



VTT BMW Wireless Line Lock install guide



Thank you for your purchase of the VTT BMW Wireless Line Lock kit! The first thing to do when you open your box is to make sure all parts are in their respective bags, and nothing has been left out or lost during shipping. Here is a breakdown of what you should have.

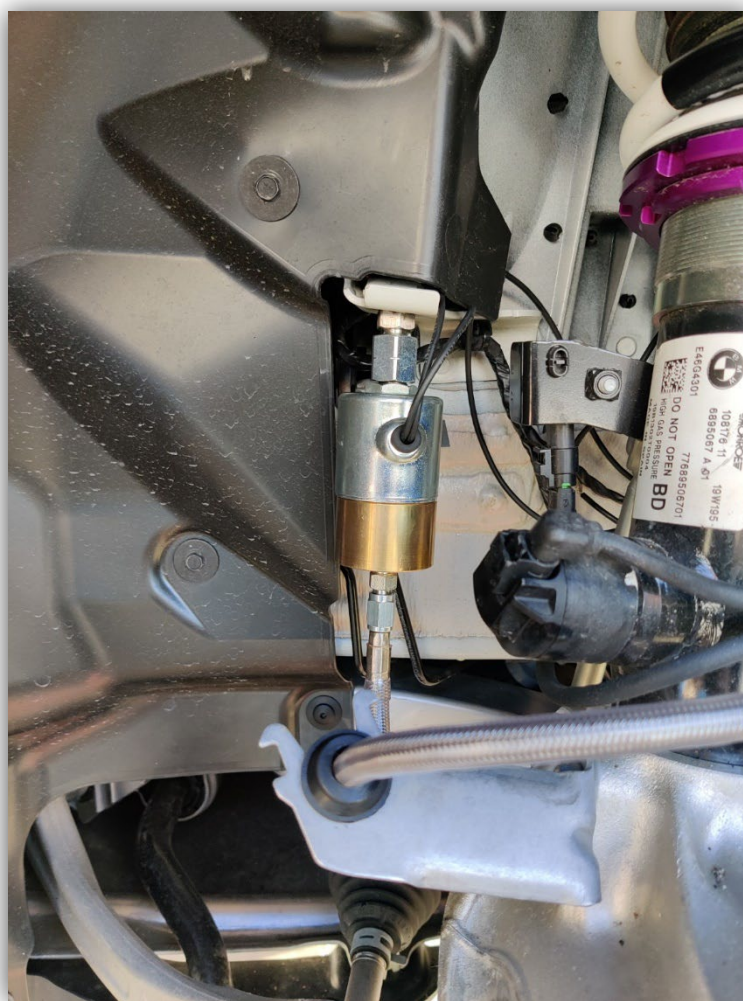
- 2 - Line lock solenoids with 2 pin plugs
- 2 - US-made DOT-approved stainless brake lines
 - 2 - Parker steel fittings
 - 2 - SS Adapter fitting
 - 1- wireless switch
 - 2 - Remotes
- 1 - plug and play wiring harness
 - 1 - power wire



Once all parts are accounted for you can proceed with the Line Installation. We suggest this only be done by a qualified technician. If

**something was missing from your upgrade,
please contact us immediately so we can
remedy this.**

**READ THE ENTIRE GUIDE BEFORE BEGINNING
INSTALLATION!**



**ANY QUESTIONS, OR FITMENT PROBLEMS, PLEASE
EMAIL SALES@VARGASTURBO.COM BEFORE TRYING
TO FORCE OR MODIFY ANYTHING. THIS UPGRADE IS
PLUG AND PLAY IF THESE INSTRUCTIONS ARE
FOLLOWED, ANY ISSUES NEED TO BE ADDRESSED TO
AVOID PROBLEMS**

INSTALL GUIDE

Please note, this guide was done using a A90 Supra/G80 M3 for the photos, but 99% of all BMW installs will be VERY similar.

1. Remove wheels, and tires, we suggest doing ONE SIDE AT A TIME.
2. Starting on the Left side (drivers side US). Remove the plastic inner fender liner using an 8 or 10mm socket. Once this is off you will have access to the factory brake line. (Please be aware we removed the rotor for these photos as it's easier to see. If you wish to do so, it has one locating bolt, and then two bolts for the caliper. DO NOT let the caliper hang if you decide to remove it.
3. To prepare for the installation. Take you solenoid on the bench and using an 11/16 or 17mm wrench hold the solenoid, install in the SS fitting into the silver side of the solenoid. We suggest thread sealant to avoid leaks, we do NOT suggest Teflon tape. (Fig 12)
4. 4. Once that first fitting is installed, CAREFULLY hold the gold portion of the solenoid in a vice or with some pliers to keep it from spinning (If you apply too much force to the solenoid you will crush it, and void the warranty, and install the straight -3 JIC to NPT fitting with more thread sealant
5. Once the solenoid is prepped and the inner fender liner is removed. You can now see the stock line (Figure 1)
6. Focus on the brake line. Using a 7/16 or 11mm wrench carefully loosen the upper hard line, HAVE THE NEW SOLENOID READY AS YOU WANT TO LOSE AS LITTLE FLUID AS POSSIBLE.
7. When the line is loose, pull the stock line down, and immediately put the solenoid into the opening as shown, (Figure 2-3) and thread the hard line into it. Cap the other end so no fluid will escape. Now tighten the hard line down until its snug into the fitting, do not go too tight this is a flare seat, just needs to be snug, not overly tight (if you have a leak at the end, put a little more on it).
8. At this point you can remove the grommet for the factory line (Fig 6), and (Supra take the two 10mm bolts for the bracket that holds the grommet for the line, turn the bracket upside down, and reinstall.) The bracket will bend slightly as you reinstall. This is ok. This moves the grommet down a couple inches to make room for the solenoid, and not pinch the line when turning. (Fig 11) G80, and other BMW there is no need to touch the bracket, the grommet for the new line will push right in.
9. Remove the line from the caliper using the same 11mm wrench. (Figure 7)
10. Now thread the new line into the caliper, this is not a swivel fitting so you will have to rotate the entire line. Once it's snug use a 9/16 or 14mm wrench and tighten this line. (Figure 8)
11. Now remove the cap from the solenoid, and quickly install the JIC end of the hose onto the fitting. Tighten this up with the 11mm, and then install the grommet in place where the factory one was. At this point you can slide the line in or out to make it first best (Figure 9-10)
12. Now that everything is installed on one side, leave the wheel off, and move to the other side (right side Passenger side US).
13. Follow all the same procedures to remove the factory line, and install the solenoid, this one will only be supported by the factory bracket that holds the line. So, you can ignore those previous steps.

14. Follow the rest of the previous procedures to install the line on the caliper, and the solenoid, including flipping the grommet bracket upside down to make room for the line.
15. Once you are done with both sides, you **MUST** bleed the brakes. This is **VERY** important. Improperly bled brakes can lead to accidents, and possibly death.
16. We suggest a pressure bleeder, but using the two-person pump, and hold method then bleeding at the screw will work as well.
17. Once you are getting no air from the bleeders, you are done bleeding.
18. Now comes the wiring. With this kit it's very simple, you have a main harness which has 2 two pin weather pack connectors that attach to the solenoids, a ground wire, a power wire that goes from the battery jump area to the switch, one ground wire, and the switch itself.
19. Plug the harness into the solenoid on the passenger side and run it through the subframe, and route it along the steering rack, secure it with the supplied zip ties, and plug it into the other solenoid, tie the wires securely (Fig 13 and 14)
20. Run your 8mm ground wire to a good ground, and secure, for the G80, and many other BMW's there is a ground junction not far from the solenoid, and the wire is designed to go there (Fig 15) If you do not have that, ANY grounded bolt will work, if you are not sure if it's a good ground use a test light to make sure. The system will not work properly without a good ground.
21. Once the main harness to the solenoids, and the ground is attached, and secured. You can the switch and power portion of the harness up through the wheel well, and into the engine bay. The switch is going to be located in the passenger side cubby, for the Supra, and G80 it's a big empty, for the F8X, F3X etc. there are things in there but still plenty of room for it. (Fig 16)
22. Once you have the harness up there, run the wiring under the rubber molding, and into the cubby, this may require removing some, clips, and bolts depending on application. (Fig 16)
23. Now, the red power wire is going to go to the Battery Jump post, there is an 8mm nut under the cover on the main power wire, you can attach the wire, and put the cover back over it so you cannot see it, run this also into the cubby. This wire is your 12V+ IN to the switch (Fig 17)
24. Now wire up the switch. Main power to the 12V in, The black wire from the main harness to Ground in, and the red wire from the main harness to the 12V+ out. (Fig 18) Ground out is left open as the solenoids have a chassis ground.
25. You can mount the switch in the cubby or tuck it in somewhere do it doesn't bounce around (Fig 19)
26. Once all this is done, and the wiring is attached screws are tight, you can set up your switch according to the instructions that came with it. We 100% SUGGEST using the momentary option, this is the safest option, and will ONLY engage the line lock when you are physically holding the button down.
27. **VERY IMPORTANT, IF YOU ACTIVATE THE LINE LOCK WHILE DRIVING YOU WILL NOT HAVE BRAKES, AS THE FLUID WILL NOT BE ABLE TO BE PUSHED THROUGH THE SOLENOID. NEVER ACTIVATE WHILE MOVING!!**
28. Once you do that, take your remote, and click the on button, you should hear **BOTH** solenoids click, its easiest to go to each side, and hold your hand on each one while clicking the button to ensure both are activating.
29. Once all is wired and has been tested. Reinstall your wheels and tires.
30. This concludes the Install of the VTT Wireless BMW Line Lock Install, go enjoy your vehicle, and do some badass burnouts!

Fig 1

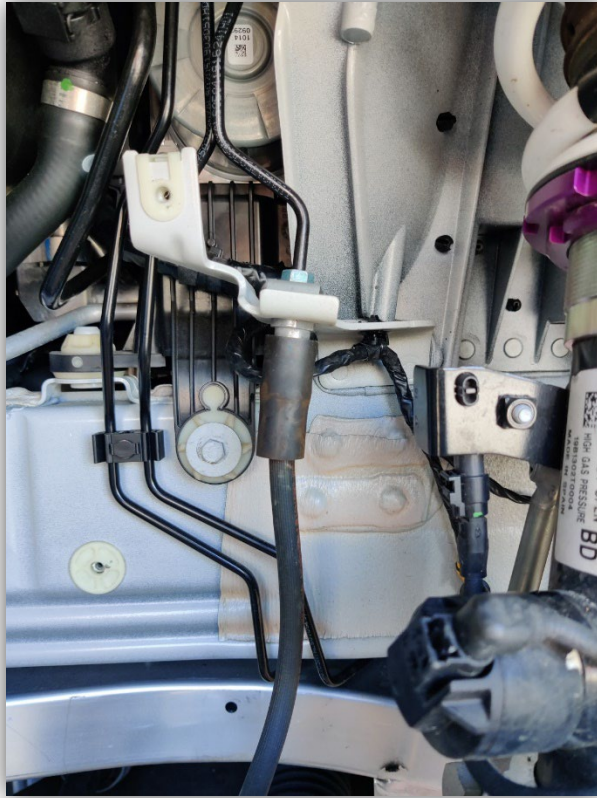


Fig 2



Fig 3



Fig 5

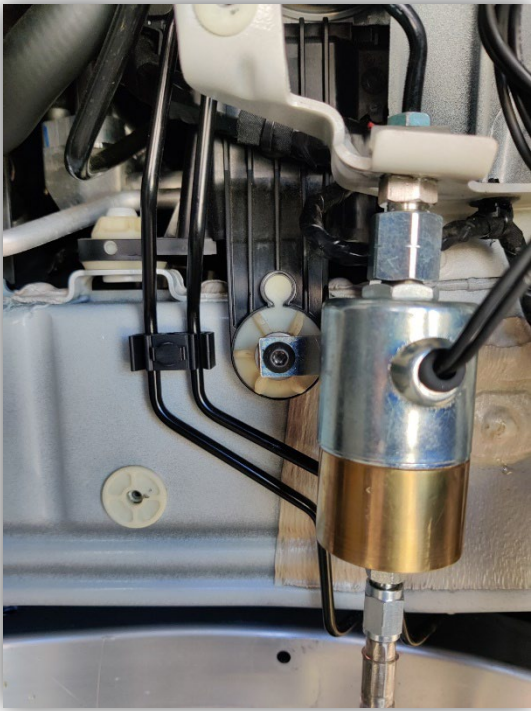


Fig 6



Fig 7



Fig 8



Fig 9

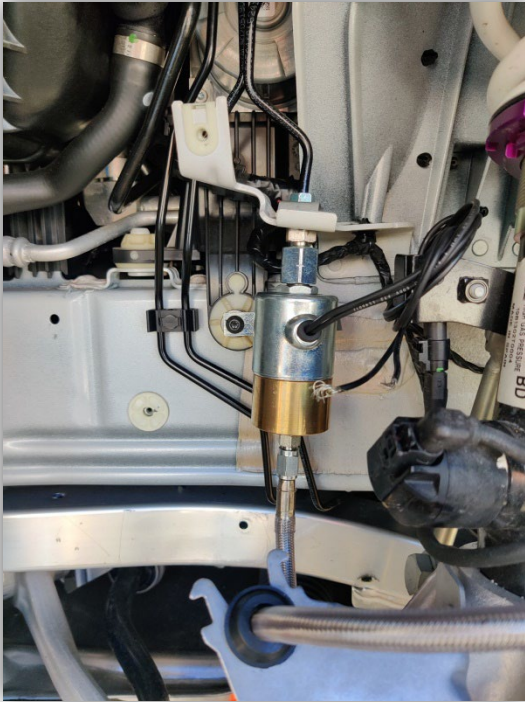


Fig 10



Fig 11

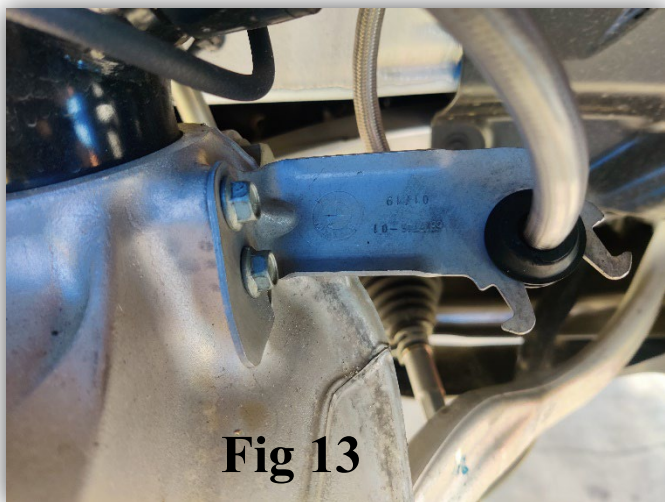
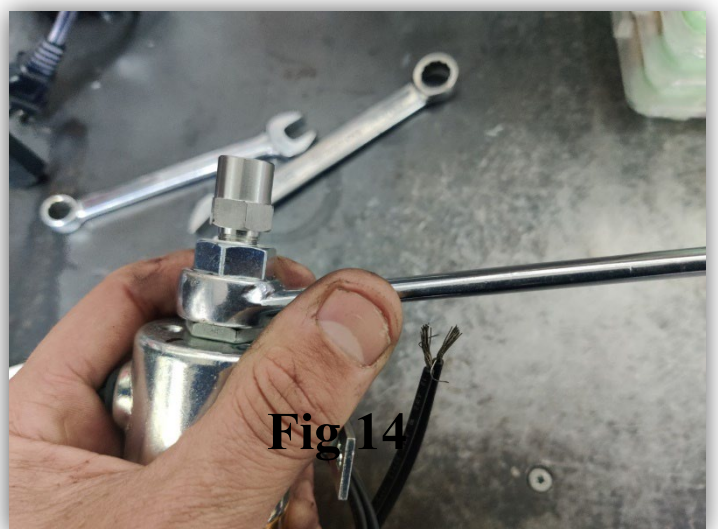


Fig 12



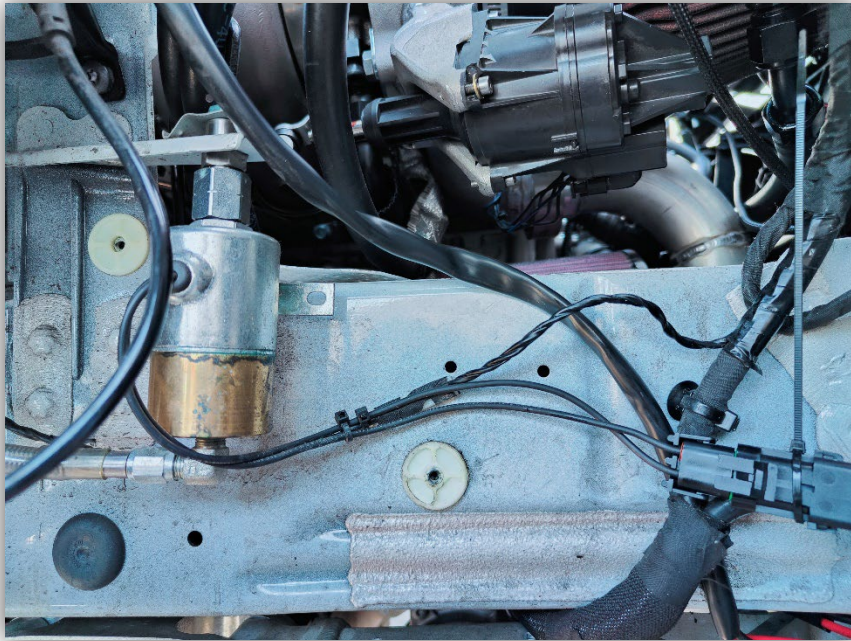


Fig 15

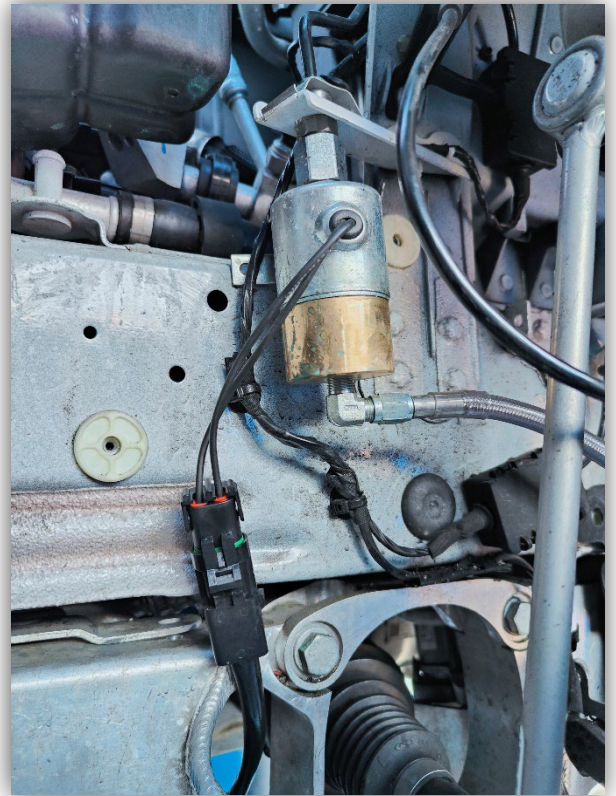


Fig 16

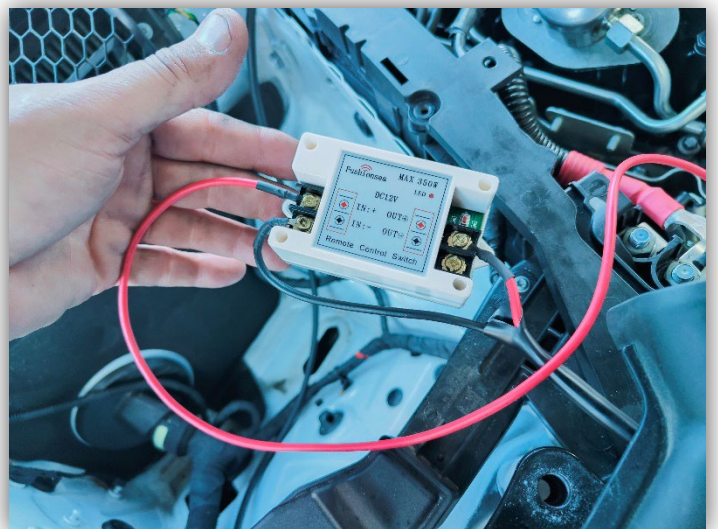


Fig 17

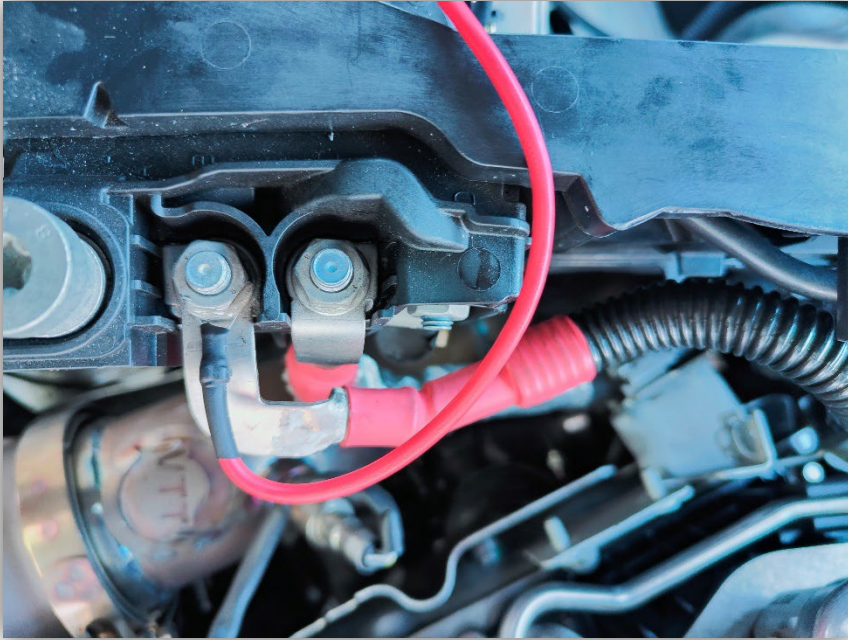


Fig 18

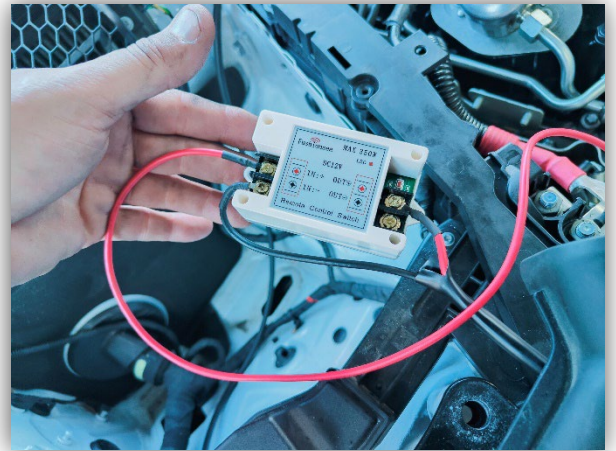


Fig 19

