# Exterra<sup>TM</sup> Belt Cleaner (Patent Pending)

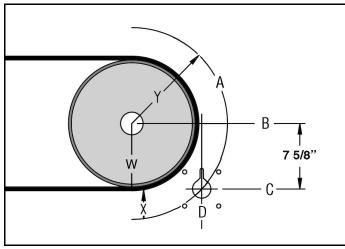


# Installation Instructions



Follow all established lockout and tagout procedures. Failure to follow correct lockout and tagout procedures could result in death or serious injury.

## Installing the Mounting Brackets

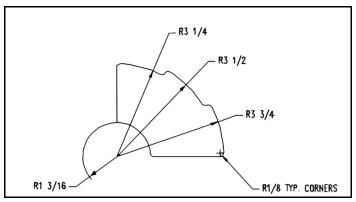


#### Figure 1

#### Refer to (Figure 1) for instructions 1-5.

1. Measure the distance from the center of the pulley shaft to the outside surface of the conveyor belt. Add this distance to the corresponding "X" dimension from the table below. This will determine the "Y" distance.

Dimension Table					
Pulley Radius (W)* (in.)	X	Z			
8"	3 3/4"	7 5/8"			
10"	3 1/2"	7 5/8"			
12" and Larger	3 1/4"	7 5/8"			
*Includes lagging and belt					



#### Figure 2

- Note: The above gauge (Figure 2) is included with the Exterra belt cleaner. This gauge will help with determining the correct distance of the blade shaft from the belt (X distance) shown in the dimension table.
- 2. From the center of the pulley shaft draw an arc equal to the "Y" distance (Line "A") on the outside of the structure mounting wall.
- 3. Draw a horizontal line from the center of the pulley shaft outward (Line "B").
- 4. Measure down from "B" using the "Z" distance (from the dimension table) and draw a horizontal line parallel to "B" across the mounting structure that intersects at the "Y" arc (Line "C").
- 5. Draw a vertical line from the end of the pulley (Line "D") which bisects line "C". The bisecting point will be the center point for the mounting bracket.
- Note: If there is no structure available at the intersection point, a bracket or additional metal will need to be added.

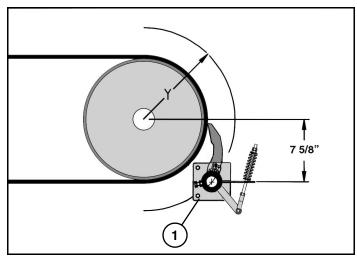
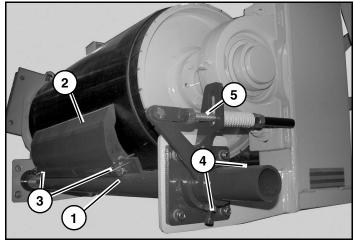


Figure 3

- 6. The bracket (Item 1) (Figure 3) can be mounted in any 90 degree position. Drill the mounting holes and attach the bracket with the supplied bolts See "Externa Belt Cleaner Mounting Bracket Template" on page 4.
- 7. Repeat steps 3 6 for the mounting bracket on the opposite side.

# Installing the Blade



#### Figure 4

- 1. Insert the blade shaft (Item 1) (Figure 4) into the mounting brackets.
- 2. Position the blade (Item 2) (Figure 4) on the blade shaft with the blade curve facing the conveyor belt.
- 3. Insert lock pins (Item 3) (Figure 4) through the blade shaft and blade.
- 4. Rest the blade against the belt and tighten the set screws (Item 4) (Figure 4) on the tensioner. There should be approximately 2"- 3" of adjustment on the tension rod (Item 5) (Figure 4) before the set screws are tight to allow for proper tensioning of the blade.

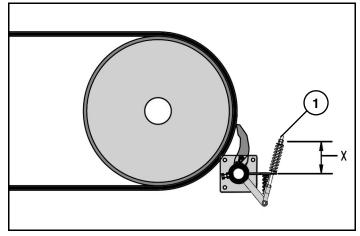
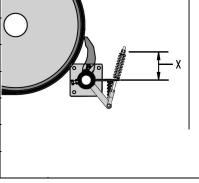


Figure 5

5. Tension the blade to the proper tension by adjusting the nut (Item 1) (Figure 5) on the tension spring according to the chart below.

Exterra™ Belt Scraper Tension Chart						
Blade Length	# of Tensioners	"X" Dim. New Blade	"X" Dim. 25% Wear	"X" Dim. 50% Wear	"X" Dim. 75% Wear	
10"	1	4"	4 1/4"	4 1/2"	4 1/2"	
16"	1	3 3/4"	4"	4 1/4"	4 1/2"	
22"	1	3 1/2"	3 3/4"	4"	4 1/4	
28"	1	3"	3 1/2"	3 3/4"	4"	
34"	1	2 3/4"	3 1/4"	3 1/2"	3 3/4"	
40"	2	3 3/4"	3 7/8"	4 1/8"	4 1/4"	
46"	2	3 1/2"	3 3/4"	4"	4 1/8"	
52"	2	3 1/4"	3 1/2"	3 3/4"	4"	
58"	2	3 1/4"	3 1/2"	3 3/4"	4"	
64"	2	3"	3 3/8"	3 5/8"	3 7/8"	
70"	2	3"	3 1/4"	3 1/2"	3 3/4"	



- 25% Worn 50% Worn 75% Worn
- Reapply tension to the blade by adjusting the nut (Item 1) (Figure 6) on the tension spring according to the chart above.

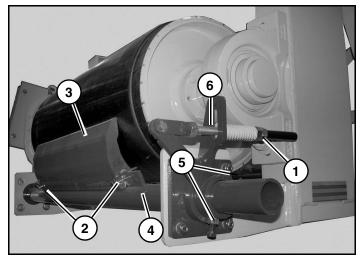
# IMPORTANT

Through out the wear life of the blade, the tensioner will need to be readjusted. Reapply tension to the blade when necessary. Superior Industries recommends the tensioner be readjusted 4-6 times throughout the life of the blade.

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## **Replacing the Blade**



#### Figure 6

- 1. Release tension on the blade by loosening the nut (Item 1) (Figure 6) on the tension spring.
- 2. Remove the lock pins (Item 2), and blade (Item 3) from the blade shaft (Item 4) (Figure 6).
- Position new blade on the blade shaft with the curve of the blade facing the conveyor belt and reinsert lock pins.
- 4. Rest the blade against the belt and tighten the set screws (Item 5) (Figure 6) on the tensioner. There should be approximately 2"- 3" of adjustment on the tension rod (Item 6) (Figure 6) before the set screws are tight to allow for proper tensioning of the blade.
- Reapply tension to the blade by adjusting the nut (Item 1) (Figure 6) on the tension spring (see Exterra<sup>™</sup> Belt Scraper Tension Chart page 2).
- Note: Throughout the wear life of the blade, the tensioner will need to be readjusted. reapply tension to the blade when necessary, Superior Industries recommends the tensioner be readjusted 4-6 times during the life of the blade.

### Weekly Maintenance Schedule

- Make sure all fasteners are tight. Tighten if necessary.
- Check blade for excessive wear. Replace blade as needed (see Replacing the Blade page 3).
- Check blade tension (see Exterra<sup>™</sup> Belt Scraper Tension Chart page 2).

# **Troubleshooting Guide**

Problem	Corrective Action
Excessive blade wear	Tension of cleaner is set too high. Reduce tensioner setting (see Exterra™ Belt Scraper Tension Chart page 2)
Blade wears in center more than on the ends	Pulley may be crowned. Use 8" minus blade length.
Insufficient cleaning and carryback	Tension of cleaner on belt is set too low or too high. Increase or decrease tensioner setting (see Exterra™ Belt Scraper Tension Chart page 2)

Exterra Belt Cleaner Mounting Bracket Template

