

INSTALLATION INSTRUCTIONS

MODEL SBR BELT CLEANER



Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to strictly follow all instructions may result in DEATH or SERIOUS INJURY. Before servicing, shut down and physically lock-out the conveyor system. Disconnect power before servicing.



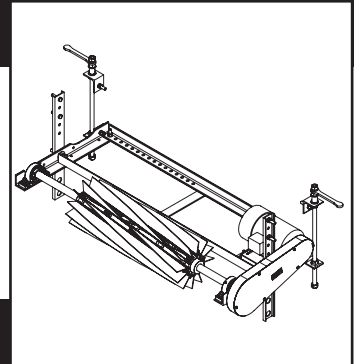
Conveyor Components Company

Division of Material Control, Inc. | Crosswell, Michigan U.S.A.

MODEL SBR BELT CLEANER

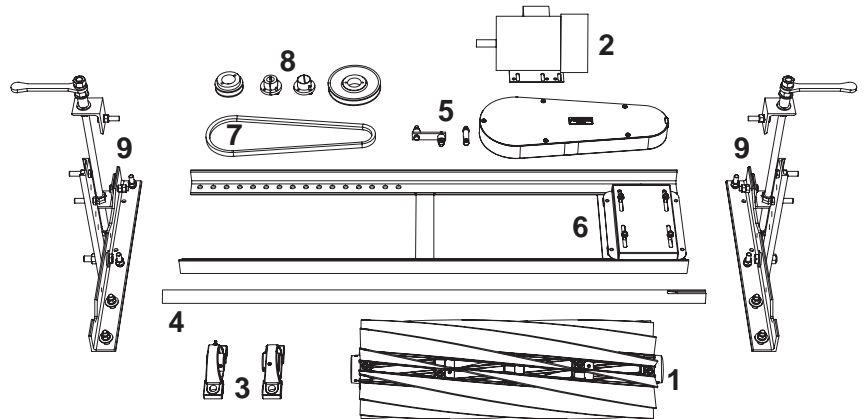
TOOLS NEEDED

- Adjustable wrenches
- 7/16", 9/16", 3/4" and 15/16" wrenches
- 5/32", 5/64" and 1/4" hex keys
- 9/16" & 1-1/16" drill bits
- Electric drill
- Mallet or Hammer
- Metal cutting saw
- Tape measurer
- Pencil, marker or scribing tool



PARTS INCLUDED

1. Brush
2. Electric Motor
3. 2 Pillow Block Bearings
4. Brush Shaft
5. Belt Guard & Support Hardware
6. H-Frame & Motor Base
7. V-Belt
8. 2 Sheaves with Tapered Bushings
9. Side Frame Assemblies



INSTALLATION



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STEP 1 CONFIGURATION: These instructions illustrate the SBR assembled with the motor mounted on top of the frame and on the left side of the conveyor, and with the brush assembly mounted on the inside of the side frames [Figure 1].

- a. The motor can be mounted on the right side or left side depending on space constraints. The H-Frame and brush assembly must be oriented so that the motor base and the brush shaft keyway are on the chosen drive side.
- b. If space constraints require, the motor may be mounted beneath the frame. The side frame assemblies must be mounted as shown in Figure 2 so that the brush is to the front when the side frames are facing angle side down. In this configuration, the SBR side frames can run closer and more parallel to the conveyor.
- c. If space constraints require, the brush bearings may be mounted on the outside of the side frames as shown in Figure 2. Different mounting holes on the belt guard must be used [Figure 7].

The hanger bar and H-Frame have a series of mounting holes to fit different sized applications. Depending on the size of your application and space constraints, you may need to cut excess material from the hanger bar, shaft and H-frame.

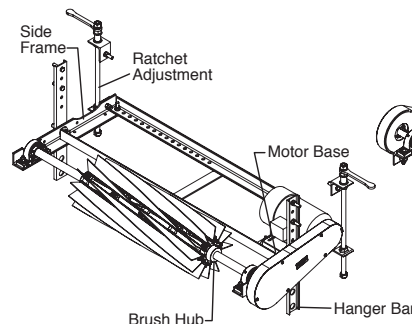


Figure 1: SBR configured with the motor mounted on top of the frame and the brush bearings mounted to the inside of the side frame

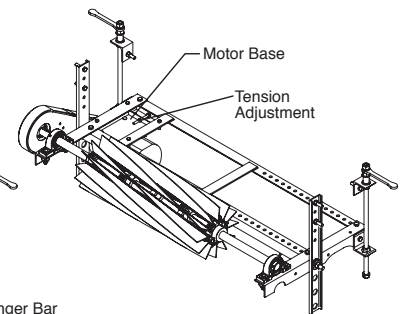
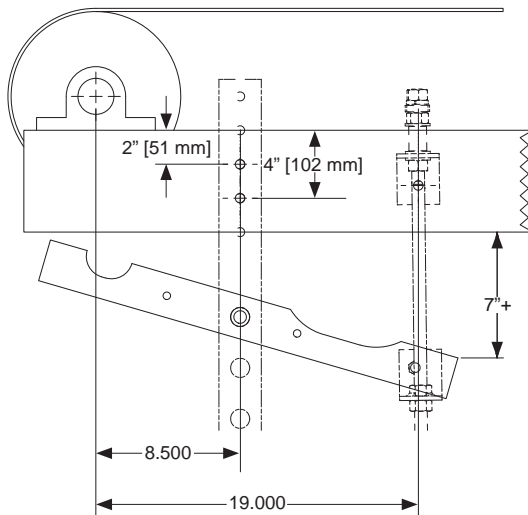


Figure 2: SBR configured with the motor mounted beneath the frame and the brush bearings mounted to the outside of the side frame

STEP 2 MOUNT SIDE ASSEMBLIES:

1. Locate centerline of head pulley on the conveyor.
2. From centerline, measure 8-1/2" inches horizontally and mark a line vertically.
3. Drill a 9/16" hole 2" inches and 4" inches from the top of conveyor frame on the marked line. [Figure 3].
4. Mount the side assembly using the bolts in the hanger bar.
5. Measure 19" inches from centerline of head pulley and mark a line vertically.
6. Drill on 9/16" hole on the vertical line for the ratchet adjustment. [Figure 3].
 - a. If the motor is being mounted on top of the frame there should be a minimum of 7" inches of clearance between the side frame in the side assembly and the bottom surface of the conveyor frame at the ratchet adjustment.
7. Fasten Ratchet adjustment assembly to conveyor.
8. Repeat for the other side of the conveyor.

Figure 3: Hole Pattern



STEP 3 ATTACH H-FRAME AND MOTOR:

1. Fit the H-frame to outside of the side frames to identify which set of bolt holes on the H-Frame will need to be used. The side frames can be adjusted at the hanger bar connection by using the washers for spacing to allow the H-frame bolt holes to align properly.
2. Remove the H-frame from the side frames and cut off the excess H-frame material 1" [25mm] from the center of the bolt holes to be used. [Figure 4].
3. Mount the H-frame and motor base to the inside of the side frames as shown in Figure 5.
4. Mount the electric motor to the motor base using the slotted holes on the motor.

Figure 4: Trimming the H-Frame

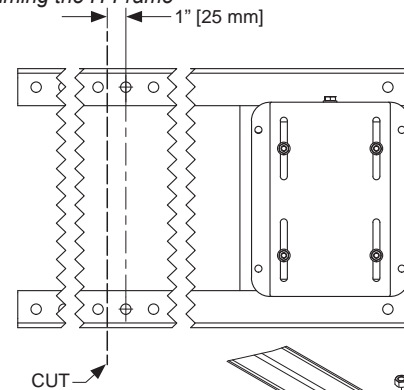
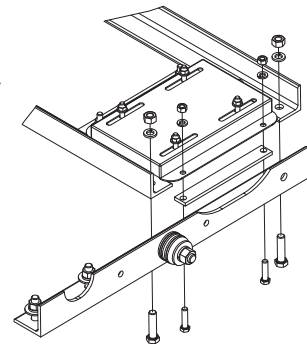


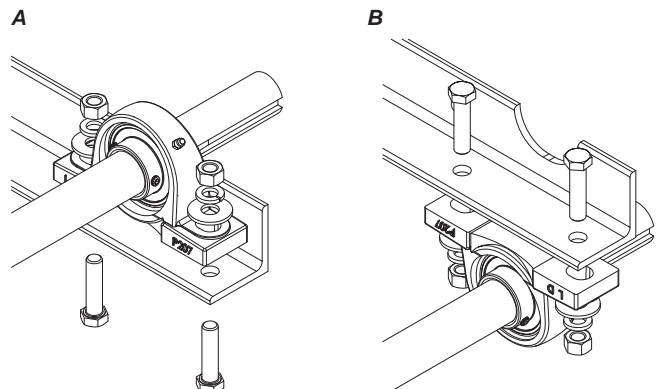
Figure 5: Frame Assembly



STEP 4 ATTACH BRUSH:

1. Slide the brush shaft through the brush assembly. Do not tighten the set screws.
2. Slide the pillow block bearings onto each end of the brush shaft. Leave at least 4 inches [100 mm] of free shaft on the keyed end of the shaft. Do not tighten the set screws.
3. Bolt the pillow block bearings to the frame in the configuration desired, using the included hardware. [Figure 6]

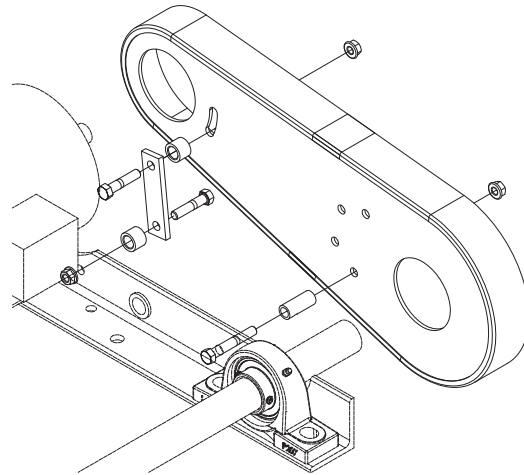
Figure 6: Pillow Block Installation



STEP 5 INSTALL BELT GUARD:

1. Remove the cover from the belt guard and mount the guard body to the side frame using the support hardware. [Figure 7]
 - a. If the pillow blocks are mounted on the angle side of the side frames [Figure 6A], use mounting holes 'A'. [Figure 8].
 - b. If the pillow blocks are mounted on the flat side of the side frames [Figure 6B], use mounting holes 'B'. [Figure 8]

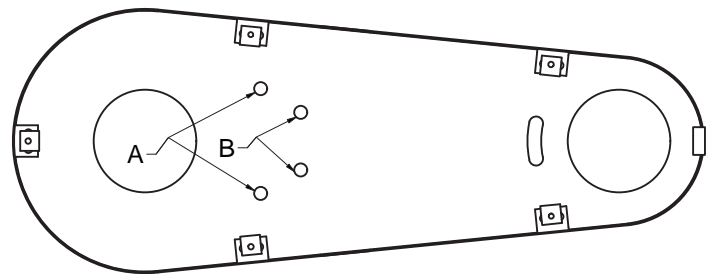
Figure 7: Belt Guard Assembly



STEP 6: INSTALL BELT DRIVE:

1. Install the tapered bushings and keys onto the motor and brush shafts approximately flush with the end of each shaft and tighten the set screw to secure the keys in the keyway. [Figure 9]
2. Install the small sheave onto the bushing on the motor shaft and the large sheave onto the bushing on the brush shaft using the included hardware. [Figure 9]
3. Adjust the brush shaft positioning so that the brush sheave aligns with the motor sheave. Then tighten the set screws in the pillow block bearings (2 per bearing).
4. Loosen the nuts holding the motor to the motor base.
5. Adjust the motor tensioner as needed and install the V-Belt onto the sheaves [Figure 9].
6. Tighten the motor tensioner until the belt slack is taken up. Double check sheave/belt alignment and adjust the brush shaft as necessary.
7. Once the tension is fully adjusted, re-tighten the nuts holding the motor to the motor base, and reinstall the belt guard cover.

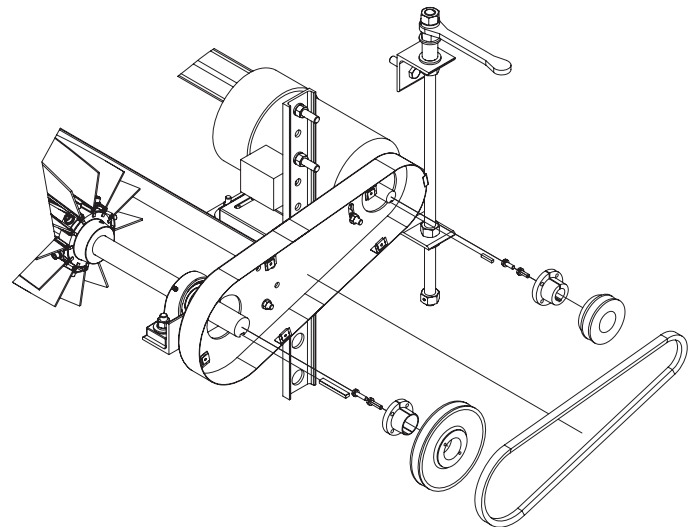
Figure 8: Belt Guard Mounting Holes



STEP 7 BELT:

1. Align the brush on the shaft so that the bristles cover the entire conveyor belt width. Tighten down the set screws in the brush hubs (2 per hub)
2. Cut off any excess shaft material.

Figure 9: Belt Guard Mounting Holes



STEP 8:

1. Wire the electric motor so that the brush sweeps in the opposite direction of the belt travel. The electric motor should be wired to stop and start with the conveyor.
2. Use the ratchets to adjust the brush height so that it just touches conveyor belt. The SBR typically cleans best when the bristles sweep the belt with a feathertouch, flicking carryback into the material stream. Excessive bristle pressure will cause the bristles to wear faster.
3. Now the Compact Model SBR is ready to go.



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