

Driveshaft and Axle

GENERAL	DS - 2
DRIVESHAFT	DS - 8
FRONT AXLE	DS -23
REAR AXLE	DS -27

GENERAL

SPECIFICATIONS EIBD9010

Drive shaft				
Joint type	2.0L M/T	2.0L A/T	2.5L M/T	2.5L A/T, 3.0L A/T, 3.5L A/T
Outer	B.J.	B.J.	B.J.	A.C.
Inner	D.O..J	T.J.	D.O.J.	G.I.
Maximum permissible angle				
Outer	46°	46.5°	46°	45°
Inner	22°	23°	22°	21°
Center bearing				
Type	Radial ball bearing			
Dimension (O.D. x I.D.) mm (in.)	62 x 30 (2.44 x 1.18)			
Wheel bearing				
Type	Double row angular contact ball bearing			
Dimension (O.D. x I.D.) mm (in.)	80 x 42 (3.15 x 1.65)			

B.J. :Birfield joint
 D.O.J. :Double offset joint
 T.J. : Tripod joint

A.C. : Angular Contact (GKN)
 G.I. : Glaenzer Interior (GKN)

SERVICE STANDARD EIBB0020

Limit		
Hub end play	mm (in.)	0.008 (0.0003)
Front wheel bearing torque	Nm (kg.cm, lb.in.)	1.8 (18, 16)
Rear wheel bearing torque	N (kg.cm, lb.in.)	28 (18, 16)

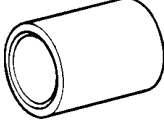
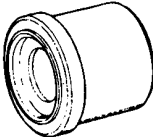
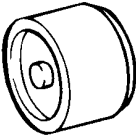
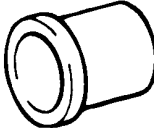
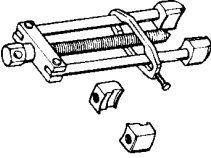

TIGHTENING TORQUE EIBD0030

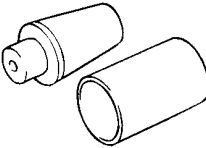
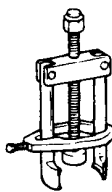
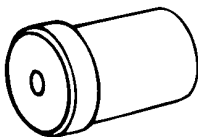
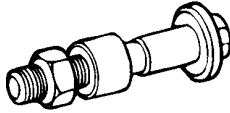
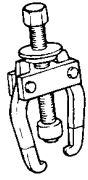

	Nm	Kg·cm	lb·ft
Driveshaft castle nut	200~280	2000~2800	148~207
Lower arm ball joint to knuckle nut	100~120	1000~1200	74~88
Tie rod end to knuckle	24~34	240~340	18~25
Stabilizer link mounting nut	35~45	350~450	26~33
Brake caliper to knuckle	69~85	690~850	51~62
Upper arm to knuckle	35~45	350~450	26~33
Brake caliper to carrier	50~60	500~600	36~44
Rear axle carrier to hub mounting bolt	70~90	700~900	52~66
Rear hub bearing flange nut	200~280	2000~2800	148~207
Rear axle carrier stud bolt	90~110	900~1100	66~81
Wheel nut	90~110	900~1100	66~81
Center arm to carrier nut	60~72	600~720	44~53
Assist arm to carrier nut	100~120	1000~1200	74~88
Shock absorber lower mounting bolt	80~90	800~900	59~66
Trailing arm to carrier nut	100~120	1000~1200	74~88
Rear upper arm to carrier nut	100~120	1000~1200	74~88

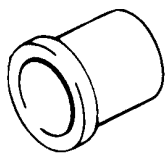
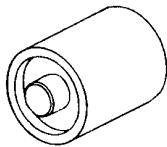
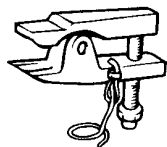
 **CAUTION**

Replace self-locking nuts with new ones after removal.

SPECIAL TOOLS EIBB0040

Tool (Number and Name)	Illustration	Use
09216-21100 Mount bushing remover and installer	 <p style="text-align: right;">B1621100</p>	<ul style="list-style-type: none"> • Removal of the center bearing • Press-fitting of the front wheel bearing outer race (Use with 09545-33100)
09216-21600 Mount bushing remover and installer arbor	 <p style="text-align: right;">B1621600</p>	Removal of the wheel bearing outer race (Use with 09216-22100)
09216-22100 Mount bushing remover and installation base	 <p style="text-align: right;">B1622100</p>	Removal of the wheel bearing outer race (Use with 09216-21600)
09221-21000 Camshaft oil seal installer	 <p style="text-align: right;">B2121000</p>	Press-fitting of the hub bearing
09432-11000 Mainshaft bearing puller	 <p style="text-align: right;">D3211000</p>	Removal of the tone wheel
09432-33300 Bearing installer	 <p style="text-align: right;">D3233300</p>	Installation of the center bearing

Tool (Number and Name)	Illustration	Use
09453-33000B Snap ring installer	 <p style="text-align: right; font-size: small;">D5333000</p>	Removal and installation of the rear axle carrier bushing (Use with 09545-21100)
09455-21000 Bearing and gear puller	 <p style="text-align: right; font-size: small;">D5521000</p>	Removal of the bearing inner race from the front hub (Use with 09545-34100)
09495-33100 Center bearing remover and installer	 <p style="text-align: right; font-size: small;">D9533100</p>	<ul style="list-style-type: none"> • Removal and installation of the center bearing • Installation of the inner dust seal (Use with 09216-21100)
09517-21500 Front hub remover and installer	 <p style="text-align: right; font-size: small;">E1721500</p>	Measurement of wheel bearing preload
09517-43001 Bearing puller	 <p style="text-align: right; font-size: small;">E1743001</p>	Removal of the center bearing bracket
09532-11600 Preload socket	 <p style="text-align: right; font-size: small;">E3211600</p>	Measurement of the wheel bearing preload (use with torque wrench)

Tool (Number and Name)	Illustration	Use
09545-21100 Ball joint dust cover installer	 <p style="text-align: right; font-size: small;">E4521100</p>	Press-fitting of the front hub to the knuckle (use with 09453-33000B)
09545-34100 Lower arm bushing remover and installer	 <p style="text-align: right; font-size: small;">E4534100</p>	Removal of the bearing inner race from the front hub(Use with 09455-21000)
09568-34000 Ball joint remover	 <p style="text-align: right; font-size: small;">E6834000</p>	Removal of the front lower arm and tie rod end ball joint

TROUBLESHOOTING

E1BB0045

Symptom	Possible cause	Remedy
Vehicle pulls to one side	Scoring of driveshaft ball joint Wear, rattle or scoring of wheel bearing Defective front suspension and steering	Replace Replace Adjust or replace
Vibration	Wear, damage or bending of driveshaft Driveshaft rattle and worn hub splines Wear, rattle or scratching of wheel bearing	Replace Replace Replace
Shimmy	Improper wheel balance Bent wheel Defective front suspension and steering	Adjust or replace Replace Adjust or replace
Excessive noise	Wear, damage or bending of driveshaft Driveshaft rattle and worn hub splines Driveshaft rattle and worn side gear splines Wear, rattle or galling of wheel bearing Loose hub nut Defective front suspension and steering	Replace Replace Replace Replace Adjust or replace Adjust or replace

**WHEEL BEARING
TROUBLESHOOTING**

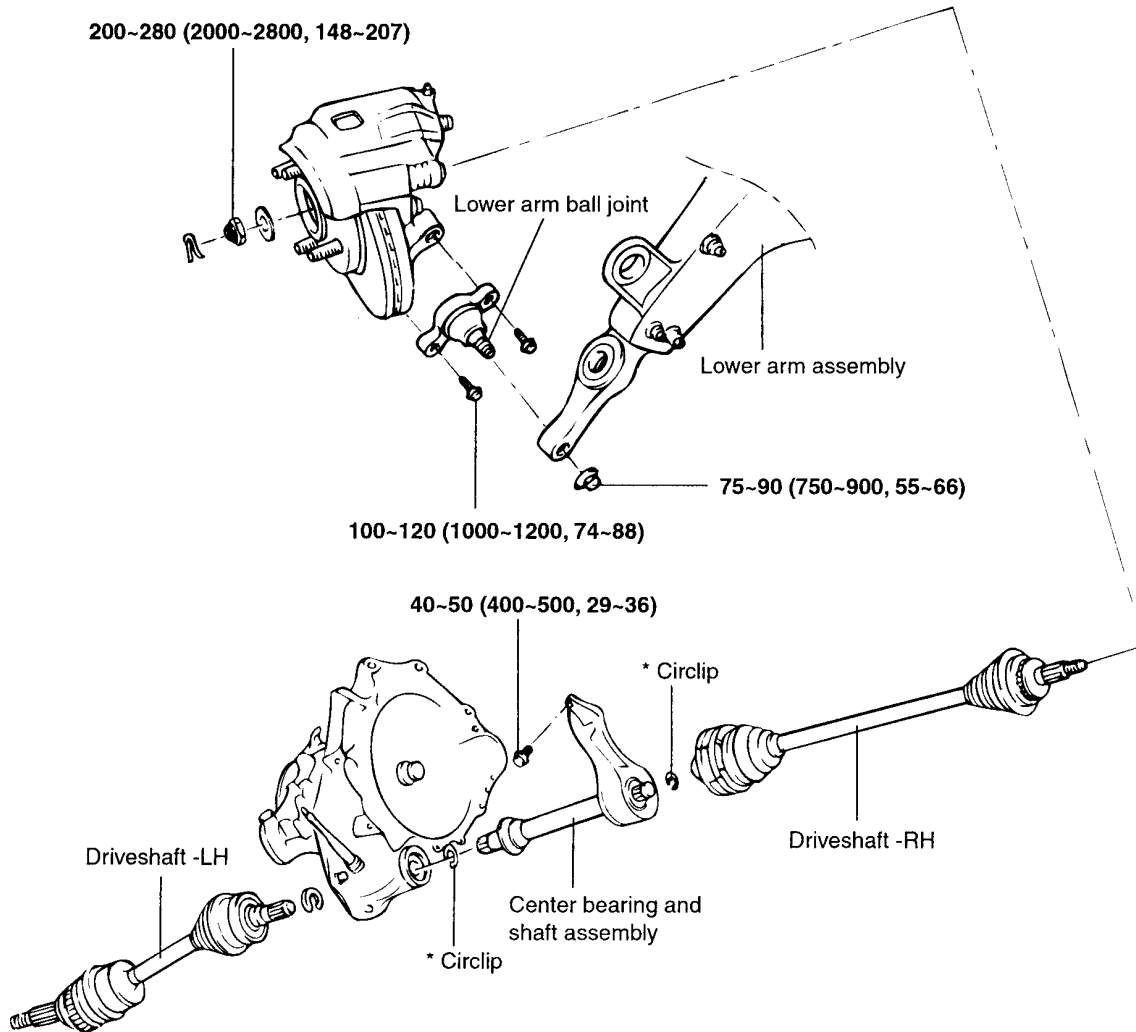
E1BB0050

Symptom	Possible cause	Remedy
Bent cage	Cage damaged by improper handling or tool usage	Replace bearing
Galling	Metal smears on roller end due to overheating, incorrect lubricant or overloading	Replace bearing Check seals, check for proper lubrication
Cracked inner race	Race cracked due to improper fit, cocking or poor bearing seats	Replace bearing
Etching	Bearing surfaces appear gray or grayish black in color accompanied by material etched away usually at roller spacing	Replace bearing Check seals, check for proper lubrication
Brinelling	Surface indentations on race surface caused by rollers being under impact loading or vibration while the bearing is not rotating	Replace bearing
Heat discoloration	Heat discoloration is dark blue resulting from overload or no lubricant (Yellow or brown color is normal)	Replace bearing Check seals and other parts
Fatigue spalling	Flaking of surface metal resulting from fatigue	Replace bearing Clean all related parts

DRIVESHAFT

FRONT DRIVESHAFT ASSEMBLY

COMPONENTS EIBD0060



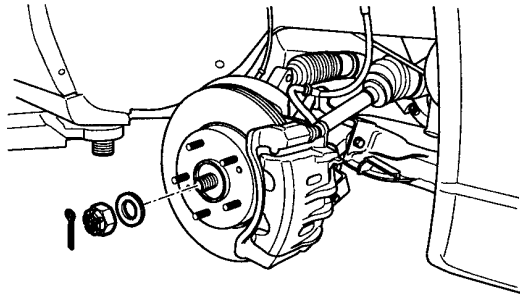
CAUTION

* : Replace the circlip with new ones after removal.

TORQUE : Nm (kg·cm, lb·ft)

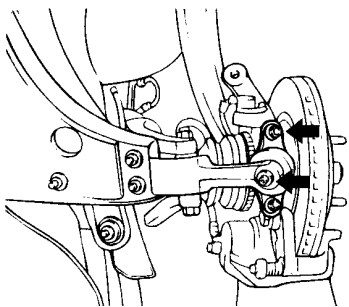
REMOVAL E18B0070

1. Remove the wheel and tire.
2. Drain the transaxle fluid.
3. Remove the split pin and driveshaft castle nut from the front hub.



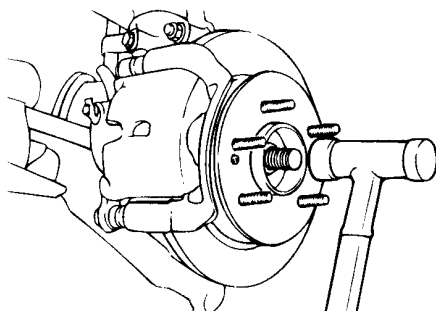
KGX7002A

4. Remove the 2 bolts and disconnect the ball joint from the knuckle.



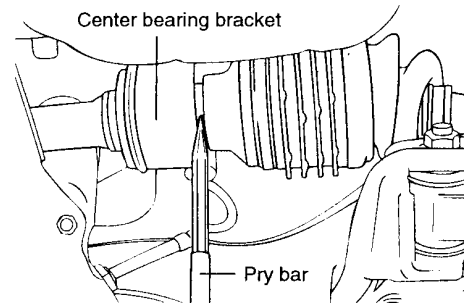
EIA9210B

5. Using a plastic hammer, disconnect the driveshaft from the axle hub.



KGKDS01A

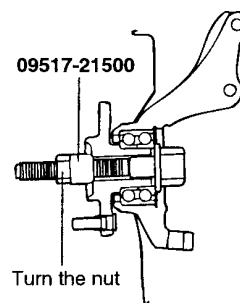
6. Push the axle hub toward the outside of the vehicle, and separate the driveshaft from the axle hub.
7. Insert a pry bar between the center bearing bracket and the driveshaft, and then pry the driveshaft from the transaxle.



S5DS007D

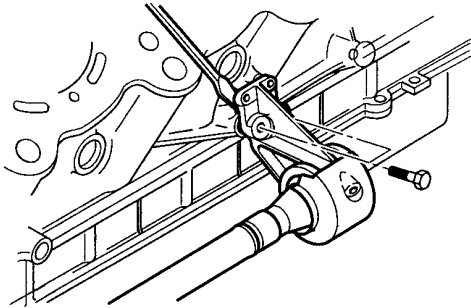
CAUTION

- Use a pry bar so you do not damage the joint.
- If you pull the driveshaft by excessive force, components inside the joint can be displaced causing the boot to be torn and the bearing to be damaged.
- Plug the transaxle case opening with an oil seal cap in order to avoid contamination.
- Support the driveshaft properly.
- Replace the retainer ring each time the driveshaft is removed from the transaxle case.
- While loosening the driveshaft nut, do not allow vehicle weight to be concentrated on the wheel bearing. If the vehicle moves, hold the wheel bearing using the special tool



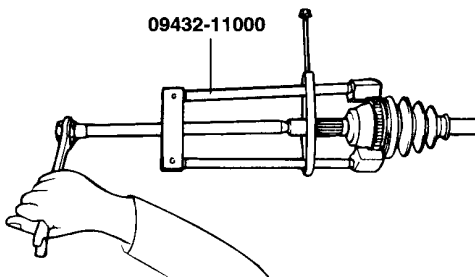
S5DS007F

- Remove the center bearing bracket mounting bolts. Insert the pry bar between the center bearing bracket and the cylinder block to disconnect the bracket from the cylinder block.



KGX7007A

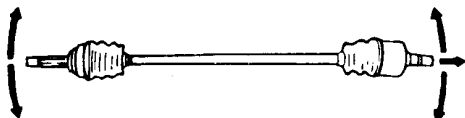
- Remove the inner shaft from the transaxle.
- Using the special tool (09432-11000), remove the tone wheel.



EIA9210C

INSPECTION EIBB0080

- Check the driveshaft boots for damage and deterioration.
- Check the splines for wear and damage.
- Check the ball joints for wear and operating condition.



S5DS008A

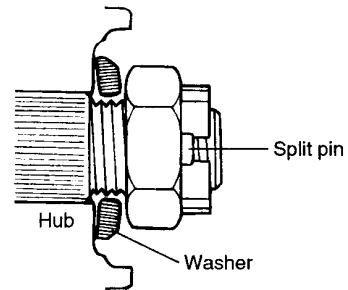
INSTALLATION EIBD0090

- Apply gear oil on the driveshaft splines and differential case contacting surface.
- Before installing the driveshaft, set the opening side of the circlip so that it faces downward.

CAUTION

Replace the circlip with new ones after removal.

- After installation, check that the driveshaft cannot be removed by hand.
- Position the washer so that the convex side faces outside and install the castle nut and split pin.



EIDA212A

- Replace the self-locking nuts and split pin with new ones after removal.
- Tighten the following parts to the specified torque.

Driveshaft castle nut : 200~280 (2000~2800, 148~207)

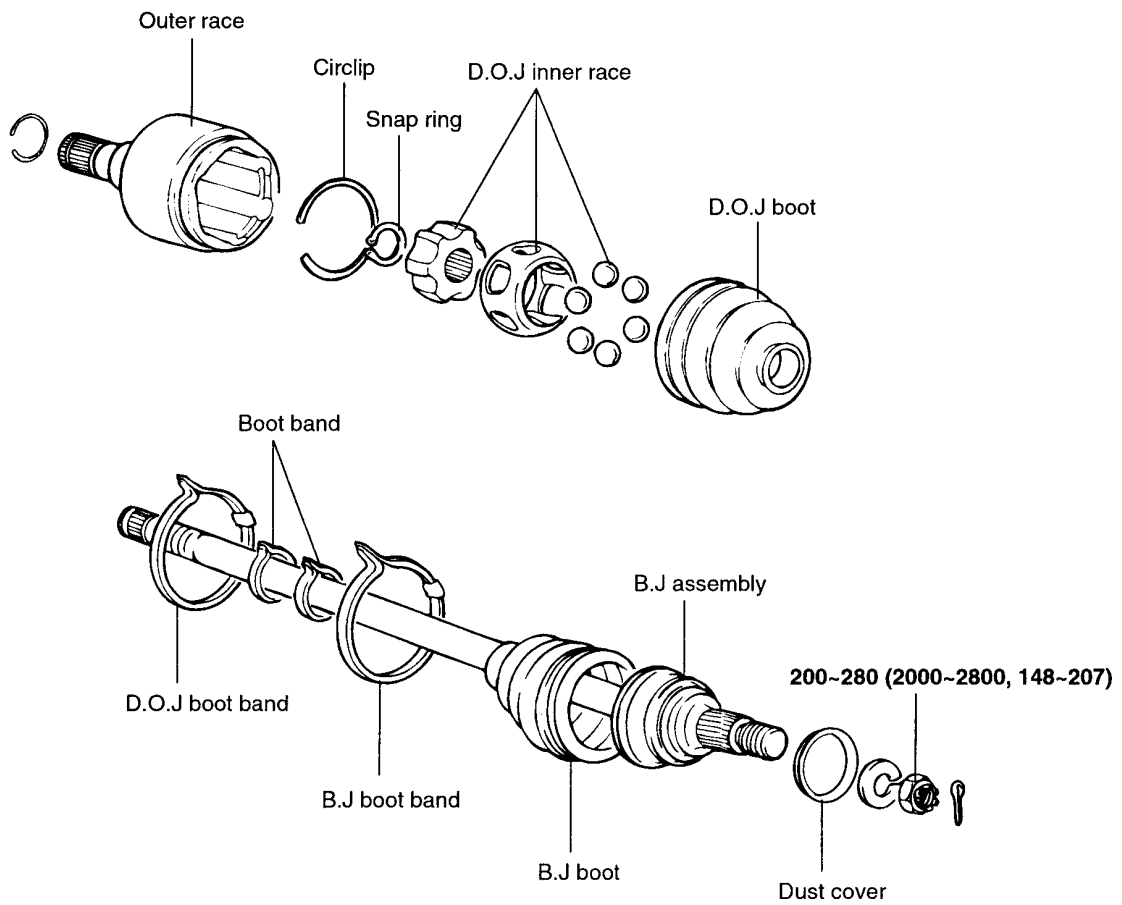
Lower arm ball joint to knuckle :
100~120 (1000~1200, 74~88)

Nm (kg-cm, lb-ft)

FRONT DRIVESHAFT (DOJ-BJ TYPE)

COMPONENTS EIBD0900

[2.0L M/T / 2.5L M/T]



TORQUE : Nm (kg-cm, lb-ft)

DISASSEMBLY E1AC1100

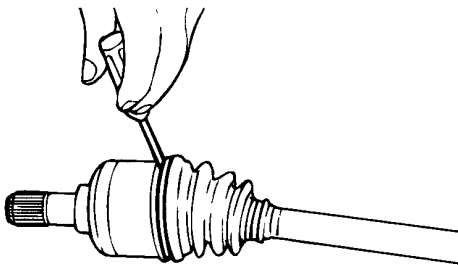
NOTE

- The driveshaft joint requires special grease. Do not substitute with another type of grease.
- The boot band should be replaced with new one.

1. Remove the D.O.J. and B.J. boot bands.

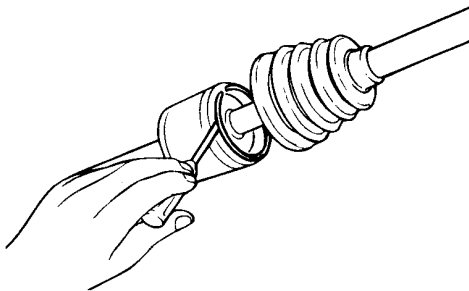
NOTE

Be careful not to damage the boot.



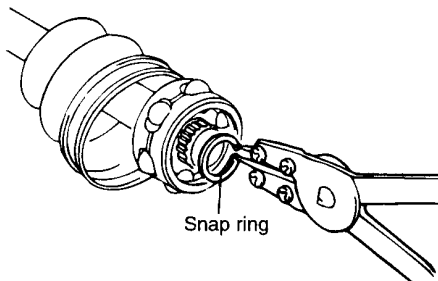
E1A9251A

2. Remove the circlip, then remove the D.O.J. outer race.



E1A9251B

3. Remove the snap ring, then remove the D.O.J. inner race, the D.O.J. cage, and the balls as a unit.



Snap ring

E1A9251C

4. Clean the D.O.J. inner race, the D.O.J. cage, and the balls, without disassembling them.

NOTE

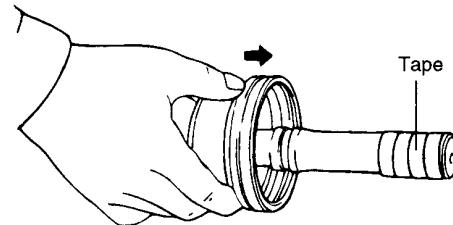
- Be careful that the balls do not drop out of the cage.
- If the balls drop out, press them back into the D.O.J. cage with the D.O.J. inner race.

5. Wipe the grease off the spline portion.

6. Remove the D.O.J. boot and B.J. boot.

NOTE

- If the boots can be reused, wrap vinyl tape around the driveshaft splines so that the boots are not damaged when they are removed.
- Do not disassemble the B.J.

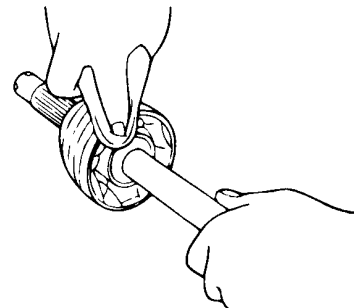


Tape

E1A9251D

INSPECTION E1AC1200

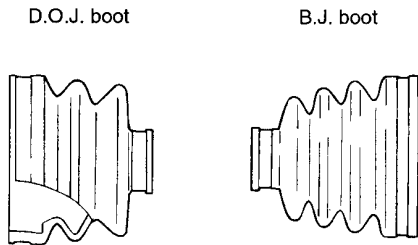
1. Inspect the driveshaft and driveshaft splines for wear, damage, bending or corrosion.
2. Inspect the birfield joint for entry of water and/or foreign material.
3. Check the D.O.J. outer race cage, balls and inner race for damage, corrosion or wear.



S5DS011A

REASSEMBLY EIBD1300

1. Wrap the driveshaft splines (D.O.J. side) with tape to prevent damage to the boots.
2. Install the boots.

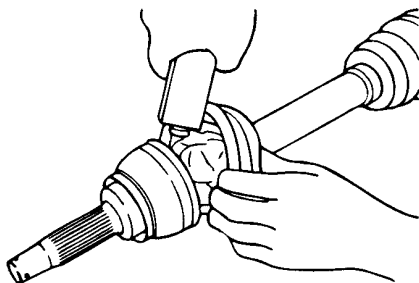


EIA9253C

3. Remove the tape
4. Fill the inside of the B.J. and B.J. boot with specified grease.

Recommended grease : CENTOPLEX 278M/136K

Quantity (gr.)	2.0L M/T	2.5L M/T
In the joint	55 ± 3	70 ± 3
In the boot	55 ± 3	65 ± 3



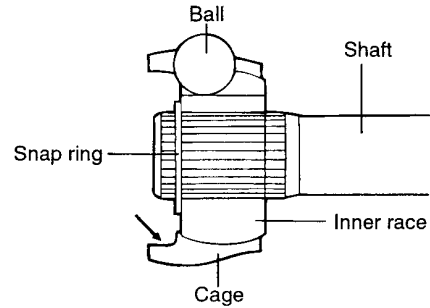
EIA9253D

5. Fill the inside of D.O.J. and D.O.J. boot with specified grease.

Recommended grease : AMBLYGON TA 10/2A

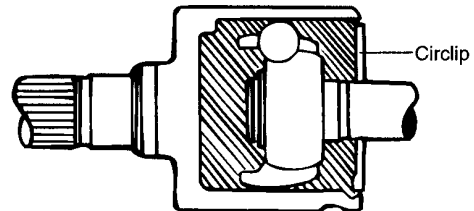
Quantity (gr.)	2.0L M/T	2.5L M/T
In the joint	60 ± 3	65 ± 3
In the boot	40 ± 3	40 ± 3

6. Install the D.O.J. cage, balls, inner race and fit the snap ring.



EIA9253E

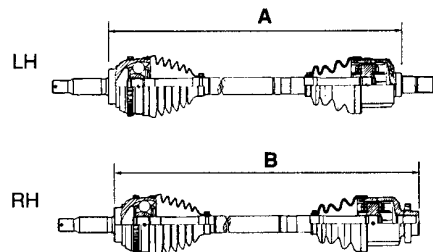
7. Fit the driveshaft into the D.O.J. outer race and install the circlip.



EIA9253B

8. To regulate the amount of air inside the D.O.J. boot, set the D.O.J. boot bands at the specified distance and tighten the D.O.J. boot band securely.

	Standard value (A, B)		mm (in.)
	LH side	RH side	
2.0L M/T	521.2 ± 2 (20.52 ± 0.08)	538.9 ± 2 (21.22 ± 0.08)	
2.5L M/T	520.2 ± 2 (20.5 ± 0.08)	539 ± 2 (21.2 ± 0.08)	

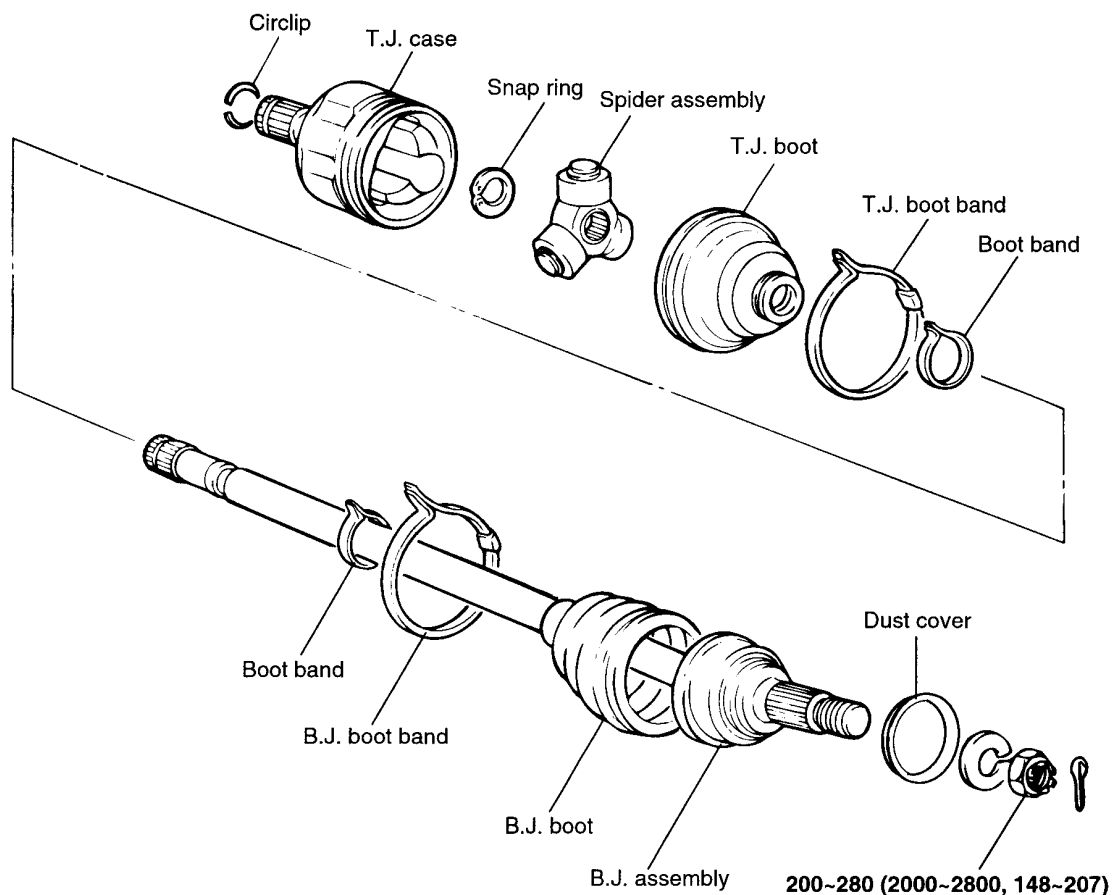


EIA9253A

FRONT DRIVESHAFT (T.J-BJ TYPE)

COMPONENTS EIBD1400

[2.0L A/T]



TORQUE : Nm (kg-cm, lb-ft)

DISASSEMBLY E1AC1500

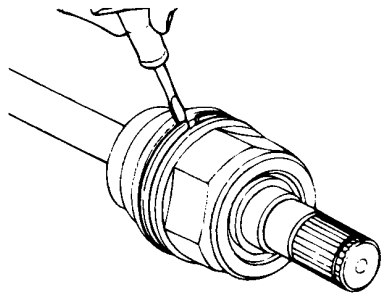
NOTE

- Do not disassemble the spider assembly.
- The driveshaft joint requires special grease. Do not substitute with another type of grease.
- The boot band should be replaced with a new one.

1. Remove the T.J. boot bands and pull the T.J. boot from the T.J. case.

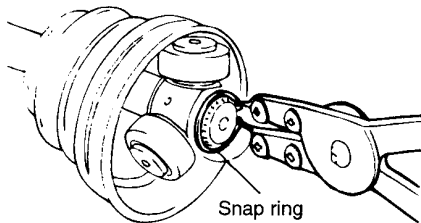
NOTE

Be careful not to damage the boot.



EIA9301A

2. Remove the snap ring and spider assembly from the driveshaft.

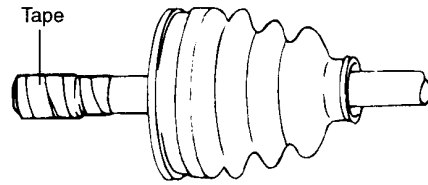


EIA9301B

3. Clean the spider assembly.
4. Remove the B.J. boot bands and pull out the T.J. boot and B.J. boot.

NOTE

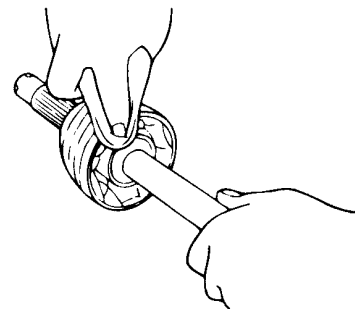
If the boot is to be reused, wrap tape around the drive-shaft splines to protect boot.



J49-015C

INSPECTION AFTER DISASSEMBLY E1BD1600

1. Check the driveshaft spline part for wear or damage.
2. Check for entry of water and/or foreign material into B.J.
3. Check the spider assembly for roller rotation, wear or corrosion.
4. Check the groove inside T.J. case for wear or corrosion.



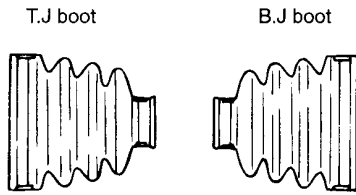
S5DS011A

REASSEMBLY E1BD1700

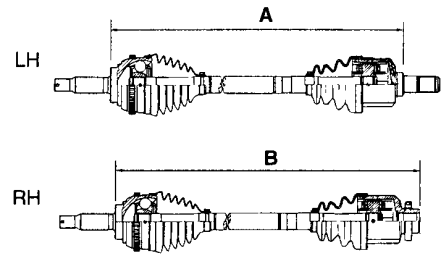
1. Wrap tape around the driveshaft splines (T.J. side) to prevent damage to the boots.
2. Apply grease to the driveshaft and install the boots.

Recommended lubricant :

- B.J. Boot grease : CENTOPLEX 278M/136K
- T.J. Boot grease : KLK TJ41-182



EIAC170A



EIA9253A

3. Apply grease into the T.J. boot and install the boot.

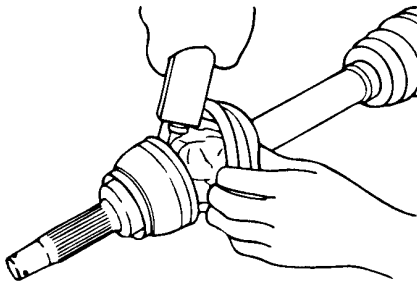
8. Tighten the T.J. boot bands.

T.J. boot grease gr. :

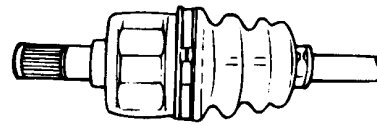
2.0L A/T

In the joint : 75 ± 3

In the boot : 45 ± 3



EIA9303C



V5DS013C

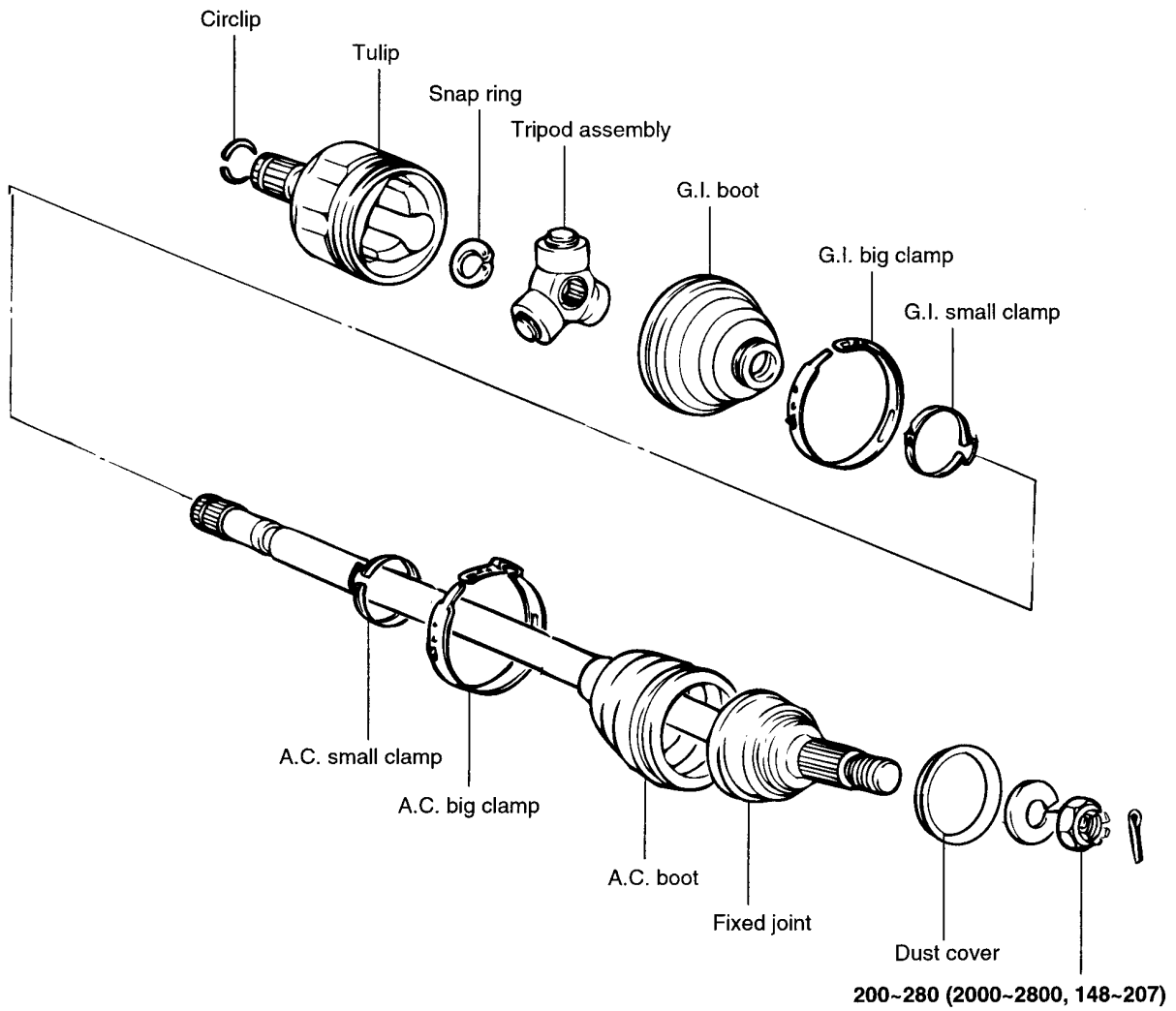
4. Add specified grease to the B.J. as much as wiped away at the time of inspection.
5. Install the boots.
6. Tighten the B.J. boot bands.
7. To control the air in the T.J. boot, keep the specified distance between the boot bands when they are tightened.

Standard value (A)	mm (in.)
LH side : 524.2 ± 2 (20.64 ± 0.08)	
RH side : 542.7 ± 2 (21.37 ± 0.08)	

FRONT DRIVESHAFT(G.I.-A.C TYPE)

COMPONENTS EIBD1800

[2.5L A/T / 3.0L A/T / 3.5L A/T]



TORQUE : Nm (kg-cm, lb-ft)

DISASSEMBLY EIBB0110

NOTE

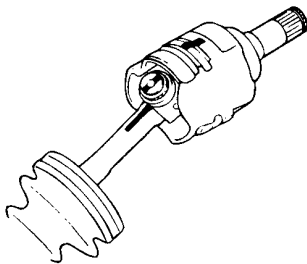
- Do not disassemble the tripod assembly.
- Special grease must be applied to the driveshaft joint.
- The boot clamp should be replaced with a new one.
- The boot should be replaced with a new one.

1. Using a side cutter, cut the G.I. and A.C. big clamps and remove them.
2. Using a brass bar and hammer, remove the G.I. and A.C. small clamps.
3. Place matchmarks on the tripod and tulip.

NOTE

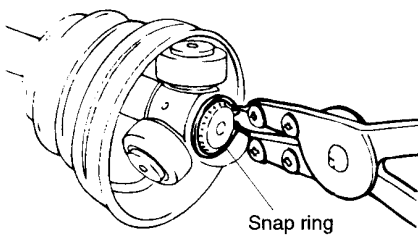
Do not punch the mark.

4. Remove the tulip assembly from the driveshaft.



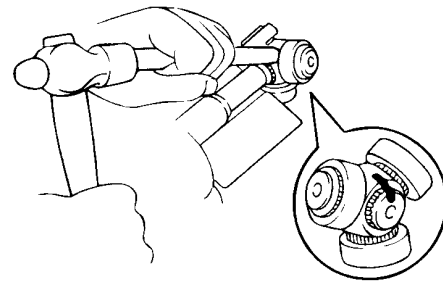
EIB9002A

5. Using a snap ring expander, remove the snap ring.



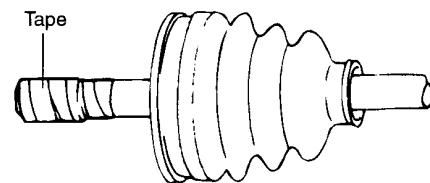
J49-015B

6. Place matchmarks on the tripod and joint shaft.
7. Using a brass bar and hammer, remove the tripod from the joint shaft.



EIB9003A

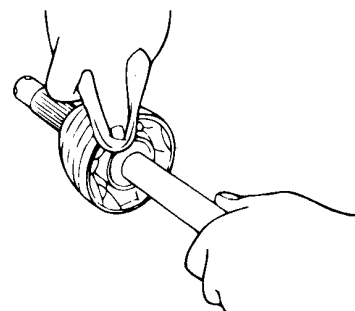
8. Remove the A.C boot clamps and pull out the G.I. boot and A.C. boot.



J49-015C

INSPECTION AFTER DISASSEMBLY EIBB0120

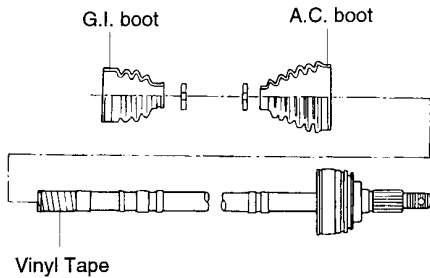
1. Check the drivshaft spline part for wear or damage.
2. Check for entry of water and/or foreign material into A.C.
3. Check the tripod assembly for roller rotation, wear or corrosion.
4. Check the groove inside tulip for wear or corrosion.



S5DS011A

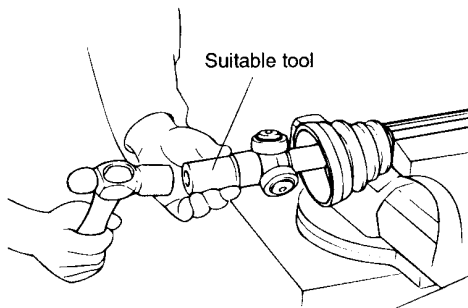
REASSEMBLY E1AC2100

1. Wrap tape around the driveshaft splines (G.I. side) to prevent damage to the boots.
2. Before installing the boots, place a new clamps to the small boot ends and install them to the driveshaft.



E1B9004A

3. After aligning the matchmark, place the beveled side of the tripod axial spline toward the A.C. joint.
4. Using suitable tool and hammer, tap in the tripod to the driveshaft.

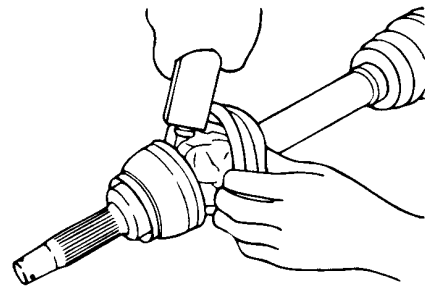


E1B9001A

5. Install new snap ring.
6. Add specified grease to the A.C. joint and boot, as much as was removed at the time of inspection.

Specified grease : CENTURY

Grease quantity (gr.) : 185



E1A9303C

7. Apply specified grease to the G.I. joint and boot.

Specified grease : One luber GKN

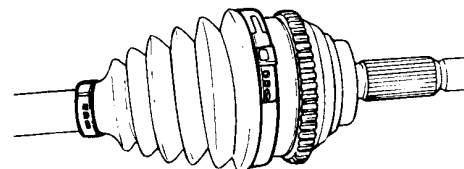
Grease quantity (gr.) : 175

8. Align the matchmarks and install the G.I. joint to the shaft.
9. Install the boots.

NOTE

- Make sure that 2 boots are on the shaft groove.
- Make sure that the 2 boots are not stretched.

10. Position the holes in the clamp's free end to the closing hooks.



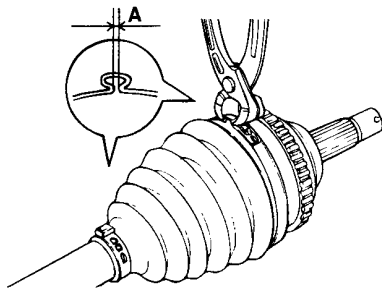
E1B9006A

11. Using pliers, secure the clamps.

Clearance (A)

A.C. big clamp : 2.0 mm (0.079 in.) or less

A.C. small clamp : 1.8 mm (0.071 in.) or less



EIB9007A

12. To control air in the G.I. boot, keep the specified distance between the boot clamps when they are tightened.

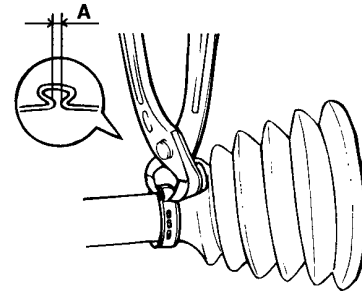
Standard value (A, B)	mm (in.)	
	LH side	RH side
2.5L A/T	524.1 (20.63 ± 0.08)	543.6 (21.4 ± 0.08)
3.0L A/T / 3.5L A/T	517.5 (20.39 ± 0.08)	533.6 (21.01 ± 0.08)

14. Secure the clamp by drawing the closing hooks together.

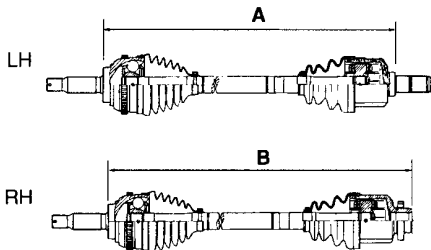
15. Using pliers, secure the G.I. small clamp.

Clearance (A)

G.I. small clamp : 1.6 mm (0.063 in.) or less

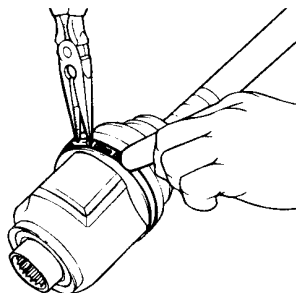


EIB9010A



EIA9253A

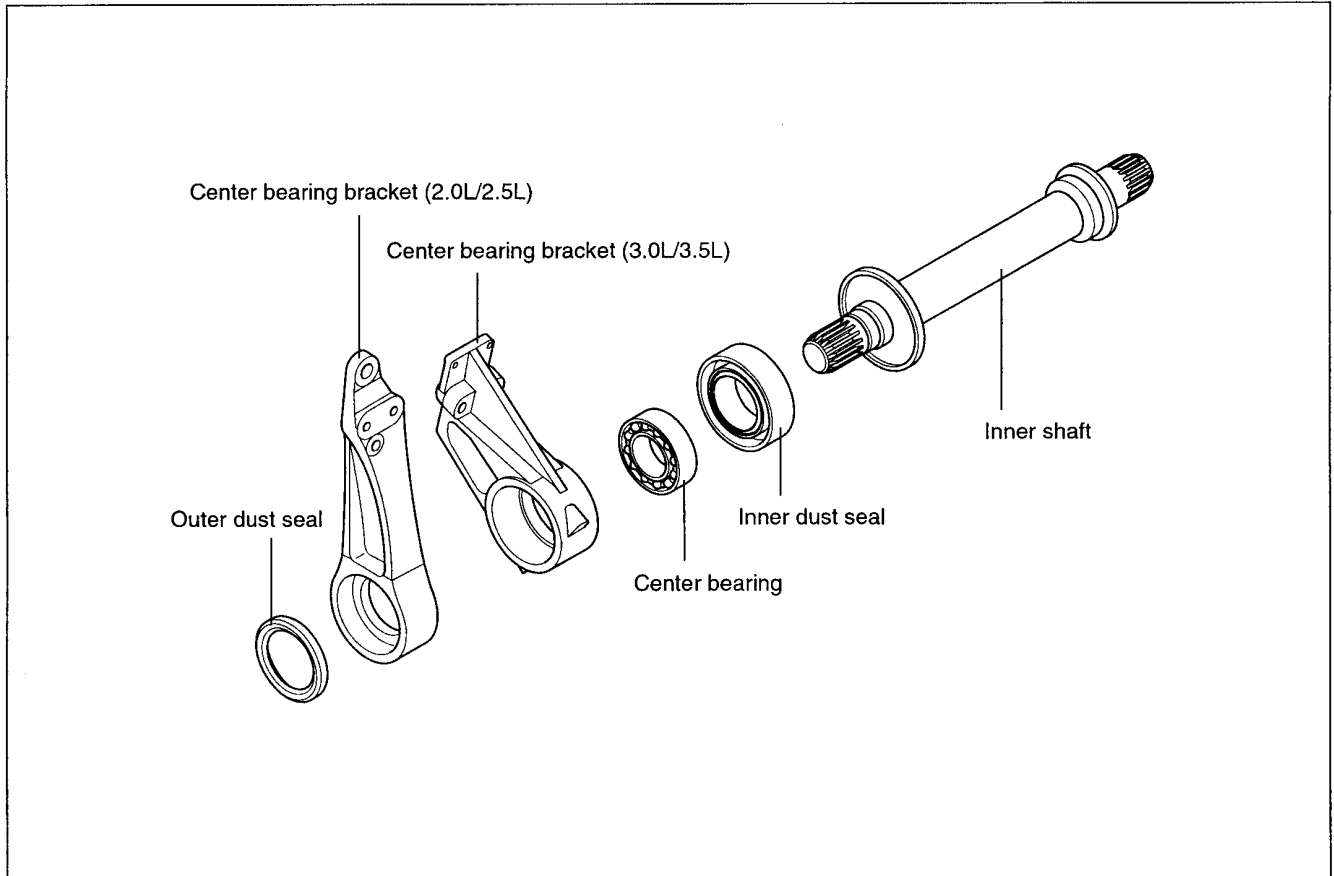
13. Holding the G.I. big clamp near the closing hook, using long nose pliers, position the hole in the clamps free end over the closing hook.



EIB9008A

CENTER BEARING AND INNER SHAFT

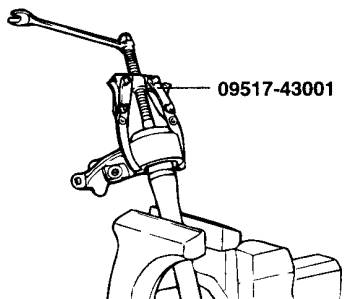
COMPONENTS EIBD2200



EIBD220A

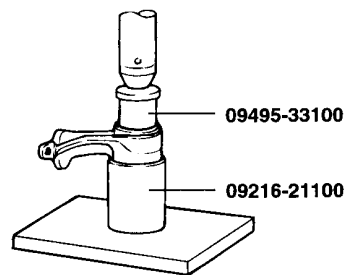
DISASSEMBLY EIBB0150

- Using the special tool(09517-43001), remove the center bearing bracket from the inner shaft.



EIA9351A

- Using the special tools(09495-33100, 09216-21100), press out the center bearing from the center bearing bracket as shown in the illustration.



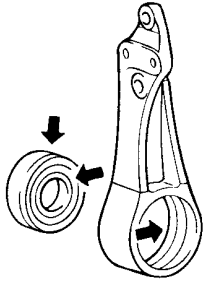
EIBB015A

INSPECTION EIHA3520

- Check the inner shaft for damage, bending or rust.
- Check the inner shaft splines for wear or damage.
- Check the center bearing for scoring, discoloration, and roughness of the roller journal's moving surfaces.

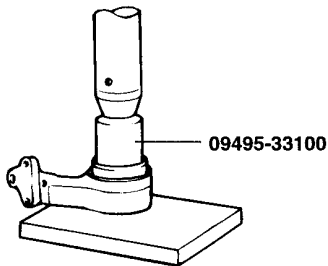
REASSEMBLY EIBB0160

1. Apply multipurpose grease to the center bearing and inside the center bearing bracket.



S5DS016A

2. Using the special tool (09495-33100), press the center bearing into the center bearing bracket.



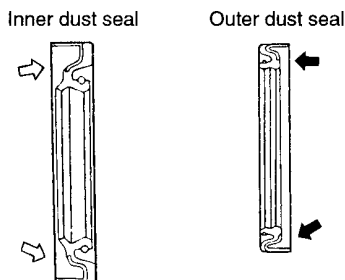
EIA9353A

3. Apply multipurpose grease to the rear surface of all dust seals.

Recommended grease : LIG-2 or Sunlight No.2

Inner dust seal : 7~10 gr. (0.25~0.35 oz)

Outer dust seal : 4~6 gr. (0.14~0.21 oz)

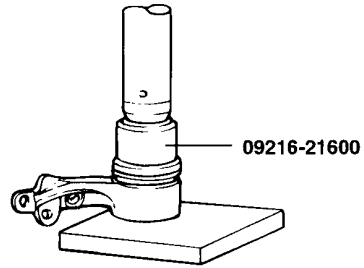


S5DS016C

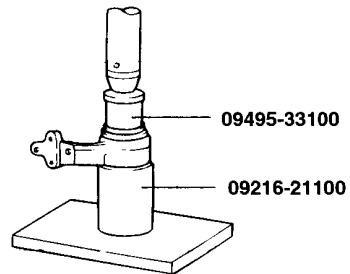
4. Using the special tool, tap in the outer dust seal and inner dust seal in that order until they are flush with the edge of the center bearing bracket.

NOTE

When applying grease, make sure that it does not adhere to anything outside the lip.

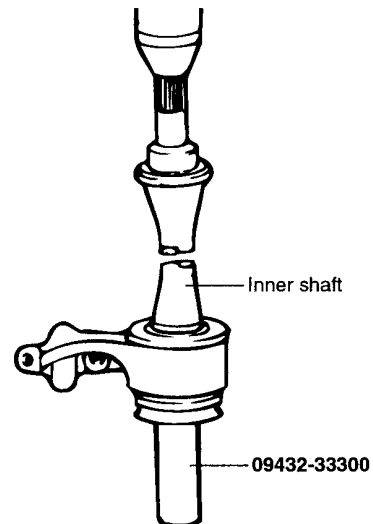


EIBB016A



EIBB016B

5. Using the special tool (09432-33300), support the center bearing as shown in the figure, then press in the inner shaft.

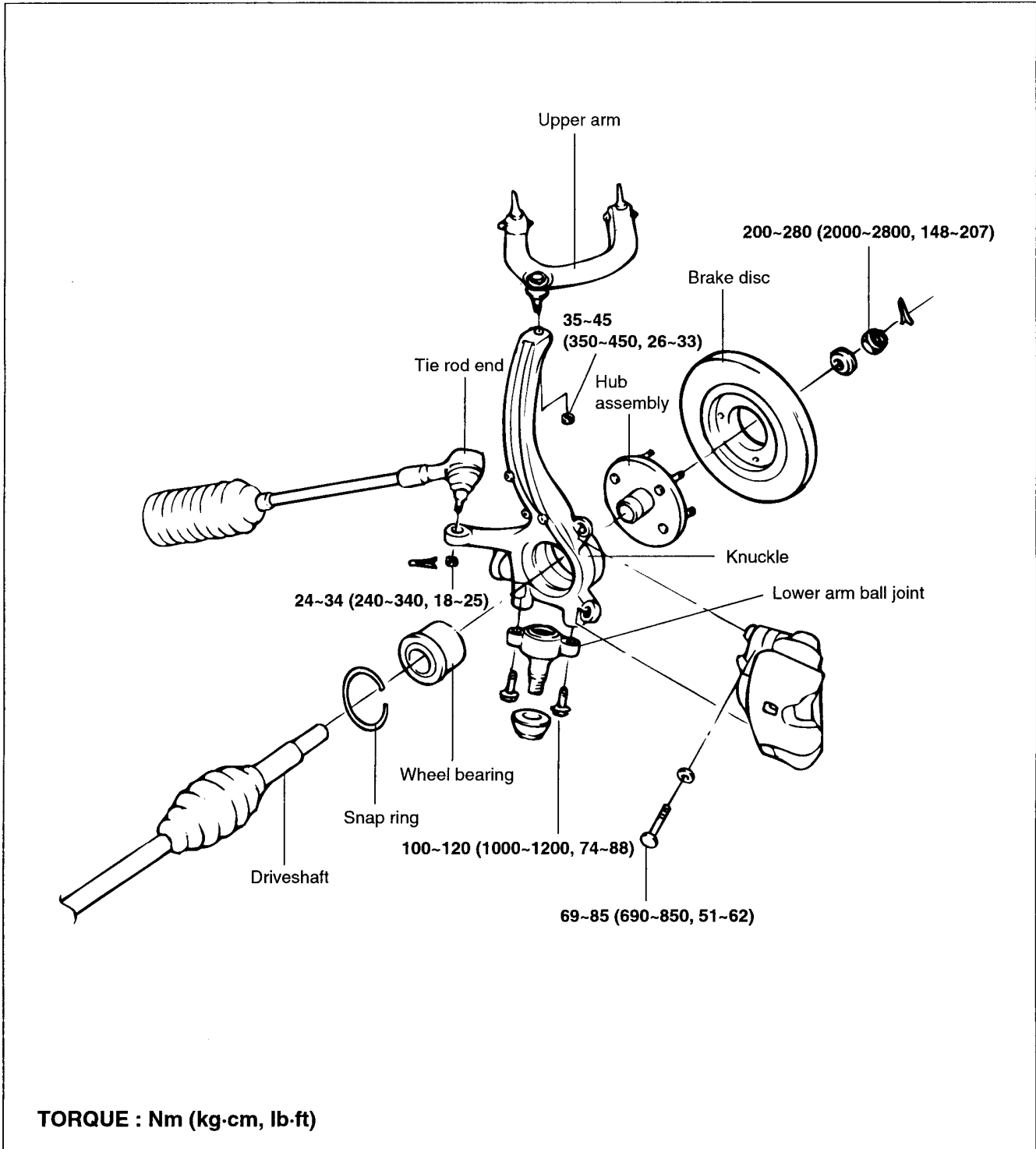


EIA9353C

FRONT AXLE

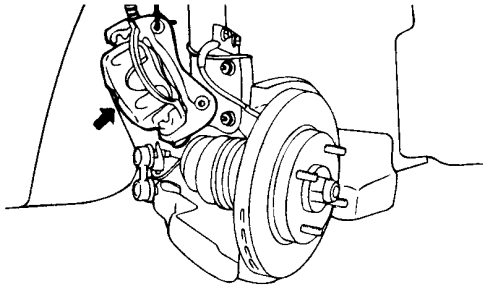
FRONT HUB/KNUCKLE

COMPONENTS EIBD0170



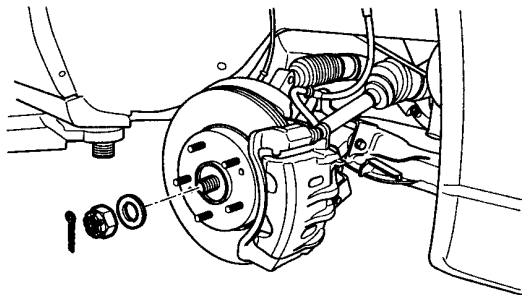
REMOVAL EIBB0180

1. Remove the wheel and tire.
2. Disconnect the wheel speed sensor from the knuckle.
3. Disconnect the brake hose from the knuckle.
4. Remove the caliper assembly and suspend it with wire.



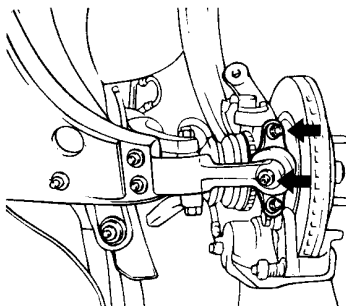
S5DS018A

5. Remove the split pin and driveshaft castle nut from the front hub.



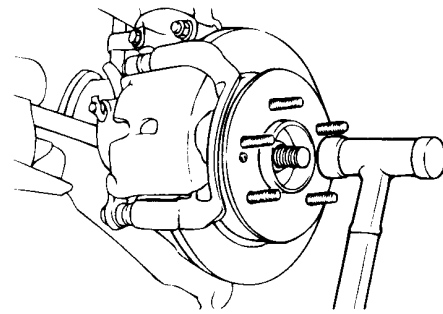
KGX7002A

6. Remove the 2 bolts and disconnect the ball joint from the knuckle.



EIA9210B

7. Using a plastic hammer, disconnect the driveshaft from the axle hub.

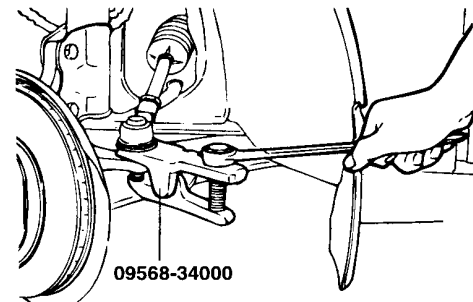


KGKDS01A

8. Using the special tool (09568-34000), disconnect the tie rod end from the knuckle.

NOTE

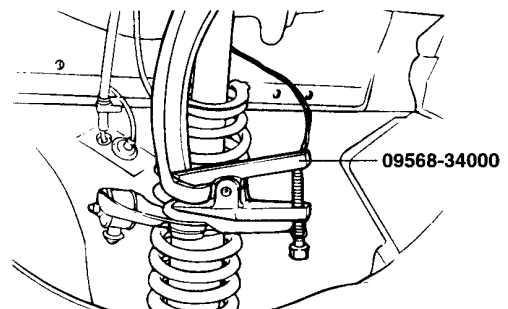
- Be sure to tie the special tool to a nearby part with cord.
- Loosen the nut but do not remove it.



EIDA401A

9. Loosen the upper arm mounting nut but do not remove it.

10. Using the special tool (09568-34000), disconnect the upper arm from the knuckle.



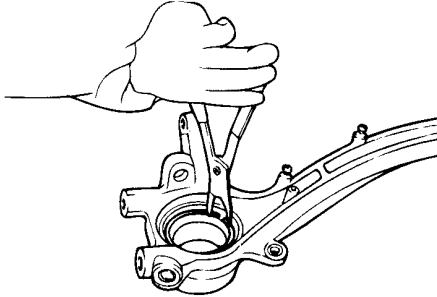
EIA9401B

11. Remove the front axle and knuckle together.

12. Installation is the reverse of removal.

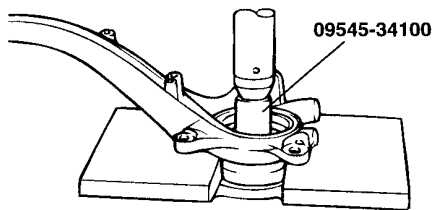
DISASSEMBLY EIBB0190

1. Remove the brake disc from the hub.
2. Remove the snap ring.



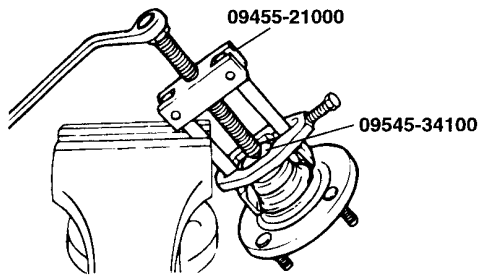
EIA9403A

3. Using the special tool (09545-34100), disconnect the hub from the knuckle.



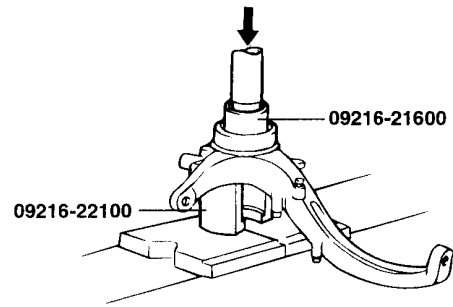
EIA9403B

4. Using the special tools (09455-21000, 09545-34100), remove the wheel bearing inner race from the hub.



S5DS020C

5. Using the special tools (09216-21600, 09216-22100), remove the wheel bearing outer race from the knuckle.



EIA9403D

INSPECTION EIBB0200

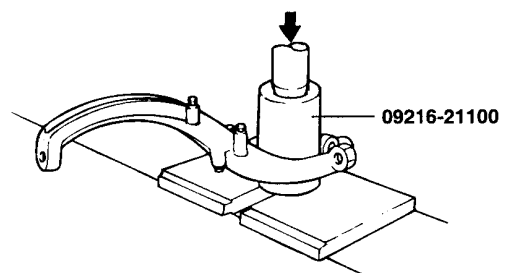
1. Check the hub for cracks and splines for wear.
2. Check the snap ring for cracks or damage.
3. Check the knuckle inner surface for scoring and cracks.

REASSEMBLY EIBB0210

1. Apply a thin coat of multi-purpose grease to the knuckle and bearing contact surface.
2. Using the special tool (09216-21100), press-in the bearing to the knuckle.

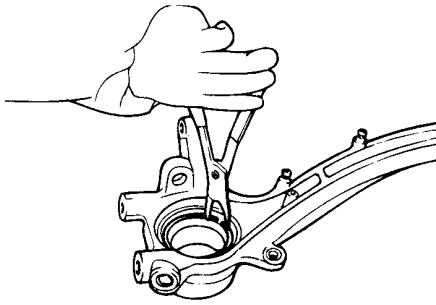
NOTE

- Do not press against the inner race of the wheel bearing because that can cause damage to the bearing assembly.
- Always use a new bearing assembly.



EIA9405A

3. Install the snap ring into the groove of the knuckle.

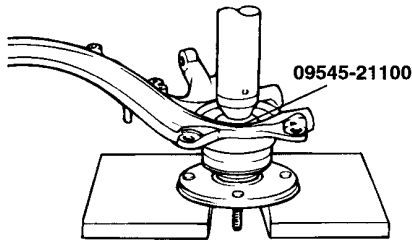


EIA9403A

- Using the special tool (09545-21100), press the hub on to the knuckle.

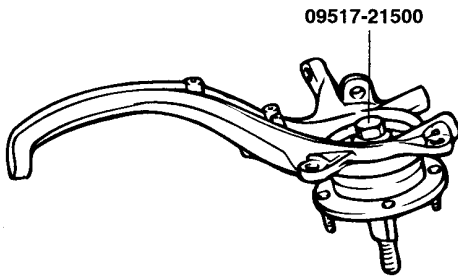
NOTE

Do not press against the outer race of the wheel bearing because that can cause damage to the bearing assembly.



EIBB021A

- Tighten the hub to the knuckle to 200 Nm (2000 kg.cm, 148 lb.ft) with the special tool (09517-21500).

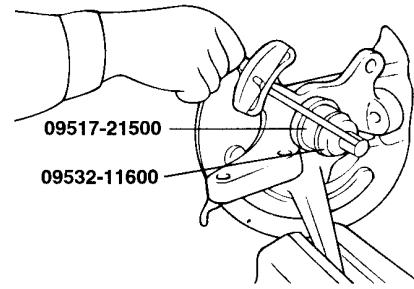


EIA9405D

- Rotate the hub to seat the bearing.
- Measure the wheel bearing starting torque.

Standard value

Starting torque : 1.8 Nm (18 kg·cm, 16 lb-ft) or less

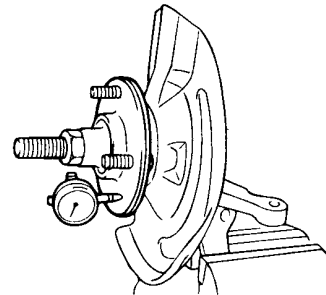


S5DS022D

- Fix a dial gauge and measure the hub end play. Check that it is within the standard value.

Standard value

Hub end play : 0.008 mm (0.0003 in.) or less



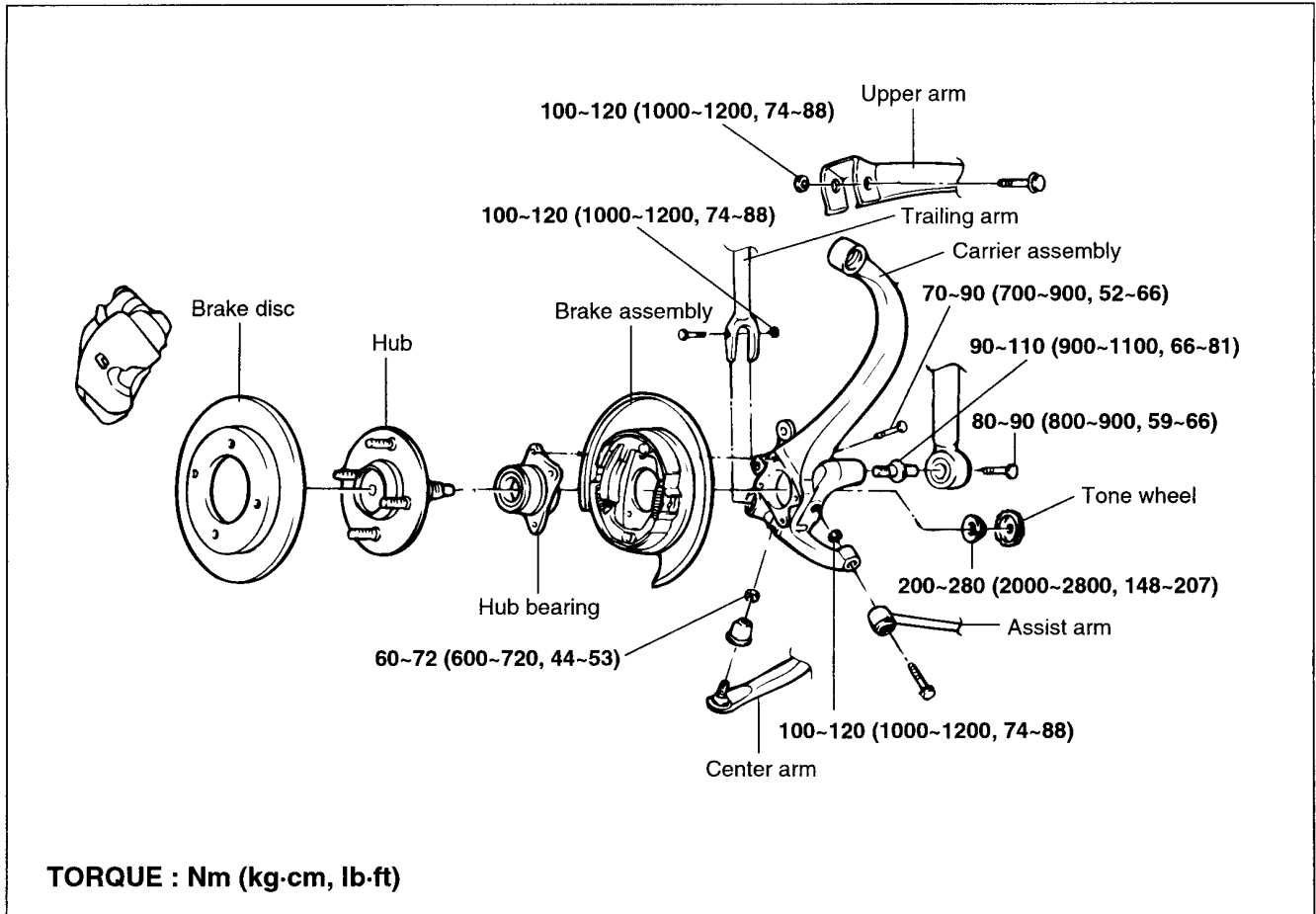
S5DS022E

- Remove the special tool.
- Install the disc to the hub.

REAR AXLE

REAR AXLE/HUB

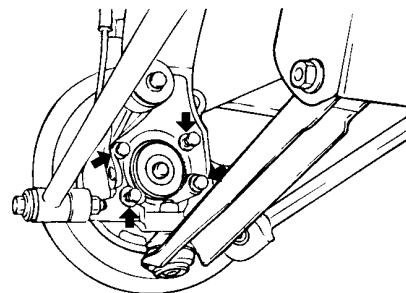
COMPONENTS EIBD0220



EIBD022A

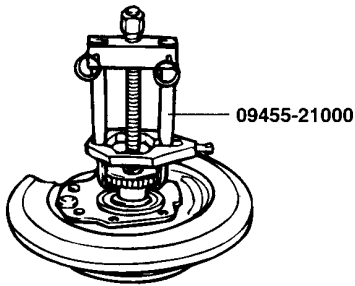
REMOVAL EIBB0230

1. Release the parking brake.
2. Remove the wheel and tire.
3. Remove the wheel speed sensor from the carrier.
4. Remove the caliper assembly from the carrier and suspend it with wire.
5. Remove the brake disc.
6. Remove the rear axle hub mounting bolts (4).

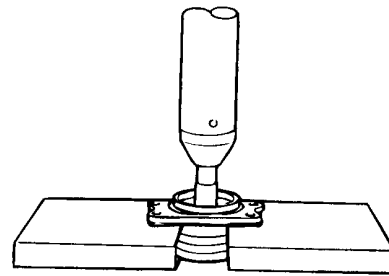


EHA9654B

7. Using the special tool (09455-21000), remove the tone wheel.



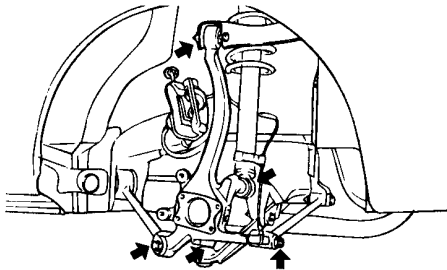
EIA9801B



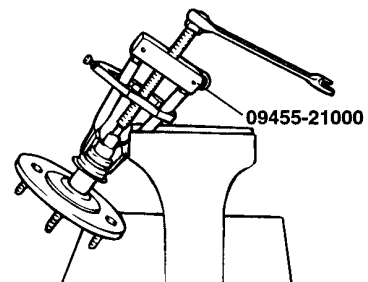
EIA9801E

11. Using the special tool (09455-21000), remove the bearing inner race from the axle hub.

8. Remove the carrier assembly.



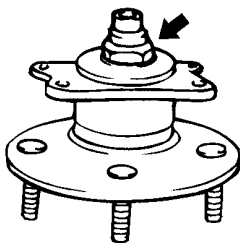
EIA9801C



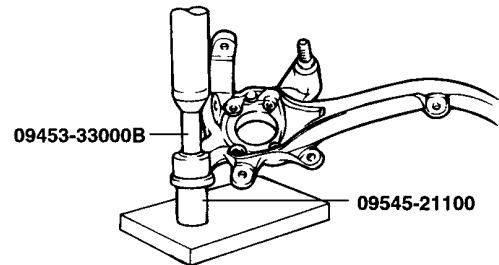
EIA9801F

12. Using the special tools (09453-33000B, 09545-21100), remove the 2 bushings from the carrier.

9. After unstaking the flange nut, remove the nut.



EIA9803B



EIBB023A

10. While supporting the flange area of the bearing outer race, press out the rear axle hub.

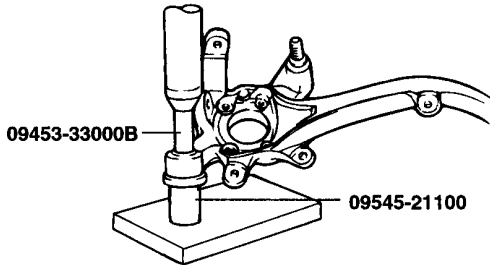
INSPECTION EIBB0240

1. Check the rear hub bearing for wear or damage.
2. Check the rear tone wheel for chipped teeth.
3. Check the hub inner surface for scoring.
4. Check the carrier for crack.

INSTALLATION

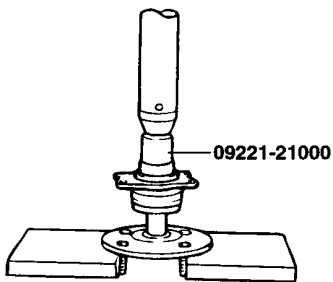
EIBB0250

- Using the special tools (09453-33000B, 09545-21100) press-in the 2 bushings to the carrier.



EIBB023A

- Apply a thin coat of multi-purpose grease to the hub and bearing contact surface.
- Using the special tool (09221-21000), press-in the bearing to the hub.

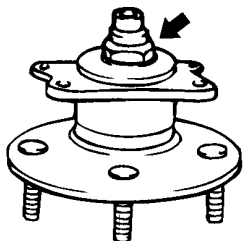


EIA9803A

NOTE

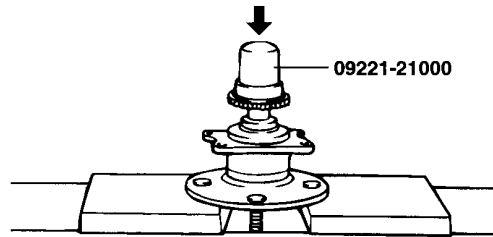
- Do not press against the outer race of the bearing because that can cause the damage to the bearing assembly.
- Always use a new bearing assembly.

- After tightening the flange nut, stake the nut to meet the concave portion of the spindle.



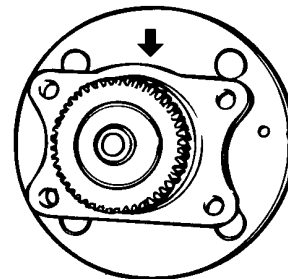
EIA9803B

- Using the special tool (09221-21000), press-in the tone wheel.



EIA9803C

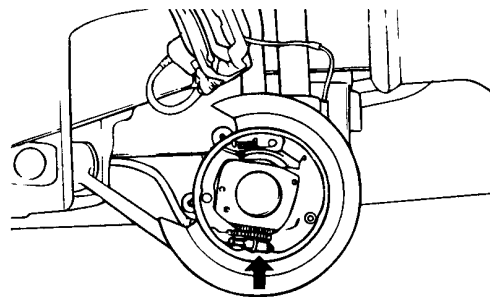
- Fix the hub and bearing assembly to the brake backing plate so that the rounded area of the bearing outer race is placed facing upward.



EIA9803D

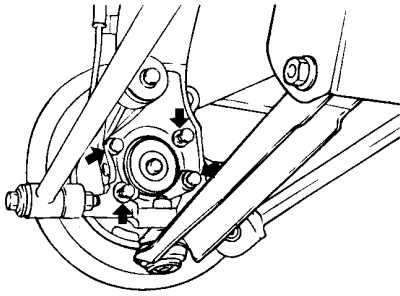
NOTE

If it is difficult to fix, adjust the parking brake adjusting nut to enlarge the space between the shoe and lining assembly.



EIA9803E

7. Tighten the 4 bolts to the specified torque.

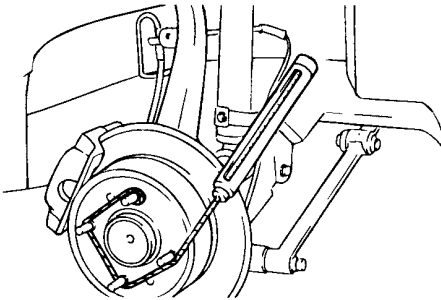


EHA9654B

8. Rotate the hub to seat the bearing.
9. Using a spring balance, measure the wheel bearing starting torque.

Standard value

Starting torque : 28N (18 kg·cm, 16 lb·in) or less

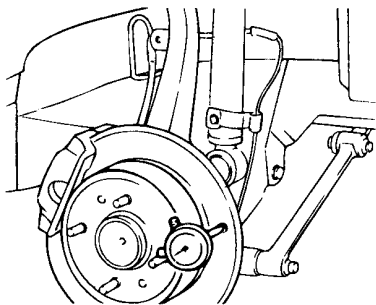


EIA9803G

10. Fix a dial gauge and measure the hub end play. Check that it is within the standard value.

Standard value

Hub end play : 0.008 mm (0.0003 in.) or less



EIA9803H

