

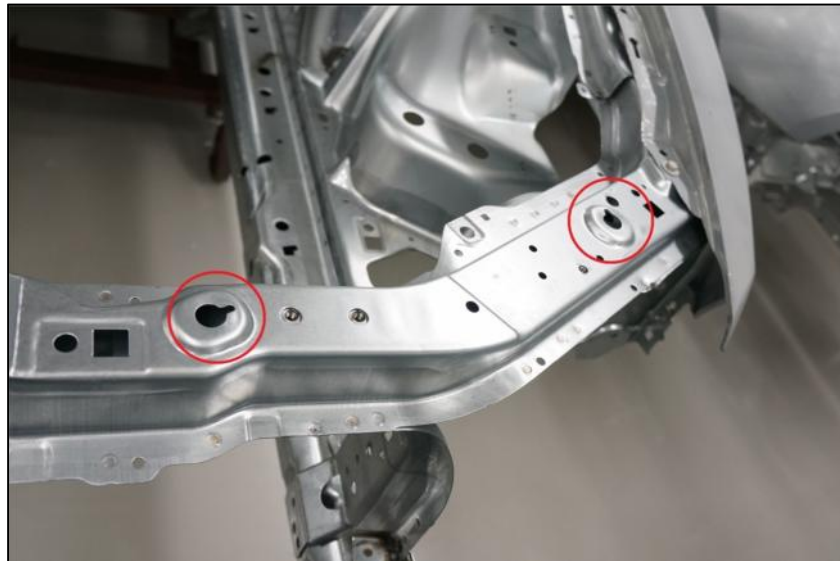


## 2005-14 Mustang HOOD PIN SPOOLS & HOOD PIN INSTALLATION INSTRUCTIONS

p/n WR-SPOOLHOODPINSET  
WR-HOODPINS

The Watson Racing Hood Pin Spool kit was designed for professional installation, using some of the existing holes in the radiator support while also requiring some cutting/modification. **Please read through ALL instructions before starting.** Be sure to take all necessary steps to protect your paint-masking tape, etc.

- 1) The spools were designed to be welded to the upper radiator support for maximum strength at race speeds. To prep for welding, disconnect the battery and remove the main connectors from the car's PCM. This ensures no current spikes are sent through the PCM, potentially causing damage.
- 2) Remove the upper radiator plastic cover, exposing the radiator support. Dislodge and move any wire harnesses away, that may be close to the heat generated by welding.
- 3) Remove the rubber hood 'adjusters' that are threaded into the radiator support. Whether you are installing two or four spools/hood pins, they will be located in these holes at either end of the radiator support:



- 4) If you look closely at the holes in the radiator support where the rubber hood adjusters were removed, you will notice that one side of the hole has a raised 'lip', to aid in threading the rubber bumper in. These raised lips need to be flattened to match the rest of the hole, allowing the hood pin spool to sit flat on the radiator support.
- 5) Looking down into these holes, you'll notice a secondary layer at the bottom of the hole, since the radiator support is boxed. The lower layer of metal will need to be drilled to a similar

diameter as the primary hole in the top of the radiator support, to allow the spool's shaft to drop through. There are a few ways to achieve this- Start with a 1/8" drill bit and center it in the upper hole, to create a pilot hole in the bottom layer of metal. You can then open that hole to the same diameter from the top, or drill from the bottom using either a large drill bit or a step-bit (sometimes referred to as a 'Unibit'. Test fit spools in the holes to ensure fitment.

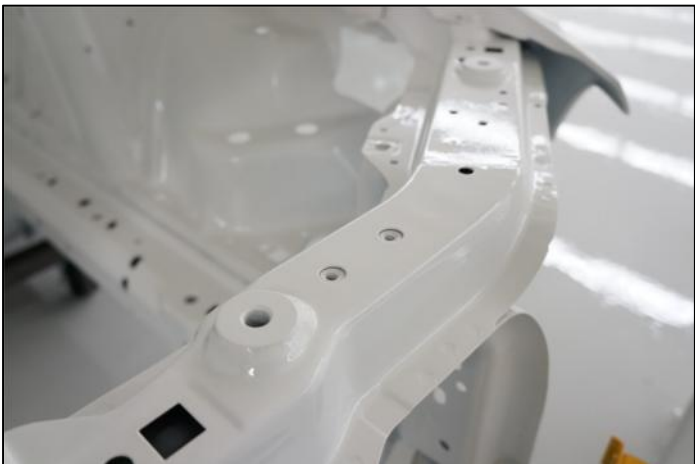
- 6) Remove the paint on the radiator support, around where the spools will be welded. Insert hood pin spools, and weld in place. TIG and MIG is acceptable.



- 7) For additional strength, the supplied washer is installed and welded in from the under-side of the spool.



- 8) Once all are welded in place, paint welds/spools to prevent rust. Spool installation is complete!

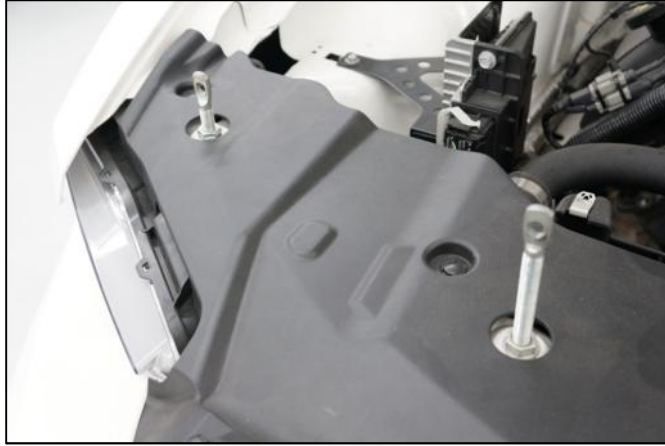


- 9) To locate the holes in the hood, install one of the hood pin studs into one of the spools, in your radiator support. You want to thread the stud down into the spool so that the hood will nearly close all the way, but still make contact with the top of the hood pin stud. The goal is to transfer a mark from the top of the stud, to the underside of the hood. You can achieve this several different ways, including lightly pressing on the hood so that the stud forms a small dimple, using a dab of paint on the top of the stud, etc. Repeat this process for all hood pin stud locations.
- 10) Drill these marks with a 1/8" drill bit to create pilot holes. BE CAREFUL not to dimple the outside (top) of the hood- depending on the angle you are drilling, this dimple could be visible once hood pins are installed. We typically enlarge these pilot holes to 1", but you can start with a smaller diameter if you choose. KEEP IN MIND that the hood pins do not penetrate the hood perpendicular to the surface of the hood – you should try and drill at the same angle that the hood pin will ultimately penetrate the hood. The green arrow indicates hood pin angle relative to the angle of the hood (black line and red arrow).



- 11) Once all four of the holes are drilled in the under-side of the hood, repeat the process for marking the holes (via one stud at a time), on the underside of the outer layer of the hood. For example- using one stud only, close the hood so that the stud goes through the hole in the under-side layer of the hood, and makes contact with the under-side of the top layer of the hood.
- 12) After all stud locations have been marked on the hood, drill using a 1/8" drill bit to create a pilot, then open these holes again. We typically open these to 3/4", but you can start smaller if you choose.
- 13) At this point, you should be able to install the hood pins and close the hood completely. Note any interference between the hood and hood pins (there will always be some), and if desired, provide additional clearance in these holes. Now begins the process of adjust the studs up and down, and place the Captive Sliding Hood Pin assembly on top of the hood, so that you can align the stud's hole with the Captive Sliding Hood Pin. **Please note** that sometimes we have to tweak the hood pin stud itself to make everything 'play' together. You can give the stud a slight tap w/ a mallet, or use a Crescent wrench to give the top of the stud a slight bend.

- 14) Once your hood pin-to-stud fitment is achieved, lock down the studs using the provided washers & jam nuts, installed from the top. Trim plastic radiator cover if needed and reinstall.



- 15) Visually align all of your hood pins in the direction you prefer, mark the holes through the sliding hood pins onto the hood surface, and drill for your fasteners. We prefer to use rivets, but screws can also be used.



- 16) For composite hoods (fiberglass or carbon fiber), Watson Racing also offers hood pin support plates that provide additional strength. P/N WR-HDPNSUPRTS. Install these sharing the same fastener that you are using to secure the sliding hood pin to the hood:



Thank you for choosing Watson Racing products! If you have any technical questions or comments, please call us at: 855-WATRACE (928-7223).