



Pressure Test Kit Technical Information Document

- Pressure test kit was developed to solve troublesome pre-turbo circuit leaks in the aging OEM header / crossover system
- Pressure test kit block off plates are CNC cut out of ½" 6000 series aluminum and contoured to match OEM surfaces
- Pressure test kit has been designed as a universal kit to pressure test OEM and aftermarket pre-turbo exhaust systems
- Pressure test kit includes extra o-rings that replace the steel crush rings to seal up OEM Porsche 944 turbo setups
- Wastegate block off plate is designed for OEM Porsche 951 wastegate or Tial F46 wastegate equipped cars
- Block off plates have grooves in them and include an embedded square profile o-rings to seal against flat surface flanges
- When installed correctly, the pressure test kit will hold north of 100psi in the circuit to trace all leaks in the system
- OEM exhaust setups are approaching 35 years of heat cycling and are riddled with both large and small cracks
- OEM systems leaking exhaust gasses may go unnoticed due to the exterior clamshell heat shielding liner
- Cracks in any portion of the exhaust system pre-turbo will have an impact on turbocharger spool characteristics
- Cracks in the exhaust system pre-turbo can lead to post combustion gasses being drawn into the cabin's fresh air system
- Many aftermarket header and crossover systems may also be of poor fabrication quality and can leak, even if brand new
- M44 Performance pressure test kit has been used successfully to uncover fabrication errors in newly made systems
- Fabrication errors such as non-fully welded merge collectors can impact the turbocharger's spool curve due to leaks
- Fabrication errors such as flanges warped from improper heat sink setups with thin metal jigs can also result in leaks
- Testing the pre turbo exhaust system on a 944 turbo is the only way to ensure the system does not leak
- Pressure test kit uses the wastegate block off plate as the pressure inlet with a 3/8 NPT port (air fitting size) pre-tapped
- 3/8 NPT bung is tapped slightly small to ensure all fittings will fit, port may need further tapping to fit larger spec fittings
- An air fitting hose barb can be installed with Teflon tape or Teflon paste to allow a shop air compressor hose to connect
- Shop air compressor regulator can then be turned down 65-80 psi (or less if the system leaks badly) to pressurize setup
- A continuous feed of air from a shop air compressor is usually recommended due to how bad many used system leak
- Do not exceed 100psi during the pressure test or the square profile o-rings can begin to leak at the face of the flanges