

**LOCOMOTIVE INSPECTION CHECKLIST FOR COMMERCIALY MADE
ENGINES WITH SMALL BOILERS**

BEFORE STEAMING

1. SAFETY VALVE – Check for smooth operation, test to ensure blow off set below 2 Bar. (Most engines except Bowman have a blow off between 1 & 1.5 bar).
2. BOILER – Check for poor soldering, solder blobs at joints (indicates previously it has been boiled dry), no deep dents –especially over joins. Rarely the surface will be rough which may indicate dezincification. This usually occurs on end caps which have not been properly annealed after pressing out. Check any level plugs or water gauges do not have stains showing signs of weeping.
3. PIPEWORK – No bad kinks, check joints on exit from boiler & entry to cylinders.

UNDER STEAM

1. SAFETY VALVE – The joint between the valve & boiler should not leak. Minor leakage between the working surfaces is acceptable although it will mean that the engine lacks power.
2. BOILER – There should be no steam or water leaks. Ideally the engine should be steamed in a cool atmosphere when such leaks may easily be detected.
3. PIPEWORK - No leaks at joints sometimes pipework will rub on part of the body or footplate causing a fracture.

GENERALLY

- This is not a mechanical test other than for the boiler.
- There should always be water left in the boiler when the fuel supply is exhausted. However all commercially built engines are designed to achieve this.
- Locomotives should be run in accordance with the manufacturer's instructions when available.