**STUDENT WORK SHEET** **WS 10**

**Transaxle shim selection, Section 6.5.12**

**Student Name** **KEY** **Date**

1. This transaxle has three selective shims, and you have installed a 1.00 mm shim at the input shaft bearing, a 1.05 mm shim at the output shaft bearing, and a 1.12 mm shim at the differential bearing.

2. When you measure the end play of the three shafts, you get the four readings for each shaft.

What is the average endplay value for the:

Input shaft: _**0.26**___ mm

Output shaft: _**0.44**___ mm

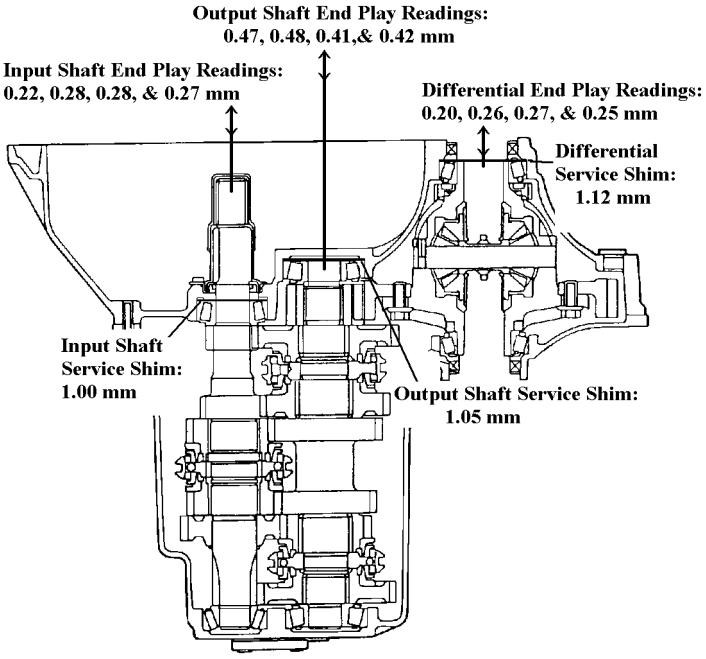
Differential: _**0.24**____ mm

**Enter these on Row 2 of the table.**

**22 + 28 + 28 + 27 = 105/4 = 26.25**

**47 + 48 + 41 + 42 = 178/4 = 44.5**

**20 + 26 + 27 + 25 = 98/4 = 24.5**




3. The manufacturer recommends adding a preload value of 0.10 mm to the Input shaft, 0.20 mm. to the Output shaft, and 0.40 mm to the Differential. **Add the service shim, the average endplay, and the preload value to determine the size of the required preload shim.**

| DESCRIPTION | INPUT SHAFT | OUTPUT SHAFT | DIFFERENTIAL |
|---|---|---|---|
| 1. Service Shim | 1.00 mm | 1.05 mrn | 1. 12 mrn |
| 2. Average Endplay | **0.26** | **0.44** | **0.24** |
| 3. Preload Value | 0.10 | 0.20 | 0.40 |
| 4. Required Shim | **1.36** | **1.69** | **1.76** |
| 5. Shim Range | 1.27 -1.71 in steps of 0.02 mm | 1.43 - 1.91 in steps of 0.02 mm | 1.40 - 2.20 in steps of 0.05 mm |
| **6. Shim to install** | **1.35** | **1.69** | **1.75** |

4. Shims are available in the sizes indicated in Row 5. Shim Range. **Determine the size that most closely fits your need, and enter it in Row 6.** If necessary, round the shim size to the next smaller shim.