

Under Investigation	Solution In Progress	Prod + Svc Solution
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# HDEP High Pressure Fuel Line Seal Failures

## Description

- Oil leaks present between the rail to injector fuel lines and mating seals since HDEP start of production.
- Especially high failure rate between 18 and 24 MIS for DD15 Gen 5.
- High failure rate for ALL years of HDEP in North America (same seal design used for all variants of HDEP since 2006).
- Cyclical failure rates higher during winter months, peaking in late winter.

## Factory Resolution

- Injector tube nut “extension” - June 2021
- P-80 installation lubricant (ICA) - March 2022
- T54 installation dry lubricant (PCA) - April 2022
- Fuel rail alignment tool - DD15 only - June 2022
- New seal design planned to be implemented in production in December.
- Service Updates:
  - Updates to the service manual to remove P80 and/or Oil from work instructions.
  - Updates to the service manual to change and modify the assembly sequence to install the seal last by slipping the seal completed past the tube nut.

## Field Resolution

- Replace seal(s).

