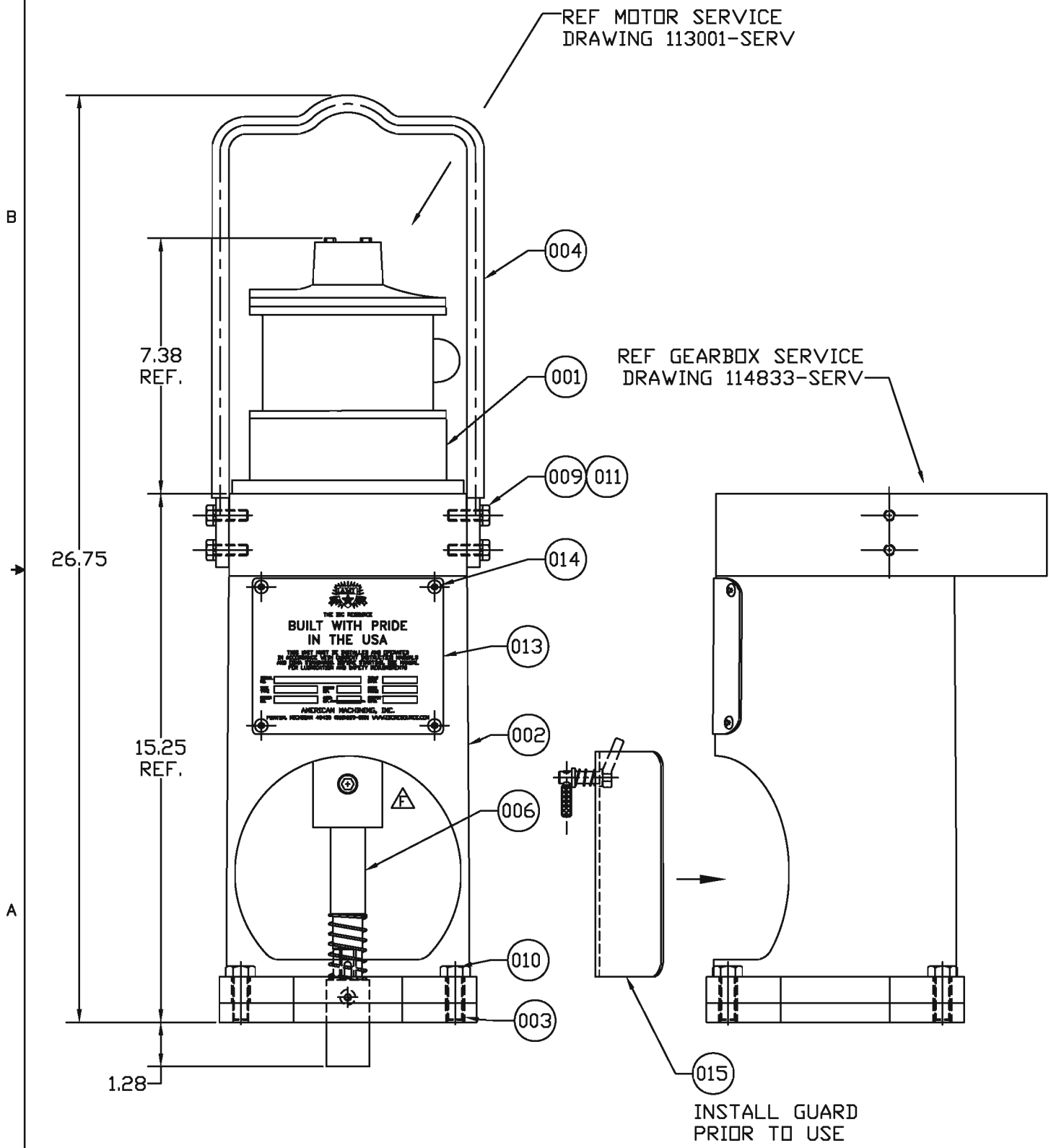
REF MOTOR SERVICE
DRAWING 113001-SERV
004
7.38
REF.
001
REF GEARBOX SERVICE
DRAWING 114833-SERV
009
011
26.75
014
BUILT WITH PRIDE
IN THE USA
013
002
15.25
REF.
006
010
003
1.28
015
INSTALL GUARD
PRIOR TO USE

REVISIONS					
ZONE	REV	DESCRIPTION	DATE	REVISED BY	APPROVED BY

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 contaminates. (TLV-TWA) User must also comply with the OSHA sound level requirements of 29CFR, Section 1910.95. The use of reclassifiers is indicated.

AIR MOTOR DETAILS

Maximum RPM = 2500
Maximum Pressure = 100 psi
Horsepower = 4.0 @ 100 in/lb torque / 90 psi
Maximum Air Consumption = 175 CFM
Mounting Restrictions = None
Rotation = Reversible
Fitting Size = ½" NPT Inlet / ½" NPT Exhaust

GEAR BOX DETAILS

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

DETAIL	QTY.	PART NO.	DESCRIPTION
001	1	113001	MOTOR - 4 HP AIR
002	1	112839	HOUSING - MIXER DRIVE UNIT
003	1	112859	FLANGE - DRIVE ADAPTER / QUICK CONNECT BASE
004	1	112949	HANDLE - 1/2" DIA HVY DUTY LIFTING CRS
005	--	--	--
006	1	113981	ADAPTER - HEX SHAFT ASSEMBLY
007	--	--	--
008	--	--	--
009	4	112975	SCREW - HHCS ZINC PLT
010	4	112867	SCREW - HHCS GR 8 ZINC PLT
011	4	112755	WASHER - SPLIT LOCK ZINC PLT
012	--	--	--
013	1	111645	TAG - AMI ID 304 SS
014	4	112972	SCREW - BUTTON HD CAP 18-8 SS
015	1	114090	GUARD - DRIVE MOTOR ASSY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
GENERAL TOLERANCES

FRACTIONS:	.XX DECIMALS:	.XXX DECIMALS:	.XXXX DECIMALS:	ANGLES:
± 1/4	± .12	± .06	± .015	± 2°

PROJECTION

DO NOT SCALE THIS DRAWING
BREAK SHARP EDGES
REMOVE BURRS & FLASH

FINISH: N/A ✓
SPECIAL FINISH: N/A
DRAWN BY: SCHULTE 12/03/03
CHECKED BY: REICH 12/18/03
APPROVED BY: DATE:

AMERICAN MACHINING, INC.
FENTON, MICHIGAN

DESCRIPTION
DRIVE - 4 HP AIR MOTOR
W/HEX OUTPUT CONNECTION

SIZE	PART NUMBER	REV
B	113045-SERV	H

SCALE: NONE | MAT'L: N/A | SHEET 1 OF 1