

Dynatrac EnduroSport Front Bumper

DYNATRAC
CONFIDENCE TO EXPLORE™





WARNING: While working with tools, always wear proper safety equipment including safety glasses and gloves. Improper use of tools and equipment may cause serious injury and/or death.



WARNING: Use a calibrated torque wrench on all fasteners.



WARNING: Failure to properly check every fastener torque may cause a serious vehicular accident, component failure, serious injury, and/or death.

Before

You

Begin

- Verify all items are included, reference Bill of Materials diagram on Page 3. Do not begin the installation if any item(s) are missing. If any item(s) are missing, please contact Dynatrac at (714) 596-4461.
- Read the instructions completely prior to performing any work. Only perform the work if you are an experienced and fully equipped mechanic.
- Allow for plenty of time, approximately 2 - 4 hours is required.

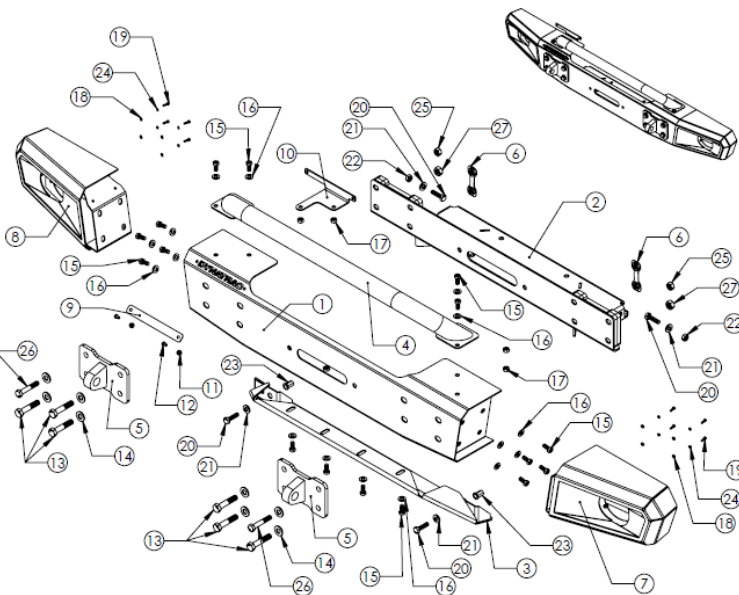
Recommended Tools

- Ratchet(s) & extension(s)
- Socket(s) & Wrench(es); 7/16", 9/16", 7mm, 10mm, 17mm, 19mm, & 22mm
- Allen Wrench; 5/32" & 3mm
- Star Bit: T25
- Screwdriver(s); Flathead, Phillips
- Needle Nose Pliers
- Plastic Push Pin Fastener Removal Tool
- Drill Bit; 5/8" (optional)
- Powered Drill (optional)

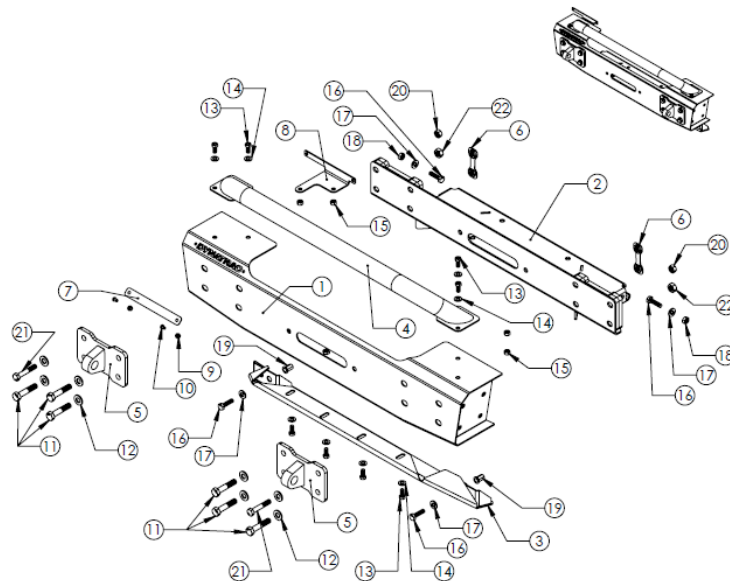


Dynatrac EnduroSport Front Bumper

JP60-2X0023-C
JL/JT Main Body Assembly,
w/Fog Light End Caps
Bill of Materials



JP60-2X0023-D
JL/JT Main Body Assembly
Bill of Materials



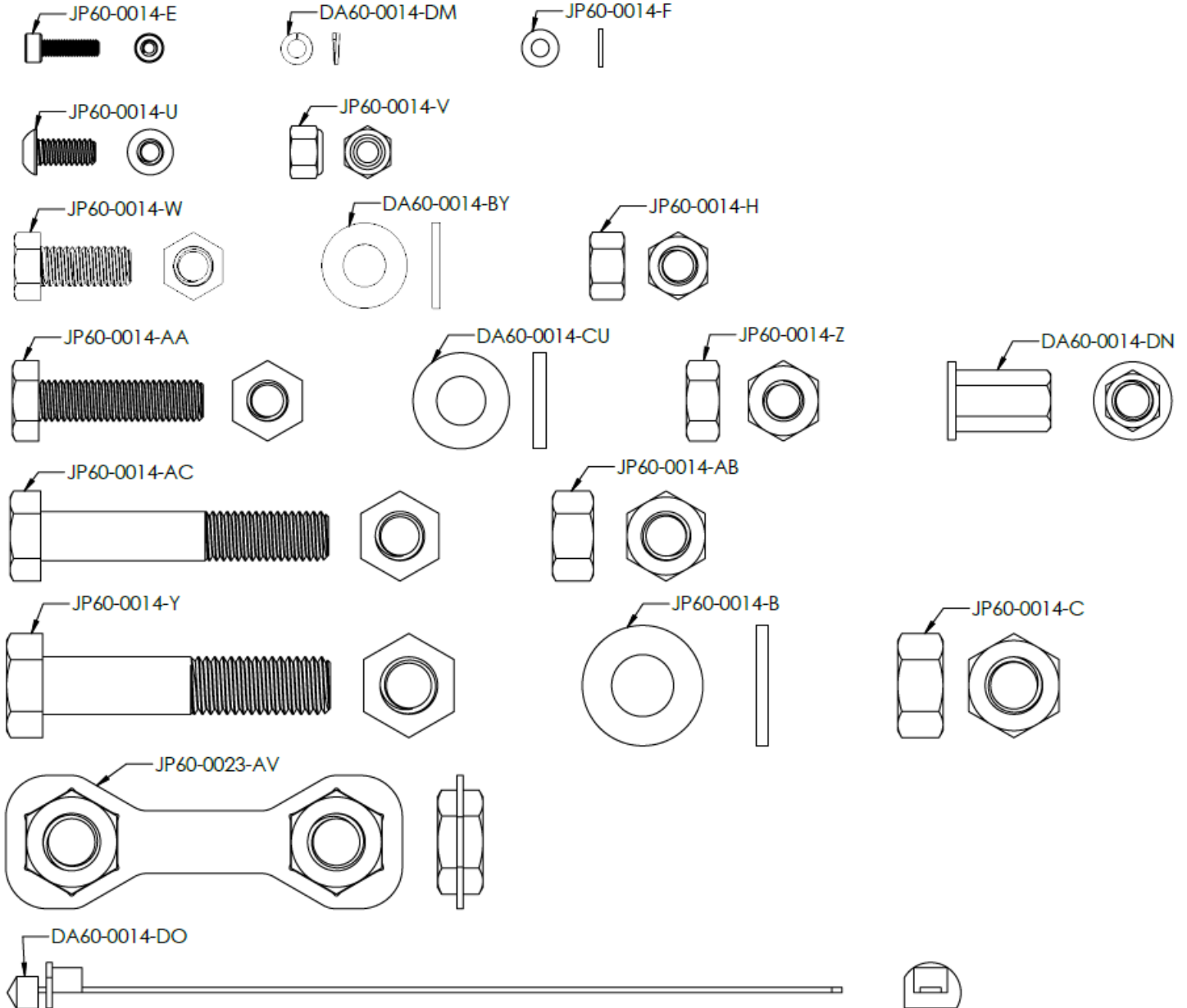
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	JP60-1X0023-AA, REV B	JL/JT Main Body Assembly	1
2	JP60-1X0023-AB, REV B	JL/JT Bumper Winch Plate Assy	1
3	JP60-1X0023-AE, REV B	JL/JT Main Skid Plate Assy	1
4	JP60-1X0023-AF, REV B	JL/JT Bull Bar Assy	1
5	JP60-1X0023-AG, REV C	JL/JT D-Plate Assy	2
6	JP60-1X0023-AH, REV B	JL/JT Bumper Flag Nut Plate Assy	2
7	JP60-1X0023-AC, REV C	JL/JT LH Fog Light Assembly	1
8	JP60-1X0023-AD, REV C	JL/JT RH Fog Light Assembly	1
9	JP60-0023-AT, REV B	JL/JT Bumper Logo Backing Plate	1
10	JP60-0023-AX, REV B	JL/JT Bumper License Plate Bracket	1
11	JP60-0014-V	Nylon Locknut, 1/4"-20, Grade 5, Steel, Zinc Plated	2
12	JP60-0014-U	Screw, BH Socket, 1/4"-20 x 9/16" length, 18-8 SS	2
13	JP60-0014-Y	Screw, Hex Head, M14 x 2mm pitch x 70mm length, High-Strength Steel, Class 10.9, Zinc Yellow-Chromate	8
14	JP60-0014-B	Flat Washer, 9/16" Screw, Steel, Grade 8, Zinc Yellow-Chromate Plated	8
15	JP60-0014-W	Screw, Hex Head, 3/8"-16 x 7/8" length, Steel, Grade 8, Zinc Yellow-Chromate	16
16	DA60-0014-BY	Washer, 3/8" Screw, 0.406" ID, 0.812" OD, Steel, Grade 8, Zinc-Chromate Plated	16
17	JP60-0014-H	Nut, 3/8"-16, High-Strength Steel Hex Nut, Grade 8, Zinc Yellow-Chromate Plated	4
18	JP60-0014-F	Washer, M4 Screw, 4.3mm ID x 9mm OD, Steel, Zinc Plated	8
19	JP60-0014-E	Socket Head Screw, CH, M4 x 0.7 mm x 14mm Length, 18-8 SS	8
20	JP60-0014-AA	Screw, Hex Head, M10 x 1.5mm pitch x 40mm length, High-Strength Steel, Class 10.9, Zinc Yellow-Chromate Plated	4
21	DA60-0014-CU	Washer, 7/16" Screw, 0.469" ID, 0.922" OD, Steel, Grade 8, Zinc Yellow-Chromate Plated	4
22	JP60-0014-Z	Nut, M10 x 1.5mm pitch, High-Strength Steel, Class 10, Zinc Yellow-Chromate Plated	2
23	DA60-0014-DN	Rivet Nut, Heavy Duty Twist-Resistant, M10 x 1.5, Zinc Plated Steel, 1.0mm - 4.5mm material thickness	2
24	DA60-0014-DM	Split Lock Washer, M4, 18-8 SS	8
25	JP60-0014-AB	Hex Nut, M12 x 1.75mm, Steel, Class 8, Zinc Plated	2
26	JP60-0014-AC	Screw, Hex Head, M12 x 1.75 x 70mm Length, Steel, Class 10.9, Zinc Yellow-Chromate Plated	2
27	JP60-0014-C	Hex Nut, M14 x 2mm, Steel, Class 8, Zinc Plated	4
28	DA60-0014-DO	Mountable Nylon Cable Tie, Tree, 8" overall length, 2" MAX Bundle diameter, 1/4" mounting hole, 0.28" MAX panel thickness	8

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	JP60-1X0023-AA, REV B	JL/JT Main Body Assembly	1
2	JP60-1X0023-AB, REV B	JL/JT Bumper Winch Plate Assy	1
3	JP60-1X0023-AE, REV B	JL/JT Main Skid Plate Assy	1
4	JP60-1X0023-AF, REV B	JL/JT Bull Bar Assy	1
5	JP60-1X0023-AG, REV C	JL/JT D-Plate Assy	2
6	JP60-1X0023-AH, REV B	JL/JT Bumper Flag Nut Plate Assy	2
7	JP60-0023-AT, REV B	JL/JT Bumper Logo Backing Plate	1
8	JP60-0023-AX, REV B	JL/JT Bumper License Plate Bracket	1
9	JP60-0014-V	Nylon Locknut, 1/4"-20, Grade 5, Steel, Zinc Plated	2
10	JP60-0014-U	Screw, BH Socket, 1/4"-20 x 9/16" length, 18-8 SS	2
11	JP60-0014-Y	Screw, Hex Head, M14 x 2mm pitch x 70mm length, High-Strength Steel, Class 10.9, Zinc Yellow-Chromate	8
12	JP60-0014-B	Flat Washer, 9/16" Screw, Steel, Grade 8, Zinc Yellow-Chromate Plated	8
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15	JP60-0014-H	Nut, 3/8"-16, High-Strength Steel Hex Nut, Grade 8, Zinc Yellow-Chromate Plated	4
16	JP60-0014-AA	Screw, Hex Head, M10 x 1.5mm pitch x 40mm length, High-Strength Steel, Class 10.9, Zinc Yellow-Chromate Plated	4
17	DA60-0014-CU	Washer, 7/16" Screw, 0.469" ID, 0.922" OD, Steel, Grade 8, Zinc Yellow-Chromate Plated	4
18	JP60-0014-Z	Nut, M10 x 1.5mm pitch, High-Strength Steel, Class 10, Zinc Yellow-Chromate Plated	2
19	DA60-0014-DN	Rivet Nut, Heavy Duty Twist-Resistant, M10 x 1.5, Zinc Plated Steel, 1.0mm - 4.5mm material thickness	2
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21	JP60-0014-AC	Screw, Hex Head, M12 x 1.75 x 70mm Length, Steel, Class 10.9, Zinc Yellow-Chromate Plated	2
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23	DA60-0014-DO	Mountable Nylon Cable Tie, Tree, 8" overall length, 2" MAX Bundle diameter, 1/4" mounting hole, 0.28" MAX panel thickness	8



HARDWARE ITEMS

NOT TO SCALE

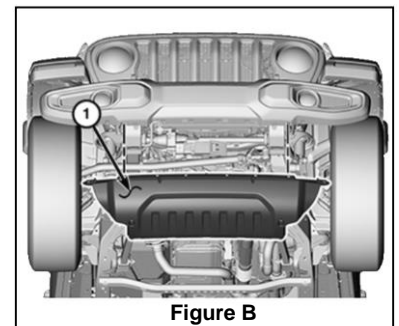
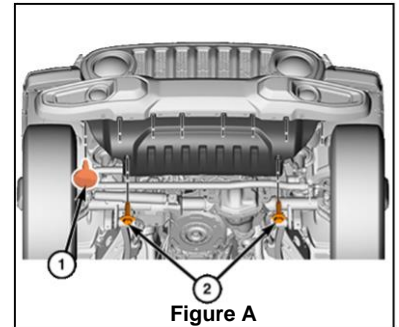


Dynatrac EnduroSport Front Bumper

Factory Air Dam Removal Steps

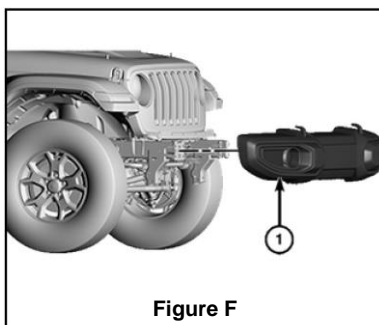
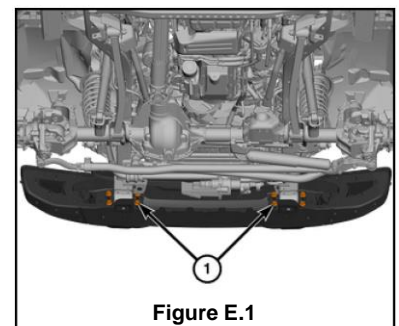
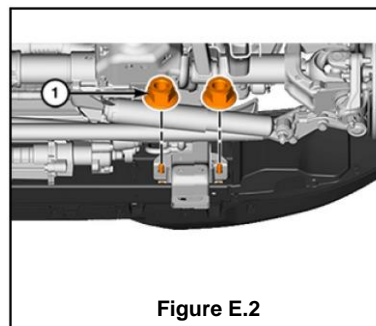
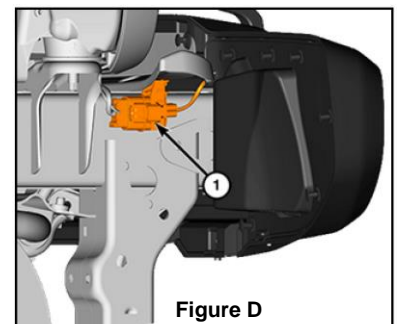
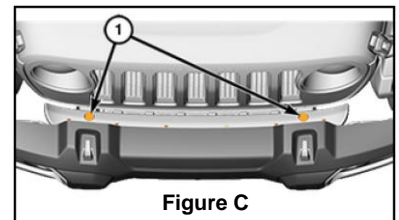
1. Disconnect and isolate the negative battery cable(s).
2. Raise and support the vehicle if available. Do not position vehicle with the front lower than the rear of the vehicle. Chuck tires if applicable.
3. Figure A, remove the eight push pin fasteners (1), and bolts (2).
4. Figure B, remove the air dam (1).

To re-install the factory air dam, perform these steps in reverse order with the factory bumper installed.



Factory Bumper Removal Steps

1. Disconnect and isolate the negative battery cable(s) if still connected.
2. Figure C, from the top of the bumper, remove the push pin fasteners (1) securing the closeout panel to the frame tips.
3. Figure D, disconnect the wire harness connector. Located on the outside of the passenger frame rail.
4. Figure E.1 and E.2, remove the four bumper frame nuts (1).
5. Figure F, remove the bumper assembly (1).



To re-install the factory bumper, perform these steps in reverse order.

Dynatrac EnduroSport Front Bumper

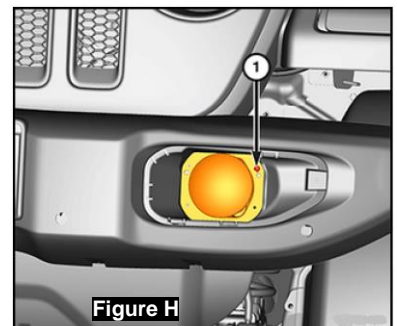
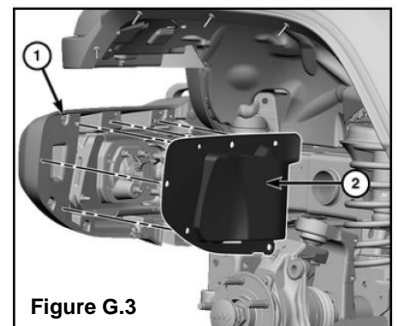
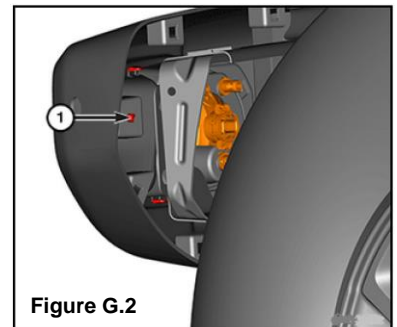
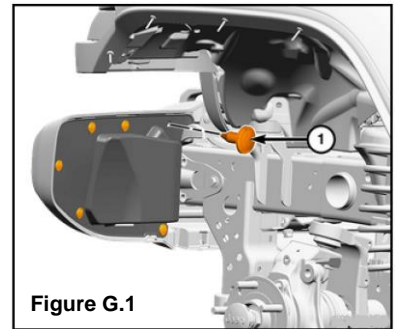
Factory Bumper Disassembly Steps

Perform these steps if you want to retain the factory fog light wiring harness on your vehicle, and/or if you will install fog lights into the JP60-2X0023-C bumper.

1. Remove the tooth lock washers from the bumper studs.
2. Figure G.1 and G.2, if your vehicle has a close-out cover behind the fog light, remove the fasteners (1). Figure G.3, remove the covers (2) from the bumper (1).
3. Disconnect the wire harness connector from the front fog lamp connector receptable.
4. Figure H, remove the fasteners (1) that secure the fog lamp housing to the front bumper. Remove fog lamp and set aside.
5. Remove the steel bumper insert from the plastic bumper shell.
6. Separate the inner and outer plastic bumper pieces by removing all screws holding them together. Remove the fog lamp wiring harness and set aside.

To re-install the factory close-out covers and front fog lamps, perform these steps in reverse order.

DISASSEMBLY IS NOW COMPLETE



Dynatrac EnduroSport Front Bumper

DYNATRAC Bumper Installation Steps

Refer to Page 3, Bill of Materials diagram.

1. Figure I, ensure that the frame and surrounding areas are clean from dirt, debris, or any other foreign material, and dry.
2. Figure J, at these two upper/outer hole locations there are two options;
 - a) Use M12 thread size hardware at these hole locations, making no modification to the frame.
 - b) Use M14 thread size hardware at these locations, making modification to the frame. This matches the hardware size used in the surrounding hole locations. To allow for this you must drill the holes larger using a 5/8" drill bit. Remove all resulting burrs and debris caused from drilling.
3. Figure K, if your vehicle does not have a threaded insert located on the front of the frame at the hole in the red highlighted area one will need to be installed on each side of the frame. If one is installed it will look like the green highlighted area. To install the included DA60-0014-DN Rivet Nut M10x1.5 it is best practice to use a rivet installation tool. If you do not have access to this tool you may install it using the steps below using the included items.
 - a) Apply grease or heavy oil to both sides of the washer. Assemble the fastener items as shown in rivet nut image, then fully insert rivet nut into vehicle frame.
 - b) Position an open-end wrench, or closed-end ratcheting wrench, onto the nut. Position another wrench onto the bolt head. While holding the bolt head stationary, tighten the nut until the rivet nut is securely fastened to the frame while also pressing the rivet nut so it stays fully seated into the frame. **RIVET NUT FAILURE MAY OCCUR IF THE BOLT AND/OR RIVET NUT ARE ALLOWED TO ROTATE RESULTING IN RIVET NUT SPIN-OUT.**
 - c) Remove fasteners from rivet nut and repeat steps for opposite side of vehicle. Clean lubricant from all items.
4. Figure L, install the JP60-0023-AT Bumper Logo Backing Plate to the JP60-1X0023-AA JL/JT Main Body Assembly using the included fasteners, then set aside.

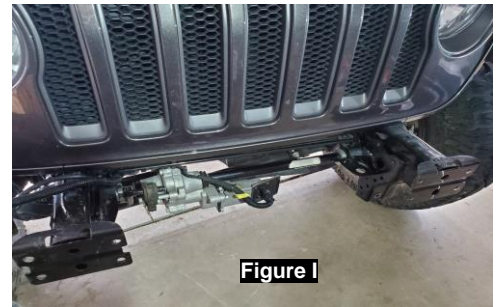


Figure I

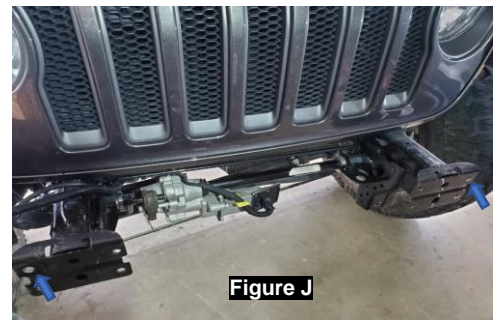


Figure J

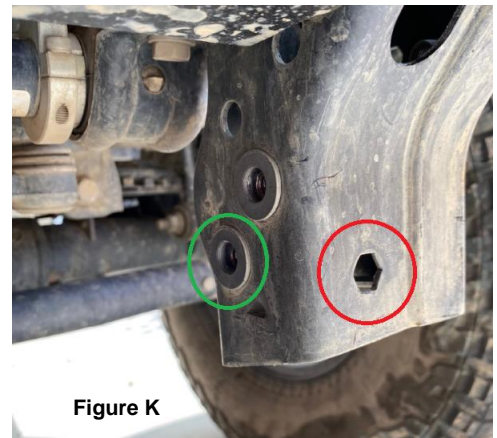


Figure K

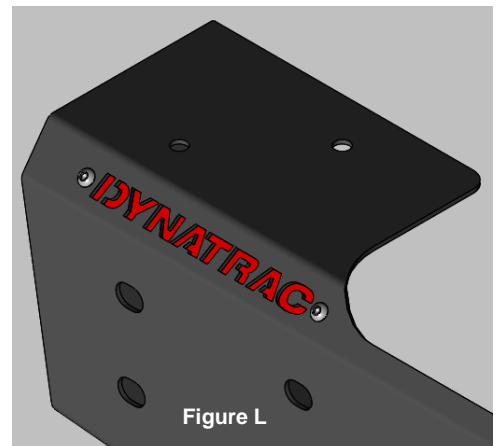
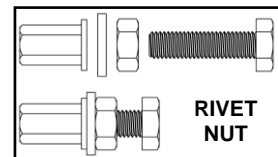
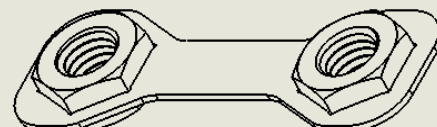
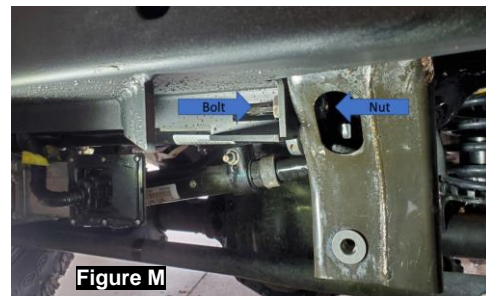


Figure L

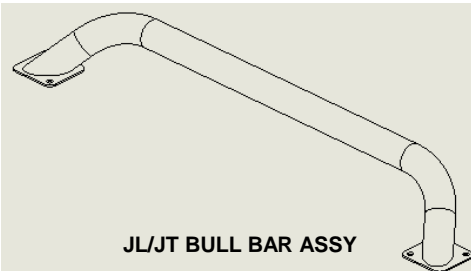
DYNATRAC Bumper Installation Steps; cont'd

Refer to Page 3, Bill of Materials diagram.

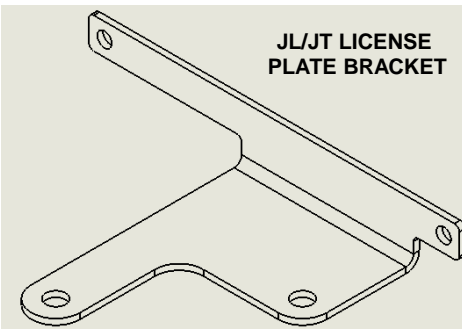
5. Figure M, viewed from the front of the vehicle, driver's side shown, use the included M10 thread size hardware to hold the JP60-1X0023-AB JL/JT Bumper Winch Plate Assy to the frame on both sides. You may access the nut using the access hole located on the frame horns. Gently allow the Bumper Winch Plate to rest suspended in position. **ONLY HAND TIGHTEN, SNUG AT TIGHTEST, THESE FASTENERS AT THIS TIME.**
6. Figure N, locate JP60-1X0023-AA JL/JT Main Body Assembly and carefully position it onto the frame so that it rests without falling off.
 - a) Using the supplied hardware and JP60-1X0023-AH JL/JT Bumper Flag Nut Plate Assy (to be positioned at hole locations nearest center of vehicle), loosely mount the JP60-1X0023-AG JL/JT D-Plate Assy (there is a top and bottom, orient so the holes match) to the bumper and frame. **DO NOT FULLY TIGHTEN AT THIS TIME.** *If you did not drill the upper/outer frame holes with a 5/8" drill bit use M12 size hardware at these locations. If you did drill the frame holes larger, you may use M14 size hardware at these locations.*
 - b) If you will be installing a fairlead (not included) you may install it now per the manufacturer's instructions. Mounting the fairlead, or using hardware in the fairlead mounting holes, may aid in aligning the fairlead hole openings during the next step.
 - c) If M12 size hardware is used, tighten to 110 Ft-lbs. torque. Tighten M14 size hardware to 175 Ft-lbs. torque. Lastly, tighten M10 size hardware to 64 FT-lbs. torque, refer to Figure M JP60-1X0023-AB JL/JT Bumper Winch Plate Assy.
7. If you will be installing a winch (not included), install it at this time per the manufacturer's instructions.
8. Install the JP60-1X0023-AF JL/JT Bull Bar Assy using the included fasteners and JP60-0023-AX JL/JT Bumper License Plate Bracket.



JL/JT BUMPER FLAG NUT PLATE ASSY



JL/JT BULL BAR ASSY



JL/JT LICENSE PLATE BRACKET

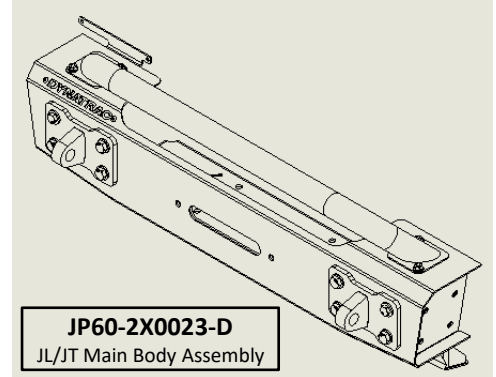
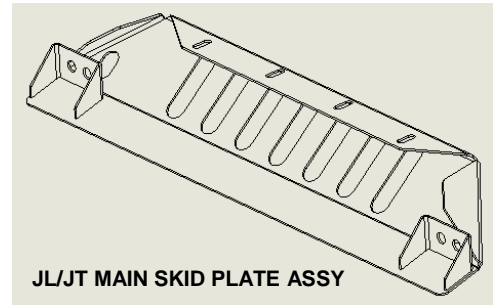
Dynatrac EnduroSport Front Bumper

DYNATRAC Bumper Installation Steps; cont'd

Refer to Page 3, Bill of Materials diagram.

9. Install the JP60-1X0023-AE JL/JT Main Skid Plate Assy using the included fasteners.
10. Included are DA60-0014-DO Mountable Nylon Cable Ties if you decide to re-install the fog lamp wire harness. The cable ties install into 1/4" size holes found on the vehicle frame and/or bumper.
11. Connect the negative battery cable(s).

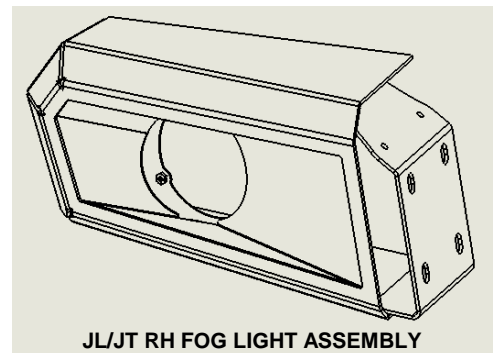
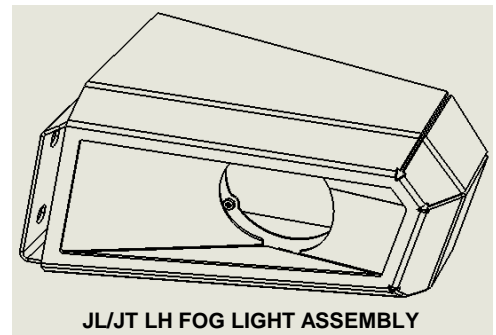
If you purchased JP60-2X0023-D JL/JT Main Body Assembly bumper, your installation is now complete.



DYNATRAC Bumper Installation Steps; JP60-2X0023-C

Refer to Page 3, Bill of Materials diagram.

12. Using the included fasteners, install the JP60-1X0023-AC JL/JT LH Fog Light Assembly and the JP60-1X0023-AD JL/JT RH Fog Light Assembly to the Main Body Assembly currently installed onto the vehicle frame.
13. Using the included fasteners install fog lamps.
14. If you haven't already, install and route the fog lamp wire harness behind the winch careful to prevent the harness from becoming pinched or damaged. Included are DA60-0014-DO Mountable Nylon Cable Ties to secure the fog lamp wire harness to 1/4" size holes found on the frame and the Fog Light Assembly mounting brackets.
15. Connect the negative battery cable(s).



If you purchased JP60-2X0023-C JL/JT Main Body Assembly bumper w/Fog Light End Caps, your installation is now complete.