Assembly Instructions

1. Locate the 90° elbow fitting from the kit. Apply a pipe thread compound to the threads of the elbow. Insert the elbow into the middle port on the bottom of the air valve solenoid (See Fig. 1). Position the elbow at an angle so that when the exhaust muffler is installed, the poly air tube will still be able to be inserted properly into the elbow.

2. Apply pipe thread compound to the threads of the two exhaust mufflers, install them into the outside ports on the bottom of the solenoid.

This kit was designed for installation as an optional intermediate discharge outlet for use in conjunction with the 9” and 13” Drag Conveyors. The outlet mounts to the trunking bottom of the conveyor and can be positioned anywhere along the length of the conveyor [although a minimum of 30” (762 mm) from a flange joint is required].

Before beginning assembly it is suggested to read through these instructions and lay out all items from the kit to ensure all parts are accounted for. This not only helps you become familiar with the parts and the assembly procedures, but also makes you aware of what tools, equipment or materials you may need to complete the installation process.

Electric motors and controls shall be installed by a qualified electrician and must meet the standards set by the National Electrical Code and all state and local codes.

Assembly, service and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.

IMPORTANT! Do Not use Teflon tape to seal pipe joints. Pieces of tape have a tendency to break off and lodge inside the unit which can possibly cause component malfunction.
Assembly Instructions (con’t.)

The regulator, pipe nipple, lubricator, and pressure gauge will be pre-assembled prior to being mounted to the side of the outlet assembly. Follow the guidelines below for proper assembly procedures.

3. Remove the cover from the outlet assembly to gain access to the limit switch (this will be necessary for connection of the electrical wiring). Retain the hardware.

4. Locate the 1/8” NPT socket head pipe plug from the kit. Apply pipe joint compound to the threads of the plug and install the plug into the back side of the pressure regulator (See Fig. 2). To determine the front and back of the regulator, note the air flow direction arrow on the regulator; the arrow needs to point towards the solenoid valve.

5. Next, apply pipe joint compound to the threads on both ends of the 2” long pipe nipple. Install the pipe nipple into the side of the regulator as shown in Fig. 2.

Install the lubricator onto the opposite end of the pipe nipple and tighten the lubricator and regulator so they are in an upright position (See Fig. 2). Note the air flow direction arrow on the lubricator; it must point towards the solenoid valve.

6. Apply pipe joint compound to the threads of the pressure gauge and install gauge into the front of the regulator. Install the poly tube fitting into the side of the lubricator as shown in Fig. 2 (apply pipe joint compound to the fitting prior to installation).

7. Attach the regulator mount bracket to the side of the outlet assembly and secure using two (2) #10 x 3/4” screws, flat washers, lock washers and non-lock nuts.

Install the regulator and lubricator assembly to the mount bracket. The regulator will pass up through the bracket and be locked into place using the mounting ring provided with the mount bracket.

8. Attach the 10 1/2” (26.7 cm) long poly air tube to the fitting on the side of the lubricator and to the elbow at the bottom of the solenoid valve.

9. Reinstall the cover and secure using the hardware previously removed. The outlet assembly is now ready to mount in the desired location on the conveyor.
Installing Outlet Assembly to Conveyor

The outlet assembly can be mounted so that the slide gate is extending either to the left or to the right of the conveyor. Make sure there is adequate space and proximity to electrical power and air supply.

1. Determine the location along the length of the conveyor that the outlet assembly will be installed and place a mark that would indicate the center of the discharge outlet. (if locating near a flange joint, a minimum of at least 30” (76.2 cm) is required from the center of the discharge outlet to the flange joint, See Fig. 3)

2. Remove the hardware from the bottom of the conveyor that would interfere with the mounting of the outlet assembly. Position the outlet assembly against the bottom of the conveyor trunking, centering it over the mark previously made. Scribe a mark at each end of the outlet assembly. When positioning the outlet assembly, try to center the bolt holes in the assembly with the existing bolts holding the bottom of the conveyor.

3. Cut the trunking bottom at the scribed marks and remove the cut-out piece (cut bottom as straight as possible and make sure the cut edge is ground smooth to prevent interference with the paddles as it conveys material).

4. Position the outlet assembly and seal plate to the bottom of the conveyor and using the hardware previously removed, bolt into place, See Fig. 3 [if the assembly is not positioned to use the existing bolt holes, it will be necessary to drill 13/32” dia. (10.5 mm) holes at each hole location to mount the outlet assembly]. Note the position of the seal plate and brush assembly, it needs to be between the outlet assembly and conveyor bottom. Caulk as necessary to prevent grain leakage.
5. The fitting(s) used to connect the air supply to the regulator are **not furnished**.

   Depending on your application, properly connect the air supply to the port on the side of the regulator (the regulator port is 1/4” NPT).

   ![Diagram](image)

   **WARNING!** All electric motors and controls shall be installed by a qualified electrician and must meet the standards set by the National Electrical Code and all state and local codes.

   Installation, service and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.

   A main power disconnect switch that can be locked in only the “Off” position shall be used. This shall be locked whenever work is being done to the outlet assembly and to the conveyor.

6. Connect electrical power to the solenoid valve and limit switch (this switch senses if the gate is open or closed). It may be necessary to slide the control gate to the closed position in order to install the limit switch electrical cord.

   Install an appropriate disconnect control switch (not furnished) to supply electrical power to the solenoid/limit switch. The main control switch can be located accordingly to fit your particular application (a main power disconnect switch that can be locked in only the “Off” position shall be used. This shall be locked when ever work is being done to the outlet assembly).

7. Once all electrical and air supply connections have been made, check for proper operation.

   Pull upward on the regulator control knob and turn counterclockwise until compression is released from the control spring, then turn on the air supply and adjust to desired setting (clockwise to increase, counterclockwise to decrease).

   Begin at about 80 PSIG (549 kPa), check for proper gate operation and adjust gate speed accordingly, **do not exceed 150 PSIG (1030 kPa)**.
### PNEUMATIC CONTROL OUTLET ASSEMBLY

**PART NO’S. 1039213 & 1031870**

#### Ref. No. | Part No. | Description |
--- | --- | --- |
1 | 1039213 | Outlet Assembly, 9” Drag Conveyor |
2 | 1031870 | Outlet Assembly, 13” Drag Conveyor |
3 | 1031885 | Regulator, Miniature Filter |
4 | 1031887 | Gauge, Pressure |
5 | 1031888 | Lubricator, Miniature |
6 | 1031974 | Nipple, Pipe 1/4” x 2” (6 mm x 51 mm) |
7 | 1031977 | Bracket, Regulator Mounting |
8 | 1031984 | Fitting, Poly Tube, 1/4” male conn. |
9 | 1031987 | Fitting, Poly Tube, 1/4” male 90° elbow |
10 | 1032085 | Muffler, pneumatic exhaust |
11 | 1032137 | Plug, 1/8” Pipe |
12 | 1039227 | Seal Plate f/ 9” Drag Conveyor |
13 | 1035044 | Seal Plate f/ 13” Drag Conveyor |
14 | 1032040 | Bolt, #10-24 x 3/4” PLT |
15 | 33021 | Washer, Flat, 3/16” PLT |
16 | 33142 | Washer, Lock, 3/16” PLT |
17 | 33149 | Nut, #10-24 Non-lock |
18 | 1039229 | Brush Flight f/ 9” Drag Conveyor |
19 | 1035047 | Brush Flight f/ 13” Drag Conveyor |
20 | 33023 | Washer, Flat, 5/16” PLT |
21 | 33135 | Nut, 5/16-18 Nylock PLT |

**Reference Bottom Lip of Conveyor Trunking**

**Maximum Pressure 150 PSIG (1030kPa)**

**Use Pipe Joint Compound for all Pipe Thread Fittings**

Existing hardware from conveyor trunking