



Module Number: 05-2

Subject: Transfer case disassembly

Objective:

At the conclusion of this module you will be able to:

- Remove and install intermediate flange
- Remove and install transfer case gear shafts
- Perform an axial play adjustment for input and countershaft

Vehicle and tools required:

- Transfer case 750.654, input shaft flanges removed
- Vernier caliper and depth gauge
- Torque wrench (10-40Nm)
- Sockets 13, 22mm
- Ratchet and extension
- Allen 5, 6mm
- Snap ring pliers - small
- Screwdriver #2
- Hammer – plastic
- MB Special Tools
- Flashlight

Required materials:

- Hand out material for Transfer Case
- WIS
- Assembly grease

Instructions:

1. Follow the attached instructions and answer the questions
2. Use your hand out and ask your instructor for assistance
3. Stop at “★ *Instructor check point* _____” for signature
4. It should take you about 70 minutes

Task: Disassemble/Assemble transfer case (AR28.10-P-1000GM)

Not all of the subtask of the transfer case disassembly will be performed. Focus is the inner mechanics of the case and adjustment of bearing preload

1. Remove transfer case actuator motor (AR28.19-P-1004GM)
2. Remove intermediate flange cover (AR28.40-P-0110GM)

Note: Oiling tube fitted inside top cover for input shaft lubrication

3. The intermediate flange cover houses the adjustment shims for the input and counter shaft axial play. Measure the thickness of the installed shims.

Input shaft _____mm Counter shaft _____mm

4. Are the shims interchangeable between input and counter shaft? YES NO

5. Remove bolts holding intermediate flange. There are 4 different lengths of bolts used in steps 2-5. Assign the size to their position (AR28.40-P-0110-01GM)

M8x60 _____

M8x75 (hexagonal) _____

M8x80 _____

M8x50 (1 hexagonal) Remaining intermediate flange screws

6. Remove snap ring and washer of the high/low shifter shaft bearing

Note: WIS instructions do not reference to this!

7. Remove Intermediate flange

Hint: Tap on the high/low shifter shaft (not bearing) and install two M10x55mm bolts in the intermediate flange for leverage if necessary

8. Remove differential (AR28.50-P-1023GM)
9. Remove input and counter shaft (AR28.50-P-1019GM)

Note: Hi/low shift fork and shifter shaft are removed at this point. Input flange has already been removed for you

10. Does the high/low shift fork pin have a small barrel bushing? YES NO

If not, call your Instructor!

★ **Instructor check point** _____

11. Assemble transfer case in reverse order until intermediate flange is installed

Note: Do not forget to install the snap ring on the hi/low shifter shaft.

12. What is the torque specification for the intermediate flange bolts? _____ NM

13. Check and adjust axial play of input shaft and countershaft (AR28.50-P-1018-02B). Install thrust device on countershaft

Hint: Look closely at instructions to determine position of spacers included with special tool

★ **Instructor check point** _____

14. What is the specification for the axial play? _____ mm

15. Calculate shim thickness for countershaft

Depth bearing seat _____ mm

Distance outer race - _____ mm

Shim thickness = _____ mm

16. Does this calculation coincide with the installed shims (step 3) YES NO

17. Calculate shim thickness for input shaft

Depth bearing seat _____ mm

Distance outer race - _____ mm

Shim thickness = _____ mm

18. Does this calculation coincide with the installed shims (step 3) YES NO

19. Install intermediate flange cover and top cover. What type of sealant is specified for this job? _____

Return tools and component to their original condition. If you have noticed any parts that need to be replaced please inform your instructor

★ **Instructor check point** _____