9. Automatic Transmission Assembly

A: REMOVAL

1) Set the vehicle on a lift.
2) Open the front hood fully, and support it with stay.
3) Disconnect the battery ground cable.
4) Remove the air intake duct. (Non-turbo model)
   <Ref. to IN(H4SO)-6, REMOVAL, Air Intake Duct.>
5) Remove the air cleaner case or air intake chamber. (Non-turbo model)
   <Ref. to IN(H4SO)-5, REMOVAL, Air Cleaner Case.>
6) Remove the intercooler. (Turbo model)
   <Ref. to IN(H4DOTC)-10, REMOVAL, Intercooler.>
7) Remove the air cleaner case stay. (Non-turbo model)
8) Disconnect the following connectors.
   (1) Transmission harness connector
   (2) Transmission ground terminal
9) Remove the starter.
   <Ref. to SC(H4SO)-7, REMOVAL, Starter.>

10) Remove the pitching stopper.

11) Separate the torque converter clutch from drive plate.
    (1) Remove the service hole plug.
    (2) Remove the bolts which hold torque converter clutch to drive plate.
    (3) Remove the V-belt cover.
    (4) Insert the wrench in the crankshaft pulley bolts, and remove all the bolts by slowly rotating the crankshaft pulley.

   CAUTION:
   Be careful not to drop the bolts into torque converter clutch housing.

12) Install the ST to torque converter clutch case.
    ST  498277200 STOPPER SET
13) Remove the ATF level gauge.
NOTE:
Plug the opening to prevent an entry of foreign particles into transmission fluid.

14) Set the ST.
ST 41099AA000 ENGINE SUPPORT ASSY

15) Remove the bolts which hold the right upper side of transmission to engine.

16) Lift-up the vehicle.
17) Remove the under cover.
18) Remove the front, center and rear exhaust pipe, and muffler. (Non-turbo model)
   <Ref. to EX(H4SO)-4, REMOVAL, Front Exhaust Pipe.>, <Ref. to EX(H4SO)-8, REMOVAL, Rear Exhaust Pipe.> and <Ref. to EX(H4SO)-9, REMOVAL, Muffler.>

19) Remove the center and rear exhaust pipes, and muffler. (Turbo model)
   <Ref. to EX(H4DOTC)-8, REMOVAL, Center Exhaust Pipe.>, <Ref. to EX(H4DOTC)-13, REMOVAL, Rear Exhaust Pipe.> and <Ref. to EX(H4DOTC)-14, REMOVAL, Muffler.>

20) Remove the heat shield cover. (If equipped)

21) Drain ATF to remove the ATF drain plug.

22) Disconnect the ATF cooler hoses from pipes of transmission side, and remove the ATF level gauge guide.

23) Remove the propeller shaft.
   <Ref. to DS-14, REMOVAL, Propeller Shaft.>

24) Remove the shift select cable. <Ref. to CS-26, REMOVAL, Select Cable.>

25) Disconnect the stabilizer link from transverse link.

26) Remove the bolt securing ball joint of transverse link to housing.
27) Remove the spring pins and separate the front drive shafts from each side of transmission.

28) Remove the nuts which hold the lower side of transmission to engine.

29) Place the transmission jack under transmission.

**NOTE:**
Make sure that the support plates of transmission jack don’t touch the oil pan.

30) Remove the transmission rear crossmember from vehicle.

31) Remove the transmission.

**CAUTION:**
Move the transmission and torque converter as a unit away from engine.

32) Separate the transmission assembly and rear cushion rubber.

**B: INSTALLATION**

1) Install the rear cushion rubber to transmission assembly.

**Tightening torque:**

- 39 N·m (4.0 kgf·m, 29 ft-lb)

2) Install the ST to torque converter clutch case.

ST 498277200 STOPPER SET
3) Install the transmission onto engine.
   (1) Gradually raise the transmission with transmission jack.
   (2) Engage them at splines.
4) Install the transmission rear crossmember.
   **Tightening torque:**
   - **T1**: 35 N·m (3.6 kgf-m, 26 ft-lb)
   - **T2**: 70 N·m (7.1 kgf-m, 51 ft-lb)
5) Take off the transmission jack.
6) Tighten the nuts and bolts which hold the lower side of transmission to engine.
   **Tightening torque:**
   - 50 N·m (5.1 kgf-m, 36.9 ft-lb)
7) Lower the vehicle.
8) Connect the engine and transmission.
   (1) Remove the ST from torque converter clutch case.
   
   **NOTE:**
   Be careful not to drop the ST into torque converter clutch case when removing ST.
9) Install the torque converter clutch to drive plate.
   (1) Tighten the bolts which hold the torque converter clutch to drive plate.
   (2) Insert the wrench in the crankshaft pulley bolts, and tighten all the bolts by slowly rotating the crankshaft pulley.
   **Tightening torque:**
   - 25 N·m (2.5 kgf-m, 18.1 ft-lb)
   (3) Clog the plug onto service hole.
   (4) Install the V-belt cover.
10) Remove the ST.
11) Install the pitching stopper.

*Tightening torque:
T1: 50 N·m (5.1 kgf·m, 37 ft·lb)
T2: 58 N·m (5.9 kgf·m, 43 ft·lb)*

12) Lift-up the vehicle.
13) Install the front drive shaft into transmission.
   (1) Lift-up the vehicle.
   (2) Install the front drive shaft into transmission.
   (3) Drive a new spring pin into chamfered hole
       of drive shaft.

14) Install the ball joint into housing.
15) Connect the stabilizer link to transverse link,
    and tighten the bolts. (Wagon model)

*NOTE:
Discard the loosened self-locking nut and replace
with a new one.*

*Tightening torque:
T1: 30 N·m (3.1 kgf·m, 22.4 ft·lb)
T2: 50 N·m (5.1 kgf·m, 37 ft·lb)*

16) Tighten the installing bolts. (Wagon model)

*Tightening torque:
50 N·m (5.1 kgf·m, 36.9 ft·lb)*

17) Install the stabilizer link to transverse link. (Se-
dan model)

*Tightening torque:
45 N·m (4.6 kgf·m, 33.2 ft·lb)*

18) Install the shift select cable onto select lever.
   <Ref. to CS-27, INSTALLATION, Select Cable.>
19) Install the ATF level gauge guide, and connect
    the ATF cooler hoses to pipe.

20) Install the propeller shaft.
   <Ref. to DS-15, INSTALLATION, Propeller Shaft.>
21) Install the heat shield cover. (If equipped)

22) Install the rear exhaust pipe and muffler assembly.
Non-turbo model
<Ref. to EX(H4SO)-8, INSTALLATION, Rear Exhaust Pipe> and <Ref. to EX(H4SO)-9, INSTALLATION, Muffler>.
Turbo model
<Ref. to EX(H4DOTC)-13, INSTALLATION, Rear Exhaust Pipe> and <Ref. to EX(H4DOTC)-14, INSTALLATION, Muffler>.

23) Install the front and center exhaust pipe. (Non-turbo model)
<Ref. to EX(H4SO)-5, INSTALLATION, Front Exhaust Pipe>.

24) Install the center exhaust pipe. (Turbo model)
<Ref. to EX(H4DOTC)-9, INSTALLATION, Center Exhaust Pipe>.

25) Install the under cover.

26) Lower the vehicle.

27) Install the ATF level gauge.

28) Connect the following connectors.
   (1) Transmission harness connectors
   (2) Transmission ground terminal

29) Connect the cruise control cable.

30) Install the air cleaner case stay.

**Tightening torque:**

16 N·m (1.6 kgf·m, 11.6 ft-lb)

31) Install the air cleaner case or air intake chamber. (Non-turbo model)
<Ref. to IN(H4SO)-5, INSTALLATION, Air Cleaner Case>.

32) Install the air intake duct. (Non-turbo model)
<Ref. to IN(H4SO)-6, INSTALLATION, Air Intake Duct>.

33) Install the intercooler. (Turbo model)
<Ref. to IN(H4DOTC)-10, INSTALLATION, Intercooler>.

34) Connect the battery ground cable.

35) Fill ATF up to the middle of the “COLD” side on level gauge by using the gauge hole. <Ref. to 4AT-29, Automatic Transmission Fluid>.

36) Take off the vehicle from lift arms.

37) Check select lever operation. 
<Ref. to 4AT-45, INSPECTION, Inhibitor Switch>.

38) Check the ATF level. <Ref. to 4AT-29, Automatic Transmission Fluid>.

39) Check the road test.
<Ref. to 4AT-31, Road Test>.