



Form P6047
Edition 7
October 2005
CCN 03524998

REVERSIBLE MULTI-VANE® MOTORS

~~MOV050 and MOV075 Series~~

Marked for

MOV075AB/VSM-4576

Operations and Maintenance Information



Save These Instructions

IR Ingersoll Rand.

 WARNING

General Product Safety Information

- Read and understand this manual before operating this motor.
 - It is your responsibility to make this safety information available to others that will operate this motor.
 - Failure to observe the following warnings could result in injury.
-

 WARNING

- Always operate, inspect and maintain this motor in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1).
 - For safety, top performance and maximum durability of parts, operate this motor at 90 psig (6.2 bar/620 kPa) air pressure at the inlet with 1-3/8" (34.9 mm) air supply hose.
 - Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this motor.
 - Do not use damaged, frayed or deteriorated air hoses and fittings.
 - Keep hands, loose clothing and long hair away from rotating end of motor.
 - Anticipate and be alert for sudden changes in motion during start up and operation of any motor.
 - Motor shaft may continue to rotate briefly after the throttle is released.
 - Do not lubricate motor with flammable or volatile liquids such as kerosene, diesel or jet fuel.
 - Do not remove any labels. Replace any damaged label.
 - Use accessories recommended by Ingersoll-Rand.
 - This motor is not designed for working in explosive atmospheres.
 - This motor is not insulated against electric shock.
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Safety Symbol Identification



(Dwg. MHP2454)



(Dwg. MHP2455)



(Dwg. MHP0884)

Safety Information - Explanation of Safety Signal Words

 DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

NOTICE

Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

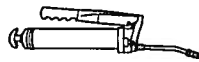
Models

Size	Model(s)	Type
6 Horsepower Sizes	M0V050AA	Foot Mounting
	M0V050AB	Nema C Face Mounting (215 Electric Motor Frame Size)
	M0V050AC	Nema D Flange Mounting (215 Electric Motor Frame Size)
7-1/2 Horsepower Sizes	M0V075AA	Foot Mounting
	M0V075AB	Nema C Face Mounting (254U Electric Motor Frame Size)
	M0V075AC	Nema D Flange Mounting (254U Electric Motor Frame Size)

Lubrication



Ingersoll-Rand No. 50



Ingersoll-Rand No. 28

We recommend the use of an air line lubricator in the air supply line. Attach the unit as close to the motor as practical.

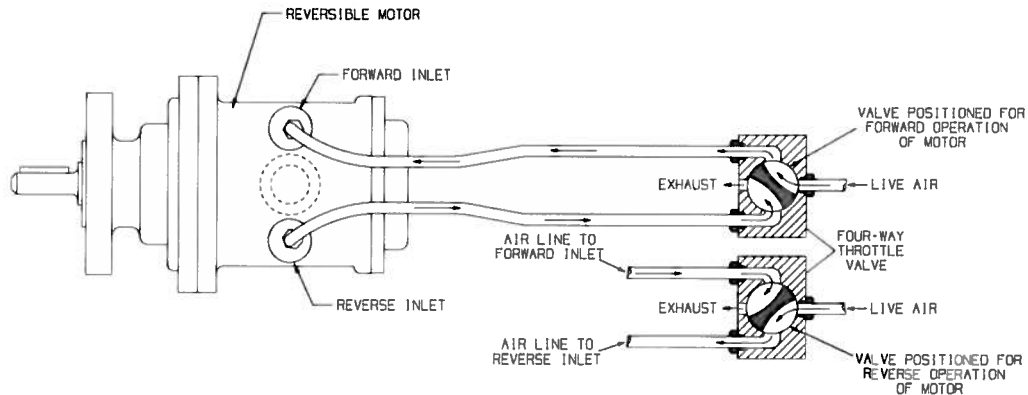
We recommend using an Ingersoll-Rand No. C31-08-600 Filter-Regulator-Lubricator Unit.

These units have 1-1/4" pipe tap inlet and outlet. The Lubricator has a 2 pint (946 ml) oil capacity. Larger capacity units may be used, but do not use a unit having less than a 1-1/4" pipe tap inlet and outlet. **Whenever the Motor is disassembled for repair or maintenance**, lubricate the Rear Rotor Bearing and Front Rotor Bearing with the recommended grease.

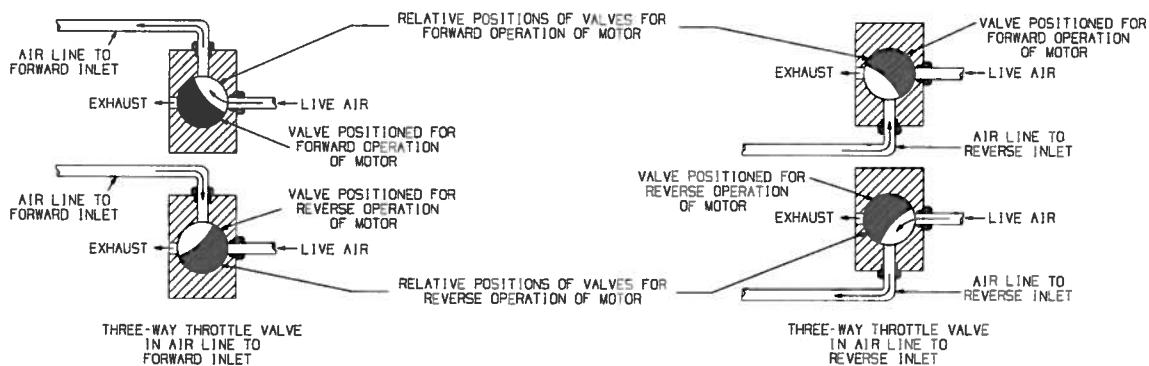
Operation

When these motors are used on applications requiring a reversible motor, a 4-way throttle valve or two 3-way throttle valves must be used in the air supply line in accordance with the schematic diagram shown in drawing TPB 256.

When the application requires a nonreversible motor, a 2-way in-line valve can be used in the air supply line. In either case, the inlet and outlet of the valve must be equal in size, and preferably one size larger, than the inlet of the motor.



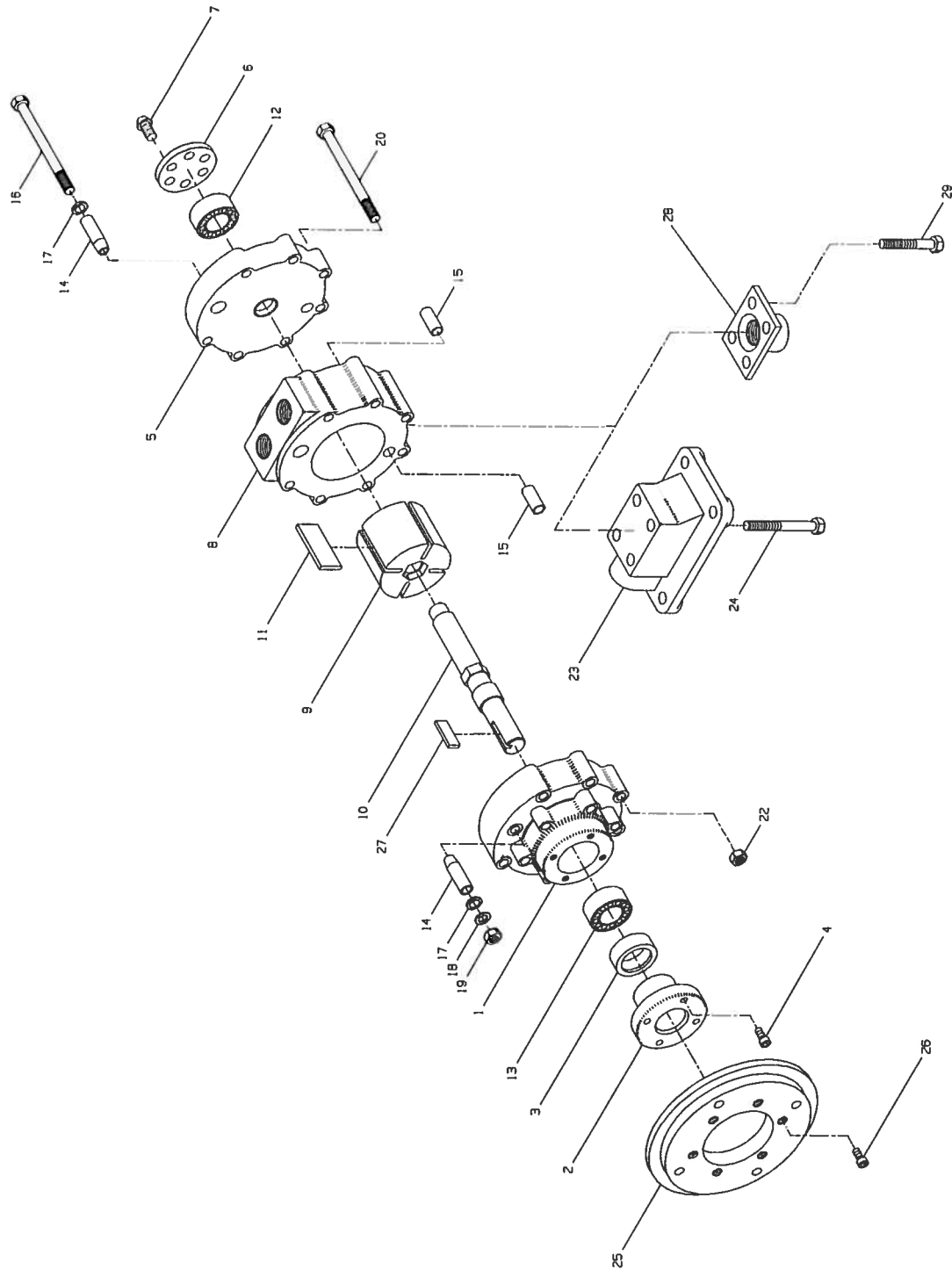
Single Four -Way Valve for Controlling Forward and Reverse Operation of Motor



Two Three -Way Valves for Controlling Forward and Reverse operation of Motor

(Dwg. TPB256)

M0V050 and M0V075 Series Exploded Diagram.



(Dwg. TPA453-3)

M0V050 and M0V075 Series Parts List

Sl. No.	Description	Part Number	Sl. No.	Description	Part Number
1	Fronthead	M0V050AA-240	23	Mounting Foot	
2	Fronthead Cap Assembly	M0V050AA-A378			
3	Rotor Shaft Seal	FM-508			
4	Fronthead Cap Retaining Screw (4) (1/4 -20 thd. x 7/8 long)	510-638	24	Mounting Foot Bolt (4)	
5	Backhead	M0V050AA-102			
6	Backhead Cap	M0V050AA-104	25	NEMA Face Mounting Adapter	
7	Backhead Cap Retaining Screw (6) (No. 10-32 thd. x 1/2 long)	M0V050AA-31			
8	Cylinder		25	NEMA Flange Mounting Adapter	
	for M0V075	M0V075AA-3			
9	Rotor		26	Adapter Screw (6) (for M0V050AB, M0V050AC, M0V075AB, and M0V075AC)	21-702
	for M0V075	M0V075AA-53	27	Shaft Key	
10	Rotor Shaft				
	for M0V075	M0V075AA-52			
11	Vane Packet (set of 5 Vanes)		28	Exhaust Connector	
	for M0V075	M0V075AA-42-5			
12	Rear Rotor Bearing	R4-24		for M0V075AB and M0V075AC	M0V075AB-288
13	Front Rotor Bearing	D10-518	29	Exhaust Connector Screw (4) (for M0V050AB, M0V050AC, M0V075AB, and M0V075AC)	B8-240
14	Large Dowel (2)	M0V050AA-98			
15	Small Dowel (2)	JC3350-74	*	5/16 Lock Washer (4)	T11-58
16	Large Dowel Bolt		*	Mounting Foot Kit	
	for M0V075				
	(1/4 -28 thd. x 4 long)	M0V075AA-99			
17	Dowel Bolt Plain Washer (2)	B12-265	*	Mounting Foot	
18	Dowel Bolt Lock Washer	10BM-67			
19	Dowel Bolt Nut (1/4 -28 thd.)	T06-139			
20	Through Bolt (7)		*	Cap Screw (2)	DLC-752
			*	Copper Seal Washer (2)	D02-504
			*	Mounting Foot Bolt	
	for M0V075				
	(3/8 -16 thd. x 4-1/2 long)	HU-548			
*	Through Bolt Lock Washer (7)	D02-321	*	Nameplate	MVA008-301
22	Through Bolt Nut (7)	D02-418	*	Nameplate Screw (2)	MVA008-302

* Not illustrated.

Notes

Notes

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