CASE

OPERATOR'S MANUAL

EXCAVATOR

CX225
TIER 3

87490340 NA

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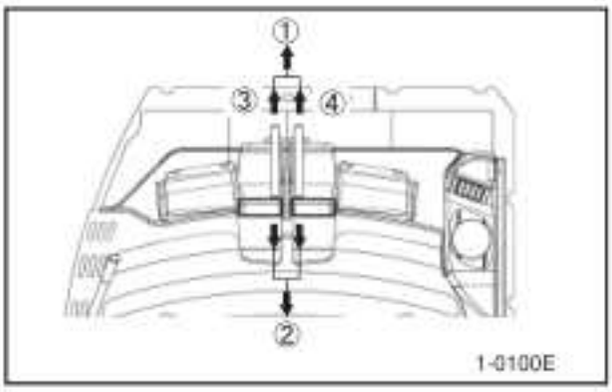
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Operation Levers

⚠ WARNING

- **Do not hang anything on the operation levers. It may cause misoperation.**
- **The Auto Idle indicator on the monitor display indicates ON. The operation lever is used to return the engine automatically to its previous r.p.m. level.**

Travel Lever



⚠ WARNING

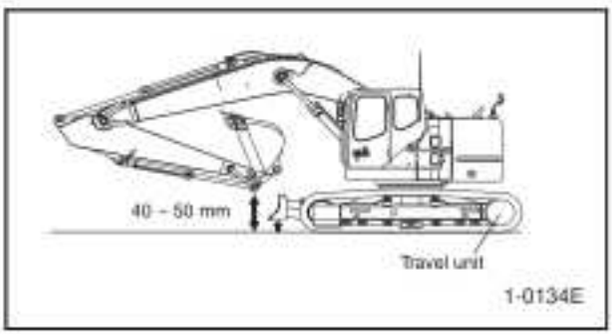
- **Before operating the travel lever, confirm the direction of the lower frame (forward or backward).**
  The travel unit is in the back and the travel lever is pushed, the machine moves forward and if it is pulled towards you the machine moves backward.
- **When not traveling, do not place your feet on the travel pedals.**

① Press the right and left travel levers at the same time to move the machine forward.

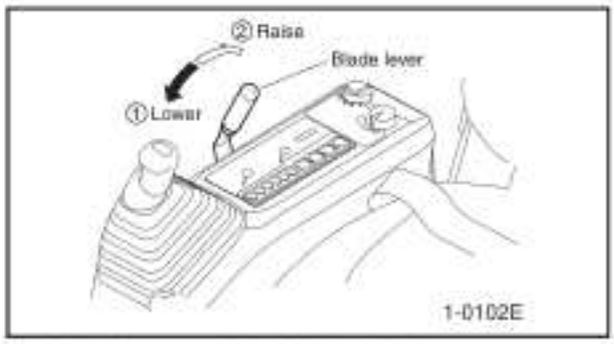
② Pull the right and left travel levers at the same time to move the machine backward.

③ Press the left travel lever to make a right turn.

④ Press the right travel pedal to make a left turn.



Blade Lever (Blade spec.)



Push the lever, and the blade will lower.

Push the lever, and the blade will raise.

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Hydraulic Oil Management
• Maintenance: every 1,000 hours

Hydraulic Oil Replacement
• Maintenance: every 5,000 hours

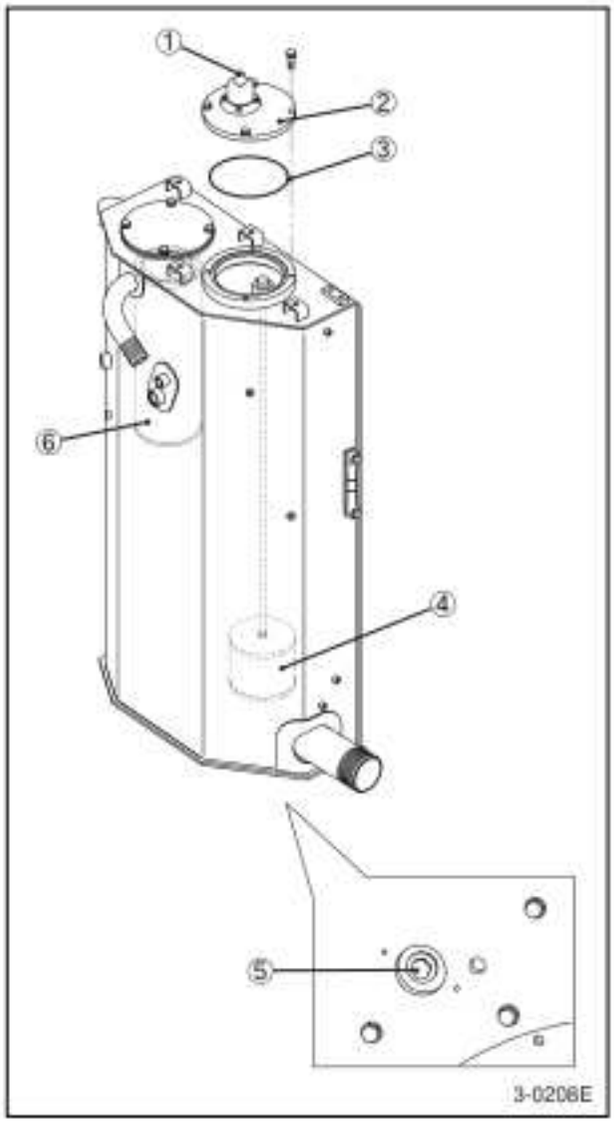
⚠ WARNING

The temperature of the hydraulic oil is hot right after stopping the engine. Wait until the oil cools down (less than 100°F (40°C)) before beginning the maintenance.

⚠ CAUTION

- **When replacing the hydraulic oil, take care to prevent dust, water, sand or other contaminants from entering the tank.**
- **Always replace with new filters and elements when the replacing the hydraulic oil.**
- **When using the hydraulic breaker, the deterioration and or contamination of hydraulic oil progresses faster compared to ordinary digging work. Be sure to carry out the full hydraulic oil maintenance more often.**
- **Hydraulic oil management at every 1,000 hours**
  Check oil for the contamination and deterioration by sampling.

1. Place the machine in the hydraulic oil check position.
2. Press the rubber cap of the breather ① located at the upper part of the hydraulic tank to release the pressure inside the tank.
3. Remove the 4 bolts on the filler port to detach the filler port cover ② and O-ring ③.
4. Using a pump, discharge the hydraulic oil into an empty waste container.
5. Remove the drain plug ⑤ on the bottom of the tank and drain the remaining oil from the tank. (Have a drain pan ready beforehand.)
6. Remove the suction filter ④ and return filter ⑥, and install new ones. (Refer to the replacing suction filter and return filter)
7. Tighten the drain plug ⑤ securely.
8. Refill with the specified hydraulic oil to the specified level.
9. Install the O-ring ③ and filler port cover ②.
   If the O-ring ③ is damaged, replace it with a new one.
10. Bleed air from the hydraulic components.
11. Start the engine and run it for about 5 minutes without load.
    Operate the travel and swing functions, and all hydraulic cylinders slowly several times. Then, put the machine in the oil check position, and stop the engine.
12. Check if the hydraulic oil level is within the proper range.



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(f) Cylinders	NO.of cylinders - bore × Rod diameter × Stroke
Boom	: 2 - φ125 mm × φ90 mm × 1284 mm
Arm	: 1 - φ135 mm × φ95 mm × 1474 mm
Bucket	: 1 - φ115 mm × φ80 mm × 1012 mm
Blade	: 2 - φ130 mm × φ80 mm × 260 mm
(g) Cooling system	
Fan	: φ650 mm (25.6 in) with 7-blades
Radiator capacity	: 77.8 kW (66,900 kcal/h)
fin type	: Corrugated fin (Wavy type)
fin space	: 2.0 mm
Long life coolant	: Coolant 55 %, Water 45 %
Oil cooler capacity	: 47.2 kW (40,600 kcal/h)
fin type	: Corrugated fin (Wavy type)
fin space	: 1.75 mm
Intercooler capacity	: 11.9 kW (10,200 kcal/h)
fin type	: Straight fin
fin space	: 1.75 mm
Fuel cooler capacity	: 1.3 kW (1,120 kcal/h)
fin type	: Corrugated fin (wavy type)
fin space	: 2.0 mm
(h) Filters	
Suction filter	: 105 mesh
Return filter	: 6 μm
Pilot line filter	: 8 μm

3. HYDRAULIC CONTROLS

(a) Boom/Arm/Bucket/Swing ..... Pilot pressure control system (ISO control pattern)

(b) Travel/Blade..... Pilot pressure control system

(c) Work mode select

(1) N- mode.....Standard operating mode

(2) E - mode .....Economy operating mode

(d) Travel mode select (2-speed travel)

(e) Attachment cushion control

(f) Hydraulic lock (Gate lock)

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