



Installation Torque Specifications Quick Reference Manual

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Torque Specification Overview

- Before installing any Unaka product, review the most up to date manual completely which can be found on our website here: <https://unakagearco.com/pages/manuals>
- This manual does not replace any information found on the individual product manual.
- This is indented as a quick reference overview of our torque specifications.
- Incorrect use of a torque wrench will result in damage to the torque wrench, or bolts tightened to the incorrect torque.
- Failure to use Loctite threadlocker, anti-seize, or torquing your hardware correctly may result in bolts loosening prematurely or seizing during installation.
- You are responsible for checking your hardware frequently to ensure all hardware remains tight (1 week after the installation, and every 2 months).
- You are responsible for ensuring the torque wrench you are using has been calibrated recently and correctly.
- If you have any questions about our torque specifications, email us at csr@unakagearco.com!

Torque Specification Overview

Metric Hardware

Rack or Product Type	Typical Use	Bolt Size / Connection Type A	Tool A	Connection Side B	Tool B	Torque (In-Lbs)	Torque (Ft-Lbs)	Torque (N-m)	Loctite or Antisieze
Fiamma F45s Awning, All Racks	Fiamma factory bracket to Unaka Adapter Bracket	M6 Carriage Bolt	N/A	M6 Nylock Nut	10mm Socket or Wrench	26.5	2.2	3	Antisieze
Ford HSLD Racks Ford Roof Rack Brackets	Ford Rack Brackets to Van Roof	M8 Hex Bolt	N/A	Threaded Insert In Van Roof	13mm Socket or Wrench	168	14	18.98	Loctite 242

1/4" Hardware

Rack or Product Type	Typical Use	Bolt Size / Connection Type A	Tool A	Connection Side B	Tool B	Torque (In-Lbs)	Torque (Ft-Lbs)	Torque (N-m)	Loctite or Antisieze
All HSLD Racks	HSLD Wind Fairing to brackets & end caps	1/4-20 Button Head or Allen Style Bolt, Any Length, Stainless Steel	5/32 Hex Key (Allen)	1/4-20 Nylock Nut	7/16" Socket or Wrench	75.2	6.26	8.48	Antisieze
All Acrylic Wind Fairings	Acrylic Wind Faring to brackets	1/4-20 Button Head or Allen Style Bolt, Any Length, Stainless Steel	5/32 Hex Key (Allen)	1/4-20 Nylock Nut	7/16" Socket or Wrench	75.2	6.26	8.48	Antisieze
All Racks	Flush Mount & Top Mount Solar Panel Brackets to Solar Panel	1/4-20 Hex Head Bolt, Any Length, Stainless Steel	7/16" Socket or Wrench	1/4-20 Nylock Nut	7/16" Socket or Wrench	75.2	6.26	8.48	Antisieze

Torque Specification Overview

5/16" Hardware

Rack or Product Type	Typical Use	Bolt Size / Connection Type A	Tool A	Connection Side B	Tool B	Torque (In-Lbs)	Torque (Ft-Lbs)	Torque (N-m)	Loctite or Antisieze
All Acrylic Wind Fairings	Acrylic Wind Fairings to 15 Series 8020 Cross Bars	5/16-18 Hex Head Bolt, Any Length, Stainless Steel	1/2" Socket or Wrench	3678 T-Nut (slides into 8020)	N/A	132	11	14.9	Loctite 242
All Racks	<p>***Most Common***: Attaching anything to 8020 using button head screws & t-nuts including: -8020 Adapters to 15 Series 8020 -HSLD Side plates to 15 Series 8020 -Cross Bar Plates to 15 Series 8020 -8020 Splice Plates to 15 Series 8020</p>	5/16-18 Button Head or Allen Style Bolt, Any Length, Stainless Steel	3/16 Hex Key (Allen)	3678 T-Nut (slides into 8020)	N/A	132	11	14.9	Loctite 242
Ford HSLD Racks	-Ford HSLD Cross bars to 15 Series 8020 -Ford HSLD Rack Brackets to 15 Series 8020 Cross Bars	5/16-18 Hex Head Bolt, Any Length, Stainless Steel	1/2" Socket or Wrench	3678 T-Nut (slides into 8020)	N/A	132	11	14.9	Loctite 242
All ProMaster Roof Racks	Ram ProMaster Roof Rack Bracket to Ram Van Roof	5/16-18 Hex Head Bolt, Any Length, Stainless Steel	1/2" Socket or Wrench	Rack Bracket Nut Plate	N/A	144	11	14.9	Loctite 242
All HSLD Racks	-HSLD Side Plate Splice Plates -HSLD Wind Fairing to HSLD Side Plates	5/16-18 Hex Head Bolt, Any Length, Stainless Steel	1/2" Socket or Wrench	5/16-18 Nylock Nut	1/2" Socket or Wrench	132	11	14.9	Antisieze
Sprinter 8020 Adapters	Sprinter 8020 Adapters to Sprinter Factory Rails	5/16-18 Carriage Bolt Through Washer Plate, Any Length	N/A	5/16-18 Nylock Nut	1/2" Socket or Wrench	132	11	14.9	Antisieze
Fiamma F45s Awning: All 8020 Racks & ProMaster HSLD	Unaka T-Shaped Adapter Bracket to top of 8020 Side Rail	5/16-18 Hex Head Bolt, Any Length, Stainless Steel	1/2" Socket or Wrench	3678 T-Nut (slides into 8020)	N/A	132	11	14.9	Loctite 242
Fiamma F45s Awning: Ford & Sprinter HSLD	Unaka Adapter Bracket to HSLD Side Rail	5/16-18 Hex Head Bolt	N/A	5/16-18 Nylock Nut	1/2" Socket or Wrench	132	11	14.9	Antisieze

Loctite & Anti-seize

A small tube of Blue Loctite 242 and Loctite anti-seize are provided with some kits. For kits that do not include these products please source them from your local hardware store. Follow the manufacturer's recommendation for application and safety.

Blue Loctite 242

- Apply this to any bolt that is not used with a nylock nut

Loctite Anti-seize

- Apply a dab of anti-seize to the side of each bolt that will be paired with a nylock nut. Nylock nuts have a small plastic insert to make them vibration resistant.



Loctite 242



Loctite C5-A Anti-Seize

Preventative Maintenance Checks

Even though we do not expect any of the hardware to come loose, we recommend checking your roof rack hardware from time to time to help minimize the chance of something coming loose over time. Using the appropriate wrenches check the roof rack hardware to ensure nothing is coming loose at the intervals below.

- Initial check : after 4 to 7 days of moderate driving
- Follow up check : 1 month after moderate driving
- Routine checks : 3 to 4 months of moderate driving
- Anytime after moderate driving on bumpy roads or gravel roads

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