

9. Front Differential

A: DISASSEMBLY

1) Remove right and left snap rings ① from differential, and then remove two axle drive shafts ②.

NOTE:

During reassembly, reinstall each axle drive shaft in the same place from which it was removed.

2) Loosen twelve bolts (3) and remove hypoid drive gear (4).



3) Drive out straight pin (5) from differential assembly toward hypoid driven gear.

ST 899904100 REMOVER

4) Pull out pinion shaft (6), and remove differential bevel pinion (7) and gear (8) and washer (9).





5) Remove roller bearing using ST. ST 399527700 PULLER SET

ВЗМ0099А

B: ASSEMBLY

1) Install bevel gear and bevel pinion together with washers, and insert pinion shaft 1.

NOTE:

Face the chamfered side of washer toward gear.



2) Measure backlash between bevel gear and pinion. If it is not within specifications, install a suitable washer to adjust it.

Standard backlash:

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0.13 — 0.18 mm (0.0051 — 0.0071 in)
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 ST1
 498247001
 MAGNET BASE

 ST2
 498247100
 DIAL GAUGE

NOTE:

Be sure the pinion gear tooth contacts adjacent gear teeth during measurement.

Washer (38.1 x 50 x t)	
Part No.	Thickness mm (in)
803038021	0.925 — 0.950 (0.0364 — 0.0374)
803038022	0.975 — 1.000 (0.0384 — 0.0394)
803038023	1.025 — 1.050 (0.0404 — 0.0413)

SERVICE PROCEDURE



3) Align pinion shaft and differential case at their holes, and drive straight pin (5) into holes from the hypoid driven gear side, using ST.

ST 899904100 REMOVER NOTE:

Lock straight pin after installing.



4) Install roller bearing (40 x 80 x 19.75) to differential case.

NOTE:

Be careful because roller bearing outer races are used as a set.

ST1 499277100 BUSH 1-2 INSTALLER ST2 398497701 ADAPTER

5) Install hypoid driven gear ④ to differential case ⑩ using twelve bolts ③.

Tightening torque: 62±5 № m (6.3±0.5 kg-m, 45.6±3.6 ft-lb)



SERVICE PROCEDURE



6) Position drive axle shaft in differential case and hold it with outer snap ring (28). Using a thickness gauge, measure clearance between the shaft and case is within specifications.

Clearance:

0 — 0.2 mm (0 — 0.008 in)

If it is not within specifications, replace snap ring with a suitable one.

Snap ring (Outer-28)	
Part No.	Thickness mm (in)
805028011	1.05 (0.0413)
805028012	1.20 (0.0472)