

Part Three: Larry Butcher's '47 Continental Rebuild

By Larry Butcher, Chesapeake Region

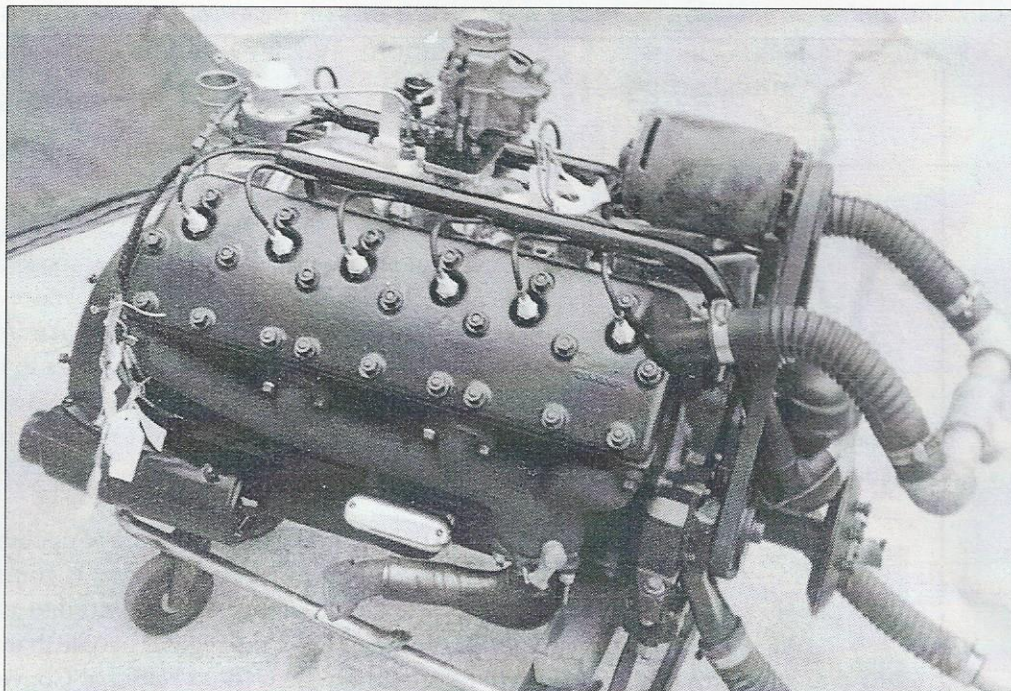
--Part Three--

EDITOR'S NOTE: Initially, we were going to conclude Larry Butcher's Continental rebuild article in three parts. However, due to space limitations, the story will be continued in full to Part IV in the August 2016 Bulletin.

Continued from June CR Bulletin...

I thought to myself, I've got something kind of rare; but still not sure of what direction to go, should I just get it running well and have some fun or should I restore the V12 and do it right? I charged the battery a few times, but could not keep it running. I purchased a rebuilt two barrel Ford carburetor from Pep Boys when you could get them for \$8.99! This didn't help much, so I decided to concentrate on putting the V12 in the car. Winter was now coming with a fury so the engine sat outside under a tarp on eight inch oak blocks. Spring finally came and before it got dark, I would work out behind the garage, tearing down the V12. This is the first engine I ever rebuilt and the only thing I had as a guide was an old Motors Repair manual and a reprint of a Lincoln repair manual. I purchased a copy of 'The Lincoln Continental' by Ocee Ritch, published by Floyd Clymer, 1963. This manual was a big help, because in the back was a reprint of the repair manual 'LINCOLN V12 ENGINES H-SERIES 1936-1947.' These manuals were all I used to overhaul the engine.

I was told by someone when working on these engines, there is no halfway 'bandaid fix', do the whole job! I surely wasn't going to install that V12 without going over the whole thing, no matter what Tom Buehler said. I finally had the engine down to bare block, with all the nuts, bolts, and small parts in tin cans with notes saying what they were and where they came from. Don't rely on your memory! Write it down. I convinced my uncle to let me have half of the garage to actually rebuild the engine. So I rolled the the block into the garage, and dragged the transmission/overdrive into a nice heated work area. At the time, all of this took place, I was employed as an estimator with Henry A. Knott Construction Company, on the remodeling side; insurance division. This was great because right next door was George William's Automotive Machine Shop. I talked to the shop foreman and he agreed to come out to my garage and pick up the block and crank, take it back to their shop, check for cracks, cook it out and do the machine work. No way could I get the parts to them in the front trunk of a 1965 Volkswagen! George informed me the block was good and so was the crank! The machinist told me what size of pistons and bearings I would need to buy. I had my own source of parts through the LCOC club. Continental Services out of Ambler, Pa., had all of the parts. Jesse Haines and Hunt Barrington started this business in the early 1960's, buying up obsolete HV12 parts. No one wanted these parts then, don't fix that '12', put a 'Caddie' motor in! George Williams finished the block and delivered it. I took the crank home in the VW. Talk about front end "California Rake"! They also honed out and hung my new pistons. I installed steel pistons, due to cost and had the rear of the crank cut to take a Ford seal. The



This is the original twelve cylinder flathead motor that came in the Lincoln Continental that Larry purchased. Fortunately, it was saved intact after it was replaced with an overhead valve V8. Larry rebuilt the flathead and reinstalled it in the '47. The engine stand the motor is resting on began life as a 'shopping cart.'

original configuration used a 'slinger' design which are prone to leaking.

The crank was turned .020 and .020, the block was 2 and ? and bored to .030 over with a final cross hatch hone. The first thing to do before assembly is to scrub out the engine and crank with very hot soapy water, and completely dry them. Next was to tap all holes to clean out any crud left from machining and washing.

Every night out in the garage putting all the components on, it finally took shape. As I was cleaning the intake manifold with kerosene and steel wool, I noticed underneath, near the core plugs, little white spots. Using a garden hose and a small scraper, I worked on these until whoa! the whole underside gave way and turned to aluminum salt. The manifolds used on all of the HV12 series had exhaust ports which took exhaust gases from the exhaust passages in the block and routed up thru the manifold to help preheat the carburetor. On short trips the moisture never has a chance to 'cook out', therefore it condensed and caused corrosion. This was no problem in 1966, just order a new one from Continental Services. 'New old stock' for \$25 plus a couple bucks for shipping! Those were the days. Now things are coming together, everything on the engine new or rebuilt and painted the correct colors. Let's start this thing out of the car! I wasn't going to install it and have trouble, then try to fix it in the car.

'Ol' Unk to the rescue, he made an adapter to bolt to the front of the crankshaft where the vibration adapter and fan attached. This crude but effective device was designed to hook up a three-quarter inch drive; two man electric drill! Since my uncle was foreman of maintenance at the Montebello Water Filtration Plant, I had access to all kinds of neat stuff.

The idea was to turnover the engine, on the ground; with the plugs removed and squirt oil in the cylinders for at least 30-40 minutes. This seemed to work well. Change the oil and new filter installed, time to fire it up. Near the garage was a stream that gathered a lot of debris, including shopping carts that never made it back to the store. I dragged one home and cut it down so as to fit the engine much as a modern engine stands available today, worked like a charm!

Now to cool it. I really didn't know how long I wanted to run the engine, so I made up a pipe work so as to run water from a garden hose. The exhaust system consisted of a new crossover pipe, but no exhaust pipes or muffler. The HV12 runs quiet with open exhaust due to the 12 cylinders. Everything hooked up, fresh charged battery, a squirt of gas and pop she was running. It sounded real good. I stopped and started it several times. It never did get warm, all I cared about was, it ran. It seemed strange, here was an old engine, not too many months ago lying next to a shed and now roaring to life. Next step roll it back into the garage and begin to work on the car. My Aunt and Uncle allowed me to bring the car over to the garage just long enough to get the old flathead V8 out and the rebuilt V12 in, not forever! A friend of mine had a tow bar hitch with which we attached the '42 Continental to his 1962 Studebaker Gran-Turismo with a 289 V8 and four-speed transmission.

A 'piece of cake!' Unk borrowed from the shop several sections of scaffolding which we set up over the car. The flathead 8 was stripped down, unbolted, ready to go, naturally the hood was removed and out came the engine.

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