

TECHNICAL BULLETIN

TB NO. 1019
REV. 1

**Subject: Gas Admission Valves on Superior
Turbocharged Engine**

PROBLEMS Superior turbocharged engines have a gas admission valve assembly installed at the intake port of each cylinder head. On several occasions, we discovered leaks at the valve and seating surface, the valve body gaskets or seals.

- A. Leakage past the valve and seating surface will create rich air/fuel mixtures indicated by detonation or high cylinder temperature.
- B. Leakage past the gasket and valve body will create lean air/fuel mixtures indicated by a low cylinder temperature and natural gas in the crankcase.
- C. Leakage past the seals could also create a lean mixture indicated by a low cylinder temperature and gas pressure on the common vent line.

SUGGESTED ACTION: Each gas admission valve assembly should be tested for leaks after it's installed in the cylinder head and just prior to installing the head on the engine. A special adaptor would need to be fabricated and test pressure should be 35 to 40 PSIG.

If the valve fails the pressure test, a common cause for leaks is a "rolled" or "pinched" o-ring that typically hangs-up on o-ring groove in the head. If this groove is sharp, deburr to remove edge and perform pressure test with a new o-ring.

For assistance and additional information on gas admission valves, please contact **EnDyn's** Technical Service Department or your local authorized **PowerParts®** Distributor.

5-20-98

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