

# ***AlumaReel***<sup>TM</sup>



## **Operational, Maintenance and Installation Manual** **Electrical Cord Reel: Models EC6 100 and EC3 100**

*Read and understand this manual before using this product.  
Retain for future reference*

## **Introduction:**

Thank you for purchasing an Alumareel Electrical Cord Reel. Alumareel takes pride in the construction and design of quality mobile welding products.

The Alumareel model EC6 100 and EC3 100 is a quality solution for mobile welder owners. This reel has a continuous contact within the reel and has no manual electrical connections to be made before and after winding or unwinding which is extremely convenient. Designed for the welding industry, it is in its own class when it comes to durable, reliable and ease of use. The EC3 100 has endless applications, as it can be installed anywhere a 15A 120V connection is required. The EC6 100 has 3 more terminals for the purpose of a control circuit, and is designed to accommodate the Alumareel line of remote welder controls. This reel comes with ½" threaded mounting holes and is very installation and user friendly.

## **Service and Contact Information:**

Valley View Metal Shop LTD.

Swan Lake Manitoba

Box 366 R0G 2S0

Phone: 204 837 7348

Email: [Info@alumareel.com](mailto:Info@alumareel.com)

Or go to [www.alumareel.com](http://www.alumareel.com)

## **Legal Disclaimer**

This Manual outlines some of the basic principles of the operation of the Alumareel Electrical Cord Reel. It is not intended to be a definitive dissertation on the all and any principles of electrical energy.

Any other reliance is expressly excluded.

The Alumareel Electrical Cord Reel must be installed properly, maintained in accordance with this Manual.

Failure to properly maintain the equipment will compromise performance and/or result in operational errors.

Servicing Information:

Should service be required during or after the Warranty period or should you have any questions regarding any issues please contact using the Contact Information on Page 2 of this Manual.

## **IMPORTANT READ FIRST**

READ THE MANUAL FULLY PRIOR TO UNPACKING AND ANY INSTALLATION OR OPERATION  
PERMANENTLY LOCATE THIS MANUAL NEAR THE EQUIPMENT FOR FUTURE REFERENCE

## **SAFETY WARNINGS**

IT IS IMPORTANT THAT THE OWNER OR OPERATOR MAKE A THOROUGH REVIEW OF THE SAFETY SECTION (page 5) AND ITS WARNING DESCRIBED IN THIS MANUAL.

IF YOU DO NOT CLEARLY UNDERSTAND THE INFORMATION PLEASE CONTACT US IMMEDIATELY

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## **Important Notifications:**

### **Maintenance:**

The Alumareel Electrical Cord Reel is designed to be a closed device and free from regular maintenance. It is important to keep it clean and dry, Any moisture or foreign buildup can affect the operation and safety of the reel.

## **!IMPORTANT!**

### **Safety Information:**

A **WARNING** identifies hazardous conditions and actions that could cause bodily harm or death!

## **!WARNING!**

This reel is designed to be used where flexibility, storage or mobile applications are desired. It should not be installed where permanent wiring is possible. Please observe the following, and all electrical rules:

! Electrical cords are not safe if twisted, frayed or stretched. Always inspect cables before using.

! Never operate equipment while the reel is being wound or unwound. This can cause arcing inside the reel. Always place the locking lever in the locked position when finished winding or unwinding.

! Do not use this reel in wet or hazardous locations.

! Inspect this reel before using it. If any signs of heat, physical, or operational damage is detected, do not use.

! Grounding can save your life. Never use tools or equipment with broken, removed or bent grounding prongs.

! Do not use this reel for any other purpose or on any equipment other than described in this manual.

**We will not be responsible for any injury or damage to equipment caused by the misuse of this device.**

## Certifications:

This reel has been evaluated and certified to comply with the requirements outlined by the Standard Council of Canada in accordance with the following Standard:

**Conforms to CSA C22.2 No. 308 and UL 355 *Cord Sets and Power Supply Cords***

Quality Auditing Institution Laboratories Accredited Body



## Electrical Cord Reel Specifications:

### Packaging Component List:

Included In the box is one EC3 100 or EC6 100 electrical Cord Reel, one shaft junction box lid/screws and one user/operator manual. Carefully remove the contents from the box and inspect the reel for physical damage. If you are missing anything or you see obvious physical damage **do not proceed**. Contact your Alumareel dealer or Valley View Metal Sho (page 2) immediately.

### Technical Specifications:

Volts:	120 V AC
Frequency:	60 Hz
Amps:	15 A /4 A Max (See Note)
Operating Temperature range:	-20°C to 60°C

Note: The Alumareel Electrical Cord Reel model EC6 100 is rated 15A on the black, white, green and red leads. The blue and orange leads are rated at 4A, and are used for low amperage control wiring.

## **INSTALLATION INSTRUCTIONS:**

### **Model EC6 100**

**Important:** We do not recommend installing any other welder remote or device other than the Alumareel Model L100P, M100P or L100R on the model EC6 100 cord reel. Doing so will void all warranty and/or guarantee, and could result in permanent damage to the reel or equipment.

Installation must be done by a qualified electrical personnel.

The three available Alumareel welder remote models all come with a 6 conductor 16 GA cable, and installation on the reel is identical for all three models.

The green bonding wire has been factory secured to the reel in the junction boxes on the mounting block and the shaft of the reel. Do not remove or alter this connection.

### **You will need:**



## Tape Measure

Robertson # 6 Screwdriver

Robertson # 8 Screwdriver

Needle nose plier

Side cutter

locking pliers

Small wire cutter

Wire stripper

Utility knife

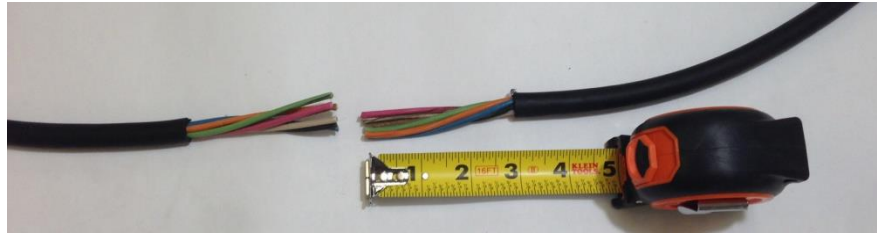
#22 - #14 Wire Connectors

Measure 36 inches, or the desired pigtail length on your remote cable from the end that connects to the welder (the forked part on your remote cable) and cut the wire.



Measure back 3 inches back on both pieces and strip the outer jacket off the cable using the utility knife. Be careful not to damage the wires while doing this. If the wires do get damaged, stop and redo by measuring back and trying again.

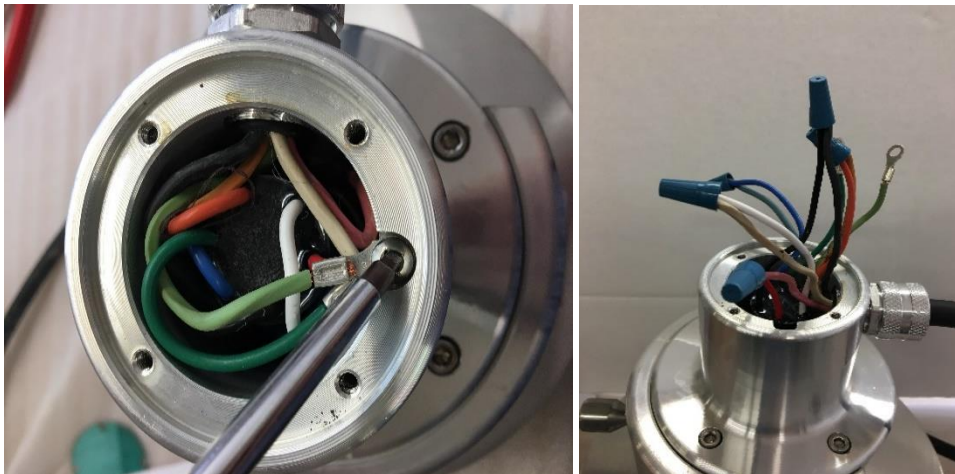




Remove the junction box cover and the seal on the reel mounting block using the # 8 screwdriver.



Using the # 8 screwdriver remove the ground screw separating the two ground wires, next use the needle nose pliers, reach inside the junction box Gently draw all the wires out of the box, disconnect the wires by removing the wire connectors, then separate the wires.



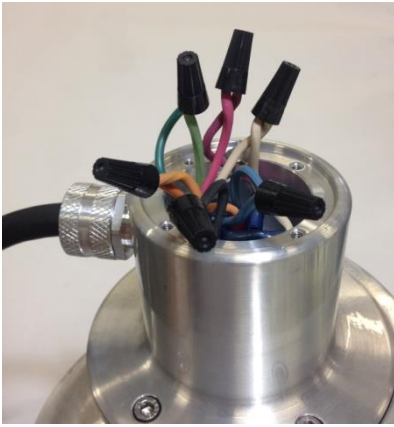
Loosen the nut on the wire connector using the adjustable pliers. Pull the existing cable out of the connector and discard. Gently feed the new pigtail you've made from your welder remote cable into the connector until the jacket is in line with the inside wall of the junction box and retighten the connector.



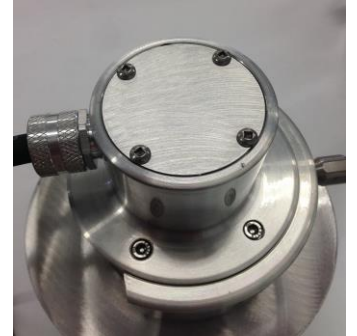
Gently bring the wires out with the needle nose pliers, cut them all to the same length and strip the insulator on all the wires as shown.



Connect the wires by twisting the copper conductors and securely installing a wire connector on each pair. Reconnect the ground wires using #8 screw and eye terminal **Be sure to match the colors correctly. Always double check.** There is enough room to tuck the wires neatly into the junction box, do not force or compress.



Reinstall the seal and cover on the junction box.



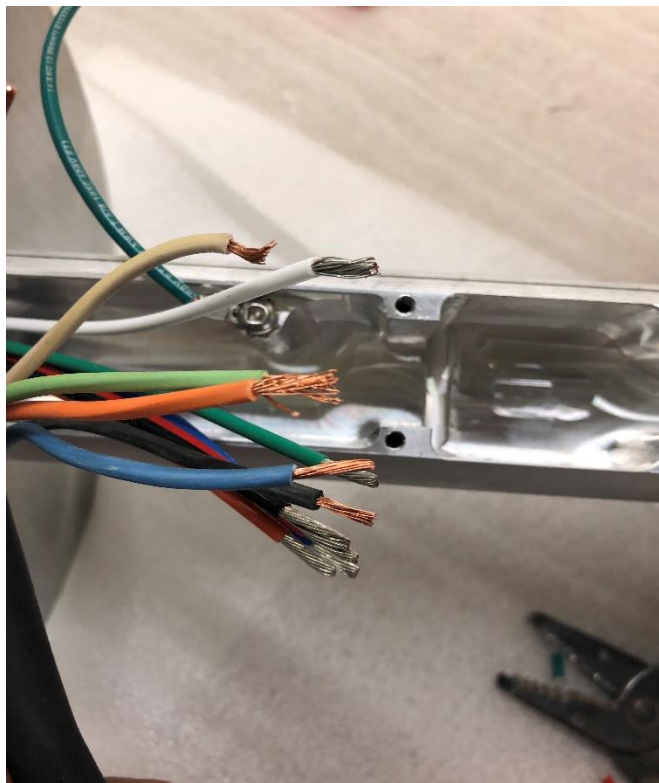
Turn to the junction box on the shaft of the reel. Cut the wires so they are the length of the junction box. **Be careful not to pull on these wires.**



Feed the remote cable you've prepared through the connector on the Junction box cover, (**Cover is in a bag in the box, along with 4 screws**) slide it back on the wire, out of your way.

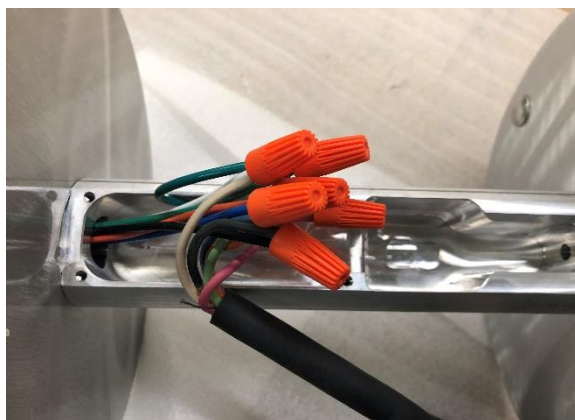


Cut all the wires to the same length and strip the insulator on the wire as shown.

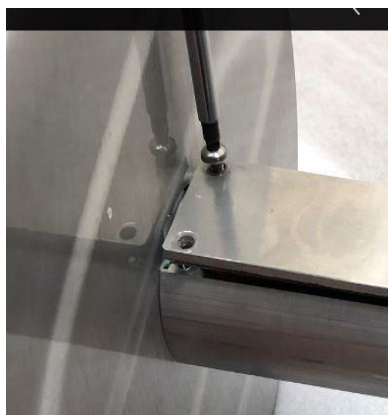




Connect the wires by twisting the copper conductors and securely installing a wire connector on each pair. Connect all the green wires together (green wire on shaft, green wire from remote cable, and green wire coming from reel mount) **Be sure to match the colors correctly. Always double check.** There is enough room to tuck the wires neatly into the junction box, your remote wire should run nicely in the groove towards the end disk, do not force or compress.



Slide the wire connector/junction cover down the wire and onto the shaft, your cord should be level with the inside of the compression fitting. **Tighten the Compression fitting before setting the cover in place.** Once you have the compression fitting snug, set the cover into place on the shaft and tighten down with the included 4 screws (Do not overtighten) Wrap up your wire neatly in desired direction.



## **Model EC3 100**

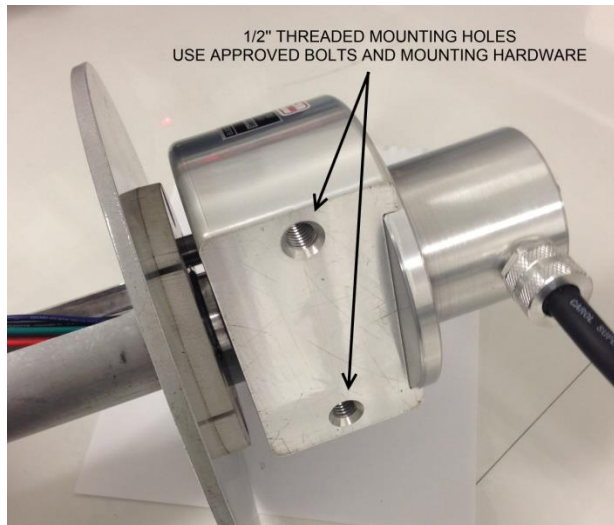
To install an extension cord on a model EC3 100 reel it is not necessary to open the junction box on the mounting block of the reel. Simply install a male plug on the factory pigtail. If the pigtail is too short for your application follow the instructions of the model EC6 100, except you are only working with the black, white and green wires.

To install a cable on the shaft of the reel, follow the instructions for a EC6 100 except you are working with the black, white and green wires on the shaft of the reel.

## **Installing the Electrical Reel**

This reel comes with two ½" threaded holes machined into the back of the bearing block. These holes are designed and both **MUST** be used when mounting this reel. It is important that this reel is installed on a suitable steel member. Installing electrical cable will add weight to the reel. The minimum structural member design is a 2" X 2" X .100 wall tubing which must be adequately secured.

We will under no circumstances be responsible for injury or damage to reel or equipment due to improper or insecure mounting.



## **User Instructions**

Remember safety first could save your life when working with electrical equipment.

This reel comes with a locking lever. It is important that this lever is in the locked position unless cable is being wound or unwound. When winding cable place locking lever in the unlock position and turn reel with one hand while guiding cable with the other. Place cable neatly on reel to ensure it will fit. Place lever in locked position when finished. To unwind place locking lever in the unlocked position and gently pull cable to unwind. Cable should come easily; if not you must stop and inspect the reel and cable.

## IMPORTANT:

- Always be sure there is no electrical load while cable is being wound or unwound.

## **Servicing**

The Alumareel electrical cord reels are designed and assembled to be free from regular maintenance. In the event of accidental damage or parts failure it is recommended that a qualified electrical personnel evaluate the unit and it be repaired by a technician approved by Alumareel. Please see page 2 for contact information.

## **Warranty**

All Alumareel electrical cord reels are warranted to be free from defects in material and workmanship under normal use. Alumareel electrical cord reels are warranted to the original owner/user for a period of 1 year from the date of purchase. Alumareels liability under this warranty shall be limited to repairing or replacing at Alumareels option. Alumareel will not be liable under this warranty for any costs of removal, transportation, or any other charges which may occur from a warranty claim. Alumareel will not be liable for damages to any or all equipment or the reel from abnormal conditions, accidents, misuse, unauthorized alterations or repair, or incorrect installation.

To obtain service under this warranty, the defective product must be returned after a Return Authorization form is completed as well the Proof of Purchase and the failure details and failure date.

Alumareel will not be liable for any incidental or consequential damages, losses or expenses arising from installation, use or any other causes.

There are no express or implied warranties other than declared above.

THANK YOU FOR CHOOSING **ALUMAREEL™**



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