

INNERDUCT PRESSURIZATION TEST KIT OPERATION MANUAL



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REVISION HISTORY

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Safety Instruction

- Read and understand all operating and safety procedures before using this equipment.
- Wear personal protective equipment: hard hat, safety glasses, safety shoes and leather gloves.
- Follow all standard manhole or trench safety procedures, including work area protection and gas detection.
- Be aware of all utility lines in the immediate area and do not work around live circuits.
- Stay out of receiving manhole or trench while pressure testing kit is in use.
- There is a danger of flying debris and loud noise.
- Ensure no personnel are in the destination manhole or trench during the blowing operation. Severe personal injury could result.



This equipment should be used only by personnel who have been given the appropriate training and who are competent to use it. These instructions are to be made available to operators of this equipment at all times. Failure to observe these safety instructions could result in serious personal injury and/or property damage.



Pressure Testing Kits and Components

P/N 89641

1-1/4" Innerduct Pressurizing Kit

P/N 89642

1-1/2" Innerduct Pressurizing Kit

Kit comprises of:

- Pressure valve assembly
- Innerduct Seal-Off
- End Plug Kit for sealing the opposite end of the innerduct
- Carry Case

Create your own kit, using the components below and the Carry Case



P/N 89643 Pressure Valve Assembly



Innerduct Seal-Off

P/N	Description
89804	1" Innerduct Seal-off
89805	1-1/4" Innerduct Seal-off
89806	1-1/2" Innerduct Seal-off
89807	2" Innerduct Seal-off





Innerduct End Plug Pulling Grip (Catcher) Teflon sealing tape Manual

P/N	Description
89821	1" Innerduct End Plug Kit
89822	1-1/4" Innerduct End Plug Kit
89823	1-1/2" Innerduct End Plug Kit
89824	2" Innerduct End Plug Kit



P/N 89820 Carry Case



Pressure Test Kit Operating Instructions

Test Requirements

- Couplings must be properly sized and fit securely.
- Duct ends must be cut off squarely and deburred.
- Duct must be fully seated into the coupler.
- Couplers should be installed in a straight section of innerduct
- Compressor must generate between 100 and 150 psi (6.9 and 10.3 bar).

1. Select the correct Seal-Off, Innerduct End Plug Kit according to the following:

1 in. Duct	1 1/4 in. Duct	1 1/2 in. Duct	2 in. Duct		
89804 Seal-off	89805 Seal-off	89806 Seal-off	89807 Seal-off		
89821 End Plug Kit	89821 End Plug Kit	89821 End Plug Kit	89821 End Plug Kit		
Pressure Valve Typical Setup					
Innerduct End Plug (see below)	I		Air Coupling		

 Securely screw the Seal-Off into one end of the innerduct to be pressure tested. If excessive leakage at the Seal-off occurs, add a couple of wraps of Teflon tape to the threads of the Seal-Off.

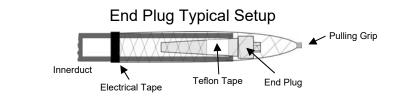
Pressure Release Valve

- 3. Connect the Pressure Valve Assembly to the Seal-Off using the quick couplers.
- 4. Close the Air Control and Pressure Relief valves on the Pressure Valve Assembly.
- 5. Connect the air compressor to the Control Valve Assembly with a pneumatic hose.



WARNING: Always use safety clips on pneumatic hose couplings. Severe personal injury could result.

- 6. Securely screw the Innerduct end plug into the opposite end of the innerduct to be pressure tested. If excessive leakage at the End Plug occurs, add a couple of wraps of Teflon tape to the threads.
- 7. Install the Pulling Grip over the End Plug and the end of the innerduct to be pressure tested. Secure with electrical tape to the innerduct.





To Compressor



WARNING: Pulling Grip must be installed over Innerduct End Plug and innerduct to prevent accidental discharge of compressed air. Severe personal injury could result.

8. Inform all crew members that the innerduct is about to be pressurized.

WARNING: Ensure no personnel are in the destination manhole or trench during the pressure testing operation. Severe personal injury could result.

9. Slowly open the Air Control Valve. Pressurize the innerduct to between 100 and 120 psi (6.9-8.3 bar). Do not exceed 120 psi.

WARNING: Forced air creates flying debris. Always wear personal protective equipment. Severe personal injury could result.

- 10. Prove the duct integrity:
 - (a) Close the Pressure Valve.
 - (b) Wait 2 minutes; read pressure on gauge.
 - (c) Duct must not lose more than 20 psi (1.4 bar) over this 2 minute period.
- 11. After reading the innerduct's internal air pressure, relieve the air pressure by slowly opening the Pressure Release Valve.



WARNING: The pressure must be relieved from the innerduct before removing the Seal-Off, Pressure Valve Assembly, Pulling Grip or End Plug. Severe personal injury could result.

If the innerduct does not hold the required pressure, check the entire duct run for leaks and repair them.

Repeat the pressure test until all leaks are found and repaired and the system holds the required pressure.

All leaks must be located and repaired before the Fiber Optic Cable Blower is used to install fiber optic cable into this section of innerduct.



WARNING: The Pulling Grip and Innerduct End Plug must be removed from the far end of the innerduct before starting the cable blowing process. Damage to the Fiber Optic Cable or severe personal injury could result.



