

## INSTRUCTION MANUAL

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# AUTO-PUMP<sup>®</sup>

120 VAC

## AIR COMPRESSOR SYSTEM WITH AUTO DRAIN



**MODEL #: 091-9B-4-AD**

**INPUT: 110-115volt, 50/60 Hz, 3.3 AMPS**  
**Vertical Mount Only**

**2 YEAR WARRANTY**

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West Sayville, NY 11796  
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**KE KUSSMAUL<sup>™</sup>**  
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## **INTRODUCTION**

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The 091-9B-4-AD Auto-Pump Air Compressor system is a 120 volt 50/60 Hz split capacitor A.C. motor operating a single cylinder air compressor designed specifically for installation on vehicles with air brakes. During long idle periods of the vehicle when even the slightest seepage can cause an air brake system pressure to drop below the brake lockup pressure, the Auto Pump automatically starts to maintain the pressure.

The Auto Pump motor is directly coupled to the compressor section eliminating all belts and pulleys assuring long life and reliable operation. A heavy duty pressure switch is adjusted to start the compressor when the system pressure drops below 75 psi and stops the compressor when 95 psi is attained. The pressure switch is adjustable.

A moisture trap is mounted on the Auto Pump. This captures any condensate which results from compressing the air. **The Auto Drain will automatically drain the condensate when the pump turns off.**

Please read and follow the installation instructions carefully . The Auto Pump requires no routine maintenance. A careful installation will assure years of trouble free operation.

### **NOTE**

**THIS PUMP REQUIRES A MINIMUM OF 120 VAC FOR OPERATION. AT LOWER VOLTAGES THE PUMP MAY NOT START**

# **CAUTION**

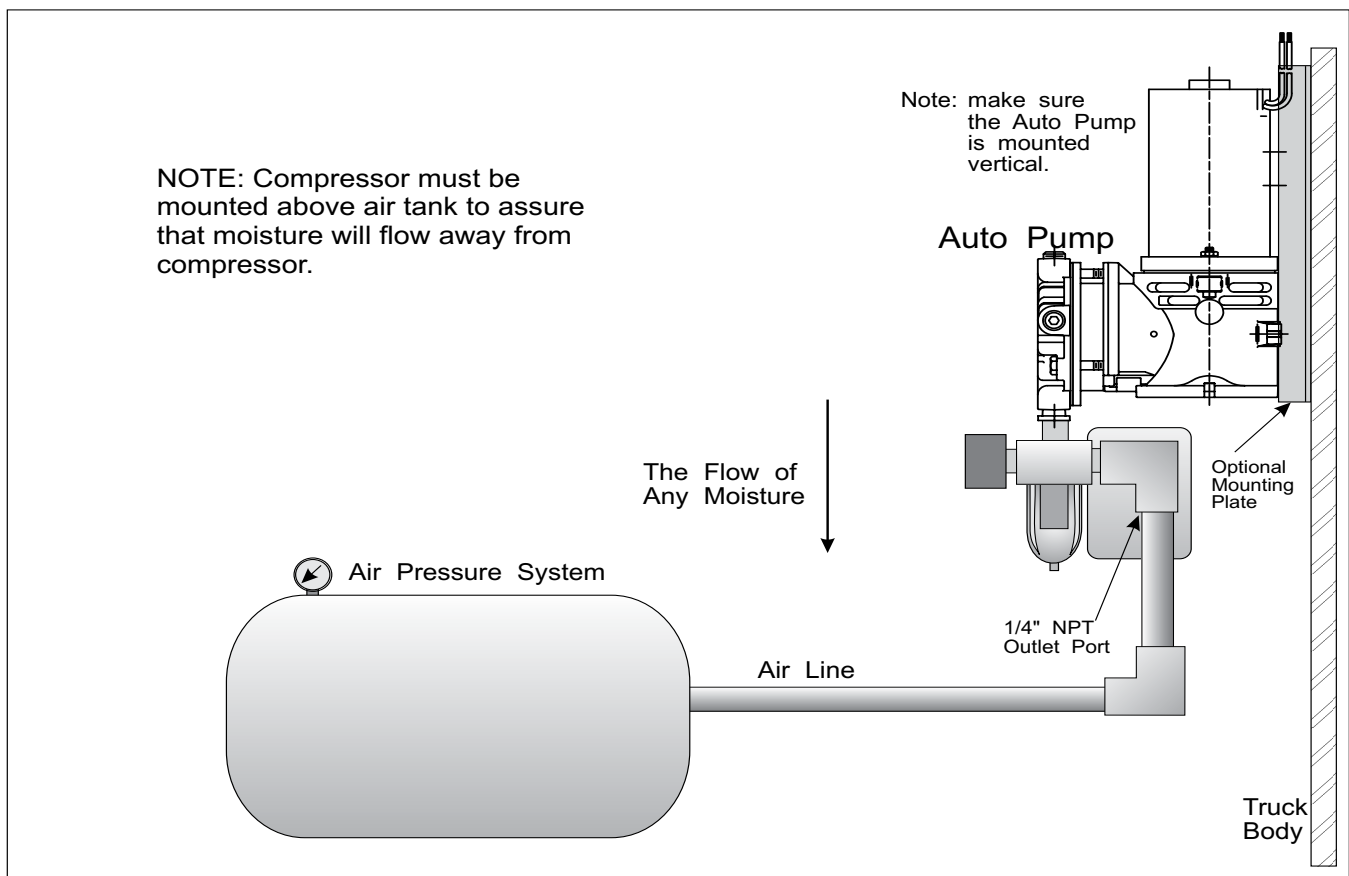
**NO CONDENSATE OR  
WATER MUST BE ALLOWED  
TO ENTER OR ACCUMULATE  
IN THE OUTPUT  
OF THE AUTO PUMP.  
ROUTE OUTPUT PRESSURE  
LINE DOWNWARD FROM  
AUTO PUMP TO PERMIT  
MOISTURE TO DRAIN AWAY.  
WATER IN THE PUMP  
OUTLET WILL INDUCE**

## **FAILURE !**

**WATER DAMAGE WILL  
VOID WARRANTY**

# VEHICLE TUBING INSTALLATION

1. Mount all components in a suitable location, preferably in a high area above the air system. Do not mount in engine compartment or near any source of heat or dirt . The system may be connected to any point in the vehicle's air system .
2. Mount air compressor in horizontal position as shown.
3. **CAUTION** no condensate or water must be allowed to enter or accumulate in the output of the Auto Pump . Route output pressure line downward from Auto Pump to permit moisture to drain away . **Water in the pump outlet will induce failure.**
4. All connections for air lines are 1/4" NPT . Use Teflon tape, or equivalent on all connections to insure no leakage of air.
5. The recommended installation of the Auto Pump air compressor system is shown below.
6. Note that an external check valve is located between the compressor and the pressure switch. No additional check valve is required.
7. Mount the air compressor. Connect a suitable piece of flexible tubing from the outlet port of compressor to the air tank . (Tubing and connectors are not supplied.)
8. An optional Mounting Plate 091-9HP-H is available to reduce any vibration and noise from the Auto Pump and to simplify pump mounting.



# VEHICLE WIRING INSTALLATION

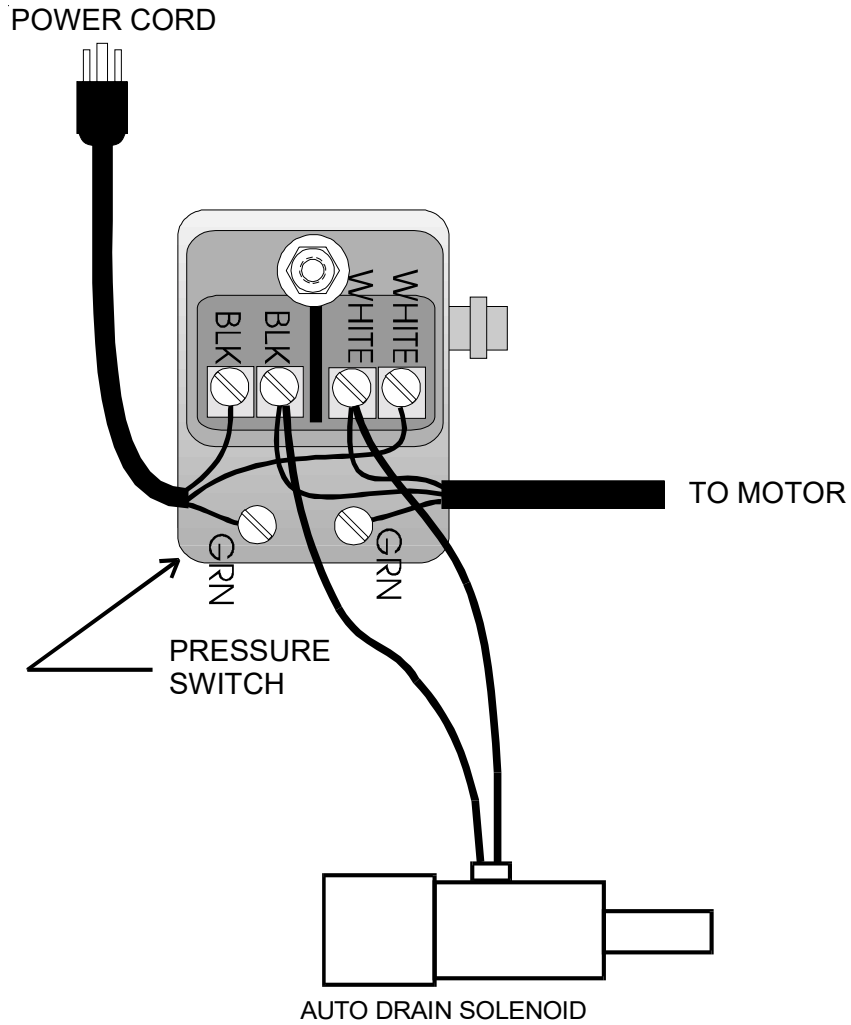
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1. The Auto Pump is supplied with an unterminated 120VAC CE rated line cord.

Wire the pump as follows: Brown wire - Line

Blue Wire - Neutral

Green/Yellow Wire - Ground



INSTALLATION WIRING DIAGRAM

# **SPECIFICATION & OUTLINE AUTO PUMP**

Input : 120 volts A.C., 50/60 Hz, 3.3 amps

Weight: 13 lbs

Motor Horsepower: 1/8 HP

Motor Type: Split capacitor A.C.

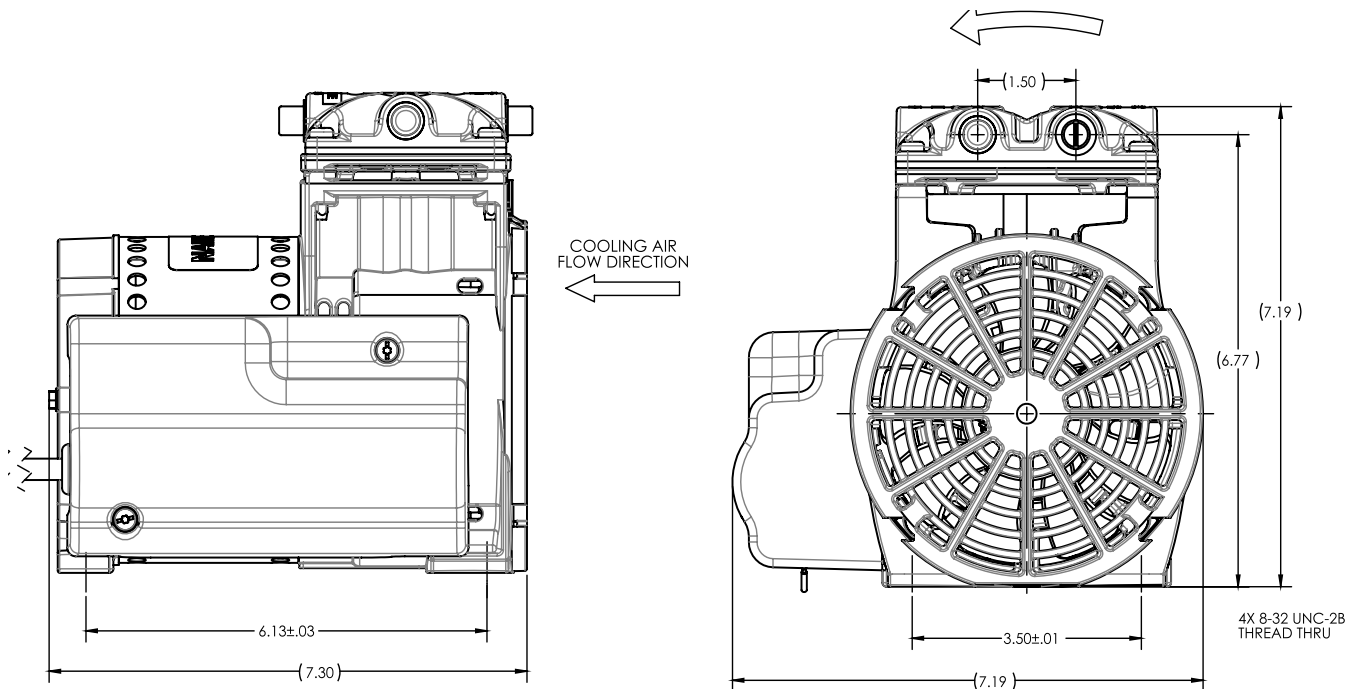
Compressor Output: 100 PSI Maximum.

Pressure Switch: Set to 75 PSI Cut-in, 95 PSI Cut-out (+/- 5 PSI )

Switch Differential: 20 PSI Nominal

Outlet Connection: 1/4 NPT, Female

Operating Temperature: 0°C to 43°C



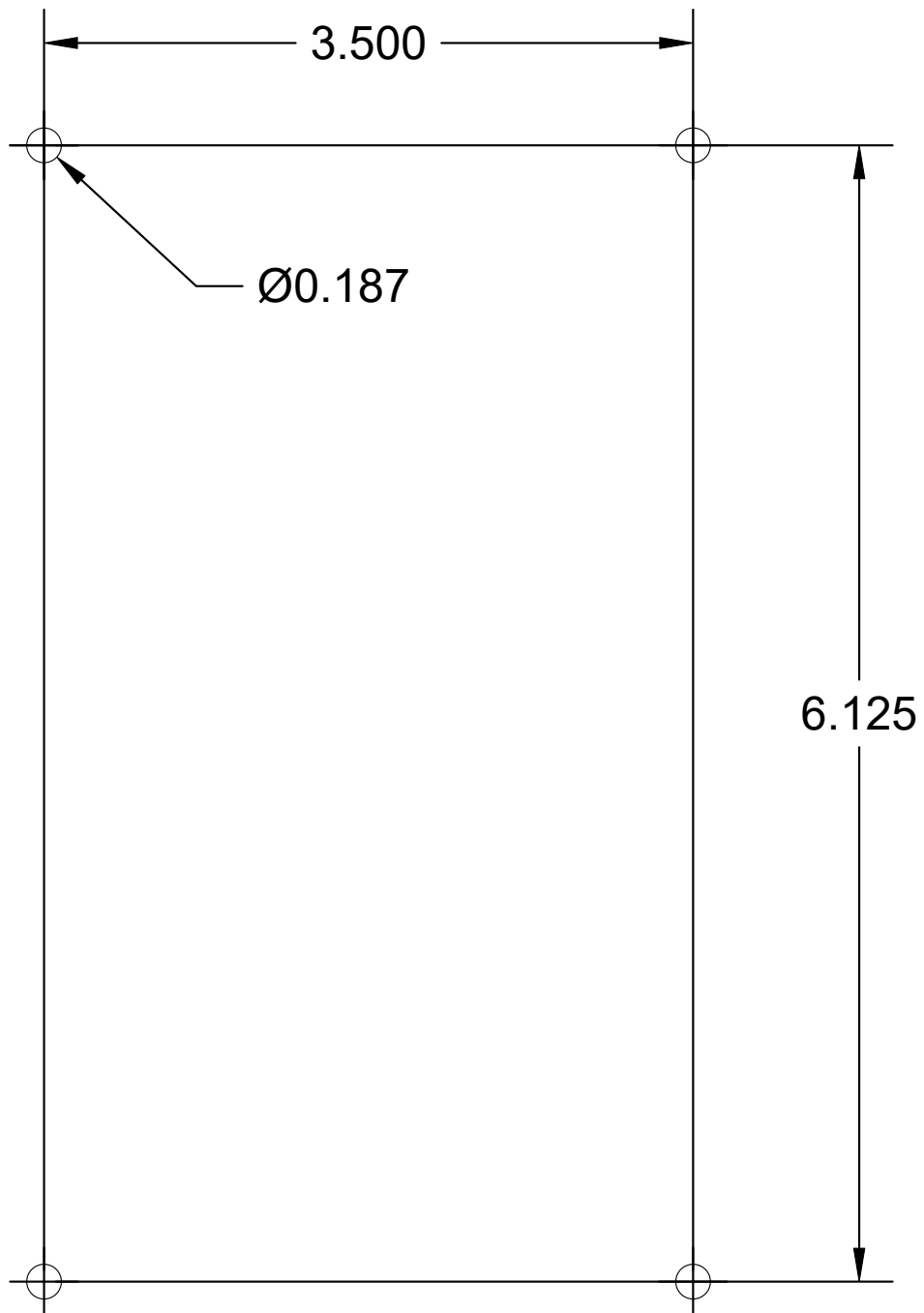
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# TEMPLATE AUTO PUMP

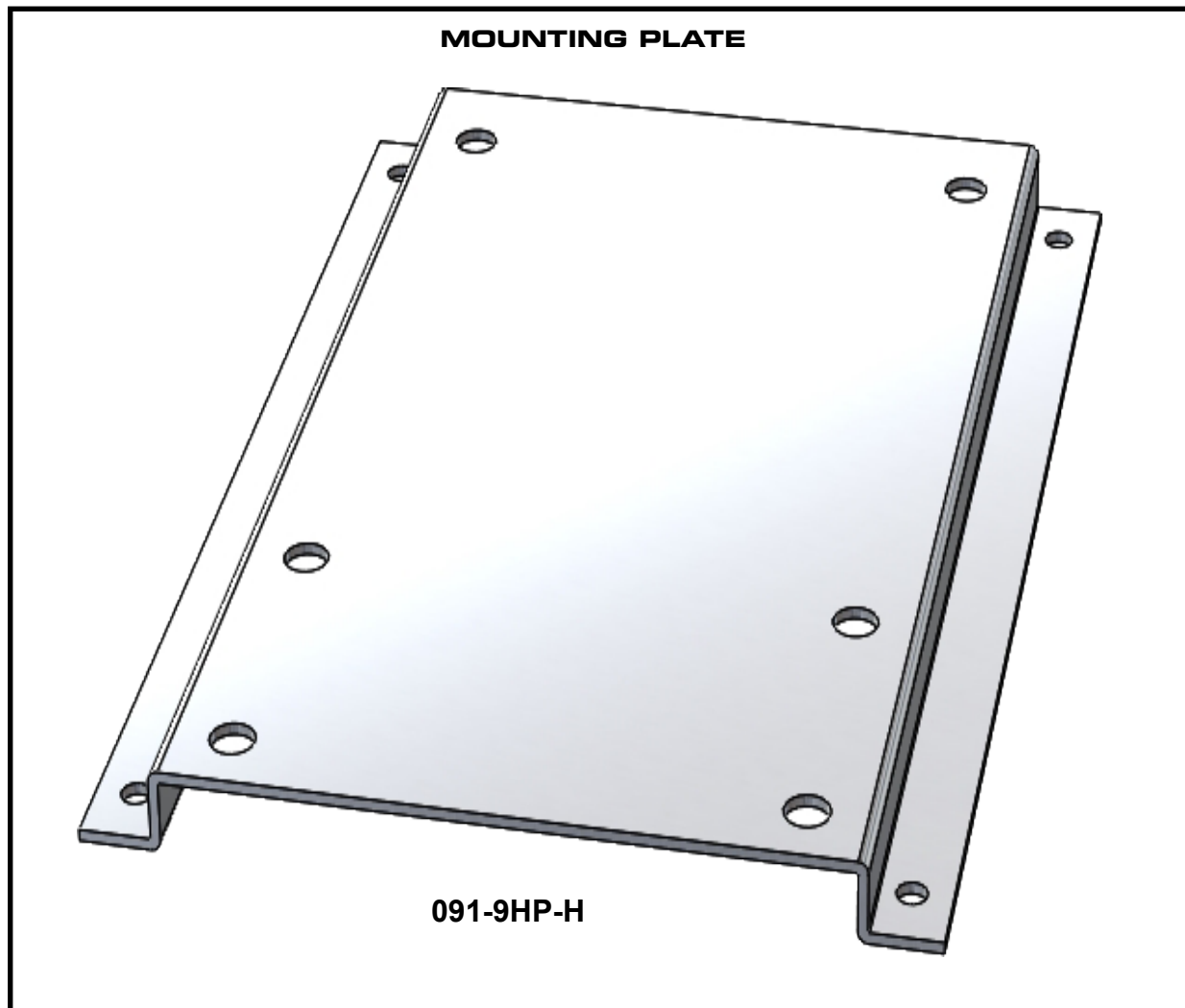
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Note: Verify measurements before using as a template.  
Must set print settings to "Actual Size".

## ACCESSORIES

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# INSTALLATION RECORD

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DATE INSTALLED \_\_\_\_\_

INSTALLED BY \_\_\_\_\_

VEHICLE IDENTIFICATION \_\_\_\_\_

VEHICLE OWNER \_\_\_\_\_

# WARRANTY POLICY

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All Auto Pumps of Kussmaul Electronics Company Inc. are warranted to be free of defects of material or workmanship. Liability is limited to repairing or replacing at our factory, without charge, any material or defects which become apparent in normal use within 2 year from the date the equipment was shipped. Equipment is to be returned, shipping charges prepaid and will be returned, after repair, shipping charges paid.

Kussmaul Electronics Company, Inc. shall have no liability for damages of any kind to associated equipment arising from the installation and /or use of the Kussmaul Electronics Company, Inc. products. The purchaser, by the acceptance of the equipment, assumes all liability for any damages which may result from its installation, use or misuse, by the purchaser, his or its employees or others.



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