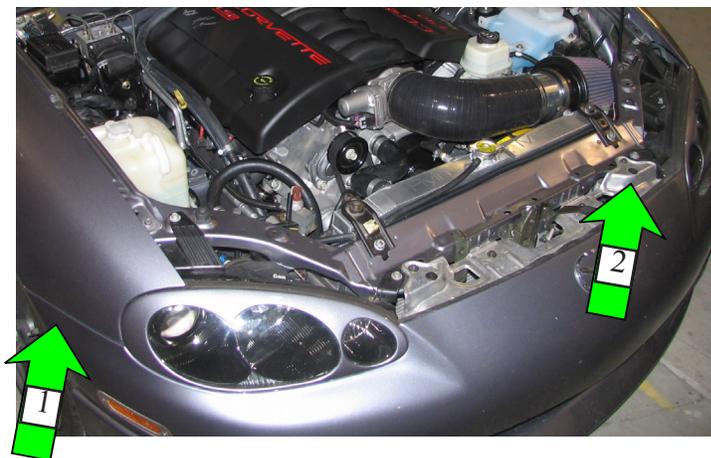


Flyin' Miata

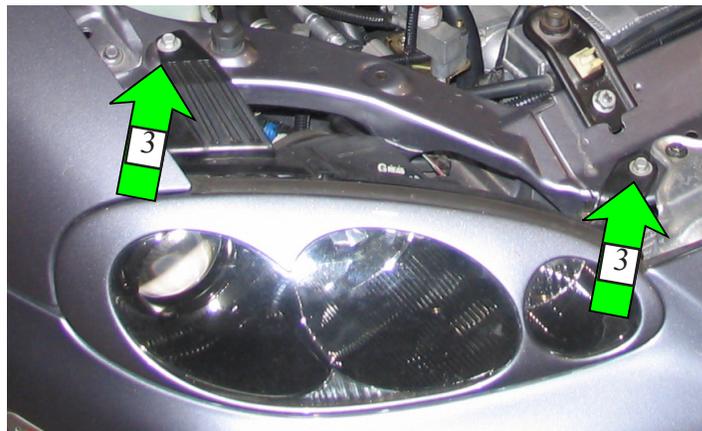
Aerocatch Hood Pins 29-41XXX

Congratulations on your purchase of the Aerocatch hood pins! The installation isn't too difficult, but this is definitely a situation where you should measure twice and cut once. There's a little bit of tolerance, but not much, so be careful. Most of the pictures herein are of the NB (99 - 05), but - unless otherwise labeled - apply to all 90 - 05 Miatas.

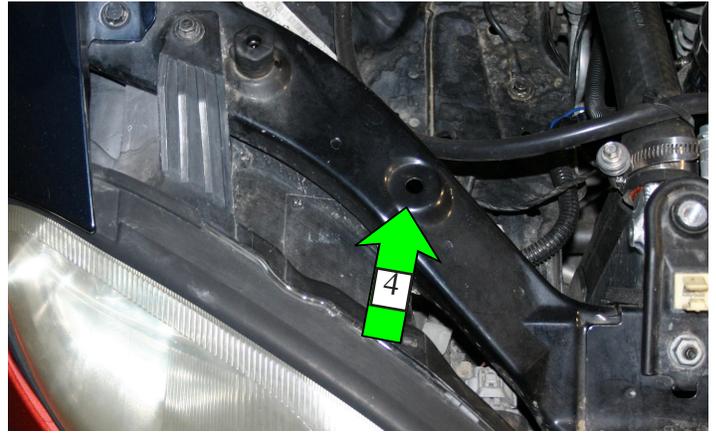
1. **99-05 only:** Remove the bumper cover. You'll need to release the wires from the foglights and corner markers first. You'll then want to release the top of the "mouth" from the bumper support (don't forget the plastic fasteners), remove the bolts holding the rear corners to the front fenders and the fender liners (1, both sides), and the four bolts holding the metal panel to the core support (2), between the headlights. Once that's done, the bumper cover should slip forward.



2. **99-05 only:** Remove the headlights. Remove the two bolts (3), unplug the wires, then pull straight out. It can be difficult to pop the lights out, but they'll release eventually. Just be sure that you're pulling straight out, any kind of side load could break something.



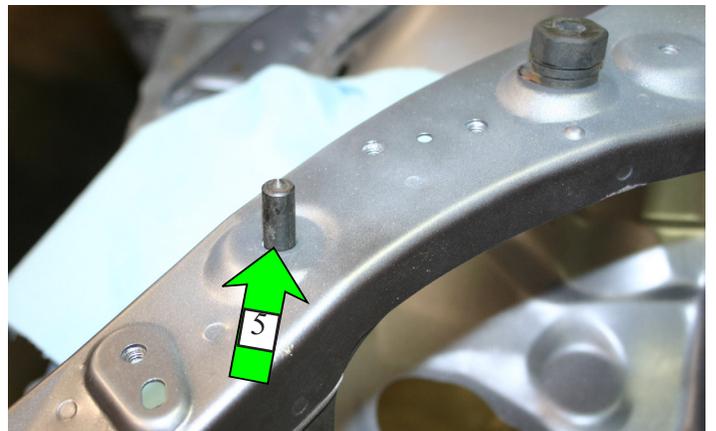
5. **99-05 only:** Now find where you're going to locate the hood pins, we typically locate them as indicated in the picture (4).



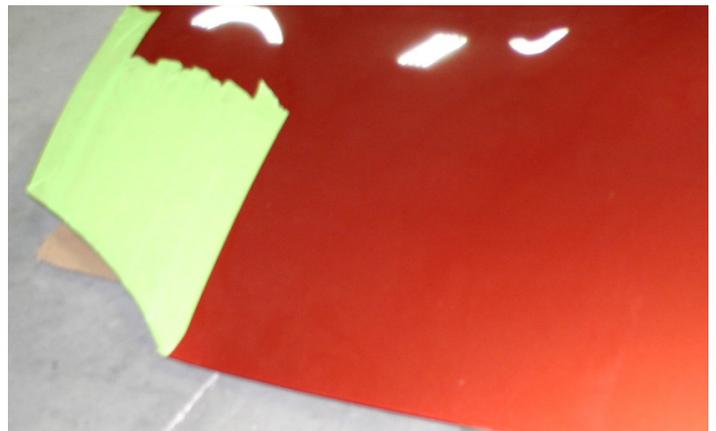
6. **90-97 only:** We typically locate the pins as shown (4). Locating them on the sides, behind the headlights isn't a good idea, as the hood will flex at the front at high speed. We strongly recommend locating them as shown. You have some different options on how to gain access to the backside of the pin - remove the radiator, remove the bumper, use small hands / tools, etc. Figure out what works best for you, and use that method.



7. Close the hood, and use a transfer punch (5) to mark where the hood pin will hit the hood. Be sure the punch is as vertical / parallel to the hood pin as possible. There is some tolerance in the latch, but not much, so try to be as precise as possible. If you find it easier to measure from datums, go for it. Be sure to do both sides.



8. Cover a generous area of the hood, where the two latches will go, with masking tape in order to protect it. Then prepare a blanket (or something to prevent scratching the hood), remove the hood (leaving the hinges installed on the car) and set it topside-down on the blanket.



9. Carefully drill a hole through the hood where you marked it in step 6. The size is largely arbitrary, but nothing too big. Try to keep the drill bit as parallel as possible to the (imaginary at this point) hood pin.



10. Grab the diagram in the packaging, then orient the backing plate for the latch and use it as a template, using the dimensions shown on the diagram to orient the plate and mark your hole centers. One dimension is missing - the centerpoint of the smaller hole is 2-9/16" (65mm) from the centerpoint of the larger hole.

11. On the top of the hood, use a 1-7/8" (47mm) holesaw at the big radius and a 1-1/4" (31mm) holesaw at the small radius. Be absolutely sure that everything is lined up properly, you can't undo this! Also, be sure to only cut through the skin of the hood (with the holesaw, the pilot hole should go all the way through), not the bracing underneath. You'll cut the bracing in the next step, but you need the small pilot hole to locate the holesaw on the other side.



12. Using the pilot holes from step 10, use a 2-1/2" (64mm) holesaw and a 2-1/8" (54mm) holesaw to cut through the bracing on the underside of the hood. Be very careful to not cut through the skin of the hood, any mistake there will be visible on the hood itself. Then, connect the tangent lines (that were traced in step 9) using a cut-off wheel or jig saw. Do this on both sides of the hood. The cut-off wheel will create a fine dust that can put slight scratches in the paint, but the hacksaw may be too long to make the cuts on the underside.

13. Try to seat the latches into the holes you just cut. Carefully use a file to clearance any interferences. Once the latch has been fully seated, use it as a template to drill the bolt holes. If your hole is at all loose, slip bolts in as you drill the holes to ensure that everything stays lined up.



14. Install the hood pins, guessing at the correct height. Be sure to use the included lock washers. They'll need to be cut down, but leave them full-length for now. Next, bolt the hood back onto its hinges. Get the nuts snug, but leave them loose enough to allow the hood to move slightly. Carefully lower the hood to see how the pins line up. Play with the orientation of the hood to get proper gaps and the closest match on the pins. Once you have the hood aligned properly, tighten down the nuts to keep it from moving any more.



15. You can use the pins to bend the mounting hole slightly, to allow for better orientation, but if you're too far off, you'll need to slot the hole with a file. For the height, you want the latch to pull the hood down slightly, to eliminate any rattle. Once you have the height and location determined, remove the pin and cut it short enough to allow room for the headlight. Be sure not to cut it too short. Then trim the included rubber spacer so that it's slightly compressed when the latch is engaged.

