

## PWJDM AeroCatch Mounting Plate

### Installation Guide

This install will take ~2 hours depending on how familiar you are with your car and tools.

If you want a full color version of this guide, you can download it at [www.passwordjdm.com/instructions](http://www.passwordjdm.com/instructions)

**Warning:** Since the AeroCatch system is flat, you must consider that mounting these may create noticeable flat spots in your hood. If your car hood has a lot of curvature to it, you will flatten and dent your hood considerably by mounting this system since it sandwiches your hood between the AeroCatch and our mounting plate.

**Read this in its entirety before starting, once you begin cutting there is no going back. Read the instructions provided by AeroCatch too!**

Before installation, double check to make sure you have all these components.

ITEM#	QTY	COMPONENT DESCRIPTION
1	2	PWJDM Aero-Catch Mounting plates
2	2	M4x30mm set screw studs
3	2	Cutting templates
4	1	Threadlock
5	1	Install manual

#### **Tools we recommend having:**

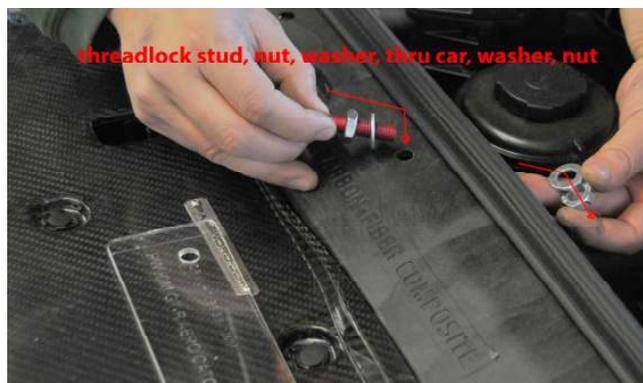
1. Dremel or airtools with small sanding drums
2. Drill bits, a small pilot hole bit, 3/16", 3/8", and a ~0.5"
3. Medium (blue) thread lock
4. 2.5mm hex driver
5. 17mm open ended (box) wrench or adjustable pliers
6. Pencil, Pen or Permanent marker
7. Masking tape
8. Measuring tape

#### **1. Prepping your car**

- a. You need to decide where you are going to install the studs that hold the hood down. It would be most logical to mount them on the same cross member as the stock hood latch but beneath the flattest spot of the hood possible.
- b. You want to mount the AeroCatch latches on the flattest spot of your hood that is located above the engine bay cross member.

#### **2. Installing the studs.**

- a. Use a tape measure to draw a centerline on the frame.
- b. Take a ruler or straight edge and mark two equidistant holes from the centerline. This is where you will be drilling holes to put your studs.
- c. Drill out the two stud mounting holes with a 3/8" drill bit.



- d. Now threadlock a stud and run it through a nut, washer, the car, and back it with a washer and a nut.

### 3. Locating the hood holes.

- a. Now that the studs are fixed, we need to mark where they will go through the hood.
- b. Roll up some tape or dab some whiteout onto the tops of the studs, and then lower the hood onto the studs. The tape or whiteout should transfer over to the hood.



- c. Now that you know where the studs want to go, drill small pilot holes through the hood where it has been marked.
- d. **MAKE SURE YOU ANGLE THE DRILL AS IF THE HOOD WAS CLOSED ON THE CAR.**



- e. If you can see the studs through the pilot holes, you've marked things properly and you can go ahead and drill out a 0.5" hole through these pilot holes.
- f. **Now would be a good time to mask off the top of the hood with several layers of masking tape, otherwise you might ruin the paint with a stray drill bit or Dremel.**
- g. If you angled your drill perfectly, the studs should be able to go through your hood. You can see in the pic below, we didn't drill the pilot holes perfectly (we're not robots). Don't worry, just mark off the amount you need to remove and make the hole larger via a bigger drill bit or a Dremel.
- h. Don't worry if you're off a bit since you will be cutting out a large hole for the latches to rest in.

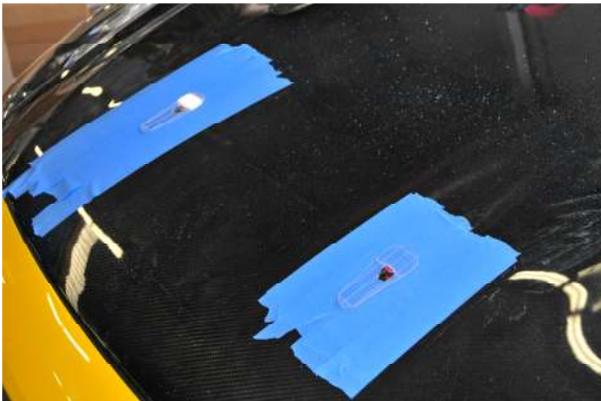


- i. The studs need to be aligned so the flats are parallel and tall enough to protrude above a closed hood.
- j. Raise or lower the studs so the tips protrude  $\sim 1/8$  above a closed hood.
- k. Use a ruler or straight edge to make both studs parallel.
- l. Tighten the stud nuts so the studs don't shift.

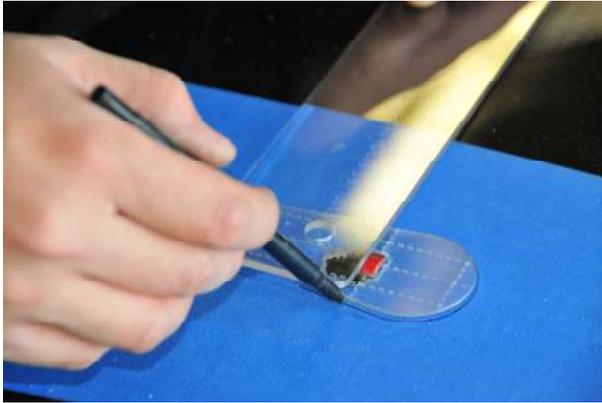


#### 4. Cutting the hood to fit the latches.

- a. Now that the two studs are sticking above the closed hood  $\sim 1/8$ " you can rest the cutout templates on them.
- b. The templates should have the larger ends toward the rear of the car as pictured below.



- c. Use a straight edge/ruler to make sure the studs and templates are aligned horizontally across the hood.
- d. Mark the perimeter of the templates with a fine line, everything within this line will be cut out.



- e. Naturally you don't want to damage the studs so you can either remove them or raise the hood so there's no risk of damage. We just raised the hood with a roll of tape. Make sure you have several layers of masking tape protecting the hood.

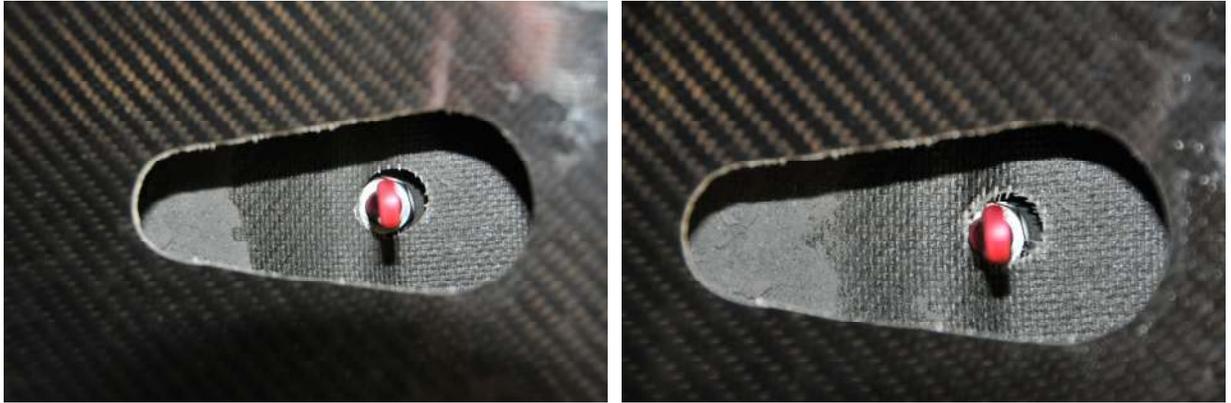


- f. Now cut out the areas you just marked from the top of the hood. A Dremel is very handy because you can cut the straights with a cutting wheel and the round ends with sanding drums.



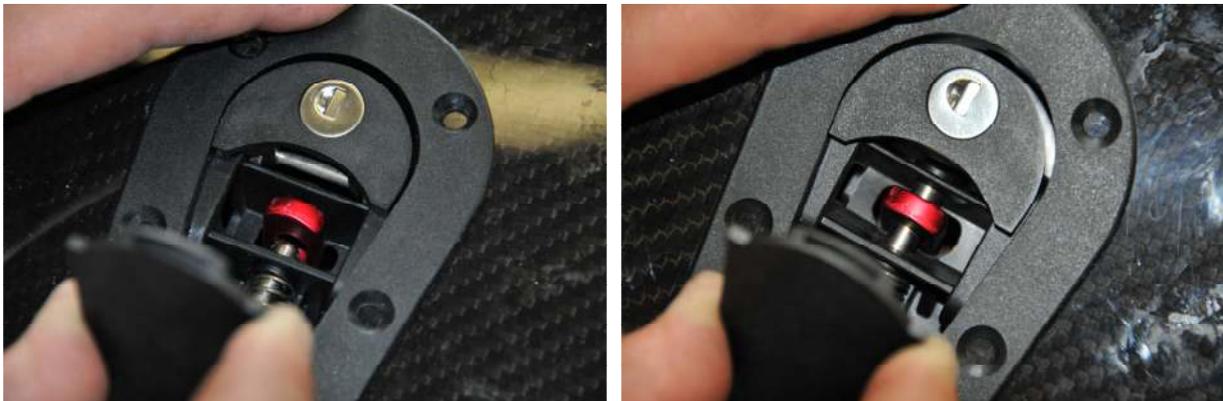
- g. Drop in the latch from time to time to open the hole as needed.
- h. **The hole should not be any larger than necessary to make the latch rest fully in the hood.**
- i. You may need to remove material from the lower frame of the hood so the latches drop in.

- j. As you can see on our car, the bottom hole of the hood is touching the stud. This may be shifting the hood around so we made the clearance hole larger.



**5. Test locking/setting studs permanently DO NOT BEND THE STUDS!**

- Now we need to set the permanent stud height.
- Completely lower the hood.
- Drop in the latches making sure they rest fully on the hood.
- Now you have an idea how much you need to lower the studs.
- Raise/lower the studs so the latch pin engages at the top of the stud hole with no slack.
- Any slack above the locking pin will allow the hood to flutter when driving.



**Note:** DO NOT BEND THE STUDS! 7075 AL does not like to be bent so bending the stud will cause fatigue and they will likely break in the future. You do not want your hood flying up at you when racing. Only the latching housing should be adjusted to make things lock properly.

**6. Installing the latches permanently.**

- With the hood closed, lock the latches through the studs.
- Make sure the latch housings are aligned across the hood as horizontally as possible and mark off the six mounting holes or just go ahead and start drilling the holes using the latch as a hole template.
- Drill the mounting holes with a 3/16" bit.
- Thread two of the provided M4 studs into the backing plate.
- Now slide the backing plate through the hood cutouts.



- f. Slide the studs up through the mounting holes in the hood.
- g. Threadlock four of the beveled screws provided by AeroCatch and loosely screw them through the latch, hood, and into the backing plate.



- h. Remove the two studs and replace them with beveled screws.
- i. Align the latch one last time and tighten all six screws.



- 7. **Adjustments:** Depending on your car's hood curvature, you might want to bend the studs so they line up with the latches better. You must realize your taking a flat latch and putting it on a curved hood. Compromises must be made to overcome this.
- 8. **Cleaning:** Over time, gunk will get into the latch mechanism. It is recommended to use WD-40 to clean and lube the latch mechanism.