

Michel's Grain Trailer EZLIFT Instructions

0017-000002 - Michel's EZ-Lift Kit for Grain Trailers



Description:

The Michel's EZ-Lift is a patent pending, torque amplifying gearbox designed to raise and lower the Landing Gear on a trailer. The Michel's EZ-Lift has two reduction ratios, one for lighter loads to get the job done faster, and one for heavy loads to effortlessly raise or lower your loaded trailer. This kit allows for a wide array of mounting options and is designed to work with Grain Trailers.

The Michel's EZ-Lift may be left on one trailer if desired and not removed between uses. **Please Note** that on some trailers the EZ-Lift can put the trailer over Legal width and **MUST** be removed after use.

What is included:

1-Michel's Trailer EZ-Lift
1-Torque Bracket
1-Trailer Mounted Bracket
1-STOP Decal
1-Nut Key

1-Socket Adapter
1-Quick Pin
1-Quick Pin with chain
1-Lag screw
1-Instruction

Warning the use of Hammer Drill or Impact will void the Warranty

Step 1:

Determine where and how the EZ-Lift will be mounted onto the landing gear.

Note: The EZ-Lift is designed to slide over a 1" shaft. The paint or powder coating may have to be removed from the shaft to slide the EZ-Lift on.

Note: The Michel's EZ-Lift will come preassembled as a "Out the Rear Assembly". See Figure 1.

Slide the Gearbox onto the input shaft and determine if the cross hole of the landing gear will line up with the slot in the EZ-Lift. If the hole does not line up with the slot in the EZ-Lift, the EZ-Lift may need to be reconfigured to the "Out the Front Assembly".

Note: There is a specialty tool in the kit that is used to hold the nut for bolting the gearbox together. See Figure 2.

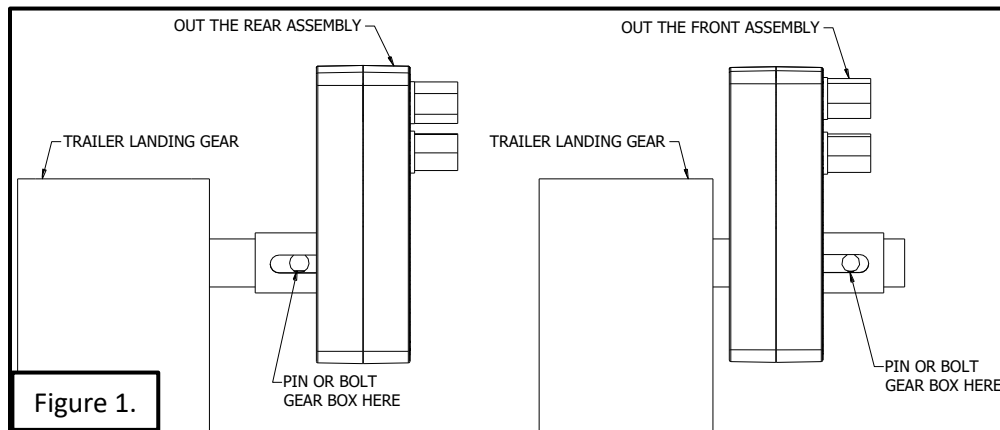


Figure 1.

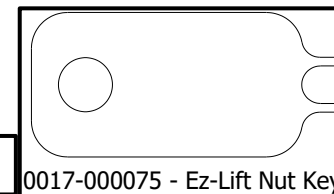


Figure 2.

0017-00075 - Ez-Lift Nut Key

Reconfiguration Instructions, Refer to Figure 7 for some common trailer configurations. If reconfiguration is not needed, continue to Step 2. Depending on how the Michel's EZ-Lift fits the landing gear, it may be necessary to reverse the output shaft within the EZ-Lift to move the slot to the front of the EZ-Lift. To do this, the EZ-Lift will have to be disassembled and reassembled. To start the process;

- A. Place the EZ-Lift face down.
- B. Remove the mounting bolts and the back cover. **Note:** If the bearings do not stay with the cover, remove and install back into cover.
- C. Remove all the gears and spacers.

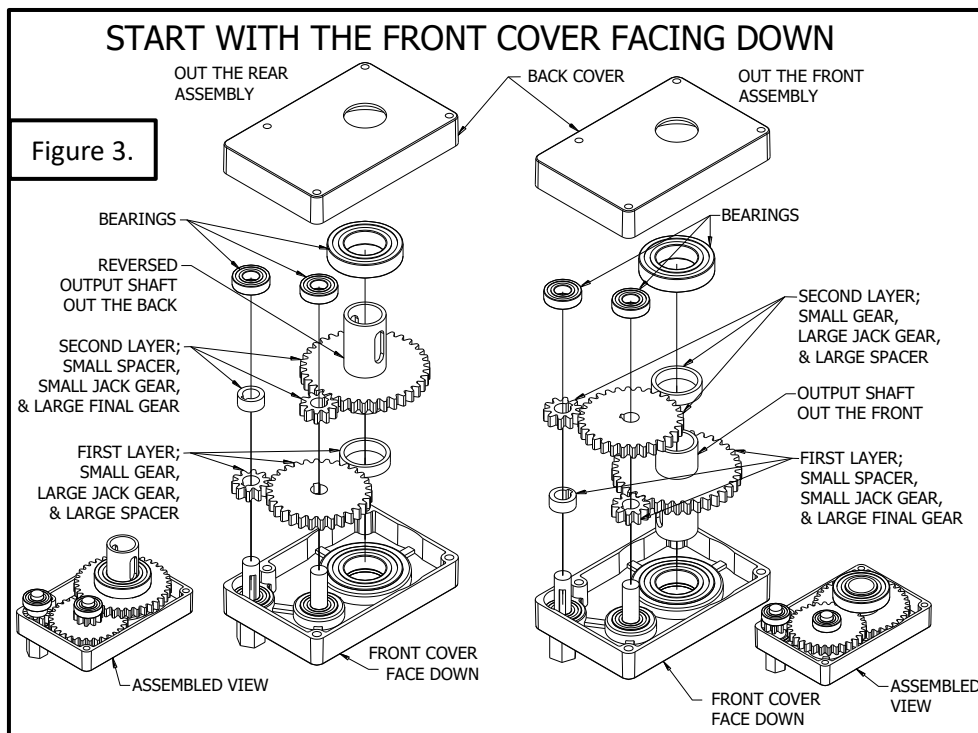


Figure 3.

Once disassembled, follow the correct instructions for the desired assembly.

Note: When referring to Figure 3, build each assembly from the bottom up.

Out the Rear Assembly Instructions

1. Place the Small Gear on the Heavy Load shaft.
2. Place the Large Jack Gear on the Light Load Shaft.
3. Turn the output shaft so the slot is towards the top. Place the Large Spacer on the output shaft below the drive key and insert the output shaft into the bearing on the front cover.
4. Slide the Large Final Gear onto the output shaft.
5. Place the Small Spacer on the Heavy Load Shaft.
6. Place the Small Gear on the Light Load shaft.
7. Install the back cover and bolt back together.

Out the Front Assembly Instructions

1. Insert the Output Shaft through the bearing up to the key so the drive slot is out the front.
2. Slide the Large Final Gear onto the output shaft.
3. Place the Small Gear on the Light Load shaft.
4. Place the Small Spacer on the Heavy Load Shaft.
5. Place the Large Spacer on the shaft.
6. Place the Large Jack Gear on the Light Load Shaft.
7. Place the Small Gear on the Heavy Load shaft.
8. Install the back cover and bolt back together.

Step 2: STOP Decal Information

Before using your Michel's EZ-Lift, Crank the landing gear all the way down **by hand**, raising the trailer all the way up until it stops. Once the landing gear is all the way up, clean the lower section of the leg and apply the included yellow and red "Stop" decal just below the bottom of the stationary section of the landing gear. See Figure 3. This Decal creates a visual warning when the landing gear is reaching the limits of the travel. **Note:** It is important not to bottom out the landing gear under mechanical power, since it can cause damage to one or all the following components; The landing gear, Michel's EZ-Lift, or the hand-held drill. Lower the trailer back down **by hand** until it covers the sticker. When raising the trailer up using the Michel's EZ-Lift, the "Yellow" portion of the decal means **Caution**. As soon as any portion of the red sticker is visible, it is a **Warning** to **STOP** raising the trailer up.

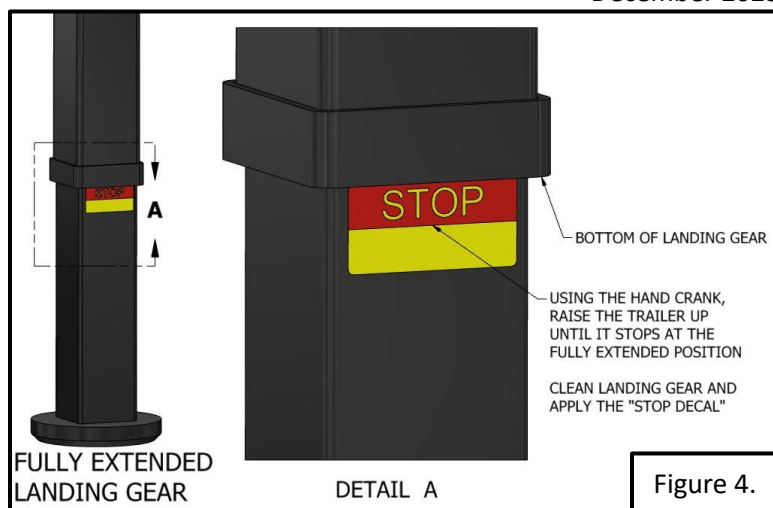


Figure 4.

Step 3: Torque Plate And Trailer Mounted Bracket Information

The Michel's Grain Trailer EZ-Lift comes with a Torque Bracket and a Trailer Mounted Bracket.

The Torque Bracket is able to be mounted 4 different ways onto the EZ-Lift. It can be mounted with the torque flange on the top or the bottom of the EZ-Lift. It can also be mounted either forward facing or rearward facing. See figure 5.

Mount the torque plate to the EZ-Lift by removing the bolts that hold the EZ-Lift assembly together. Place the Mounting plate in the proper orientation and secure to the EZ-Lift with the same hardware that was removed. Refer to Figure 7 for common trailer configurations.

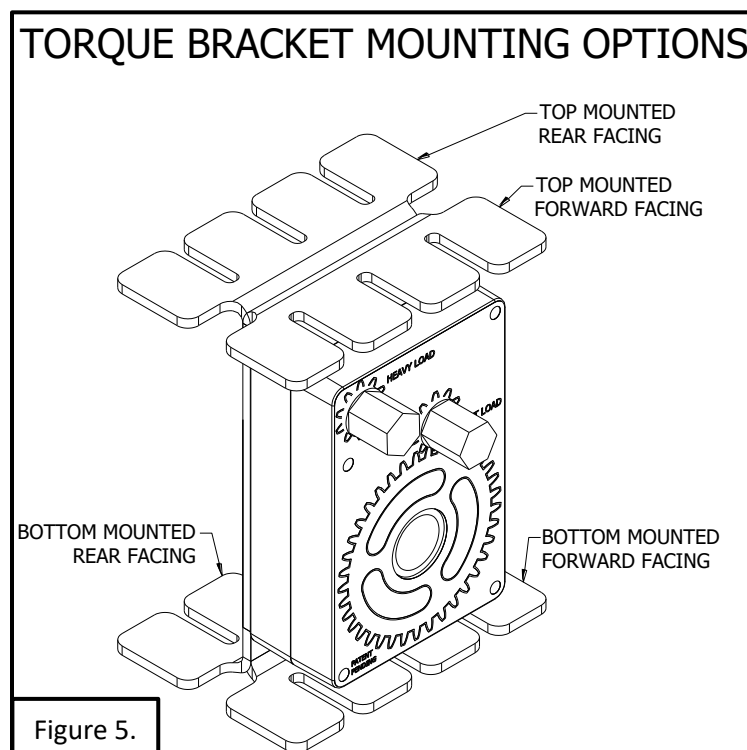


Figure 5.

The Trailer Mounted bracket is designed to be mounted to the trailer in a position that is going to stop the EZ-Lift from rotating. This bracket will remain attached to the trailer even when the Trailer EZ-Lift is removed. See Figures 6 & 7. If using the Michel's Trailer EZ-Lift on multiple trailers, more brackets can be ordered. The part number for the bracket is 0017-000051 – Grain Trailer EZ-Lift – Trailer Bracket.

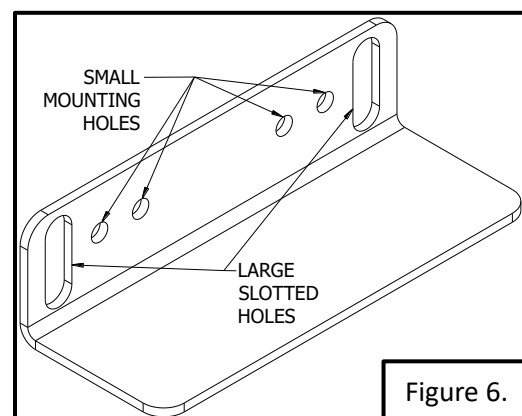
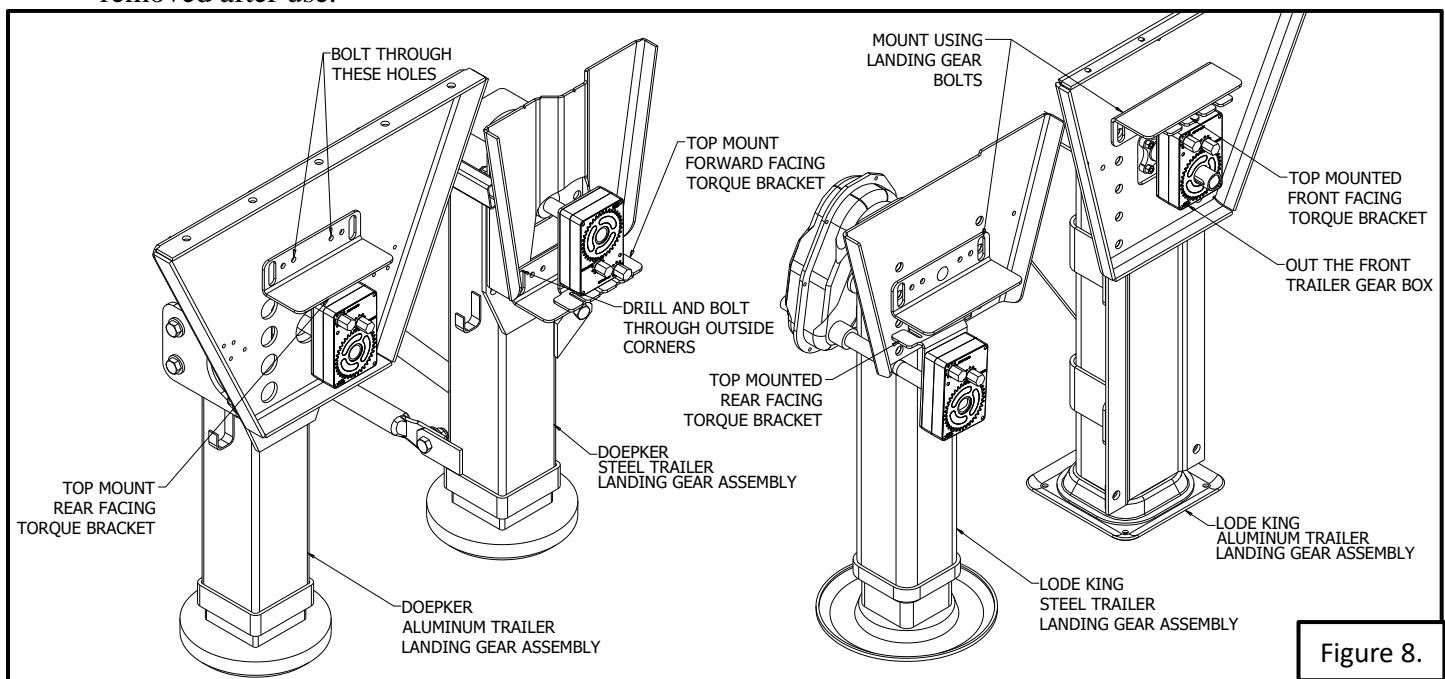
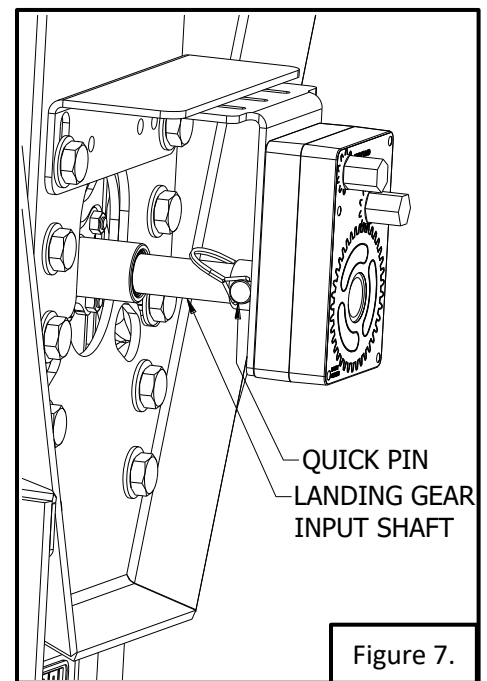


Figure 6.

Step 3: Attachment Instructions

1. Remove the crank handle from the landing gear.
2. Mount the Michel's EZ-Lift on the input shaft of the landing gear and secure with the supplied quick pin. Refer to Figure 6. Change the input shaft of the landing gear from high speed to low speed a couple of times, by pushing and pulling on the EZ-Lift. This will determine how much room there is for the Torque Bracket and which way it will need to be mounted on the EZ-Lift.
3. Now that the EZ-Lift is mounted, the Trailer Mounted bracket can be secured to the trailer. The large slotted holes can be used by removing one pair of bolts holding the landing gear onto the trailer. **Note:** On some trailers, the landing gear mounting bolts can not be used and may require holes to be drilled to mount the Trailer Mounted bracket. See Figure 7 for some mounting options. Note: This is just an example of some mounting styles and other trailers may require different mounting positions. It may be necessary to modify or fabricate brackets depending on the application.
4. If the EZ-Lift is going to remain attached to the landing gear, Michel's recommends using a bolt to secure it to the output shaft. The Michel's EZ-Lift may be left on one trailer if desired and not removed between uses. **Please Note** that on some trailers the EZ-Lift can put the trailer over Legal width and **MUST** be removed after use.



Warning the use of Hammer Drill or Impact will void the Warranty

Step 4: Landing Gear Locking

Without locking the landing gear, there is a possibility that the landing will creep down. This may cause a ground clearance problem. There are a couple of options for locking the landing gear.

1. Remove the EZ-Lift and pin the crank handle back onto the landing gear using the same quick pin.
2. Before removing the EZ-Lift, turn the quick pin so it is vertical. Remove the Trailer EZ-Lift and insert the included quick pin with a chain attached into the input shaft of the landing gear. Attach the other end of the chain to the trailer so the chain is close to being tight. This cable and quick pin will prevent the landing gear from creeping down.
3. If leaving the Trailer EZ-Lift on the trailer, a second hole may have to be drilled for the Safety Pin.

Operation:

Once the Michel's EZ-Lift is attached to the landing gear of a trailer, it is ready to be used. To operate the EZ-Lift, use a socket adaptor (Included) with a 3/4" socket and a cordless drill to effortlessly raise or lower the trailer. *****Warning the use of a Hammer Drill or Impact will void the Warranty.***** There are two input shafts on the EZ-Lift, a Light Load shaft, and a Heavy Load shaft. These inputs will be used under different load conditions. The Light load input shaft should only be used when the landing gear is not touching the ground. For example: When lowering the landing gear to the ground or raising the landing gear after the trailer has been hitched to the vehicle. The Heavy Load input shaft should be used when lifting or lowering the weight of the trailer. **Note:** To reduce the load stress on the drill, switch the drill to Low speed. This will reduce the stress on the drill and improve the battery life.

To aid in the safe operation of the Michel's EZ-Lift, the landing Gear, and the Cordless Drill; Use the clutch setting on the Cordless Drill on the highest setting needed to raise the trailer without slipping the clutch. This will help prevent any damage if the landing gear is bottomed out in either direction. It is good practice to place a piece of 2x6 wood or similar under the trailer landing gear to support and distribute the weight evenly. Make sure to chock the tires on the trailer before uncoupling, even if on perceived flat ground.

Using the Michel's EZ-Lift greatly reduces the fatigue of the operator and reduces the likelihood of shoulder and elbow injuries caused by hand cranking.

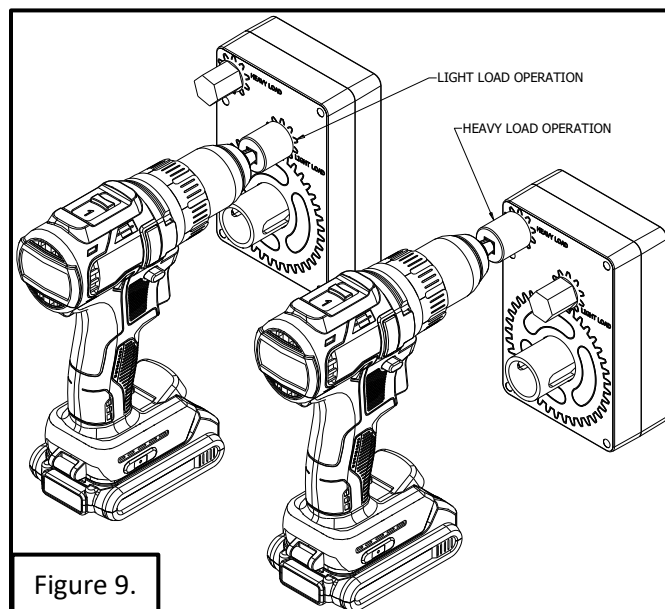


Figure 9.

*****Warning the use of a Hammer Drill or Impact will void the Warranty.*****

Warranty:

All Hardware carries a **One Year Warranty** against manufacturers defects **FROM THE DATE OF PURCHASE, F.O.B. FACTORY**, St. Gregor, Saskatchewan, Canada. All warranty work must be approved by the manufacture prior to warranty work done by an approved warranty depot. **Proof of purchase must accompany all claims.**

Michel's

Industries, Ltd.

P.O. Box 119

St. Gregor, Saskatchewan

S0K 3X0 Canada

Ph#(306)366-2184 or Fax#(306)366-2145