

DeTomaso of *Kirby Schrader's 1971 Pantera* Story by Kirby Schrader Photos by Dennis Quella and Kirby Schrader

I started out as a child and grew up on a farm in Kansas. That's me-hick country Kansas farm boy with three brothers and three sisters. At 14, I got my first car; a 300ci six cylinder, 3 speed automatic 1957 Ford Custom 300 4 door sedan. That was the only new car my Dad ever bought in his life by the way...

My younger brother and I were returning from a basketball game one night and this guy in my class made a U-turn in front of us. We hit him at about 65 mph. The '57 was totalled, but my brother and I walked away from it. The replacement was the biggest piece of junk I've ever had, a yellow and white 1959 Ford 4 door sedan with a 332ci big block and a 2 speed automatic. I hated it, but it was transportation; even with a blown head gasket that wouldn't seal up until the engine was warm.

Then for my senior year in high

school, my Dad and I went halves on a 1964 Ford Galaxy 500, 390 4 speed. It soon got 12:1 Jahns pistons, 428 heads, a solid lifter cam which was waaayyy too aggressive (but hey, I was 17 years old and thought I knew everything! 324 degrees of duration sounded cool), 427 Ford cast iron headers, and a 4:57 rear end. It soon wore a blacked-out hood with a 427 Corvette-style hood scoop. It was jacked way up in the back with air shocks, shock extensions, leaf spring shackles turned over, traction bars and L70 tires on chrome reverse rims. Your typical midwest high school hot rod, in other words. It was the fastest car in the area until all those other Dads started buying their sons new SuperBees, Roadrunners and GTO's for their graduation presents... Sigh... I went through three engines, two transmissions and five rear ends while I had that car-It was really reliable!

And then my life changed. It was

while I was going to Kansas State University. I was driving down the street in the '64 when I saw my first Pantera. A white one pulled into the gas station up in front of me across the street. At first, I didn't know what it was, but I was awed. It was small, looked absolutely mean as hell and sounded great! I drove into the gas station to get a better look and then realized it was a Pantera. I had a new goal! I just had to finish my degree, get a job and get a Pantera! However, before graduating, I got a good deal on a '69 Mach I which originally had been a 428, but had a 289 replanted in it, so I sold the '64 for \$125.

I got out of college with a BSEE and immediately went overseas with Schlumberger where I worked with them for 20 years. I've worked in Holland, England, Ireland, Scotland, Norway, Turkey, Iraq, Sudan, Peru, Trinidad, the Shetland Islands, Scotland, Indonesia and Japan before coming back to work in the USA for the first time in my life in August 1994.

I actually bought my first Pantera in 1983 while I was working in Aberdeen, Scotland and the Shetland Islands. It was a red, 1972 right-hand drive car that I found in London. The registration is/was 238 HOT and if anyone knows whether it still exists or not, I'd be interested to know! I can't find the serial number of it anymore, since I gave all the paperwork and information to the guy who bought it.

I also bought a second right-hand drive car in London later (THPNMY04682). My brother-in-law went to look at it and bought it for £7,000, but what a rustbucket! I took



Kirby Schrader

I bought my first Pantera while living in Scotland. 238 HOT was a 1972 right-hand drive European GTS—where is it now?

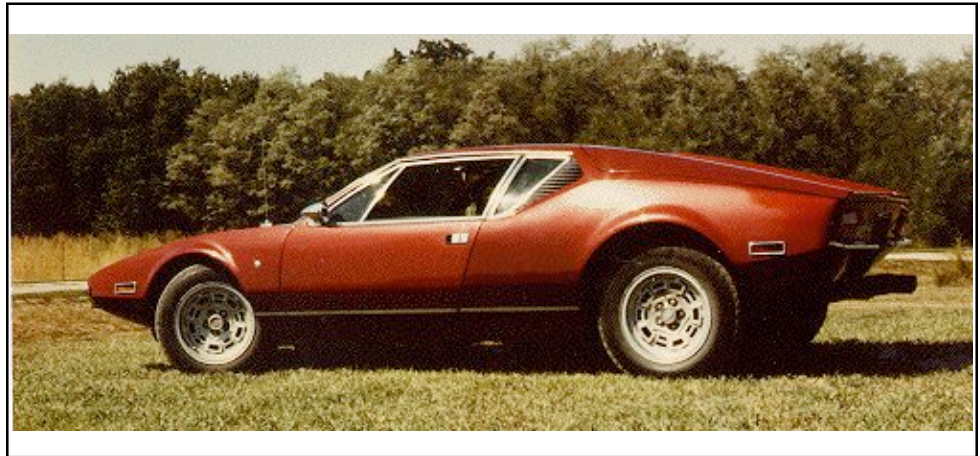
the Quarter

all the 'good stuff' off the white car (the interior, wheels and various trim bits were almost perfect) and installed them on 238 HOT. Old 238 HOT spent a lot of time at the local BMW dealer getting some rust fixed and then it was repainted.

I sold 238 HOT in 1988 to a guy that I had worked with previously in Aberdeen. I was transferred to Indonesia and really couldn't take it along. The new owner blew the engine within two

weeks of owning the car. The remains of the white car had been sent to Fred Fosset in Atwood, Kansas about three years previously with the intention of restoring it and converting it to left-hand drive. Fred's estimate was ridiculously high (a little over \$75,000), so Fred offered me \$5,000 for the right hand drive car as a down payment on a new 1985 GT5-S and I took him up on it. Big mistake...The GT5-S was to be light blue with a tan leather interior and I actually visited the factory in March of 1984 to see it, but it wasn't ready yet. (I did see the red right-hand drive GT5-S that was subsequently featured in many UK magazines.) In fact, it was not delivered within the agreed one year and then the bank foreclosed on Fred and...well, let's just say it's not a nice story.

After that, I decided that I'd try to find a car here in the USA and my brother's wife's sister's husband's friend (!) knew that Ralph Baird in Larned, Kansas had one for sale. Since my brother lived in Great Bend at the time, we drove down to Larned one day when I was visiting and Ralph took us to his storage barn to see it. In addition



When I bought #1661, it was in fairly good condition but had obviously been suffering from extensive owner neglect

Kirby Schrader

to old Lincolns, a '72 Mustang convertible with 52 miles on it and about 10 other cars, he had two Panteras, a yellow one that he didn't want to sell because it had sentimental value (he'd bought it for his son for high school graduation) and a burgundy red one. I made an offer, he accepted and I owned a 1971 Pantera—THPNLY01661.

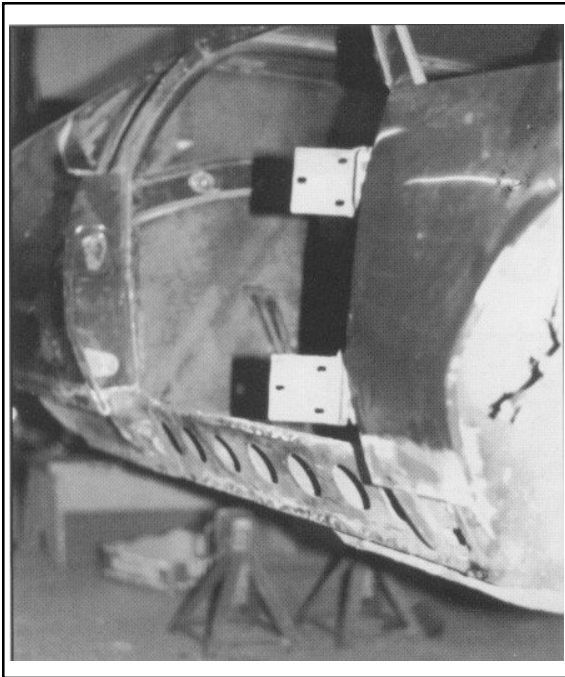
That was back on September 1, 1984 and I paid \$21,322 for it. I'm the third owner. The first owner was an 'area Ford representative' according to Ralph, and the original owner had most of the standard Ford updates done to the car prior to Ralph buying the car. There was also a set of Hall's big bore headers and exhaust on the car. 1661 originally started life as a lime green car, but had been repainted at some point. The car had 14" wire wheels on it and F70 tires when I bought it, believe it or not. The stock brake calipers had been ground down to get the wire wheels to fit! No, I don't have a picture of it like that...It was too embarrassing!

I immediately put the 7" and 8" Campagnolos with Michelins on it that came off the white right-hand drive car and drove it like that for a couple of

weeks. Then I bought some 10" Campagnolos from Pantera Performance Center and put Pirelli P7's on the car. In the next few weeks (what was left of my vacation) I rebuilt the carb, tidied up some wiring, and in general performed lots of little chores that needed to be done after the car had sat idle for so long. In fact, Ralph did drive the car once a year in the Larned 4th of July parade! But his mechanic told me that they fought with it every year just to get it to drive that few blocks and then it'd go back into storage again.

I realized that coming home for a month every year and trying to restore the car was going to be pretty pointless. It would be 2020 before I finished it at the rate I was going. So, I called Dennis Quella at Pantera Performance in Aurora, Colorado and asked him if he'd restore it. He told me that he would, but only if he could look at it first. So, I drove it out to Colorado. Dennis said it looked reasonable enough and he'd be glad to do the work for me while I was away overseas. The condition was that it would be done by my vacation next summer.

Dennis set to work on it right away.



Dennis Quella

Minor structural surgery began with the removal of the rusty outer rocker panels, and the installation of several small sheetmetal patches in the usual areas

Fortunately the car was relatively free of rust. Dennis replaced the outer rocker panels, and fabricated some small patches to take care of tiny rust spots in the traditional places (bottom of the left quarter panel in front of the gas tank, and the bottom rear edge of both front fenders.) The car had obviously been in a very minor front-end collision early in its life, and the front hood had some bondo and rust, so he re-skinned it with all new metal, incorporating cutouts for factory-style front hood vents. The barn where the car had been stored was close to a creek and a few of the cars in Ralph's barn had sat in flood-water for awhile. I didn't know this at the time I bought it, but in any case, water had pooled underneath the radiator and some rust had started there, so the front lower crossmember and front lower valence were both cut out and replaced.

The doors were both acid-dipped to banish any hidden rust. Extra steel gussets were welded in at several key areas on the body to prevent stress

cracks from developing. Then some minor re-leading was performed around the base of the taillights. Finally, Dennis welded on steel GTS flares on all four corners and affixed a fiberglass post '74 Euro GTS front air dam. Then the car was entirely stripped to bare metal, and was painted GTS silver and black, with the black extending up to the beltline, but the hood and decklid left silver.

The headlights were converted over to "Vader" style square halogen units, and the taillights lenses were replaced with Euro lights featuring amber turn signal lenses. Dennis installed Mind Train rear

deck lid louvers and a "Turbo" wing. He also mounted an electric radio antenna on the gas tank shield, which passes up through a hole cut through the engine cover and louvers to allow it to extend.

All exterior trim was powdercoated black, and a few interior pieces such as the shift gate were re-chromed. With the exterior taken care of, it was time

to focus on the chassis. The upper rear control arms were replaced with adjustable units from PPC, and the rest were powdercoated black to match. The stock bushings were replaced with PPC's polyurethane units. While the car was apart, Dennis converted the rear hub carriers over to Timkin tapered roller bearings; since the existing axles/bearings hadn't fallen apart yet, he was able to utilize my stock axles.

The stock springs and shocks were replaced with Koni adjustable gas shocks, with 700 lb rear springs and 450 lb front springs. Recently I installed the Hall Pantera upper and lower rigidity kit, and it has done such an exceptional job of stiffening up the car that now I believe the 700 lb springs are too stiff, and I will probably retrofit softer rear springs. A new steering rack from TRW Italy replaced the original British steering rack, and was further improved by the installation of the PPC bump steer kit. To keep the alignment in place, the PPC camber lock kit was installed at the same time.

The stock brakes were replaced by the PPC racing brake system of the time, consisting of an aluminum SVO master cylinder, all new stainless steel hard lines and braided stainless steel flex lines, and Wilwood Superlite II calipers gripping vented discs. When the car came back together, it wore 8- and 10-inch Campy wheels with Pirelli



Dennis Quella

The car was completely dismantled, stripped to bare metal, and steel GTS flares were welded on to create the first of the "Mini-Group 4" Panteras

P7's, sized 225/50-15 and 285/50-15. Dennis rebuilt the gearbox and safety-wired the ring and pinion. The stock driveshafts were replaced with heavy-duty Spicer units.

The cooling systems were completely overhauled next. A new PPC brass radiator was installed, but the stock fans were retained. A 160 degree thermostat ensures that coolant flows from the engine to the radiator sooner rather than later. Gates Green Stripe hoses are used throughout. Since my stock water pipes were in good shape, they were powdercoated and then reinstalled. The stock tanks were similarly treated, but I recently replaced the pressure tank with an aluminum one from PPC.

The stock A/C condenser was retained, but the compressor was replaced with a rotary unit, and all new lines are routed outside the engine compartment. Since it's a 1971 car, the hoses run through the right rocker panel instead of the center console. I also had the battery relocated to just in front of the right rear wheel.

From there, work then focused on the interior of the car. The center console was showing some wear, so Dennis re-stitched it in matching black vinyl. My car is early enough that it has functional fresh air intakes, but the factory pull knob was very inconvenient as it was mounted on the passenger side of the front console, so I had them cover over the hole and move the knob out of sight on the driver's side, under the tachometer. The coin tray in the center console has been modified with a lid and padding for an arm rest; it's my own design that needs some further slight modifications to be perfect.

The seats are custom Recaro KRS units, in black cloth. The left side of the passenger seat has been modified



Dennis Quella

Due to preexisting damage, the original front hood skeleton was re-skinned with new sheet metal

to allow greater clearance with the engine cover. Since I'm 6'2" I need all the room I can get, so the seats are bolted directly to the floor instead of using the factory rails. Simpson 5-point harnesses help keep me secure in the seat, and the stock 14" steering wheel was replaced with a large-grip 13" LeCarra wheel which gave my knees more room.

The stock gauges were replaced with VDO mechanical units, and the tach and speedo faces were changed to match. The speedo and tach bulbs were replaced with brighter units. Additionally, an oil temperature gauge was installed in the dashboard between the tach and the left A/C vent. A Halmeter (fuel/air ratio meter) has been installed in the center console where the ashtray and cigarette lighter used to be.

The early style dashboard features three A/C vents. The rotary windshield wiper switch was swapped out for later-style rocker switches. The courtesy switch was replaced with a second fan switch, so now that switch controls the

low speed on the blower fan while the standard blower switch control handles the medium and high speeds on the custom three-speed PPC blower fan. The courtesy light itself was replaced with a GT5 unit which incorporates its own on-off switch. The hazard switch was moved underneath the dash, along with three small toggle switches which control the alarm, the electric antenna, and finally a kill feature for the thermostatically actuated radiator fan.

The shift lever was shortened and fitted with an aluminum shift knob with the Isis logo; all the fingers were cut out of the shift gate except for the one between reverse and second gear. The shift linkage was modified with the PPC kit consisting of a hardened stainless steel shift rod and a spherical rod end trunnion bearing. Floor mats were a nice idea but they got in the way of my rather large feet, so those quickly had to go! While the doors were apart, brass gears were installed in the mechanisms (and in the headlight motor too.)

An Alpine stereo was installed in the dash, with a booster amplifier in the front trunk. Alpine speakers reside in the door, but I rarely listen to the music, preferring to listen to the cool sounds coming from behind my head!

The original engine in the car ran okay, but burned a little oil. When PPC rebuilt the car, I had to get a new two-bolt main block in November 1985. The original block had a huge score down one cylinder, which tends to explain the oil burning!

I ran the car for over two years with a stock block and heads, mild hydraulic cam and a 700 double pumper Holley carb on an Edelbrock intake. It ran a best time of 13.64 at 101.6 mph at a Shelby event in 1986 against a twin turbo GTS Ferrari. See the Quicktime movies on my website (<http://users.ev1.net/~schrader/>) if you're in-



Dennis Quella

As the silver and black paint went on, the project began to gain momentum—this Pantera was about to be reborn!

terested in seeing how badly I whupped him...

The car was done on time after PPC spent one year on the project, and it looked great. My car was the first of what Dennis Quella called the 'mini-Group 4' cars. That's his name for cars with GTS flares and the wider Group 4 tires. He subsequently built several of them and he claimed my car was the best advertising he had while it sat at his shop waiting for me to pick it up. I highly recommend Pantera Performance Center and all the folks who work for Dennis Quella. I can't think of anyone I'd prefer to work on my Pantera.

When I picked up the car the next year, I immediately drove it from Colo-

rado to New Jersey and back to Kansas. Just had to show up at our friend's wedding in style, ya' know.

I attended my first track event in Aspen, Colorado with CECA (Colorado Exotic Car Association) and went back a second year to the same event. I won my first car show trophy at that event and also won the long distance award since I'd flown in from Indonesia at the time. I also won Best of Class at the Shelby event I attended in 1987.

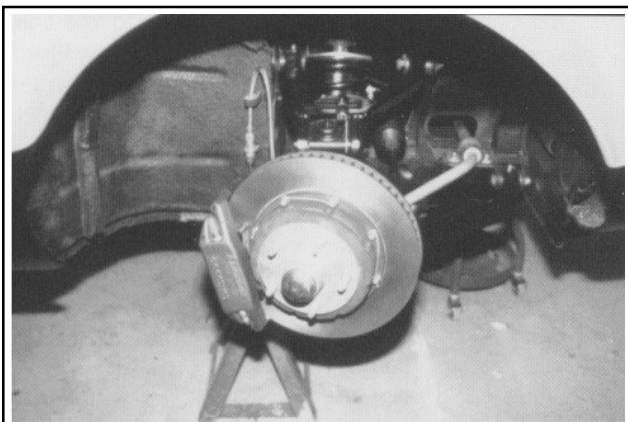
As I mentioned previously, when the car was first restored, I ran the 8" and 10" Campies, but it was too easy to light the tires at the stop lights. I needed more rubber! So in 1987, the car was modified for Gotti J55C wheels measuring 9" front, 12" rear, and fitted

with Yokohama AVS Intermediate Z-rated tires in 285/40-15 front, 345/35-15 rear, the same sizes as the GT5 and GT5-S Panteras wear. The front spoiler and fender had to be cut out slightly to clear the front tires when turning corners.

At the same time, I had PPC convert the engine to a Crower solid lifter cam and Boss intake which I ran up until February 1998. The stock-style radiator and fans were trashed in favor of PPC's lay-forward 3 1/2" thick aluminum radiator with twin sucker fans in a custom shroud. The left fan

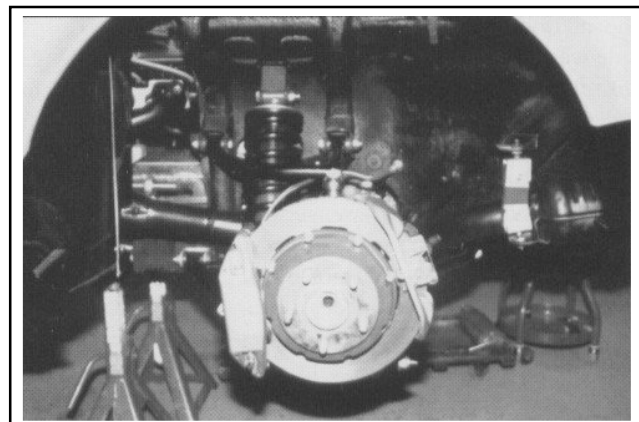
is thermostatically actuated, while the right one is controlled from the manual switch on the center console. For ten years, the car was put up on blocks while I was away, then driven hard for a month every time I was back on vacation.

I regularly wound the stock 2 bolt bottom end to 7,000 rpm with a few excursions to 7600 when I goofed. I had absolutely no problem with this engine until it started blowing oil one day. I'm still not exactly sure what created so much blue smoke (intake manifold gasket leaking? valve seal shot?), but the engine got pulled anyway. Nothing serious was found during the tear-down other than a broken valve spring and worn guides and seals. For street use, I



Dennis Quella

The front suspension got every trick in the book—Wilwood brakes with braided steel lines, Koni shocks, a new steering rack, poly bushings, and PPC's bump steer kit and camber lock kit



Dennis Quella

The rear suspension got a similar treatment, with adjustable upper control arms, Wilwood brakes (the stock caliper is retained to serve as a parking brake) and a new GTS sway bar and mounts

believe the 4 bolt option to be unnecessary. If you've got it, great. If not, don't worry about it.

I then rebuilt the engine myself and went with a PPC stroker kit. It's still the same good old 2 bolt main block though. PPC did various modifications to the block (chamfering, etc.) and they also installed an oil restrictor kit to keep more oil at the crank journals.

The original closed-chamber 4V heads were fitted with Crane triple valve springs, and the one-piece stainless valves



Kirby Schrader

My Pantera was everything I had hoped for and more when I picked it up from Pantera Performance Center (note Kip's GT-40 hiding in the garage!)



Kirby Schrader

The interior features a host of upgrades including VDO gauges, a large-grip LeCarra steering wheel, rocker switches for the windshield wipers, super-comfortable Recaro seats, and a collection of switches and knobs under the dash within easy reach of the driver

are supported by bronze valve guides with Teflon seals, and are actuated by Crane roller rockers. The Crower 15380 solid lifter camshaft is spun by a Rollmaster double roller timing chain, and has 288° of rotation at .567 lift, while the exhaust has 294° of duration

at .580 lift. The duration at .050 is 254° intake and 258° exhaust, while the lobe lift is .328 intake and .335 exhaust.

The block was fitted with a nodular iron crankshaft offset-ground for 3.700" of stroke, supported by Michigan 77 main and rod bearings. The

journals were widened for the Eagle Chevrolet small-block 6" connecting rods with ARP bolts. The rods are topped off by Wiseco 4.0150 pistons and Childs and Albert piston rings, which together yield a compression ratio of 10.5:1 and 375 cubic inches.

The engine is lubricated by a blueprinted high volume Milodon oil pump, driven by a heavy duty SVO oil pump shaft. A PPC 10-quart oil pan has internal baffles to prevent oil sloshing away from the pickup.

A 100 amp heavy duty alternator generates more than enough power to keep the battery charged even with all the accessories and fans running at idle. The Mallory Hy-Fire ignition system uses a ProMaster coil, and a Mallory Unilite distributor re-curved by PPC to feed the sparks through the Accel spark plug wires.

The front of the engine features a stock cast-iron water pump housing, with a custom PPC impeller with a backing plate welded onto it to prevent cavitation, and an underdrive pulley. The stock crankshaft damper was replaced with a chrome Romac damper. The stock starter was trashed in favor of a gear reduction starter which incor-

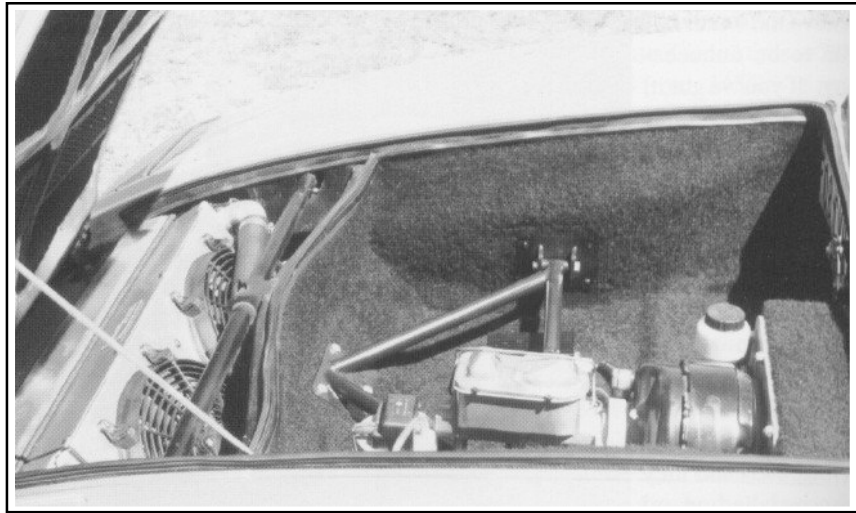
porates its own solenoid, enabling me to bypass the original solenoid.

The exhaust system is factory Euro GTS, with the headers Jet-Hot coated to keep engine compartment heat under control and also to preserve them; the coating renders them virtually immortal.

PPC's carbon/kevlar clutch is actuated by stock hydraulic systems. A custom aluminum flywheel enables the engine to rev quickly.

I've managed to attract three tickets for speeding over the years with the car. Once, on a trip to my brother's house, I got stopped and surrounded by two highway patrol cars, an undersheriff and five Great Bend Police cars...but that's another story.

Since returning to the USA in 1994, I have driven my Pantera every day to work and back, rain or shine, and I've also driven it at many track events



Kirby Schrader

The Hall Pantera chassis rigidity kit added measurable stiffness, while the PPC aluminum shrouded radiator is highly effective

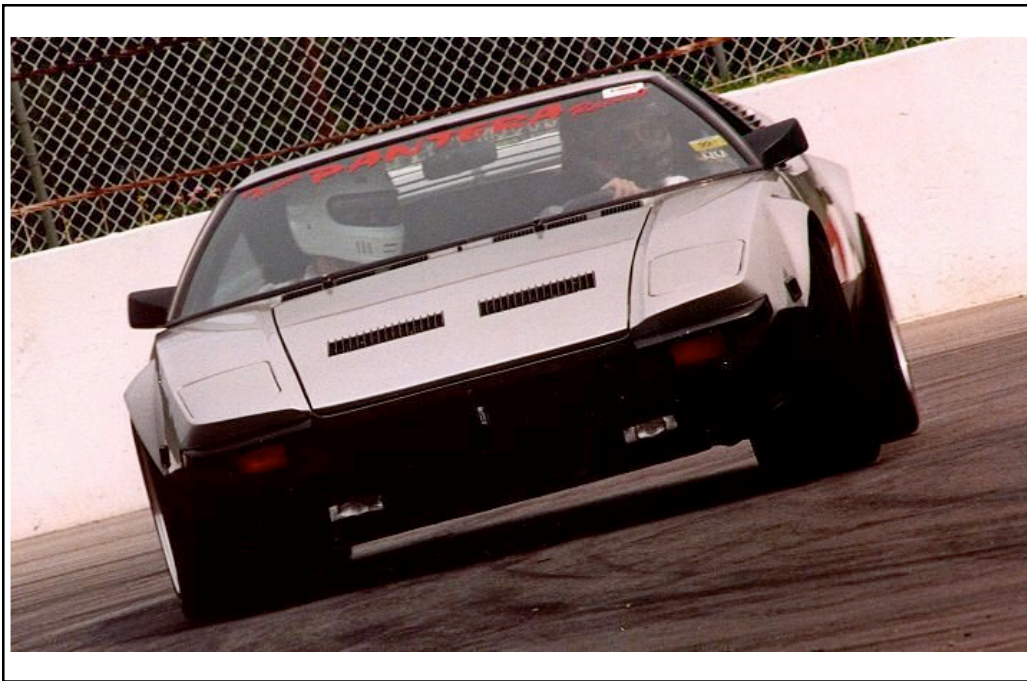
at Texas World Speedway, Texas Motorsports Ranch and Pocono. I won trophies at car shows initially, but as the wear and tear of everyday driving

started showing, the trophies stopped appearing. That's okay, I didn't buy the car to show it, I bought it to drive it!



Kirby Schrader

Dennis Quella's fuel injection system is simply awesome. It took about five days to install it and I'm still dialing it in, but the improvements in horsepower, torque and driveability (not to mention appearance) have made everything worthwhile!



SpeedGrafix

My goal was to own a Pantera that would be just as comfortable on the racetrack as it is in my daily commute. Mission accomplished!

I just added the PPC Weber-manifold-based Haltech EFI system (tall version) in January 2000. This kit includes air temp sensor, water temp sensor mounted in water pump, manometer for barometric pressure sensing, throttle position sensor, fuel pressure gauge mounted on the fuel rail, new high pressure fuel pump, new fuel filter, return line to fuel filler neck, Halmeter fuel/air ratio meter, etc. etc. Give yourself at least five days if you want to install one of these yourself!

I don't have any dyno numbers, but Gray Gregory's identical stroker engine (except he used a hydraulic cam and a Holley) dynoed at 472 hp at the flywheel. If we play the numbers game with a solid vs. hydraulic cam and EFI vs. Holley (Dennis Quella says 60-70 more horsepower is the norm) I can try to claim I have around 530 at least.

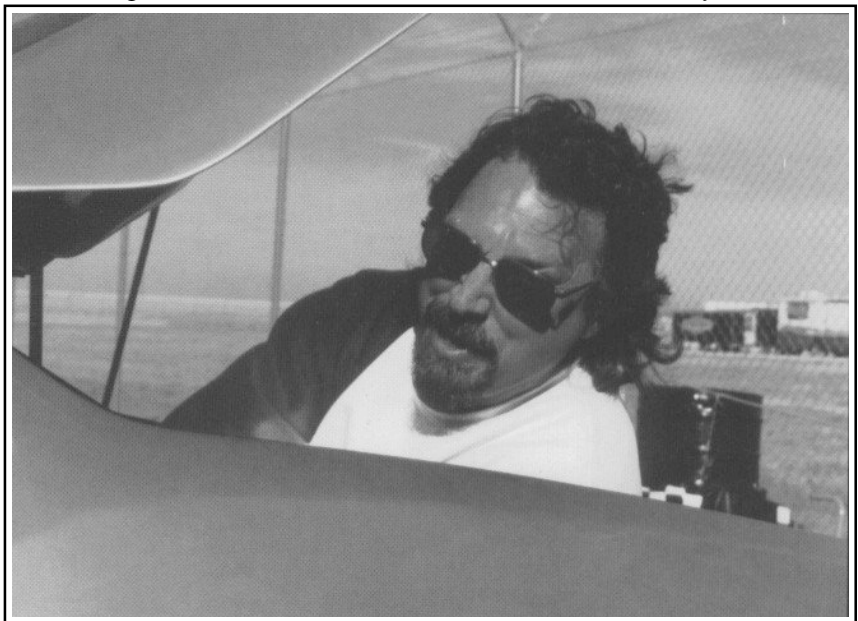
I know, I know...Proof is required! I'll see what I can do to get the car on a chassis dyno in April now that I feel I've got the EFI dialed in pretty well.

As a finishing touch, recently I changed out the stock quarter windows and gills for Amerisport GT5-S style finned scoops with air intakes. Another retrofit recently was the Hall 'Sphere bars' on the front and rear sway bars. Since February this year, I've been run-



Kirby Schrader

My other DeTomaso—Isabelle DeTomaso's personal Longchamp GT5 is also a daily driver



Steve Donegan

In my element, tweaking the fuel injection in the pits at TWS

ning Hoosier DOT slicks when on the track to try and save the street Yokohamas that are obsolete now. The track wheels are old Gottis (8 x 15" and 10 x 15") and the Hoosiers are 245 fronts and 265 rears.

As for my plans for the future? It's been over 15 years since the restoration and the car needs a new paint job. The car had 48,000 miles on it when PPC rebuilt it and I've put over 50,000 on it since then. A lot of those miles are hard ones. I don't baby the car at all although I must admit I've never driven it in the snow. There's bound to be a few more additions in the future, but I can't think of any now other than getting paint redone.

Oh, and a leather interior maybe. And maybe an aluminum SVO block and heads. And maybe...