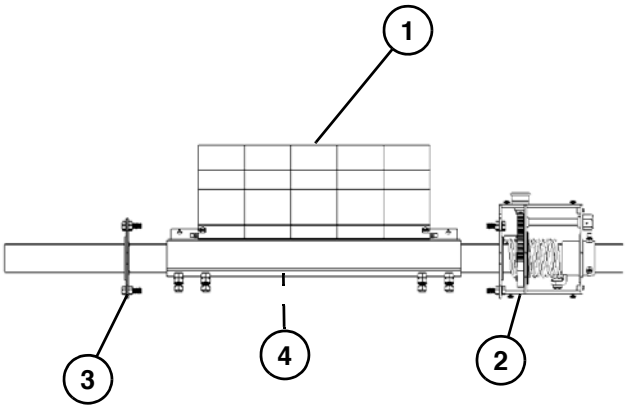
SFL Mine Duty Belt Scraper

Read and understand equipment operators manual before operating or performing maintenance. Failure to do so could result in serious injury or death.

⚠ WARNING
Heed to the following warnings. Failure to do so could result in death or serious injury. • Lockout/Tagout/Blockout before performing maintenance or installation.

Overview

Figure 25

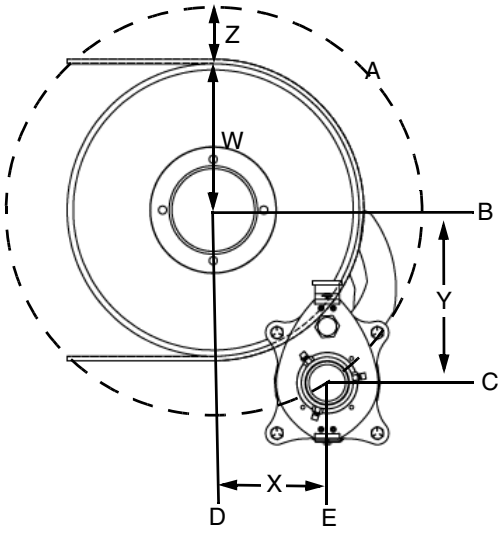


Refer to figure above and description below for SFL Mine Duty Scraper *(Figure 25)* components:

1. Primary Blade
2. Shaft Tension Assembly
3. Shaft Mounting Bracket
4. Blade Mounting Tube

Installing Belt Scraper

Figure 26



Refer to *(Figure 26)*

1. Measure distance from center of pulley shaft to outside belt surface “W”.
2. Add “Z” value from chart *(page 69)* to “W” measurement draw an arc (Label Line “A”).

Note: If no structure is available for hole locating, add additional mounting plate.

3. Draw a horizontal line from center of pulley shaft outward parallel to belt travel (Label Line “B”).
4. Measure down from Line “B” value “Y” from chart *(page 69)* and draw a horizontal line parallel to Line “B” (Label Line “C”).
5. Draw a vertical line from center of pulley shaft downward perpendicular to belt travel (Label Line “D”).
6. Measure across from Line “D” value “X” from chart *(page 69)* and draw a horizontal line parallel to Line “D” (Label Line “E”).
7. Where Line “A”, Line “C” and Line “E” intersect is the center point for shaft mounting bracket.

NOTICE

- Measurements should always be parallel and perpendicular to belt travel. Proper placement insures proper tension.
- Moving belt cleaner further around pulley in direction of belt travel will increase tension and cleaning pressures on both primary and secondary blades.

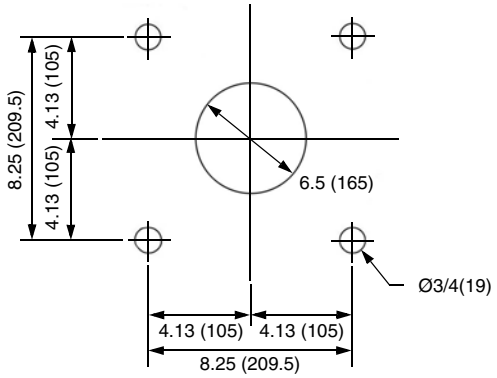
Pulley Diameter 12in (305mm)-20in (508mm)

Pulley Radius ("W") in (mm)*	*("Y") in (mm)*	*("X") in (mm)*	*("Z") in (mm)*
6 (152)	8 9/16 (217)	3 7/16 (87.3)	3 1/4 (83)
7 (178)	9 (229)	4 15/16 (126)	3 1/4 (83)
8 (203)	8 1/2 (216)	7 3/8 (187)	3 1/4 (83)
9 (229)	9 15/16 (252)	7 3/16 (183)	3 1/4 (83)
10 (254)	10 7/8 (276)	7 1/2 (191)	3 1/4 (83)
*includes lagging and belt			

Pulley Diameter 22in (559mm)-30in (762mm)

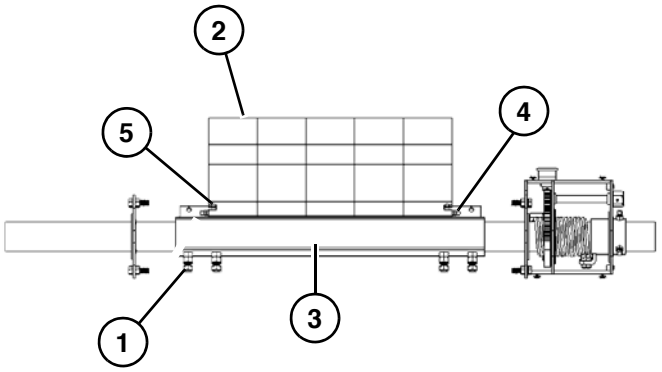
Pulley Radius ("W") in (mm)*	*("Y") in (mm)*	*("X") in (mm)*	*("Z") in (mm)*
11 (279)	10 3/16 (259)	9 15/16 (253)	3 1/4 (83)
12 (305)	11 (279)	10 9/16 (268)	3 1/4 (83)
13 (330)	11 15/16 (303)	11 (279)	3 1/4 (83)
14 (356)	12 9/16 (319)	11 13/16 (300)	3 1/4 (83)
15 (381)	13 15/16 (354)	11 3/4 (298)	3 1/4 (83)
*includes lagging and belt			

Figure 27



8. Drill holes for shaft mounting bracket. Template is also provided with SFL Mine Duty Scraper. *(Figure 27)*
9. Repeat steps 1-9 on opposite side of conveyor.

Figure 28



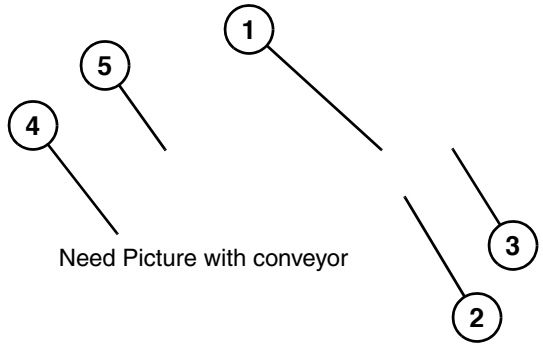
10. Tighten bolts (1) *(Figure 28)* on blade mounting tube to lock blade location.

11. Position groove of blades (2) on blade mounting tube (3) and secure blades together with bolt on each side of tube (4). *(Figure 28)*

Note: Curve of blade faces belt.

12. Secure blades with pins (5) *(Figure 28)*.

Figure 29



13. Insert shaft (3) into shaft mounting brackets (1) *(Figure 29)*.

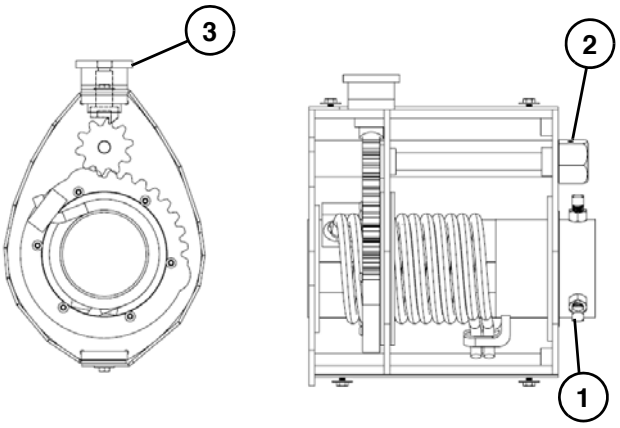
Note: Conveyor mounting plate is not included with SFL Mine Duty Scraper.

14. Attach shaft mounting brackets (1) to conveyor mounting plates (2). *(Figure 29)*

Note: Shaft can be shortened to ease installation.

15. Position blade (4) resting on center of belt (5) with concave blade curve facing belt. *(Figure 29)*

Figure 30



16. Tighten set screws (1) *(Figure 33)* on tension.

17. To increase tension tighten nut (2) *(Figure 33)* on tensioner

Note: Tighten nut until tension gear cannot go further.

Note: Pull up on tensioner switch to release tension.

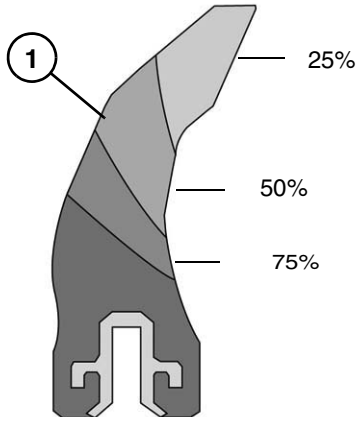
Maintenance

Weekly

- Check primary and secondary blades for excessive wear.

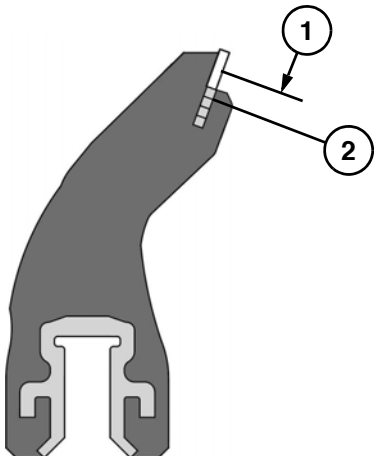
Blade Replacement

Figure 31



Average for the primary blade (1) *(Figure 31)* is to replace blade between 50%-75% worn. Material being conveyed determines how often replacement is needed.

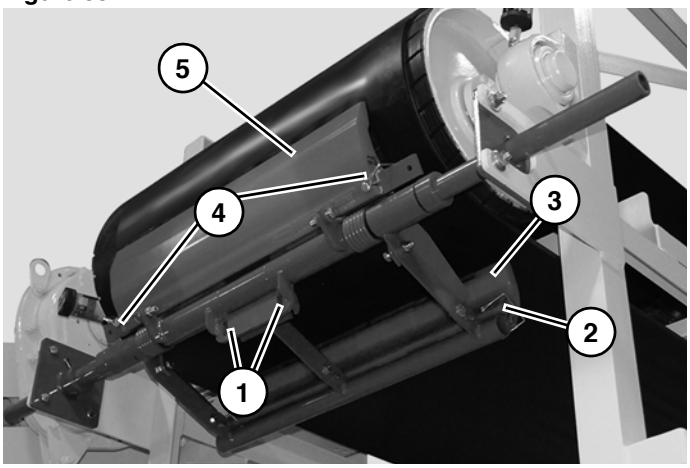
Figure 32



Replace blade at 0.5” (12.7mm) (1) wear. Once holes (2) appear blade has worn too far. *(Figure 32)*

Note: If blade wear reaches wear point (2) *(Figure 32)* belt may wear excessively.

Figure 33



1. Install bolts (1) *(Figure 33)* to remove tension from primary and / or secondary blades.
2. Remove pins (2) holding secondary blade section (3) to be replaced. *(Figure 33)*
3. Install new blade section with curve facing mounting pole and secure with pins.
4. Remove pin clips (4) holding primary blade (5). *(Figure 33)*
5. Position groove of new blade on blade mounting bracket. Position in the center with blade curve facing belt.
6. Reinstall pin clips.
7. Remove carriage bolts (1) *(Figure 33)* fully to allow primary and secondary blades to apply pressure to belt.

Specifications

Blade Width..... 10in-70in (254mm-1778mm)
Primary Blade Material ..... 87A Urethane
Secondary Blade Material.....87A Urethane with Tungsten Tips
Fits Belt Widths 18in-72in (457mm-1829mm)
Pole Length 48in-114in (1219mm-2896mm)

Troubleshooting

If the problem you are experiencing is not listed or the solution does not solve the problem call Superior Industries for help.

Problem	Cause
Excessive blade wear.	1
Blade wears in center more than ends.	2
Insufficient belt cleaning and carry back.	1 or 3

1. Check mounting location for proper placement.

2. Pulley may be crowned. Use 8in (203mm) minus belt width for blade length.

3. Carriage bolts have not been loosened enough or removed causing blades to not be secure to belt.