

# FRONT & REAR AXLE

# SECTION AX

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EM

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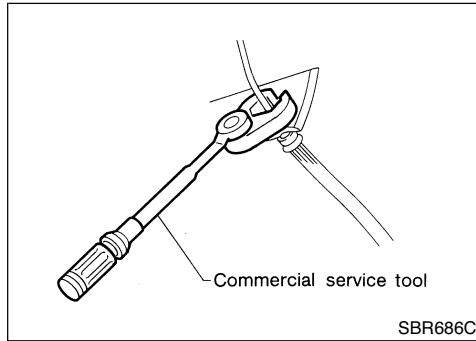
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# FRONT AXLE

## Precautions



## Precautions

### PRECAUTIONS

- ☐ When installing rubber parts, final tightening must be carried out under unladen condition\* with tires on ground.  
\*: Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.
- ☐ Use flare nut wrench when removing and installing brake tubes.
- ☐ After installing removed suspension parts, check wheel alignment and adjust if necessary.
- ☐ Always torque brake lines when installing.

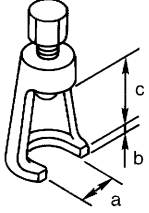
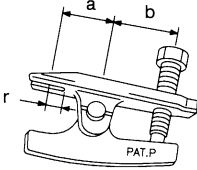
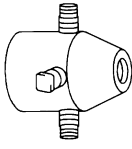
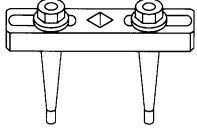
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## Preparation

## SPECIAL SERVICE TOOLS

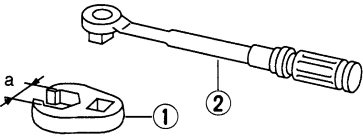
The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

NGAX0002

Tool number (Kent-Moore No.) Tool name	Description	
ST29020001 (J24319-01) Gear arm puller		Removing ball joint for knuckle spindle a: 34 mm (1.34 in) b: 6.5 mm (0.256 in) c: 61.5 mm (2.421 in)
HT72520000 (J25730-B) Ball joint remover		Removing tie-rod outer end a: 33 mm (1.30 in) b: 50 mm (1.97 in) r: R11.5 mm (0.453 in)
KV401021S0 ( — ) Bearing race drift		Installing wheel bearing outer race
KV40105400 (J36001) Wheel bearing lock nut wrench		Removing and installing wheel bearing lock nut (4WD models only)

## COMMERCIAL SERVICE TOOLS

NGAX0003

Tool name	Description	
1 Flare nut crowfoot 2 Torque wrench		Removing and installing each brake piping a: 10 mm (0.39 in)

# FRONT AXLE

Noise, Vibration and Harshness (NVH) Troubleshooting

## Noise, Vibration and Harshness (NVH) Troubleshooting

### NVH TROUBLESHOOTING CHART

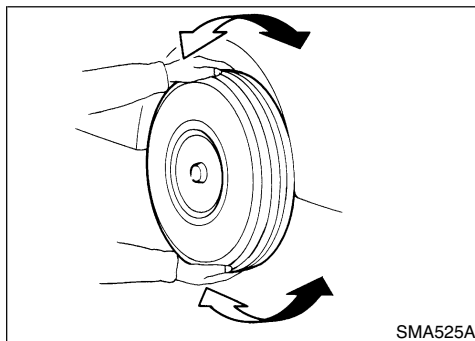
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NGAX0004S01

Use the chart below to help you find the cause of the symptom. If necessary, repair or replace these parts.

Reference page			—	AX-17	—	AX-7, 25	—	—	AX-4, 25	NVH, PD-4	NVH, PD-4	Refer to DRIVE SHAFT in this chart.	Refer to AXLE in this chart.	NVH, SU-3	NVH, SU-3	NVH, SU-3	NVH, BR-5	NVH, ST-5	
Possible cause and SUSPECTED PARTS			Excessive joint angle	Joint sliding resistance	Imbalance	Improper installation, looseness	Parts interference	Wheel bearing damage		PROPELLER SHAFT	DIFFERENTIAL	DRIVE SHAFT	AXLE	SUSPENSION	TIRES	ROAD WHEEL	BRAKES	STEERING	
Symptom	DRIVE SHAFT	Noise, Vibration	x	x						x	x		x	x	x	x	x	x	
		Shake	x		x					x			x	x	x	x	x	x	
	AXLE	Noise				x	x			x	x	x		x	x	x	x	x	x
		Shake				x	x			x		x		x	x	x	x	x	x
		Vibration				x	x			x		x		x	x				x
		Shimmy				x	x							x	x	x	x	x	x
		Judder				x								x	x	x	x	x	x
Poor quality ride or handling				x	x	x						x	x	x					

x: Applicable



### On-vehicle Service

#### FRONT AXLE PARTS

NGAX0005

Check front axle parts for excessive play, cracks, wear and other damage.

- Shake each front wheel to check for excessive play. If looseness is noted, adjust wheel bearing end play, then check ball joint end play.
- Make sure that the cotter pin is inserted.
- Retighten all nuts and bolts to the specified torque.

: Refer to "FRONT SUSPENSION", SU-13.

### AX-3