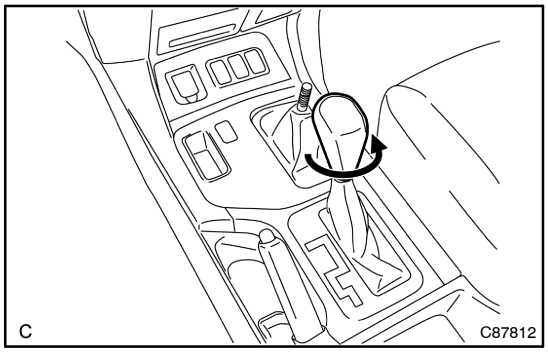
40100–01

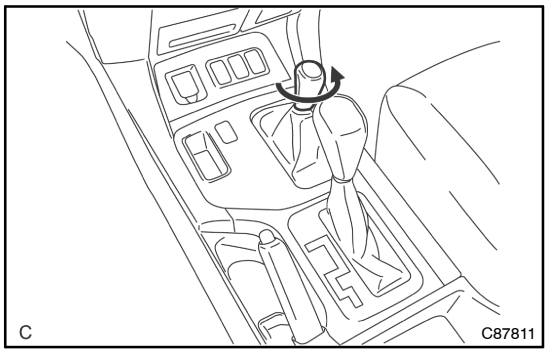
# REPLACEMENT

**1. SEPARATE BATTERY NEGATIVE TERMINAL**




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

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

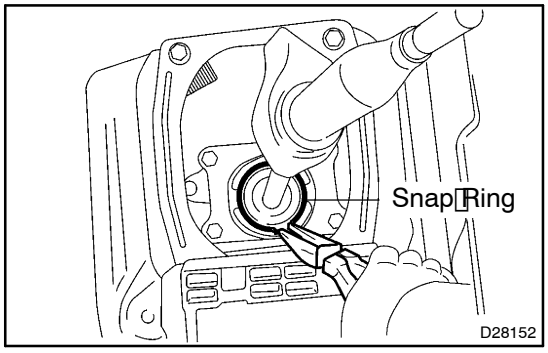



(b) Remove the floor shift shift lever knob sub–assy.

**3. REMOVE CONSOLE UPPER PANEL GARNISH NO.1 (See pub. No. RM990E, page 71–12)**

**4. REMOVE CONSOLE UPPER PANEL GARNISH NO.2 (See pub. No. RM990E, page 71–12)**

**5. REMOVE CONSOLE PANEL UPPER ASSY (See pub. No. RM990E, page 71–12)**




**6. REMOVE TRANSFER HIGH & LOW SHIFT LEVER ASSY**

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

**7. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1**

**8. REMOVE ENGINE UNDER COVER ASSY REAR**

**9. DISCONNECT OXYGEN SENSOR (See page 15–3)**

**10. REMOVE EXHAUST PIPE ASSY (See page 15–3)**

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

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

**13. DRAIN AUTOMATIC TRANSMISSION FLUID**

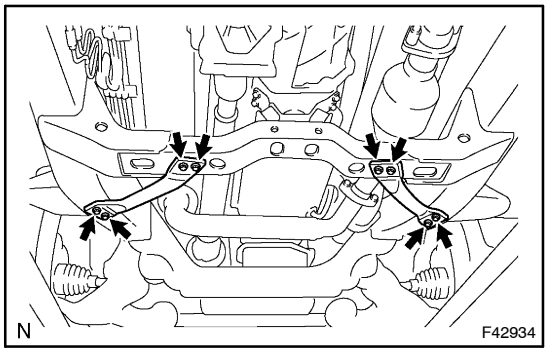
(a) Remove the drain plug, gasket and drain ATF.

(b) Install a new gasket and drain plug.

**Torque: 28 N·m (285 kgf·cm, 21 ft·lbf)**

**14. REMOVE PROPELLER SHAFT HEAT INSULATOR**

(a) Remove the 2 bolts and propeller shaft heat insulator.

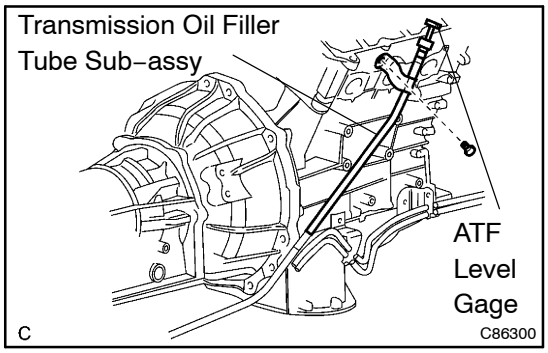



**15. REMOVE FRONT SUSPENSION MEMBER BRACKET**

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

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

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

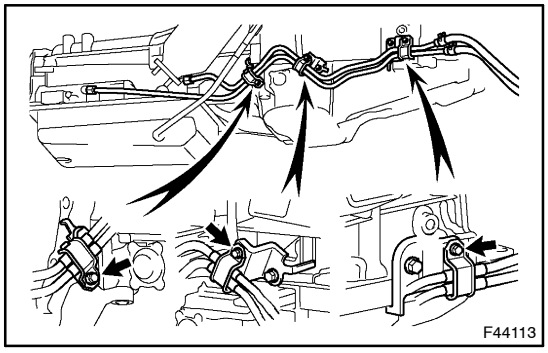



**17. REMOVE TRANSMISSION OIL FILLER TUBE SUB–ASSY**

(a) Remove the ATF level gage.

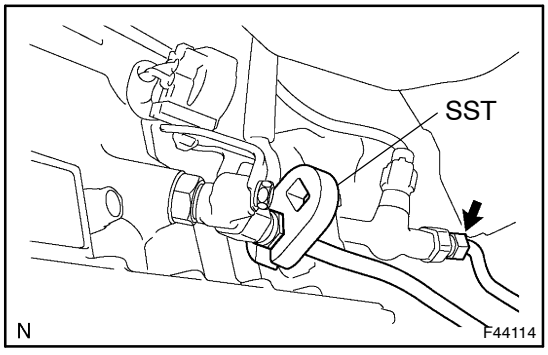
(b) Remove the bolt and oil filler tube.

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




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

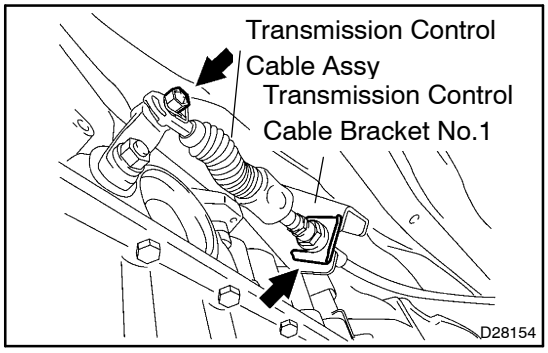
(a) Remove the 3 bolts and 3 clamps.




(b) Using SST, disconnect the oil cooler outlet tube No.1.
SST 09023–12700

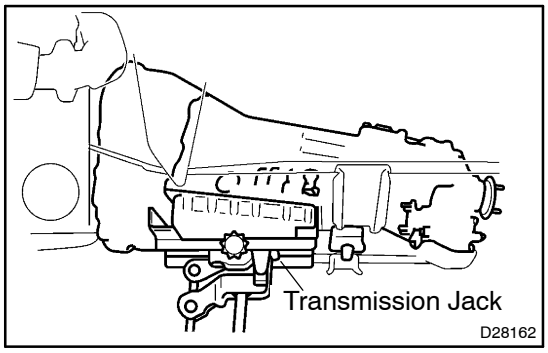
**19. REMOVE OIL COOLER INLET TUBE NO.1**

(a) Using SST, disconnect the oil cooler inlet tube No.1.
SST 09023–12700



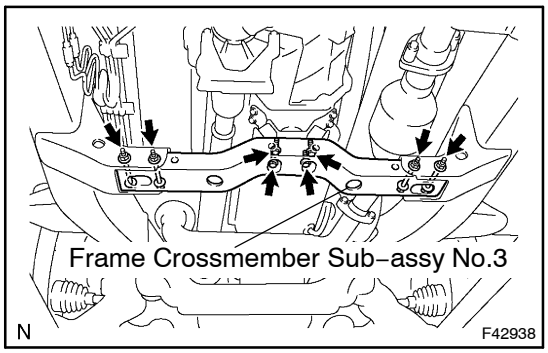

**20. DISCONNECT TRANSMISSION CONTROL CABLE ASSY**

(a) Removing the nut and clip, disconnect the transmission control cable assy from the transmission control cable bracket No.1.




**21. SUPPORT AUTOMATIC TRANSMISSION ASSY**

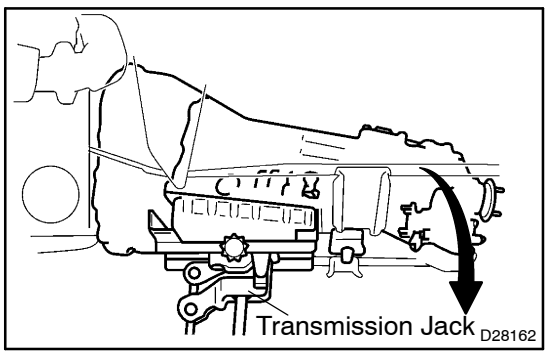
(a) Support the transmission with a transmission jack.




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

(a) Remove the 4 bolts on the frame crossmember sub–assy No.3.

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

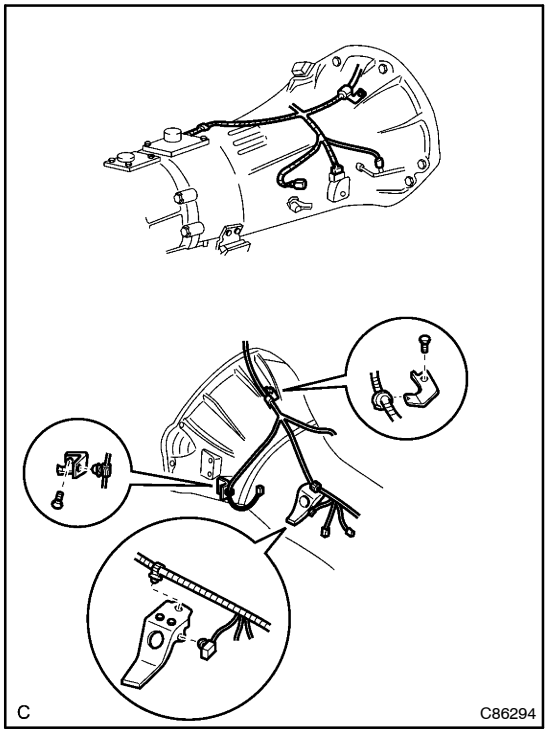



**23. DISCONNECT CONNECTOR**

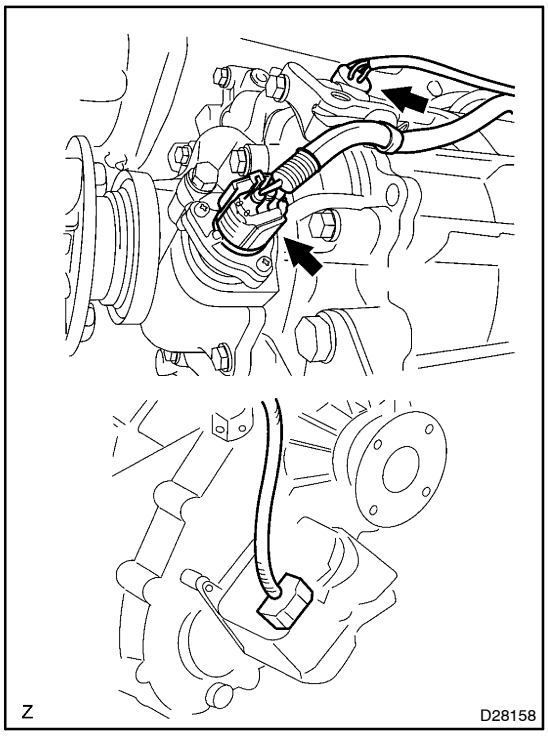
(a) Tilt down the transmission.

**NOTICE:**

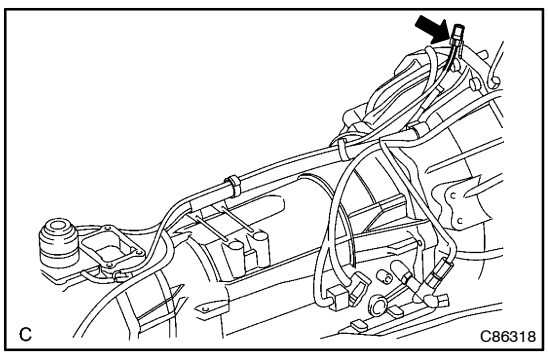
**Take care so that the cooling fan does not come in contact with the fan shroud.**




(b) Transmission side:
(1) Disconnect the park/neutral position switch connector.
(2) Disconnect the transmission wire connector.
(3) Disconnect the speed sensor SP2 connectors.
(4) Disconnect the speedometer sensor connector.
(5) Disconnect the temperature sensor connector.




(c) Transfer side:
(1) Disconnect the indicator No.1 switch connector. (Low)
(2) Disconnect the indicator No.2 switch connector. (Neutral)
(3) Disconnect the indicator No.3 switch connector. (Diff. lock)
(4) Disconnect the transfer shift actuator connector. (w/ transfer shift actuator)
(5) Remove the 2 bolts and wire harness from the transmission and transfer.




**24. 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.

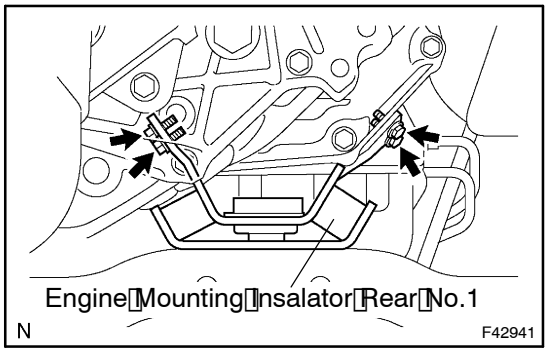
**25. REMOVE STARTER ASSY (See page 19–4)**

**26. REMOVE MANIFOLD STAY (See page 15–3)**

**27. REMOVE MANIFOLD STAY NO.2 (See page 15–3)**

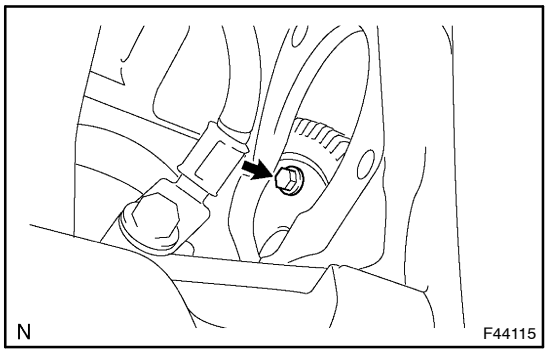
**28. SEPARATE FRONT DIFFERENTIAL ASSY**

(a) Remove the 2 bolts and nut and disconnect the front differential.




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

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

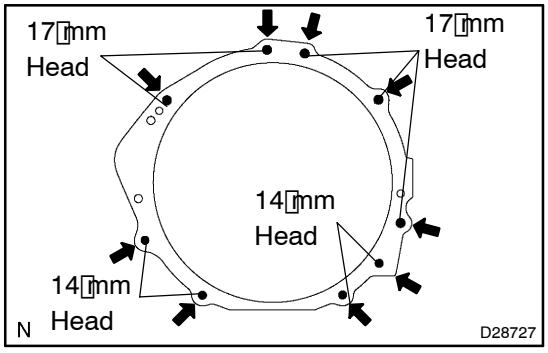



**30. REMOVE AUTOMATIC TRANSMISSION ASSY**

(a) Remove the flywheel housing side cover from the engine.

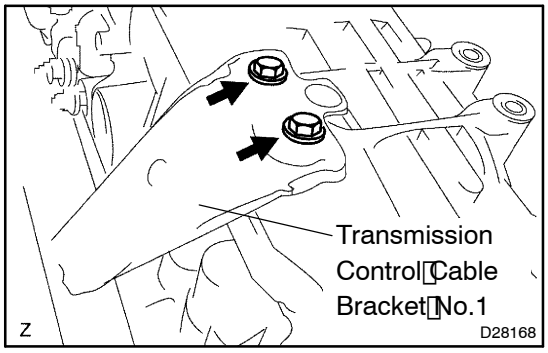
(b) Turn the crankshaft to gain access to each bolt.

(c) Hold the crankshaft pulley nut with a wrench and remove the 6 bolts.




(d) Remove the 9 bolts.

(e) 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 TRANSFER ASSY (See pub. No. RM990E, page 31–18)**

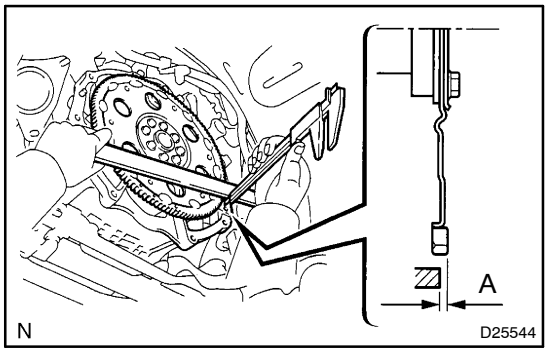
**33. REMOVE TORQUE CONVERTER CLUTCH ASSY**

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

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

**35. INSTALL TORQUE CONVERTER CLUTCH ASSY**

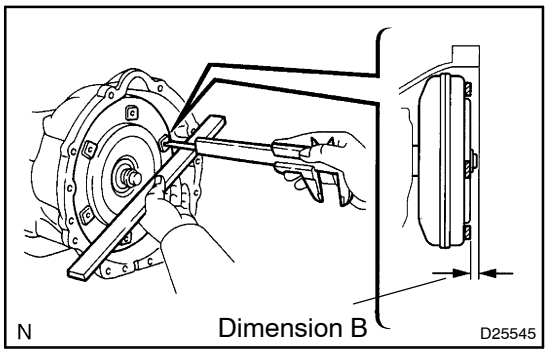
(a) Install the torque converter clutch to the automatic transmission.




(b) Using calipers and a straight edge, measure dimension A between the transmission and the end surface of the drive plate.

**Standard:**

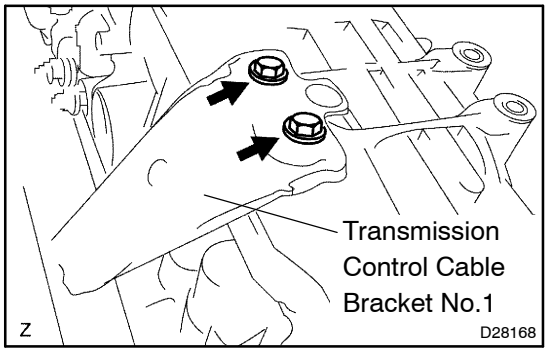
**A: 22.28 mm (0.8772 in.)**




(c) Using calipers and a straight edge, measure the dimension B shown in the illustration and check that B is greater than A measured in (b).

**Standard: A + 1 mm (0.03937 in.) or more**

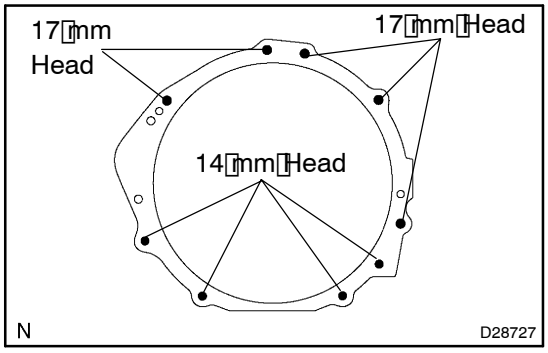
**36. INSTALL TRANSFER ASSY (See pub. No. RM990E, page 31–18)**




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

(a) Install the transmission control cable bracket No.1 and 2 bolts to the transmission assy.

**Torque: 25 N·m (255 kgf·cm, 19 ft·lbf)**

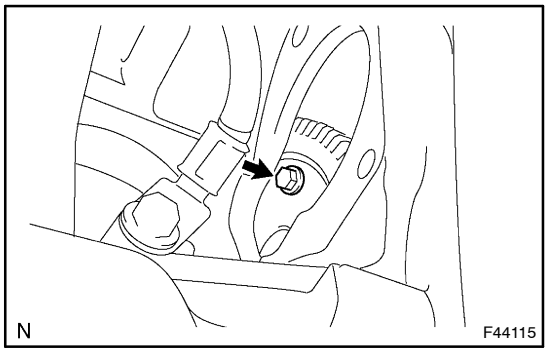



**38. INSTALL AUTOMATIC TRANSMISSION ASSY**

(a) Install the automatic transmission assy and 9 bolts to the engine.

**Torque:**
**17 mm head: 71 N·m (720 kgf·cm, 53 ft·lbf)**
**14 mm head: 37 N·m (380 kgf·cm, 27 ft·lbf)**

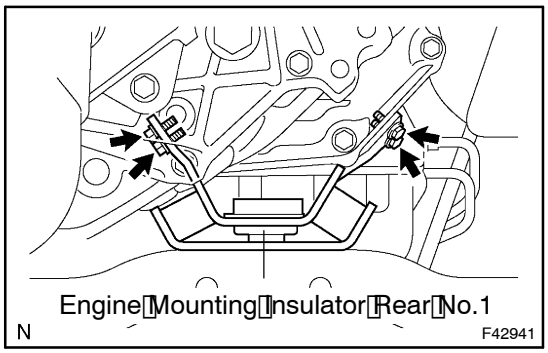
(b) Install the flywheel housing side cover to the engine.




(c) Install the 6 torque converter clutch mounting bolts.

**Torque: 48 N·m (490 kgf·cm, 35 ft·lbf)**

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




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

(a) Install the engine mounting insulator rear and 4 bolts to the automatic transmission.

**Torque: 65 N·m (663 kgf·cm, 48 ft·lbf)**

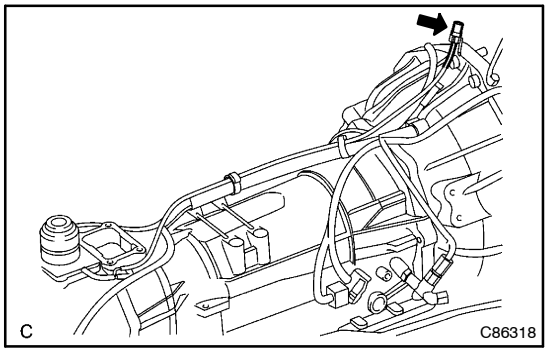
**40. CONNECT FRONT DIFFERENTIAL ASSY**

(a) Connect the front differential with the 2 bolts and nut.

**41. INSTALL MANIFOLD STAY NO.2 (See page 15–3)**

**42. INSTALL MANIFOLD STAY (See page 15–3)**

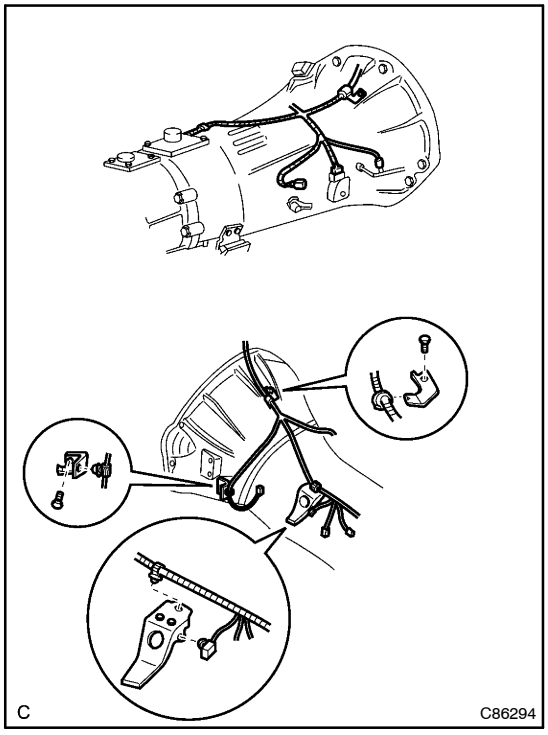
**43. INSTALL STARTER ASSY (See page 19–4)**




**44. 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.

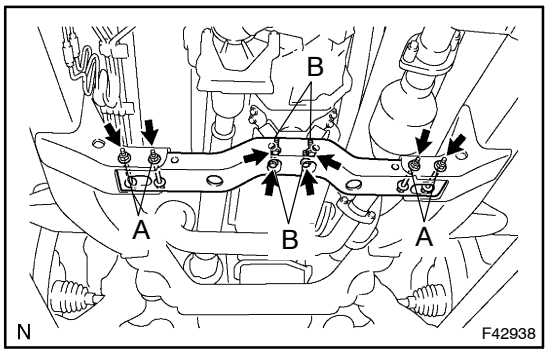



**45. CONNECT CONNECTOR**

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

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

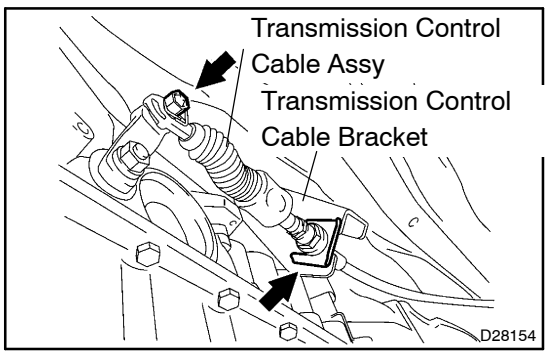
(c) Install the wire harness with the 2 bolts.
**Torque: 8.0 N·m (83 kgf·cm, 71 in.·lbf)**




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

(a) Install the frame crossmember sub–assy No.3 with 4 bolts and 4 nuts.
**Torque: 72 N·m (735 kgf·cm, 53 ft·lbf) (A)**

(b) Tighten the 4 bolts to the frame crossmember sub–assy No.3 and engine mounting insulator rear No.1.
**Torque: 18 N·m (184 kgf·cm, 13 ft·lbf) (B)**



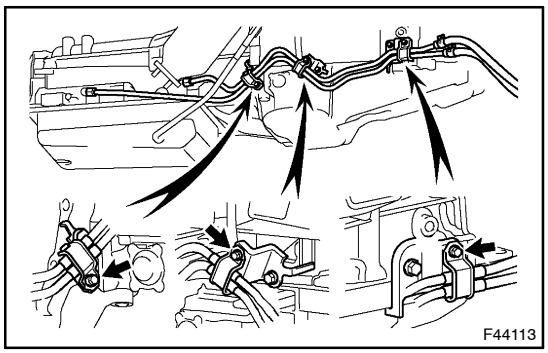

**47. CONNECT TRANSMISSION CONTROL CABLE ASSY**

(a) Install the nut and clip on the transmission control cable assy.
**Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**

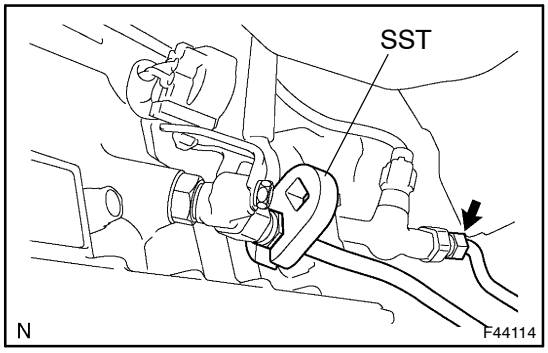
**48. INSTALL OIL COOLER OUTLET TUBE NO.1**

(a) Temporarily install the oil cooler outlet tube No.1.

(b) Temporarily install the oil cooler inlet tube No.1.



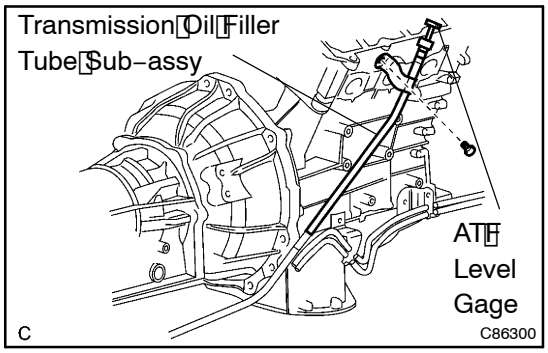

(c) Install the 3 clamps and 3 bolts.
**Torque: 5 N·m (50 kgf·cm, 43 in.·lbf)**




(d) Using SST, tighten the oil cooler outlet tube No.1.
SST 09023–12700
**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 09023–12700
**Torque: 34 N·m (346 kgf·cm, 25 ft·lbf)**

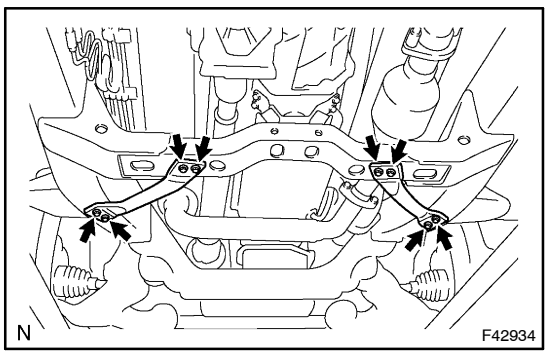



**50. INSTALL TRANSMISSION OIL FILLER TUBE SUB–ASSY**

(a) Coat a new O–ring with ATF, and install it to the transmission oil filler tube.

(b) Install the transmission oil filler tube and bolt to the automatic transmission assy.
**Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**

(c) Install the ATF level gauge.




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

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

**52. INSTALL FRONT SUSPENSION MEMBER BRACKET**

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

**53. INSTALL PROPELLER SHAFT HEAT INSULATOR**

(a) Install the propeller shaft heat insulator with 2 bolts.
**Torque: 16 N·m (163 kgf·cm, 12 ft·lbf)**

**54. INSTALL PROPELLER SHAFT ASSY (See pub. No. RM990E, page 30–12)**

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

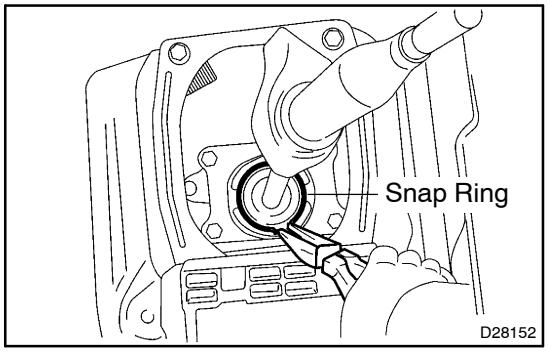
**56. ADJUST SHIFT LEVER POSITION (See pub. No. RM990E, page 40–68)**

**57. INSTALL EXHAUST PIPE ASSY (See page 15–3)**

**58. INSTALL OXYGEN SENSOR (See page 15–3)**

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

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




**61. INSTALL TRANSFER HIGH & LOW SHIFT LEVER ASSY**

(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.

**62. INSTALL CONSOLE PANEL UPPER ASSY**

**63. INSTALL CONSOLE UPPER PANEL GARNISH NO.2**

**64. INSTALL CONSOLE UPPER PANEL GARNISH NO.1**

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

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

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

**66. ADD AUTOMATIC TRANSMISSION FLUID**

**67. INSPECT AUTOMATIC TRANSMISSION FLUID (See pub. No. RM990E, page 40–2)**

**68. INSTALL BATTERY NEGATIVE TERMINAL**

**69. INSPECT SHIFT LEVER POSITION (See pub. No. RM990E, page 40–68)**

**70. CHECK FOR EXHAUST GAS LEAKS**