

DISCLAIMER: These Standard Operating Procedures (SOP's) are for the exclusive use of Navy Public Works Center (PWC) Norfolk. They are promulgated as guidance for their NAVFAC Commands. If intended to be used by other activities, they must be tailored to each activity's particular requirements and must be reviewed/approved by the activity's safety professionals prior to use.

Standard Operating Procedures
Jump Starting Fuel Operated Engines

PPE Required:

Leather gloves
Safety goggles
Hearing protection

Equipment Required:

Jumper cables
Engine with charged battery

References:

1. PWC Occupational Safety and Health Program Manual,
PWCNORVAINST 5100.33E

Procedures:

1. Examine jumper cables for damage. If cable is damaged, mark accordingly, and return to the tool room for an exchange. If cable is determined to be in good working condition, proceed.
2. Check length of cable to determine how close engine with charged battery will need to be located with respect to the dead battery.
3. To enable the cable length to easily span the distance between batteries, locate engine with charged battery to within sufficient proximity of the dead battery. Take care not to allow exterior frames of the two engines to come into contact with each other. Have a second person act as a spotter during this step. Leave the engine with the charged battery running for the duration of the jump start process and set the parking brake.
4. Connect the ground wire clamp (black) of jumper cables to the negative terminal of the charged battery.
5. On the same end of the jumper cables, connect the hot wire clamp (red) to the positive terminal of the charged battery.

NOTE: Always ensure the jumper cable clamps do not come in contact with each other. Failure to keep these clamps separated may result in sparking, short-circuiting, and/or personal injury.

6. On the opposite end of the jumper cables, connect hot wire clamp (red) to the positive terminal of the dead battery.

7. The last connection is the ground wire clamp (black) of the jumper cables to the frame of engine (away from the dead battery).

8. Verify the parking brake is set and increase RPMs on the running engine to about 1500 to 2000.

9. Start the engine of the machinery with the dead battery.

10. After engine with dead battery starts, keep the engine running for a minimum of 15 minutes to allow the dead battery sufficient time to re-charge.

Note: Throughout steps 11 and 12, always ensure clamps on the cable ends are kept separated.

11. Disconnect the clamps in the reverse order by first removing the clamp on the engine frame.

12. Continue disconnecting the remaining clamps in the reverse order.