TOYOTA **Tech Tip T-TT-0424-16** October 25, 2016

Subject
# Brake Vibration - Importance of Lug Nut Torque

Market
USA

Service Category
Brake

Section
Brake (front)

Applicability
All vehicles

## APPLICABLE VEHICLES

| | | | |
|---|---|---|---|
| 2013-2016 | Highlander | 2013-2016 | Prius |
| 2013-2016 | Sienna | 2013-2016 | Tundra |
| 2016-2017 | Mirai | 2013-2016 | Land Cruiser |
| 2012-2016 | 4Runner | 2013-2016 | Sequoia |
| 2013-2016 | Avalon | 2016-2017 | RAV4 HV |
| 2013-2016 | Venza | 2017 | Prius Prime |
| 2013-2016 | Tacoma | 2013-2016 | Yaris |
| 2017 | 86 | 2013-2016 | Corolla |
| 2013-2016 | Camry | 2013-2016 | Avalon HV |
| 2013-2017 | Prius V | 2013-2016 | RAV4 |
| 2016-2017 | Yaris R | 2017 | iM |
| 2013-2017 | Prius C | 2013-2016 | Highlander HV |
| 2013-2016 | Camry HV | | |

## CONDITION

**Front Brake Vibration Key Points:**

- Issue can occur at any time if improper torque is applied on lug nuts
- Over time, even one lug nut over or under torqued, can cause a vibration issue
- When lug nuts are over torqued, this causes the rotor to have a runout out condition which can lead to brake vibration concerns
- Brake vibration issues can occur at parking lot to highway speeds
- Brake vibration issues can occur at light to moderate braking
- Tightening lug nuts in a star pattern method during the torqueing process will assure that even/equal pressure is applied across the rotor hub surface
- Torque sticks/wrenches should be used to apply accurate torque values when tightening
- **Do Not** use impact guns/ratchets to completely run lug nuts up to the wheel surface

## RECOMMENDATIONS

When performing service on a vehicle that requires the installation of wheel lug nuts, it is critical that the technician ensures that lug nut torque matches the repair manual specification for that particular vehicle and a star pattern method is performed during the lug torque procedure.

## LINK REFERENCES

This Tech Tip does not contain any link references





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