# OPERATOR MANUAL Chip Blocker











Bulletin #09-03 Rev. 0816

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### **PACKING LIST**

- ChipBlocker Assembly including Pullout Chip Basket Assembly
- In-line Strainer/Ball Valve Subassembly
- Ø1" NPT x Ø1" NPT x ؽ" NPT Street Tee
- ø1" NPT Pipe Nipple
- ø½" NPT Hose Barb Brass
- 1 ½ " I.D. Accuflex Hose x 10' LG (Drain Hose)
- ½" I.D. Accuflex Hose x 10' LG (Supply Hose)
- ø1 ½ "Hose Clamp
- Qty  $(2) g^{1/2}$ " Hose Clamp
- Qty (4) 7/16" Hex HD Cap Screw,  $\frac{1}{4}$ "-20 UNC x  $\frac{3}{4}$ " LG
- Qty (4) Spring Lock Washer 1/4"
- Qty (4) Flat Washer 1/4"
- Qty  $(4) \frac{1}{4} 20$  UNC nuts
- Operators Manual

## TOOLS REQUIRED FOR INSTALLATION

- 5/32" Allen HD Wrench
- Tape Measure
- Pencil
- #8 (0.1990") Size Drill
- 1/4"-20 UNC Tap
- 5/16 drill bit
- 7/16" Hex Wrench or Socket
- Pipe Wrench
- Pipe Sealant
- Slotted Screwdriver

## **INSTALLATION INSTRUCTIONS**

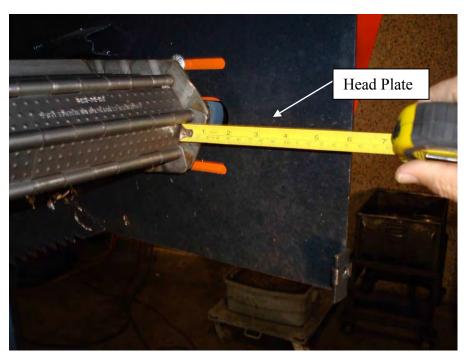
**WARNING:** Never install ChipBlocker while the conveyor is running. Maximum operating pressure is 75 psi.

Step 1. Disconnect electrical power and lock out the conveyor before installing the ChipBlocker.

Step 2. Remove the access cover from the conveyor.



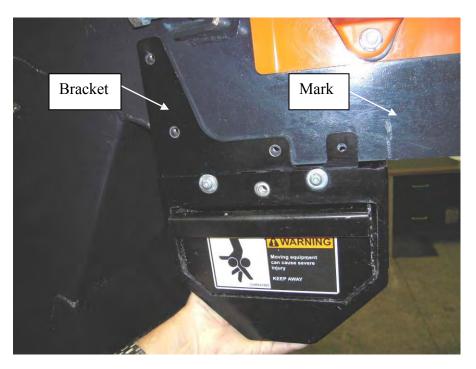
Step 3. Measure the distance from the end of the belt flat to the edge of the head plate.



Step 4. Add 1-2 inches to the measurement from step 3 and mark the dimension on the head plate. Maximize this dimension as this allows more time for chips to fall into the hopper before they reach the ChipBlocker.



Step 5. Install the brackets included with your ChipBlocker to the assembly if required. Place the ChipBlocker adjacent to the mark on the head plate making sure the assembly is aligning securely with the discharge bottom edges.



Step 6. Using the brackets as a template mark the holes to be drilled to connect the ChipBlocker to the Conveyor. Be sure the locations of the bolts do not interfere with the belting or tracks on the inside of the discharge chute.



Step 7. Drill and tap the holes using #8 (0.1990 inches) size drill and tap for a ½-20 UNC thread. Another option available is to drill a 5/16 inch diameter through hole for a ½-20 UNC bolt and secure with the nuts provided. In this case make sure that you have access to the nuts for tightening.



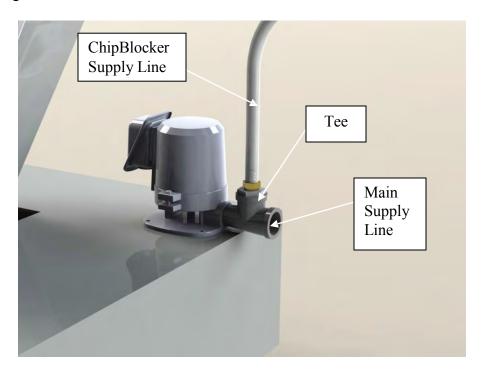
Step 8. Assemble the ChipBlocker to the conveyor with the fasteners included. Next connect your drain hose to the bottom fitting of the ChipBlocker, clamp the hose to the fitting, and route the hose to your coolant tank.



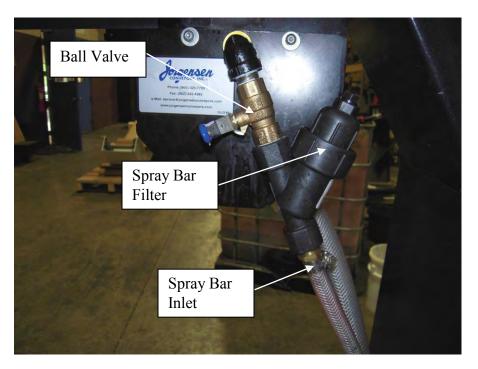
Step 9. Snap the Ball Valve/Spray Bar Filter Assembly in place by retracting the coupler as shown below and inserting onto the plug fitting.



Step 10. Select an existing machine supply pump as your source of coolant for the ChipBlocker. Disconnect the coolant line and fitting from the supply pump. Insert the tee provided and reattach the fitting and coolant line.



Step 11. Next attach your ChipBlocker coolant supply line to both the supply pump tee and the coupling inlet to the ChipBlocker spray bar using the clamps provided.



Step 12. Reconnect the electrical power. Be sure the chip basket is installed and the ball valve is closed. Turn on the conveyor first followed by the supply pump. Slowly adjust the ball valve controlling the flow to your nozzles so that the spray pattern has an overlapping spray. The spray bar does not need much flow to be effective and typically consumes approximately  $1\frac{1}{2}$  to 3 GPM, depending on the number of nozzles. Observe the operation of the overall system and readjust the ball valve accordingly to make sure you have full coverage of the wash on the bottom side of the belt.



Step 13. Stop the conveyor. Next close off your flow of coolant to the ChipBlocker spray bar by rotating the ball valve handle to the closed position. As required remove the pullout chip basket and empty into the hopper.



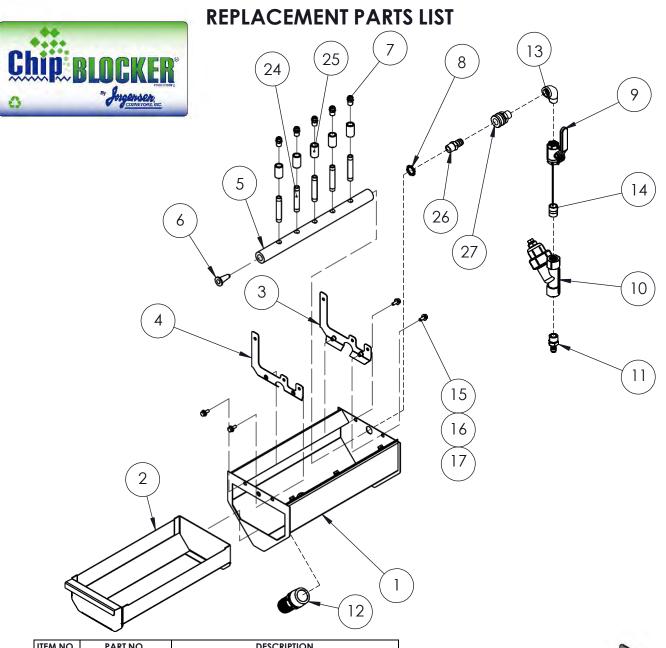
### MAINTENANCE AND TROUBLE SHOOTING

WARNING: Never perform maintenance on the ChipBlocker while the conveyor is running. Disconnect electrical power and lock out the conveyor before maintenance.

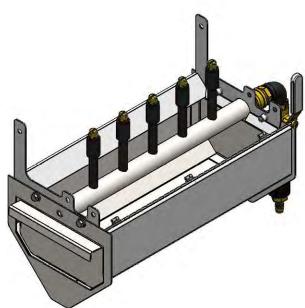
**MAINTENANCE**: Very little maintenance is required for the ChipBlocker. But to ensure maximum efficiency refer to the below steps periodically as required.

- Remove the pullout chip basket and empty into the hopper.
  - o Scrub the perforations of contaminates.
- Remove the spray bar Filter Media and clean the mesh of contaminates when you see a disruption in your spray pattern.
- Check the hose clamps to ensure they are tight.
- Check the mounting screws to ensure they are tight.
- Verify that the lock nut on the quick connect plug to the spray bar is tight.
- Check the nozzles to verify that they are not plugged, if plugged;
  - o Remove and clean spray bar.
  - o Remove and clean nozzle extensions and nozzles.
  - o If the nozzles become frequently plugged you may consider changing your spray bar Filter Media to a finer mesh. The mesh that is supplied with the ChipBlocker is a 40 mesh or 385 micron cartridge (Contact Jorgensen Conveyors, Inc. for different mesh options).
- Check that the nozzles are horizontal with respect to each other to provide the overlapping wash. The distance between the belt flat and nozzle face is typically 1½ to 2 inches.

**TROUBLESHOOTING**: If the nozzles become plugged or misaligned please refer to the above maintenance steps.



ITEM NO.	PART NO.	DESCRIPTION
1	VARIES*	HOUSING ASSEMBLY
2	VARIES*	PULL-OUT CHIP BASKET ASSEMBLY
3	30-7571-T01	MOUNTING BRACKET - FAR SIDE, CHIPBLOCKER
4	30-7571-T02	MOUNTING BRACKET - FAR SIDE, CHIPBLOCKER
5	VARIES*	SPRAY BAR ASSEMBLY
6	66-1093	SILICONE END PLUG FOR SPRAY BAR
7	68-1949	SPRAY NOZZLE - Ø1/4" NPT - BRASS
8	70-1562	ø1/2" NPT LOCK NUT
9	73-1085	ø1/2" NPT BALL VALVE
10	68-1952	IN-LINE LINE STRAINER - Ø1/2" NPT
11	68-1553	Ø1/2" NPT HOSE BARB - BRASS
12	68-1570	FITTING-BARB-1-1/2 PIPE X 1-1/2 HOSE-
13	68-1293	ø1/2" NPT 90° STREET ELBOW
14	73-1193	ø1/2" NPT CLOSED PIPE NIPPLE
15	70-1003	HEX HEAD CAP SCREW - 1/4-20UNC x 3/4" LONG
16	70-1421	SPRING LOCK WASHER - Ø1/4"
17	70-1411	FLAT WASHER - Ø1/4"
18	68-1973	Ø1-1/2" I.D. ACCUFLEX HOSE x 10'-0" LG.
19	68-1348	ø1/2" I.D. ACCUFLEX HOSE x 10'-0" LG.
20	70-1722	ø1-1/2" HOSE CLAMP
21	70-1634	ø1/2" HOSE CLAMP
22	68-1965	ø3/4" x 3/4" x 1/2" NPT SCH. 40 REDUCING TEE
23	68-0809	ø3/4" NPT CLOSED PIPE NIPPLE
24	68-1272	ø1/4" NPT x 3.00" PIPE NIPPLE
25	73-1047	ø1/4" NPT FULL COUPLING
26	68-1964	QUICK CONNECT PLUG - Ø1/2" NPT - BRASS
27	68-1963	QUICK CONNECT COUPLER - Ø1/2" NPT - BRASS
28	70-1638	NYLOK HEX NUT - 1/4-20UNC



COMPLETED CHIP BLOCKER® ASSEMBLY

\*SUPPLY J.C.I. WITH THE SERIAL NUMBER OF THE UNIT

