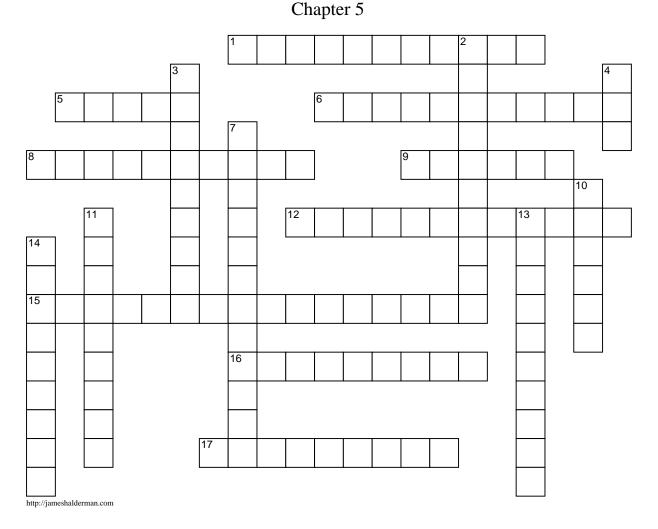
Manual Transmissions Parts and Operation



ACROSS

- 1 A _____ is also called a stop ring or synchronizer ring.
- 5 Constant mesh gears are always engaged with their mating gear and are mounted so that one of them, called a ______ gear, can freewheel on its shaft.
- 6 The _____ is also called a main shaft.
- 8 Some synchronizers use a _____, with an outer cone and an inner cone along with the blocker ring.
- **9** Small, spring-loaded detent keys, also called synchronizer keys or _____, ride in slots on the outer sleeve.
- 12 A blocker ring is also called a stop ring or ______ ring.
- 15 Small, spring-loaded detent keys, also called ______ or struts, ride in slots on the outer sleeve.
- 16 The input shaft is also called a _____ gear or clutch shaft.
- **17** The synchronizer sleeve is moved by a _____ that is mounted on either a rail or a cam.

DOWN

- 2 ______ either in the shifter linkage itself or inside the transmission/transaxle prevent the accidental selection of reverse except when shifting from neutral and also prevent selecting two gears at the same time.
- **3** To make the vehicle back up, the main shaft must rotate counterclockwise. To accomplish this, an _____ is meshed between the cluster gear and the reverse gear on the main shaft.
- 4 Abbreviation for manual transmission fluid.
- 7 _____ gears are always engaged with their mating gear and are mounted so that one of them, called a speed gear, can freewheel on its shaft.
- **10** A ______ is usually a spring-loaded ball or bulletshaped rod that is pushed into one of a series of three notches or a spring-loaded lever with three notches that drop over a cam.
- **11** The output shaft is also called a _____
- 13 The _____ is also called a main drive gear or clutch shaft.
- 14 ______ is a measurement of fluid thickness.