PART NO. WJBK40-EN-00

HITACHI

Reliable solutions

Workshop Manual

ZX
670LC-6
690LCH-6
690LCR-6

Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOJBK40-EN
Technical Manual (Troubleshooting)	: Vol. No.TTJBK40-EN
Workshop Manual	: Vol. No.WJBK40-EN
Engine Manual	: Vol. No.ETJBK40-EN, EWJBK40-EN

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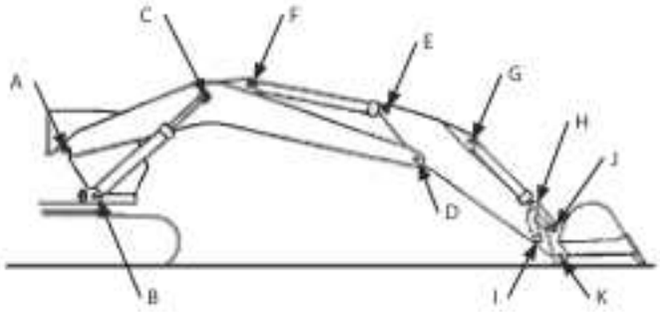
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Pin and Bushing



W1V1-04-01-012

Unit: mm

	Part Name	Standard	Allowable Limit	Remedy
A	Pin	150	149	Replace
	Bushing (Main Frame)	150	151.5	
	Bushing (Boom)	150	151.5	
B	Pin	130	129	
	Boss (Main Frame)	130	-	
	Bushing (Boom Cylinder)	130	131.5	
C	Pin	130	129	
	Bushing (Boom Cylinder)	130	131.5	
	Boss (Boom)	130	-	
D	Pin	140	139	
	Bushing (Boom)	140	141.5	
	Bushing (Arm)	140	141.5	
E	Pin	130	129	
	Boss (Arm)	130	-	
	Bushing (Arm Cylinder)	130	131.5	
F	Pin	130	129	
	Boss (Boom)	130	-	
	Bushing (Arm Cylinder)	130	131.5	

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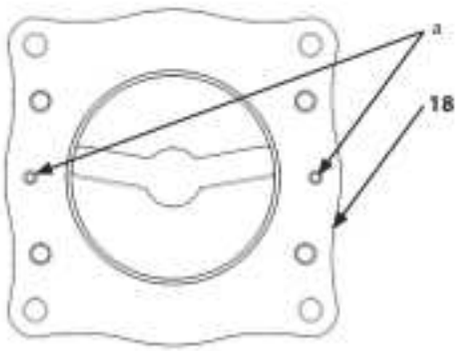
12. Install O-ring (19) to cartridge (18).

CAUTION: Cartridge (18) weight: 31 kg

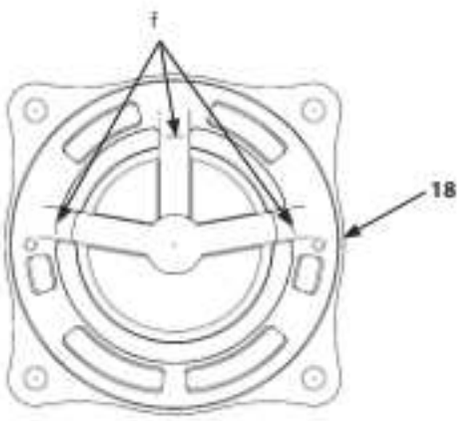
13. Install eyebolts (M12, Pitch 1.75 mm) (2 used) to lifting holes (a) (2 places) of cartridge (18). Attach nylon slings onto the eyebolts. Hoist cartridge (18). Install cartridge (18) to casing (00) with oil groove (f) facing to the air breather (47) side with socket bolts (12) (4 used).

: 17 mm

: 400 N·m



a- Lifting Hole WJBC-03-09-002



f- Oil Groove WJBC-03-09-007

14. Install other gear (15) in the same way as step 9 to step 13.
15. Install O-ring (49) to elbow (39). Install elbow (39) to casing (00).

: 32 mm

: 140 N·m

16. Install O-ring (37) to elbow (39). Install pipe (48) to elbow (39).

: 46 mm

: 140 N·m

17. Install a seal tape onto air breather (47). Install air breather (47) to pipe (48).

: 19 mm

: 15 N·m

18. Install O-ring (49) to adapter (38). Install adapter (38) to casing (00).

: 41 mm

: 140 N·m

19. Install O-ring (37) to adapter (38). Install pipe (51) to adapter (38).

: 46 mm

: 140 N·m

20. Install O-ring (20), pipe (26), and level gauge (24) to casing (00) with socket bolts (27) (4 used).

: 8 mm

: 50 N·m

21. Install O-rings (49) (2 used) to plugs (31) (2 used). Install plugs (31) (2 used) to casing (00).

: 36 mm

: 140 N·m

22. Add hydraulic oil in casing (00).

NOTE: Amount of oil: 6 L

23. Install O-ring (49) to plug (31). Install plug (31) to pipe (51).

: 36 mm

: 140 N·m

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CONNECTORS (ONE NOx SENSOR) (MACHINE: UP TO SERIAL NO.60012)

CONNECTOR CHART

(NO COMMENTS CONNECTOR IS HARNESS SIDE'S)

<INSIDE OF CAB>

SEC_HORN — 7283-8220
CAN1 — Z02FGY — 7123-8520-40
OPTION — M06FW — 7123-6060
OPTION2 — C12FW — 7123-7920
OPT_SW — C03FW — 7123-7830
OPT_WIPER — C06FW — 7123-7860
FAN_REVERSE_SW — C04FB — 7123-7841-30
AUTO_LUB_SW — C06FBR — 7123-7862-80
AUX_2,AUX_3,12V_UNIT,IMMOBI,WARNING_LAMP, CAB_LAMP_REAR,QUICK_HITCH — CN02F — 7123-2825
SEAT,CAB_LAMP_FRONT, CAB_LAMP_FRONT+2 — CN03F — 7123-2835
POWER_DIG_SW — 174056-2
BACK_UP — Z02FBR — 7123-8521-60
D_BACK_UP — Z02MBR — 7222-8521-80

JOINT1 — DSD-06F-W
JOINT_E — 7123-6261-40
WIPER_STD BOOM_MODE_SW — C04FW — 7123-7840
CAB LIGHT — C03FW — 7123-7830
DOOR_SW — 6520-0564
HORN_SW — 174056-2
EC1 — C02MW — 7122-7820
ST_EC1 — C02FW — 7123-7820
EC2 — C02FW — 7123-7820
ST_EC2 — C02MW — 7122-7820
EM_EC1 — C02FW — 7123-7820
EM_EC2 — C02MW — 7122-7820
PILOT SHUT-OFF SOL — Z02FGY — 7123-8520-40
PILOT SHUT-OFF SW — Z03FGY — 7123-7730-40
ENG_STOP_SW — C06FB — 7123-7861-30
MANUAL REGENERATION_SW/H — C06FB — 7123-7861-30
EL_LEVER_OPTION — C12FW — 7123-7920

MC_A — 353031-2
MC_B — 353029-2
MC_C — 353027-1
MC_D — 1318758-1
MC_E — 1318756-1
MC_F — 1318757-1
T_WIPER_B — C02MB — 7122-7821-30
T_WIPER — C02FB — 7123-7821-30
SPEAKER — CN04F — 7123-2845

MAIN/H_1 — BP-002A
MAIN/H_2 — NMWP32FGY
A/C_1 — 6098-0514
A/C_2 — 7283-1100
RADIO — 174046-2
RADIO_AUX — C06FB — 7123-7861-30
MONITOR/H — C04FW — 7123-7840
SEC_D — C02MW — 7122-7820
SEC_H — C02FW — 7123-7820
MONITOR CONTROLLER_C — MX340125F1
MONITOR CONTROLLER_A — MX34028SF1
MONITOR CONTROLLER_B — MX34036SF1
MONITOR CONTROLLER_D — MX34016SF1
MONITOR CONTROLLER_G — MX38002FQ1

FUSE_BOX — 361897-0533
FUSE_BOX2 — 361897-0533
SW_BOX_1 — C10FW — 7123-7900
SW_BOX_2 — C12FB — 7123-7921-30
SW_BOX_3 — C16FB — 7123-7961-30
SW_BOX_4 — C16FW — 7123-7960
GSM/H — C08FW — 7123-7880
RELAY_BOX — 361897-0553
WIPER/LIGHT CONTROLLER_A — 174044-2
WIPER/LIGHT CONTROLLER_B — 174047-2
Dr — 7323-2064

R11,R14,R15 — 6098-1493
R12,R13,R16 — 6098-1493
DIODE1,3,6-10,11-13 — 7283-5028 — ASSY_7321-9822
DIODE2,4,5,14 — 6098-0022 — ASSY_6098-0126

<OUTSIDE OF CAB>

CAB/H_1 — BP-001C
ECM_1 — 2109432-2
ECM_2 — 2109431-2
CAB/H_2 — NMWP32MGY
MAIN_P/H — 6189-0714
PUMP/H,CV/H, ENG/H — 6188-0494
ENG_1 — NMWP32FGY
ENG_2,PUMP/H_2 — SWP16MGY — 7222-7564-40
ENG_3 — SWP14MGY — 7222-7544-40
ENG_4 — Y01MGY — 7222-4210-40
ENG_5 — 6188-0494
NOX/H — 6188-0495
NOX/H(PUMP) — 6189-0715
CAMERA_MAIN — 6189-7039
CAMERA_SUB — 6188-4776
CAMERA — TC57392
ATT — 6189-0714
TEMP_SENSOR — 54200206
DCU-CAN_RESISTOR — DT06-3S-CE05
VGS(TURBO)_C/U — SWP16FGY — 7123-7564-40

DCU_1 — 9-4486-01
DCU_2 — 9-4493-01
DEF SENSOR UNIT — 1-1719434-1
P1,P2 — EJ3FF — 173091-2
PC1,PC2,FUEL_P/S,BMU,BMD,AMC ,AMD,BKD,BKC,TR,S3,SA,SB — RV03FB — 7223-6536-30
STARTER RELAY 1 — 7123-1424-40
BOX/H — SWP6MGY — 7222-7464-40
COOLANT_LEVEL — Z02MGY — 7222-8520-40
SUPPLY_MODULE — 2-1703639-1
CAN,DCU_CAN — Z02FGY — 7123-8520-40
STARTER RELAY 1 — Y02FGY — 7123-4220-40
GLOW PLUG RELAY — 7323-3010
GLOW PLUG RELAY — 7323-3010
GLOW PLUG RELAY — 7323-2228
4SG,4SJ,4SF,4SC,FP,2SC,2SJ — 6189-0031
DIAG — Z08FGY — 7123-7780-40
ROOF_WASHER — Z02MBR — 7222-8521-80
HORN_H,L — 7283-8220
DEF SENSOR UNIT/H — Z06FGY — 7123-7760-40
TRAVEL_ALARM — SJD PH805-04028
SWING_ALARM — Z04FGY — 7123-7740-40
OPEN_AIR_S — 7283-7028-30
OIL_TEMP_S — 178390-2
WASHER — 7323-2228
FUEL_FEED_M — X02FB — 7123-6423-30
FUEL_PUMP — W02FW — 7223-1826-40
ENG_OIL_LEVEL_SW — 7123-7414-40
ISOCAN_RESISTOR — DT06-3S-CE05
CW_P/S — Z03FGY — 7123-7730-40
DOSING MODULE — COMPACT_CONN(B) — 1_928_404_072
WATER_SEPARATOR — 7283-7028-30
NOX_SENSOR_1 — 872-860-541
HEATER_VALVE — 6189-0682
AIR_COMPRESSOR — 4F017B-0001K
F/L_45A — 7322-4125-50
F/L_75A — 7322-4123-30
EXHAUST_TEMP 1(CSF)/S — 7282-7026-30
EXHAUST_TEMP 2(DOC)/S — 7282-7023-10
PRESSURE_SW — 6189-0094
ALTERNATOR — 7323-7414-40

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