PART NO. EM4GB-1-1

HITACHI

Operator's Manual

ZW

220

250

310

Wheel Loader

Serial No 005101 and up

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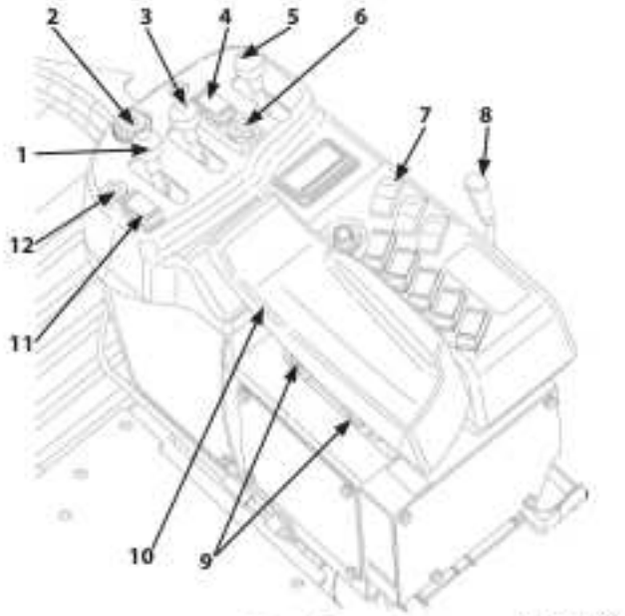
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RIGHT CONSOLE/SWITCHES

Finger Type

1- Bucket Control Lever
2- DSS (Down Shift) Switch
3- Lift Arm Control Lever
4- Forward/Reverse Switch
5- Auxiliary Control Lever (Optional)
6- Horn Switch
7- Quick Coupler Switch
8- Front Control Lever Lock
9- Armrest Adjust Handle
10- Armrest
11- DSS/USS (Down Shift/Up Shift) Switch
12- Hold Switch

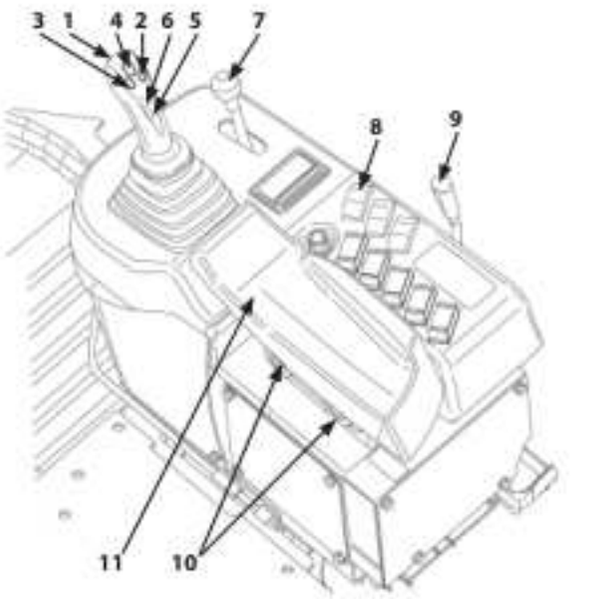


Finger Type M4GB-01-007

RIGHT CONSOLE/SWITCHES

Multi-Function Type

1- Multi-Function Control Lever
2- USS (Up Shift) Switch
3- DSS (Down Shift) Switch
4- Forward/Reverse Switch
5- Horn Switch
6- Hold Switch
7- Auxiliary Control Lever (Optional)
8- Quick Coupler Switch (Optional)
9- Front Control Lever Lock
10- Armrest Adjust Handle
11- Armrest



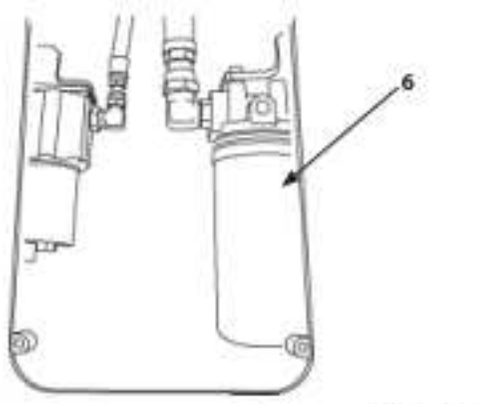
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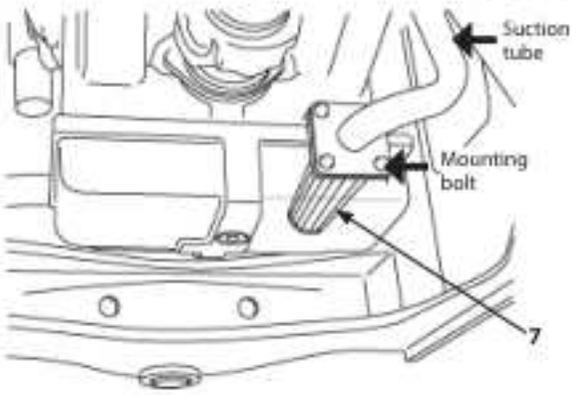
9. Securely tighten drain plug (5).
10. Using a filter wrench, turn cartridge filter (6) counter-clockwise to remove it.
11. Clean the filter-seating surface. After coating the new cartridge filter gasket surface with new oil, lightly turn the cartridge filter clockwise by hand until the cartridge filter sealing surface comes in contact with the filter-seating surface.
12. At this time, further tighten the cartridge filter 3/4 turns using a filter wrench. Take care not to excessively tighten the cartridge filter. The cartridge filter may become deformed if excessively tightened.
13. Clean transmission strainer (7) on the ZW310.
    - Remove the suction tube mounting bolts (4 used).
    - Take out strainer (7). Remove dirt and foreign matters from the strainer. Clean the strainer with cleaning oil. In case the strainer is broken, replace the strainer with a new one together with the gasket and O-ring.
    - Install the strainer, O-ring, and gasket. Tighten the suction tube mounting bolts.
14. Refill the specified amount of oil through transmission oil filler port (8).

    ZW220, ZW250: 25 liters
    ZW310: 25 liters
15. Start the engine and keep it running for two minutes.
16. Check that the oil level is within the specified range in oil level gauge (6). Refill as necessary.

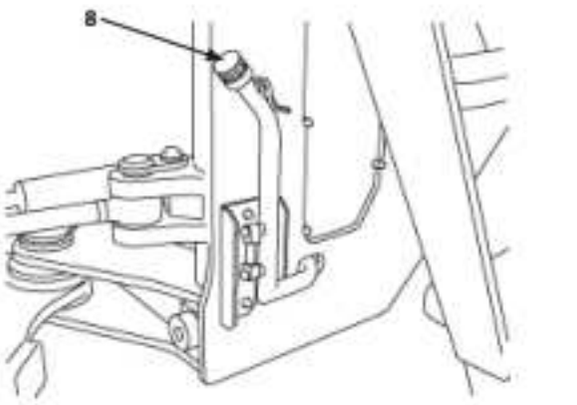
Note: Never reuse a cartridge type element. Install the cartridge with care so that the O-ring is not damaged due to twisting. Check for any oil leakage at the drain plug and the filter mounting area.



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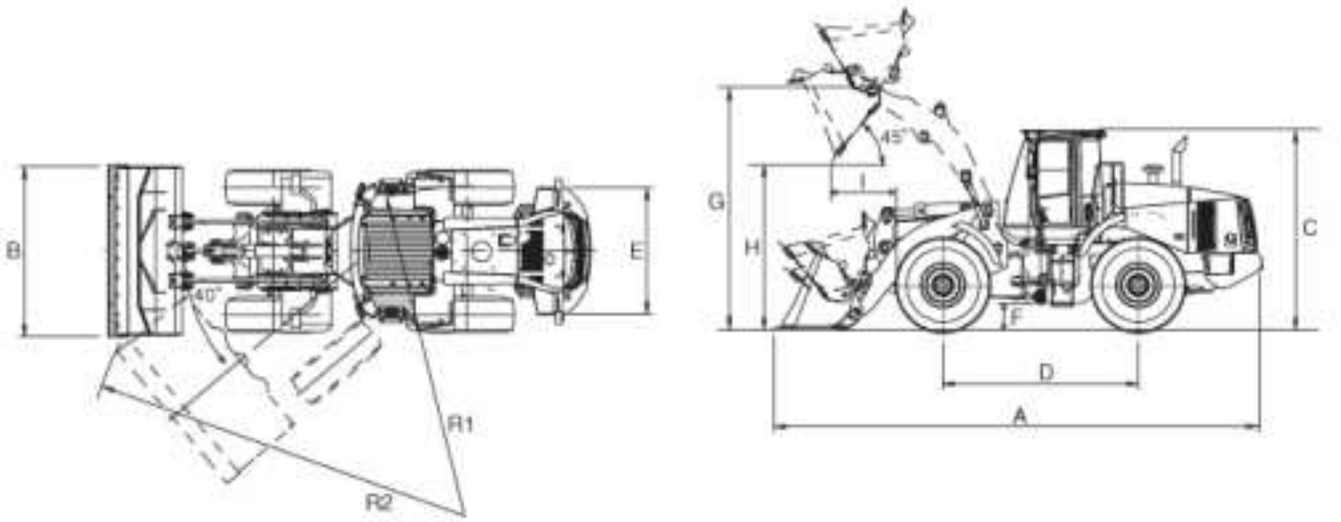
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SPECIFICATIONS



M4GB-12-001

Model		ZW220	ZW250	ZW310
Bucket Capacity : heaped	m^3	3.4 (BOC*)	3.7 (BOC*)	4.0 (with BOC*)
Operating Weight	kg	17370	19690	22370
Rated Loading Weight	kg	5120	5600	6400
Engine		ISUZU AH-6HK1 139 kW/2170 rpm (189 PS/2170 rpm)	ISUZU AH-6HK1 163 kW/2240 rpm (222 PS/2240 rpm)	Daimler Chrysler OM460LA 216 kW/2000 rpm (294 PS/2000 rpm)
A: Overall Length	mm	8245	8385	8760
B: Overall Width (Bucket)	mm	2910	3050	3150
C: Overall Height	mm	3375	3405	3465
D: Wheel Base	mm	3300	3350	3450
E: Tread	mm	2160	2200	2300
F: Ground Clearance	mm	450	425	485
G: Bucket Hinge Height	mm	4090	4195	4395
H: Dumping Clearance (45°)	mm	2880	2950	3130
I: Dumping Reach (45°)	mm	1150	1120	1180
R1: Minimum Rotation Radius	mm	5620	5715	5900
R2: Minimum Rotation Radius	mm	6620	6780	6970
Travel Speed Forward/Reverse	km/h	34.5/34.5	34.5/34.5	34.5/34.5
Transmission Speeds (F/R)	—	4/4	4/4	4/4
Articulation Angle (Left/Right) deg	(°)	40	40	40
Tire Size	—	23.5-25-16PR	23.5-25-16PR	26.5-25-16PR

NOTE: • ** BOC (Bolt-On Cutting Edge)*
• *These specifications are subject to change without notice.*

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