PART NO. WDC390-EN-00

HITACHI

Reliable solutions

Workshop Manual

ZX210LCN-G

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TODC390-EN
Technical Manual (Troubleshooting)	: Vol. No.TTDC390-EN
Workshop Manual	: Vol. No.WDC390-EN
Engine Manual	: Vol. No.EDCD-EN

MidWestTech | Hitachi ZX210LCN-G Excavator Workshop Service Manual | Publication WDC390-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 ZX210LCN-G Excavator Workshop Service Manual | Publicatio... Order the manual at mid-west-tech.com >

Hydraulic Circuit Pressure Release Procedure

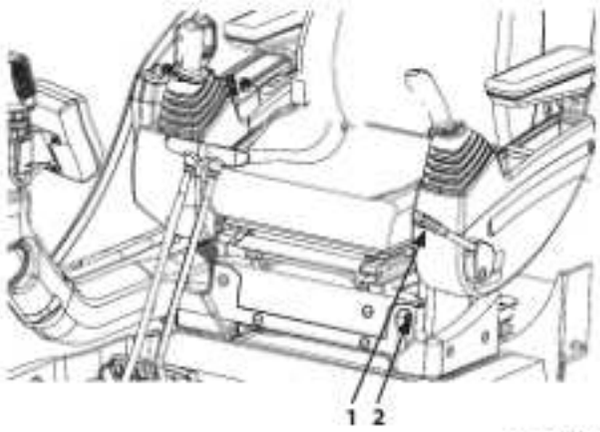
Release any remaining pressure as follows before removing/installing the front attachment.

1. Set pilot shut-off lever (1) to the UNLOCK position.
2. Turn engine stop switch (2) ON.

NOTE: Perform step 1 and step 2, and set the key switch to the START position. Although the starter rotates, the engine does not start.

IMPORTANT: Battery will deplete. Operate the key switch for short period.

3. With the key switch set in the START position, operate the control lever in order to release any pressure in the hydraulic circuit 4 to 5 times.
4. Return pilot shut-off lever (1) to the LOCK position.
5. Turn engine stop switch (2) OFF.



M1U1-01-029

MidWestTech | Hitachi ZX210LCN-G Excavator Workshop Service Manual | Publicatio... Order the manual at mid-west-tech.com >

Pin



W142-03-07-004

Unit: mm (in)

	Standard	Allowable Limit	Remedy
A	212 (8.35)	-	Replace
B	38 (1.50)	[35 (1.4)]	

NOTE: *Values in [ ] are just for reference.*

Bushing



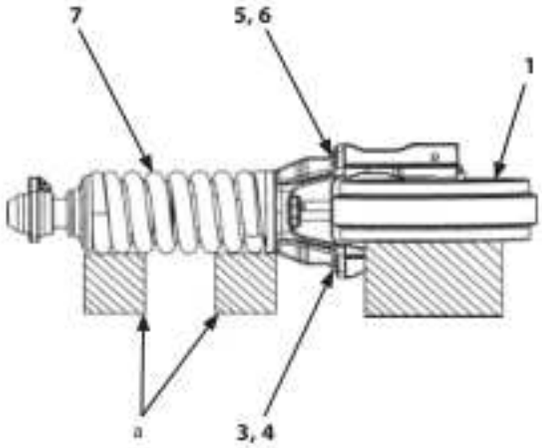
W105-03-07-023

Unit: mm (in)

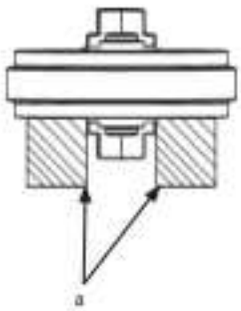
	Standard	Allowable Limit	Remedy
A	137.5 (5.41)	-	Replace
B	38.7 (1.52)	[39.7 (1.56)]	
C	59 (2.32)	[54 (2.13)]	

NOTE: *Values in [ ] are just for reference.*

MidWestTech | Hitachi ZX210LCN-G Excavator Workshop Service Manual | Publicatio... Order the manual at mid-west-tech.com >



WDCD-04-04-004



WDCD-04-04-003

a - Block

Installation

CAUTION: Take care not to turn over track adjuster (7).

CAUTION: Front idler (1) weight: 110 kg (245 lb)

Track adjuster (7) weight: 140 kg (310 lb)

1. Place track adjuster (7) and front idler (1) onto blocks (a) (4 used) with the bolt (5) hole side up.
2. Install front idler (1) with washers (6) (2 used) and bolts (5) (2 used).

   : 24 mm

   : 270 N·m (27 kgf·m, 200 lbf·ft)

CAUTION: The track adjuster (7) assembly weight: 250 kg (555 lb)

3. Turn over the track adjuster (7) assembly.
4. Install washers (4) (2 used) and bolts (3) (2 used).

   : 24 mm

   : 270 N·m (27 kgf·m, 200 lbf·ft)

MidWestTech | Hitachi ZX210LCN-G Excavator Workshop Service Manual | Publicatio... Order the manual at mid-west-tech.com >