

# Gurney Flap for 2015+ WRX and STI w/Low Profile Trunk Spoiler

2016-02-26

Thank you for purchasing this PERRIN product for your car! Installation of this product should only be performed by persons experienced with installation of aftermarket performance parts and proper operation of high performance vehicles. If vehicle needs to be raised off the ground for installation, the installer must use proper jacks, jack-stands and/or a professional vehicle hoist for safety of the installer and to protect property. If the vehicle is lifted improperly, serious injury or death may occur! Please read through all instructions before performing any portion of installation. If you have any questions, please contact our tech department prior to starting installation.

#### GENERAL MODIFICATION NOTE

Modifications to any vehicle can change the handling and performance. As with any vehicle, extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive a vehicle safely may result in serious injury or death. Do not drive a vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state or country. Consult the owner's manual, service manual, instructions accompanying these products, and local laws before purchasing and installing these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

#### **SPECIAL NOTES:**

- . It is important that many measurements are taken before any drilling occurs. Triple check everything before drilling the first hole.
- It is very helpful but not necessary to have a second person to help hold the Gurney Flap while holes are being marked.
- You will need a 25/64" or size "W" drill bit to install this part.
- The slots in the part are designed to align wing level to car, not allow adjustment vertically.
- If any of the holes end up slightly off, you can always drill out the Gurney Flap slots to add additional adjustment. It is constructed of aluminum and will not rust. So there is no reason to re-paint areas where powder coat was removed.

#### **Included Parts with PERRIN Gurney Flap:**

- (1) PERRIN Gurney Flap
- (7) M6x14 Button Head Screw Black
- (8) M6 Fender Washer Black
- (7) M6 Rivet Nut or "Rivnut"
- (1) M6x20 Grade 10.9 Hex Bolt
- (1) PERIN Rivet Nut Tool
- (1) M4 Hex Wrench



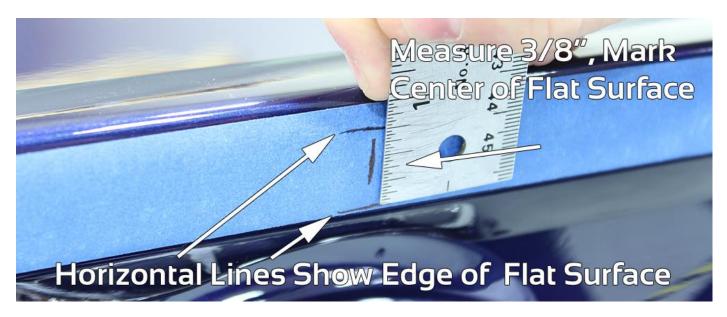
### **Installation Instructions**

- 1. Wash car or at minimum, wash rear spoiler.
- 2. Locate flat area (roughly 3/4" tall) on wing where Gurney Flap will be installed. This is where all the holes will be drilled in later steps.
- 3. Apply masking tape across surface. This step allows you to protect the spoiler as well as help the flat surface stand out. **NOTE: Use** tape that is at least 1" wide to help edges stand out the best.

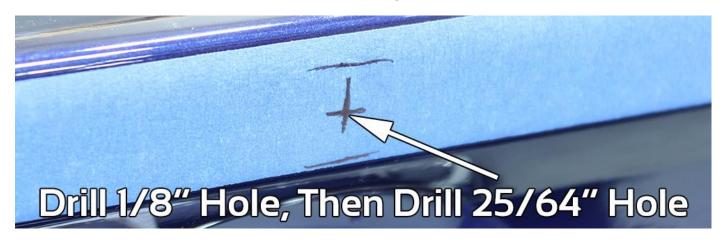


- 4. Using a tape measure, find the center (horizontally across spoiler) as shown in picture.
  - a. Starting with the left side of trunk (next to tail light), measure 22" toward the center of the wing. Make a small mark (vertical type) with a pen or pencil.
  - b. Do the same thing from the right side of the trunk and measure 22" toward the center. Make a small mark with a pen or pencil.
  - c. These marks should line up indicating center. If the marks do not line up, create a new mark between them to indicate center.

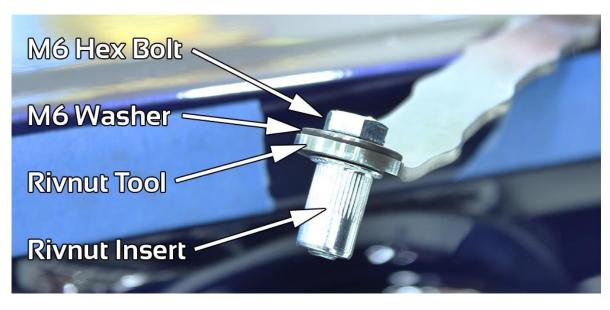




- 5. Using the mark indicating center (horizontally across spoiler), locate center (vertically across spoiler) on the 3/4" flat surface.
  - a. Using a ruler, locate the 3/4" tall surface, measure 3/8" from the top or bottom and mark with a pen or pencil. **NOTE:**Marking the upper and lower edges of the surface (as shown above) can aid in locating the center of this surface.
  - b. Step back, look from all angles and verify that this mark is visually in the middle of the 3/4" flat surface.
  - c. This final center mark indicates absolute center of the wing, as well as where the first hole will be drilled.



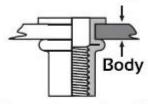
- 6. Before continuing, double check that you have found the proper center of the wing in both directions.
- 7. Starting with a 1/8" drill bit (or any small size close to this) drill your first hole. Move to the 25/64" drill bit and drill to final size.
- 8. Remove roughly 1" of tape around hole.



- 9. Install (1) M6 fender washer onto M6x20 hex bolt, apply grease to threads and under head of bolt, install bolt through supplied tool, and install supplied M6 Rivet nut (with flange side facing tool). See picture above.
- 10. Install rivet nut fully into hole on wing.
  - a. While holding tool and rivet nut tightly against wing, slowly tighten M6 bolt. **NOTE: You will feel some force on the wrench for the first couple of turns, then it will get much easier.**
  - Continue to tighten M6 bolt (while holding the tool steady) until the turning force becomes much harder, and/or stops.
    NOTE: During this stage, the rivet nut is compressing and biting into the wing from the inside.
  - c. Once the bolt/rivet nut have hit this stopping point, remove screw, washer, and tool and check that flange of rivet nut is sitting flush with the wing.



## Rivet Nut Shown Compressed



## Visual Representation Of When Tool Stops During Installation

- 11. Using supplied black M6 button head bolt and washer, install PERRIN Gurney Flap onto wing.
- 12. Using the Gurney Flap as your guide, bend around wing and trace each of the slots onto the wing (still covered with tape). Make sure to line up the bottom of the Gurney Flap to the bottom of wing to ensure it is as level as possible. **NOTE: This is the step that it would be nice to have a friend help, as they can bend the Gurney Flap around while you mark the wing.**

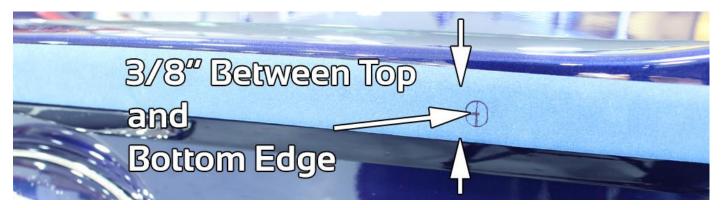




- 13. Remove Gurney Flap from car.
- 14. If lined up properly, all "slots" should line up in the middle of the 3/4" flat surface, or at least be very close to lining up.



15. As a double check and just as done in step 5, locate center (vertically) on all "slots" that were marked. This measurement will be 3/8" from the top or bottom of the 3/4" flat surface.



- 16. Starting with inner most two "slots", drill 1/8" hole on the center (vertically) as marked in step 15. Then continue to drill 25/64" hole. Remove tape around each hole.
- 17. Just as done in step 10, install rivet nuts into the two new drilled holes.
- 18. Reinstall Gurney Flap using the (3) mounting locations and supplied hardware.
- 19. Once again, bend Gurney Flap around wing and double check that the slots line up with the marks made in step 12.
- 20. Remove Gurney Flap from vehicle and continue to drill the next two most inner holes with a 1/8" drill bit. Then drill them out using 25/64" drill bit. Remove tape around each hole.

21. Just as done in step 10, install rivet nuts into the two new drilled holes.



- 22. Reinstall Gurney Flap to wing using all (5) mounting locations. Bend around wing one last time to ensure last two slots still line up.
- 23. Remove Gurney Flap from vehicle and continue to drill the final two outer holes with a 1/8" drill bit. Then drill them out using 25/64" drill bit. Remove remaining tape from wing.
- 24. Reinstall Gurney Flap to wing using all (7) mounting locations, but leave all hardware loose.
- 25. Adjust wing vertically to desired location. Starting with inner M6 bolt, tighten to roughly 8ft-lbs torque. During this step you may find that the insert will compress a bit further, this is normal and expected.
- 26. After a week of driving the car, inspect all M6 bolts to ensure they are tightened properly.

