



# Installation/Modifications Instructions

6718 Whitestone Rd • Gwynn Oak, Maryland 21207 • (410) 298-4343  
FAX: (410) 298-3579 • www.atiracing.com

## T400 MANUAL VALVE BODY

Part #403200

### PACKING LIST

- |                                                      |                                                                 |
|------------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> (1) Compu-Flow Valve Body   | <input type="checkbox"/> (1) #407010 Modulator Plug with O-Ring |
| <input type="checkbox"/> (1) #403211 Separator Plate | <input type="checkbox"/> (1) #403200-I Instruction Sheet        |
| <input type="checkbox"/> (2) #403221 Gaskets         |                                                                 |

Packed by: \_\_\_\_\_

**\*\*\* NO SECOND GEAR ENGINE BRAKING, HAS ENGINE BRAKING IN LOW GEAR \*\*\***

### TRANSMISSION REMOVAL:

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 bolts and small parts. Note the position of the detent guide plate, detent roller assembly, detent spring and all linkage.
3. Note the position of the detent guide plate, detent roller assembly, detent spring and all linkage.
4. Remove the transmission from the vehicle.

### MODIFICATIONS:

Use normal assembly procedures for the T400 transmission with the exception of these modifications:

**HIGH GEAR CLUTCH DRUM:** Remove the piston and remove the center seal from the clutch drum. Reinstall piston using only the inner and outer lip seals. Set clutch pack clearance between .070" and .090".

**INTERMEDIATE BAND:** Do not install intermediate band. Notice that there is no hole in the Compu-Flow separator plate for the intermediate servo. Do not install the intermediate servo assembly!

**MODULATOR:** Remove and discard vacuum modulator. Do not remove the modulator spool valve from the transmission case. Install ATI modulator plug with o-ring. Hold down clamp and bolt.

*continued*

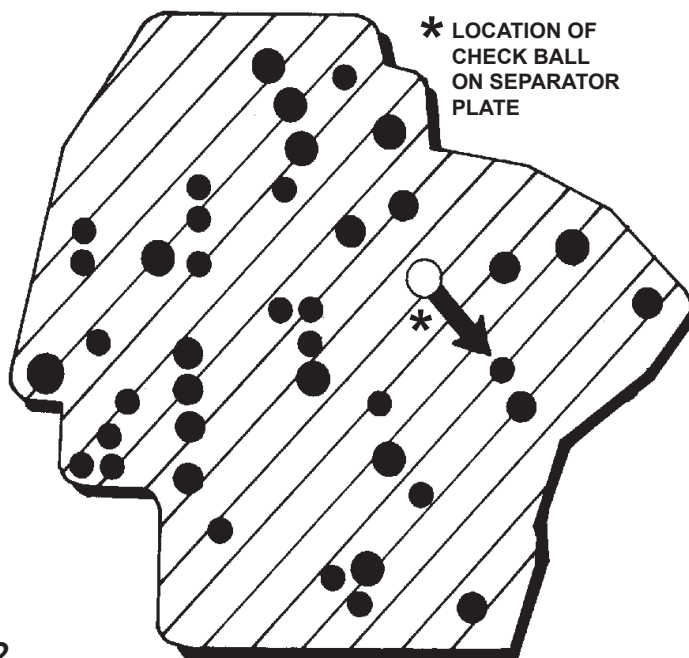
**GOVERNOR ASSEMBLY:** Remove and discard governor assembly. Also discard oil supply tubes from the valve body to the case.

**ELECTRIC KICKDOWN SWITCH:** Remove and discard electric kickdown switch and bolts.

**Note! Do not remove the two oil rings on the rear servo.**

### VALVE BODY INSTALLATION

1. Install one (1) stock check ball (.250" diameter) in the transmission case at the stock location near the intermediate servo bore. Use only this single ball. If you are installing this valve body with the transmission in the car, you could place the check ball on the separator plate. See figure below for check ball location on the plate.
2. Use one (1) ATI manual valve body gasket on each side of the separator plate and place with gaskets onto the transmission case.
3. Clean your stock manual valve by dipping it in clean transmission fluid and install in your ATI Valve Body.
4. Install valve body, making sure the check ball is in place. Make sure the manual valve is engaged with the inner selector lever pin.
5. Install all valve body retaining bolts and torque to 10 ft. lbs. Also install detent roller at this time.
6. Remove any pieces of old pan gasket from the transmission case and oil pan. Clean the 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.



### REMEMBER!

This is a reverse pattern valve body!

P  
R  
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1  
2  
3

### REMEMBER!

- DO NOT OPERATE WITHOUT VERIFYING PROPER SHIFTER ADJUSTMENT.
- NEVER TRY TO NEUTRAL THE TRANSMISSION DURING A SHUT DOWN. KEEP THE TRANSMISSION IN HIGH GEAR WHILE SLOWING THE CAR.

*continued*

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 probably reach the FULL mark after the transmission has reached operating temperature. DO NOT OVERFILL!



**WARNING! Do not remove the 2  
oil rings on the rear servo!**