



Installation Instructions for 93180 and 93181 Ingalls PowerStick™ Pitch Mount For 2002-2006 Subaru Impreza WRX and STi

The **PowerStick™ Pitch Mount** is engineered to reduce deflection under hard acceleration and cornering for improved performance and power to weight transfer. Deflection in the motor mounts, as with the chassis and suspension, is a formidable enemy in power and weight transfer, robbing valuable horsepower and control. The innovative “dog bone” or pitch mount replacement eliminates the huge amounts of movement and “torque shock” that causes wheel-hop and vague power transfer. The **PowerStick™** transfers more power to the road and improves acceleration, shifting, overall control and balance.

CAUTION: Observe proper safety and repair procedures for installation of all chassis parts. Some chassis parts require specialized tools and experience and therefore **MUST** be installed by a qualified technician otherwise an unsafe vehicle and/or personal injury could result. Wear safety glasses and other protection.

WARNING: Before beginning, check for any damaged or loose suspension connections. Loose connections here indicate worn or broken parts which **MUST BE REPLACED**. Failure to replace a damaged or worn spindle and/or link may cause the wheel to separate from the vehicle, possibly resulting in serious personal injury. Installer **MUST** check for proper clearance. Modification(s) may be required. Please proceed **ONLY** if the vehicle owner is completely aware of these potential suspension modifications.

Estimated Installation Time: One Hour

Technical Rating: Easy

Kit Includes:

(1) PowerStick™ Pitch Mount

Tools Required:

Metric and/or SAE Socket Set

Metric and/or SAE Open/Closed Wrench Set

Installation:

1. Under the hood, locate the intercooler and remove the three 8mm bolts that secure the EGR lines to the front of the intercooler as shown in **illustration 1**.
2. Remove the two 8mm bolts that mount the turbo bypass valve to the intercooler as shown in **illustration 2**.
3. Remove the 8mm bolts that mount the intercooler to the OEM mounting brackets as shown in **illustration 3**.
4. Loosen the hose clamp on the intercooler discharge tube as shown in **illustration 4**.
5. Loosen the hose clamp on the intercooler inlet tube as shown in **illustration 5**.
6. Remove the intercooler. **Note:** This can be tricky... try pulling back, and to the right on the cooler to pull the cooler off the aluminum inlet housing and rubber discharge tubing. **Refer to illustration 6**.
7. Locate the OEM “Dog Bone” pitch mount at the rear of the engine and remove the 10mm bolts, washers and nuts at each end of the mount as shown in **illustration 7**. Remove the OEM mount from the vehicle.
8. On a table or workbench, assemble the PowerStick™ Pitch Mount as shown in **illustration 8**. **Note:** There are left hand and right hand threads on the center tube. If you try to thread the rod end or forging and it will not thread into the tube, turn over the tube and try the other end. Some PowerSticks™ may be pre-assembled when you receive them. They may not be set to the correct length though.

9. With the PowerStick™ assembled and the jam nuts loose, turn the center tube until the component is set to the same length as the OEM part. Tighten the jam nut at the rod end using one wrench on the jam nut and another wrench on the flat at the end of the center tube. **Note:** The best way to set the correct length on the PowerStick™ is to insert the OEM bolts through the holes on the OEM “dog bone” mount and use it as a gauge as shown in **illustration 9**.
10. Install the Power Stick in the OEM mounts using the OEM bolts, washers and nuts removed in step 7 of the instructions. Torque bolts to OEM torque specifications. Tighten the jam nut at the forged end using one wrench on the jam nut and another wrench on the flat at the end of the center tube. Try to keep the rod end housing centered in the engine mount. You may have to try this a couple of times to get it right.
11. Install the intercooler. This can be tricky again... try to insert the inlet and discharge tubes into place at the same time. **Note:** As shown in **illustration 10**, there is a lever point on the inlet tube and you can “burp” the inlet tube into place by using a pry bar or large screwdriver, which is why the lever point is there in the first place. If you don’t use it, you either got lucky or you will be there for an hour trying to get the intercooler back on.
12. Once the tubing is all back in place, mount the intercooler to the OEM mounts as per step 3. **Note:** This is a pain because the OEM mounts never line up perfectly with the brackets on the intercooler. Start one bolt first and then try to line up the other side.
13. Mount the turbo bypass valve as per step 2.
14. Mount the EGR line as per step 1.
15. Go out and tear up some asphalt, or gravel if you’re a rally driver.



Illustration 1



Illustration 2



Illustration 3



Illustration 4



Illustration 5



Illustration 6



Illustration 7



Illustration 8



Illustration 9



Illustration 10

Limited Warranty

Subject to Disclaimer. All Ingalls products are warranted against defects in materials and workmanship for ninety (90) days from date of purchase. During the warranty period, Ingalls will repair, or at its option replace at no charge, components that prove to be defective. The product must be returned, shipping prepaid, to Ingalls facility. This limited warranty does not apply if the product is damaged by accident or misuse. The foregoing warranty is in lieu of all other warranties expressed or implied including but not limited to any implied warranty of merchantability, fitness, or adequacy for any particular purpose or use. Ingalls shall not be liable for any special, incidental or consequential damages whether in contract, tort, or otherwise resulting from the use or the inability to use the product.

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