



WESTERN WASHINGTON FIREBIRDS

OFFICIAL NEWSLETTER

October 2025

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Website: www.wwfirebirds.com Facebook: Western Washington Firebirds

Hello Fellow Firebird Enthusiasts,

Wow, October is here already, and that means Fall! Some people love fall. Crisp mornings and cools afternoons. Leaves starting to change colors. More rainy days than sunny days. But I am a summer guy. Born in the fall, but still spring and summer are the best to me. Anyway, there is still time to enjoy our Firebirds a few more times before their long winter slumber. Binford's just held there last Friday Night Cruise-In on Friday September 26th. And it was perfect weather and the fiels was packed. Over 1,000 vehicles of all types were there to celebrate the final cruise in. Sun sets a lot earlier if course, but that didn't stop folk from having an awesome time with a great, not kidding the band was super tight and the guitarist was phenomenal! The Corey Wilds Band, just Wow! We had quite a few members show up, we all had a great time. So for October we have the last Cruise Puyallup Saturday October 11th. And our monthly club meeting Saturday October 18th, and Binford's Annual Trunk Or Treat Event Saturday October 25th. So pretty active. We hope to see you all at all these great events! Always Remember... Keep Those Firebirds Flyin'! And **Happy Halloween!**

October Club Events

Saturday October 11th The final Cruise Puyallup of 2025. Let's try and meet up and park as a group if we can. I figure 3pm, because it will get busy and lots will fill up. So we can meet up at our usual Safeway parking lot, near the car wash. It costs \$5 or \$10 to park there but you have a guaranteed spot. Or we can meet up there and together find a spot to park together. And we should text each other as we arrive so we can stay together. If you loved the classic movie American Graffiti, Cruise Puyallup is just like that! Same vibe and cool vehicles EVERYWHERE you look! The sights and sounds of being younger and just hanging out and showing off your ride. My cell is 206-349-1282. This will be super fun so you do not want to miss this event! Last One Of 2025!

Saturday October 18th 5pm October Club meeting at the Federal Way Round Table Pizza, located at 34410 16th Ave S Federal Way WA 98003. We will have details on both car shows and we will put up for vote as to whether we host again for 2026, and we have dates and venue already set, but it's up to you the members to decide if we do this again. We will also be going over important information like taking nominations for club officers. And info on club events for the rest of 2025, like the Christmas

party. We are also going to be discussing the 2025 toy donation. So, a lot to discuss, and as always your input is really needed and appreciated. So please join us for great pizza and great discussions on our clubs end of 2025. We will see you there!

Saturday October 25th 3pm The Annual Binford's Trunk Or Treat Event. The address is 26311 78th Ave S Kent WA. We will be there by 3pm to set up. It's a great and fun way to decorate your cars, daily drivers or Firebirds, This is a super fun event for the kids, and a great way to hand out candy and other items to the kiddos! And you can dress up too! I believe the gates open up for the kiddos at 4pm. There will be food trucks and a live band, Washington Bigfoot Society. We will discuss this more at the October club meeting. So bring your vehicle and candy and have fun decorating and bringing the kiddos fun and scary lifetime memories!

What we did in September

Saturday September 6th was our first and hopefully not the last All Pontiac Cruise-In & Picnic at The Tappero's home in Auburn WA. The weather was great, partly cloudy and warm. And the turn out was excellent! My counts may be off but there were 35 cars and over 60 folks! Diane and Mike and Sammy were awesome hosts for this great family friendly setting and it was great meeting the awesome folks from the Jet City Fieros, Puget Sound POCI. The Northwest GTO Legends and other Pontiac owners who showed up. Mike had an awesome Mack truck BBQ and cooked up super good hamburgers and hot dogs and lots of other really good food and deserts. Everyone I saw was having a great time talking cars and munching down on good food. I believe this may become a regular annual event. A great way to Celebrate All Things Pontiac and a great way to wrap up the Summer Car Show events. Thank you so much to the Tappero's for doing such a fantastic job for planning and hosting this event!

Your Upcoming Fall 2025 Club Events, Please Mark Your Calendars And Let's have Fun! Pumpkin Spice Style!

Saturday October 11th 3pm The Final Cruise Puyallup of 2025

Saturday October 18th October Club Meeting 5pm Federal Way Round Table Pizza

Saturday October 25th 3pm Set up for Trunk or Treat Binford Field of Dreams Kent WA 4pm-8pm for trick or treaters!

Western Washington Firebird club sponsored events. Things may change, but as of now this is your official list And, these will also posted in more detail on club website and Facebook group.)

Other Events of interest Non Club

Sponsored:

Saturday October 4th Ortig Red Hat Days Car Show 10am-3pm

October 11th Trunk Or Treat Griot's Garage 4-8pm

Saturday October 18th Fall Swap Meet @ Pacific Raceways Kent WA

Saturday October 18th Halloween Car Show Griots Garage Tacoma WA 2-6pm

Sunday October 26th Car Show & Trunk Or Treat 11am-2pm Pacific Racways Kent WA

For a complete list of all car related events in the northwest, please

visit: www.cruzinmag.com/calendar.html or

www.good-guys.com or

www.nwcareventscalendar.com

Local Cruise-In Spots

Here is the cruise-in list. If you know of any, please let me know so we can get it on this list, thanks!

We will also be supporting Wileson and Carbonato, who just had the rug pulled out from them when the state shut down a 100 year old bridge thar brought folks into their towns. They are hosting a cruise In/Show

*on the last Sunday of the month. Dates are as follows:
May 25th, June 22nd, July 27th, August 24th, September
28th. 1pm to 5pm*

*Cruiz'n Cole Enumclaw WA first Friday of each
month. 2025 Dates are: May 2nd, June 6th, July 5th,
August 1st, September 5th
Cruise Puyallup Dates Are: April 26th, May 10th, June
7th Cruise Into Meeker Days, July 12th, August 9th,
October 11th, December 13th Christmas Cruise
Binford's Field Of Dreams Every Friday Evening 4pm-
10pm. Live music, food trucks and An Awesome Way
To End A Crazy Week! Kent WA
First Saturday of every month is Caffeine & Gasoline
@ Griot's Garage 8am to 10am.
Starting May 3rd Every Friday Night 4pm-8pm
Covington Wal Mart.
Thrashers Corner on Friday Nights
Saturday evenings Marysville DQ
Clearview McDonalds Saturday nights 4pm-8pm
Starting in mid to late May.
Sunday mornings at the Lake Stevens Les Schwabis
Cars and Coffee
Friday Night Cruise In Every Friday 2pm-9pm Cruise
to The Village 3509 72nd St E Tacoma
First Saturday of every month is Caffeine & Gasoline
@ Griot's Garage 8am to 10am.
Starting May 10th Friday Nights 4pm-8pm
Covington Wal Mart.
Clearview McDonalds Saturday nights 4pm-8pm
Starting in mid to late May.
Friday's At Dairy Queen At Thrashers Corner 3-6pm
Friday Nights Binford Metals in Kent Starts at 5pm
Starting Late April- October
Saturday's Farmboy Drive-In Olympia 3pm-8pm
Starting May 25th through September
Saturday's Sunrise-Village Puyallup 5pm till Dusk
June 7th – August 30
Wednesday's Newport Hills Bellevue 3pm-6pm
May-September
Cruie-In At The Drags Pacific Raceways Kent WA \$20
entry fee. Events are May 10th, May 31st, June 14th,
June 21st, June 22nd, August 23rd*

*More will be added as soon as I know more details on other
cruise-in locations. If you know of any, please text me at 206-349-
1282. Just need the place, day of cruise-in, and time. Thanks!*

Membership Information

MEMBERSHIP DUES:

Membership Dues are \$30 U.S. per year and are renewed each year in January. Just go to the club's website, www.wwfirebirds.com and follow the links to renew and we use Paypal so it's quick, super easy and safe. Note: Each person on the membership list (spouses included) may receive the newsletter by email. Let us know if you would like this option.

And make sure you give us their e-mail address.

Welcome to our newest Club Members!

Roger Wills from Camano Island WA. Roger has a Bronze 1971 Formula 400. Roger also has a '67 400, a '68 350, a '74 350, and a '78 Trans Am with a 403. That's a great collection of Firebirds Roger!

Bruce Smith From Happy Valley OR. Will owns a 1970 Formula 400 Carosel Red Ram Air III with an M20 4spd. Sweet Ride Bruce!

David Herness from Bellevue WA. David Owns a Black 1968 Firebird 400

Welcome to Western Washington Firebirds!

CAR SHOWS

**2026 7th Firebird & Camaro Show (June 7th
@ Burgermaster)**

**2026 23rd All Pontiac Show & Shine (Sunday
August 9th) at Burgermaster**

WEBSITE

Be sure to check out the club website. It has been completely revamped, thanks to Neil Warren. It is way easier to navigate and works awesome on phones or laptops. For tech articles, links to other clubs and nearly all things Pontiac related in

addition to all of the great pictures and articles of Member's Rides. Contact Neil Warren and he will give you all the info you need to give him so he can upload your pics and a short write up about your car.

The Members Rides web pages continue to grow, but we have plenty of room for more. This is your chance to show the world your own Firebird! Send or e-mail pictures of your car, with a little of what you would like everyone to know about it, and we will add them to the rest. If you have your own web page featuring your car, send us your URL. We will link to it from the Members' Rides page. For pictures and descriptions of many of our member's cars, check out the club website at: www.wwfirebirds.com

TECH

Picking a Pontiac 400 or 455 Block for Performance Use

The Pontiac Motor Division was an all-star in General Motors' starting lineup of auto manufacturers. It was introduced in 1926 as a spin-off of the Oakland Motor Division, filling a gap in GM's product lineup between Chevrolet and Oakland. Pontiac's popularity was such that by 1932 GM actually dropped the Oakland and renamed it "Pontiac Motor Division." With conservative styling and mechanical reliability, its aging inline six- and eight-cylinder engines were losing out to the competitors' V8s of the early 1950s. Brand excitement was rejuvenated in 1955 when Pontiac introduced its own V8, and it was the first step in positioning it as GM's performance Division of the 1960s and 1970s. Pontiac's Ram Air and H.O. engines developed during the muscle-car era for its exciting GTOs and Firebirds were among the most potent to come from Detroit at the time. A powerful V8 and youthful styling made it hip to drive a Pontiac, and the Division maintained that reputation right up to that fateful day in the April 2009 when GM announced it was dropping the

brand. Today's Pontiac hobby seems vehemently divided when discussing the Division's death. Loyalists hold firm that it occurred in December 2009 when the last new Pontiac was officially produced, while purists argue that Pontiac ceased to exist after March 1981 when the last true Pontiac V8 was assembled and installed into a Pontiac vehicle.

No matter how you perceive Pontiac's discontinuance, there's no denying that vintage Pontiac V8 performance is alive and well. Achieving 600 streetable horsepower has never been easier for the average hobbyist, and the wide array of high-performance components available on today's aftermarket gives buyers countless options. The 400- and 455ci block castings remain the most popular foundations for modern Pontiac builds, but the Division produced several variations during the 1960s and 1970s. That begs the question, what should I look for when buying one? We took that up with the professionals at Butler Performance, and here's what they had to say.

Pontiac V8 History

To gain a better understanding of Pontiac's V8, let's step back to the early 1950s. Chevrolet was developing its 265ci V8 for 1955, and because Pontiac was a rung higher on the corporate ladder, GM felt that Pontiac needed to offer a similar level of technology to substantiate its higher cost. Pontiac began developing an all-new, 287ci V8 also slated for 1955. The block was beefy to maintain the reputation of reliability while also allowing future displacement increases without requiring major retooling. The cylinder-head intake ports were siamesed for compact packaging and port volume was kept small to maintain velocity for snappy throttle response and strong low-speed performance to enhance its feel during typical driving conditions on the street. Starting at 287 ci for 1955, displacement increased in each of the succeeding years, while basic architecture of the V8 went unchanged. Total displacement grew to 316.6 ci for 1956 and then to 347, 370, and finally to 389 by 1959, where its 4.06-inch bore and 3.75-inch stroke

length stayed for the next several years. Available with two-barrel, four-barrel, and Tri-Power carburetion in that time, a heavy-duty 389 (with four-bolt main caps to increase bulkhead durability for Super Duty applications) was also available through dealership parts departments, along with a host of other go-fast goodies.

To satisfy the need for the consumer demanding maximum engine output and to remain competitive with the growing engine sizes from other makes, Pontiac introduced its 421 ci in late 1961. The oversized block was created by taking the heavy-duty 389 and increasing the bore diameter to 4.09 inches. The main journal bore grew by 0.250 inch to accommodate the 3.25-inch-diameter main journals of the new crankshaft with a 4.00-inch-long stroke.

The Super Duty 421 was Pontiac's most powerful offering for 1962 and 1963. It was factory-installed into a handful of Pontiacs in each of those model years, where it was feared by competitors at every level before General Motors pulled the plug on factory-backed racing involvement in January 1963. The basic 421 became a regular production option in 1962 and the 421 H.O. with Tri-Power induction was Pontiac's hottest street engine.

Pontiac's 389- and 421ci V8s were steadfastly popular and powerful. A small-displacement, 326ci V8 was added in 1963 for Pontiac's compact Tempest model line. To proactively promote a safety-conscious image during the mid 1960s, General Motors prevented the use of multiple carburetors on all 1967 vehicles with the Corvette as the only exception. The decision marked the end of the line for Pontiac's highly touted Tri-Power engines, and a single carburetor was forced to provide maximum engine performance.

Pontiac didn't sit back and take GM's directive lightly, however. To maintain its image as a performance leader, it increased the bore diameter of its 389- and 421ci by 0.030 inch, which boosted displacement to 400 and 428 ci, respectively. In the process, Pontiac improved cylinder-head airflow by decreasing valve angle

from 20 degrees to 14 and adding larger intake and exhaust valves. A new cast-iron intake manifold derived from the highly successful single four-barrel that made the Super Duty 421 such a competitor on the NASCAR tracks was created, and it was topped by Rochester's new wonder carburetor, the four-barrel Quadrajete. As a result, 1967 four-barrel engines were capable of generating power equal to that of the Tri-Power engines from 1966, while maintaining the potential for so much more.

The basic 400 continued through the 1978 model year, and the 428 grew into the 455 for 1970 when a 0.21-inch increase in stroke was added to its crankshaft. The 455 went away after 1976, and Pontiac went to work developing an entirely new small-displacement V8 whose total design was aimed at maximizing fuel economy. The 301 was developed during the mid 1970s, released in 1977, and installed into a number of Pontiacs and picked up by other Divisions as corporate power became commonplace. The 301 was left as Pontiac's only V8 for 1979 and it was joined by an even smaller 265 for 1980, before Pontiac V8 production ceased entirely in March 1981 after more than 14 million total V8s had produced over the years,

Pontiac's 400

The 400 ci was Pontiac's most popular V8 during the glory years, and a number of different blocks were produced in that time. The wide array of casting numbers created for standard and high-performance applications can be confusing, but a brief overview that summarizes them is all that's needed to help you find a suitable candidate for your project.

PN 9786133 was the 400 block introduced in 1967. The casting featured two-bolt main caps and was the basic foundation for all two- and four-barrel applications. Even Pontiac's highest-performance V8—the 400 Ram Air—utilized the PN 9786133 casting for much of the 1967 model year before the four-bolt, PN 9792506 casting took its place in approximately May 1967. The PN 9792506 was carried over into 1968 for Ram Air applications, while Pontiac created the PN

9790071 casting for two-bolt applications. By year's end, Pontiac determined that two separate castings were unnecessary and it began drilling and tapping the PN 9790071 casting to accept four-bolt main caps as required for Ram Air applications. The PN 9790071 was carried over for 1969, also using the same practice of for attaining two- and four-bolt blocks. The 1970 model year saw the introduction of yet another 400 ci casting. It differed in that it was equipped with all of the appropriate mounting bosses to fit the new-for-1970 Firebird chassis. Despite being drilled and tapped for four-bolt caps, Pontiac installed two-bolt caps on PN 9799914 for typical applications, while a second casting, PN 9799915, was limited to four-bolt Ram Air applications. The PN 9799915 was actually created by grinding away the "4" of the "9799914" part number and hand-stamping a "5" into place. The need for Pontiac to require two identically machined blocks remains unclear, and in rare instances we find where Pontiac used the PN 9799914 or PN 9799915 interchangeably. The four-bolt 400 went away for 1971 and the new PN 481988 was equipped with two-bolt caps only. The casting went on virtually unmodified until midyear 1975, when it was replaced by an entirely new 400. Like all manufacturers during the mid 1970s, Pontiac was seeking to improve its vehicles' fuel economy, and shedding total weight was among the easiest ways. Virtually every component used to produce a vehicle went under the microscope to locate and eliminate mass in non-critical areas, and the 400 was no exception. Pontiac's engineers removed material from the deck surface, cylinder walls, and main journal bulkheads to shed weight while maintaining sufficient durability for the low-performance, smog-laden engines of the day. Other ancillary components like the crankshaft and harmonic balancer were also reviewed. The revised 400 block was ushered into production in approximately February 1975, and the new PN 500557 casting went on to become the foundation of every 400-inch application through 1977.

With economy and emissions the primary focus of all engineering development within General Motors, performance was deemphasized and Pontiac knew that its large 455 was being phased out. In the interest of providing performance-minded Firebird buyers with an up-level 400 boasting of additional output, Pontiac's engineers created the T/A 6.6 for 1977. Its 200hp rating matched that of the outgoing 455 while offering greater fuel economy in the process. A new camshaft and low-restriction exhaust system added 20 more horsepower for 1978, and the increase had a noticeable effect on vehicle acceleration.

Pontiac recognized that performance-starved enthusiasts buying Firebirds with T/A 6.6 engines would likely push them to the limits and modify them like hot rodders of the era were accustomed to. To improve the T/A 6.6's durability, Pontiac resurrected the PN 481988 block casting for 1978, and so workers could immediately differentiate the PN 481988 block from the PN 500557 on the assembly line, Pontiac added a large "XX" in several locations. The PN 500557 remained the foundation for every other 1978 400, including the standard engine in the Trans Am while the PN XX481988 was limited to the T/A 6.6 only.

After producing about more than a million 400s since the 1967 model year, Pontiac's bread-and-butter engine was discontinued as the 1978 model year came to a close. It did, however, recognize the need for a high-performance V8 for special models of its 1979 Trans Am, so the Division stockpiled and earmarked several thousand PN XX481988 blocks from the 1978 model year for use in 1979. That inventory was exhausted by May 1979, and the 400-powered Trans Am went away forever.

Pontiac's 455

As the overall size of General Motors' vehicles grew year over year during the late 1960s, so did the need for additional displacement to maintain sufficient acceleration. Pontiac's 421 had already gone to 428 with a bore-diameter increase in 1967. That then grew to 455 ci for 1970 when a

new crankshaft with a 4.21-inch stroke was introduced. The added stroke length simply increased to the copious amounts of low-speed torque the large-cube Pontiac was already notorious for, and with some simple bolt-ons in the following years, it made an excellent high-performance engine too.

When the 455 was introduced for 1970, the basic PN 9799140 block was drilled and tapped for four-bolt main caps, though most were fitted with two-bolt caps. The casting continued into 1971 before it was replaced by the PN 483677 for a short time, and then by the PN 485428 by midyear 1971. Functionally, these blocks are very much the same, with only minor structural differences, and virtually all were drilled and tapped for four-bolt caps (though only the 1970–1972 455 H.O. engines were equipped with them).

The PN 485428 was replaced by the PN 500813 for 1975. Unlike PN 500557 400 block, which was lightened for improved economy, the PN 500813 455 was as robust as any earlier example. Unlike its predecessors, however, it was drilled and tapped for two-bolt caps only. It went on unchanged for 1976 and was quietly dropped at the end of that model year.

During the 455's run, Pontiac developed and created the Super Duty 455, which was a beefy mill designed for the rigors of continuous high-rpm racing. The internals and bolt-on running gear were very different from standard fare, but the Super Duty 455 block was visually identical to the standard 455 block in physical measurement, but additional material was added to high-stress areas to increase durability. PN The 490132 was limited to the Super Duty 455 only, and all were fitted with four-bolt main caps.

Building a Pontiac V8

For years, hobbyists and racers looking to build the largest and most powerful Pontiac V8 generally sought a 455 for the foundation because its standard-issue cast-nodular iron crankshaft was equipped with the greatest amount of stroke length and the widest main journal diameter to accommodate it. You see, as Pontiac increased

the stroke length of its cast crankshaft past 3.75 inches, it also increased the diameter of its main journal to ensure it retained sufficient (connecting rod and main) journal overlap to maintain planar strength, and the stock 455 crank provided racers with displacement and durability.

For a time, the 455 seemed a commodity and usable cores were quite valuable, with asking prices of \$1,500 or more not uncommon. Then affordable forged-steel crankshafts came along, changing the game forever. Not only could hobbyists purchase a new forging in 455 dimensions, companies like Eagle Specialty Products began marketing long-stroke crankshafts with 3-inch main journal diameter to fit Pontiac's 400 too. The forging was strong enough that journal overlap could be reduced without compromising strength, and hobbyists could take a typical 400 and transform it into a 467-inch, fire-breathing Poncho with the single swipe of the credit card. In modern times, the 455 remains quite valuable, but not nearly as desirable as in the past. Hobbyists and racers are able to achieve equal amounts of power from a 400, whose availability is generally much greater and whose purchase price is generally several hundred dollars less than a similarly equipped 455. In fact, the 400 actually has a slight advantage over the 455 for maximum performance applications because its smaller-diameter bearings offer less friction and its smaller main journal bore leaves more material in the bulkhead.

With so many 400 and 455 blocks available, what should folks search for when seeking a foundation for their big-cube Pontiac V8 build? We took the question to David Butler of Butler Performance in Lawrenceburg, Tennessee, for his professional opinion. He advises, "With the exception of the mid- to late-1970s PN 500557 casting, we consider all Pontiac 400 blocks functionally identical. The 455 blocks from 1970 to 1976 are also functionally identical. Core shift can vary run to run, so we check every block casting individually before using it in any application, but we have found that no one 400 or 455 block is better than another beyond the well-

known issues with the 500557.”

Just how much horsepower a stock Pontiac 400 or 455 block can handle is a question that Butler has been asked countless times over the years, and he says there isn’t a straight answer. “In the 1990s, before aftermarket Pontiac V8 blocks were available, we had to push the stock Pontiac blocks a lot further than we do today. Many of them lived successfully at 1,000 hp or more back then, but there were a lot of failures too. Generally speaking, in today’s hobby, we start recommending an aftermarket block when horsepower surpasses the 700- to 800hp mark. A stock block can certainly live beyond that, but the resources and prep required to do so make an aftermarket block a cost-effective option at that point.”

Typical preparation of a stock Pontiac block at Butler Performance is very straightforward. The casting is thoroughly cleaned and subjected to a magnetic particle inspection process to verify it’s crack-free. The cylinder walls are sonic-tested to ensure a minimum wall thickness of 0.125 inch after reaching the desired bore size, but the minimum amount can vary with application. Once a block is deemed usable, ARP main studs are added and it’s line-honed, and the cylinders are then bored and honed with a torque plate installed. The deck surface is machined, all threads are chased with a tap, and the block is manually deburred of any casting flash.

Adds David, “All of our factory blocks are prepared similarly. The factory fasteners are pretty durable, but even the newest ones are pushing 40 years old. Part of our standard block preparation is to install ARP main studs prior to line-honing. Depending upon the application, we may have to install lifter-bore bracing for radical camshafts. We also deburr the oil galleries and restrict oil feeds where necessary too.”

Pontiac’s stoutest 400 and 455s were factory-equipped with four-bolt main caps on the center three journals, and we asked Butler for his opinion of them. “Pontiac’s cast four-bolt caps were marginally stronger than their two-bolt units, but we don’t recommend paying any more

for a 400 or 455 simply because it was originally equipped with them unless originality requires it. We prefer aftermarket billet caps over the factory caps because they definitely increase block rigidity. We recommend them when horsepower reaches 600 and feel they’re required when horsepower reaches 650.”

Pouring high-resin filler into the water jacket of a stock Pontiac block is a popular racer’s trick that can increase bottom-end rigidity. It can, however, have adverse side effects on the street. “Our recommendation when filling a block is very application dependent. We tend to recommend it only when horsepower approaches 750. It helps reduce the amount of cylinder wall distortion we see in long-stroke applications, and we feel it’s especially important when stepping up to an aftermarket crankshaft with 4.5-inch stroke. We have been using longer-than-stock rods to reduce side loading to help eliminate the need for block filling in many applications. While our testing has shown no real issue with coolant temperature, the lack of coolant around the lower water jacket can cause oil temperature to climb during extended street use, and that can lead to premature oil breakdown from the heat.”

So what about hobbyists owning the mid- to late-1970s PN 500557 block? What can it be used for? Assuming a given casting is in excellent reusable condition, the PN 500557 can be prepped similarly to any other 400 and should be quite suitable for a standard-type 400-inch rebuild—and even a bit more. “We feel the real key in successfully using a PN 500557 block is keeping peak horsepower to a moderate level and rpm down. We recommend limiting horsepower to about 450 and prefer keeping stroke length at a maximum of 4 inches with a 6.7-inch-long connecting rod when possible.”

Concerning aftermarket Pontiac V8 blocks, there are presently two companies producing them in cast iron and cast aluminum. Both are beefier than any stock Pontiac casting and will tolerate much larger bore-and-stroke combinations to achieve a total displacement of 541 ci or slightly more. The IA-II block from AllPontiac.com is

available in cast-iron or -aluminum and Kauffman Racing Equipment sells its MR1 in cast-iron or -aluminum. Pricing for a cast-iron block from either company starts around \$3,000 and many options are available. We briefly mention them here should your project take you in that direction, but they're an unneeded expense if the power goal doesn't require it as outlined above.

Conclusion

Around 50 years have passed since Pontiac assembled its last 400 and 455s. While the 455s are somewhat tough to find, 400s seemingly remain plentiful, and the advent of affordable, long-stroke crankshaft kits has opened for the door to an entire generation of Pontiac hobbyists. Whether you're building a 350hp daily driver street engine or a 700hp bracket engine, finding a 400 or 455 is as easy as verifying a casting number and negotiating a price that's livable for both buyer and seller. And being better educated on block choices should leave more green in your wallet for the cylinder heads and camshaft needed to achieve your performance goals!

Written by Rocky Rotella on April 13, 2016
Poncho Building Blocks

MEMBER'S UPDATES

Bill Rosen has written a book and he would like you all to check it out. It's a very cool book. lot's of great information in there!

You may already know this, but in case you don't I wanted to tell you that I wrote a book that was released this past Sunday. It's definitely a car book, just not Pontiac or Firebird specific. It's called *Bill's Guide: Buying and Selling Used Cars*. It's doing well on Amazon with 5-star reviews. Currently #1 in Automotive Buyers Guides. See the screen shot from today.

Would you mind following the link for Amazon below and take a look at the summary and reviews of the book? I'm wondering if it's something that might interest the club. Maybe I could share about the book for a few minutes at some

future meeting, why I wrote it and its purpose. It is super practical for anyone who ever buys or sells a used car, Firebird or otherwise. Let me know what you think.

Amazon link: <https://a.co/d/oB27WFO>

Bill Rosen
1969 Firebird 400 4 speed convertible (restoration under way)

Please contact me, Jeff Driscoll, on any new updates to you or your Firebird or any new purchases or anything exciting you would like to share with the club in the newsletter.

WANT ADS

CLUB MEMBER ADS

Want ads are free to members and will run for four months unless updated or canceled. Please update your ad on a monthly basis. All ads with *4 will not run the next month, unless resubmitted. (The number after the * shows how many months the ad has run without a change.) Please send all Parts for Sale, Cars for Sale, and Wanted ads

For Sale:

Russ Nobel has some parts for sale. Here is what he has: Jeff, I have parts that I took off my 1967 Firebird 400 engine:

Alternator

Fuel Pump

Power Steering Pump

Edelbrock Water Pump

A/C compressor and mounting brackets and hardware

Billet pulleys for crankshaft with A/C and water pump

I also have an OEM fan and an electric fan.

I really don't know how much to ask for them.

I'm not looking to get retail or top dollar, I just don't want to give them away. I'm cleaning out my garage, so I need them gone fairly soon.

Russ Nobel

Hi there. I'm one of your invisible members in the south sound. I have a question. We have a real nice

'69 Firebird, but it's going to be completely reincarnated over the winter. That means I'm going to turn it into a real nice pro-touring car. All of the running gear and front clip and rear suspension is going to be replaced. I'm going to have a pile of good parts looking for a home at ridiculous (cheap) prices. The original 350 runs great. I'm curious if someone in the club might want a killer deal on stuff. It's a running and driving car today, so they can see that it works before I tear it apart. If you know someone, please keep us in mind. I'm in Olympia and visits to my shop are always welcome. Thanks much,
Jerry Swenson
360-250-8004
JERRYANDHELEN@gmail.com

Please Contact Me, Jeff Driscoll if you have any parts for sale or if you need parts. E mail a70frmula400@aol.com or text me at 206-349-1282

Parts Wanted:

Please Contact me if you are looking for any parts for your Firebird so I can list it here or on the website

NON-MEMBER ADS

I will add any non member items that are for sale here

**Member Owned/
Recommended Businesses**

If you own a business and want to add your contact information, I will put it here. Also if you have a business related to our awesome Firebirds, please let me know and I will add it here.

Racing Automatic Transmissions

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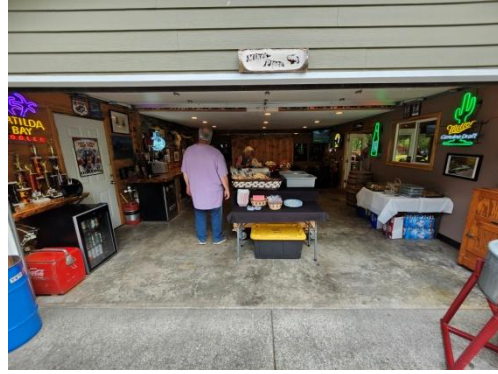
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NUMBER CRUNCHING

The codes that count on the 1974 Firebird.

BY THOMAS A. DeMAURO

The harsh realities of owning and operating a motor vehicle in the United States had become readily apparent by 1974. Again, it was the same old story of insurance and emissions and bad gas, but late in the 1973 calendar year a new player joined the game—OPEC. The resulting oil embargo shot gas prices into the stratosphere overnight. Five-block-long lines at the pumps characterized the morning commute, and your greatest concern became whether the last numeral on your license plate was odd or even. This turn of events sent the Big Three scurrying for solutions; i.e., smaller cars and squeezing the last ounce of fuel economy from the large models.

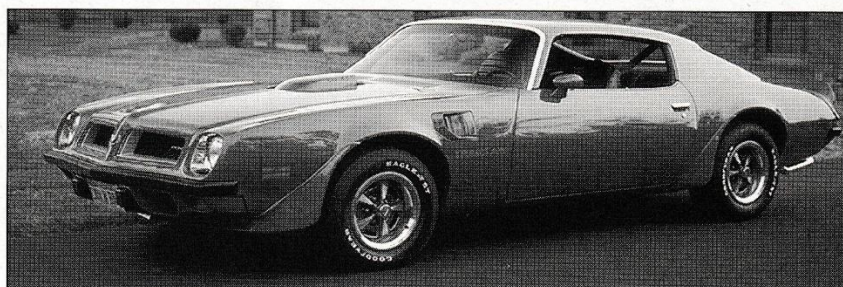
The Firebird, as I'm sure you've already guessed, was not a social drinker at the pumps. Pontiac made adjustments to the model line to pick up some mpg and to preview the public's desires for the next model year. The hi-po Trans Am and Formula would be hardest hit.

By mid-'74 both the 455 Super Duty and the 455 D-port engines were being phased out the lineup. Also at midseason the famed HEI distributor was added to increase ignition efficiency on hi-po 'Birds. A sign of the times was the availability of an optional Mileage Meter (134 installed), which took up residence where the tach and/or clock would have been. The times were definitely changin' for the Firebird.

TOTAL PRODUCTION

While the nation was reeling from the Arab oil embargo of the past year, the automotive community was bracing for the blow. Many consumers moved toward smaller economy cars, but the holdouts who still held horsepower close to their hearts made their voices heard by buying Trans Ams at a fever pitch. T/A sales were up 113 percent over the 1973 tally.

Model	Manual Trans	Auto Trans	Total
Firebird base L6	—	—	7,603
Firebird base V8	—	—	18,769
Model Total	—	—	26,372
Esprit 350	—	—	—
Esprit 400	—	—	—
Model Total	—	—	22,583
Formula 350	—	—	—
Formula 400	—	—	—
Formula 455	—	—	—
Formula SD	—	—	58
Model Total	—	—	14,519
Trans Am 400	1,750	2,914	4,664
Trans Am 455	—	4,648	4,648
Trans Am SD	212	731	943
Model Total	—	—	10,255
Grand Total	1,962	8,293	73,729



SERIAL NUMBERS

The first character was a number denoting the Division. The second was a letter that indicated the series. Symbols three and four denoted hardtop coupe, which was the only Firebird configuration. In the fifth place was an alphabetical code indicating the engine. The sixth place held a digit for the year and the seventh was an "N" for the Norwood, Ohio, assembly plant. The final six digits were the sequence number that ran 100001 up.

The VIN was stamped on a plate that was attached to the driver's side of the dashboard and was visible through the windshield. A sample serial number for a Formula model appears as follows:

2U87X4N100001

2—Pontiac

U—Formula (S-base Firebird, T-Esprit, V-Trans Am)

87—Hardtop coupe

X—455 SD engine (D-250, M-350 single exhaust, N-350 dual exhaust, R-400 2-bbl. single exhaust, P-400 2-bbl. dual exhaust, T-400 4-bbl. dual exhaust, Y-455 D-port)

4—Last digit of model year

N—Assembly plant: N—Norwood

100001—Consecutive Sequence Number

COWL DATA PLATES

A data plate was attached to the top of the cowl, just ahead of the windshield, on the driver's side. An example of a 1974 plate for a Trans Am reads as follows:

Line 1: Body By Fisher

Line 2: ST 74 2FS87 N 123456 BDY

Line 3: TR 576 A51 11 11 PNT

Line 4: 10A WS4 BLK

Line 5: 390261

Line 6: General Motors Corporation

Line 1 is self-explanatory.

Line 2 denotes the last two digits of the model year ('74) followed by the body style number (2FS87 base model). The remaining numbers (123456) comprise the consecutive body number, which has no direct correlation to the VIN.

Line 3 indicates the interior trim (TR) code (576) in this car: black standard bucket seats. A51 is the modular seat location code and exterior

Cu. In.	Net HP	Casting No.
350	155/170	4C
350	155	46
400	190	4C
400	190	4X
400	200/225	4X
455	250	4X
455 SD	290	16

Firebirds, they are as follows:

Cylinder heads on V8s can be identified by a two-digit casting number/letter found above the center exhaust ports. For 1974

CYLINDER HEAD CASTING NUMBERS

Cu. In.	Code	Carb	Net HP	Trans
350	WA	2-bbl.	155	Man.
350	YA	2-bbl.	155	Auto
350	ZA	2-bbl.	155/170	Auto
350	AA	2-bbl.	155	Auto
400	YF,YH,AD,AH	2-bbl.	175/190	Auto
400	ZJ,ZK	2-bbl.	175/190	Auto
400	Y3,WJ,WR	4-bbl.	225	Man.
400	YL,YM,YT,YZ	4-bbl.	200	Auto
400	A3,AT	4-bbl.	200	Auto
400	ZS,ZT	4-bbl.	200	Auto
455	Y9,A4,Z4,Y4	4-bbl.	250	Auto
455	AU,ZU,YW,ZW	4-bbl.	250	Auto
455 SD	W8	4-bbl.	290	Man.
455 SD	Y8	4-bbl.	290	Auto

Pontiac stamped the two-letter engine block code (listed here) on the front passenger's side of its V8 block below the cylinder deck. The last eight digits of the VIN can be found adjacent to the timing cover on the passenger side of the block. The 250-cubic-inch 6-cylinder was once again produced by Chevrolet. It will not be included in this article.

ENGINE BLOCK CODES

Line 6 is self-explanatory.

Line 5 may be an accessory line. It has not yet been deciphered.

Line 4 lists the date code for when the body was assembled. On the Data plate, "10" represents the 10th month of the year (October), while "A" represents the week, the first week of October. The "WS4" code denotes a Trans Am. The Formula's code would read "W66." The final notation on line 4 is "BLK." In all the cars we've seen, this notation matches that of the dash and console, while the trim code on line 2 (576) matches the bucket seat color. Since our example has standard black interior, the coding may seem redundant unless you take into account that there were multiple interior color combinations offered in '74. This leaves the possibility that Fisher Body began to split code the interior, with bucket seat color code listed on line 3, and dash and console color listed in letters on line 4 to commonize the coding procedure. This has not been verified as yet, so consider this information as speculation.

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color code (11) Cameo White. Note the use of a double coding for the paint. If the car was ordered with a Cordova top, the second "11" would be replaced with the corresponding letter code of the top color.

Continued from page 19

NUMBER CRUNCHING

CARBURETORS

All carbs are Rochester.

Cu. In.	HP	Trans	Size	Part No.
350	155	Man	2-bbl.	7044071
350	155/170	Auto	2-bbl.	7043062, 72 Alt
400	190	Auto	2-bbl.	7044063 Calif.
400	225	Man.	4-bbl.	7044067 Calif.
400	200	Auto	4-bbl.	7044266-74 Alt.
455	250	Auto	4-bbl.	7044262-374, 272 Alt.
455 SD	290	Man	4-bbl.	7044273
455 SD	290	Auto	4-bbl.	7044270

INTAKE MANIFOLDS

The SD intake is easily identifiable by the "LS2" or "LS2X" casting found near the front of the manifold.

EXHAUST MANIFOLDS

Cu. In.	Right Side	Left Side
455 SD	490802	490803
455	—	495107
400	495104	495106
350	495104	—
4-bbl.	2-bbl.	4-bbl.

DISTRIBUTORS

The large variety of distributors offered for 1974 and the amount of differing applications due to production changes make the listing of all part numbers and applications impractical in an article of this size. The Unitized distributor was back for '74 with 136 units installed in Trans Ams and Formulas. The HEI bowed in at midseason with 5,562 produced. Strangely enough, according to Frank Gatarz of the 455 SD Registry, the SD engine was fitted with a regular points distributor.

ALTERNATOR

Part No.	Amps	Application
1100927	37	Std. 350, 400, 455
1100928	55	A/C or R window defog
1101015	80	A/C, and R Window defog or HD

TRANSMISSION CODES

3-Speed Manual Transmissions: Saginaws have a two-letter code stenciled in yellow on the upper passenger side of the case. The VIN is stamped on a pad, also located on the upper passenger side, which consists of a "2" followed by the last eight digits of the VIN.

4-Speed Manual Transmissions: A two-letter code was stenciled in yellow on Muncie 4-speed transmissions on top of the case (the Saginaw's code was on the right side of the trans). A "2" followed by the last eight digits of the VIN was stamped on a machined pad on the passenger's side of the case adjacent to the tailshaft housing mounting surface on Muncies.

3-Speed Automatic Transmissions: M40s had a two-letter code stamped on a plate on the passenger's side of the case just ahead of the governor.

The M38's code location is the governor cover found on the middle rear driver's side of the case. Also on the cover are the build date code, production year and shift. The VIN was stamped on the lower driver's side of the case.

the rest of the interior trim. They also allowed a color appointment package that had the color of the instrument panel, carpeting, steering column, console and rear package shelf contrasting with that of the seats, door panels, rear seat armrests and other trim.

Color	Std. Bucket	Custom Bucket	Cloth
Blue	—	811	—
White	721	921	831
Saddle	731	931	—
Green	—	941	—
Black	761	961	861
Red	—	901	—

COLORED INTERIOR WITH COMPATIBLE SEATS

Order Code

White	331
Black	332
Red	333

COLORED APPOINTMENTS WITH COMPATIBLE SEATS

Order Codes

Blue	335
Green	336
Red	338

CORDOVA (VINYL) TOP COLORS

Once again, Fisher Body used a different coding sequence than Pontiac. In this instance, cowl plates used a letter and the factory used a number.

Color	Pontiac Code	Fisher Body Code
White	1	A
Black	2	B
Beige	3	C
Russet	4	D
Green	5	E
Burgundy	6	F
Blue	7	G
Brown	8	H
Saddle	9	I
Taupe	0	J

1974 FACTS

• Prices rose in 1974. The base bird carried a price tag of \$3,174.70 to \$3,335. The Esprit and the Formula came in at \$3,526.70 to \$3,687 and \$3,614.20 to \$3,659, respectively; the T/A rose to \$4,350.75 to \$4,446. Price differences are due to price hikes through the selling season.

• The Firebird's body received the first significant changes since 1970. The new beak, which became known as the "shovel nose," debuted and with it came refinements to the rear of the body. The new rear bumper was a plastic-covered affair with a contrasting black rubber strip to match the front. The taillights grew larger and all vestiges of chrome were removed from the rear.

• Formulas ordered with the 455 SD in '74, as in '73, got a Trans Am-type shaker hood in place of the dual-scooped Formula unit.

• Nineteen seventy-four, not 1973 as previously stated, marked the introduction of Radial Tuned Suspension to the Firebird lineup. GR-70 radial tires, special spring settings, altered bushing durometers and a smaller rear sway bar characterized the package.

Sincere thanks to Jim Mattison of Pontiac Historic Services, Fred Simmonds of Pontiac Motor Division, Jim Treadway of the Trans Am Club Of America, Brenda Neyra of the Dallas Area Pontiac Association, and Frank Catanzar of Trans Ams/Formulas/Firebirds of America and the SD Registry for their assistance in preparing this article.

350 3-sp. 4-sp. 5-sp. 3-sp. Comments

350	—	—	—	—	Saginaw
350	—	—	—	—	Saginaw
350	—	—	—	—	MA
350	—	—	—	—	M38, Turbo 350, W/2.73 Ratio
350	—	—	—	—	ME
400*	—	—	—	—	M38, Turbo 350, W/3.08 Ratio
400	—	—	—	—	PL
400	—	—	—	—	M40, 2-bbl. Calif.
400	—	—	—	—	PT
400	—	—	—	—	M40, 2-bbl. engine
400	—	—	—	—	PW
400	—	—	—	—	M40, 4-bbl. Calif.
455	—	—	—	—	PG
455 SD*	—	—	—	—	M40, 4-bbl.
455 SD*	—	—	—	—	PZ
455 SD*	—	—	—	—	M40, Turbo 400
455 SD*	—	—	—	—	M20, W/Ratio
455 SD*	—	—	—	—	M21, C/Ratio
455 SD	—	—	—	—	PQ
455 SD	—	—	—	—	M40, Turbo 400

* A Dealer Bulletin dated June 17, 1974, announces the introduction of the Borg-Warner transmission to the lineup, thereby replacing the Muncie transmissions. Whether or not the close-ratio trans was available with the 400 is not yet known. SD Registry figures to date show that all SD cars ordered with the 4-speed were produced late in the season, meaning they would have received the Borg-Warner trans, not the Muncie. Research continues, so consider this speculation right now.

REAR AXLE CODES

A three-letter code was stamped on the front of the right-hand side axle tube to the left of the carrier case, to indicate axle ratio and type.

EXTERIOR COLOR CODES

The Data plate on the cowl denoted body color with a number code. Pontiac factory paperwork denoted body color with a letter code. For those of you who are comparing your Firebird's paperwork with its plate, here is a list that shows how the numbers and letters correspond to the exterior colors. Cameo White and Buccaneer Red were joined by Admiralty Blue for the T/A color choices. Brewster Green was dropped from the lineup.

Color	Fisher Pontiac	Color	Fisher Pontiac
Cameo White	11	C	Pinmist Green
Admiralty Blue	29	E	Buccaneer Red
Regatta Blue	26	F	Honduras Maroon
Carmel Beige	50	G	Sunstorm Yellow
Denver Gold	53	H	Ascot Silver
Limefire Green	46	J	Fire Coral Bronze
Gulflmist Aqua	36	K	Colonial Gold
Fermist Green	40	M	Crestwood Brown

INTERIOR COLOR CODES

The standard bucket seat interior is upholstered in Madrid Morrokide. Custom bucket seat interior is offered in Prado Corduroy with Bravado bolster cloth with Madrid Morrokide or Perforated and Madrid Morrokide. The codes that follow are from the 1974 Pontiac Interior Trim And Exterior Colors brochure.

According to Jim Mattison, to decode the trim on the cowl tag, you must add a "5" to the front, and drop the last character of the codes below. For example, the Pontiac code listed for standard White interior is 721; the Fisher Body code would be 572. Pontiac mixed up the availabilities of the

