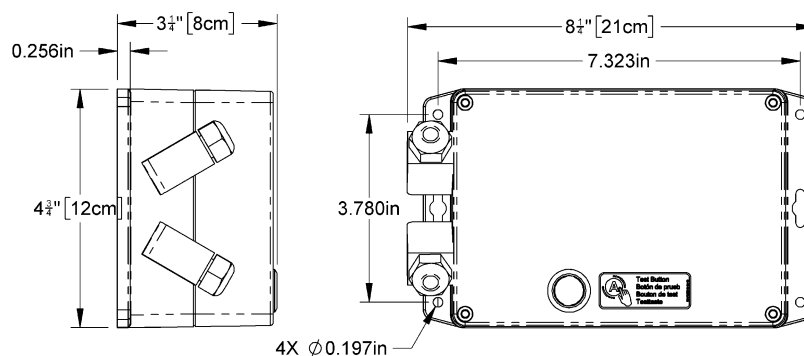


## SPECIFICATIONS

Description	The Battery Back-Up System is an auxiliary power source for the vacuum components of AC3 vacuum lifters and is designed to maintain power to the critical system components if the primary AC supply is interrupted.
Compatibility	The lifter must be an AC3 type vacuum lifter (check model number of serial tag) and be equipped with a boosted voltage power supply (13.5V or above) <sup>1</sup> .
Stock Numbers	93759
Product Weight	6 lbs [3 kg] <i>(Note: This weight should be added to the Lifter Weight when determining hoisting equipment capacity.)</i>
Power Source	13.5-15 VDC
Battery Capacity	2.9 amp-hours
Maximum Output	10A (12 VDC)

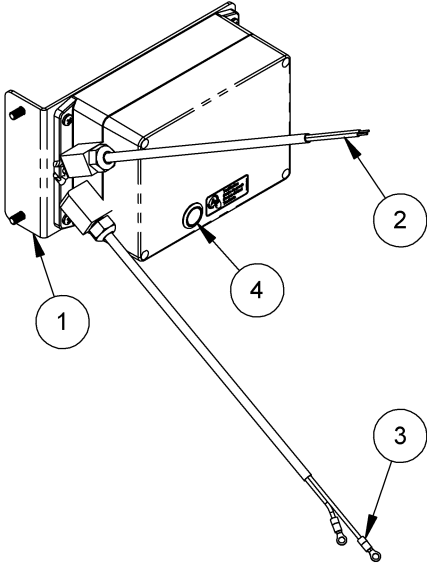
Note: Before installing and using the Battery Back-Up System read, understand and follow the lifter's OPERATING INSTRUCTIONS except when directed differently in these option instructions. Intended use, inspections, tests and maintenance in the lifter's instructions should be understood to include options, when relevant. All warnings in the "SAFETY" section, as well as alerts in other sections, are applicable when using the Battery Back-Up System.



<sup>1</sup> To check if an AC3 lifter is equipped with a boosted voltage supply, turn the vacuum lifter on and observe the Intelli-Grip display. If the displayed voltage is above 13.5V then it is equipped with the appropriate supply. If needed a boosted supply can be purchased to achieve compatibility.

# FEATURES

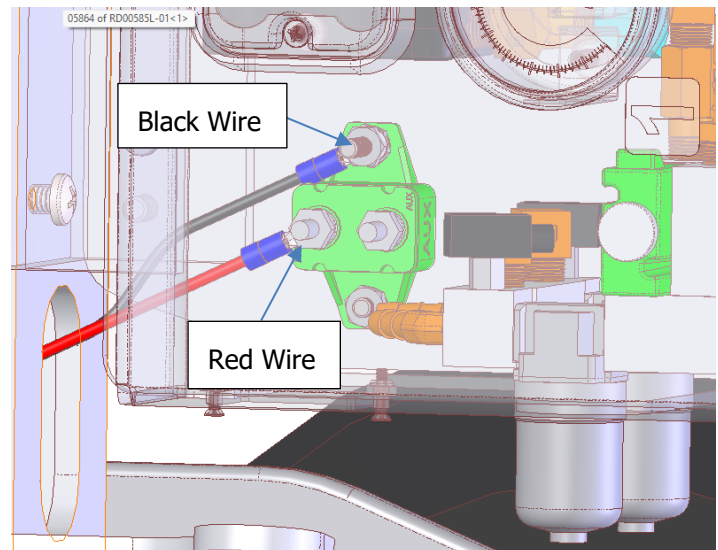
- 1 MOUNTING BRACKET (when needed)
- 2 POWER "IN" ELECTRICAL CORD
- 3 POWER "OUT" ELECTRICAL CORD
- 4 TEST BUTTON



For information about specific parts, see "REPLACEMENT PARTS".

# INSTALLATION

- 1) Remove the Battery Back-Up system from its packaging
- 2) Confirm the lifter is in good working order before installing the Back-Up System (see "INSPECTIONS and TESTS" and "MAINTENANCE" in the lifter's OPERATING INSTRUCTIONS).
- 3) Disconnect (unplug) the power to the lifter.
- 4) Identify a mounting location where the Warning Buzzer will not interfere with lifter operation. Mounting holes may already be predrilled on the lifter. Consult with the manufacturer if unsure.
- 5) If mounting holes need to be drilled use the holes in either the mounting plate or the enclosure as a template for the screw location. Drill and tap as appropriate for 10-32 or 1/40-20 screws.
- 6) Mount the battery back-up system securely.
- 7) Remove the pump cover and locate the wires that supply power from the incoming power to the Intelli-Grip system. These wires should terminate with ring terminals at the mounting plate for the vacuum pump plate assembly and connect to a circuit breaker. (Note where the connections are for this wire on both ends as this wire is going to be replaced by the electrical cords on the battery back-up.)
- 8) Disconnect the ring terminals of this wire and connect the "Power Out" electrical cord of the battery back-up to these terminals.
- 9) Locate the other end of the original electrical wires and replace them with the "Power In" electrical cord of the battery back-up.
- 10) The wire lengths can be adjusted as needed for best routing to ensure they are not pinched, cut, or snagged.
- 11) Reinstall the pump cover.
- 12) Connect the battery inside the Battery Back-Up enclosure by removing the enclosure lid, sliding the battery connections on (red +, black -) and reinstalling the enclosure lid being careful not to pinch any wires.
- 13) Reconnect the main power for the lifter and turn on the lifter. With the lifter powered up, push and hold the test button on the Battery Back-Up and observe the Intelli-Grip control head to make sure the system remains powered up while it runs on the battery.



## **BEFORE USE**

The battery in the battery backup is set to slowly charge when the lifter is plugged into an AC power source. The battery must be adequately charged to function as a backup power supply in the case where the AC power is interrupted.

Prior to using each day, or following an AC power loss event, it is important to test the condition and charge of the battery in the Battery Back-Up. To check the condition of the battery, turn on the vacuum lifter and engage the power save mode. Once in the power save mode, watch the Intelli-Grip screen while pressing and holding the test button on the Battery Back-Up. The system will test the battery and provide on screen battery charge information.

If the battery is low, the Intelli-Grip system will warn of the low battery by chirping the audio alarm. This chirp will continue even when running on AC power to notify the operator that the battery needs to be replaced. The chirp can be temporarily suspended by turning the lifter "off" and back "on" again.

## **TYPICAL USE**

The Battery Back-Up System is designed to automatically activate when the AC supply voltage is interrupted. When activated, the Back-Up system supplies battery power to the Intelli-Grip controls and the vacuum system providing time for the load to be supported if the AC power isn't restored.

When the Battery Back-Up is activated, the Intelli-Grip system and vacuum system can be operated normally. When the battery charge gets low or is otherwise unable to supply sufficient energy, the attach mode will be blocked.

Note that the battery and charger in the Battery Back-Up System were sized to be used as a secondary power source only.

## **STORAGE**

It is recommended that the battery be completely charged every 6 months. This can be done by plugging the lifter into AC power and monitoring the battery charge by turning on the vacuum lifter, engaging the power save mode, pressing the test button on the Battery Back-Up enclosure, and reading the battery energy gauge on the Intelli-Grip control enclosure screen.

# MAINTENANCE

If the battery is unable to maintain its charge or can not adequately power the control and vacuum components of the vacuum lifter, the battery likely needs to be replaced, or the charging circuit is not working correctly.

The Intelli-Grip system should help determine the condition of the battery<sup>2</sup>. Perform the next steps without being attached to a load.

- 1) With AC power disconnected (or someone holding the test button), turn on the vacuum lifter.
- 2) The state of charge should automatically be shown on the Intelli-Grip screen.
- 3) Press the Intelli-Grip power button 5 times to enter the live stats information.
- 4) Press the Intelli-Grip power button additional times until getting to the screen reporting information about the 12V Battery.
- 5) Find the "Health" information about the battery. If this reports that the battery is in poor health, it should likely be replaced.

A multimeter is required to check the status of the battery charging circuit. Check as follows:

- 1) With the AC power disconnected (and the vacuum lifter off), remove the cover of the Battery Back-Up enclosure.
- 2) Set the multimeter to read DC voltages up to 15V and read the battery voltage.
- 3) Plug in the AC power and again read the battery voltage. If this second voltage measurement is greater than the first (even by 0.1V), then the charging circuit is likely working correctly.

# REPLACEMENT PARTS

Stock No.	Description	Qty.
(none)	12V, 2.9Ah Sealed AGM Battery	1

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<sup>2</sup> Note that the performance of the battery is reduced when operating in cold temperatures.