ACROSS

3. Eliminating torque converter _______ can improve fuel economy approximately 4% to 5% during freeway cruising.

5. The outermost member of the gear set is the ________, the internal type with teeth inside.

7. The ________ holds the pinion gears which revolve around the sun gear.

8. In the_______ position, the output shaft is locked to the case of the transmission/transaxle, which keeps the vehicle from moving.

9. The _______ is located on the engine side of the converter.

12. Lockup torque converters reduce slippage by using a ________ _______ _______ to lock the turbine to the cover.

14. Most automatic transmissions use a ________ _______ system that does not require manual gear shifting or an interruption of torque flow to change gear ratios.

15. ________ _______ _______ is highly refined oil with a viscosity similar to SAE 20W-20 oil, is red in color and specially designed for use in an automatic transmission.

DOWN

1. A torque converter is typically bolted to a thin metal disc called a ________.

2. The _______ gets its name from its position at the center of the gear set.

4. Another name for pinion gears are ________ _______.

6. The ________ is the driving member inside the torque converter housing and is driven by the engine.

10. A torque converter is capable of transferring some engine torque to the transmission with the engine at idle speed which results in some vehicle movement, called_______, if the brakes are released.

11. A torque converter also contains the ________, or reactor, which is a reaction member mounted on a one-way clutch.

13. The impeller _______ pick up fluid in the converter housing and direct it toward the turbine.