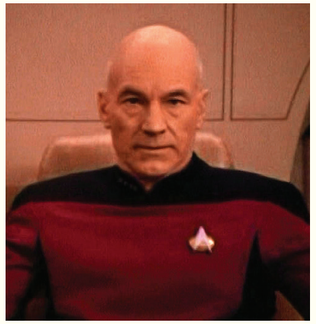
A Spacey Packard

by Bob Earls

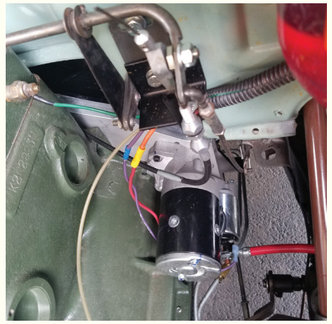
JEAN-LUC LIVES!

Jean-Luc Packard (a 1951 300) is up and running after almost 9 years of downtime. It has undergone much; from a complete repaint, plating, and interior to some interesting mechanical transformations.

I went through the engine about 10 years ago, rebuilding it mostly stock. I did some minor port work (grinding) to smooth out some rough edges that would slow down/alter the intake flow past the valves into the cylinder. The best Packard pistons for monoblock engines come from Terrill Machine in Texas (they have steel inserts in the skirts like the originals) and the tops of my set were ceramic coated and the skirts were plated with a special lubricant. The combustion chambers in the head were also ceramic coated. The purpose of ceramic coating is to either block heat transfer, or to expel heat (2 different coatings). The tops of the pistons and the head were done with the barrier type. This serves two purposes. The more heat you can generate in the combustion process, the more pressure you're going to have pushing the piston down. With bare metal, a lot of heat is absorbed by the metal and transferred into the cooling system (via the combustion chamber in the head) or the oil on the underside of the piston. Ceramic coating greatly diminishes that heat transfer and is used to create more/hotter expansion during the combustion



StarTrek Enterprise-D Captain Jean-Luc Picard played by Patrick Stewart.



The 12-volt mini-starter

Now a padded dash complements Jean-Luc's interior.

process. More bang. The lubricant on the piston skirts makes a slicker surface and it was noticeably easier to turn the engine over when I was putting it together. It just reduces friction. Both of these processes add not even .0005" and can be applied to almost any mechanical part: cams, valves, rocker arms, and air-cooled engine fins (for better heat transfer). I could tell an immediate difference when I first drove it. I mean, it may have added an eye-popping 3 horsepower, but I was more interested in reducing the amount of work the cooling system had to do.

One problem I encountered after the rebuild was a couple of hydraulic lifters that were giving me grief. I'd done a leakdown test on them and they seemed okay, but under actual running temperatures and conditions things can change. At the time, I couldn't find any OEM lifters, and because it's a LOT OF WORK to replace them I wasn't about to put in the new aftermarket ones that were made in China. I made the decision to go with solid lifters from a 288 engine. David Moe had a new set and I snagged them. Because the cam lobe ramps are different between a "juice" lifter and solids I had the cam reground to solid lifter specs (the lift and duration between the two are the same, but the ramps are different). The beauty of the 288 lifters is the ease of adjustment because they don't use a jam-nut…they're an interference fit. Solids, when adjusted properly hardly make any noise and don't need readjustment for 10,000+ miles.

I decided to employ the factory 4-barrel intake manifold that I'd been hauling around for years, and in the process had the exhaust manifold ceramic coated. I've done that to almost all of Howard's cars over the years. The advantages are that the manifold won't rust (the coating has a cast iron look) and that it significantly lowers the underhood temperature. I didn't want to use the original 4-barrel carb (a Carter WCFB), so I opted for a new 500cfm Edelbrock (Carter) AFB-type. Along with this I eliminated the old road-draft tube and installed a modern PCV valve.

The car was originally Turquoise Blue. I always liked Packard's Ash Green bottom with a Valiant Green top. In the famous words of Captain Jean-Luc Picard, "Make it so," and I did. I also don't like the look of two-stage (clear coat) paint on older cars and opted for a single stage. The color I chose for the top is a lighter green metallic than the Valiant.

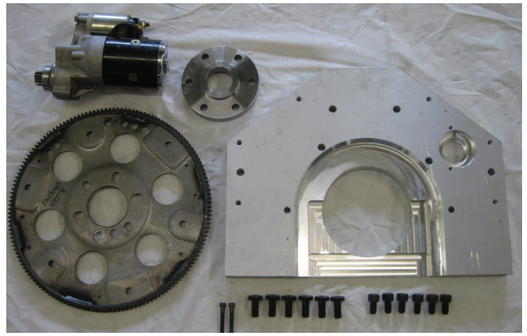
All the stainless was straightened and polished, and pretty much all the chrome was redone, including the massive grill ($$$).

The interior has undergone some changes. As comfortable as the original front seat was, I pulled it and installed a pair of beige, early 70s Mercedes buckets. Since Lisa likes driving the car and it's going to be our "go to Los Angeles" car the seats need to accommodate her smaller stature without forcing my knees into my chest. They're really a perfect fit in the car because they're not high backs and they're broad enough to fill the space. I wanted a more contemporary look and while the stock dash is painted I covered it all in brown vinyl with a woodgrain appliqué in the glovebox area. The rear seat and the buckets are similarly color themed and aren't a match…but that will come in due time. I also installed the requisite stereo system as well.

The big change was eliminating the Ultramatic transmission. They're a good trans, smooth and frugal with gas on the road (because of the lockup converter), but they're not terribly efficient in town, requiring you to floor it at a light to keep up with traffic. Early on I tried the Sierra-designed Torqueflight conversion, but didn't like the way they went about things and sent it back. There's a place in Minnesota called Bendtsen's Machine (763-767-4480) or www.transmissionadapters.com. Their conversions are nicely engineered, well made and reasonably priced. They make conversions for just about anything: Hudson, Chrysler flat-head 6 and early hemi, early Olds V-8, Ford flathead, Pontiac straight 8 and early V-8, Buick straight-8 and nailhead, postwar Cadillac, Kaiser, and many more. For Packards they

cover all 288, 327, 356, 359 and Packard V-8. Most of the conversions are to a Chevy-based bellhousing, such as Powerglide, Turbo 350/400, and the newer 700R4 with overdrive. Prices for the kits are in the $800-$1100 range. Here's the URL for the specific page for Packard 8s:

http://www.transmissionadapters.com/Packard%20to%20Chev%20adapter%20kit.htm



The Packard straight-8 kit is $895 and includes 4 pieces. The main adapter plate is a beautiful and accurately machined chunk of 1-inch thick aluminum. There's a crankshaft adapter which adapts the Chevy flex plate (also included) to the crank. And, finally, they include a new gear-reduction, 12-volt mini starter (more about the starter in a bit). They also give you every nut and bolt to put it together. Once I removed the Ultramatic, flywheel and bellhousing it took less than 10 minutes to install the main adapter plate, crank spacer and flexplate. Installing the trans also took about 10 minutes, but another hour or so to fabricate a new rear mount.

What consumed some time was hooking up all the miscellaneous stuff like trans cooler lines (I'd gotten rid of the stock Packard cooler years ago), throttle pressure cable, dipstick and shift linkage. The last 3 parts were courtesy of a hot rod outfit called Lokar. Their stuff is spendy, but I've never had any problems with it. It fits and it looks sharp. The shift linkage was a snap and, fortunately, all the stock detents built into the steering column/shift linkage worked. The only thing I'll have to change is the quadrant display near the steering wheel. Packard's quadrant is P-N-D-L-R, the 700R4 is P-R-N-Od-3-2-1. It all fits into the same space, but everything is tighter together. The last thing is the driveshaft needs to be lengthened a couple of inches with a new front u-joint and slip yoke into the trans. The beauty of this conversion is that you don't have to alter anything other than the driveshaft. It could be returned to stock quite easily with no traces of having ever been modified.

The driving experience is amazing and thoroughly justifies the time and expense to do it. After all is said and done the conversion was right around $3500 for parts, which is about what an Ultramatic overhaul costs. Labor for the conversion would be right around $700-$800. The big differences between the two are that the 700 R4 has a low first gear, so starting off doesn't require much throttle and it has overdrive which drops engine revs by 30% plus a lock-up converter. With the Ultramatic I had gotten 17 mpg when I last drove it from Los Angeles. With the 700R4 I fully expect to get 22-23 mpg. Having a total of 4 speeds gives the engine lots more flexibility and it shows. Acceleration is surprisingly quick, and in overdrive it loafs along on the freeway. I've done this conversion on Howard's '48 Cadillac, and a '55 Olds. Jeremy Wilson did it to his '52 Packard. They're all transformed vehicles. Needless to say, I'm sold on the conversion.

I mentioned that part of the kit was a 12-volt starter. It's one big difference between the Sierra/Torqueflight conversion and the Bendsten setup. With the T-flight they wanted to keep the stock starter, so they kept the stock bellhousing to do it. But that added length to the whole setup, which, without going into boring details, is one of their problems. The 700R4 setup eliminates the original bellhousing. The only real problem is the 12-volt part. I'd converted Jean-Luc to 12-volts long ago, but what do you do if you want to stay with the 6-volt system? Many years ago there was a cool item called the 6-12 battery. It was basically two 6-volt batteries sharing a common case. Stradling them was an "Orpin" solenoid. With some simple rerouting of a couple of wires the solenoid would join the two batteries together in series and send 12 volts ONLY to the starter. Everything else was run on 6-volts. Six-volt starters can handle 12 volts with no problems, and they sure turn the engine over quickly. You use the stock generator and all it does is charge two 6-volt batteries. It's a slick system and I've used it over the years to correct hard hot-starting problems on everything from big eights to V-12s. The big problem is that "Orpin" no longer makes them. So, what do you do? Run 2 Optima 6-volt batteries (they'll fit in most conventional 6-volt battery boxes) and hook up a solenoid made by Texas Industrial Electric, part #1119844-6V, Telephone: 210-654-4075, http://www.texasindustrialelectric.com/relays_1119844_6V.asp . Slick system and one which I recommend whether you do the trans conversion or not.

That's about it for Jean-Luc, except for finishing off the interior and some other minor details. It's been so nice driving him again and reconnecting with why I fell in love with this era of Packards.