CEAM023802

Operation & Maintenance Manual

450FXL-1

CRAWLER FELLER BUNCHERS/HARVESTERS

SERIAL NUMBER	450FXL-1 A10001-UP
ENGINE	QSC 8.3 TIER 3

KOMATSU®

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Travel Controls

⚠ WARNING

- **You must read and understand all safety messages and instructions in Section 1 of this manual before beginning operating procedures.**
- **The cab door must be closed and secured before beginning any operations. If the door is not fully closed, the safety interlock system will lock out all hydraulic controls.**
- **Operate the travel controls gradually and smoothly. Excessive speed and quick control movements are hazardous and could cause an accident.**

⚠ WARNING

- **The travel direction of the machine is with the track drive sprockets toward the rear of the machine when you are looking out the front window.**
- **Do not travel at high speed for more than 30 minutes. When traveling at high speed for a long period of time, overheating of the final drives could result. Stop the machine at regular intervals and allow the drives to cool.**

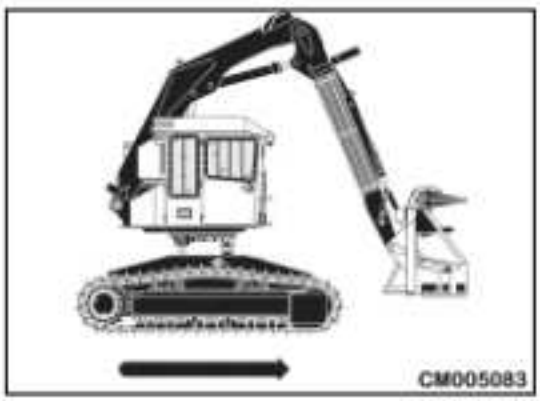
Forward Travel

To travel forward, push down on the top of both travel pedals with your toes (1). The farther the pedals are pressed downwards, the faster the machine will travel.

To stop traveling, release the pedals and they will return to the neutral position stopping machine movement.

Check that the travel alarm sounds properly.

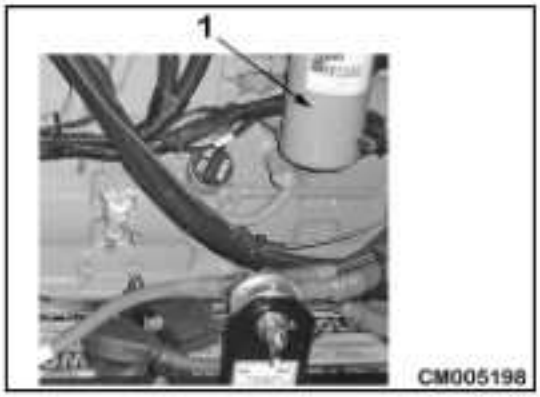




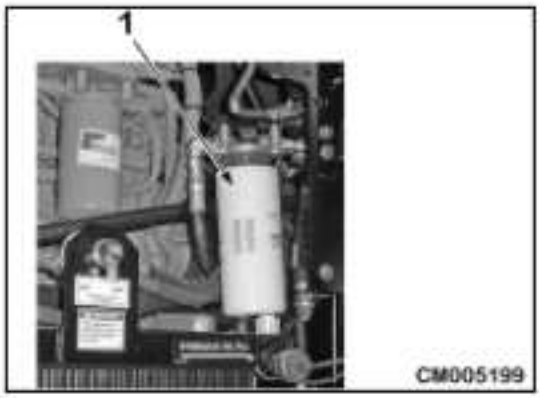
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Fuel Filter and Primary Fuel Filter

The fuel filter is located directly on the engine (1) behind the master power switch.



The primary fuel filter (1) is located on left side of the hydraulic pump compartment.



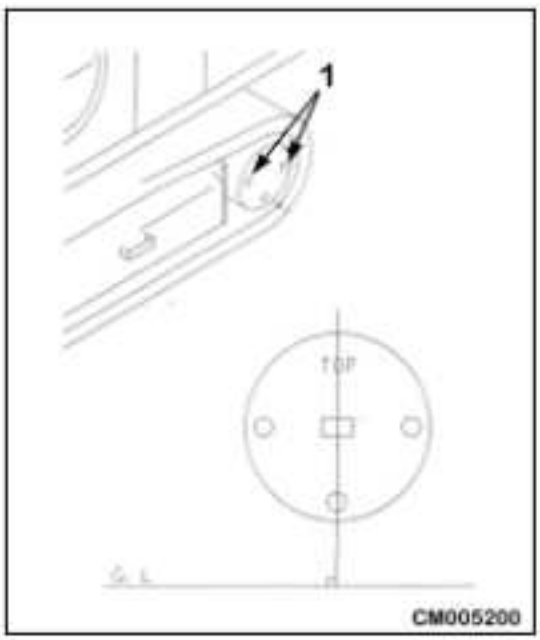
1. Clean the area around the fuel filter head assembly. Remove the old fuel filter by turning counter-clockwise.
2. Clean the filter mount housing bases to remove any remaining gasket material from the old filters.
3. Fill the new filter with clean fuel.
4. Apply a thin coating of clean fuel to the gasket on the top of the new filter.
5. Install the new filter by hand until the filter gasket contacts the housing. Tighten to filter manufacturers' recommendations. Do not over-tighten.

Bleeding Fuel System

If the machine runs out of fuel, it will be necessary to purge air from the fuel system after refilling the fuel tank. See the Cummins Engine Manual.

Check Track Final Drive Oil

1. Locate the final drive oil fill and level plugs (1) as shown.



⚠ WARNING

Overfilling the track final drive will cause the track motor seals to allow hydraulic oil or water to enter and contaminate the track drive motor.

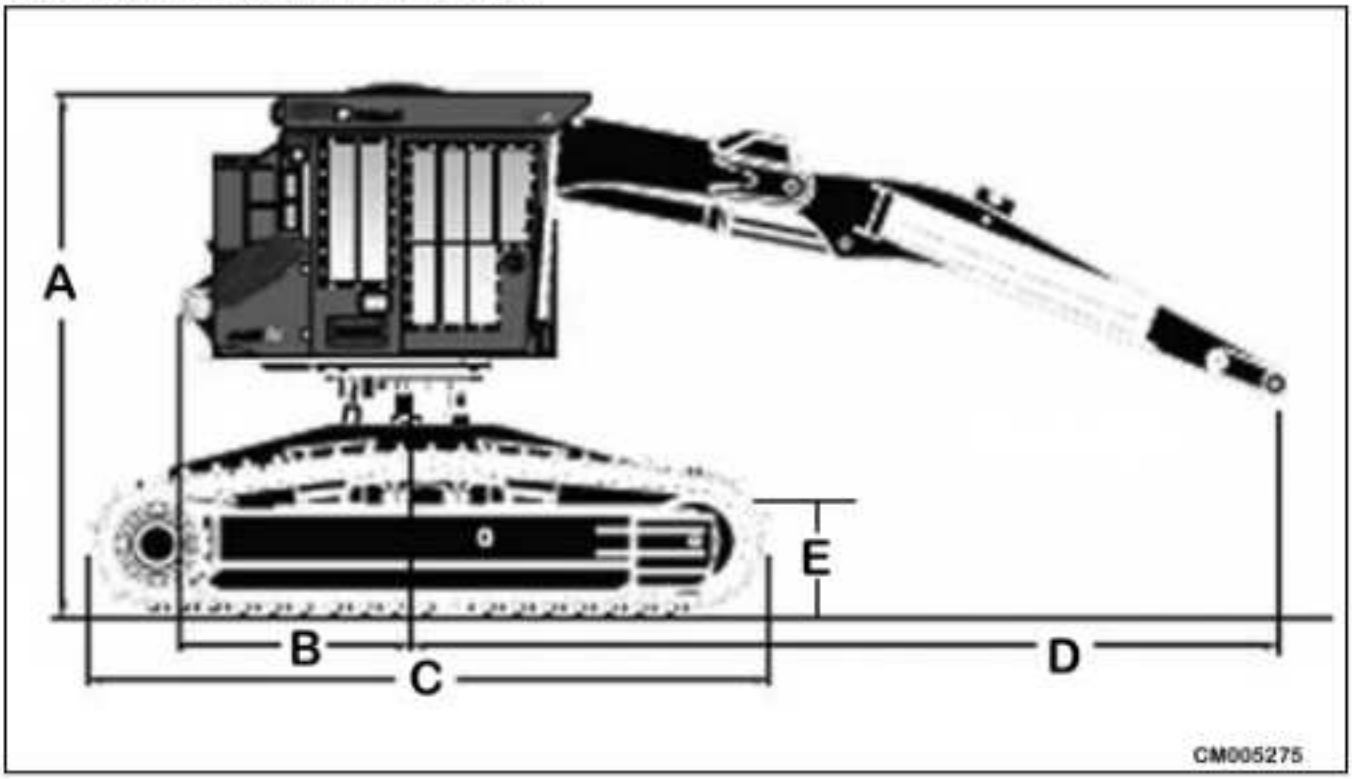
Remark

There are two plugs (1). Add oil through the one that is easier to fill and no internal gears are seen.

2. Remove the plugs from the level port (1).
3. If oil is required, fill with oil until the level is 0.4 inches (10 mm) below the bottom of the plug hole (1).
4. Clean the port plugs. Inspect the O-ring seals and replace if damaged.
5. Reinstall the port plugs.
6. Repeat procedure for the other final drive.

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450 FXL SPECIFICATIONS



Dimension		
A. Height	12 ft 9 in	3887 mm
B. Boom foot pin to center	4 ft 10 in	1470 mm
C. Track length	15 ft 8 in	4770 mm
D. Center to stick arm pin	21 ft 6 in	6530 mm
E. Ground clearance	32 in	810 mm

Engine	
Model	Cummins QSC8.3 Tier 3
HP	300 HP 224 kW @ 2000 rpm
Torque	1000 lbf ft (1356 N•m) @ 1300 rpm
Fuel capacity	130 gal (492 ℓ)
Machine Track Shoe Width	
Std. 600 mm (24 in) Single grouser	10 ft 5 in (3170 mm)
Opt. 700 mm (28 in) Single grouser	10 ft 9 in (3270 mm)
Machine Weight Base machine without attachment 69500 lb (331525 kg) Remark - Approximate "woods ready" operating weight, fully serviced including 1/2 tank of fuel 90 gal. (341 ℓ) at 738 lb (335 kg) and 175 lb (80 kg) operator.	

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Hydraulic Tank Removal

Remark

Tag and mark all of the hydraulic hoses, wire connectors, and fittings before removal to ensure correct installation. Cap and plug all the fittings and hoses after removal to prevent contaminants from entering the hydraulic system.

1. If equipped with a vacuum pump, remove the pump cover from the top of the tank.
2. Remove the hydraulic filter cover from the top of the tank.
3. Remove all the hoses and fittings from the hydraulic filters on top of the tank.

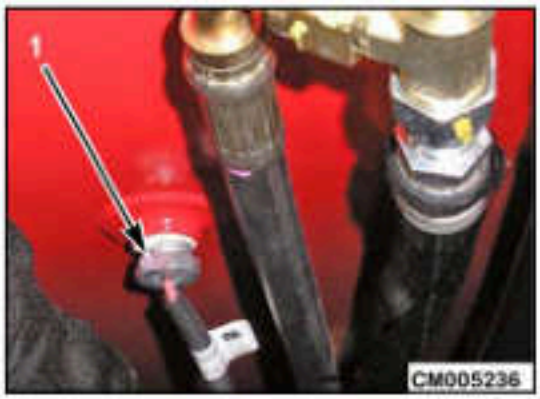




4. Disconnect the oil level sensor connector (1) from the back of the tank.

Remark

Follow the wires down to the connector.

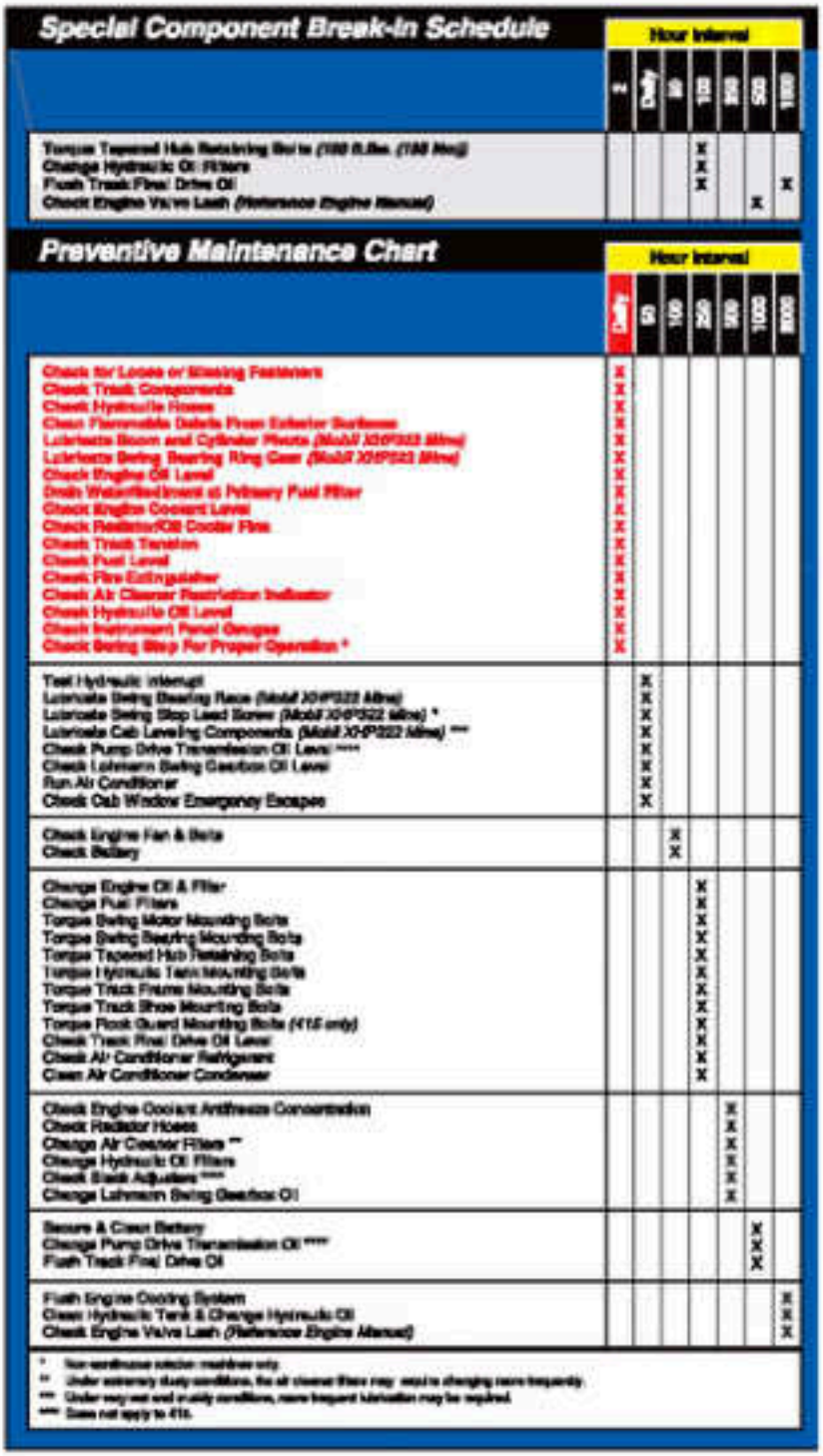


5. Remove all the hydraulic hoses from the bottom of the tank. The fittings are easier to remove after the tank is removed from the machine.



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Example: One half of laminated card for Preventive Maintenance and Lubrication.



Special Component Break-In Schedule

	Hour Interval						
	1	Daily	50	100	250	500	1000
Torque Tapered Hub Retaining Bolts (100 ft.lbs. (135 Nm))				X			
Change Hydraulic Oil Filters				X			
Flush Track Final Drive Oil				X			
Check Engine Valve Lash (Reference Engine Manual)						X	X

Preventive Maintenance Chart

	Hour Interval						
	Daily	50	100	250	500	1000	2000
Check for Loose or Missing Fasteners	X						
Check Track Components	X						
Check Hydraulic Hoses	X						
Clean Flammable Debris From Exterior Surfaces	X						
Lubricate Boom and Cylinder Pivots (Mobil XHP222 Mine)	X						
Lubricate Swing Bearing Ring Gear (Mobil XHP222 Mine)	X						
Check Engine Oil Level	X						
Drain Water/Sediment at Primary Fuel Filter	X						
Check Engine Coolant Level	X						
Check Radiator/Oil Cooler Fins	X						
Check Track Tension	X						
Check Fuel Level	X						
Check Fire Extinguisher	X						
Check Air Cleaner Restriction Indicator	X						
Check Hydraulic Oil Level	X						
Check Instrument Panel Gauges	X						
Check Swing Stop For Proper Operation *	X						
Test Hydraulic Interrupt		X					
Lubricate Swing Bearing Race (Mobil XHP222 Mine)		X					
Lubricate Swing Stop Lead Screw (Mobil XHP222 Mine) *		X					
Lubricate Cab Leveling Components (Mobil XHP222 Mine) ***		X					
Check Pump Drive Transmission Oil Level ****		X					
Check Lohmann Swing Gearbox Oil Level		X					
Run Air Conditioner		X					
Check Cab Window Emergency Escapes		X					
Check Engine Fan & Belts			X				
Check Battery			X				
Change Engine Oil & Filter				X			
Change Fuel Filters				X			
Torque Swing Motor Mounting Bolts				X			
Torque Swing Bearing Mounting Bolts				X			
Torque Tapered Hub Retaining Bolts				X			
Torque Hydraulic Tank Mounting Bolts				X			
Torque Track Frame Mounting Bolts				X			
Torque Track Shoe Mounting Bolts				X			
Torque Front Guard Mounting Bolts (416 only)				X			
Check Track Final Drive Oil Level				X			
Check Air Conditioner Refrigerant				X			
Clean Air Conditioner Condenser				X			
Check Engine Coolant Antifreeze Concentration					X		
Check Radiator Hoses					X		
Change Air Cleaner Filters **					X		
Change Hydraulic Oil Filters					X		
Check Track Adjusters ****					X		
Change Lohmann Swing Gearbox Oil					X		
Secure & Clean Battery						X	
Change Pump Drive Transmission Oil ****						X	
Flush Track Final Drive Oil						X	
Flush Engine Cooling System							X
Clean Hydraulic Tank & Change Hydraulic Oil							X
Check Engine Valve Lash (Reference Engine Manual)							X

* Non-warehouse selection machines only.

** Under extremely dusty conditions, the air cleaner filters may need to changing more frequently.

*** Under very wet and muddy conditions, more frequent lubrication may be required.

**** Does not apply to 416.

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