



# Operating Instructions

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## **T-400 E-QUICK™** **BILLET ALUMINUM VALVE BODY**

Part # 403070 and 403060 (Transbrake Version)

Reverse Manual: P-R-N-1-2-3

**ATI's Billet Aluminum E-Quick Valve Body operates as a normal reverse manual or Transbrake unit for driving in the pits, doing a burn-out or going down the track if you prefer to shift manually or have issues with shifting table or wiring.**

**\*\*\* Operating as a Reverse Manual Valve Body \*\*\***

### **BURNOUT**

- Manually place shifter in desired forward gear and conduct burnout.
- Drivers MUST shift back to N to clear out the lines BEFORE shifting to low gear to start the run.  
- *This step is not required if drivers use reverse to back up after burnout.*

### **ARMING**

- Drivers must "arm" the system by a switch or other type of trigger method.
- This should be done after the burnout and while the transmission is in a NEUTRAL position with the shifter in "N".

### **DRIVERS WILL LAUNCH IN LOW GEAR**

- Manually place shifter in low gear.
- No further manual action required.

### **SHIFTING TO SECOND (ELECTRONIC)**

- Cut power to Band Apply solenoid  
*Note! You MUST cut power 500 RPM prior to energizing the 2ND gear solenoid!*
- Supply power to 2ND gear solenoid.

### **SHIFTING TO THIRD (ELECTRONIC)**

- Leave power supplied to 2ND gear solenoid.
- Supply power to 3RD gear solenoid.

### **NEUTRAL AT END OF PASS**

- Move shifter one notch to the N position from first gear position for a clean neutral.
- Allow the engine to return to idle, do not shut off until at a very slow speed if you are going to shut it off at all. When you shut off the engine, you lose all oil lube inside of the transmission.
- Disarm or turn off supplied power to the system.

### **REVERSE**

- Manually shift to reverse as needed after the system has been disarmed.

### \*\*\* Operating as a Reverse Pattern Transbrake \*\*\*

OPERATION IS THE SAME AS THE NON-TRANSBRAKE VALVE BODY EXCEPT FOR A SAFETY REVERSE WITH THE TRANSBRAKE OPTION VALVE BODY

#### **BURNOUT**

- Manually place shifter in desired forward gear and conduct burnout.
- Drivers MUST shift back to N to clear out the lines BEFORE shifting to low gear to start the run.  
- This step is not required if drivers use reverse to back up after burnout.

#### **ARMING**

- Drivers must “arm” the system by a switch or other type of trigger method.
- This should be done after the burnout and while the transmission is in a NEUTRAL position with the shifter in “N”.

#### **DRIVERS WILL LAUNCH IN LOW GEAR**

- Manually place shifter in low gear.
- No further manual action required.
- Transbrake can be used as normal.

#### **SHIFTING TO SECOND (ELECTRONIC)**

- Cut power to Band Apply solenoid  
*Note! You MUST cut power 500 RPM prior to energizing the 2ND gear solenoid!*
- Supply power to 2ND gear solenoid.

#### **SHIFTING TO THIRD (ELECTRONIC)**

- Leave power supplied to 2ND gear solenoid.
- Supply power to 3RD gear solenoid.

#### **NEUTRAL AT END OF PASS**

- Move shifter one notch to the N position from first gear position for a clean neutral.
- Allow the engine to return to idle, do not shut off until at a very slow speed if you are going to shut it off at all. When you shut off the engine, you lose all oil lube inside of the transmission.
- Disarm or turn off supplied power to the system.

#### **REVERSE**

- Manually shift to reverse as needed after the system has been disarmed.
- Drivers must press transbrake button to back up.



Both valve body versions (with and without transbrake) may be shifted manually, however, the band will not apply and there is no clean neutral position.

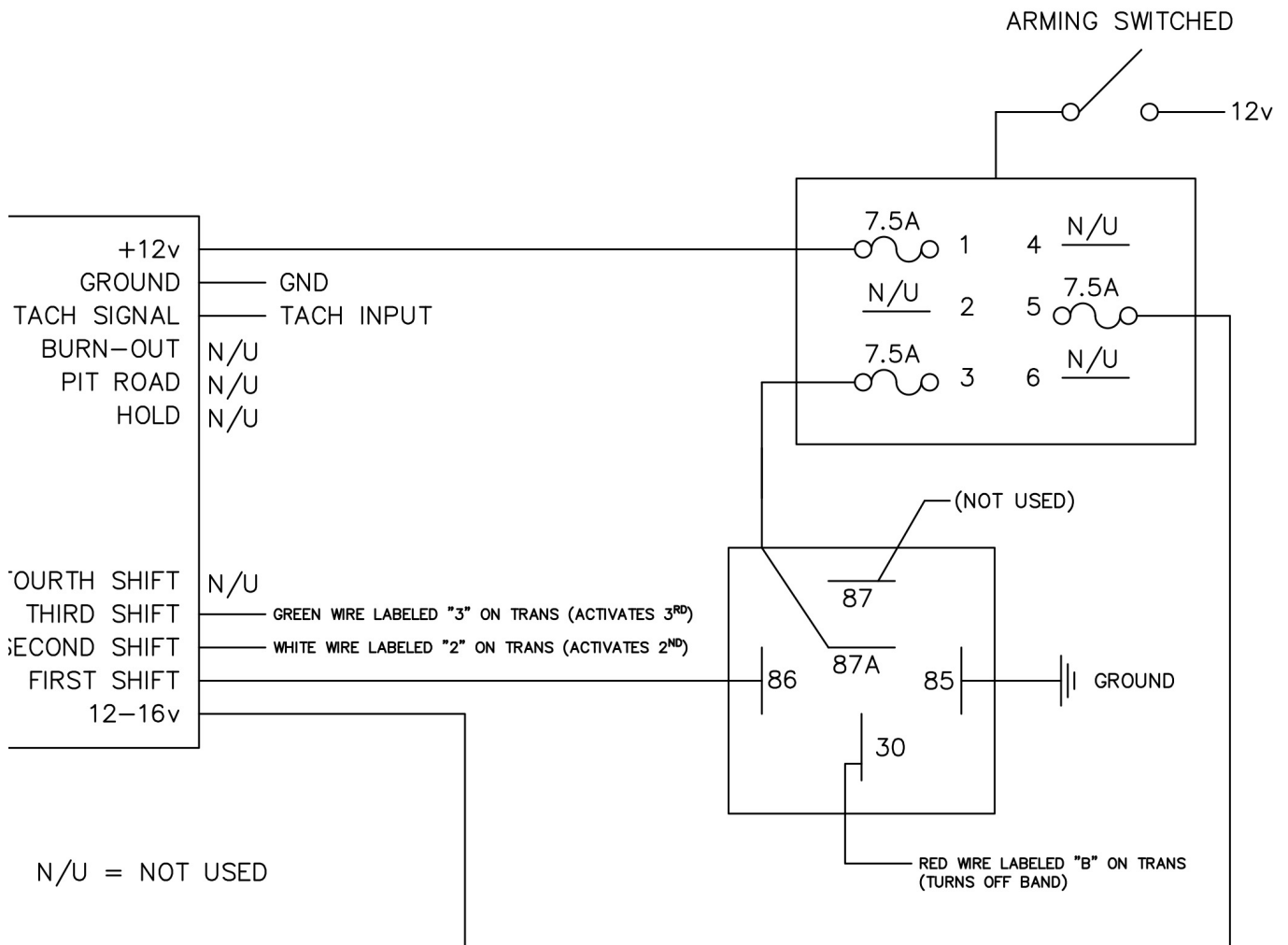
**Table 1: SOLENOID OPERATION FOR T400 ELECTRONIC SHIFT VALVE BODY**

**Note: E-Quick solenoids draw approximately one (1) amp each.**

GEAR / SOLENOID	PARK	REVERSE	NEUTRAL	FIRST	SECOND	THIRD
BAND APPLY	OFF	OFF	OFF	ON	OFF	OFF
SECOND GEAR	OFF	OFF	OFF	OFF	**ON**	ON
THIRD GEAR	OFF	OFF	OFF	OFF	OFF	ON

*Note! Band apply solenoid MUST cut off 500 RPM before second gear solenoid comes on!*

# Wiring Diagram for E-Quick



An ATI transmission equipped with the E-Quick valve body will have a 'three wire pass through connector' coming through the case. The case should be stamped confirming each colored wire's intended use.

The wires and uses are as follows:

- RED – BND – low band release
- WHITE – 2ND – 1-2 SHIFT
- GREEN – 3RD – 2-3 SHIFT

Please contact ATI with any questions, comments or concerns