



Installation Instructions for Jac-Knife Highway Pegs (Patent No. US 7,497,291 B1)

Required Tools

- Allen wrench (2) – 5/32”; 1/4”
- Blue Loctite
- Center punch
- Die grinder
- Drill
- Drill bit (2) – 1/8”; 17/64”
- File
- Flat driver bit – #8
- General purpose grease
- Hammer
- Hand grinder with a medium to fine grit flap disc wheel
- Needle nose pliers
- Scriber
- Snips

Installation

1. Make sure you have a bench with plenty of room to work on your floorboards. Lay a piece of cardboard down to protect the board. You can also place masking tape over visible areas of the board for extra protection.
2. Remove the floorboard insert from the board and inspect the bottom side of the board. Some boards may have weld spatter from manufacture and may even have weld that extends into areas where it shouldn't. If your pegs are being installed on the square style board than two of the rubber mount bosses will need to be trimmed so they don't interfere with the peg motion. Using your snips, remove the ends of the bosses. You can use the hand grinder to smooth the ends up if needed.
3. Next install the ball plunger from the bottom side of the highway peg using the #8 flat driver bit. If you have to use a regular straight screwdriver be careful not to strip the slot in the ball plunger. The tip is usually tapered on a screwdriver and makes for poor engagement with the ball plunger. Screw the ball plunger in until the threads are flush with the topside. Make sure the ball is clean from debris after screwing it in. Un-screw the ball plunger 1 turn and then apply a small amount of grease to the tip. Inspect the shoulder bolt to make sure it is free of burrs on the inside of the head. A good way to do this is to chuck up on the bolt and use a small file to clean the inside of the head. The kit comes with two different size shim washers to achieve the proper fit. Choose one and slide it on to the shoulder bolt. Next put the shoulder bolt into the peg. Screw the peg to the bracket and tighten it. If the peg is stiff then the smaller shim should be used. It is necessary to seat the ball plunger by extending the peg and retracting in by hand. Unscrew the ball plunger until it is possible to move the peg between positions. Then gradually tighten until the peg seats without excessive endplay. Make sure not to bottom out the ball plunger. This will cause damage to the bracket and peg. After seating the ball plunger, remove the peg and clean the mating surfaces and ball plunger and then re-apply lube to the mating surfaces and ball plunger. Then reassemble the peg and bracket.
4. Set the peg assembly into position on the bottom side of the board and mark the floorboard brackets where material needs to be removed for peg clearance. Using a hand grinder with the flap disc wheel, remove the material from the brackets so that the peg has sufficient clearance when it's retracted. It's better to remove a little extra from the bracket than to risk damaging the surface of the peg. The flap disc wheel leaves a better finish and it also helps to dissipate heat while grinding so you don't discolor chrome. It may also be



necessary to remove any weld spatter or areas where the weld interferes with the bracket. Use a file to scrape areas with weld spatter and a die grinder or Dremel tool for other areas. Now it's time to place the peg assembly into position and mark the mounting holes. Don't get in a hurry while you do this. Make sure the end of the peg fits up against the floorboard bracket when the peg is extended. It might be necessary to remove a small amount of material from the contour of floorboard bracket where the end of the peg seats due to the manufacturing process of the floorboard. You can use a small clamp to hold the assembly in position if you need to. After making sure the pegs rests against the floorboard bracket, retract the peg to make sure it matches up to the outside contour of the floorboard. When you have the assembly positioned so that it's in the proper spot in the retracted and extended position, mark your hole with a scribe or marker.

5. Remove the peg assembly and center punch your holes. **Place a small block of wood under the board so you don't bend or dent the board while center punching the holes.** Next pre-drill the boltholes with the 1/8" drill bit. Set the peg assembly back in place to make sure your holes are in the correct spot. After that you can finish drill the holes with the 17/64" drill bit. Make sure your holes are de-burred after drilling. Set the assembly in place and install the pan head cap screws loosely. Some floorboards may have uneven edges from stamping. If the edges cause interference with the pegs then use your hand grinder to carefully even the edges so the peg doesn't scrape. Make sure the rotation of the grinding wheel is toward the inside of the board. This will prevent damage to the edge of the floorboard.
6. Once the peg assembly fits into place and there are no clearance issues, it's time to disassemble and clean the floorboard and the peg assembly components. Using blue Loctite, bolt the bracket to the floorboard. Install the floorboard insert back on the board using needle nose pliers (figure 14). Lube the ball plunger and apply a small amount of blue Loctite to the threads. Apply a thin film of lube to the bearing surface of the shoulder bolt and to the inside of the head. Use blue Loctite on the threads of the shoulder bolt and fasten the peg to the bracket. Tighten the shoulder bolt and then make sure peg moves properly. Make sure to remove the shoulder bolt and lubricate the moving parts periodically to ensure proper function. If you have any additional questions contact your dealer or Innovative Metal Technologies for technical questions.