

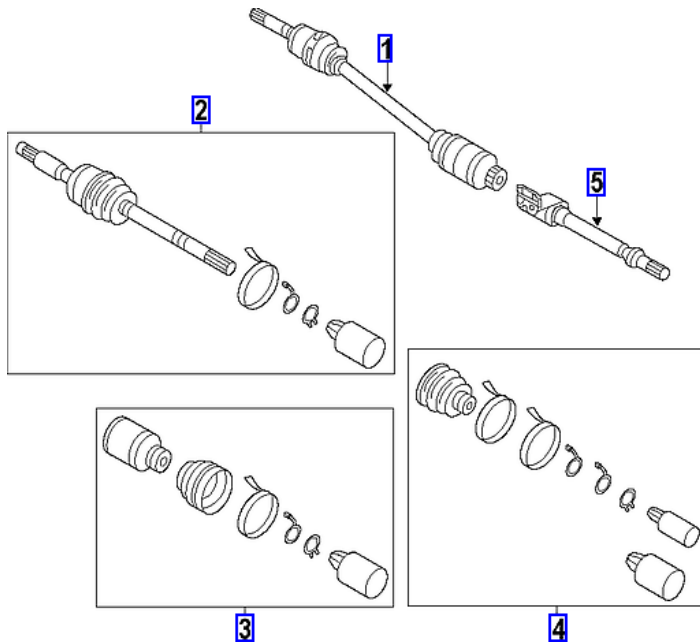
# **Component Procedures: Drive Axles, Bearings and Joints**

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# Component Procedures: Drive Axles, Bearings and Joints

## Front Axle (Article 80007)



## Parts and Labor (itype\_189)

### Parts

Qualifier	Part #	Name	Price	Note
Front Axle > Axle Assembly >?	49500F2300	1 - Left	507.34	
Front Axle > Axle Assembly >?	49501F2300	1 - Right	507.34	
Front Axle > Axle Assembly >?	49500F3100	1 - Left	415.16	
Front Axle > Axle Assembly >?	49501F3150	1 - Right	415.16	
Front Axle > Axle Assembly >?	49500F3000	1 - Left	415.16	
Front Axle > Axle Assembly >?	49501F3050	1 - Right	415.16	
Front Axle > Boots > Korea B?	49542F2305	4 - Left	55.66	
Front Axle > Boots > Korea B?	49536F2100	4 - Outer	42.61	
Front Axle > Boots > Korea B?	49542F2300	4 - Right	58.35	
Front Axle > Boots > Korea B?	49542F2305	4 - Left	55.66	
Front Axle > Boots > Korea B?	49542F2300	4 - Right	58.35	
Front Axle > Boots > Us Buil?	49581F3000	4 - Left	295.94	
Front Axle > Boots > Us Buil?	49581F3000	4 - Outer	295.94	
Front Axle > Boots > Us Buil?	49581F3000	4 - Right	295.94	
Front Axle > Boots > Us Buil?	49584F3000	4 - Left	114.79	
Front Axle > Boots > Us Buil?	49585F3000	4 - Right	141.71	
Front Axle > Boots > Us Buil?	49581F3000	4 - Left	295.94	
Front Axle > Boots > Us Buil?	49581F3000	4 - Outer	295.94	
Front Axle > Boots > Us Buil?	49585F3000	4 - Right	141.71	
Front Axle > Boots > Us Buil?	49584F3000	4 - Left	114.79	
Front Axle > Boots > Us Buil?	49585F3000	4 - Right	141.71	
Front Axle > Inner Cv Joint ?	49535F2305	3 - Left	326.68	
Front Axle > Inner Cv Joint ?	49535F2300	3 - Right	284.16	
Front Axle > Inner Cv Joint ?	49582F3100	3 - Left	313.18	
Front Axle > Inner Cv Joint ?	49583F3100	3 - Right	294.98	
Front Axle > Inner Cv Joint ?	49582F3000	3 - Left	313.18	
Front Axle > Inner Cv Joint ?	49583F3000	3 - Right	343.16	
Front Axle > Outer Cv Joint	49580F3000	2 - Left	352.03	
Front Axle > Outer Cv Joint	49580F3000	2 - Outer Cv Joint	352.03	
Front Axle > Shaft		5 - Part Of Axle Assem?	0.00	
Front Axle > Shaft		5 - Part Of Axle Assem?	0.00	

## Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Install	Front Axle > Axle Assembly, R&I > One Side	B	1.3	0.0
Remove & Install	Front Axle > Axle Assembly, R&I > One Side > ?		0.2	
Remove & Install	Front Axle > Axle Assembly, R&I > One Side > ?		0.5	
Remove & Install	Front Axle > Axle Assembly, R&I > One Side > ?		0.5	
Remove & Install	Front Axle > Axle Assembly, R&I > Both Sides	B	2.1	0.0
Remove & Install	Front Axle > Axle Assembly, R&I > Both Sides ?		0.2	
Remove & Install	Front Axle > Axle Assembly, R&I > Both Sides ?		0.5	
Remove & Install	Front Axle > Axle Assembly, R&I > Both Sides ?		0.5	
Remove & Replace	Front Axle > Axle Assembly, R&R > One Side	B	1.3	0.0
Remove & Replace	Front Axle > Axle Assembly, R&R > One Side > ?		0.2	
Remove & Replace	Front Axle > Axle Assembly, R&R > Both Sides	B	2.1	0.0
Remove & Replace	Front Axle > Axle Assembly, R&R > Both Sides ?		0.2	

## Specifications Quick Reference (itype\_439)

### Quick Specifications

- item

## Driveshaft and Axle - Specifications (Article 45265)

- Specification

Engine Transaxle Joint type Max. permissible angle

Outer Inner Outer Inner

NU 2.0 6 MT BJ#23 CTJ#23 46.5° 23°

6 A/T BJ#23 CTJ#23

1.4 T-GDI 6 MT BJ#23 CTJ#23 46.5° 23°

7DCT BJ#24 CTJ#24

- Tightening torque

Item N.m kgf.m lb-ft

Front Hub nuts 107.9 ~ 127.5 11.0 ~ 13.0 79.6 ~ 94.0

Driveshaft caulking nut 274.6 ~ 294.2 28.0 ~ 30.0 202.5 ~ 217.0

Strut assembly to knuckle 156.9 ~ 176.5 16.0 ~ 18.0 115.7 ~ 130.2

Front caliper to knuckle 78.5 ~ 98.1 8.0 ~ 10.0 57.9 ~ 72.3

Wheel speed sensor mounting bolt 7.8 ~ 11.8 0.8 ~ 1.2 5.8 ~ 8.7

Disc fixing screw 4.9 ~ 5.9 0.5 ~ 0.6 3.6 ~ 4.3

Lower arm to knuckle 58.8 ~ 70.6 6.0 ~ 7.2 43.4 ~ 52.1

Tie rod end castle nut 24.5 ~ 34.3 2.5 ~ 3.5 18.1 ~ 25.3

Rear Hub nuts 107.9 ~ 127.5 11.0 ~ 13.0 79.6 ~ 94.0

Rear caliper to torsion beam axle 63.7 ~ 73.5 6.5 ~ 7.5 47.0 ~ 54.2

Wheel speed sensor mounting bolt 8.8 ~ 13.7 0.9 ~ 1.4 6.5 ~ 10.1

Rear herb assembly to torsion beam axle 49.0 ~ 58.8 5.0 ~ 6.0 36.2 ~ 43.4

Replace caulking nuts with new ones after removal.

# NOTICE

- Replace caulking nuts with new ones after removal.

- Lubricants

Engine Joint type Lubricants Quantity

NU 2.0 BJ BM71-141 90g + 10g

TJ CW09-VX21 125g + 10g

1.4 T-GDI BJ BM71-141 100g + 10g

TJ CW09-VX21 130g + 10g

## Driveshaft and Axle - Specifications (Article 45266)

### - Specification

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Outer Inner Outer Inner

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6 A/T BJ#23 CTJ#23

1.4 T-GDI 6 MT BJ#23 CTJ#23 46.5° 23°

7DCT BJ#24 CTJ#24

### - Tightening torque

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Front Hub nuts 107.9 ~ 127.5 11.0 ~ 13.0 79.6 ~ 94.0

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Wheel speed sensor mounting bolt 7.8 ~ 11.8 0.8 ~ 1.2 5.8 ~ 8.7

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TJ CW09-VX21 130g + 10g

## All Technical Service Bulletins (itype\_100)

Tsbs

- WHEEL BEARING NOISE INSPECTION (19-DS-001H-1, 2019/02/05)

## Driveshaft and Axle - Troubleshooting (Article 45286)

### - Troubleshooting

Trouble Symptom Probable cause Remedy

Vehicle pulls to one side Scoring of driveshaft ball joint Replace

Wear, rattle or scoring of wheel bearing Replace

Defective front suspension and steering Adjustment or Replace

Vibration Wear, damage or bending of driveshaft Replace

Driveshaft rattle and hub serration Replace

Wear, rattle or scratching of wheel bearing Replace

Shimmy Defective wheel balance Adjustment or Replace

Excessive noise Wear, damage or bending of driveshaft Replace

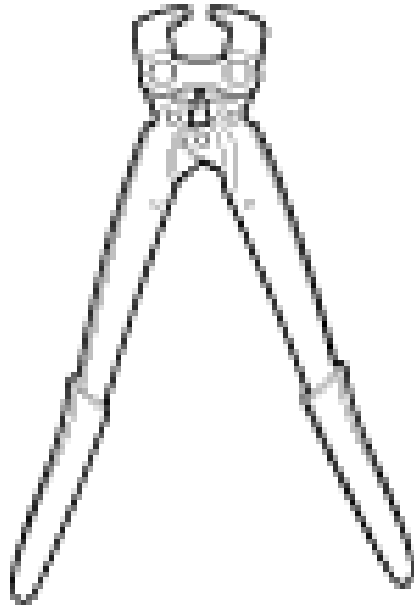
Rattle of driveshaft and worn hub splines Replace  
Loose hub nut Adjustment or Replace

### **Driveshaft and Axle - Special Service Tools (Article 45279)**

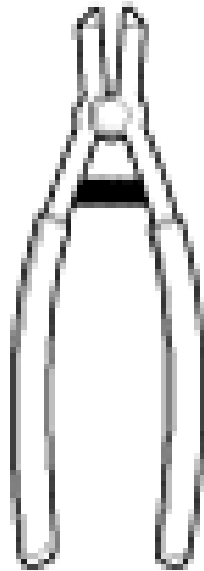
- Special Service Tools

Tool(Number and Name) Illustration Use

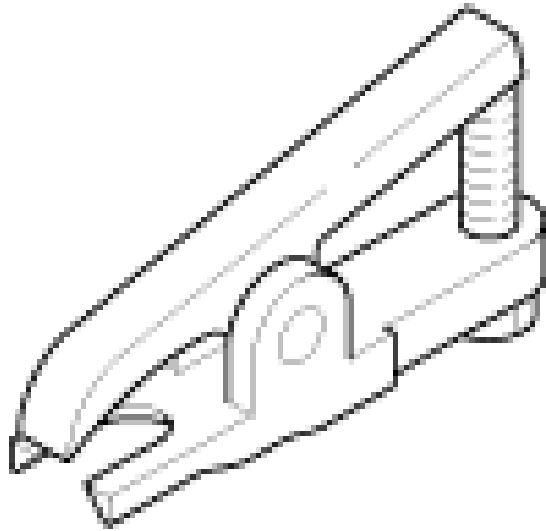
09495-3K000 Band installer Installation of ear type boot band



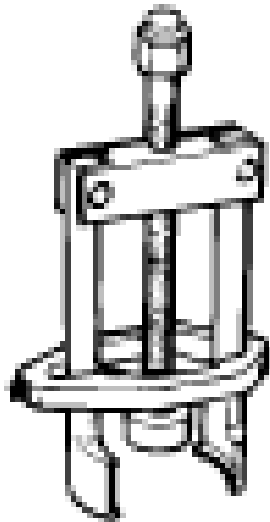
09495-39100 Band installer Installation of hook type boot band



09568-1S100 Ball joint puller Saperate the ball joint from the front axle



09495-33000 Puller Removal of spider assembly from a drive shaft



**Noise (itype\_156)**

Tsbs

- WHEEL BEARING NOISE INSPECTION (19-DS-001H-1, 2019/02/05)