

PERRIN

Wheel Spacer Installation

2023-04-12

All Wheel Spacers

Thank you for purchasing this PERRIN product for your car! Installation of this product should only be performed by persons experienced with installation of aftermarket performance parts and proper operation of high performance vehicles. If vehicle needs to be raised off the ground for installation, the installer must use proper jacks, jack-stands and/or a professional vehicle hoist for safety of the installer and to protect property. If the vehicle is lifted improperly, serious injury or death may occur! Please read through all instructions before performing any portion of installation. If you have any questions, please contact our tech department prior to starting installation. We can be reached in any of the following methods:

Email Tech@PERRIN.com

Instant Chat off the main page of www.PERRIN.com

Or simply call our tech team at 503-693-1702



WARNING: This product can expose you to chemicals including Lead which is known to the State of California to cause cancer birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

WHEEL SPACER INSTALLATION WARNING:

Improper installation, using broken or damaged lug bolts / studs / nuts or failing to follow instructions below, can cause your wheels to become loose or simply fall off, which can result in injury or death. PERRIN Performance and ASMC, LTD., are NOT responsible for damage or injury as a result of installing wheel spacers! Installer and vehicle owner/ operator assume all risks associated with this installation! Contact: Tech@PERRIN.com with any questions prior to or during installation!

Installation of this product is a modification to the drivetrain. As a result, the vehicle may handle differently than that of factory-equipped vehicles. As with any vehicle extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive this vehicle safely may result in serious injury or death. Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state or country. Consult your owner's manual, service manual, instructions accompanying this product, and local laws before undertaking these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

Pre-Installation Notes

Corrosion and Defects:

- Check OEM wheel studs and nuts for defects such as heavy corrosion, stripped or galled threads. Follow the factory service manual to replace any found to be damaged or defective.
- If heavy corrosion is found on studs and or nuts, apply a penetrating oil and use a wire brush to remove as much as possible. After corrosion has been removed, we highly recommend applying a lightweight oil to the thread to help protect the studs and nuts. If there is any question about their integrity of either the studs or nuts, replace them!
- If heavy corrosion is found on the hub (surface that wheel and spacer touches), clean off with penetrating oil and/or use a light abrasive. A "Scotch-Brite" pad is an excellent choice to remove corrosion without damaging the surface.
- If you live in a highly corrosive environment (salted roads in winter, coastal zones, etc.) lubricating hardware with a lightweight oil is a recommended. This helps prevent corrosion and makes for easy removal in the future. It is ok to apply this to the threads as well as the tapered portion of the nuts/bolts. **NEVER use grease or anti-seize in place of oil!**

Tightening All Nuts/Bolts:

- Always work in a crisscross pattern to tighten all nuts. Torque specs are printed on the face of your PERRIN Wheel Spacer.
- If at any time during installation you are not able to fully tighten nuts/bolts to their specified torque, stop and replace stud/bolt/nut immediately. Failure to replace broken lug bolts, studs or nuts can cause injury or death!
- When oil is applied to any of the threads (as recommended for highly corrosive environments), it is critical to follow the torque specs when tightening and if anything undershoot by 5ft-lbs. **NEVER** use an impact gun or torque stick to tighten nuts as they will become over torqued and will cause premature failure of hardware.
- After installation, test drive car for no more than 10 miles. Re-torque all nuts/bolts (which may mean removing the wheels to tighten adapters). It is not uncommon to find a few that have loosened up. Continue with driving another 10 miles and re-torque all nuts/bolts one last time. If any have loosened during the second 10 mile test drive, proceed with another 10 mile test drive and re-torque one more time. If any nuts/bolts are still loose, stop and replace loose studs immediately.

Wheel Clearance at Hub:

- 20mm and thinner spacers require wheels that have recessed pockets between each of the lug nut holes on the wheel mounting face. If your wheels do not have any pockets between the lug nut holes, do NOT try to install spacers as significant damage to the wheel and spacer will occur. **This can also risk failure to both and can cause injury or death.**
- After just the spacers are bolted on; measure how far the studs and nuts stick out past the face of the spacer. Using that measurement, verify that your wheel has the proper clearance in the pockets between the lug nut holes.

Bolt-On Type Spacer Installation:

1. Raise vehicle onto jack stands or hoist.
2. Remove wheels.
3. Inspect for and correct any corrosion and defects as described above.

4. Install PERRIN spacer onto hub using supplied low-profile nuts.
5. In a crisscross pattern, tighten nuts to the torque rating printed on the face of the spacer.
6. After installation, test drive car for around 10 miles then re-torque all wheel nuts, including removing the wheels to check the nuts securing the adapter to the hub. It is not uncommon to find a few that have loosened up.
7. Continue with driving another 10 miles and then re-torque all nuts one last time. As noted above, in some cases a third drive may be necessary. If any studs / nuts are loose, do not maintain torque or any vibrations are felt in the vehicle, remove the wheels and spacers then inspect for any damage. Contact Tech@PERRIN.com with any questions or concerns.

Slip-On Type Spacer w/Studs Installation:

1. Raise vehicle onto jack stands or hoist.
2. Remove wheels.
3. Inspect for and correct any corrosion and defects as described above.
4. Follow factory service manual to replace OEM studs with supplied studs.
5. Install PERRIN spacer over new studs.
6. Install wheel with nuts removed in previous step. **NOTE: During this step it is important to make sure that the nuts thread on a safe amount. Follow chart below based on the thread pitch of your studs.**
 - a. Thread M12x1.25 = at least 8.0 rotations = approx. 10 mm of load-bearing thread
 - b. Thread M12x1.5 = at least 6.5 rotations = approx. 10 mm of load-bearing thread
 - c. Thread M12x1.75 = at least 6.5 rotations = approx. 12 mm of load-bearing thread
 - d. Thread M14x1.25 = at least 9 rotations = approx. 12 mm of load-bearing thread
 - e. Thread M14x1.5 = at least 7.5 rotations = approx. 11 mm of load-bearing thread
 - f. Thread 1/2" UNF = at least 8.0 rotations = approx. 11 mm of load-bearing thread
7. In a crisscross pattern, tighten nuts to the torque rating specified on the spacer.
8. After installation, test drive car for around 10 miles then re-torque all nuts. It is not uncommon to find a few that have loosened up. Continue with driving another 10 miles and then re-torque all nuts one last time. If any have loosened during the second 10 mile test drive, proceed with another 10 mile test drive and re-torque one more time. If any studs / nuts are loose, do not maintain torque or any vibrations are felt in the vehicle, remove the wheels and spacers then inspect for any damage. Contact Tech@PERRIN.com with any questions or concerns.

Slip-On Type Spacer w/Lug Bolts Installation:

1. Raise vehicle onto jack stands or hoist.
2. Remove wheels.
3. Inspect for and correct any corrosion and defects as described above.
4. Install PERRIN spacer over hub. **NOTE: Try to line up holes in spacer with holes in hub as this will make installation of wheel easier.**
5. Install wheel to hub and secure with supplied bolts. **NOTE#1: If your kit contains thicker and thinner spacers, take note of longer and shorter bolts that coincide with each spacer. NOTE#2: During this step it is important to make sure that the bolts thread on a safe amount. Follow chart below based on the thread pitch of your bolts.**
 - a. Thread M12x1.25 = at least 8.0 rotations = approx. 10 mm of load-bearing thread
 - b. Thread M12x1.5 = at least 6.5 rotations = approx. 10 mm of load-bearing thread
 - c. Thread M12x1.75 = at least 6.5 rotations = approx. 12 mm of load-bearing thread
 - d. Thread M14x1.25 = at least 9 rotations = approx. 12 mm of load-bearing thread
 - e. Thread M14x1.5 = at least 7.5 rotations = approx. 11 mm of load-bearing thread
 - f. Thread 1/2" UNF = at least 8.0 rotations = approx. 11 mm of load-bearing thread
6. In a crisscross pattern, tighten bolts to the torque rating specified on the spacer.
7. After installation, test drive car for around 10 miles then re-torque all bolts. It is not uncommon to find a few that have loosened up. Continue with driving another 10 miles and then re-torque all bolts one last time. If any have loosened during the second 10 mile test drive, proceed with another 10 mile test drive and re-torque one more time. If any Lug Bolts are loose, do not maintain torque or any vibrations are felt in the vehicle, remove the wheels and spacers then inspect for any damage. Contact Tech@PERRIN.com with any questions or concerns.

Questions, Comments and Suggestions Contact: Tech@PERRIN.com
Visit Our Website for Instant Chat Options at www.PERRIN.com
Call Our Tech Team at 503-693-1702