

## Metal Tech 4x4 “Blackbird” 2016+ Tacoma Bumper & Winch Mount Installation guide

### Standard Parts:

- 1 Bumper
- 1 Winch Mount
- 1 Hoop
- 1 Accessory package
  - a. Lower Guard
  - b. Side Plates Left & Right
  - c. Large Spacers (2 universal)
  - d. Small Spacers (2 universal)
  - e. Installation wrench
  - f. Winch Controller Mount
- 1 Bumper Bolt Kit (BK-MT-33701)
- 1 Winch mount Bolt Kit (BK-MT-TACO3G-33702)
- 1 Hoop Bolt Kit (BK-MT-33734)
- 1 Lower Guard Bolt Kit (BK-MT-33745)
- 1 Blackbird Grill Hardware Pack (not pictured)

### Tools needed:

- Metric sockets 10mm, 14mm, 17mm
- SAE Socket 3/4”
- Drill w/ 1/2” drill bit
- Cold chisel
- Hammer
- Optional blue thread locker for all threads

### Optional Add On Parts:

- 2 OPOR 20W Flange Mount LEDs (stage 2 & 3)
- 1 OPOR LED Wire Harness (stage 2 & 3)
- 1 OPOR 30” Single Row Combo LED Light Bar (stage 3)
- 1 Grill Insert For Light Bar Pocket (Sold Separately)



**FIG A**

### Safety:

Please note that this work should be done by a competent mechanic. If you feel you are not competent to do this work please have a professional mechanic do this installation. Metal-tech Cage, LLC is not responsible for any modifications you make to your vehicle. These instructions are meant to be a guide to assist a competent mechanic.

**#1 Always wear safety glasses**

**#2 Always chalk the opposite end of wheels when working on a car. (ie. Chalk the rear when working on the front, and vice versa.)**

**#3 Always use jack stands!!!! Never work on a vehicle solely suspended by a jack.**

All Modifications are done at the owners risk, check local laws for compatibility.

## Prep:

1. **Grill Removal:** The grill needs to be removed first in order to remove the bumper. (#1 FIG A)
  - a. The grill is attached with two bolts at the top.
  - b. 2 clips (one each side) next to the headlight.
  - c. The lower portion requires a prying force with your hands to pull the grill off the top of the stock bumper. It will come off with some force. (Tip: Try to not use a tool, it can be done with hands.)

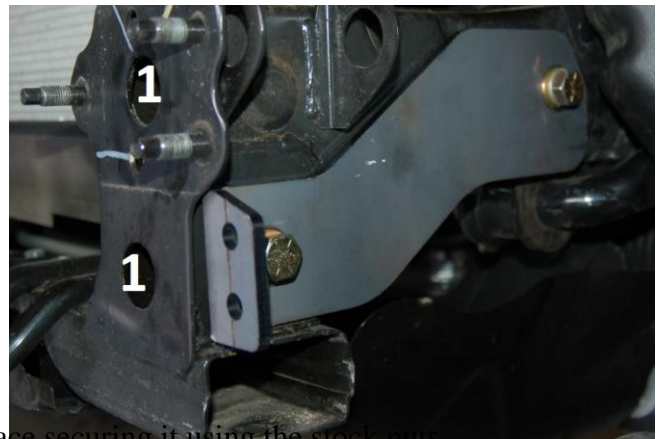


2. **Stock Bumper Removal:**
  - a. The stock bumper has clips holding in the top portion. (#2 FIG b)
  - b. The Fender Flares will need to be pulled on to get the front of them to unclip. (may take force)
  - c. The lower portion of the bumper has a series of bolts holding it on underneath and a few in the fender well.
  - d. The stock fog light wire harness has a plug and a clip holding it on (#3 FIG A)
3. **Remove the OEM inner cross brace**
  - a. The brace is behind the plastic bumper shell. This will take some force as Toyota typically has the nuts on tight. (Tip: Try to use a 6 point socket to keep from stripping the shoulders of the nuts. The nuts are reused.)
  - b. Remove Stock Tow Hook and Horns from lower the frame ends.

## Winch Mount Installation:

After removing the stock bumper, supports and grill you are then able to start installation of your new Metal Tech 4x4 blackbird Bumper for the 2016+ Tacoma.

1. (Plastic Frame Plugs may need to be removed during this step)
  - a. Begin by locating the frame (FIG C) on the driver's side of the vehicle. Using a 1/2"-13x1.5" bolt and either the \*included install wrench or a size 3/4" box wrench enclosed with tape and a partnering nut; line up one of the 2 large frame mount spacers and the left side frame mount, loosely tighten. REPEAT this on the Passenger/Right side of the vehicle using the right side frame mount in place of the left.
2. Set your main winch mount onto the vehicle in place securing it using the stock nuts.
3. On the driver's side of the vehicle insert a small front frame mount spacer between the main winch assembly and the side frame mount. Use 2 3/8"-16 bolts with the matching hardware to loosely secure the spacer into place and use a 3/8"-16 bolt underneath to secure the winch to the underside of the frame. REPEAT on passenger side.
4. **(VERY CRITICAL)**
  - a. Now that all of your winch mount pieces are in place go through and tighten all the bolts beginning with the 1/2"-13 bolt you placed in step 1 on the side of the frame.



## Winch Installation & Metal Tech 4x4 Rock Guard

NOTE: Metal Tech 4x4's 2016 Tacoma Bumper Fits most planetary style winches.

1. With the winch mount secured it is the ideal time to install your winch following manufacturer's instructions.
2. For your specific winch installation please refer to the manufacturer's installation instructions. Ensure proper winch placement and ease of use by making sure the clutch is clocked to be accessed via the front of the truck. To clock your winch forward also refer to the manufacture.
3. Once the winch is operation use the Lower Guard Bolt Kit hardware to install the Metal Tech 4x4 Rock Guard.

## Bumper Installation

You are now ready to install the Metal Tech 4x4 "Blackbird" Front Bumper. For completing this part of the process we strongly advise calling your buddy over to help and offering him a cold beverage (pint glasses available at [www.metaltech4x4.com](http://www.metaltech4x4.com)) or hot meal.

1. After the stock bumper and factory fog light harness is removed you and replace with the Metal Tech "plug-and-play" harness (if applicable) by simply plugging it in.
2. Grill rill two 3/8 holes into the lower portion of your grill where the cross member holes line up and bolt it down to the cross member just below it using the Blackbird Grill Hold Hardware Pack.
3. If you choose to run with the Blackbird Single Hoop on your bumper now is the time to open the Hoop Bolt Kit and secure the bull bar to the top of the bumper.
4. Grab a sharpie, your friend, and 4 of 1/2-13x2 1/2" bolt and matching washers lock washers and nuts. Lift the bumper into place by aligning the slots in the end of the winch mount with the slotted holes in the backside of the bumpers pull points and secure the bumper into position. Adjust for proper fitment then using a punch or a sharpie, mark the winch blade through the third/rear hole of the pull-point. This hole is designed to be a placement lock for your bumper so that it maintains its placement during your travels.
5. **(EYE PROTECTION CRITICAL)**  
Remove the bumper and drill two 1/2" holes where you marked your winch blades in the last step.
6. If you purchased the dual fog lights or a 30" light-bar from Outpost Offroad please install them into the bumper now along with the fairlead for your winch. Metal Tech 4x4 offers a delete plate that may be purchased which could be installed now in place of the light-bar for areas with light-bar restrictions or if you choose to go without. At this time install the license plate with the provided hardware in the matching holes on the main face of the bumper
7. Grab the other 2 sets of 1/2"-13 bolts from the bolt kit and use your friend to place the bumper back onto the truck and secure it into position.
8. Plug all of your lights in. Secure any excess slack in the harness using zip ties to the cross member you bolted the grill to earlier. Pull your winch line through the fairlead and connect your desired winch attachment.
9. Trim the inner fender well back as necessary to avoid rubbing on the tire and to keep it from flapping in the wind.
10. Install Metal Tech 4x4 Stickers everywhere appropriate, enjoy and show off your newly installed Metal Tech 4x4 "Blackbird" 2016+ Tacoma Front Bumper.