Michel'S INSTALLATION INSTRUCTIONS Econo Flip Tarp Top Crank Pull-Tarp PLEASE READ ENTIRE INSTRUCTIONS BEFORE BEGINNING

Step 1: Rolltube Bracket Installation (See Figure 1-2)

(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 11/32" 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 3/8"x1-1/4" 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.

Step 2: Tarp Installation

(See Figure 3)

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

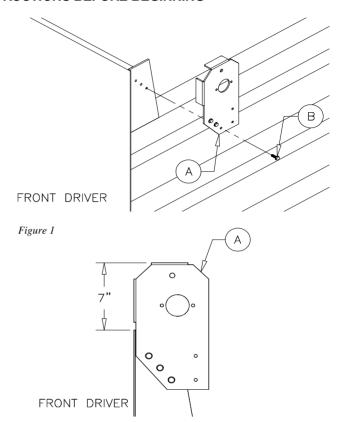


Figure 2

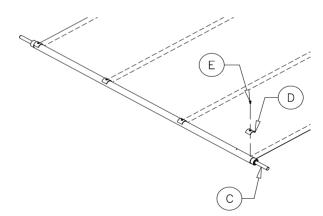


Figure 3

Michel's Industries LTD. 01/01/00

Rev. 11/20/00

Step 3: Rolltube Installation

(See Figure 4)

Procedure: Insert the rolltube ends (C) through the large hole in the the driver and passenger side rolltube brackets. Slide the round flanges (F) and the UC205-16 self aligning bearing (G) on the rolltube end (C). Fasten the flanges to the rolltube brackets with the 5/16"x1" hex bolts (J), 5/16" flat washers and 5/16" nylon lock nuts provided. Center the rolltube on the driver and passenger bracket. Tighten the grub screws in the the UC205-16 bearings (G).

Step 4: Top Crank Installation

(See Figure 5-7)

Note: See Step 5 for Bottom Crank Installation. See Step 11 for Electric Motor Installation.

Procedure: Attach the extension spring (K) to one of the 1/8"x3/4" cotter pins (L) provided. Insert the cotter pin into the predrilled hole in the top ratchet handle (M). Secure the cotter pin to the top ratchet handle.

Slide the top crank handle (N) on the rolltube end.

Fasten the top ratchet handle (M) to the driver side rolltube bracket with the 1/2"x2-1/2" hex bolt (O), 1/2" flat washers and 1/2" nylon lock nut.

Note: The top ratchet handle (M) must rotate freely on the $1/2^{"}x^{2-1}/2^{"}$ hex bolt (O).

Insert the opposite end of extension spring (K) into the other cotter pin (L) provided. Insert the cotter pin into the predrilled hole in the rolltube bracket (A). Secure the cotter pin to the rolltube bracket. Adjust the top crank so the sprocket teeth make contact with the top ratchet handle (M). Remove the 5/16"x3/4" set screws from the 1X hub. Mark the location of the two 5/16" threaded holes in the 1X hub. Using a 5/16" drill bit, drill two holes in the rolltube end approximately 1/4" deep. Secure the top crank to the rolltube end with the 5/16"x3/4" set screws.

Note: The rolltube end may have to be cut to a shorter length before the top crank can be properly installed.

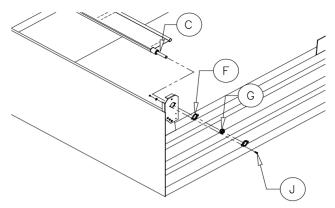


Figure 4

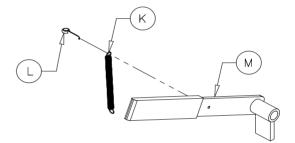
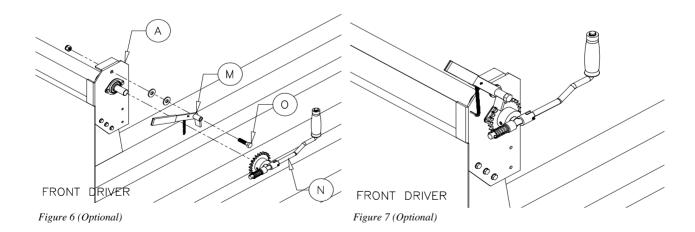


Figure 5 (Optional)



Michel's Industries LTD. 01/01/00

Step 5: Rear Crossmember Holders

(See Figure 8)

Procedure: Slide the rear crossmember throught the pocket in the rear of the tarp. The rear crossmember is a galvanized pipe. Place the rear crossmember holders at the back of the box. The distance between the holders has to be wider than the tarp. Secure the holders to the box with 3/8"x1-1/4" self threading bolts.

