



INSTALLATION INSTRUCTIONS WINCH MOUNTING KIT

Part Numbers: 73520 (black), 73521 (stainless steel)

Application: Dodge Ram HD

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgment.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. **WARNING** and **CAUTION** are signal words that identify the level of hazard. These signal words mean:

WARNING signals a hazard that could cause serious injury or death, if you do not follow recommendations.

CAUTION signals a hazard that may cause minor to moderate injury, if you do not follow recommendations.

This guide uses **NOTICE** to call attention to important mechanical information, and **Note**: to emphasize general information worthy of special attention.

WARNING

INJURY HAZARD

Failure to observe these instructions could lead to severe injury or death.

- Always** use extreme caution when drilling on any vehicle. Make sure that all fuel lines, brake lines, electrical wires, and other objects are not punctured or damaged when/if drilling on the vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged. Failure to inspect the area to be drilled may result in vehicle damage, electrical shock, fire or personal injury.
- Always** wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- Always** use extreme caution when cutting and trimming during fitting.
- Always** remove jewelry and wear eye protection.
- Never** lean over battery while making connections.
- Never route electrical cables:**
 - o Across any sharp edges.
 - o Through or near moving parts.
 - o Near parts that become hot.
- Always** insulate and protect all exposed wiring and electrical terminals.
- Always** install terminal boots as directed in installation instructions.
- Always** use appropriate and adequate care in lifting components into place.
- Always** insure components will remain secure during installation and operation.
- Always** tighten all nuts and bolts securely, per the installation instructions.
- Always** replace all worn or damaged parts before operating.
- Never** operate this WARN product with damaged or missing parts.

Caution

Moving Parts Entanglement Hazard

Failure to observe these instructions could lead to minor or moderate injury.

- Always** take time to fully read and understand the installation and Operations Guide included with this product.
- Never** operate this product if you are under 16 years of age.
- Never** operate this product when under the influence of drugs, alcohol or medications.

Read installation and operating instructions thoroughly.

Notice
Equipment Damage
<input type="checkbox"/> Always refer to the Installation and Specification Guide, supplied in the winch kit, for all wiring schematics and specific details on how to wire this WARN product to your vehicle. Read installation and operating instructions thoroughly.

This **WARN Trans4mer system** can be customized to give your Dodge Ram a wide variety of looks, front-end protection and winch mounting capability. The system starts with this strong two-tube Grille Guard that attaches to the truck's frame with brackets designed by Warn engineers to handle up to a 16,500 lb. winch. It is durable and good-looking, even as a stand-alone Grille Guard, but can be easily upgraded with some great options! You can add a third large size tube (Light Bar) that adds even more protection and includes tabs for mounting auxiliary lights. The tubes can be mounted in a variety of positions to achieve the look and function that you desire. You can mount a Winch Carrier Bracket that provides a permanent mount for a Warn winch. An accent cover is available to dress up the winch carrier. You may also add a Receiver Bracket that will handle the Warn Multi-mount winch system, a draw bar or any other accessory that fits the standard 2-inch receiver tube. Finally, Brush Guards that protect the headlights and front corners of the truck that can be easily added to any of the options above.

WARN PART NUMBERS FOR AVAILABLE OPTIONS

Light Bar Kit, (Black)	29395
Light Bar Kit, (Stainless)	63325
Winch Carrier Kit (mid-frame)	29394
Winch Carrier Kit (large frame)	62027
Receiver Kit (Black only)	29397
Brush Guard Kit (Black)	72470
Brush Guard Kit (Stainless)	72469
SST Stainless Carrier Cover Kit	63130 or 63135

I. BEFORE YOU BEGIN

NOTES: PLEASE READ THESE INSTRUCTIONS THOROUGHLY BEFORE STARTING THE INSTALLATION OF THIS KIT. MINOR MODIFICATIONS MAY BE REQUIRED DUE TO VARIATIONS BETWEEN VEHICLES. STAINLESS STEEL KITS WILL BE SLIGHTLY DIFFERENT AND MAY CONTAIN DIFFERENT HARDWARE.

II. PARTS LIST

PART NO.	QUANTITY	DESCRIPTION
73527	2 (black kit only)	SIDE MEMBER, BLACK
73526	2 (stainless kit only)	SIDE MEMBER, STAINLESS
65210	1	SIDE MEMBER BRKT, RH
65209	1	SIDE MEMBER BRKT, LH
65218	1	FRAME EXTENSION, RH
65217	1	FRAME EXTENSION, LH
65352	1	UPPER BRACE, RH
65351	1	UPPER BRACE, LH
73524	1	LOWER BRACE, RH
73523	1	LOWER BRACE, LH
65358	2	DIAGONAL BRACE
63688	1 (stainless kit only)	1-1/2" TUBE, STAINLESS

29365	1 (black kit only)	1-1/2" TUBE, BLACK
60326	1 (stainless kit only)	2-1/2" TUBE, STAINLESS
29366	1 (black kit only)	2-1/2" TUBE, BLACK

III. TOOLS REQUIRED

7/32" Allen wrench	10mm end or socket wrench (diesel)
1/4" Allen wrench (for large winch carrier)	18mm end or socket wrench
9/16" end and socket wrench	7/16" drill
5/8" socket wrench	1/2" drill
11/16: end and socket wrench	Large screw driver or prying tool
3/4" socket wrench	

IV. TORQUE SPECIFICATIONS (

1/4	8 lb. ft. (10.8 N-m)
3/8	30 lb. ft. (40.7 N-m)
7/16	50lb. ft. (67.8 N-m)
1/2	75 lb. ft. (101.7 N-m)

Do not securely tighten any fasteners until directed later.

V. INSTALLATION

1. Review all illustrations to become familiar with the kit components.
2. Remove the gray plastic insert(s) from the center of the bumper, if so equipped. Unscrew the fasteners and remove. The insert(s) will not be reinstalled. Note the spacing between the headlights and the top of the bumper. You will want to return the bumper to this spacing after installation. If the vehicle is equipped with factory tow loops, remove them now. They will not be used with the Grille Guard.



Figure 1 Bolts attaching bumper brackets to frame (viewed from center of vehicle, looking outward)

3. Remove bumper with brackets. Unplug the factory fog lamps if so equipped. Support the bumper then remove the "paired bolts" attaching the bumper brackets to the frame. See **Figure 1**

Vehicles with diesel engines might require removal of the upper intercooler mounting bolts. Remove the bolts then lift the intercooler enough to remove the “paired bolts” (about 3/4”). Temporarily slide the intercooler back in place. See **Figure 2**

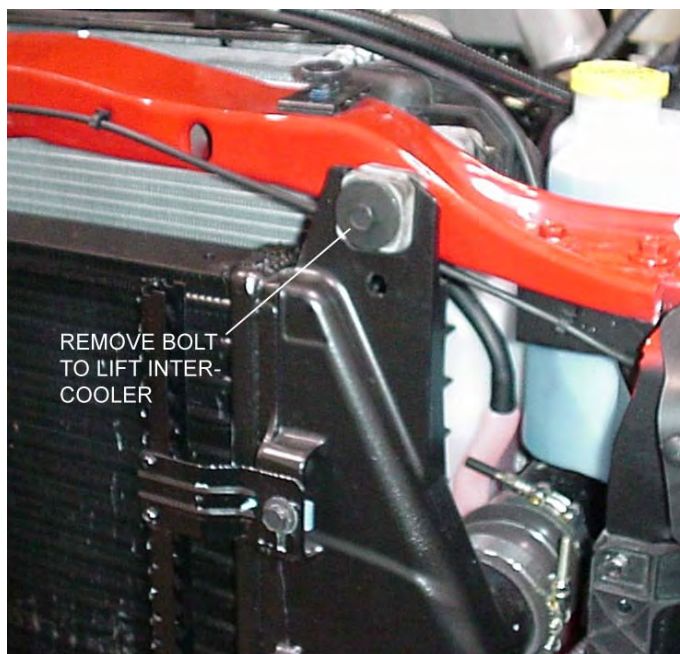


Figure 2 Left (driver side) diesel intercooler bolt

4. Remove the brackets from the bumper. Remove the three (3) nuts holding each bracket in place. Save the nuts to reattach the bumper later. The brackets will not be reinstalled.

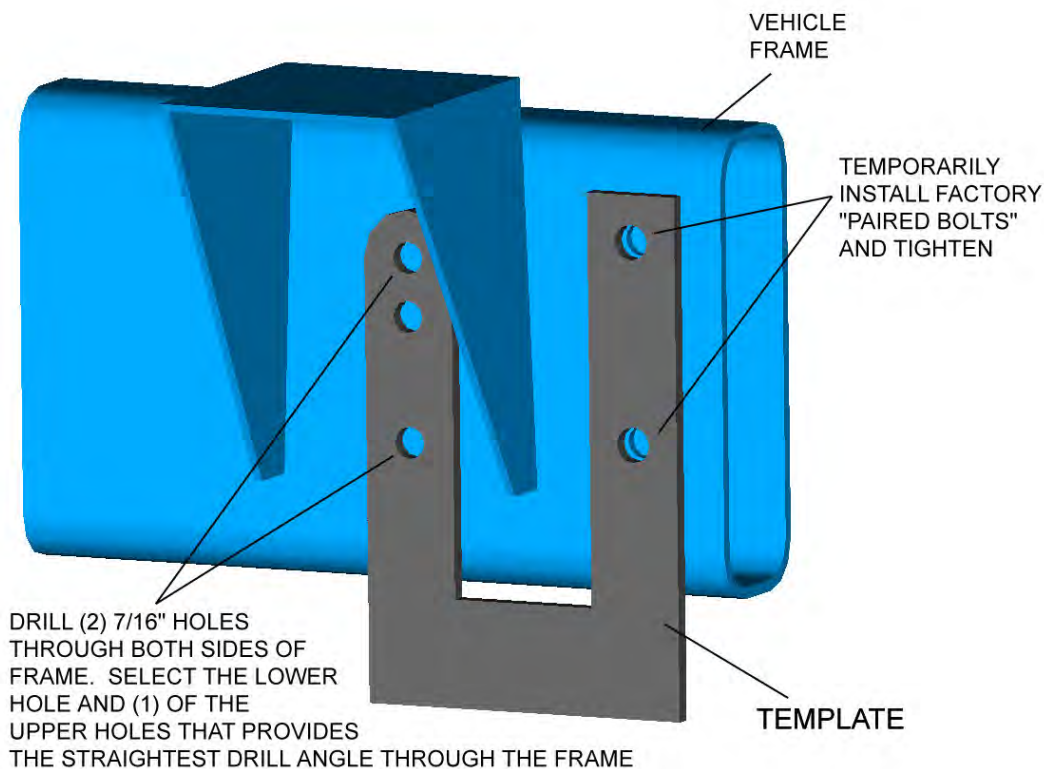


Figure 3 Template in place outside the right (passenger side) frame rail

5. Install the Template as shown in **Figure 3**. Temporarily install the factory “paired bolts from the outside of the frame. Install the nuts and tighten enough to prevent the Template from moving. Drill two (2) 7/16” holes through the remaining Template holes and both inner and outer frame walls. It is important that the holes be drilled straight across the frame in order to align with the brackets to be installed later. If the Template has more than one upper hole, drill the one that allows for the straightest drill angle through the frame. Later models typically use the lower of the (2) upper holes due to body mount interference. Repeat this step for the opposite side of the vehicle.

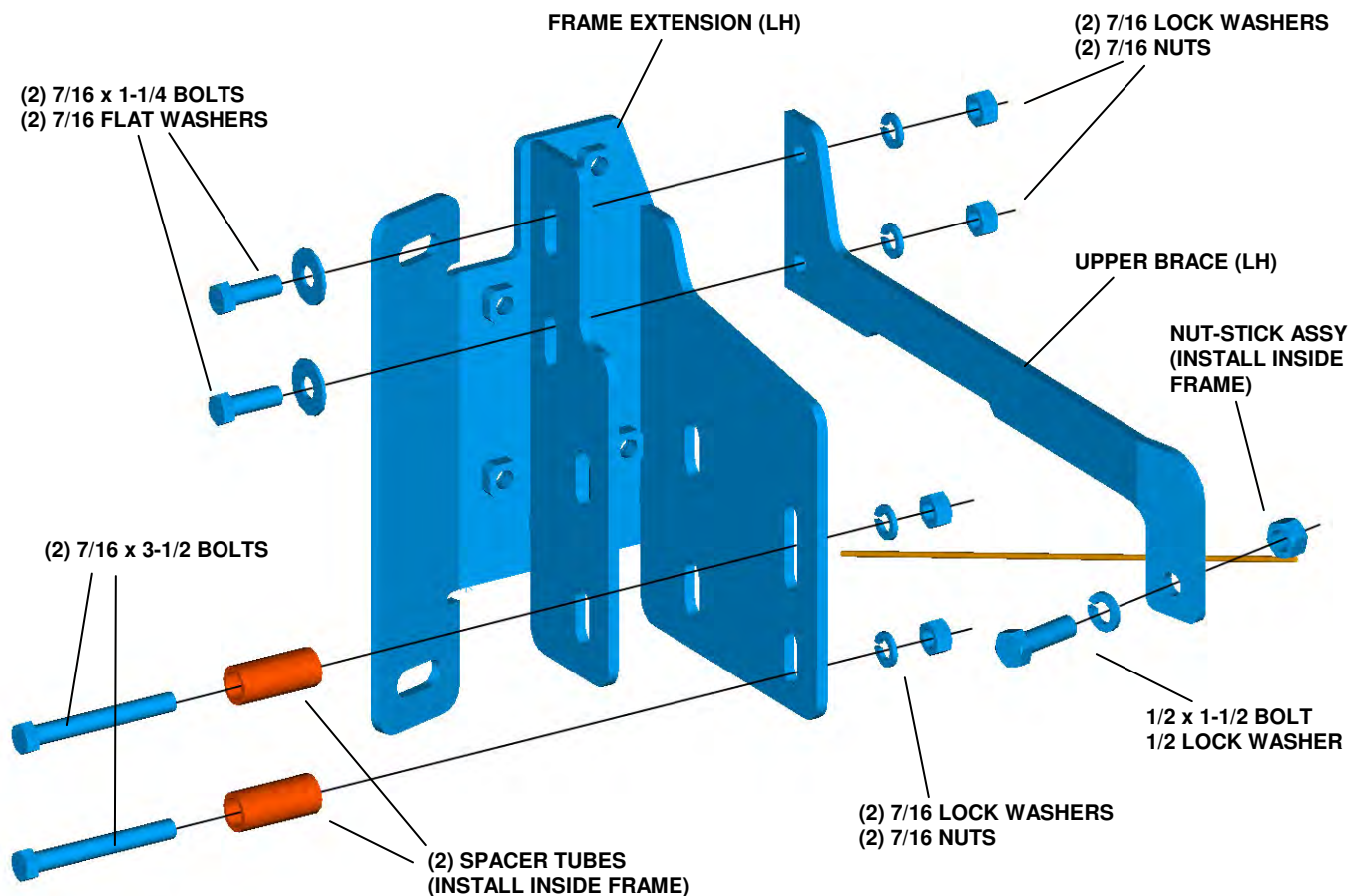


Figure 4 Left Hand Frame Extension, Upper Brace and hardware

6. Slide the LH Upper Brace above the frame, inboard of the body mount. The tab with the 1/2” hole should be to the rear and outboard of the frame.

7. Temporarily install the LH Frame Extension Bracket. Align the Frame Extension slots with the holes in the frame. Use the “paired bolts” inserted from the outside of the frame to hold the Frame Extension in place.

8. Attach the Upper Brace to the Frame Extension Bracket with the hardware finger tight. See **Figure 4**. Drill a 1/2” hole through the hole in the end of the Brace into outer frame wall, only. See **Figure 5**.

9. Remove the Frame Extension. It is not necessary to repeat for the opposite side. The right side frame already has the hole.



Figure 7 Left frame tube “anti-crush” brackets pried up for access inside the frame tube

- 11.** Insert a nut-stick assembly through the end of the frame and install a 1/2 x 1-1/2” bolt and lock washer through the LH Upper Brace, into the frame and nut. It may be helpful to bend the wire slightly to better align the nut with the bolt. Do not tighten yet.
- 12.** Slide the RH Upper Brace above the frame and install a 1/2 x 1-1/2” bolt and lock washer and nut-stick assembly. Do not tighten yet.
- 13.** Measure back from the end of the frame tube. Mark the bottom of the frame along the center at 3-1/2” and 6-1/2”. Drill 7/16” holes where marked. Repeat this step for the opposite side. See **Figure 8**

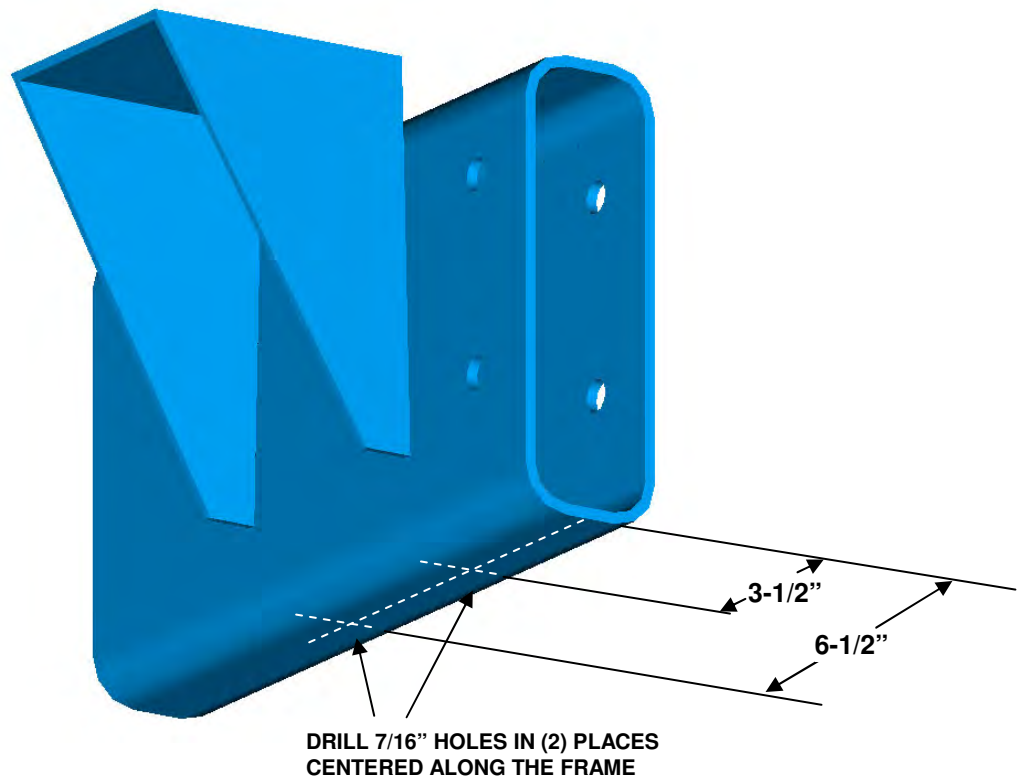


Figure 8 Right frame with hole locations marked

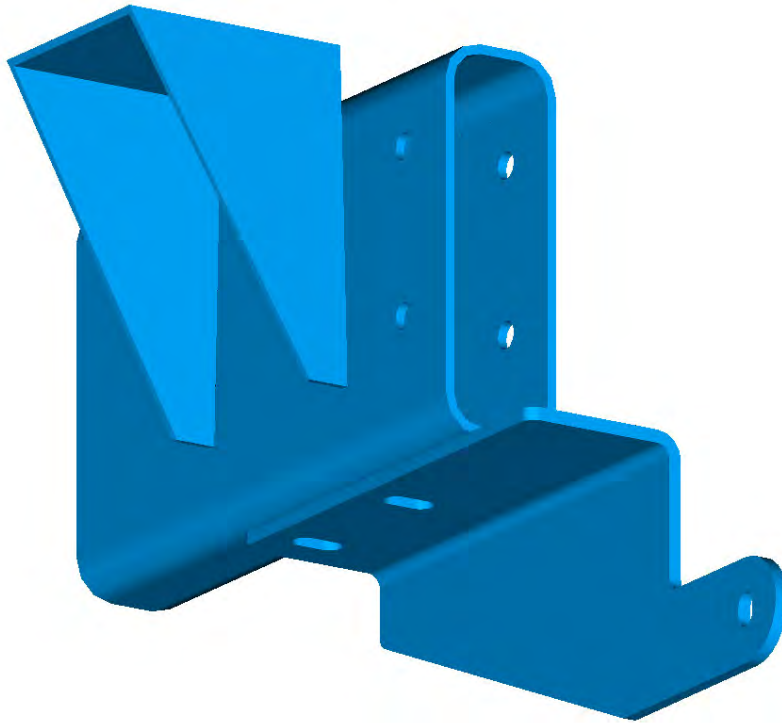


Figure 9 Right frame with Lower Brace in position

- 14.** Insert a 7/16" Nut Plate into the frame (long leg first, towards rear of vehicle) and install the correct Lower Brace. Use a 7/16" x 1-1/2" bolt, lock washer and flat washer through the Brace and frame, into the Nut Plate. Repeat for each Brace slot. Do not tighten at this time. See **Figure 10**
- 15.** Hold a spacer tube inside the frame and insert a 7/16 x 3-1/2" bolt through one of the holes drilled with the Template and the spacer from outside the frame. These spacers will prevent frame distortion when the bolts are tightened. Do not push the bolt through the inside frame wall yet. Repeat this step for each hole drilled with the template. See **Figure 11**
- 16.** Push the "anti-crush" brackets back into the original positions. Do not let the spacer tubes drop off the bolts inside the frame.
- 17.** Install the appropriate Frame Extension. Push the 7/16" x 3-1/2" bolts through the Frame Extension and install a 7/16" flat washer, lock washer and nut on each. Lift the intercooler and reinstall the factory "paired bolts" from the inside, through the Frame Extension. Install the factory nuts. Do not tighten any hardware yet. Repeat for the opposite side. See **Figure 4**
- 18.** Attach the Upper Braces to the inside of the Frame Extensions. Use (2) 7/16 x 1-1/4" bolts and flat washers through the Frame Extension into the Upper Brace. Install a 7/16" lock washer and nut on each bolt. Push the intercooler back into position. Install and tighten hardware.

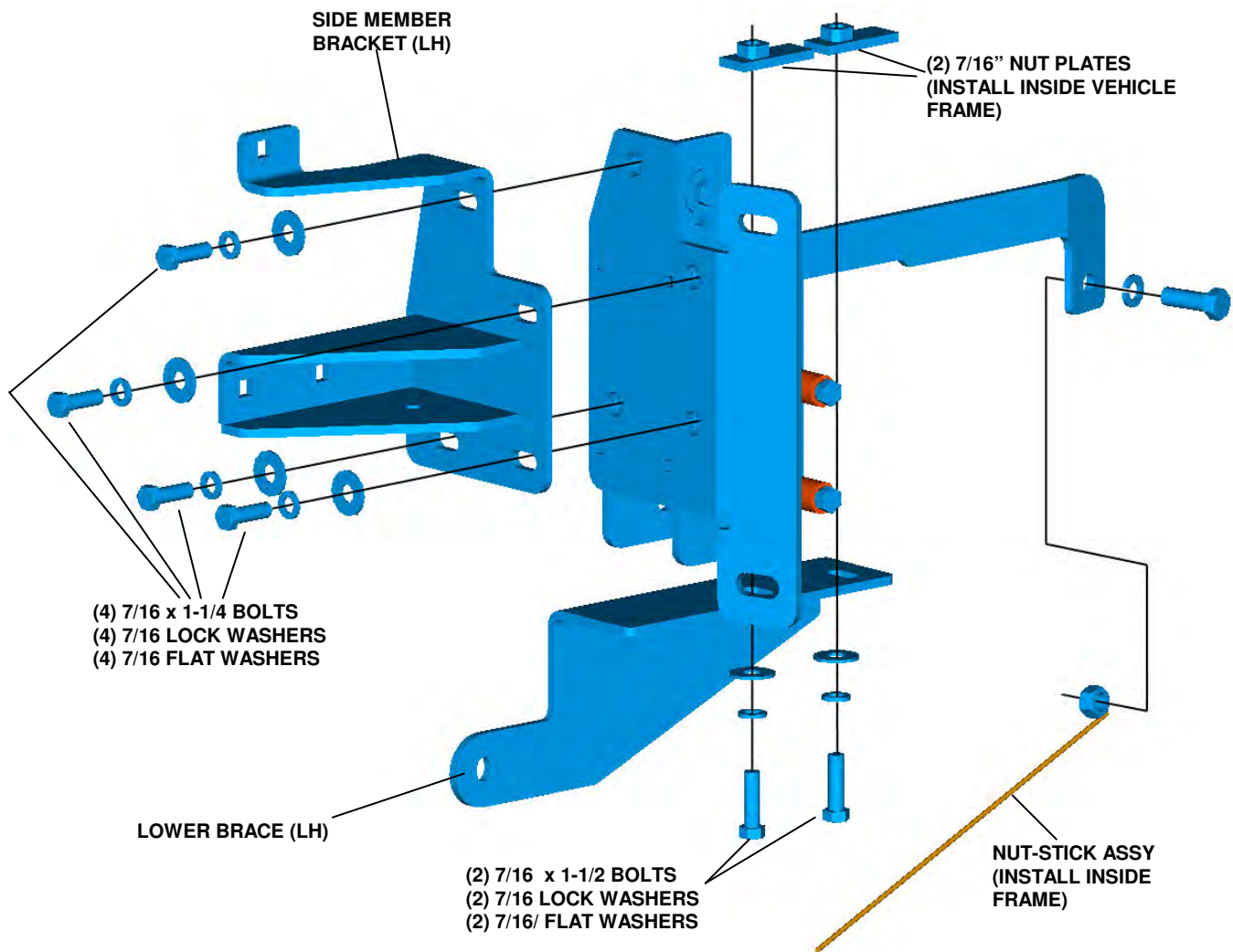


Figure 10 Left Hand Lower Brace and Side Member Bracket

19. Install the LH and RH Side Member Brackets. Use 7/16 x 1-1/4" bolts, lock washers and flat washers through the Side Member Brackets into the threaded holes in the Frame Extensions. Center the Brackets on the vehicle and adjust them so there is 32-1/2" between the inner faces (where the Side Members will be installed). Tighten the hardware before proceeding. See **Figure 10**

20. If the Trans4mer is being installed as a Grille Guard and a winch is not being mounted at this time, skip this step and install the tubes in any desired position as shown in **Figure 11**. If a winch is to be installed proceed with the next step.

21. Install the Diagonal Braces. Use 3/8 x 1-1/2" bolts through the hole in each Side Member Bracket into the Diagonal Brace. Install 3/8" lock washers and nuts. Do not tighten yet. The other end of the brace will be attached to the Winch Carrier after the bumper is reinstalled.

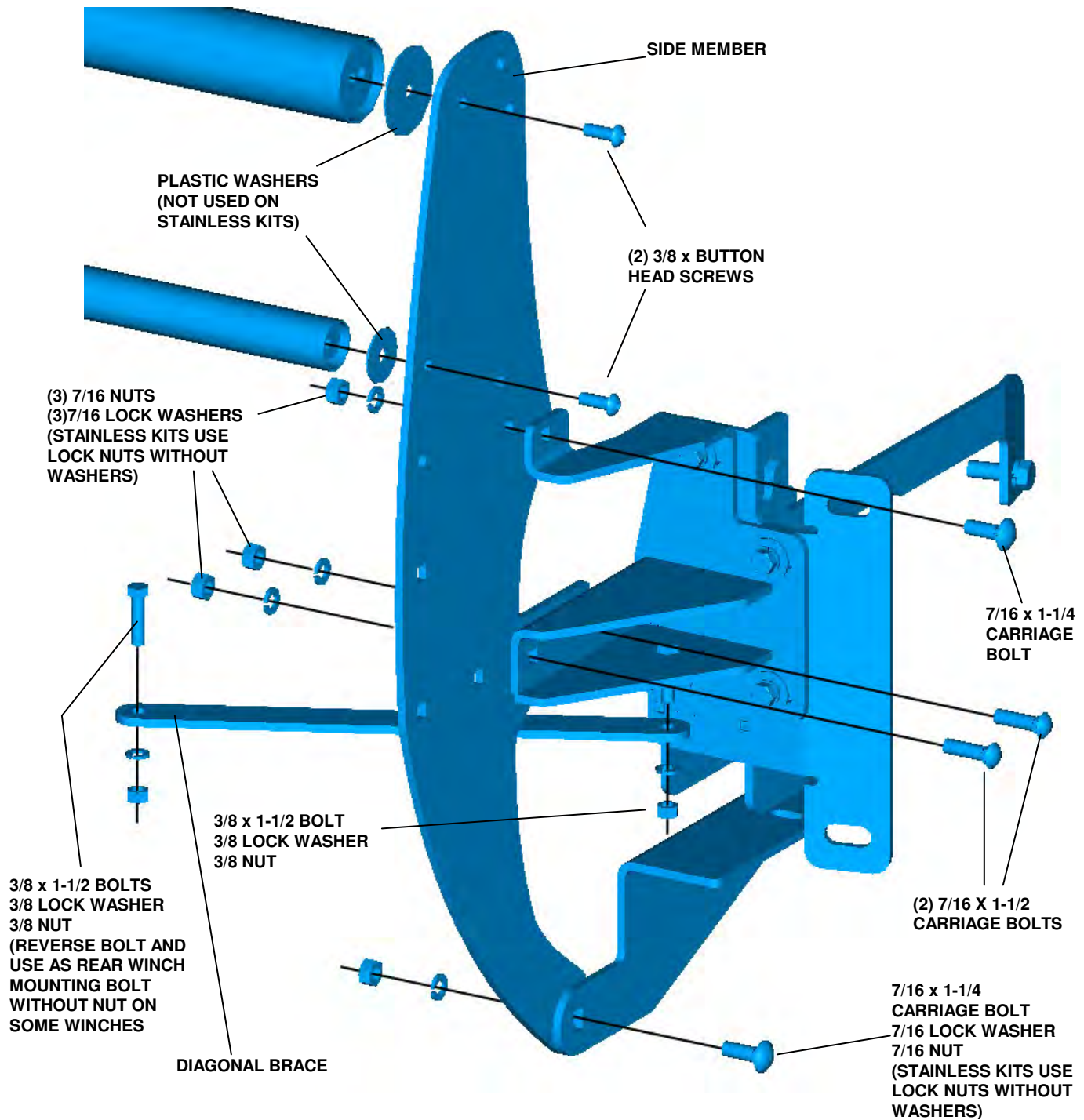


Figure 11 Side Member, Diagonal Brace and Center Tubes (Bumper and grille not shown for clarity)

Brush Guard Note: If Brush Guards are to be installed refer to those instructions at this time. It is easier to install the stabilizing brackets for the Brush Guards before the bumper is reinstalled.

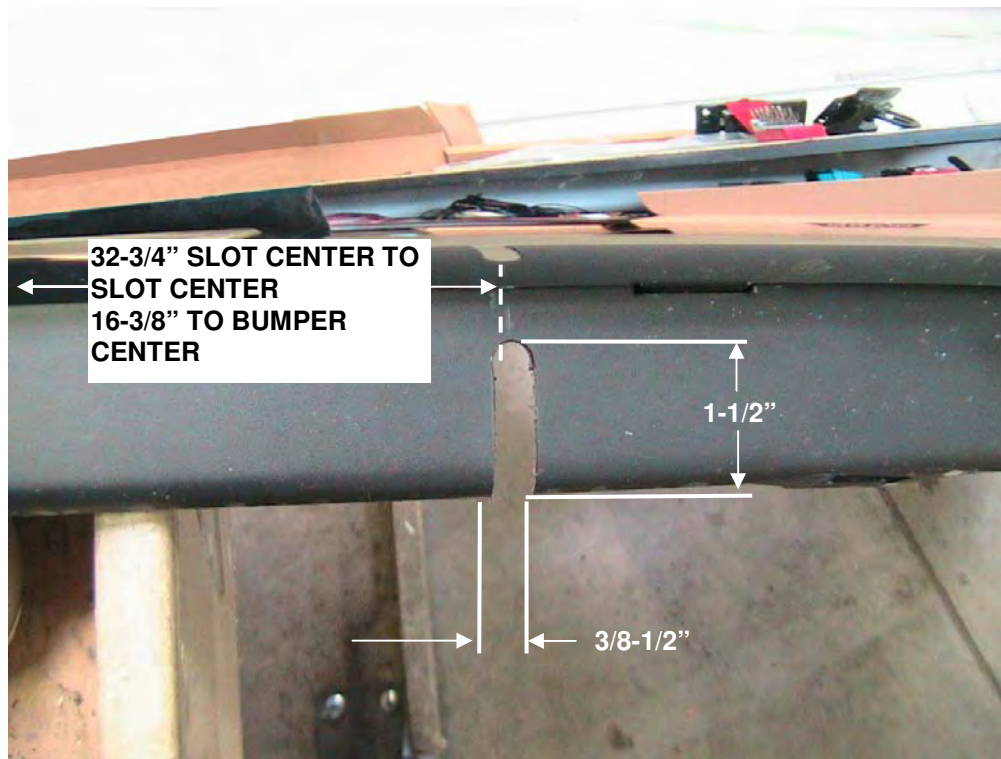


Figure 12 Slot cut into air dam

22. Cut two (2) slots in the front air dam for the Lower Braces. Determine the center of the air dam and measure out 16-3/8" in each direction for the center of the slots. Measure up 1-1/4" from the bottom edge of the air dam and mark for the drill center. Drill a 3/8 to 1/2" hole then cut from the bottom edge to the hole with a saw or knife. See **Figure 12**

23. Install the bumper. Slide the bumper mounting studs through the slots in the Frame Extensions. Only the four (4) outboard bolts are used. Install the original nuts, center the bumper and tighten.



Figure 13 Side Members and Lower Braces installed

24. Adjust the bumper to the desired vertical position and tighten the ‘paired bolts’ and the 7/16 x 3-1/2 bolts through the Frame Extensions first. Next, tighten the 7/16 x 1-1/4” Upper Brace bolts, then the rear 1/2 x 1-1/2” Upper Brace bolts. Do not tighten the Lower Brace hardware or the Side Member Bracket hardware yet.

25. Attach the Side Members to the insides of the Side Member Brackets and Lower Braces. Use 7/16 x 1-1/4” carriage bolts, lock washers and nuts (use nylon lock nuts without washers for Stainless Side Members. See **Figure 9**



Figure 14 Vehicle frame and LH Lower Brace installed

26. Install the Winch Carrier. Use the carriage bolts, lock washers and nuts from the Winch Carrier Kit unless you are installing a stainless steel Trans4mer. When installing a stainless kit use the stainless button head bolts and lock nuts from this kit instead.

27. Attach the Diagonal Braces to the Winch Carrier. For a Large Frame Winch Carrier (12,000 to 16,500 lbs) install 3/8 x 1-1/2” bolts from the top of the Carrier Base (before the winch is installed) and secure with lock washers and nuts. For a Mid Frame Winch Carrier (9500 lbs and below, including Tabor 12) use the 3/8 x 1-1/2” bolts with lock washers as rear winch mounting bolts, installed from the bottom of the Carrier Base.

28. If the Winch Carrier or Receiver Kit is being added, install a tube only in the top position and then refer to the specific instructions packaged with those items.

29. The plastic washers are not used when installing Stainless Steel Tubes

30. Tighten the remaining fasteners securely. Start with the Side Member and Winch Carrier hardware first, and then work towards the vehicle.

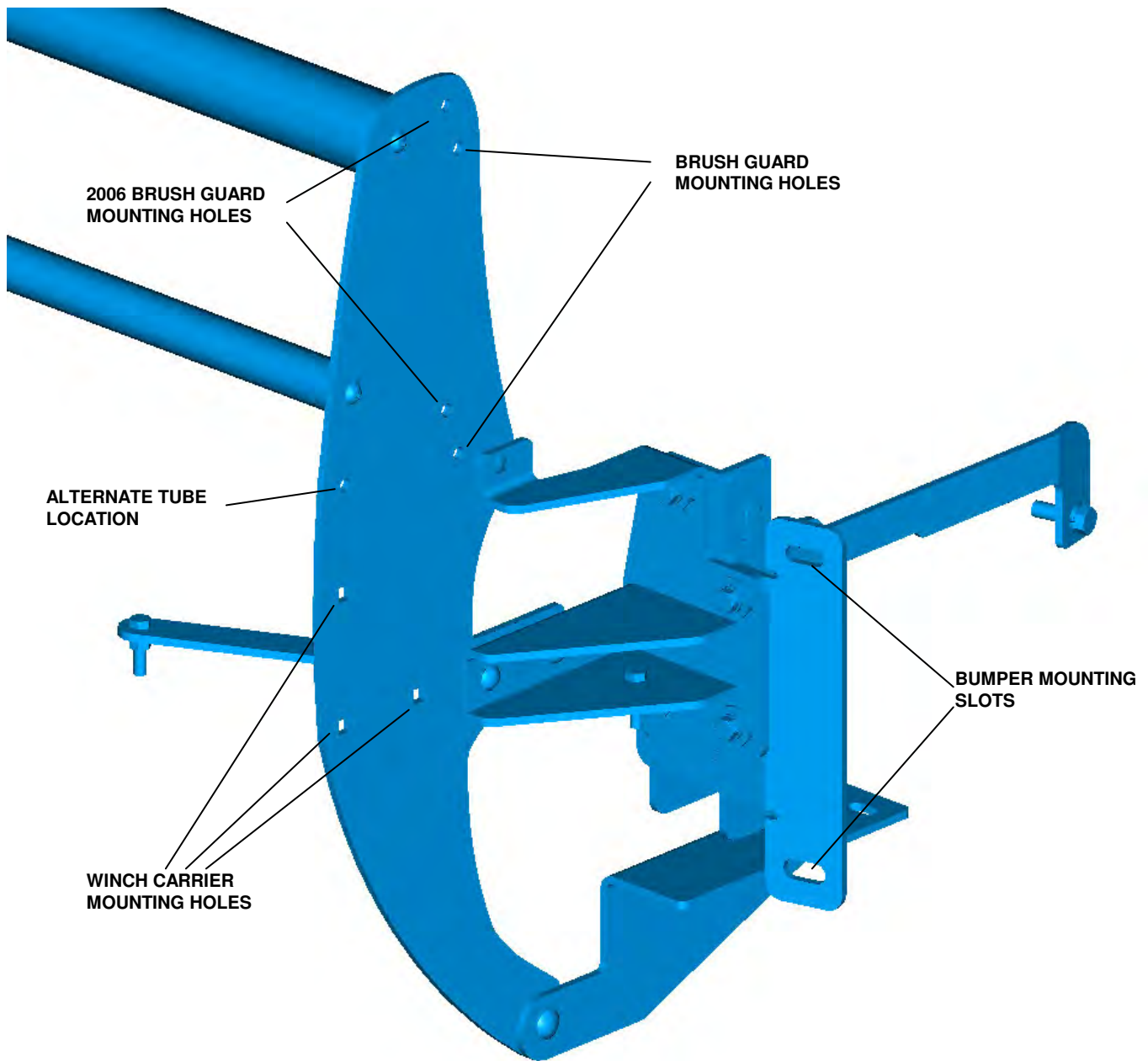


Figure 15 Left Hand Assembly complete

THE TRANS4MER INSTALLATION IS NOW COMPLETE. PROCEED TO SECTION IV TITLED "MAINTENANCE/CARE".

⚠ WARNING

READ THE VEHICLE'S OPERATOR MANUAL, WINCH OPERATOR MANUAL, AND ALL WARNING LABELS PRIOR TO OPERATION OF WINCH.

WARNING

FAILURE TO SECURELY TIGHTEN ALL BOLTS ON THE WINCH PLATE, WINCH, AND FAIRLEAD CAN RESULT IN PRODUCT FAILURE WHICH MAY RESULT IN VEHICLE DAMAGE AND OPERATOR INJURY OR DEATH. DOUBLE CHECK THAT ALL BOLTS ARE SECURELY TIGHTENED PRIOR TO USE.

VII. MAINTENANCE/CARE

1. Inspect all parts on the winch, winch mount, and related hardware prior to each use. Replace all hardware that appears rusted or deformed.
2. Inspect all nuts and bolts on the winch, winch mount, and related hardware prior to each use. Tighten all nuts that appear to be loose. Stripped, fractured, or bent bolts or nuts need to be replaced.
3. Check all cables prior to use. Replace cables that look worn or frayed.
4. Check all moving or rotating parts. Remove debris that may inhibit the part from moving freely.

Stainless Steel Truck Accessories

What to expect:

Polished stainless steel combines the beauty of a chrome-like appearance with extreme durability and corrosion resistance. With a minimum amount of care, the appearance will last almost indefinitely. Unlike platings or coatings, there is nothing to peel off or wear away that would allow corrosion underneath.

The actual appearance may not be exactly like new chrome in either the degree of luster or color. There may be fine polishing lines visible up close and small differences between mating parts of an assembly. A grille guard, for instance, may have small differences between the round tubing and the flat plate. The backside of a part may not be as highly polished as the front. However, part of the beauty and appeal of stainless actually lies in the smooth “hand-worked” appearance.

There also is a possibility that small rust spots can appear on stainless products. They are usually due to minor iron contamination on the surface as a result of normal manufacturing and handling processes. This minor rust, if it occurs at all, is easy to remove and will not tend to spread.

Recommended care:

Regular washing with fresh water and mild car wash detergents followed by rinsing and drying with a soft towel is the best minimum care. Beyond that, any cleaner/wax recommended for automotive finishes will work well to remove minor stains and scuffs, enhance the shine and provide protection. Always use clean soft cotton cloths. In most cases, this will be all that is required for many years. For more serious blemishes or a rust spot, use a cream metal polish recommended for stainless, aluminum, etc. Try to rub in the direction of the original polishing lines.

Ultimately, any stainless part can be restored to a brilliant shine with power buffing processes.

Caution:

Do not use steel wool or any type of metal scraper. Do not use “Scotch Brite” pads or abrasive powdered cleaners. Do not try to clean with muriatic acid or any other acid.

Stainless Fasteners

Stainless steel fasteners are included in many of the stainless kits. These fasteners provide similar corrosion resistance and appearance as the rest of the kit. However, stainless fasteners are prone to galling when installed in similar stainless material. It is a good idea to apply a small amount of anti-seize compound to the threads when installing them. Care should also be taken when tightening the fasteners to prevent rounding or deforming the corners of the bolts. Make sure the wrenches are the correct size and fit properly. In the case of socket heads, the wrench should have sharp, un-worn edges. With a few precautions during assembly the products should provide years of service.

 WARNING

PERFORM REGULAR INSPECTIONS ON THE WINCH, WINCH MOUNT, AND RELATED HARDWARE. NEVER OPERATE THE WINCH WITH DAMAGED OR MISSING PARTS. FAILURE TO FOLLOW THIS WARNING MAY CAUSE VEHICLE DAMAGE AND OPERATOR INJURY OR DEATH.