Vehicle Repair Preventive Maintenance Operations

**Description:**

This document provides procedures for performing preventive maintenance on University equipment and vehicles.

**References:**

FM Procedure OP05 After Hours Procedures for the Facilities Management Warehouse

**Definitions:**

Computerized maintenance management system (CMMS): Database that Facilities Management uses as a work management system.

Preventive Maintenance (PM) work request: A work request generated in the CMMS to track preventive maintenance done on Weber State University Campuses.

**Responsible Party:**

Facilities Management Vehicle Repair Shop Manager or designee

**Procedure:**

For any work that is preventive maintenance, a tag number should be assigned. The technician should ensure that the correct tag number is entered on the work request.

A. Annual PM Generator Maintenance
   1. Call FM Warehouse to order parts or obtain from shop stock
   2. Gather tools and parts needed:
Tools:
- Oil Filter Wrench
- Drain Plug wrench
- Drain pan
- Floor dry
- Rags
- Funnel
- (3) cans of brake cleaner

Parts:
- Oil filter
- Fuel filter
- Air filter
- Oil

3. Find location of part and plan most effective route to obtain part (FM Warehouse should be the first resource).
4. Organize equipment in area for most efficient draining.
5. Turn off Genset so the generator cannot be ran during maintenance (the technician will run the generator to warm the oil for draining).
6. Place drain pan under engine.
7. Locate drain the drain location. Place drain pan under plug and remove oil plug.
8. Drain engine oil.
9. Remove oil filter (turn counter clockwise).
10. Drain oil from filter.
11. Place small amount of oil on filter seal.
12. Fill filter with oil and install.
13. Tighten until snug then turn ¼ of an additional turn.
14. Replace drain plug or oil drain valve.
15. Refill oil well with appropriate amount and type of oil (Delo 4000LE).
16. Drain water from fuel separator into proper small container and place rags in container.
17. Remove fuel filters (turn counter clockwise). Ensure both old seals are removed (small one and large one).
18. Remove secondary fuel filter if applicable (ensure old seals are removed).
19. Fill new fuel filters with fresh diesel to avoid losing prime in the system.
20. Check seal on filters and install fuel filters by turning clockwise in the order they were removed.
21. Start generator and standby to look for fuel and oil leaks.
22. Re-check oil level and fill to specifications of necessary (turn off the motor for check on oil).
23. Clean up any spillage of oil or fuel.
24. Clear away area around generator set if needed.
25. If no leaks or issues are observed, set Genset to “Automatic.”
26. Note any other deficiencies and create a work request for necessary actions.
27. Take oil to the oil waste station.
28. Fill out work time and parts in CMMS. Change work order status to “work complete.”
29. Follow up with the customer a after one week to ensure no further issues occur.

B. Procedure for Preventive Maintenance Emissions Inspection

1. If a vehicle PM has not flagged, submit a work request through the CMMS online or contact the FM Business office.
2. Submit a PM to calibrate the emissions machine.
3. Notify operating personnel of testing schedule, and ask for operating deficiencies.
4. Set up the emissions machine.
5. Bring vehicle into the shop.
6. Ensure the MIL is off.
7. Pull vehicle into the bay.
8. Turn engine off and open hood of the car.
9. Find the emissions diagram in the vehicle glove compartment.
10. Verify which emissions components should be in the vehicle.
11. Verify that components are correctly installed on the vehicle.
12. Input vehicle information and owner identification onto emissions machine.
13. Another technician must verify that the VIN on the vehicle is identical to the VIN input into the machine.
14. **IF** the vehicle is older than 1996 and weighs more than 8500 GVWR, the vehicle must have a two-speed idle test. The tests must be performed when the vehicle is at operating temperature.
15. **IF** the vehicle is newer than 1996 and weighs less than 8500 GVWR, an OBDII test may be performed.
16. Print the certificate of inspection on blank piece of paper and sign.
17. Have the technician who verified the VIN will sign the certificate.
18. Reprint the certificate on Emissions Inspection paper.
19. Deliver vehicle to operator or notify the operator is ready for pick up. Travel time will be recorded on the work request.
20. In the work request note the vehicle mileage, enter shop stock information and change the work order status to “complete.”
21. Fill out work time and parts in CMMS.