



# INSTRUCTION BULLETIN

No. 340082  
Machine: 800/810  
Published: 10-98/01  
System: SWEEPING

**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 375571

## **SYNOPSIS / PROBLEM:**

This kit contains the parts needed to replace the multi-level hopper dump system on the model 800/810 sweeper. Any model 800 (with a serial # 1700 and under) or any model 810 (with a serial # 2299 and under) will be converted to the latest design.

**NOTE: Any model 800 (with a serial # 1242 and under) or any model 810 (with a serial # 2045 and under) will have to order 2 new arms (part # 76235). The existing arms (62985) are not compatible with this kit.**

**SPECIAL TOOLS / CONSIDERATIONS:** Overhead hoist (hopper removal)

(Estimated time to complete: 6 hours)

## **TO REMOVE HOPPER**

(Refer to pictures. 1 thru 6)

**FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.**

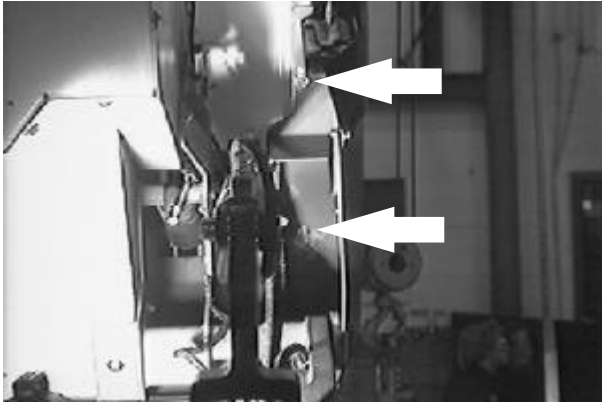
1. Make sure the hopper has been emptied of all debris.
2. Set the parking brake, Raise the hopper and engage the prop arm.



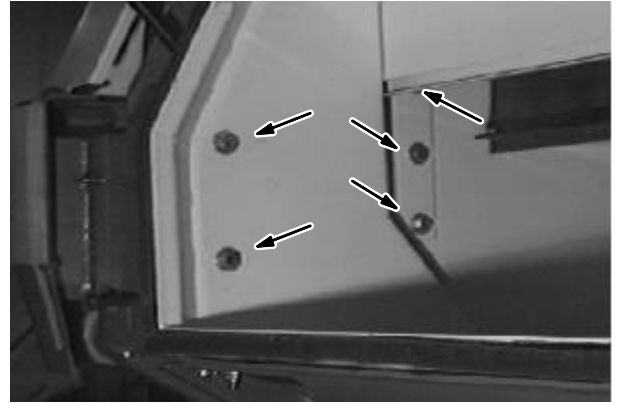
**WARNING: Raised Hopper May Fall. Engage Hopper Support Bar.**

3. Remove the two M8 hex screws holding each fender to the hopper bumper. Disengage the prop arm and lower the hopper. (Refer to pictures. 1 thru 6)
4. Open hopper cover and remove eight M8 hex screws attaching LH and RH fenders to hopper. (Refer to pictures. 1 thru 6)
5. Open the front headlight panel. Spread the front fenders apart and pull the headlight panel out of the hole on each end. (Refer to pictures. 1 thru 6)
6. Remove the headlight panel and both front fenders from the machine.  
(Refer to pictures. 1 thru 6)
7. Start the machine and open hopper dump door. (Refer to pictures. 1 thru 6)

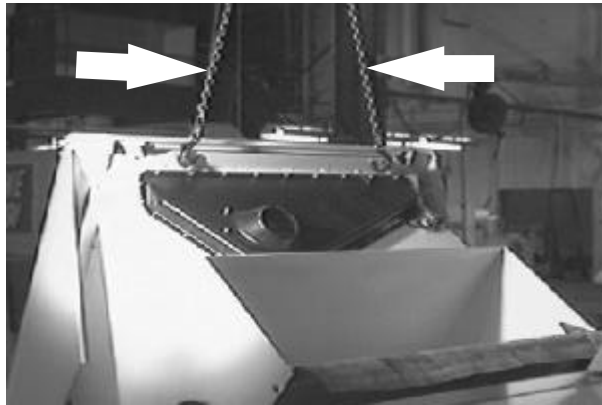
8. Remove the two M10 hex screws from the bottom front corners of the hopper.  
(Refer to pictures. 1 thru 6)
9. Remove the five M10 hex screws from both sides of hopper. (accessed inside hopper)  
(Refer to pictures. 1 thru 6)
10. Start the engine and roll the hopper slightly forward. Hook an over head hoist to the two adjustment bolts on the back of the hopper. (Refer to pictures. 1 thru 6)
11. Remove the five M10 hex screws from on top of hopper in front. (Refer to pictures. 1 thru 6)
12. Unbolt the bracket holding the hydraulic hose tee fittings at the front of the hopper.
13. Start the engine, close the dump door, and roll the hopper all the way out. Use the over head hoist to help roll the un-bolted hopper forward. (Refer to pictures. 1 thru 6)
14. Unplug the hopper wire harness from the main harness. Remove any ties holding the harness to the lift arm.
15. The hopper can now be lifted up and out of the lift arms using the over head hoist.  
(Refer to pictures. 1 thru 6)
16. Set the hopper on the floor. (Refer to pictures. 1 thru 6)



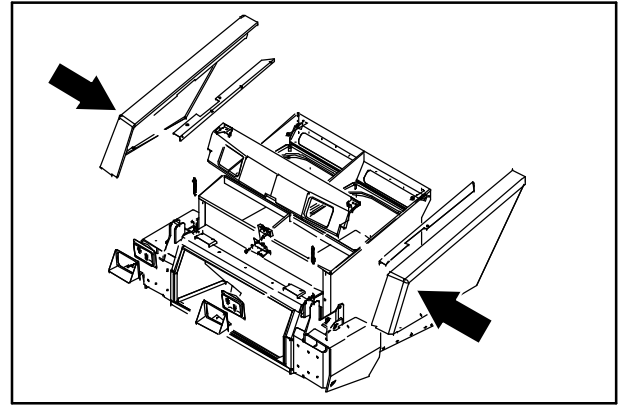
Pic. 1



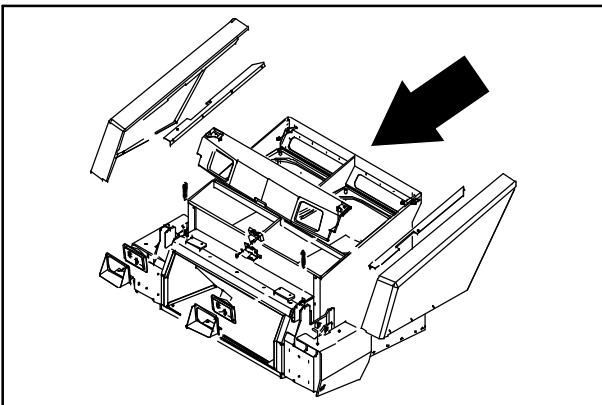
Pic. 2



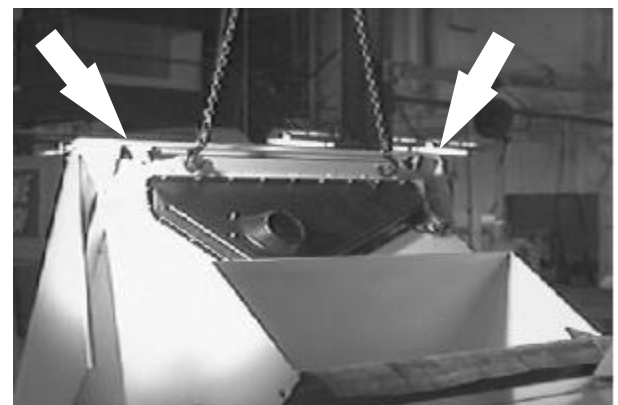
Pic. 3



Pic. 4



Pic. 5



Pic. 6

## PARTS TO REMOVE AND DISCARD:

(Refer to FIG. 1 and 2)

**FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.**

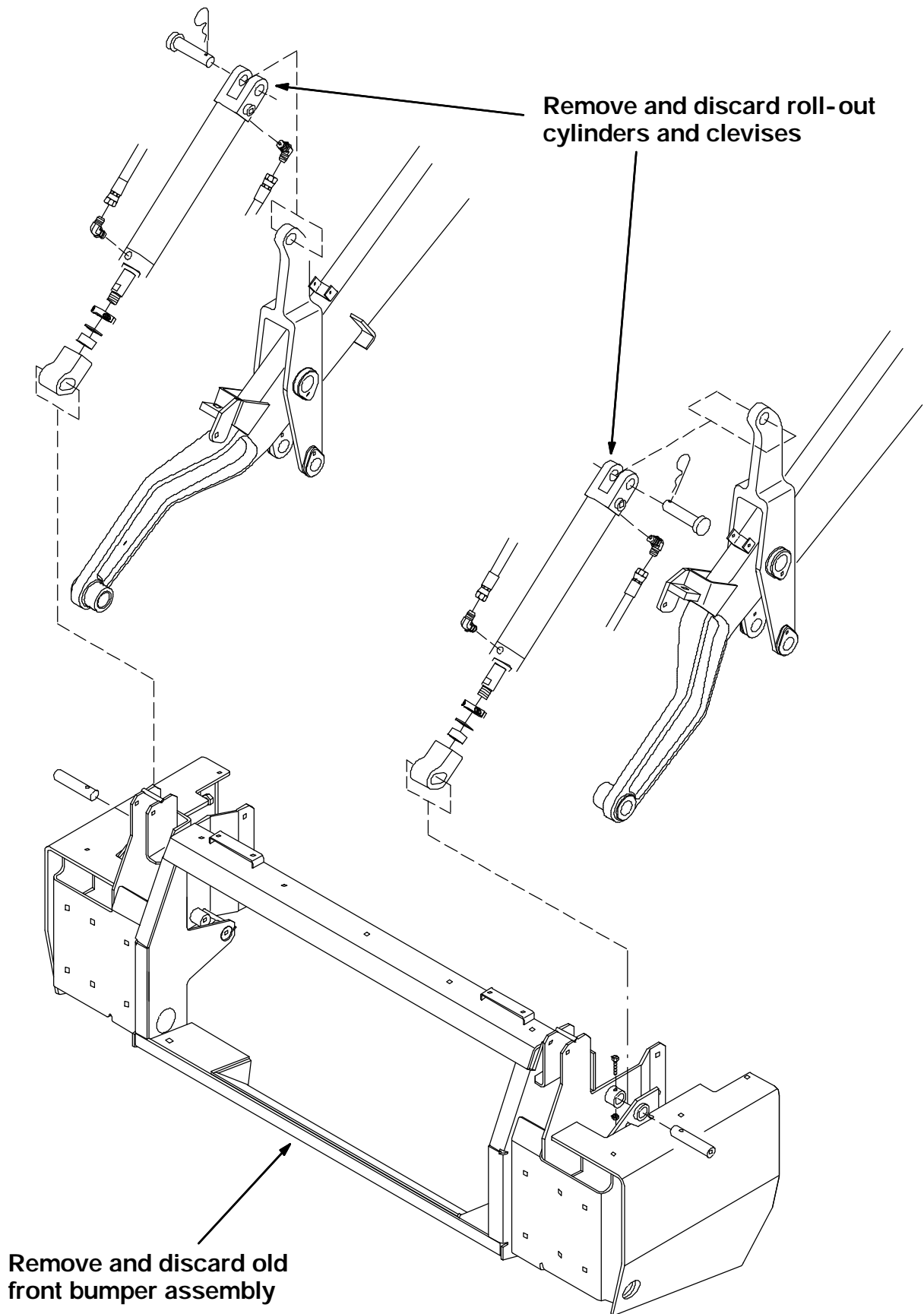
1. Remove the old hopper dump door from the hopper.
2. Remove the old hopper roll-out cylinders and clevis pins. (Refer to FIG. 1)
3. Remove the hydraulic fittings and install into the new cylinders (20) in the same orientation. (Refer to FIG. 1)
4. Remove the lower lift arm pins at the front bumper assembly. (Refer to FIG. 1)
5. Remove and discard the old front bumper assembly. (Refer to FIG. 1)
6. Remove and discard the old cylinder pivots and clevis pins. (Refer to FIG. 2)
7. If your machine is equipped with part #62985 lower arms--new arms must be ordered (part # 76235). The old lower arms are not compatible with this kit. (Refer to FIG. 2)

## NEW PARTS TO INSTALL:

(Refer to FIG. 3 thru 6)

**FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.**

1. Use the illustration in FIG. 3 to assemble and install the new style front bumpers (5 and 6) and hopper bumper weldments (1 and 2). (Refer to FIG. 3)
2. Install the bumper latches (12) onto the back of the new bumper assembly. (Refer to FIG. 3)
3. Install the hopper guard (9) on the bottom side of the bumper assembly. (Refer to FIG. 3)
4. Use the illustration in FIG. 4 to assemble and install the new style link plates (22) and new pivot pins (24 and 25). Install the new retainer plates (23) onto the new pins. (Refer to FIG. 4)
5. Use the illustration in FIG. 5 to assemble and install the new style hopper roll-out cylinders (20) and new pivot pins (17). Install the new retainer plates (18) onto the new pins. Make sure the the new steel spacers (21) and washers (19) are placed on each side of the new cylinders (20). ***The cylinder must be centered in the new link plates (22).*** (Refer to FIG. 5)
6. Use the new lower pins (16) down at the new bumper assembly. Reconnect the hydraulic hoses. (Refer to FIG. 5)
7. Use the illustration in FIG. 6 to assemble and install the new style hopper dump door (26) and spacers (27). Make sure the new bearing journal (31) and washers (28) are in place. Use the new hardware (29 and 30). (Refer to FIG. 6)
8. Use the new clevis pins (32) to connect the dump door cylinders to the new door (26). (Refer to FIG. 6)
9. Reinstall the hopper and adjust as necessary.



**FIG. 1 - Parts To Remove And Discard**

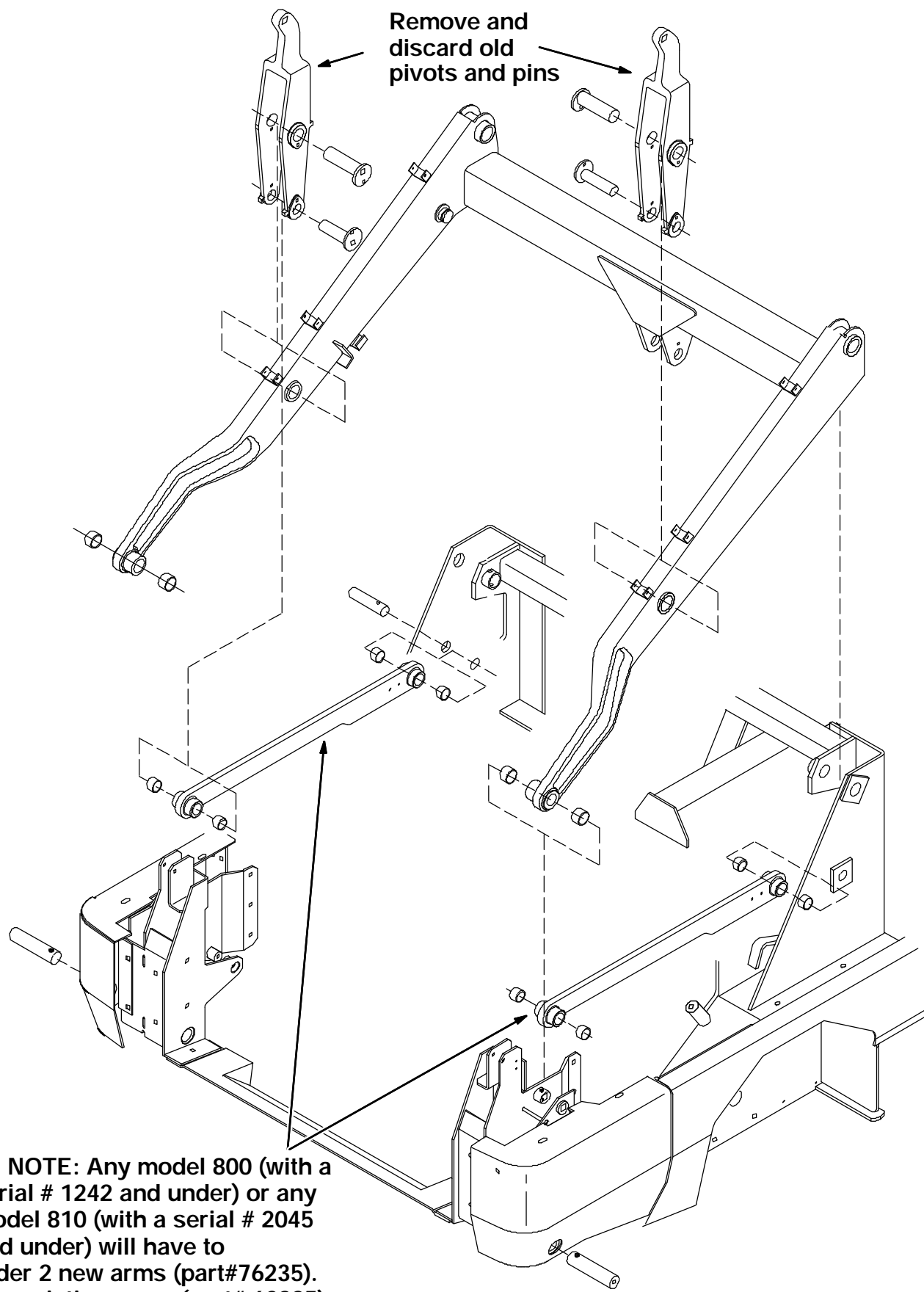
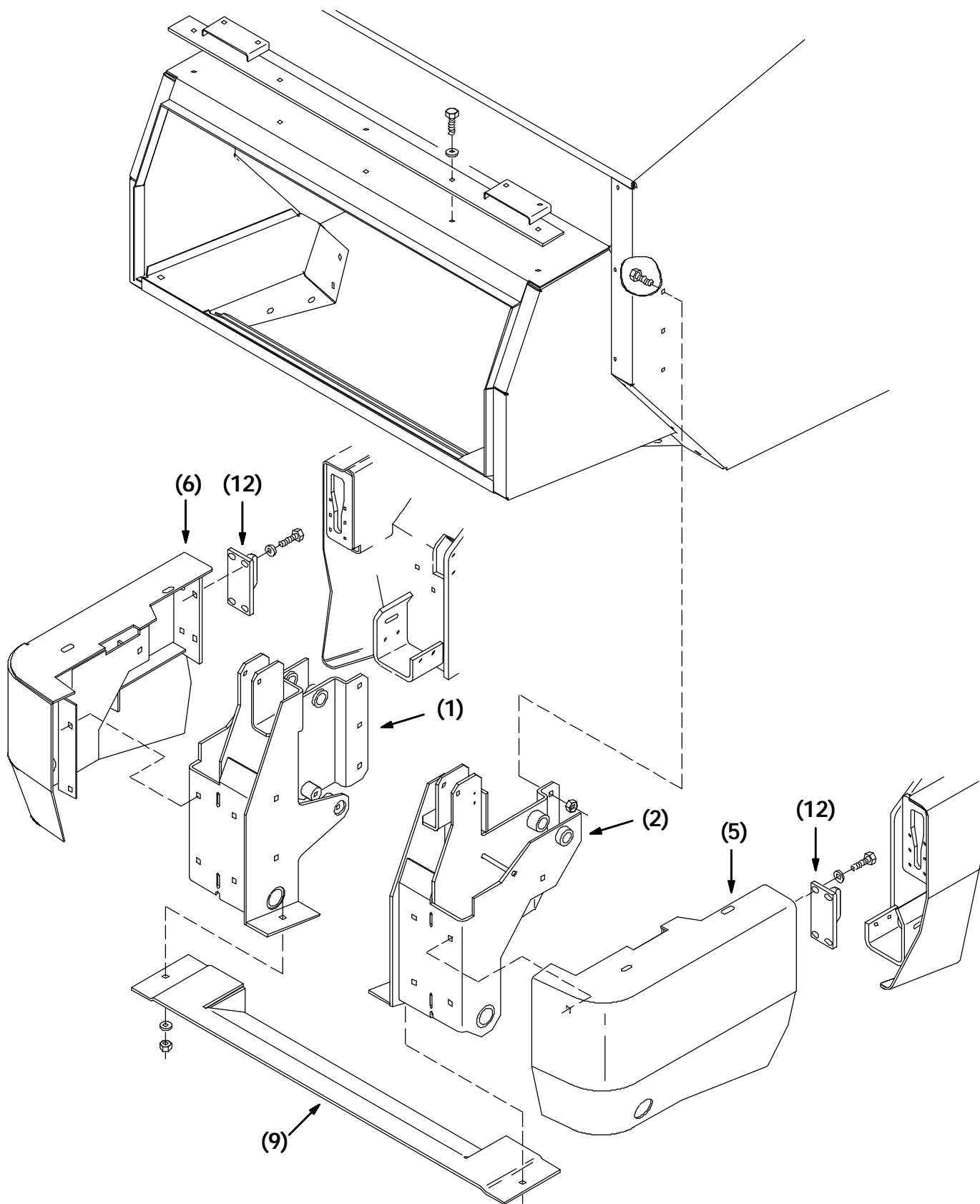
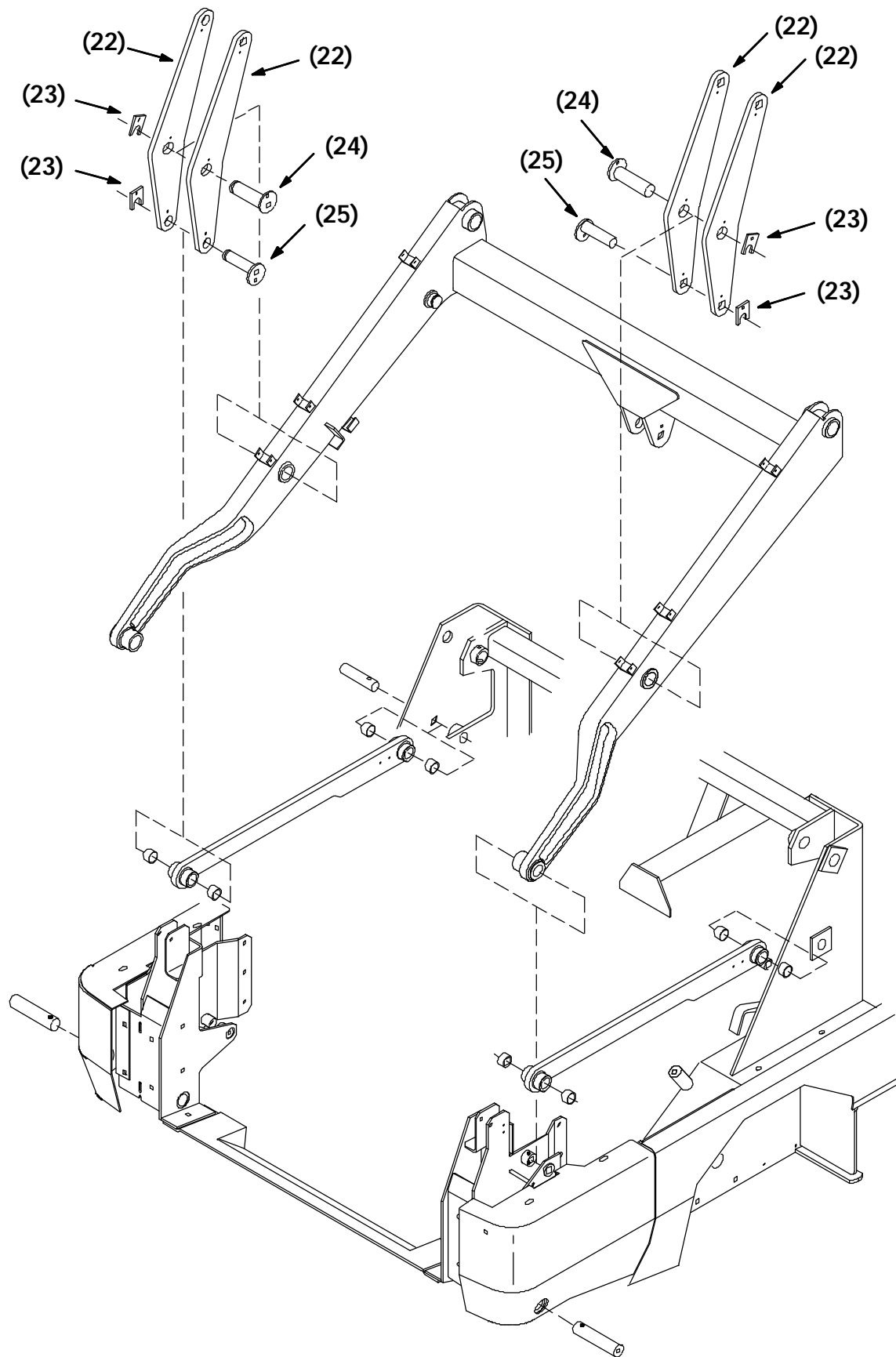


FIG. 2 - Parts To Remove And Discard



**FIG. 3 - New Front Bumper Assembly**



**FIG. 4 - New Link Plate And Pins**



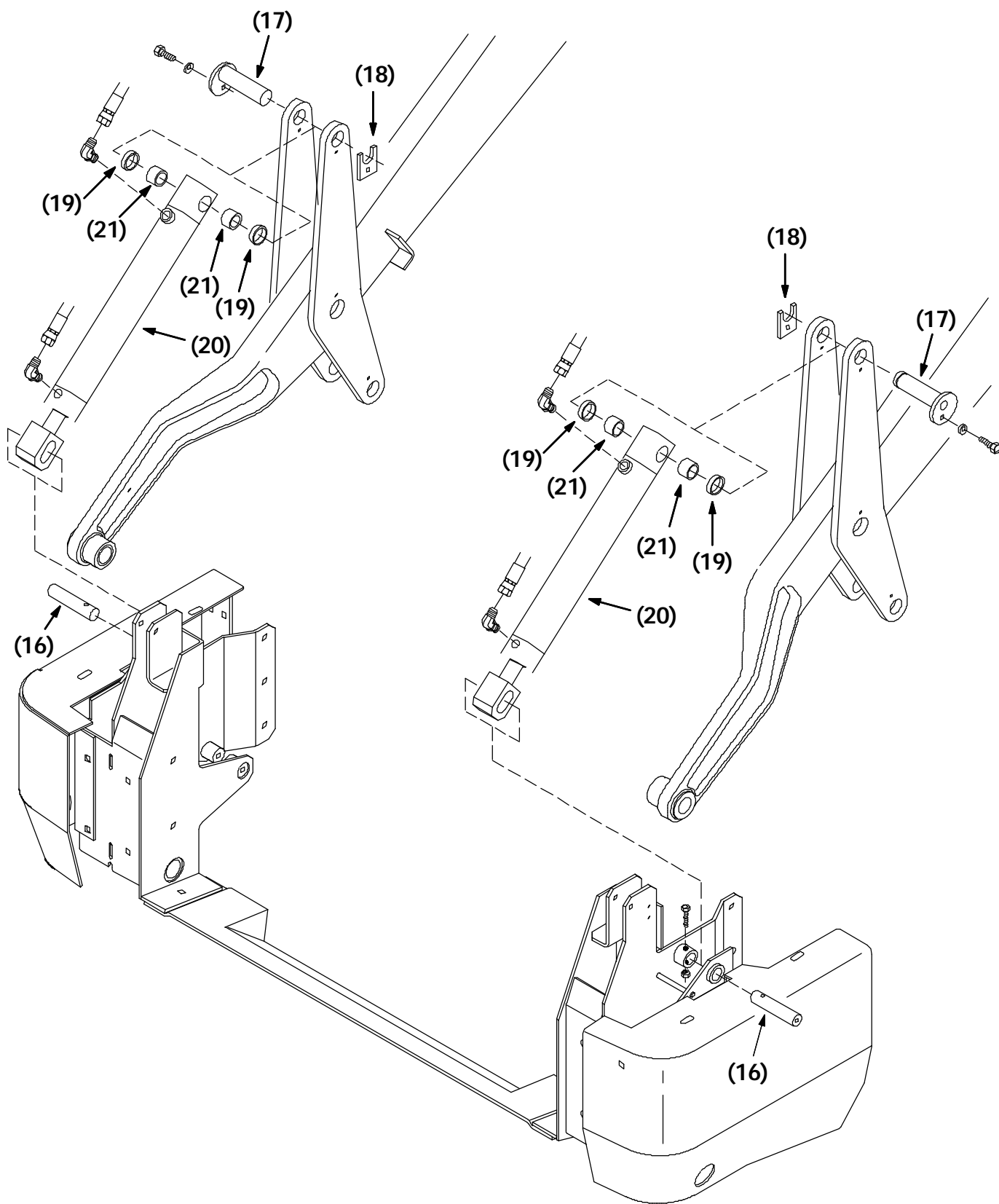
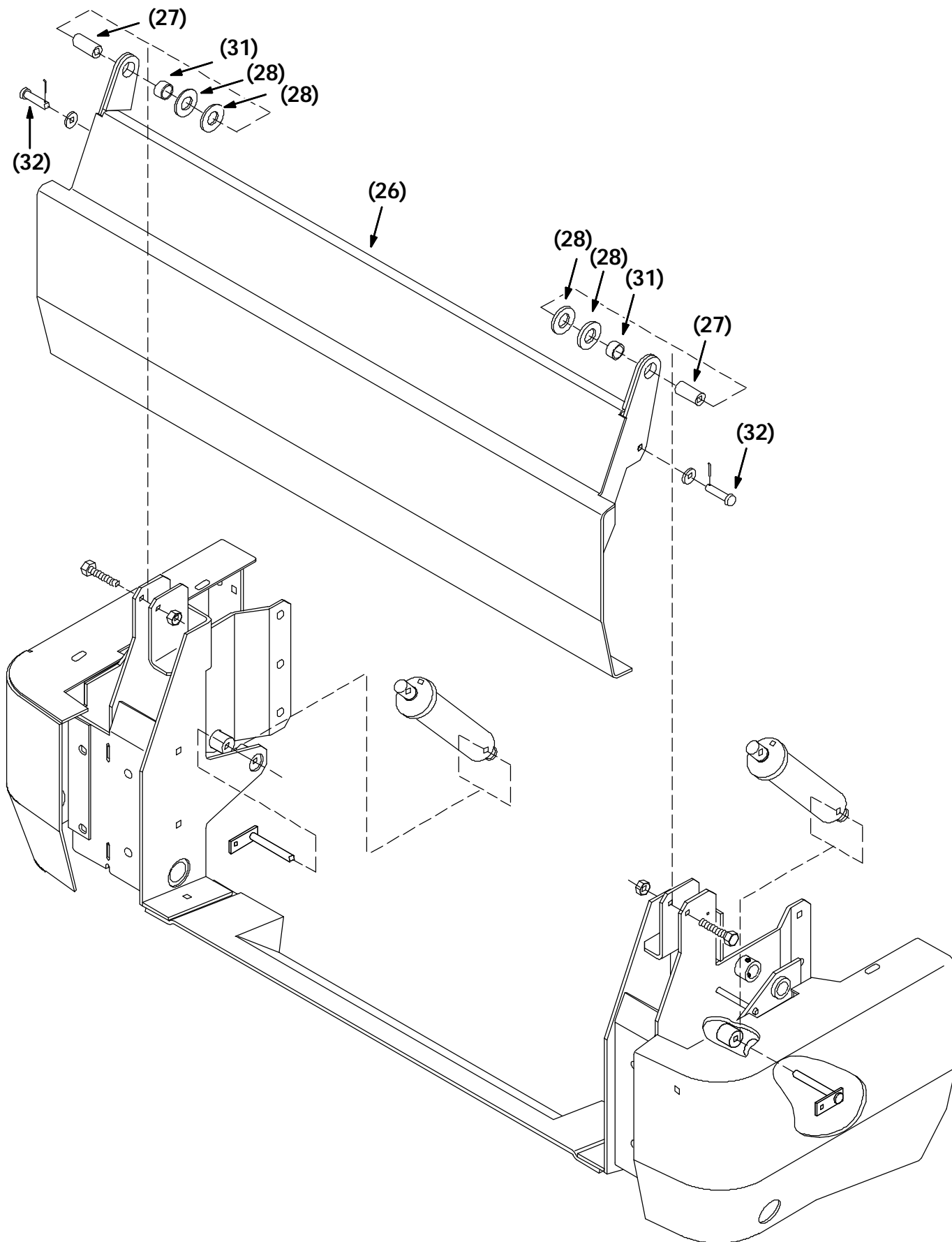


FIG. 5 - Hopper Roll-out Cylinders And Pins



**FIG. 6 - New Hopper Dump Door And Bearings**

## **TO INSTALL HOPPER**

(Refer to pictures. 1 thru 6)

1. Engage parking brake, Lift the hopper back into the machine using the rear adjustment bolts and a chain or strap. (Refer to pictures. 1 thru 6)
2. Roll the hopper back half way. Open the hopper dump door. (Refer to pictures. 1 thru 6)

**FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.**

3. Reinstall all the hopper hardware. Align holes by rocking hopper and using a drift punch. (Refer to pictures. 1 thru 6)
4. Tighten the M10 hex screws to 37 - 48 Nm (27 - 35 ft lb).
5. Reinstall the hydraulic hose tee bracket. Tighten the M8 hex screws to 18 - 24 Nm (13 - 18 ft lb).
6. Reinstall the front headlight panel and RH and LH fenders. Tighten the ten M8 hex screws to 18 - 24 Nm (13 - 18 ft lb). (Refer to pictures. 1 thru 6)
7. Reconnect the hopper harness to the main harness. Reattach the harness to the lift arms.
8. Close the hopper dump door, roll the hopper back, raise the hopper, engage the prop arm.
9. Reinstall the four M8 hex screws in the bottom of both fenders. Tighten to 18 - 24 Nm (13 - 18 ft lb). (Refer to pictures. 1 thru 6)
10. Disengage the prop arm and lower the hopper.

## **TO ADJUST AND LEVEL HOPPER HEIGHT**

(Refer to pictures. 1 thru 6)

1. The two M12 hex screws at the rear of hopper should be set at 45 mm (1.75 in) from the head of bolt to the edge of bracket. (Refer to pictures. 1 thru 6)

## **TO ADJUST HOPPER DUMP DOOR**

**FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.**

1. Engage the parking brake and open the hopper dump door.
2. Use the two 0.50 in x 3.5 in hex screws located in the lower corner of front bumper to adjust hopper dump door in and out for proper seal.

# BILL OF MATERIALS FOR MULTI-LEVEL HOPPER DUMP KIT 375571

Ref.	TENNANT Part No.	Description	Qty.
1	83547	RH hopper bumper weldment	1
2	83548	LH hopper bumper weldment	1
3	09028	M10 hex screw, 25mm	5
4	08714	M10 nyloc nut	5
5	83620	LH bumper weldment	1
6	83622	RH bumper weldment	1
7	09028	M10 hex screw, 25mm	6
8	08714	M10 nyloc nut	6
9	77523	Hopper guard weldment	1
10	05720	M10 SS hex screw, 40mm, full thread	2
11	08714	M10 nyloc nut	2
12	63671	Bumper latch	2
13	06968	M12 hex screw, 35mm	8
14	32486	.50 flat washer	8
15	07793	M12 flange nut	8
16	63584	Pin, 1.00 in. x 4.5 in., drilled	2
17	83553	Pin weldment	2
18	83554	Pin retainer plate	2
19	83555	Tube, 1.5 in.	4
20	379050	Hydraulic cylinder	2
21	57936	Bearing journal	2
22	83549	Plate link	4
23	83554	Pin retainer plate	4
24	83551	Pin weldment	2
25	83553	Pin weldment	2
26	83618	Hopper door weldment	1
27	79138	Door pivot sleeve	2
28	79596	Washer	6
29	06975	M12 hex screw, 90mm	2
30	08711	M12 nyloc nut	2
31	35688	Bearing journal	2
32	21722	Clevis pin, .5 x 2.25 in.	2

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