POSSIBLE WHEEL BEARING DEGRADATION
BRAKE KITS AND SENSORS

www.ntn-snr.com

GENERAL RECOMMENDATIONS

- Use original quality parts
- Work all doors and elements, for parts to fall
- Use original quality parts, assembly tools, for parts to fall
- In case of abnormal noise or force of any kind during installation, bearing must be replaced
- Use suitable tooling and apply assembly force at the correct position on the part being installed
- Be sure to check the condition of the mating surfaces of the hub or stub axle and of the bearing (no cracks, wear or deep scratches)
- Do not lower the vehicle to the ground with the bearing loose (loose stub axle or driveshaft loosened or removed)
- Do not hit the driveshaft nut or speculum with the vehicle on the ground

- To ensure correct operation of the magnetic encoder, do not mark the magnetic surface of the bearing and do not bring it near a magnetic source (speaker or shielded) do not remove the ABS plastic cover till ready for installation
- Handle the products carefully
- Apply the tightening torque specified by the vehicle manufacturer. Refer to our TechScal® app

FLANGE INDENTATIONS OR FRAC TURES

CAUSES
- Lack of lubrication or inappropriate● CAUSES
- Incorrect installation● CAUSES
- Water Ingress:
- Transmission of installation force via the● CAUSES
- Dropping the bearing on a hard floor● CAUSES
- Transmission of installation force via the● CAUSES

EFFECTS
- Reproduction of indentations on the● EFFECTS
- Scratches, “croquet ball” appearance● EFFECTS
- Circular deterioration of balls with discharge● EFFECTS
- Damage to balls that come in contact with● EFFECTS
- Evidence of grease leaking from the bearing seals● EFFECTS
- Water ingress in the bearing● EFFECTS
- Extremely high bearing temperature, causing grease to deteriorate● EFFECTS

RECOMMENDATIONS
- Reproduction of indentations on the● RECOMMENDATIONS
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WATER ENGRESS DUE TO A SEALING FAILURE

CAUSES
- Water ingress:
- Transmission of installation force via the● CAUSES
- Dropping the bearing on a hard floor● CAUSES
- Transmission of installation force via the● CAUSES

EFFECTS
- Reproduction of indentations on the● EFFECTS
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GREASE LEAKS

CAUSES
- Grease high temperature, causing grease to deteriorate● CAUSES
- Grease high temperature, causing grease to deteriorate● CAUSES

EFFECTS
- Water ingress in the bearing● EFFECTS
- Water ingress in the bearing● EFFECTS

RECOMMENDATIONS
- Water ingress in the bearing● RECOMMENDATIONS
- Water ingress in the bearing● RECOMMENDATIONS

VIBRATIONS

CAUSES
- Vibration:
- Transmission of installation force via the● CAUSES
- Dropping the bearing on a hard floor● CAUSES
- Transmission of installation force via the● CAUSES

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- Reproduction of indentations on the● EFFECTS
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ABS MALFUNCTIONS

CAUSES
- ABS malfunction:
- Evidence of grease leaking from the bearing seals● CAUSES
- Water ingress in the bearing● CAUSES
- Extremely high bearing temperature, causing grease to deteriorate● CAUSES

EFFECTS
- ABS® indicator on the instrument panel lights up or remains lit● EFFECTS
- Encoder damage● EFFECTS
- Connector problem● EFFECTS
- Sensor error● EFFECTS

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FLANGE INDENTATIONS OR FRAC TURES

CAUSES
- Lack of lubrication or inappropriate● CAUSES
- Incorrect installation● CAUSES
- Fatigue

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SEIZING / OVERHEATING / LUBRICATION FAILURES

CAUSES
- Lack of lubrication or inappropriate● CAUSES
- Incorrect installation● CAUSES
- Fatigue

EFFECTS
- Reproduction of indentations on the● EFFECTS
- Scratches, “croquet ball” appearance● EFFECTS
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FATIGUE SPALLING

CAUSES
- Fatigue

EFFECTS
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- Scratches, “croquet ball” appearance● EFFECTS
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SCRATCHES ON THE BALLS

CAUSES
- Lack of lubrication or inappropriate● CAUSES
- Incorrect installation● CAUSES
- Fatigue

EFFECTS
- Reproduction of indentations on the● EFFECTS
- Scratches, “croquet ball” appearance● EFFECTS
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LOSS OF STEERING PRECISION

CAUSES
- Loss of precision:
- Evidence of grease leaking from the bearing seals● CAUSES
- Water ingress in the bearing● CAUSES
- Extremely high bearing temperature, causing grease to deteriorate● CAUSES

EFFECTS
- In this case, the vehicle tend to go to the right or to the left● EFFECTS
- Risk of bearing damage (spalling, scratches on the surface of the surface of the balls)

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CLACK NOISE

CAUSES
- Lack of lubrication or inappropriate● CAUSES
- Incorrect installation● CAUSES
- Fatigue

EFFECTS
- Risk of bearing damage (spalling, scratches on the balls)

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- Scratches, “croquet ball” appearance● RECOMMENDATIONS
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