Install: Rugged Rear Bumper  
Part Number: S-11AC00001545

WORK INSTRUCTION OVERVIEW

DANGER

- Read and understand manual of die grinder before operating.
- Do not attempt to use this tool unless experienced to do so.
- Before starting this tool, be sure that no one is in the plane of rotation.
- Always wear eye protection.
- Failure to observe these warnings could result in severe injury to yourself and/or bystanders.

WARNING

- DO NOT ATTEMPT THIS PROCEDURE IF YOU DO NOT HAVE PROPER TOOLS, TRAINING, AND FACILITIES.
- Never consider using a two-post lift that is not certified according to ANSI/ALI ALCCTV-2011 or ANSI/UL 201. (autolift.org)
- Read and follow all instructions provided when installing this product. Failure to do so may result in placing occupants at risk of serious injury or death.
- To protect bystanders and the service technician(s), shut vehicle off, remove the Ignition Key and secure vehicle to prevent unintended movement.
- Never operate the vehicle in excess of manufacturer’s specifications.

NOTICE  When installing this Rugged Rear Bumper accessory on all 2018MY and some early 2019MY ROXOR units, Technical Service Bulletin TSB-014 must be performed prior to completing this installation procedure. Refer to the link below.  
TSB-014 Rear Chassis Harness Replacement

TOOLS REQUIRED

- 1/8” Drill Bit
- 11 mm Drill Bit
- 10 mm Socket
- 13 mm Socket
- 5/8” Wrench
- 13 mm Wrench
- 5 mm Allen Wrench
- Center Punch
- Angle Grinder
- Right Angle Die Grinder
- Ratchet / Socket Driver / Extension
- Torque Wrench (N•m)
- Protective Eye-wear

TORQUE SPECIFICATION

Tighten each fastener to the torque specification below:

- M8 Bolts 18 N•m (±2 N•m)
- M10 x 30 Bolts 45 N•m (±5 N•m)
- M10 x 20 Bolts 59 N•m (±6 N•m)

KIT COMPONENT TABLE

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<tr>
<th>Component</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rugged Rear Bumper</td>
<td>P/N: S-0101AUA00761N</td>
<td>1</td>
</tr>
<tr>
<td>Receiver Hitch</td>
<td>P/N: S-0101AUA00531N</td>
<td>1</td>
</tr>
<tr>
<td>M8 Hex Flange Bolts - M8x25</td>
<td>P/N: S-0000AUA00381N</td>
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<td>M10 Hex Flange Bolt - M10x20</td>
<td>P/N: S-0000AUA00871N</td>
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<tr>
<td>M10 Hex Flange Bolt - M10x30</td>
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<tr>
<td>M10 Nyloc Nut - M10x1.5</td>
<td>P/N: S-7903234004</td>
<td>4</td>
</tr>
<tr>
<td>Light Jumper Harness</td>
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<tr>
<td>CABLE TIE STRAP 530 LONG</td>
<td>P/N: S-0000AUA00471N</td>
<td>4</td>
</tr>
<tr>
<td>KC LED Flood Light</td>
<td>P/N: S-1701DUA00011N</td>
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<tr>
<td>KC Light Bracket</td>
<td>Included in KC Light Kit</td>
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<tr>
<td>M8 Allen Bolt</td>
<td>Included in KC Light Kit</td>
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<tr>
<td>M8 Carriage Bolt</td>
<td>Included in KC Light Kit</td>
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<tr>
<td>M6 Nyloc Nut</td>
<td>Included in KC Light Kit</td>
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<tr>
<td>M8 Nyloc Nut</td>
<td>Included in KC Light Kit</td>
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</tr>
<tr>
<td>M8 Flat Washer</td>
<td>Included in KC Light Kit</td>
<td>2</td>
</tr>
</tbody>
</table>
INSTALLATION PROCEDURE

1. Cut off recovery loop using an angle grinder. This requires cutting thru two welds on each side to remove the entire recovery loop as shown.

2. Clean up excess welds to make surface flat on both sides.

   **NOTICE** To prevent premature rusting of the body, apply paint or other suitable rust inhibitor to all ground surfaces and holes drilled for this installation.

3. Counter-holding inner (2) M8 nuts, remove (2) M8 bolts and remove rear bumper corner. Repeat for opposite side.

   **NOTICE** Rear bumper corners and fasteners may be kept at customer discretion.

4. Using a suitable marker, make a reference line on receiver hitch end plate as shown. Repeat for opposite side.

5. Mount receiver and install (2) M8 bolts and (2) M10 x 30 Bolts with M10 Nyloc Nut. Tighten evenly, but do not torque.

6. Use tape to transfer reference lines to frame rails. Also, trace a line onto receiver hitch using frame rail edge as guide.

7. Remove receiver hitch. On each end, find and record the measurements as shown below.
8. Using measurements, mark (2) bolt locations through reference line onto tape. Repeat for opposite side.

9. Remove (2) rear M6 bolts for exhaust hanger and rotate hanger out of the way to aid in drilling.

10. Center punch and drill (4) 1/8" pilot holes at marked locations, then open (4) holes to 11 mm. Repeat for opposite side.

11. Re-install receiver hitch, threading (2) M8 bolts by hand.

12. Install (1) M8 bolt, outer. Install (2) M10 x 30 bolts, counter-holding (2) M10 nyloc nuts, firm but not torqued. Repeat for opposite side.

13. Install remaining (2) M8 bolts by hand.

**NOTICE** All metal to metal contact surfaces in fastened points must be cleaned prior to bolt tightening to avoid fastener loosening. (no dirt/ mud in the stack up)

**NOTICE** All bolts should be loose at this point.

**NOTICE** To avoid damage to locking nut features, these fasteners should be tightened slowly (350 max RPM's). It is recommended to tighten all fasteners by hand.
14. Install and torque (2) M10 x 20 fasteners to specification. Repeat for opposite side.

15. Torque all remaining fasteners for receiver hitch. Inner nuts must be counter-held to torque bolts.

16. Install (1) M8 carriage bolt with (1) M8 washer and (1) M8 nyloc nut through light bracket. Repeat for opposite side.


18. Connect (1) jumper wire to light connector. Repeat for opposite side.

19. To install bumper cover, align over receiver hitch edge downward and push on. Install (8) M10 x 20 hex bolts and torque to specifications.

21. Route excess directly over frame rail. Using (2) cable ties around bundle and through connector around frame rail support rail. Push clip onto support rail. Repeat for opposite side.

22. Re-install exhaust hanger and torque to specifications.