



INSTRUCTION BULLETIN

No. 340717
Machine: Sentinel
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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 9004218**

SYNOPSIS:

This kit contains the parts needed to install/replace a turbo engine fan kit on Sentinel sweepers. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 2 hours)

PREPARATION:

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

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

2. Disconnect the gas springs (one on each side of the cab) from the back of the cab. The gas springs can remain attached to the doors.
3. Use a small cable tie to tie off the windshield washer hose by the wiper arm.
4. Pry the plastic plugs from both rear corners of the cab and remove the M20 hex nuts and washers holding the cab to the machine. Set the hex nuts, washers, and plastic plugs aside. Refer to Fig. 1.



FIG. 1

NOTE: Tilting the cab. Refer to "Tilting the Cab with a Hoist" if cab is not equipped with a hydraulic cab tilt group. Refer to the "Tilting the Cab with the Hydraulic Tilt Assembly" if there is a hydraulic cab tilt group for tilting the cab.

TILT THE CAB FORWARD WITH A HOIST

The cab prop arm is located on the bottom of the cab. Engage the prop arm when the cab is tilted forward. Refer to Fig. 2.

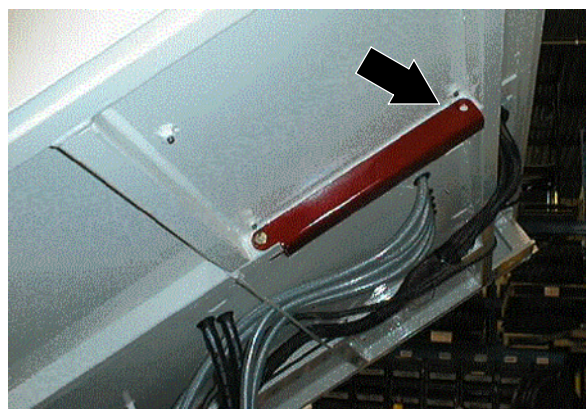


FIG. 2

CAUTION; DO NOT ATTEMPT TO TILT THE CAB WITHOUT AN OVERHEAD MOTORIZED TROLLEY CRANE.

1. Hook the overhead hoist chain to the lift bracket located at the top rear of the cab. Refer to Fig. 3.

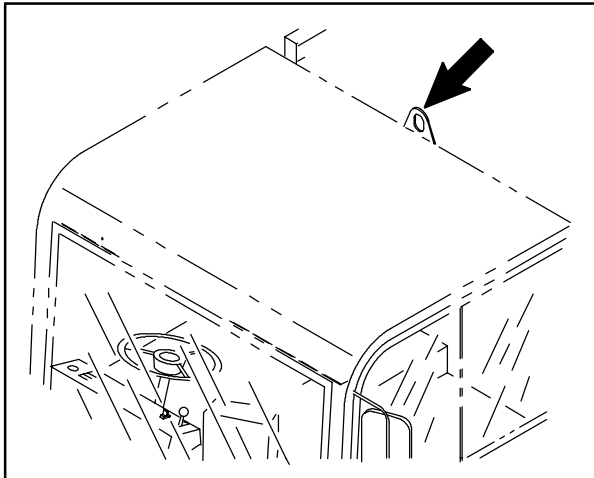


FIG. 3

2. Start lifting the cab and simultaneously moving the hoist toward the front of the machine. The cab is completely tilted when the retaining cable is taut.
3. Pull the pin from the cab prop arm, let arm drop, and install the pin into the lower hole on the arm and frame bracket. Refer to Fig. 4.

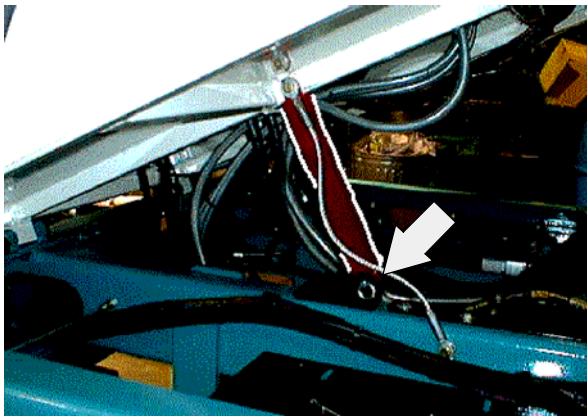


FIG. 4

4. Leave the hoist chain hooked to the cab while working under the cab.

TILTING THE CAB WITH THE HYDRAULIC TILT ASSEMBLY:

1. Remove the hex nut and washer from both rear corners of the cab. Refer to Fig. 1 for location of hex nut and washer.
2. Elevate cab to full tilted position.
3. Engage cab support mechanism to hold cab into the tilted position.



WARNING: Tilted cab may fall. Engage cab support mechanism whenever the cab is tilted for maintenance.

INSTALLATION:

NOTE: Drain radiator and remove lower radiator hose (A) - Steps 1 and 2 - only if necessary to make installation of new fan easier.

1. Drain the radiator.
2. Remove the lower radiator hose (A) at the water pump. Refer to Fig. 5.

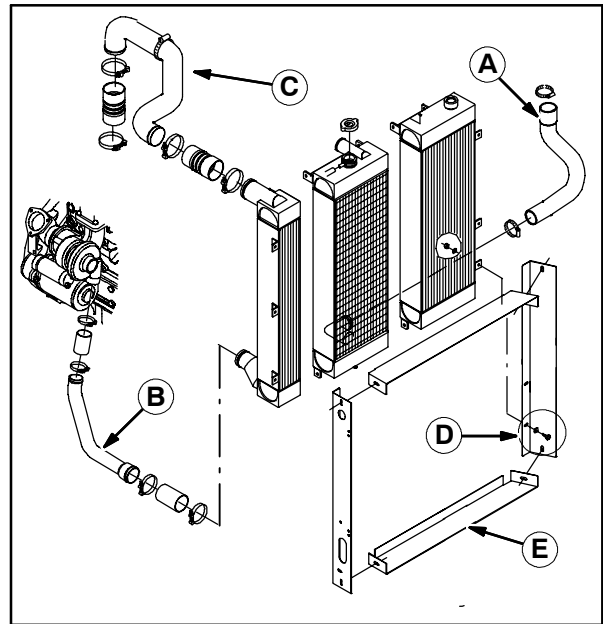


FIG. 5

3. Remove the lower turbo air cooler hose (B). Refer to Fig. 5.
4. Remove the upper turbo air cooler hose (C). Refer to Fig. 5.
5. Remove the bolts (D) holding the lower radiator shroud (E) onto the radiator.

6. Pivot the entire radiator assembly out approximately 6" and block it out.
7. Remove the four bolts holding the existing fan and fan extension spacer onto the engine. Discard the four bolts, spacer, and fan.
8. Apply blue Loctite (242 or 243) to the four hex screws (4).
9. Use four hex screws (4), four belleville washers (6), and four flat washers (5) to install the fan (3) and spacers (1) and (2) onto the engine. Be sure the print on the fan is pointed towards the engine. Tighten the bolts to between 13.6–17.7 ft. lbs (18.5–24 NM). Refer to Fig. 6.
10. Remove the block from the radiator assembly.

NOTE: Refer to the Oetiker Stepless Spring Clamp Installation Procedure if installation guidance is required.

11. Reinstall the lower turbo air cooler hose (B). Refer to Fig. 5.
12. Reinstall the upper turbo air cooler hose (C). Refer to Fig. 5.
13. If lower radiator hose (A) was removed, reinstall the lower radiator hose to the water pump. Refer to Fig. 5.
14. If radiator was drained, refill the radiator.
15. Lower cab and reinstall all nuts and washers.
16. Reinstall the gas springs onto the engine doors and remove cable tie from windshield washer hose.

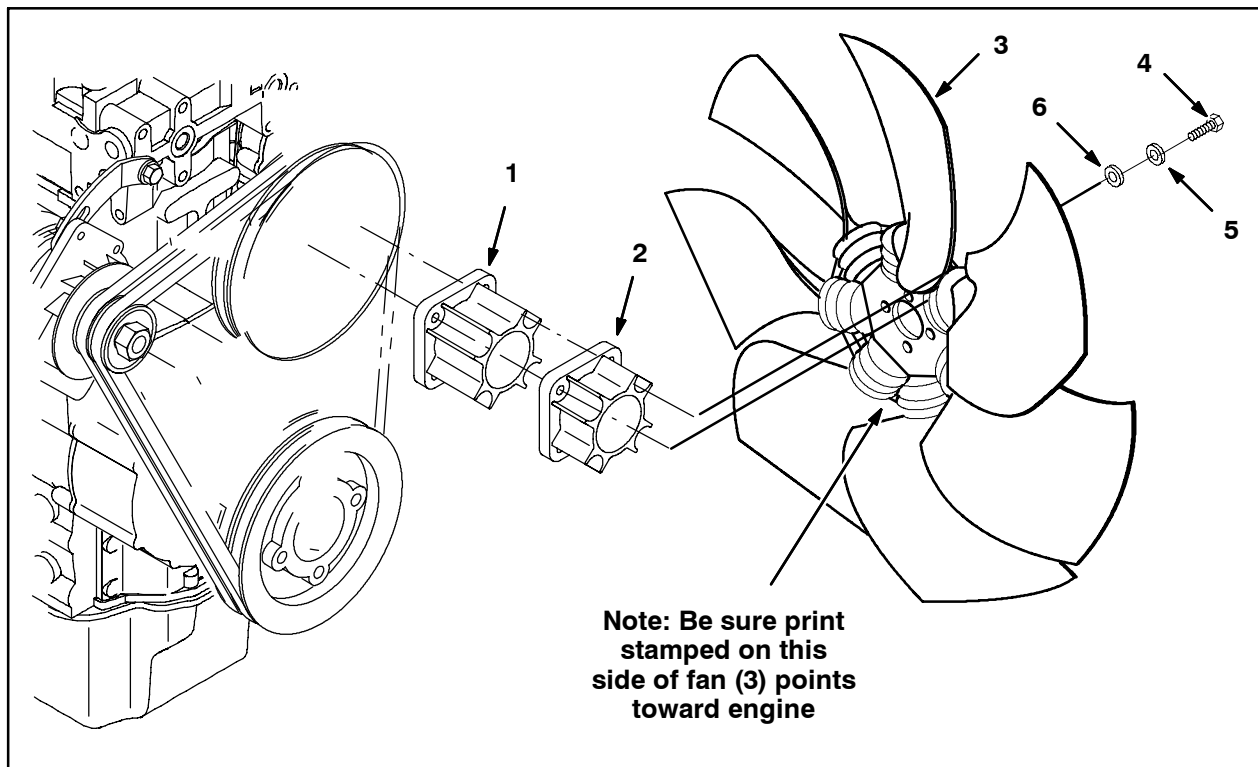


FIG. 6

Oetiker Stepless Spring Clamp Installation Procedure:

1. Open the screw until it stops at the D-nut. Refer to Fig. 1.

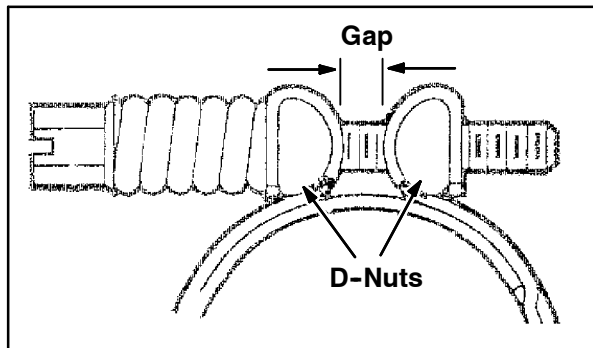


FIG. 1

2. Unhook the range control latch from the tabs and place the clamp over the hose. Refer to Fig. 2.

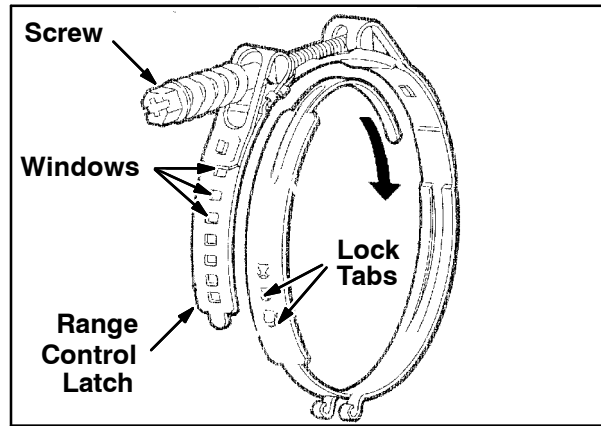


FIG. 2

3. Engage all lock tabs in windows to highest position. There should be little or no play between the clamp and hose. Refer to Fig. 2.
4. Tighten the screw until the spring is fully compressed, and then tighten the screw three (3) more full turns. There should be a gap between the two D-nuts. Refer to manufacturer specifications for torque values.

Bill of Materials for Fan Kit, Replmt, Turbo-9004218

Ref.	Tennant Part No.	Description	Qty.
▽	9004218	Fan Kit, Replmt, Turbo	1
▲	1	1043982 VR, Spacer, Fan, 2.00 Inch	1
▲	2	1043984 VR, Spacer, Fan, 1.50 Inch	1
▲	3	1036697 Fan, [Sickle]. Eng, Turbo [Sentinel]	1
▲	4	49883 Screw, Hex, M8 X 1.25 X 120, 8.8, FL	4
▽	5	32490 Washer, Flat, 0.25, Std	4
▲	6	763041 Washer, Flat, Belleville, M8	4

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