Castlemaine ROD SHOP

AP052.doc
05/04/05

V6 COMMODORE AUTO (PRE MID 1991) TO HOLDEN OR CHEV V8.
AP052A – HOLDEN/ AP052B – CHEV/ AP052C PONTIAC

This kit allows the fitting of a Commodore V6 4 speed automatic transmission produced until late 1991 to a Holden or Chev V8 motor.

Check to see if the transmission has a manual valve body, this is important because some of the later model transmissions have an electronic valve body which may cause some problems to set up properly. NOTE: This transmission may not be suitable for a high performance application.

Kit consists of:

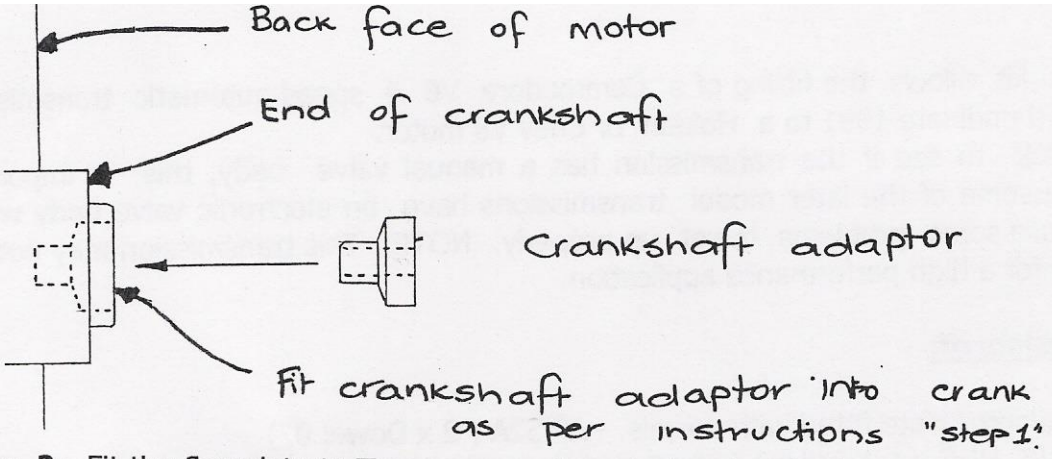
1 off Adaptor plate fitted with dowels - AP 52A (2 x Dowel 07)
4 off 3/8" UNC x 1-1/2" long bolts & spring washers }adaptor to
2 off 3/8" UNC x 1-1/2" unbrako bolts } motor

2 off 7/16" UNC x 1-1/2" long bolts & spring washers } transmission
4 off 7/16" UNC x 1-3/4" long bolts & spring washers } to
} adaptor
1 off Torque Converter Locator – TC Locator 04
1 off Flex plate to torque convertor adaptor ring – TC Spacer 04
3 off M10 x 1.5P x 25mm long unbrako bolts - adaptor ring to torque convertor
3 off 3/8" UNC x 1" long bolts - flex plate to adaptor ring

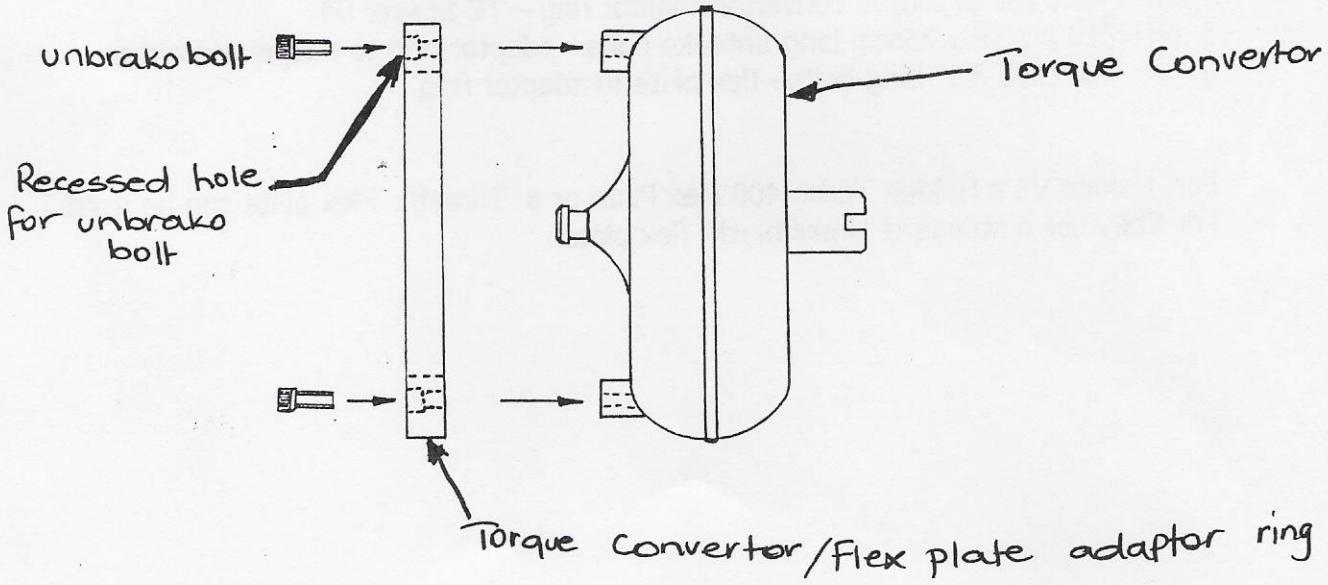
For Holden V8 a Holden Turbo 400 Flex Plate or a Trimatic Flex plate can be used.
For Chev use a standard "small block" flex plate.

FITTING INSTRUCTIONS.

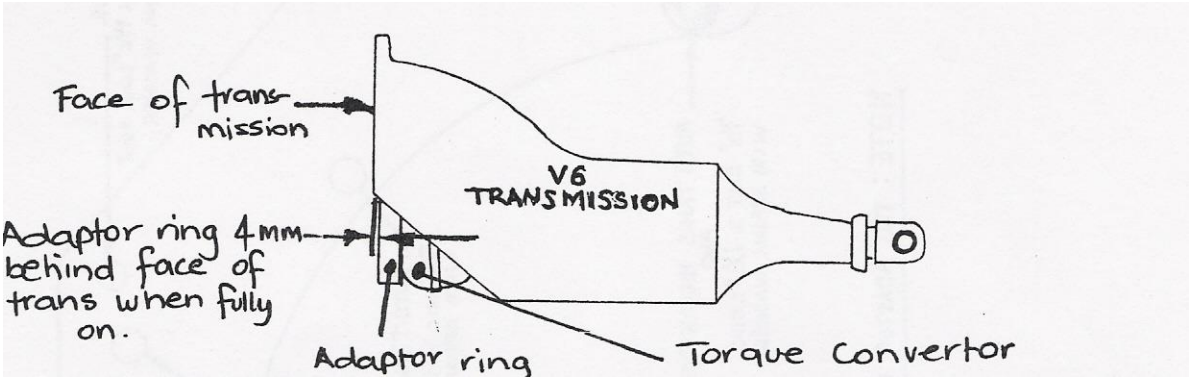
Step 1: Thoroughly clean the transmission face of the motor, remove any burrs or "hi" spots. Very important - remove the spigot bearing from the end of the crankshaft and clean the bore of the crank thoroughly as well. Bolt the adaptor plate to the motor using the bolts as shown on the main drawing. Fit the crank adaptor to the crankshaft as shown, we recommend that you use "Loctite" metal adhesive on the crank adaptor "Loctite type 242" is medium strength and will suit this application as it allows removal at a later stage. This "type 242" Loctite is also very suitable to use on any of the bolts used in this conversion. "Loctite" products can be purchased at most good automotive, engineering or bearing outlets.
BOLT THE FLEXPLATE TO THE MOTOR.



Step 2: Fit the flex plate to Torque convertor adaptor ring to the torque convertor, using the 3 off M10 x 1.5 x 40 long unbrako bolts as shown.

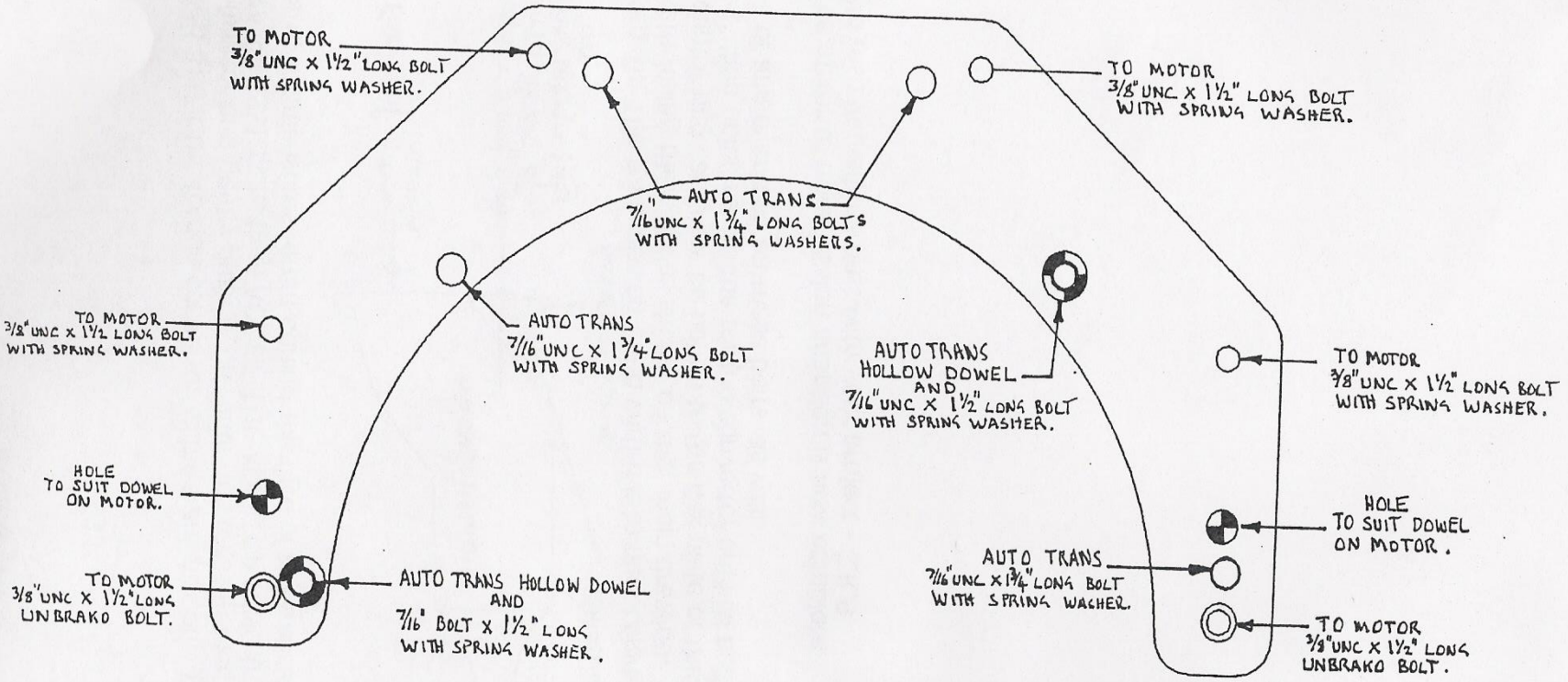


Step 3: Fit the torque convertor to the transmission. You will need to rotate the convertor and gently push it on until the measurement from them FACE OF THE TRANSMISSION to the FACE OF THE ADAPTOR RING that is bolted to the torque convertor measures 4mm behind the face of the transmission.



Step 6: The transmission fitted with the torque convertor can now be fitted to the motor using the bolts as shown on the main drawing. The torque convertor fitted with adaptor ring can now be bolted to the flex plate of the motor using the 3 off 3/8" UNC x 1" long bolts, rotate the torque convertor until all bolts fit. "Loctite type 242" would be of an advantage on these bolts as well.

The motor to transmission adaption is now complete.
We wish you all the best with your project - C.R.S.



NOTE: THIS ADAPTOR IS AS IT WOULD APPEAR WHEN BOLTED TO THE MOTOR.

The conversion you have chosen uses a Chevrolet motor. There are a few things with regard to the flywheel selection you need to be aware of. Some motors use a flywheel with a counter weight on them. You need to make sure the flywheel you use is the correct one to suit your motor. **THIS IS PARTICULARLY IMPORTANT IF YOUR CONVERSION USES A SPECIAL FLYWHEEL MADE BY C.R.S. – IF YOUR MOTOR REQUIRED A COUNTER WEIGHTED FLYWHEEL YOU WILL NEED TO TAKE THE NEW C.R.S. FLYWHEEL (AND CRANK ADAPTOR IF ONE IS USED) AND ALL CRANK BOLTS SUPPLIED TO A FLYWHEEL BALANCING SPECIALIST AND HAVE THEM BALANCE THE NEW FLYWHEEL TO SUIT YOUR MOTOR. THIS IS VERY IMPORTANT.** Phone C.R.S. for recommended balancer if you can not find one to do the job.

The following info is supplied as a guide only – make sure you know exactly what your motor is and what flywheel balance it requires. This information applies only to a standard – unmodified motor.

1. **SMALL BLOCK CHEV 1955-85:** Have a 3.580" bolt pattern and a 2 piece rear oil seal. All small block Chevs use a neutral balanced flywheel EXCEPT FOR THE 400 C.I. SMALL BLOCK which uses a counter balanced flywheel.

2. **SMALL BLOCK CHEV 1986 ONWARD:** Have a 3.000" bolt pattern and one piece rear oil seal. All of these motors use a counter weighted flywheel.

3. **BIG BLOCK MARK IV 1965-1990:** Used a two piece rear oil seal 396CI, 402CI, 427CI, motors have neutral balance flywheels. 454CI have counter weighted flywheels.

4. **BIG BLOCK GEN V 1991 ONWARD:** Use a one piece oil rear seal all GEN V motors use a counter weighted flywheel.