

REF MOTOR SERVICE
DRAWING 113000-SERV

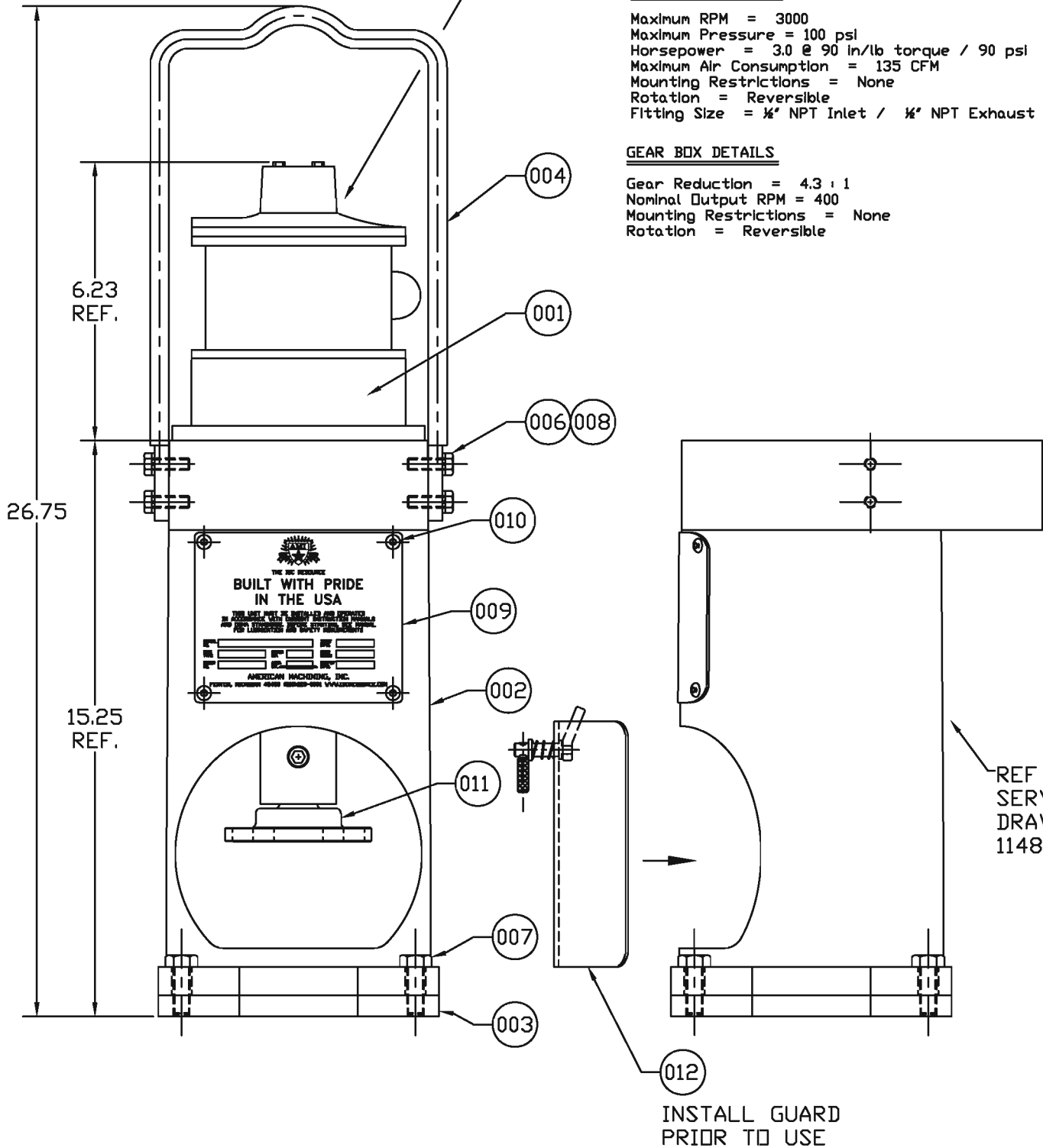
AIR MOTOR DETAILS

Maximum RPM = 3000
 Maximum Pressure = 100 psi
 Horsepower = 3.0 @ 90 in/lb torque / 90 psi
 Maximum Air Consumption = 135 CFM
 Mounting Restrictions = None
 Rotation = Reversible
 Fitting Size = 1/2" NPT Inlet / 1/2" NPT Exhaust

GEAR BOX DETAILS

Gear Reduction = 4.3 : 1
 Nominal Output RPM = 400
 Mounting Restrictions = None
 Rotation = Reversible

B



REF GEARBOX
SERVICE
DRAWING
114833-SERV

INSTALL GUARD
PRIOR TO USE

A

REVISIONS

ZONE	REV	DESCRIPTION	DATE	REVISED BY	APPROVED BY
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USE OF AIR MOTORS IN HAZARDOUS ATMOSPHERES

At the time of this writing, there are no known standards for the operation of air motors in hazardous atmospheres. However, there are several points to remember regarding their operation.

First, an air motor is not a source of electric sparks. It is possible, however, that an article which is not part of the air motor, such as wrenches, could create a spark if sharply impacted on the cast iron or aluminum components, or the shaft of the air motor.

Second, an air motor housing is not designed to contain an internal explosion as is an explosion-proof electric motor. The only possible internal source of ignition in an air motor is a contact between the stationary housing components and the rotating elements creating a spark. The likelihood of this occurring is reduced by the fact that the contact must be made at precisely the same time as a flammable or explosive atmosphere is introduced into the air motor in a sufficient quantity to achieve a flammable or explosive mixture while overcoming the positive pressure of the driving gas.

Finally, an air motor is designed to operated by compressed air, the expansion of which in normal operation creates a cooling effect. As a result, the temperature of the air motor will not exceed the higher of the temperatures of the surrounding atmosphere or the air delivered to the inlet.

We do not guarantee the safety of every application, but to ensure the safe operation of an air motor in your application, always follow the product directions and consult with a qualified engineer.

WARNING: Units should not be propelled by combustible gasses or be used in combustible ambients.

LUBRICATION & AIR SUPPLY



Proper operation of the air motor attached to this drive requires that the motor be lubricated. AMI recommends the use of a positive displacement single point lubricator.

Use a high quality hydraulic or SAE automotive engine oil with anti-wear, anti-oxidation, VI improver, rust inhibitor, and detergent additives. Viscosity should be approximately 220 SUS or SAE #10. Pre-filter lubricating fluid to ISO 4406 (SAE J1165) 18/16/14.

Air supplied to the motor must be clean and dry (no moisture). AMI recommends the use of a non-clogging separator with a minimum of a 40-micron filter downstream of the regulator. Additionally, the use of a 3-micron coalescing filter with Dioctyl Phthalate (D.O.P.) efficiency of 99.97% should be mounted downstream of the pre-filter.

Exhausted air must comply with OSHA regulation 29CFR, Part 1910, Sub-Part Z, Section 1910.1000, and Table Z1 for air contaminants. (TLV-TWA) User must also comply with the OSHA sound level requirements of 29CFR, Section 1910.95. The use of reclassifiers is indicated.

DETAIL	QTY.	PART NO.	DESCRIPTION
001	1	113000	MOTOR - 3 HP AIR
002	1	114833	GEARBOX
003	1	112859	FLANGE - DRIVE ADAPTER / QUICK CONNECT BASE
004	1	112949	HANDLE - 1/2" DIA HVY DUTY LIFTING
005	---	---	---
006	4	112975	SCREW - HHCS ZINC PLT
007	4	112867	SCREW - HHCS ZINC PLT
008	4	112755	WASHER - SPLIT LOCK ZINC PLT
009	1	111645	TAG - AMI ID SS
010	4	112972	SCREW - BUTTON HD CAP SS
011	1	112966	COUPLING - DRIVE OUTPUT
012	1	114090	GUARD ASSY. - DRIVE MOTOR

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES GENERAL TOLERANCES FRACTIONS: ± 1/4 .XX DECIMALS: ± .12 .XXX DECIMALS: ± .06 .XXXX DECIMALS: ± .015 ANGLES: ± 2°					PROJECTION 		DO NOT SCALE THIS DRAWING BREAK SHARP EDGES REMOVE BURRS & FLASH		 AMERICAN MACHINING, INC. FENTON, MICHIGAN			
THIS DRAWING HAS BEEN FURNISHED BY AMERICAN MACHINING, INC. THE INFORMATION AND KNOW-HOW CONTAINED MAY NOT BE USED NOR MAY THE DRAWING BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF AMERICAN MACHINING, INC. ALL REPRODUCTIONS IN WHOLE OR IN PART, INCLUDING VENDOR SHOP DRAWINGS, SHALL BEAR OR REFER TO THIS NOTE.					FINISH: N/A <input checked="" type="checkbox"/>		DESCRIPTION DRIVE - 3 HP AIR W/QUICK CONNECT COUPLING		SIZE: B PART NUMBER: 113084-SERV REV: D			
					SPECIAL FINISH: N/A							
					DRAWN BY: M. SCHULTE		12/03/03		SCALE: NONE		MAT'L: AS NOTED	
					CHECKED BY: REICH		12/03/03		SHEET 1 OF 1			
APPROVED BY: _____		DATE: _____										