

KEEP FOR FUTURE REFERENCE

# INSTRUCTIONS MANUAL



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 **INTENDED FOR USE BY  
SKILLED PROFESSIONALS •  
READ AND UNDERSTAND BEFORE  
INSTALLING AND USING**



## VACUUM LOSS WARNING BUZZER

Stock numbers: 93780AM, 93780BM



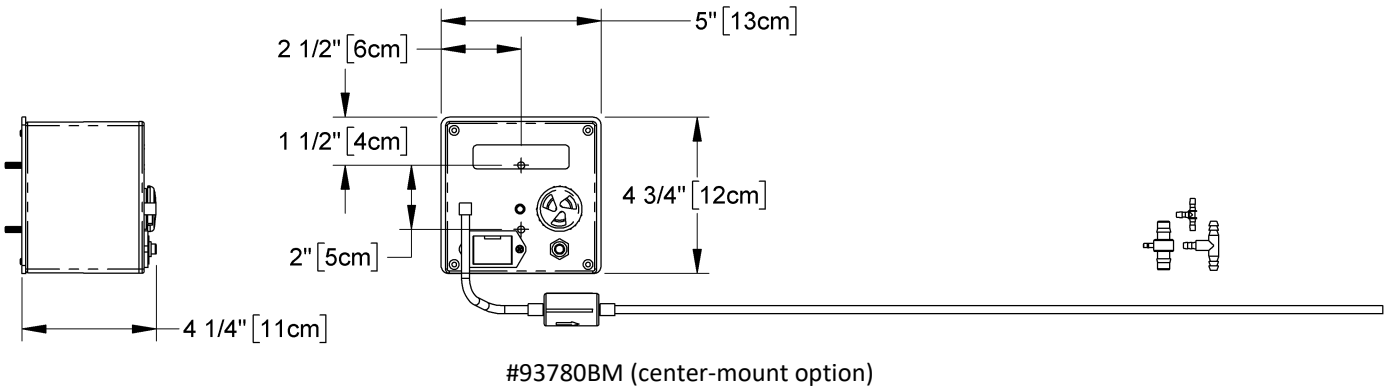
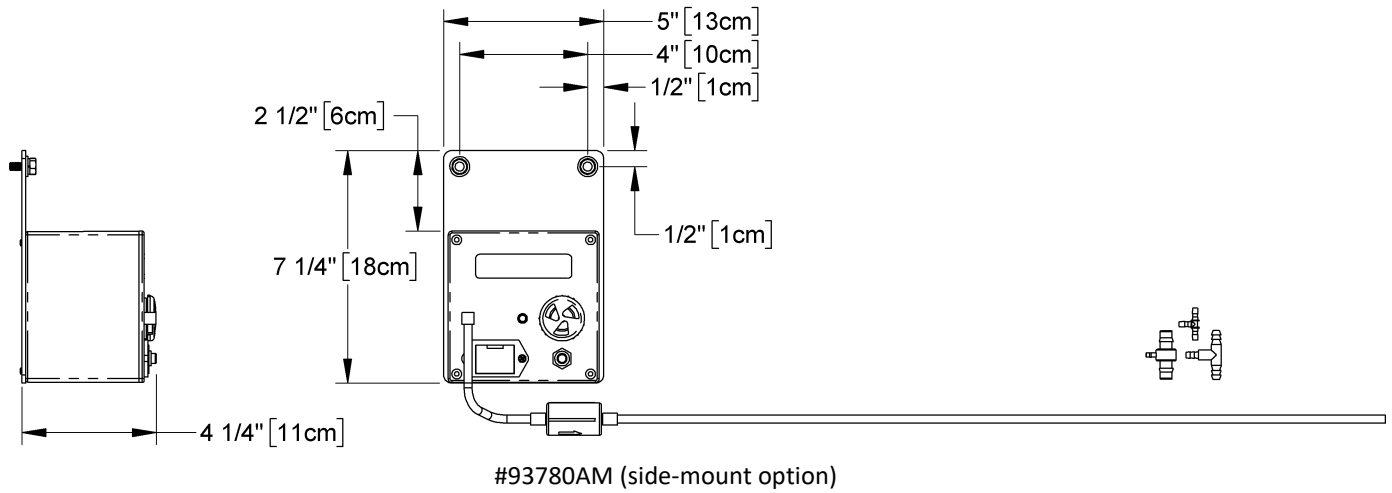
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# SPECIFICATIONS

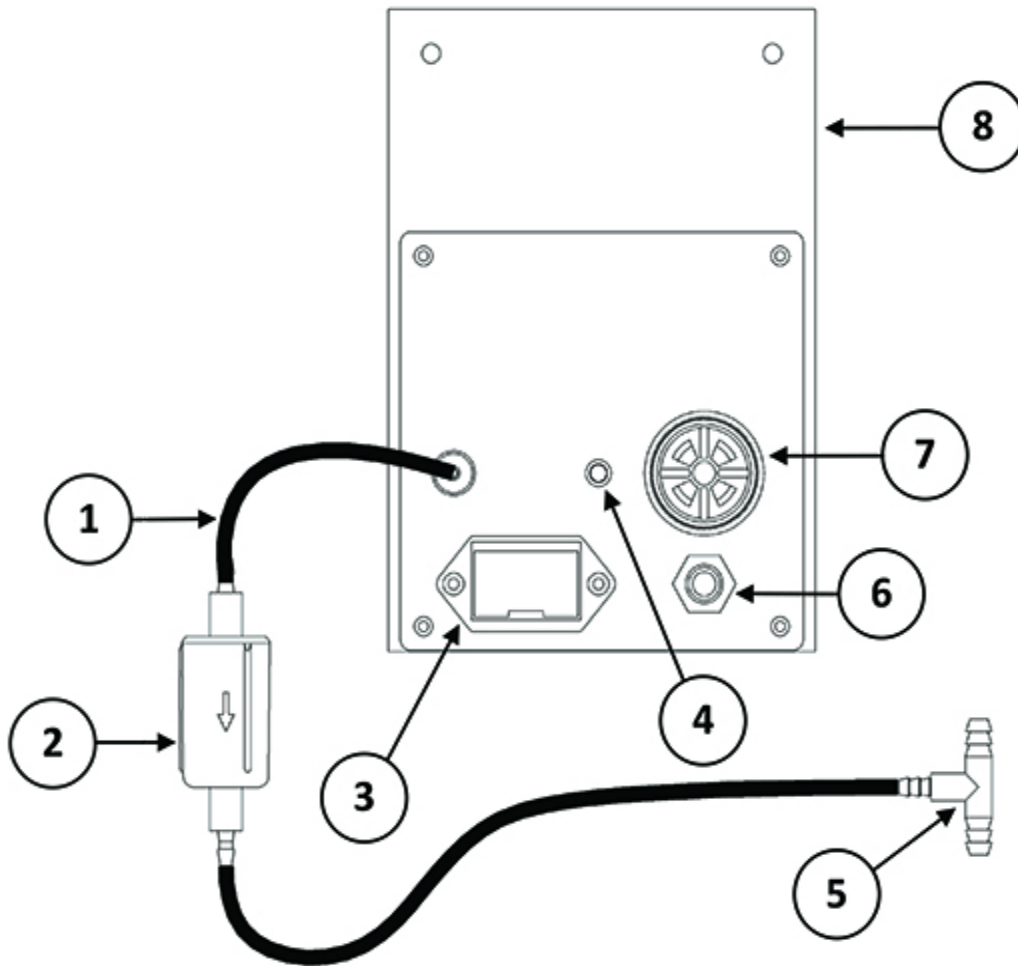
<b>Product Description</b>	The Vacuum Loss Warning Buzzer monitors vacuum during lifter operation and sounds an alarm if the lifter fails to reach or maintain the vacuum level required for lifting.
<b>Stock Numbers</b>	93780AM (side-mount option) 93780BM (center-mount option)
<b>Independent Power Source</b>	9 volts DC
<b>Maximum Alarm Volume</b>	103 dBA at 2' [60 cm]
<b>Product Weight</b>	1.1 lbs [0.5 kg] <i>Note: This weight should be added to the Lifter Weight when determining hoisting equipment capacity.</i>
<b>Operating Temperatures</b>	40° — 104° F [4° — 40° C]

*Note: Before installing and using the Vacuum Loss Warning Buzzer read, understand and follow the lifter's OPERATING INSTRUCTIONS. Inspections and maintenance in the lifter's instructions should be understood to include options, when relevant. All warnings in the "SAFETY" section, as well as alerts in other sections, are applicable when using the Vacuum Loss Warning Buzzer.*



# FEATURES

Features shown here are underlined> on their first appearance in each section following.



- |   |                         |   |                |   |                             |
|---|-------------------------|---|----------------|---|-----------------------------|
| 1 | VACUUM HOSE             | 2 | IN-LINE FILTER | 3 | BATTERY HOLDER with BATTERY |
| 4 | BATTERY INDICATOR LIGHT | 5 | TEE FITTING    | 6 | BATTERY TEST BUTTON         |
| 7 | ALARM SHUTTER           | 8 | MOUNTING PLATE |   |                             |

Within enclosure: CIRCUIT BOARD ASSEMBLY

*Note: A Vacuum Loss Warning Buzzer is shown with a side mounting plate.*

For information about specific parts, see ["REPLACEMENT PARTS"](#).

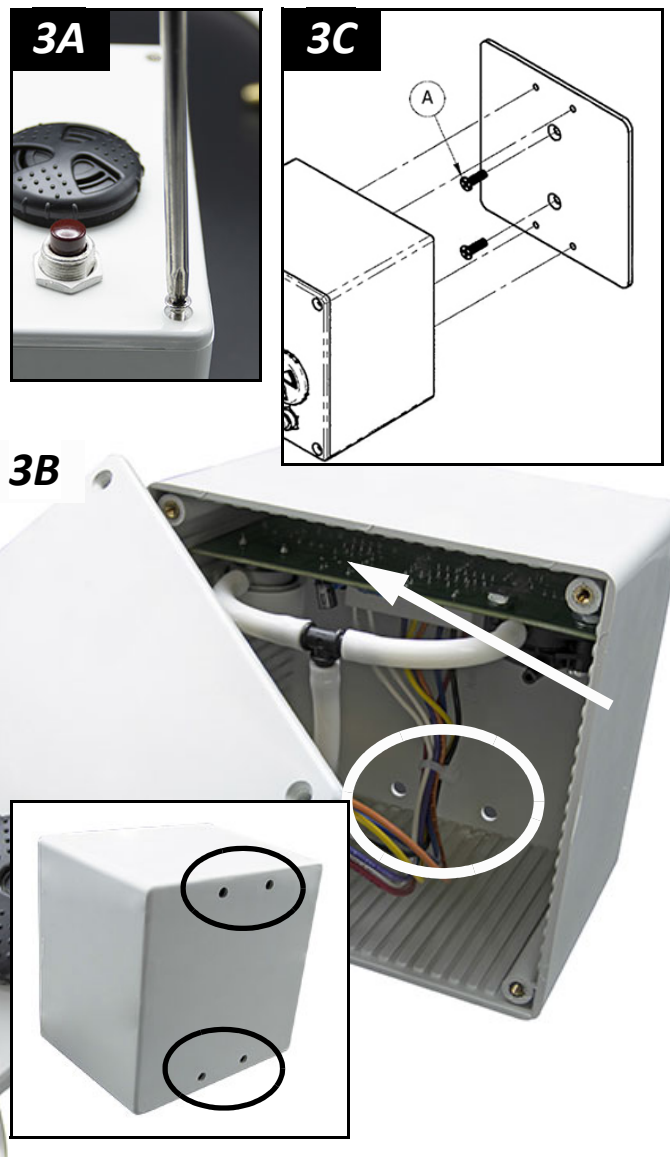
# INSTALLATION

- 1) Remove the Vacuum Loss Warning Buzzer, its attached mounting plate and other supplied components from their packaging.
- 2) Confirm the vacuum lifter is in good working order before installing the Warning Buzzer (see “INSPECTIONS and TESTS” and “MAINTENANCE” in the lifter’s *OPERATING INSTRUCTIONS*).
- 3) Identify a mounting location where the Warning Buzzer will not interfere with lifter operation.<sup>1</sup> Then mount the Warning Buzzer on the lifter:
  - 3.1) For **#93780BM** (Warning Buzzer with *center* mounting plate):

- Remove the screws that secure the cover on the Warning Buzzer’s enclosure (fig. 3A). Set aside the removed cover screws.
- Remove the cover, to access the four round head mounting screws.

*Note: The circuit board assembly (arrow in fig. 3B) is connected to the back side of the cover. This assembly can slide out of the enclosure, allowing easier access to the round head screws.*

- Remove the round head screws from the mounting screw holes (circled in fig. 3B), to detach the plate from the enclosure.
- Use the two provided flat head screws (item A in fig. 3C) to secure the plate to the lifter.
- Align the 4 enclosure mounting holes (circled in the inset of fig. 4B) with the mounted plate. Then secure the enclosure to the plate with the round head screws.



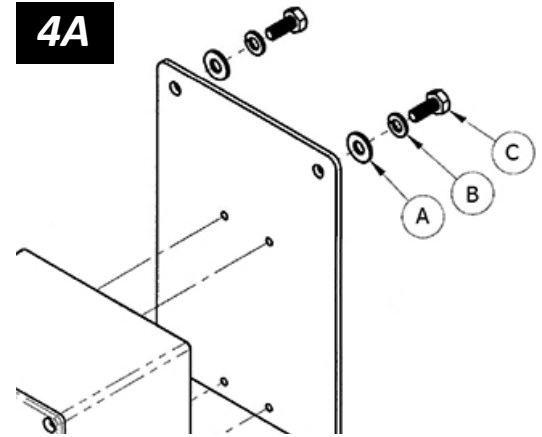
1..... Consult the lifter’s manufacturer for appropriate locations to install the Vacuum Loss Warning Buzzer.

# INSTALLATION

- If necessary, reinstall the circuit board assembly.
- Reinstall the enclosure cover and secure with its screws.

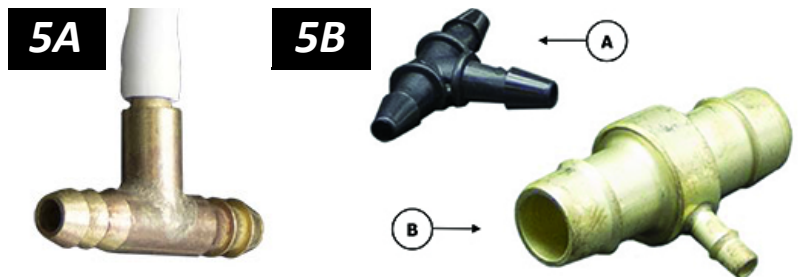
## 3.2) For #93780AM (Warning Buzzer with *side* mounting plate):

- Use the provided flat washers (item A in fig. 4A), split lock washers (item B in fig. 4A) and hex head bolt (item C in fig. 4A) to secure the Warning Buzzer on the lifter.



- 4) Locate a section of the vacuum hose between the lifter's air filter and vacuum pads; **this hose must have enough flexibility and space to allow you to splice in a new fitting.**

- 5) Cut the vacuum hose and insert the provided 1/4" tee fitting (fig. 5A) to splice the hose together and connect the vacuum hose to the Warning Buzzer.



*Note: A nylon 1/8" tee fitting (item A in fig. 5B) or a 3/8" tee fitting (item B in fig. 5B) may be required, depending on the size of the lifter hose section.*

- 6) Route the vacuum hose from the tee fitting to the Warning Buzzer. Make sure that the hose will not become damaged while using the lifter, nor interfere with its operation.

**! Securely position vacuum hose to avoid damage during lifter operation.**

- 7) Install the 9-volt battery (see ["TO REPLACE THE BATTERY"](#)).
- 8) To make sure the alarm sounds immediately after vacuum falls below a level sufficient for lifting (see ["DURING LIFTER OPERATION"](#)), create a controlled leak and observe the Warning Buzzer activity in relation to the vacuum level registered on the vacuum gauge. *Note: Improper vacuum setting of the Warning Buzzer's circuit board assembly could necessitate adjustment or repair; contact WPG for more information.*

## BEFORE USE

### Checking the Battery



***Always check battery energy before every lift.***

Press the battery test button (fig. 1A), to illuminate the battery indicator light (fig. 1B)<sup>1</sup>:

- *Green* light: Battery is in good condition.
- *Red* light: Replace the battery (see [“TO REPLACE THE BATTERY”](#)).



*Note: The battery indicator light does not indicate vacuum level.*

### Setting the Alarm Volume

Rotate the Warning Buzzer’s alarm shutter (fig. 2A), to set the alarm volume as desired.



***Make sure warning buzzer can be heard over noise at operator position.***

Make sure the alarm is clearly audible at the maximum distance between the operator and the lifter, despite any barriers or obstacles.<sup>2,3</sup>



1..... Additionally, pressing **and holding** the battery test button for an extended period (approximately 20 seconds or longer) will sound the Warning Buzzer’s alarm. If the alarm does not sound, the Warning Buzzer may not be functioning correctly; contact WPG for more information.

2..... Maximum alarm volume is 103dBA at 2’ [60 cm]. If CE standards apply, consult EN 7731 to make sure the Warning Buzzer is compliant.

3..... A vacuum test provides a convenient opportunity to check this (see “Vacuum Test” the lifter’s *OPERATING INSTRUCTIONS*).



## DURING LIFTER OPERATION

Operate the vacuum lifter as directed in its *OPERATING INSTRUCTIONS*.

The Vacuum Loss Warning Buzzer automatically turns on and begins monitoring the lifter's vacuum level when the vacuum pads begin attaching to a load.<sup>1</sup> Vacuum should continue to increase until it reaches a level sufficient for lifting the maximum load weight (see "Reading the Vacuum Gauge" in the lifter's *OPERATING INSTRUCTIONS*).

The Warning Buzzer will begin sounding an alarm *if vacuum fails to increase steadily toward a level sufficient for lifting.*<sup>2</sup> Do not attempt to lift the load in this case, because it could result in a load release and personal injury.



**Do not lift load if alarm is sounding.**

The Warning Buzzer will also begin sounding an alarm *if vacuum reaches a level sufficient for lifting and subsequently decreases.*<sup>3</sup> If this happens while the load is suspended:

- 1) Keep everyone away from a suspended load until it can be safely lowered to a stable support.



**Stay clear of any suspended load while alarm is sounding.**

- 2) Stop using the lifter until the cause of the vacuum loss can be identified: Conduct the "Pad Inspection" and perform the "Vacuum Test" as directed in the lifter's *OPERATING INSTRUCTIONS*.

- 3) Correct any faults before resuming normal operation of the lifter.

The Warning Buzzer's monitoring system automatically turns off when vacuum decreases to less than the initial activation level, which normally happens as the load is released.

## AFTER USE

Remove the Warning Buzzer's battery before placing the lifter in storage (see ["TO REPLACE THE BATTERY"](#)).

1..... The battery indicator light automatically signals the condition of the Warning Buzzer's battery while the lifter is attached to a load.

2..... In this case, the Warning Buzzer will stop sounding an alarm if vacuum resumes a strong trend increasing toward a level sufficient for lifting.

3..... In this case, the Warning Buzzer will stop sounding an alarm if vacuum regains a level sufficient for lifting.

# INSPECTIONS AND MAINTENANCE

## TO INSPECT THE IN-LINE FILTER

*Note: Perform the following inspection frequently and periodically as part of the “INSPECTION SCHEDULE” of the lifter’s OPERATING INSTRUCTIONS:*

Examine the in-line filter to assess the condition of its desiccant:

- When the filter is new, the desiccant appears *blue* (fig. 1A).
- As the filter absorbs moisture with use, the desiccant progressively turns *pink*.
- As the filter loses effectiveness, the desiccant progressively turns *white*.



When the desiccant is no longer effective, the filter must be replaced (see “[REPLACEMENT PARTS](#)”).

**Caution:** Replacement filter requires careful handling to avoid damage.

## TO REPLACE THE BATTERY

- 1) Release the battery holder tray as directed on the holder (fig. 1A). Then slide the tray out.
- 2) Install a new 9-volt battery according to the polarity markings. Then slide the tray back into position (fig. 2A).
- 3) Press the battery test button, to confirm battery strength.



# REPLACEMENT PARTS

Stock No.	Description	Qty.
65438	1/8" ID Vacuum Hose	*
64752	Audio Alarm - 5-15 V DC - Panel Mount	1
64691	9-Volt Alkaline Battery	1
64200	Push-Button Test Switch	1
58612	Center Mounting Plate (for 93780BM)	1
56496AM	Circuit Board Assembly	1
56412	Side Mounting Plate (for 93780AM)	1
53126	1/4" x 1/8" x 1/4" Barbed Brass Tee Fitting	1
16101AM	In-Line Filter	1
15210	1/8" Barbed Nylon Tee Fitting	1
14195	3/8" x 1/8" x 3/8" Barbed Brass Tee Fitting	1
12770	1/4" Flat Washer (for 93780AM)	2
12752	1/4" Split Lock Washer (for 93780AM)	2
10704	1/4-20 x 5/8" Hex Head Bolt (for 93780AM)	2
10358	10-32 x 5/8" Flat Head Screw (for 93780BM)	2
10156	10-32 x 1/4" Round Head Screw	4

\* — Length as required; sold by the foot (approx 30.5 cm).

**SERVICE ONLY WITH IDENTICAL REPLACEMENT PARTS,  
AVAILABLE AT [WPG.COM](http://WPG.COM) OR THROUGH AN AUTHORIZED WPG DEALER**

# LIMITED WARRANTY

Wood's Powr-Grip® (WPG) products are carefully constructed, thoroughly inspected at various stages of production, and individually tested. They are warranted to be free from defects in workmanship and materials for a period of one year from the date of purchase.

If a problem develops during the warranty period, follow the instructions below to obtain warranty service. If inspection shows that the problem is due to defective workmanship or materials, WPG will repair the product without charge.

## **Warranty does not apply when ...**

- modifications have been made to the product after leaving the factory
- rubber portions have been cut or scratched during use;
- repairs are required due to abnormal wear and tear, and/or;
- the product has been damaged, misused or neglected.

If a problem is not covered under warranty, WPG will notify the customer of costs prior to repair. If the customer agrees to pay all repair costs and to receive the repaired product on a C.O.D. basis, then WPG will proceed with repairs.

## **TO OBTAIN REPAIRS OR WARRANTY SERVICE**

### **For purchases in *North America*:**

Contact the WPG Technical Service Department. When factory service is required, ship the complete product – prepaid – along with your name, address and phone number to the street address listed at the bottom of this page. WPG may be reached by phone or fax numbers listed below.

### **For purchases in all *other localities*:**

Contact your dealer or the WPG Technical Service Department for assistance. WPG may be reached by phone or fax numbers listed below.

Wood's Powr-Grip Co., Inc.

908 West Main St.

Laurel, MT 59044 USA

406-628-8231 (phone)

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# ENGINEERING DRAWINGS



INTENDED FOR USE BY SKILLED TECHNICAL  
PROFESSIONALS • READ AND UNDERSTAND  
BEFORE ROUTING, WIRING AND/OR ASSEMBLING



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VACUUM LOSS  
WARNING BUZEER

Model numbers: 93780AM, 93780BM

TYPE: <b>STANDARD</b> DIRECTORY: <b>722-W01 [W01]</b>		H:\Working\STD\722-VLWB\ECN 3441	
WIRE LEGEND: CONTROLLED BY WIRING SYMBOLS DRAWING EXCEPT AS NOTED AND BELOW. LINE STYLES AND WIDTHS FOR WIRE UNLESS NOTED OTHERWISE. --- N/A --- - - - 20 AWG - - - - - - N/A - - -		THIS DRAWING IS THE PROPERTY OF <b>WOOD'S POWR-GRIP CO., INC.</b> LAUREL, MONTANA U.S.A.	
PRODUCT MANAGER: <b>KEITH B.</b>		DATE: <b>08/07/2002</b>	
CHECKED: <i>CR</i>		ECN NUMBER: <b>3441</b>	
APPROVED: <i>Cur</i>		DATE: <b>05/16/2014</b>	
SCALE: <b>A NONE</b>		BY: <b>BSD</b>	
SIZE: <b>A</b>		EST. WEIGHT: <b>N/A</b>	

VACUUM LOSS WARNING BUZZER  
 N/A  
 WIRING SCHEMATIC  
 D722-W01 [W01]

