

# **Rugged Bumper Installation Instructions**

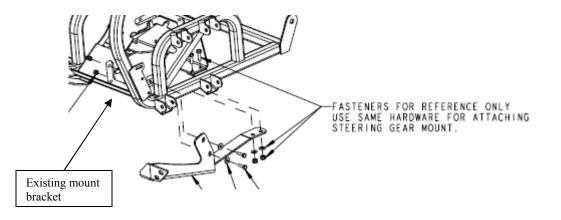
(2005 - current Models ONLY)

\* NOTE: BEFORE ATTEMPTING ANY SERVICE TO THE VEHICLE IT IS REQUIRED TO PROPERLY SUSPEND THE FRONT AXLE FOR PROPER INSTALLATION. A FLOOR JACK AND JACK STANDS WILL BE NEEDED. FOLLOW PROPER HOISTING PROCEDURES NOTED IN THE OWNER'S MANUAL OR SERVICE MANUAL.

### Front bumper installation – (*ALL* 2005 – current Models)

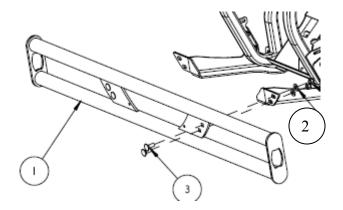
- Mounting of front brackets:

- 1. Install rear four (4) bolts at the bottom of the sub frame utilizing the steering gear mounting bracket hardware (see drawing below) and torque down. The right and left brackets will be installed attached at the steering gear mounting location to the sub frame (see drawing below).
- 2. Install front <sup>1</sup>/<sub>4</sub>" bolts at front existing bumper mount brackets located on the sub frame. Do NOT tighten at this time. The bumper will be adjusted later during installation.



- Mounting of Bumper:

- 1. Use 3/8" hardware provided in kit (see drawing below, bullets 2 & 3, next page) to mount the bumper to the brackets. Adjust the bumper so that it is level prior to torquing hardware.
- 2. Torque the front <sup>1</sup>/<sub>4</sub>" bolts noted from Step 2 above securing the brackets at this time using a 7/16' wrench.
- 3. Torque the 3/8" bolts used to secure the bumper to the brackets using a 9/16" wrench.
- 4. Front bumper installation complete.

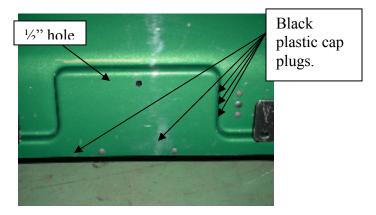


### Rear bumper installation – (2005 – current Models e2, e4 & e6 ONLY)

\* e6 Model installation may vary slightly due to differences in bracketry. Use your best judgement or call Tech Support 866.764.0616 for further information.

- Mounting of rear brackets:

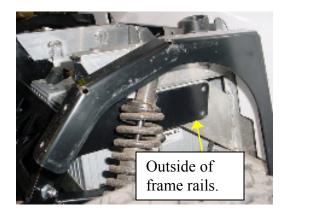
- 1. Remove any rear pack (Trunkback/Swivelpak, Golfback/Linkspak, Clip-in Stake Bed) from the rear of the vehicle. (See Service Manual, Section 7 BODY)
- 2. Remove the rear spat of the vehicle. (See Service Manual, Section 7 BODY) Disconnect any wires necessary, note orientation. You will also need to remove the License Plate light and rear License Plate bracket. The light will be mounted on to the rear bumper and the bracket will be unused for this application. You may leave the bracket attached to the spat if you wish. Using the black plastic caps provided in the kit, plug the unused holes of the spat. See picture below in Step 3.
- 3. Locate the new hole for the License Plate light wires to route through. From the License Plate bracket mounting bolts, locate the center between them, and then measure up 6". Drill a  $\frac{1}{2}$ " hole. See picture below.

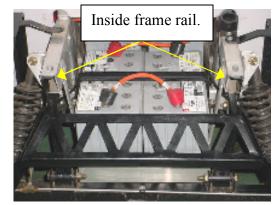


4. Assemble the rear bumper brackets and cross member pieces. See picture below (as shown from the rear). Note left and right hand brackets. Use 3/8" hardware provided. Tighten using 9/16" wrenches.

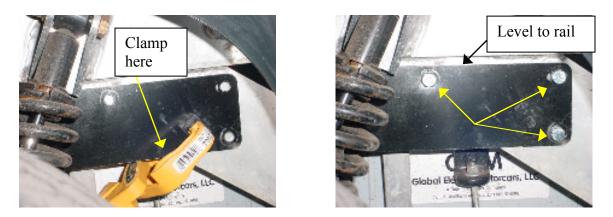


- 5. Prep the vehicle and clean it of any debris to make a nice, tight fit. Often the frame and suspension pieces get covered with dirt, sand, gravel, etc; that can make for an uneven fit.
- 6. Fit the bracket assembly to the vehicle. The assembly should fit toward the front (to back panel) on the outside of the frame rails, and behind to the inside of the spat brackets. See picture below (left). Also you will notice the top of the bumper brackets mount inside the frame rail to the existing mounting holes. See picture below (right).

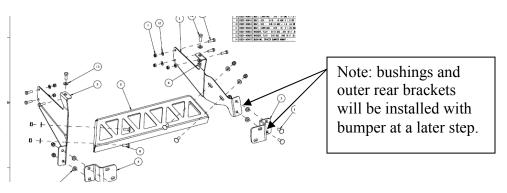




- 7. Insert 3/8" hardware to top frame rail mounts through existing predrilled holes and brackets to secure and support the assembly. Before tightening pull the brackets out as far as they go. Secure using 9/16" wrenches.
- 8. Level out the assembly. The flat extended portion of the brackets should be level/parallel to the aluminum frame rails. Attach straight below the existing welds of the rails. Using clamps, secure the front of the brackets to the frame rail support angles/gussets. Mark out mounting hole locations. See picture below (left).



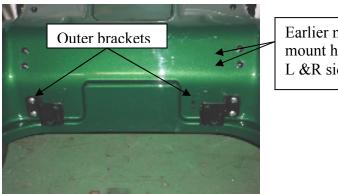
- 9. Drill 1/8" pilot holes for the brackets in the frame. Then drill to 5/16".
- 10. Install brackets using 5/16" hardware provided in kit. Remove clamps. Tighten and secure using  $\frac{1}{2}$ " wrenches. See picture above (right).

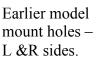


11. The spat must be trimmed/drilled for proper fit of the bushings. Using a step drill bit, drill the existing lower spat mount holes to  $\frac{3}{4}$ ".

\* NOTE: For earlier 2005 model vehicles, the lower spat mount holes were not in existence. The spat brackets were short and mounted mid-way on the rear of the spat (as shown in the picture below), not on the lower portion as newer models are currently. To resolve this issue follow Service Bulletin # 05TF2001.

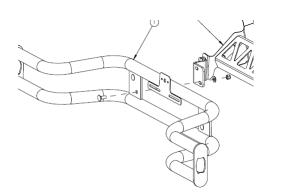
- 12. Install rear spat and secure using existing hardware and caps.
- 13. Install outer rear bumper brackets and bushings to the spat. Use 3/8" hardware provided in the kit. Tighten using 9/16" wrench. See picture below.





#### - Mounting of Bumper:

1. Install rear bumper to outer rear bumper brackets using 3/8" hardware provided in kit. See pictures below.





- 2. Tighten using 9/16" wrench.
- Mounting the License Plate Light:
  - 1. Mount the License Plate light to the bumper's license plate bracket and route the wires through the <sup>1</sup>/<sub>2</sub>" hole drilled in the spat. See picture below. Using the short 6" piece of black plastic conduit, cover the exposed wires from the light through the spat to protect them from any harm.



- 2. Route the wires to the battery compartment under the seat and connect to the rear harness. Black to black. Violet/blue to Violet/blue.
- 3. Turn the Master Disconnect Switch (MDS), located in the Fuse Access Panel of the white lower dash to the ON position. Turn the vehicle key switch on. Turn the headlight switch on. Verify light operation.
- 4. Installation complete.

# Parts List:

## Front Rugged Bumper – 0107-01777

0207-00234	WLD, BUMPER - RUGGED	1
0207-00235	WLD, BRACKET - BUMPER LH RUGGED	1
0207-00236	WLD, BRACKET - BUMPER RH RUGGED	1
0510-00342	O-RING, 3/32 CS X 7/32 ID X 13/32 OD	2
0521-00010	NUT, HEX - NYLOCK - 3/8 - 16 UNC	4
0521-00050	NUT, HEX - NYLOCK - 1/4 - 20 UNC GR 5 ZI	4
0522-00056	BOLT, HEX - 1/4 - 20 UNC X 1.0 GRADE 8 Z	4
0522-00495	BOLT, CARRIAGE - 3/8-16 X1.00 BMPR BLT Z	4
0524-00009	WASHER, FLAT - 3/8 SAE	4
0524-00062	WASHER, FLAT-1/4 .281 ID X.625 OD X.05ZP	4
0605-00488	RETAINER, MOULDING - BLACK EU	2

## Rear Rugged Bumper e2/e4 ONLY – 0107-01793

0207-00237	WLD, BUMPER - REAR (RUGGED)	1
0351-02087	HANGER, BUMPER MNT - RH	1
0351-02088	HANGER, BUMPER MNT - LH	1
0351-02089	MNT, BUMPER - RH	1
0351-02090	MNT, BUMPER - LH	1
0351-02091	XMBR, BUMPER MNT	1
0522-00001	BOLT, CARRIAGE -3/8-16 UNC X 1.0 GRD 5 Z	4
0522-00016	BOLT, HEX - 5/16 - 18 UNC X 1.0 GR 5 ZIN	4
0522-00063	BOLT, HEX - 3/8 - 16 UNC X 1.0 GR 5	2
0522-00494	BOLT, CARRIAGE - 3/8-16 X 1.25 BMPR BLT	4
0522-00495	BOLT, CARRIAGE - 3/8-16 X1.00 BMPR BLT Z	4
0524-00003	WASHER, FLAT - SAE 5/16 .344 ID X .688 O	8
0524-00009	WASHER, FLAT - 3/8 SAE	12
0524-00487	BUSHING, STEEL75 ODX.406 IDX 19 THK P	4
0605-00488	RETAINER, MOULDING - BLACK EU	4
0610-00527	PLUG, HOLE - 1/2" BLACK PLASTIC EU	1

## Rear Rugged Bumper e6 ONLY – 0107-03121

0251-00315	WLD, BRACKET - BUMPER REAR LH e6	1
0251-00316	WLD, BRACKET - BUMPER REAR RH e6	1
0521-00017	NUT, HEX - NYLOCK - 5/16 - 18 UNC GR 5 Z	8
0522-00016	BOLT, HEX - 5/16 - 18 UNC X 1.0 GR 5 ZIN	8
0524-00003	WASHER, FLAT - SAE 5/16 .344 ID X .688 O	16
0307-02640	GASKET, BUMPER	2

0207-00237	WLD, BUMPER - REAR (RUGGED)	1
0306-02126	LOOM, CORRUGATED 1/4" X 4.5"	1
0307-02640	GASKET, BUMPER	2
0351-02089	MNT, BUMPER - RH	1
0351-02090	MNT, BUMPER - LH	1
0510-00342	O-RING, 3/32 CS X 7/32 ID X 13/32 OD	4
0521-00010	NUT, HEX - NYLOCK - 3/8 - 16 UNC	8
0522-00494	BOLT, CARRIAGE - 3/8-16 X 1.25 BMPR BLT	4
0522-00495	BOLT, CARRIAGE - 3/8-16 X1.00 BMPR BLT Z	4
0524-00009	WASHER, FLAT - 3/8 SAE	4
0524-00487	BUSHING, STEEL75 ODX.406 IDX 19 THK P	4
0605-00488	RETAINER, MOULDING - BLACK EU	4
0610-00527	PLUG, HOLE - 1/2" BLACK PLASTIC EU	1