

Congratulations on your purchase of the R•O•M Cargo Cover / Hose Bed Cover!

## Please read and carefully follow these instructions!

# **NOTES AND CAUTIONS**

- Track system allows for +/- 5/8" manufacturing tolerance in body width along opening (if actual variation exceeds 5/8" the track should be shimmed, or the body modified.
- Power Cargo Cover requires 15 Amp circuit with 30 Amp "Slow Blow" fuse.
- NEVER apply 12V power directly to motor without disconnecting motor from control module.
- Power Cargo Covers are equipped with automatic shut down if objects block path of curtain
- Track sections are a convenient location to route Power Lock wires.

You will need the following parts and tools for installing your Cargo Cover; please note that these are not included with your system.

- 7/16" wrenches and / or sockets
- Fasteners for track and spiral curtain assembly (1/4" x 3/4" flat-head and pan head screws)
- Tools to install track fasteners
- Support structure for spiral assembly
- Tape measure
- Allen wrenches
- 1/4" wrench or nut driver
- Locking pliers
- 3/8" drill bit for manual override cable
- Single pole double throw momentary switch for door open/close (On)-Off-(On)
- 12VDC Power (10V min to 15V max) with 15 Amp circuit
- Power wire: 12-gauge
- Control wire: 16-gauge
- 30 Amp "Slow Blow" Fuse and holder
- Wiring Tools and connectors for 12-guage and 16-gauge wires
- Light Option 10 Amp Fuse and Holder
- Heavy Duty Wire Cutters





#### **Overview**

For a successful installation of the R•O•M Cargo Cover, please follow these steps

- 1) Unpack
- 2) Spiral Assembly Installation
- 3) Track Installation
- 4) Curtain Installation
- 5) Override Cable Installation

- 6) Power Door Module Installation
- 7) Power Locks Installation
- 8) Finishing
- 9) Manual Curtain Installation

## 1. Unpack

- a. Unpack and carefully lay out all of the parts. The shutter should be placed on a smooth, clean, soft surface to prevent scratching the finish on the slats.
- b. Make sure all parts are included:
  - Spiral curtain assembly
  - Horizontal track
  - Vertical track, horizontal track, & corner track
  - Power motor control module

- Curtain opening stops & fasteners
- 1/8" rivets
- Power locks
- Lock keys

### 2. Spiral Assembly Installation

a. Create a support structure. This could be the compartment floor or a 1-1/2" wide angle min. 10" long on both sides of opening. See *Fig. 1 and Table A* for location.

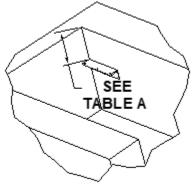


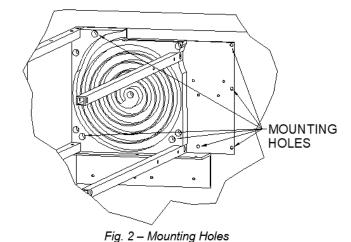
Fig. 1 - Support Location

Table A – Support Location			
Total Length (Horizontal + Vertical (Ignore Corner / Radius))	Support Distance from Top	Size	
30" to 91"	12 1/8"	В	
>91" to 132"	14 3/16"	С	
>132" to 174"	16"	D	
>174" to 226"	18 1/2"	Е	





- b. Set spiral assembly on support structure.
- c. Attach each side with a minimum of four 1/4" fasteners in mounting holes see Fig 2.



### 3. Track Installation

- a) Clamp ALL track sections in place. Horizontal tracks fit snug against spiral plate see Fig. 3.
- b) If desired route wires behind track. Power lock wires should pass through grommets at end of track.
- c) Install horizontal sections before drilling for corners and vertical sections.
- d) Match drill and install 1/4" x 3/4" flat head screws inside the track.
- e) Install corner track and vertical track if required.

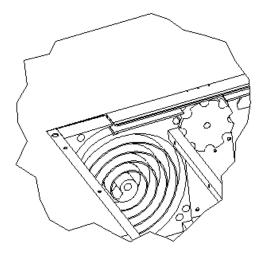
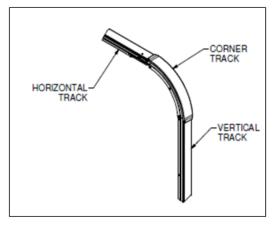


Fig. 3 - Track / Spiral Interface



Corner Pieces



### 3. Curtain Installation

- a) Remove corner sections of track.
- b) Pull and hold override t-handle to disengage motor from drive train.
- c) Load curtain into track and store in the spiral assembly. Replace track corner sections.
- d) Pull curtain through entire track horizontal and vertical to insure smooth operation. Adjust corner joints if required. End this step with curtain in closed position.
- e) Install stop brackets with enclosed #8 socket head cap screws on spiral end of horizontal track. See Fig. 5.
- f) Pull override t-handle and move curtain to open position.

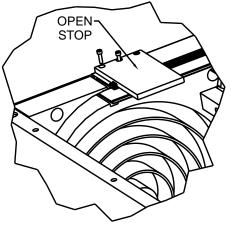


Fig. 5 - Open Stop

# 4. Override Cable Installation

- a) Disconnect cable assembly from drive assembly. Loosen and remove cable screw inside of pivot bracket, then remove the bracket screw from cable retainer bracket. See Fig. 6.
- b) Determine override t-handle location and route cable from override mounting location back to motor assembly. T-handle mounting requires a 3/8" diameter hole with access to both sides.
- c) Secure cable every four feet using enclosed brackets. Two brackets are required on bends with a radius less than 12 inches.
- d) Tighten cable screw on pivot bracket.
- e) Pull t-handle and move curtain to half open position.

Cable may be shortened (if required) by following these steps:

- Completely pull inner wire from sleeve.
- Remove vinyl end seal.
- Cut outer sleeve to be flush with last cable bracket before drive assembly.
- Re-insert wire back in to sleeve and reinstall vinyl end seal.
- Cut off excess wire flush with drive assembly bracket, insert wire back in pivot bracket and bend a right angle in end of wire.

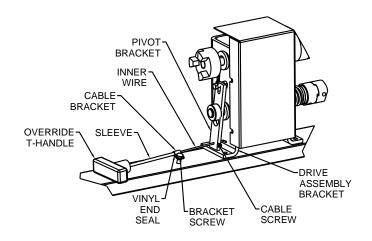


Fig. 6 - Override cable



### 5. Power Door Module Installation

- a) Mount control module in a convenient, secure, dry location.
- b) Following wiring schematic; connect wiring as shown. See Fig. 7.
  - 12V Power to controller (Black & Red with 12-gauge wire)
  - 12V Power to terminal strip for Open / Close sensors (Red)
  - Motor Wires (Brown & Gray) to terminal strip (12-gauge wire)
  - Power Locks (Orange & Green) connect wires but do not install locks on track
  - Open/Close switch(s) (Blue & Green) connect to installer supplied switch
  - Open / Close sensors (Pink & Purple) connect to terminal strip
  - Lights (White & Yellow) Optional
  - Door Ajar Circuit Third proximity switch (farthest from track) provided with normally open connection.

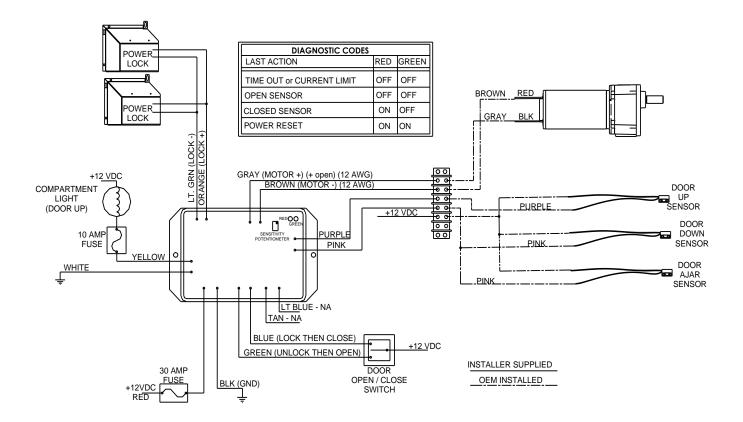


Fig. 7 - Power Cargo Cover Schematic



- c) Apply power to module and cycle curtain. Drive the door both directions.
  - NOTE: The control module is supplied with a sensitivity potentiometer that will adjust the closing force of the door. On the power control module there is a very tiny screw; with a screwdriver turn the screw 25 times clockwise then counterclockwise 12 times. This will be approximately the middle of the sensitivity range. Try testing the unit by placing an object in the path of travel; it should stop the unit when it hits the object. After testing you can adjust the setting to meet your needs by adding or removing turns. Clockwise will decrease the sensitivity and counterclockwise will increase the sensitivity.
- d) Note the gap between the bottom rail rubber bumper and curtain open stop. Adjust the **Door Up Sensor** (sensor closest to track, see *Fig. 8*) using 1/4" wrench. In some situations, the magnet and holder located on the bottom of the curtain slats may need to be moved over one slat and reinstalled with supplied 1/8" rivets.
- e) Repeat curtain cycling as needed.
  - Note: Curtain coast distance will vary depending on vehicle incline and size of curtain)
- f) Cycle to closed position and adjust **Door Down Sensor** (middle sensor and magnet) to bring door to closed position.
- g) If door ajar function is desired adjust the **Door Ajar Sensor** (far sensor and magnet) so the magnet and sensor are in line when door is completely closed.

Check to see that power locks extend and retract when door is cycled

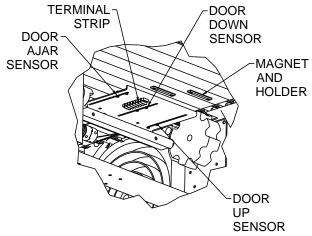


Fig. 8 – SENSOR LOCATIONS

#### 6. Power Locks Installation

- a) Align slotted hole in power lock cover with second hole on track support flange.
- b) Insert 1/4" wide tab on power lock cover in 1" wide slot on angled track support.
- c) Mount right power lock with 1/4" pan head screws centered in two slotted holes. See *Fig. 9*
- d) With curtain closed extend bottom rail lock rods using the provided key. Adjust location of power lock so that lock pawl on the power lock engages the lock rods in the bottom rail of curtain.
  - NOTE: Using the override function may make this adjustment process easier
- e) Repeat with left power lock.
- f) Install remaining power lock mounting screws

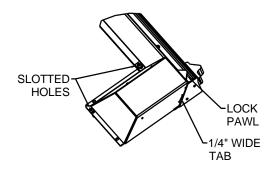


Fig. 9 – POWER LOCKS





### 7. Finishing

Optional items supplied by customer.

- Top Trim (if desired) can be mounted to spiral plate or vehicle body. Be careful when drilling and driving screws to avoid curtain.
- b) Aluminum crossbars on spiral assembly can be removed or used for attachment of protective structures.
- c) Drip pan (if desired) may be installed under the curtain assembly to capture water shed by curtain when opened.
- d) Install bulkhead between R•O•M Cargo Cover and vehicle payload compartment to protect the curtain and motor assembly.

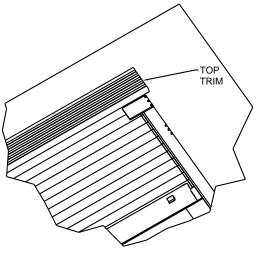


Fig. 10 - Trim

## **Manual Systems:**

Manual systems **cannot** be converted to a power system.

# **Tools & Components required for MANUAL HCARGO COVER WITH POWER LOCKS**

- Single Pole Double Throw Momentary Switch for Power Lock (On)-Off-(On)
- Wire: 16-gauge for controls
- 10 Amp "Slow Blow" Fuse and holder
- Wiring Tools and connectors for 16-gauge wires

#### **MANUAL Curtain Installation**

- a) Install spiral assembly, track, and load curtain like power units.
- b) Pull curtain through entire travel (in both directions) to insure smooth operation. Adjust Corner joints as needed. End this step with curtain in closed position.
- c) Install Open Stop Brackets with #8 Socket Head Cap Screws on Spiral end of Horizontal Track (*Refer back to Fig. 5*).
- d) Power Lock Option:
  - Mount power lock control module in a convenient, secure, dry location.
  - Wire power locks per schematic to Lock/Unlock switch.
  - Skip to power lock installation in this manual





# APPENDIX A

# R•O•M CARGO COVER TROUBLE SHOOTING GUIDE

ISSUE	POTENTIAL CAUSE	TIPS
POWER: Curtain will not move & No lock activation heard	Loose wires or misconnected wires	Check voltage at control module. Che connections through out system
	Curtain bound or caught on something in track	Check curtain for free movement
	Control module not receiving minimum of 10 VDC	Check voltage at control module
	No or very little power	Confirm power source / wires support 30 AMP or 12 Volts
POWER: Curtain will not move & lock activation is heard	Control module not receiving current required to turn motor	Check voltage at motor
	Loose wires or misconnected wires	Check connections through out system
	Reversed wires to terminal strip	Check connections
POWER: Curtain moves opposite direction from expected	Reversed wires from OPEN/CLOSE switch	Reverse switch wires
	Reversed wires to terminal strip for sensors	Reverse sensor wires
POWER: The curtain does not complete full travel	Sensors adjusted too far from end of travel	Adjust sensor or magnet location
	Timer circuit expired (set for 40 seconds of travel) (red and green LED's off)	Disconnect power from module for five seconds
	Current draw exceeds 40Amps for more than 0.5 seconds (red and green LED's off)	Disconnect power from module for five seconds
	Current Limit Reached (Both LED's off)	Adjust Sensitivity Potentiometer 24 turns clockwise
POWER: Curtain runs in to stops on either end	Sensors adjusted too close to end of travel	Adjust sensor or magnet location
	Reversed wires on proximity sensor (pink/purple)	Switch sensor wires
	Magnets missing or placed incorrectly	Override motor, open door and cycle. Use loose magnet to trigger sensors
POWER: Motor turns but not curtain	Override Cable pulled or stuck open	Push in cable. Check clutch parts.
	Chain, sprocket, shaft, keys or pins broke	Visually inspect for damage.
	Broken end shoes on curtain.	Check curtain for broken or missing end shoes



ISSUE	POTENTIAL CAUSE	TIPS
POWER: Curtain stops and both LED's (red/green) are NOT lit	Current exceeded 24 Amps for more than 0.5 seconds due to loading on motor	Reset power to system; investigate cause of motor current spiking.
	Curtain travel took longer than controller allows	Determine what is impeding movement of curtain
POWER OR MANUAL: Curtain Bottom Rail gets caught going around corner section	Joints not adjusted properly	Adjust track legs by bending with pliers. Manual motion is different than power due to lifting vs. pulling of curtain
POWER OR MANUAL: Curtain will not move	Curtain parts caught on Spiral / track interface	Repair curtain



#### APPENDIX B

### CLEANING, MAINTENANCE, AND TENSION ADJUSTMENT INSTRUCTIONS

#### THE R-O-M CARGO COVER IS MADE OF ANODIZED ALUMINUM

Anodized aluminum is extremely hard and resistant to abrasion. Anodized aluminum can retain its original appearance indefinitely if you follow a sound cleaning and maintenance program. All surfaces are likely to collect dirt and pollutants over time. In some parts of the country, this soiling happens rather quickly due to the level of pollution and proximity to humid coastal regions.

With frequent cycles of condensation and drying as experienced in a humid coastal regions, salts and pollutants build up very quickly on exterior surfaces. Contamination in recessed areas that are not exposed to the washing effects of rains also builds up more quickly. These soils can become more and more concentrated as they go through cycles of re-wetting and drying. Eventually mild acid pollutants become harsh acid pollutants. These strong acids can attack aluminum causing a pitting type of corrosion. It is important to begin a cleaning maintenance program as soon as you receive your vehicle to prevent soil build-up.

#### I. CLEANING AND MAINTENANCE

The R•O•M Cargo Cover needs very little maintenance, and cleaning is very simple. To clean the anodized shutter slats, use a sponge with mild soap or detergent, such as Ivory Liquid, Joy, Lux Liquid, or Dove Liquid. A 50/50 isopropyl alcohol and water mixture is recommended for cleaning anodized slats prior to applying decals.

The tracks should be frequently cleaned to get the best performance and longest life. To clean the track, use a mild soap and water to remove any dirt or grime build-up.

### **II. SLAT REPLACEMENT**

If the slats need replaced, they can be replaced non-visible slats that are inside the Spiral Assembly.

#### Before you begin

Always remember to protect the face of the curtain and any other visible parts. This procedure requires that you remove the curtain. For this reason, you will need to have a blanket, rug, towel, or something soft that will not scratch the face of the curtain and track. During this procedure you will have access to many of the parts that need cleaning as previously discussed in the Appendix.

#### **III. CHAIN LUBRICATION**

The drive chain should be lubricated at least once a year.

If you have any questions or problems, please contact your Customer Development Representative at 800-827-3692.

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