TENNANT INSTRUCTION BULLETIN Machine: 800/810 Dubliched: 10.05/

No. 3758 Machine: 800/810 Published: 10-95/00 System: HYDRAULICS

### 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 21724

### SYNOPSIS / PROBLEM:

This kit contains the parts needed to replace the dump door hydraulic cylinders on the model 800/810 sweeper. The existing dump cylinders may break in the area of the rod end clevis pin hole. The new cylinders have a larger diameter rod and are stronger than the existing dump cylinders. Please follow step-by-step instructions.

### SPECIAL TOOLS / CONSIDERATIONS: None

(Estimated Time to complete: 2 hours)

# **PREPARATION:**

(Refer to FIG. 1)

1. Raise the hopper and engage the safety arm.

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

2. Open the dump door. Shut off the engine. (Refer to FIG. 1)

# TO REMOVE DUMP DOOR CYLINDERS:

### (Refer to FIG. 1)

- NOTE: Remove only one cylinder at a time with the dump door open. For added safety, place a block of wood or a steel pipe from the front hopper lip to the front lip of the opened dump door.
  - 1. Disconnect and plug the two hydraulic hoses leading to the dump door cylinder that needs replacing. Mark the hoses for proper reassembly. (Refer to FIG. 1)

NOTE: Observe hydraulic cleanliness requirements when opening hydraulic lines.

- 2. Remove the M8 hex screw holding the lower pin weldment to the hopper bumper. Remove and discard the pin weldment. (Refer to FIG. 1)
- 3. Remove and discard the cotter pin and clevis pin from the rod end of the dump door cylinder. Remove the dump door cylinder from the machine. (Refer to FIG. 1)

# TO INSTALL DUMP DOOR CYLINDERS: (Refer to FIG. 1)

- 1. Remove the fittings from the old cylinder and install them in the new cylinder (1) in the same orientation. Discard the old cylinder. (Refer to FIG. 1)
- 2. Position the new cylinder (1) back in the machine in the same orientation as the old one. (Refer to FIG. 1)

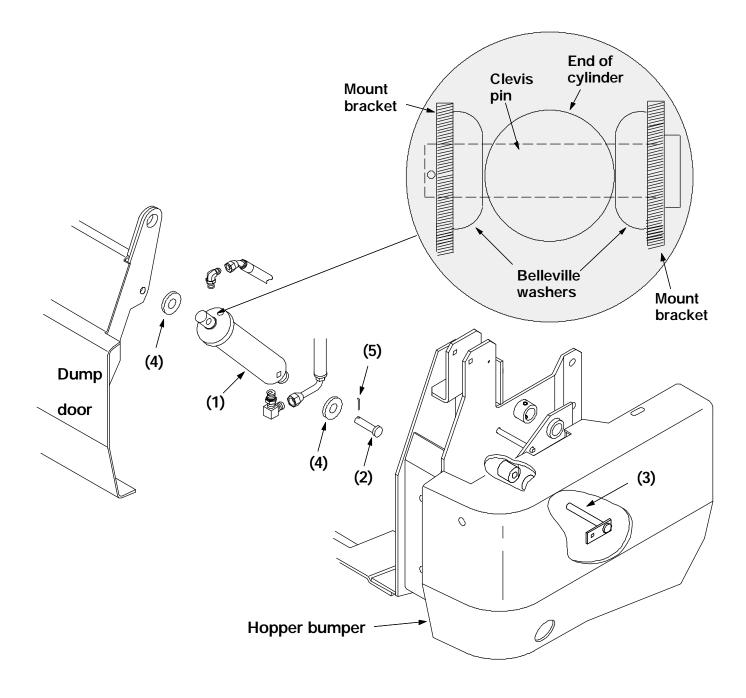


FIG. 1 - Dump Cylinder Assembly

3. Install the new pin weldment (3) in the lower end of the new cylinder (1). Reinstall the M8 hex screw and tighten to 18 - 24 Nm (15 - 20 ft lb). (Refer to FIG. 1)

- 4. Install the new clevis pin (2), two belleville washers (4), and cotter pin (5) in the rod end of the new cylinder (1). The two belleville washers (4) go on either side of the cylinder rod with the dished side facing the cylinder rod and the flat side against the mount brackets. (Refer to FIG. 1)
- 5. Reconnect the hydraulic hoses to the dump cylinder. Make sure to connect the hydraulic hoses to the correct fittings. (Refer to FIG. 1)
- 6. Repeat these steps on the other side if needed.
- 7. Disengage the safety arm and lower the hopper.
- 8. Start the engine and operate the dump door. Check for any leaks and proper operation. (Refer to FIG. 1)

Ref.	TENNANT Part No.	Description	Qty.
1	21721	Hydraulic cylinder	1
2	21722	Clevis pin, 2-1/4 in.	1
3	64893	Pin weldment	1
4	36328	Belleville washer	2
5	08346	Cotter pin	1

# BILL OF MATERIALS FOR DOOR CYLINDER REPLACEMENT KIT 21724