



Subject

**Best Practice for Tire Rotation / Nitrogen Filling**

Market

USA

Applicability

All Models

**RECOMMENDATIONS**

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	76	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	2013-2014		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.

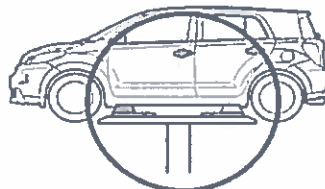


When performing nitrogen replacement procedure with the tire/wheel on the vehicle, ensure the vehicle is lifted on a rack or jack stands. This prevents the weight of the vehicle from compressing the tire sidewall when tire pressure is reduced.

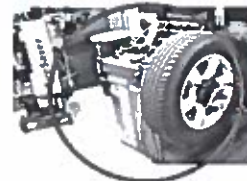
Alternatively, the nitrogen replacement procedure may also be performed with the wheel/tire removed from the vehicle and suspended off the ground: for example, on a wheel/tire balancer machine.



On the ground



Lifted up



On a machine

**LINK REFERENCES**

This Tech Tip does not contain any link references