



INSTRUCTION BULLETIN

No. 340133
Machine: ATLV 4300
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Rev. 07

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you 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 367613**

DESCRIPTION:

This kit contains the parts needed to install/replace a dust filter kit option on the model ATLV 4300 Litter Vacuum.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: Hand Drill and Following Drill Bits: 13/64 [5.2 mm], 19/64 [7.5 mm], and 11/32 [8.7 mm]

(Estimated time to complete: 3 hours)

PREPARATION:

(Refer to FIG. 1 thru 9)

1. Park machine on a clean level work surface.

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

2. Disconnect battery cables from the machine.



WARNING: Always disconnect battery cables from machine before working on electrical components.

3. Remove the filter bag and vacuum fan exhaust plate from the vacuum fan housing.



WARNING: Spinning fan. Stop engine before opening debris canister.

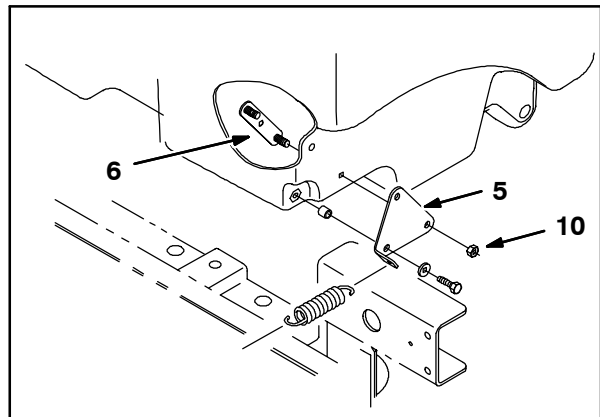
4. Open and lower the debris canister. Remove any garbage bags or liners from the debris canister.



SPRING MOUNTING PLATE INSTALLATION: (Refer to FIG. 1 thru 7)

Note: Spring eyelet holes may be predrilled on some machines..

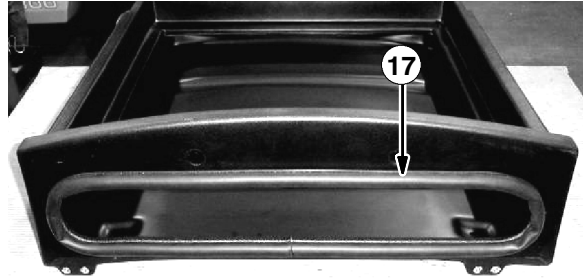
1. Mark and drill two 19/64 [7.5 mm] holes for bolt eyelet installation on the machine frame, beneath the debris hopper as shown in Fig. 2. (Refer to FIG. 2, 5 and 7)
2. Install the two bolt eyes (11) with hex nuts (12) and nyloc nuts (13). Connect one end of the tension springs (42) to each of the bolt eyes (49). (Refer to FIG. 5 and 7)
3. Disconnect and remove the debris cannister cables, canister cable sleeves and mounting hardware on the debris canister.
4. Slip the canister cables onto the new sleeves (8), then loosely mount the spring mounting plates (5), sleeves (8), and canister cables to the lower front corners of the hopper with hex screws (18), and washers (7). (Refer to FIG. 5 and 7)
5. Rotate the spring mounting plates (5), until centered in the corner of the canister. Then, using the plates as templates, mark and drill two 11/32 [8.7 mm] mounting holes in the lower front corner, on each side of the hopper. (Refer to FIG. 5 and 7)
6. Using the new mounting holes, assemble the spring mounting plates (5) to the canister with backing strips (6), and hex nuts (10). Tighten all mounting hardware. (Refer to FIG. 5 and 7)
7. Connect the open end of the tension springs (4) to the open tabs on the spring mounting plates (5). Close the debris hopper, and place it back in the upright position. (Refer to FIG. 5 and 7)



PLASTIC FILTER HOUSING ASSEMBLY AND INSTALLATION:

1. Clean off a large table or work surface. Place the new plastic filter housing (1) on the flat surface, with the back side of the plastic filter housing (1) facing down. (Refer to FIG. 6)

2. Push the bulb seal (17) onto the edge, around the entire bottom opening of the filter housing. (Refer to FIG. 6)



3. Mount the hinges (16) to the bottom of the plastic filter housing (1) with screws (10) and washers (4). Leave the hardware loose for the time being. (Refer to FIG. 6)

4. Mount the latch brackets (14) and door hinge (9), to the inside of the plastic filter housing (1) with screws (10), (15) and washers (4). (Refer to FIG. 6)

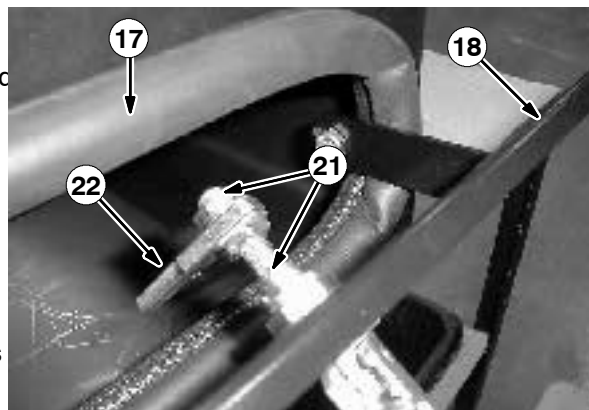


5. Install the bypass door latches (21) and latch pawls (22) to the bypass door (18) as shown. (Refer to FIG 6)

6. Mount the bypass door (18) onto the door hinges (16) with the nylon bushings (19). Secure the door onto the hinges with the cotter pins (20). (Refer to FIG 6)

7. Close and latch the bypass door (18). Install the door stop bolts (23) and nuts (24) from the inside of the plastic filter housing (1). (Refer to FIG. 6)

8. Open and close the bypass door (18) a few times. Adjust the latch pawl (22) location as necessary to compress the door seal (17) when the door is closed and latched. (Refer to FIG. 6)



9. Remove the debris canister latches, flip them 180°, then remount. (Refer to FIG. 9)

10. (Machines S.N. 000000 - 001741) Using the upper (27) and lower (28) filter housing mounting brackets as templates, mark and drill sixteen mounting holes in the debris hopper according to the dimensions in figure 5. (Refer to FIG. 3)

11. (Machines S.N. 000000 - 001741) Mount the upper (27) and lower (28) filter housing mounting brackets to the hopper with pop rivets (8) and washers (29). Install rivets from the inside of the debris hopper. (Refer to FIG. 6)

12. (Machines S.N. 000000 - 001741) Mount the plastic filter housing (1) to the mounting brackets, (27) and (28), with hex screws (31) and mounting strips (30). (Refer to FIG. 6)

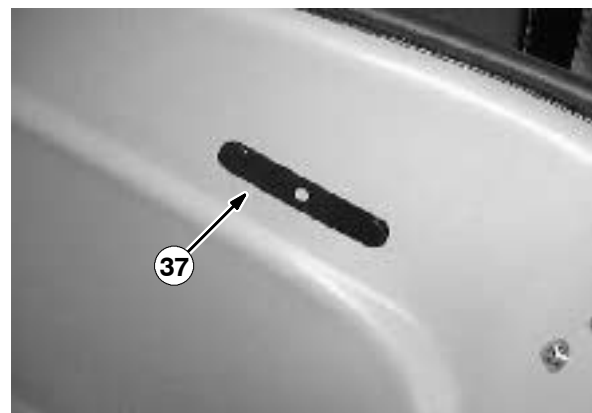
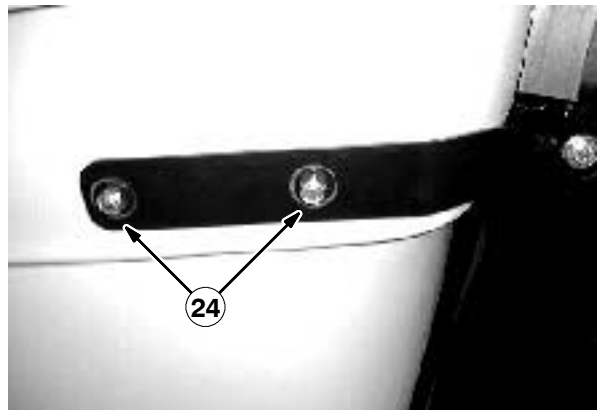
13. (Machines S.N. 000000 - 001741) Mount the support brackets (35) and (36) to each side of the plastic filter housing (1) with hex screws (23). (Refer to FIG. 6)

(Machines S.N. 001741 - xxxxxx) Mount the support brackets (42) and (43) to each side of the plastic filter housing (1) with hex screws (23). (Refer to FIG. 6)

14. (Machines S.N. 000000 - 001741) Using the support brackets (35) and (36) as templates, mark and drill two 11/32 [8.73 mm] mounting holes for the support brackets in each side of the debris hopper. (Refer to FIG. 6)

(Machines S.N. 001741 - xxxxxx) Using the support brackets (42) and (43) as templates, mark and drill two 11/32 [8.73 mm] mounting holes for the support brackets in each side of the debris hopper. (Refer to FIG. 6)

15. (Machines S.N. 000000 - 001741) Secure the support brackets to each side of the debris hopper with backing strips (37) and lock nuts (24). (Refer to FIG. 6)



16. (Machines S.N. 000000 - 001741) Mount the door latches (6) to the sides of the filter housing (1) with pop rivets (8) and washers (29).
(Refer to FIG. 6)

(Machines S.N. 001741 - xxxxxx) Mount the door latches (40) to the sides of the filter housing (1) with pop rivets (41) and washers (29).
(Refer to FIG. 6)

Note: Install the rivets from the inside of the filter housing.

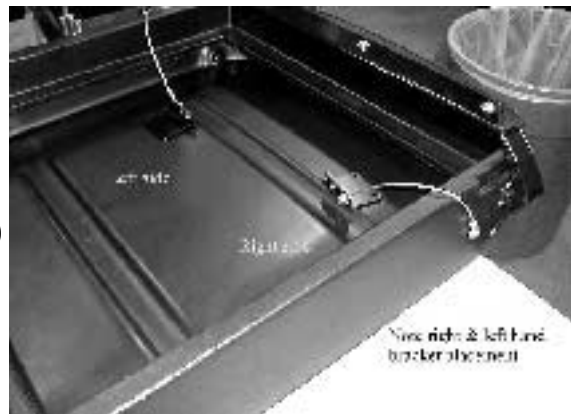
17. (Machines S.N. 000000 - 001741) Mount the door latch tabs to the right hand (2) and left hand (3) cable brackets with pop rivets (7). If the latch keepers are mounted backwards, latches will not close properly.
(Refer to FIG. 6)

(Machines S.N. 001741 - xxxxxx) Mount the door latch tabs to the right hand and left hand cable brackets with pop rivets (41). If the latch keepers are mounted backwards, latches will not close properly.
(Refer to FIG. 6)

18. Loosely mount the right hand (2) and left hand (3) cable brackets to the filter door (32) with washers (4) and nyloc nuts (5). (Refer to FIG. 6)

19. Mount one end of each filter housing cable (11) to each side of the plastic filter housing (1) with hex screws (13) sleeves (12), washers (4) and lock nuts (5). (Refer to FIG. 6)

20. Install the filter door (32) onto the door hinge (9), in the plastic filter housing (1). Close the filter door (32) and secure it with the door latches (6).
(Refer to FIG. 6)



21. Connect the open ends of each filter housing cable to the cable brackets on each side of the filter door (32), with sleeves (12), washers (4) and lock nuts (5).
(Refer to FIG. 6)

22. Open the filter door, and insert the filter panel (33) with the gasket side facing the housing, and filter pleats vertical. Close the filter door (32) and secure the filter (33) in the plastic filter housing (1) with latches. Tighten the nuts (5) on the right hand (2) and left hand (3) cable brackets.
Adjust the door hinge (9) and latches if necessary to achieve gasket compression on the filter panel (33).
Tighten all plastic filter housing hardware when finished adjusting all the filter door mounting hardware. (Refer to FIG. 6)

FILTER HOUSING DUCT INSTALLATION:

1. Mount the vacuum exhaust plate gasket (15) to the new vacuum exhaust plate (14), then attach the vacuum exhaust plate (14) to the vacuum fan housing with pan screws (16) and washers (17).
(Refer to FIG. 5 and 7)
2. Insert the new filter bag (9) through the top opening of the filter housing (1). Place the filter bag's elastic band over the lip of the filter housing (1).
(Refer to FIG. 5 and 7)

Note: The filter bag is now inserted inside the filter housing.

3. Mount one end of the filter inlet duct (1) over the vacuum exhaust plate (14) with the worm drive clamps (2). (Refer to FIG. 5 and 7)

Note: The filter bag is now kept in the filter housing, and no longer mounts to the vacuum fan housing.

4. Place the bottom end of the filter inlet duct (1) over the opening in the plastic filter housing. Check that the inlet duct (1), and the retaining clamp (3) fit over the lip of the plastic housing, and the filter bag (9). Secure the filter inlet duct (1) in place with the draw latch on the retaining clamp (3).
(Refer to FIG. 5 and 7)
5. Mount the label mounting bracket (25) to the plastic filter housing (1) with screws (23), washers (26) and lock nuts (24). Place warning decals 367667 and 367668 from the label kit onto the label mounting bracket. Discard the rest of the label kit.
(Refer to FIG. 6)
6. If the machine is equipped with a slow-moving vehicle sign, mount the SMV label bracket (34) to the filter door (32) with hex screws, (13) and washers (4). Attach the sign to the bracket (34). (Refer to FIG. 6)
7. Open the debris canister and replace the liners and garbage bags. Close and latch the canister.
8. Start the machine and check the vacuum dust filter kit for proper operation.

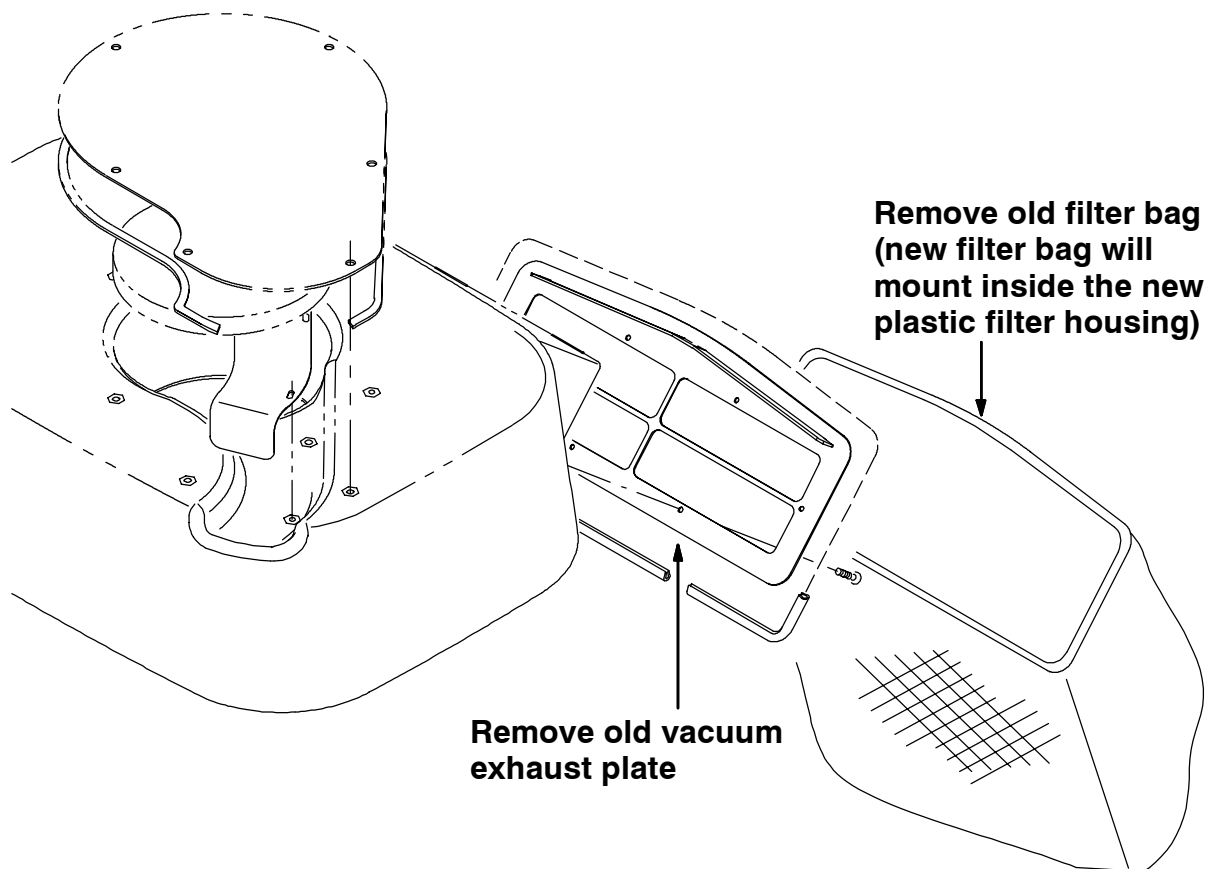


FIG. 1 - FILTER BAG AND PLATE REMOVAL

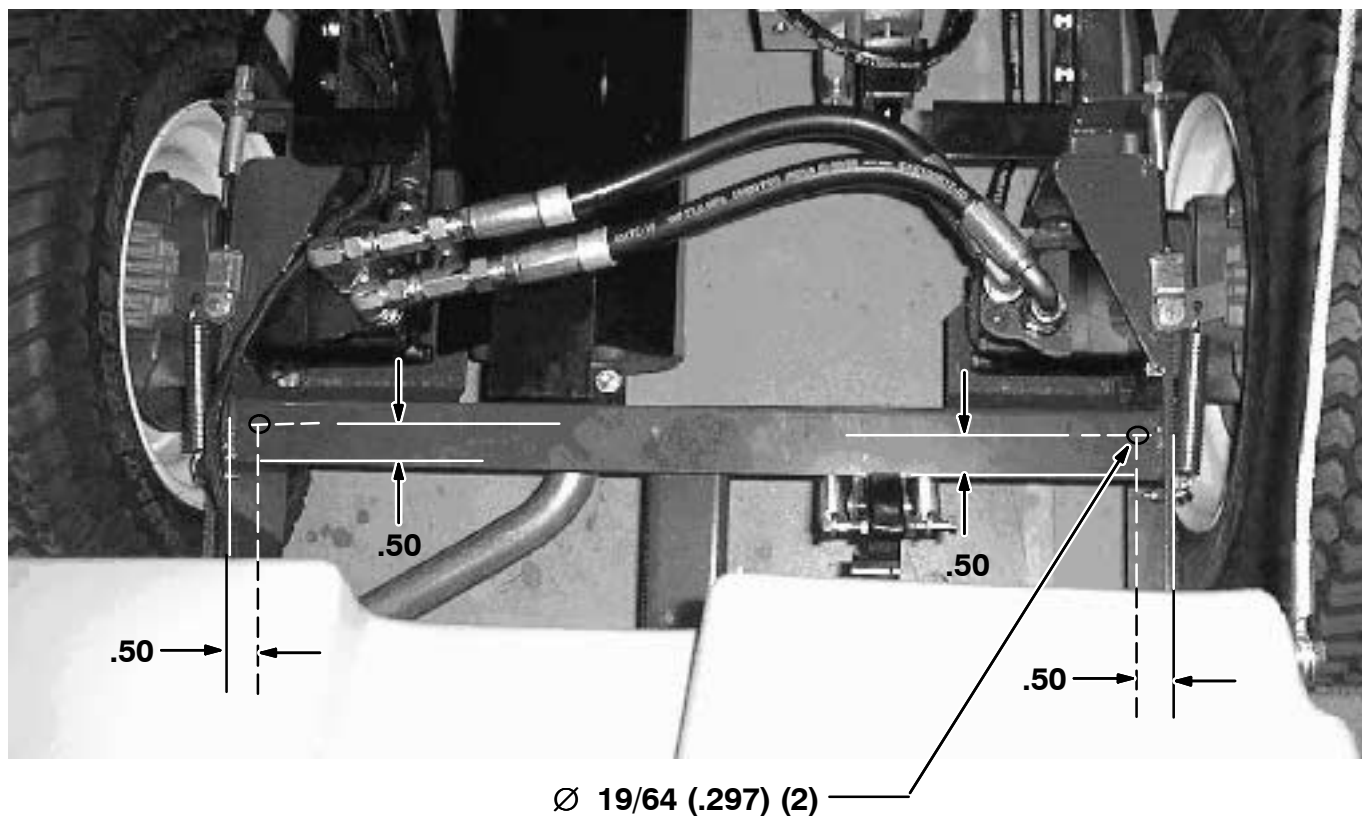


FIG. 2 - HOLE LOCATIONS FOR SPRING EYELET MOUNTINGS

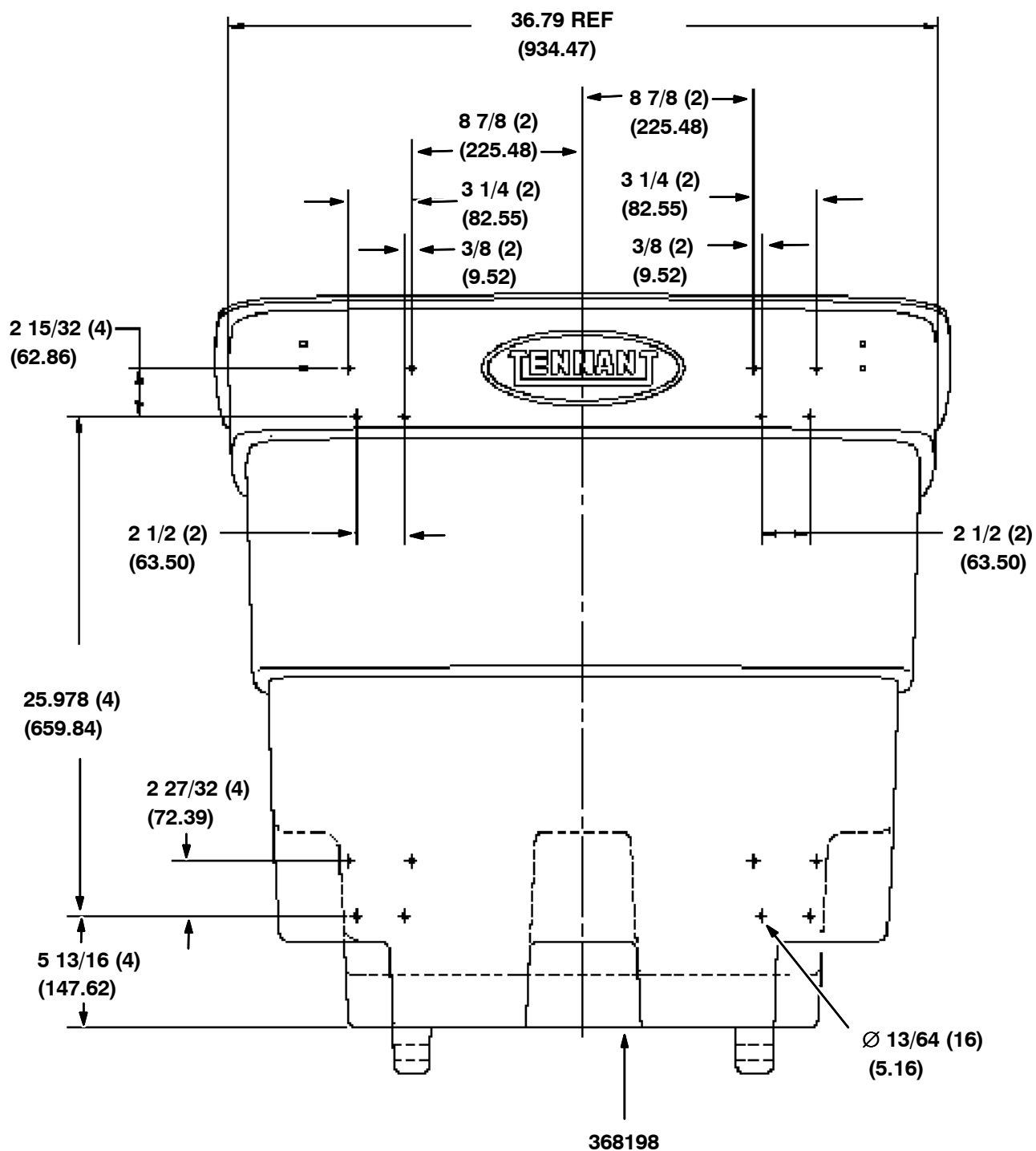


FIG. 3 - MOUNTING BRACKET HOLE DIMENSIONS

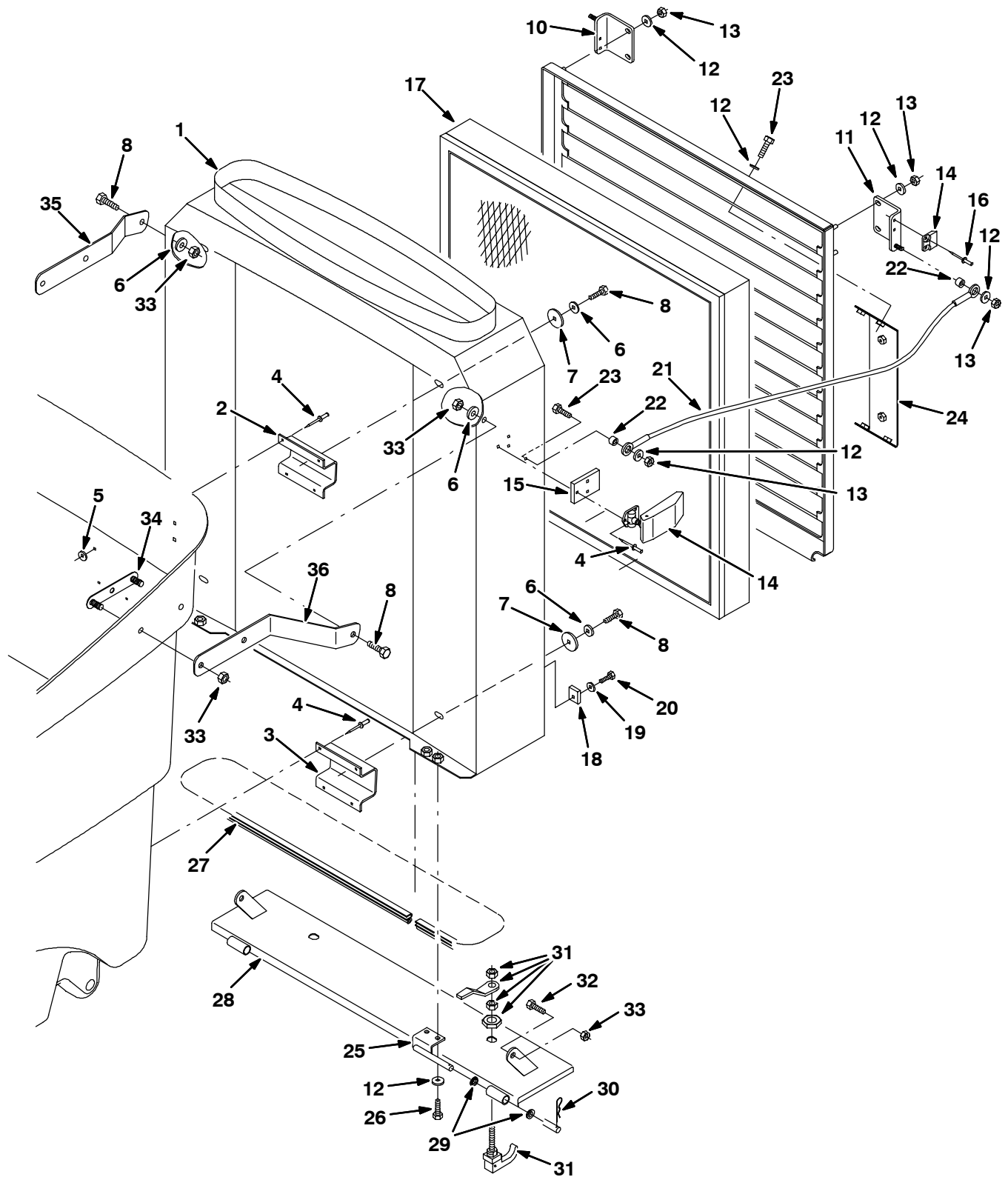


FIG. 4 - Dust Filter Housing Group (Serial Number 000000-001535)

BILL OF MATERIALS FOR DUST FILTER HOUSING GROUP (S.N. 000000-001535)

NOTE: Dust Filter Kit, Tennant Part Number 367613 includes Fig. 4 and Fig. 5

Ref.	Tennant Part No.	Machine Serial Number	Description	Qty.
1	368405	(000000-001535)	Housing Assy, Dust Filter	1
2	367985	(000000-001535)	Bracket, Mtg, Upper	2
3	367982	(000000-001535)	Bracket, Mtg, Lower	2
4	80218	(000000-001535)	Rivet, Pop .196dx.76x38dhd	22
5	08793	(000000-001535)	Washer	16
6	01685	(000000-001535)	Washer, Flat, .31 Ss	8
7	30013	(000000-001535)	Washer, Flat, .31 Fender	4
8	09010	(000000-001535)	Screw, Hex, M08-1.25 X 25, Ss	6
9	367994	(000000-001535)	Door, Filter, Mtg	1
10	368221	(000000-001535)	Bracket, Mtg, Rh	1
11	368254	(000000-001535)	Bracket, Mtg, Lh	1
12	01684	(000000-001535)	Washer, Flat, .25 Ss	16
13	08712	(000000-001535)	Nut, Hex, Lock, M06-1.0, NI,Ss	8
14	368586	(000000-001535)	Kit, Ci, Filter Latch	1
15	368253	(000000-001535)	Plate, Latch (Repl. by 368586)	2
16	87821	(000000-001535)	Rivet, Pop	4
17	368542	(000000-001535)	Filter Panel, [In A Box]	1
18	368318	(000000-001535)	Guide, Centering, Door	2
19	01683	(000000-001535)	Washer, Flat, #10 Ss	2
20	55845	(000000-001535)	Screw, Hex, Fmg, M05-0.8 X 16	2
21	19676	(000000-001535)	Cable, Lanyard	2
22	80491	(000000-001535)	Sleeve	4
23	15678	(000000-001535)	Screw, Hex, M06-1.0 X 16, Ss	6
24	368263	(000000-001535)	Bracket, Mtg, Label	1
25	368341	(000000-001535)	Hinge Wldt, Door	2
26	08716	(000000-001535)	Screw, Hex, M06-1.0 X 20, Ss	4
27	368340	(000000-001535)	Seal, Door	1
28	368339	(000000-001535)	Door Wldt, By-Pass	1
29	15877	(000000-001535)	Bearing, Flange	4
30	08178	(000000-001535)	Pin, Cotter	2
31	65695	(000000-001535)	Latch	2
32	09740	(000000-001535)	Screw, Hex, M08-1.25 X 20, Ss	2
33	08713	(000000-001535)	Nut, Hex, Lock, M08-1.25,NI,Ss	8
34	368222	(000000-001535)	Strip, Backing	2
35	368402	(000000-001535)	Bracket, Support, Rh	1
36	368403	(000000-001535)	Bracket, Support, Lh	1

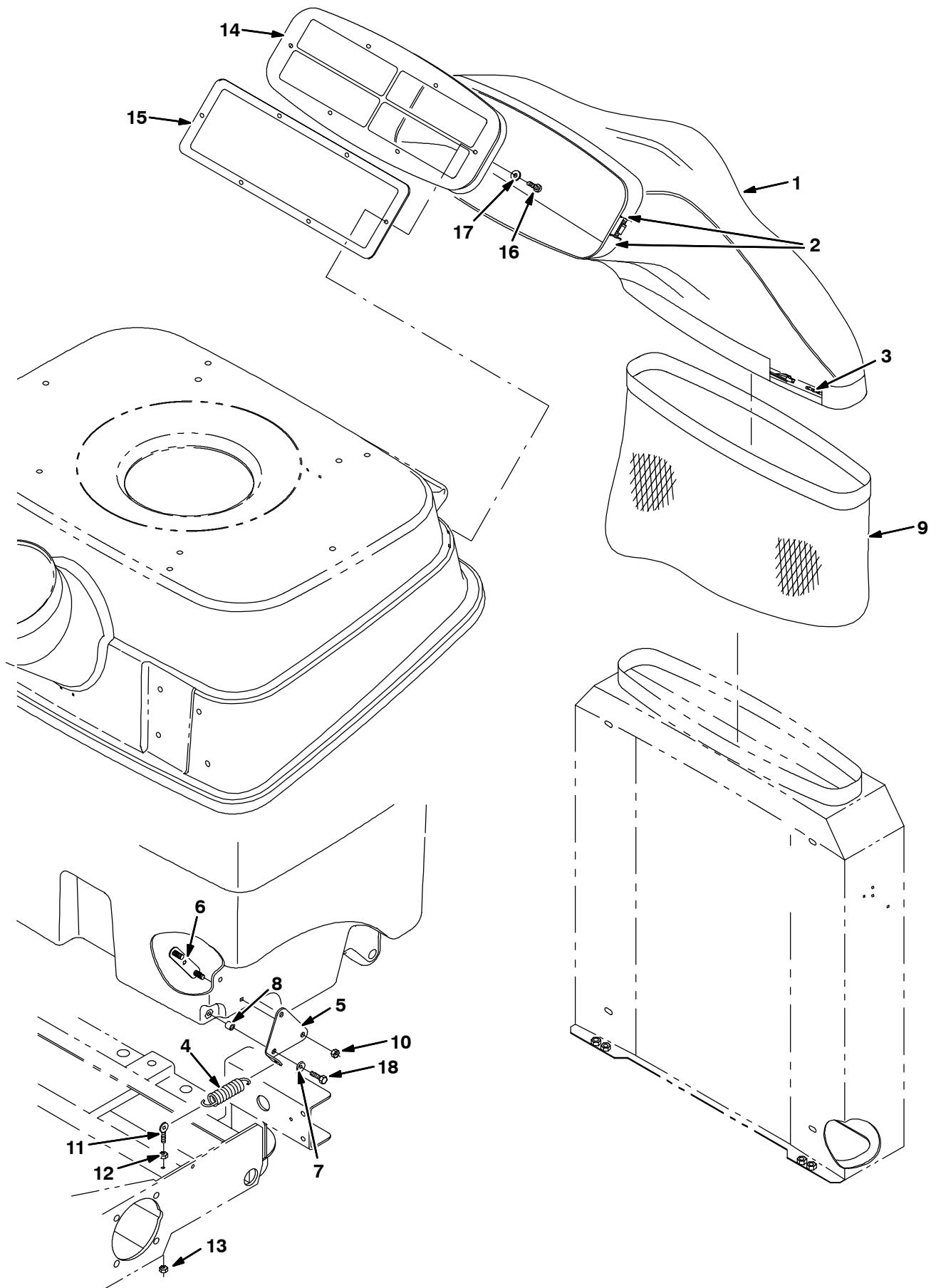


FIG. 5 - Dust Filter Bag Group (Serial Number 000000-001535)

BILL OF MATERIALS FOR DUST FILTER BAG GROUP (S.N. 000000-001535)

NOTE: Dust Filter Kit, Tennant Part Number 367613 includes Fig. 4 and Fig. 5

Ref.	Tennant Part No.	Machine Serial Number	Description	Qty.
1	367977	(000000-001535)	Duct, Inlet, Filter	1
2	02363	(000000-001535)	Clamp, Wormdrive	2
3	368333	(000000-001535)	Clamp, Retaining	1
4	368197	(000000-001535)	Spring, Tension	2
5	368392	(000000-001535)	Plate, Mtg, Spring	2
6	368222	(000000-001535)	Strip, Backing	2
7	01685	(000000-001535)	Washer, Flat, .31 Ss	6
8	222460	(000000-001535)	Sleeve	2
9	368541	(000000-001535)	Bag, Vacuum, 30.0 Lg	1
10	08713	(000000-001535)	Nut, Hex, Lock, M08 X 1.25, NI, Ss	6
11	48079	(000000-001535)	Bolt, Eye, .25-20x1.1x .25 Eye	2
12	19312	(000000-001535)	Nut, Hex, Std, .25-20	2
13	32981	(000000-001535)	Nut, Hex, Lock, .25-20, NI	2
14	368382	(000000-001535)	Bracket Assy, Vacuum Exhaust	1
15	368224	(000000-001535)	Gasket, Vacuum Plate	1
16	09200	(000000-001535)	Screw, Pan, M05-0.8 X 12, Ss	6
17	01683	(000000-001535)	Washer, Flat, #10 Ss	6
18	09011	(000000-001535)	Screw, Hex, M08 X 1.25 X 30, Ss	2

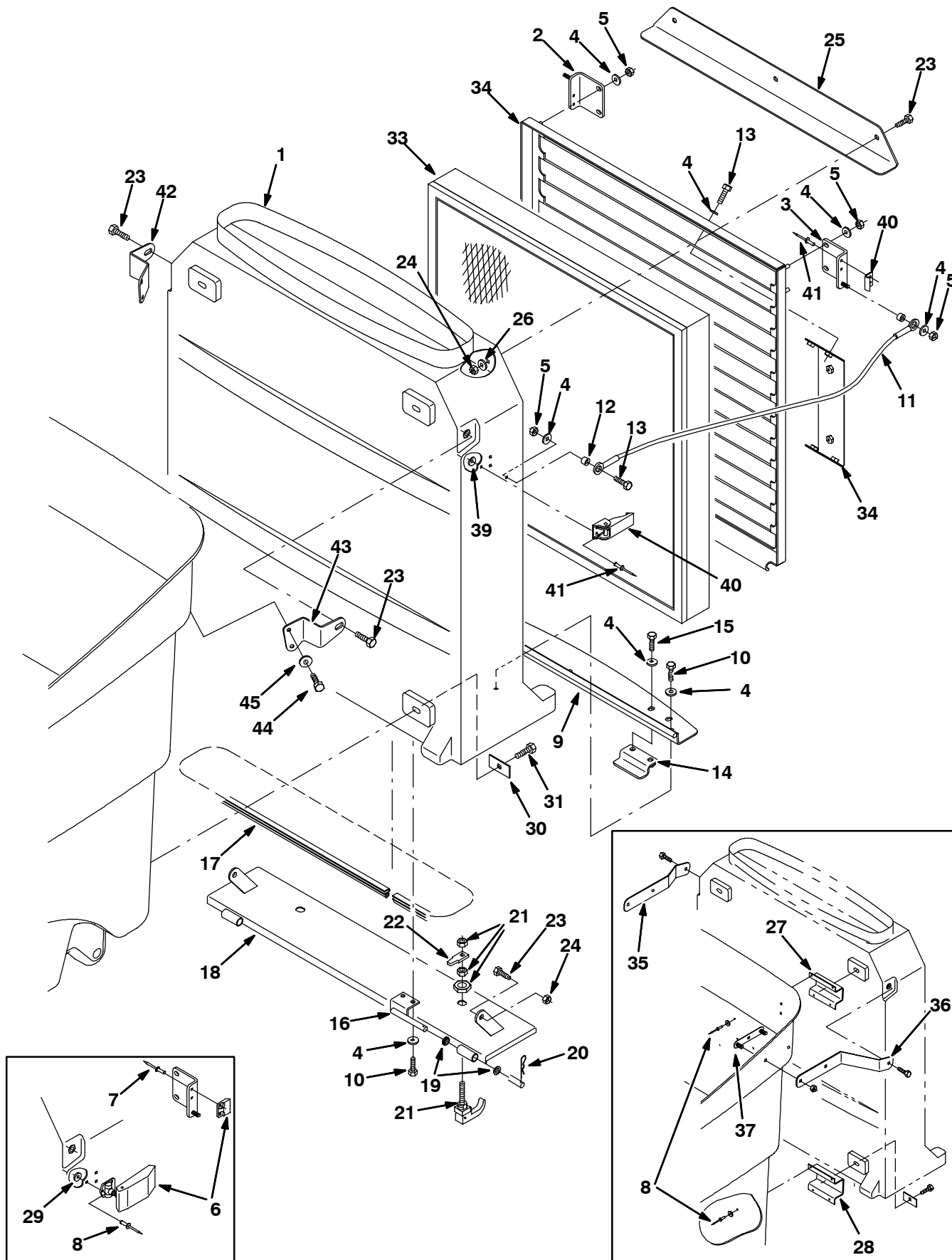


FIG. 6 - Dust Filter Housing Group (Serial Number 001535-)

BILL OF MATERIALS FOR DUST FILTER HOUSING GROUP (S.N. 001535-)

NOTE: Dust Filter Kit, Tennant Part Number 367613 includes Fig. 6 and Fig. 7

Ref.	Tennant Part No.	Machine Serial Number	Description	Qty.
1	367980	(001536-	) Housing, Filter	1
2	368221	(001536-	) Bracket, Mtg, Rh	1
3	368254	(001536-	) Bracket, Mtg, Lh	1
4	01684	(001536-	) Washer, Flt, .25 Ss	27
5	08712	(001536-	) Nut, Hex, Lock, M06 X 1.0, NI, Ss	8
6	368586	(001536-001741	) Kit, Ci, Filter Latch	1
7	87821	(001536-	) Rivet, Blind, .187d X 0.44 X .38d, Alm	4
8	80218	(001536-	) Rivet, Blind, .187d X 0.66 X .38d, Alm	22
9	368363	(001536-	) Hinge Wldt, Door	1
10	08716	(001536-	) Screw, Hex, M06 X 1.0 X 20, Ss	7
11	19676	(001536-	) Cable, .09d, 13.0l, .38eye /.38eye	2
12	80491	(001536-	) Sleeve	4
13	15678	(001536-	) Screw, Hex, M06 X 1.0 X 16, Ss	6
14	368459	(001536-	) Bracket, Latch	2
15	09007	(001536-	) Screw, Hex, M06 X 1.0 X 25, Ss	4
16	368450	(001536-	) Hinge Weldment, Door	2
17	368461	(001536-	) Seal, Bulb, 56.25 Lg.	1
18	368339	(001536-	) Door Wldt, By-Pass	1
19	15877	(001536-	) Bushing, Flng, 0.38b 0.50d 0.25l, Nyl	4
20	08178	(001536-	) Pin, Cotter, .062 X 0.75	2
21	65695	(001536-	) Latch	2
22	20839	(001536-	) Pawl	2
23	09740	(001536-	) Screw, Hex, M08 X 1.25 X 20, Ss	7
24	08713	(001536-	) Nut, Hex, Lock, M08 X 1.25,NI, Ss	5
25	368455	(001536-	) Bracket, Mtg, Label	1
26	30013	(001536-	) Washer, Flat, .31 Fender	3
27	367985	(001536-001887	) Bracket, Mtg, Upper	2
28	367982	(001536-001887	) Bracket, Mtg, Lower	2
29	08793	(001536-001887	) Washer, 0.20b 0.50d .06, Alm	16
30	368411	(001536-	) Strip, Mtg, Filter Hsg	4
31	09010	(001536-	) Screw, Hex, M08 X 1.25 X 25, Ss	4
32	367994	(001536-	) Door, Fltr	1
33	368542	(001536-	) Filter Panel, [In A Box]	1
34	368263	(001536-	) Bracket, Mtg, Label	1
35	368402	(001536-001887	) Bracket, Support, Rh	1
36	368403	(001536-001887	) Bracket, Support, Lh	1
37	368222	(001536-001887	) Strip, Backing	2
38	01685	(001536-	) Washer, Flt, .31 Ss	2
39	41579	(001742-	) Washer, Flt, #08 Ss	4
40	368584	(001742-	) Latch	2
41	763075	(001742-	) Rivet, Blind, .156d X 0.71 X .31d	8
42	368408	(001888-	) Bracket, Sppt, Rh	1
43	368409	(001888-	) Bracket, Sppt, Lh	1
44	11329	(001888-	) Screw, Hex, M06 X 1.0 X 16, Ss, NI	4
45	19066	(001888-	) Washer, Flt, #10	4

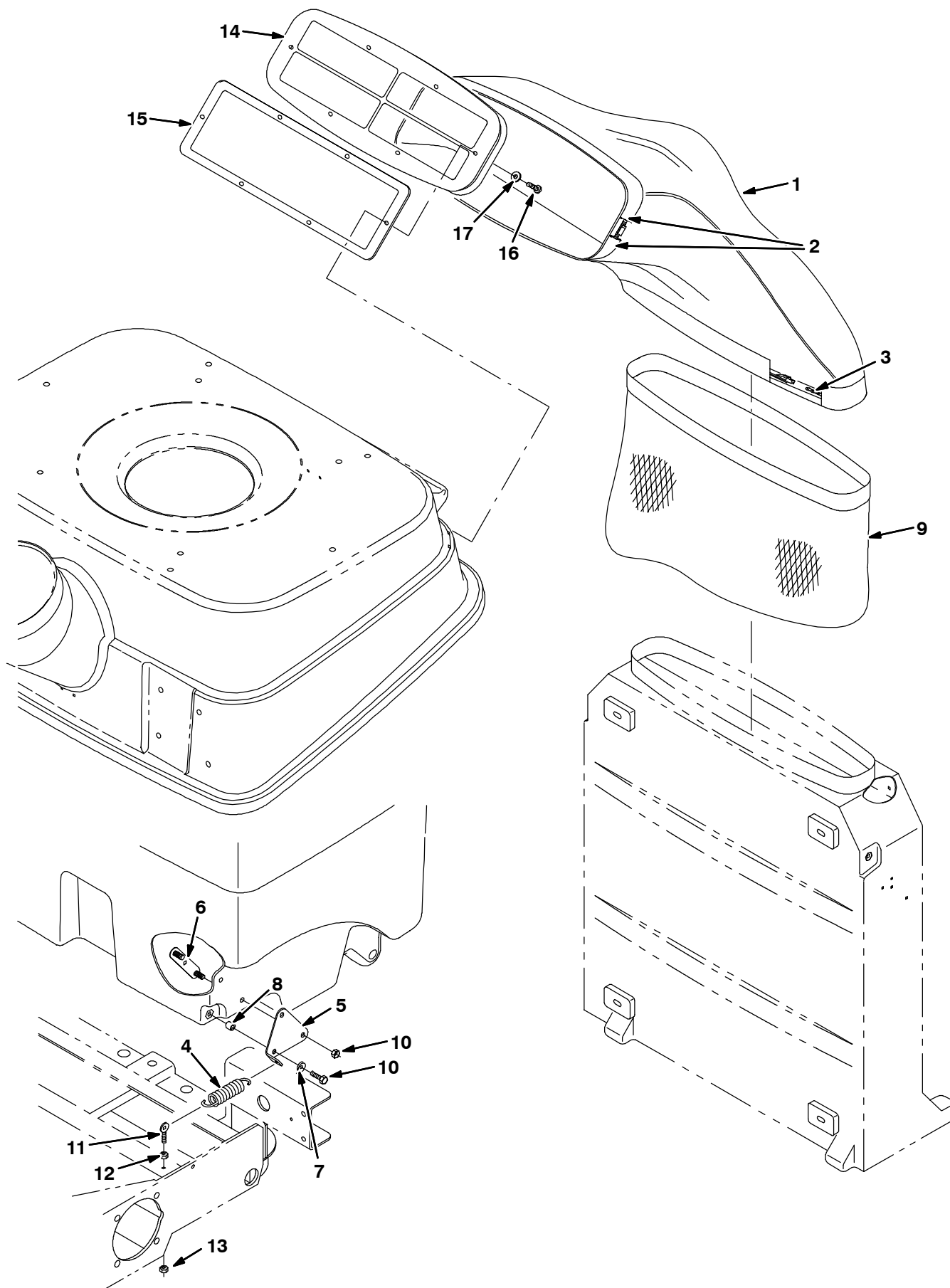
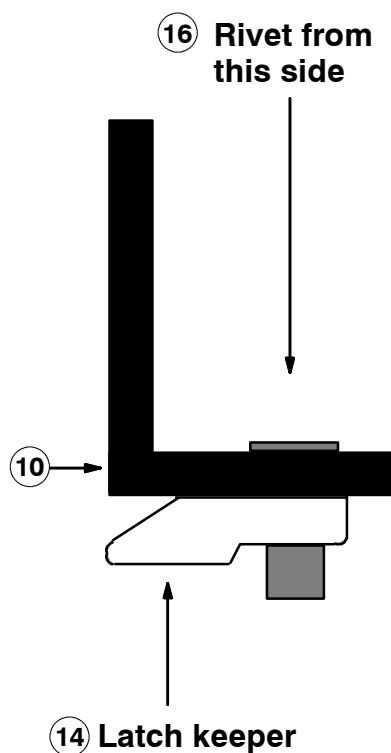


FIG. 7 - Dust Filter Bag Group (Serial Number 001535-)

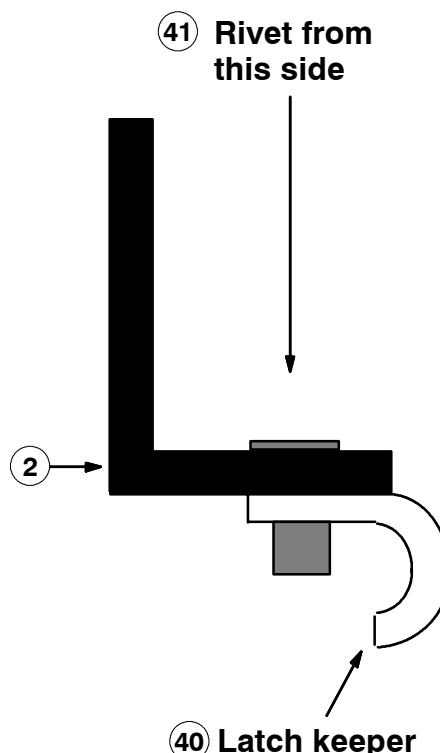
BILL OF MATERIALS FOR DUST FILTER BAG GROUP (S.N. 001535-)

NOTE: Dust Filter Kit, Tennant Part Number 367613 includes Fig. 6 and Fig. 7

Ref.	Tennant Part No.	Machine Serial Number	Description	Qty.
1	367977	(001536-)	Duct, Inlet, Filter	1
2	02363	(001536-)	Clamp, Wormdrive	2
3	368333	(001536-)	Clamp, Retaining	1
4	368197	(001536-)	Spring, Tension	2
5	368392	(001536-)	Plate, Mtg, Spring	2
6	368222	(001536-)	Strip, Backing	2
7	01685	(001536-)	Washer, Flat, .31 Ss	6
8	222460	(001536-)	Sleeve	2
9	368541	(001536-)	Bag, Vacuum, 30.0 Lg	1
10	08713	(001536-)	Nut, Hex, Lock, M08 X 1.25, NI, Ss	6
11	48079	(001536-)	Bolt, Eye, .25-20x1.1x .25 Eye	2
12	19312	(001536-)	Nut, Hex, Std, .25-20	2
13	32981	(001536-)	Nut, Hex, Lock, .25-20, NI	2
14	368382	(001536-)	Bracket Assy, Vacuum Exhaust	1
15	368224	(001536-)	Gasket, Vacuum Plate	1
16	09200	(001536-)	Screw, Pan, M05-0.8 X 12, Ss	6
17	01683	(001536-)	Washer, Flat, #10 Ss	6
18	09011	(001536-)	Screw, Hex, M08 X 1.25 X 30, Ss	2



(Machines S.N. 000000 - 001741)



(Machines S.N. 001741 - xxxxxx)

FIG. 8 - LATCH KEEPER ORIENTATION

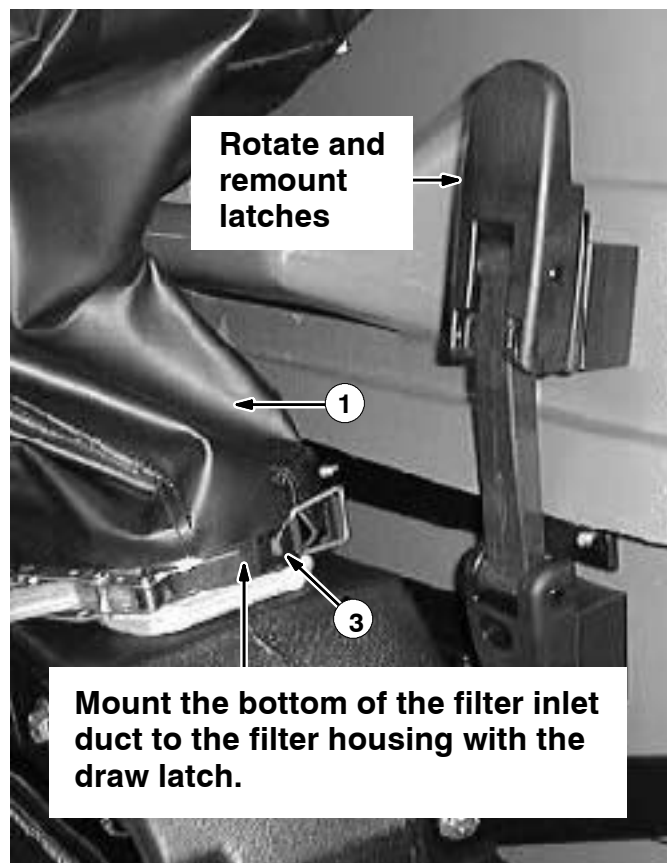
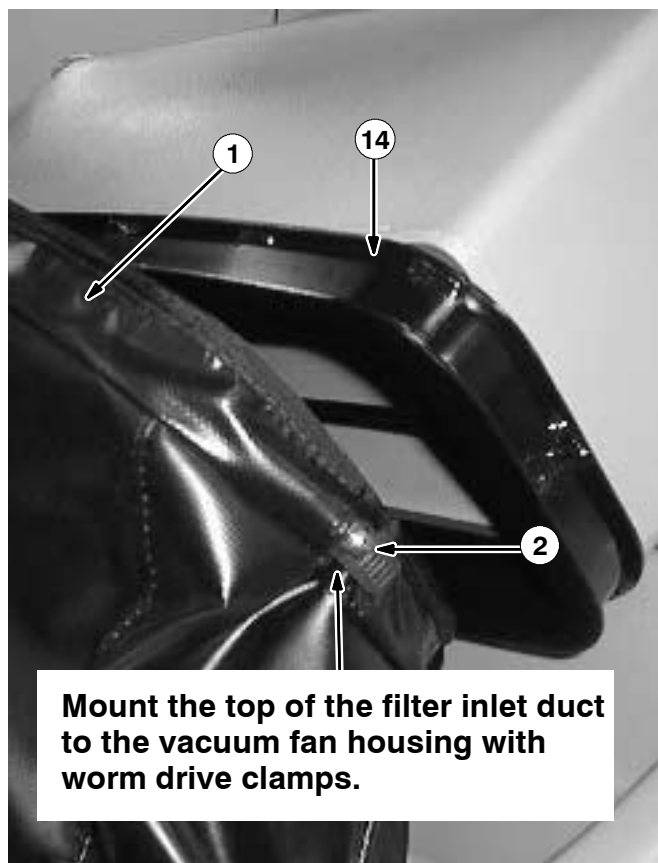


FIG. 9 - FILTER INLET DUCT INSTALLATION

TENNANT COMPANY
P. O. Box 1452
Minneapolis, MN 55440-1452