

OPERATOR'S MANUAL FOR MORSE MODELS 1-5154 AND 1-5154VS Serial Number 12501 to 174637

A. IMPORTANT:

- 1. Review the Material Safety Data Sheet(s) for the material(s) in the drum(s) and take all necessary precautions. Safety shoes, work gloves, hard hat and other personal protective devices are recommended.
- 2. Please read all instructions thoroughly before attempting to operate your new MORSE stationary drum rotator.
- 3. The model 1-5154 drum speed of 10, 20, OR 30 RPM was set at the factory according to customer's order specification. The drum speed is based on a 22-1/2" dia. 55 gallon steel drum. The maximum liquid load capacity rating is 1000 lb. (454kg). Dry load capacity varies with speed of drum rotation. 400 lb. (181kg) at 10 RPM, 300 lb. (136kg) at 20 RPM and 250 lb. (113kg) at 30 RPM. The model 1-5154vs has variable speed from 10 to 40 RPM. The capacities are the same as the 1-5154. The rotator will accept steel drums 6" to 28" in diameter and up to 40" long.

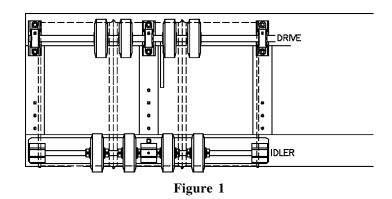


WARNING - DO NOT exceed these ratings. Exceeding these ratings or handling drums other than those mentioned above is unsafe and could result in equipment damage, excessive wear, motor overload and shortened service life of transmission components.

4. When loading, unloading, operating, or maintaining your MORSE stationary drum rotator, always use care and good judgment. Maintain secure footing and a firm hold. Keep hands and loose clothing away from all moving parts. Never allow anyone to be near a rotating drum. Read operating instructions and review the pictures in the sales brochure before operation.

Morse rotators do not comply with OSHA unless they are installed in accordance with OSHA subpart O, 1910.212 - "General requirements for all machines."

- **A. ASSEMBLY AND INSTALLATION INSTRUCTIONS:** Adjust drive and idler wheels to your particular drum. With provided 1/8" allen wrench, loosen the two set screws found in each drive wheel hub and the set screw in each collar surrounding the idler wheels. Wheels should be positioned to support the drum at its strongest point; adjacent to ribs (see Figure 1). This configuration will also prevent the drum from moving axially. Tighten set screws.
 - A variety of drum diameters can be accommodated by adjusting the idler plate assembly toward the drive side for smaller diameters and away from the drive side for larger diameters. The plate may be adjusted to allow drive shaft spacing from 8" to 18". It is preset to the second (outer) set of holes for use with standard 55 gallon steel drums. To adjust, remove the three idler plate bolts (item 8) and slide the idler plate assembly (item 7) to the proper set of mount holes and refasten the mount bolts.



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- 2. Do *not* put into service without proper motor protection and controls. Customer should provide the proper controls and consult an electrician to complete the wiring. When starting the unit be careful to stand clear of the rotator as the drum will begin to rotate. Rotators equipped with an air motor require 40 psi, 40 scfm. *Operating the air motor at higher pressures will reduce the life of the air motor and power transmission components.*
- 3. Anchor to the floor with four $\frac{1}{2}$ " dia mounting lugs.

OPERATING INSTRUCTIONS:



DANGER - Stay Clear of Rotating Drum NEVER allow anyone to be near any part of the rotating drum. Operator should remain clear of the rotator.

- 1. Drums should be loaded onto the rotator horizontally. Overhead lifting equipment and the Morse model 41 Drum Lifting Hook provide an effective loading system for horizontal 55 gal steel drums. Also, the Morse model 405 Omni Lift Karrier can be used for taking a drum from vertical and placing onto the rotator horizontally (see literature).
- 2. Drum is now ready to be rotated.
- 3. The speed on the 1-5154vs can be adjusted manually by turning the knob located on the back corner of the variable speed drive (item 29) opposite the motor (item 10). Turn the knob counterclockwise to increase the speed.

D. MAINTENANCE:

- 1. Idler wheels and drive bearings are equipped with grease fitting and should be lubricated periodically. High pressure grease guns are not recommended, as their force may damage seals.
- 2. The speed reducer has been filled and tested prior to shipment. After operating a new machine for 50 hours, the housing should be thoroughly flushed out and new oil added to fill the housing to the oil level plug. The oil should be changed every 6 months or 5000 operating hours thereafter or more often if operating conditions cause condensation of moisture resulting in sludge formation inside housing
- 3. Motors have permanently lubricated ball bearings. Variable speed drive should be serviced according to manufacturer's instructions.
- 4. Periodically inspect all moving parts, framework, and contact areas for signs of wear or loosening. Tighten, adjust, or replace parts as necessary to prevent failure and maintain proper function.



PARTS LIST FOR MORSE MODEL 1-5154 OR 1-5154VS SERIES ROTATOR

ITEM	* MODEL	MODEL SUFFIX	QTY	P/N	DESCRIPTION
1	1-5154		1	298-P	FRAME WELDMENT, 1-5154
1	1-5154VS		1	1816-P	FRAME WELDMENT, 1-5154VS
2			1	295-P	IDLER PLATE WELDMENT, 5154
3			4	292-P	WHEEL, IDLER, 6" W/ 3/4" BRG
4			8	15-P	COLLAR, 3/4" ID
5			8	55-P	WASHER, 3/4 SAE FL 1-1/2 OD
6			1	301-P	IDLER SHAFT, 3/4" X 38" 5154
7			1	295CPT-P	IDLER PLATE CPT, 1-5154
8			3	1657-P	3/8 - 16 X 3/4 HHCS GR 2 STL
9			3	1474-P	WASHER, 3/8 SPLIT LOCK
10		-1	1	290-1-P	MOTOR, 1/2HP, 1PH, 56C, TEFC
10		-3	1	290-3-P	MOTOR, 1/2HP, 3PH, 56C, TEFC
10		-E1	1	290-E1-P	MOTOR, 1/2HP, 1PH, 56C, EXP
10		-E3	1	290-E3-P	MOTOR, 1/2HP, 3PH, 56C, EXP
10		-A	1	290-A-P	MOTOR, AIR 1HP, 56C
11	1-5154	20 RPM	1	302-P	** SPEED REDUCER 5154 20:1
11	1-5154	10 RPM	1	302-10-P	** SPEED REDUCER 1-5154 40:1
11	1-5154 OR VS	30 RPM OR VS	1	302-30-P	** SPEED REDUCER 5154VS 15:1
11	1-5154	40 RPM	1	302-40-P	** SPEED REDUCER 5154 10:1
12			4	35-P	5/16 - 18 X 1 HHCS GR 2
13			4	1650-P	WASHER, 5/16 SPLIT LOCK
14			1	1666-P	COUPLING BODY HALF, 7/8" BORE
15			1	305-P	SPIDER, BUNAN, 5154
16			1	1665-P	COUPLING BODY HALF, 1" BORE
17			1	304-P	COUPLING CPT, 1" TO 7/8"
18			1	1315-P	3/8 - 16 X 2-3/4 HHCS GR 2 STL
19			4	291-P	WHEEL, DRIVE, 6", 1" BORE
20			6	1464-P	3/8 - 16 X 1-1/4 HHCS GR 2 STL
21			6	1166-P	WASHER, 3/8 USS 1" OD
22			6	1169-P	3/8 - 16 REV HEX LOC NUT
23			3	297-P	BEARING, 1" PILLOW BLOCK
24			2	213-P	DRIVE SCREW, #7 X 5/16"
25			1	217-P	GROUNDING STRAP, 5154, 201
26			1	299-P	DRIVE SHAFT, 1" X 40" 5154
27			1	736-P	KEY, WOODRUFF, SIZE 15, ASA808
28			1	1326-P	KEY, SQUARE, 3/16 X 1"
29	1-5154VS		1	306-P	VARIABLE SPEED DRIVE

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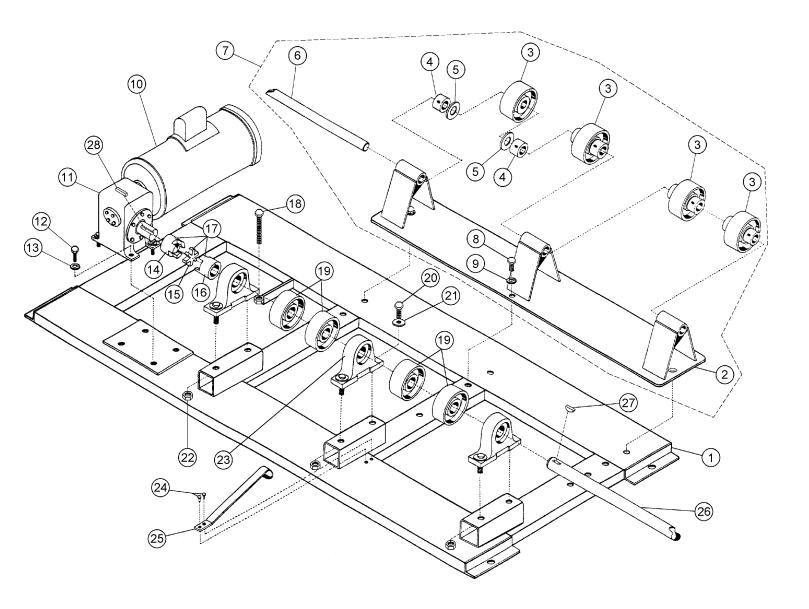
** Item 11 has been discontinued and is no longer available.

Please call Morse for substituted parts.



1-5154 SERIES STATIONARY DRUM ROTATOR

PARTS DIAGRAM FOR MORSE MODELS 1-5154 AND 1-5154VS Serial Number 12501 to 174637



When ordering parts, specify part number and description, model number and serial number. Find model number and serial number on metal tag attached to Rotator.