

SAFEDRIVETM PRO PLUS

INSTALLATION INSTRUCTIONS



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READ ALL INSTRUCTIONS BEFORE INSTALLING OBSERVE ALL WARNINGS

If you are not skilled with installation of mechanical components and/or use of the Tools Needed for this installation, refer this installation to someone qualified.

Instructions:

Read this manual completely before beginning installation. Failure to follow these instructions or tips can result in a system malfunction which could cause the vehicle not to stop and/or extra work.

Inspect Parts:

Check the Materials Supplied for possible damage in shipping. If any parts are damaged, contact us for replacement parts at support@gosafedrive.com. Please include your order number.

Check Installation Location:

Some components require the installation of mounting bolts into the firewall and floorboard of your vehicle. Check for possible obstructions such as brake lines, electrical lines, or fuel lines.

System Testing:

After installation, test the system thoroughly. Simulate an emergency stop by pressing on the brake pedal very hard several times. Make sure to check cables for wear and test the pedals before every use on public roads.

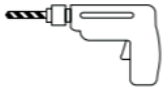
System Maintenance:

Prior to each use, examine all components for wear and tear, especially the brake cable around the pulley of the PulleyMount. Replace the cable annually, and install a Maintenance Kit every two years for optimal security.


Practice:

It is important to practice using the system before starting out on the road. The SAFEDRIVE Pro Plus pedals will require more foot pressure than the driver side pedals. Get familiar with the feel and responsiveness before driving in traffic.

Tools Needed:



Drill and 5/32nds bit or smaller

 Do not exceed a drill bit size of 5/32nd inch to pre-drill holes.

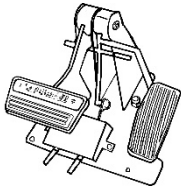
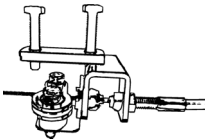
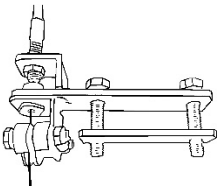
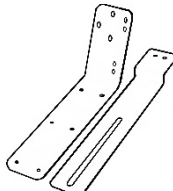
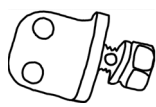
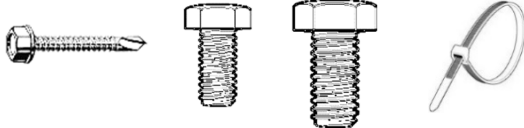
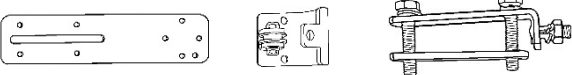



Socket wrench set or socket screwdriver set.



2 Adjustable wrenches

Materials Supplied:

 <p>1 SAFEDRIVE Pro Plus Pedal Assembly</p>	 <p>1 Brake Pedal PulleyMount with cable</p>
 <p>1 Gas Pedal PulleyMount with cable</p>	 <p>2 Offset Bars</p>
 <p>2 QuickConnects</p>	 <p>12 Self-Tapping Hex Head bolts 2 Large Bolts 4 Small Bolts 4 Zip ties</p>
 <p><i>Offset Bar Pulley Gas Pedal Mount</i></p> <p>Optional Gas Pedal Install Kit</p>	 <p>2 Extra Cables for the Brake and Gas <i>REPLACE ANNUALLY AND/OR WHENEVER MOVING TO A NEW VEHICLE</i></p>

Step by Step Installation Instructions:

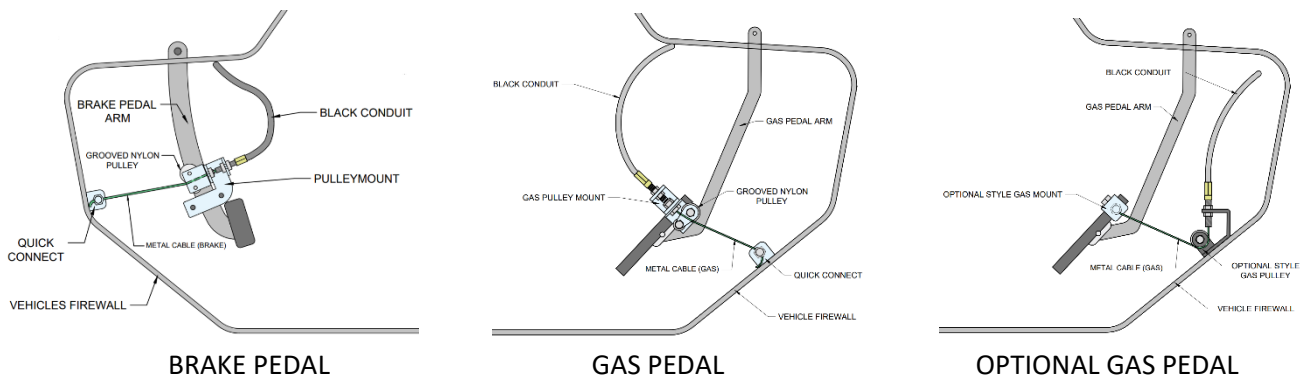
⚠️ WARNING – Power Adjustable Pedals:

If the vehicle has a brake/gas pedal that is adjustable, the system must be disabled or set in a fixed setting. If the vehicles brake or gas pedal location is changed after installation, it could cause the brake or gas of your SAFEDRIVE pedals to become engaged, create unwanted slack in the system, or change the Cable Alignment, all of which could cause a critical failure.

Cable Alignment:

The system operates by *pulling* the brake and gas pedals back towards the firewall. See the pictures below for how to mount the components and achieve proper alignment.

⚠️ Proper alignment is critical for making it easier to press the pedals from the passenger side and cable longevity.



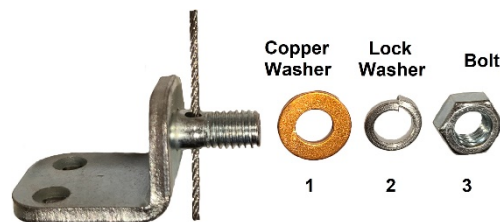
To properly locate the QuickConnect, loosely install the PulleyMount and start the vehicle. Press the vehicles brake pedal all the way down and position the nut on the QuickConnect directly behind and at the same height as the Grooved Nylon Pulley on the PulleyMount as shown. If there is an obstruction to mounting the QuickConnect, it can be relocated a little higher or a little to the left or right. Do not mount the QuickConnect lower than the Grooved Nylon Pulley as that will pull the brake pedal down to the floor of the firewall, not the back of the firewall and make it very difficult to operate the SAFEDRIVE Pro brake.


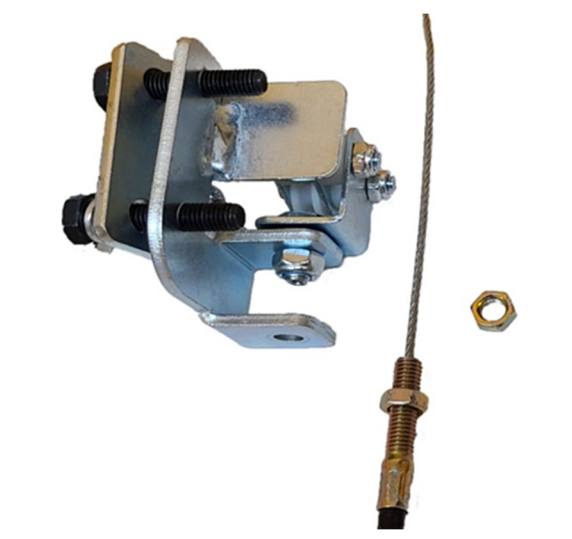

* If you had to place the Quick Connect a little left or right of center, the assembly holding the Grooved Nylon Pulley can rotate by hand to better align the cable coming out of the pulley.

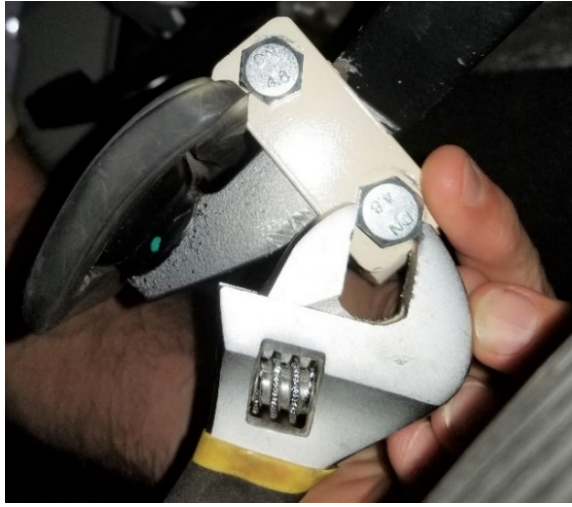


In rare cases, the vehicles brake pedal arm might be too wide or thick to accommodate the PulleyMount. In that case, contact us and we will send a custom designed adapter to you free of charge.


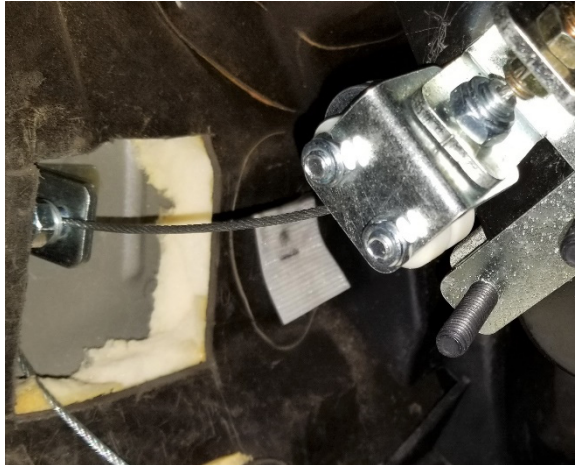
Cable the QuickConnect in the following order:

Put the cable through the hole and then stack the copper washer, lock washer, and the bolt.



<p>Step 1: Reveal Firewall</p>	<p>Parts needed: None</p>
	<p>Pull the carpet back to reveal the area of the firewall beneath the brake and accelerator pedal. Revealing this area will help identify usable installation locations for the QuickConnect.</p> <p>Never mount the QuickConnects onto plastic or rubber, they need to be screwed down and secured firmly into a metal surface. You may need to cut away surface carpet or rubber insulation to access the metal firewall surface or use the Offset Mounts to secure them into a metal surface.</p>
<p>Step 2: Prepare Cable for Routing</p>	<p>Parts needed: PulleyMounts</p>
	<p>The cables will need to pass from the passenger's side to the driver's side foot well. Typically, they route under the front dash. Removing the PulleyMounts from the cable conduit will make it easier to pass the cables under the dash. Some vehicles have enough room to pass under the dash while the PulleyMounts are attached to the cable conduit. Depending on your installation, this step may not be required.</p> <p>Take care not to damage the tip of the cable and cause it to fray. Wrap a small piece of tape over the tip to protect it.</p>
<p>Step 3: Route Cables Under Dash</p>	
 <div data-bbox="227 1816 755 1900" style="border: 2px solid red; padding: 5px; color: red; font-weight: bold;"> <p>Tip: Cut slits in the carpet here and route the cables around and to the back under the carpet.</p> </div>	<p>Place the SAFEDRIVE Pro Plus in the location for final installation and route the cables to the driver foot well. There are a number of possibilities here on how to "hide" the cables. For example, the floor matt could be cut to size to fit around the base of the SAFEDRIVE Pro Plus or the cables can route under the carpet by cutting a small slit in the carpet directly in front of the pedals. <u>The cables should not have sharp bends in them.</u> Try to keep all bends as rounded as possible to reduce internal cable friction.</p> <p>Leaving the cables exposed is not an operational hazard, only an aesthetics issue.</p>



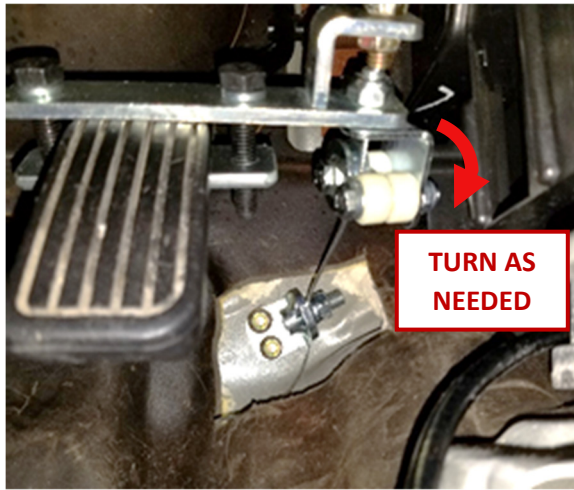
<p>Step 4: Install PulleyMount to Brake</p>	<p>Parts Needed: Brake Pedal PulleyMount</p>
	<p>Re-attach the cables to the PulleyMounts if you removed them in Step 2.</p> <p>Install the PulleyMount by unscrewing one of the two long black bolts and sandwiching the vehicle's brake pedal arm between the two bracket plates of the PulleyMount. <u>Install the PulleyMount bracket as close as possible to the vehicle's brake pedal as shown here.</u> See the photo on Page 3 for another perspective of the install.</p> <p>Snug down the bolts but do not make a final tight fit as the PulleyMount may need minor adjustment later on.</p>
<p>Step 5: Position QuickConnect</p>	<p>Parts needed: 1 QuickConnect</p>
	<p><u>Start the car and push the vehicles brake pedal down.</u> Align the components as described in Cable Alignment on Page 3 and mark the hole locations for drilling.</p> <p>If there is an obstruction preventing a QuickConnect from being mounted in the best location, move the install location up a little or a little to the left or right or use an Offset Bar.</p> <p>Make sure the brake pedal does not bottom out and hit the QuickConnect. If the brake pedal is hitting the QuickConnect, consider having the vehicles brake system checked.</p>
<p>Step 6: Pre-drill QuickConnect Holes</p>	<p>Parts Needed: None</p>
	<p>Use a 5/32nd inch bit or smaller to pre-drill holes for mounting the QuickConnect. Make sure you are not drilling into a hose or electrical line on the other side of the firewall.</p> <p><u>Do not plunge the drill through the hole while drilling.</u> If you are unable to determine if there is an obstruction behind the firewall prior to drilling, drill just enough to penetrate the firewall (very shallow). Then, use a straightened paper clip to poke through the hole to feel if it is hitting anything to a depth of 1 1/4th inch. You may need to acquire and use shorter bolts or use an Offset Bar.</p>

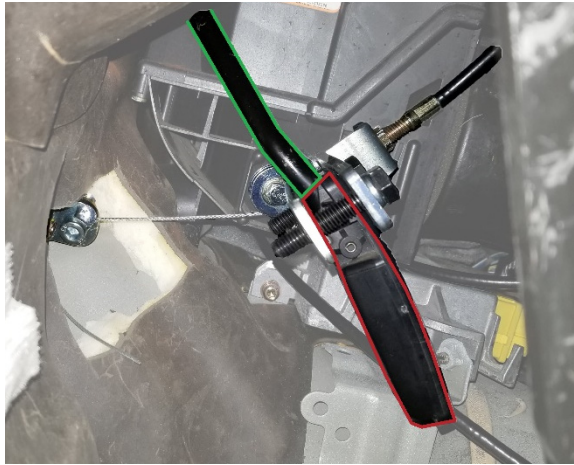
Step 7: Install QuickConnect	Parts needed: QuickConnect, Two Hex Screws
	<p>Thread the cable through the hole in the bolt of the QuickConnect and snug it down by hand, but do not tighten it.</p> <p>⚠ WARNING: The cable passes through the hole on the QuickConnect, then the copper washer, then the lock washer, then the bolt. Failure to install these components in this order may cut the cable.</p> <p>Position the QuickConnect over the pre-drilled holes and firmly screw it into a solid metal part of the firewall using two self-tap screws.</p>
Step 8: Tighten Everything Down	Parts Needed: None
	<p>Make any final, minor adjustments to the PulleyMount angle and tighten the two black bolts on the PulleyMount firmly using even pressure on each bolt for a tight fit. The PulleyMount should not twist or turn at all.</p> <p>Next, pull the loose end of the cable you passed through the QuickConnect and remove cable slack between it and the PulleyMount.</p> <p>Firmly tighten the nut down on the QuickConnect to secure the cable in place.</p>

This completes the installation of the brake pedal

Steps 9-12 review the installation of the gas pedal components. The gas pedal installation is very similar to the brake pedal installation. Install the PulleyMount to the gas pedal, push it down to determine the location for the QuickConnect, install the QuickConnect to the firewall, attach the cable and tighten everything down.

NOTE: Depending on the vehicle, it may be easier to start by installing the Gas Pedal PulleyMount on the gas pedal first. Then there is no need to work around the brake pedal installation parts. However, the gas pedal install can be a bit tricky and learning the process is easier by starting with the brake.

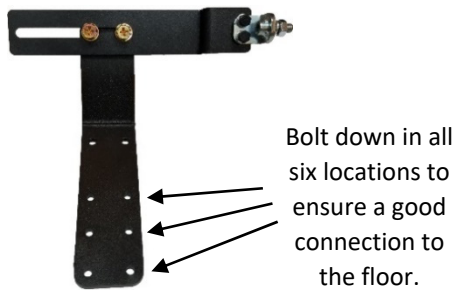
<p>Step 9: Install PulleyMount to Gas Pedal</p>	<p>Parts Needed: Gas Pedal PulleyMount</p>
	<p>Install the Gas Pedal PulleyMount by unscrewing one of the two long black bolts and sandwiching the top of the vehicle's gas pedal between the two bracket plates as shown. If there is no clearance on the right, flip it over so the cable is on the left. Just make sure the cable does not interfere with the driver's foot passing between the gas and brake pedal.</p> <p>Snug down the bolts but do not make a final tight fit as the it may need minor adjustment later.</p> <p>Depress the gas pedal and make sure it has free range of motion. If there are obstructions interfering with the installation, use the optional kit included.</p>
<p>Step 10: Position QuickConnect</p>	<p>Parts Needed: QuickConnect</p>
	<p>Push the vehicle's gas pedal down and observe the direction of travel and height of the white, plastic pulley on the PulleyMount. Position the QuickConnect behind and at the same height of the pulley.</p> <p>If there is an obstruction preventing the QuickConnect from being mounted in the best location, move the install location up a little or a little to the left or right. Remember to keep proper alignment (see Page 3).</p> <p>Make sure the gas pedal does not bottom out and hit the QuickConnect.</p>
<p>Step 11: Install QuickConnect</p>	<p>Parts Needed: QuickConnect</p>
	<p>Pre-drill holes into the firewall for the QuickConnect.</p> <p>Thread the cable into the QuickConnect in this order:</p> <ol style="list-style-type: none"> 1) Thread the cable through the hole 2) Add the copper washer and lock washer 3) Hand tighten the nut <p>Screw the QuickConnect into the firewall using two self-tapping screws. Remove slack from the line and tighten the nut on the QuickConnect.</p> <p>Turn the pulley assembly as needed so the cable slides freely through the groove in the pulley when the SAFEDRIVE Pro Plus gas pedal is applied.</p>

Step 12: Tighten Everything Down	Parts Needed: None
	<p>Here is another example highlighting the alignment. The gas pedal arm is outlined in green and the pedal is outlined in red. Note how the QuickConnect and PulleyMount are oriented so the cable is level between the two (see Page 3, Alignment)</p> <p>Pull the loose end of the cable you passed through the hole on the QuickConnect, remove cable slack and tighten the nut.</p> <p>Make a final tight fit to the two black bolts on the PulleyMount.</p>
Step 13: Tuck Cable & Replace Carpet	Parts Needed: Zip Ties
	<p>Use zip ties secure the cables out of the way of the driver's feet. Do not tie the cables tightly to any framework as they need slack to move with the pedals.</p> <p>Avoid making any sharp bends and turns in the cable. Sharp bends add friction and may prevent the vehicles brake or gas pedal returning to a rest position.</p> <p>⚠️ WARNING: Make sure the cable routes do not impede operation of the vehicle pedals or are in the way of the driver's feet.</p>
Step 14: Bolt Down SAFEDRIVE Pro Pedal	Parts Needed: SAFEDRIVE Pro and Hex Screws
	<p>It is highly recommended to pull back the carpet on the passenger's side to reveal the floor prior to bolting the SAFEDRIVE Pro Plus to the floor. There may be electrical harnesses or ductwork to avoid.</p> <p>Prior to mounting the SAFEDRIVE Pro Plus to the floor, understand from the owner their preference for location and angle. Using the included bolts and the multiple mounting holes, secure the unit to the floor. You may need to purchase longer bolts to reach metal.</p> <p>Mounting it at a high angle against the firewall may make it harder to press the pedals. Test pressing the pedals before final placement.</p>

How to Use the Offset Bars:

The kit includes Offset Bars to assist in securing components into the firewall. In some situations, it can be challenging to place the QuickConnect in the correct orientation. The Offset Bars are used to work around obstructions and access difficult areas by bolting the Offset Bar into the firewall and extending the QuickConnect into the optimal location for installation.

The Offset Bars are designed to work individually or together to create a variety of configurations.



The Offset Bars, shown to the left, visualize one way they can connect together. In this case, the QuickConnect is attached to the straight Offset Bar which is in turn bolted to the L shaped Offset Bar. The bottom part of the L shaped bar is bolted to the vehicle floor positioning the QuickConnect behind the brake or gas pedal.

Using the configuration example above, the Offset Bars helped to place the QuickConnect behind the gas pedal, which was a difficult area to reach.



The Optional Gas Pedal Mount Kit also has an Offset Bar specifically designed for use with that kit. However, if not needed for the brake or gas pedal, it could be used to position a QuickConnect. In most cases, the Offset Bars are not needed, but do not throw them out as they could be useful in a future installation.

⚠ WARNING: Make sure the Offset Bar(s) are firmly bolted together and secured onto the firewall using multiple screws. Typically, the Offset Bar will undergo additional leveraged stress. It is important to screw it down securely using all the screw holes (screw holes do not have threads in them) or it may pull free of the firewall during use.

Optional Gas Pedal Mount Kit:

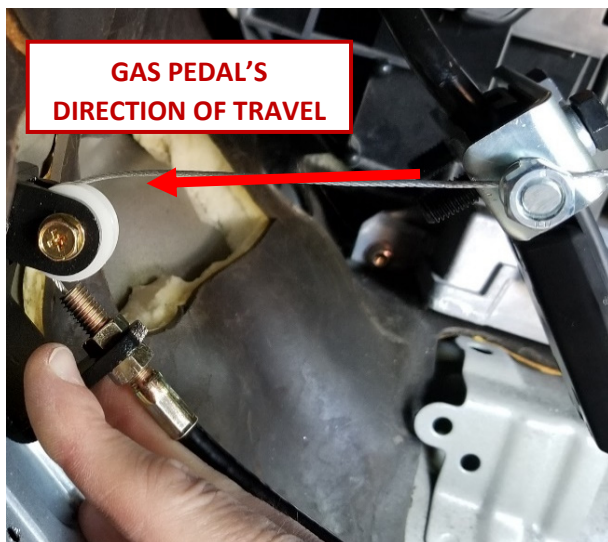
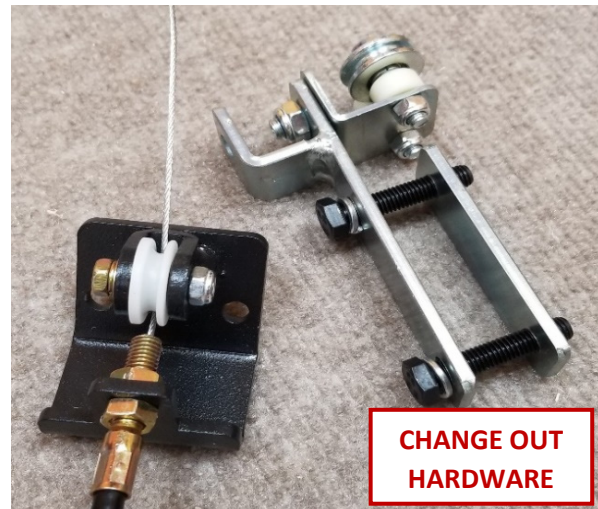
Gas pedal designs are changing due to the introduction of electronic gas pedal controls. In some cases, the pre-installed PulleyMount may not fit the gas pedal of your car. To ensure compatibility now and into the future, an optional method for connecting to the vehicles gas pedal is included with your kit.

The Optional Gas Pedal Mount is packaged separately and contains a Pulley, a Gas Pedal Mount, and an additional Offset Bar which is designed to work with the Pulley and help position it behind the gas pedal. The Offset Bar was used in the images below but may not be needed depending on your installation.

Much like mounting the QuickConnect on Page 3, the goal is to position the Pulley so the cable pulls the gas pedal back in the direction of normal operation. The cable should not come off the pulley at an angle. It should be a straight line between the pulley and the mounting point (threaded hole) on the Gas Pedal Mount.

Outline for Installation:

- 1) Remove the PulleyMount from the gas pedal cable and replace it with the Pulley.
- 2) Install the Gas Pedal Mount to the vehicle's gas pedal and thread the cable.
- 3) Press the vehicles gas pedal down to determine the placement of the Pulley.
- 4) Screw the Pulley into the firewall either directly or by using an Offset Bar.
Note: It can be oriented in either direction as shown in the photos below.
- 5) Remove cable slack and tighten the nut.



It is important to make sure the pulley is mounted directly in line with the connection point on the Gas Pedal PulleyMount. The cable should not rub against the sides of the pulley at an angle. This will wear down the pulley, cause the cable to wear and break, and/or make it difficult to work the accelerator.

System Testing:

Before starting the car:

- 1) Remove the safety pin with the red flag from the SAFEDRIVE Pro Plus by pulling it out. The safety pin locks the pedals of the SAFEDRIVE Pro Plus and makes them inoperable.
- 2) Step on the SAFEDRIVE Pro Plus brake pedal hard to simulate an emergency stop of the vehicle. Do this several times. Check to make sure nothing has slipped out of position. The cars brake pedal will not operate because the engine is not running. However, pressing on the SAFEDRIVE brake pedal hard will stress the system for a good test.
- 3) Step on the SAFEDRIVE Pro Plus gas pedal. Observe the movement of the vehicle's gas pedal to be sure it is being applied. Make sure the vehicle's gas pedal returns to a rest position.

Start the car, leave it in park:

- 1) If the engine is racing, turn off the car immediately. The cable for the gas pedal is too tight and is applying the vehicle's gas pedal. You will need to put slack in the cable. The cable going from the firewall to the gas pedal connections do not need to be tight like a banjo string. The cable should be slightly loose and routed as in the examples on Page 3.
- 2) Step on the SAFEDRIVE Pro Plus brake pedal and check the cable is gliding freely through the pulley on the vehicle's brake pedal PulleyMount. You should see the vehicles brake pedal being applied.
- 3) Observe the movement of the brake pedal and angle of the cable between the brake and QuickConnect. The brake pedal should be pulled back towards the QuickConnect and be fully applied.
- 4) Remove your foot from the SAFEDRIVE Pro Plus brake pedal and make sure the vehicle's brake returns to the rest position.
- 5) Check that the vehicle's brake lights turn off after applying the SAFEDRIVE Pro Plus brake pedal. See Tricks and Tips if the vehicle's brake lights do not turn off.
- 6) Fully depress the vehicles brake pedal. Make sure the brake pedal movement is not obstructed and is fully depressed. Relocate the QuickConnect to the left, right, or higher up if the vehicle's brake movement is obstructed (see Step 5), or use an OffsetBar to reposition it.
- 7) Press the SAFEDRIVE Pro Plus gas pedal. Make sure the gas pedal is applied and the car's engine does not race after taking your foot off the gas.
- 8) Double check to make sure none of the cables or fittings have slipped after simulating an emergency stop using the SAFEDRIVE Pro Plus brake.
- 9) Road test the vehicle in a safe location with a driver in the driver's seat while you practice using the system.

We are here to help!

The brake and gas pedal of the SAFEDRIVE Pro Plus have additional springs in them to retract the cable and ensure the vehicles peddles do not stay applied. It is natural for the SAFEDRIVE Pro Plus peddles to be stiffer than the vehicle peddles, but they should not be extremely hard to press. The angle that the SAFEDRIVE Pro Plus pedals are installed can also affect the feel of the pedals. Sometimes a flatter angle will make it easier to press the pedals down. Feel free to send several pictures from angles as shown in these instructions for both the brake and gas to support@gosafedrive.com and we will be happy to evaluate the situation and provide recommendations.

Tricks and Tips:

- Read all instructions before you begin and be familiar with the Materials Supplied on Page 2.
- Plan ahead when thinking about how to route cables prior to installation. Speak with the system owner to determine where to mount the SAFEDRIVE Pro Plus pedal before cutting slits into the carpet or custom cutting the floor mat.
- In newer cars, manufacturers are installing thicker insulation in the foot wells on both the passenger side and driver side. The bolts in this kit may not be long enough to penetrate the insulation to reach metal. You may need to purchase longer bolts in some cases.
- Remember to disengage the vehicle's Power Adjustable Pedals. If disengagement is not possible, setup the system for the driver brake/gas preference prior to installation. Never adjust Power Adjustable Pedals after installing the SAFEDRIVE Pro Plus. Some vehicles may have a fuse for this, remove the fuse to prevent accidental adjustments and/or put tape over the adjustment knob.
- The base is a thick, slightly soft metal that you can drill through in case the existing holes are not working out for mounting the SAFEDRIVE Pro Plus to the floor.
- If the vehicle's brake lights stay on or the gas pedal stays depressed, this is usually due to sharp bends in the cable, or the black cable was zip-tied too tight near the PulleyMount. Check there are no sharp bends in the cable and the black cable can move as the car's pedal is pressed.
- To help ensure the drill bit does not plunge through the firewall, wrap a piece of tape around the bit so only the first ¼" of the bit shows. The tape will prevent the bit from going too deep.
- Put a little bit of lubrication under the SAFEDRIVE Pro Plus gas and brake arms to reduce noise where the spring runs along the bottom part of the brake and gas pedal arms.
- Always test the system prior to entering the roadway and ensure proper operation.

Maintenance:

Your kit comes with two extra cables for both the gas and brake pedal. Check the cables monthly for any signs of wear and replace annually.



WARRANTY

The SAFEDRIVE Pro Plus comes with a two-year, renewable and transferrable warranty for the life of the pedal. If any part of the pedal fails for any reason, simply contact us and we will provide new parts free of charge, just pay shipping and handling. Renewing the warranty for another two years or transferring the warranty requires purchasing a SAFEDRIVE Pro Plus Maintenance Kit. The kit contains four new cables, cable conduits, replacement springs, pulley, pulley-guide, bearing, flashlight, and zip ties.

We highly recommend replacing the cable every year and installing a maintenance kit every two years to help protect against unexpected failures, ensure your safety, and the safety of others on the road.

Best wishes on your success!

Give Them a Brake, LLC

www.gosafedrive.com

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