

**Mine Name:**

\_\_\_\_\_

**DIESEL EQUIPMENT  
200-HOUR  
MAINTENANCE RECORD**

**Machine Number and Type:**

\_\_\_\_\_

**Beginning**

**Ending**

Date: \_\_\_\_\_

Hour  
Meter: \_\_\_\_\_

# 200-HOUR MAINTENANCE CHECKLIST

ENGINE SERIAL NUMBER: \_\_\_\_\_

- ☐ Set the park brand and wash or steam clean the equipment.
- ☐ Check for and remove any accumulated coal or fluids.
- ☐ Inspect brakes, safety chains, and reflectors.
- ☐ Repair damaged or missing intake or exhaust components, heat shields or shutdown controls.
- ☐ Check electrical equipment, E-stop, breakers, fuses, battery switch and repair, as necessary.
- ☐ Change engine oil and filter, write date or new oil filter, also update next service interval tag.
- ☐ Check transmission fluid and add if necessary.
- ☐ Check hydraulic fluid and add if necessary.
- ☐ Check all other fluid levels and add if necessary.
- ☐ Check for and repair oil, coolant, or other fluid leaks.
- ☐ Check the cooling fan, radiator, and fan shroud for obstructions or bent blades and repair.
- ☐ Tighten or replace all belts, as necessary.
- ☐ Check battery and service as needed.
- ☐ Check automatic fire suppression system and recharge or repair if defective.
- ☐ Check portable fire extinguisher(s) and replace if missing or defective.
- ☐ Check front and rear headlights, horn, dash instruments, and replace or repair if defective.

## Keep brake set, secure the machine against movement, and start the engine.

- ☐ Check oil pressure.
- ☐ Check intake restriction at full engine speed and replace intake filter(s) if necessary. Normal intake restriction is \_\_\_\_\_ inches.
- ☐ Check engine back pressure at full engine speed and replace or clean the soot filter if necessary. Normal back pressure is \_\_\_\_\_ inches.
- ☐ Test engine shutdown controls and repair or replace if defective.
- ☐ Conduct 90 second untreated and treaded load tests and record readings.
- ☐ Evaluate emission test data, make necessary repairs, or remove the equipment from service.
- ☐ Measure smoke in the treaded exhaust to check soot filter performance. Be sure some number is less than 3. Current smoke number is \_\_\_\_\_.
- ☐ Be sure surface **and** exhaust gas temperatures are less than 302 degrees F.
- ☐ Perform all additional service as required by the manufacturer's service instructions.
- ☐ Fill out this 200-Hour Record, the CO Emissions Form, and the Repair & Maintenance Form.

Engine hours at time of service: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ a.m. ☐ / p.m. ☐

Signature of qualified diesel mechanic: \_\_\_\_\_ Date: \_\_\_\_\_

Countersigned

by: \_\_\_\_\_ Mine Foreman ☐ or Chief Electrician ☐

Date: \_\_\_\_\_

Attach emissions printout here or emission chart if available.

# 200-HOUR CARBON MONOXIDE EMISSIONS FORM FOR DIESEL POWERED EQUIPMENT

MACHINE TYPE: \_\_\_\_\_

Form must be filled out by a qualified diesel mechanic as part of the CO emissions record. Engine must be operating temperature before test. Emissions readings should be taken at 30 second intervals once oxygen drops to 10% or when CO<sub>2</sub> is between 8 to 10% (10 to 12% for engine without turbo).

## At start of test:

Engine Speed ..... \_\_\_\_\_ RPM  
Engine Temperature ..... \_\_\_\_\_ F  
Transmission Temperature ..... \_\_\_\_\_ F  
Maximum Intake Restrictions (at high Idle) ..... "wg  
Maximum Exhaust Back Pressure (at high Idle) ..... "wg  
Maximum Exhaust Temperature ..... \_\_\_\_\_ F

## Emissions Readings: Treated or Untreated

	CO <sub>2</sub> / CO <sub>2</sub>	Untreated CO	Treated CO
1 <sup>st</sup> 30 Second ....	____/____ .....	_____ .....	_____
2 <sup>nd</sup> 30 Second ....	____/____ .....	_____ .....	_____
3 <sup>rd</sup> 30 Second ....	____/____ .....	_____ .....	_____

Average Untreated: \_\_\_\_\_ ..... Treated: \_\_\_\_\_

Engine hour reading: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ a.m. ☐ / p.m. ☐

Person performing emissions test: \_\_\_\_\_

Countersigned

by: \_\_\_\_\_ Mine Foreman ☐ or Chief Electrician ☐

Date: \_\_\_\_\_

# Diesel Powered Equipment Repair and Maintenance Form

Note: Diesel Mechanics should use this form to list all repairs or maintenance performed during each 200-hour scheduled service, or any additional maintenance or repair required between service intervals.

## Description of maintenance or repair

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Engine Hour Reading: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ a.m. ☐ . p.m. ☐

Person performing  
maintenance repairs: \_\_\_\_\_ Date: \_\_\_\_\_

Countersigned  
by: \_\_\_\_\_ Mine Foreman ☐ or Chief Electrician ☐

Date: \_\_\_\_\_