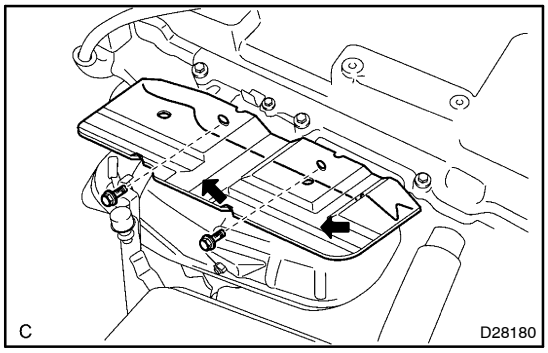
400TG–01

REPLACEMENT

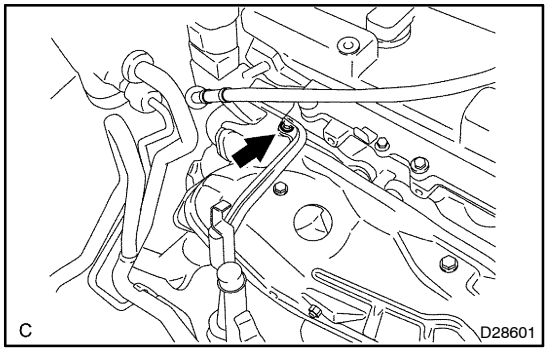
1. SEPARATE BATTERY NEGATIVE TERMINAL
2. REMOVE AIR CLEANER CAP SUB–ASSY
3. REMOVE INTAKE AIR CONNECTOR SUB–ASSY
4. REMOVE AIR CLEANER HOSE NO.2



5. REMOVE AIR CONNECTOR STAY

(a) Remove the 2 bolts and air connector stay.

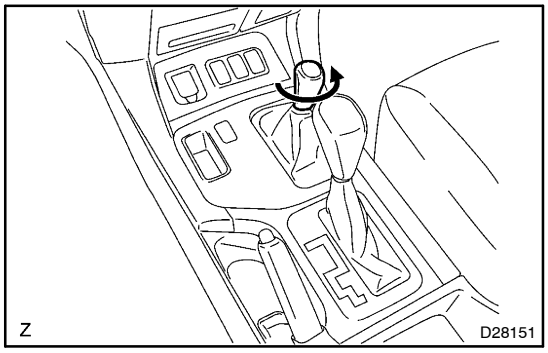
6. DISCONNECT THROTTLE CABLE ASSY (See page 40–74)



7. SEPARATE TRANSMISSION OIL FILLER TUBE SUB–ASSY

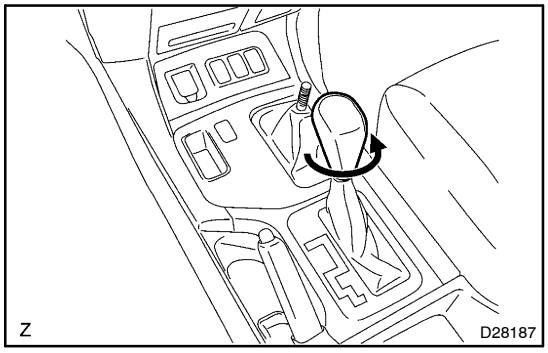
(a) Remove the transmission oil level gage.

(b) Remove the bolt and disconnect the oil filler tube.



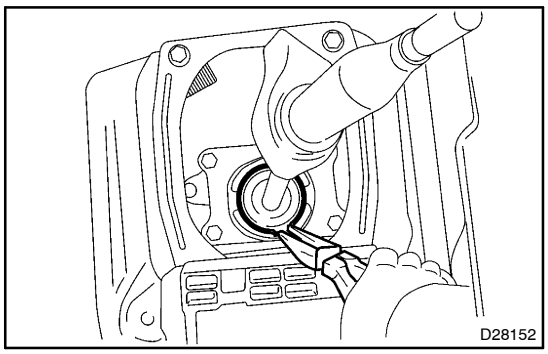
8. REMOVE SHIFT LEVER KNOB SUB–ASSY

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



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

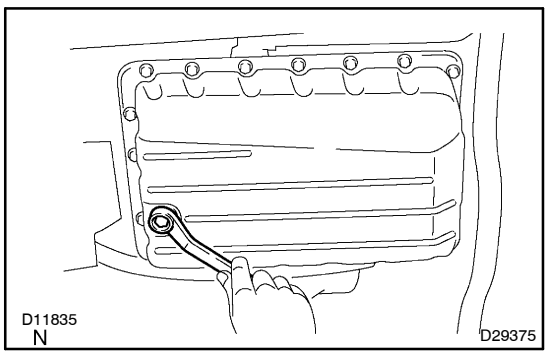
9. REMOVE CONSOLE UPPER PANEL GARNISH NO.1 (See page 71–13)
10. REMOVE CONSOLE UPPER PANEL GARNISH NO.2 (See page 71–13)
11. REMOVE CONSOLE PANEL UPPER ASSY (See page 71–13)



12. 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.

13. REMOVE ENGINE UNDER COVER ASSY REAR
14. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1



15. 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)

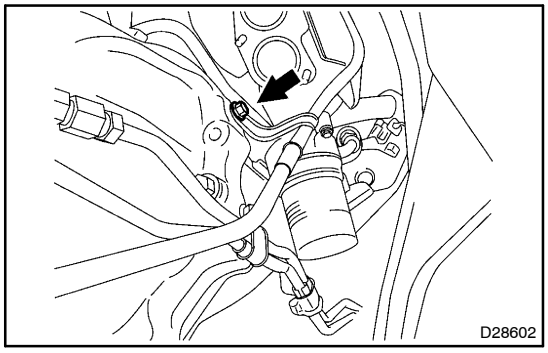
16. REMOVE PROPELLER SHAFT ASSY (See page 30–12)
17. REMOVE PROPELLER SHAFT ASSY FRONT (See page 30–4)
18. REMOVE FRONT SUSPENSION MEMBER BRACKET LH

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

19. REMOVE FRONT SUSPENSION MEMBER BRACKET

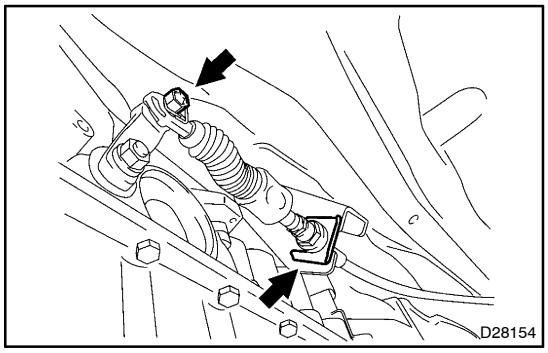
(a) Remove the 4 bolts and suspension member bracket.

20. REMOVE EXHAUST PIPE ASSY FRONT (See page 15–3)



21. REMOVE TRANSMISSION OIL FILLER TUBE SUB–ASSY

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

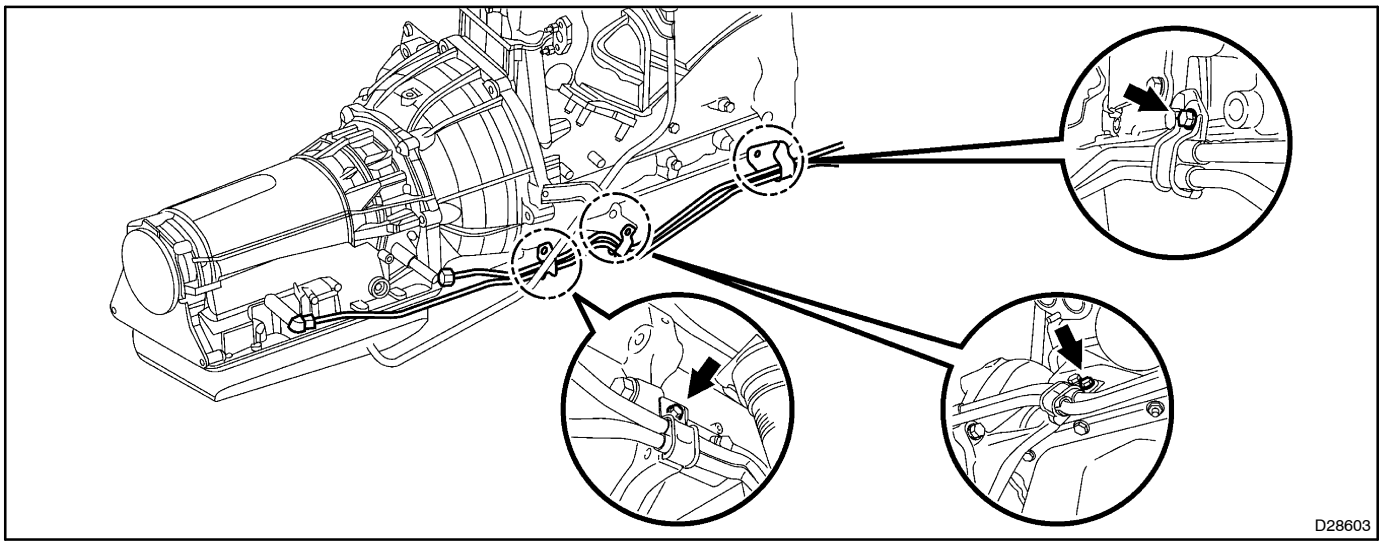


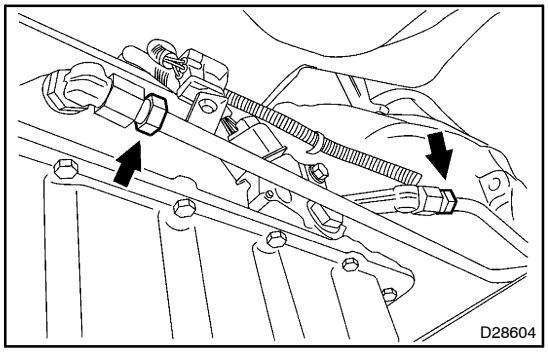
22. SEPARATE TRANSMISSION CONTROL CABLE ASSY

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

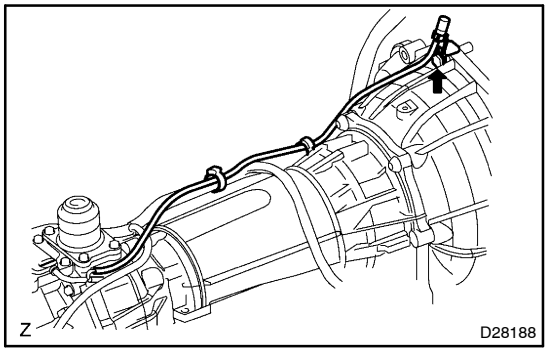
23. SEPARATE OIL COOLER PIPE

(a) Remove the 3 bolts and separate the oil cooler pipes from the 3 clamps.





(b) Using SST, disconnect the 2 oil cooler pipes.
SST 09023–12700



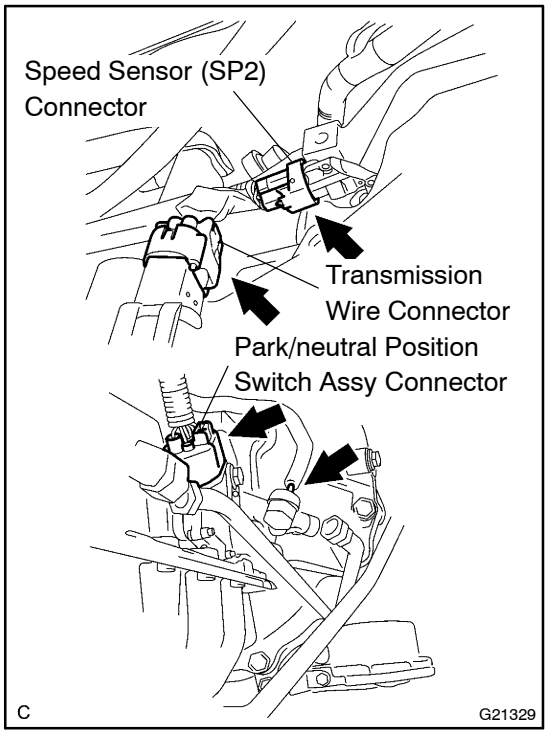
24. SEPARATE TRANSFER BREATHER HOSE SUB–ASSY

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

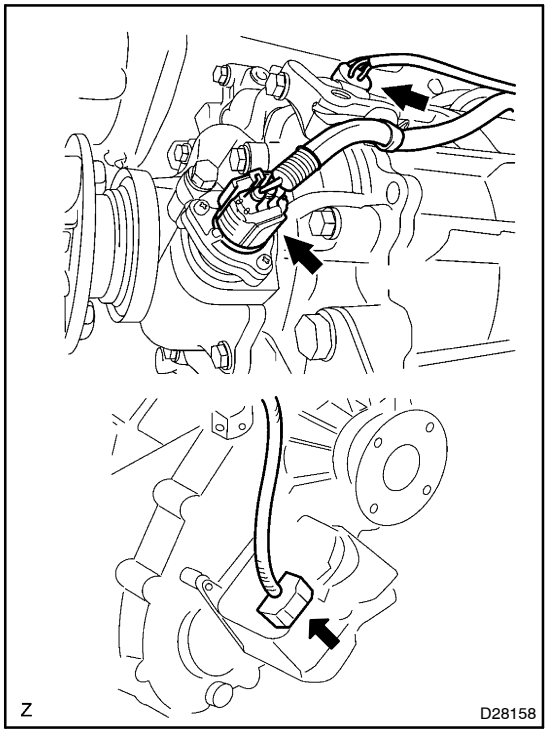
HINT:

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

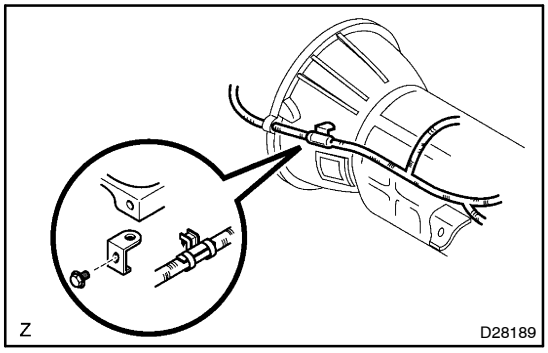
25. DISCONNECT CONNECTOR



(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.

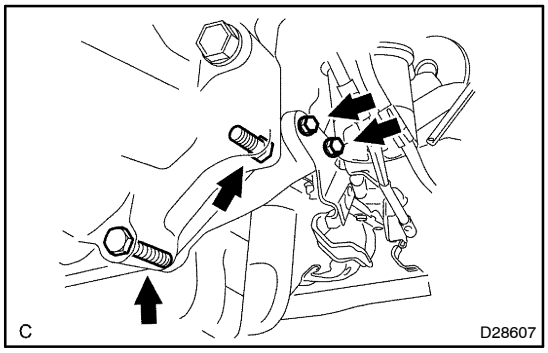


(b) Transfer side:
- (1) Disconnect the speedometer sensor connector.
- (2) Disconnect the indicator No.1 switch connector. (Low)
- (3) Disconnect the indicator No.2 switch connector. (Neutral)
- (4) Disconnect the indicator No.3 switch connector. (Diff. lock)
- (5) Disconnect the transfer shift actuator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



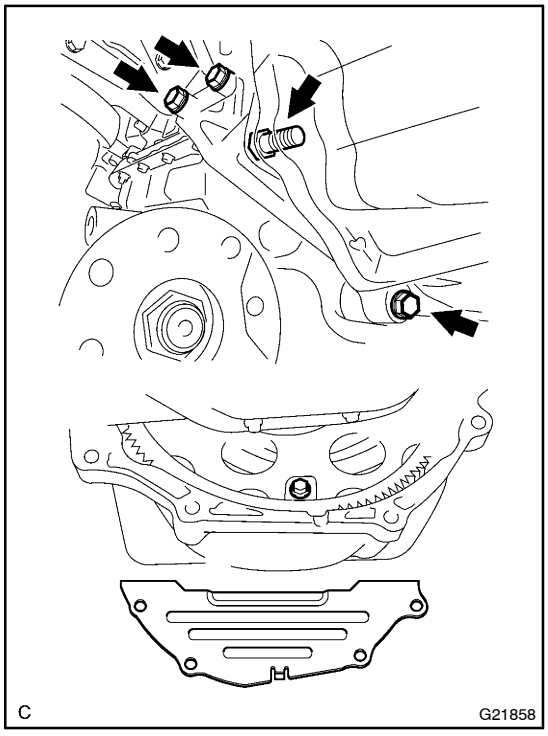
26. DISCONNECT WIRE HARNESS

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



27. REMOVE STIFFENER PLATE RH (ATM)

(a) Remove the 4 bolts and stiffener plate RH.

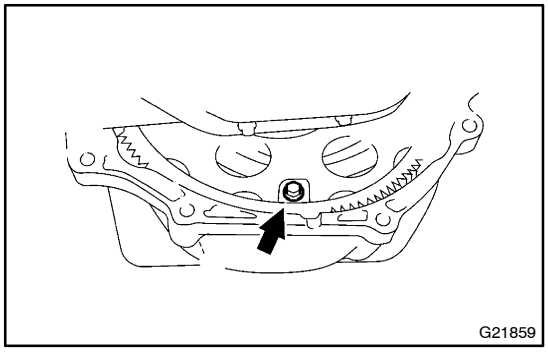


28. REMOVE STIFFENER PLATE LH (ATM)

(a) Remove the 4 bolts, stiffener plate LH and flywheel housing under cover.

HINT:

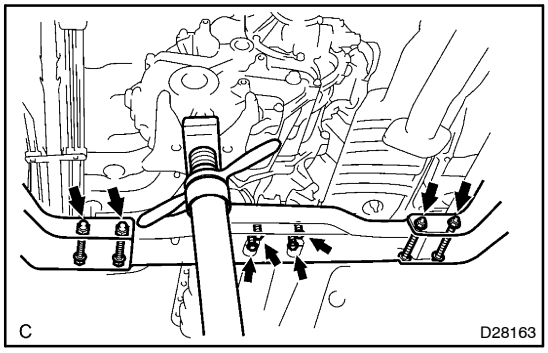
The flywheel housing under cover is tightened together with the stiffener plate.



29. REMOVE DRIVE PLATE & TORQUE CONVERTER CLUTCH SETTING BOLT

(a) Turn the crankshaft to gain access.

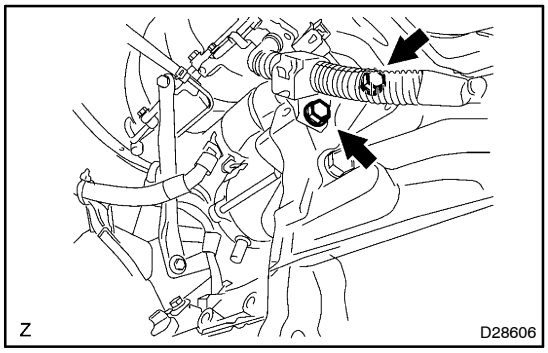
(b) Remove the 6 bolts while holding the crankshaft pulley set bolt with a wrench.



30. REMOVE FRAME CROSSMEMBER SUB–ASSY NO.3

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

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



31. REMOVE STARTER ASSY

(a) Remove the nut and disconnect the starter wire and connector.

(b) Lower the transmission rear side.

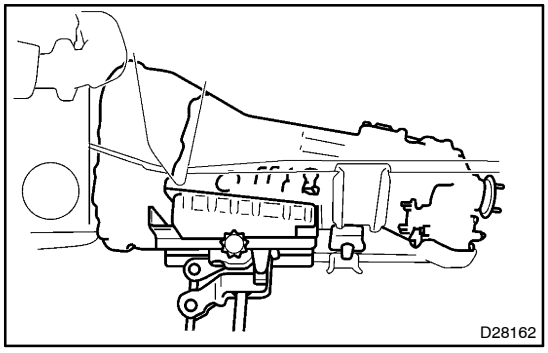
NOTICE:

Be careful not to touch the front differential and engine oil pan.

(c) Remove 2 bolts and starter assy from the transmission assy.

HINT:

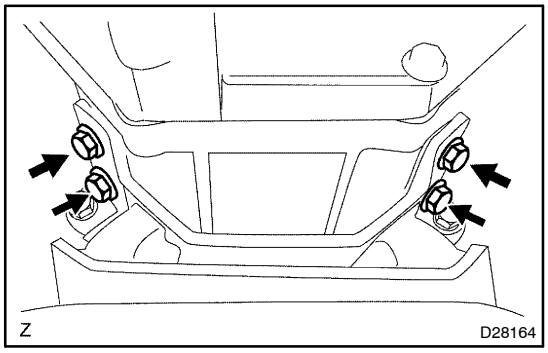
The wire harness and the starter are tightened together in the transmission housing.



32. SUPPORT AUTOMATIC TRANSMISSION ASSY

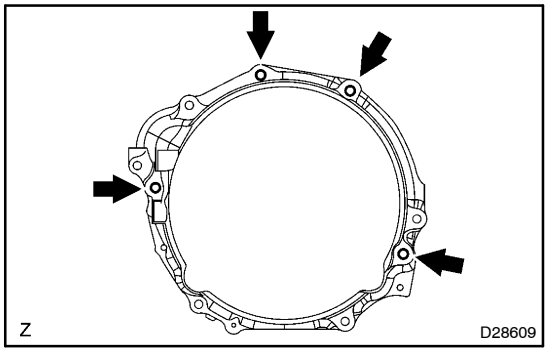
(a) Support the transmission with a transmission jack.

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



33. REMOVE ENGINE MOUNTING INSULATOR REAR NO.1

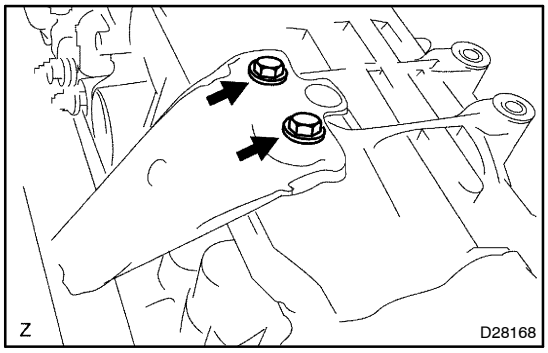
(a) Remove the 4 bolts and engine mounting insulator rear No.1.



34. REMOVE AUTOMATIC TRANSMISSION ASSY

(a) Remove the 4 bolts.

(b) Separate and remove the automatic transmission assy.



35. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.1

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

36. REMOVE TORQUE CONVERTER CLUTCH ASSY

37. INSPECT TORQUE CONVERTER CLUTCH ASSY (See page 40–45)

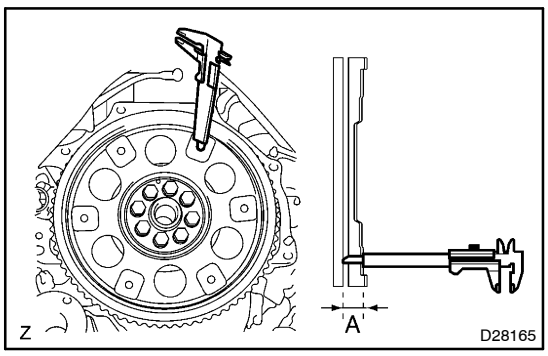
SST 09350–32014 (09351–32010, 09351–32020)

38. REMOVE TRANSFER ASSY (VF2A TRANSFER TYPE) (See page 31–51)

39. REMOVE TRANSFER ASSY (VF4BM TRANSFER TYPE) (See page 31–18)

40. INSTALL TRANSFER ASSY (VF2A TRANSFER TYPE) (See page 31–51)

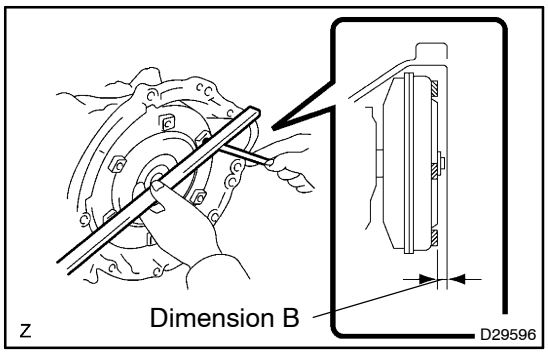
41. INSTALL TRANSFER ASSY (VF4BM TRANSFER TYPE) (See page 31–18)



42. INSTALL TORQUE CONVERTER CLUTCH ASSY

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

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

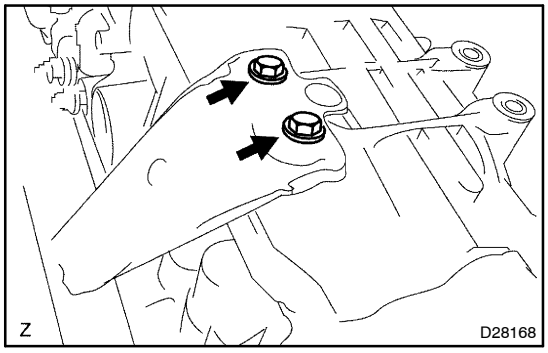


(c) Using calipers and straightedge, measure the dimension B shown in the illustration measured in (b).

Standard distance: A + 1 mm or more

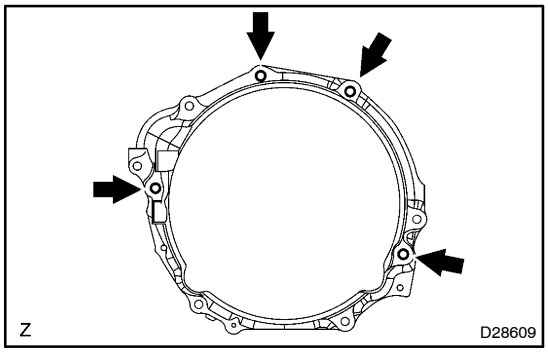
NOTICE:

Do not add the thickness of straight edge.



43. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.1

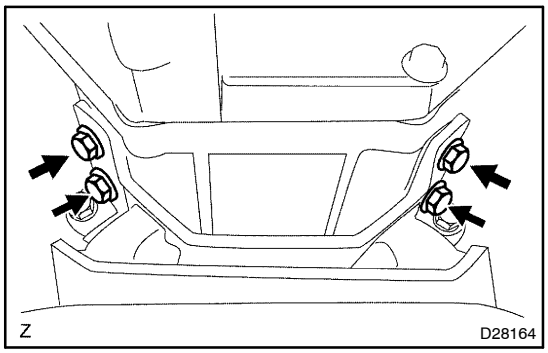
(a) Install the transmission control cable bracket No.1 and 2 bolts on the transmission assy.
Torque: 25 N·m (255 kgf·cm, 19 ft·lbf)



44. INSTALL AUTOMATIC TRANSMISSION ASSY

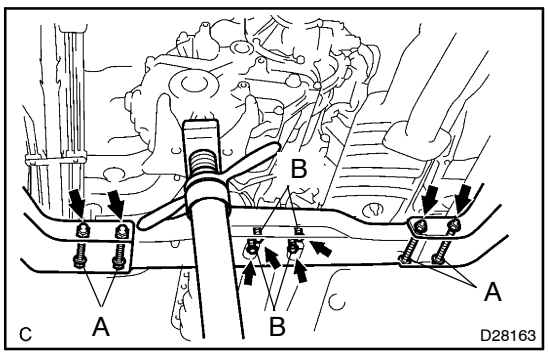
(a) Install automatic transmission assy and 4 bolts to the engine.
Torque: 71 N·m (724 kgf·cm, 54 ft·lbf)

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



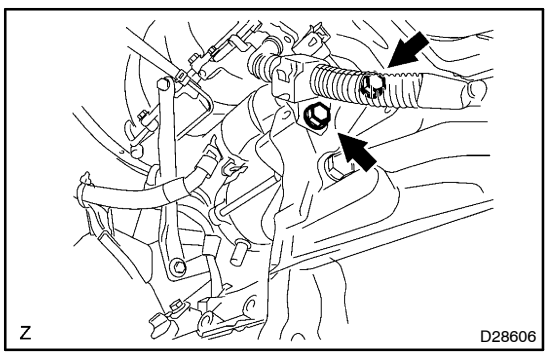
45. INSTALL ENGINE MOUNTING INSULATOR REAR NO.1

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



46. INSTALL FRAME CROSSMEMBER SUB–ASSY NO.3

(a) Install the frame crossmember sub–assy No.3 and 4 nuts, bolts on the automatic transmission assy.
Torque:
Bolt A: 72 N·m (735 kgf·cm, 55 ft·lbf)
Bolt B: 18 N·m (183 kgf·cm, 13 ft·lbf)



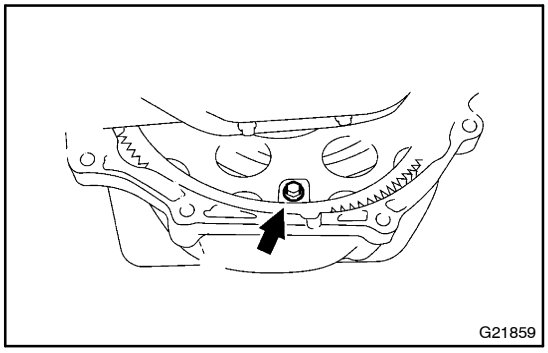
47. INSTALL STARTER ASSY

(a) Install the starter assy with 2 bolts.
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

HINT:
The wire harness and the starter are tightened together in the transmission housing.

(b) Install the starter wire with nut on the starter assy.
Torque: 8.8 N·m (90 kgf·cm, 78 in.·lbf)

(c) Connect the connector.

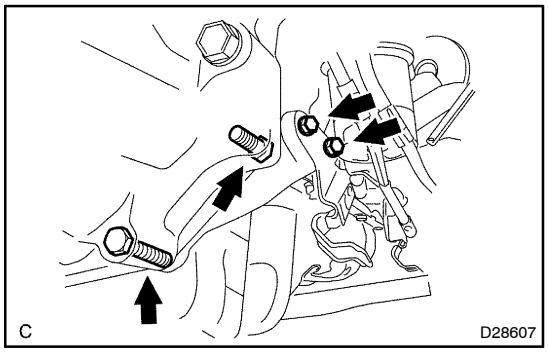


48. INSTALL DRIVE PLATE & TORQUE CONVERTER CLUTCH SETTING BOLT

(a) Apply a few drops of adhesive to each 2 threads on the tip of the 6 torque connecter clutch setting belts.
Adhesive: part No.08833–00070, THREE BOND 1324 or equivalent.

(b) Install the 6 torque connector clutch setting bolts.
Torque: 48 N·m (489 kgf·cm, 35 ft·lbf)

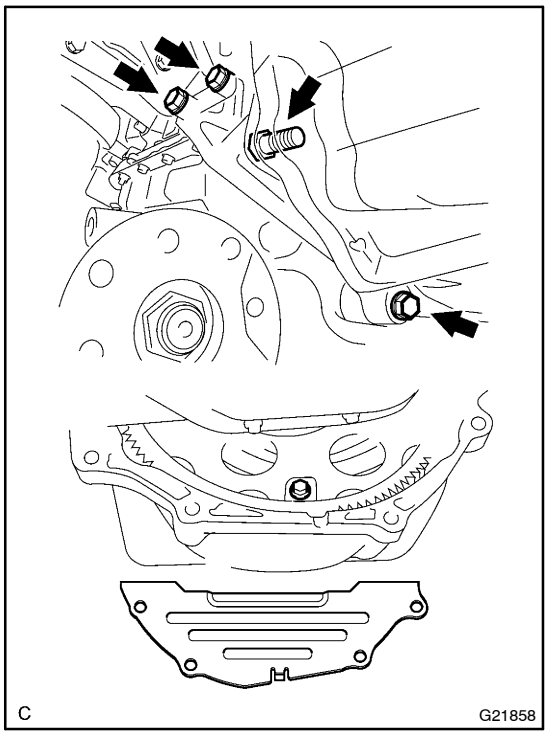
HINT:
Install the position bolt (the bolt with taper) at the beginning.



49. INSTALL STIFFENER PLATE RH (ATM)

(a) Install the stiffener plate RH with the 4 bolts.
Torque: 37 N·m (377 kgf·cm, 27 ft·lbf)

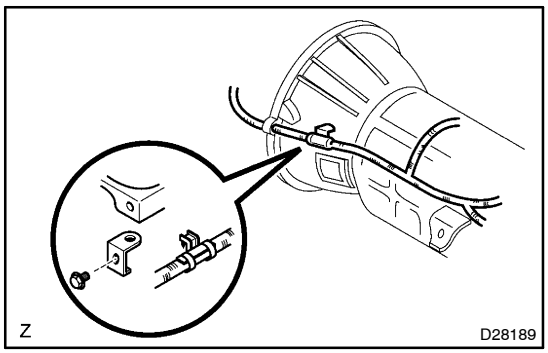
HINT:
The flywheel housing under cover is tightened together with the stiffener plate.



50. INSTALL STIFFENER PLATE LH (ATM)

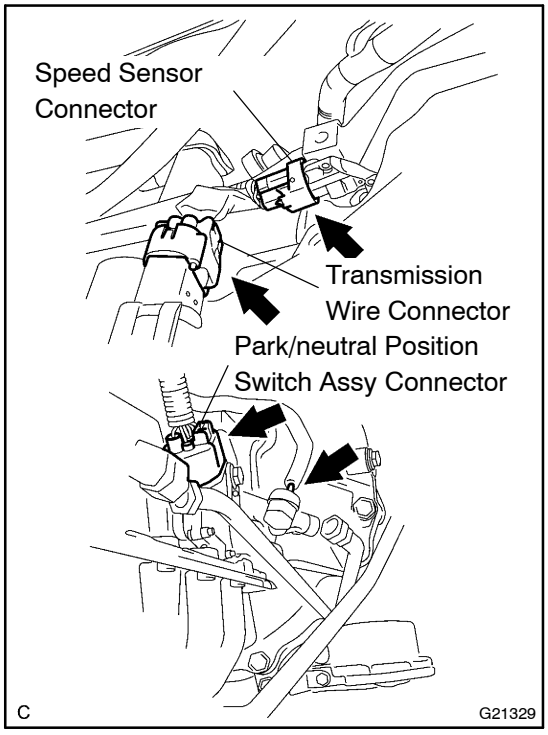
(a) Install the stiffener plate LH and flywheel housing under cover with the 4 bolts.
Torque: 37 N·m (377 kgf·cm, 27 ft·lbf)

HINT:
The flywheel housing under cover is tightened together with the stiffener plate.



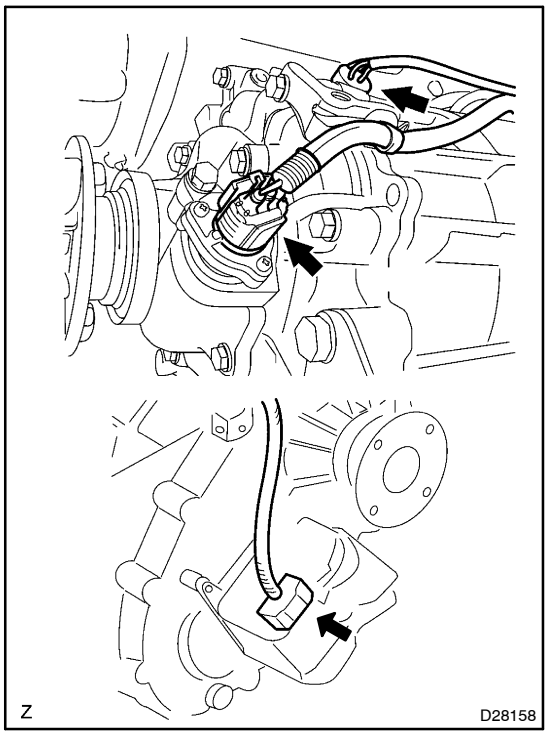
51. CONNECT WIRE HARNESS

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

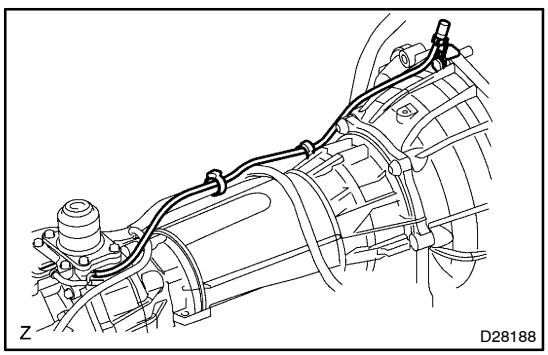


52. CONNECT CONNECTOR

(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.



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

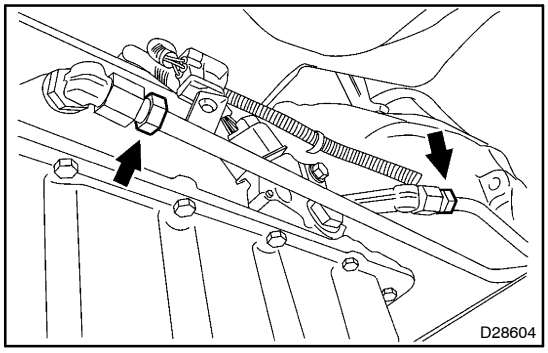


53. INSTALL TRANSFER BREATHER HOSE SUB–ASSY

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

HINT:

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



54. INSTALL OIL COOLER PIPE

(a) Temporarily install the 2 oil cooler pipes.

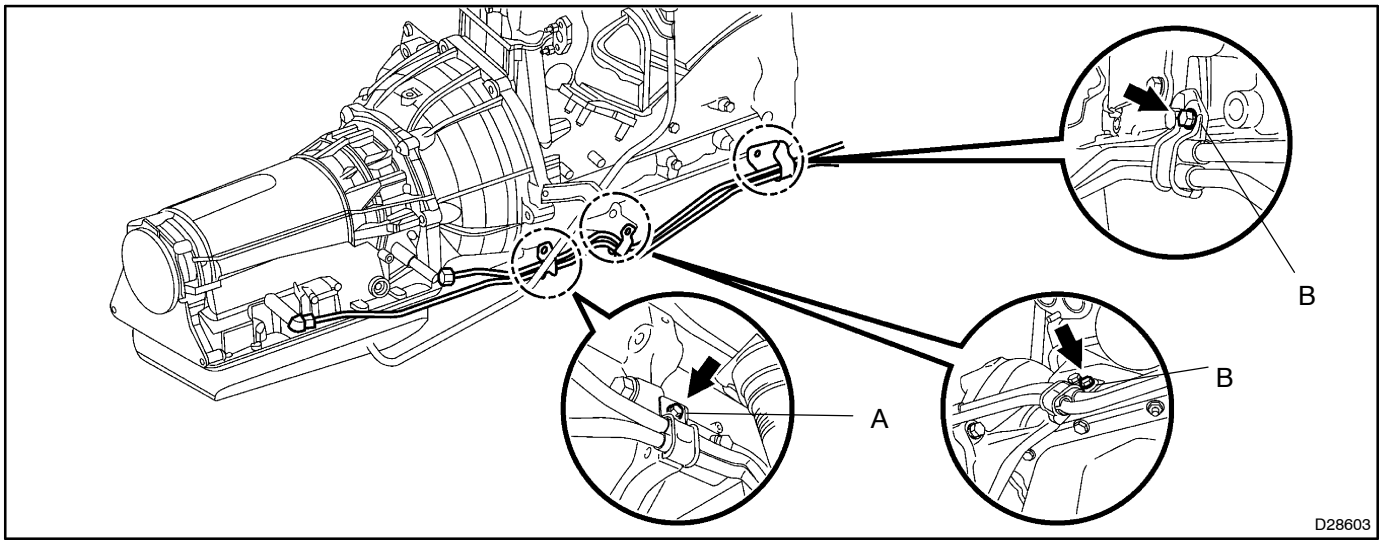
(b) Install the 3 clamps with 3 bolts.

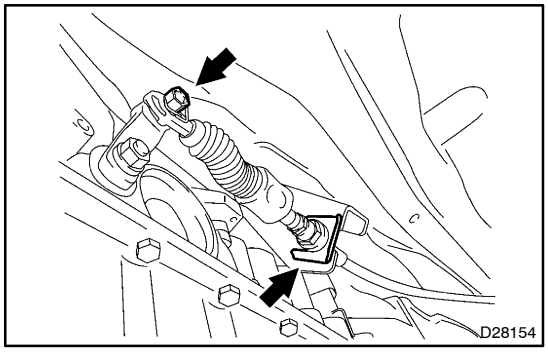
Torque:
Bolt A: 12 N·m (122 kgf·cm, 9 ft·lbf)
Bolt B: 5.0 N·m (51 kgf·cm, 44 in.·lbf)

(c) Using SST and spanner, tighten the oil cooler pipes.

SST 09023–12700

Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

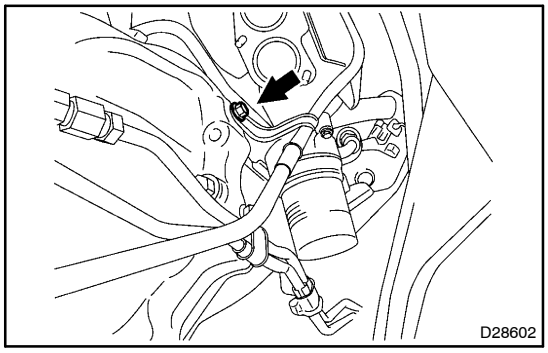




55. INSTALL TRANSMISSION CONTROL CABLE ASSY

(a) Install the nut and clip on the transmission control cable assy.

Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)



56. INSTALL TRANSMISSION OIL FILLER TUBE SUB–ASSY

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

(b) Install the oil filler tube sub–assy with bolt.

Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

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

58. INSTALL FRONT SUSPENSION MEMBER BRACKET

(a) Install the front suspension member bracket with the 4 bolts.

Torque: 33 N·m (337 kgf·cm, 24 ft·lbf)

59. INSTALL FRONT SUSPENSION MEMBER BRACKET LH

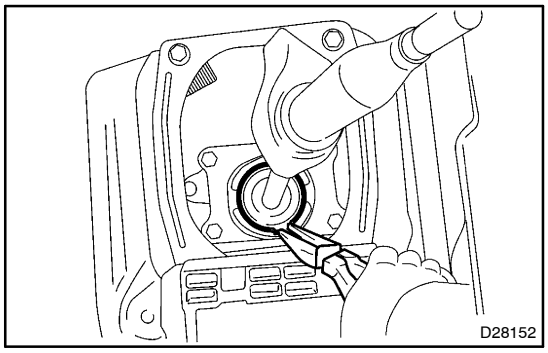
(a) Install the front suspension member bracket LH with the 4 bolts.
Torque: 33 N·m (337 kgf·cm, 24 ft·lbf)

60. INSTALL PROPELLER SHAFT ASSY FRONT (See page 30–4)

61. INSTALL PROPELLER SHAFT ASSY (See page 30–12)

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

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



64. 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 snap ring.

HINT:
Apply MP grease to the transfer shift lever.

65. INSTALL CONSOLE PANEL UPPER ASSY

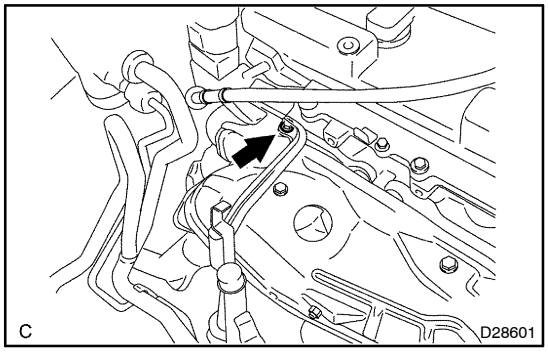
66. INSTALL CONSOLE UPPER PANEL GARNISH NO.2

67. INSTALL CONSOLE UPPER PANEL GARNISH NO.1

68. 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.

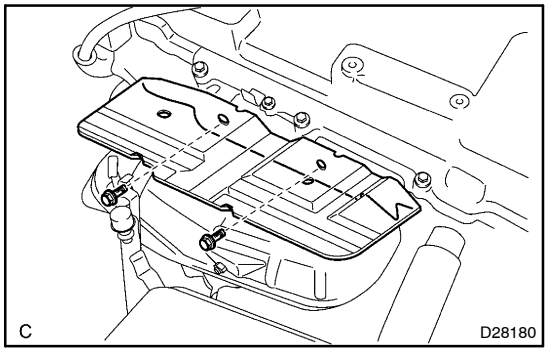


69. INSTALL TRANSMISSION OIL FILLER TUBE SUB–ASSY

(a) Install the transmission oil filler tube sub–assy with the bolt.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

(b) Install the transmission oil level gage.

70. CONNECT THROTTLE CABLE ASSY (See page 40–74)



71. INSTALL AIR CONNECTOR STAY

(a) Install the air connector stay with the 2 nuts.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

72. INSTALL AIR CLEANER HOSE NO.2
73. INSTALL INTAKE AIR CONNECTOR SUB–ASSY
74. INSTALL AIR CLEANER CAP SUB–ASSY
75. ADJUST THROTTLE CABLE ASSY (See page 40–78)
76. INSPECT THROTTLE CABLE ASSY (See page 40–78)
77. ADD AUTOMATIC TRANSMISSION FLUID
78. INSPECT AUTOMATIC TRANSMISSION FLUID (See page 40–2)
79. ADJUST SHIFT LEVER POSITION (See page 40–68)
80. INSPECT SHIFT LEVER POSITION (See page 40–68)