# INSTALLATION AND MAINTENANCE MANUAL FOR MODEL T48 and T007 SERIES BARRING MOTORS



## **WARNING**

## IMPORTANT SAFETY INFORMATION ENCLOSED. READ THIS MANUAL BEFORE OPERATING TOOL.

#### FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

- 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 120 psig (8.2 bar/827 kPa) air pressure at the inlet with 1/4" (6 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 or before performing any maintenance on this motor.
- 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 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.
- This motor is not designed or sealed to be operated on compressed gas. Use compressed air only.

#### NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased tool performance and increased maintenance, and may invalidate all warranties.

Ingersoll-Rand is not responsible for customer modification of tools for applications on which Ingersoll-Rand was not consulted.

Repairs should be made only by authorized, trained personnel. Consult your nearest Ingersoll-Rand Authorized Servicenter.

It is the responsibility of the employer to place the information in this manual into the hands of the operator.

Refer All Communications to the Nearest Ingersoll-Rand Office or Distributor.

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#### WARNING LABEL IDENTIFICATION

## **A** WARNING

#### FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.



## **WARNING**

Always wear eye protection when operating or performing maintenance on this motor.



#### **WARNING**

Always wear hearing protection when operating this motor.



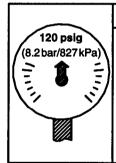
## **WARNING**

Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this motor.



## **WARNING**

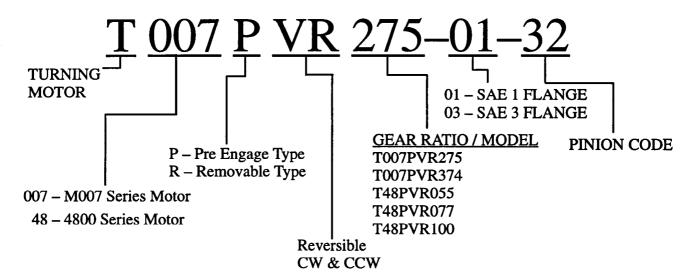
Do not use damaged, frayed or deteriorated air hoses and fittings.



## **A** 1

#### WARNING

Operate at 120 psig (8.2 bar/827 kPa) Maximum air pressure.



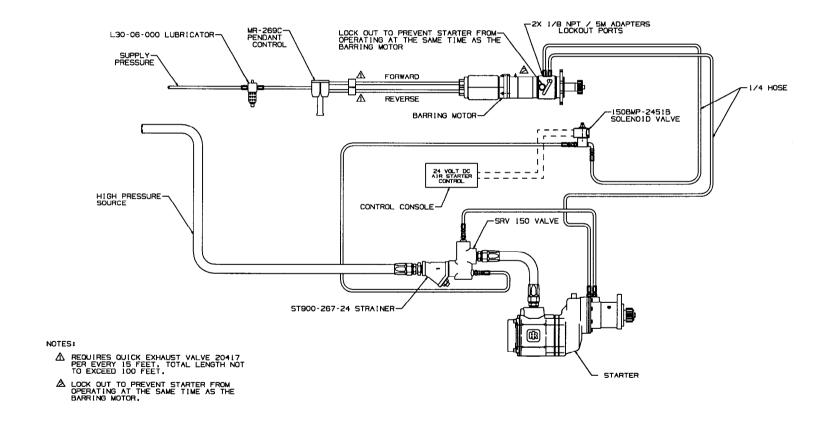
When ordering a Barring Motor, refer to table below for correct pinion data.

#### **PINION DATA**

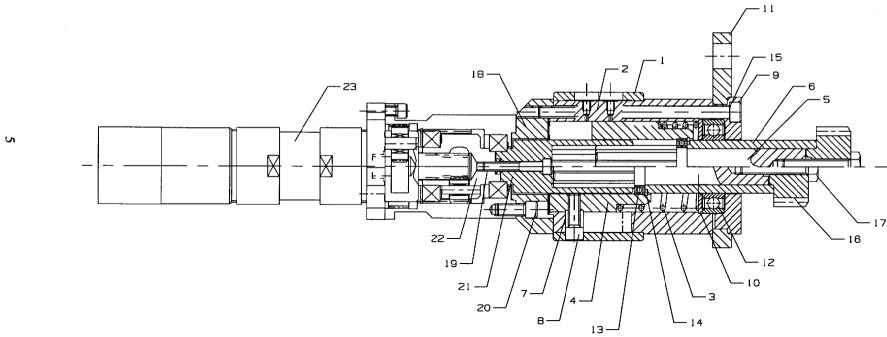
TEETH	BLANK	D.P.	MOD.	P.A.	ROTATION	PINION	CODE
10	10	8/10		20 DEG	RIGHT	ST400-13-15	15
12	12	8/10		20 DEG	RIGHT	ST400-13-29	29
12	12	6/8		20 DEG	RIGHT	ST400-13-31	31
9	9		3	15 DEG	RIGHT	ST400-13-77	77
11	11		3	15 DEG	RIGHT	ST400-13-85	85
11	12	8/10		20 DEG	RIGHT	SS350R-13-21	21
13	14		3.5	15 DEG	RIGHT	SS350R-13-895	895
24		12/14		12 DEG	LEFT	SS175L-13-1448	1448
10	11	10/12		20 DEG	RIGHT	04335055	71
9	10		3.5	15 DEG	RIGHT	04595799	79
17	18		3.5	15 DEG	RIGHT	04334371	95
11			3.5	20 DEG	RIGHT	04333969	832
13	13		3.5	15 DEG	RIGHT	04332292	893
14	16		3.5	15 DEG	RIGHT	04595807	91
14			3.5	14.5 DEG	LEFT	04334363	92
12			4	14.5 DEG	LEFT	04331724	101
14	15	-	3.5	20 DEG	LEFT	04334389	942

For different models or special applications, contact your nearest Ingersoll–Rand Distributor or Ingersoll–Rand, Engine Starting Systems, Box 8000, Southern Pines, NC 28387 (910) 692–8700

#### AIR STARTER AND BARRING MOTOR SYSTEM WITH PENDANT CONTROL

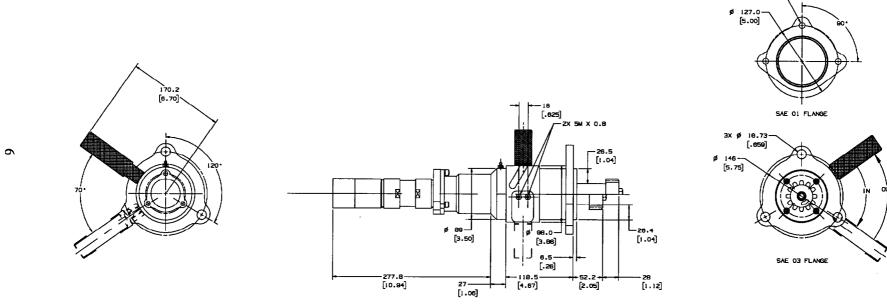


#### SERIES T007PVR275 and T007PVR374 BARRING MOTORS



TPM\_1020

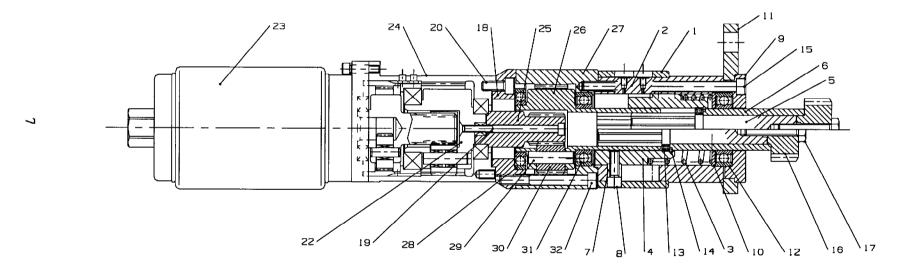
## MOUNTING DIMENSIONS FOR T007PVR275 and T007PVR374 BARRING MOTORS



TPM\_1021

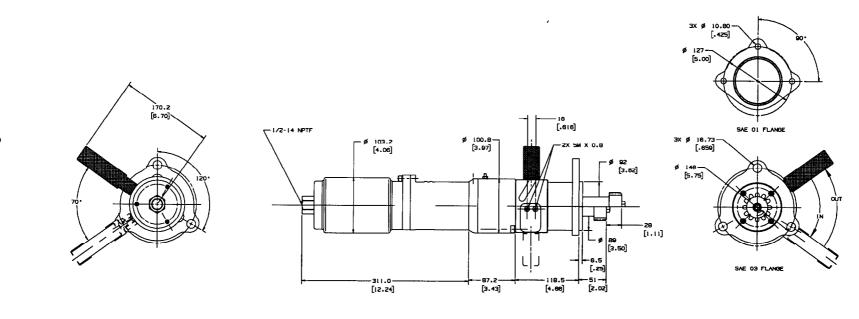
3X Ø 10.80-

### SERIES T48PVR077 and T48PVR100 BARRING MOTOR



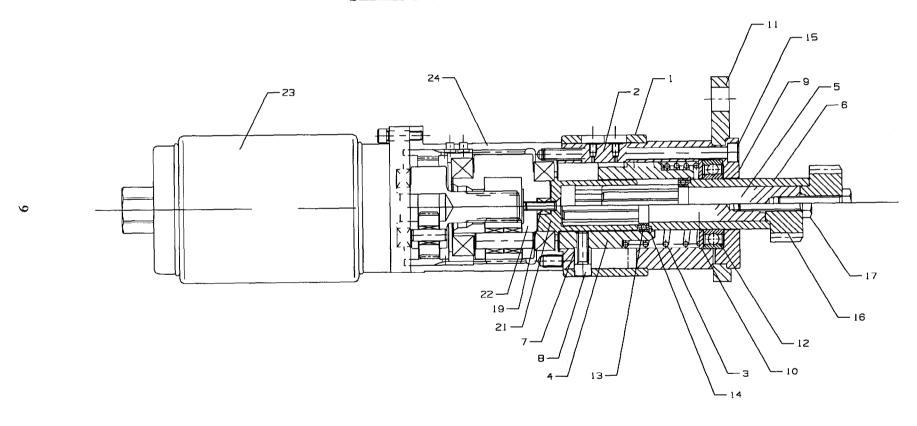
TPM\_1022

## MOUNTING DIMENSIONS FOR T48PVR077 and T48PVR100 BARRING MOTORS



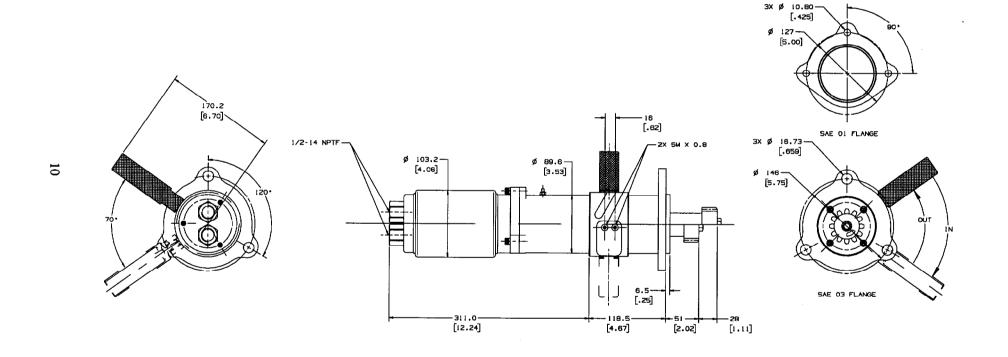
TPM\_1023

## SERIES T48PVR055 BARRING MOTOR



TPM\_1024

#### MOUNTING DIMENSIONS FOR T48PVR055 BARRING MOTOR



TPM\_1025

#### PART NUMBER FOR ORDERING

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5			
0			

MAINTENANCE SECTION

		▼			▼
1	Drive Piston Ring	T48-703B	21	Drive Spindle	
2	Drive Piston Housing	T48-300		for T007PVR275	T007-17F
3	Spring				T007-17F
4	Drive Piston	T48-703		for T48PVR055	
5	Drive Shaft	T48-8	22	Planet Gear Frame	
6	Drive Shaft Collar	T48-175		for T007 models	T007P-108
7	Drive Piston Bushing	T48-180		)	T4800P-108
8	Drive Piston Screw (2)	T48-179		for T48PVR077	T4800U-108
9	Flange Cover		23	Air Motor	
	SAE01	T48-480-01		for T007PVR275	M007VR275BR6
	SAE03	T48-480-03			M007VR374BR6
10	Return Spring Seat	T48-191		for T48PVR055 and T48PVR100	
11	Flange				4840S
	SAE01	ST400-300-01	24	Gear Case	4840S
	SAE03			for T48PVR models	
12	Drive Bearing		25	Intermediate Pinion	
13	Piston Bearing			for T48PVR077	T48S-17
14	Retaining Ring	T48-109		for T48PVR100	T48U-17
15	Drive Housing Cap Screw (4)	T48-744	26	Spindle Planet Gear Frame	
16	Drive Pinion	See Chart pg. 3		for T48PVR077 and T48PVR100	T48_9
17	Pinion Screw		27	Intermediate Gear Case	,
18	Adapter	T007-37-03		for T48PVR077 and T48PVR100	T48-37B
	not used on T48PVR055		28	Spindle Planet Gear Frame Rear Bearing	110 372
19	Drive Spindle Screw			for T48PVR077 and T48PVR100	T48-97
	for T007 models	T007-179	29	Spindle Planet Gear Shaft	
	for T48 models	T48-179B		for T48PVR077 and T48PVR100 (4).	T48-190
20	Adapter Screw		30	Spindle Planet Gear	
	for T007 models (6)	T007-638		for T48PVR077 and T48PVR100 (4).	T48-10
	for T48PVR077 and T48PVR100 (4).	T007-638	31	Spindle Planet Gear Frame Front Bearing	
				for T48PVR077 and T48PVR100	T48-510
			32	Intermediate Gear Case Bolt	
				for T48PVR077 and T48PVR100 (4).	T48-744B
			33	Handle	ND

PART NUMBER FOR ORDERING -