

No. 340765 Machine: Sentinel Published: 11-2004

Rev. 01

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in the machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save the cost of ordering an entire kit.

NOTE:Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation instructions for kit number 9001187

SYNOPSIS / PROBLEM:

This kit contains the parts needed to install conveyor update kit on Sentinel model sweepers. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 6-8 hours)

PREPARATION:

- 1. Park the machine on a clean level surface.
- 2. Turn off the machine, remove the key, and set the parking brake.

FOR SAFETY: Before leaving or servicing machine, stop on level surface, turn off machine, set parking brake, and remove key.

3. Raise or tilt the hopper and engage hopper support bar or support pin.



WARNING: Raised or tilted hopper may fall. Engage hopper support bar or support pin.

4. Thoroughly clean all dirt and debris from the conveyor. It is much easier to install this kit if the conveyor is clean.

INSTALLATION:

- 1. Remove the upper rear panel (the upper panel facing the hopper) from the conveyor.
- 2. Remove the thirteen conveyor paddle angle assemblies (A) and the paddle spacers (B) from the conveyor chains (C). Refer to Fig. 1.

3. Set the paddle spacers (B) aside. The spacers are used to install the new conveyor paddle angles (1) onto the conveyor chains. Twelve paddle spacers (2) are included to replace damaged or lost spacers. Discard the paddle angle assemblies (A) and the other hardware used to hold the paddle angle assemblies onto the conveyor. Refer to Fig. 1.

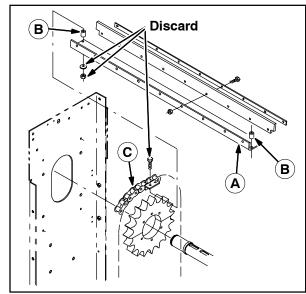


FIG. 1

4. Remove the main brush to access the lower sprockets. Refer to the Maintenance Section in the Operators Manual for instructions.

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- 5. Remove the deflector plate (F) from the right side of the conveyor assembly. Do not discard the bolts or washers (E) since they are needed to install the new plate (5). Tip the new deflector plate (5) so it clears the chain guides and use the bolts and washers removed from the old deflector plate to install the new deflector plate. Torque the bolts 18.5-24 Nm, 13.6-17.7 ft. lbs. Refer to Fig. 5.
- 6. Remove the deflector plate (D) from left side of the conveyor assembly. Do not discard the bolts or washers (E) since they are needed to install the new deflector plate (5). Remove the top and bottom bolts (G) from the the angle guide (H), slide the angle guide up approximately 2" (enough to allow the deflector plate (5) to be slid over the sprocket teeth, the sprocket teeth will not allow the cover plate to be installed without sliding the angle guide up), and clamp the angle guide to the chain. Refer to Fig. 5.
- 7. Use the bolts and washers (E) to install the new deflector plate (5) to left front angle guide. Unclamp the angle guide (H), slide the angle guide back into place, and reinstall the top bolt (G) (be sure the angle guide is through the slot in the deflector). Finish bolting the deflector plate and angle guide onto the conveyor assembly. Torque the bolts 18.5-24 Nm, 13.6-17.7 ft. lbs. Refer to Fig. 5.

NOTE: The cloth located inside the conveyor paddle strips (7) is not centered. Position the thicker rubber side of the conveyor paddle strips up away from the conveyor paddle angle (1).

8. Use nine hex screws (8) and nine hex nuts (9) to assemble a paddle retainer strip (7) and a conveyor paddle strip (6) onto each conveyor paddle angle (1). Hand tighten the hex screws and hex nuts. Refer to Fig. 2.

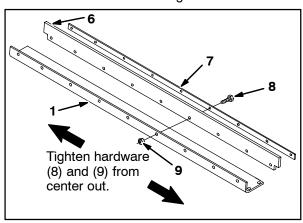


FIG. 2

9. Tighten the hex screws (8) and the hex nuts (9) assembled in the previous step. Start from the center and work out towards the sides. Tighten the hex screws and hex nuts until they touch the conveyor paddle assembly and then tighten an additional 1/4 turn. Refer to Fig. 2.

NOTE: If the conveyor paddle strip (6) starts to bow, loosen the hex nuts (9)/hex screws (8) a 1/8 turn.

NOTE: To prevent hardware from being damaged during conveyor operation, install items assembled in the following step as shown Fig. 3. Be sure the hex screws (3) come up from the bottom as shown in Fig. 3. **Do Not** reassemble the hardware as shown in Fig. 1 (how these items were previously assembled).

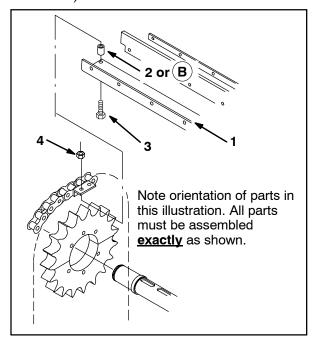


FIG. 3

Use the hex screws (3), the paddle spacers (B) (new paddle spacers (2) if necessary), and the lock nuts (4) to install the paddle assemblies assembled in Step 8 and Step 9 onto the conveyor assembly chains. Torque screws 37-48 Nm, 27.3-35.4 ft. lbs. Refer to Fig. 3.

11. Measure 12" from the outer edges of each side of the top cross member and clean any built up dirt from the two areas just measured. Refer to Fig. 4.

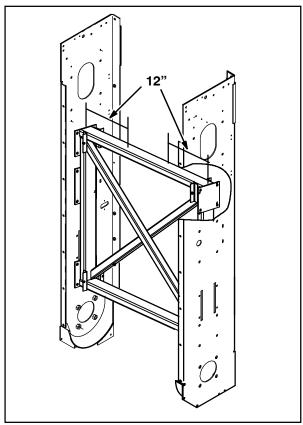


FIG. 4-(not to scale)

NOTE: Use a tap to clean the M8 X 1.25 holes in the four chain guides prior to installing the deflectors (10). Refer to Fig. 6 for locations of holes on the chain guides.

- 12. Place both deflectors (10) onto the areas of the top cross member of the conveyor frame cleaned in the previous step. Refer to Fig 6.
- 13. Use two hex screws (11) and two washers (12) to connect the deflectors (10) to the chain guides. Refer to Fig 6.
- 14. Slide one washer (14) onto each hex screw (13) and insert a hex screw into one side of the each deflector (10), underneath the top cross member of the conveyor frame, and out through the other side of the deflector. Refer to Fig 6.
- 15. Slide another washer (14) onto each hex screw (13) and tighten a lock nut (9) onto each hex screw. Do not over tighten the lock nuts onto the hex screws. Refer to Fig 6.
- 16. Reinstall the main brush onto the machine.
- 17. Reinstall the upper rear panel onto the conveyor assembly.
- 18. Test the conveyor to ensure it operates properly.

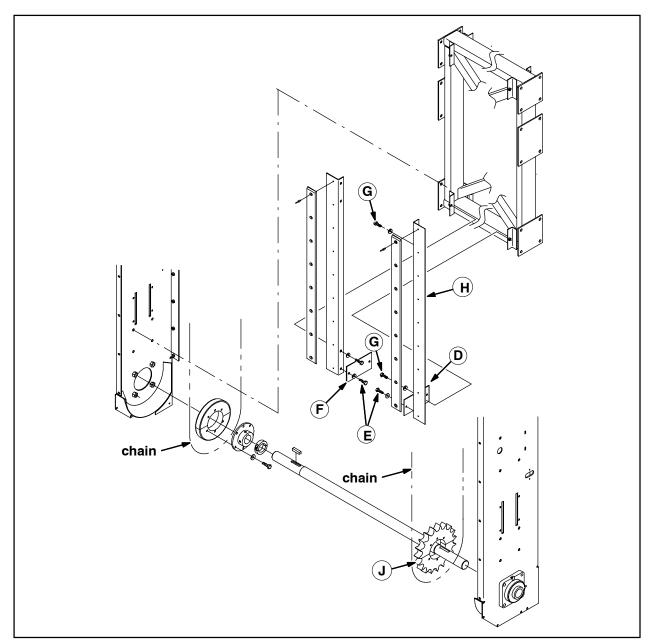


FIG. 5

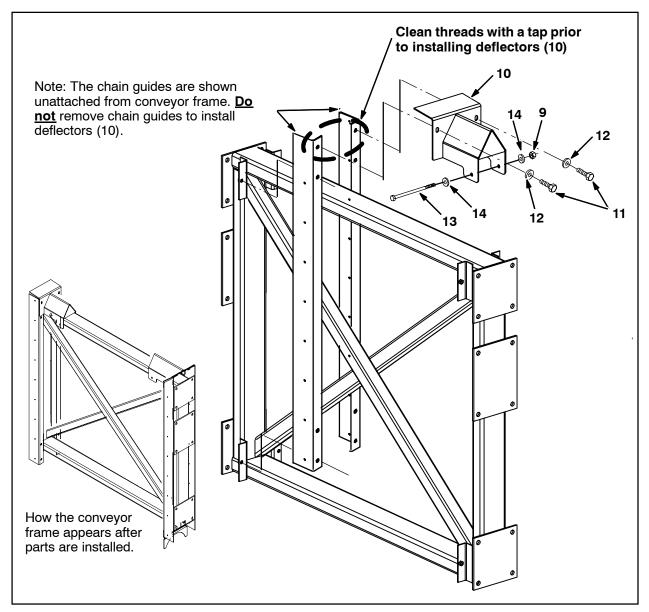


FIG. 6

Bill of Materials for Conveyor, Kit, Update-9001187

		Tennant		
	Ref.	Part No.	Description	Qty.
Δ		9001187	Conveyor, Kit, Update	1
•	1	1005678	Angle, Paddle, Conveyor	13
•	2	1005722	Spacer, Paddle	12
•	3	16930	Screw, Hex, M10 X 1.5 X 50, 8.8	52
•	4	08166	Nut, Hex, Lock, M10 X 1.5	52
A	5	1019488	Plate, Deflector	2
•	6	1005719	Strip, Paddle, Conveyor	13
•	7	1005718	Strip, Retainer, Paddle	13
•	8	76570	Screw, Hex, M8 X 1.25 X 30, 8.8	117
•	9	08709	Nut, Hex, Lock, M8 X 1.25, NL	119
A	10	1020442	Deflector, Weldt	2
•	11	16931	Screw, Hex, M8 X 1.25 X 20, 8.8	4
A	12	32491	Washer, Flat, 0.31 Std	4
A	13	16946	Screw, Hex, M8 X 1.25 X 150, 8.8	2
A	14	32490	Washer, Flat, 0.25 Std	4

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