

# 1994-2004 Mustang Pedal Assembly Main Structure & Brake Pedal Instructions



FFP Customs prides itself on not only manufacturing quality parts, but also offering real world, race car solutions. Our Patented Pedal Assembly is another product aimed at improving your experience behind the wheel of your race car. These instructions are designed to make installing your new FFP Customs Pedal Assembly that much easier, so follow along as we guide you through the installation process.

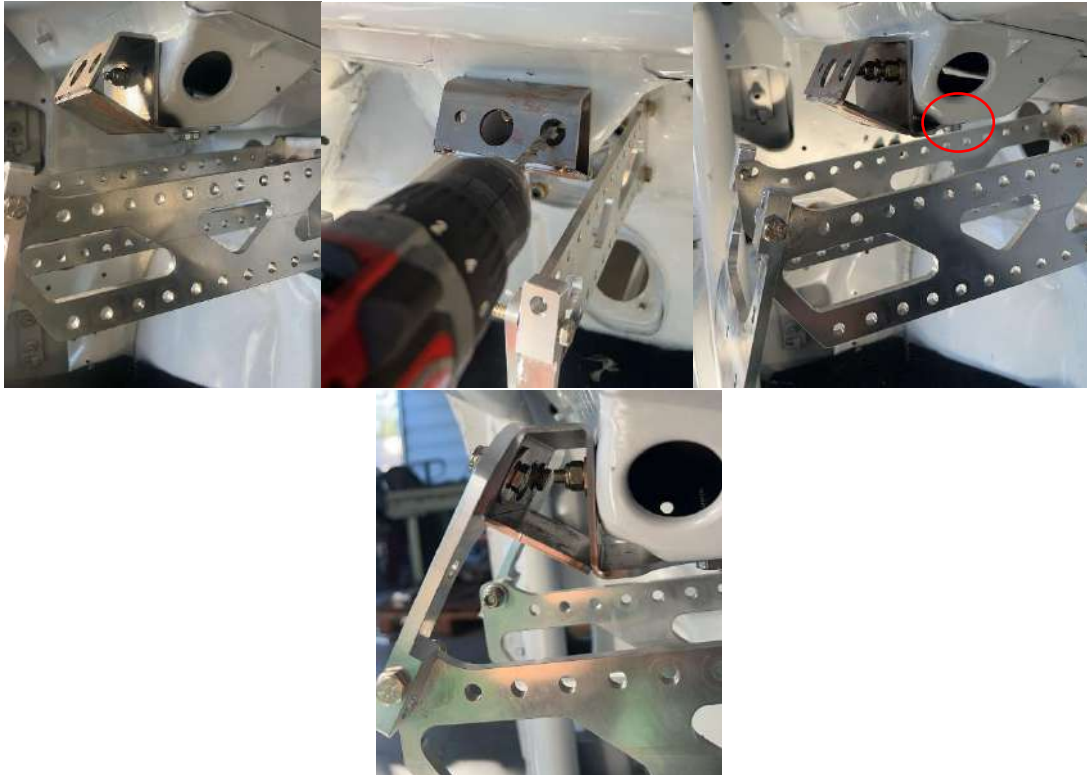


*Depending on the pedal assembly you have ordered, each individual pedal will be pre-assembled, as will the pedal assembly's main structure, off which everything is built. So, along with the subassemblies, and Wilwood master cylinder box, we also have hardware bags that go with the appropriate subassembly. With the main structure and brake pedal assembly we include hardware bags for the pedal pad, cowl panel mount, reservoir mount, and brake master cylinder mount.*

First things first, we have shipped you our pedal assembly with some of the components already installed together. This has been done to lessen the intimidation one may feel when receiving a pedal assembly. With many subassemblies pre-built, we hope this makes final installation much more understandable and easier to follow.

#### Pedal Assembly Contents

- Pedal Assembly main structure pre-assembled.
- Brake Pedal pre-assembled.
- Clutch Pedal, if applicable, pre-assembled.
- Throttle Pedal, if applicable.
- Pedal Pads for each included pedal.
- Brake Fluid Reservoir Mount.
- Wilwood Master Cylinder.
- Hardware Bags for each component.

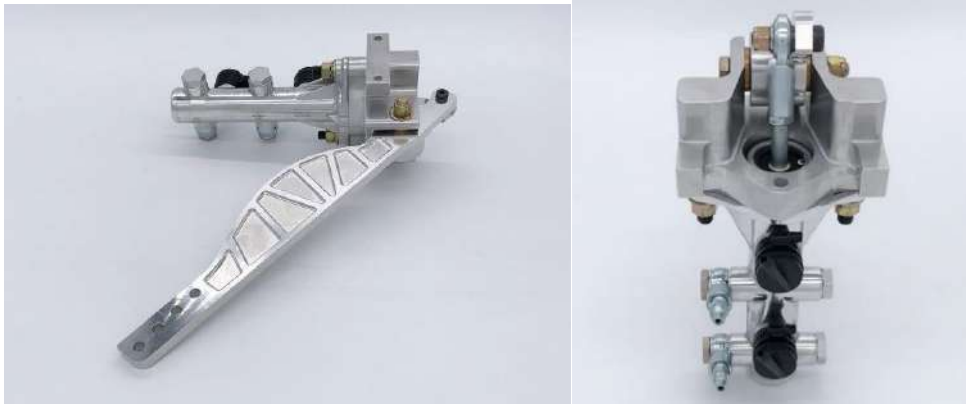


The Pedal Assembly's main structure installs using the outside firewall mount and the inside firewall mount. Before you do anything, drill out the brake booster/outside firewall mount holes with a 7/16" drill bit for our hardware. Then take your outside firewall mount, feed it through the 4 holes you just drilled out, and fit the inside firewall mount and main structure to the 4 studs on the outside firewall mount. The next part to install on the car will be the body to cowl panel mount, which can be seen in the pictures above. The 8mm x 1.25 silver bolt and washer will be used for the bottom slot of the body to cowl panel mount which will thread into the threaded hole on the bottom of the cowl of the car circled in red on the third picture. The 3/4" long 1/4" bolts with single washers will be used to fasten the body to cowl panel mount to the body of the car. ALL of the mounting bolts should be fed from the front of the car so that the nuts are easy to start. With the silver bolt and the driver's side mounting bolt tight (First pic), you can now drill the passenger's side mounting hole with a 1/4" drill, (second pic) and then clean the drill chips before tightening down the body to cowl mount. Using the 4<sup>th</sup> picture (center bottom) as a reference, use the large fender washer and remaining normal washers to secure the aluminum cowl panel to the body-to-cowl panel mount. The finished product should match the following picture.



The main structure is the key to our pedal assembly. Once you have the main structure installed, the rest of the installation is a matter of adding the brake pedal and master cylinder, the throttle pedal, and if applicable, the clutch pedal.

The master cylinder bolts to the brake pedal, and then the subassembly is fitted into the main structure. Once a comfortable seating position has been attained, mark the main structure where you want to mount the brake pedal and master cylinder. The brake pedal and master cylinder will need to be removed and bench bled prior to final assembly. It should be noted that the bolts used to mount the brake sub assembly to the main structure have a locking thread, so you will feel some tension once you get the bolt started. We've included spring lock washers for these bolts also as a secondary lock.



*Not only is the brake pedal assembly adjustable fore and aft, but you can also adjust pedal height, as well, thanks to the extra provisions at the bottom of the brake pedal. As mentioned, the brake pedal and master cylinder mount arrive to you in the box as a subassembly. Attach the included Wilwood master cylinder to the brake pedal subassembly and it is ready to be attached to the main structure. Make sure the pedal has freedom of movement. We include a threaded Heim joint to connect the master cylinder to the brake pedal at the top. The Heim joint shoulder bolt and nut needs to be arranged in this fashion to provide clearance for full brake pedal travel (Right). This is looking down at it from overhead. Make sure not to preload the master cylinder or you could cause brake drag.*

*With the main structure, brake pedal and master cylinder installed, do not tighten everything until you have adjusted it to your liking and bled the master cylinder. With the master cylinder bled and everything firmly attached, the brake pedal portion of the install is done.*



*The main structure/brake pedal assembly includes this reservoir mount for the brake master cylinder. This mount is designed to use the roll bar running behind the dash, but if you don't have that, the reservoirs still need to be mounted above the master cylinder for proper operation as they are gravity fed.*



- 1/2" Banjo bolt
- 9/16" Inner diameter sealing washer
- -3AN Banjo
- 1/2" Inner diameter sealing washer

This is the correct orientation for the pressure output fittings that will be screwed into the brake master cylinder.

*These lines, fittings, and brake light switch are included with the pedal assembly. These fittings and lines connect the master cylinder to the bulkhead at the firewall (right). The way we have the fittings laid out here on the bulkhead, you can easily run a line for the rear brakes using the 90-degree fitting, and the other to the Line-Loc and/or front brakes. This layout is just an example of how and where to mount the bulkhead and fittings.*

If you have made it this far, you have completed the installation of the FFP Customs pedal assembly's main structure and brake pedal subassembly. If you have also ordered a throttle pedal and/or clutch pedal



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subassembly as part of your FFP Customs pedal assembly, we have included separate instruction sheets to also ease the installation of those subassemblies.

If you have any installation concerns or roadblocks, please call us. We would rather you call us for clarification instead of being frustrated with the installation.

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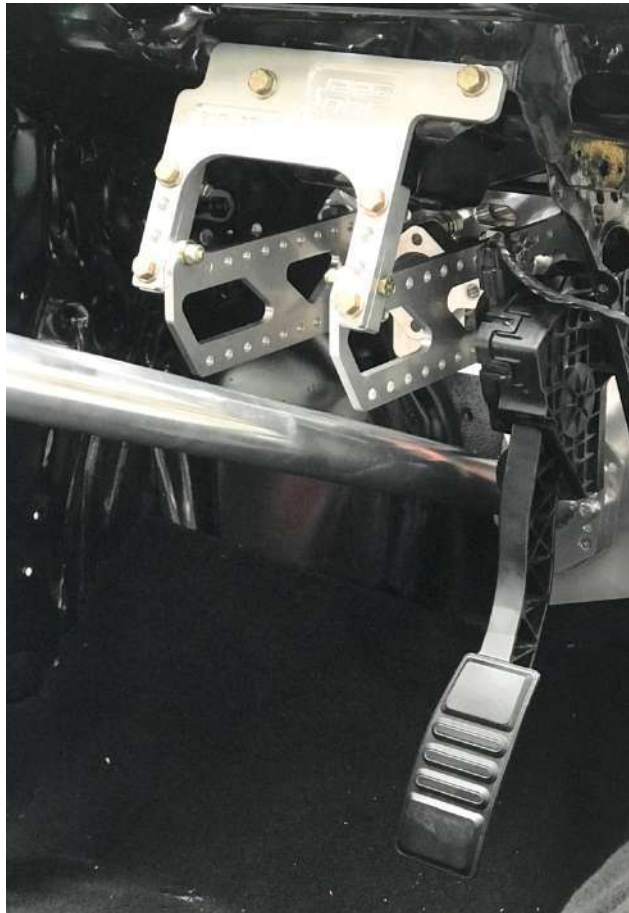
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## Coyote Swap Pedal Bracket Instructions



Coyote swaps are a big thing in the Mustang hobby. With this swap growing more popular, and to introduce our pedal assemblies to 2005-2014 Mustang enthusiasts, we had to come up with a solution to pair the Ford Performance Control Pack and factory Electronic Throttle Control pedal with our FFP Customs Patented Pedal Assembly. What we did was make a bracket that attaches the Ford pedal to our existing pedal assembly's main structure. Follow along as we show you how it is installed.

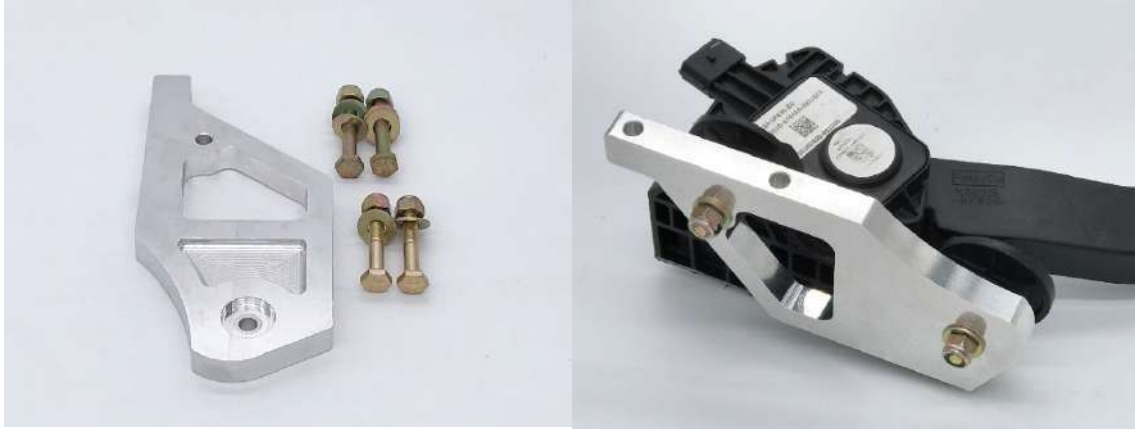


*To add our Coyote Swap Pedal Bracket to the factory or Control Pack pedal, the factory bracket must be modified. We eliminate the 3<sup>rd</sup> hole on the factory pedal. We make a mark on the factory webbing where we need to cut it and use a saw to make the cut. The factory pedal is plastic, so this is a simple modification.*

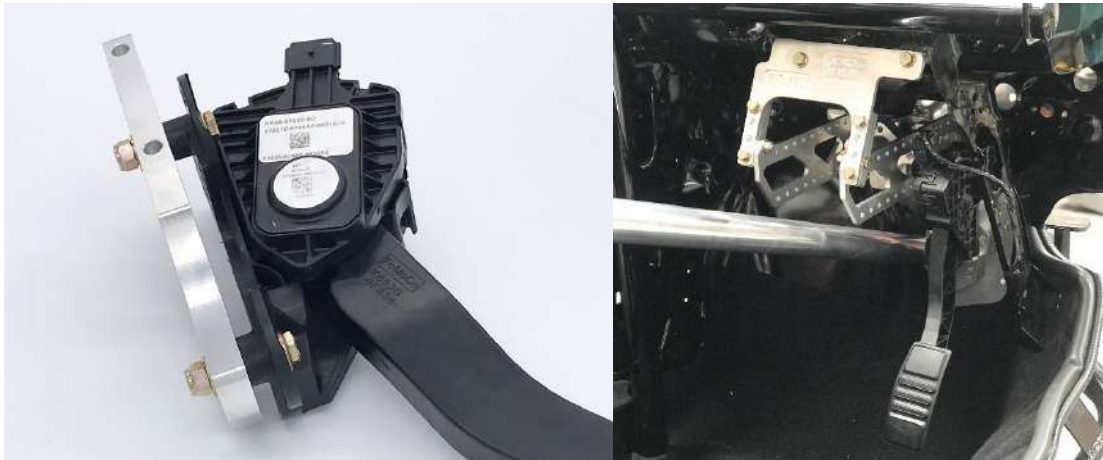


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*We made this bracket to bolt a Ford Performance Control Pack Electronic Throttle Control pedal to our Patented Pedal Assembly. Our bracket attaches to the Control Pack pedal, and then the bracket is bolted to the pedal assembly. This bracket will also work with a factory 2005-2014 Mustang GT throttle pedal, as well. The 1/4-28 x 1 1/2" bolts are to mount the bracket to the main structure, while the 1/4-28 x 1 3/4" are to mount your pedal to our bracket.*



*With a 1979-1993 Mustang, it may be necessary to modify or trim the factory cowl support bracket. However, that is only if you mount the pedal to the point where it is up against the firewall. The factory cowl support panel curves in towards the pedals, and the panel and pedal are fighting for the same space. This bracket is the one attaching the cowl to the trans tunnel under the dash.*

The installation of the pedal bracket is straightforward. Simply trim the factory throttle pedal bracket as we show, bolt our Swap Bracket to it, and then bolt the FFP bracket to the pedal assembly's main structure. Remember, even though we bill this as a Coyote Swap Pedal Bracket, it will fit all Mustang GTs from 2005-2014.

Like all other FFP Customs parts, this Coyote Swap Pedal Bracket is designed as a Bolt On & Go installation. However, if you do hit any snags with the installation feel free to contact us via phone or social media. We would rather you contact us for clarification instead of being frustrated with the installation.

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# Patented Pedal Assembly 1979-2004 Mustang Clutch Pedal Instructions

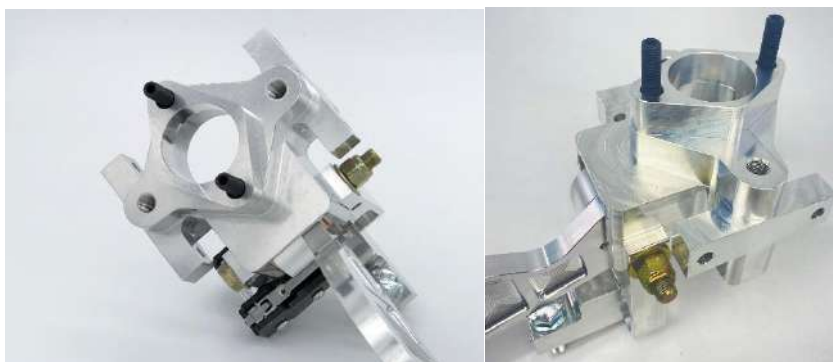


If you are reading this, you have already installed the FFP Customs pedal assembly's main structure, brake pedal subassembly, and most likely, the throttle pedal subassembly. The last piece of the FFP Customs patented pedal assembly is the clutch pedal subassembly. As we have mentioned, everything is built off the pedal assembly's main structure. As such, the clutch pedal uses the main structure as its attaching point.

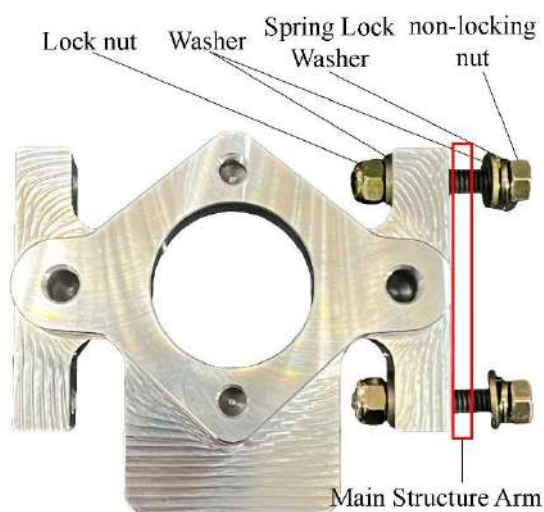


*The clutch pedal is sectioned off by itself in the box when you receive the pedal assembly. It uses a mount like that of the brake pedal to attach it to the main structure. We include labeled hardware bags for the pedal pad, reservoir mount, and clutch master cylinder mount.*

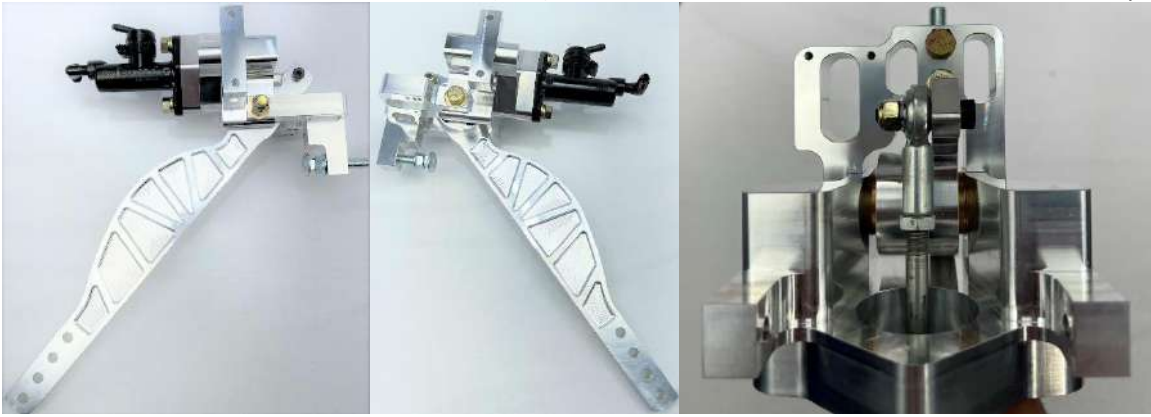
The clutch pedal subassembly consists of the clutch pedal, master cylinder mount, clutch pedal stop, and a neutral safety switch mount and switch. A Wilwood master cylinder is included with the kit, but it must be assembled, bled, and then installed onto the pedal assembly's main structure.



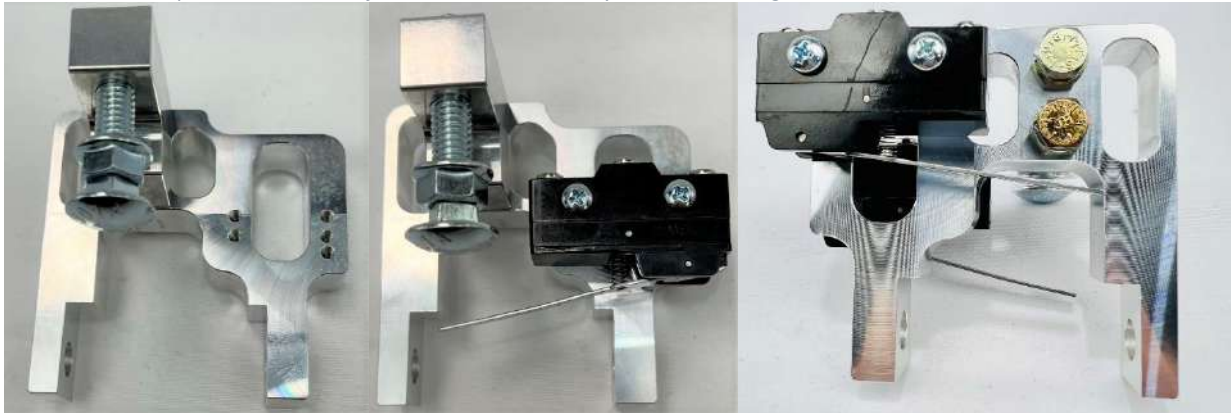
*The clutch master cylinder uses this spacer and studs to attach it to the clutch pedal.*



*The clutch sub-assembly attaches to the main structure arm in the orientation pictured above. We recommend installing the set screw, washer, and locknut while the sub-assembly is outside the car. Make sure some of the set screw protrudes through the locknut to ensure the nylon lock is engaged. Once that is built, slide the set screws through the main structure arm and use the washer, spring lock washer, and non-locking nut to fasten it to the main structure.*



With the master cylinder spacer and studs installed into the master cylinder mount, install the Wilwood master cylinder. Make sure the pedal has freedom of movement. We include a threaded Heim joint to connect the master cylinder to the clutch pedal at the top. The Heim joint shoulder bolt and nut needs to be arranged in this fashion to provide clearance for full clutch pedal travel (Right). This is looking down at it from overhead. Make sure not to preload the master cylinder. The 90-degree 1/8" male NPT fitting in the master cylinder is included. Now you are ready to attach it into the main structure. Take the provided hardware from the clutch master cylinder mount bag and attach it to the main structure.



When it comes to the clutch pedal, we do have a couple clutch pedal switches that can be attached to the clutch pedal mount. One is a neutral safety switch, which is included with the pedal assembly, and an optional ignition cutoff switch that can be ordered (Part Number Z-15GW-B), as well. The neutral safety switch is adjustable via 5 different mounting holes to accommodate different clutch pedal stroke lengths. This is dependent on your clutch pedal stop's final adjustment. It might be necessary to adjust the neutral safety switch to work with your clutch pedal's stop bolt. There are several mounting options for the neutral safety switch and the neutral safety switch arm can be manipulated to offer even more adjustment. The middle image shows just the neutral safety switch installed, whereas the far-right image shows both switches installed.



The Reservoir Mount either attaches to the roll bar, or you can remotely mount the reservoirs, but they must be mounted above the master cylinder since they are gravity fed. The Wilwood instructions go over this, as well as the bleeding procedure. The picture to the right shows an example of how you can add the clutch reservoir tank to the existing brake reservoir tanks.

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*For a clutch car, it would be impossible for us to provide a one-size-fits-all fluid delivery system. We provide a -4 AN steel braided line from the master cylinder to the bulkhead at the firewall, a -4 AN bulkhead fitting, a 90-degree 1/8" male NPT to a -4 AN male fitting that screws into the end of the clutch master cylinder. Wilwood provides the line coming from the reservoir tank to the master cylinder. The bulkhead seen here has fittings for your front and rear brake lines at the top, and the clutch line to the hydraulic control at the transmission on the bottom.*

As for bleeding the system, Wilwood does a great job of explaining the bleeding process for the clutch master cylinder so source their instruction sheet within the provided clutch master cylinder box for that information.



*Use the hardware marked Pedal Pads to attach the pedal pad to the clutch pedal, and you are done. The completed clutch pedal assembly is probably the last subassembly installed onto the pedal assembly. As you can see, all lines are connected and routed to the bulkhead at the firewall.*

If you have made it this far, we trust you have installed a complete FFP Customs Patented Pedal Assembly. Remember, if you have any questions, feel free to contact us via phone or social media. We would rather you contact us for clarification instead of being frustrated with the installation.

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