

Fastest AMC

Half the battle of going fast is starting with the best engine/body combo for optimum power-to-weight ratio. If you buy an existing car, you're locked into that configuration. If you start from square one and build what you want, you can select the ultimate combination.

Scouring spec sheets, Dan Jensen was looking for the ideal 401 body.

"The lightest car the 401 was optional in was the Javelin, which was available in three trim levels: base (the lightest), the SST and the AMX," he explained. AMC built just a few 401 Javelins, with most used as Alabama Highway Patrol cars, leaving around 25 sold to the public. Dan found a nice six-cylinder base Javelin at an auction, bought it and added the 401 engine, radiator, crossmember and rear axle to convert it to 401 specs.

Dan bored the engine just 0.020-inch over and used a cam with the closest grind he could find to match the stock specs: a Comp Cams High Energy 268. The lift at 0.050 differs by just a thousandth of an inch—0.457 OE vs. 0.456 for the Comp cam—and the 218/218-degree duration specs are close to the OE 218/233 specs, too. The aftermarket cam is less aggressive than the stocker, but the alternative is to shell out big bucks for a custom grind. Dan went with the off-the-shelf stick and saved the money.

As per Pure Stock rules, heads are untouched. AMC used dual-snorkel breathers on the 401 only in 1971, and Dan uses a tall K&N filter that lifts the breather lid off the base about 3/8 inch for better breathing. Beneath the



breather is a fully stock Autolite 4300 carb. The distributor has been recurved to bring in full advance of 36 degrees by 2,600 rpm. Dan dyno'd the engine before installing it to make sure that it was optimally tuned. This takes extra cost and effort, but there is nothing that tells the truth about your engine's function like a dyno tune.

Dan built his own 2-1/2-inch mandrel-bent exhaust system. It uses an X-pipe and Walker DynoMax Ultraflow mufflers. "It is very quiet and probably flows as good as one can on these cars," he said.

AMC was still using Borg-Warner automatic transmissions in '71, and Dan wanted to try one to see if they were as bad as their reputation suggested. Unfortunately, he had problems with the transmission all summer long. But Dan says that, at least in this case, the B-W automatic wasn't really to blame. "To its credit, all the problems were caused by the rebuilder not tightening just about every internal bolt! Once I had everything torqued to spec, the trans worked great."

Dan had an AMC axle rebuilt by Drive Train Specialties in Ionia, Michigan, and loaded it with 3.73:1 gears and an

Auburn differential. New V-8-spec leaf springs were ordered from Eaton Detroit Spring, and standard heavy-duty shocks replaced the old air shocks that were on the car. A front anti-sway bar had to be added since that was standard equipment for a V-8.

Dan runs 50 psi on all four repro Polyglas tires, comes off the line at idle, and then floors it. He hits the 1-2 shift at 5,000 rpm, and the 2-3 shift a little lower, at 4,700. Through the traps, the engine is taching 5,500. In bad air at the race—a heavy headwind with a low barometer (high atmospheric pressure fills the cylinders better) and temperature in the high 70s—the Javelin very nearly broke into the 12s, running a low e.t. of 13.041 at 105.84.

QUICK READ

1971 AMC JAVELIN

Owner: Dan Jensen, Portland, MI
Engine: 401ci V-8
HP: 330
Weight: 3,501 lbs.
Axle: 3.73:1 Twin Grip
Best e.t.: 13.041 @ 105.99

Fastest Olds

"It's run a best of 12.55 at Norwalk at almost 111 mph," said Darrel Detwiler of his '70 455 W-30 Olds. This year at Mid-Michigan, it ran 12.810, making it the fastest Olds there.

Darrel's engine followed the rulebook very carefully. Cylinder bores are 0.070-inch over, the maximum allowed. Crank is stock. Pistons are as close to stock aftermarket replacements as possible. "On this model, the only piston I could get aftermarket is a little bit lighter than factory, but it still has the same cc that conforms to NHRA specs."

Heads are stock, original castings with no grinding anywhere—no gasket matching, no combustion chamber reliefs and no porting. Valves are stock 2.07/1.63-inch units with OEM GM valvesprings. The cam is close to completely stock but with updated ramps. "It's a new style cam that closes the valves a lot faster,"

Darrel said. But it still produces the required 16 inches of vacuum at idle.

The exhaust system is one of the few places where some modifications are allowed. No headers are allowed, and exhaust manifolds must be stock, but smaller 2- and 2.25-inch systems can be increased to 2.5 inches. X-pipes are OK, and almost every high achiever has one. Mandrel-bent pipe with no steps and high-flow mufflers are the ticket. Darrel uses a system for GM A-Bodies from TA Performance Products, and even has the stock 2-inch tailpipe trumpets in the bumpers.

The 4-4-2 uses the Turbo 400 with the stock, unmodified torque converter, and a 3.91:1 Anti-Spin rearend.

Tuning is conservative. "It doesn't like

