

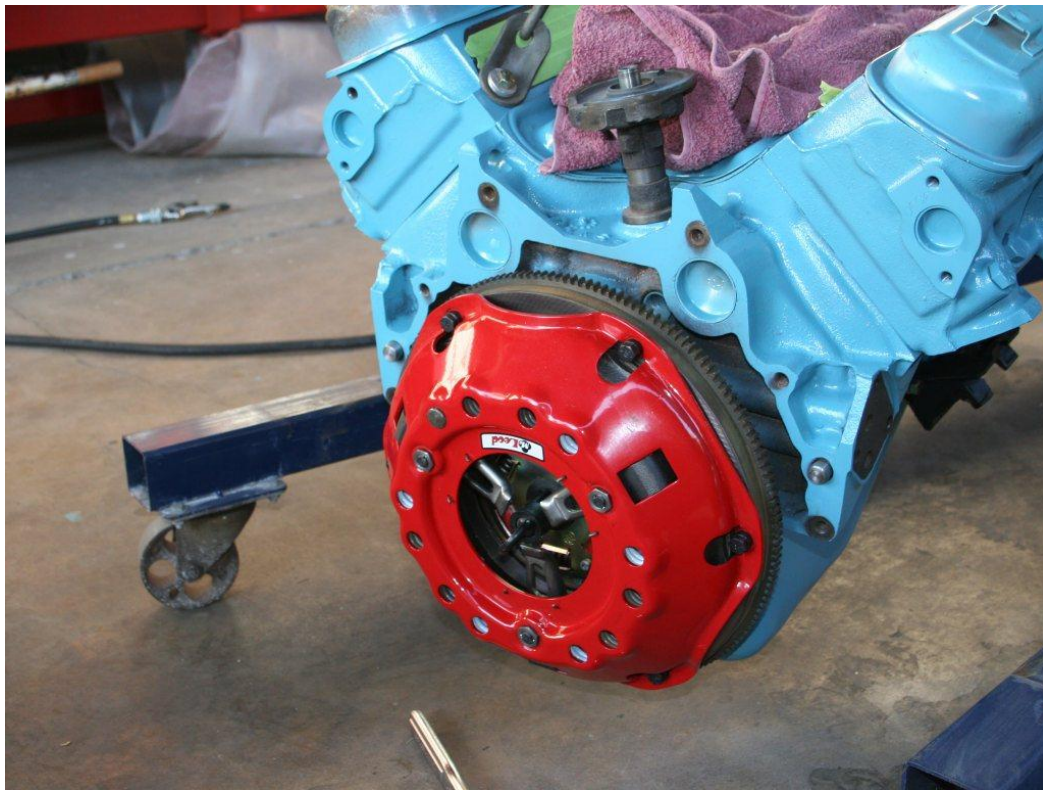
## 2010/11

Some of the engine had been assembled a number of years ago. The crank, pistons, cam and heads were done as well as the oil pump. I went over the engine to finish the assembly this year. Assembling the engine was a major problem as all I had was a photo of the engine in the body and you could not see any detail below the fenders. I also had no information on what went into the engine. As I noted in the history of the car, Fritz Voight who worked with Mickey Thompson on this engine, gave me some information, but that was limited. I did measurements on the push rods length and order them as well as performance lifters and installed these in the engine. Installed the oil pan and timing cover. The timing cover was hard to tell what was used as the 63 421 cover will not work. Mickey did an engine in 1961 using a Pontiac 421 block and had it in Hot Rod of 1961. I had to find a cover of that vintage that would fit this block. The one I used had the water bypass on it that could be used for the heater operation. Another item was the cooling water flow. There is not water crossover in the intake manifold. All the photos show two hoses from the radiator going down into the engine compartment but no hook up. Using the cooling flow we determined that the only flow has to come from the heads so I designed special pipes to fit the heads. After checking the fits of the blower the engine was cleaned and painted. The frame was removed from my trailer into the shop. The frame had been done several years ago and has all new parts installed.



The engine was removed from its stand of many years and the flywheel installed, then the clutch and pressure plate. I used Mc Cloud performance pressure plate and clutch. I chose these since this engine is very powerful and a normal clutch today and pressure plates are not as strong as they were in the past. I had the transmission rebuilt by Lloyds' Transmissions in Tucson. He

has been in business for many years and had the parts to rebuild a 4 speed and the knowledge to get it correct. When I got the car it still had the 4 speed that was installed when at GM even though the engine had been changed. The 4 speed was a Muncie and not a T10, so it had a newer transmission that would appear in cars in the next year. The transmission needed a full overhaul. One gear was bad and there were several worn parts. The transmission was different from what was used in the car off the line. The Muncie was used in the Corvette and not in the Pontiac in 63, but hey used this one on the car. This was the one that came in this car when I got it.







I attached the transmission to the engine and installed all of this into the frame. Everything fit correctly on new mounts and was bolted in to place. This was the first time the engine had been in the frame since it left GM in 1965. Now I could install the blower and all the top parts and begin to see what else I would need to make this work. One needs to remember all I had to put this together was photo of the engine in the car so none of the details below the top of the engine, could be seen and I was unable to find any photos showing the engine out of the car except the 1961 Hot Rod cover showing all of this in an early version. I had to install the heater water fittings in the manifold as well as the temp sender and the blower boost/vac fittings. I was able after some searching found a set of intake manifold gaskets for a blower manifold and this early Pontiac 421. When the packages came in they were very old, but the gaskets were good. I installed the manifold and the blower and drive.

Next I had to select the correct alternator and power steering pump and have the PS pump chromed and the alternator painted wrinkle black. Both were rebuilt before installing them. I had no detail about how each of these were installed so I used the photos I had to position them and made all the brackets and fasteners to mount them to the engine. I designed and built a special spacer/nut that would fasten the water outlet to the engine and still let the PS pump fasten and adjust. The alternator mount was a problem as nothing from a standard engine would work and still allow for adjustment and clear the water outlets. So I was able to use a mount from a 1962 generator and make an adapter to hold the alternator and allow for adjustments. The alternator pulley had to clear the belt adjustment for the super charger.

I found Mickey Thompson valve covers. These covers had breathers on the sides. I found the breathers at Mickey's when I got the blower from him, but I only found one cover for the

breather. So had new castings done and I had to make an adapter to mount the breathers on the covers as the correct angle. These were all sent out to be chrome plated or polished.