

Subject Best Practice for Tire Rotation / Nitrogen Filling		Market USA
Service Category Suspension	Section Tire/Wheel	
Applicability All Models		

APPLICABLE VEHICLES

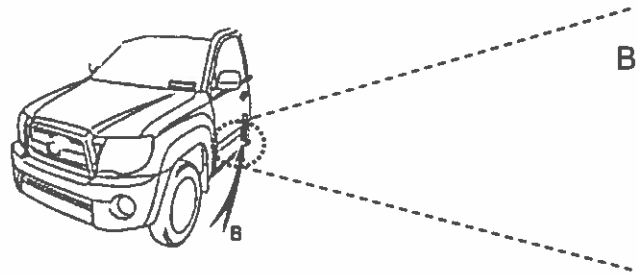
2008-2014	xD	2013	iQ EV
2013, 2013-2014	FR-S	2004-2006, 2008-2014	xB
2005-2014	tC	2004-2006	xA
2012-2014	iQ		

RECOMMENDATIONS

Tire Rotation Best Practices

Please refer to the following recommendations for the best practices for vehicle tire rotations.

- Prior to tire rotation use the quick reference chart below to verify the size of the lug nut and the lug nut torque specifications. The quick reference chart is applicable to current generation vehicles only (Table 1).
- It is recommended to rotate tires as specified in the vehicle repair or owner's manual.
- For proper tire inflation, please refer to the corresponding "Tire Inflation Pressure Compensation and Adjustment" bulletin, for the listed Toyota Models.
- Reference the Tire Pressure label on the vehicle for the proper tire inflation pressure.



<p>SCION OPTIMA TOTAL 7 FRONT 2-REAR 5 The combined weight of occupants and cargo should never exceed 500 kg or 1100 lb.</p>			<p>SCION OPTIMA TOTAL 7 AVANT 2-ARRIÈRE 5 Le poids total des occupants et de chargement ne doit jamais dépasser 500 kg ou 1100 lb.</p>		
TIRE	SIZE	COLD TIRE PRESSURE	PNEU	DIMENSIONS	PRESSION DES PNEUS À FROID
FRONT	P285/60R18	220kPa, 32PSI	AVANT	P285/60R18	220kPa, 32PSI
REAR	P285/60R18	220kPa, 32PSI	ARRIÈRE	P285/60R18	220kPa, 32PSI
SPARE	P285/60R18	220kPa, 32PSI	DE SECOURS	P285/60R18	220kPa, 32PSI

- After completing a tire rotation, always initialize the tire pressure warning system. Refer to the specific vehicle repair manual for the appropriate procedure.
- It is recommended that the wheel lug nuts be re-installed by hand starting.
- Tightening of lug nuts should be performed using a "star" pattern.
- Final tightening of lug nuts should be performed with a manual torque wrench or torque stick.

Note 1: The vehicle's spare tire may be included in the rotation only if it is a matching full size spare

Note 2: Failure to comply with proper lug nut torque procedures may contribute to complaints regarding steering vibration or difficulty in removing lug nuts.

Note 3: Please ensure that the final lug nut torque be reached with torque wrench and not with impact tool.

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Tire Rotation Quick Reference Chart					
Model	Model Years	Special	Lug Nut Size (mm)	Lug Nut Torque (ft.*lb.)	Lug Nut Torque (N*m)
iQ	2012-2013		21	123	103
iQ EV	2013		21	76	103
tC	2005-2013		21	76	103
xA	2004-2006		21	76	103
xB	2004-2006		21	76	103
xB	2008-2013		21	76	103
xD	2008-2013		21	76	103
FRS	2013-2013		21	89	120

Table 1.

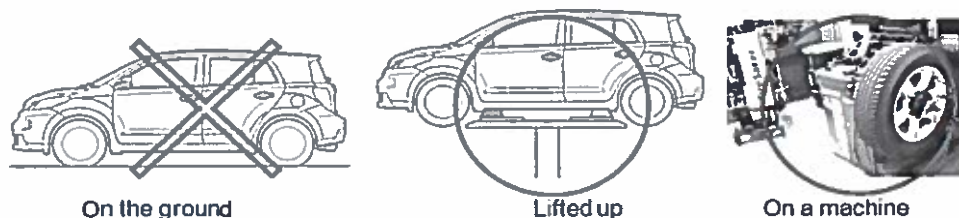
Nitrogen Filling Procedures

Some customers may complain about vehicle vibration due to incorrect tire balance following a nitrogen refill. It has been found that nitrogen replacement may cause tire out of balance conditions if the tire is deflated and refilled with weight on the tire. When the original air in a tire is evacuated during the replacement procedure, the internal pressure against the tire carcass is reduced. If the vehicle is *on the ground* during this procedure, the low tire inflation pressures may cause the tire sidewall to compress.



When performing nitrogen replacement procedure with the tire/wheel on the vehicle, ensure the vehicle is lifted on a rack or jack stands. This prevents the weight of the vehicle from compressing the tire sidewall when tire pressure is reduced.

Alternatively, the nitrogen replacement procedure may also be performed with the wheel/tire removed from the vehicle and suspended off the ground: for example, on a wheel/tire balancer machine.


LINK REFERENCES

This Tech Tip does not contain any link references