Use normal assembly procedures for the T-400 transmission being certain not to remove the following parts: governor, electric kickdown, modulator.

1. Raise the vehicle and support with jack stands or raise on an automotive lift. Make sure that the vehicle is properly supported! Place a drain pan under the transmission.

2. If your transmission is equipped with a drain plug, remove the plug and allow the fluid to drain. If your unit does not have a drain plug, remove all pan bolts except the 2 at the front of the transmission. Remove bolts one at a time, working back to front. Exercise caution as transmission fluid will splatter erratically during oil pan removal. You might need to reposition the transmission crossmember in order to remove the rear oil pan bolts. If this becomes necessary, support the rear of the transmission to prevent the transmission / engine assembly from moving down and causing damage to the distributor cap and /or engine mounts. As you remove the bolts along the sides of the oil pan, the weight of the fluid will usually cause the oil pan to separate from the transmission case, allowing the fluid to drain from the rear of the oil pan. However, if the pan does not readily separate from the transmission case, insert a screwdriver between the oil pan and the case and pry gently to begin the draining process. Remove the two from oil bolts slowly (about one turn at a time) and fluid will drain at a steady rate from the rear of the oil pan. Drain the oil pan completely and keep it to hold bolts and small parts. Note the position of the detent guide plate, detent roller assembly, detent spring and all linkage.

3. Remove the valve body from the transmission. Save the checkballs for use with your ATI Valve Body.

4. Double check the transmission case and make sure that there are no pieces of old valve body gasket remaining on the valve body mating surface of the case. Use a single edge razor blade or a gasket scraper to remove any remaining debris.

5. Install checkballs on the plate as shown in the diagram. Install the plate to the case with the gasket in place and install the kickdown switch and bolts to hold the plate to the case. Install the ATI valve body into the transmission. Carefully torque the valve body bolts to 120 in/lbs (10 ft/lbs). Install a new filter.
6. Remove any pieces of old pan gasket from the transmission case and oil pan. Clean oil pan and install using a new pan gasket. Secure all pan bolts evenly and then torque them to 150 in. lbs. or 12 ft. lbs. If you have removed a drain plug, install it now and tighten securely.

7. Always check shifter adjustment after installation. Never adjust the shifter linkage or cable in "PARK" position. Always start adjustment / alignment with the shifter and the transmission in high gear. After setting the cable or linkage in high gear, make sure that your linkage or cable aligns perfectly with the transmission lever in all other gear positions. Proper shifter adjustment is vital and critical to proper operation of the transmission. Do not operate without verifying proper shifter adjustment! Secure your linkage or cable appropriately when finished.

8. Lower the vehicle. Keep the rear wheels off the ground if possible. Pour in four (4) quarts of automatic transmission fluid. ATI recommends using a quality brand of Dexron fluid. Start the engine with the transmission in NEUTRAL. Check the fluid level with the dipstick and continue adding until it has reached the ADD mark on the dipstick. With the brakes on, select each gear position for several seconds each in order to fill all oil circuits. Select the neutral position again and recheck the fluid level. If the level is at the ADD mark when the fluid is cold, it will probable reach the FULL mark after the transmission has reached operating temperature. DO NOT OVERFILL!

Note! This valve body will fit all GM T-400 transmissions manufactured from 1965 until November 23, 1987. GM added an additional factory metering check ball on units built after November 23, 1987. This valve body is not compatible with those transmissions.

Never attempt to NEUTRAL the transmission during a shutdown. Keep the transmission in high gear while slowing the car.

Always begin your burnout in first gear and then shift to high gear. Drive the car out of the water under power and lift before the tire hooks. Never allow the tires to hook during a burn out as this can cause sprag failure.

For your own protection, never operate without an approved transmission shield. (Transmission shields available from ATI, Part # 406610.)