

9. Front Differential

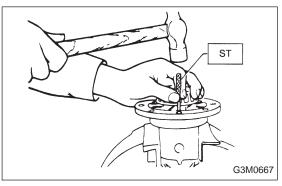
A: DISASSEMBLY

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

NOTE:

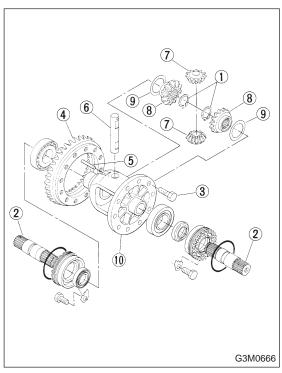
During reassembly, reinstall each axle drive shaft in the same place from which it was removed.

2) Loosen twelve bolts ③ and remove hypoid drive gear④.

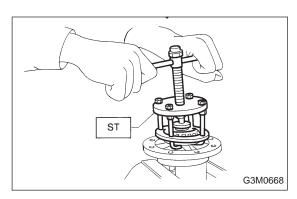


3) Drive out straight pin (5) from differential assembly toward hypoid driven gear.

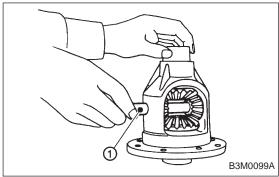
ST 899904100 REMOVER



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

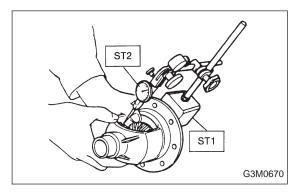


B: ASSEMBLY

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:

0.13 — 0.18 mm (0.0051 — 0.0071 in)

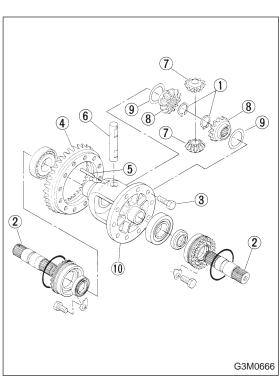
ST1 498247001 MAGNET BASE ST2 498247100 DIAL GAUGE

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

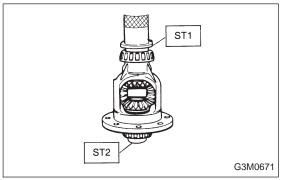


3) Align pinion shaft and differential case at their holes, and drive straight pin ⑤ into holes from the hypoid driven gear side, using ST.

ST 899904100 REMOVER

NOTE:

Lock straight pin after installing.



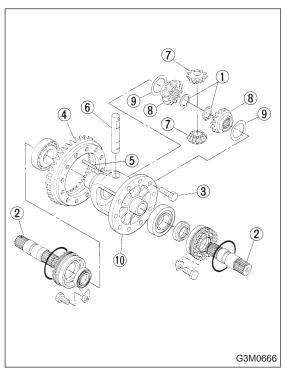
4) Install roller bearing (40 x 80 x 19.75) to differential case.

NOTE:

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

ST1 499277100 BUSH 1-2 INSTALLER

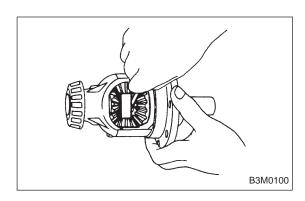
ST2 398497701 ADAPTER



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

Tightening torque:

62±5 N·m (6.3±0.5 kg-m, 45.6±3.6 ft-lb)



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:

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)