

# **40LC Series B Feller/Buncher Excavator**

## **Operators Manual**

**S406194M5**

**Reprinted**



CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: [www.heydownloads.com](http://www.heydownloads.com) by clicking the link below










- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.


















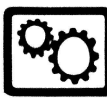






CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

## INTERNATIONAL SYMBOLS

Symbols are used in this Handbook to help identify and explain LOGGER controls and operation.

A solid arrow (  ) always indicates direction. A broken arrow (  ) indicates movement in a particular direction.

Many of the following symbols are self-explanatory. Others require more study. An understanding of the basic symbol is essential to understanding the more complicated ones. For example, the symbol for the engine is (  ). This symbol can be used in various combinations to stand for hourmeter (  ), engine oil (  ), engine oil pressure (  ), or engine rpm. (  ).

 PARK	 BRAKE	 WINDSHIELD WIPER	 HORN	 DIRECTION of CONTROL LEVER
 INSTRUMENT PANEL LIGHT	 MAIN LIGHT SWITCH	 FILTER	 FILTER, AIR	 HEATER
 COOLANT	 TEMPERATURE WATER	 DIESEL FUEL	 FUEL SHUT-OFF	 AMMETER, GENERATOR
 HYDRAULIC RESERVOIR	 GREASE	 GEAR BOX	 ENGINE	 IGNITION SWITCH
 ENGINE OIL PRESSURE	 STARTER	 ENGINE HOURS (Running Time)	 ENGINE SPEED (in RPM)	

## OPERATING INSTRUCTIONS

This section contains the information necessary to correctly operate the LOGGER. Included are (1) starting the engine, (2) driving the LOGGER, (3) using the Feller-Buncher and (4) general operating instructions.

### DELIVERY INSPECTION

The LOGGER has been serviced and tested at the factory. As an added precaution, perform the checks listed in the Preventive Maintenance Schedule (page 48) before operating the machine.



Before starting the engine make sure all operating controls are in NEUTRAL.

### STARTING THE ENGINE

Apply track brake. Push Engine Shutoff Control down and set throttle 1/4 open. Turn on the key switch and depress starter button. Do not exceed 30 seconds cranking time as heat damage to Starter could result. When engine starts, release starter button.

### COLD WEATHER STARTING

Pull the Engine Shutoff Control out. Turn the Key Switch ON and crank the engine to warm the pistons. Then push the Engine Shutoff Control in, set throttle 1/4 open and again crank the engine. If engine fails to start, press the Cold Start Button, then again crank the engine.

**NOTE:** A metered amount of starting fluid is injected into the engine each time the Cold Start Button is depressed. The button should not be depressed more than once during start-up, as engine may become vapor-locked.

Let the engine warm up to normal operating temperatures before using the machine. Check all gauges for proper reading. Approach full working capacity gradually to allow the hydraulic oil to warm up.

### USING BOOSTER BATTERIES

The engine in this machine cannot be started by towing or pushing. The following procedure must be used to start the engine if the Batteries are discharged. Both the booster and the discharged Batteries should be treated carefully when using jumper cables.

# OPERATING INSTRUCTIONS

## OPERATING THE HOIST/UTILITY CONTROL

To hoist UP (Item 2, Figure 16), pull the Hoist/Utility Control Handle back. Use a smooth, continuous motion until the desired hoisting speed is reached. To hoist DOWN (Item 1, Figure 16), move the Control forward.

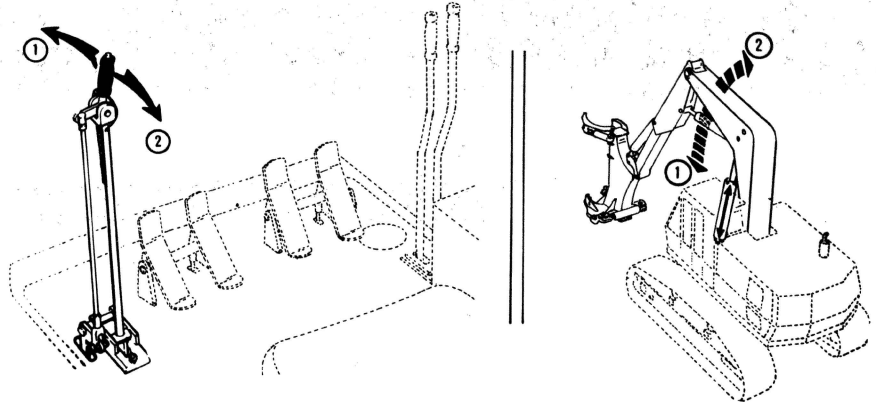


Figure 16. Hoist Up/Down Operation

To OPEN the Feller/Buncher Shear Arms (Item 2, Figure 17), move the Hoist/Utility Control Handle to the Left.

To CLOSE the Shear Arms (Item 1, Figure 17), move the Handle to the right.

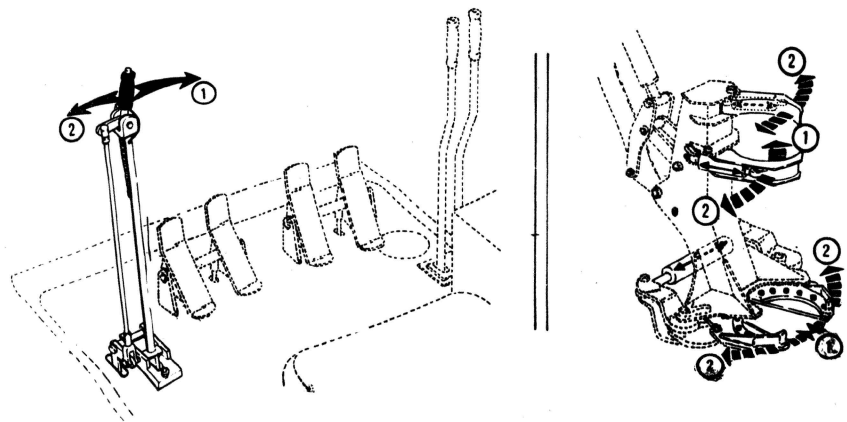


Figure 17. Shear Arm Control

## **Operating on Snow or Ice**

The Track Pads are equipped with “Grippers” for increased traction in snow or ice. Each pad contains two 3/4” holes as well. Bolts or chains can be mounted in these holes to meet extreme traction demands.

## **Tamping Brush**

When traveling or working in dense underbrush, the Feller/Buncher may be used to tamp down brush for better visibility and smoother operations. THE BOOM MUST NOT BE FULLY EXTENDED FOR TAMPING. Slightly retract the Boom to prevent damage to the Crowd and Hoist cylinders.

## **Working in Wet or Swampy Areas**

When working in wet or swampy areas it is best to make fewer track moves in a given area, if possible. Loosen the Tracks slightly to minimize the effects of mud between Track and Track Rollers. Clean the tracks frequently to keep mud from piling up. Grease components more often - see Page 62.

## **Track Width**

For greater stability, the LOGGER tracks should be in the Extended Position for Feller/Buncher operation. The Retracted Position should only be used during transportation or travel.

## **Traveling over Stumps**

Traveling over stumps should be avoided. If and when it becomes necessary, make sure track idler is to front, as shown, to prevent extreme shock loads on track drive transmission.

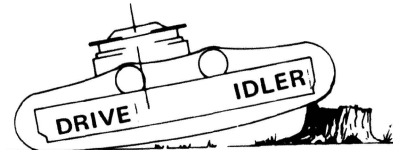


Figure 26. Traveling over Stumps

# **SCHEDULED PREVENTIVE MAINTENANCE**

## **LUBRICANTS**

It is not DROTT policy to publish lists of approved lubricants or to guarantee lubricant performance. The responsibility for the quality of any lubricant rests solely with the distributor or manufacturer of the lubricant.

In various paragraphs of this manual, you will find the statement "Use (lubricant brand name) or functional equivalent". This statement does not constitute an unconditional guarantee of the performance of the brand of oil mentioned; it is intended only as a guide to the type of lubricant recommended for a given application.

## **HYDRAULIC OIL RECOMMENDATIONS**

DROTT DHF fluid is recommended for year-round use in the hydraulic system; or use the following chart as a guide:

<b>OIL WEIGHT</b>	<b>SYSTEM OPERATING TEMPERATURE</b>
SAE 20 - 20W	50° to 210° F (10° to 99° C)
SAE 10W	0° to 180° F (-18° to 82° C)
SAE 5W or 5W-20	Arctic Conditions

**Viscosity:** The viscosity of the oil at starting should not exceed 4000 SSU or drop below 60 SSU for sustained high temperature operation. The optimum operating conditions are between 80 SSU and 180 SSU. The viscosity index should not be less than 90 (for this service).

**Arctic Conditions:** The use of an auxiliary heater, a warm-up period avoiding high speed operation of hydraulic components until the system is warm, and the use of SAE 5W or SAE 5W-20 oils may be necessary, provided the viscosity requirements for sustained high temperature operation are not exceeded at maximum operation temperatures. See paragraph on Viscosity above.

## SCHEDULED PREVENTIVE MAINTENANCE

8. **TURNTABLE CAPSCREWS** - The Turntable Capscrews should be checked for proper torque upon delivery, and after the first week or first 50 hours of operation. Thereafter, they should be checked every 250 hours or monthly, whichever comes first.

**NOTE:** If a broken Capscrew is found, that Capscrew and the Capscrew on each side of it must be replaced. When any Capscrew is replaced, its hardened washer must also be replaced. After replacing any capscrew the entire Turntable Bearing must be retorqued.

The correct torquing sequence for the Turntable to Bearing and for the bottom Capscrews is illustrated in Figure 41. It is not necessary to follow this sequence when CHECKING for proper torque. However, if loose Capscrews are found or if repairs have been made on the Turntable Bearing the torquing sequence **MUST** be followed. The tools required for torquing the Capscrews are shown in Figure 42. If any Capscrews are removed, Blue Loctite must be applied to the threads. A 12-point socket is required, since some areas offer very limited wrench swing space. Two men are required to torque the Capscrews, one to handle the torque wrench and one to hold the wrench onto the Capscrew. Use the following procedure:



**WARNING:** This machine must be level when torquing turntable capscrews. Since it is necessary to disconnect the swing brake, the boom will swing to the down side unless the machine is level. Blocking or resting the boom in the required position is not safe.

- a. Machine must be on a firm, level surface. Move the Boom directly over the **FRONT** of the machine, then raise the Boom.
- b. On machines through PIN 6275248, remove the Seat and Seat mounting brackets. Remove the four Swing Brake Handle Capscrews and move the Handle out of the way. Remove the window channel plate behind the seat. Then remove the side panel on the dash and roll the floor mat toward the front of the Cab.
- c. In the Control Valve access area behind the Cab, remove the clevis pins from the right control valve linkage to permit the control rods to be shifted from side to side.

## **SCHEDULED PREVENTIVE MAINTENANCE**

**IMPORTANT:** If the breather is installed on the Reservoir while wet it may clog with dirt and create a vacuum in the Reservoir.

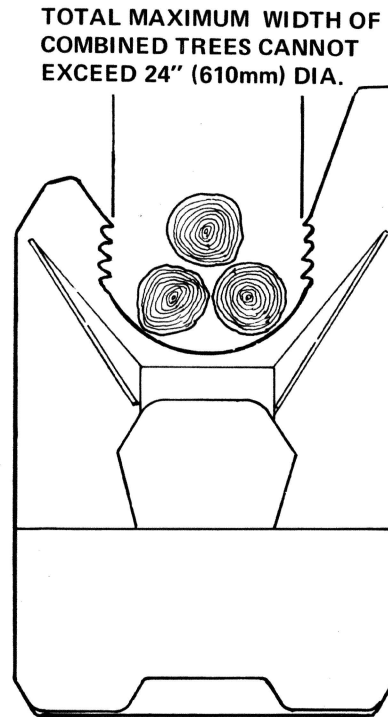
Remove the Capscrews that retain the 100 mesh filter in the Reservoir. Remove the filter and clean in non-flammable solvent. Dry thoroughly. Remove any sediment from the Tank bottom before installing the filter.

Refilling Procedure: Reassemble and install in-line filters. Be sure the filter in the Reservoir is installed. Replace the drain plug. Refer to HYDRAULIC OIL RECOMMENDATIONS on Page 48 and obtain the type and weight of oil recommended for your weather conditions. Use a screen of 200 mesh (or finer) to filter the oil as it is poured into the Reservoir. DO NOT USE CLOTH AS A FILTER, SINCE THE OIL WILL PICK UP LINT AS IT PASSES THROUGH. Make sure the funnel used is clean. After the Reservoir has been filled, start the engine and with the engine at Idle continue filling while someone works the controls. Continue filling until all cylinders and lines have filled with oil and the Boom is fully raised and crowded out. Replace the Filler Cap and operate work functions through several cycles, then recheck the fluid level. Add oil until it reaches the level marked on the Dipstick. Check for leaks in the Filter Mountings.

**IMPORTANT:** Remember that a large percentage of all hydraulic System failures can be traced to dirt in the oil. Keep hands, tools, parts and working area as clean as possible when performing maintenance on this system.

13. **FINAL DRIVE TRANSMISSION** - Check oil level in Final Drive Transmission weekly or every 50 hours, whichever occurs first. Drain and refill every 1500 hours or six months, whichever comes first. FILL, CHECK and DRAIN plugs are shown in Figure 54 for current units; Figure 55 shows the location of plugs on transmission used on earlier units.

5. If more than one tree is cut at a time, the total maximum width of the combined trees cannot be over 24" (610 mm) diameter.



6. To avoid wedged or stalled cutting arm it is important that the attachment be properly positioned and that grab arms firmly grasp the tree prior to start of cut. If cutter arm should wedge or stall, move auxiliary lever to left hand position while keeping button pressed down. If cutter arm does not retract, slowly alternate auxiliary lever from left to right until cutter works itself free. If after several attempts cutter remains wedged, tilt the turntable slightly to the left, while working the auxiliary lever (button must be held down).

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: [www.heydownloads.com](http://www.heydownloads.com) by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL