Manual Transmission/Transaxle Diagnosis and Service
Chapter 8

ACROSS

1. Check for ________, which is a reddish dust found around areas that have rusted and is a likely location where wear has occurred.
2. _______ _______ measures the effort required to move the synchronizer sleeve or gear, fork, and shift rail past the neutral detent and into mesh.
3. _______ _______ is a series of small burn marks or grooves across the raceways of a bearing.
4. _______ _______ is a series of indentations pressed or worn into a bearing race.
5. The _______ _______ is almost a repeat of the engine-off check except that it checks for clutch drag as well as transaxle/transmission problems.
6. When small particles decay and break off the bearing races, it is called _______.
7. During the reassembly of a transaxle/transmission that uses tapered roller bearings, the _______ of each shaft should be checked.
8. A diagonal polish of the stationary bearing race while excess wear occurs all over the rotating raceway from a bore and shaft that are not correctly aligned is called _______.
9. It is recommended to do a _______ _______ at each engine oil change.
10. _______ is an advanced stage of decay when flaking away of particles from the bearing race occurs.
11. A selective _______ is located at a bearing at one end of each shaft, and the thickness of it controls the amount of preload.
12. _______ is caused when balls or rollers fail to roll and this causes damage to cage and end of rollers with evidence of excessive heat.
13. A light scraping away of the surface of the bearing race is called _______.
14. _______ _______ is another name for preload.
15. Scratches, pitting, or scoring in a scattered pattern on the ball or roller surfaces of a bearing is called _______.

DOWN

1. _______ _______ is a likely location where we a has occurred.
2. _______ _______ _______ is a repeat of the engine-off check except that it checks for clutch drag as well as transaxle/transmission problems.
3. _______ _______ _______ _______ _______ measures the effort required to move the synchronizer sleeve or gear, fork, and shift rail past the neutral detent and into mesh.
4. _______ _______ _______ _______ is a series of small burn marks or grooves across the raceways of a bearing.
5. _______ _______ _______ is a series of indentations pressed or worn into a bearing race.
6. _______ _______ _______ _______ _______ _______ _______ is an advanced stage of decay when flaking away of particles from the bearing race occurs.
7. _______ _______ _______ _______ _______ is located at a bearing at one end of each shaft, and the thickness of it controls the amount of preload.
8. _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ ---------