

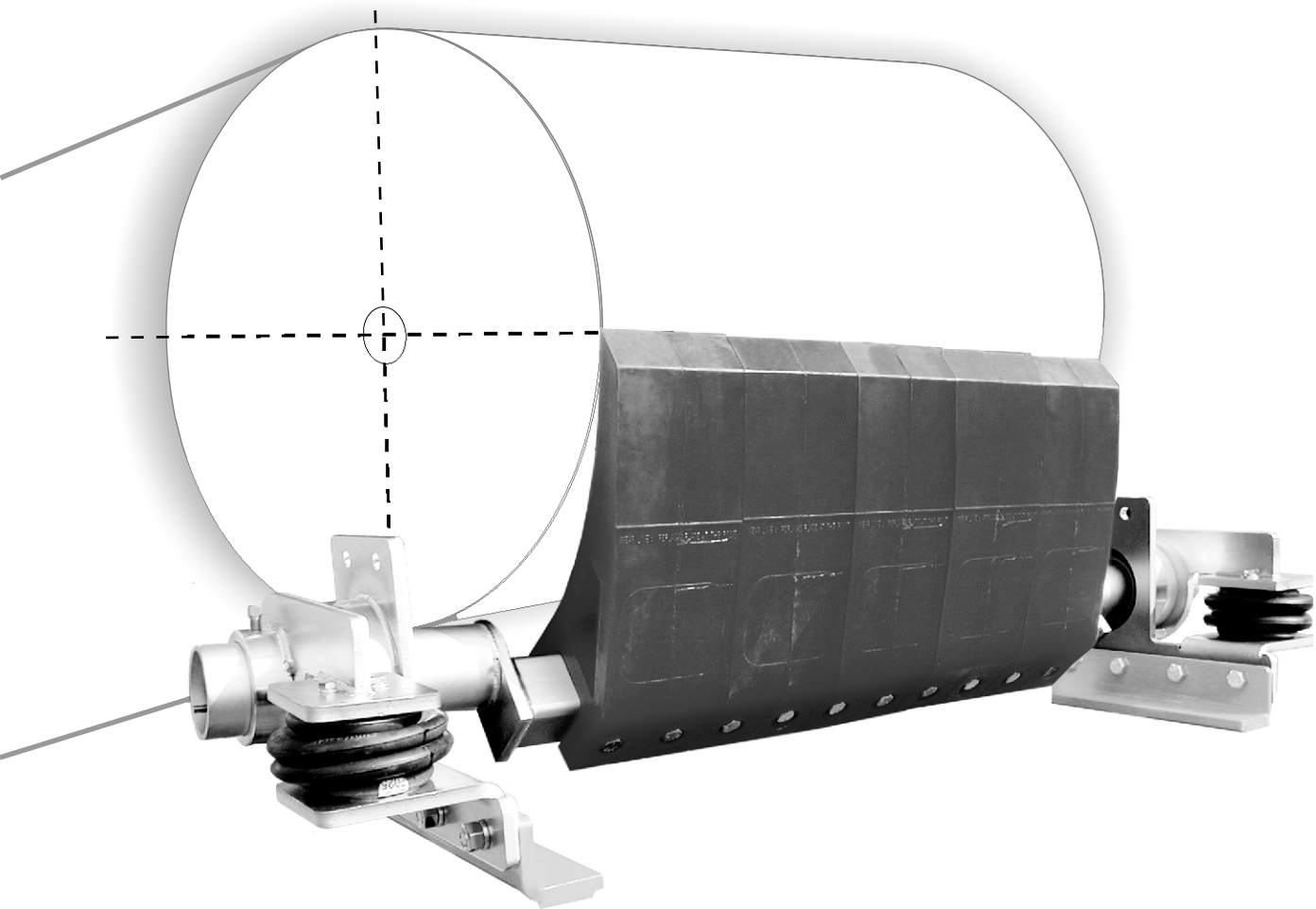
**ASGCO**

Complete Conveyor Solutions

# SKALPER MDX<sup>®</sup>

WITH AIR-SHOC TENSIONER<sup>®</sup>

## INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS



Check us out at  
[www.asgco.com](http://www.asgco.com)

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Allentown, PA 18102  
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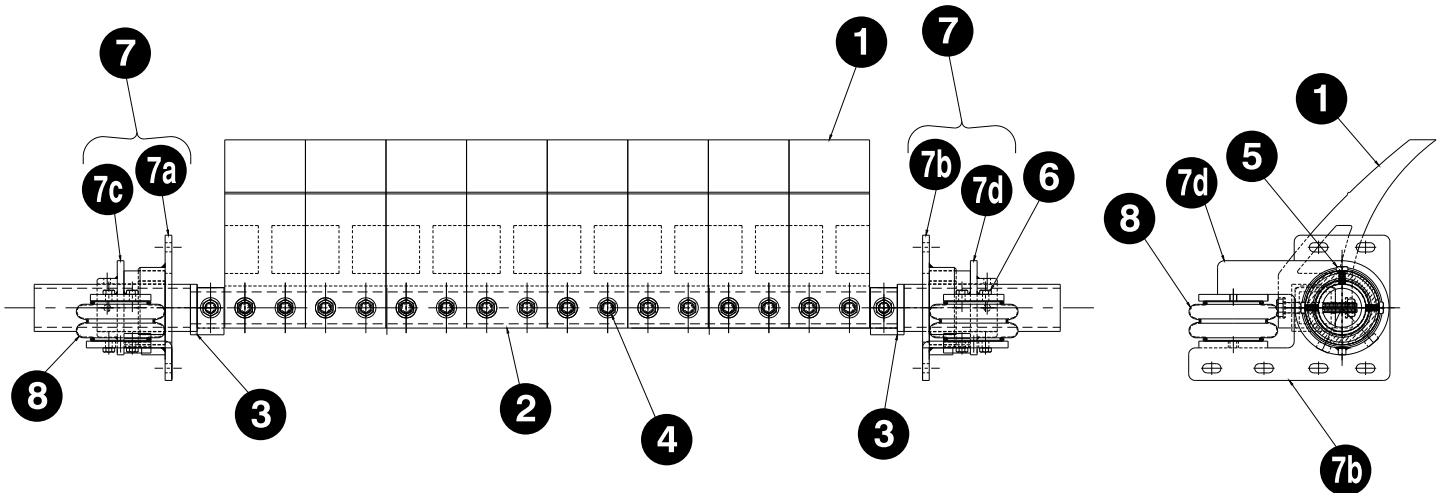
## Important Safety Notice

Always observe the basic rules of safety when working with any conveyor system. To avoid injury and equipment damage, be sure that all controls to the conveyor are locked out and the power source is disconnected at all times during installation.

### Overall View

If mounting structure is not available, additional steel may have to be added. *Note: Excess mounting tube may be trimmed after installation. Also note required lubrication of components.*

### Components Diagram



- ① MDX Mine Duty Blade
- ② Mounting Tube
- ③ Mounting Tube Holder
- ④ 10-3/4 x 5-1/2 Bolt/  
Washers/Nut
- ⑤ Set Screw
- ⑥ 3/8-16 x 1 Bolt

- ⑦ Air Shoc Tensioner
- ⑦a Left Mounting Base
- ⑦b Right Mounting Base
- ⑦c Left Torque Arm
- ⑦d Right Torque Arm
- ⑧ Expanding Air Bag

See last page for Part Number and Ordering Information

## 1. Determine the Critical "N" Dimension

The MDX Primary Cleaner is designed to be installed on pulleys as shown in Figure 1. Determining the "N" dimension, the distance from the belt surface to the mounting tube center, is critical to achieve optimal performance and life for your cleaner system. Ensure that the mounting tube and tensioner system are clear of all obstacles in the selected mounting location.

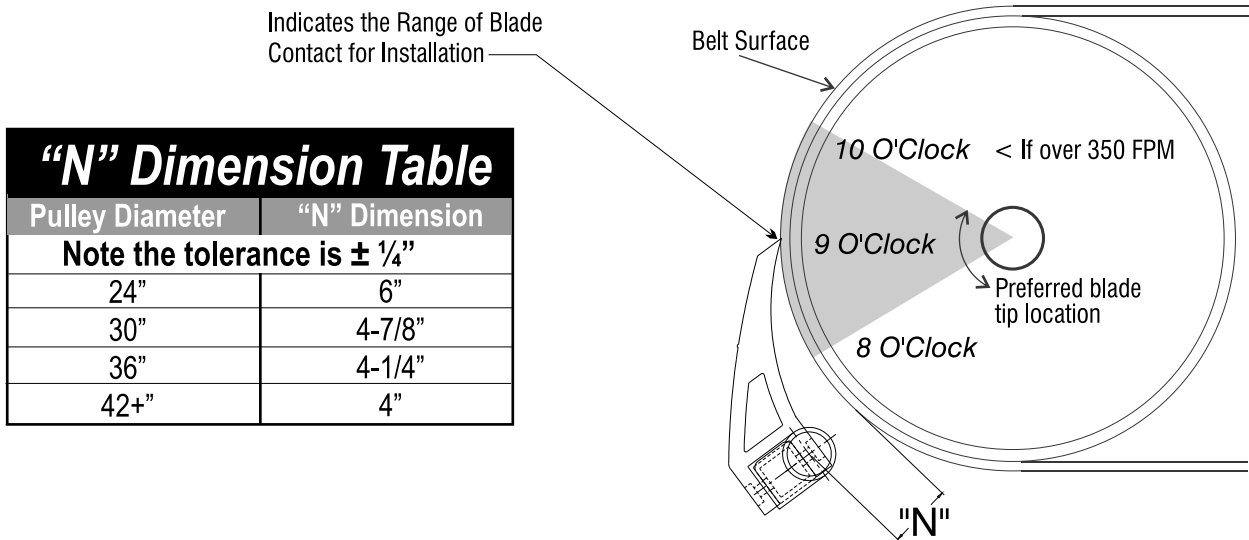


Figure 1: Typical Mounting Position  
\*Note:  $\pm 1/4$ " tolerance

## 2. Cut Cutouts and Access

Installing our MDX Primary Cleaner may require cutting access openings in your head pulley chute. Since the mounting tube can be installed last the only holes you will need on the chute sides are to allow the tube holders to penetrate inside the chute as shown in Figure 2.

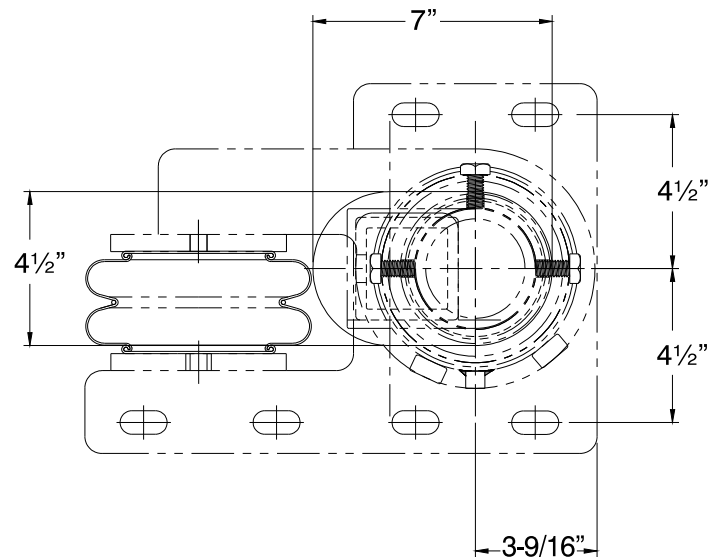


Figure 2: Slot Sizes and Location

### 3. Installing the MDX Blades

It is recommended that the MDX blades be installed onto the mounting tube prior to the tube being installed into the mounting tube holders. The mounting tube and blades would then have to be placed into the mounting tube holders through another access door or removable panel.

### 4. Mount Brackets To Chute By Welding or Bolting To Conveyor

Determine the desired location of the mounting base. Attach the mounting base to the conveyor frame by welding or bolting.

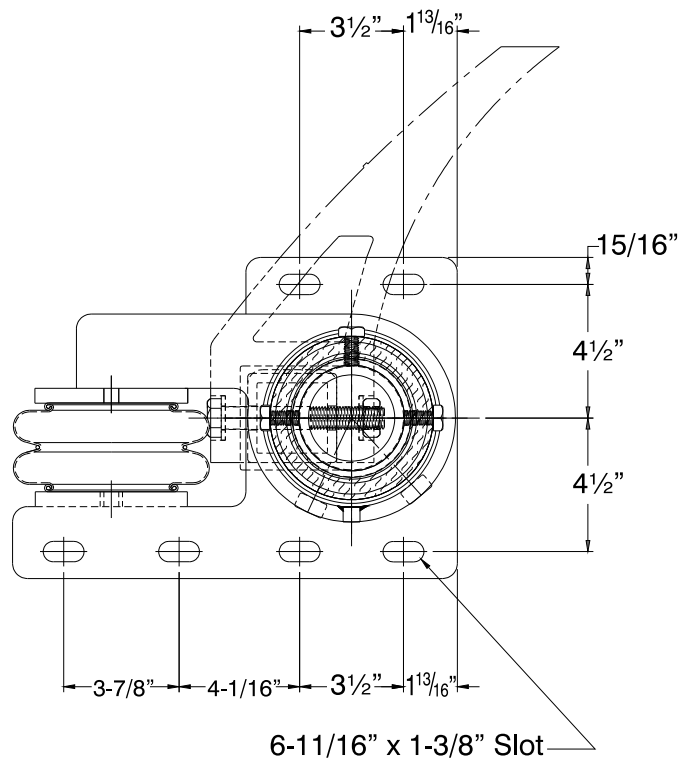


Figure 3

### 5. Installing the MDX Blades

The Air-Shoc Tensioner will be packaged unassembled. The package will include all of the required parts and hardware to assemble one complete Skalper MDX unit. The package will also include 25 ft of airline and all necessary fittings to feed both air bags. The Air control box will be delivered assembled. (See Figure 8)

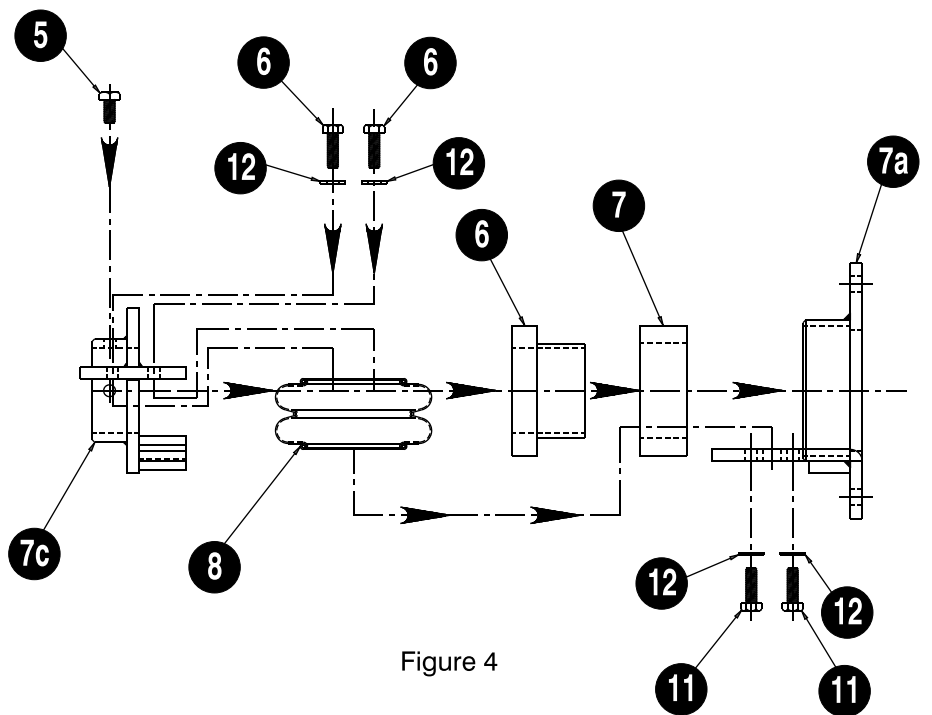


Figure 4

When assembling the Air-Shoc Tensioner be sure to place the Expanding Air Bag (8) with the center air inlet facing down. The 3/8-16 bolt should be torqued no tighter than 20 ft/lbs.

Refer to the parts list on page 9 for part identification.

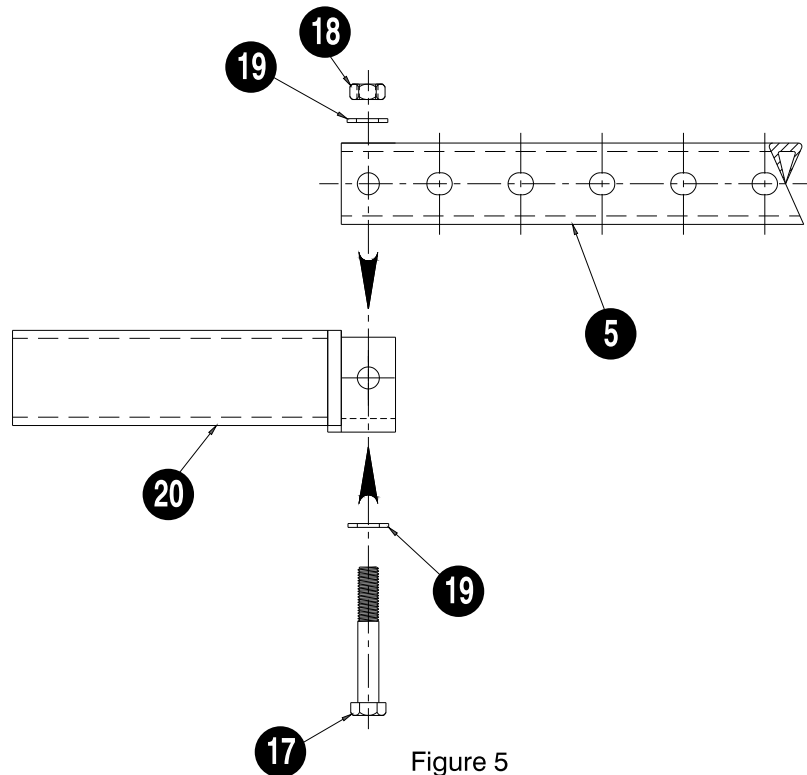


Figure 5

Figure 5 shows the Tube holder and blade mounting tube assembly. The 3/4-10 bolt should be torqued to 80 ft/lbs.

## 6. Mounting the MDX Blades

The MDX blades can be mounting for full belt width, Belt width 6, or belt width 12. To mount the blades for full belt width the blade should be mounted starting at the second hole from the end of the mounting tube. The first hole on the tube is always used for mounting the tube into the tube holder. For mounting the blades at belt width 6" you start mounting at the third hole from the end. To mount your blades for belt width 12 you mount the blades starting at the fourth hole from the end.

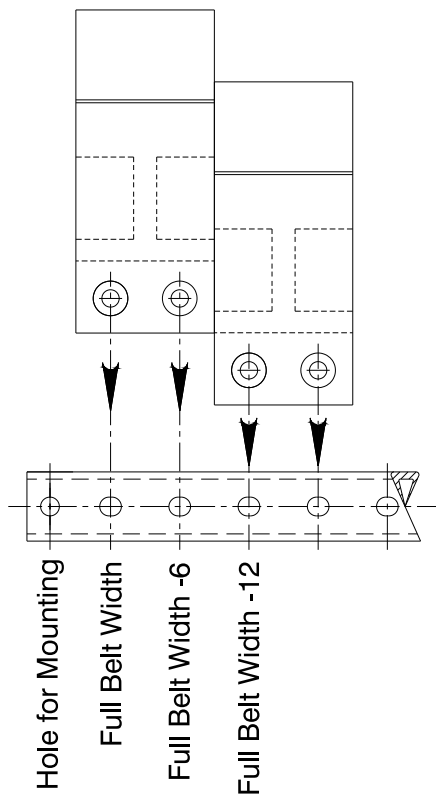


Figure 6

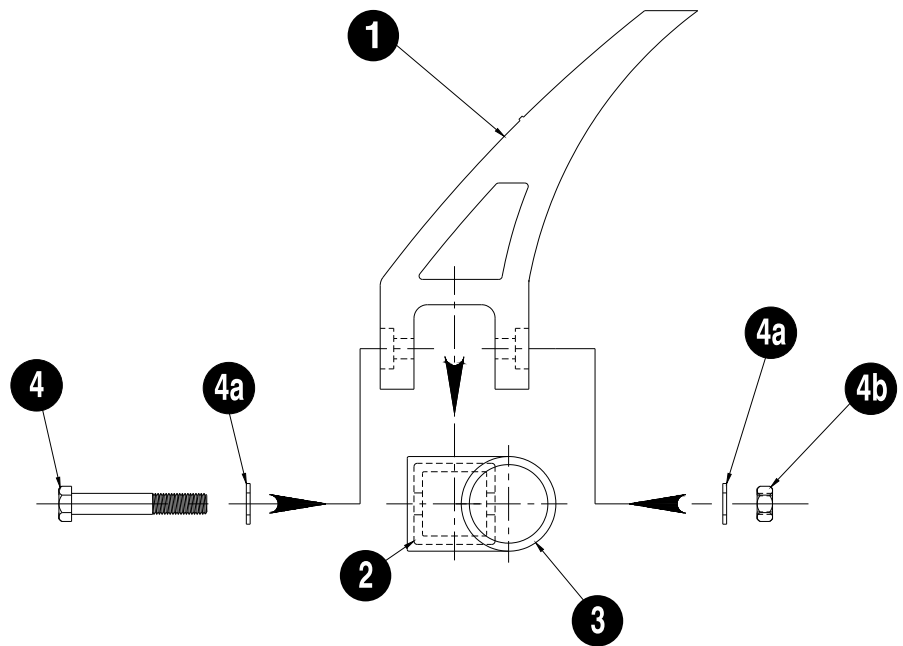


Figure 7

Mount the MDX Blades using the  $\frac{3}{4}$ -10 x 5  $\frac{1}{2}$ " bolts provided. Make sure to insert the  $\frac{3}{4}$ " washers on both sides of the blade. Torque the bolt to approximately 50 lbs/ft. If the blades are mounted correctly they should appear even along the top edge.

## 6. Setting the Tension

The tension of the blade against the belt is determined by the pressure applied to the expending air bags. Most MDX applications will have an air-bag located on both sides of the blade mounting tube as shown below. The air pressure can be controlled by the air control box supplied by ASGCO. Or by an owner supplied air regulator. The pressure should range from 8 psi to 20 psi.

A good place to start is  $\frac{1}{4}$  psi. per every inch of blade width.

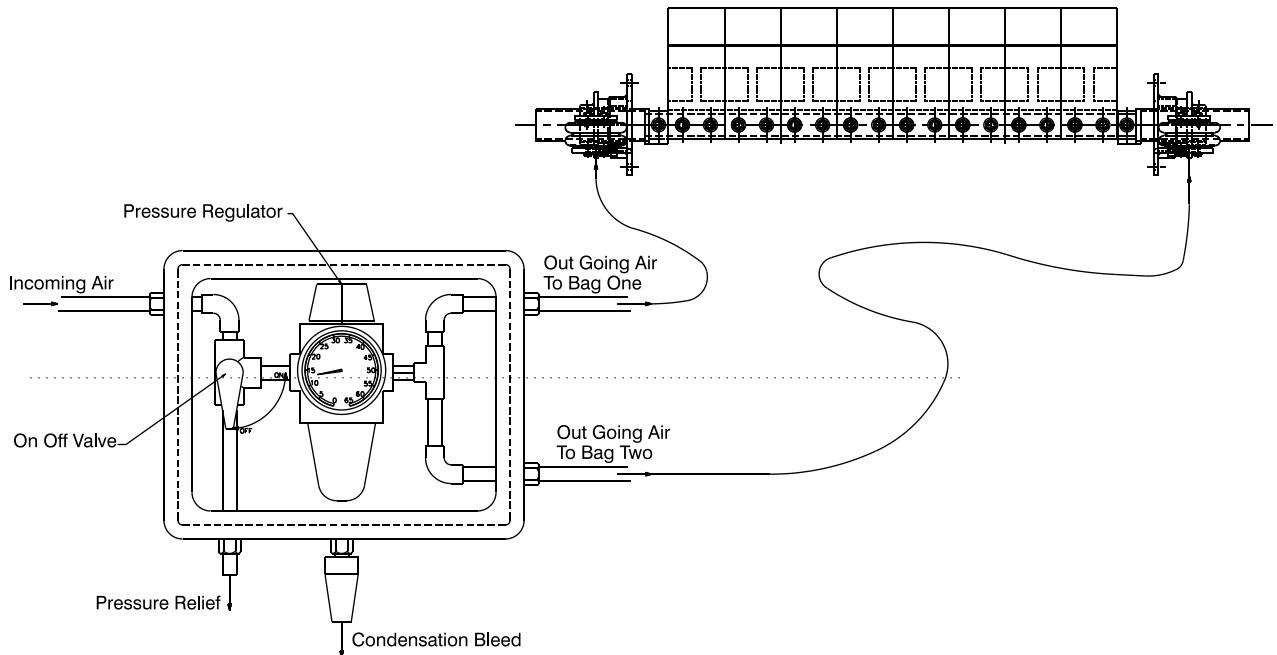


Figure 8

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## PERIODIC MAINTENANCE & ADJUSTMENTS

- 1)** Frequent inspection is the key to proper belt cleaning and easy scraper servicing. Weekly inspections are recommended, but actual service frequency may vary widely depending on various plant operating conditions.
  
- 2)** Inspect the belt surfaces and edges for cracks, splits, tears, holes or any other worn or
  
- 3)** Damaged condition occurring on the surfaces or edges of the belt itself. If necessary make repairs to the belt. Wash the entire cleaner regularly to prevent excessive build-up. Check the tightness of all fasteners.
  
- 4)** Inspect for proper operation. Inspect air supply and drain condensation if needed. Replace the Skalper MDX blades as required. Use only ASGCO Manufacturing approved replacement scraper blades. Replace all blades together. Replacing only one or two blades at a time will greatly reduce the efficiency of the cleaner

## Information

1	MDX Mine Duty Blade	ASG-MDX-BLD-6-PRI	[BW] = Blade Width
2	Mounting Tube	ASG-MDX-MT-[BW]-PRI	
3	Mounting Tube Holder	ASG-MDX-MTH-PRI	
4	10-3/4 X 5-1/2 Bolt	ASG-MDX-3/4X5-1/2-BOLT	
4a	3/4 Flat Washer	ASG-FW-3/4	
4b	10-3/4 Grade 5 Nut	ASG-NUT-3/4G5	
5	Set Screw	AS-SSH-8X1.5-NCG8	
6	16-3/8 x 1" Bolt	ASG-BOLT-C06X016	
6a	3/8 Lock Washer	ASG--LW-3/8	
7	Air Shoc Tensioner	ASS-ROT-LC-AL	
7a	Left Mounting Base	ASG-MDX-MB-PRI-L	
7b	Right Mounting Base	ASG-MDX-MB-PRI-R	
7c	Left Torque Arm	ASG-MDX-LS-TA-PRI	
7d	Right Torque Arm	ASG-MDX-RL-TA-PRI	
8	Expanding Air Bag	ASG-MDX-AIRBAG	
9	Shock Collar	ASG-MDX-SHOCK-COLLAR	
10	UHMW Bushing	ASG-MDX-UHMW-BUSHING-PRI	
11	Air Control Box	ASG-MDX-ACB	
12	3/8 ID Air Hose	HS-AIRFLEX-06	
13	3/8 ID Power Crimp Coupling	CV-6-6MBX	

*Call your ASGCO Distributor for any questions or replacement parts*

## TROUBLE SHOOTING

<b>PROBLEM</b>	<b>SOLUTION</b>
<i>Excess vibration of the scraper.</i>	<p>Make certain all bolts are tight and the pin is securely engaged on the tensioner.</p> <p>Ensure the cleaners n-dimension is proper (See Table and Figure 1).</p>
<i>Excess carryback.</i>	<p>Check for excess build-up on the scraper.</p> <p>Check for proper scraper tension. Put additional tension on cleaner.</p> <p>Check for non-uniform scraper wear.</p> <p>Check n-dimension.</p> <p>Clean the back-side of the belt cleaner.</p>
<i>Uneven Cleaner Blade Wear</i>	<p>Check to see if belt is mis-tracking</p> <p>Inspect air lines for leakage or kink that would starve air to one side.</p> <p>Check if blade height is even on both sides.</p>
<i>Excessive Blade Wear or Short Blade Life</i>	<p>Check for excessive air pressure Ref. to Tensioning, Operation and Maintenance section</p> <p>Check N-dimension</p>