

Diesel Generator Mechanic

Physical Demands Level: **HEAVY**

This position requires the successful applicant to be able to routinely perform a number of heavy physical tasks which the Anchorage School District needs to know can be performed by the applicant safely. The applicant must be able to perform the following tasks while demonstrating safe body mechanics.

Job Specific Task I – Simulates replacing 4D battery on battery tray

Equipment Used: 10.5"x9" box weighing 75 lbs., lift station

Description of Task Simulation 1:

- A) Candidate will lift 75 lb. box off floor by rope handle
- B) Candidate will carry box 20 feet and place on 28" high shelf
- C) Candidate will lift box off shelf by rope handle and carry it back to starting point

Repetitions: 2

Job Specific Task II – Simulates changing out small generator starter

Equipment Used: NIOSH box to support bolt box, 50 lbs. dumbbell with 10 lbs. added, bolt box, 12" ruler

Description of Task Simulation 2:

- A) Candidate will ½ kneel LEFT lifting 60 lbs. dumbbell from floor, support LEFT elbow on LEFT knee
- B) Maintaining position, the candidate will extend dumbbell horizontally approximately 12" from chest
- C) Holding dumbbell in extended position, candidate will hold for 10 seconds while simulating attaching the starter
- D) Candidate will lower dumbbell to the floor.
- E) Candidate will turn around and ½ kneel RIGHT lifting 60 lbs. dumbbell from floor, support RIGHT elbow on RIGHT knee
- F) Candidate will ½ kneel, kneel, or squat and disassemble bolts from bolt box in all planes of motion for 1 minute with the RIGHT hand
- G) Candidate will turn around and assume same position
- H) Candidate will ½ kneel, kneel, or squat and disassemble bolts from bolt box in all planes of motion for 1 minute with the LEFT hand

Repetitions: 1

Job Specific Task III – Simulates climbing vertical ladder to access top of fuel tanks and generator rooms, open hatch as necessary

Equipment Used: Vertical ladder, 20 lb. weight

Description of Task Simulation 3:

- A. Candidate will climb up 3 rungs and then down 3 rungs; Repeat 3 times
- B. Candidate will stop on bottom rung at the end of the last set and, while standing on the rung closest to the floor, perform a 1 handed press-up with the 20 lb. dumbbell

Repetitions: 1

Job Specific Task IV – Simulates walking on top of generator to service parts

Equipment Used: Cybex pull up machine, 11"x42" gray padded bench

Description of Task Simulation 4:

- A) Candidate will walk to rear of Cybex pull-up machine
- B) Candidate will step up 24" onto 4 set screw plate with both feet using hand support as necessary to step up
- C) Candidate will side step with LEFT foot onto 2" wide grey side support (38" off of ground) followed by RIGHT foot
- D) Candidate will then step down to grey padded bench which is directly alongside of Cybex machine with LEFT foot followed by RIGHT foot
- E) Candidate will then side step UP with LEFT foot onto 2 ft. step at the front of Cybex machine, followed by RIGHT foot
- F) Candidate will step deown from the 2 ft. step to the floor

Candidate can use all available hand holds as necessary for ALL steps.

Repetitions: 1

Job Specific Task V – Simulates tilting 55 gal. drum of coolant

Equipment Used: Sled loaded with 335 lbs. (equals the force needed to tilt a 55 gal. drum of coolant)

Description of Task Simulation 5:

- A. Candidate will push loaded sled 1 foot.
- B. Candidate will pull loaded sled 1 foot

Repetitions: 1

Job Specific Task VI – Simulates sustained bolting and unbolting of overhead generator accessories

Equipment Used: Valpar 9 range of motion test station

Description of Task Simulation 6: With the ROM overhead shelf raised to 77”, candidate will unscrew the plastic bolts from each bolt, using both hands simultaneously, and rescrew them onto a separate bolt on shelf

Lowering of arms prior to 2 minutes will constitute a NOT CAPABLE score

Repetitions: 2