



## WORKSHEET 5-1

### *Transfer Case—Disassembly and Component Identification*

Vehicle:	Year/Prod. Date:	Engine	Transmission:
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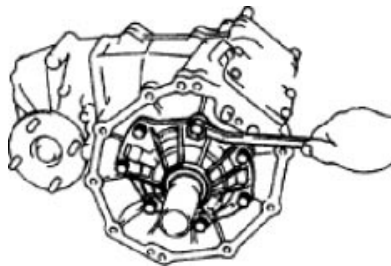
### Worksheet Objectives

With this worksheet, you will follow the disassembly of a four wheel drive transfer case using the required special tools, make measurements where appropriate, retrieve and apply the needed service information, retrieve and interpret service specification information from the repair manual.

### Tools and Equipment

- Vehicle Repair Manual
- Hand Tool Set
- Dial Indicator and Stand
- Micrometer, 0-1 in.
- Feeler Gauge

### Section 1: Case Disassembly



1. Remove the front bearing retainer and front and rear companion flanges.
  - a. What Special Service Tool is used to remove the companion flange?

\_\_\_\_\_

b. Is this Special Service Tool an essential tool or available tool?

\_\_\_\_\_

2. Remove extension housing and speedometer drive gear. (Caution: Don't loose the steel ball)
3. Remove the detent plugs, springs and balls.
4. Separate the case halves and remove the front case.
5. What shaft turns to drive the oil pump?

\_\_\_\_\_

\_\_\_\_\_

6. Is the vehicle dinghy tow able?

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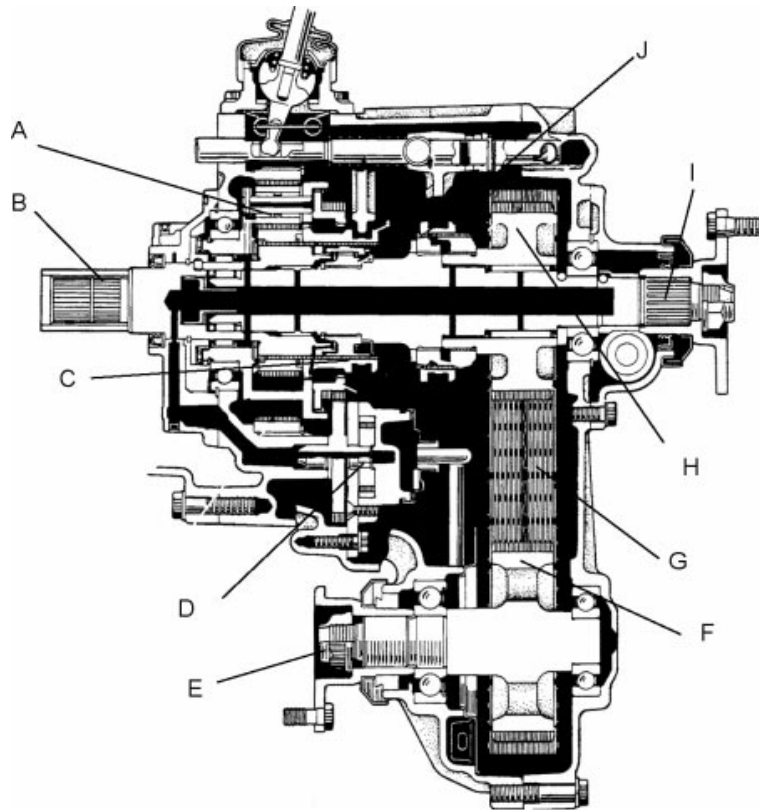
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## Section 2: Component Identification

Match the component names listed below with the parts in the illustration. Place the letter that identifies the part on the line in front of the component name.



- \_\_\_\_\_ 1. Transfer input shaft
- \_\_\_\_\_ 2. Planetary gear set
- \_\_\_\_\_ 3. Rear output shaft
- \_\_\_\_\_ 4. Silent chain
- \_\_\_\_\_ 5. Front output shaft

- \_\_\_\_\_ 6. Drive sprocket
- \_\_\_\_\_ 7. Driven sprocket
- \_\_\_\_\_ 8. Front drive clutch sleeve
- \_\_\_\_\_ 9. High low clutch sleeve
- \_\_\_\_\_ 10. Oil pump

### Section 3: Gears, Shafts and Shift Linkage Removal

1. **STOP** proceed only as directed by your instructor.
2. Remove the shift forks and shift fork shafts. Shift forks are secured to the shaft with a roll pin or in some cases with a double roll pin. The position of the roll pin slit is essential to preventing the pin from being compressed and working its way from the shift shaft. Explain how the roll pin should be placed into position.

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3. Remove the output shaft, chain and front drive sprocket.
4. Remove the oil pump and planetary gear assembly with input shaft.

### Section 4: Clearance Measurement

1. Measure the rear output shaft drive sprocket thrust clearance:

Measurement: \_\_\_\_\_ Specification: \_\_\_\_\_

(If the clearance exceeds the maximum, the sprocket should be replaced.)

2. Measure the input shaft and planetary gear thrust bearing axial play:

Measurement: \_\_\_\_\_ Specification: \_\_\_\_\_



## Notes

# Transfer Case—Disassembly & Component Identification

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Review this sheet as you are doing the Transfer Case—Disassembly & Component Identification worksheet. Check each category after viewing the instructor's presentation and completing the worksheet. Ask the instructor if you have questions regarding the topics provided below. Additional space is provided under Topic for you to list any other concerns that you would like your instructor to address. The comments section is provided for your personal comments, information, questions, etc.

I have questions

I know I can

Topic	Comment		
Identify all gears in the transfer case.			
Identify all synchronizers in the transfer case.			
Explain how 2WD and 4WD is engaged.			
Explain how 4 low and 4 high is engaged.			
Measure output shaft drive sprocket thrust clearances.			
Measure input shaft and planetary gear thrust bearing axial play.			



## Notes