

TDI *TURBOTWIN*[™] T50-I Air Starter

APPLICATION VERSATILITY

- Suitable for starting diesel and gas engines up to 80 liters (4,882 CID).
- Engine applications include Caterpillar 3500, C175 Series, Detroit Diesel 16V4000, & Cummins KTA-50 engines.

SIMPLICITY

- Installation requires only a starter relay valve and operation within starter recommended maximum pressure.
- Features modular construction with serviceable parts providing low cost overhaul.

CONTAMINATED SUPPLY

- Configured with the same rugged turbine motor used in the *TURBOTWIN* starters.
- The *TURBOTWIN* motor is highly resistant to damage caused by wet or hard contaminated air/gas.

LOW AIR CONSUMPTION

- The efficient 2 stage turbine motor delivers more torque using less air/gas than previous starter designs.
- Standard pressure 8 nozzle (150 psig), 10 nozzle (120 psig) and low pressure 14 nozzle (100 psig) configurations are available.

NO MAINTENANCE DESIGN and ENVIRONMENTALLY SAFE

- Maintenance free design with grease-packed bearings for the life of the starter.
- No external lubrication required as there are no rubbing parts.
- Eliminates lubricator problems, installation expense, system maintenance, and the messy/hazardous oil film around the starter exhaust as with vane type motors.

HEAVY DUTY CONSTRUCTION

- Constructed from durable, corrosion resistant, and high quality materials.
- Major components are made from high strength aluminum or steel alloy.
- As with all *TURBOTWIN* series starters, there are no rotating plastic parts.

BROAD RANGE of OPERATION

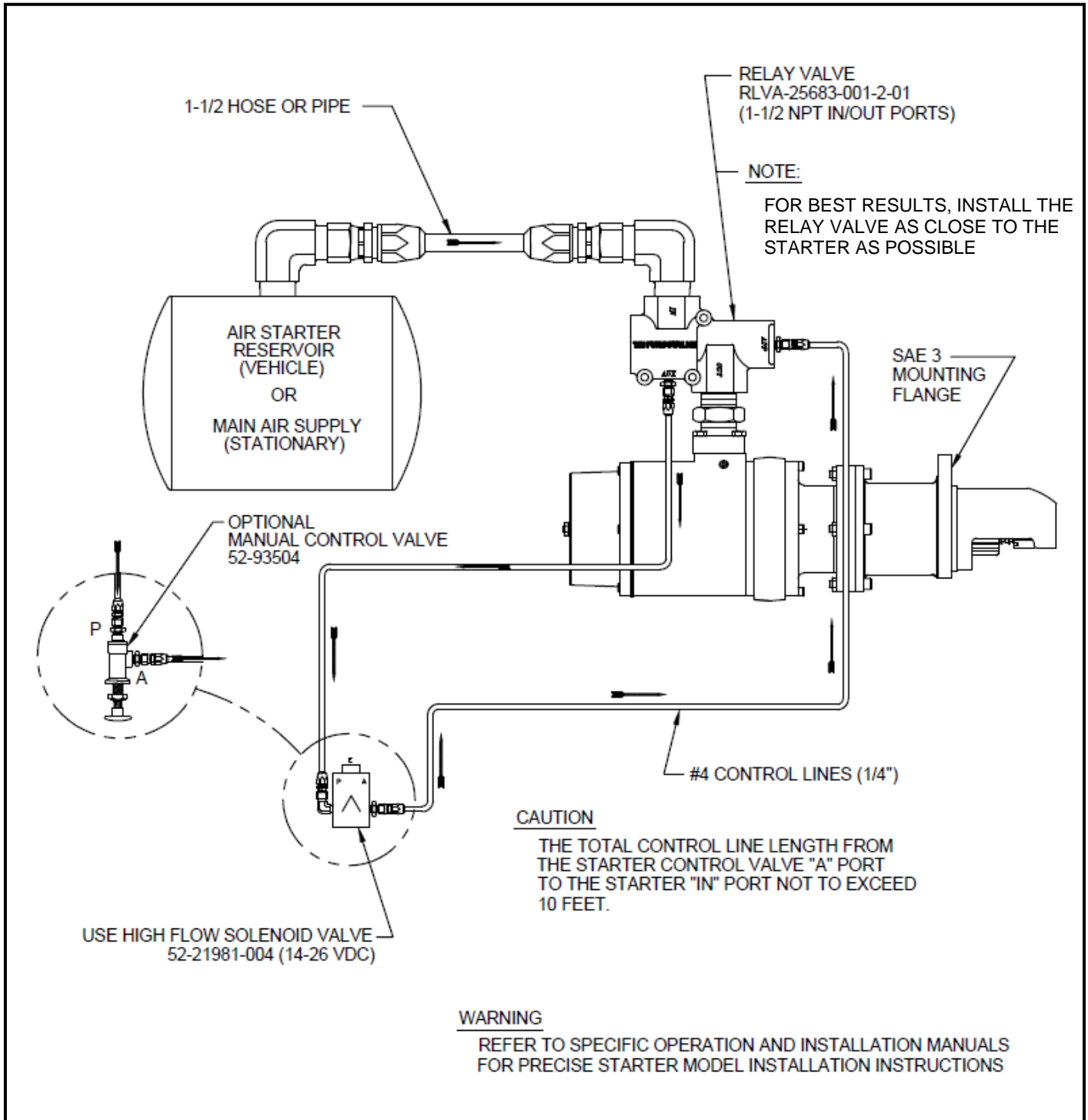
- Lightweight at only 45 lbs. (20.4 Kg)...the T50-I is capable of delivering over 40 HP at 120 psig.
- Operating pressure ranges from 30 psig (2 BAR) to 150 psig (10 BAR).
- Compressed air and natural gas compatible.

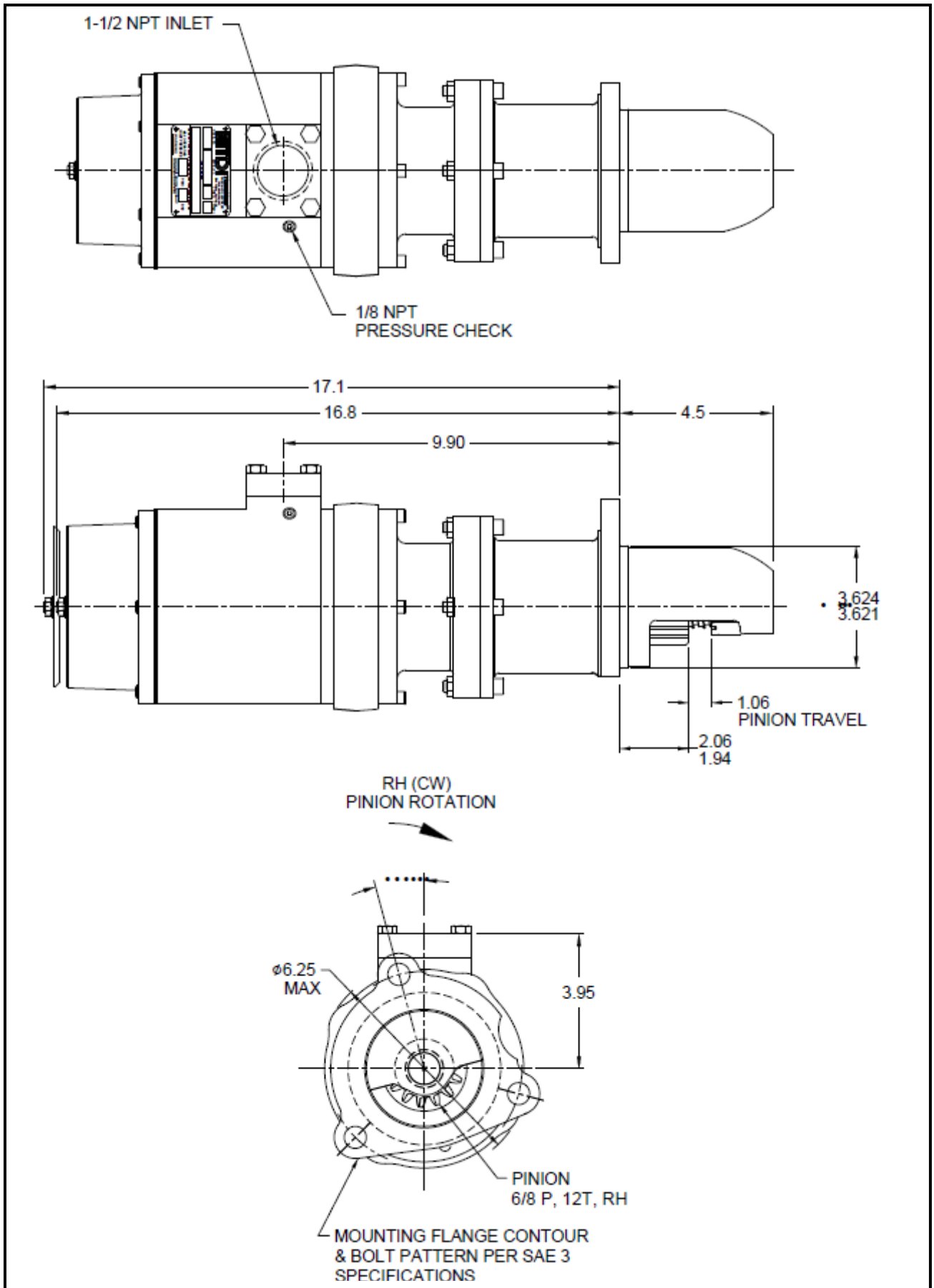
DESCRIPTION of OPERATION

- The high horsepower of the turbine air motor combined with a planetary gear speed reducer results in a very efficient and reliable starter.
- An axial flow turbine motor coupled to a simple planetary gear reduction powers the T50-I inertia drive to crank the engine.

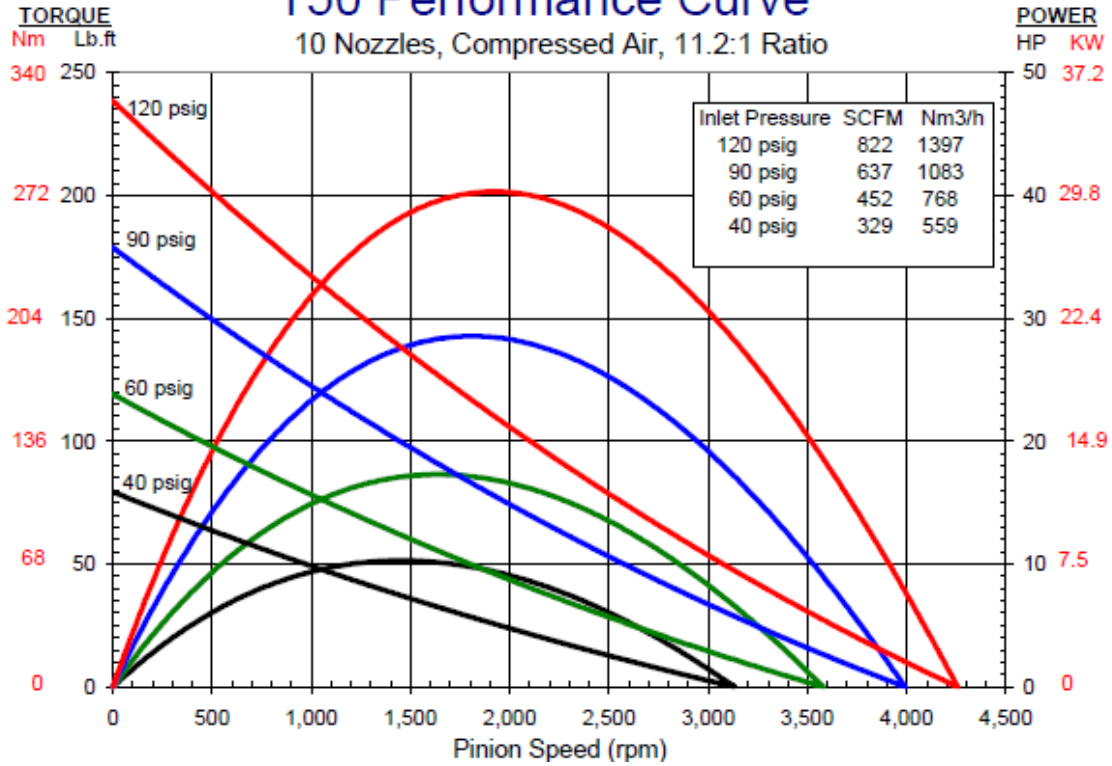
DEVELOPMENT HISTORY

- Tech Development introduced the first turbine technology for starting industrial engines in 1979.
- The T50-I features an innovative and more reliable turbine motor than anything on the market today.
- The *TURBOTWIN* T50-I is the result of TDI's continuing turbine starter design innovations.





T50 Performance Curve



Model: T50 Performance Curve

