INSTALLATION INSTRUCTIONS | ti



Bellhousings







99T 5.5" Magnesium



102T 5.5" Aluminum



110T 7.25" Aluminum

DESCRIPTION

Tilton Bellhousings are manufactured from rigid aluminum or lightweight magnesium and are blueprinted for parallelism and concentricity. Available for both 5.5" and 7.25" clutch applications the compact design provides increased ground and exhaust header clearance.

CHECKING ALIGNMENT

Bellhousing must be both parallel with the block and concentric to the input shaft with a tolerance of .010" for each. If the input shaft and crankshaft are not aligned there will be increased stress and wear on the transmission input bearing, clutch, and engine main bearings. (See Figures 1 and 2).

- 1. Install the flywheel to the crankshaft making sure the bolts are torqued to manufacturer's specification.
- 2. Mount the bellhousing to the block.
- 3. Place a magnetic mount dial indicator on the flywheel friction surface and arrange the indicator plunger so that it will travel along the inside diameter of the register hole to check concentricity while the crank is turned by hand.
- 4. If more than .010" is measured, offset dowels will be needed to correct alignment.
- 5. Adjust the indicator plunger to contact the face of the bellhousing register hole to check parallelism while the crank is turned by hand. If more than .010" is measured, the block face will need to be machined.
- 6. Once concentricity and parallelism are within specification, remove the bellhousing and proceed to assemble the clutch to the flywheel following the instructions included with the clutch.

Concentricity Crankshaft and transmission input shaft must be on the same centerline Parallelism Transmission face must be parallel to the back of the engine block

Torque Specifications (for dry hardware)

	Ford	Chevy (Early)	Chevy (LS1)
Flywheel	75 ft-lbs*	75 ft-lbs*	75 ft-lbs*
Clutch	18 ft-lbs*	18 ft-lbs*	18 ft-lbs*
HRB	72 in-lbs	72 in-lbs	72 in-lbs
Housing	65 ft-lbs	40 ft-lbs	40 ft-lbs
Starter	110 in-lbs	110 in-lbs	110 in-lbs
Transmission	65 ft-lbs	65 ft-lbs	65 ft-lbs

* With thread locking compound

INSTALLATION

- 1. Install the hydraulic release bearing onto the bellhousing, making sure the piston is fully compressed into the body.
- 2. Connect the hydraulic hoses, making sure that there will be no contact with the clutch. Installing a cushion (Adel) clamp on one of the bearing mounting bolts may be useful to keep the hoses close to the bellhousing. Route hoses thru bellhousing holes as desired.
- 3. Install the bellhousing onto the block. If using the mounting ears as the rear engine mount, attach to chassis.
- 4. Mount the transmission to the bellhousing. Make sure the input shaft goes thru the release bearing without contact. The splines must engage the clutch disc hubs and the tip must seat into the pilot bearing.
- 5. Install the starter. Note Starter can be installed before the transmission but will make access to transmission mounting bolts more difficult.
- 6. Connect master cylinder hose and proceed to release bearing bleeding.