

Figure 6-62

14. Install the differential cover and tighten the bolts in order from 1 to 10 to specification.

#### Specification:

**Differential Cover Bolts** 

**Initial Torque** 

20 N·m (2.0 m·kg; 14.8 lb-ft)

**Final Torque** 

28 N·m (2.9 m·kg; 20.7 lb-ft)

- 15. Install the axle shafts.
- 16. Install the rear axle. See Install the Rear Axle Carburetor Models on page 6-16.
- 17. Install rear axle gear oil. See Check the Axle Oil Level on page 3-40.

# TRANSMISSION - EFI MODELS

#### **Axle Shafts**

Remove the wheels.

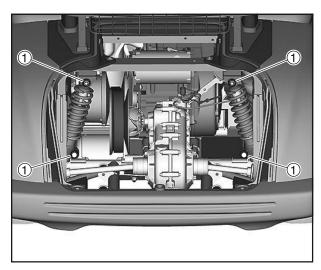


Figure 6-63

2. Remove the bolts (Figure 6-63, (1)) of the rear shock absorber. Remove the rear shock absorber.

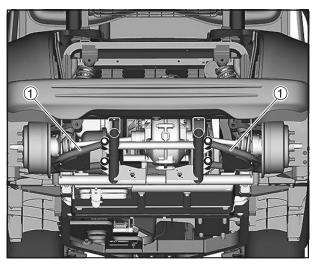


Figure 6-64

3. Remove the lower arm (Figure 6-64, (1)). See REAR SUSPENSION COMPONENTS – EFI MODELS on page 7-48.

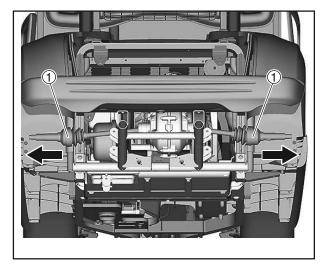


Figure 6-65

4. Pull out the drive shaft (Figure 6-65, (1)).

#### **Remove the Transmission**

- 1. Park the vehicle on a flat surface.
- 2. Block the front wheels.
- 3. Remove the seat.
- 4. Disconnect the negative (-) battery cable.
- 5. Remove the drive belt. See Replace the Drive Belt on page 3-10.

- 6. Remove secondary sheave assembly. See SECONDARY SHEAVE ASSEMBLY on page 6-10.
- 7. Remove rear access panel.
- 8. Raise the rear of the vehicle and lower onto jack stands under the rear frame.
- 9. Place a hydraulic jack under the Jack uppoint to support it.
- 10. Remove the rear wheels.

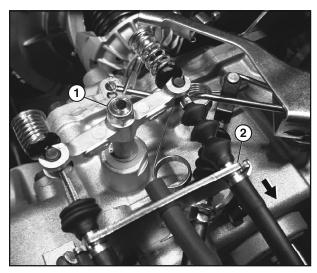


Figure 6-66

- 11. Remove nut (Figure 6-66, (1)) from the shifter shaft.
  - Slide shift lever off the shaft.
- 12. Pull the cables back out of the cast bracket on the transmission and slide the inner cables out of the slot (Figure 6-66, (2)).
- 13. Move shift lever and cables toward the front of car away from transmission.

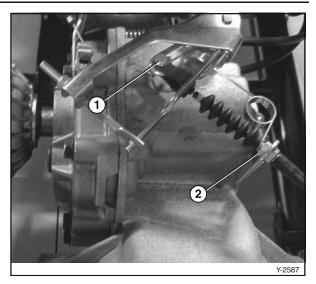


Figure 6-67

- 14. Remove the clevis pin (Figure 6-67, (1)) and disconnect the throttle cable from the speed limiter.
- 15. Loosen the jam nuts (Figure 6-67, (2)) and remove the throttle cable from the bracket.

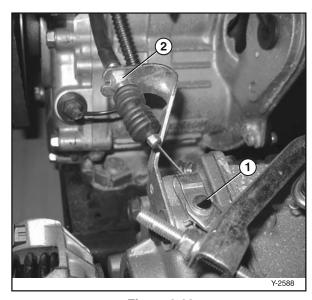


Figure 6-68

- 16. Remove the clevis pin (Figure 6-68, (1)) and disconnect the throttle cable.
- 17. Loosen the jam nuts (Figure 6-68, (2)) and remove the throttle cable from the bracket.

18. Remove the drive shaft. See Axle Shafts on page 6-26.

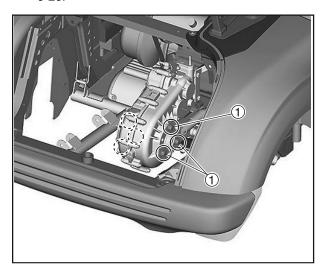


Figure 6-69

- 19. Remove six mounting bolts (Figure 6-69, (1)).
- 20. With the help of an assistant, lift up and slide the transmission from vehicle.

# Install the Transmission – EFI Models

Installation is done in the reverse of removal with the following notes:

- Tighten all fasteners to the specified torque.
- Adjust the shift cables. See Adjust the Shift Cable on page 3-11.
- Adjust the brake cable.
- Adjust throttle cables. See Adjust the Throttle Cables EFI Models on page 3-23.

#### Specification:

Shift Cable Equalizer Bracket Locknut Torque 3.5–5.5 N·m (0.4–0.6 m·kg; 31–49 lb-in.)

Rear Transmission Bolt Torque

55-65 N·m (5.5-6.5 m·kg; 40-47 lb-ft)

Rear Shock Absorber Bolt Torque

52-58 N·m (5.2-5.8 m·kg; 38-43 lb-ft)

Suspension Lower Arm Bolts Torque 48-58 N·m (4.8-5.8 m·kg; 35-42 lb-ft)

**Wheel Nut Torque** 

88 N·m (8.8 m·kg; 65 lb-ft)

**Rear Hub Flange Nuts Torque** 

220-290 N·m (22-29 m·kg; 159-210 lb-ft)

# **Disassemble the Transmission**

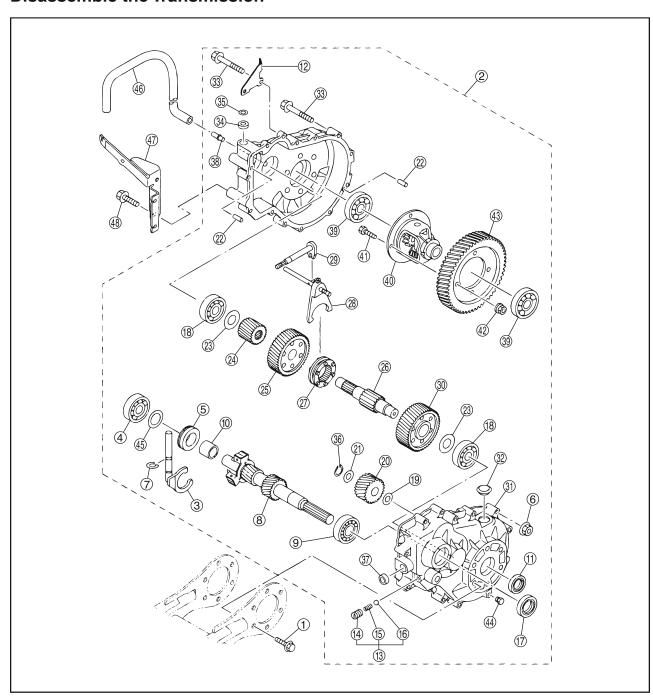


Figure 6-70

- 1. Flange Bolt (six used)
- 2. Transmission
- 3. Governor Lever
- 4. Bearing
- 5. Governor Sleeve
- 6. Nut (thirteen used)
- 7. Retaining Ring
- 8. Input Shaft
- 9. Bearing
- 10. Collar
- 11. Dust Seal
- 12. Bracket
- 13. Detent Assembly
- 14. Set Screw
- 15. Spring
- 16. Ball
- 17. Oil Seal
- 18. Bearing (two used)
- 19. Plate Washer
- 20. Idler Gear
- 21. Plate Washer
- 22. Dowel Pin (two used)
- 23. Washer (two used)
- 24. Gear

- 25. Reverse Gear
- 26. Counter Shaft
- 27. Shift Collar
- 28. Shift Fork
- 29. Shift Lever
- 30. Forward Gear
- 31. Case Cover
- 32. Oil Check and Fill Plug
- 33. Flange Bolt (thirteen used)
- 34. Oil Seal
- 35. Washer
- 36. Retaining Ring
- 37. Oil Seal
- 38. Vent Fitting
- 39. Bearing (two used)
- 40. Differential Assembly
- 41. Bolt (four used)
- 42. Nut (four used)
- 43. Ring Gear
- 44. Drain Plug
- 45. Shim 0.76 mm (0.030 in.)
- 46. Vent Hose
- 47. Bracket
- 48. Flange Bolt (two used)

- 1. Place a drain pan under the transmission case.
- 2. Drain the oil.
- 3. Remove the transmission from the car. See TRANSMISSION EFI MODELS on page 6-26.

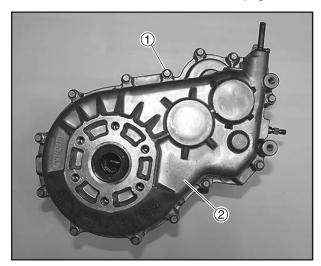


Figure 6-71

4. Remove the bolts (Figure 6-71, (1)) and nuts and remove the transmission case (Figure 6-71, (2)).

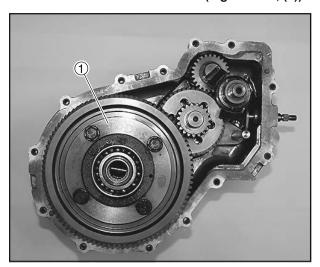


Figure 6-72

5. Remove the differential assembly with the ring gear (Figure 6-72, (1)).

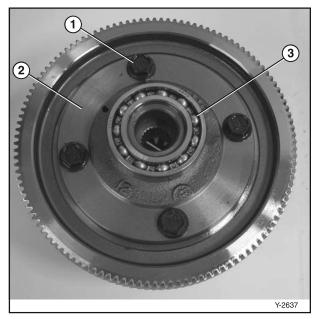


Figure 6-73

- 6. Remove the bolts and nuts (Figure 6-73, (1)) and remove the ring gear (Figure 6-73, (2)) from the differential assembly.
- 7. Inspect the bearings (Figure 6-73, (3)). They must rotate smoothly and quietly.

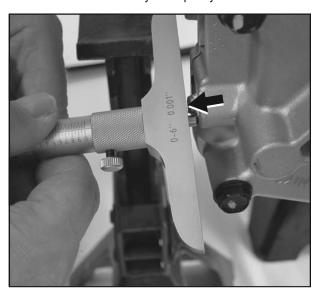


Figure 6-74

8. Measure the height that the detent set screw protrudes from the case. When installed it must be at the same height.

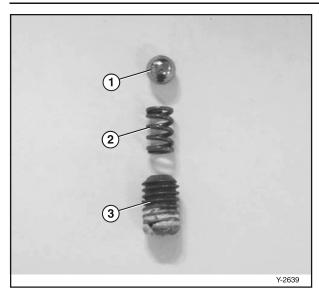


Figure 6-75

9. Remove the set screw (Figure 6-75, (3)), the spring (Figure 6-75, (2)) and the detent ball (Figure 6-75, (1)).

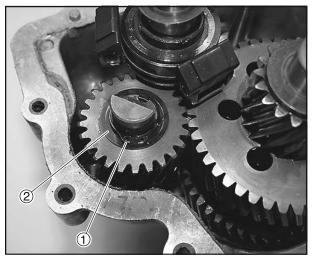


Figure 6-76

10. Remove the retaining ring (Figure 6-76, (1)) and the plate washer (Figure 6-76, (2)).

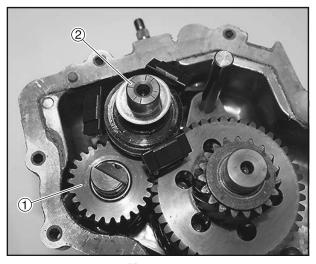


Figure 6-77

- 11. Remove the idler gear (Figure 6-77, (1)) and input shaft and rotate the governor shaft (Figure 6-77, (2)).
- 12. Inspect the gear for wear.



Figure 6-78

- 13. Inspect the weights (Figure 6-78, (1)) for the governor. Make sure they move freely.
- 14. Make sure the shim (Figure 6-78, (2)) is smooth on both sides.



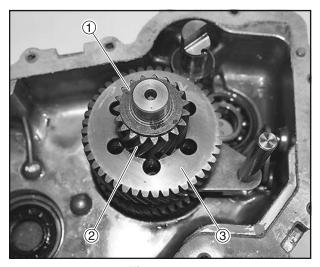


Figure 6-79

- 15. Remove the washer (Figure 6-79, (1)) and gear (Figure 6-79, (2)) and reverse gear (Figure 6-79, (3)) from the countershaft.
- 16. Inspect the gears for wear.

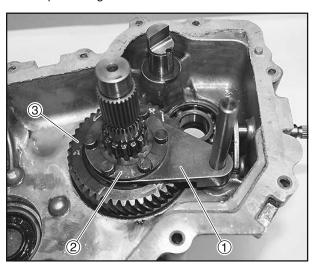


Figure 6-80

- 17. Remove the shift fork (Figure 6-80, (1)) along with the shift collar (Figure 6-80, (2)).
- 18. Remove the forward gear (Figure 6-80, (3)) and the countershaft.

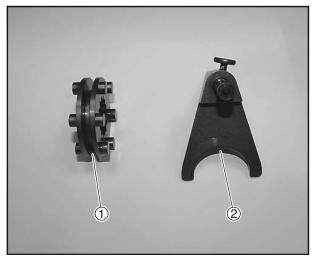


Figure 6-81

19. Inspect the shift collar (Figure 6-81, (1)) and the shift fork (Figure 6-81, (2)) for wear.

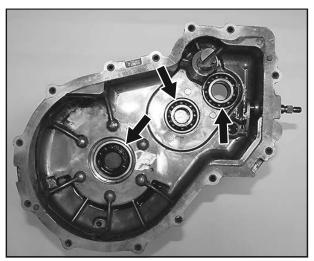


Figure 6-82

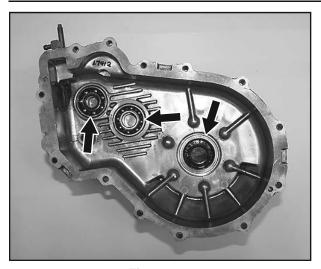


Figure 6-83

- 20. Inspect the bearings in the case. They must rotate smoothly.
- 21. Replace the oil seal for the cover.

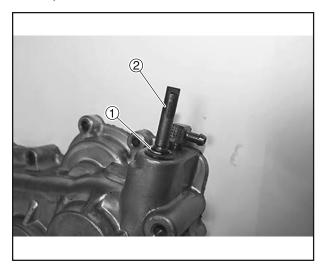


Figure 6-84

22. Remove the retaining ring (Figure 6-84, (1)) and slide the governor shaft (Figure 6-84, (2)) inside the case to remove.

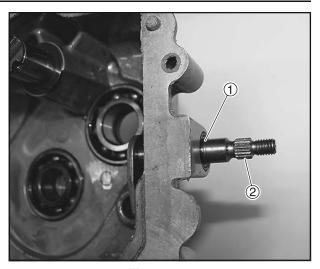


Figure 6-85

23. Remove the snap ring (Figure 6-85, (1)) and slide the shift lever (Figure 6-85, (2)) into the case to remove.

### **Assemble the Transmission**

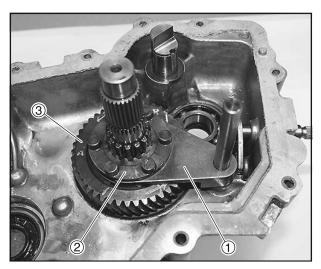


Figure 6-86

- 1. Install the forward gear (Figure 6-86, (3)) and the countershaft.
- 2. Install the shift fork (Figure 6-86, (1)) along with the shift collar (Figure 6-86, (2)).



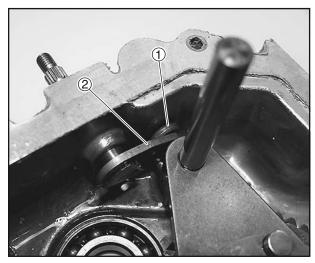


Figure 6-87

3. Install the shift fork and shift collar onto the countershaft making sure that the roll pin (Figure 6-87, (1)) on the shift fork shaft is in the groove on the shifter lever (Figure 6-87, (2)).

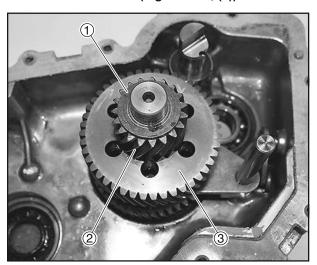


Figure 6-88

4. Install the reverse gear (Figure 6-88, (3)) and gear (Figure 6-88, (2)) and washer (Figure 6-88, (1)).

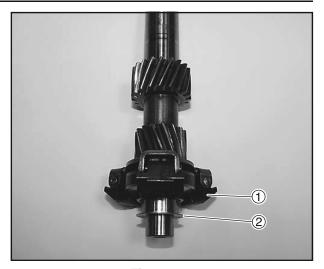


Figure 6-89

 When installing the input shaft make sure to use the same shim (Figure 6-89, (2)) that was removed. (Figure 6-89, (1)) shows the weights.



Figure 6-90

6. Install the input shaft and rotate the governor shaft (Figure 6-90, (2)) and idler gear (Figure 6-90, (1)).

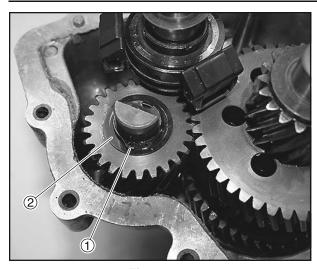


Figure 6-91

7. Install the plate washer (Figure 6-91, (2)) and retaining ring (Figure 6-91, (1)).

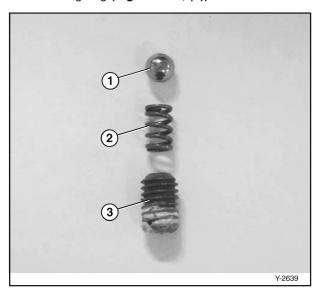


Figure 6-92

- 8. Install the detent ball (Figure 6-92, (1)), the spring (Figure 6-92, (2)) and the set screw (Figure 6-92, (3)).
- 9. Tighten the set screw to the same height that was measured before disassembly.

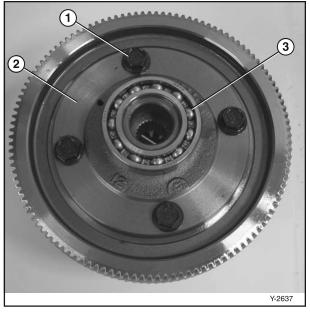


Figure 6-93

10. Install the ring gear (Figure 6-93, (2)) to the differential assembly. Tighten bolts and nuts (Figure 6-93 (1)) to specification.

(Figure 6-93, (3)) shows the bearings as well.

Specification:

Ring Gear Bolts Torque 54 N·m (5.5 m·kg; 39.8 lb-ft)

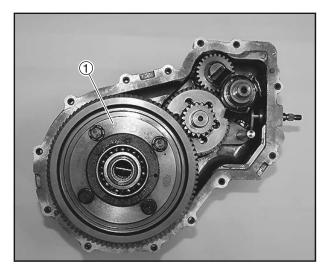


Figure 6-94

- 11. Install the differential assembly (Figure 6-94, (1)).
- 12. Clean the transmission case and the case mounting surface.
- 13. Apply RTV gasket sealant to the cover.

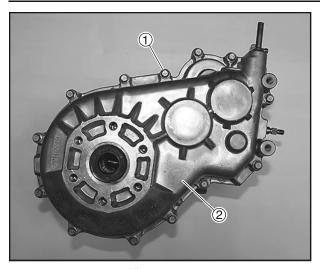


Figure 6-95

14. Install the transmission case (Figure 6-95, (2)) and tighten the bolts (Figure 6-95, (1)) and nuts.

## Specification:

**Transmission Case Bolts** 

#### **Initial Torque**

12 N·m (1.2 m·kg; 8.7 lb-ft)

- 15. Install the transmission.
  Install the axle shafts. See Install the
  Transmission EFI Models on page 6-28.
- 16. Install transmission gear oil. See Check the Transmission Oil (EFI Models) on page 3-29.