

# **INSTALLATION MANUAL**

# 2157001

#### **Level of Difficulty**

Moderate

# Parts List

| 1 | TrailCrusher <sup>™</sup> bumper |
|---|----------------------------------|
| 2 | Support bracket                  |
| 4 | Square hole spacer plate         |
| 4 | Carriage bolt, M10 x 45mm        |
| 4 | Flat washer, M10                 |
| 4 | Lock washer, M10                 |
| 4 | Hex nut, M10                     |
| 4 | Fishwire, M10                    |
| 8 | Hex bolt, M12 x 45mm             |
| 8 | Flat washer, M12                 |
| 8 | Lock washer, M12                 |
| 8 | Hex nut, M12                     |

| Tools Required |         |  |  |
|----------------|---------|--|--|
| Torque wrench  | Ratchet |  |  |
| Socket set     | Level   |  |  |

#### **Torque Specifications**

| Metric | M6 bolt  | 7 ft-lbs.  |
|--------|----------|------------|
|        | M8 bolt  | 16 ft-lbs. |
|        | M10 bolt | 48 ft-lbs. |
|        | M12 bolt | 83 ft-lbs. |
|        | M12 bolt | 83 ft-lbs. |

Use above torque setting unless otherwise noted

# **Product Photo**



#### **Notes and Maintenance**

Before you begin installation, read all instructions thoroughly.

Proper tools will improve the quality of installation and reduce the time required.

To protect the product, wax after installing. Regular waxing is recommended to add a protective layer over the finish. Do not use any type of polish or wax that may contain abrasives that could damage the finish.

For polished, gloss and other smooth finishes,

polish may be used to clear small scratches and scuffs on the finish.

Mild automotive detergent may be used to clean the product. Do not use dish detergent, abrasive cleaners, abrasive pads, wire brushes or other similar products that may damage the finish.

Refer to the table to the left when securing hardware during the installation process to help prevent damage to the product or vehicle.



#### Step 1

Starting on the passenger side, using a T27 Torx, remove the Torx head bolts holding the corners of the bumper on.





# Step 2

Remove the two hex nuts holding the bumper to the frame of the vehicle.





### Step 3

Remove the rear most hex bolt from the frame of the vehicle.

**Note:** If there is a hitch present, loosen but do not fully remove the hex nut.





# Step 4

Repeat steps 1 - 3 on the driver side. Remove the factory rear bumper.

**Note:** ARIES TrailCrusher<sup>™</sup> bumper may not work with aftermarket trailer hitches other than CURT hitches.







Fishwire two M10 bolts and spacer plates on to the driver side as shown.

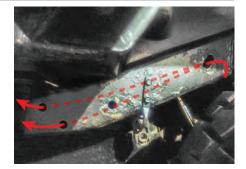
Once bolts are in place, install the support bracket with a flat washer, lock washer and hex nut.

Snug the hardware, but do not fully tighten.

Repeat for the passenger side.

#### FISHWIRE TECHNIQUE

Insert colled end of fishwire tool through bracket mounting hole in vehicle frame rail and out the access hole. Pass coiled end of fishwire through spacer and thread bolt into coil. Kink wire to keep spacer seperate from bolt as shown. Pull fishwire, spacer and bolt through frame and out mounting hole. Use fishwire to guide bracket during mounting and prevent loss of bolt or spacer inside frame rail.





#### Step 6

With help, lift the bumper into place and secure to the brackets with two M12 hex bolts, flat washers, lock washers and hex nuts.

Secure the support bracket to the bumper with two M12 hex bolts, flat washers, lock washers and hex nut.

Snug with an 19mm socket, but do not fully tighten.

Repeat this step for the passenger side.







# Step 7

Check to make sure the bumper is level. Adjust if necessary and fully tighten all hardware.

Torque M12 bolts to 83 ft-lbs. Torque M10 bolts to 48 ft-lbs.

With the bumper installed, periodic inspections should be performed to ensure all mounting hardware remains tight.

To protect your investment, see the 'Notes and Maintenance' section on the first page of this instruction manual.

Congratulations on the installation of your new ARIES TrailCrusher<sup>™</sup> bumper.



