

Retrofit Installation of Sprocket Drive Turntable Assembly on a MART Power Washer with tire drive system.

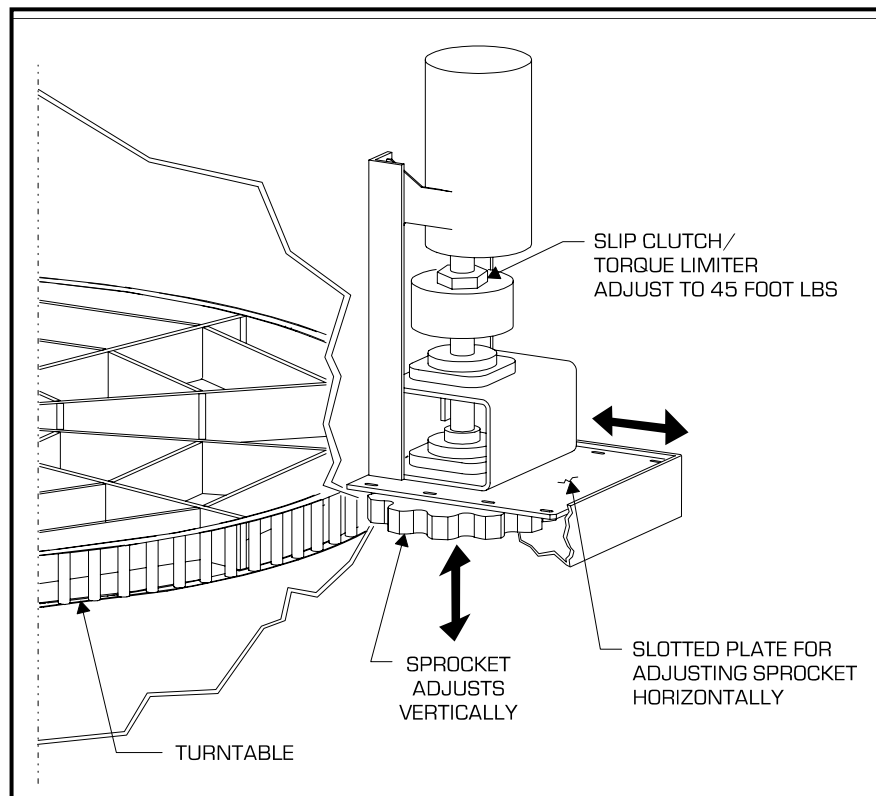


FIGURE 1: General Arrangement: Turntable Drive System

General Description:

Basic Turntable Function: During the wash cycle the turntable rotates at approximately 29 feet (8.9 m) per minute. The rotation is not synchronized to the sweep and speed of the Power Blast Manifold. The turntable is driven by the turntable drive system.

This system rotates the turntable and controls its speed. It also serves as a clutch to allow table slippage, if a wash load shifts and jams the turntable.

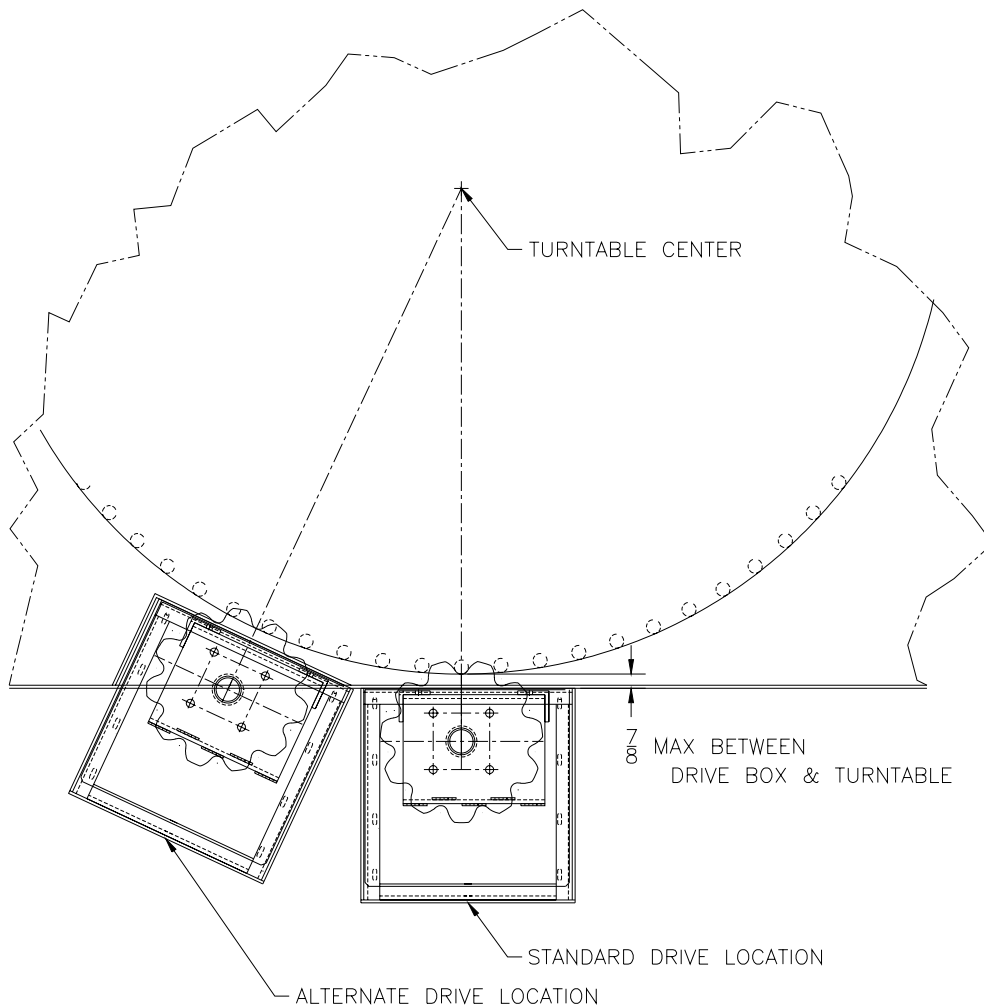
Turntable Sprocket Drive System Assembly: The drive motor assembly mounts onto a small box on the door of the cabinet. The assembly's key features are a gear motor, a slip-clutch shaft coupling, two flange mount bearings, the plastic drive sprocket, and a sprocket support plate. The slip clutch is located just below the drive motor and couples the motor shaft to the sprocket jackshaft. The sprocket is mounted on the end of the jackshaft.

Basic Turntable Drive System Function: The drive system uses a plastic drive sprocket to engage and drive the sprocket teeth on the turntable. If factory-preset torque is exceeded, the slip clutch functions as a torque limiter, and slips.

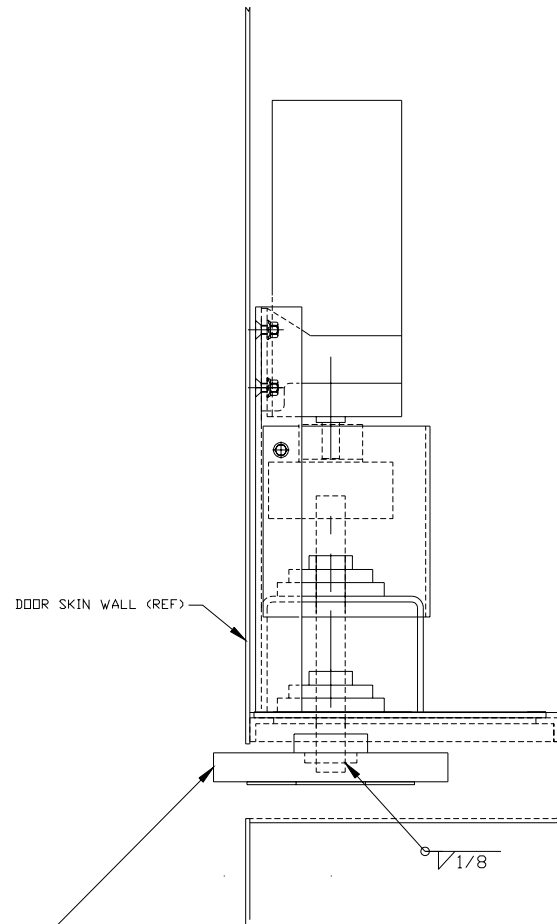
To install the new Turntable Sprocket Drive System Follow these General Steps:

1. Remove the existing tire & mandrel drive gearmotor, mandrel and tire assembly – discard.
2. Mount a cover plate made from sheet steel over tire drive box – not supplied in retro fit kit
3. Determine mounting location of new sprocket drive on the door of Power Washer. Refer to the following figure and instructions:

- Select position that locates the drive such that the sprocket centerline is directly in-line with the center of the turntable shaft. Note: On most machines this is centered on the door at the point where the turntable is closet to the door. In some cases this location is not accessible because of the diagonal structural tubing brace on the door front. If this is your case you will have to construct a recessed pocket along side of the diagonal brace that allows the drive system to remain tangent to the turntable and still retain the proper sprocket engagement.
- The plastic sprocket must engage the teeth on the turntable fully. In some cases where the turntable is too far from the door of the washer a recessed pocket in the door must be constructed of sheet steel to allow the drive to be properly positioned relative to the turntable.



4. Cut hole for drive sprocket in Power Washer door or
5. Weld drive box to door – weld must be water tight
6. Install Drive assembly.
7. Adjust vertical height of drive sprocket to align with turntable teeth and weld sprocket hub to shaft as shown in drawing.



WELD THE SPROCKET HUB AT FINAL ASSEMBLY SO THAT THE CLEARANCE BETWEEN THE SPROCKET AND THE UPPER AND LOWER WELDS ON THE TURNTABLE TEETH IS EQUAL FOR A COMPLETE REVOLUTION OF THE TURNTABLE THE MINIMUM CLEARANCE ALLOWED IS 1/16" FOR THE 40'S AND BELOW AND 1/8" FOR 60'S AND ABOVE.

TURNTABLE SPROCKET DRIVE ASSY

8. Wire drive motor to control system
9. Test drive and adjust teeth engagement horizontally