



## **Nailhead Installation Instructions**

### **'53 to '66 Buick Nailhead**

Due to the many changes in transmissions all thru the '50's and '60's, its no wonder that no one has attempted to tackle the difficult task of designing engine to transmission adapter kits for these motors before. Have no misconceptions about how much time and effort went into the development of these kits. Every time the transmission changed, the flywheel changed, sometimes the crankshaft changed, and sometimes the starter changed. One of the many difficulties was trying to achieve universality so that I wouldn't have to stock 13 different kits to cover 13 years. Success! 3 kits now cover all these years. 1 kit covers '53 thru '56, another fits the '57 to '63, and another fit's the '64 to '66. These kits allow you to use any Chev transmission built for a V8 from 1955 to 1997, stick (will work but not recommended for racing) or automatic. You may have to do a slight block modification on the '57 and '58 blocks. You have to drill an extra starter hole, and cut a small ear off of the block. Then you will be running a '60 to '63 starter. Try your existing starter. If it doesn't work with the supplied flywheel, then try this modification.

One of the criteria that I wanted to achieve with this kit was NO modifications to either the block or the transmission case or torque converter. The slight modification it takes to achieve my goal is minimal. For the most part it even allows you to retain your original starter. The flywheels are custom made (except the '64 to '66) and balanced. All parts are CNC machined and ground. All parts are American made.

### **Kit contents**

1. One aluminum adapter plate
2. On the '57 thru '63, an inner crank spacer.
3. All kits take an outer crank adapter (different lengths between kits)
4. The '57-'63 kit comes with a rebalanced late flywheel. (the other kits retain original flywheels)
5. Bolt kit
6. Torque converter drive plate

With your transmission removed, clean the back of the block where the adapter will contact it. Make sure both alignment dowels are in place. Install the crank adapter. 264 and 322 nailhead engines retain the original front part of the torque converter that has the starter ring gear attached to it. This kit utilizes that part. Remove the bolts holding it to the crankshaft and install the provided crank adapter and supplied bolts. ('57 to '63 only, sandwich the provided flywheel between the inner and outer crank spacers.) Make sure you position the flywheel weight correctly if you have a 401 or 425 engine. Then bolt them to your crankshaft with the long capscrews provided. Use loctite, then torque them to factory specs. Bolt the

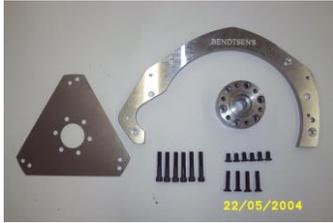
adapter plate to the block with the 4, 7/6" x 14" x 1-3/4inch socket head capscrews\_and the 2, 7/16 x 1inch capscrews provided. The 2 shorter capscrews get installed next to the spot where there are adjoining (siamesed) holes. The other two holes are for the Chev dowel pins. After the bolts are in place, lightly oil, then tap the provided dowel pins in place with a hammer. Make sure they go in straight. They are a tight slip fit. The dowel pins are threaded for easy removal should you want to. Now install the provided torque converter drive plate using the 6 flywheel bolts provided. You should now be able to bolt any Chev automatic transmission to the back of this motor. There is a recess in the outer crank spacer for a pilot bushing/bearing should you ever want to install a manual transmission. This is possible but not recommended due to the length of the crank spacer! Simply bolt on any Chev stick flywheel and install the bushing/bearing. '57 to '60 blocks only. You may have to use a '64 to '66 starter. Try your original starter first! It has been reported that some of the old starters work with my kit. If necessary, you will have to drill the second hole in the block, and cut a small protrusion off the block. After cutting the protrusion off the block, simply bolt on the starter with the lower bolt, then mark the second hole. Very easy.

### **Important!**

'53 to '56 and '64 to '66 blocks retain their original starter and flywheel. '64 & up, make sure your flywheel is aligned on the crank correctly. It is balanced. Also '64 & up will have to grind a small lip off their original flywheel so the crank adapter will bolt on flat. Stick flywheel is shown, but is the same alignment hole.



**Make sure you can see the dimple in the crankshaft through the alignment hole**



53 - 56 Nailhead Kit



57 - 63 Nailhead Kit



64 - 66 Nailhead Kit

\*Design change-

Additional information for the installation of the 1957 through 1966 Buick Nailhead adapter plate.

We have added 2 boltholes to the adapter plate. They are partially under the Chev dowel pin holes. The shorter 2 of the 6 adapter plate to engine block bolts go in these locations. After the 6 cap screws are installed, then tap the dowel pins in place. You will see the siamesed holes. Everything else is the same in the regular instruction sheet. The dowel pins have tapped holes in them so they will be easy to remove should you ever need to.

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