

[ ] : Reference

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