PART NO. WJAA-EN-01

HITACHI

Reliable solutions

Workshop Manual

ZX
470-5B
470LC-5B
470H-5B
470LCH-5B
470R-5B
470LCR-5B

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOJAA-EN
Technical Manual (Troubleshooting)	: Vol. No.TTJAA-EN
Workshop Manual	: Vol. No.WJAA-EN
Engine Manual	: Vol. No.ETJAA-EN, EWJAA-EN

MidWestTech | Hitachi ZX470-5B, ZX470LC-5B, ZX470H-5B, ZX470LCH-5B, ZX470R-5B, ZX470LCR-5B Excavator Workshop Service Manual | Publication WJAA-EN-01

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Safety Alert Symbol and Headline Notations

In this manual, the following safety alert symbol and signal words are used to alert the reader to the potential for personal injury of machine damage.

⚠ This is the safety alert symbol. When you see this symbol, be alert to the potential for personal injury.
Never fail to follow the safety instructions prescribed along with the safety alert symbol.
The safety alert symbol is also used to draw attention to component/part weights.
To avoid injury and damage, be sure to use appropriate lifting techniques and equipment when lifting heavy parts.

⚠ **CAUTION:**
Indicated potentially hazardous situation which could, if not avoided, result in personal injury or death.

IMPORTANT:
Indicates a situation which, if not conformed to the instructions, could result in damage to the machine.

NOTE:
Indicates supplementary technical information or know-how.

Units Used

SI Units (International System of Units) are used in this manual. MKSA system units and English units are also indicated in parentheses just behind SI units.

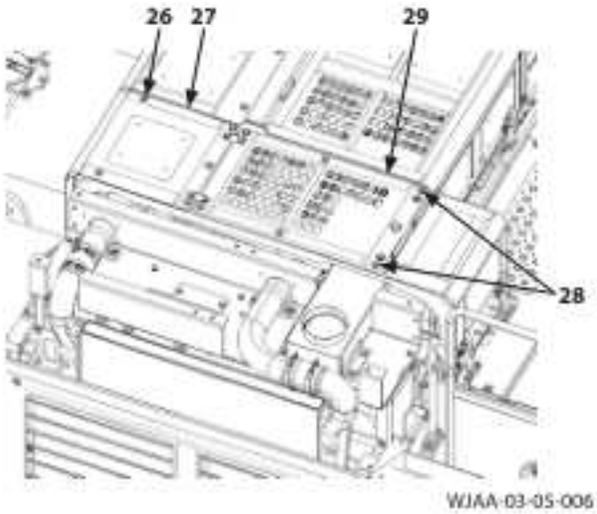
Example: 24.5 MPa (250 kgf/cm², 3560 psi)

A table for conversion from SI units to other system units is shown below for reference purposes.

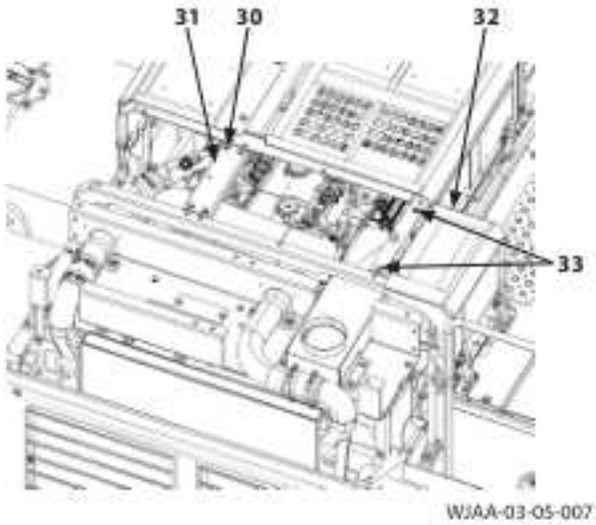
Quantity	To Convert From	Into	Multiply By
Length	mm	in	0.03937
	mm	ft	0.003281
Volume	L	US gal	0.2642
	L	US qt	1.057
	m^3	yd^3	1.308
Weight	kg	lb	2.205
Force	N	kgf	0.10197
	N	lbf	0.2248
Torque	N·m	kgf·m	0.10197
Pressure	MPa	kgf/cm^2	10.197
	MPa	psi	145.0
Power	kW	PS	1.360
	kW	HP	1.341
Temperature	°C	°F	°C×1.8+32
Velocity	km/h	mph	0.6214
	min^{-1}	rpm	1.0
Flow rate	L/min	US gpm	0.2642
	mL/rev	cc/rev	1.0

NOTE: The numerical value in this manual might be different from the above-mentioned table.

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WJAA-03-05-006



WJAA-03-05-007

13. Remove bolts, washers (26) (7 used). Remove cover (27).

    : 19 mm

14. Remove bolts, washers (28) (6 used). Remove cover (29).

    : 19 mm

15. Remove bolts, washers (30) (4 used). Remove bracket (31).

    : 19 mm

16. Open cover (32).

17. Remove bolts, washers (33) (2 used). Remove the cover (32) assembly.

    : 19 mm

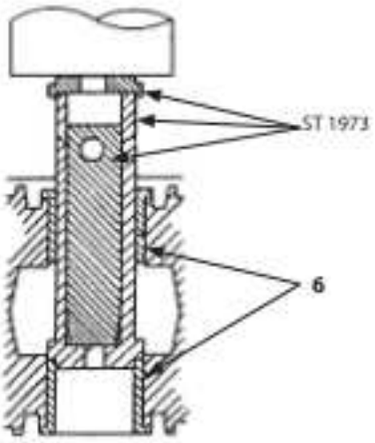
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Assembly of Front Idler

IMPORTANT: Before assembling, apply hydraulic oil onto parts in order to prevent them from seizing.

CAUTION: Idler (7) weight: 150 kg (335 lb)

1. Install bushings (6) (2 used) to idler (7) by using the special tool (ST 1973) and a press.



W105-03-05-011

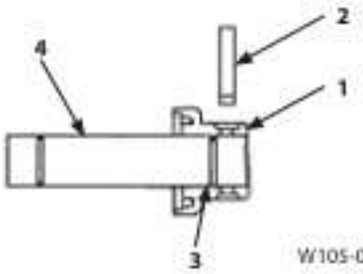
CAUTION: Axle (4) weight: 28 kg (62 lb)

Bearing (1) weight: 27 kg (60 lb)

2. Attach a nylon sling onto axle (4). Hoist axle (4). Place axle (4) vertically. Install O-ring (3) to the upper side of axle (4).

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.

3. Fit the matching marks made when disassembling and install bearing (1) to axle (4) by using a plastic hammer. Install pin (2) to bearing (1) by using a bar and a hammer.



W105-03-05-014

IMPORTANT: Handle floating seal (5) with care. (Refer to W4-5-3.)

4. Apply grease onto O-ring of floating seal (5). Install floating seal (5) to idler (7) and bearing (1).

CAUTION: The axle (4) assembly weight: 54 kg (120 lb)

5. Attach a nylon sling onto bearing (1) of the axle (4) assembly. Hoist the axle (4) assembly. Install the axle (4) assembly to idler (7) from the side where floating seal (5) has already been installed.

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