



## Nevada Southern Railway

### D-1012 GE 80 Ton (L3) STARTUP PROCEDURE

Revised January 16<sup>th</sup>, 2017

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**This startup procedure is written as a general reference only. It is not intended to be sufficiently complete for self training. This procedure requires two people.**

#### Activate the systems in the cab

1. Close the battery switch (on the left in the engine 1 electrical cabinet}



2. Using the key, turn on the CONTROL switch



3. Turn on/clockwise both ENGINE SHUTDOWN switches



4. Install the console handles (if any have been removed),  
Throttle (select to IDLE)  
Reverser (select to NEUTRAL),  
Automatic (select to RUN),  
Independent (select to full application -  
“against-the-spring”)

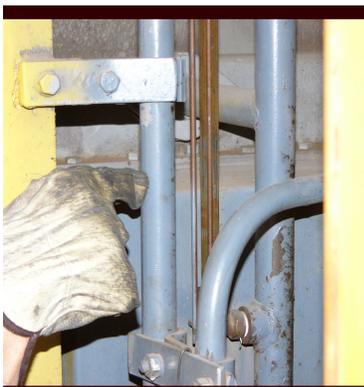
5. Ensure that all breakers on the panel are off



**Inspect the mechanical systems in the engine bay**

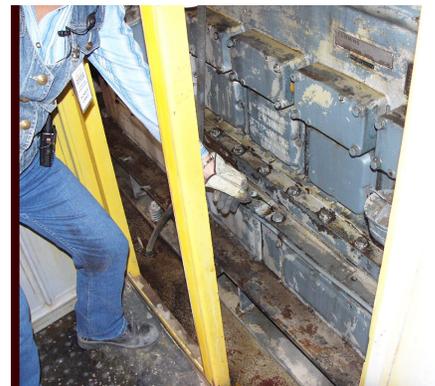


6. Open access doors by pulling up on the handles



7. Check the water level sight glass to make sure there is water in the tank when the engine is cold. The water should be near the top of the radiator.

8. Check the engine oil level (it should be about 1/2 way up the dipstick).





9. Open the compression release valve by pulling the handle toward you



10. Spray (about one second) starter fluid into each of the two intake vents

11. In the cab, once the outside person has returned to the compression release valve, push the START button for the appropriate side - hold in until the oil pressure begins to rise



12. Outside, once the engine begins to rotate, close the compression release valve by pushing the handle away from you. Give it a hard last push to ensure that it is completely seated.

13. In the cab, after the engine has started watch your oil pressure gauge. It should slowly build up to a minimum of between 30 and 40 P.S.I. If the oil pressure does not pick up within 45 seconds to one minute shut the engine down.

14. Before closing your side doors do a quick visual and audible check around the engine compartment for the following:
  - A. Listen for air leaks
  - B. Listen for exhaust leaks at the expansion joints and other areas
  - C. Take a last look around the engine compartment for any types of leaks. Listen for strange noises and check for odd odors (such as in electrical wires burning etc.).

15. Close the doors and repeat for the second engine.

## Prepare for Service

16. In the cab, the following items should take place:
  - A. The main reservoir should come up to between 120 and 140 PSI
  - B. The equalizing reservoir should come up to 90 PSI
  - C. The independent brake gauge should read between 45 and 50 PSI
  - D. The brake pipe pressure should read 90 PSI
  - E. Bell should operate
  - F. Horn should operate
  - G. Both engines should load
  
17. On the ground, during your walk-around
  - A. Brake cylinder extension should be about 4"
  - B. Check the headlights
  - C. Check the coupler operation
  - D. Check grab bars and stairs.



- E. Drain condensation from both air tanks (fireman's side)
  
18. After the inspection make sure you sign the daily locomotive inspection card in the cab.
  
19. Verify that your engine handbrake has been released and your engine is ready for assignment.



**If oil or water need to be added**

Oil fill cap is just to the right of the oil dipstick



To add water, fill pipes are on the top of the engine

