

# SAFEDRIVE PRO INSTALLATION INSTRUCTIONS



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## **READ ALL INSTRUCTIONS - OBSERVE ALL WARNINGS**

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

#### Instructions:

Read these instructions completely before starting installation. Improper installation can result in a system malfunction which could result in serious bodily harm or death.

#### **System Maintenance:**

Prior to every training session, examine components for wear and tear. Perform complete annual inspections for any signs of wear and tear, especially with the cable. Replace components if needed.

### **Inspect Parts:**

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

## **System Testing / Practice:**

After installation and prior to use, test the system thoroughly. Become familiar with the feel and input strength needed to stop the vehicle before instructional training.

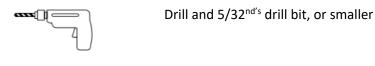
#### **Check Installation Location:**

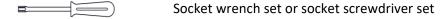
Some components require the installation of mounting screws into the firewall and floorboard of your vehicle. Check for possible obstructions such as brake lines, electrical lines, or fuel lines. Relocate installation points as necessary.

## **Brake Sensitivity:**

It is important to practice using the system before training begins. The SaveDrive Pro brake pedal will typically require a little more foot pressure than the driver side brake and require less travel to apply the brake (you don't have to push down as far to achieve maximum braking).

## **Tools Needed:**



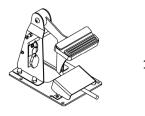




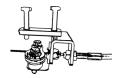


WARNING: The installation kit is supplied with self-tapping screws. Most vehicles have firewalls and foot wells that are too thick for the self-tapping screws to drill through. It is recommended to pre-drill holes. Do not exceed a drill bit size of 5/32<sup>nd</sup> inch to pre-drill holes.

## **Materials Supplied:**



1 SaveDrive Pro Passenger Side Brake Assembly



1 PulleyMount with cable



1 QuickConnect \*



10 Self-Tapping Hex Head Screws and zip ties

<sup>\*</sup> The bolt on the QuickConnect has a small hole drilled through it. It can be found behind the nut and washer. This is used to thread the cable and secure it. The cable goes through the hole, then the washer goes on, and then the nut is tightened down to secure the cable. Make sure you have the washer in place or you will cut the cable when tightening the nut down.

## **Step by Step Installation Instructions:**



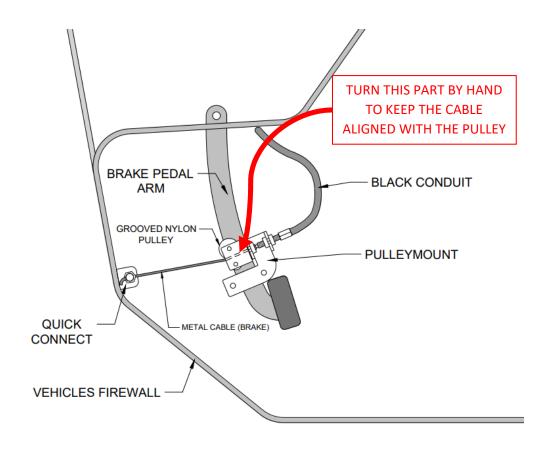
## WARNING – Power Adjustable Pedals:

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



## WARNING – Cable Alignment:

The system essentially operates by pulling the brake pedal back towards the firewall. The cable coming from the PulleyMount and secured to the QuickConnect should be aligned in the same direction and angle as the brake pedal moves towards the firewall when depressed. See the photo below for reference on where and how to mount the components to achieve optimal alignment.



To properly locate the QuickConnect, start the vehicle and depress the brake pedal and observe the motion of the brake pedal. Push the pedal all the way down and position the nut on the QuickConnect directly behind and at the same height as the white plastic pulley on the PulleyMount. If there is an obstruction to mounting the QuickConnect, it can be relocated a little higher or a little to the left or right. You can twist the top of the PulleyMount so the cable is aligned with the groove in the pulley. Do not mount the QuickConnect lower as that would pull the brake pedal down and not back towards the firewall.

\* Note the pulley's orientation is to the top. The pulley can be turned left or right to orient towards the QuickConnect. When the brake is activated, the cable should pull through the groove of the pulley.

## Step 1: Reveal Firewall



## Parts needed: None

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.

Note that in this installation, there is rubber and foam insulation under the carpet. It was necessary to cut away a section of the insulation in order to access the firewall. Never mount the QuickConnect onto plastic or rubber, it needs to be bolted down and secured firmly into a metal surface.

**Step 2: Prepare Cable for Routing** 



## Parts needed: PulleyMount

The cable will need to pass from the passenger's side to the driver's side foot well. Typically, it is routed under the front dash.

Removing the PulleyMount from the cable conduit will make it easier to pass the cable under the dash. Some vehicles have enough room to pass it under the dash while attached to the cable conduit. Depending on your installation, this step may not be required.

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.

Step 3: Route Cable Under Dash



PLAN AHEAD - READ STEP 9 & 10

Place the SafeDrive Pro brake pedal in the location for final installation and route the cable to the driver's foot well. There are a number of possibilities here on how to "hide" the cable. For example, the floor matt could be cut to size to fit around the base of the SafeDrive Pro or the cable can route under the carpet by cutting a small slit in the carpet as shown. The key thing is that the cable should not have sharp bends in it.

Leaving the cable exposed is not an operational hazard, only an aesthetics issue.

## Step 4: Install PulleyMount



## Parts Needed: PulleyMount

Re-attach the cable to the PulleyMount if you removed it in Step 2 and AFTER you have routed it (Step 10).

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. Install the PulleyMount's bracket as close as possible to the vehicle's brake pedal as shown here. See the photo on Page 3 for another perspective of the install. Your install should look like that photo.

Snug down the bolts but do not make a final tight fit as the PulleyMount may need minor adjustment later on.

**Step 5: Position QuickConnect** 



## Parts needed: QuickConnect

Start the car and push the vehicles brake pedal down. Align the components as described in Cable Alignment on Page 3 and mark the hole locations for drilling.

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. Moving it up is preferred.

Make sure the brake pedal does not bottom out and hit the QuickConnect. If this is an issue, consider having the vehicles brake system checked.

Step 6: Pre-drill PulleyMount Holes



## Parts Needed: None

Use a 5/32<sup>nd</sup> inch bit 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. Do not plunge the drill through the hole while drilling. If you are unable to determine if there is an obstruction behind the firewall prior to drilling, drill just enough to clear the depth of the firewall (very shallow). Then remove the drill bit and, using your hand, push the drill bit into the hole to feel if it is hitting anything to a depth of 1 1/2<sup>th</sup> inch. Using shorter bolts is also an option.

## Step 7: Install QuickConnect



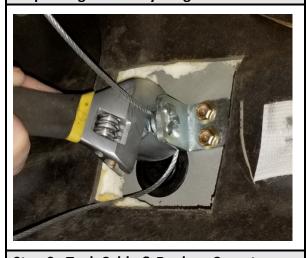
## Parts needed: QuickConnect, Two Hex Screws

Thread the cable through the hole in the bolt of the QuickConnect and snug it down by hand, but do not tighten it.

Position the QuickConnect over the pre-drilled holes and firmly screw it into place into a solid metal part of the firewall.

Note: While it is possible to replace the carpet and screw down the QuickConnect through the carpet into the firewall, it is not recommended. A small slit can be cut into the carpet from the top down to allow access to the QuickConnect and allow the cable to pass through.

**Step 8: Tighten Everything Down** 



## Parts Needed: None

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.

Next, pull the loose end of the cable you passed through the hole in the bolt and remove extra cable slack, but not so much that is pulling the pedal down. Just remove any slack. Then, tighten the nut down on the QuickConnect to secure the cable in place.

**Step 9: Tuck Cable & Replace Carpet** 



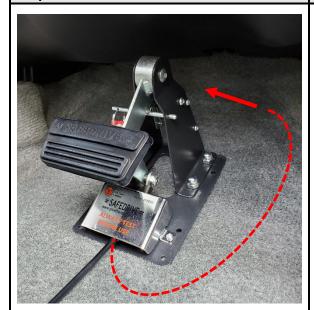
Parts Needed: Zip Ties

Use the included zip ties as needed to "loosely" secure the cable up under the dash panel so it does not hang down. The cable needs to move freely with the brake pedal when the brake is pressed.

Avoid making any sharp bends and turns in the cable when routing it. Sharp bends add friction to the cable and may prevent the brake returning to a rest position.

WARNING: Make sure the conduit/cable is routed so as not to impede operation of the gas pedal.

## **Step 10: Bolt Down SafeDrive Pro Pedal**



## Parts Needed: SafeDrive Pro and Hex Bolts

Understand where to mount the pedal to the floor. An instructor may have a preference where to locate it.

Prior to routing the cable in Step 2, consider how to hide the cable. Typically, cutting a small slit in the carpet in front of the SafeDrive Pro and then routing the cable around and to the right, then behind the SafeDrive Pro and under the dash makes for a very clean installation.

Position it at least 8" away from the right side to leave room for the instructor's right foot. Using the included bolts and the multiple mounting holes, secure the unit to the floor. You may need longer bolts than those provided if the insulation under the carpet is thick.

Step 11: Test the System



Remove the safety pin with the red tag from the SafeDrive Pro by pulling it out. The safety pin prevents the accidental application of the SafeDrive Pro brake when the vehicle is not used for instruction.

MARNING: Remove the safety pin prior to any instructional driving.

## **ALWAYS TEST BEFORE USE**

## Parts Needed: An Assistant

#### Start the car, leave it in park.

- Step on the SafeDrive Pro brake pedal and observe that the vehicles brake pedal is being applied.
   Step down again, HARD, simulate an emergency stop of the vehicle. Do this several times.
- Check that the cable is gliding freely through the pulley on the PulleyMount, is straight, and any cables remain positioned out of the way of the driver's feet and gas pedal.
- 3) Remove your foot from the SafeDrive Pro brake pedal and make sure the vehicles brake returns to the rest position.
- 4) Check that the vehicle's brake lights turn off after applying the SafeDrive Pro brake. See Tricks and Tips if the brake lights do not turn off.
- 5) Fully depress the vehicles brake pedal. Make sure the brake pedal's movement is not obstructed and is fully depressed. Relocate the QuickConnect to the left or right if the brakes full movement is obstructed (see Step 5).
- 6) Double check to make sure none of the cables or fittings have slipped after simulating an emergency stop using the SafeDrive Pro brake.
- 7) Road test the vehicle in a safe location with a driver and passenger testing the SafeDrive Pro.

## **Tricks and Tips:**

- Read these instructions completely before starting. That's our best tip!
- Plan ahead when thinking about how to route the cable under the carpet prior to beginning the installation. Speak with the system purchaser to determine where they prefer the SafeDrive Pro brake be located and angled 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 drivers side. The bolts in this kit may not be long enough to penetrate the insulation to reach metal. You may need to purchase lag screws/bolts of 3-4 inches in length.
- Leave about eight inches of room to the right of the SafeDrive Pro. This leaves room for the instructor's right foot or the SafeDrive Pro Foot-Rest, which is an optional accessory.
- To increase the angle of the SafeDrive Pro, the back can be propped up with small wooden blocks. Drill the blocks into the floor board and the SafeDrive Pro base can be drilled into the blocks.
- Remember to disengage the vehicle's Power Adjustable Pedals if that option is turned on. If
  disengagement is not possible, setup the system for the student drivers brake preference and only
  use that setting when driving. Never adjust Power Adjustable Pedals after the SafeDrive Pro is
  installed. Some vehicles may have a fuse for this, remove the fuse to prevent accidental
  adjustments and/or put tape over the adjustment knob to prevent accidental use.
- The base is made with a thick, but slightly soft metal that can be drilled through in case the existing holes are not working out for mounting the SafeDrive Pro to the passenger's side.
- In rare cases, the vehicle's brake lights may stay on after applying the SafeDrive Pro brake. The SafeDrive Pro has two, redundant springs to ensure the SafeDrive Pro brake returns to a rest position. Check to make sure there was a little slack in the steel cable (Step 8) there are no sharp bends in the cable or a spring isn't broken needing replacement.
- Always test the system prior to entering the roadway to ensure proper operation.



The SafeDrive Pro 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. Retaining the warranty for another two years or transferring the warranty requires purchasing a SafeDrive Pro Maintenance Kit every two years. The kit contains two new cables, cable conduit, replacement springs, nylon pulley and guide, pulley bearing, a 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

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