

## Maintenance

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***DO NOT perform any maintenance procedures while the equipment is running. Moving parts and hot components may cause personal injury or damage to components may occur.***

This section of your machine manual may very well be the most important section of the manual that you read. The proper care and maintenance of your El Diablo truck mount is essential for a safe and reliable long life to your investment.

### Engine

Check the engine oil level daily when the engine is turned off and is in a level position. The oil level should be between the upper limit and the low limit marks on the dipstick. ***Operating the engine with improper oil level can cause engine damage that is not covered under warranty.***

Change the oil after the first 20 hours and then every 100 hours thereafter. Use SAE 10W-30 with an API SERVICE CATEGORY SJ or higher motor oil (see Kohler owners manual). The engine holds approximately 1.7 - 1.9 US qt with an oil filter change. It is recommended that the oil be warm so it will drain more quickly and efficiently.

Change the oil filter at least every 200 hours. Use only a genuine Kohler oil filter or a filter of equivalent quality **specified for your engine model**. Check the air filter every 50 hours and replace as necessary. Replace the spark plugs every 300 hours. For more specific engine maintenance procedures see the Kohler Engine Owners Manual.

For best results use only unleaded gasoline with a pump rating of 87 octane or higher.

### Blower

The El Diablo uses a Roots URI-J DSL blower that is splash lubricated by gear oil on both the front and back of the blower. There are sight gauges on the side of each gear case for checking the oil level. The gear boxes are filled with ROOTS SYNTHETIC OIL. It is highly recommended that ROOTS SYNTHETIC OIL be used to maintain optimum performance. The gear oil should be changed after the first 100 hours of operation, then every 1000 hours thereafter. To drain the oil, remove the drain plug in the bottom of the gear case and allow the oil to drain out. It is recommended that the oil be warm so it will drain more quickly and efficiently. To refill the gear case, remove the top plug and fill until the oil reaches the middle of the oil sight gauge on the side of the gear case. The front and rear gear case must be serviced individually.

At the end of each working day, lubricate the lobes in the blower by spraying WD-40 (or equivalent) for 5 to 10 seconds into the Blower Lube located on the front panel of the machine. If the blower is going to be shut down for an extended time, it is especially important that this be done to protect the lobes from rusting.

(Note: When spraying the WD 40 the engine should be at operating speed and a vacuum load applied.)

### Cat Pump

The crank case on the Cat Pump is filled with special CAT PUMP CRANKCASE OIL. The oil should be changed after the first 50 hours of operation then every 500 hours thereafter. Use only CAT PUMP CRANKCASE OIL to maintain optimum performance. The oil level should be at the middle to the top of the red dot in the oil sight gauge located on the pump housing.

### Belt and Coupler

Belt tension is adjusted by first removing the belt guard. Then loosen the four generator mounting bolts. Slide the generator to tighten the belt. Make sure the generator base is parallel with the mounting plate to assure belt alignment before tightening bolts. Reinstall the belt guard.

A spare belt is already installed at the factory. To install a new spare belt or to replace the coupler sleeve, loosen the generator as previously described above, and then loosen the two set screws in the engine coupling flange. The flange will slide on the shaft to open up a gap in the coupler assembly to allow a new belt or coupler sleeve to be installed.

### Heater

***It is suggested that approximately every 500 hours the burner gun assembly be removed from the top of the heater and the electrodes be inspected for proper adjustment (see diagram).*** While the burner gun assembly is removed this is a good time to replace the fuel nozzle. Also inspect the interior of the burner chamber for any excess soot build up. ***These maintenance procedures may best be done by your distributor or a qualified diesel heater technician.***

There is an inline fuel filter that should be replaced at the 500 hour interval. It is also a good idea to inspect the quality of the fuel on a regular basis. Carefully inspect for moisture buildup inside the fuel tank. If there is any moisture present in the fuel, an additive for diesel fuel may be added accordingly to the amount of fuel in the tank.

**Maintenance** (continued)

	Service Interval (hours)					
Service Item	Daily	50	100	200	500	1000
ENGINE						
Oil	Check	1st Change @ 20 Hours	X			
Oil Filter		1st Change @ 20 Hours		X		
Air Filter		X		Replace		
Spark Plug					Replace .030	
Fuel Filter					Replace	
BLOWER						
Crankcase Oil			1st Change			Change
Lube Impellers	X					
Clean Lint Screen	Every Job X					
Clean Lint Basket	Every Job X					
CAT PUMP						
Crankcase Oil		1st Change			Change	
Belt Tension			X			
DIESEL HEATER						
Change Fuel Filter					X	
Check Burner Gun					X (See diagram)	