Manual No. : KM-18FE
Vol. No. : W18F-E-00

Workshop Manual

EX1200-5D

Excavator

Service Manual (Manual No. KM-18FE) consists of the following three separate volumes:

Technical Manual (Operational Principle)	:	Vol. No. TO18F-E
Technical Manual (Troubleshooting)	:	Vol. No. TT18F-E
Workshop Manual	:	Vol. No. W18F-E

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SECTION 1
GENERAL INFORMATION



CONTENTS

Group 1 Precautions for Disassembling and Assembling

Precautions for Disassembling and Assembling..... W1-1-1
Maintenance Standard Terminology..... W1-1-7

Group 2 Tightening Torque

Tightening Torque Specification..... W1-2-1
Torque Chart..... W1-2-3
Piping Joint..... W1-2-6
Periodic Replacement of Parts..... W1-2-10

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SECTION 2
UPPERSTRUCTURE



CONTENTS

Group 1 Cab

Remove and Install Cab W2-1-1
Dimensions of the Cab Glass W2-1-15

Group 2 Counterweight

Remove and Install Counterweight W2-2-1

Group 3 Pump Device

Remove and Install Pump Device W2-3-1
Disassemble Pump Transmission W2-3-4
Assemble Pump Transmission W2-3-6
Disassemble Main Pump W2-3-8
Assemble Main Pump W2-3-12
Maintenance Standard W2-3-14
Disassemble Regulator(Main Pump) . W2-3-16
Assemble Regulator(Main Pump) W2-3-20
Disassemble Pump of
Oil Cooler Fan Motor W2-3-26
Assemble Pump of
Oil Cooler Fan Motor W2-3-30
Maintenance Standard W2-3-32
Disassemble Regulator(Pump for
Driving Oil Cooler Fan Motor) W2-3-34
Assemble Regulator(Pump for
Driving Oil Cooler Fan Motor) W2-3-38
Configuration of Pilot Pump W2-3-44
Configuration of Pump for
Lubricating Pump Transmission W2-3-46

Group 4 Control Valve

Remove and Install Control Valve W2-4-1
Disassemble Main Control Valve 1
(5-Spool Section) W2-4-6
Assemble Main Control Valve 1
(5-Spool Section) W2-4-10
Disassemble Main Control Valve 2
(5-Spool Section) W2-4-16
Assemble Main Control Valve 2
(5-Spool Section) W2-4-18
Disassemble Main Control Valve 1
(4-Spool Section) W2-4-20
Assemble Main Control Valve 1
(4-Spool Section) W2-4-28
Disassemble Main Control Valve 2
(4-Spool Section) W2-4-34
Assemble Main Control Valve 2
(4-Spool Section) W2-4-36
Disassemble Manifold W2-4-38
Assemble Manifold W2-4-40
Disassemble Swing Control Valve 1 ... W2-4-42
Assemble Swing Control Valve 1 ..... W2-4-48
Disassemble Swing Control Valve 2 ... W2-4-52
Assemble Swing Control Valve 2 ..... W2-4-54

Group 5 Swing Device

Remove and Install Swing Device W2-5-1
Disassemble Swing Reduction Gear W2-5-6
Assemble Swing Reduction Gear W2-5-12
Disassemble Swing Motor W2-5-16
Assemble Swing Motor W2-5-20
Disassemble and Assemble Swing
Parking Brake Releasing Valve W2-5-24
Maintenance Standard W2-5-26

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SECTION 3
UNDERCARRIAGE



CONTENTS

Group 1 Swing Bearing
Remove and Install Swing Bearing W3-1-1
Disassemble Swing Bearing W3-1-4
Assemble Swing Bearing W3-1-6

Group 2 Travel Device
Remove and Install Travel Device W3-2-1
Disassemble Travel Reducer W3-2-4
Assemble Travel Reducer W3-2-10
Disassemble Travel Motor W3-2-18
Assemble Travel Motor W3-2-22
Disassemble Travel Brake Valve W3-2-26
Assemble Travel Brake Valve W3-2-30
Maintenance Standard W3-2-32

Group 3 Center Joint
Remove and Install Center Joint W3-3-1
Disassemble Center Joint W3-3-4
Assemble Center Joint W3-3-6
Maintenance Standard W3-3-10

Group 4 Track Adjuster
Remove and Install Track Adjuster W3-4-1
Disassemble Track Adjuster W3-4-2
Assemble Track Adjuster W3-4-8

Group 5 Front Idler
Remove and Install Front Idler W3-5-1
Disassemble Front Idler W3-5-2
Assemble Front Idler W3-5-6
Maintenance Standard W3-5-8

Group 6 Upper and Lower Roller
Remove and Install Upper Roller W3-6-1
Remove and Install Lower Roller W3-6-3
Disassemble Upper Roller W3-6-6
Assemble Upper Roller W3-6-8
Disassemble Lower Roller W3-6-10
Assemble Lower Roller W3-6-12
Maintenance Standard W3-6-14

Group 7 Track
Remove and Install Tracks W3-7-1
Maintenance Standard W3-7-7

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2. Connect hoses (30 to 35).
   - : 19 mm
   - : 29.5 N·m (3 kgf·m, 21.5 lbf·ft)

IMPORTANT: If the harness is arranged to the inside of spring pin (7), it may make contact with the moving part of the pilot valve which may damage it. Be sure to arrange the harness to the outside of spring pin (7).

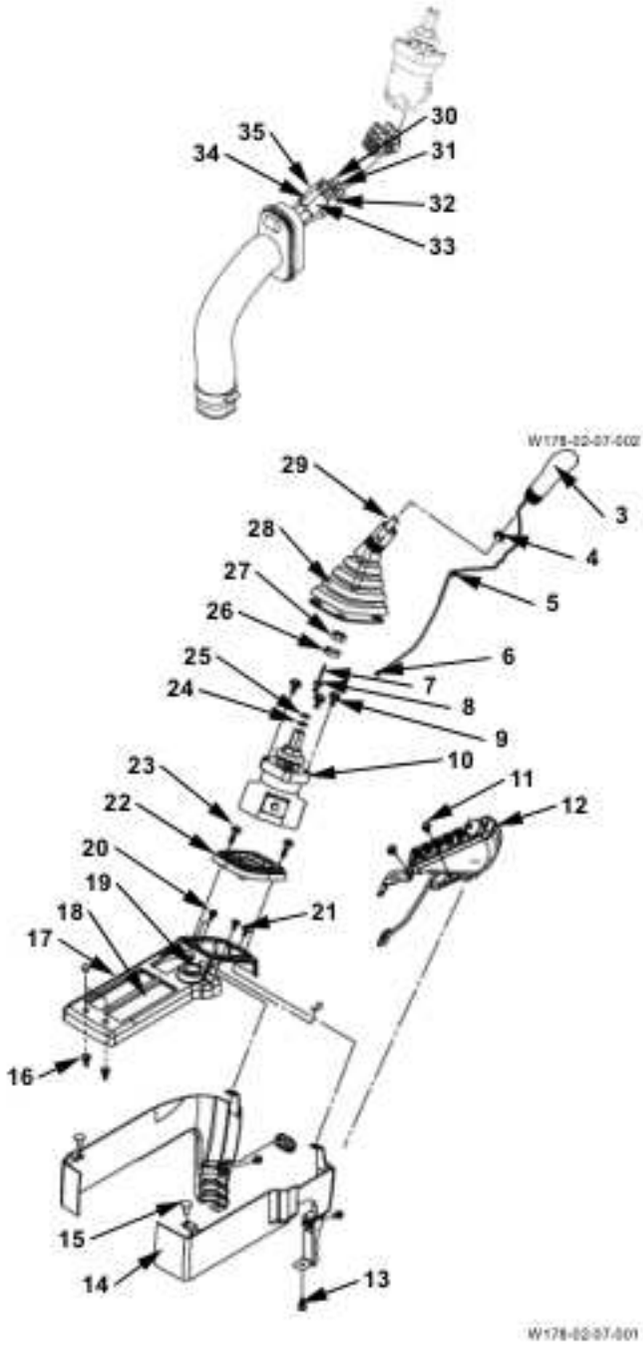
3. Temporarily tighten nut (27) to lever (29), then install washers (24), (25). Install lever (29) onto valve (10) with nut (27). Install boot (28).
   Temporarily tighten nut (4) to lever (29), then install grip (3) with nut (4).
   Pass the harness of grip (3) through the upper hole of boot (28), then connect it to lever (29), via clips (5) and (26). Arrange the harness to the outside of spring pin (7) over bolt (8) head. Connect connector (6).
   - : 22 mm
   - : 26 N·m (2.0 kgf·m, 14.5 lbf·ft)
   - : 19 mm
   - : 26 N·m (2.0 kgf·m, 14.5 lbf·ft)

4. Install switch box (12) with bolt (11), then connect the connector.
   - : 13 mm
   - : 10 N·m (1.0 kgf·m, 7.2 lbf·ft)

5. Connect each harness of key switch (19) and air controller (18).

6. Install cover (14) with bolts (21), (15) and (13). Install cover (17) with bolts (20 and 16).

7. Install cover (22) with bolt (23).



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CAUTION: 2-Stage carrier (28) assembly weight: 95 kg (210 lb)

11. Install eyebolts (M12, Pitch 1.75) into the two sling holes in the 2-stage carrier (28) assembly. Hoist the assembly to remove it from 3-stage carrier (1).

CAUTION: 3-Stage carrier (2) weight: 30 kg (70 lb)

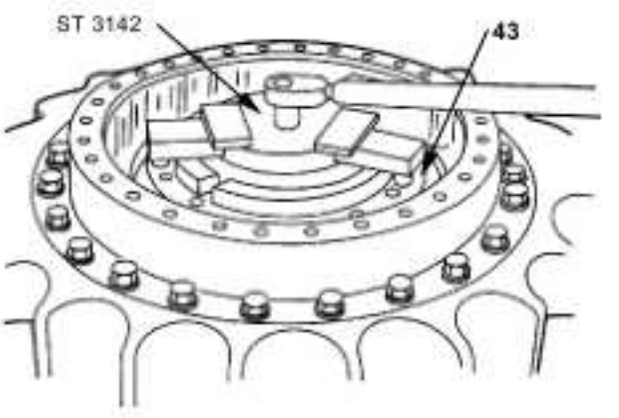
12. Attach a nylon sling to the gear part of 3-stage sun gear (2) (2 places). Hoist the gear to remove it from 3-stage carrier (1).

CAUTION: 3-Stage carrier (1) assembly weight: 210 kg (460 lb)

13. Install eyebolts (M12, Pitch 1.75) into the two sling holes in the 3-stage carrier (1) assembly. Hoist the assembly to remove it.

14. Remove bolts (41) (2 used) to remove lock plate (42) from bearing nut (43).
    : 22 mm

15. Install jig (ST 3142) to bearing nut (43). Loosen and remove bearing nut (43) from housing (36).



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CAUTION: Drum (46) + sprocket (45) + the others weight: 560 kg (1230 lb)

16. Install eyebolts (M22, Pitch 2.5) into the holes for socket bolts (19) of drum (46). Hoist drum (46) to remove it from housing (36). At this moment, the drum section is connected with the outer race of roller bearing (38) and roller bearing (44).

17. Remove floating seal (48) from housing (36) and support (37) respectively.

18. Remove the inner race of roller bearing (44) from drum (46).

19. Remove dummy plugs (52) (2 used) from sprocket (45). Remove bolts (40) (30 used) from sprocket (45).

CAUTION: Sprocket (45) weight: 210 kg (460 lb)

20. Screw puller bolts (M27, Pitch 3, L 70 mm) into the two pulling holes in sprocket (45) and make sprocket (45) separate from drum (46) slowly.

NOTE: Apply adhesive on the interface of sprocket and drum.
: 41 mm

21. Install eyebolts (M27, Pitch 3) into the two sling holes in sprocket (45). Hoist sprocket (45) to remove it from drum (46).
    : 41 mm

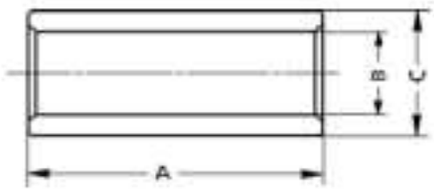
CAUTION: Drum (46)+the others weight: 290 kg (640 lb)

22. Hoist drum (46) to reverse it.

23. Remove socket bolts (47) (18 used) to remove support (37) from drum (46).
    : 10 mm

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Bushing

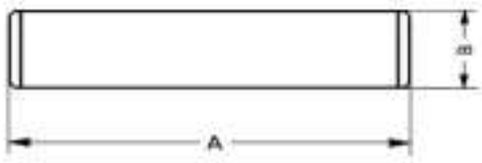


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Unit: mm (in)

	Standard	Allowable Limit	Remedy
A	222.1 (8.74)	-	Replace
B	59.15 (2.33)	[60.2 (2.37)]	
C	90 (3.54)	85 (3.35)	

Pin



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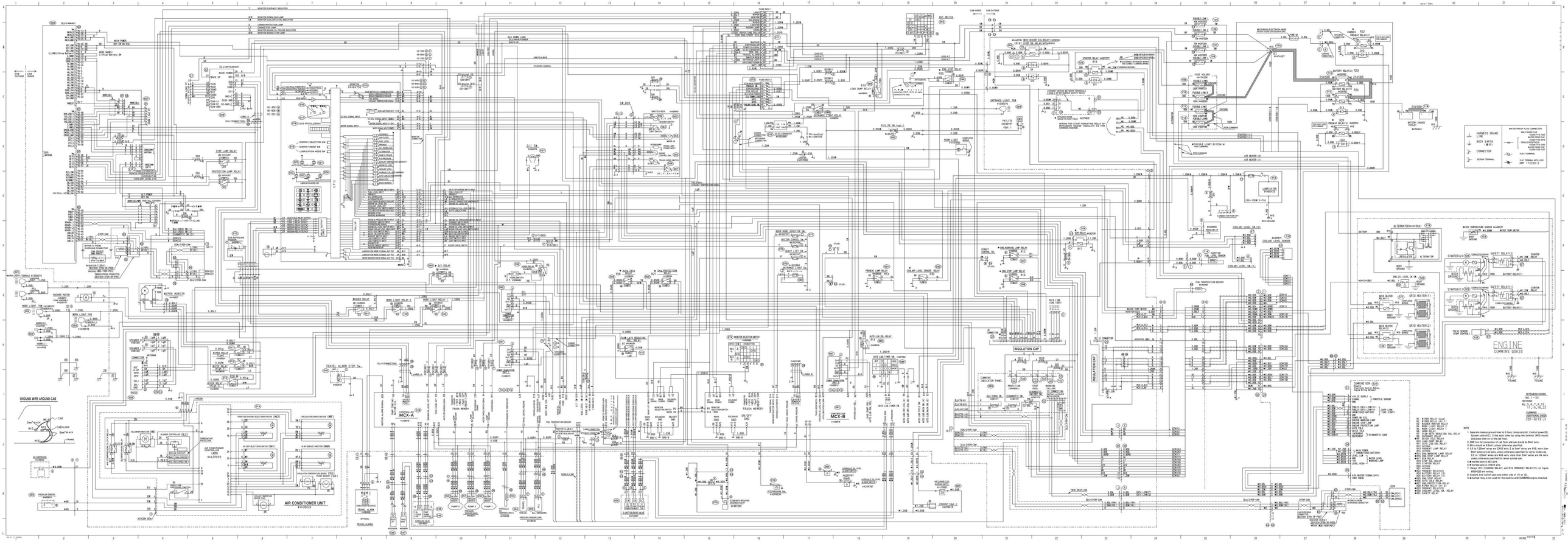
Unit: mm (in)

	Standard	Allowable Limit	Remedy
A	319.5 (12.58)	-	Peplace
B	58.15 (2.29)	[55.2 (2.17)]	

NOTE: Values in [ ] are just for reference.

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EX1200-5c ELECTRICAL CIRCUIT DIAGRAM (CUMMINS ENGINE SPECIFICATION)



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