PART NO. W1P1-E-00

HITACHI

Workshop Manual

ZX
70-3
70LC-3
70LCN-3
75US-3
85US-3
Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TO1P1-E
Technical Manual (Troubleshooting)	: Vol. No.TT1P1-E
Workshop Manual	: Vol. No.W1P1-E

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SECTION 1
GENERAL



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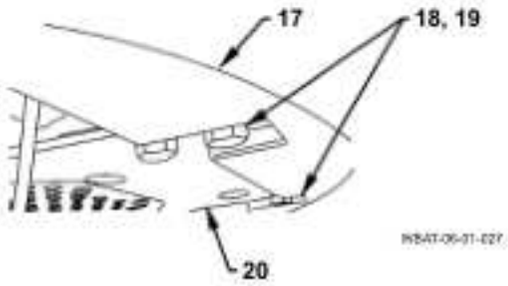
Bleed Air from Hydraulic Oil Tank W1-4-1

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Installation

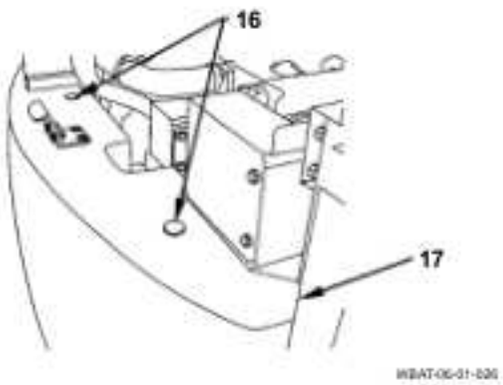
CAUTION: Counterweight (17) weight: 1380 kg (3050 lb)

1. Install Freno-Linkbolts (A-20: M20, Pitch 2.5 mm) (2 used) to counterweight (17). Attach a wire rope onto the Freno-Linkbolt. Hoist and align counterweight (17) with the mounting hole of main frame (20).



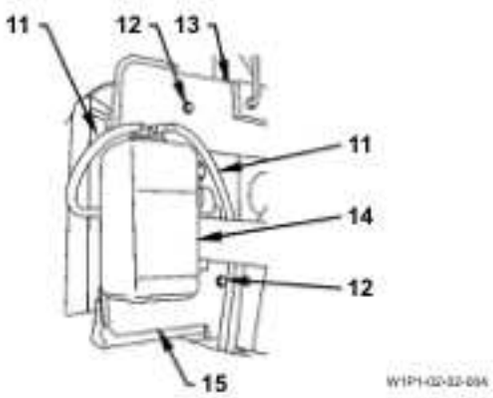
2. Install counterweight (17) to main frame (20) with bolts(18) (3 used) and washers (19) (3 used).
   : 30 mm
   : 550 N·m (55 kgf·m, 410 lbf·ft)

3. Remove the wire rope and the Freno-Linkbolts (2 used) from counterweight (17). Install caps (16) (2 used) to counterweight (17).



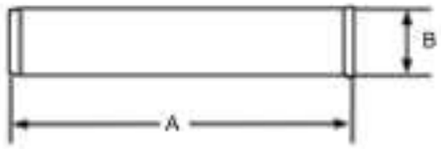
4. Install the cover (15) assembly to bracket (13) with sems bolts (12) (2 used).
   : 13 mm
   : 20 N·m (2 kgf·m, 44 lbf·ft)

5. Connect hoses (11) (2 used) to reserve tank (14).



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Pin



W143-03-07-804

Unit: mm (in)

	Standard	Allowable Limit	Remedy
A	131 (5.2)	-	Replace
B	24 (0.9)	[21 (0.8)]	

Bushing



W106-03-07-823

Unit: mm (in)

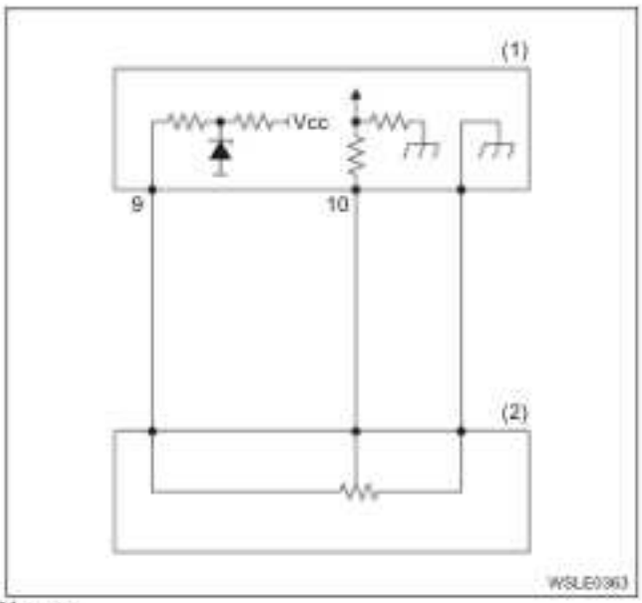
	Standard	Allowable Limit	Remedy
A	81 (3.2)	-	Replace
B	24.5 (1)	[25.5 (1)]	
C	41.26 (1.6)	[37.76 (1.5)]	

NOTE: The value in [ ] is just for reference.

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Boost Pressure Sensor Circuit Diagram

W1G00820051



Name

1. EGR Cut Controller
2. Boost Pressure Sensor

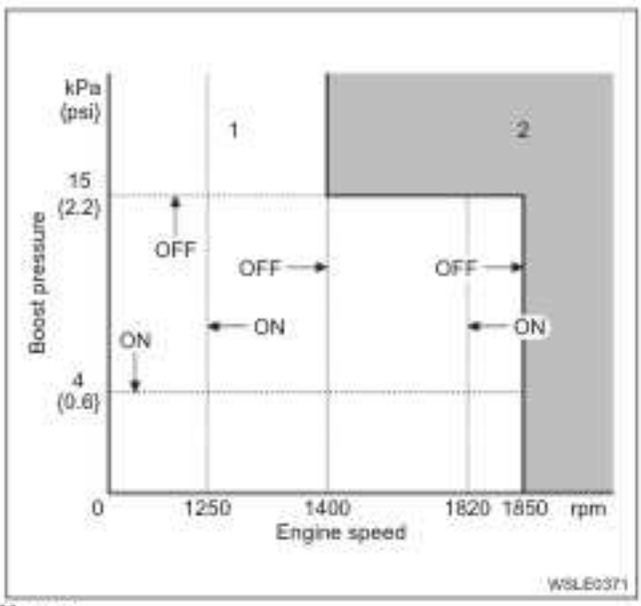
Engine Coolant Temperature Control

W1G00820052

The EGR valve is opened when the engine coolant temperature becomes 60°C {140°F} or more, and is closed when 55°C {131°F} or less.

Engine Speed and Boost Pressure Control

W1G00820053

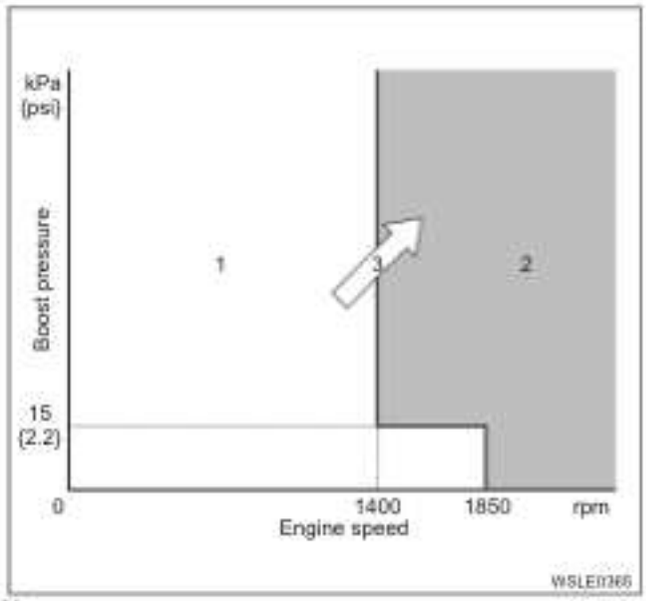


Name

1. EGR Valve Closed
2. EGR Valve Open

When the engine speed and boost pressure increase

W1G00820054

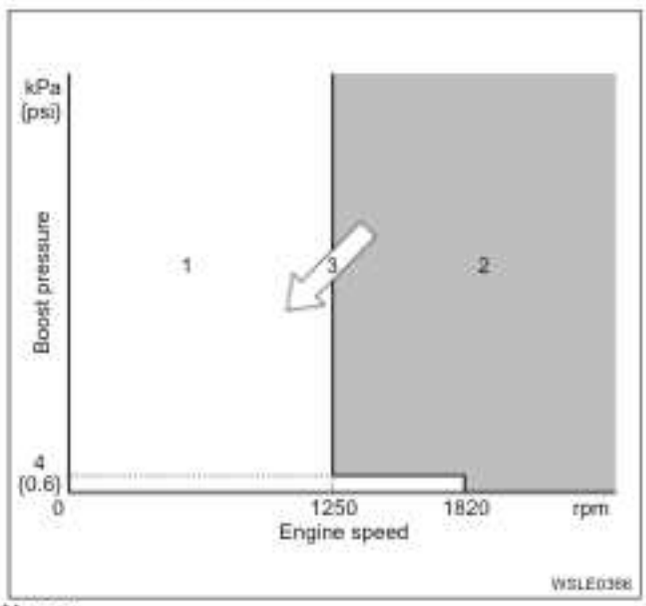


Name

1. EGR Valve Closed
2. EGR Valve Open
3. Engine Speed and Boost Pressure Increase

When the engine speed and boost pressure decrease

W1G00820055



Name

1. EGR Valve Closed
2. EGR Valve Open
3. Engine Speed and Boost Pressure Decrease

Control When the Sensor Has an Open Circuit

W1G00820056

Close the EGR valve if the engine coolant temperature sensor, tachosensor, or boost pressure sensor has an open circuit.

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PREVENT PARTS FROM FLYING

- Grease in the track adjuster is under high pressure. Failure to follow the precautions below may result in serious injury, blindness, or death.
  - Do not attempt to remove GREASE FITTING or VALVE ASSEMBLY.
  - As pieces may fly off, be sure to keep body and face away from valve.
  - Never attempt to disassemble the track adjuster. Inadvertent disassembling of the track adjuster may cause the parts such as a spring to fly off, possibly resulting in severe personal injury or death.
- Travel reduction gears are under pressure.
  - As pieces may fly off, be sure to keep body and face away from AIR RELEASE PLUG to avoid injury.
  - GEAR OIL is hot. Wait for GEAR OIL to cool, and then gradually loosen AIR RELEASE PLUG to release pressure.



SA-344

STORE ATTACHMENTS SAFELY

- Stored attachments such as buckets, hydraulic hammers, and blades can fall and cause serious injury or death.
  - Securely store attachments and implements to prevent falling. Keep children and bystanders away from storage areas.



SA-034

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