

# Micro Duct Installation Kit



# Important Safety Notice

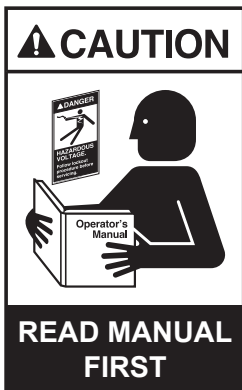
Read and understand all procedure and safety instructions before using this product. Observe all safety information on this page and note specific safety requirements as explained by procedures called out in this manual. Failure to follow these instructions could result in serious personal injury or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

Save this user guide for future reference.

## AVISO IMPORTANTE DE SEGURIDAD

Leer y comprender todo el procedimiento y las instrucciones de seguridad antes de usar este producto. Observe toda la información de seguridad en esta página y tenga en cuenta los requisitos específicos de seguridad según lo explicado por los procedimientos se indica en este manual. El incumplimiento de estas instrucciones puede resultar en lesiones personales graves o la muerte.

Guarde esta guía del usuario para futuras consultas.



## COMMUNICATIONS WITH THE MANUFACTURER

For information related to the machine (use, maintenance, spare parts) always-state model number, manufacturing Year and Order. This date can be found on the parts identification label

### Manufacturer:

Condux International, Inc  
145 Kingswood Drive, PO Box 247  
Mankato, MN 56002-0247  
1-507-387-6576 Fax 1-507-387-1442  
E-mail: [cndxinfo@condux.com](mailto:cndxinfo@condux.com)



If you have questions on:  
**SAFETY - OPERATIONS - APPLICATIONS**  
CALL 1-800-533-2077

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# General Information

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## 1.

The Micro Duct Installation Kit is designed to be used with the Condux LW Cable Blower.

The Micro Duct Kit allows multiple Micro Ducts of the same size to be installed simultaneously into one larger duct, by using a combination of pushing from the tracks/belts and air to help carry the ducts.

The Micro Ducts are pressurized to help reduce crushing during installation.

### **GENERAL MACHINE USE**

- a. Only qualified operators should use the machine. The operator should only be the person who received qualified training from the product owning company or trained by the manufacturer.
- b. Machine must only be used for the work it was designed for.
- c. Machine is not to be used with unauthorized personnel on the job site.
- d. Should there be any doubt concerning use, functioning, maintenance or anything else, please contact the factory or factory representative.

### **OPERATOR QUALIFICATIONS**

- a. Operator must know the required safety directives to run the machine that are pertinent to the country where it is being used.
- b. Operator in charge of the machine and installation project must be appropriately dressed, avoiding large clothes, hanging jewelry or whatever might become entangled in the moving parts.
- c. Operator must also wear the necessary protective equipment such as gloves, boots, helmet, etc.
- d. Operator must carefully follow all advisements contained in the instruction manual or on the machine.
- e. Operator must have work area kept clean of obstacles that might inhibit a safe working area.

### **MAINTENANCE QUALIFICATION**

- a. All of the machine maintenance must be carried out with the machine on a level surface and not attached to any form of power source: pneumatic, nor hydraulic.
- b. Authorized and trained personnel must do all maintenance operations. Trained personnel are defined as people who have received qualified training from the using company or from the manufacturer.

# Safe Operating Practices

Read and understand all procedures and safety instructions before using the Micro Duct Installation Kit. Observe all safety information on this page 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, property damage or death.

## 2.

### A. WORK AREA SAFETY

1. Wear personal protective equipment: hard hat, safety glasses, safety shoes, and leather work gloves.
2. The safe operation of this equipment requires that the operators be on stable footing.
3. Stay clear of cables or lines under tension.
4. Stay clear of pressurized line and conduit.
5. Stay out of manhole while blower is in use.
6. Use the blower only for its intended purpose. Do not use the tractor drive without the air block to push or pull cable.
7. Do not place cable reel too close to unit. Place the reel far enough away from the unit to ensure proper control.
8. Do not tamper with relief valves or pressure reducing valves.
9. Place cable grip on end of conduit to catch cable carrier and cable.
10. Keep hands away from tractor drive while blower is in operation.

### B. HYDRAULIC DEVICES

Escaping fluids under pressure can penetrate the skin and cause serious personal injury. Observe the following precautions to avoid hydraulic hazards:

1. Tighten all connections before applying pressure. Relieve pressure when connecting or disconnecting hoses when servicing the unit.
2. Check for leaks with a piece of cardboard. Do not use your hands!
3. Do not exceed working pressure of hydraulic hoses.
4. Visually inspect hoses regularly and replace if damaged.

### C. PNEUMATIC DEVICES

The Micro Duct Installation Kit is a pneumatic device, using pressurized air to project cable at high velocities. Please observe the following precautions when operating the blower:

1. Forced air creates flying debris. Always wear personal protective equipment. Severe personal injury could result.
2. Ensure no personnel are in the destination access vault during the blowing operation. Severe personal injury could result.

# Belt Replacement

## 3.

**A. Belt Removal Instructions** - Upper and Lower Instructions are identical.

1. Remove screw and washer (Figure 1)
2. Unscrew handle completely (Figure 2)

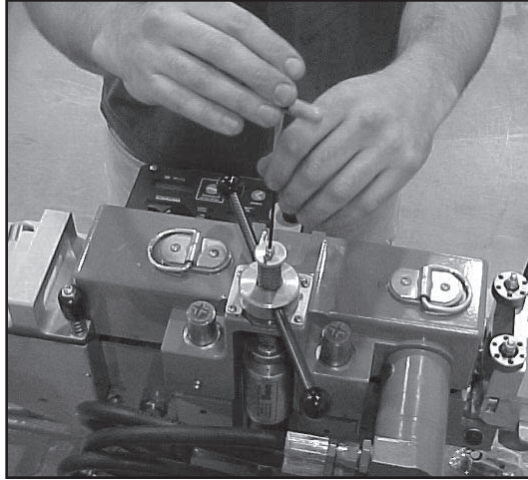


Figure 1

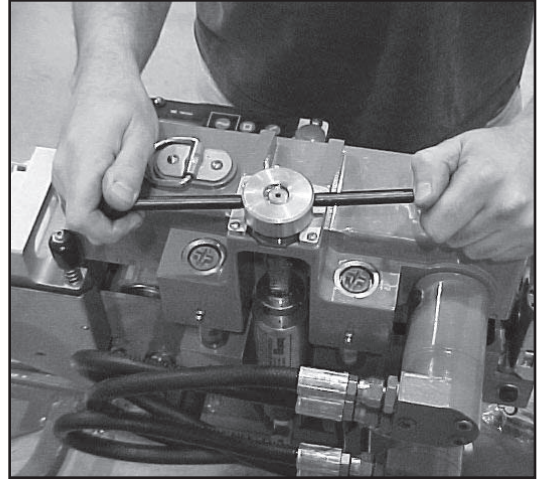


Figure 2

3. Remove top track assembly (Figure 3)
4. Remove two idler track retaining screws (Figure 4)

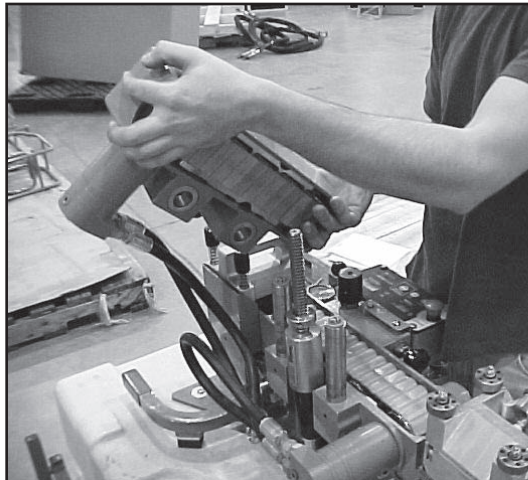


Figure 3

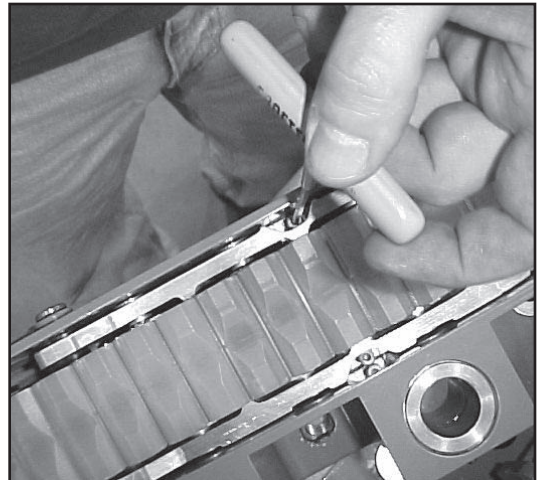
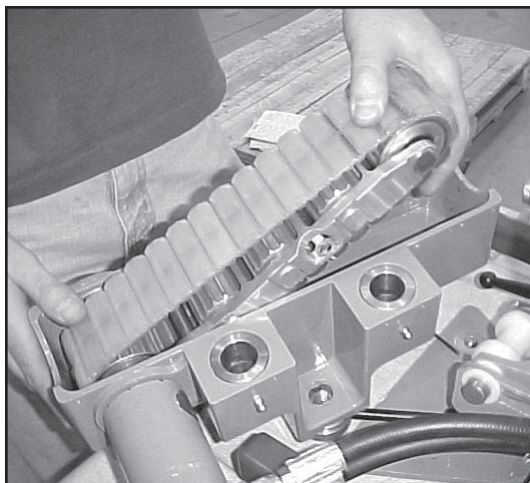
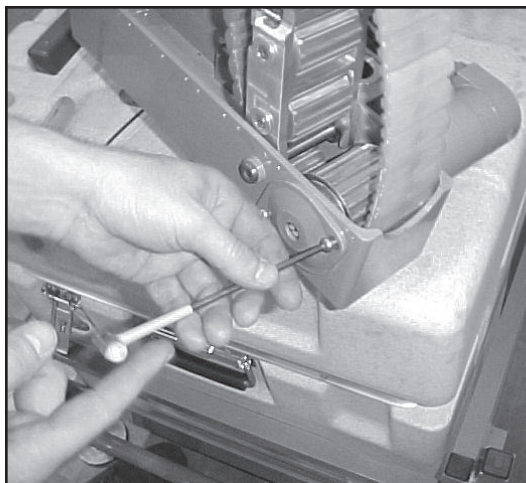


Figure 4

5. Rotate idler track assembly up (Figure 5)
6. Remove two screws from bearing cap (Figure 6)



**Figure 5**

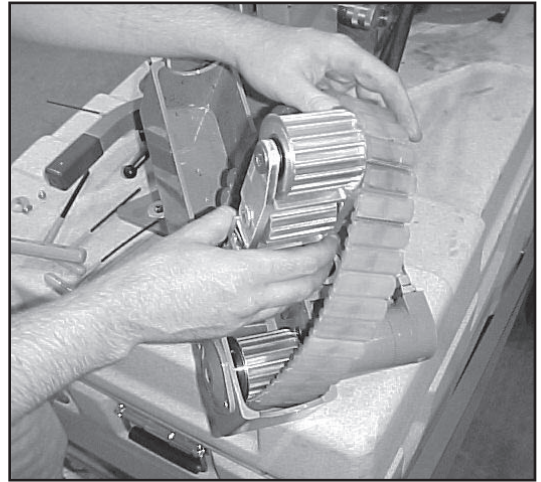


**Figure 6**

7. Loosen idler pivot shaft (Figure 7)
8. Slide track free from track idler assembly (Figure 8)

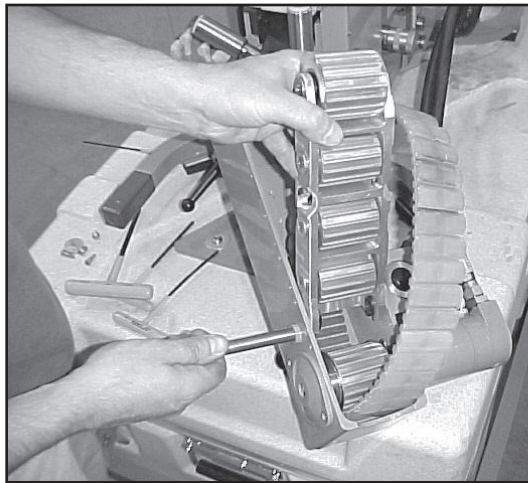


**Figure 7**

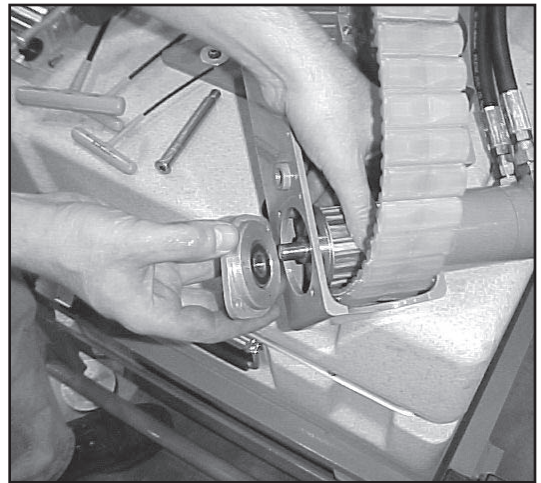


**Figure 8**

9. Remove idler pivot shaft and track idler assembly (Figure 9)
10. Remove bearing cap (Figure 10)



**Figure 9**



**Figure 10**



11. Slide drive sprocket out through hole (Figure 11)

12. Slide track past motor drive shaft and out (Figure 12)

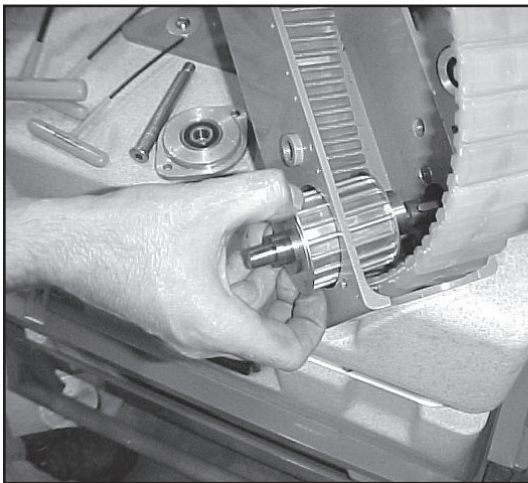


Figure 11

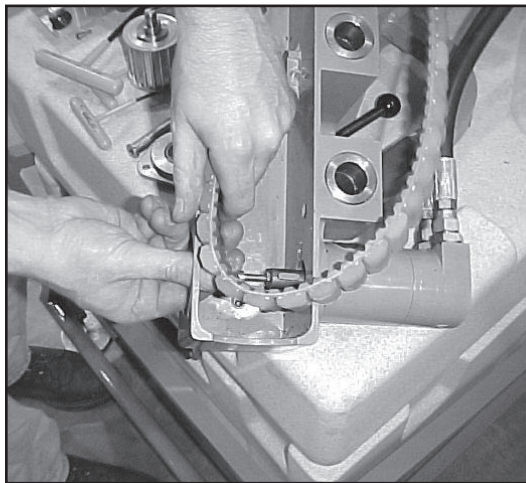


Figure 12

### B. Belt Installation Instructions - Upper and Lower Belt.

Verify which Micro Duct Kit is being installed and then review correct belt configuration from diagram below. Left View (Figure 13) is for the 10/8 Micro Duct and the Right view (Figure 14) is for the 12/10 and the 12.7 Micro Duct. NOTE upper and lower belt orientation.

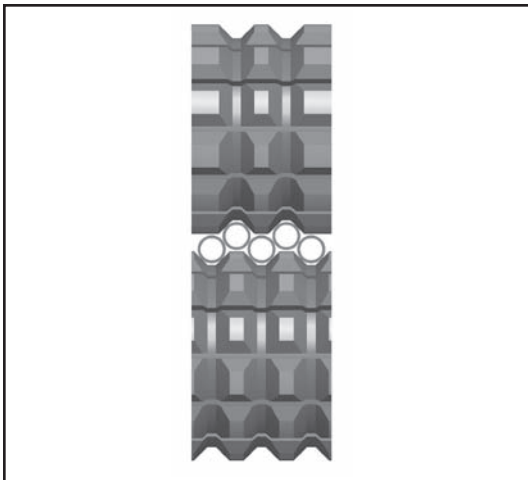


Figure 13

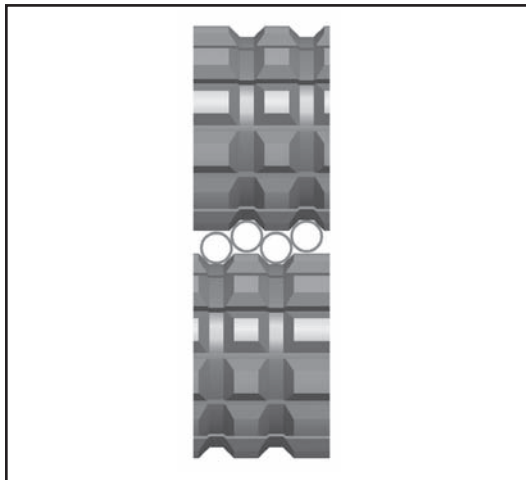


Figure 14

1. Slide track past motor drive shaft (Figure 15)
2. Replace pivot screw and bushings. NOTE: correct orientation of bushings (Figure 16)

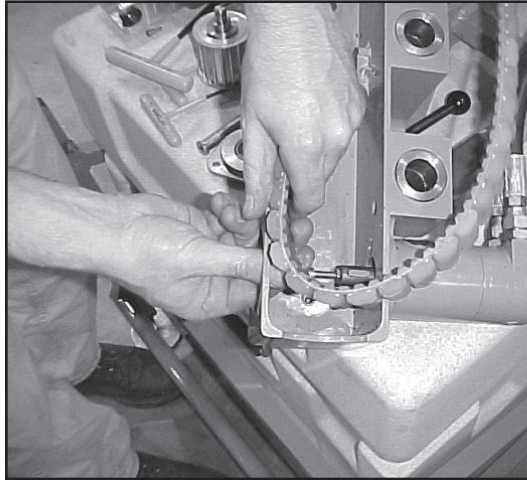


Figure 15

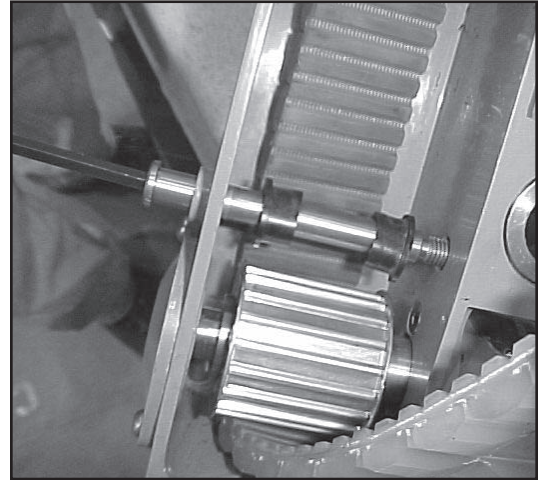


Figure 16



Figure 17

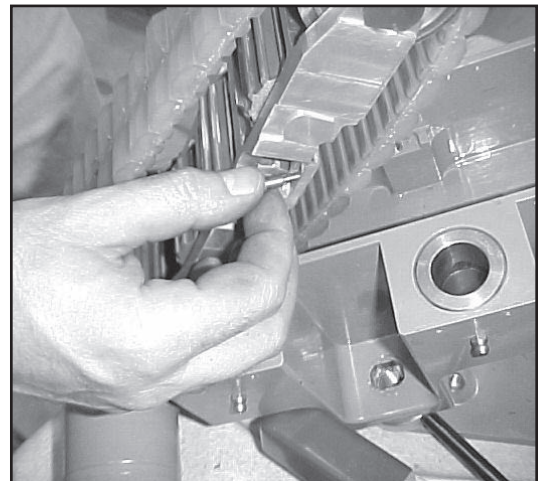


Figure 18

3. Replace track idler assembly (Figure 17)
4. Insert two track assembly retaining screws (Figure 18)
5. Rotate track into housing (Figure 19)

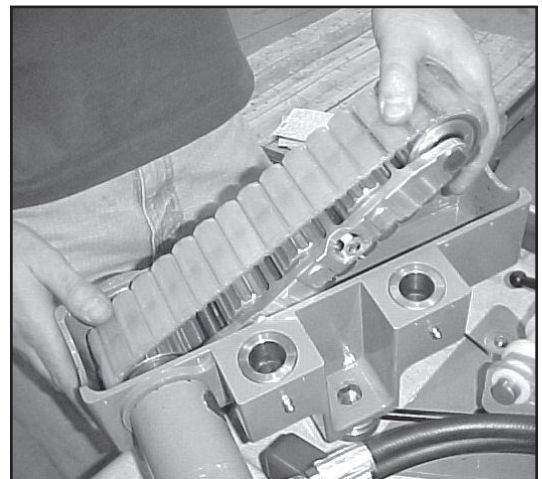
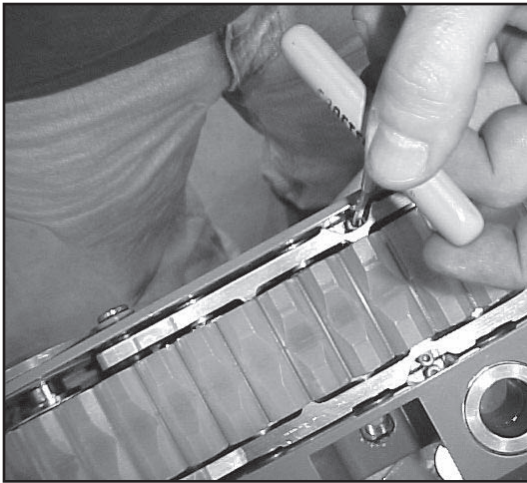


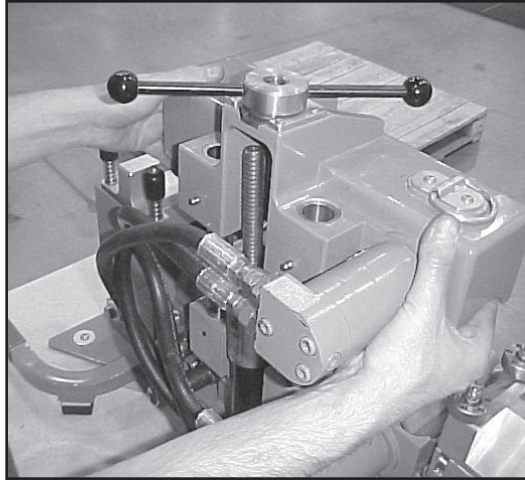
Figure 19

6. Tighten two idler assembly retaining screws (Figure 20)

7. Replace housing onto guide posts (Figure 21)



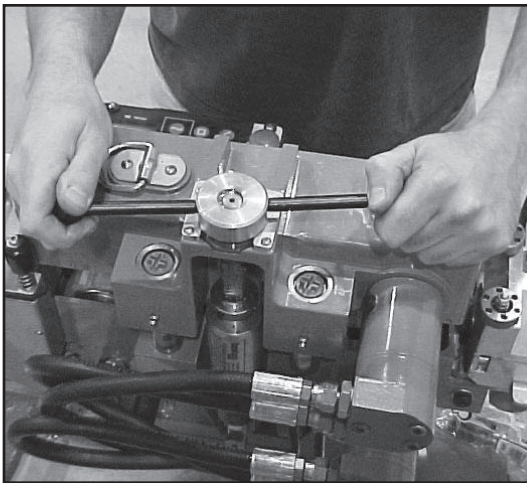
**Figure 20**



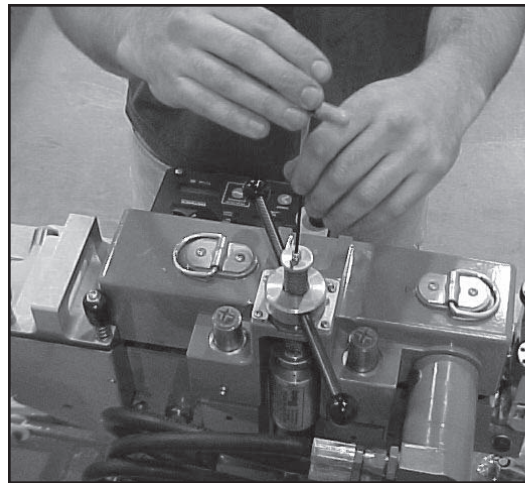
**Figure 21**

8. Replace handle (Figure 22)

9. Replace washer and screw (Figure 23)



**Figure 22**



**Figure 23**

# Machine Set-up

## 4.

- A. Install Rear Guide on the back of the blower with (2) pins provided (Figure 24)
- B. Install Duct Guide in Rear Guide Bracket (Figure 25)

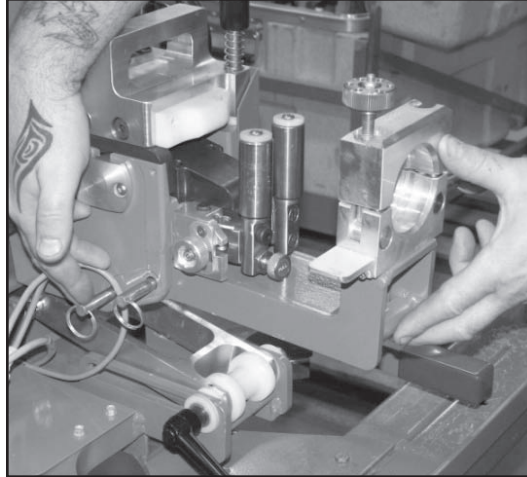


Figure 24

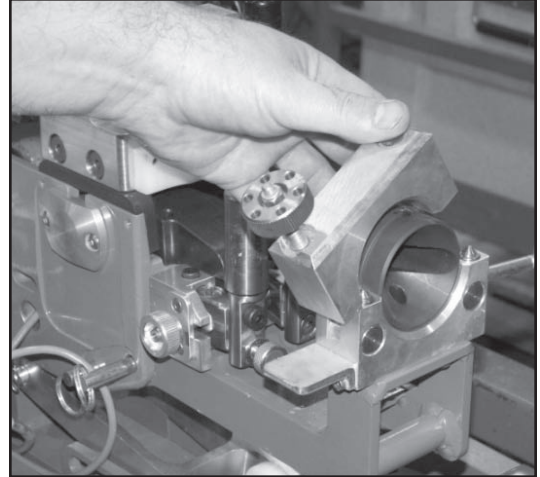


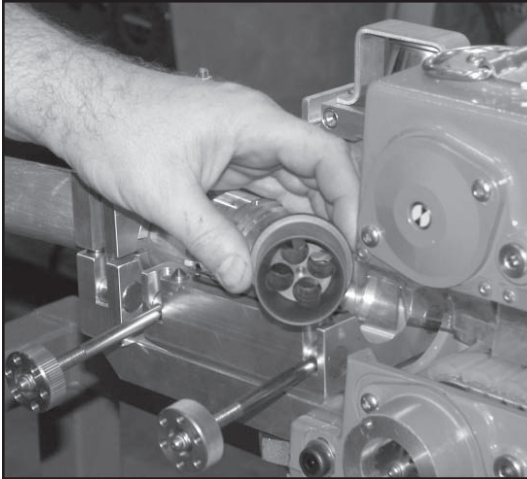
Figure 25

- C. Plug any holes in the Venturi that will not be used with the included Venturi Plugs (Figure 26)

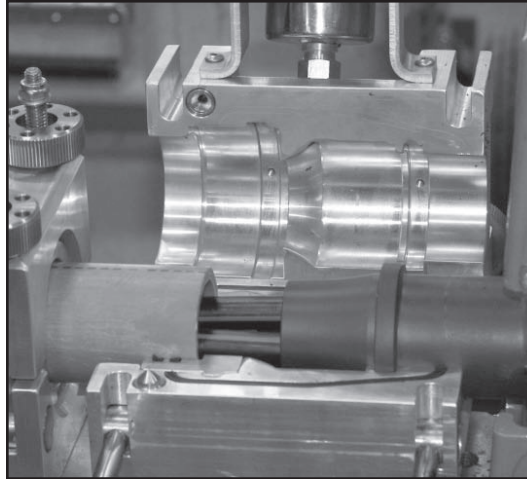


Figure 26

- D. Install Venturi in Air block on the front end of blower. Insert duct thru Venturi. (Figure 27 and 28)

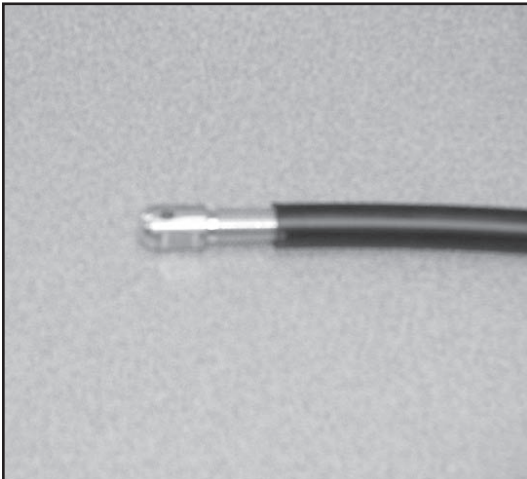


**Figure 27**



**Figure 28**

- E. Install Duct Cap into the exposed end of Micro Duct (Figure 29)  
F. Install Duct Fill Plug into the beginning end (inside end) of Micro Duct (Figure 30)



**Figure 29**



**Figure 30**



G. Pressurize the Micro Duct using the Micro Duct Pressure Gauge (or similar device) to 100psi. This will help eliminate the duct from crushing during the installation process. (Figure 31 and 32)

**CAUTION: Do Not Over Inflate or Duct May Burst**



Figure 31



Figure 32

H. Rotate Venturi for best duct lay in the tracks for the number of Micro Duct being installed. (Figure 33)

I. Lower top Housing and arrange Micro Duct according to the track configuration. You can now start pushing and blowing the Micro Duct. (Figure 34)

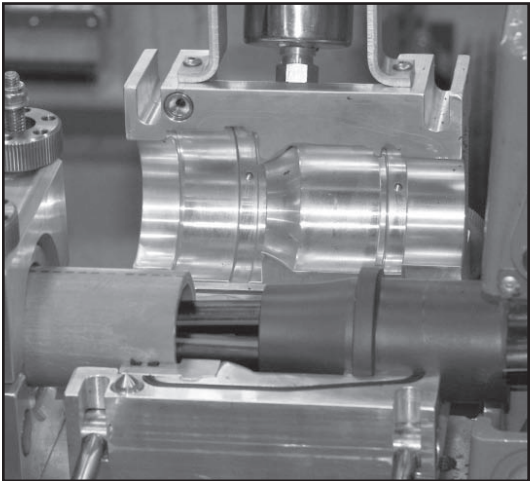


Figure 33

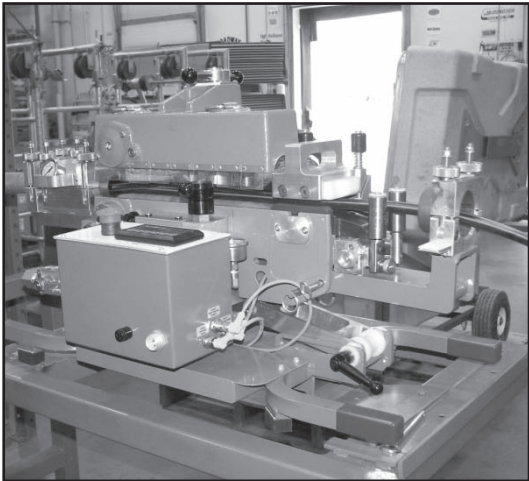
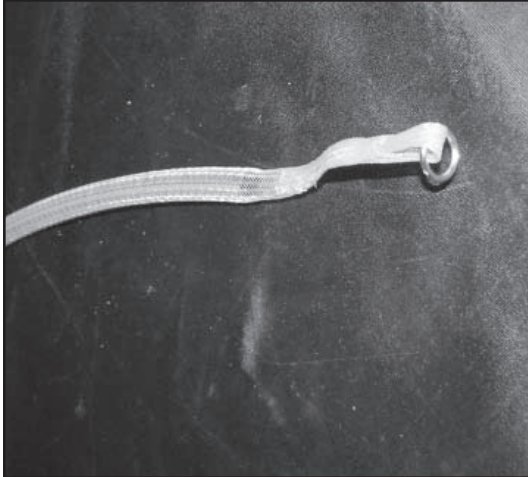
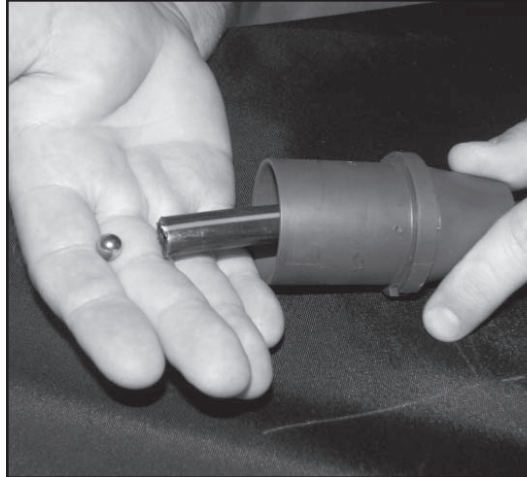


Figure 34

- J. Prior to installing any cable into Micro Duct it should be proofed for integrity using Air, Cable Grip and Proofing Balls. (Figure 35 and 36)



**Figure 35**



**Figure 36**

# Kits/Parts

# 5.

Part Number	Description	
<b>08780710</b>	<b>10/08 MICRO DUCT KIT</b>	
	<i>Includes The Following:</i>	
08645705	Cable Grip- .13- .56- 28 30#	1
08780720	Belt,Track-Lower 10/08Md	1
08780721	Belt,Track-Upper 10/08Md	1
08780724	Guide,Rear Microduct- Assy	1
08780739	Plug,Venture Assy 10/08Md (4 Pk)	1
08780740	Plug,Duct-Fill Assy 10/08Md (5 Pk)	1
08780741	Plug,Duct-Cap Assy 10/08Md (5 Pk)	1
08780742	Guide,Rear Microduct 10/08Md	1
08780748	Balls,Proofing 10/08 Microduct	1
08780735	Venturi,10/08 Microduct	1
<b>08780712</b>	<b>12/10 MICRO DUCT KIT</b>	
	<i>Includes The Following:</i>	
08645705	Cable Grip- .13- .56- 28 30#	1
08780722	Belt,Track-12/10Md	2
08780724	Guide,Rear Microduct- Assy	1
08780725	Venturi,12/10 Microduct	1
08780729	Plug,Venture Assy 12/10Md (3 Pk)	1
08780730	Plug,Duct-Fill Assy 12/10Md (4 Pk)	1
08780731	Plug,Duct-Cap Assy 12/10Md (4 Pk)	1
08780732	Guide,Rear Microduct 12/10Md	1
08780750	Balls,Proofing 12/10 Microduct	1
<b>08780770</b>	<b>12.7 MICRO DUCT KIT</b>	
	<i>Includes The Following:</i>	
08645705	Cable Grip- .13- .56- 28 30#	1
08780722	Belt,Track-12/10Md	2
08780724	Guide,Rear Microduct- Assy	1
08780732	Guide,Rear Microduct 12/10Md	1
08780750	Balls,Proofing 12/10 Microduct	1
08780771	Venturi,12.7Md	1
08780772	Plug,Venture Assy 12.7Md (3 Pk)	1
08780774	Plug,Duct-Cap Assy 12.7Md (4 Pk)	1
08780776	Plug,Duct-Fill Assy 12.7Md (4 Pk)	1
<b>08780705</b>	<b>MICRO DUCT PRESSURE GAUGE</b>	



# Warranty Information

Condux International, Incorporated 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 a period of 1 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 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 Dr  
Mankato, MN 56001

**THERE ARE NO EXPRESS WARRANTIES COVERING THESE GOODS OTHER THAN AS SET FORTH ABOVE. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR 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**





**ISO 9001:2008**  
CERTIFIED

**Condux International, Inc.**

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