

WILDERNESS PRODUCTS JL 4 DOOR HARDTOP ADVENTURE RACK

PAGE 1 OF 9

PART # 20094

PARTS LIST

TOP SUPPORT PLATE KIT PAGES 7,8,9

- 2 TOP SWAY BRACKETS (RT & LT)
- 2 TOP SUPPORT PLATES (RT & LT)
- 4 6MM X 60MM BUTTON HEAD ALLEN BOLTS
- 4 6MM X 20MM BUTTON HEAD ALLEN BOLTS
- 8 1/4 USS THICK FLATWASHERS (3/4" DIA.)
- 8 1/4 LOCKWASHERS
- 2 3/8 USS FLATWASHERS (1" DIA.)
- 4 1/4" ID. X 3/8" OD. X 1 5/16" LONG TUBING SPACERS
- 4 1" OD. X 3/8 ID. X 1/2" LONG NYLON SPACERS

FRONT SUPPORT KIT PAGES 7,8,9

- 2 FRONT SUPPORTS (RT & LT)
- 4 8MM X 35MM BUTTON HEAD ALLEN BOLTS
- 4 5/16 LOCKWASHERS
- 4 5/16 EXTRA THICK FLATWASHERS (7/8" DIA.)
- 3 5/16 SAE THICK FLATWASHERS (11/16" DIA.)
- 4 3/4" DIA. X 3/8" THICK NYLON SPACERS
- 1 8MM WING NUT
- 2 8MM X 50MM STUDS

TOP SUPPORT BARS & CROSSBAR KIT PAGE 7

- 2 TOP SUPPORT BARS (83 1/2")
- 2 TOP SUPPORT CROSSBARS (40 3/8")
- 8 3/8 X 1 1/4 CARRIAGE BOLTS
- 8 3/8 USS FLATWASHERS
- 8 3/8 NYLON LOCKNUTS

TOP RUBBER BUMP STOP KIT PAGE 6

- 2 1 1/2" RUBBER BUMP STOPS
- 2 5/16 X 2 1/2" ALL THREAD BOLTS
- 4 5/16 NUTS
- 2 5/16 LOCKWASHERS
- 2 3/8 FENDER WASHERS (1 1/2" DIA.)
- 2 3M SCUFF PADS
- 2 BLACK TUBING THREAD COVERS (CUT TUBING TO FIT)

INSIDE SUPPORT BRACKETS PAGE 8

- 2 INSIDE SUPPORT BRACKETS (RT & LT)
- 2 6MM X 50MM ALL THREAD BOLTS
- 2 1/4 LOCKWASHERS
- 4 1/4 X 1 HD. THICK FLATWASHERS

LOWER SUPPORT KIT PAGE 4

- 2 LOWER SUPPORTS
- 2 1/2 X 1 1/2 BOLTS
- 2 1/2 LOCKWASHERS
- 2 1/2 LARGE FLATWASHERS

INNER SUPPORT KIT PAGE 4

- 2 INNER SUPPORTS
- 4 3/8 NUTS
- 4-3/8 LOCKWASHERS
- 4 3/8 USS FLATWASHERS (1" DIA.)

TOP ANGLE MOUNTING BRACKET KIT PAGE 5

- 2 TOP ANGLE MOUNTS
- 2-7/16 X 1 1/2 BOLTS
- 4 7/16 SAE FLATWASHERS (15/16" DIA.)
- 2-7/16 TAP LOCKNUTS

REAR SUPPORT KIT PAGE 5

- 2 REAR SUPPORTS (RT & LT)
- 4-7/16 X 1 1/2 BOLTS
- 2 BLACK 1/8" THICK NYLON PADS
- 8 7/16 SAE FLATWASHERS (15/16" DIA.)
- 4-7/16 TAP LOCKNUTS

FRONT AND REAR CONNECTING TUBE KIT PAGES 5,9

- 1 FRONT CONNECTING TUBE (28 7/8")
- 1 REAR CONNECTING TUBE (38")
- 4 5/16 X 1 BUTTON HEAD ALLEN BOLTS
- 4 5/16 LOCKWASHERS
- 4 5/16 EXTRA THICK FLATWASHERS
- 1-3/16 ALLEN WRENCH

Part# 20094

JL Adventure Rack

Installation Instructions

Please Note! For an easier installation, leave all fasteners loose until directed to tighten.

- 1. Remove factory rear bumper as shown on page 3.
- 2. Install inner support brackets as shown on bottom of page 3, and figures A & B on page 4.
- 3. Install rear mounting brackets, page 4, figures B & C. Adjust brackets so the Velcro pad is as close to the body as possible. Align and tighten all fasteners.
- 4. Re-install rear bumper, support brackets, and plug in the wiring. Tighten all fasteners.
- 5. Re-install rear plastic panels (6-8mm head screws)
- 6. Install top angle brackets to rear mounts as shown on page 5, slightly tighten to hold in place.
- 7. Assemble rear bump stops. Follow the instructions on page 6.
- 8. Install rear supports and black nylon pads to top angle bracket, as shown on page 5. Slightly tighten to hold in place.
- 9. Remove radio antenna (3/8" end wrench)
- 10. Remove front cowlings, 4 (T-40) Bolts.
- 11. Remove front cowlings and install inside support brackets, as shown on page 8, figure B.
- 12. Re-install cowlings and install the 8mm x 50mm stud in lower holes. Refer to page 9, figure A. This step will make the front support installation easier.
- 13. After installing the front supports on both sides, leave slightly loose and spread top supports apart and install front connecting tube, as shown on page 9, figure C. Leave hardware loose.
- Install top support plates and top support flex brackets as shown on page 8 and 9. Align and tighten all fasteners.
- 15. Re-install radio antenna
- 16. Install the two top support bars (83 3/8"L) to the front and rear supports, as shown on page 7.
- 17. Install the two top crossbars (40 3/8") to the top support bars.
- 18. After the rack is aligned and all hardware tightened, refer to pages 5 and 6 for placement of the 3M scuff pads and top bump stop adjustment.

Weather Proofing Connecting Joints:

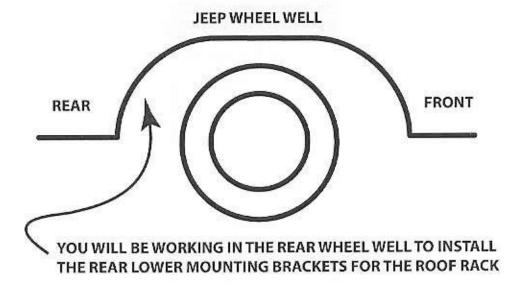
- Back out the 5/16 button head bolts approximately ¼" from the tubes. Apply black silicon to the threads and hole. Re-tighten bolt.
- 2. Apply black silicon around the area where the front and rear tubes slide over the supports.
- Touch up all nicks and scratches, that normally occur with a roof rack, with some black enamel paint.
- We recommend touching up all mounting hardware with black enamel paint. During installation the coating on the hardware can get stripped off.



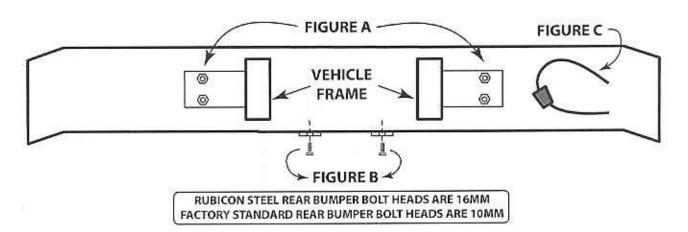
JEEP WRANGLER JL 4 DOOR ADVENTURE RACK PART # 20094



PAGE 3 OF 9



- 1 REMOVE THE PLASTIC PANEL BEHIND THE REAR TIRES (6 8MM HEAD SCREWS)
- 2 REMOVE THE OUTBOARD BUMPER SUPPORT BRACKETS (8 BOLTS 16MM HEAD)
- 3 PULL WHITE TAB UP ABOUT 1/8" ON THE SENSOR WIRING CONNECTER AND UN-PLUG CONNECTER, FIGURE C , ALSO DISCONNECT FROM METAL BRACKET
- 4 REMOVE THE 4 16MM NUTS (FIGURE A) AND BOLTS (FIGURE B)
- 5 TILT BUMPER UP AND REMOVE REAR BUMPER.



- 6 AFTER YOU HAVE REMOVED ALL THE PANELS AND BUMPER, YOU WILL SEE A LARGE OVAL HOLE IN THE BODY STRUCTURE AND ON THE BOTTOM YOU WILL SEE A SQUARE HOLE.
- 7 INSTALL THE INNER SUPPORT BRACKET THRU THE OVAL HOLE AS SHOWN IN FIGURE A, PAGE 4.



JL JEEP WRANGLER 4 DOOR ADVENTURE RACK



PART # 20094

PAGE 4 OF 9

FIGURE A

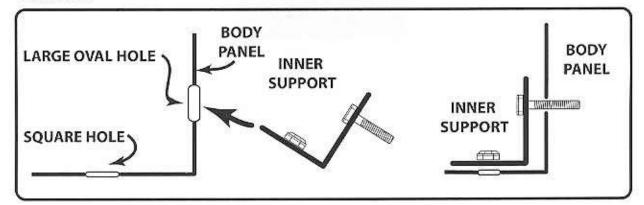


FIGURE B

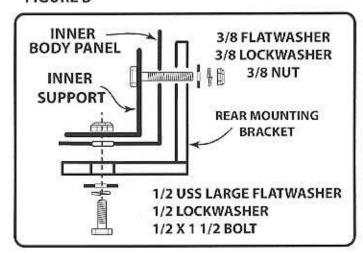


FIGURE C

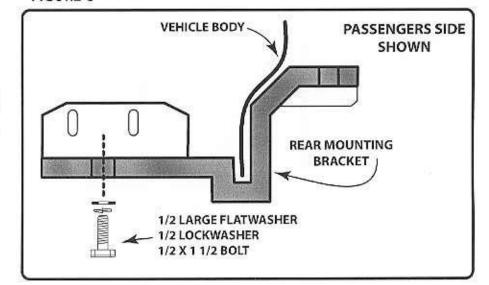


FIGURE C THIS VIEW IS FROM UNDER THE JEEP LOOKING TOWARD THE REAR OF THE VEHICLE, ON THE PASSENGERS SIDE



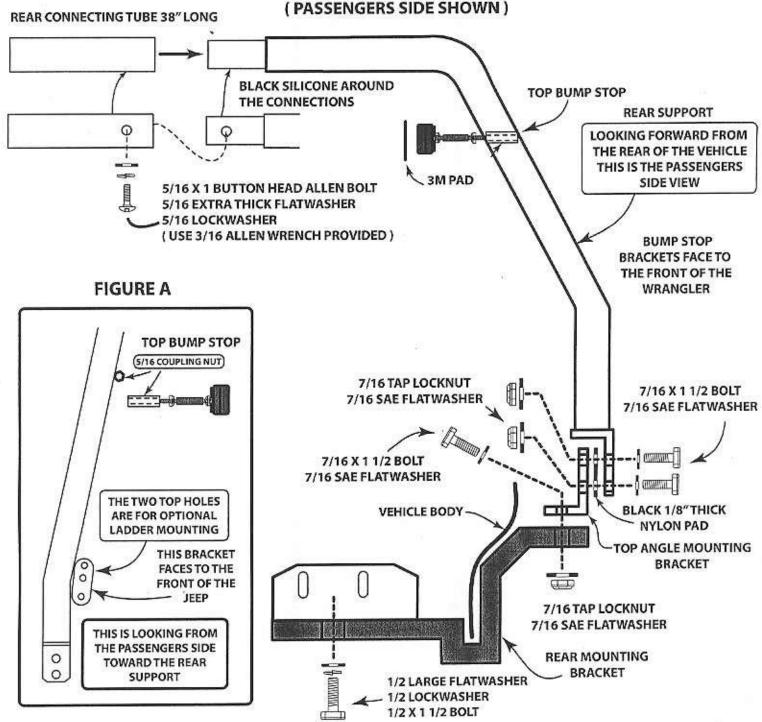
JL JEEP WRANGLER 4 DOOR ADVENTURE RACK



PAGE 5 OF 9

PART # 20094

REAR TOP SUPPORT BRACKET AND REAR CONNECTING TUBE INSTALLATION DRAWING





JL ADVENTURE RACK 4 DOOR HARD TOP PART# 20094



PAGE 6 OF 9

REAR SUPPORTS TOP BUMP STOP AND RAIN GUTTER BUMP STOPS

FIGURE A

TOP BUMP STOP ASSEMBLY

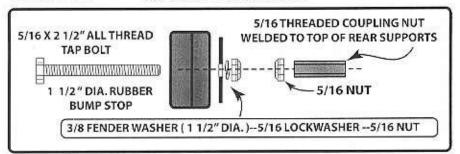
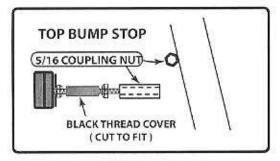
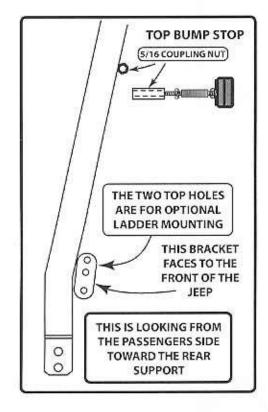


FIGURE B





- 1 ASSEMBLE RUBBER BUMPER TO TAP BOLT AND TIGHTEN. REFER TO FIGURE A
- 2 INSTALL RUBBER BUMP STOPS TO REAR SUPPORTS BEFORE INSTALLING ON VEHICLE. REFER TO PAGE 5 & 6 INSTALL HARDWARE LOOSE TO HOLD ON DURING INSTALATION.
- 3 FINISH ROOF RACK INSTALLATION
 AND AFTER THE ROOF RACK IS
 ALIGNED AND ALL FASTENERS
 ARE TIGHTENED, POSITION THE
 RUBBER BUMP STOP WHERE IT
 WILL TOUCH THE BODY. AT THAT
 PLACE, REMOVE THE WHITE BACKING
 FROM THE 3M SCUFF PAD AND STICK
 TO BODY.
- 4 ADJUST THE RUBBER BUMP STOP SO IT JUST TOUCHES THE BODY. SECURE BY TIGHTENING THE 5/16 NUTS AND LOCKWASHER.
- 5 USE SOME VASOLINE JELLY ON THE RUBBER IF A SQUICKING NOISE IS HEARD, AS THE RUBBER BUMPER WILL GET HARD OVER TIME.



WILDERNESS PRODUCTS

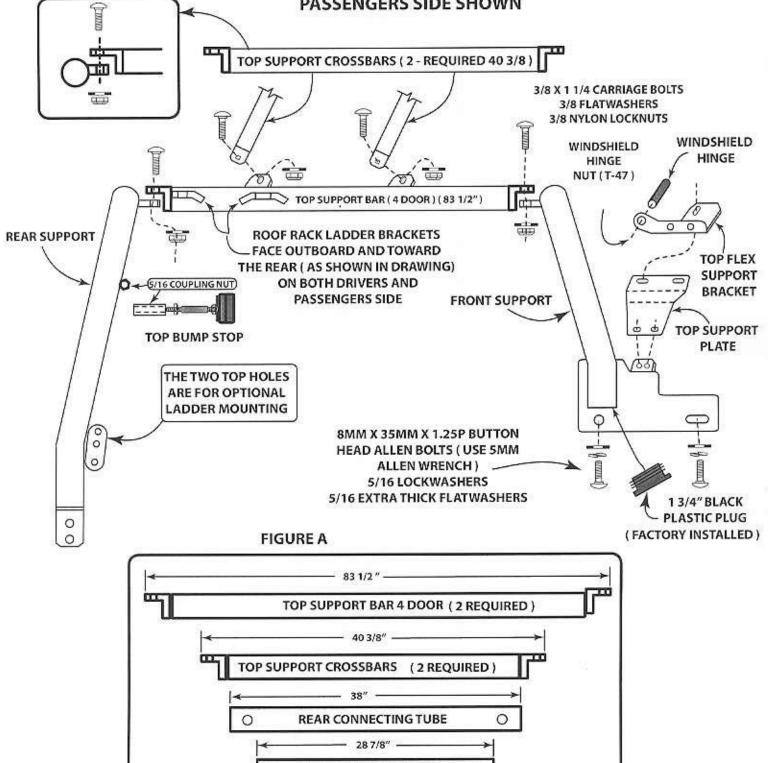
JEEP WRANGLER JL 4 DOOR ADVENTURE RACK



PAGE 7 OF 9

PART# 20094

GENERAL DRAWING
PASSENGERS SIDE SHOWN



FRONT CONNECTING TUBE

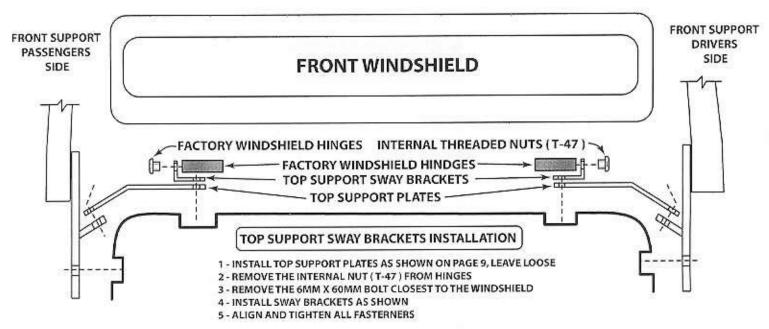


WILDERNESS PRODUCTS

JL 4 DOOR HARDTOP ADVENTURE RACK

PART # 20094

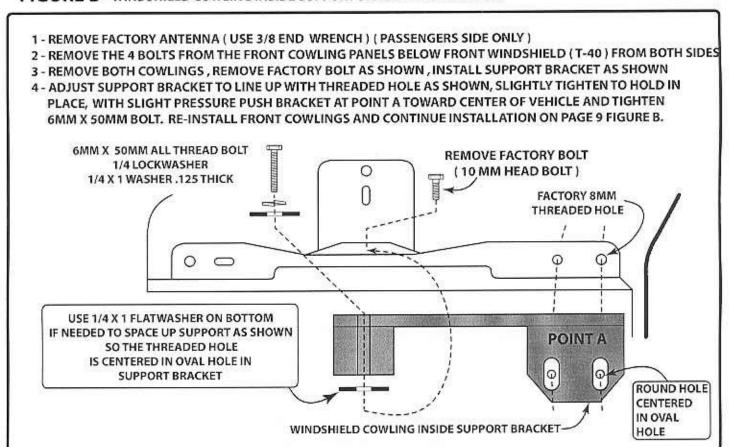
PAGE 8 OF 9



TURN, SO THE HINGE WILL PIVOT ON THE NUT. AFTER THE WINDSHIELD IS LOWERED, RE-TIGHTEN THE T-47 NUT REVERSE PROCEDURE FOR RAISING WINDSHIELD

TO LOWER WINDSHIELD THE T-47 NUTS MUST BE LOOSENED ABOUT ONE

FIGURE B WINDSHIELD COWLING INSIDE SUPPORT BRACKET INSTALLATION



WILDERNESS PRODUCTS PART # 20094

PAGE 9 OF 9

FIGURE A

SHORT THREADS TO VEHICLE **BMM WING** NUT (HIHHHH 8MM X 50MM STUD 5/16 SAETHICK FLATWASHER 1 - RE-INSTALL FRONT COWLING. INSTALL 8MM STUDS IN LOWER HOLES. 2 - INSTALL SPACERS AND FRONT SUPPORT ON 8MM STUDS AND SECURE WITH THE 8MM WING NUT AND FLATWASHER, REFER TO FIGURE A. SLIGHTLY TIGHTEN TO HOLD IN PLACE. 3 - REMOVE THE OTHER STUD AND INSTALL THE 8MM BOLT, LOCKWASHER AND FLATWASHER (FIGURE B) SLIGHTEN TIGHTEN TO HOLD IN PLACE. 4 - REMOVE WING NUT AND STUD AND INSTALL 8MM BOLT AND HARDWARE SLIGHTEN TIGHTEN TO HOLD IN PLACE. 5 - REPEAT PROCEDURE ON OTHER SIDE AND CONTINUE FRONT SUPPORT INSTALLATION.

FIGURE C

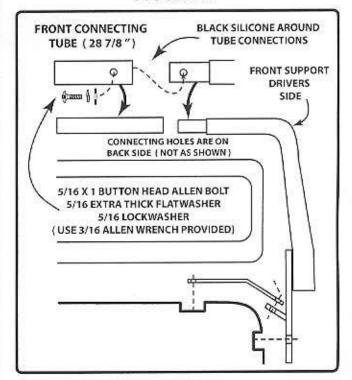
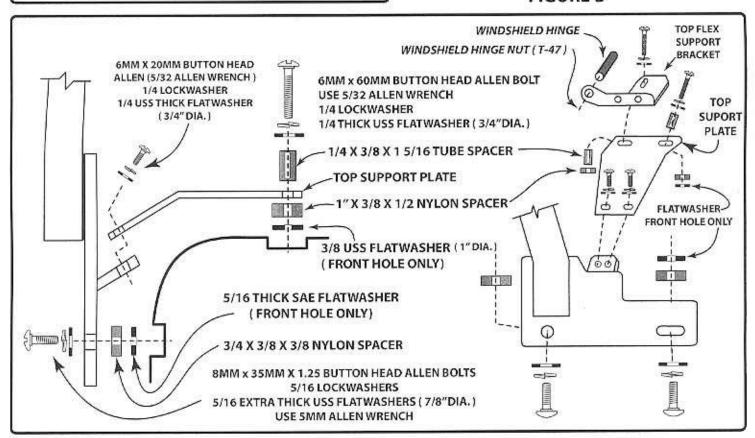


FIGURE B



PART # 20094-8 MFG. BY GARVIN INDUSTRIES 316 MILLAR AVE. EL CAJON CA. 92020 (619) 440 - 7415