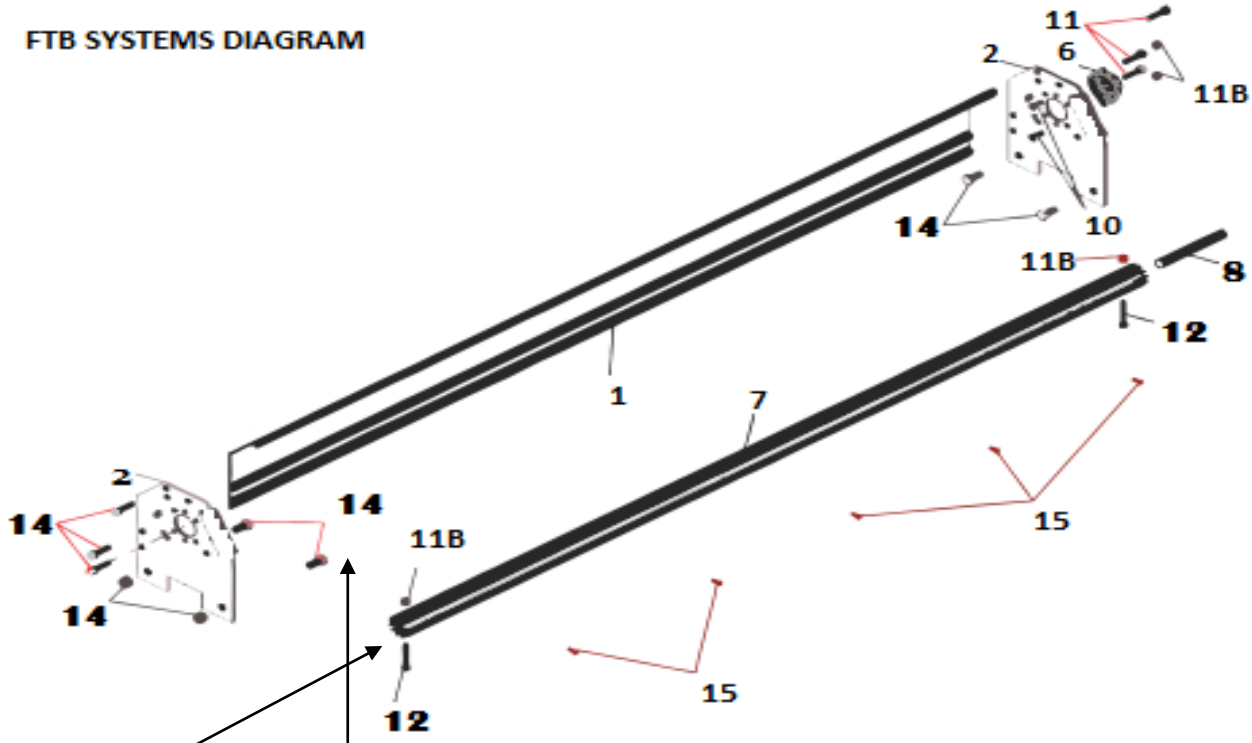
1-800-765-6127

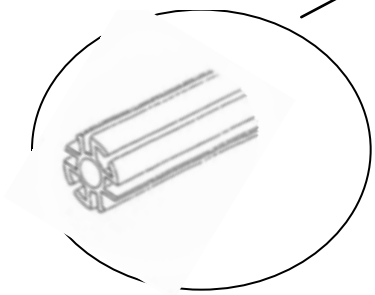
ROLL MASTER

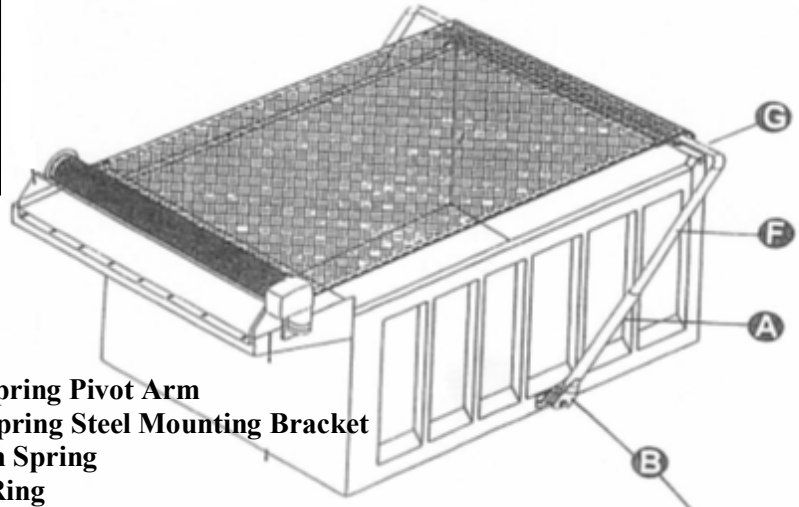
SYSTEMS

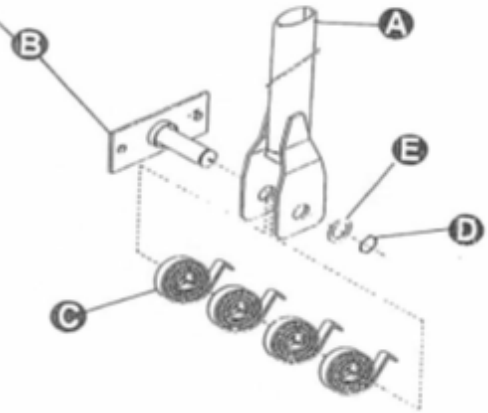
FRONT TO BACK SYSTEM
ELECTRIC & MANUAL SYSTEM
INSTALLATION

FTB SYSTEMS DIAGRAM









ROLL TUBE

A) FTBAPA 4 Four Spring Pivot Arm
B) FTBSMB 4 Four Spring Steel Mounting Bracket
C) FTBS Torsion Spring
D) FTBSR Snap Ring
E) FTBSPW Pivot Mount Washer
F) FTBAPE Aluminum Pivot Arm Extension
G) FTBARC Aluminum Rear Cross Bar
H &
1) FTBWD Wind Deflector
2) FTBBP Bearing Plate
6) FTB B Bearing
7) FTBART Aluminum Roll Tube
8) FTBCRR ¾ Crank Round Rod
10 – 15 are bolt included in the Bolt Package
10) 5/8 x 1 ½" Bolt
12) 3/8 x 1 Bolt
14) 3/8 Self Tapping Bolt
15) 5/16 x 1" Bolt

ELECTRIC FTB SYSTEM

STEP 1: TARP SPOOL WITH GEAR MOTOR (INCLUDES INSTRUCTIONS FOR OPTIONAL WIND DEFLECTOR)

QTY	COMPONENT PARTS DESCRIPTION
1	ROLL MASTER ELECTRIC FTB TANDEM MOTOR
2	MOUNTING BRACKETS
1	ALUMINUM EXTRUDED ROLLER BAR WITH SPOOL SHAFT
1	AXEL BEARING WITH FLANGE

QTY	WIND DEFLECTOR PART DESCRIPTION
1	ALUMINUM WIND DEFLECTOR
6	3/8 X 1" SELF THREADING BOLTS

****Before beginning, please ensure that you have all the parts necessary to complete the system installation. Contact us immediately if you have missing parts. Please read through the entire system installation to get a good understanding of how each component part is installed and how the system will come together.**

CHOOSING THE MOUNTING LOCATION

The tarp spool and motor should be mounted on top of the cab guard and as far forward as possible to avoid damage by loaders. *Note: If it is mounted to far forward, it may interfere with the truck doors.* The ideal location is determined by placement of the pivot arms from the tarp spool axel to the pivot point on the dump body. See the pivot mounting instructions for determining the pivot point on dump or trailer body.

EXCEPTIONS: Trucks with vertical stacks may be in the way of the pivot arms if the tarp spool and motor were mounted ahead of the stacks. You can either re-align or shorten the stacks to solve this problem. Otherwise, the tarp spool and motor should be mounted towards the rear of the Stacks. If there is no room to mount the tarp spool and brackets towards the rear, they will need to be mounted on the top of the side board pockets to the front of the body.

INSTALLING THE MOUNTING BRACKETS

Once you have determined your mounting location, you may either install the included mounting brackets using the enclosed hardware or use the brackets as a template to drill the necessary holes into the cab guard sides or other secure location. *Note: If you use the brackets as a template, please ensure that there is enough clearance between the tarp spool and the cab guard to roll-up the entire tarp.*

MOUNTING YOUR ROLL MASTER MOTOR AND TARP SPOOL

Mount the motor to the mounting brackets or cab guard. Measure from inside of one bracket to the inside of the other. Cut the aluminum roller bar on the end without the predrilled hole 1 inch shorter than its length. Drill a 5/16" cross hole through the aluminum roller bar axel, ¾" in from the end that was just cut off. Start the hole in one of the round bottomed slots, not one of the threaded slots. Slide one end of the tarp spool axel over the motor output shaft and secure with a 5/16" bolt, washer and nut. Slide the spool shaft through the axel bearing into the roller bar. Line up the holes in the roller bar to the hole in the spool shaft and secure with 5/16" bolt, washer and nut.

INSTALLING THE OPTIONAL WIND DEFLECTOR

Cut the wind deflector to the proper length and attach it to the mounting brackets using the included 6 each self threaded bolts.

STEP 2 PIVOT INSTALLATION INSTRUCTIONS

Installation Instructions

1. Measure from Point A (see Figure 1) to a point on the side rail of the box that is close to where the pivot should be mounted. Mark this point and note the distance as Measurement X.

2. Using Measurement X from the previous step, measure from Point B and make a 2nd Mark on the side rail. NOTE: If Measurement X is large enough, the 1st and 2nd Mark may be reversed relative to Figure 1. This will not affect the Pivot Point Location.

3. Divde the distance betwwen the 1st and 2nd Mark in half and mark this point as the PIVOT POINT. Check to see that the distance between the Pivot Point and Point A is the same as the distance between the Pivot Point and Point B. Erase the 1st and 2nd mark.

4. To mark the Pivot Point on the other side of the box, measure from the head assembly to the Pivot Point you have already found and use that measurement to mark the other Pivot Point.

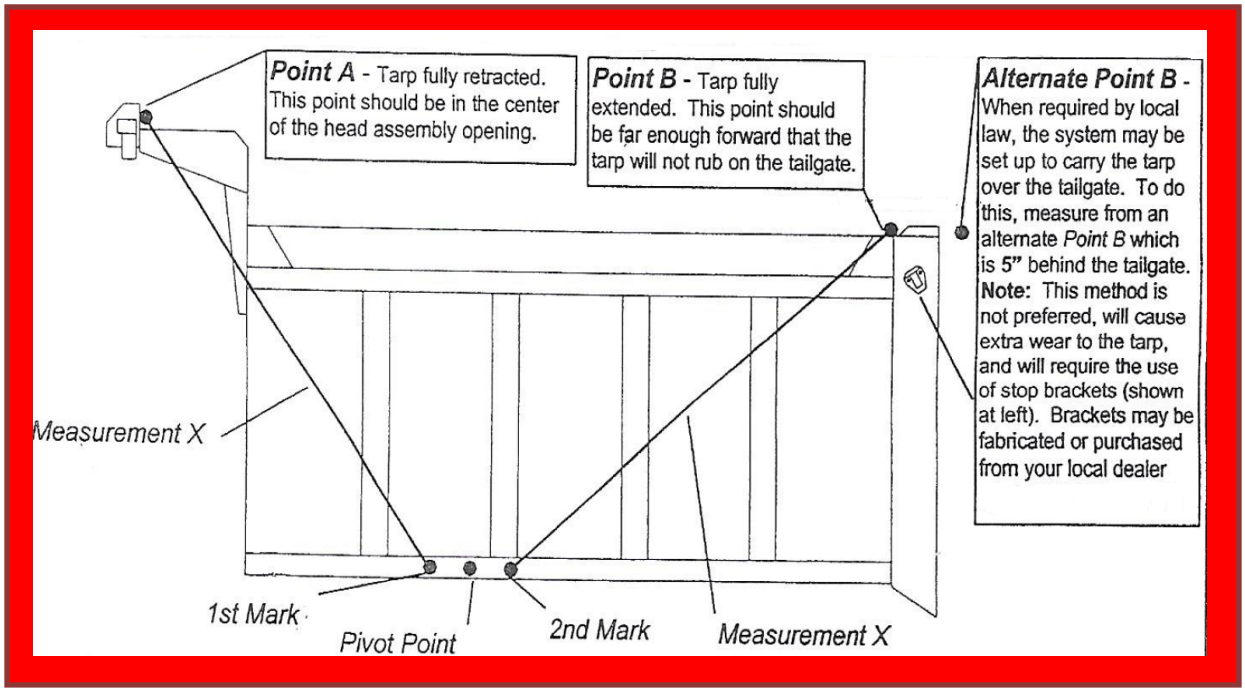


FIGURE 1

NOTE: The pivot mounts are directional (see Figure 2 for proper set-up of both sides).

CAUTION: Failure to comply with the above instructions could cause severe damage to the system.

5. To load the springs, rotate the lower pivot arms (discussed during pivot arm installation) so that thethe hooks on the springs will clip over the pin inside the spring guard. (See Figure 2).

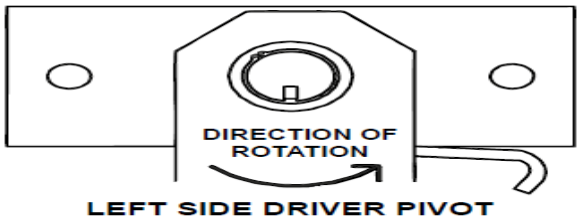
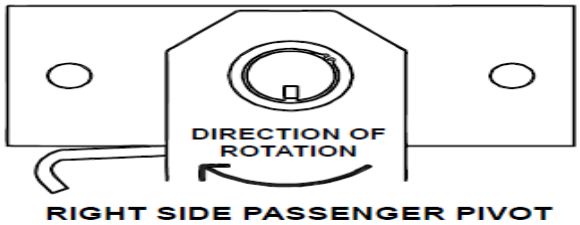


FIGURE 2



STEP 3 PIVOT INSTALLATION INSTRUCTIONS

Contents of Kit:

2 Aluminum Upper Pivot Arms with 90 degree Elbows (Installed)
1 Aluminum Rear Cross Bar (FTB-ARC)
2 Aluminum Pivot Arm Rest (FTB-APR)

Installing the Pivot Arms

1. Install the lower pivot arms on the pivot mounts without the flat torsion springs. This will simplify the rest of the installation because the pivot arms may now be moved without the spring tension.

2. Slide one of the upper pivot arms into a lower arm. Adjust the arm length until the corner rests on the desired landing point at the back of the box (Point B/Figure 1 from the Pivot Installation Instructions.) If the upper arm is too long, cut both upper arms to allow at least 2 feet of upper pivot arm sticking into the lower pivot arm.

3. Attach the other lower arm assembly, again leaving the springs off to allow for ease of arm adjustment.

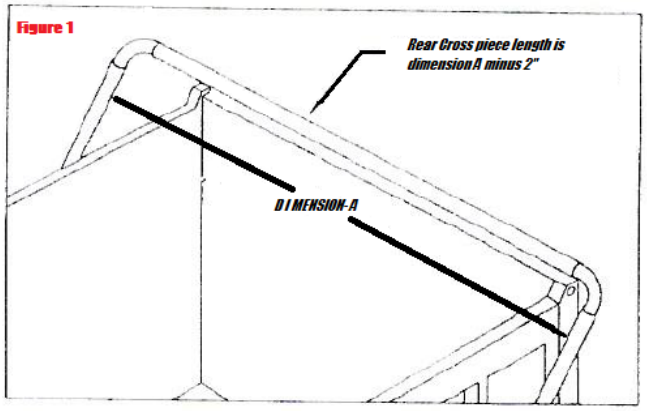
4. Slide both upper pivot arms into the lower pivot arms (make sure that both arms end up the same length) and lightly tighten the two bolts which hold each upper arm into the lower arm. Fianl tightening will be done later.

5. Measure the distance between the upper arms as in Figure 1. Cut the end of the rear cross piece that does not already have the holes 2" shorter than the distance measured. Using the pre-drilled bolt holes in the 90 degree bend castings as a template, mark the rear cross piece for drilling. Drill two 3/8" holes in the rear cross piece at these markings such that when the casting is inserted into the rear cross piece the holes will align to allow bolting.

6. Slide the ends of the rear cross piece over the 90 degree elbow.

7. Secure the rear cross piece to the elbows with the T-nuts and bolts.

8. Swing the complete pivot arm assembly forward until it rests on the head assembly. The Rear cross piece should be resting in the center of the head assembly opening (See Figure 2) If the rear cross piece is not landing in the center of the opening, loosen the 4 bolts that hold the upper arms into the lower arms and adjust where the Rear cross piece lands. Lightly re-tighten the bolts.



9. Swing the pivot arm assembly back to the rear of the truck and check the landing position. If it appears that the rear cross piece will interfere with the operation of the tailgate, the pivot point may need to be moved or mount the pivot arm rests (pivot arm rest installation discussed later) so that the Rear cross piece remains clear of the tailgate.

10. Check for binding or rubbing of the pivot arms against the sides of the box. Check both sides of the box, and adjust the pivot mounts or arms as necessary of clearance.

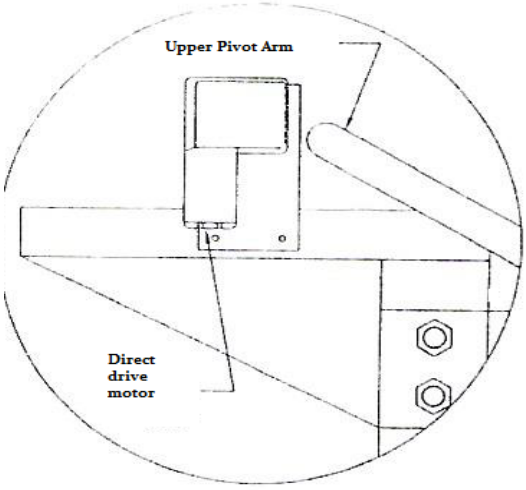


FIGURE 2

11. Mark both upper arms where they slide into the lower arms. This will allow you to reassemble the arms without re-measuring.
12. Remove the RCO, lower and upper arms so that you may install the flat torsion springs.
13. Remount the lower pivot arms with the flat torsion springs. (4 per side) Make sure the hook ends of the springs have clipped over the pin in the spring guard. Place the 1-1/4" shim over pivot mount shaft. Place the spring clip back onto the pivot mount shaft.
14. Slide the upper arms into the lower pivot arms to the marks made in Step 11 and tighten the bolts that hold them in place.

INSTALLING THE TARP

1. **Mount tarp to front roll tube using the 5-5/16 Bolts and washers in provided in roll tube. Center tarp on tube and bolt on with 5/16 bolts and washers through grommet in tarp.**
2. **Slide rear cross bar into pocket at rear of tarp.**
3. **Center the tarp on both aluminum roller bar and rear cross piece.**
4. **Bolt the rear cross piece back to the 90 degree elbows in the upper arm using T-nuts and bolts.**
5. **Check all mechanism bolts and screws for security.**

INSTALLING THE PIVOT ARM RESTS

1. **Unwind the tarp so that the system is in the "covered" position.**
2. **Position the pivot arm rests so that upper arms are as level as possible and do not make contact with the tailgate or any other part of the dump body.**
3. **Weld or bolt pivot arm rests into place.**

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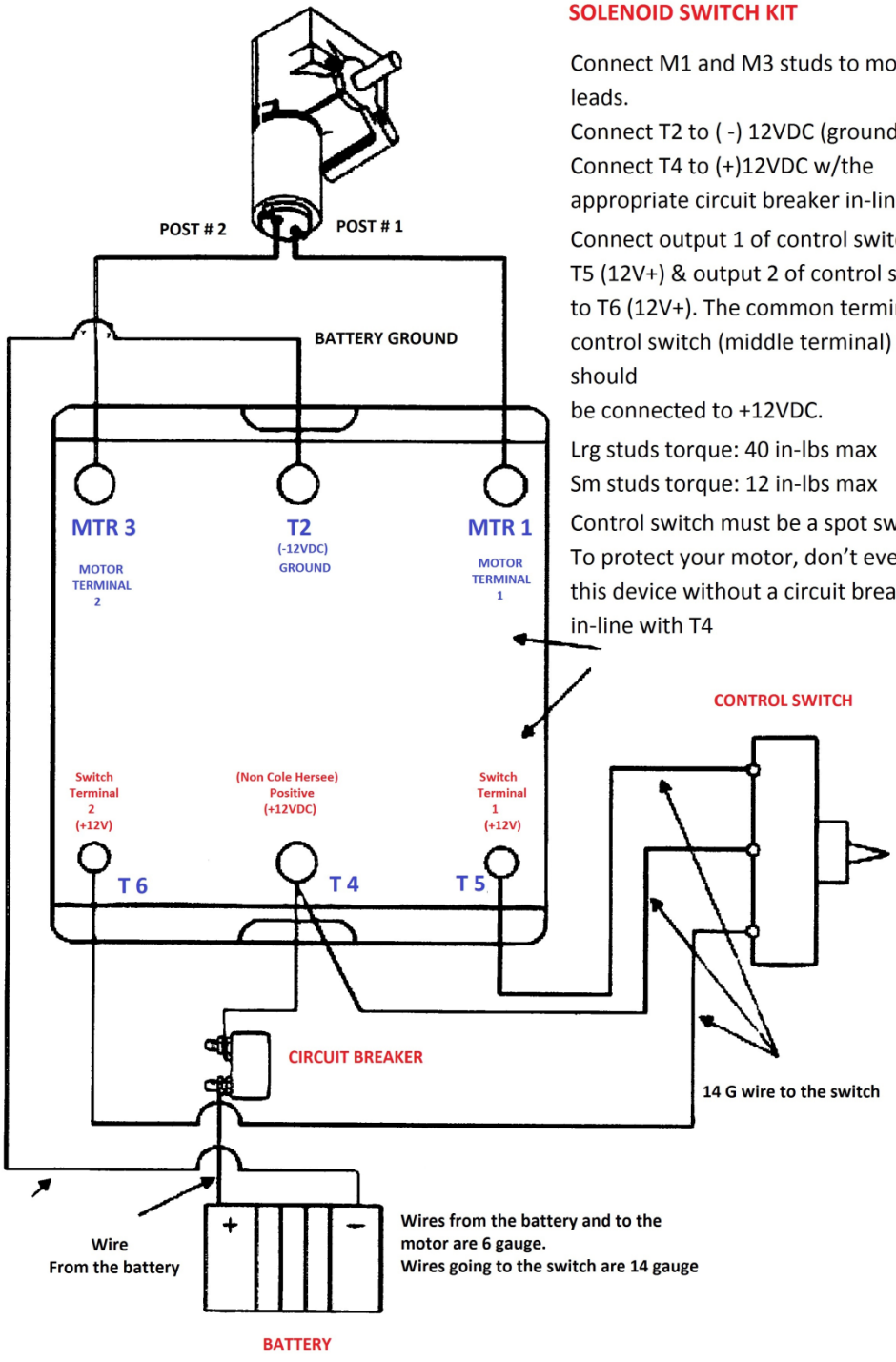

SOLENOID SWITCH KIT

Connect M1 and M3 studs to motor leads.

Connect T2 to (-) 12VDC (ground)

Connect T4 to (+)12VDC w/the appropriate circuit breaker in-line.

Connect output 1 of control switch to T5 (12V+) & output 2 of control switch to T6 (12V+). The common terminal of control switch (middle terminal) should
be connected to +12VDC.

Lrg studs torque: 40 in-lbs max

Sm studs torque: 12 in-lbs max

Control switch must be a spot switch. To protect your motor, don't ever use this device without a circuit breaker in-line with T4

THIS PAGE FOR MANUAL SYSTEM ONLY:

If you are installing a MANUAL system instead of an electric, skip the sections regarding installing and wiring the motor and use the following instructions:

After tarp roller bar is mounted in wind deflector brackets, attach hand crank u-joint in ¾ shaft using ¼" drive pin. Next mount crank arm retainer to the truck body in location best suited for your use, using 3/8 x 1" self tapping bolts. Use snapper pin and cable to secure.