



INSTRUCTION BULLETIN

No. 340335
Machine: Litter Hawk™
Published: 10-99/02
System: VACUUM

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 382696

SYNOPSIS / PROBLEM:

This kit contains the parts needed to update the vacuum wand system.
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: HAND DRILL, 11/32 DRILL BIT

(Estimated time to complete: 2 hours)

PREPARATION:

(Refer to FIG. 1 thru 7)

1. Turn off the machine.

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

INSTALLATION:

(Refer to FIG. 1 thru 7)

HOSE GUARD INSTALLATION:

1. Lower the vacuum head. Raise the hopper cover and remove the debris hopper.
2. Remove the left side access panel
3. Locate the brake lever weldment bearing on the left side of the machine behind the left front wheel. (Refer to FIG. 1)
4. Remove and set aside the front socket screw and washer from the bearing. (Refer to FIG. 1)
5. Place the vacuum hose guard flap (9) in position between the vacuum hose and the brake lever weldment bearing. (Refer to FIG. 1)
6. Mount the front end of the guard flap (9) with the set aside socket screw, washer and sleeve (8). (Refer to FIG. 1)
7. Mount the rear end of the guard flap (11) to the frame of the machine with the hex screw (11), washers (10), and lock nut (12). (Refer to FIG. 1)
8. Remove tie straps that are holding up vacuum hose.
9. Replace the left side access panel.

URETHANE BUMPER INSTALLATION:

1. Clean the end of the vacuum wand inlet to remove any burrs or sharp edges.
(Refer to FIG. 7)
2. Clamp the bumper (3) in place on the end of the vacuum hose with a hose clamp (1).
(Refer to FIG. 7)

VACUUM WAND DOOR INSTALLATION:

1. Remove and discard the rubber securing strap, securing strap brackets, and mounting hardware. (Refer to FIG. 2)

NOTE: The vacuum wand door, when properly installed, can be locked into the open or closed position. After a length of vacuum hose is pulled from the machine, the door, when placed in the closed position should lock tight enough against the hose to hold it securely in place. If the installed door does not hold an exposed length of hose in place, remove the door, and bend it slightly in a vice until it holds the hose securely in place.

2. Mark and drill the lower middle 11/32 mounting hole in the right side bumper according to the dimensions in figure 6. (Refer to FIG. 3 and 4)
3. Invert the door upside down and place the long end of the pin into the new hole.
4. Raise the door up out of the hole until it touches the bottom of the upper bumper.
5. Check that the door is straight up and down and parallel with the bumper. Mark and drill the upper mounting hole where the weldment pin touched beneath the upper bumper.
(Refer to FIG. 4 and 5)
6. Invert the door once again so that it is now in the correct mounting position. (Refer to FIG. 4)
7. Slide the spring (5) and required spacers (6) over the upper pin of the door (4).
(Refer to FIG. 4)
8. Install the top pin in the upper part of the bumper, and then compress the spring (5) until the lower pin can slide into the lower hole in the bumper. The door should have enough spacers on the pin that it needs to be firmly forced into the mounting holes. (Refer to FIG. 4)
9. Swing the door into the open and closed positions. Mark and drill the two 11/32 outer door securing holes using the door's securing tab and the dimensions in figure 7 for reference.
(Refer to FIG. 3 and 5)

VACUUM WAND HANDLE TUBE INSTALLATION:

1. Remove the old vacuum wand handle tube from the mounting position on the side bumper.
2. Remove the pins and handle from the old handle tube, and place the new pins (2) and (13) and the handle on the new tube (7). (Refer to FIG. 2)
3. The new tube (7) is shorter and will allow room for the new vacuum wand door to open fully.
4. Place the debris hopper back into the machine and close the hopper cover.
5. Start the machine, and check the vacuum wand for proper operation.

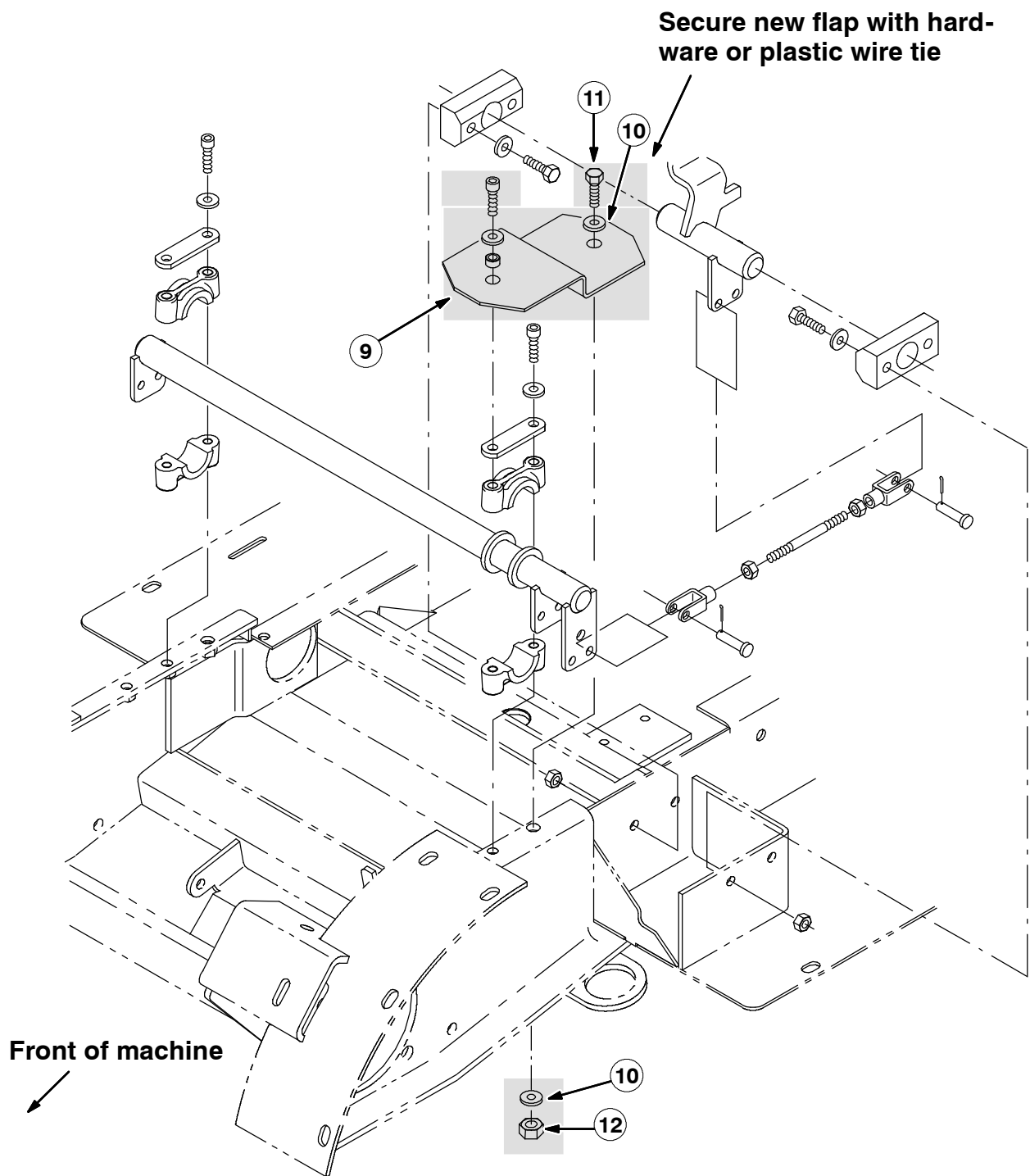


FIG. 1 - HOSE GUARD KIT INSTALLATION

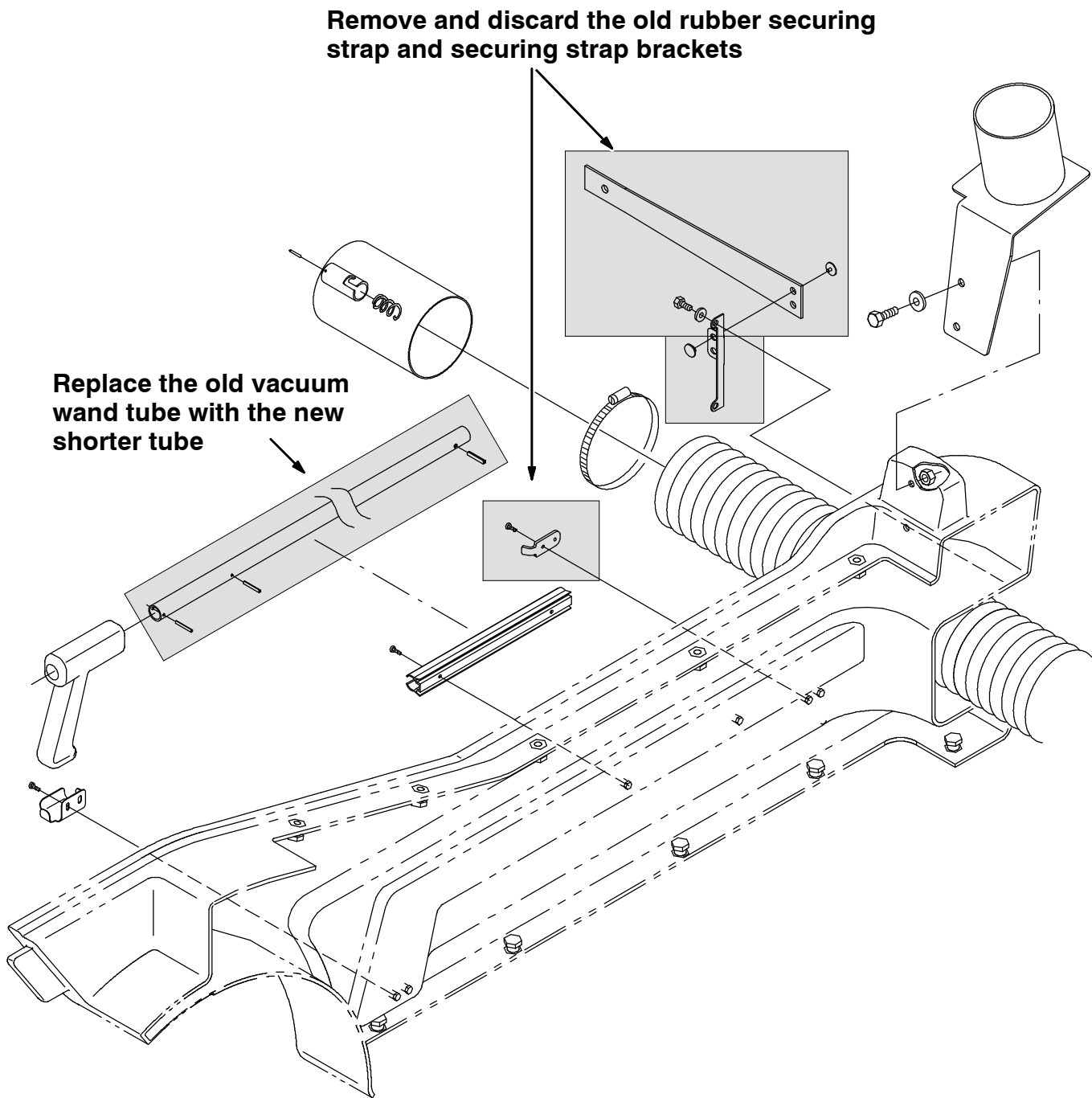


FIG. 2 - OLD WAND TUBE AND SECURING STRAP REMOVAL

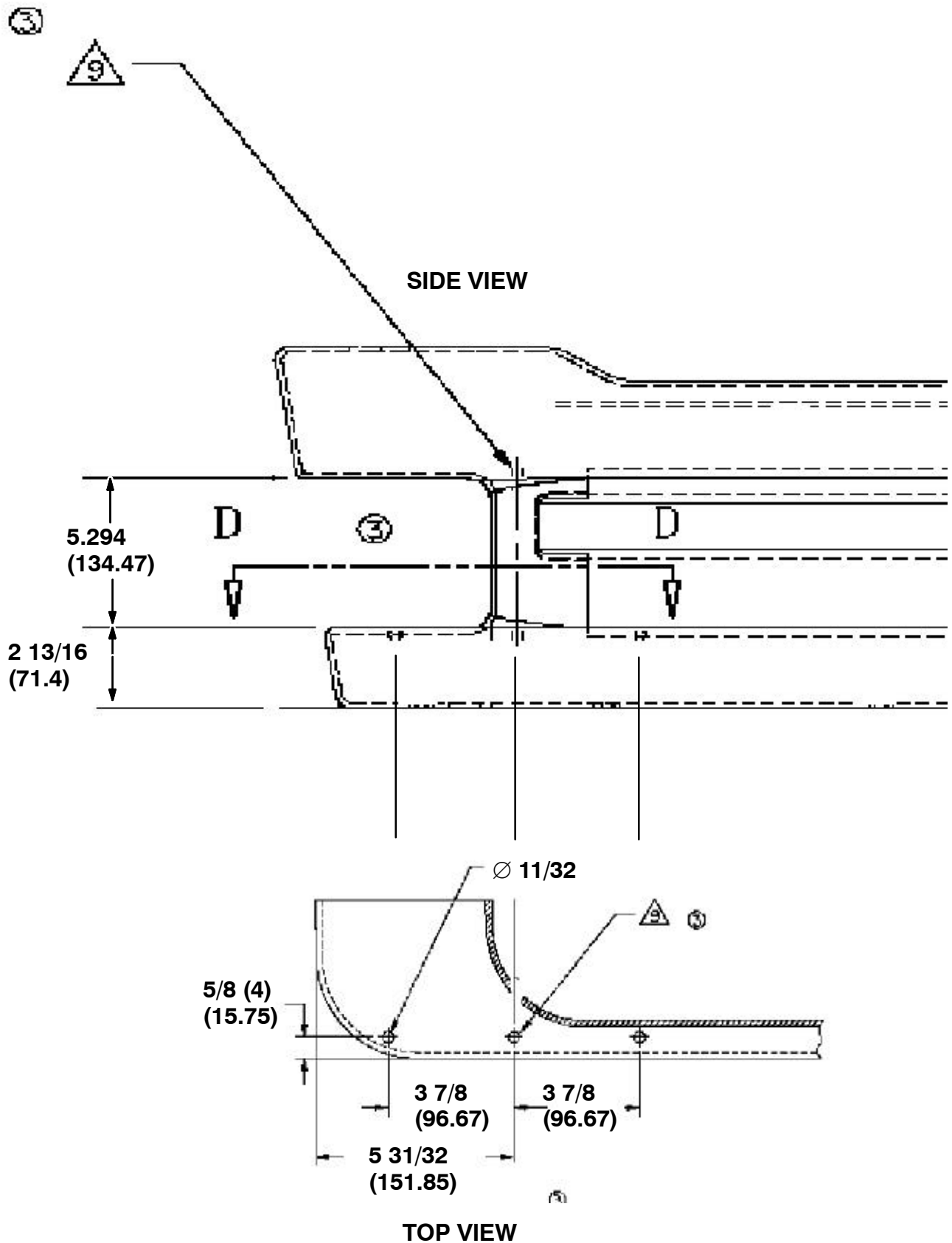


FIG. 3 - VACUUM WAND DOOR MOUNTING HOLE DIMENSIONS

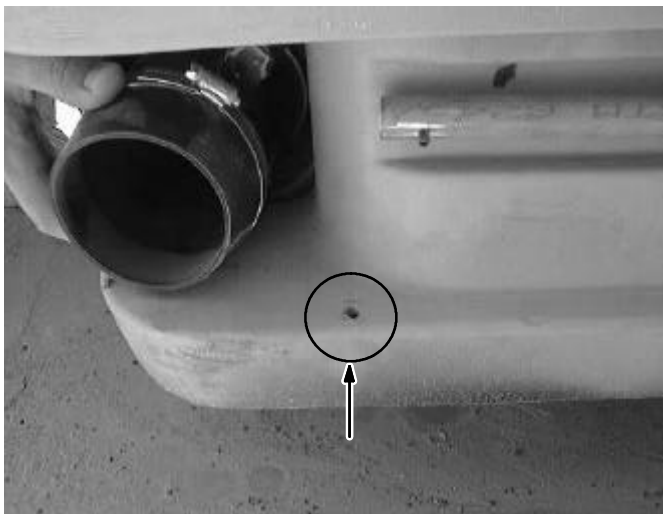


FIG. 4 - MIDDLE DOOR MOUNTING HOLE LOCATION

PLACE THE DOOR UPSIDE DOWN IN THE BOTTOM MIDDLE HOLE LOCATION TO MARK THE LOCATION OF THE UPPER HOLE

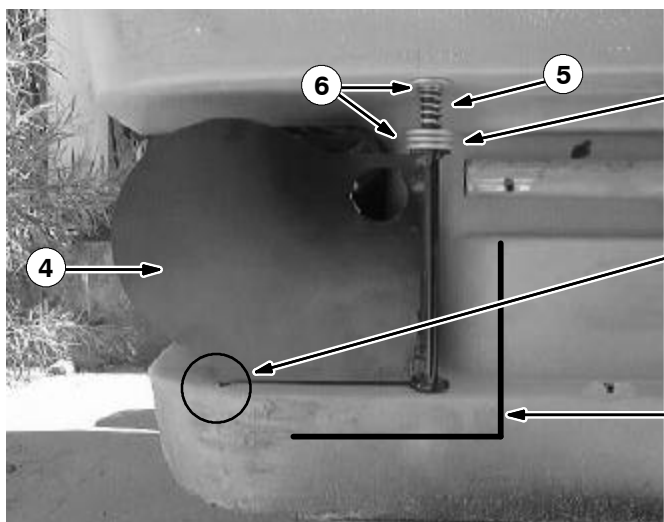


FIG. 5 - DOOR INSTALLATION

FORCE THE DOOR INTO POSITION WITH AS MANY WASHERS AS POSSIBLE TO PREVENT ANY PLAY IN THE DOOR WHEN IT IS RAISED TO OPEN

DOOR TAB SHOULD REST FLUSH IN SECURING HOLES IN BUMPER

THE DOOR MOUNTING ROD SHOULD STAND STRAIGHT UP AND DOWN. THE BOTTOM OF THE DOOR SHOULD SWING PARALLEL TO THE BOTTOM BUMPER

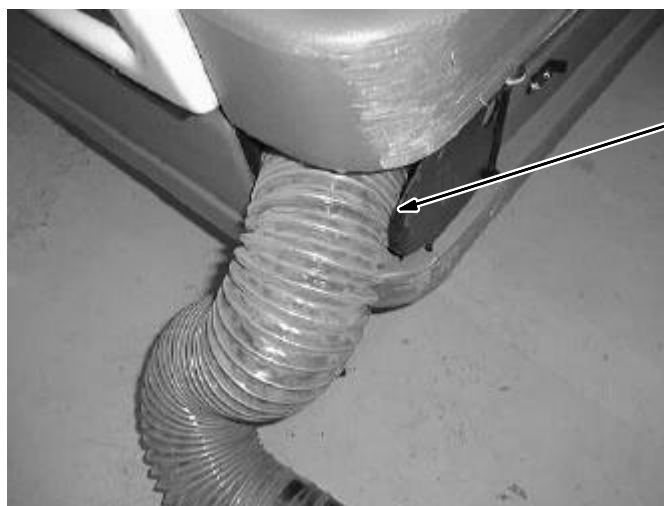


FIG. 6 - DOOR CLOSED ON HOSE

THE CLOSED DOOR SHOULD SLIGHTLY PINCH THE VACUUM HOSE TO PREVENT ANY EXTRA HOSE FROM ESCAPING

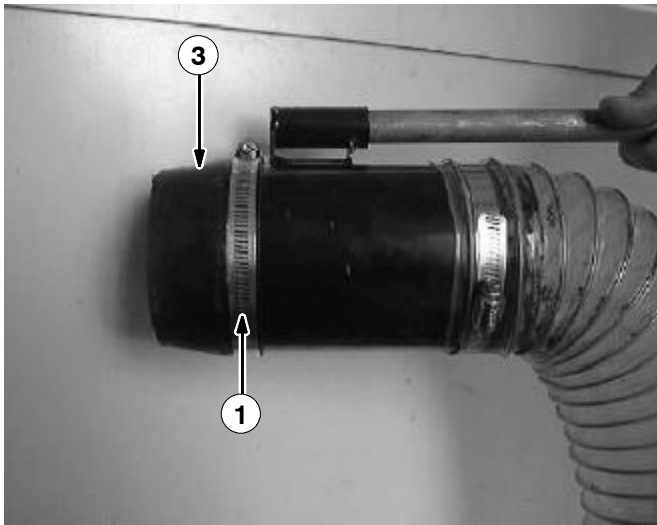


FIG. 7 - BUMPER INSTALLATION

BILL OF MATERIALS FOR VACUUM WAND IMPROVEMENT KIT 382696

Ref.	TENNANT Part No.	Description	Qty.
1	23498	Clamp, wormdrive	1
2	28144	Pin, roll	1
3	382634	Bumper, wand, vacuum	1
4	382643	Door, vacuum wand	1
5	80448	Spring, compression	1
6	32491	Spacers, washers, flat, hard	5
7	381458	Tube, handle, vacuum	1
8	360801	Sleeve,	1
9	382668	Flap guard, hose	1
10	32491	Washer, flat, hard pltd	3
11	16931	Screw, hex, 0.8 pltd	1
12	08709	Nut, hex, lock M08 - 1.25. NL	1
13	11476	Pin, roll	2

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