PART NO. WLAA-EN-00

HITACHI

Reliable solutions

Workshop Manual

ZX
140W-5B
Wheeled Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOLAA-EN
Technical Manual (Troubleshooting)	: Vol. No.TTLAA-EN
Workshop Manual	: Vol. No.WLAA-EN
Engine Manual	: Vol. No.EDBE-EN

MidWestTech | Hitachi ZX140W-5B Wheeled Excavator Workshop Service Manual | Publication WLAA-EN-00

Order the manual at mid-west-tech.com >

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:**
Indicates 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.

MidWestTech | Hitachi ZX140W-5B Wheeled Excavator Workshop Service Manual | P... Order the manual at mid-west-tech.com >

Maintenance Standard Terminology

"Standard"

1. Dimension for parts on a new machine.
2. Dimension of new components or assemblies adjusted to specification. Allowable errors will be indicated if necessary.

"Allowable Limit"

1. Normal machine performance cannot be accomplished after exceeding this limit.
2. Repair or adjustment is difficult after exceeding this limit.
3. Repair or adjustment is impossible after exceeding this limit.
   Therefore, in consideration of operation efficiency and maintenance expense, proper maintenance shall be carried out before reaching the "Allowable Limit".

MidWestTech | Hitachi ZX140W-5B Wheeled Excavator Workshop Service Manual | P... Order the manual at mid-west-tech.com >

Assembly of Muffler Filter

1. Install gasket (15), the filter (05) assembly, and brackets (35, 34) to the muffler (07) assembly. Temporally tighten them with washers (32) (3 used), nuts (31) (3 used), and bolts (29) (6 used).

   : 12 mm

2. Install gasket (15), the diesel oxidation catalyst (03) assembly, and brackets (33, 13) to the filter (05) assembly. Temporally tighten them with washers (32) (2 used), nuts (31) (2 used), and bolts (29) (6 used).

   : 12 mm

3. Install bracket (36) to the muffler (07) assembly. Temporally tighten them with washers (32) (2 used), nuts (31) (2 used), and bolts (30) (2 used).

   : 12 mm

4. Install washers (32) (3 used), nuts (31) (3 used), and bolts (29) (3 used) to the filter (05) assembly. Temporally tighten them.

   : 12 mm

5. Install bracket (09) to the diesel oxidation catalyst (03) assembly. Temporally tighten them with washer (32), nut (31), and bolt (30).

   : 12 mm

6. Install bracket (11) to the diesel oxidation catalyst (03) assembly. Temporally tighten them with washers (32) (2 used), nuts (31) (2 used), and bolts (30) (2 used).

   : 12 mm

7. Install washers (32) (3 used), nuts (31) (3 used), and bolts (29) (3 used) to the diesel oxidation catalyst (03) assembly. Temporally tighten them.

   : 12 mm

8. Keep the mounting surfaces of the filter (05) assembly and brackets (35, 34, 33, and 13) horizontally by using the special tool (ST 5120).

9. Tighten nuts (32) (12 used) and bolts (29) (11 used).

   : 12 mm

   : 30 N-m (3 kgf-m, 22 lbf-ft)

10. Tighten nuts (31) (4 used) and bolts (30) (5 used).

    : 12 mm

    : 30 N-m (3 kgf-m, 22 lbf-ft)

11. Clean the thread surfaces of pipes (18, 17). Apply lubricant onto them.

12. Install clips (25, 24) (2 used for each) to brackets (36, 11). Temporally tighten them with bolts (26) (2 used).

    : 10 mm

13. Install pipes (18, 17) to the muffler (07) assembly and the diesel oxidation catalyst (03) assembly. Temporally tighten them.

    : 14 mm

14. Tighten bolts (26) (2 used).

    : 10 mm

    : 17 N-m (1.7 kgf-m, 12.5 lbf-ft)

15. Tighten pipes (18, 17).

    : 14 mm

    : 35 N-m (3.5 kgf-m, 26 lbf-ft)

MidWestTech | Hitachi ZX140W-5B Wheeled Excavator Workshop Service Manual | P... Order the manual at mid-west-tech.com >