

CAR LIFE ROAD TEST



AMERICAN MOTORS JAVELIN SST

*A Bright, New All-American
Image Buster*

FRANKLY, WE were a little surprised at the attention garnered by the Javelin SST. After all, American Motors' brand-new image buster is not the first Ponycar out of the chute, nor is it the first to affect the sleek, probing snout and tucked-under rump of today's high-bred racing machinery. However, there it was: small boys stopped their bicycles and stared, and grown-up boys stopped their cars and asked questions. And, just as frankly, we enjoyed their interest. Apparently AMC has a winner.

The Javelin is a good-looking car, with some strong assets and a few, mostly remediable, faults. The forward-thrusting lines are proportioned well enough for nearly any modern eye, with plenty of front overhang to satisfy the current demand for long-hood, neoclassic styling. The sweeping curves of its modified Coke-bottle configuration carry smoothly all the way from nose to tail, giving the body design a pleasing coherence and even serving to partially disguise the head room allowance necessary for rear seat passengers. Front and rear bumpers are drawn well back into the nose and rear deck.

The upper portion of the body is kept light and attractive by several styling devices. Great areas of glass and slim front pillars give a feeling of spaciousness, as does the absence of front vents and dividing pillars between the side windows. The entire upper-body design is made up of a series of curves, extending even to the windows. There is not a single piece of flat window glass in the Javelin.

Toward making the side-window vents unnecessary, AMC developed a new "Flow-Thru" ventilation system. Air enters the passenger compartment through the cowl intake and two interior grilles, then exits by way of controllable openings under the armrests, going out through louvers in the door edges.

Surprisingly, in view of the extremely short rear deck, the trunk area actually is large enough for a few small suitcases, though of course the spare tire dominates this area. Incidentally, we essayed a tire change using the Javelin's scissor-type jack—and herewith recommend that any lady caught flat in an SST save her energies for flagging down the first available male help.

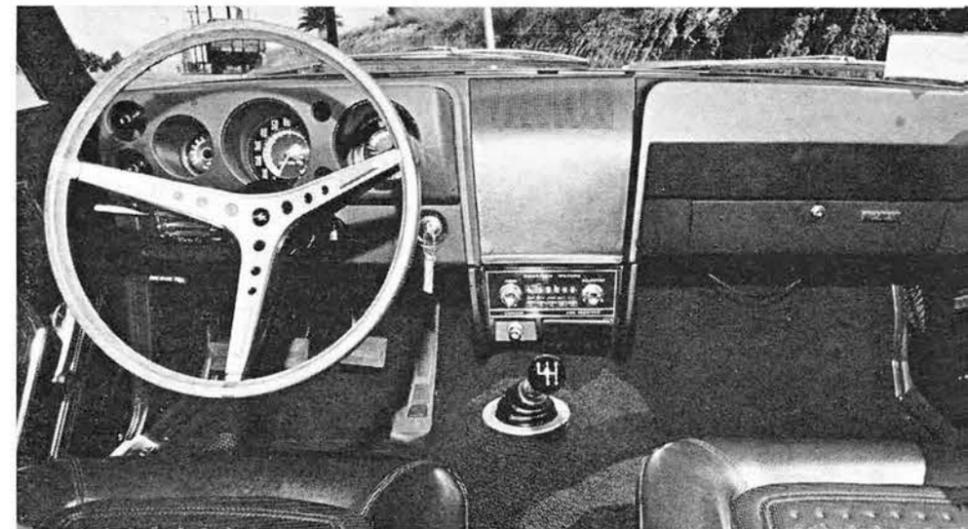
The optional (at \$39.95) "Turbo-cast" SST wheel covers are admittedly attractive, but they grip the wheel rim like a pit bull and are very nearly beyond the capabilities of the short jack handle, especially if wielded by dainty feminine hands. However, the jack itself lifts against special receptacles at the side of the car, and is a giant step forward in security and peace of mind

CHAN BUSH PHOTOS



TOP PERFORMANCE engine for Javelin is 343-cid/280-bhp engine which supplied more torque than could be applied to pavement on takeoff.

STARK, SIMPLE instrument panel presented a vast area of dull black vinyl and plastic, appeared hazard-free but rather uninspiring.



over those ominously swaying, bending and universally accursed bumper jacks.

The test Javelin came equipped with AMC's strong, quiet 343-cid/280-bhp V-8 with 4-barrel carburetion, an engine which pumps out a potent 365 lb.-ft. of torque at 3000 rpm. With larger intake and exhaust valves this year (2.025 and 1.625, respectively), the 343 "Typhoon" is comparable to the best-breathing competitive engines.

The torque curve of this engine is broad and useful, but a combination of factors kept the car from converting all

of its available power into acceleration and top speed. A standing 1/4-mile time of 15.4 sec. is far from stodgy, but it could have been equaled with the optional 3.15:1 final-drive ratio, rather than the test car's 3.54:1, and the numerically lower ratio would have allowed much better use, too, of the manual 4-speed transmission.

Transmission ratios are too close together in the 4-speed for full, effective employment of the gearbox, particularly in the lower gears. It is notable in the data panel that only 11 mph was

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gained in 2nd gear before the 2nd to 3rd shift was made. (Also note that just 1.5 sec. was spent in 2nd!) Further, an experimental acceleration run starting in 2nd gear produced both plenty of wheelsmoke and a quarter-mile time almost identical to that recorded using all four gears.

The gearbox action is excellent, however, with full synchromesh and a crisp, definite progression through the gates. Reverse lockout is a convenient pull-up ring just below the knob. This transmission responds well to hard, active operation and the synchromesh is all but faultless.

One other item stood in the way of accelerative progress: the E70-14 tires simply hadn't enough grip on the pavement to translate the car's power into action. They howled and smoked too easily through the first two gears, and even broke loose for a moment in 3rd. The Javelin does carry a front-end weight bias, but at 56.5% (with driver) this alone is not enough to cause such a loss of traction. All-out acceleration

would benefit from larger, fatter tires.

The optional power disc-front/drum-rear brake system is very good indeed. Braking was smooth, progressive and consistent, with almost no sign of fade whatever through six successive panic stops from 80 mph. This actually is two separate systems, front and rear, with a proportioning valve to control the degree of braking effort transmitted to each. If either system should fail, a large red warning light flashes in the instrument panel. American Motors' power disc brakes are available only on cars equipped with V-8 engines, but they are a truly significant safety development. We applaud and recommend them.

We also recommend power steering for the Javelin, particularly over the optional "quick-ratio" manual steering. The test car's manual quick-ratio system was too heavy for comfortable operation, especially around town. At highway speeds steering was reasonably easy, but slow city corners and parking were a chore. Power steering would have added a lot to the pleasure of driving the car.

Various "packages" are available for appearance and performance, and the "SST" insignia denotes the installation of one such assemblage: a choice of

black, red or tan interior, and special moldings on the rocker panels, side-window bases, drip rails and hood scoops. It also includes the "mag-style" wheel covers, a good reclining action on the front bucket seats (buckets are standard on all Javelins), wood-grain paneling on the doors, and a sports steering wheel. The latter is attractive, hefty enough for good handling, and has an embossed wood grain effect which adds both to its appearance and grippability.

The performance "Go" package, also partially installed on the test Javelin, includes the 343-cid V-8, dual exhaust, power disc brakes, E70-14 wide-oval tires, rally stripes all the way down the sides (not yet applied to the test car) and, within this package, a "handling" package!

The handling components differ slightly between the 6-cyl. and V-8 installations. The former receives a front antisway bar and heavy-duty springs and shocks, while the V-8 gets the same, but with a larger bar plus wider (5.5-in.) wheel rims.

While the appearance options are pretty much a matter for individual taste, the "Go" package definitely adds a great deal to the sporting nature of the car. And this, of course, is what the

1968 AMERICAN MOTORS JAVELIN 2-DOOR HARDTOP



DIMENSIONS

Wheelbase, in.....	109.0
Track, f/r, in.....	58.4/57.0
Overall length, in.....	189.2
width.....	71.9
height.....	52.0
Front seat hip room, in.....	23.2 x 2
shoulder room.....	55.0
head room.....	37.5
pedal-seatback, max.....	42.3
Rear seat hip room, in.....	55.4
shoulder room.....	53.2
leg room.....	31.5
head room.....	36.0
Door opening width, in.....	39.6
Ground clearance, in.....	6.2
Trunk liftover height, in.....	31.4

PRICES

List, FOB factory.....	\$2813
Equipped as tested.....	3683
Options included: 343 V-8 handling package, 4-speed trans., Twin-Grip dif., quick-ratio steering, tilt steering wheel, Turbo-Cast Wheel covers, visibility group, am radio, H-D cooling, Air-Guard emission control.	

CAPACITIES

No. of passengers.....	5
Luggage space, cu. ft.....	10.2
Fuel tank, gal.....	19
Crankcase, qt.....	4
Transmission/dif., pt.....	3.75/4.0
Radiator coolant, qt.....	13

CHASSIS/SUSPENSION

Frame type: Unifized.	
Front suspension type: Independent by s.l.a., coil springs, telescopic shock absorbers.	
ride rate at wheel, lb./in.....	127
antiroll bar dia., in.....	0.88
Rear suspension type: Hotchkiss-type live axle, multileaf springs, trailing arms above rear axle, telescopic shock absorbers.	
ride rate at wheel, lb./in.....	107
Steering system: Recirculating ball gear, parallelogram linkage ahead of front wheels.	
overall ratio.....	19.3
turns, lock to lock.....	4.2
turning circle, ft. curb-curb.....	36.8
Curb weight, lb.....	3370
Test weight.....	3740
distribution (driver), % f/r.....	56.5/43.5

BRAKES

Type: Two-line hydraulic, disc front, cast iron non-servo drum rear.	
Front drum dia. x width, in.....	11.2 x 2.31
Rear drum, dia. x width.....	10.0 x 1.75
total swept area, sq. in.....	371
Power assist.....	Integral
line psi at 100 lb. pedal.....	780

WHEELS/TIRES

Wheel rim size.....	14 x 5.5
optional size.....	none
bolt no./circle dia. in.....	5/4.5
Tires: Goodyear Speedway Wide Tread.	
size.....	E70-14
normal inflation, psi f/r.....	26/28
Capacity @ psi.....	n.a.

ENGINE

Type, no. of cyl.....	ohv 90° V-8
Bore x stroke, in.....	4.08 x 3.28
Displacement, cu. in.....	343.064
Compression ratio.....	10.2:1
Fuel required.....	premium
Rated bhp @ rpm.....	280 @ 4800
equivalent mph.....	102
Rated torque @ rpm.....	365 @ 3000
equivalent mph.....	64
Carburetion: 1x4 Carter AFB	
throttle dia., pri./sec.....	1.44/1.69
Valve train: Hydraulic lifters, push-rods and overhead rocker arms.	
cam timing	
deg., int./exh.....	18.5-67.5 / 60.5-25.5
duration, int./exh.....	286/266
Exhaust system: Dual exhaust with reverse-flow mufflers.	
pipe dia., exh./tail.....	2.125/2.125
Normal oil press. @ rpm.....	.50 @ 1000
Electrical supply, V./amp.....	12/35
Battery, plates/amp. hr.....	54/50

DRIVE TRAIN

Clutch type: Single dry disc, semi-centrifugal.	
dia., in.....	10.5
Transmission type: 4-speed synchromesh, close ratio.	
Gear ratio 4th (1.00:1) overall.....	3.54:1
3rd (1.60:1).....	5.66:1
2nd (2.10:1).....	7.43:1
1st (2.64:1).....	9.35:1
1st x t.c. stall ().....	
Shift lever location: Floor.	
Differential type: Hypoid, limited slip.	
axle ratio.....	3.54:1



message of the Javelin SST is supposed to be all about.

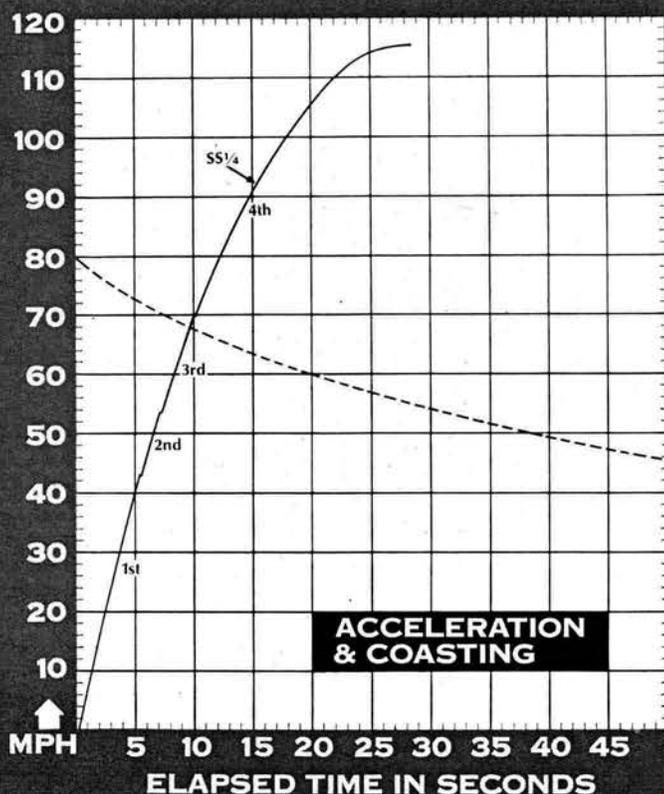
We ordinarily find that performance and handling benefits from the installation of heavier, stiffer springs and shocks, but in view of the Javelin's problematical road adhesion under full power we believe the buyer would do well to pass up this option and stay with the softer stock components. This

will add a bit to the car's corner lean and dipping over heavy bumps, of course, but should help keep the rubber on the road.

Driving the Javelin is an interesting and satisfying experience, and will be especially delightful to those who revel in the sounds and sensations of straight-line power. The ability to bring a howl from the rear wheels in any of

the lower gears is undeniably exciting, and the test car's engine supplied a unique song of aspiration and exhaust noises to accompany the shrieks from the tires. On hard acceleration the engine wound rapidly and easily up to about 2800 rpm, then from this point was accompanied by a sound we can only describe as a raffish snaffling. This was punctuated at each pedal back-off

CAR LIFE ROAD TEST



CALCULATED DATA

Lb./bhp (test weight).....	13.4
Cu. ft./ton mile.....	150.3
Mph/1000 rpm (high gear)....	21.3
Engine revs/mile (60 mph)....	2820
Piston travel, ft./mile.....	1540
CAR LIFE wear index.....	43.5
Frontal area, sq. ft.....	20.8
Drag class, NHRA-AHRA.....	n.a.

SPEEDOMETER ERROR

30 mph, actual.....	28.8
40 mph.....	38.3
50 mph.....	46.0
60 mph.....	55.5
70 mph.....	64.0
80 mph.....	74.5
90 mph.....	83.8

MAINTENANCE

Engine oil, miles/days.....	4000/120
oil filter, miles/days.....	4000/120
Chassis lubrication, miles.....	12,000
Antismog servicing, type/miles.....	replace PCV every 12,000 miles
Air cleaner, miles.....	8,000
Spark plugs: Champion N-12Y.....	gap, (in.).....0.035
Basic timing, deg./rpm.....	TDC/650
max. cent. adv., deg./rpm.....	13-15/2200
max. vac. adv., deg./in. Hg.....	18.5/20.5
Ignition point gap, in.....	0.016
cam dwell angle, deg.....	29-31
arm tension, oz.....	17-21
Tappet clearance, int./exh.....	0/0
Fuel pressure at idle, psi.....	5-6.5
Radiator cap relief press., psi.....	14

PERFORMANCE

Top speed (5350), mph.....	114
Test shift points (rpm) @ mph.....	
3rd to 4th (5300).....	70
2nd to 3rd (5300).....	54
1st to 2nd (5300).....	43

ACCELERATION

0-30 mph, sec.....	3.5
0-40 mph.....	5.0
0-50 mph.....	6.5
0-60 mph.....	8.1
0-70 mph.....	10.0
0-80 mph.....	12.0
0-90 mph.....	14.6
0-100 mph.....	17.7
Standing 1/4-mile, sec.....	15.4
speed at end, mph.....	93.0
Passing, 30-70 mph, sec.....	6.5

BRAKING

Max. deceleration rate from 80 mph.....	ft./sec. ²24
No. of stops from 80 mph (60-sec. intervals) before 20% loss in deceleration rate.....	6-no loss
Control loss? Moderate.	
Overall brake performance.....	good

FUEL CONSUMPTION

Test conditions, mpg.....	11.6
Normal cond., mpg.....	11-15
Cruising range, miles.....	200-275

GRADABILITY

4th % grade @ mph.....	18 @ 68
3rd.....	27 @ 53
2nd.....	off scale
1st.....	off scale

DRAG FACTOR

Total drag @ 60 mph, lb.....	165
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JAVELIN

by subdued percussions from the dual exhausts.

Nearly all these distinctive effects were caused in one way or another by the exhaust emission control. American Motors V-8s with manual transmissions use an "Air-Guard" air-pump system, which blows fresh air into the exhaust just as it leaves the engine to induce further burning of the gases. It was undoubtedly the auxiliary pump valving which contributed the raffishness, and backfiring is a common product of lean carburetor settings and low-speed timing retardation, both used in emission control.

American Motors V-8s with automatic transmission, as well as all Sixes, will use a different antismog approach. Called the "Engine-Mod" system, it includes a thicker head gasket and altered carburetor and distributor specifications.

Driving position in the Javelin can be accommodated to most owners' requirements, particularly with the tilt-back seat and the optional 7-position steering wheel. The front bucket seats are firm, comfortable, and have a long front-back distance travel. Pedal/steering wheel/seat locations could be improved, however, as some drivers found the clutch either too close or the accelerator too distant.

AMC 3-speed manual transmissions

and automatics have their shift levers mounted on the steering column, and an optional floor/console mounting is available on V-8s for automatic and manual 4-speed.

The instrument panel is a one-piece plastic molding, deeply padded on potential impact areas. All knobs and instruments are recessed well below the panel surface, rendering them free from both hazard and light reflections. Yet another package, the "Rally-Pak" dealer accessory kit for V-8s only, contributes a tachometer, oil pressure gauge, ammeter and clock to the panel. All of these are useful and readable, except that part of the tachometer is often hidden by the steering wheel. Absent-minded owners can even arrange to be prodded by a warning buzzer whenever the lights are left on with the engine off.

American Motors' 1968 door-locking system is worth a little familiarization by the new owner's whole family, toward avoiding locked-in keys or moppets. The controls are positive and convenient: a large, recessed "paddle" is the outside door handle, with a similar flush-mounted handle inside. A push-down lever in the armrest either locks the doors from the inside or presets the mechanism to lock automatically when the handle is pulled and the door shut. When so locked, the doors cannot be opened either from the inside or outside without raising the lever or using the key. This of course makes it possible to be embarrassingly outside wanting to get in—or inside not knowing how to get out quickly. Each pas-

senger should know how to open the locked door from the inside.

As listed in our technical description (*CL*, Sept. '67), there are four engines available for the Javelin, ranging from the standard 232-cid/145-bhp Six to the test car's 343-cid V-8. The other two choices are based on a 290-cid V-8, with either 2- or 4-barrel carburetion and giving either 200 or 225 bhp, respectively. All are well-engineered and reliable, and the buyer's choice is entirely up to his own power preference or requirements.

As one of the very first Javelins rushed through production for testing and appraisal, the test car had the expected number of minor flaws, including a loose rearview mirror, stiff window action and the like. However, these are matters for dealer preparation, are easily corrected, and should not exist in showroom models.

With its extremely attractive body design, a range of engines and transmissions from economical to dynamic, optional appearance and performance packages of every kind, plus American Motors' hard-won reputation for solid durability, the Javelin has a lot of things going for it. *CAR LIFE* expects to see it well represented on the roads.

Further, this dramatic and successful design turnabout shows a welcome strength and purpose in an industry which often seems to hesitate overlong before venturing even a furtive grille change or re-sculptured headlight bezel. May AMC's reward be in direct proportion to its decisiveness and courage. ■

