Note #1: You must remove the speedometer sensor from the transmission case before installing your 6-Speed Gear Set. Note #2: CCI recommends using our electronic speedometer recalibration unit (CCI #58-318) due to the different gear ratios. Refer to your OEM service manual for all necessary preparation procedures to disassemble & remove the top transmission cover, shift cam & fork assembly, clutch release cover, trap door with gear set assembly and shifter arm assembly.

1. Remove your transmission top cover, shift cam & fork assembly, clutch release cover, trap door mounting bolts and pulley nut.
2. Remove your bearing inner race from main shaft (pulling tool not included).
3. Use a large plastic mallet and remove & set aside your existing gear set with trap door assembly. Now you can remove your existing shifter arm assembly.
4. Use the supplied bushing punch & installation kit and remove your existing shifter arm shaft bushing. Use the same bushing punch & installation kit and install the supplied shifter arm shaft bushing. Now you can install new shifter arm assembly as per OEM service manual. Remove all gears and both gear shafts from your existing trap door.

Assembling Your New Main and Counter Shafts onto Your Existing Trap Door

5. Slide a thrust washer (CCI #30-434) onto the main shaft. Lightly coat the bearings with grease then slide the bearing cage (CCI #30-430) onto main shaft.
6. With pockets facing upwards, slide 6th gear main (CCI #30-406) onto the main shaft until against the thrust washer.
7. Place a thrust washer (CCI 30-432) onto the main shaft and slide up until against 6th gear.
8. Install the main shaft and the counter shaft (with pre-installed 6th gear counter and alloy key) into the trap door using the supplied nylon lock nuts and torque to 30 - 35 ft.-lbs. Do not over torque these nuts. Note: If the 6th gear is removed, place the alloy key into the shaft groove then press gear (with the shoulder facing downwards) onto the counter shaft.
Assembling Your New Gear Set: Part 1

9. With the thicker shifting dog base facing upwards, place the slider main (CCI #30-416) onto the main shaft and slide down until the dogs are engaged with the 6th gear pockets.

10. Use retaining pliers and install a snap ring (CCI #30-428) onto the main shaft, as shown in the illustration.

11. Place a thrust washer (CCI #30-431) onto the main shaft and slide down until against the snap ring.

12. Lightly coat bearings with grease then place bearing cage (CCI #30-430) onto top of main shaft. Use retaining pliers and open bearing cage just enough to clear the shaft diameter then slide bearing cage down until seated on shaft. **Caution: Do not over expand the bearing cage when installing.** After the bearing cage is seated onto shaft, reinstall any loose roller bearings. **Note:** Apply same procedure for all bearing cages.

13. Use retaining pliers and install a snap ring (CCI #30-428) onto the counter shaft, as shown in the illustration.

14. With the shoulder facing downwards, place the 4th gear counter (CCI #30-412) onto the counter shaft and slide down until flat against the snap ring.

15. Lightly coat bearings with grease then install a bearing cage (CCI #30-430) onto the counter shaft.
Assembling Your New Gear Set: Part 2

16. With the pockets facing downwards, place the 4th gear main (CCI #30-404) onto the main shaft and slide down until against the thrust washer.

17. With the shoulder facing upwards, place the 2nd gear main (CCI #30-402) onto the main shaft and slide down until against the 4th gear main.

18. Lightly coat bearings with grease then install a bearing cage (CCI #30-430) onto the main shaft.

19. With the pockets facing upwards, place the 2nd gear counter (CCI #30-410) onto the counter shaft and slide down until against the 4th gear counter.

20. Place a thrust washer (CCI #30-431) onto the counter shaft and slide down until against the 2nd gear counter.

21. Install a snap ring (CCI #30-428) onto the counter shaft, as shown in the illustration.
Assembling Your New Gear Set: Part 3

22. With the pockets facing upwards, place the 3rd gear main (CCI #30-403) onto the main shaft and slide down until against the 2nd gear main.

23. Place a thrust washer (CCI #30-431) onto the main shaft and slide down until against the 3rd gear main.

24. Install a snap ring (CCI #30-428) onto the main shaft, as shown in the illustration.

25. With the shift fork groove facing upwards, place the 3rd gear counter (CCI #30-411) onto the counter shaft and slide down until the dogs are engaged with the 2nd gear pockets.

26. Install a snap ring (CCI #30-428) onto the counter shaft, as shown in the illustration.

27. Place a thrust washer (CCI #30-431) onto the counter shaft and slide down until against the snap ring.

28. Lightly coat bearings with grease then install a bearing cage (CCI #30-430) onto the counter shaft.
Assembling Your New Gear Set: Part 4

29. Install these next two gears at the same time: With the pockets facing downwards, place the 1st gear counter (CCI #30-408) onto the counter shaft and slide down until against the thrust washer. With the thicker dog base facing downwards, place the 1st gear main (CCI #30-400) onto the main shaft and slide down until the dogs are engaged with the 3rd gear pockets.
Assembling Your New Gear Set: Part 5

30. With the beveled side facing downward, place the 5th gear counter (CCI #30-413) onto the counter shaft and slide down until against the 1st gear.

31. Place a thrust washer (CCI #30-433) onto the counter shaft and slide down until against the 5th gear.

32. Install the snap ring (CCI #30-429) onto the counter shaft, as shown in the illustration.

33. Install the 5th gear main (CCI #30-405) into the transmission case as per OEM service manual, see Main Drive Gear Installation procedures. (Note: The 5th gear main has pre-installed bearings).
Assembling Your New Gear Set: Part 6

**Note #1:** On some transmission cases, the 4-6 shift fork may have interference with the shift fork boss on the inside of case. Use a suitable hand file and file the boss down, if necessary.

**Note #2:** Due to the variety of transmission case cores, in some instances the 1st gear counter and/or the 6th gear main may have contact with the lower portion of the inner case. Check clearance before completely installing the gear assembly into case. Relieve the interference in the case core, if necessary.

**Note #3:** The supplied spacer plate (CCI #30-438) must be installed under the speedometer sensor pick-up to allow gear assembly clearance.

**Note #4** You must purchase separately and install a CCI neutral light switch CCI #30-439.

**Note #5:** Use Loctite™ (CCI #35-007) on the first three threads of all hardware, before the final assembly.

34. Install your new 6-Speed Gear assembly with existing trap door (gasket not supplied) into your existing transmission case as per OEM service manual.

35. Place your new shift forks 4-6 main, 1-2 counter and the 3-5 main into their proper gear positions. Use your existing shift fork shaft (Note: Check the shift fork shaft for any excessive wear) and slide the shift fork shaft through the transmission case, shift forks and into opposite side of case.

36. Install your new 6-speed shifter cam assembly as per OEM service manual. **Note:** Manually check the free play of each shift fork with each gear engagement.

37. Gear engagement (shifter pawl) adjustment: Use your OEM service manual for the adjustment procedures. **Note:** Your RevTech® 6-Speed Shifter Pawl can be adjusted in any one of the following gears: 2nd, 3rd, 4th or 5th.

38. Install your existing transmission top cover and clutch release cover (gaskets not supplied) using your existing screws. (clutch release cover plate with R/T 6-Speed Logo and mounting hardware is optional). Tighten all hardware to OEM torque values.

39. Referring to **Note #4** installation of the neutral light switch CCI #30-439, will require the removal of the existing OEM neutral light wire connectors and replacing with the supplied eyelet connectors.
Complete RevTech® 6-Speed Transmission

When installing this transmission on 1993 and later models equipped with electronic speedometers, it will also be necessary to:

1) Remove the solid sensor plate that is pre-installed on the transmission and replace it with the supplied spacer plate (CCI #30-438). This should be done before installing the speedometer sensor pick-up to insure that there is proper clearance between the pick-up and the gear assembly.

2) Purchase and install a Speedometer Recalibration Unit (CCI #58-318). This will insure that your speedometer maintains it's accuracy, because of the change in the final drive ratio.

Note: Add the proper amount of RevTech transmission lube (One quart supplied CCI #35-055). Use your OEM service manual for the proper fluid amount or level.
NOTE #1: This tool does not pull the trap door with gear sets attached from the transmission case.
NOTE #2: This tool is used to remove the trap door from the transmission shafts.
NOTE #3: If necessary, refer to your proper OEM service manual for any preparation procedures.

1. REMOVAL
   a. Drain transmission lube into suitable container.
   b. Remove clutch release cover
   c. Remove top cover
   d. Remove shift drum
   e. Remove shift fork shaft and shift forks
   f. Lock into two gears and remove main and counter shaft lock nuts.
   g. Remove trap door hardware.
   h. Install removal tool (puller plate) onto trap door with hardware that was previously removed from clutch release cover. Place existing bolts (4) into appropriate holes (see photo #1). Thread jack screws into puller plate tool and press the main and counter shafts out of the trap door bearings (Turn each jack screw one turn at a time).

2. INSTALLATION
   a. Install new trap door bearings and retaining rings.
   b. Install new trap door gasket.
   c. Place trap door over the main and counter shafts.
   d. Thread two long installation nuts onto the main and counter shafts (see photo #2).
   e. Pull the shafts into the bearings (Turn each installation nut one turn at a time).
   f. Install trap door mounting hardware.
   g. Lock into two gears and install and torque shaft lock nuts to 30-lbs./ft. torque.
   h. Install throw-out bearing.
   i. Install shift forks and shift fork shaft.
   j. Install new clutch release cover gasket.
   k. Install clutch release cover.
   l. Install shift drum.
   m. Install new top cover gasket.
   n. Install top cover.
   o. Add appropriate amount of transmission lube.