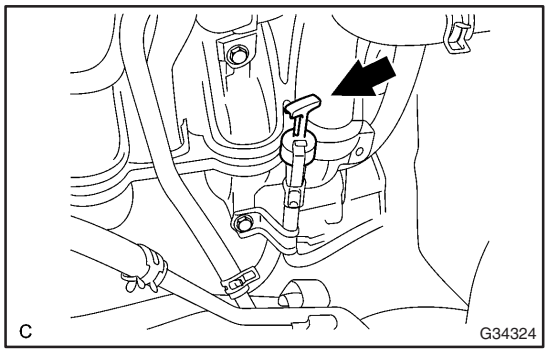
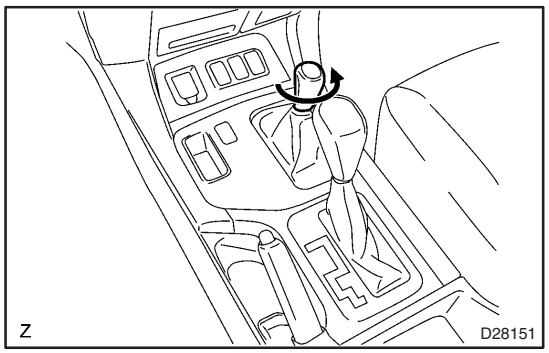
# REPLACEMENT

**1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL (SEE PAGE14–19)**



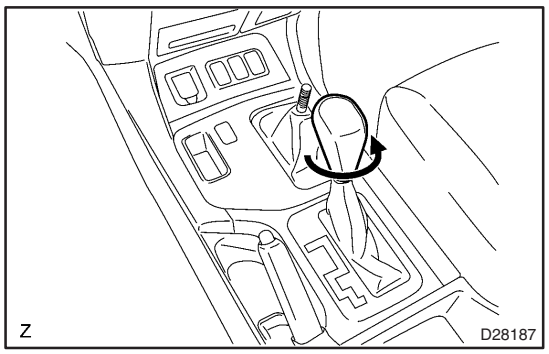

**2. REMOVE TRANSMISSION OIL LEVEL GAGE SUB–ASSY**

(a) Remove the transmission oil level gauge.




**3. REMOVE SHIFT LEVER KNOB SUB–ASSY**

(a) Remove the floor shift shift lever knob sub–assy.

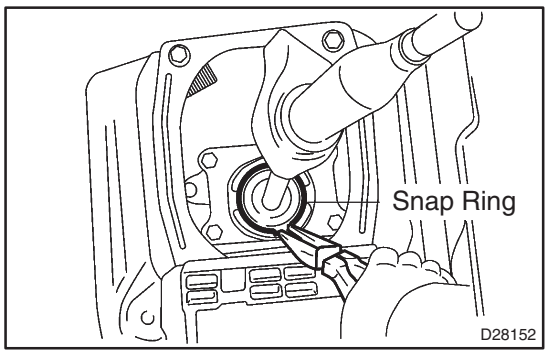



(b) Remove the shift lever knob sub–assy.

**4. REMOVE CONSOLE UPPER PANEL GARNISH NO.1 (See Pub. No. RM990E, page 71–13)**

**5. REMOVE CONSOLE UPPER PANEL GARNISH NO.2 (See Pub. No. RM990E, page 71–13)**

**6. REMOVE CONSOLE PANEL UPPER ASSY (See Pub. No. RM990E, page 71–13)**

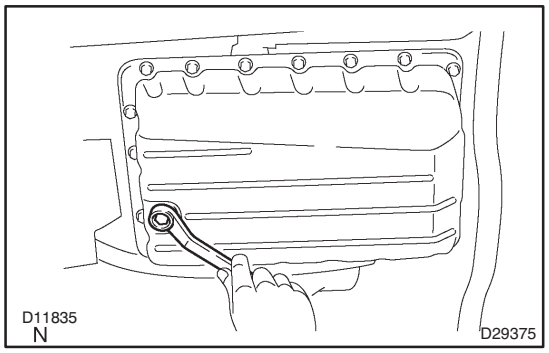



**7. REMOVE TRANSFER HIGH & LOW SHIFT LEVER ASSY (W/ TRANSFER HIGH AND LOW SHIFT LEVER)**

(a) Using needle–nose pliers, remove the snap ring and pull out the transfer high & low shift lever assy.

**8. REMOVE ENGINE UNDER COVER ASSY REAR (SEE PAGE 14–19)**

**9. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1 (SEE PAGE 14–19)**



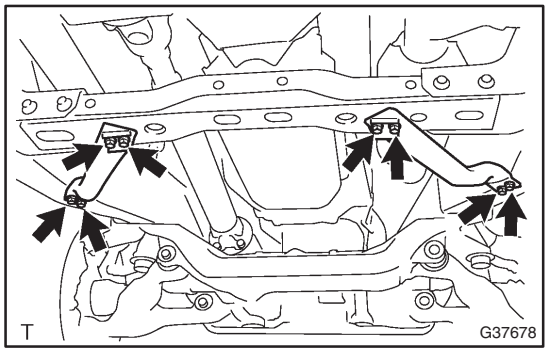

**10. DRAIN AUTOMATIC TRANSMISSION FLUID**

(a) Remove the drain plug and drain the fluid.

(b) Install the drain plug with a new gasket.
**Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)**

**11. REMOVE PROPELLER SHAFT ASSY (SEE PAGE 30–2)**

**12. REMOVE PROPELLER SHAFT ASSY FRONT (See Pub. No. RM990E, page 30–4)**



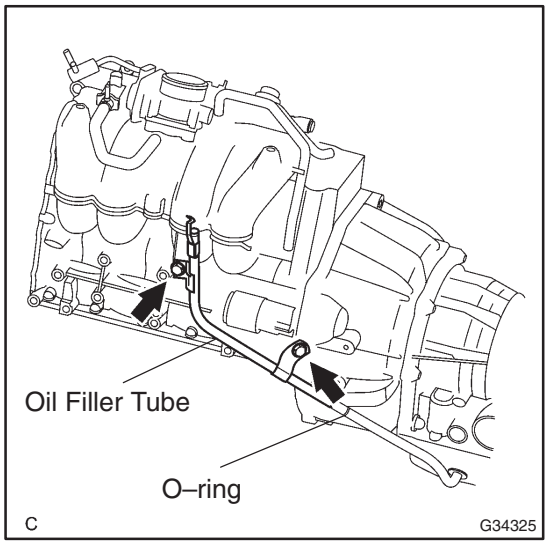

**13. REMOVE FRONT SUSPENSION MEMBER BRACKET LH**

(a) Remove the 4 bolts and suspension member bracket LH.

**14. REMOVE FRONT SUSPENSION MEMBER BRACKET**

(a) Remove the 4 bolts and suspension member bracket.

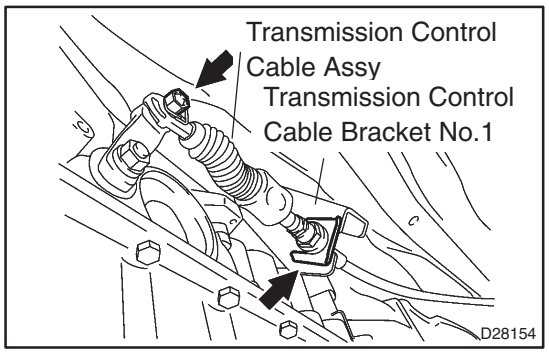
**15. REMOVE EXHAUST PIPE ASSY FRONT (SEE PAGE 15–3)**




**16. REMOVE TRANSMISSION OIL FILLER TUBE SUB–ASSY**

(a) Remove the 2 bolts and transmission oil filler tube sub–assy.

(b) Remove the O–ring from the oil filler tube.

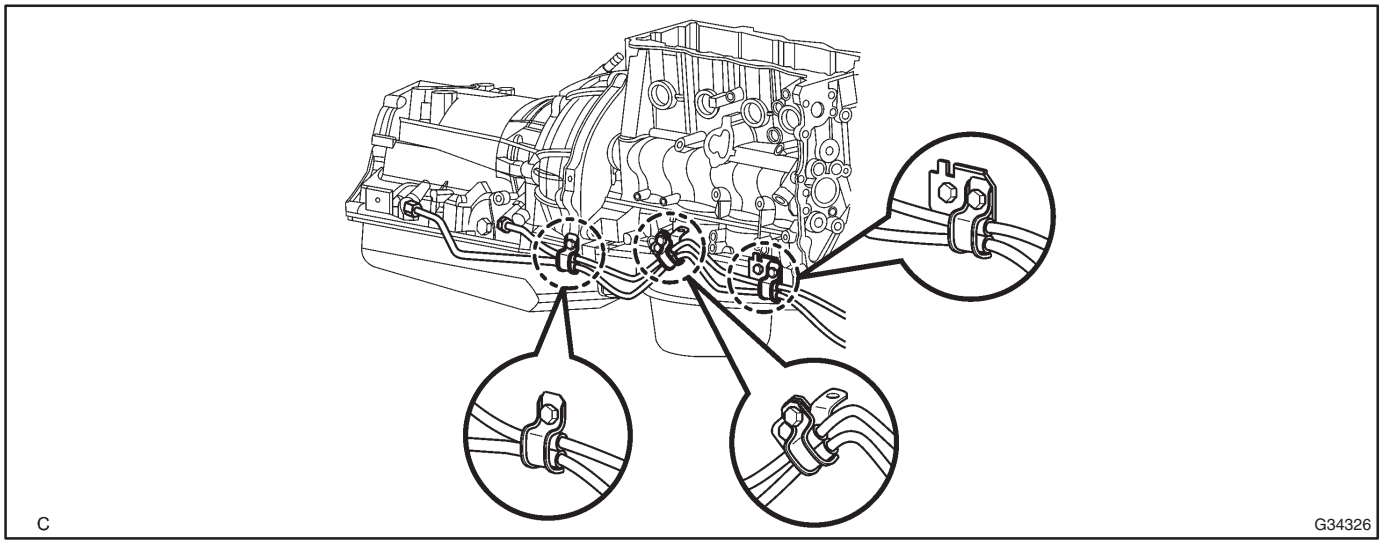


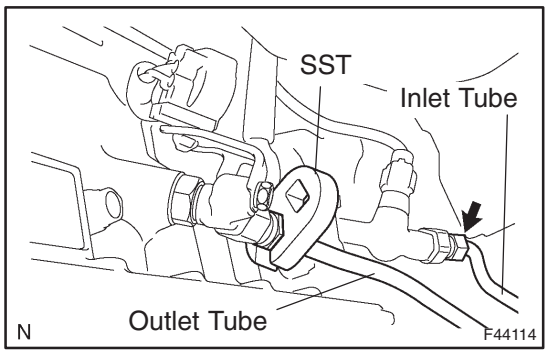

**17. SEPARATE TRANSMISSION CONTROL CABLE ASSY**

(a) Remove the nut and clip, and then separate the transmission control cable assy from the automatic transmission.

**18. DISCONNECT OIL COOLER OUTLET TUBE NO.1**

(a) Remove the 3 bolts and the 3 clamps.

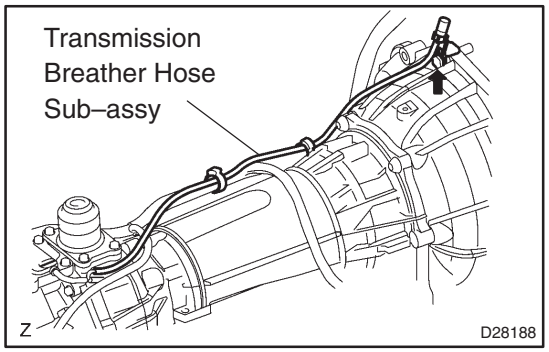



(b) Using SST, disconnect the 2 oil cooler outlet tube No.1.
SST 09023–12701

**19. REMOVE OIL COOLER INLET TUBE NO.1**

(a) Using SST, disconnect the 2 oil cooler inlet tube No.1.
SST 09023–12701

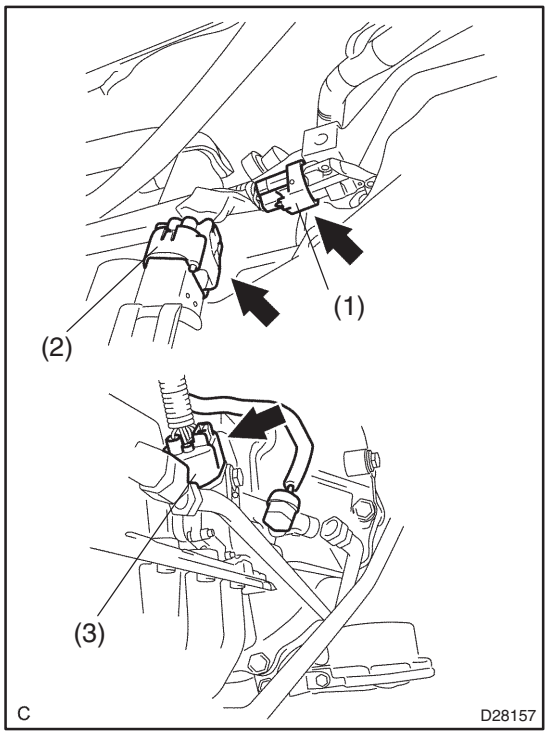



**20. SEPARATE TRANSFER BREATHER HOSE SUB–ASSY**

(a) Separate the transfer breather hose sub–assy from the transmission assy.

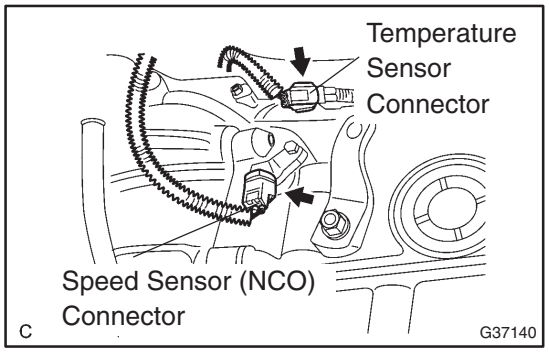
HINT:

The breather hose bracket is tightened together with the transmission housing.

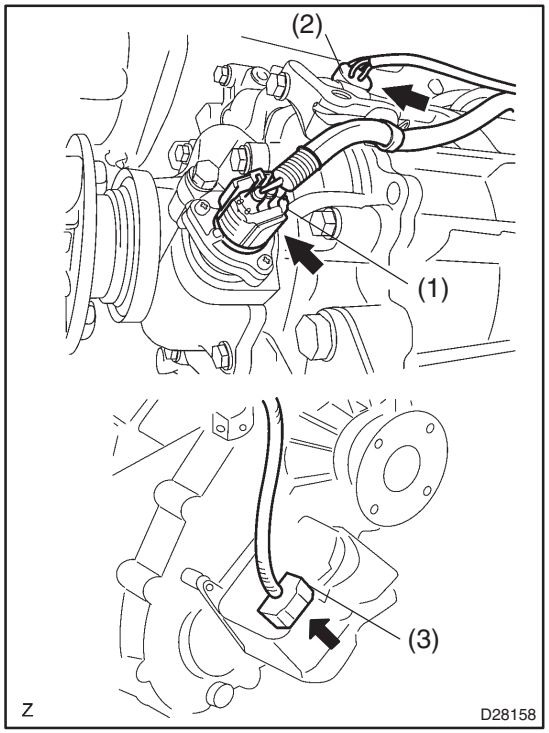



## 21. DISCONNECT CONNECTOR

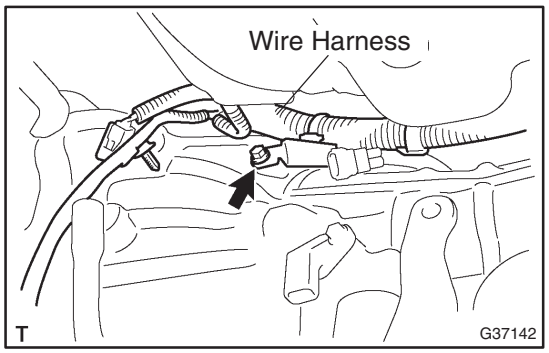
(a) Transmission side:
- (1) Disconnect the speed sensor SP2 connector.
- (2) Disconnect the transmission wire connector.
- (3) Disconnect the park/neutral position switch assy connector.




- (4) Disconnect the temperature sensor connector.
- (5) Disconnect the speed sensor NCO connector.

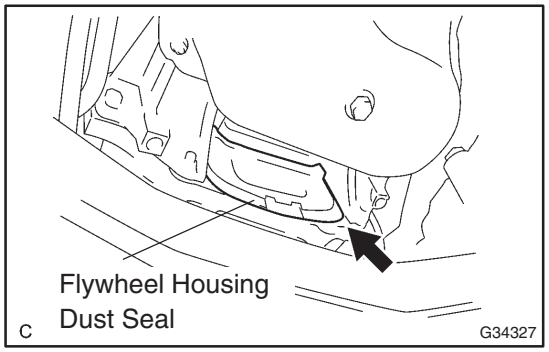



(b) Transfer side:
- (1) Disconnect the speedometer sensor connector.
- (2) Disconnect the indicator No.3 switch connector. (Diff. lock)
- (3) Disconnect the transfer shift actuator connector. (w/ transfer shift actuator)
- (4) Disconnect the indicator No.1 switch connector. (Low)
- (5) Disconnect the indicator No.2 switch connector. (Neutral)



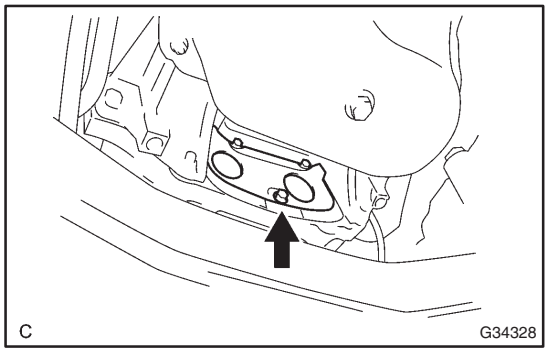

**22. DISCONNECT WIRE HARNESS**

(a) Remove the bolt and wire harness from the automatic transmission.




**23. REMOVE FLYWHEEL HOUSING DUST SEAL**

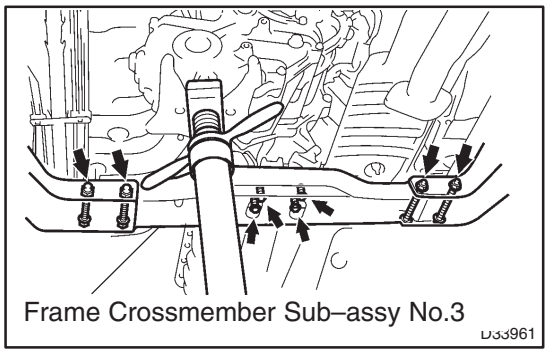
(a) Remove the flywheel housing dust seal.




**24. REMOVE DRIVE PLATE & TORQUE CONVERTER CLUTCH SETTING BOLT**

(a) Turn the crankshaft to gain access.

(b) Remove the 6 bolts while holding the crankshaft pulley set bolt with a wrench.

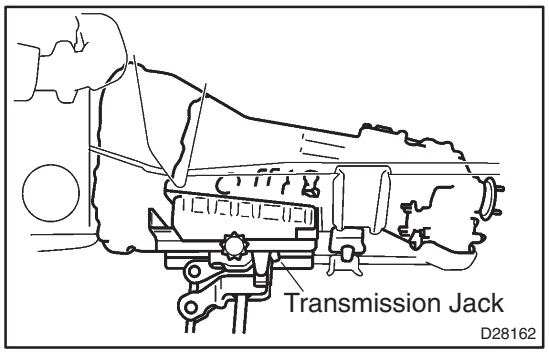



**25. REMOVE FRAME CROSSMEMBER SUB–ASSY NO.3**

(a) Support the transmission rear side with a support stand.

(b) Remove the 4 nuts, 8 bolts and frame crossmember sub–assy No.3.

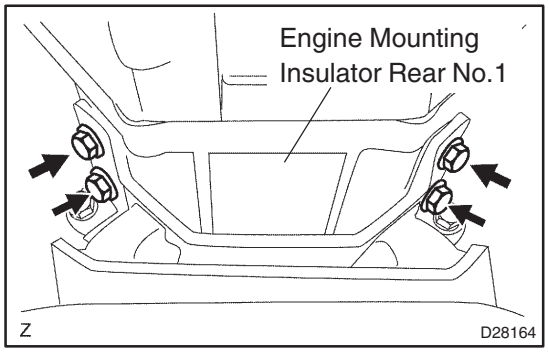
**26. REMOVE STARTER ASSY (SEE PAGE 19–7)**




**27. SUPPORT AUTOMATIC TRANSMISSION ASSY**

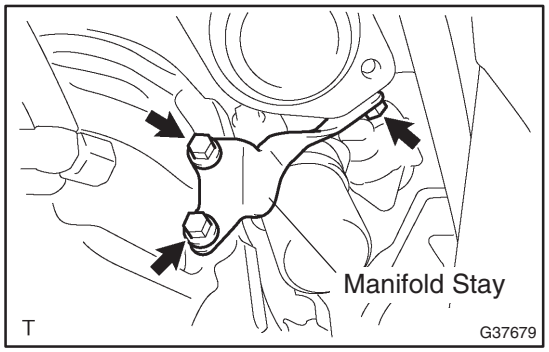
(a) Support the transmission with a transmission jack.

(b) Remove the support stand from the transmission rear side.



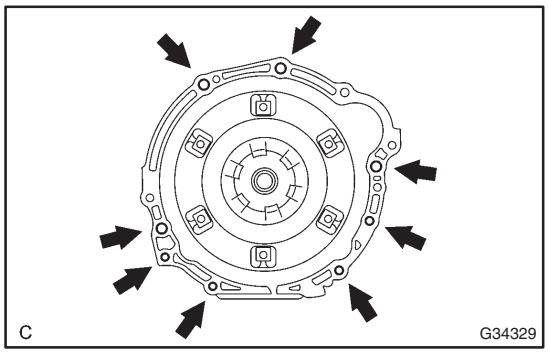

**28. REMOVE ENGINE MOUNTING INSULATOR REAR NO.1**

(a) Remove the 4 bolts and engine mounting insulator rear No.1.




**29. REMOVE MANIFOLD STAY**

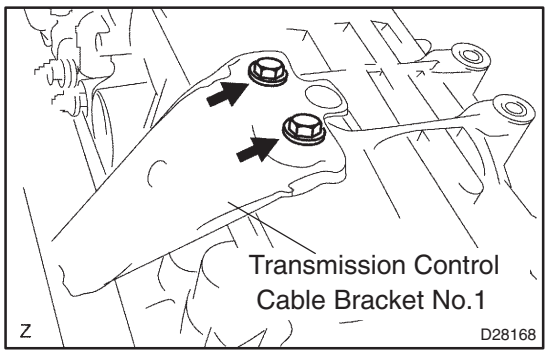
(a) Remove the 3 bolts and manifold stay.




**30. REMOVE AUTOMATIC TRANSMISSION ASSY**

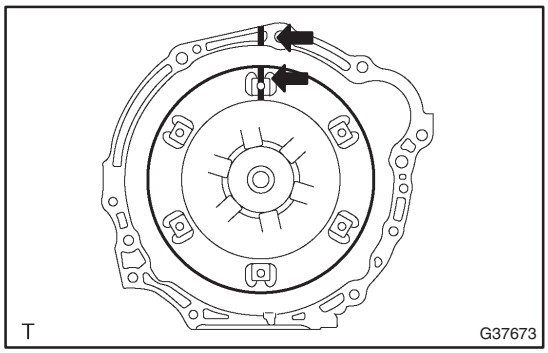
(a) Remove the 7 bolts and transfer breather hose bracket.

(b) Separate and remove the automatic transmission assy.




**31. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.1**

(a) Remove the 2 bolts and transmission control cable bracket No.1 from the transmission assy.




**32. REMOVE TORQUE CONVERTER CLUTCH ASSY**

(a) Put matchmarks on the transmission case and torque converter clutch assy.

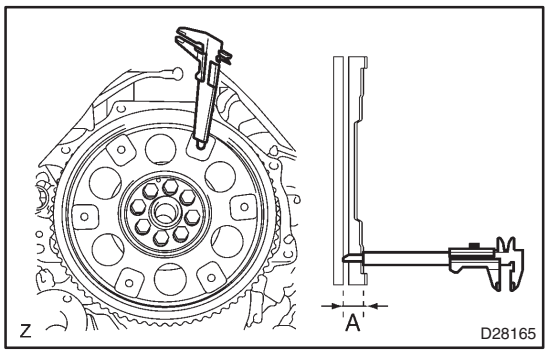
(b) Remove the torque converter clutch assy from the automatic transmission assy.

**33. INSPECT TORQUE CONVERTER CLUTCH ASSY (See Pub. No. RM990E, page 40–45)**

SST 09350–32014 (09351–32010, 09351–32020)

**34. REMOVE TRANSFER ASSY (SEE PAGE 31–23)**

**35. INSTALL TRANSFER ASSY (SEE PAGE 31–23)**



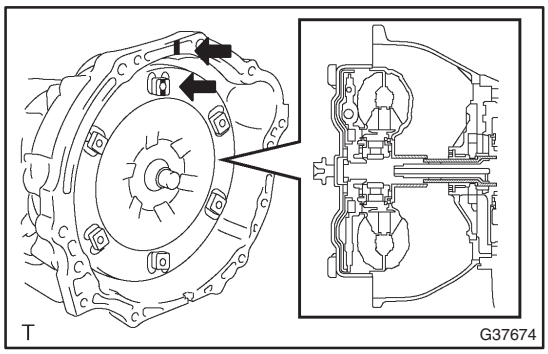

**36. INSTALL TORQUE CONVERTER CLUTCH ASSY**

(a) Install the torque converter clutch assy to the transmission housing.

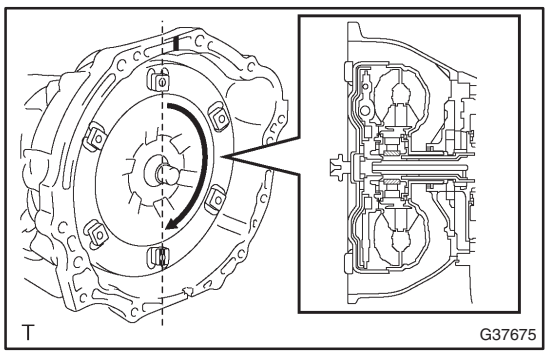
(b) Using vernier calipers, measure dimension ”A” between the transmission fitting part and the converter fitting part of the drive plate.

**Standard:**

**A: 31.75 mm (1.2500 in.)**



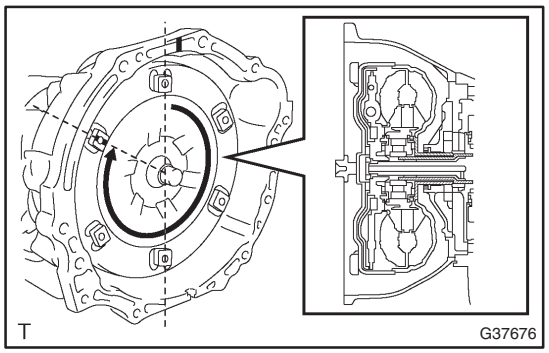

(c) Aligning the matchmarks on the transmission case and torque converter clutch assy, engage the splines of the input shaft and turbine runner.




(d) Engage the splines of the stator shaft and stator while turning the torque converter clutch assy.

HINT:

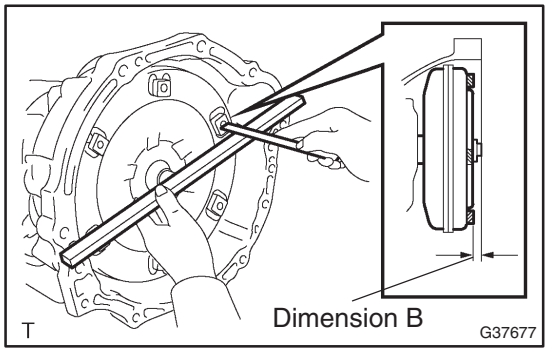
Turn the torque converter clutch assy approximately 180°.




(e) Turn the torque converter clutch assy and align the matchmarks on the torque converter clutch assy and transmission case to engage the key of the oil pump drive gear into the slot on the torque converter clutch assy.

**NOTICE:**

**Do not push on the torque converter when aligning the matchmarks.**

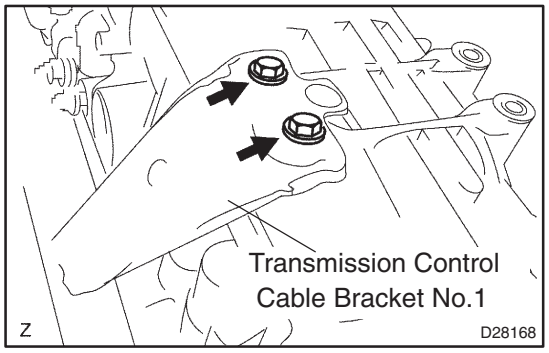



(f) Using calipers and a straight edge, measure dimension B shown in the illustration measured in step (b).

**Standard distance: A + 1 mm or more**

**NOTICE:**

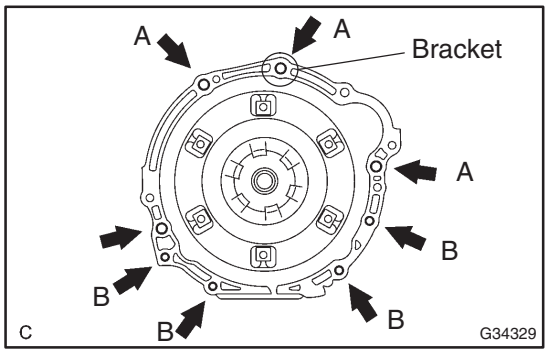
**Do not add the thickness of the straight edge.**




**37. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.1**

(a) Install the transmission control cable bracket No.1 on the transmission assy with the 2 bolts.

**Torque: 28 N·m (286 kgf·cm, 21 ft·lbf)**




**38. INSTALL AUTOMATIC TRANSMISSION ASSY**

(a) Install the automatic transmission assy and transfer breather hose bracket to the engine with the 7 bolts.

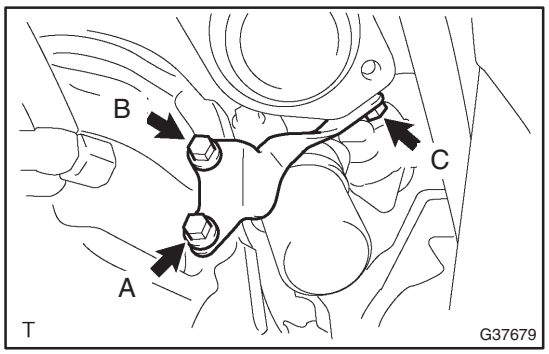
**Torque:**

**Bolt A: 71 N·m (724 kgf·cm, 54 ft·lbf)**

**Bolt B: 37 N·m (377 kgf·cm, 27 ft·lbf)**

HINT:

The breather hose bracket is tightened together with the transmission hosing.




**39. INSTALL MANIFOLD STAY**

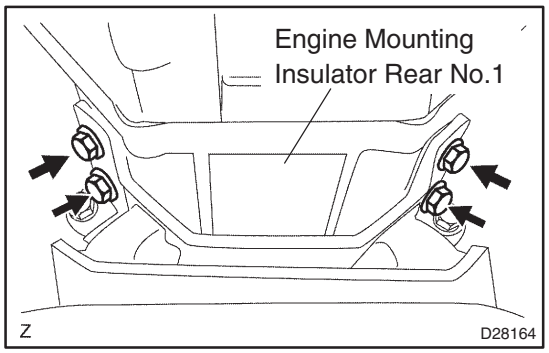
(a) Install manifold stay with the 3 bolts.

**Torque:**

**Bolt A: 71 N·m (724 kgf·cm, 54 ft·lbf)**

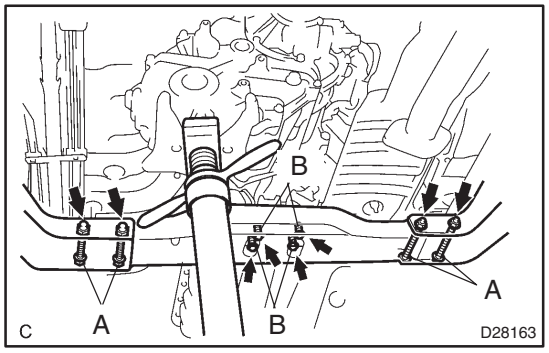
**Bolt B: 44 N·m (449 kgf·cm, 32 ft·lbf)**

**Bolt C: 30 N·m (306 kgf·cm, 22 ft·lbf)**




**40. INSTALL ENGINE MOUNTING INSULATOR REAR NO.1**

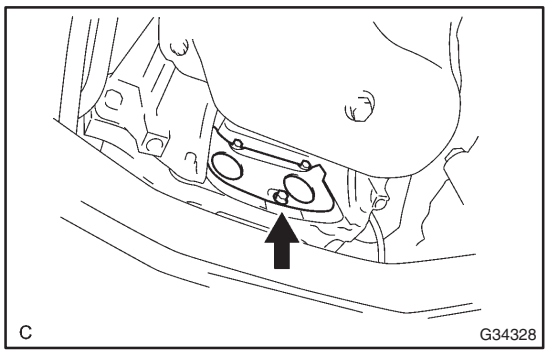
(a) Install the engine mounting insulator rear No.1 to the automatic transmission assy with the 4 bolts.
**Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)**




**41. INSTALL FRAME CROSSMEMBER SUB–ASSY NO.3**

(a) Install the frame crossmember sub–assy No.3 on the automatic transmission assy with the 8 bolts and 4 nuts.
**Torque:**
**Bolt A: 72 N·m (735 kgf·cm, 53 ft·lbf)**
**Bolt B: 18 N·m (184 kgf·cm, 13 ft·lbf)**

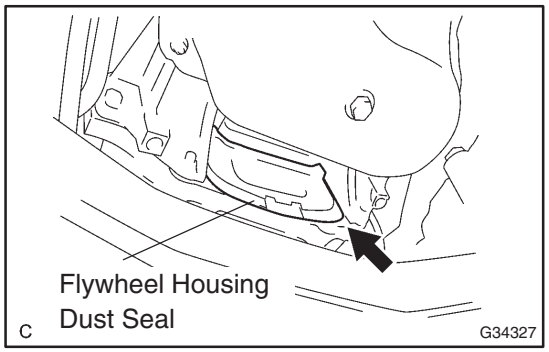
**42. INSTALL STARTER ASSY (SEE PAGE 19–7)**




**43. INSTALL DRIVE PLATE & TORQUE CONVERTER CLUTCH SETTING BOLT**

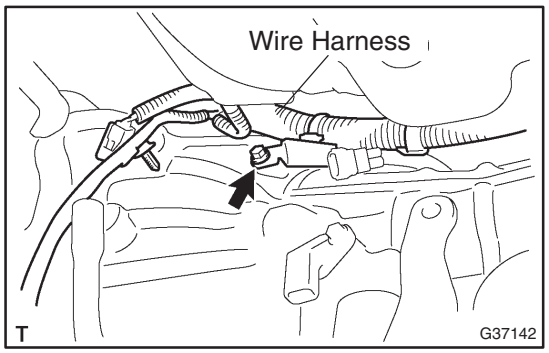
(a) Install the 6 torque converter clutch mounting bolts.
**Torque: 48 N·m (489 kgf·cm, 35 ft·lbf)**

HINT:
First install the black colored bolt and then the remaining 5 bolts.



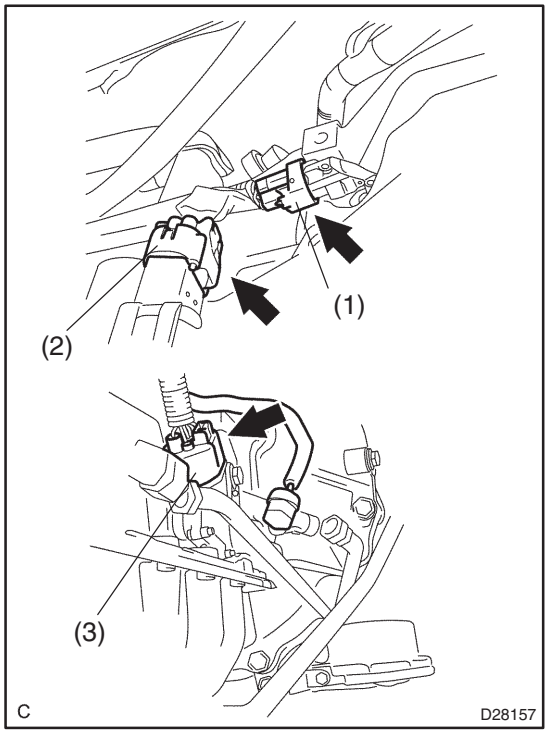

**44. INSTALL FLYWHEEL HOUSING DUST SEAL**

(a) Install the flywheel housing dust seal.



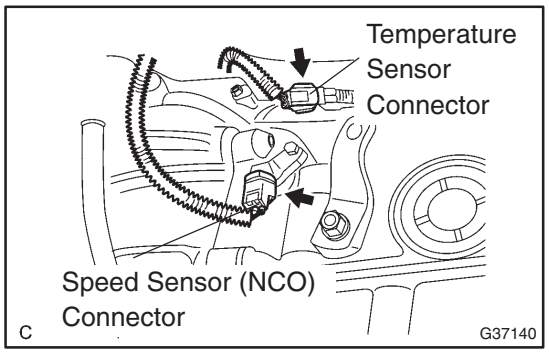

**45. CONNECT WIRE HARNESS**

(a) Install the wire harness with the bolt.
**Torque: 8.0 N·m (83 kgf·cm, 71 in.·lbf)**

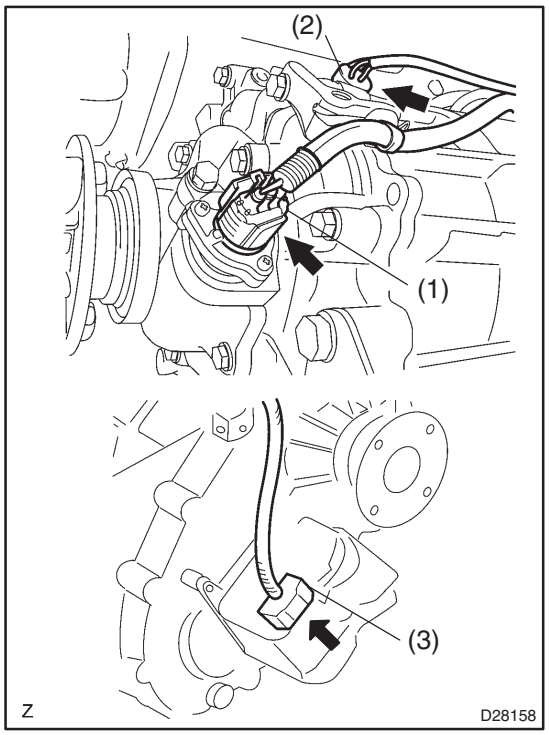



**46. CONNECT CONNECTOR**

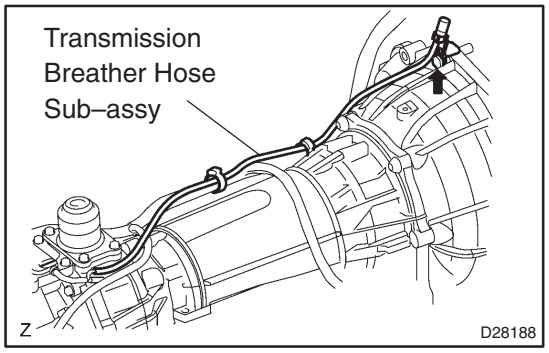
(a) Transmission side:
(1) Connect the speed sensor connector. (SP2)
(2) Connect the transmission wire connector.
(3) Connect the park/neutral position switch assy connector.




(4) Connect the temperature sensor connector.
(5) Connect the speed sensor connector. (NCO)




(b) Transfer side:
(1) Connect the speedometer sensor connector.
(2) Connect the indicator No.3 switch connector. (Diff. lock)
(3) Connect the transfer shift actuator connector. (w/ transfer shift actuator)
(4) Connect the indicator No.1 switch connector. (Low)
(5) Connect the indicator No.2 switch connector. (Neutral)

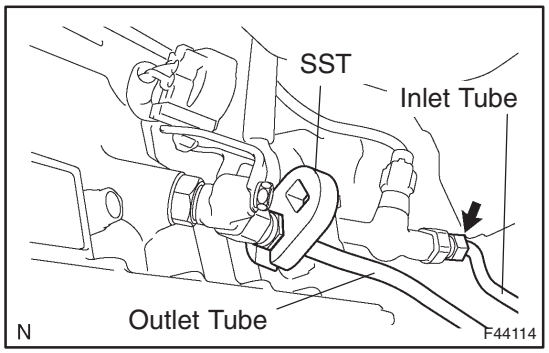



**47. INSTALL TRANSFER BREATHER HOSE SUB–ASSY**

(a) Install the transfer breather hose sub–assy.

HINT:

The breather hose bracket is tightened together with the transmission housing.



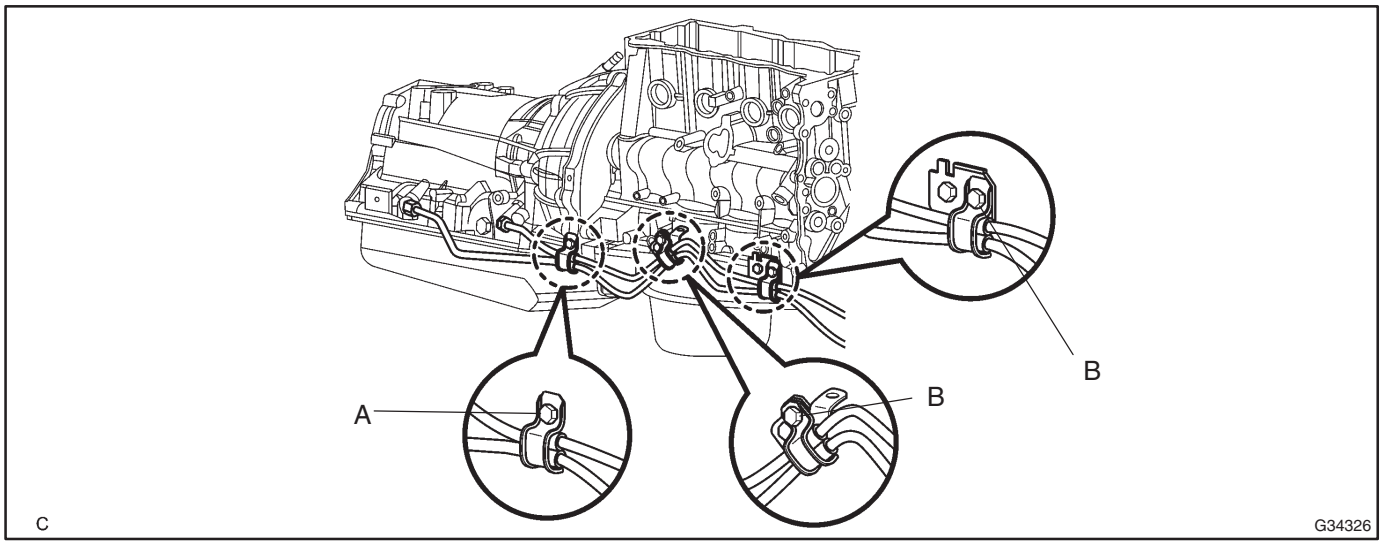

**48. INSTALL OIL COOLER OUTLET TUBE NO.1**

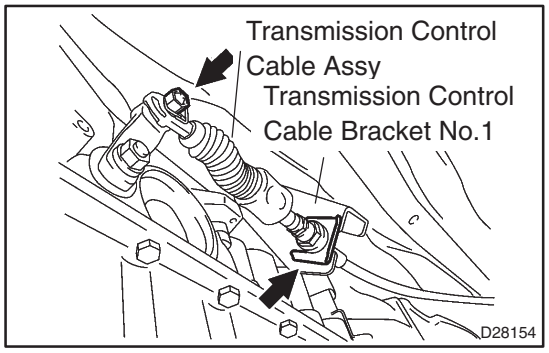
(a) Using SST, tighten the oil cooler outlet tube No.1.
SST 09023–12701
**Torque: 34 N·m (346 kgf·cm, 25 ft·lbf)**

**49. INSTALL OIL COOLER INLET TUBE NO.1**

(a) Using SST, tighten the oil cooler inlet tube No.1.
SST 09023–12701
**Torque: 34 N·m (346 kgf·cm, 25 ft·lbf)**

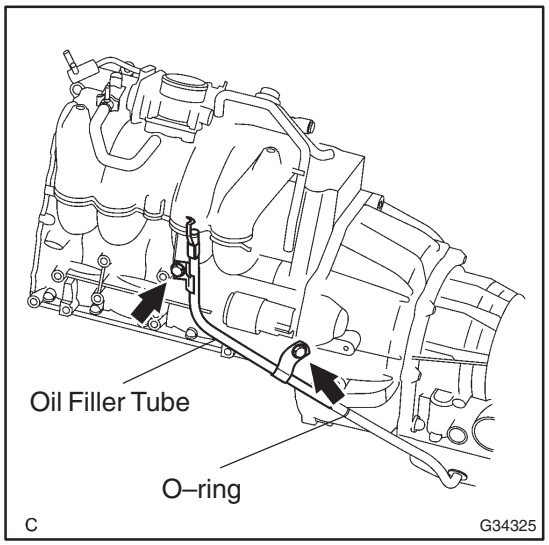
(b) Install the 3 clamps with the 3 bolts.
**Torque:**
**Bolt A: 12 N·m (122 kgf·cm, 9 ft·lbf)**
**Bolt B: 5.0 N·m (51 kgf·cm, 44 in.·lbf)**




**50. INSTALL TRANSMISSION CONTROL CABLE ASSY**

(a) Install the transmission control cable with the nut and clip on the transmission control cable assy.
**Torque: 14 N·m (143 kgf·cm, 10 ft·lbf)**

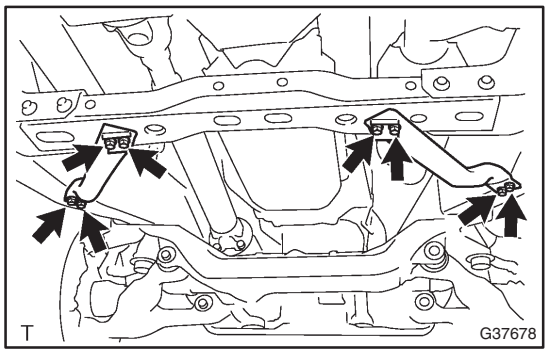



**51. INSTALL TRANSMISSION OIL FILLER TUBE SUB–ASSY**

(a) Coat a new O–ring with ATF, and install it on the oil filler tube sub–assy.

(b) Install the oil filler tube sub–assy with the 2 bolts.
**Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**

**52. INSTALL EXHAUST PIPE ASSY FRONT (SEE PAGE 19–7)**




**53. INSTALL FRONT SUSPENSION MEMBER BRACKET**

(a) Install the front suspension member bracket with the 4 bolts.
**Torque: 33 N·m (336 kgf·cm, 24 ft·lbf)**

**54. INSTALL FRONT SUSPENSION MEMBER BRACKET LH**

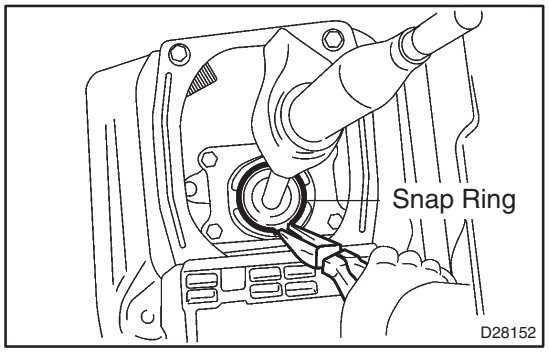
(a) Install the front suspension member bracket LH with the 4 bolts.
**Torque: 33 N·m (336 kgf·cm, 24 ft·lbf)**

**55. INSTALL PROPELLER SHAFT ASSY FRONT (See Pub. No. RM990E, page 30–4)**

**56. INSTALL PROPELLER SHAFT ASSY (SEE PAGE 30–2)**

**57. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1**
**Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)**

**58. INSTALL ENGINE UNDER COVER ASSY REAR**
**Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)**




**59. INSTALL TRANSFER HIGH & LOW SHIFT LEVER ASSY (W/ TRANSFER HIGH AND LOW SHIFT LEVER)**

(a) Using needle–nose pliers, install the transfer high & low shift lever assy with the snap ring.

HINT:
Apply MP grease to the transfer shift lever.

**60. INSTALL CONSOLE PANEL UPPER ASSY (See Pub. No. RM990E, page 71–13)**

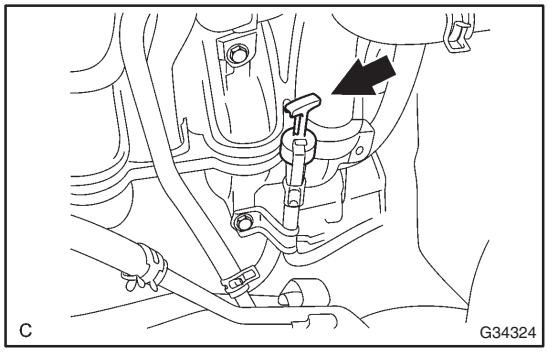
**61. INSTALL CONSOLE UPPER PANEL GARNISH NO.2 (See Pub. No. RM990E, page 71–13)**

**62. INSTALL CONSOLE UPPER PANEL GARNISH NO.1 (See Pub. No. RM990E, page 71–13)**

**63. INSTALL SHIFT LEVER KNOB SUB–ASSY**

(a) Install the shift lever knob to the shift lever.

(b) Install the floor shift shift lever knob to the shift lever.




**64. INSTALL TRANSMISSION OIL LEVEL GAGE SUB–ASSY**

(a) Install the transmission oil level gauge.

65. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL (SEE PAGE14–19)
66. ADD AUTOMATIC TRANSMISSION FLUID (SEE PAGE 40–2)
67. INSPECT AUTOMATIC TRANSMISSION FLUID (SEE PAGE 40–2)
68. ADJUST SHIFT LEVER POSITION (SEE PAGE 40–84)
69. INSPECT SHIFT LEVER POSITION (SEE PAGE 40–84)
70. CHECK FOR EXHAUST GAS LEAKS (See Pub. No. RM1017E, page 15–3)