

**INSTRUCTIONS FOR INSTALLING
KAHLENBERG P449 SERIES COMPRESSORS
PART NOS. P449-17, P449-18, Compressor Kits
WITH P569-01A and P569-02A Compressor Pump Assemblies**

REFERENCES: Drawing No. 3-6331
 Drawing No. 3-6577

Thank you for buying a Kahlenberg P449 Series Intermittent Duty Compressor Kit. This is an automatic, powerful, and compact accessory for your air horn system and should give you years of trouble-free performance. Although installation of this compressor kit is straightforward and simple, we offer the following guidelines to assist you.

WARNING

THIS COMPRESSOR SYSTEM IS RATED FOR INTERMITTENT DUTY ONLY. PLEASE READ AND UNDERSTAND THESE INSTRUCTIONS INCLUDING SAFETY PRECAUTIONS ON PAGE 5.

IMPROPER INSTALLATION CAN BE DANGEROUS, AND MAY ALSO RESULT IN PERMANENT DAMAGE TO THE SYSTEM WHICH IS NOT COVERED UNDER WARRANTY.

THE FOLLOWING ITEMS ARE INCLUDED IN THIS PACKAGE:

- (1) P449 Series Compressor Pump Assembly including air gauge, safety valve and 1/4" tube fitting installed
 - (1) 1/4" Nylon Tube, 8' Length
 - (1) 5/16" Nylon Tube, 15' Length
 - (1) Plastic Package containing (1) 1/8" Nipple, and (1) 5/16" Tube Fitting
 - (1) Air Tank w/1/4" Drain Cock, 1/8" and 5/16" Tube Fittings Installed
1. Arrange compressor, tank, and air horn in such a way as to keep air line runs as short as possible. It is best to mount the valve (whether electric or manually operated) directly to horn with 1/8" N.P.T. nipple, provided. See additional valve instructions enclosed if you have purchased a Kahlenberg valve. The kit provides you with 8' of 1/4" SAE J844 brake line tube (for installation between pump and tank) and 15' of 5/16" tube (for installation between tank and horn operating valve). Some custom O.E.M. kits provide longer lengths of tubing. Lengths up to 50' between the tank and valve may be used and can be purchased from Kahlenberg or your local industrial supply store. Use ONLY 1/4" SAE J844 tube or equivalent between compressor and tank. Use connectors already installed on compressor and tank. Cut tube off square with razor or sharp knife and push firmly into connector. To disconnect, press in on red connector collar and pull tube out. This provides a simple, airtight flexible connection. **See Installation Drawings 3-6331 attached for additional details.**

2. The compressor will run HOT. Although the compressor pump includes an internal thermal disconnect switch which will automatically shut the unit off if it becomes too hot, as much ventilation as possible is advised. **Do not install the pump in a very small enclosed space.**
3. We recommend that the tank be bulkhead mounted with the ¼" N.P.T. Drain Cock facing down and accessible. Once a year, switch the PT148-005 Pressure Switch on the compressor to OFF, and open the drain cock on the tank to drain condensation from the tank, if any. Experience will dictate if the tank should be drained more or less often. **IF ANY PRESSURE IS LEFT IN THE SYSTEM, BLEED IT OFF SLOWLY BEFORE OPENING DRAIN COCK COMPLETELY.**
4. Wiring connections are made within the PT148-005 Pressure Switch which is pre-wired to the compressor pump. Simply connect your your positive line voltage to the RED line connection marked "Line", and ground to "Line" matching the BLACK compressor wire. **(14 gauge wire minimum, see recommended wire gauge vs. length of run on the following page).** For 24 Volt Units, the electrical circuit should include a slow burn fuse or breaker rated for 15 amps. For 12 Volt Units, a 25 amp slow burn fuse or breaker should be used. Refer to the installation drawing included with these instructions for additional information. We recommend placing a single pole toggle switch in either of these lines if not connected to a breaker panel, to disconnect the compressor when not needed during storage periods etc.
5. The pressure switch mounted on the compressor will automatically switch on the compressor when the pressure in the system is below 120 P.S.I. and turn compressor off when pressure reaches 150 P.S.I. **MAKE SURE THE SWITCH ON THE SIDE OF THE PRESSURE SWITCH IS SET TO "AUTO".**
6. **Upon initial installation of this system, verify that the compressor pumps strongly to a pressure between 140-150 p.s.i. and shuts off. You should here an audible "click" when the pressure switch trips. The time to pump the system from 0 p.s.i. to 150 p.s.i. should not exceed 5 minutes. If the pumping time exceeds 5 minutes and the system does not reach full pressure, immediately disconnect power to the unit and see the troubleshooting list below.**
7. **If you are installing a Kahlenberg V69-K solenoid valve kit, refer to instruction sheet #306 for further guidance. (Shipped with valve kit)**

IMPORTANT!!!**RUN DISTANCE****WIRE GAUGE**

Less than 10'	14 AWG
10' to 35'	12 AWG
35 to 50'	10 AWG
50 to 70'	8 AWG

NOTE: THESE ARE THE WIRE GAUGES NECESSARY FOR THE ENTIRE WIRING RUN TO YOUR POWER SOURCE (BATTERY). IF THIS IS NOT DONE, IT WILL RESULT IN A LOW AMPERAGE CONDITION AND SUBSEQUENT DAMAGE TO THE COMPRESSOR UNIT.

SEE THE FOLLOWING PAGES FOR TROUBLESHOOTING AND IMPORTANT SAFETY INFORMATION.

TROUBLESHOOTING

IF THE COMPRESSOR DOES NOT SHUT OFF AFTER APPROXIMATELY 5 MINUTES OR IF IT SHUTS OFF BUT INTERMITTENTLY TRIES TO START UP (CHUGS), IMMEDIATELY DISCONNECT POWER AND CHECK THE FOLLOWING:

- VERIFY THE CURRENT AND WIRE SIZE (SEE ABOVE SUGGESTED WIRE SIZES) GOING TO THE COMPRESSOR. NOTE: THE 12-VOLT MOTOR REQUIRES 21 AMPS AT FULL LOAD.
- CHECK THE SYSTEM FOR AIR LEAKS, AND CHECK THAT THE DRAIN COCK ON THE TANK IS COMPLETELY CLOSED.
- **MAKE SURE THE V-69K SOLENOID VALVE (IF SUPPLIED) IS ORIENTATED PROPERLY. THE “1” STAMPED ON THE BRASS BODY OF THE VALVE RECEIVES THE AIR FROM THE COMPRESSOR/TANK AND THE OUTLET STAMPED “2” IS CONNECTED TO THE HORN.**
- IF THE COMPRESSOR DOES NOT OPERATE AT ALL, VERIFY CURRENT SUPPLY, AND VERIFY THAT THE LEVER SWITCH ON THE SIDE OF THE PRESSURE SWITCH (BLACK BOX ON TOP OF COMPRESSOR PUMP) IS SET TO AUTO.
- CONTACT THE FACTORY IF NEEDED:

SALES/CUSTOMER SERVICE: PH: 920-793-4507
FX: 920-793-1346
E-MAIL: info@kahlenberg.com

IMPORTANT SAFETY INFORMATION

Read and understand the following information and instructions included with this product before using. This information is for your safety and to prevent damage to the product.

! CAUTION: To reduce risk of electric shock or electrocution:

1. Do not disassemble compressor pump. Disassembly or attempted repairs if accomplished incorrectly can create electrical shock hazard.
2. Do not use this product in or near an area where it can fall or be pulled into water or other liquids.
3. Do not reach for this product if it has fallen into liquid. Disconnect power immediately.
4. Never operate this product outdoors in the rain or in a wet area.

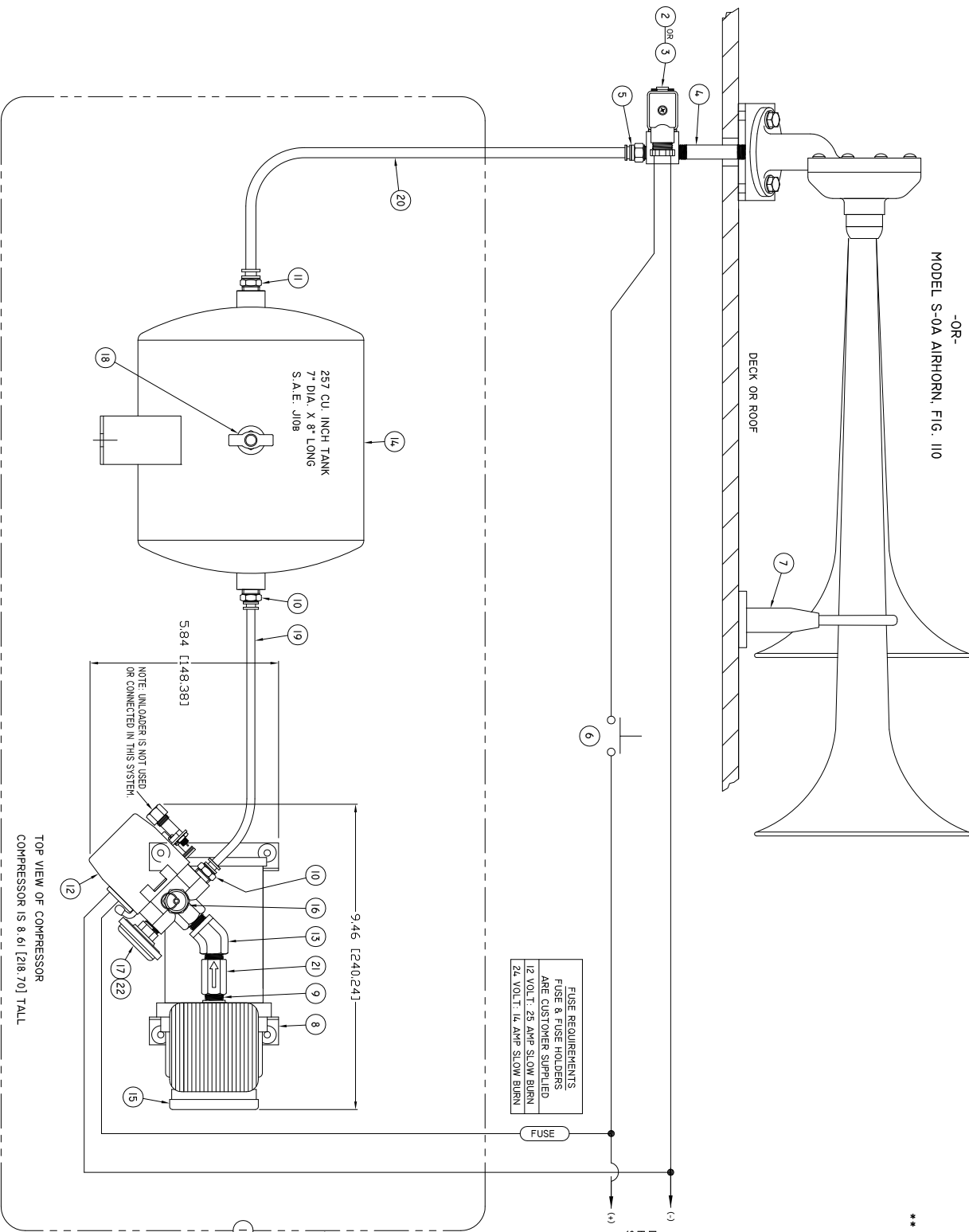
! DANGER: To reduce risk of explosion or fire...

1. Do not use this product in or near explosive atmospheres or where aerosol (spray) products are being used.
2. Do not pump anything other than atmospheric air.
3. Do not pump combustible liquids or vapors with this product or use in or near an area where flammable or explosive liquids or vapors may exist.
4. Do not use this product near flames.

! CAUTION: To prevent injury...

1. Never operate this product if it has been dropped or damaged, or if it has fallen into water. Return the product to the factory for examination and repair.
2. This unit is thermally protected and can restart when the protector resets. Always disconnect power source before servicing.
3. Use only in well ventilated areas.
4. Do not use any tools or attachments without first determining maximum air pressure for that tool or attachment.
5. Never point any air nozzle or air sprayer toward another person or any part of the body.
6. All electrical products generate heat. To avoid serious burns, never touch unit during or immediately after operation.

KAHLENBERG
 MODEL D-0A AIRHORN, FIG. 210
 -OR-
 MODEL S-0A AIRHORN, FIG. 110



FUSE REQUIREMENTS:
 FUSE & FUSE HOLDERS
 ARE CUSTOMER SUPPLIED
 12 VOLT, 25 AMP SLOW BURN
 24 VOLT, 16 AMP SLOW BURN

CURRENT REQUIREMENTS
 12 VOLT 21 AMP
 24 VOLT 12 AMP
 C.F.M. OUTPUT @ 100 P.S.I.
 12 VOLT 0.85 C.F.M.
 24 VOLT 0.99 C.F.M.

REV.	BY	DATE	DESCRIPTION	APP'D.
A	ZN	04/20/05	CHANGED CFM @ 0 TO 100 PSI	EKM
B	ZN	03/19/10	PRESSURE SWITCH WAS PT148-002	EKM
C	ZN	04/07/10	ADDED V-63 CHECK VALVE	EKM
D	ZN	06/09/10	LABELLED ITEM 12 ON DRAWING	EKM
E	ZN	01/17/11	ITEM 17 WAS M-143, ADDED ITEM 22	EKM
F	ZN	10/20/16	ADDED UNLOADER NOTE	EKM

NO.	PART NO.	DESCRIPTION	DRWG.
1	P449-17	COMPRESSOR KIT 12V DC	
2	P449-18	COMPRESSOR KIT 24V DC	
2	V-69K	SOLENOID VALVE 12 OR 24V DC, 1/8" NPT	2-5025
3	V-110B	MANUAL VALVE 1/8" NPT	2-1456
4	P129-08	PIPE NIPPLE, 1/8" NPT	
5	P516-03	CONNECTOR, MALE 1/8" NPT X 5/16" TB	2-5047
6	M-126	PUSH BUTTON SW, MOMENTARY, S.P.S.T.	
7	P519-01	PROJECTOR SUPPORT ASSEMBLY	2-5046
8	P449-15/16	COMPRESSOR UNIT ONLY, 15/16" DC, 16-24V	
9	P129-19	NIPPLE, CLOSE, 1/4" NPT	
10	P516-04	CONNECTOR, MALE 1/4" NPT X 1/4" TUBE	
11	P516-05	CONNECTOR, MALE 1/4" NPT X 5/16" TUBE	
12	PT148-005	PRESSURE SWITCH 120/150 P.S.I.	3-6554
13	P512-06	ELBOW, 45 DEGREE, 1/4" NPT	
14	P521-01A	AIR RECEIVER	
15	92623	FILTER	
16	V-808	VALVE, SAFETY, 1/2" PSI	
17	M-145	GAUGE, PRESSURE	
18	D176-02	BRANCOCK	
19	PT130-005	TUBE, 1/4" O.D. X 8", S.A.E. J844	
20	PT130-004	TUBE, 3/16" O.D. X 18" (LONGER LENGTHS AVAILABLE) S.A.E. J844	
21	V-63	CHECK VALVE	
22	PT134-004	BISHING, FACE 1/8" 1/4" NPT	

** SUGGESTED ONLY FOR HIGH SHOCK CONDITIONS

ALL ITEMS WITHIN DASHED LINE ARE INCLUDED IN COMPRESSOR KIT. KIT ALSO INCLUDES ITEMS #4 & #5.
 MOUNT COMPRESSOR ON RIGID SUPPORT IN PROTECTED AREA WITH AIR FLOW AROUND THE COMPRESSOR.
 USE PIPE SEALANT ON ALL THREADED PIPE JOINTS.
 PRESSURE SWITCH MAINTAINS PRESSURE BETWEEN 120 & 150 P.S.I.
 REFER TO INSTRUCTION SHEETS FOR ALL INSTALLATION REQUIREMENTS.

KAHLENBERG INDUSTRIES
 TWO RIVERS, WI, U.S.A.

Kahlenberg's

INSTALLATION (SUGGESTED)
 & PARTS LIST FOR
 "D-0A" & "S-0A" AIRHORN SYSTEM

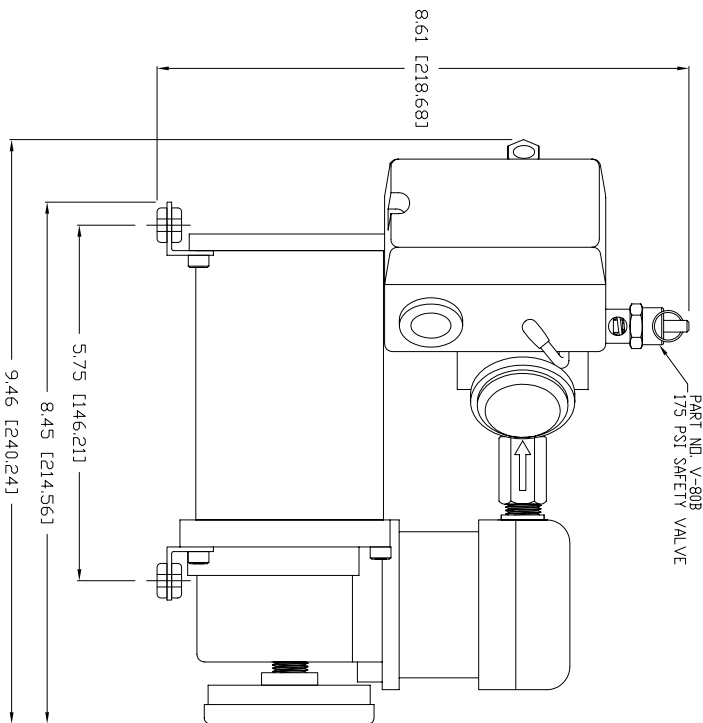
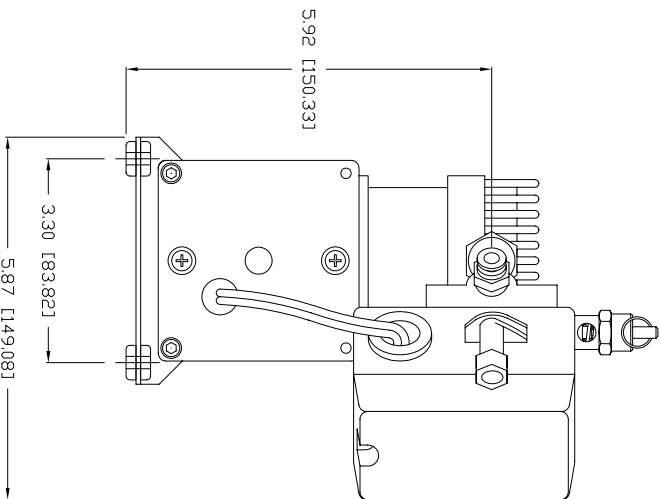
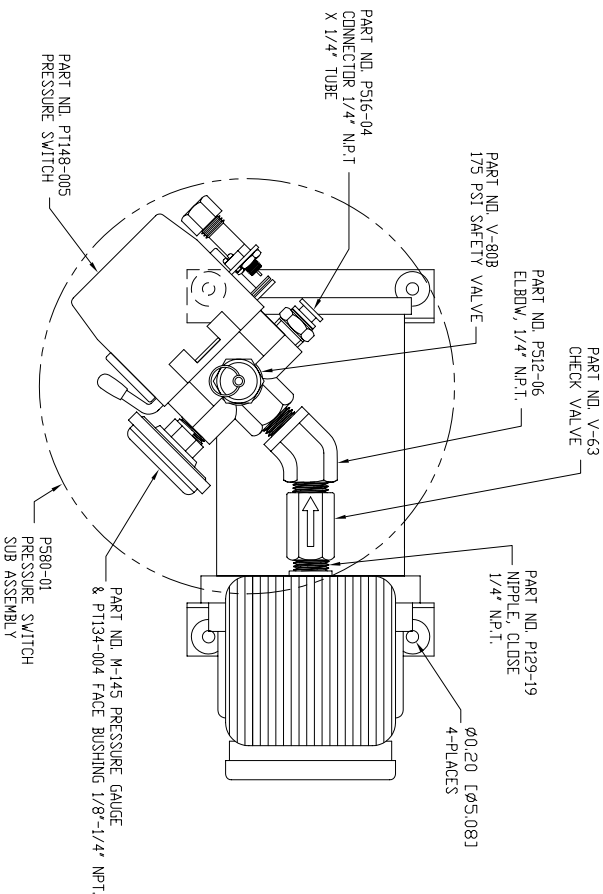
DR.	DATE	CD.	SCALE	DRWG. NO.	REV.
ZJN	12/06/04	EKM	N.T.S.	3-6331	F

P569-01A SPECIFICATIONS

12 VDC
 CFM @ P.S.I.: 0.85 @ 100 P.S.I.
 MAX PRESSURE: 150 P.S.I.
 CURRENT @ RATED LOAD (AMPS): 21
 MAX. AMBIENT TEMPERATURE: 158°F, 70°C
 MIN. AMBIENT TEMPERATURE: -40°F, -4.4°C
 MAX. DUTY CYCLE: 33%
 WEIGHT: 7.91 LBS./3.59 KG.
 (PUMP ALONE P449-15)

P569-02A SPECIFICATIONS

24 VDC
 CFM @ P.S.I.: 0.99 @ 100 P.S.I.
 MAX PRESSURE: 150 P.S.I.
 CURRENT AT RATED LOAD (AMPS): 12
 MAX. AMBIENT TEMPERATURE: 158°F, 70°C
 MIN. AMBIENT TEMPERATURE: -40°F, -4.4°C
 MAX. DUTY CYCLE: 33%
 WEIGHT: 7.91 LBS./3.59 KG.
 (PUMP ALONE P449-16)



PART NO. 92623
 FILTER

REV.	BY	DATE	DESCRIPTION	APP'D.
A	ZN	04/07/10	ADDED V-63 CHECK VALVE	EMK
B	ZN	04/27/10	5.75 DIMENSION WAS 5.63	EMK
C	ZN	11/09/10	PRESSURE GAUGE WAS M-143, ADDED PT134-004 BUSHING	EMK

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KAHLBERG INDUSTRIES INC.

TWO RIVERS, WISCONSIN 54241



OUTLINE DIMENSIONS
 P569-01A & P569-02A
 COMPRESSOR PUMP ASSEMBLIES

DR.	DATE	CND.	SCALE	DRWG. NO.	REV.
ZJN	03/18/10	EMK	N.T.S.	3-6577	C