Specalizing in Racing Transmissions and Valve Bodys

P/N 34G10

GRINER ENGINEERING

General Motors Turbo-Hydramatic 400 Billet Valvebody

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VERY IMPORTANT

This Aluminum Billet Valve Body Incorporates The Reverse Safety Feature
which means there are two things that must be done in order to back up...

PLACE THE SHIFTER IN "REVERSE"
PRESS THE TRANSBRAKE BUTTON

The car will back-up as long as the button is held down. If the button is pushed while the transmission is in neutral, the car will also back-up. Which ever method used is a matter of personal preference and will impose no ill effects on the transmission.

PACKING LIST

1	-	Billet 400 Valve Body	6	(5/16 - 18)	-	1 3/4"	Hex Head Bolts
1	-	Seperator Plate	1	(5/16 - 18)	-	1"	Hex Head Bolts
1	-	Solenoid	2	(1/4 - 20)	-	1 3/4"	Hex Head Bolts
1	-	Modulator Plug	1	(1/4 - 20)	-	1 1/4"	Hex Head Bolt
5	-	Teflon Sealing Rings	1	(1/4 - 20)	-	1"	Hex Head Bolt
1	-	Electrical Connector	1	(5/16 - 18)	-	3/4"	Button Head Bolt
16	-	Springs	3	(1/4 - 20)	-	5/8"	Hex Head Bolts
1	-	1/2" Nylon Ball	1		-		Instruction Sheet

*** WARNING ***

1.) UNDER NO CONDITION IS THIS TURBO 400 TRANSMISSION TO BE NEUTRALED DURING SHUTDOWN. RIDE THE TRANSMISSION DOWN IN HIGH GEAR ONLY.

2.) ALWAYS START BURNOUT IN 2nd GEAR, THEN SHIFT TO HIGH GEAR.

FAILURE TO COMPLY MAY POSSIBLY CAUSE EXTREME DAMAGE TO TRANSMISSION AND/OR POSSIBLE INJURY OR DEATH TO DRIVER.

*** FOR YOUR PROTECTION ***

DON'T EVEN THINK ABOUT RUNNING WITHOUT A SHIELD OR A TRANS BLANKET!

IMPORTANT - ALL MODIFICATIONS ARE ESSENTIAL

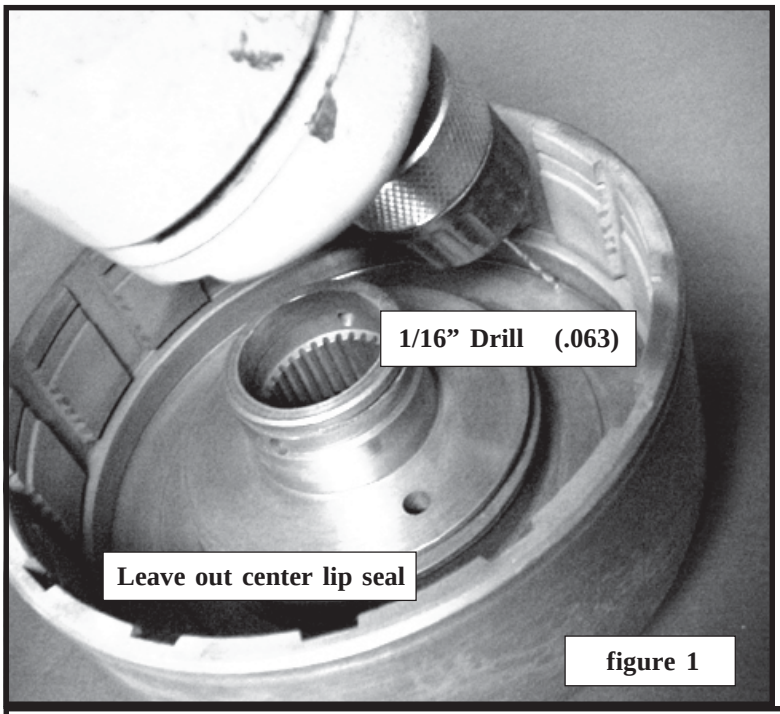


figure 1

*** CASE PREPARATION ***

Try to find a complete transmission, or core that has not been messed with and try to keep the parts together. (prevents problems). This valvebody requires no case modifications

*** REAR SERVO ***

Rear servo is installed in normal manner, the two accumulator rings may be removed if desired. (use stock springs and parts)

*** INTERMEDIATE SERVO ***

Leave out intremediate servo, servo spring, parts, and intrrmediate band.

*** CLUTCH PACK CLEARNCE ***

Foward and High - .050 - .070

Intermediate - .030 - .050

*** HIGH DRUM ***

Preparation of the high clutch drum is extremely important. Removal of piston is necessary. A 1/16 inch (.063) bleed hole is drilled through the drum in the area behind the piston. It is best to drill from the inside-out placing the hole as close to the outer sealing portion as possible (big lip seal). The drill may beheld at an angle for more drilling room. (...figure 1). Reinstall piston in the drum using only two lip seals, the outer and the inner. (Do not use the center seal). Discard the 16 original piston springs and replace them with the special springs provided with the kit.

*** CLUTCH INFORMATION ***

# of clutches 5-5-3. in normal applications NO3 or Blown, 6-6-4. Raybestos, B/W or Alto clutches are OK. High gear clutches must be waffled or slotted. Intermediate clutches are preferred to be smooth, (to reduce shock load on intermediate sprag).

*** NO VALVE BODY GASKETS ***

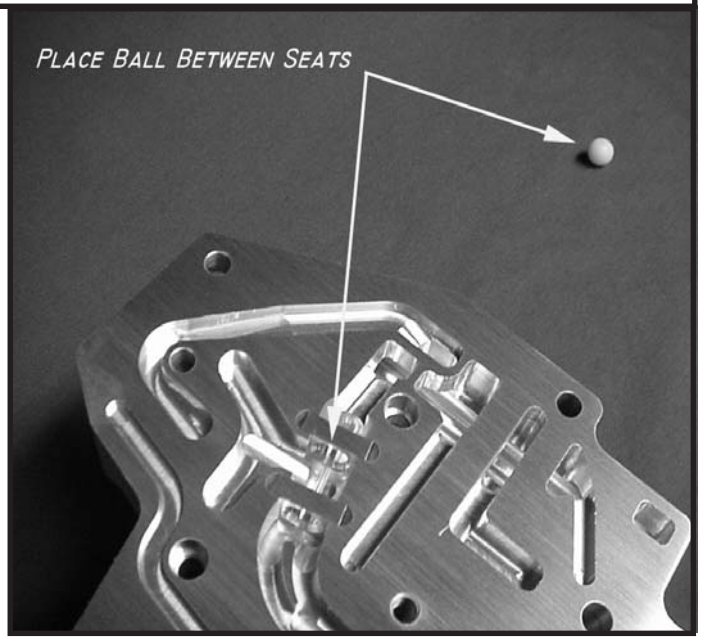
Run a flat file or a wetstone over the case to remove any high spots that might cause a crossover leak.

*** USE STOCK MANUAL VALVE ***

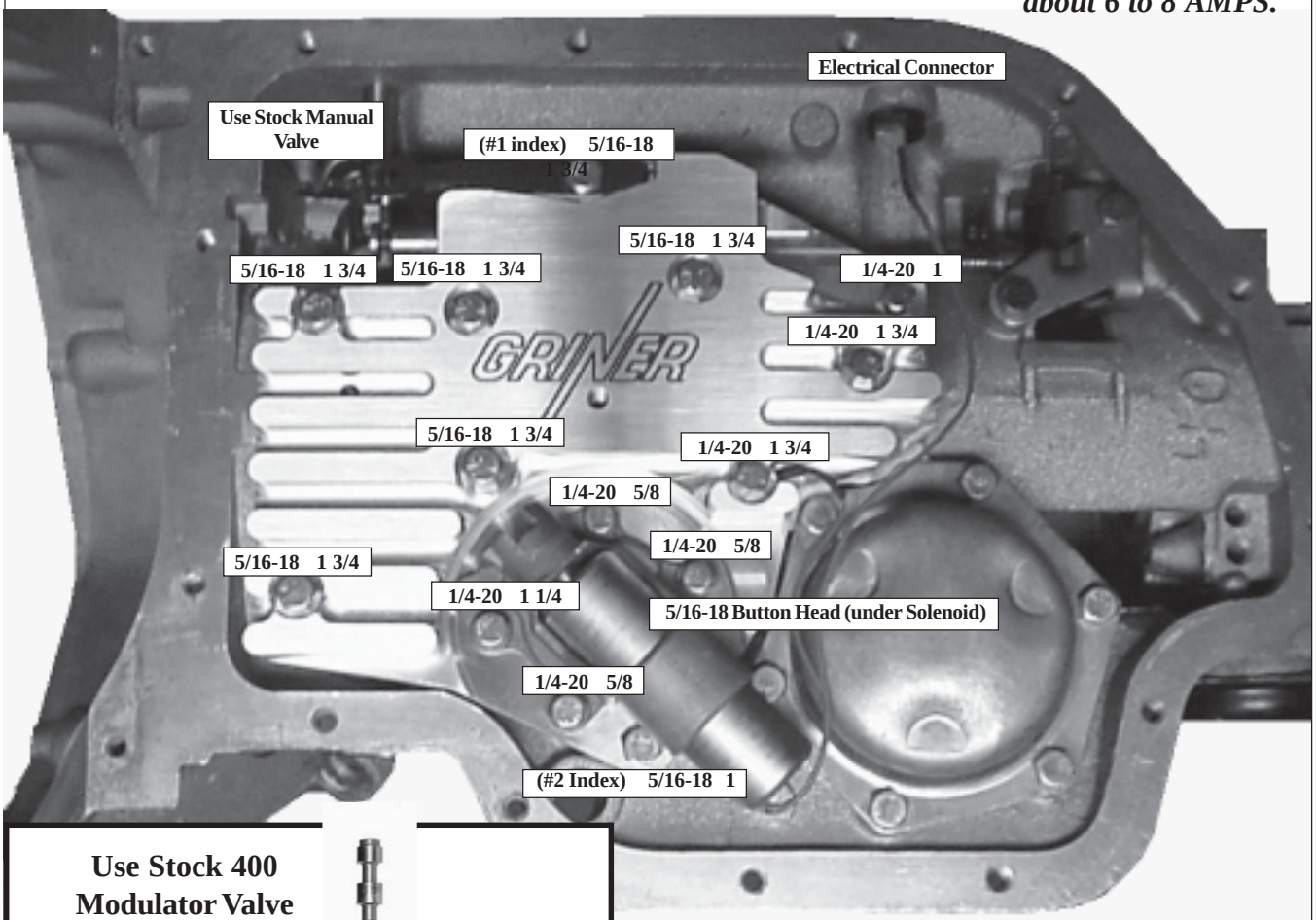
Must be free of nicks and burrs.

*** OIL PAN ***

Use1968-up pan and filter (2 dimple) (aftermarket pans are OK)



Transbrake Electrical Connection *is activated by applying 12 (or 16) volts into the spade connector where the kickdown used to be. Use minium 16 gauge wire and a 20 AMP fuse. Solenoid pulls about 6 to 8 AMPS.*



Use Stock 400 Modulator Valve

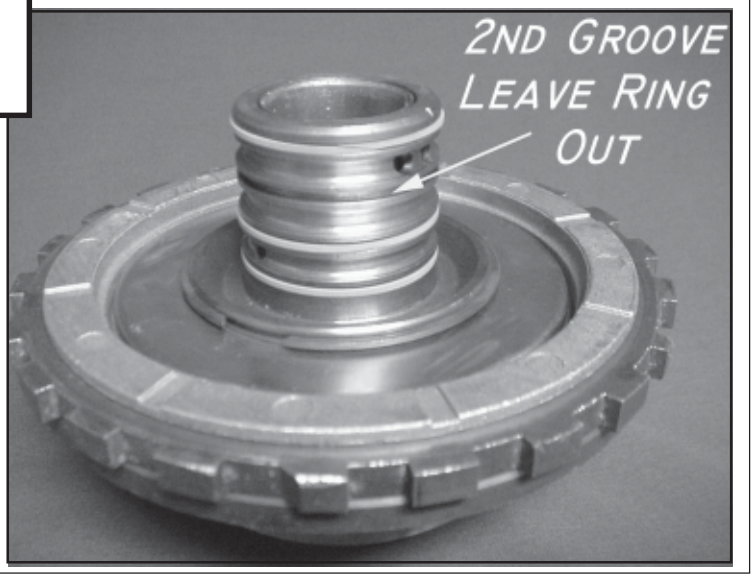
*** NOTE ***
INSPECT VALVE

Cannot be modified or ground on in any way.
Cannot be someone elses after-market valve.

Aluminum Modulator Plug

A SIMPLE TRICK

To make sure the valve body is properly aligned, start all the bolts by hand. First tighten the 5/16" bolt marked **#1 Index**. And then, tighten the bolt marked **#2 Index**.



* CENTER SUPPORT *

INSTALLATION OF TEFLON RINGS

1 - Fill the groove with assembly lube.
(Don't worry about 2nd groove)
2 - Hand shape rings as round as possible.
3 - Fit ring into groove.
4 - Same thing for the front pump.

The assembly lube will hold the rings in place during assembly. They will not seal until the transmission has been run, so don't expect them to pass an air check.