



INSTALLATION INSTRUCTIONS

Electric - Direct Drive

PLEASE READ ENTIRE INSTRUCTIONS BEFORE BEGINNING

Step 1: Rolltube Bracket Installation

(See Figure 1-2)

Procedure: Position the driver and passenger rolltube brackets (A) along the front sides of the gravel box. The brackets should be mounted at a distance of 7" higher than the top of the box (see Figure 2).

Using a 9/32" drill bit, drill 3 holes through the predrilled holes in the brackets and through the box. Fasten the driver and passenger rolltube brackets to the box with the 5/16"x1" self threading bolts (B) provided.

Note: If the brackets are to be mounted to the wood side boards then drill 5 holes through the predrilled holes in the bracket and through the wood side boards. Fasten the brackets to the wood side boards with the 5/16"x2-1/2" hex bolts, 3/8" flat washers, and 5/16" nylon lock nuts provided.

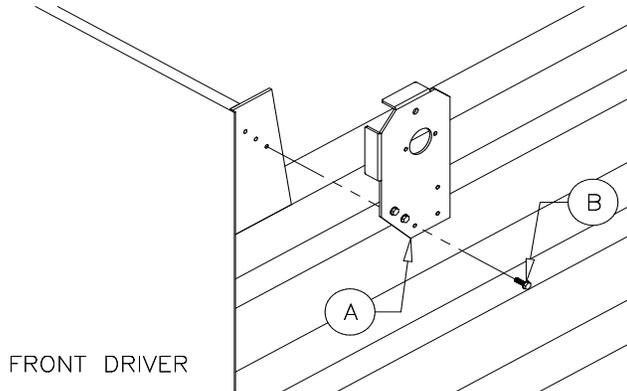


Figure 1

Step 2: Rolltube Installation

(See Figure 3-4)

Procedure: Slide the rolltube (C) through the large pocket at the front of the tarp. Insert the 1" rolltube end through the large hole in the driver side rolltube bracket. Slide the round flanges (F) and the UC205-16 self aligning bearing (G) on the rolltube end (C). Fasten the flange to the roll tube bracket with the 5/16" x 1" carriage bolts (J) and 5/16" nylon lock nuts. Next slide the electric motor into the rolltube and bolt to the rolltube bracket with 5/16"x3/4" bolts (N) and lock washers (O). Center the 2" pipe of the rolltube between the boards and then align the nearest hole in the rolltube with motor and secure with a 5/16"x2-1/4" bolt (M) and nylon lock nut (L). Tighten the set screw in the UC205-16 bearings (G).

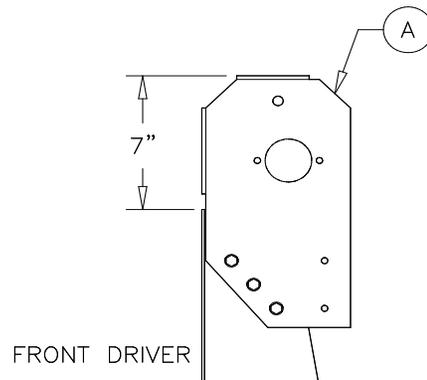


Figure 2

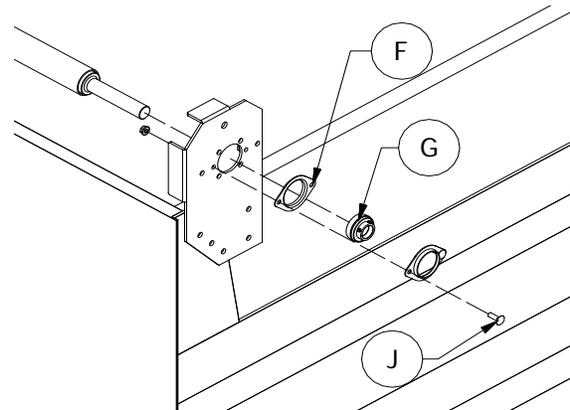


Figure 3

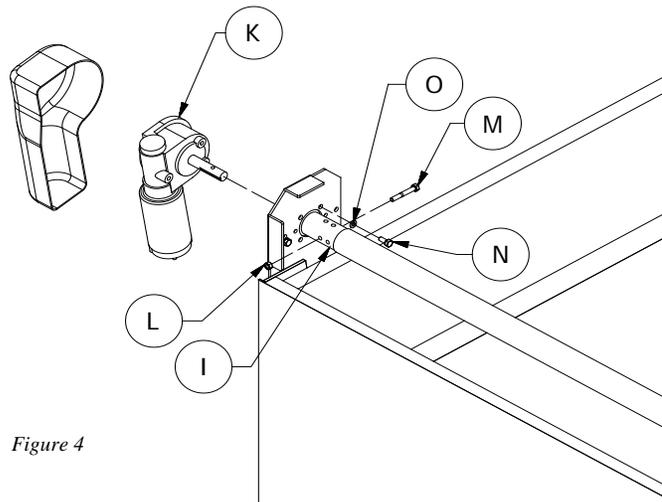


Figure 4

Step 3: Tarp Installation

(See Figure 5)

Procedure: Center the tarp on the rolltube between the boards. Remove any creases in the tarp along the rolltube. Position a pvc front clamp (D) on both edges of the tarp material. Fasten both tarp clamps to the tarp and the rolltube with the #10-24x3/4" wafer head screws (E) provided. Center the remaining two pvc front tarp clamps to the tarp material and rolltube.

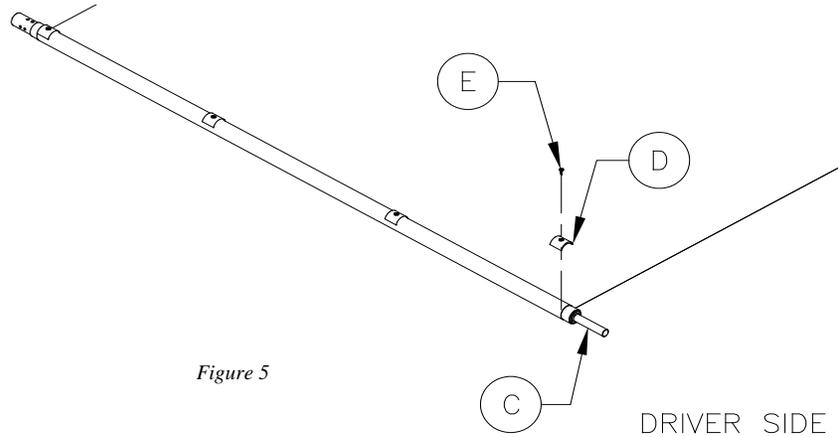


Figure 5

Step 4A: Rocker Switch Electrical Installation

(See Figure 6)

Note: Apply the supplied Dielectric Lubricant to all wire connections when each wire is hooked up. The Dielectric Lubricant will help to prevent corrosion.

Procedure: Mount the 2 pole connector on the front of the trailer. Note: If tarp is not going on a trailer, the 2 pole connector is not needed. Run #6 double strand wire from the motor posts down the front, back to the hinge point of the box, and along the frame to the 2 pole connector. Secure the wire with the wire clips and lags provided. Install the motor cover on the motor and secure with (2) #10x1/2" screws. Mount the rocker switch in the dash or an obstruction free area in the truck cab. Mount the solenoid near the cab and the battery of the truck. Run #6 double strand wires from the solenoid along the truck frame to the 2 pole male connector at the back of the truck. Connect the motor wires to the "IN" & "OUT" on the solenoid. Install a black rubber boot on each wire. If not on a trailer, the #6 double strand wire would run straight from the motor to the solenoid. Run #6 double strand wire from the solenoid to the battery. Connect the positive red wire to the "+" post on the solenoid alone with a red rubber boot and connect the negative wire to the "-" post with a black rubber boot. Install a 50amp circuit breaker in line with the positive wire. Run 14G-3 wire from the solenoid to the switch in the cab. The wires at the switch each get 14G female connectors crimped on. At the solenoid the 14G-3 wire gets (2) 14G female connectors and (1) 14G-1/4" ring terminal crimped on. The ring terminal is mounted on the battery positive (+) post of the solenoid. NOTE: If the motor runs backwards, switch the (2) outside wires on the switch. Raise and lower the hoist to make sure that the wires are free from obstructions.

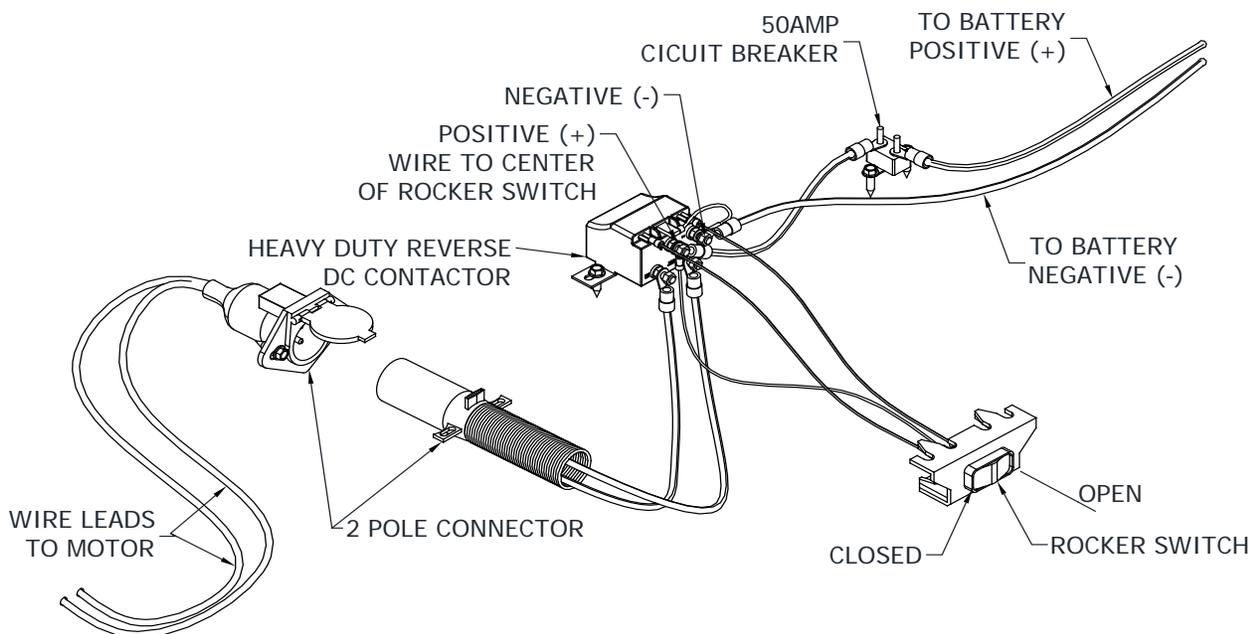


Figure 6

Step 4B: Wireless Remote Electrical Installation

Lead B-Train/Single Trailer Mounted Wireless Remote instructions

1. If the trailer is a closed front, drill a 2" hole in the front of the trailer and mount the supplied two pole female connector. If the trailer is an open front, mount the female connector on the top side of the frame.
2. Apply the supplied Dielectric Lubricant to all wire terminal connections as each wire is hooked up.
3. Mount the wireless remote box on the front of the trailer making sure that the switches will still be accessible.
4. Hook the red wire to the + positive post and the black wire to the - negative on both the two pole connector and the remote box. Make sure to crimp, solder, and use the shrink tubes on the female trailer connector. Install the Red rubber boot on the positive wire at the remote box and a Black rubber boot on the negative wire.
5. Connect the wire to Motor 1 and 2 on the remote box and run the wire to the electric motor. Use the remaining two black rubber boots at the remote box.
6. Connect the black wire from negative post of the battery directly onto the NEG- terminal in the male trailer connector. Mount the 50A circuit breaker as close to the battery as possible. Connect the red wire from the positive post on the battery to the circuit breaker and from the circuit breaker to the POS+ terminal in the male trailer connector. When installing the wires into the male trailer connector, the provided wire sleeves must be used on the end of the wires. It is required that the connection then be crimped, soldered, and the shrink sleeve installed. Double check that the positive and negative wires match the trailer plug. If these wires are crossed it will damage the wireless remote box.
7. Power the hand held remote on and press the open and close buttons to make sure that they work correctly. Also check the buttons on the remote box. If the motor runs the opposite direction as desired, reversed the wires that are connected to MOTOR 1 and 2.

Rear B-Train Mounted Wireless Remote instructions

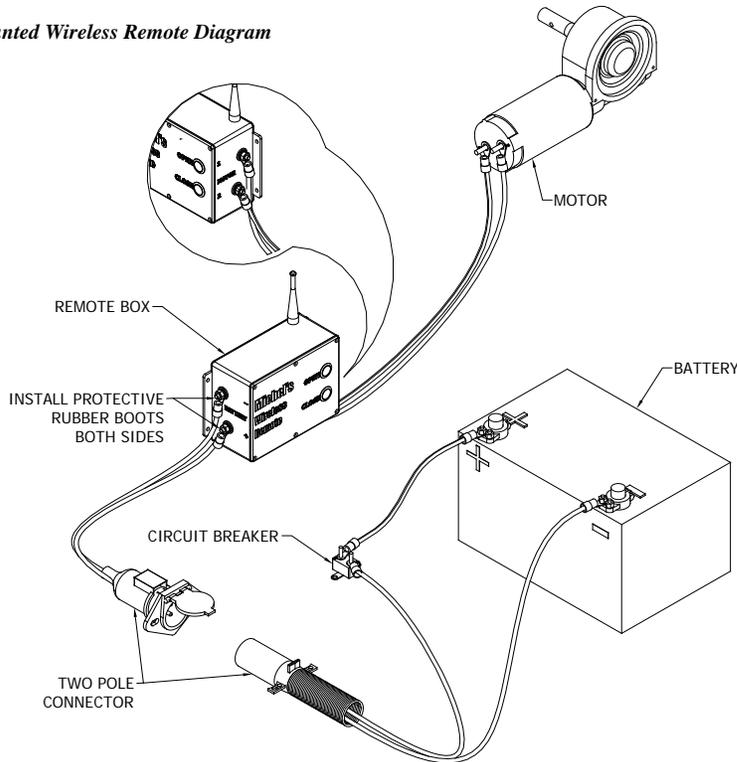
1. The two pole connector on the lead trailer is shared by the lead and rear trailer.
2. Run #6 wire from the two pole plug on the lead trailer to the rear of the lead trailer.
3. Wire the rear trailer the same as the above instructions for a single trailer.

3 Ton Truck Mounted Wireless Remote instructions

1. The instructions for a 3 Ton Truck are similar to the instruction for a trailer mounted Wireless Remote, with two exceptions.
 - a. Exclude the two pole connector and run the power wires direct from the battery and circuit breaker to the wireless remote box.
 - b. Mount the wireless remote box in a location where it won't be in the way and the buttons will be accessible.

Note: If wiring is hooked up incorrectly it will void your warranty.

Trailer Mounted Wireless Remote Diagram



Wireless Operation

Press and hold the power button on the transmitter until both LED's turn on, then release. The green LED will flash rapidly when communication has been established with receiver. The green LED flashes slowly if the receiver is off or there is no communication between the transmitter and receiver. Turn the receiver on and press the corresponding buttons on the transmitter keypad to turn on and off each of the outputs. **Only one receiver can be operated at a time.**

PLEASE PHONE MICHEL'S INDUSTRIES FOR ASSISTANCE (306) 366-2184.