

Subject

# Front/Rear Wheel Offsets and Width

Market

USA

Service Category

Suspension

Section

Tire/Wheel

Applicability

Models with different F/R offsets/width

## APPLICABLE VEHICLES

All models equipped with front and rear wheels of different wheel offsets

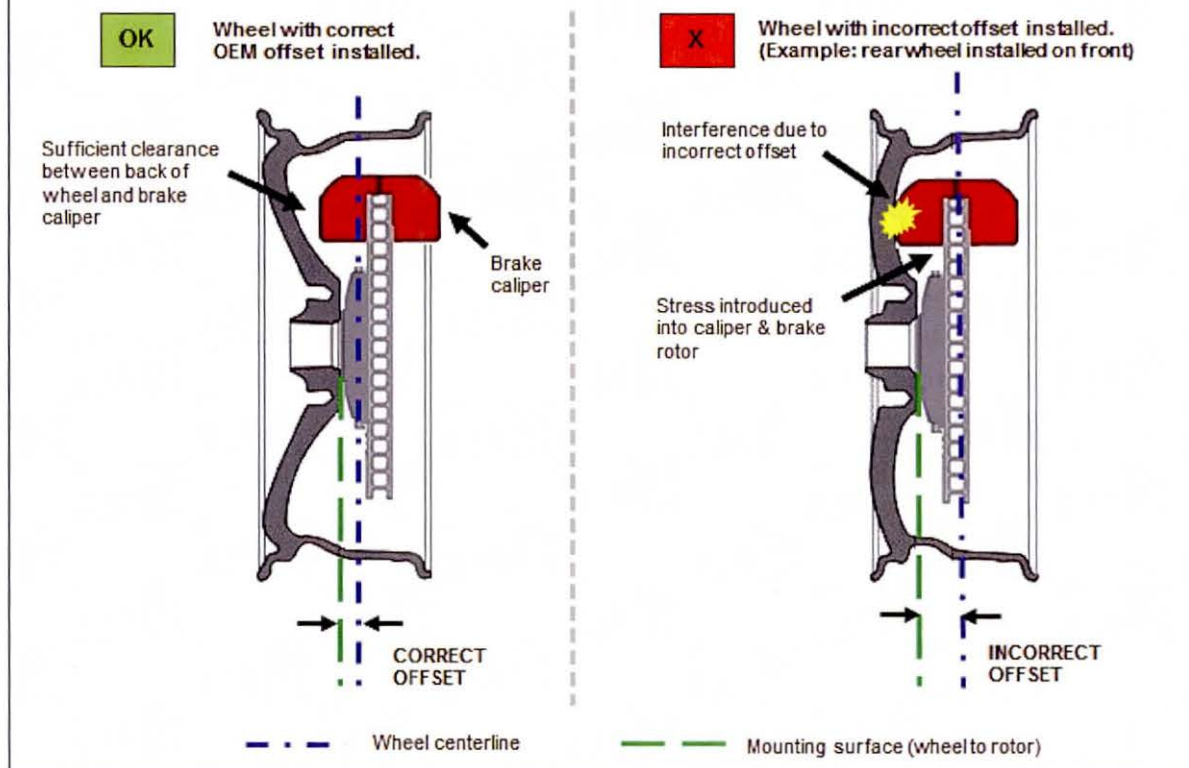
2015	RC F	2015	RC350
2006-2015	IS250	2013-2015	GS350
2006-2015	IS350	2010-2015	IS250C
2010-2015	IS350C	2008-2014	IS F

## CONDITION

Some models are equipped with front and rear wheels of different offsets or width. Wheel offset, defined as the distance between the wheel's centerline and the wheel-to-rotor mounting surface, affects the clearance between the back of the wheel and surrounding brake components (Figure 1).

Installation of a wheel with an offset or width different than the correct specification, such as installing the rear wheel on the front, can cause damage to brake components due to interference between the wheel and adjacent parts. The wheel could contact the brake caliper thereby introducing stress into the caliper, brake rotor, and potentially other components. In some cases, this stress could contribute to cracking or separation of the brake rotor.

Figure 1. Effect of wheel offset on clearance between wheel and adjacent brake components.



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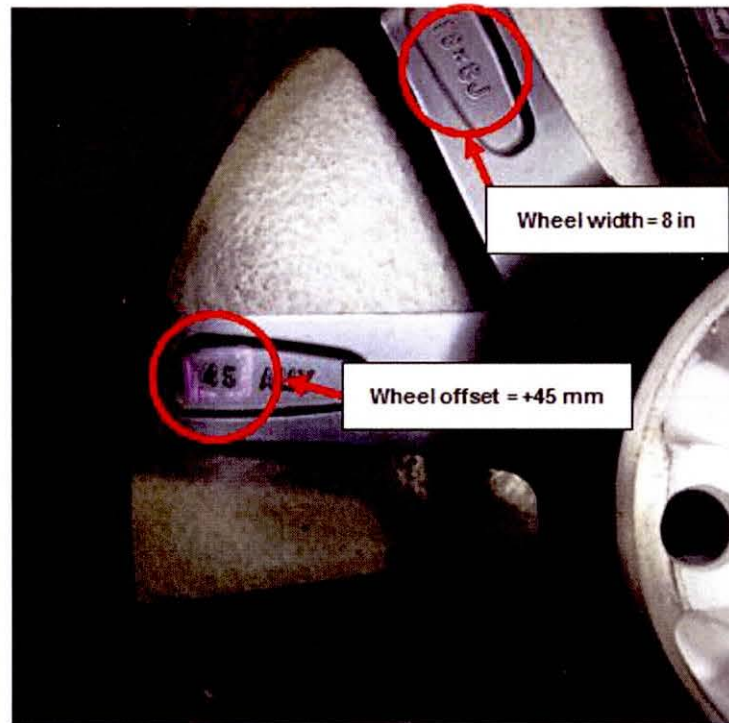
USA

## Models with different F/R offsets/width

Note that wheels of different offsets or width can appear virtually identical even when compared side by side and therefore the wheels can be inadvertently swapped. Offset and width can be identified by inspecting the back of the wheel (Figure 2).

Wheel offset information is also available on TIS in the Suspension (Tire/Wheel) section in New Car Features. Tire size information is located on the vehicle's tire placard.

Figure 2. Wheel offset and width located on back of wheel



### RECOMMENDATIONS

Ensure front and rear wheels are installed at the proper location on the vehicle.

### LINK REFERENCES

This Tech Tip does not contain any link references



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