



INSTALLATION GUIDE

2018+ JEEP WRANGLER JL/2020+ JEEP GLADIATOR JT SNORKEL | SKU: MMAI-JL-18N



SCAN CODE OR CLICK HERE TO WATCH THE INSTALLATION VIDEO

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CALL 1-877-GOMISHI CUSTOMER SERVICE HOURS: MON-FRI 8:30AM-5:00PM EST



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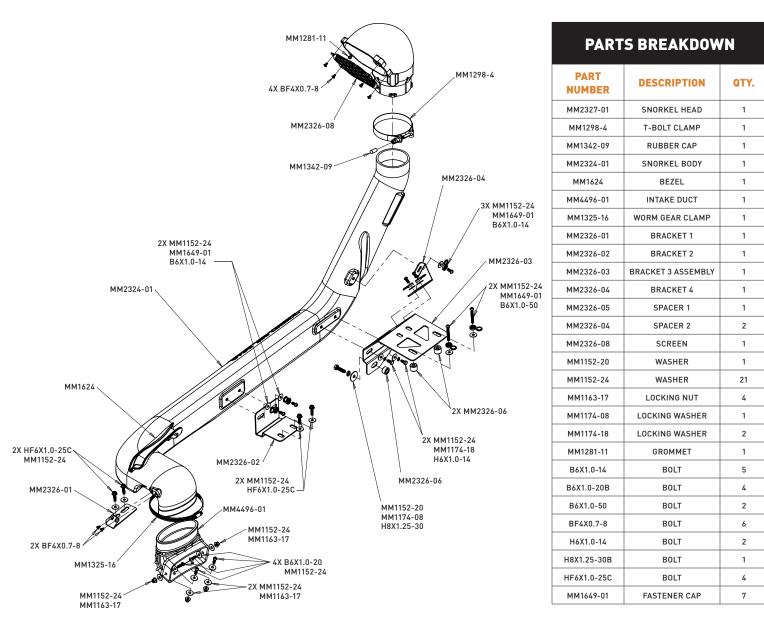


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ENGINEERING BLOG

2018+ JEEP WRANGLER JL/2020+ JEEP GLADIATOR JT SNORKEL EXPLODED VIEW & PARTS BREAKDOWN







IMPORTANT SAFETY INFORMATION

- Mishimoto recommends you use safety glasses and protective gloves during the install of their products
- > Raise vehicle only on jack stands or on a vehicle lift
- > Allow vehicle to cool completely prior to attempting installation
- > Do not run the engine or drive the vehicle while overheating; serious damage can occur
- > Please dispose of any liquids properly
- > Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products
- If you need any assistance while installing our products, reach out to our Customer Service Team at 1-877-GOMISHI

TOOLS NEEDED

1/4" RATCHET AND	13MM WRENCH
EXTENSIONS	T40 TORX BIT
7MM SOCKET	TAPE MEASURE
8MM SOCKET	
10MM SOCKET	DREMEL OR SMALL PNEUMATIC DIE GRINDER WITH CUTTING DISKS AND
2.5MM ALLEN KEY	SMOOTHING/DEBURRING BITS
4MM ALLEN KEY	
10MM WRENCH	SILICONE SEALANT (OPTIONAL)

INSTALLATION TIME 3 HOURS

INSTALLATION INSTRUCTIONS

- 01. Trim hood for snorkel installation.
 - A. CAUTION: To ensure that your template is sized properly, first measure the distance from the back to the front of the cutting template outline, as shown on the template to verify scale. The measurement should match exactly what is printed on the template. Carefully cut out the provided hood cutting template along the solid outer line.
 - **B.** Remove the hood. Be sure to note any hinge alignment features so that the hood goes back on in the same spot.





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- C. Place the cutting template on your hood by measuring 26 5/32" (66.4 cm) from the back edge of the hood to the rear edge of the template. Ensure that the side of the template printed "INSIDE" is on the underside of the hood and "OUTSIDE" faces the exterior of the vehicle. Use the provided line on the template to help align the template to the edge of the hood. Trace your outline, keeping your line tight to the edge of the template.
- D. Using a cutting tool of your choice, begin cutting the hood along the line drawn. Using masking tape or other protective measures is recommended to safeguard against a slip of your hand or tool while performing this cut. Since the hood is double-walled, you will need to cut the inside and outside layers separately. After completing your cut, clean and deburr all edges. Reinstall the hood to the vehicle.
- 02. Remove air box assembly from the vehicle.



03. Remove the upper airbox lid and panel filter, then remove stock air duct from the lower airbox.



- 04. Attach provided rubber air duct to lower airbox. (4x 20mm button head M6 bolts, 8x M6 flat washers, 4x M6 locking nuts)
 - A. OPTIONAL: Apply silicone sealant (not included) on the contacting surfaces and seams. Install the large worm gear clamp to the rubber air duct, as shown.
 - **B. OPTIONAL:** Seal water drainage holes located on the bottom of the lower airbox with silicone sealant.



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05. Reassemble lower airbox with upper lid and panel filter.



06. Reinstall airbox assembly.



07. Remove 2x 10mm hex head bolts on the passenger side fender.



08. Install 2x fender brackets for the snorkel (4x 25mm M6 hex head bolts, 4x M6 flat washers). **DO NOT FULLY TIGHTEN THE BOLTS**.

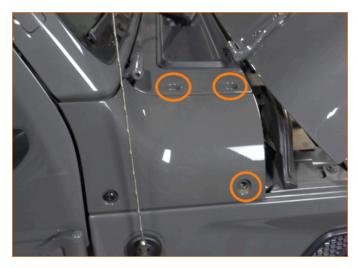




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09. Remove 3x T40 Torx bolts from the trim panel.



10. Install the largest bracket. There are 3x composite spacers included with your kit. Use the two taller spacers for the two mounting holes on the top side of the bracket, closest to the wiper cowl. These spacers get installed between the body of the vehicle and the mounting bracket. Use 2x 50mm M6 button head bolts, 2x M6 washers, and 2x bolt caps to secure the bracket (flat washers should be installed underneath the plastic bolt caps). The shorter spacer goes behind the lower mounting point of the bracket. Use 1x 30mm M8 hex head bolt, 1x M8 locking washer, and 1x M8 flat washer to fasten. DO NOT FULLY TIGHTEN THESE BOLTS.



 Install the smallest bracket onto the large bracket (2x 14mm M6 bolts, 2x M6 flat washers, 2x bolt caps). DO NOT FULLY TIGHTEN THESE BOLTS.



 Install the main snorkel tube. Connect the intake end of the snorkel tube with the rubber air duct and ensure it is fully seated. Attach snorkel to the first bracket installed on the fender (2x 14mm M6 bolts, 2x M6 flat washers, 2x bolt caps).
 DO NOT FULLY TIGHTEN THESE BOLTS.



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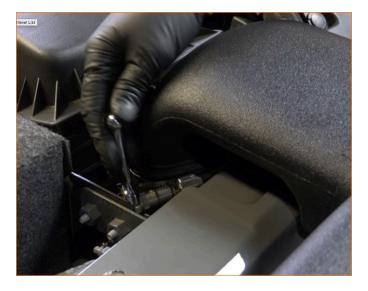
 Attach the snorkel to the largest bracket. Use 2x 14mm M6 hex head bolts, 2x M6 locking washers, and 2x M6 flat washers. Then attach the snorkel to the smaller bracket bolted onto the larger bracket (1x 14mm M6 button head bolt, 1x M6 flat washer, 1x bolt cap). DO NOT FULLY TIGHTEN THESE BOLTS.



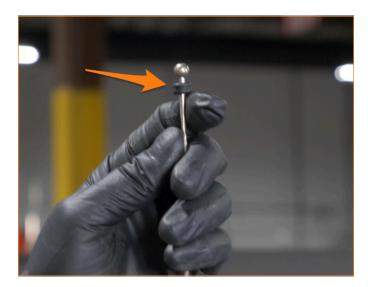
 Attach the snorkel to the second bracket installed on the fender with 2x M4 button head flanged bolts. DO NOT FULLY TIGHTEN THESE BOLTS.



- 15. Check snorkel clearance with passenger side mirror with door fully open, and clearance with hood cutout when the hood is fully closed and latched, adjust the snorkel assembly accordingly and fully tighten all fasteners.
- **16.** Tighten the worm gear clamp on the rubber duct collar.



17. Install the provided small rubber grommet on the antenna by stretching it over the metal ball.



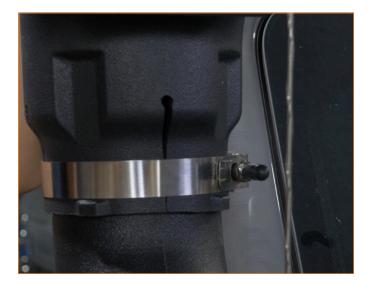
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 Install the T-bolt clamp and the screen on the snorkel head as shown. (4x M4 button head flanged bolts)



19. Install the snorkel head assembly. Adjust for levelness and orientation, then tighten the t-bolt clamp. Slip the protective rubber cap over the exposed thread on the T-bolt clamp.



20. Secure the antenna by clipping it into the tab with the rubber grommet.



21. Install the rubber hood bezel temporarily. It should be able to move along the cutout on the hood.



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22. Temporarily close the hood, allow the bezel to move freely, and center itself around the snorkel profile. Mark this outline on the hood as shown.



23. Now remove the bezel, apply silicone sealant (not included) inside and secure it to the hood matching the outline you marked in the previous step. This is to ensure proper alignment of the bezel when opening and closing the hood.

Congratulations! You have finished installing the Borne Off-Road 2018+ Jeep Wrangler JL Snorkel.

*For **Disposal Instructions**, and **Warranty Information** continue to the following page.



DISPOSAL INSTRUCTIONS

- > Do not dispose of any product as unsorted municipal waste.
 Use separate collection facilities. Contact your local authority for information regarding the collection systems available.
- > Never improperly dispose of any coolant, oil, or other chemicals.



WARRANTY INFORMATION

- > All claims must be accompanied with a picture of the Mishimoto product showing the issue for which the claim is being submitted.
- Mishimoto asks that the customer inspect their purchased item for any damage immediately upon arrival.
- Any product deemed dead on arrival (DOA) must be claimed within 14 business days of delivery. Claims outside of this time frame will not be covered under the Mishimoto Lifetime Warranty.
- This warranty does not include payment and/or reimbursement of the cost of labor in connection with the removal of any product returned pursuant to the warranty policy or in connection with the installation of any replacement items provided under the warranty policy.
- > Mishimoto has the right to refuse a claim at any time.

- > When Mishimoto accepts a claim, Mishimoto retains full discretion to choose if it will: (i) repair or replace purchaser's original Mishimoto product; (ii) replace purchaser's original Mishimoto product with the most current available model; or (iii) provide the purchaser with a gift card redeemable on Mishimoto.com in the amount of the original purchase price of the original Mishimoto product. The provision of a replacement of a Mishimoto product is subject to availability and Mishimoto retains the right to substitute any warranty claim item with a comparable item or credit at any time.
- If Mishimoto determines that it will provide a replacement item in connection with a claim under this warranty policy, and such item is out of stock, Mishimoto will place the customer on backorder and ship the replacement product to the purchaser once it becomes available.
- Mishimoto is not liable for incorrect shipments in connection with a claim if a claim form is completed incorrectly, or if a model number is not included in a claim.
- If you have a vehicle equipped with an automatic transmission, please make sure to specify this within the text box on the claim form. Mishimoto is not responsible for incorrect replacement shipments if transmission type is not indicated.



This product can expose you to chemicals which are known to the state of California to cause cancer. For more information visit: www.p65warnings.ca.gov



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