CX160B
Tier 3
Crawler Excavator

OPERATOR'S MANUAL

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CASE CONSTRUCTION

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Chapter 2
SAFETY AND DECALS

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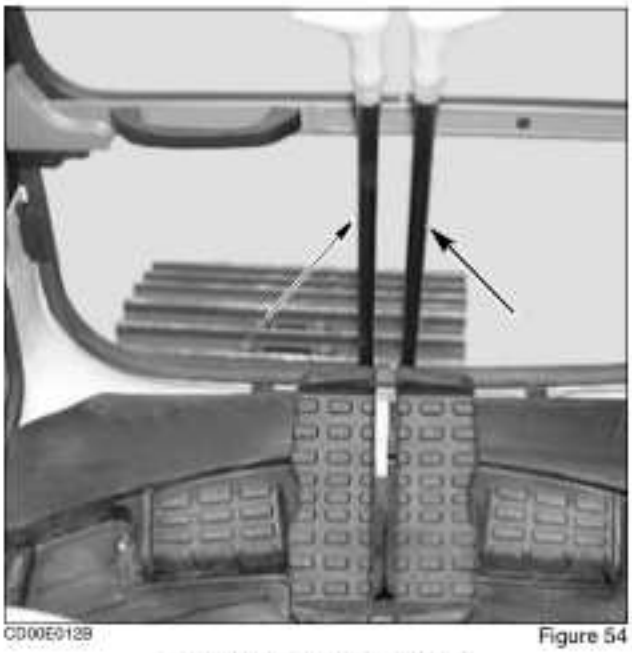
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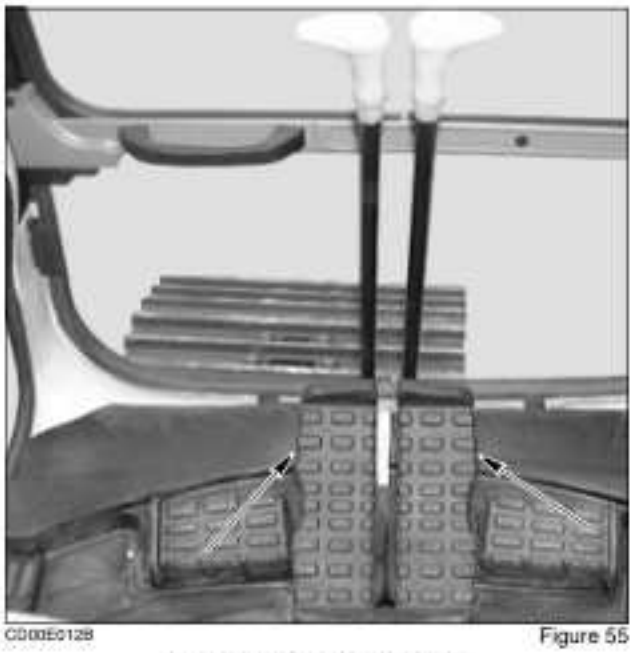
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TRAVEL CONTROL LEVERS AND PEDALS



CD00E012B Figure 54

TRAVEL CONTROL LEVERS



CD00E012B Figure 55

TRAVEL CONTROL PEDALS

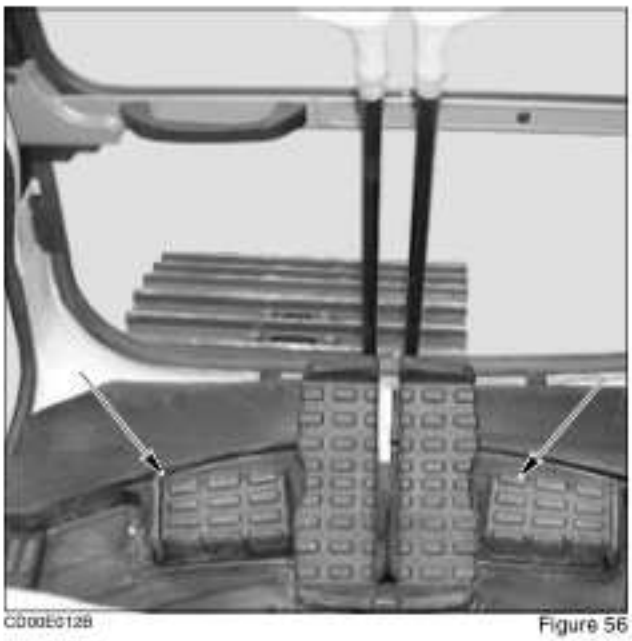
For machine travel, see "Machine travel" in the "Operating Instructions" Section.

IMPORTANT: *Travel speed either forwards or in reverse depends on the position of the travel speed selector. See "Systems display panel".*

IMPORTANT: *The movements of the machine are shown in the "Control functions" decal. See "Decals" in the "Safety/Decals/Hand signal" Section. Make certain the decal and the movement patterns match by operating the machine in a level, unobstructed area clear of unauthorized personnel.*

IMPORTANT: *Ask your CASE Dealer for advice on optional tools.*

FOOT RESTS



CD00E012B Figure 56

FOOTREST

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500 HOUR MAINTENANCE

OIL CHANGE AND FILTER REPLACEMENT

Service Specifications

Oil Type . . . . . CASE AKCELA No. 1

Oil Capacity with filter . . . . . 18 Qts. (17 Liters)

Change the engine oil more frequently than every 500 hours when the engine operating conditions are severe (frequent stopping and starting and high or low engine temperatures).

1. Park the machine on a flat, level area. Stop the engine, and remove the starter key. Oil will be easier to change if it is still warm (not hot). Before draining the oil, have a container that will hold the required oil quantity.



CT07A079 Figure 44

2. Remove the oil filter cap (1).



CT07A084 Figure 45

3. Remove the protective cap (2) from the engine housing drain.
4. Screw the end of the extension drain hose provided with the machine onto the engine check valve. Place the other end in a container of suitable capacity and allow the oil to drain.
5. Remove the extension drain hose and install the protective cap on the housing check valve. Return the extension drain hose to its storage compartment.



CT07A090 Figure 46

6. Clean the area around the filter (3) and remove it.



PH08325 Figure 47

7. To replace the filter, coat the seal of the new filter with a fine film of oil.
8. Install the new filter. Turn the filter until the seal comes into contact with the filter head, and turn an extra half turn by hand.

IMPORTANT: *Do not use a filter wrench to tighten the filter. Excessive tightening can damage the filter and their seals.*

9. Fill the engine with new engine oil. Install the oil filler cap.
10. Run the engine for a few minutes, and make certain there are no leaks. Check the oil level again, and add more oil if necessary.

IMPORTANT: *You must shorten the oil change interval if you use diesel fuel with a sulphur content of more than 0.5%.*

IMPORTANT: *Always wait fifteen minutes to allow the oil to return to the sump before checking the oil level.*

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5000 HOUR MAINTENANCE

Service Specifications

Reservoir capacity	24 Gal. (90 Liters)
Total system capacity	44 Gal. (165 Liters)
Type of oil	Case Hy-Tran Ultra® (MAT 3505)

REPLACING THE HYDRAULIC FLUID

1. Keep all unauthorized personnel clear of the area. Release all pressure in the hydraulic reservoir. See "Releasing pressure in the hydraulic system."



CT08K102 Figure 83

2. Remove the reservoir cover plate.
3. Using a pump, remove the fluid from the hydraulic reservoir. Have a container with a suitable capacity ready.



CT05M023 Figure 84

4. Remove the drain plug to remove the remaining fluid from the reservoir.
5. Replace the inlet filter and the return filter. See "Cleaning and replacement of the inlet filter" and "Return filter replacement".
6. Install the reservoir drain plug.
7. Put new hydraulic fluid into the reservoir. See "Filling the reservoir".
8. Install the reservoir cover plate and seal.

IMPORTANT: *Before you start the engine, it is very important that you bleed air from all the hydraulic components. See "Bleeding air from the hydraulic components".*

9. Start and run the engine with no load for approximately five minutes.
10. Move each control slowly several times to remove any air in the system.
11. Swing the upper structure evenly left to right two turns or more.
12. Place the machine in position, and then stop the engine.
13. Check the oil level in the hydraulic reservoir and add oil as required. Make sure there are no air bubbles in the hydraulic reservoir.
14.

⚠ WARNING ⚠

Hydraulic fluid or diesel fuel leaking under pressure can penetrate the skin and cause infection or other injury. To prevent personal injury: Relieve all pressure before disconnecting fluid lines or performing work on the hydraulic system. Before applying pressure, make sure all connections are tight and all components are in good condition. Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose. If injured by leaking fluid, see your doctor immediately. Failure to comply could result in death or serious injury.

WO178A

⚠ WARNING ⚠

Before performing any service on the hydraulic system, you must allow it to cool. Hydraulic fluid temperature should not exceed 40 °C (104 °F).. Failure to comply could result in death or serious injury.

WO241A

⚠ WARNING ⚠

The hydraulic tank is a pressurized system. Vent tank slowly by loosening the breather before performing work on the hydraulic system. Failure to comply could result in death or serious injury.

WO198A

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