By Steve Kelly  You can't build a simple, economical little $2000 car and expect to get away with it. The minute the car hits the stands, there'll be a curious, mechanically minded and technically sharp hot rodder along, and sure as some cars are painted red, he'll try to make the thing go faster and run better. Ford's Maverick wasn't even introduced when equipment manufacturers and eager wrench turners were whetting their innovative senses with the prospect of turning out a measure of extra horsepower for the little car. Naturally, Ak Miller was engrossed in his own program for the Maverick. It's got a six in it, and he likes six-bangers even more than apple pie. It has gotten to be a habit of mine to stop in and see Ak at his "downtown Pico Rivera" garage, and once in a while I'm lucky and he isn't there. But when he has been there during the past six months, I've been able—amid sorting through his verbal propaganda and ingenuous humor—to pick up a few morsels of information about his small-displacement six-cylinder Ford engine project(s). The current undertaking involves a Maverick, a car far down on the street rodder's list of "must have" automobiles, but one that really does have an immense amount of potential. Better than that, it has a low price tag.

Ak, who predates Stroker McGurk, enlisted the aid of Fred and Carl Offenhauser (also seniors to Stroker), and the Offenhauser dyno, to engineer some new pieces for the 170-, 200- and 250-cubic-inch Ford six. The pieces wrought from this development also apply to the old 144-inch six. First area of concern was carburetion. The 170-, 200- and 250-inch sixes have an integral head and intake manifold casting, making removal close to impossible at best. The late 170 and 200 head, introduced with the Maverick, has a square intake manifold, a flat top and 30 percent more volume. This head is parts No. DODZ6049-A. Ak already had a 200-cubic-inch six of an early design, and a 200 is the wiser choice, since it has seven main bearings, versus four.

HOT STUFF FOR MAVERICKS

What an economical six-holer needs is better performance. The most recent Ford muscle parts are suited for sixes.

Oblivious to high taxes, high speeds and desert rats, Ak Miller and Boss Maverick press on to 111-mph top end across dry lake bed. Motor Trend's fifth wheel came home in need of a bath.

LEFT—Adco stabilizer bar was adapted to rear of Ak's Maverick; improved handling is significant and very noticeable. Larger-diameter exhaust and Gabriel shocks were also installed as part of the performance rework.
in the 170. Ak chose the late 170 head, which bolts right to a 200, and milled the combustion chamber facing surface 0.050-inch. The stock head measures 51.5cc (250 combustion volume is 59.4cc), and when bolted to the 200 six, using a steel shim head gasket .027inch thick [Autolite parts No. C9DZ-6051-C], results in a final compression value of 9.7:1. Okay, we were talking about carburetors. The Offenhauser people went to work making carb adapters, and Ak bored one-inch openings at each end of the integral intake. Two carb/adaptor hold-down positions were marked, drilled and tapped. The head should be off the car for this operation, to prevent metal chips from entering the cylinders. There's much work to be done on the head for a complete job, anyway, so yank the head from the engine for starters. Offenhauser and Autolite market the adapters with complete instructions for manifold hole cutting, and progressive linkage kit, and they should have dealer-available supplies by now.

A pair of early Falcon one-barrel carbs from the 144-cubic-inch engine bolt on each end. Parts number for these is C2DZ9510-A. The center carb used is the 250 six model, parts No. DOZZ9510-E. Flowing 210 cubic feet per minute, compared to 156 cfm for the 200 and 146 for the 170. Throttle bore size is 1.688 inches and is a simple substitute on the 170 head. Other than piping fuel lines to each carburetor and adding three small chrome dome air cleaners, this completes the job of making a tri-power six-banger for Mavericks, Mustangs, Falcons, etc.

With increased compression and more fuel flow, valves need beffing. A careful valve job can be done, but it's the springs that need attention. Small-block 289 V8 springs (P/N 88A6651-A) fit right on, and early 260 V8 retainers (C3426514-B) fit the 5/16-inch valve stems. Stock 1.50:1, 200 six rockers are used, but if a mechanical cam is added, early Falcon adjustable rockers can be used. Should the pushrods prove to be too

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LEFT — Three-in-a-row, headers and a chrome rocker cover; the cost is right and there's still plenty of working room. RIGHT — Progressive, adjustable linkage is part of tri-carb package. Production carb adapters will be one-piece, not three separate ones. This is a prototype. BELOW — Trans-Dapt replacement front stabilizer (top) is larger than stock item and is a simple bolt-in on Mavericks.
long after the head is replaced, Ford offers .060-inch shorter than stock pushrods. Or .040-inch shims can be placed under the rocker stands. Either method will produce the right amount of clearance and not alter rocker ratio or action.

Pistons weren't changed, and a high-dome piston can't be used in conjunction with the milled and steel-gasketed head, or they'll produce costly damage. High-dome pistons are offered by some manufacturers (among them Jahn's), but when installed, the 250-size head must be used. The head machining process, which is simpler — especially in this case — accounts for a boost of at least 10 horsepower.

Doug Thorley Tri-Y 1 3/8-inch headers were also put to work, and they feed into a single tailpipe and exhaust. Ak upgraded the system with a 250-version exhaust, which has a 2.00-inch outside diameter, whereas the 170-200 Maverick has 1.75-inch plumbing. The system is quiet, free-flowing and very effective.

Man-A-Fre Induction has developed another method of aiding carburetion on Mavericks. This one utilizes a Rochester 2-bbl carburetor with an adapter to fit the stock center intake opening, with a list price of under $50. Man-A-Fre also has tube headers (under $70) for the Maverick. It's unfortunate that we didn't have a chance to dig in and test this setup, as it does sound promising. Maybe later.

Trans-Dapt is now also in the Maverick equipment business, with rear lift kits (No. SP-971), 5-bolt wheel adapters, and a one-inch diameter front sway bar. Engine swap adapters are already on their way. Trans-Dapt owner Willie Garner has already slipped a Boss 302 and four-speed in his own Maverick, plus a '57 Ford wagon rear axle. A rear sway bar for the Maverick is just about ready.

Ak didn't stop development on his Maverick after he and Offenhauser were finished with the engine. He revised the suspension a good deal too, put in a Home-O-Drive and a 4.00:1 rear gear. In overdrive, the car runs with a 2.78:1 final ratio. Gabriel Silver E shocks (for Mustangs) were matched, a GT350 one-inch-diameter front stabilizer (.690-inch bar is standard) was installed, as well as a .50-inch-diameter Adco rear stabilizer. Production Mach 1 Mustang bars will also fit. Ak now recommends the GT Mustang front stabilizer (.850-inch) in place of the GT350 unit, which has proved too stiff. Mustang power steering gears were shipped into the Maverick steering box, easily done since Ford uses linkage assist rather than integral power assist. Ak's new quick steering takes only 3.5 turns lock to lock, against the stock 5.2 turns lock to lock, and turning effort increase is negative. A set of F60-14 Goodyears and GT option wheels were added, and the little blue Maverick is really an enjoyable car to drive. It sure shocks people on mountain roads. What this car lacks now is a 2.78:1 low geared four-speed with a 3.55 final drive. It's easy to match this up, and all you need to do is shorten the driveshaft. The 2.99:1 low three-speed (3.41:1 and 1.86:1 on 170s) with 200-inchers has a 1.75 second gear, and the spread is just too great for the engine to keep working easily after each upshift. The 170 engine won't take a four-speed directly, so a complete 200-inch engine bellhousing, clutch and flywheel has to be substituted. Better to start with the 200 engine.

Adding horsepower is no big secret. The Maverick engine modifications done by Ak have resulted in a net increase of 55 horsepower, with a corresponding torque boost. Mileage, the big attraction in owning a six-cylinder compact car, hasn't really been hurt. Now that's the cue for this story to have an influence on anybody who likes keeping his money. The Home-O-Drive is a participating factor, naturally. On a run up to El Mirage dry lake to check out the top end of this car, it recorded 26-mpg average, including our top speed runs where the car hit an honest 111.0 mph at 4200 rpm.

Our stock automatic-equipped Maverick did the Orange County quarter-mile in a smashing 16.5 seconds and 72 mph. Ak's three-speed, triple-carbed Maverick was more than a second quicker, finding a low of 17.1 seconds and staying with it for several passes. Speed reached was a record-setting (for Blue Mavericks on overcast Wednesdays) 80.10 mph. Quick shifts with the standard column linkage aren't easy, and the levers take to hanging up between 1st and 2nd on occasion. The four-speed idea, with its much better intermediate gearing, is the way to have this car set up for good performance. Ak's "Boss 200" Maverick also showed a healthy share of improvement in the handling chores. A good handling "little" car is pleasurable; a poorly-handling little car can be quite a handful. The override unit in the Miller Maverick rounded out the better-performing compact to make it an economical one too. Premium fuel is required though, to get 26 mpg.

Small-dimension cars are enjoying their second phase, and this time the taste is going to last longer. There's just too much expense, gas and smog attached to the big hulks for buyers to keep on liking them now that proper emphasis and engineering is returning to smaller sizes. Ford is fortunate in that a few people are farsighted enough to begin development on muscle parts for their Maverick, The Hornet, and the Duster, and all the other little autos might get the same attention. They might also get huge V8s, which could easily put us all back in another predicament ten years from now. Good performing and easily maintained small-displacement powerplants are worth consideration.