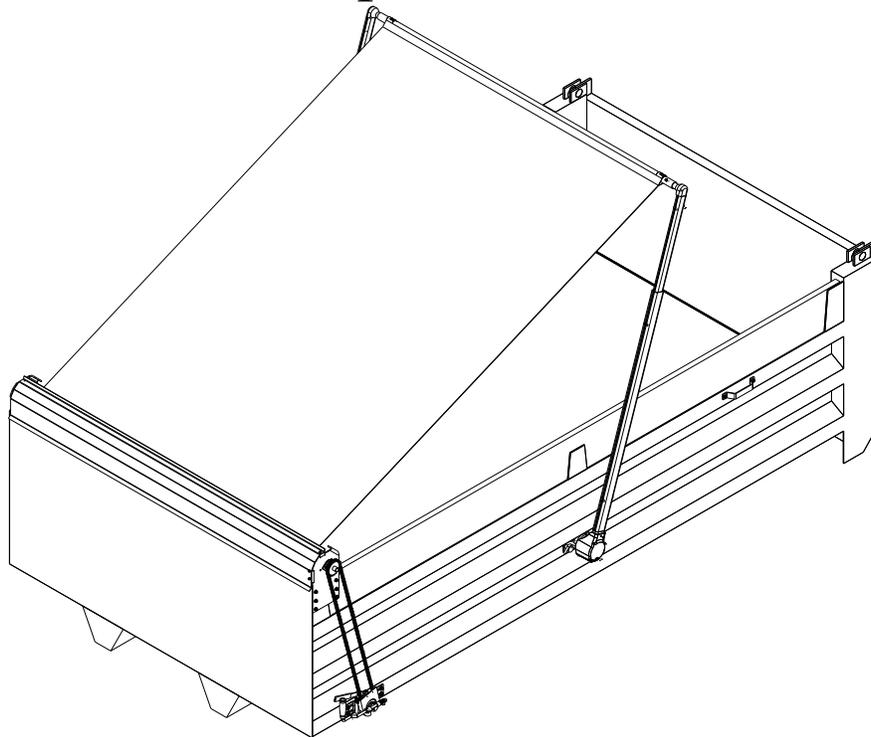


Michel's

Dura Flip Manual Electric Direct Drive Up to 22'



Installation Instructions – Page 1-10

Warranty – Page 11

Operating Instructions – Page 11-12

Maintenance Guidelines – Page 12

Trouble Shooting Electric System – Page 13-14

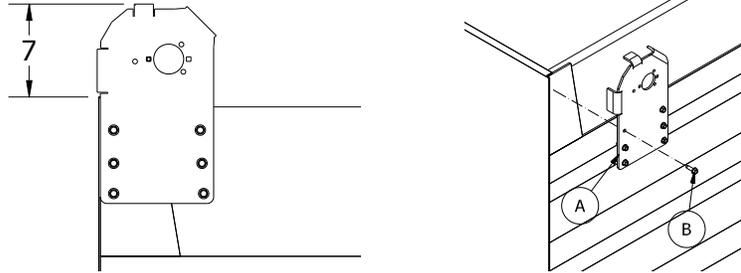
Parts Break Down – Page 15-16

PLEASE FORWARD ONTO CUSTOMER

Installation Instructions

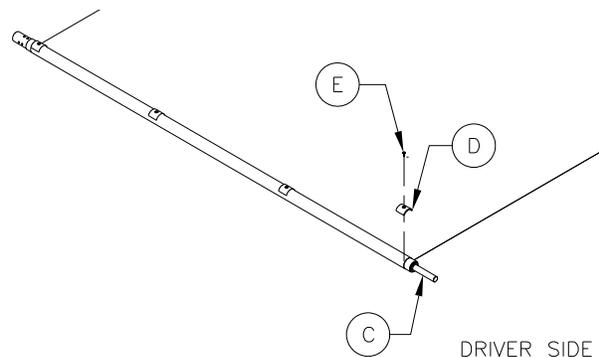
Step 1: Rolltube Bracket Installation

- Position the driver and passenger rolltube bracket (A) along the front side of the gravel box. The brackets should be mounted at a distance 7" higher than the top of the box.
- Using a 11/32" drill bit, drill through the predrilled holes in the brackets and through the box.
- Fasten the brackets to the box with 3/8"x1-1/4" self threading bolts (B).



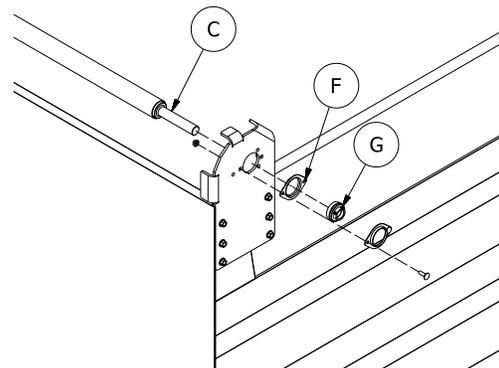
Step 2: Tarp Installation

- Slide the rolltube (C) through the large pocket at the front of the tarp. Have the 1in bearing shaft (C) positioned on the driver side.
- Center the tarp material on the rolltube. Remove any creases in the tarp along the rolltube.
- Position a large pvc 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).
- Center and fasten 2 more large pvc tarp clamps to the tarp material and rolltube.
- Roll the tarp up on the rolltube so you turn the 1" bearing shaft counterclockwise.

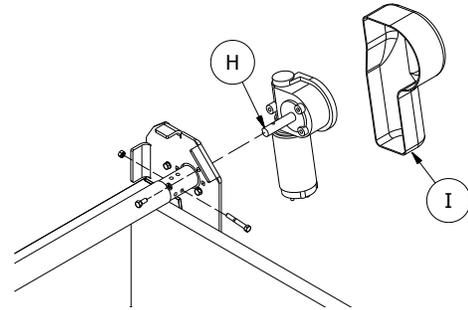


Step 3: Rolltube Installation

- Insert the rolltube end (C) through the large hole in the driver side rolltube bracket and the motor bushing in the passenger rolltube bracket.
- Slide the round bearing flanges (F) and the UC205-16 self-aligning bearing (G) on the rolltube end.
- Fasten the flanges to the rolltube bracket with 5/16"x1" carriage head bolts and 5/16" nylon lock nuts
- Slide the electric motor (H) into the



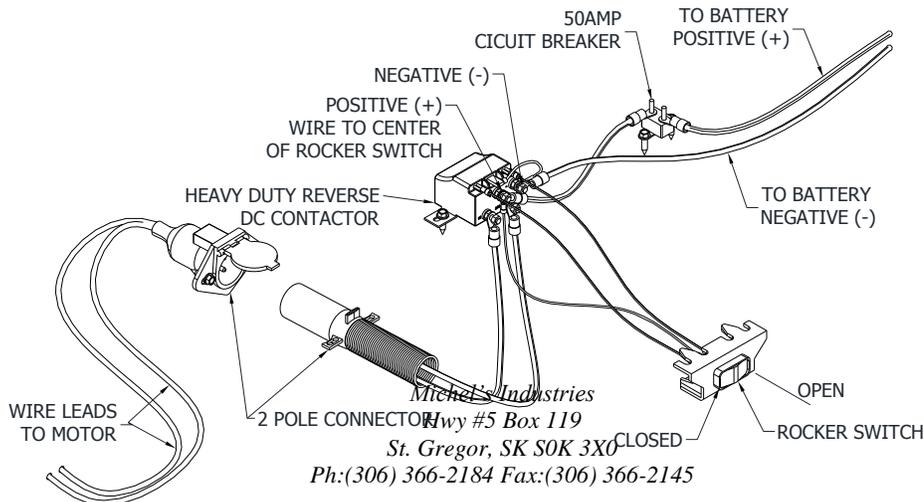
- rolltube and bolt to the passenger rolltube bracket with 5/16"x3/4" bolts and lock washers.
- Center the tarp between boards and then align the nearest hole in the rolltube with the motor. Secure together with a 5/16"x2-1/4" bolt and nylon lock nut.
- Tighten the setscrews in the bearing collar on the driver side.



Step 4: Electrical Installation

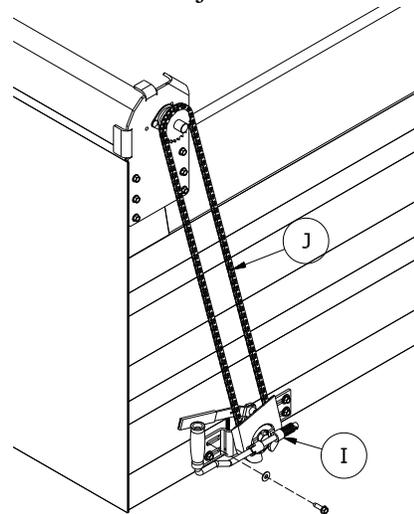
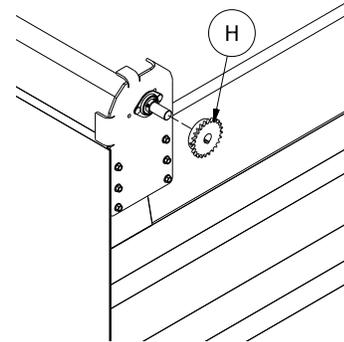
Note: Apply the supplied Dielectric Lubricant to all wire connections when each wire is hooked up. The Dielectric Lubricant will help to prevent corrosion.

- Mount the 2 pole connector on the front of the trailer.
 - Note: If tarp is not going 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 to the trailer with the wire clips and lags provided.
 - Install the motor cover (I) 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 along 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.

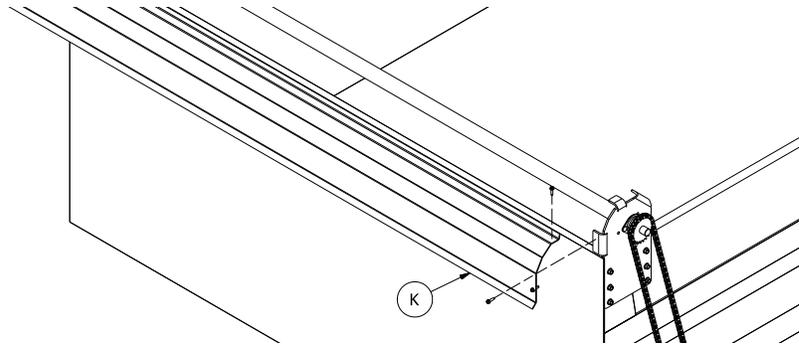


Step 5: OPTIONAL BACKUP Crank Installation

- Slide the #40x24 sprocket (H) on the rolltube end.
- Loosen the $\frac{3}{4}$ " bolt on the crank handle assembly (I) so the plastic chain guard can be adjusted.
- Place the #40 roller chain (J) on the #40x24 sprocket and through the bottom crank handle assembly.
- Secure the chain together with the connector link.
- Hang the bottom crank assembly by the chain. Apply downward force to the bottom crank to stretch the chain out.
- Place the crank handle assembly along the bottom of the box. Adjust the chain guard so the chain clears.
- Mark the slots of the crank assembly onto the box.
- Tighten the $\frac{3}{4}$ " bolt to secure the chain guard in place.
- Using a $1\frac{1}{32}$ " drill bit, drill four holes through the box at your marks. Drill on the right side of the slots.
- Fasten the crank assembly to the box with $\frac{3}{8}$ "x $1\frac{1}{4}$ " self-threading bolts and washers.
- Align the #40x24 sprocket on the rolltube end with the sprocket on the crank handle assembly.
- Tighten the $\frac{5}{16}$ " set screws in the sprocket and then loosen off to provide a mark on the rolltube end.
- Slide the sprocket on the rolltube end and drill $\frac{5}{16}$ " holes at your marks. Drill approximately $\frac{1}{4}$ " deep.
- Slide the sprocket back, align the setscrews with the holes you drilled and tighten the setscrews.
- Remove the roller chain and store in the truck in case of motor failure.

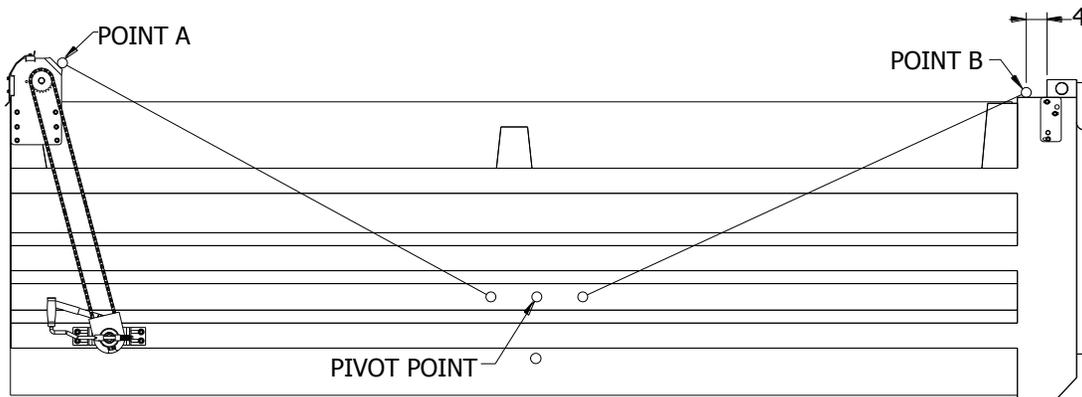
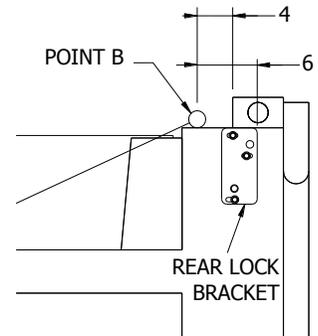
**Step 6: Front Hood Installation**

- Place the front hood (K) on the rolltube brackets and center it.
- Secure to the rolltube brackets with $\frac{1}{4}$ "x 1 " lag screws into the tabs.



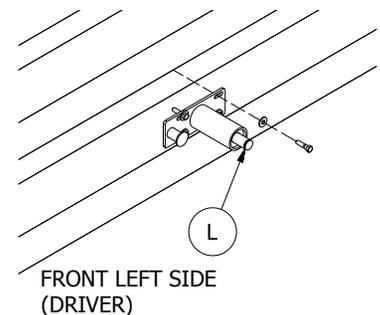
Step 7: Pivot Arm Installation

- Measure from Point A to a point on the lower inside rib of the box that is close to the pivot point of the box.
- Mark this point and record the distance as X.
- Using distance X, measure from Point B to a point on the lower inside rib of the box and mark it.
- To install the rear lock there needs to be 6" of room behind Point B. (shown in figure to the right)
- Divide the distance between the first and second mark by two and mark this point as the pivot point.

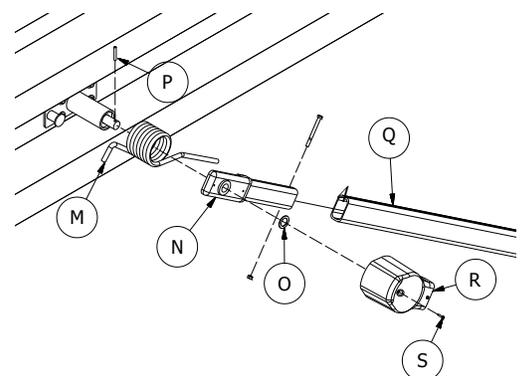


- Align the shaft on the pivot arm bracket (L) with the pivot point.
- Mark the center of the slots on the box.
- Drill 3/8" holes through the box at your marks.
- Fasten the pivot arm bracket to the box with 3/8"x1-1/2" bolts, 3/8" flat washers and 3/8" nylon lock nuts.

Note: If you are mounting the pivot arm bracket into the bottom tubing use a 11/32" drill bit and secure with 3/8"x1-1/4" self threading bolts.



- Slide the helical torsion spring (M) on the pivot arm bracket and hook the spring on the catch.
- Place the bottom cast pivot arm (N) onto the shaft and have the spring end in the slot of it. Secure it to the



- pivot arm bracket with a machinery bushing (O) and roll pin (P).
- Slide the aluminum bottom pivot arm (Q) (largest tubing) over the bottom cast pivot arm and spring. The end you slide on is the side with the 5/16" hole 8" in from the edge.
 - Secure together with a 5/16"x3-1/2" bolt and nylon lock nut through the predrilled holes.
 - Place the spring cover (R) on the bottom cast pivot arm. Align the 2 holes and secure together with #10x1/2" self-tapping screw (S).
 - Slide the top cast pivot arm (U) into the aluminum top pivot arm (T) and bolt together with 5/16"x3" bolt and nylon lock nut.
 - Place the Dura Flip Tarp sticker on the bottom aluminum pivot arm near the bottom of it.
 - Repeat for the other side of the box.
 - Unroll the tarp to the rear of the box.
 - Slide the rear crossmember (V) in the rear pocket of the tarp and position at Point B.

For Installation of Standard Straight arms continue reading or for Optional Pivot Arm Elbows Proceed to Step 7A below.

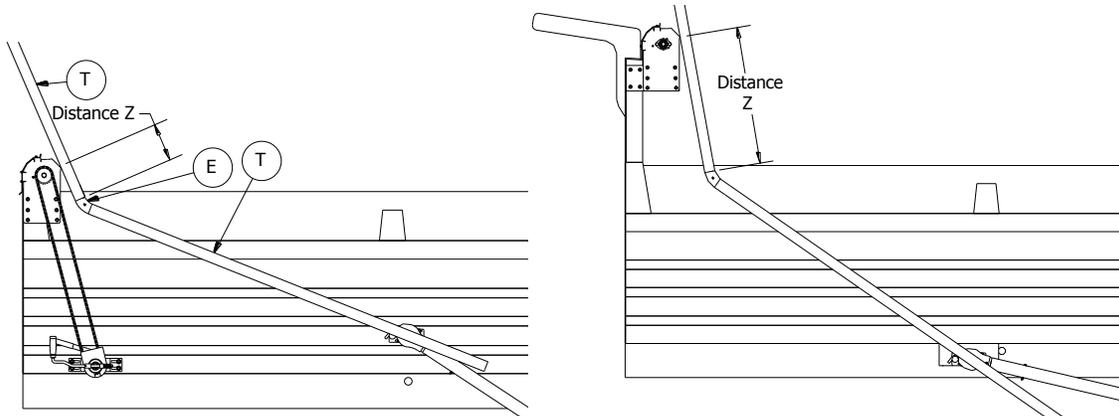
- Slide the rear crossmember holders (U) into the top aluminum arm (T). Secure together with 5/16"x3" bolt and nylon lock nut through the predrilled holes.
- Slide the aluminum top pivot arm into the bottom arm.
- Rotate the arms up and slide the rear crossmember into the rear crossmember holder.

Note: *The top aluminum arm may need to be shortened.*

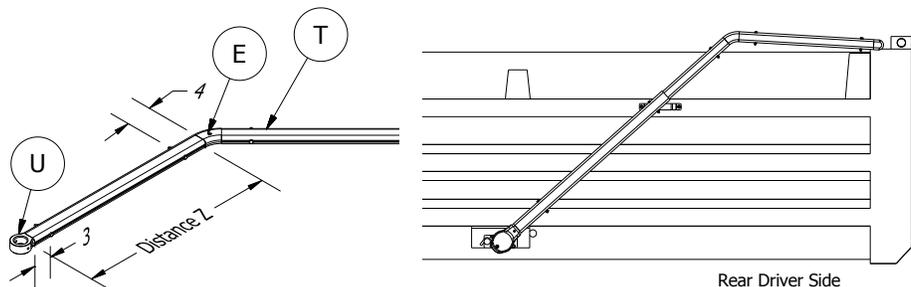
- Repeat for the other side of the box and proceed to Step 7B.

Step 7A: Optional Pivot Arm Elbows Installation

- Depending on the configuration of your box the distance from the end of the arm to the cast elbow will vary.
- Take one of the cast elbows (E) and slide it into the one the top aluminum pivot arms (T). Slide the other end into the other top aluminum pivot arm (T).
- Hold the arms and elbow up against the side of the box and position the cast elbow close to the top of the boards. Have the one top aluminum arm rest up against the rolltube bracket while holding the other one so the center of it goes through the pin on the pivot arm bracket. (Shown below)



- Make sure the arm will not hit the chain or any other obstruction on the box.
- Record the distance from the edge of the rolltube bracket to the edge of the cast elbow.
- Take the arms down and slide the cast elbow out of them.
- If Distance Z is greater than 36" then make Distance Z = 36".
- On the end with the pre-drilled holes on the top aluminum arms make a mark @ Distance Z in from the edge. Cut both arms at your mark. (Shorten each arm)
- With the aluminum arms cut at Distance Z drill a 5/16" hole 4" in from the edge on the opposite end of the pre-drilled hole.
- Slide the rear crossmember holder (U) into the one of the short top aluminum pivot arms in the end with the pre-drilled hole from factory (3" in). Secure together with 5/16"x3" hex bolt and nylon lock nut.
- Slide the cast elbow (E) in the top aluminum arms. Secure together with a 5/16"x3" hex bolt and nylon lock nut.
- Drill a 5/16" hole in the ends of the remaining (2) top aluminum arms (T) at 4".



- Slide the top aluminum pivot arm assembly into the bottom aluminum pivot arm.
- Rotate the arms up and slide the rear crossmember holders over the rear crossmember.

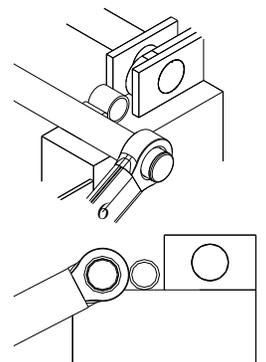
Note: The top aluminum arm that slides inside the bottom arm may need to be shortened.

- Repeat for the other side of the box and proceed to Step 7B.

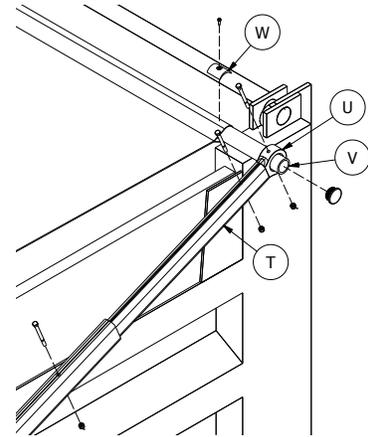
Step 7B: Rear Crossmember / Tarp Installation

- Align the rear crossmember (V) and top arms so they are at Point B. Make sure the top aluminum arms are protruding out the bottom arms the same.

Michel's Industries
Hwy #5 Box 119
St. Gregor, SK S0K 3X0
Ph:(306) 366-2184 Fax:(306) 366-2145

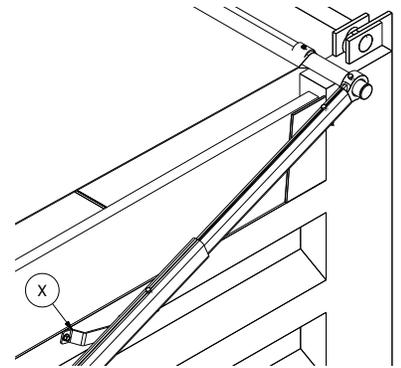


- The rear crossmember should be sitting so both large tubing are sitting on the trailer.
- The rear crossmember will only have the extra set of tubing welded on if the rear lock option is to be installed.
- Using a 5/16" drill bit, drill through the predrilled hole in the bottom arm and the top pivot arm.
- Secure the arms together with 5/16"x3-1/2" bolts and nylon lock nuts.
- Align the pivot arms so they are parallel with the side of the box.
- Position the rear crossmember so it protrudes out of the rear crossmember holder on one side by 3/4".
- Drill through the hole in the crossmember holder and through the rear crossmember with a 5/16" drill bit.
- Secure together with a 5/16"x3-1/2" hex bolt and nylon lock nut.
- On the other side cut the rear crossmember so it just protrudes past the rear crossmember holder by 3/4". Secure together like the other side.
- Press the plastic plugs into the open ends of the rear crossmember.
- If your crossmember has the extra tubing's, center it with the box and cut equally off each side so it sticks out 3/4" on each side.
- Center the rear pocket of the tarp on the rear Crossmember (V).
- Position a small pvc tarp clamp (W) on both edges and secure together with #10-24x3/4" wafer head screws.



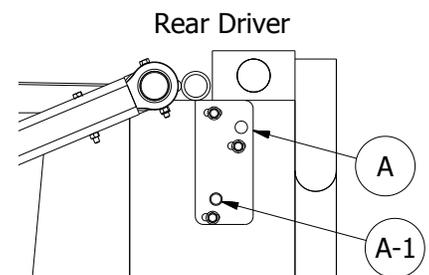
Step 8: Pivot Arm Guide Installation

- The pivot arm guides (X) prevent the tarp from shifting to either side of the box when closed.
- Close the tarp and place a pivot arm guide along one of the ribs in the box wall against the inside of the aluminum arms.
- Mark the 2 holes on the box and drill a 11/32" at your marks.
- Secure the pivot arm guides to the box with 3/8"x1-1/4" self threading bolts.
- Repeat for the other side of the box.

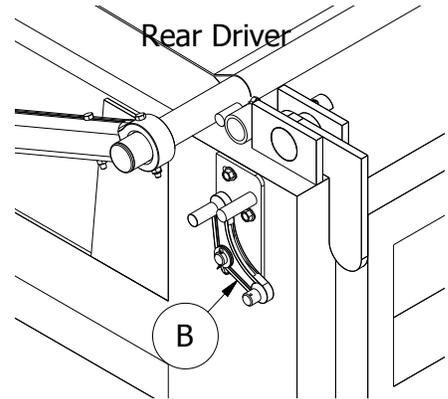


Step 9: OPTIONAL Rear Lock Installation

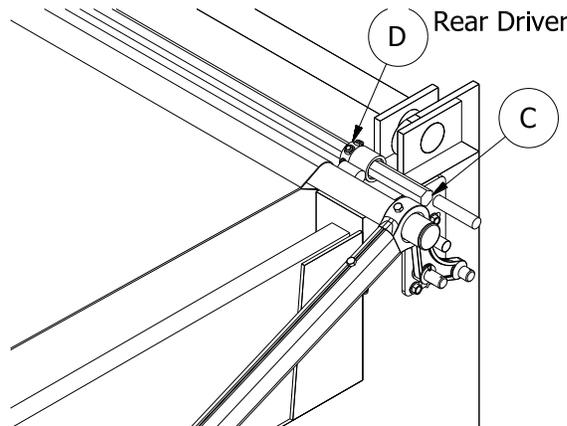
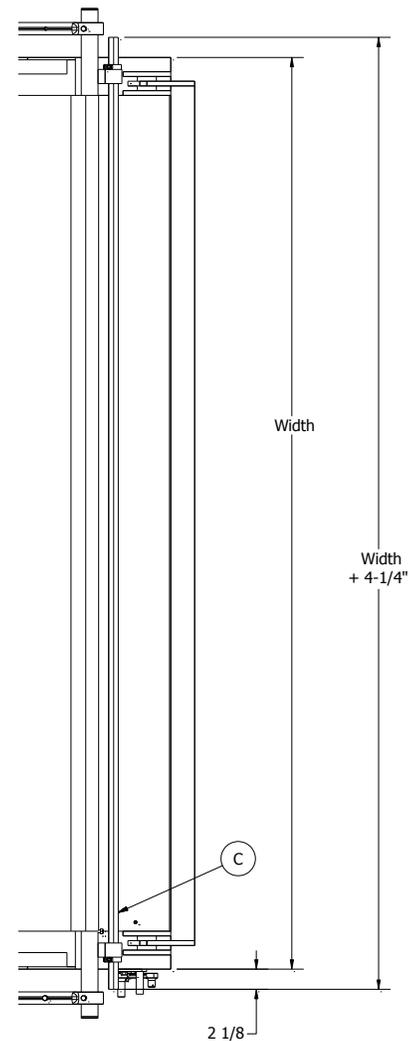
- Mount the rear driver lock bracket (A) to the back post of the trailer shown here.
- Place the bracket so the front edge of the bracket is in line with the center of the short pipes welded on the rear crossmember and the top of it is the same height as the bottom of the pipes.
- Mark your holes in the center of the slots and drill an 11/32" at your marks.



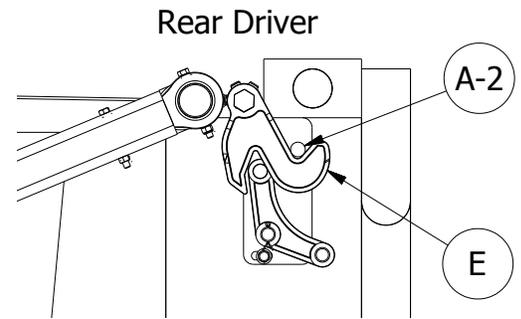
- Secure the rear driver lock bracket to the trailer with 3/8"x1-1/4" self-threading bolts.
- Slide the plastic latch (B) onto the mounting pin (A-1) (shortest one with a hole in it) on the driver rear bracket. The side with the collar on it goes to the inside so both posts stick outwards from the trailer. Secure on with a 3/4" machinery bushing and 1/8" cotter pin.



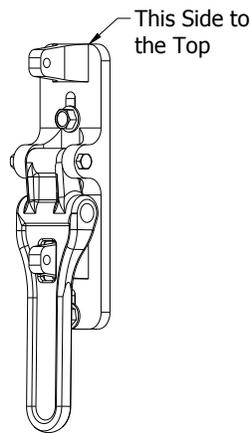
- Measure the width of the box where you will be installing the lock components.
- Cut the aluminum hex shaft (C) at the width of the box + 4-1/4".
- Slide the shaft into the rear crossmember pipes.
- Slide the hex locking collars (D) onto the hex shaft between crossmember pipes and into the pipes. Slide them on so the setscrews are on the same faces of the hex shaft.
- Center the hex shaft so 2-1/8" sit out each side of the box and tighten the setscrews in the hex collars preventing it from moving side to side.



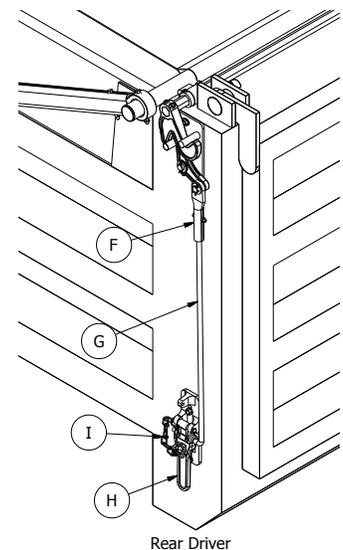
- Slide a rear hook (E) onto each end of the hex shaft so they are flush to ends and are positioned the same. Secure the rear hooks to the hex shaft by tightening the setscrews in them.
- Rotate the hex shaft so the rear hook locks under the pin (A-2) on the driver bracket. You may need to adjust the driver bracket so the rod sits in the hook as shown here.
- Have the latch so the largest post on it is pushing up against the rear hook as shown here.
- Place the plastic rod connector (F) onto the latch and secure with 3/4" machinery bushing and 1/8" cotter pin.
- Place the short leg of the aluminum connecting rod (G) into the handle assembly (H). Use the lynch pin (I) to keep the handle assembly in the locked position shown here.



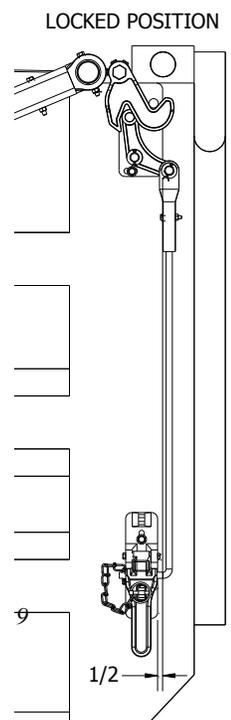
Locked Position



Handle Assembly (H)

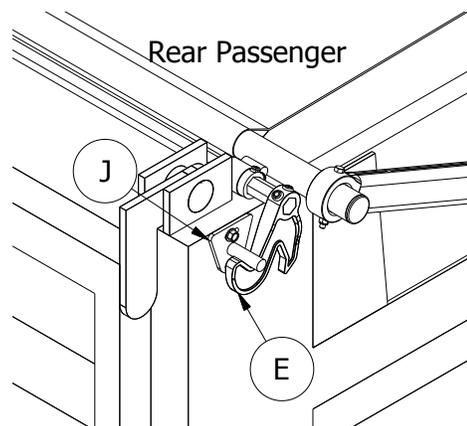


- Next slide the long leg of the aluminum connecting rod into the rod connector while having the locking handle flush up against the trailer. The aluminum rod may need to be shortened.
- With the aluminum connecting rod at the necessary length secure it to the rod connector. Make sure the aluminum rod is all the way into the rod connector
- Drill a 1/4" hole through both of them and bolt together with a 1/4"x1-1/2" bolt and nylon lock nut. The aluminum connecting rod has to be positioned so the short leg is running parallel with the side of the box. Drill the hole through them so the bolt runs the length of the box preventing it from rubbing the side of the trailer.
- Once secured make sure the hook is fully locked under the locking pin with the latch pushing up against it and place the handle assembly against the side of the box. The back face of the latch handle should be 1/2" in from the back face of the driver lock bracket.
- Mark the bottom of the top slot in the handle assembly

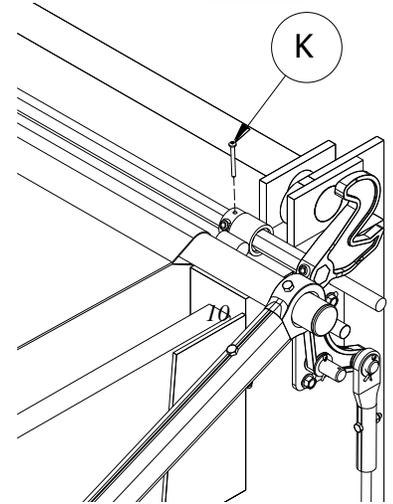
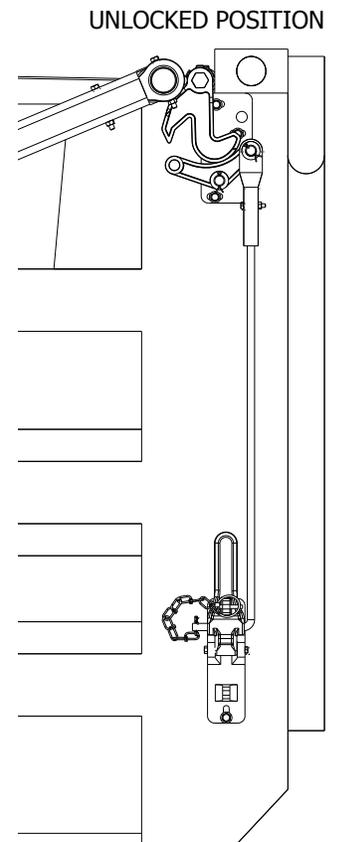


- Drill a 11/32" hole at your mark and secure the handle assembly to the trailer with a 3/8"x1-1/4" self threading bolt.
- Remove the lynch pin from the handle allowing the handle to rotate up.
- With the handle assembly sitting vertically drill a 11/32" hole at the bottom of the bottom slot and secure with a 3/8"x1-1/4" self threading bolt.
- Rotate the handle down so the hook locks and you can put the lynch pin back in the handle preventing it from unlocking. You should have to apply a little force to lock the handle and should snap locked when over centered. If this doesn't happen, loosen the (2) bolts securing the handle to the trailer and move the handle downwards and retighten the bolts. You do not want to have excess tension on the handle when locking it.

- With the driver side hook locked under the pin, place the passenger side lock bracket (J) against the trailer so the locking pin sits in the hook like the driver side.
- Mark the center of the top slot and drill a 11/32" hole at your mark.



- Go to the driver side and unlock the tarp by rotating the handle up and using the lynch pin to secure it in the unlock position.
- Secure the bracket to the trailer with a 3/8"x1-1/4" self-threading bolt. Have the top of the bracket running parallel with the top of the trailer.
- Drill a 11/32" hole in the middle of the bottom slot and secure with a 3/8"x1-1/4" self threading bolt.
- Lock the hooks under the locking pins and adjust the passenger side if necessary.
- With the lock working properly, bolt the hex locking collars to the hex shaft. Drill a 13/64" hole through the pre-drilled holes in the locking collars and hex shaft.



- Secure together with the #10x2" machine screw and nylon lock nut.

Note: You may want to lift the rear crossmember up and rotate the hex shaft to allow for easier drilling and installing

Note: For the lock to work properly the pivot arm guides need to be installed and provide very little side to side movement when closed so the rear lock components line up properly.

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

Warranty

Michel's Industries warrants their products for a period of one year from date of purchase. **ONLY** the Power Plus electrical motor has 18 month warranty from date of purchase and is **VOID** if opened or tampered with. Any parts returned to Michel's Industries LTD. will be shipped prepaid by the customer and will be returned F.O.B. St.Gregor, Sk. Canada. We will not assume responsibility for shipping, labor or travel expenses. Please Note: We reserve the right to make improvements; therefore specifications are subject to change without notice.

Operating Instructions

Electric

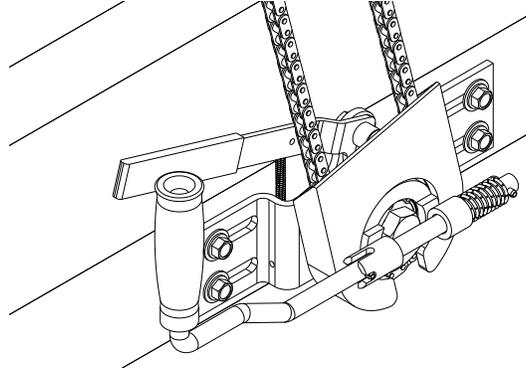
To open and close the tarp system, simply hold the rocker switch in the cab. When closing you have to let go of the switch when the rear crossmember rests on the rear of the box. Opening the tarp you hold the switch until the tarp is tight on the rolltube and the rear crossmember is up against the rolltube brackets. To open the tarp if there is an optional rear lock installed, the tension should first be removed from the tarp by pushing 'close' on the rocker switch. Then go to the rear of the trailer and remove the lynch pin holding the handle in the locked position. Rotate the handle up and use the lynch pin to secure the handle in the unlocked position. Perform the reverse of this procedure to lock the tarp when you are closing it. Once the tarp is locked, it can be tightened by pressing 'open' on the rocker switch.

In case of Motor Failure

- Install the roller chain on the top sprocket and crank handle as shown in Step 5.
- On the passenger side remove the 5/16" bolt holding the motor shaft to the rolltube as shown in Step 3.
- Now the rolltube will just rotate on the motor shaft while the new motor is being shipped to you.

Manual Backup Crank

Opening Tarp – To open the tarp so it is fully rolled up on the front rolltube to allow product to be dumped into the box, first pull the handle of the crank and rotate it so the handle is sticking out from the box. Turn the crank counter clockwise to open the tarp. The locking handle on the crank will click on the sprocket and prevent the crank from spinning if you let go of the handle. Stop cranking when the tarp is completely rolled up on the front rolltube. Reposition the crank handle back into transport position so it will not be sticking out (shown below).



Closing Tarp – To cover your box, pull the crank handle and rotate it so the handle will be sticking out from the box. Firmly hold onto the crank handle and lift the locking handle up and slowly turn the crank clockwise to unroll the tarp. **CAUTION** The crank will want to spin clockwise on you since there is a high torque being applied to it. If you need to stop, lower the locking handle so it locks in the sprocket first and then let go of the handle. In case your hand slips off the crank handle, quickly let go of the locking handle and the tarp will stop. Unroll the tarp until the rear cross member is sitting on the back of the box.

Maintenance Guidelines

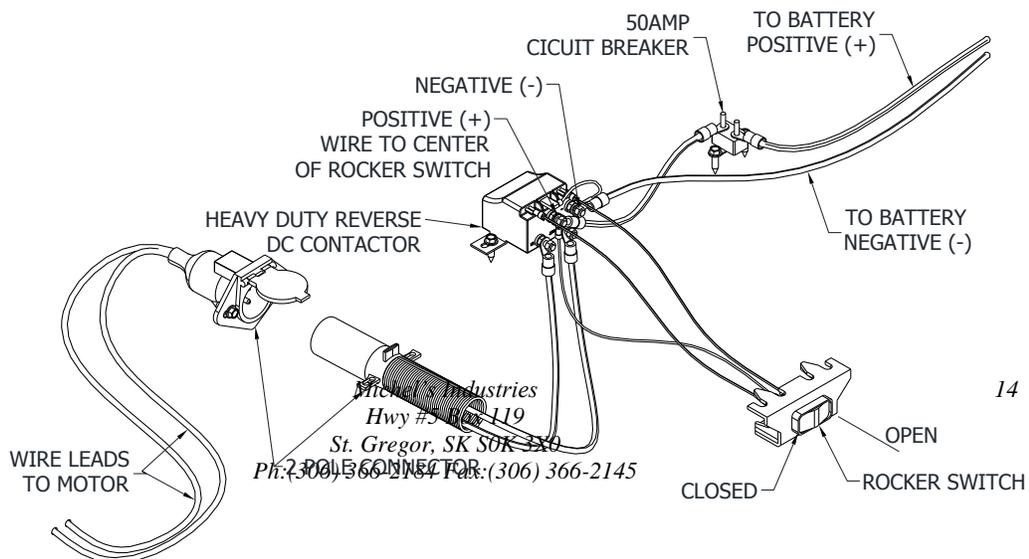
- Inspect the tarp for rips and tears.
- Make sure all bolts are tight and none are missing.
- Inspect the springs for breakage or stretching.
- Examine the bearings on the front shaft for excessive play and wear.
- Replace all worn and/or broken parts.

Trouble Shooting Electric System

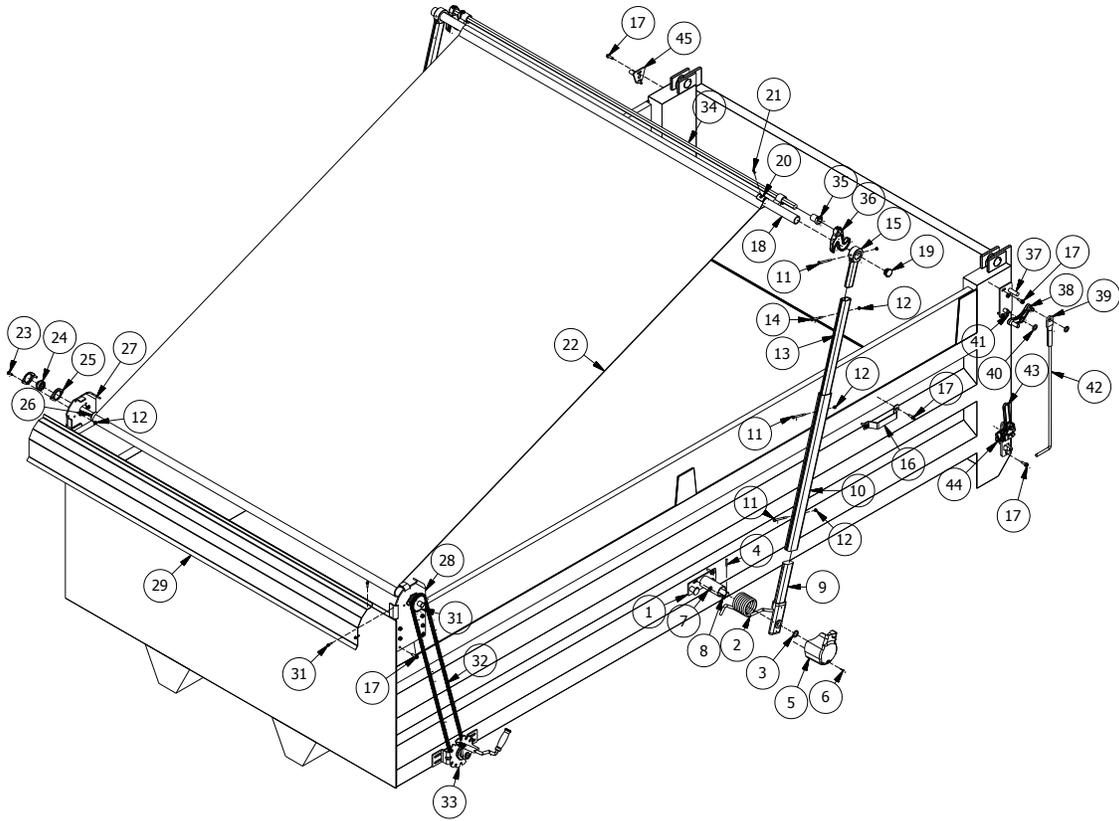
- 1) My motor does not work, how do I check to see if the problem is the motor?
 - Take a set of jumper (booster) cables and hook up one end directly to a 12v battery using red for positive and black for negative, and then take the other end and hook one clamp on one of the motor posts, and the other on the remaining motor post. The motor should turn one way, then change the clamps on the motor to the opposite posts, and the motor should turn the other way. If motor does not run in both directions, you will need to replace the motor. *****DO NOT TAMPER WITH MOTOR OR GEAR BOX AS THIS WILL VOID THE WARRANTY***** Should you have a problem with the motor, call us at 1-306-366-2184.

- 2) If the motor is functioning properly, but the switch does not work. What do I check?
 - Trace the wire from the motor to the solenoid block checking for damage. If the motor is on a trailer double check the 2 pole connector for loose connections.
 - At the solenoid block double-check all connections to make sure they are all tight and clean.
 - If the wire is all good and the connections are all tight press the switch open and close and the solenoid should click each time.
 - i. If the solenoid doesn't click there are 3 areas where there could be problems
 1. Switch
 2. Solenoid
 3. No power at the solenoids.
 - ii. If the solenoid clicks when the switch is pressed both ways then there is a problem with the wire running from the solenoid to the motor.
 - iii. If the solenoid only clicks one way then there is a problem with the switch or solenoid or a loose connection.
 - **Test for power at the Solenoid** - Use a 12v tester and connect the ground/negative to the negative post of the solenoid and the positive to the (+) post to see if there is power. If there is no power at the solenoids, then there are 3 things that could be wrong.
 - i. Loose connection on your battery

- ii. Wire is damaged
 - iii. Circuit breaker
- Trace the wire back to the battery checking for damage and loose connections. If there is no damage or loose connections and there is still no power, test both sides of the in line circuit breaker located on the positive wire. If there is no power on the solenoid side, but on the other side then the circuit breaker needs to be replaced.
- **Test Switch** – First see if there is power coming to the switch by using a 12v tester. With the ground attached to the truck frame and the positive to the middle post of the switch.
 - i. If there is no power at the switch the wire has a loose connection or has been damaged between the switch and the solenoid.
 - ii. If there is power then see if there is power leaving the switch. Press the switch to one side and then connect the positive to the post on that side while the ground is still connected to the frame. Check both posts.
 - 1. If there is no power at one or both sides then the switch needs to be replaced.
 - 2. If there is power leaving the switch on both sides then check the solenoid to see if there is power coming from the switch.
- **Test for power at the Solenoids coming from the Switch** – Connect the ground to the negative post of the solenoids and the positive to one of the small posts that at a 14G wire is connected to. Press the switch either way to see if there is power coming to the post. Check both posts.
 - i. If there is no power coming to one or both of the posts then check for the wire for damage or loose connections.
 - ii. If there is power at both posts then test to see if there is power leaving the solenoid.
- **Test for power leaving the Solenoids** – With the ground attached to the negative post connect the positive to the one of the outside posts. Press the switch either way to see if there is power there. Check both posts.
 - i. If there is power at both posts then check the wire running to the motor for damage and loose connections.
 - ii. If there is no power at one or both posts then the solenoid needs to be replaced.



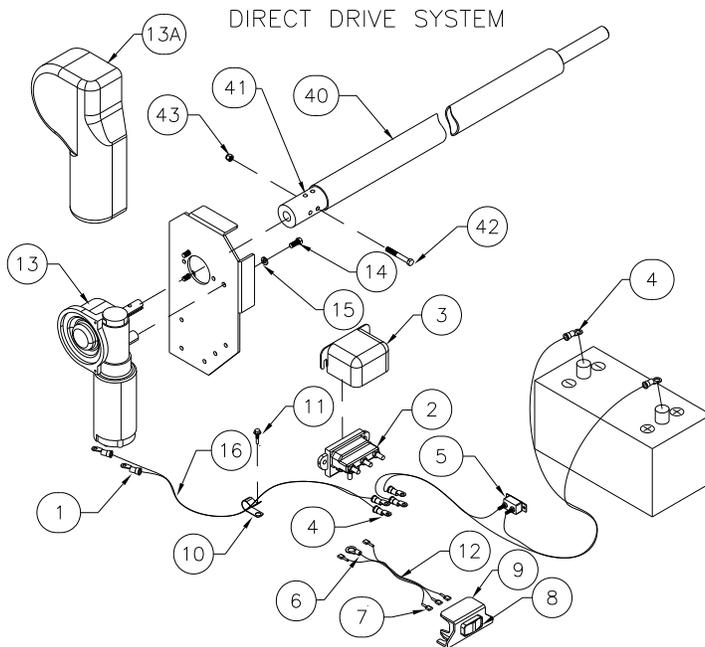
Parts Break Down



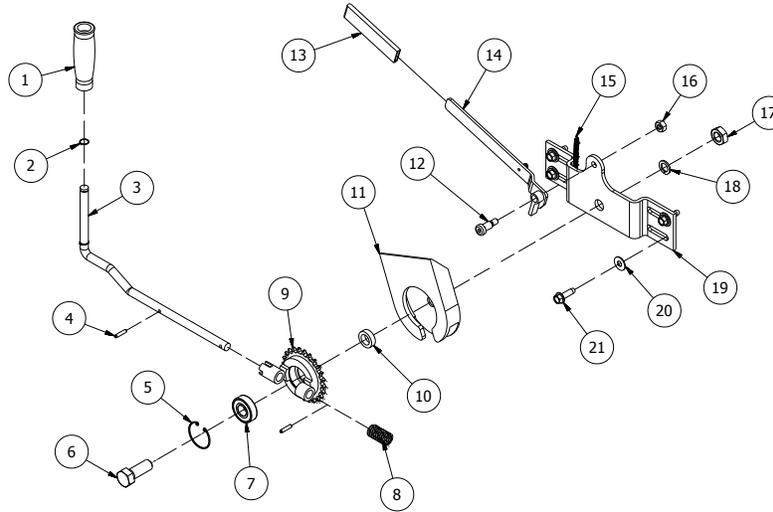
| REF # | DESCRIPTION | PART # | REF # | DESCRIPTION | PART # |
|-------|-----------------------------------|--------------|-------|----------------------------------|-------------|
| 1 | DURA PIVOT ARM BRACKET | 0002-061001 | N/A | YELLOW CANVAS MATERIAL | FR02-072003 |
| 2 | 1/2" DURA SPRING - DRIVER | 0117-003001 | 23 | 5/16"X1" CARRIAGE HEAD BOLT | 0105-009102 |
| N/A | 1/2" DURA SPRING - PASSENGER | 0117-003002 | 24 | UC205-16 SELF ALIGNING BEARING | 0115-000008 |
| 3 | 1" MACHINERY BUSHING | 0101-001407 | 25 | 52mm FLANGETTE | 0115-001000 |
| 4 | 1/4"X2" ROLL PIN | 0110-000021 | 26 | 8' FRONT ROLLTUBE | 0002-040308 |
| 5 | PLASTIC SPRING COVER | 0113-000048 | N/A | 8'6" FRONT ROLLTUBE | 0002-040311 |
| 6 | #10X1/2" SELF TAPPING SCREW | 0106-000032 | 27 | DURA ROLLTUBE BRACKET - PASS | 0002-040502 |
| 7 | 3/8" FLAT WASHER | 0101-001002 | 28 | DURA ROLLTUBE BRACKET - DRIVER | 0002-040501 |
| 8 | 3/8"X1-1/2" HEX BOLT | 0105-000204 | 29 | 8' STD DURA FRONT HOOD | 0002-040503 |
| 9 | BOTTOM CAST PIVOT ARM | 0002-061013 | N/A | 8' 6" STD DURA FRONT HOOD | 0002-040504 |
| 10 | BOTTOM ALUMINUM ARM - 5' | 0002-061002 | 30 | 1/4"X1" LAG SCREW | 0106-000005 |
| 11 | 5/16"X3-1/2" HEX BOLT | 0105-000112 | 31 | #40X36 SPROCKET - 1" BORE | 0002-041106 |
| 12 | 5/16" NYLON LOCK NUT | 0100-001101 | 32 | #40 HYDRO ROLLER CHAIN | 0116-002005 |
| 13 | TOP ALUMINUM ARM | 0002-061003 | 33 | FLIP CRANK ASSEMBLY | 0002-010620 |
| 14 | 5/16"X3" HEX BOLT | 0105-000110 | 34 | 1" HEX SHAFT | 0002-031004 |
| 15 | REAR CROSSMEMBER HOLDER | 0161-003018 | 35 | REAR HEX LOCK COLLAR | 0113-000302 |
| 16 | ALUMINUM PIVOT ARM GUIDE - 2" | 0002-061006 | N/A | 1/4"X3/8" SET SCREW - KNURL | 0104-000002 |
| N/A | ALUMINUM PIVOT ARM GUIDE - 1-1/2" | 0002-061011 | 36 | REAR LOCK HOOK | 0113-000301 |
| 17 | 3/8"X1-1/4" SEF THREADING BOLT | 0106-000016 | 37 | REAR DRIVER DURA LOCK BRACKET | 0002-031001 |
| 18 | 8' DURA REAR CROSSMEMBER - LOCK | 0002-061012 | 38 | REAR DURA LATCH | 0113-000305 |
| N/A | 8'6" DURA REAR CROSSMEMBER - LOCK | 0002-061009 | 39 | ROD CONNECTOR | 0113-000306 |
| N/A | 8' DURA REAR CROSSMEMBER | 0002-061004 | 40 | 3/4" MACHINERY BUSHING | 0101-001406 |
| N/A | 8'6" DURA REAR CROSSMEMBER | 0002-061005 | 41 | 1/8"X1-1/4" COTTER PIN | 0110-000022 |
| 19 | 1-3/4"OD PLASTIC PLUG | 0113-000054 | 42 | CONNECTING ROD - 60" | 0002-031003 |
| 20 | REAR PVC TARP CLAMP | 0113-000036B | 43 | REAR LOCK HANDLE ASSEMBLY | 0002-031008 |
| N/A | FRONT PVC TARP CLAMP | 0113-000036 | 44 | 1/4"X1-9/16" LYNCH PIN | 0110-000004 |
| 21 | #10X3/4" WAFER TEK SCREW | 0106-000011 | 45 | REAR PASSENGER DURA LOCK BRACKET | 0002-031002 |
| 22 | MESH MATERIAL | FR02-072001 | 46 | 45 DEGREE CAST ELBOW | 0151-910005 |
| N/A | VINYL MATERIAL | FR02-072018 | 47 | 35 DEGREE CAST ELBOW | 0151-910004 |
| N/A | NEOPRENE MATERIAL | FR02-072002 | | | |

Electrical and Crank Handle Assembly Parts Break Down on Next Page

Parts Break Down



| REF # | DESCRIPTION | PART # |
|----------------|--|--------------|
| 1 | WIRE END #6 - 1/4" | N/A |
| 2 | REVERSE DC CONTACTOR | 0145-400003 |
| 3 | REVERSE DC CONTACTOR COVER | 0145-400005 |
| 4 | WIRE END #6 - 3/8" | N/A |
| 5 | 50amp CIRCUIT BREAKER | 0145-100015 |
| 6 | WIRE END 14G - 3/8" | N/A |
| N/A | WIRE END #6 - #10 | N/A |
| 7 | WIRE END 14G - 1/4" PUSH ON | N/A |
| 8 | ROCKER SWITCH | 0145-400002 |
| 9 | ROCKER SWITCH BRACKET ONLY | 0145-400009 |
| 10 | 3/4" WIRE CLIP | 0145-200005 |
| 11 | 1/4" LAG SCREW | 0106-000005 |
| 1-11 | 40amp ROCKER SWITCH ELECTRICAL KIT | 0145-4000001 |
| 12 | 14G-3 WIRE | 0145-100007 |
| 13 | SUPER TORK MOTOR | 0145-100014 |
| 13A | SUPER TORK CHROME MOTOR COVER c/w SCREWS | 0145-100014A |
| 14 | 5/16"X3/4" HEX BOLT | 0105-000101 |
| 15 | 5/16" LOCK WASHER | 0101-001201 |
| 16 | #6 DOUBLE STRAND WIRE | 0145-120015 |
| 40 | 8' ELECTRIC ROLLTUBE C/W REF#20. | 0002-040312 |
| N/A | 8'6" ELECTRIC ROLLTUBE C/W REF# 20 | 0002-040313 |
| 41 | MOTOR BUSHING - FLIP (INCLUDED WITH REF# 1) | 0161-003004 |
| 42 | 5/16" X 2-1/4" HEX BOLT | 0105-000107 |
| 43 | 5/16" NYLON LOCK NUT | 0100-001101 |
| 1-43 | MICHEL'S 8' ELECTRIC FLIP TARP KIT - DIRECT DRIVE | 0002-080205 |
| N/A | MICHEL'S 8'6" ELECTRIC FLIP TARP KIT - DIRECT DRIVE | 0002-080206 |
| 1-43 w/o 40 | MICHEL'S FLIP DIRECT DRIVE ELECTIC KIT - JUST MOTOR BUSHING (41) NOT COMPLETE ROLLTUBE AND EVERYTHING ELSE | 0002-080207 |



| REF # | DESCRIPTION | PART # | REF # | DESCRIPTION | PART # |
|-------|------------------------------------|--------------|-------|---------------------------------|-------------|
| 1 | BOTTOM FLIP CRANK ASSEMBLY | 0002-010620 | 12 | PLASTIC CHAIN GUARD | 0002-010622 |
| 2 | LARGE PLASTIC GRIP | 0113-000027 | 13 | 1/2" SHOULDER BOLT X 3/4" | 0105-006402 |
| 3 | 9/16" SNAP RING | 0110-000100 | 14 | RATCHET HANDLE VINYL CAP | 0113-000013 |
| 4 | BOTTOM FLIP CRANK HANDLE | 0002-010003 | 15 | RATCHET HANDLE | 0002-010623 |
| 5 | 7/32" ROLL PIN | 0110-000003 | 16 | EXTENSION SPRING | 0117-002015 |
| 6 | 1-7/8" INTERNAL SNAP RING | 0110-000012 | 17 | 3/8" NYLON LOCK NUT | 0100-001102 |
| 7 | 3/4"X2" HEX BOLT | 0105-000606P | 18 | 3/4" JAM NUT | 0100-001206 |
| 8 | 6204-2RS BEARING | 0115-000001 | 19 | 3/4" LOCK WASHER | 0101-001206 |
| 9 | COMPRESSION SPRING | 0117-002003 | 20 | BOTTOM CRANK HANDLE BRACKET | 0002-010621 |
| 10 | #40X24 SPROCKET c/w BEARING, TUBES | 0161-023005A | 21 | 3/8"X1-1/4" SELF THREADING BOLT | 0106-000016 |
| 11 | SPROCKET SPACER | 0002-010624 | 22 | 3/8" FLAT WASHER | 0101-001102 |