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Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per ECO 18-058	7/9/18	A.S.
B	Revision Per ECO 19-023	2/19/19	A.S.
C	Revised Per ECO 19-050	4/5/19	A.S.



5 AND 6 LUG WHEEL SPACERS

Installation Instructions

Applications:
Various



TITLE:

**5 AND 6 LUG WHEEL SPACER
INSTALLATION INSTRUCTIONS**

SIZE A	DWG NO: 5-6-LUG-INST	REV C
	SCALE: N/A	PAGE 1 OF 5



5 AND 6 LUG WHEEL SPACER INSTALLATION INSTRUCTIONS

Thank you for purchasing the best aftermarket products available for your vehicle. We strongly feel that the parts you are about to install should meet or exceed your expectations for performance. Proper assembly is critical to the performance of these components and the vehicle as a whole. Please take the time to carefully read these instructions and familiarize yourself with the installation procedure before working on your vehicle. If you have any questions PLEASE contact Synergy Manufacturing BEFORE beginning installation. Thanks again for supporting Synergy – enjoy the performance benefits of the best aftermarket products available for your vehicle!

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Modifying or otherwise altering vehicle components may cause the vehicle to handle differently than originally designed. It is the driver's responsibility to familiarize themselves with the performance and handling characteristics of the modified vehicle. Vehicles with larger diameter than stock tires must be driven carefully and cannot be expected to perform as stock or meet OEM performance with regard to handling, braking or crash performance. Ensure all replacement components are compatible with vehicle capacities so as not to overload components, especially tires. It is up to the individual to ensure that the vehicle and all components are compatible with the intended vehicle use, including load ratings, road conditions, and driver abilities. Thorough and frequent vehicle inspections are recommended to ensure a safe and reliable state of readiness, especially after off-highway use.

GENERAL NOTES

- These instructions are also available on our website; www.synergymfg.com. Check the website before you begin for any updated instructions and additional photos for your reference.
- Some Toyota models will require extended thread lug nuts which are not included in this kit.

TOOLS REQUIRED

- Jack and Jackstands
- Basic hand tools (sockets and wrench)
- Angle grinder, sander and paint (if factory studs are longer than spacers)
- Torque wrench

ESTIMATED INSTALLATION TIME

1 Hour

INSTALLATION

1. Jack the vehicle up and support it securely using jackstands.
2. Remove the wheel from the vehicle and remove drum / rotor retainer clips if present.
3. Make sure the studs are clean and free of debris. Use a wire brush to clean the threads if necessary.
4. Install wheel spacer / adapter to drum / rotor using the lug nuts provided with the kit. **Be sure the spacers clear the OEM wheel studs and are sitting flat against the face of the rotor / drum. Be sure the factory wheel studs are not extending beyond the face of the wheel spacer. See Figure 1.** If the studs do not extend beyond the face of the wheel spacer, proceed to step 10.

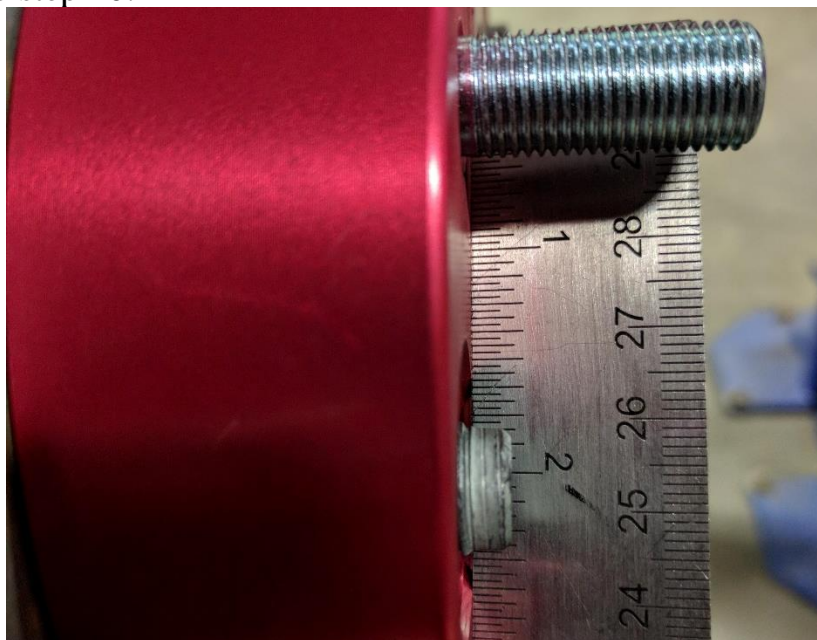


Figure 1. OEM Wheel Studs Extending Beyond Face of Wheel Spacer

5. If the factory studs extend beyond the face of the wheel spacer as shown in **Figure 1**, then they must be trimmed. Measure how far the studs extend beyond the spacer as shown in **Figure 2**.

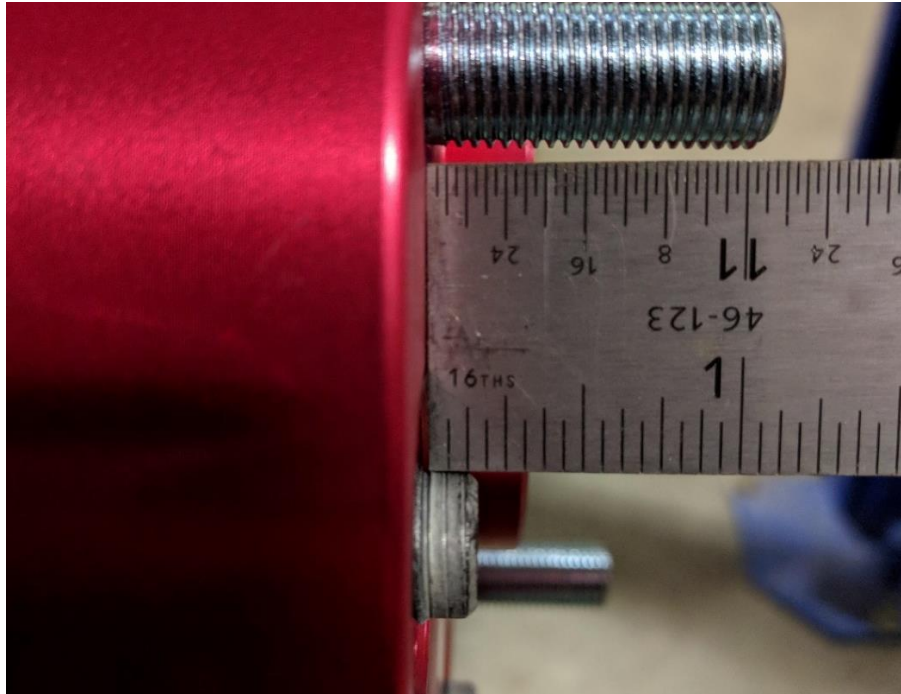


Figure 2. Measuring Stud Extension

6. After measuring stud extension, remove wheel spacers. Fully thread the included wheel spacer lug nuts on to the lugs. Installing the nuts before cutting the studs will allow the nuts to clean up the ends of the cut threads upon removal. Add at least 1/8" to the measurement from step 5 and mark all the lug studs as shown in **Figure 3**.

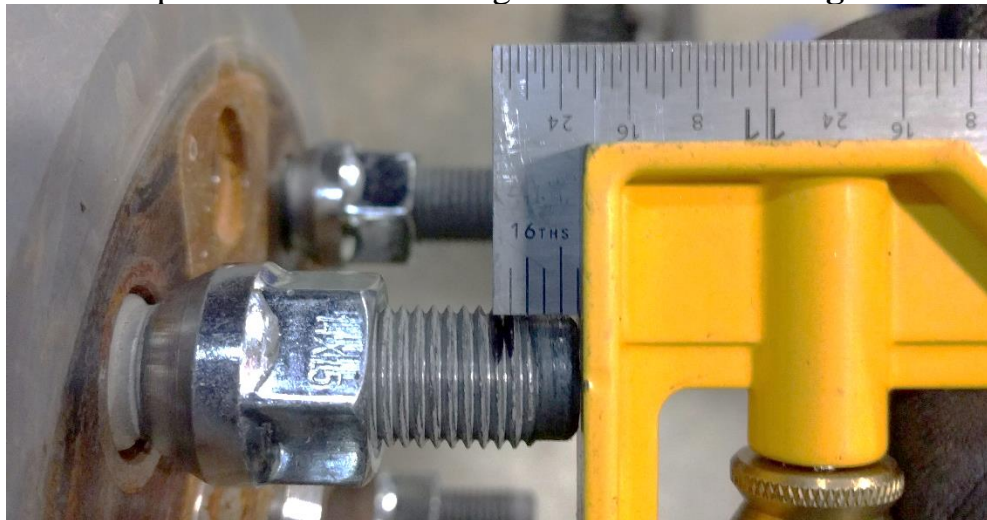


Figure 3. Marking Studs 1/8" Below Spacer Face

7. Cut studs with an angle grinder and clean up as needed. See **Figures 4 and 5**.



Figures 4 and 5. Cutting and Cleaning the Studs

8. Remove lug nuts from the studs. Paint the cut ends of the studs to prevent corrosion.
9. Install wheel spacers and check stud clearance to verify studs were cut short enough. Re-trim studs if necessary.
10. Check to make sure that there are at least 7 turns of thread engagement between the lug studs and nuts. If there is not enough thread engagement, it will be necessary to purchase extended thread lug nuts. This is most common on the front of some Toyota models. If there is adequate thread engagement and the studs do not extend beyond the face of the spacer, remove the lug nuts, apply the thread lock provided in the kit to the lug nuts and reinstall the lug nuts.
11. Tighten lug nuts holding the spacer to the wheel hub in a star pattern to the torque shown in Table 1. Have another person apply the brakes to achieve this torque spec.
12. Reinstall wheel to vehicle using the original lug nuts. Tighten lug nuts in a star pattern to the torque shown in Table 1. ****Do not use more than one wheel spacer per wheel.****
13. After driving the vehicle approximately 50 miles repeat steps 1 and 2 and re-check the torque of the lug nuts holding the wheel spacer to the hub. If the torque is insufficient and the nuts move, remove any nuts that moved and re-apply thread locker.
14. After driving the vehicle an additional 50 miles, check the torque of all lug nuts holding the wheels to the wheel spacers.

Table 1. Lug Nut Tightening Torques

Lug Stud Thread	Tightening Torque
1/2-20	85-95 lb-ft
M12-1.5	80-90 lb-ft
M14-1.5	120-130 lb-ft