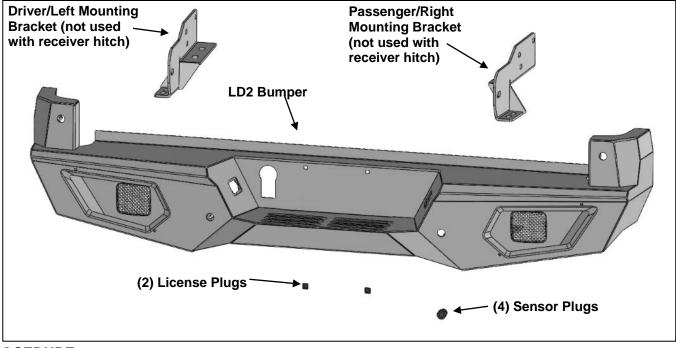


### **AB2228**

Endurance Truck Rear Bumper for 16-20 TOYOTA TACOMA (Excl. of Blind spot alert and rear cross traffic alert system)

### PARTS LIST:

1	LD2 Rear Bumper	4	12mm x 24mm x 3mm Flat Washers
1	Driver/Left Mounting Bracket	4	12mm Lock Washers
1	Passenger/Right Mounting Bracket	6	12mm Nylon Lock Nuts
2	Mesh Panels	4	6mm x 20mm Combo Bolts
2	License Plate Plugs	4	6mm Flange Hex Nuts
1	Sensor Cover Kit	8	4mm x 10mm Button Head Bolts
4	Sensor Plugs	1	4mm Hex Wrench
6	12-1.75mm x 40mm Coarse Thread Hex Bolts	1	2.5mm Hex Wrench
4	12-1.25mm x45mm Fine Thread Hex Bolts	10	Wire Ties
12	12mm x 32mm x 3mm Flat Washers		



## PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS DESIGNED TO INSTALL WITH FACTORY RECEIVER HITCH, AFTERMARKET RECEIVER HITCH MAY INTERFERE WITH INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

- 1. Locate BSM (Blind Spot Monitor) button underneath the radio display to turn off and RCTA (Rear Cross Traffic Alert) Systems, (if equipped). Next, unplug the wire harnesses from the (2) monitor sensors located on the sides of the Rear Bumper. **NOTE:** The BSM and RCTA systems will not work with Bumper installation, monitor sensors cannot be reinstalled.
- 2. Unplug the wiring harness leading to the bumper, (Figure 1). Move all wiring harnesses away from bumper.
- 3. Determine if vehicle is equipped with factory receiver hitch

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### Models without receiver hitch:

**a.** Place blocks or jack stands under the bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the factory hex bolts attaching the bumper brackets to the sides and bottom of the frame and slide the bumper assembly off of the vehicle.

# Models with factory receiver hitch:

- **a.** Remove the plastic cover from the top of the bumper, **(Figure 2)**. **NOTE**: Cover is attached at top, back and bottom by several plastic clips. Remove these pins to release plastic cover.
- **b.** Place blocks or jack stands under the bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the factory hardware attaching the bumper to the top and bottom of the receiver hitch and remove the bumper, **(Figures 3 & 4)**. **NOTE**: Leave hitch attached to vehicle.
- 4. Remove the trailer plug, sensors and wiring harness, (if equipped), from bumper.
- 5. Determine if lights will be installed, (lights not included)

## For Mesh Panel installation

- a. Select (1) Mesh Panel.
- **b.** Attach the Panel to the back of the Driver/Left side of the Bumper with (2) 6mm Combo Bolts and (2) 6mm Flange Nuts, **(Figure 5).**
- **c.** Repeat previous **Steps** to attach the remaining (1) Mesh Panel to the Passenger/Right side.

# For Light installation (Light not included).

- a. Select a Light, (light not included).
- **b.** Attach light to the mounting tab on the back of the Bumper, (Figure 5).
- **c.** Follow instructions included with lights to attach to the mounting tab on the back of the Bumper.
- **6.** Depending on tow package, it may be necessary or easier to install sensors at this time, (if equipped), before installing the Bumper.

## Models without bumper sensors:

- a. Select (4) Rubber Plugs.
- **b.** From behind bumper, push plugs into sensor mounting holes, **(Figure 6)**. **(Optional)** Use 4mm Button Head Bolts to hold the plugs in place.

# Models with bumper mounted back-up sensors:

- a. Select (1) sensor. Insert the sensor into the mounting sleeve in the back of the bumper.
- b. Secure sensor to the sleeve with (2) 4mm x 10mm Button Head Screws, (Figure 7). IMPORTANT: Sensors fit snug in sleeves. The 4mm Bolts are used to apply slight pressure to lock the sensors in place. Tighten both Bolts evenly until they touch the sensor body only. Do not overtighten Bolts or damage to sensors will result.
- **c.** Repeat previous **Steps** to install the remaining (3) sensors.

# 7. Models without factory receiver hitch only, (models with hitch, skip to Step 8):

- a. Select the Driver/Left Mounting Bracket. Attach the Driver/Left Mounting Bracket to the sides and bottom of the frame with (3) factory bolts, (2) 12-1.25mm x 45mm Fine Thread Hex Bolts, (2) 12mm Lock Washers and (2) 12mm x 32mm Flat Washers, (Figures 8 & 9). Do not tighten hardware at this time. Important: Select all 12mm Hex Bolts and separate the (4) 12-1.25mm x 45mm Fine Thread Hex Bolts for the (6) 12-1.75mm x 40mm Coarse Thread Hex Bolts.
- **b.** Repeat previous **Step** to attach the Passenger/Right Mounting Bracket.
- **8.** With assistance, hold the LD2 Bumper up to the Brackets or receiver hitch. Temporarily support the weight of the Bumper. **WARNING**: To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported.
- 9. Attach the Bumper to the bottom of the Driver/Left Bracket or to the hitch with the included (2) 12mm x 40mm Coarse Thread Hex Bolts, (2) 12mm x 32mm Flat Washers (bottom), (2) 12mm x 24mm Flat Washers (top), and (2) 12mm Nylon Lock Nuts, (Figures 10—12). Do not fully tighten hardware at this time. Repeat this **Step** to attach the Bumper to the Passenger/Right Mounting Bracket.

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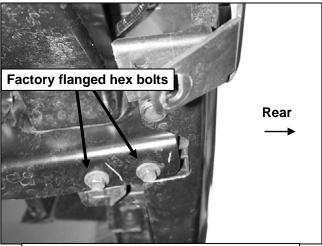
- **10.** Next, attach the bumper to the side of the Driver/Left Mounting Bracket slot or upper hitch slot with (1) 12mm x 40mm Coarse Thread Hex Bolts, (2) 12mm x 32mm Large Flat Washers and (1) 12mm Nylon Lock Nuts, (**Figures 10—12**). Repeat this **Step** for the Passenger/Right Mounting Bracket.
- 11. Open tailgate and check for clearance. Level and adjust the bumper and fully tighten all hardware.
- 12. Plug in all wiring harnesses.
- **13.** Insert (2) License Plate Plugs to attach the license plate to the Bumper, **(Figure 13)**. Insert the factory license plate light into the hole in the step area. Connect the harness to the license plate light.
- **14.** Do periodic inspections to the installation to make sure that all hardware is secure and tight.

**To protect your investment**, Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Bumper assembly.

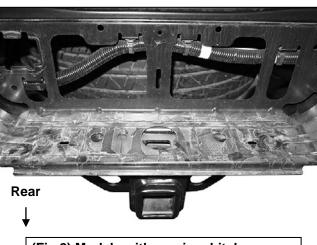
# **Driver/Left Side Installation Pictured**



(Fig 1) Unplug and remove trailer plug, unplug license plate lights and sensors if equipped



(Fig 3) Models with receiver hitch, remove the hex bolts attaching bottom of bumper



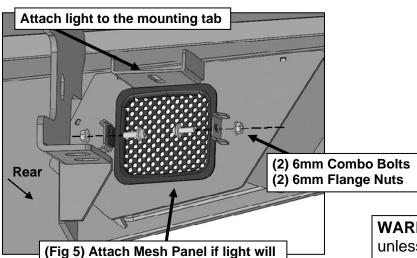
(Fig 2) Models with receiver hitch, remove plastic cover from top of bumper



(Fig 4) Models with receiver hitch, remove the hex bolts attaching top of bumper

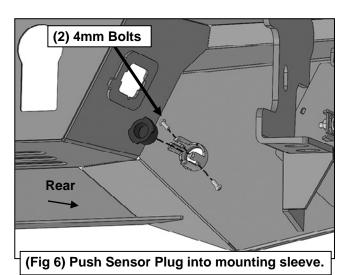
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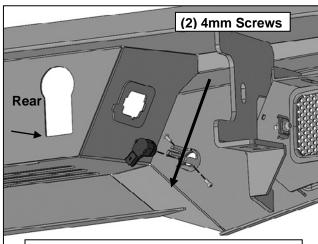
(Fig 5) Attach Mesh Panel if light will not be installed, (light not included)

**WARNING!** Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or the bumper may fall.



Rear (3) Factory Bolts

(Fig 9) Models without factory receiver hitch: Reuse factory hex bolts to attach Mounting Bracket to side of frame. Use 12-1.25mm Fine Thread Bolts on the bottom of the Bracket

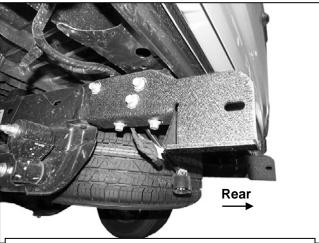


(Fig 7) Push Sensor into mounting sleeve. Use 4mm Screws to lock sensor in place

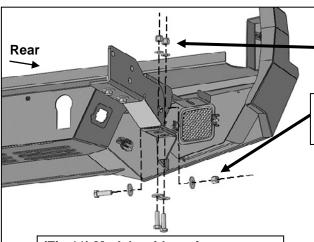
- (2) 12-1.25mm x 45mm Fine Thread Hex Bolts
- (2) 12mm Lock Washers
- (2) 12mm x 32mm Flat Washers

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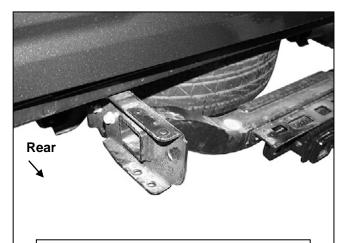
(Fig 10) Driver/Left Mounting Bracket attached



(Fig 11) Models without factory receiver hitch: Attach Bumper to side and bottom of Mounting Bracket

- (2) 12mmx 40mm Coarse Thread Hex Bolts
- (2) 12mm x 24mm Flat Washers (top)
- (2) 12mm x 32mm Flat Washers (bottom)
- (2) 12mm Nylon Lock Nuts

12mm x 40mm Coarse Thread Hex Bolt (2) 12mm x 32mm Flat Washers 12mm Nylon Lock Nut

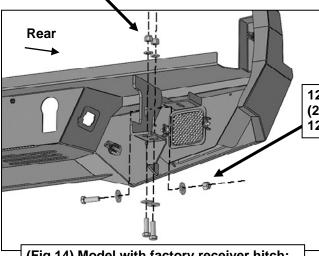


(Fig 13) Model with factory receiver hitch

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- (2) 12mm x 40mm Coarse Thread Hex Bolts
- (2) 12mm x 24mm Flat Washers (top)
- (2) 12mm x 32mm Flat Washers (bottom)
- (2) 12mm Nylon Lock Nuts



12mm x 40mm Coarse Thread Hex Bolt (2) 12mm x 32mm Flat Washers 12mm Nylon Lock Nut

Trailer plug

(Fig 14) Model with factory receiver hitch: Attach Bumper to side and bottom of hitch

(Fig 15) Attach License Plate to the Bumper

(2) License Plate Plugs

License light