


'No Holes' Front License Plate Bracket

Thank you for choosing US Mill Works. Our brackets are precision made in the USA using modern CNC machines and the finest materials available. Every bracket has been hand inspected for quality. If you have any questions or concerns, contact us at usmillworks@gmail.com or visit us on the web at <http://www.usmillworks.com>.

 **Warranty and Limited Liability Statement:** US Mill Works LLC warrants this bracket against manufacturing defects for a period of 30 days from the time of purchase and limits its liability to the replacement of defective parts only. Under no circumstances will US Mill Works LLC accept liability for damage to persons or property resulting from the use of this bracket regardless of root cause. In other words, **USE OF THIS BRACKET IS DONE SOLELY AT YOUR OWN RISK.**

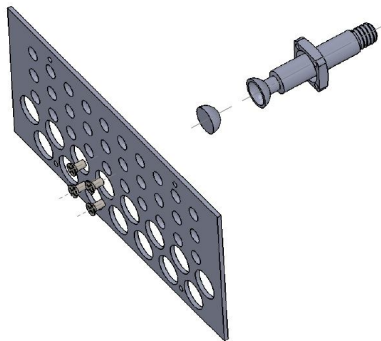


Figure 1: Explode Diagram

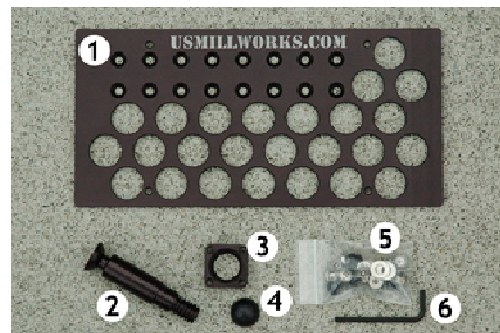


Figure 2: Kit Contents

Kit Contents: (1) plate (2) bolt (3) collar (4) half-ball (5) Fasteners (6) 4mm hex wrench

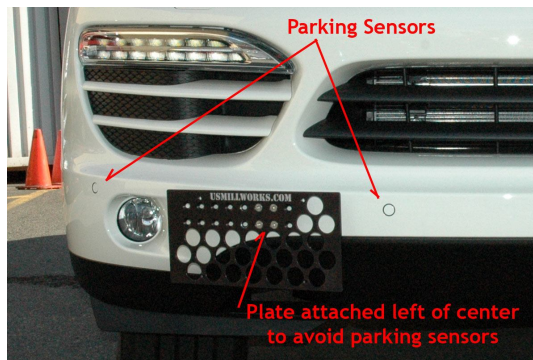
Fasteners (in sets of 4): (a) M6x1 12mm flat-head (b) 1/4"x20 3/8" pan-head (c) 1/4"x20 1/4" pan-head, black oxide, Philips (d) 1/4"x20 1/4" pan-head, Philips (e) 1/4" washers (2 sets)

Install (Estimated at 30 minutes)

- 1) **Watch the video.** We strongly encourage you to visit our homepage (<http://www.usmillworks.com>) and watch the install video. We also have a "videos" link which has more install videos.
- 2) **Remove the plug.** Most plugs push in to remove, some must be pried (use a plastic pry tool). For the former, press around the plug to find the weak spot, then push in.
- 3) **Chase the threads of the receiver in your bumper.** This is an important step for cars with some road miles on them. Screw the factory tow hook in and out several times to clean the threads (the tow hook is in your roadside emergency kit).
- 4) **Install the bolt and collar.** *NOTE: some vehicles have left-hand thread tow bolts (you will need to turn it left to tighten).* Slide the compression collar over the tow bolt and hand-tighten the assembly into your bumper. Screw this

in as tight as possible. The more work you do here, the easier things are later. The anodized coating will resist galling. Anti-seize is only necessary for extreme driving conditions where corrosion is a known issue.

- 5) **Choose a mount position clear of the parking sensors (PDC) if equipped.** The image to the right shows a suitable placement for a Porsche Cayenne. In this example, the plate has been moved left of center to avoid triggering the sensors. Generally, line of sight and swiveling the plate tight against the bumper is all that is necessary for sensors to function correctly. Sometimes height makes a difference – mounting the plate upside down is fine. Other times, a slight tilt or angle to the plate will make the difference between tripping and not. Lastly, plate surrounds or other accessories attached to the bracket will increase the footprint of the plate, and that may trigger the PDC, so try it first without those attached.



- 6) **Mount the plate.** Holding the ball in the socket of the bolt with one hand, slide the plate mount up from the bottom. Use one hand to pinch the three pieces together, use the other to install the 4mm flat-head screws. Tighten in an alternating pattern.
- 7) **Drive the bolt into the receiver.** At this point, you're going to use the bracket itself to tighten the tow bolt into the frame of your car. On some vehicles, due to the angle of the bolt, this will be an iterative process. The steps are as follows:
- a. Tighten the compression collar screws and turn the entire bracket as a unit to tighten the tow bolt. Watch the clearance between the plate and the bumper.
 - b. Loosen the screws on the collar and swivel the plate back. Repeat step A until the tow bolt is firmly snug.
- 8) **Level the plate.** Once the tow bolt is driven in tight, loosen the collar screws and level set the plate. On this final tightening, check that the gap between the plate and collar is equidistant on each corner. Adjust as necessary. Verify the bracket is secure by applying force to the corners – it should not move.
- A note regarding automatic car washes:** The bracket should be removed prior to washing to prevent damage to your license plate or any attached plate surround (surrounds may break from the brushes, and your state license plate may bend forward or dog ear). Our optional **Quick Release Adapter** is recommended if you use car washes. It will allow you to remove and reinstall your plate in seconds, without tools.*
- 9) **Attach your license plate.** We include several sets of pan-head fasteners to give you some install options. Select an appropriate length and color, and use washers as necessary to prevent the screws from protruding out the back of the plate. A clean backside looks great and reduces the chance of damage to your bumper in the case of a collision.
- 10) **Stow the wrench and tow plug.** Store the 4mm hex wrench in your glove box or roadside kit. Should you need to tow your vehicle, you'll be happy you have that wrench. Same with the tow plug, keep it in your vehicle to keep it from getting lost.

Again, a big thanks from all of us at US Mill Works
... **Happy Motoring** ...

Also by US Mill Works...

Optional Quick-Release adapter (shown right) allowing easy removal of plate for car washes.

Patent No. 9,242,610

