

Austin Healey Trunk Lid Gas Spring Kit Installation Instructions for 2 seat (BN6 & BN7), and 4 seat (BN4, BT7, BJ7, and BJ8)

Tools that may be required:

- 9/16", 7/16", 3/8" socket or open end wrench
- Phillips head screwdriver
- Allen wrench
- Small flat blade screwdriver

What the kit includes:

- Packages A, B and C (contain all the brackets and bits needed)
- Flat aluminum leg with one round hole and one slotted hole
- Gas spring

To get started open the trunk (boot) lid and support it with something... a short rod or piece of wood that will keep it stable while it is open and you are working on it. Make sure the trunk lid is secure. I put some rags between the trunk lid and the shroud to protect them.

- 1. Move the prop rod out of the way. You can secure it in its regular rubber resting location.
- 2. On the lower bracket that is attached to the left side of the shroud: Remove the limiting strap (wire) that connects the lower bracket to the upper hinge.
- 3. Remove the nuts on the left hinge; be sure that it is supported while the nuts are off the hinge. Care should be taken when removing the nuts from the hinge. If they have been attached for a long time they may be difficult to remove.
- 4. Open packages A and B. The shouldered nuts in package B will be used to attach the bracket in Package A to the left hinge on your trunk.
- 5. Place the extruded aluminum gas spring mounting bracket over the hinge bolts with the small end of the mounting bracket closest to the edge of the trunk.
- 6. Orient the shouldered nuts so they are centered in the holes on the mounting plate with the split locking washers and, with your fingers, gently screw them onto the hinge bolts. Be very careful not to cross thread them. Then, using a 9/16" open end wrench or socket wrench, gently tighten them until the split washer is flat. Be VERY careful not to over tighten these. You really do not want to strip the bolts or break them... doing so will require you to replace the trunk hinge! On some Healey's these studs in the hinges are replaceable ... but on some they are not. Note: You may want to remove the 10mm ball stud that is attached to the mounting bracket during this process, but please note it's position so that you and replace it in the same direction. (See note regarding the use of the serrated locking washers.)
- 7. Now remove the original bracket that held the old prop rod. If this bracket has been left in place while the car has been painted, this can be challenging to get off. You may want to use an Exacto knife or something similar to cut the paint around the attachment screws. This will help prevent a larger piece of the paint from breaking off.

- 8. Once the original bracket is off and the dimpled holes are cleaned out, using a Phillips head screwdriver and a 7/16" open end wrench you can attach the new aluminum gas spring mounting bracket. The orientation of it should be similar to the original bracket. Again, you may want to remove the 10mm ball stud to make the mounting of the bracket easier, but be sure to note which hole it goes in.
- 9. I have provided an aluminum leg to brace this mounting bracket. The intent of this brace is to prevent placing too much stress on the edge of the Austin Healey aluminum shroud... which could bend and crack the paint or worse crack the aluminum.
- 10. The slotted end of the provided aluminum brace will be attached to the bumper bracket bolt. Using a 9/16" wrench, remove the bumper bolt that is the furthest from to the rear of the car. Depending on what model Healey you have and how the trunk is finished, this may require cutting a slot in the material between the bumper bolt attachment location and the floor of the trunk.
- 11. Reinstall the lower bumper bolt through the slotted hole in the aluminum brace...do not tighten the bumper bolt until the upper end of the leg is attached to the new aluminum bracket.
- 12. The leg should be oriented so there is no pressure on mounting bracket. (That's why it's slotted.) It is to prevent the bracket from deflecting and should not introduce pressure on the bracket. Once the upper and lower attachment points are in place you can tighten up the bolts.
- 13. Now replace the 10mm ball studs and tighten them down.
- 14. Now fit the gas spring. The proper orientation for the gas spring is with the cylinder attached to the mounting bracket on the hinge and the shaft attached to the mounting bracket on the shroud.
- 15. Slip a small screwdriver under the C clip and <u>ease</u> the clip back just a little bit... not too much so the spring clip flies off and you can't find it! This will allow you to easily press the socket over the ball stud. I like to do the bottom one first, but either is fine.
- 16. Then repeat this procedure on the other ball stud.
- 17. Now remove whatever you had supporting the trunk (boot) and carefully/gently close the trunk. I say carefully/gently because sometimes when the gas springs have been sitting or shipped in warm (or cold) climates they can be somewhat locked up. So you may have to break them loose. Once you have determined that the gas spring is free and functioning, cycle (open and close) the trunk 5 to 10 times to ensure the internals are lubricated and functioning properly.

So there you are!!.... no more prop rod swinging around just waiting to scratch up your paint. No more wind catching the trunk and disengaging the prop rod to have the trunk lid hit you in the head. And, you may find as I have, I get into my trunk much more often now that I don't have that pesky prop rod to deal with!

Happy Healeying!

Note: Use of the serrated washers on the shoulder nuts. If you prefer using the serrated washers on the shoulder nuts you will need to remove a small amount of material from the shoulder nuts. The length of the shoulders needs to be matched to the split washers to ensure the nuts will not protrude beyond the aluminum mounting bracket.

<u>Caution</u>: Always wear safety glasses as you should for any automotive project. Do not puncture or heat the gas spring's cylinder as contents are under pressure.