



Wheel Speed Sensors and Contaminants

Brand	BXT/TITAN-XF	Product	Wheel Hub Assembly	Date	June 2020
Part Number(s)	ALL				

Some applications feature a knuckle mounted wheel speed sensor where the sensor end is exposed and extended to face the hub assembly's integrated magnetic encoder ring. This allows the sensor end to capture a signal for the correct operation of the ABS system.

When installing a new hub assembly on vehicles with this type of configuration, it is important to inspect for and remove all debris, rust, dirt and grease (collectively contaminants) from all mating surfaces and the sensor end.

Failure to do so may allow contaminants to become loose and become attracted to the magnetic encoder ring and or sensor end. Additionally, contaminants may prevent the hub assembly from becoming properly seated, enlarging the "air gap" between the magnetic encoder ring and the sensor. In both cases, this may lead to the incorrect function of the ABS system and possible damage to the sensor and or hub assembly.

Solution:

During installation:

1. Inspect knuckle bore and face for abnormal wear and remove all contaminants.
2. Inspect axle splines for abnormal wear and remove all contaminants.
3. Inspect brake dust shield and remove all contaminants.
4. Inspect sensor end and remove all contaminants.

By following this procedure, correct operation of the ABS system is ensured, and premature failure of the hub assembly is prevented.

