Operation & Maintenance Manual

TEN00054-03

GALEO

PC40MR-2
PC50MR-2

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC40MR-8772 and up
PC50MR-5587

WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.

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TIGHTENING TORQUE SPECIFICATIONS

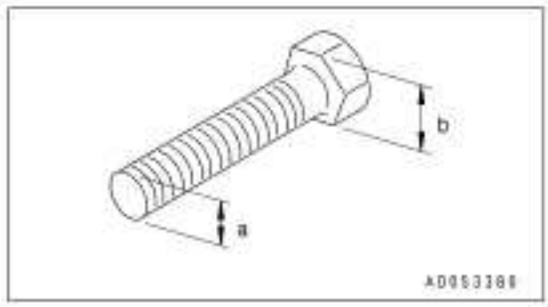
TIGHTENING TORQUE LIST

⚠ CAUTION

If nuts, bolts, or other parts are not tightened to the specified torque, it will cause looseness or damage to the tightened parts, and this will cause failure of the machine or problems with operation.
Always pay careful attention when tightening parts.

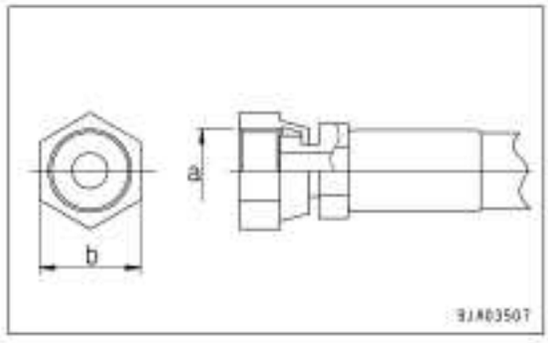
Unless otherwise specified, tighten the metric nuts and bolts to the torque shown in the table below.
If it is necessary to replace any nut or bolt, always use a Komatsu genuine part of the same size as the part that was replaced.

Thread diameter of bolt (a)(mm)	Width across flats (b)(mm)	Tightening torque					
		Target value			Service limit		
		N·m	kgf·m	lbf·ft	N·m	kgf·m	lbf·ft
6	10	13.2	1.35	9.8	11.8-14.7	1.2-1.5	8.7-10.8
8	13	31	3.2	23.1	27-34	2.8-3.5	20.3-25.3
10	17	66	6.7	48.5	59-74	6.0-7.5	43.4-54.2
12	19	113	11.5	83.2	98-123	10.0-12.5	72.3-90.4
14	22	172	17.5	126.6	153-190	15.5-19.5	112.1-141
16	24	260	26.5	191.7	235-285	23.5-29.5	170.0-213.4
18	27	360	37	267.6	320-400	33.0-41.0	238.7-296.6
20	30	510	52.3	378.3	455-565	46.5-58.0	336.3-419.5
22	32	688	70.3	508.5	610-765	62.5-78.0	452.1-564.2
24	36	883	90	651	785-980	80.0-100.0	578.6-723.3
27	41	1295	132.5	958.4	1150-1440	118.0-147.0	853.5-1063.3
30	46	1720	175.0	1265.8	1520-1910	155.0-195.0	1121.1-1410.4
33	50	2210	225.0	1627.4	1960-2450	200.0-250.0	1446.6-1808.3
36	55	2750	280.0	2025.2	2450-3040	250.0-310.0	1808.3-2242.2
39	60	3280	335.0	2423.1	2890-3630	295.0-370.0	2133.7-2676.2



Apply the following table for Hydraulic Hose.

Nominal-No. of threads (a)	Width across flats (b) mm	Tightening torque (N·m (kgf·m, lbf·ft))	
		Target valve	Parmissible range
9/16 -18UNF	19	44 (4.5, 32.5)	34 - 54 (3.5 - 5.5, 25.3 - 39.8)
11/16 -16UN	22	74 (7.5, 54.2)	54 - 93 (5.5 - 9.5, 39.8 - 68.7)
13/16 -16UN	27	103 (10.5, 75.9)	84 - 132 (8.5 - 13.5, 61.5 -97.6)
1 -14UNS	32	157 (16.0, 115.7)	128 - 186 (13.0 - 19.0, 94.0 - 137.4)
1·3/16 -12UN	36	216 (22.0, 159.1)	177 - 245 (18.0 - 25.0, 130.2 - 180.8)



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EVERY 1000 HOURS MAINTENANCE

Carry out the maintenance for EVERY 500 HOURS SERVICE at the same time.

REPLACE HYDRAULIC OIL FILTER ELEMENT

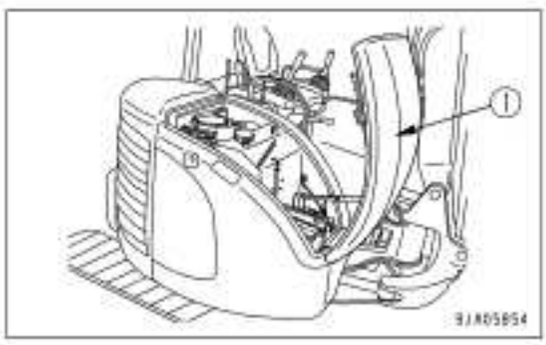
⚠ WARNING

- **The parts and oil are at high temperature immediately after the engine is stopped, and may cause burns. Wait for the temperature to go down before starting the work.**
- **When removing the oil filler cap, turn it slowly to release the internal pressure, then remove it.**

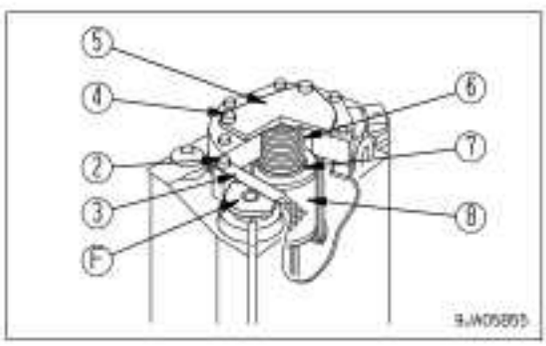
NOTICE

If the machine is equipped with a hydraulic breaker, the hydraulic oil will deteriorate much faster than during normal bucket operations. For details, see "MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER (PAGE 4-16)" when carrying out maintenance.

1. Open dust cover (1) fully until it is secured in position.
   (For details of the method of opening and closing the cover with the lock, see "In Case of Engine Rear Cover and Dirt Cover (PAGE 3-28)")



2. Loosen bolts (2), then remove plate (3) to the outside.
3. Remove the cap from oil filler (F), and release the internal pressure.
4. Remove bolts (4), then remove cover (5). When this is done, the cover may fly off under the force of spring (6), so keep the cover pushed down when removing the bolts.
5. After removing spring (6) and valve (7), take out element (8).
6. Clean the rempved parts in diesel oil.



7. Install the new element where old element (8) was installed.
   Inspect the O-ring set between the hydraulic tank and cover (5). If there are any scratches, replace the O-ring.
8. Set valve (7) and spring (6) on top of the element.
9. Set cover (5) in position, hold it down by hand, and tighten cover mounting bolts (4) to install cover (5).
10. Extend the boom, arm, and bucket cylinder fully as shown in the diagram on the right, remove the oil filler cap, then install the cap and pressurize the inside of the tank.



NOTICE

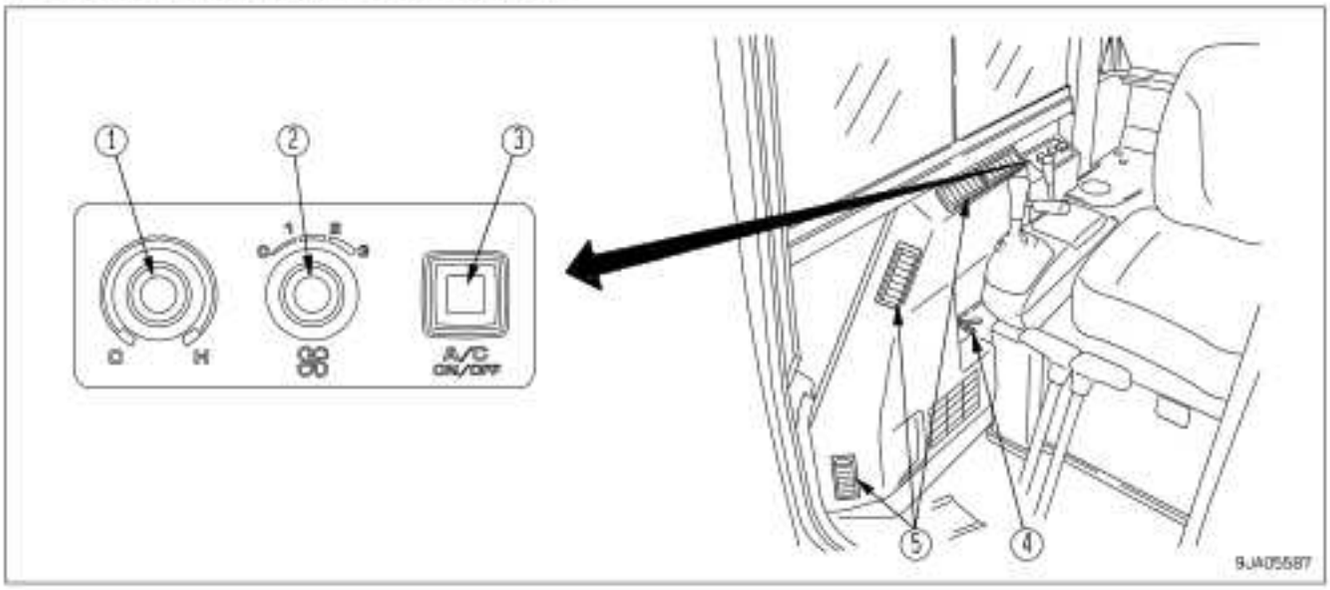
Be sure to pressurize the hydraulic tank. If it is not pressurized, the pump will suck in air, and this will adversely affect the equipment.

11. Close cover (1) at right side of the machine.

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AIR CONDITIONER

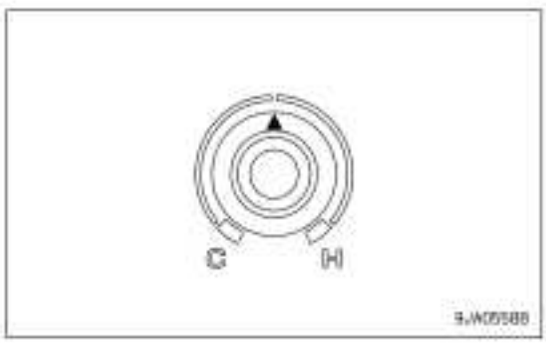
CONTROL PANEL AND COMPONENTS



(1) Temperature control switch
(2) Air flow selector switch
(3) Air conditioner switch
(4) FRESH/RECIRC selector lever
(5) Vent

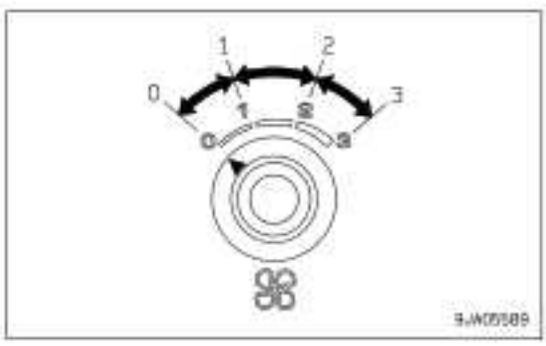
Temperature Control Switch

This switch (1) continuously adjusts the temperature between high and low.
The more the switch is turned to the left, the lower the temperature becomes; the more the switch is turned to the right, the higher the temperature becomes.



Air Flow Selector Switch

This switch (2) adjusts air flow in three steps.
Position (3): High
Position (2): Intermediate
Position (1): Low
Position (0): OFF



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