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### Monthly Maintenance Procedure for GENSET

#### I. Purpose:

The purpose of this procedure is to describe the monthly maintenance for the ARCS Generator. This procedure includes a visual inspection that uses minimal operation interaction. There are no electrical or mechanical hazards associated with this procedure, but care should be taken to perform only activities within the scope of this procedure.

#### II. Cautions and Hazards:

- Individuals who perform inspection and maintenance of generator should be aware that high voltage exists within this van and that the generator could start up at any time. Therefore, any maintenance that is performed other than visual inspection, will require a shutdown procedure.
- Under no circumstances should any of the power cabinets (i.e., as transfer switch, circuit breaker, and monitor panels) be open as part of maintenance procedure.

#### III. Requirements:

- The visual inspection of the generator is performed, at a minimum, on a monthly basis and more often should the generator be used at more frequent intervals. This is dependent upon the availability and continuity of grid power. Even with high usage of generator power, a weekly inspection is adequate, with a few exceptions (e.g., gas and oil).
- Diesel gasoline
- Oil 15w-40 Weight
- Wire brush
- Rags
- Voltmeter

#### IV. Procedure:

#### Note: The following 12 steps are visual inspections and are performed monthly and without the need of performing the GENSET shutdown procedure.

- A. Steps:
  - 1. Inspect outside of U van making sure that all connectors are secured tightly and not damaged.
  - 2. Verify that all vents are in the open position, secured and functioning as designed. Flaps on vents should swing and rotate freely.

 Open right front door of U-Van and inspect floor for any type of fluids (i.e., oil, antifreeze, or diesel fluid) that may have leaked out of generator set or radiator.

# Note: Beware that generator could possibly start up should a grid utility power failure occur during inspection.

- 4. Inspect vibration mounts, insure that they are secure and have not loosened.
- Inspect battery posts for any corrosion or electrolyte seepage (clean with baking soda (sodium bicarbonate) water mixture when necessary).
  Scrub with wire brush and clean off debris with rag. Dispose of rag when completed.
- 6. Check electrolyte level in batteries in the UVAN. Fill to appropriate level with electrolyte (or distilled water) if necessary.
- 7. Make a standard volt measurement reading with a voltmeter, the operator should observe a reading greater than 24 volts.
- 8. Check oil fluid level. This level can be checked while the generator is running or at rest. The dipstick is located on front right engine area.
- 9. Inspect all fuel line fittings associated within U-Van GENSET area and fuel filter connections for leakage.
- 10. Check diesel fluid level in the large tank outside the U-Van; A reading should be indicated by the red float type gauge.
- 11. Should oil or fuel be low, fill to appropriate level.
- 12. Ensure that dipstick, battery caps, fuel openings are secured and returned to normal configuration.

## V. References:

1. Fred Helsel

# VI. Attachments:

None.