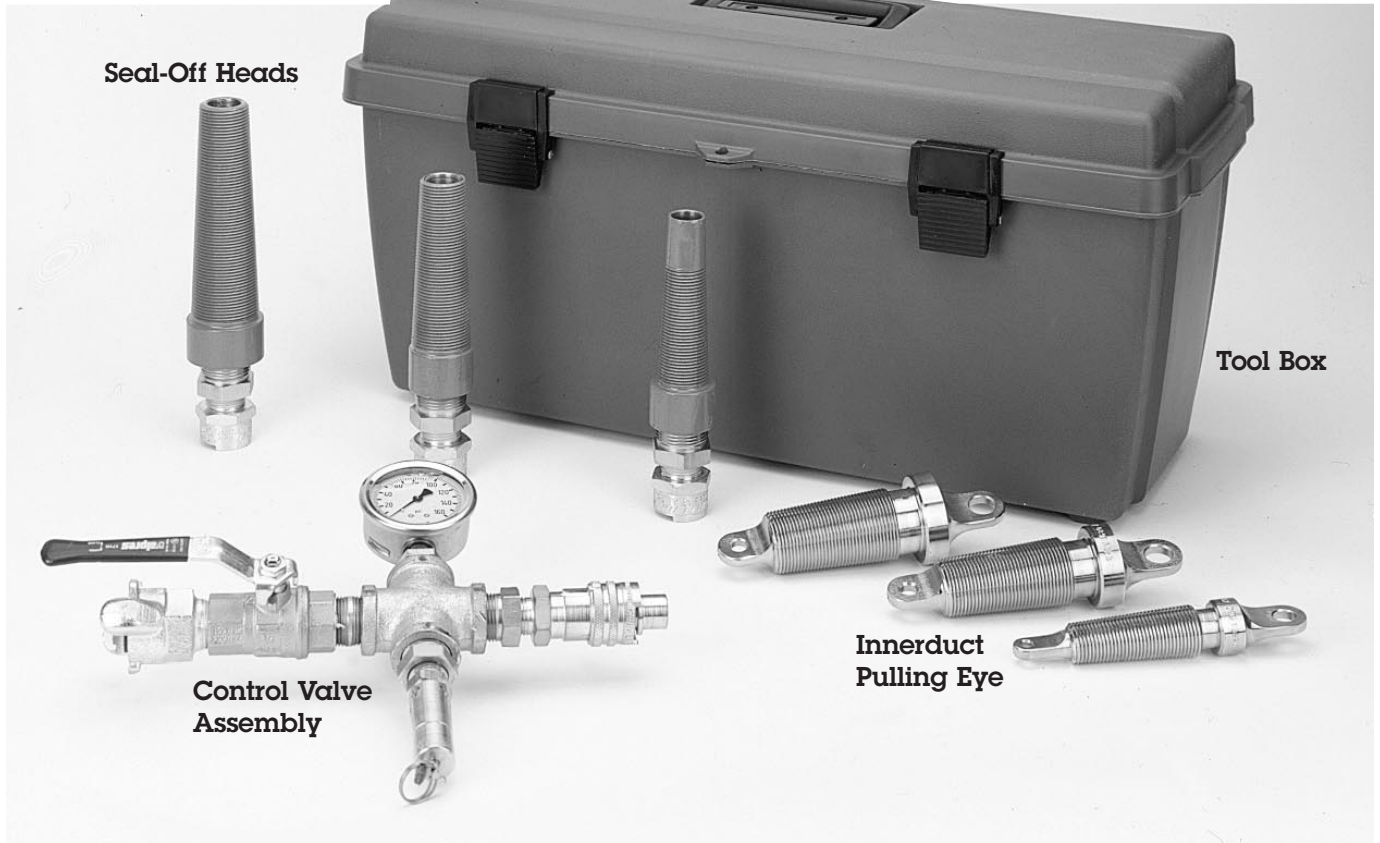


# Innerduct Pressure Test Kit



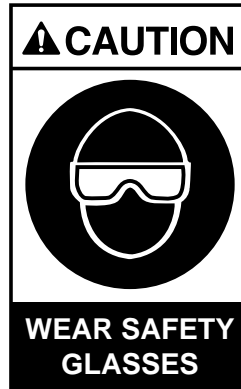
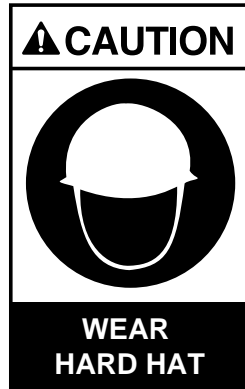
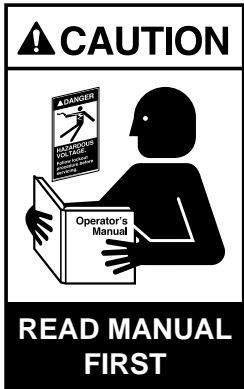
CONDEX

# Important Safety Notice

Read and understand all procedure and safety instructions before using the Condux Innerduct Pressure Test Kit. Observe all safety information on these pages and note specific safety requirements as explained by procedures called out in this manual. Failure to follow these instructions could result in serious personal injury or death.

## ADVERTENCIA:

Favor de leer y comprender todas las instrucciones de operación y seguridad antes de usar la máquina. Si Ud. no comprende las instrucciones favor de consultarle a su jefe.



**Save this user's guide for future reference.**



If you have questions on:

**SAFETY - OPERATIONS - APPLICATIONS**

CALL 1-800-533-2077

# Safe Operating Practices

Read and understand all procedure and safety instruction before using the Condux Innerduct Pressure Test Kit. Observe all safety information on these pages and note specific safety requirements as explained by procedures called out in this manual. Failure to follow these instructions could result in serious personal injury or death.

# 1.

## A. WORK AREA SAFETY

- Wear personal protective equipment: hard hat, safety glasses, safety shoes and leather work 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 test kit is in use. There is a danger of flying debris and loud noise.
- Users should not tamper with pressure relief valve.

## B. PNEUMATIC DEVICES

The Condux Innerduct Pressure Test Kit is a pneumatic device, using pressurized air to pressure test the innerduct. Please observe all standard safety precautions required when working with pressurized air.

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



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



# Pretest Requirements

## A. INNERDUCT COUPLING REQUIREMENTS

- Must withstand a minimum pressure of 150 psi (10.3 bar).
- Must withstand axial loading and vibrations.
- Must be screw type, compression type or fusion type.
- Sight holes on screw type are not recommended. If they exist, they must be fully sealed for 150 psi (10.3 bar).
- 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.

# 2.

## B. AIR COMPRESSOR REQUIREMENTS

- Compressor must generate between 100 and 150 psi (6.9 and 10.3 bar).
- Required flow for pressure testing: 125 to 175 CFM (3.5 to 5.0 m<sup>3</sup>/min).  
**Note:** Fiber Optic Cable Blower requires a 175 to 375 CFM (5.0 to 10.6 m<sup>3</sup>/min) compressor. See cable blower manual for details.
- Air hose fittings need to be compatible with Dixon “Air King” universal couplings.

# Unpacking the Innerduct Pressure Test Kit

## 3.

### A. PRESSURE TEST KIT COMPONENTS

#### 08761457 Complete Pressure Test Kit

*consisting of:*

08761458	Test Kit Control Valve Assembly
08034315	Seal-Off Head for 1.00" SDR 11 & 13.5 Innerduct
08034316	Seal-Off Head for 1.25" SDR 11 & 13.5 Innerduct
08034317	Seal-Off Head for 1.50" SDR 11 & 13.5 Innerduct
08913320	Pulling Eye for 1.00" SDR 11 & 13.5 Innerduct
08913323	Pulling Eye for 1.25" SDR 11 & 13.5 Innerduct
08913327	Pulling Eye for 1.50" SDR 11 & 13.5 Innerduct
08643137	Pulling Grip for 1.00" SDR 11 & 13.5 Innerduct
08643149	Pulling Grip for 1.25" & 1.50" SDR 11 & 13.5 Innerduct
02276000	Tool Box
08761459	Pressure Test Kit Manual

### B. OTHER COMPONENTS AVAILABLE

08034318	Seal-Off Head for 2.00" SDR 11 & 13.5 Innerduct
08913328	Pulling Eye for 2.00" SDR 11 & 13.5 Innerduct
08643155	Pulling Grip for 2.00" SDR 11 & 13.5 Innerduct

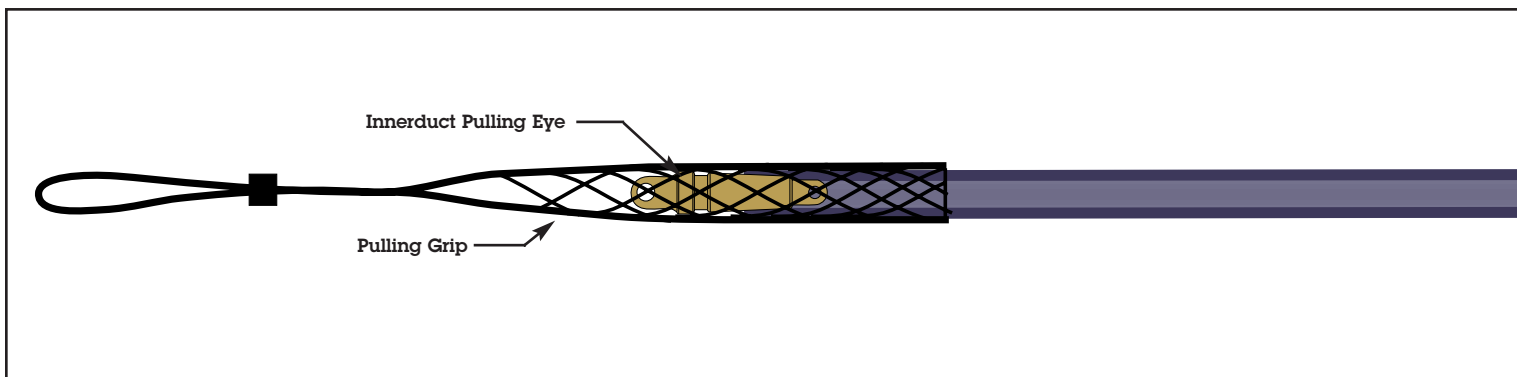


Figure 1. Typical Set up of Seal-Off Head, Innerduct Pulling Eye and Pulling Grip.

# Pressure Test Kit Operating Instructions

# 4.

The duct system must be able to withstand and hold 150 psi (10.3 bar) for the Fiber Optic Cable Blower to work properly. This **Pressure Test Kit** will allow the innerduct to be pressure tested before setting up the complete Fiber Optic Cable Blower.

1. Select the correct **Seal-Off Head**, **Innerduct Pulling Eye** and **Pulling Grip** according to the following:

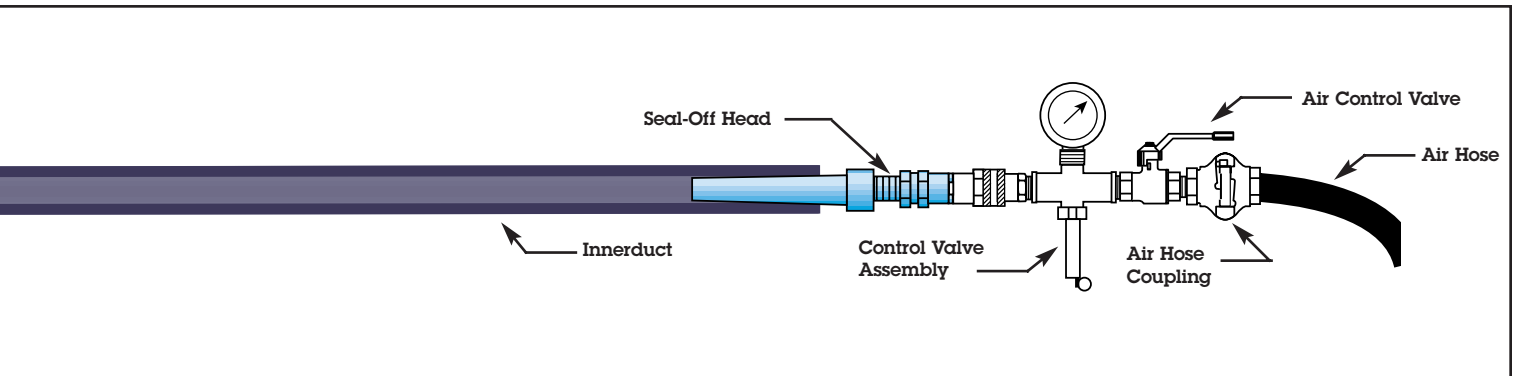
1.00" SDR 11 & 13.5 Innerduct		1.25" SDR 11 & 13.5 Innerduct	
08034315	Seal-Off Head	08034316	Seal-Off Head
08913320	Innerduct Pulling Eye	08913323	Innerduct Pulling Eye
08643137	Pulling Grip	08643149	Pulling Grip
1.50" SDR 11 & 13.5 Innerduct		2.00" SDR 11 & 13.5 Innerduct	
08034317	Seal-Off Head	08034318	Seal-Off Head
08913327	Innerduct Pulling Eye	08913328	Innerduct Pulling Eye
08643149	Pulling Grip	08643155	Pulling Grip

2. Securely screw the **Seal-Off Head** into one end of the innerduct to be pressure tested.
3. Connect the **Control Valve Assembly** to the **Seal-Off Head** using the quick couplers.
4. Close the **Air Control Valve** on the **Control 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 Pulling Eye** into the opposite end of the innerduct to be pressure tested. This innerduct pulling eye will act as a plug in the end of the innerduct.
7. Install the **Pulling Grip** over the **Innerduct Pulling Eye** and the end of the innerduct to be pressure tested.

**!WARNING: Pulling Grip must be installed over Innerduct Pulling Eye 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 blowing 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).

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

10. Prove the duct integrity:

- Close the **Air Control Valve**.
- Wait 2 minutes; read pressure on gauge.
- *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 pulling open the **Air Pressure Relief Valve**.

12. An alternate method of relieving air pressure is as follows:

- Close the **Air Control Valve** on the **Control Valve Assembly**.
- Shut down the air compressor.
- Relieve the pressure in the air compressor storage tank and in the air line from the air compressor to the **Control Valve Assembly**.
- Disconnect the air line from the **Control Valve Assembly**.
- Open the **Air Control Valve** on the **Control Valve Assembly** to relieve the pressure in the innerduct.



**!WARNING: The pressure must be relieved from the innerduct before removing the Seal-Off Head, Control Valve Assembly, Pulling Grip or Innerduct Pulling Eye. Severe personal injury could result.**

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

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

**!WARNING: The Pulling Grip and Innerduct Pulling Eye 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.**

# Warranty Information

Condux International, Inc. extends the following warranty to the original purchaser of these goods for use, subject to the qualifications indicated:

Condux International, Incorporated warrants to the original purchaser for use that the goods or any component thereof manufactured by Condux International will be free from defects in workmanship for the period of one year from the date of purchase, provided such goods are installed, maintained, and used in accordance with Condux's written instructions.

Components not manufactured by Condux International but used within the assembly provided by Condux International are subject to the warranty period as specified by the individual manufacturer of said component, provided such goods are installed, maintained and used in accordance with Condux's and the original manufacturer's written instructions.

Condux's sole liability and the purchaser's sole remedy for a failure of goods under this limited warranty, and for any and all claims arising out of the purchase and use of the goods, shall be limited to the repair or replacement of the goods that do not conform to this warranty.

To obtain repair or replacement service under the limited warranty, the purchaser must contact the factory for a Return Material Authorization (RMA). Once obtained, send the RMA along with the defective part or goods, transportation prepaid, to:

Condux International, Inc.  
145 Kingswood Road  
Mankato, MN 56001 USA

**THERE ARE NO EXPRESS WARRANTIES COVERING THESE GOODS OTHER THAN AS SET FORTH ABOVE. THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF PURCHASE.**

**CONDUX ASSUMES NO LIABILITY IN CONNECTION WITH THE INSTALLATION OR USE OF THIS PRODUCT, EXCEPT AS STATED IN THIS LIMITED WARRANTY. CONDUX WILL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**





**Condux International, Inc.**

---

P.O. Box 247 • 145 Kingswood Road, Mankato, MN 56002-0247 USA

1-507-387-6576 • 1-800-533-2077 • FAX 1-507-387-1442

Internet: <http://www.condux.com>

© Copyright 1998, Condux International, Inc.

Printed in USA

Literature Part Number: 08761459

Revision Number: 2.1