REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

2. REMOVE NO.1 ENGINE UNDER COVER SUB-ASSEMBLY

3. REMOVE NO. 2 ENGINE UNDER COVER (w/ No. 2 Engine Under Cover)

4. DISCONNECT OXYGEN SENSOR

5. REMOVE EXHAUST PIPE
   (See page EX-3)

6. REMOVE PROPELLER SHAFT ASSEMBLY FRONT
   (See page PR-16)

7. REMOVE PROPELLER WITH CENTER BEARING SHAFT ASSEMBLY (See page PR-8)

8. DRAIN AUTOMATIC TRANSMISSION FLUID
   (a) Remove the drain plug and gasket, and drain ATF.
   (b) Install a new gasket and drain plug.
       Torque: 28 N*m (285 kgf*cm, 21 ft.*lbf)

9. REMOVE MANIFOLD STAY
   (a) Remove the 3 bolts and manifold stay.

10. REMOVE NO.2 MANIFOLD STAY
    (a) Remove the 3 bolts and manifold stay No. 2.

11. DISCONNECT NO.1 OIL COOLER INLET TUBE
    (a) Remove the 3 bolts and 2 clamps.
(b) Using SST, disconnect the oil cooler inlet tube No. 1.
   SST  09023-12701

12. DISCONNECT NO.1 OIL COOLER OUTLET TUBE
   (a) Using SST, disconnect the oil cooler outlet tube No. 1.
   SST  09023-12701

13. DISCONNECT TRANSMISSION CONTROL CABLE ASSEMBLY
   (a) Remove the nut and disconnect the transmission control cable.
   (b) Remove the 2 bolts and disconnect the transmission control cable.

14. SUPPORT AUTOMATIC TRANSMISSION WITH TRANSFER
   (a) Support the automatic transmission assembly with a transmission jack.

15. REMOVE NO.3 FRAME CROSSMEMBER SUB-ASSEMBLY
   (a) Remove the 4 bolts on the frame crossmember sub-assembly No. 3.
   (b) Remove the 4 nuts, 4 bolts and frame crossmember sub-assembly No. 3.

16. REMOVE REAR NO.1 ENGINE MOUNTING INSULATOR
   (a) Remove the 4 bolts and engine mounting insulator rear from the automatic transmission.

17. DISCONNECT CONNECTOR
   (a) Disconnect the park/neutral position switch connector.
   (b) Disconnect the transmission wire connector.
   (c) Disconnect the 2 speed sensor connectors.
   (d) Disconnect the transfer shift actuator connector.
(e) Disconnect the indicator switch No. 1 connector.
(f) Disconnect the indicator switch No. 2 connector.

18. DISCONNECT WIRE HARNESS

19. REMOVE STARTER ASSEMBLY (See page ST-13)

20. REMOVE FLYWHEEL HOUSING SIDE COVER
   (a) Remove the flywheel housing side cover from the cylinder block.

21. REMOVE AUTOMATIC TRANSMISSION WITH TRANSFER
   (a) Turn the crankshaft to gain access to each bolt.
   (b) Hold the crankshaft pulley nut with a wrench and remove the 6 bolts.
   (c) Remove the 9 bolts.
   (d) Separate and remove the automatic transmission.

22. REMOVE TORQUE CONVERTER CLUTCH ASSEMBLY

23. REMOVE TRANSFER ASSEMBLY (See page TF-14)
INSTALLATION

1. INSTALL TRANSFER ASSEMBLY (See page TF-38)

2. INSPECT TORQUE CONVERTER CLUTCH ASSEMBLY (See page AT-169)

3. INSTALL TORQUE CONVERTER CLUTCH ASSEMBLY
   (a) Install the torque converter clutch onto the automatic transmission.
   (b) Using calipers and a straight edge, measure dimension A, between the engine and the end surface of the drive plate, shown in the illustration.
   (c) Using calipers and a straight edge, measure dimension B shown in the illustration and check that B is greater than A measured in (b).
   **Standard:**
   \[ A + 1 \text{ mm or more} \]

4. INSTALL AUTOMATIC TRANSMISSION WITH TRANSFER
   (a) Install the automatic transmission onto the engine with the 9 bolts.
   Torque: \(71 \text{ N} \cdot \text{m} \) (720 kgf*cm, 53 ft.*lbf) for bolt A
   \(37 \text{ N} \cdot \text{m} \) (380 kgf*cm, 27 ft.*lbf) for bolt B
   (b) Install the 6 torque converter clutch mounting bolts.
   Torque: \(48 \text{ N} \cdot \text{m} \) (489 kgf*cm, 35 ft.*lbf)
   **HINT:**
   First install the black bolt and then the other 5 bolts.
5. INSTALL FLYWHEEL HOUSING SIDE COVER  
   (a) Install the flywheel housing side cover onto the cylinder block.

6. INSTALL STARTER ASSEMBLY (See page ST-19)

7. INSTALL REAR NO.1 ENGINE MOUNTING INSULATOR  
   (a) Install the engine mounting insulator rear and 4 bolts onto the automatic transmission.  
   Torque: 65 N*m (663 kgf*cm, 48 ft.*lbf)

8. INSTALL NO.3 FRAME CROSSMEMBER SUB-ASSEMBLY  
   (a) Install the frame crossmember sub-assembly No. 3 with the 4 bolts and 4 nuts.  
   Torque: 40 N*m (408 kgf*cm, 30 ft.*lbf)  
   (b) Install the frame crossmember sub-assembly No. 3 with the 4 bolts.  
   Torque: 19 N*m (189 kgf*cm, 14 ft.*lbf)

9. INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY  
   (a) Install the transmission control cable bracket No. 1 with the 2 bolts.  
   Torque: 28 N*m (286 kgf*cm, 21 ft.*lbf)  
   (b) Connect the transmission control cable with the nut.  
   Torque: 14 N*m (143 kgf*cm, 10 ft.*lbf)

10. INSTALL NO.1 OIL COOLER OUTLET TUBE  
    (a) Provisionally install the oil cooler outlet tube No. 1.  
    (b) Provisionally install the oil cooler inlet tube No. 1.  
    (c) Install the 2 clamps and 2 bolts.  
    Torque: 12 N*m (122 kgf*cm, 9 ft.*lbf) for bolt A  
          5.0 N*m (50 kgf*cm, 43 in.*lbf) for bolt B
(d) Using SST, tighten the oil cooler outlet tube No. 1.
SST 09023-12701
Torque: 34 N*m (350 kgf*cm, 25 ft.*lbf)

11. INSTALL NO.1 OIL COOLER INLET TUBE
(a) Using SST, tighten the oil cooler inlet tube No. 1.
SST 09023-12701
Torque: 34 N*m (350 kgf*cm, 25 ft.*lbf)

12. INSTALL NO.2 MANIFOLD STAY
(a) Install manifold stay No. 2 with the 3 bolts.
Torque: 40 N*m (408 kgf*cm, 30 ft.*lbf)

13. INSTALL MANIFOLD STAY
(a) Install the manifold stay with the 3 bolts.
Torque: 40 N*m (408 kgf*cm, 30 ft.*lbf)

14. INSTALL PROPELLER WITH CENTER BEARING SHAFT ASSEMBLY (See page PR-8)

15. INSTALL FRONT PROPELLER SHAFT ASSEMBLY (See page PR-19)

16. INSTALL EXHAUST PIPE (See page EX-3)

17. CONNECT OXYGEN SENSOR

18. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL
Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)

19. PERFORM INITIALIZATION (See page AT-17)

20. ADD AUTOMATIC TRANSMISSION FLUID (See page AT-139)

21. INSPECT SHIFT LEVER POSITION (See page AT-158)

22. CHECK FOR EXHAUST GAS LEAKAGE

23. INSTALL NO. 2 ENGINE UNDER COVER (w/ No. 2 Engine Under Cover)

24. INSTALL NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY