CAR LIFE
ROAD TEST

Rambler Classic Typhoon

This Mid-Year Model with the 232 Engine is a Preview of the '65s

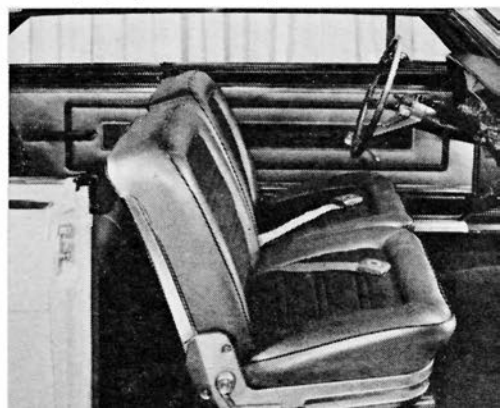
WHEN CAR LIFE asked for a new Rambler Classic Typhoon for a road test and evaluation, the car had just been unveiled by American Motors in a springtime announcement. It looked to us like a significant new model, one that could help bolster the Classic's slipping sales curve, and one that would be interesting to our readers.

However, a few production snarls delayed our (and Rambler's) schedule and the test car arrived in mid-summer just as the CL testers began to get involved with the various 1965 models. Rather than put off the test, though, it was decided to go ahead since the Typhoon proved more nearly representative of the '65 Rambler Classic line than we at first had realized. With its new engine and detail refinements, the Typhoon, in effect, was a preview of the '65 Classics.

That the Typhoon bore great resemblance, both in mechanical and physical specification, to the '65s was revealed at the American Motors long-lead press preview where it was announced that the new 232-cu. in., 7-main bearing 6-cyl. engine would be standard equipment in the upper-line 1965 Classics and (with a 2-barrel carburetor) optional in all Americans, Classics and Ambassadors. Further, a shorter stroke version of the same engine, displacing 199 cu. in., was to be standard in the least expensive Classics. Clearly, this new Typhoon engine was the forerunner of a whole new family of 6-cyl. engines for American Motors.

Of modern oversquare design, this new overhead valve 6-cyl. replaces Rambler's reliable, mileage-getting 196-cu. in. 6-cyl. (except in the American) which has done yeoman service in the many years of its existence. Although the overhead valve conversion was made only as far back as 1960, the actual design of the block and lower end traces back to the Nash 600 model of 1941. In this form it was of a "flathead" side-valve configuration of 175 cu. in. When the redesign of 1960 put a more efficient, but more costly, overhead valve cylinder head onto the old side-valve block, the L-head engine was retained as standard power for the lowest priced lines of the Rambler American. Rambler has used this "lowest-priced domestic car" gimmick as a very effective come-on to entice salesroom shoppers, who generally ended up buying the ohv engine option for just a few dollars more. At 196 cu. in., this flathead, long-stroke 6-cyl. produces 90 ▶

CLASSIC INTERIOR for '65 features new dash layout, optional reclining seats.



With This Engine AMC Leap-Frogs 20 Years Out of the Past

sound bhp, and relatively good performance in the lighter American. AMC says this engine is to be continued for the price leader in '65.

The new engine series follows the pattern of its forebears in being a straightforward, simple design. Although 3 in. longer than the 196 block, it is 2 in. shorter in block height and all-up weight remains approximately the same—a good trick when the displacement has been increased some 15%. The bore is 3.75 in., on 4.38-in. bore centers, which eliminates the siamesing of cylinders and surrounds all bores with coolant. Stroke is 3.5 in. and the rods are extremely short, stiff cast-iron units—only 6 in., center-to-center.

The crankshaft is the main departure from the norm—it runs in seven main bearings where heretofore Rambler's Sixes ran in only four mains. That means that there is now one main bearing (2.5-in. diameter) between each cylinder, where before there were mains only every two cylinders. The result is obvious: A stiffer crankshaft, more able to withstand higher piston pressures and bearing loads, and a crankshaft which will run smoother and quieter. Durability and longevity are greatly increased.

IF THERE ARE drawbacks to the use of a 7-main engine, they would be in the extra amount of internal friction that three more mains would create and the increased cost of manufacture. Excess internal friction would manifest itself in increased fuel consumption and decreased performance—two areas where our test Typhoon seemed outstandingly good, so we must proclaim this no handicap. Since these units are being produced in AMC's newly modernized and expanded Kenosha engine and axle plant, we must assume that all the latest pieces of automated equipment are being utilized to keep cost increases at a minimum. For '64, it was optional in other Classics at $59.95, which is somewhat less than the optional V-8 engine at $105.

A further departure from AMC's normal practice was the adoption of hydraulically operated lifters for the overhead valves: although hydraulics are used on the company's V-8s, they were not used on the Sixes. Valves are set into the head at a 10° angle to allow a wedge-shaped combustion chamber and are 1.787-in. diameter on intakes and 1.406 for exhausts. The piston tops have depressions in their centers, to impart a swirling effect to the incoming fuel/air charge, while the piston skirts carry three (two compression, one oil control) rings. Compression is at a modest 8.5:1 ratio, which should allow the comfortable use of regular grade gasoline if timing and carburetion are set to the proper specifications. Carburetion of this particular engine is by a single-throat Holley instrument, atop an exhaust-heated log-type manifold.

It would appear that with this engine AMC has leap-frogged about 20 years out of the past and at least into the current stream of 6-cyl. development. For a small company, with its concomitantly small research and development staff, this represents a Herculean task. That the engine is the base of Rambler's new family of Sixes means that it has been designed with an abundance of strength to meet the needs of future refinements and enlargement. Although no horsepower race is likely to develop among the 6-cyl. powerplants, it is fairly safe to assume that this new Rambler engine could cope with at least one-third more power without undue strain.

As we have observed, the 7-main engine in the CL test car paid no penalty in performance or economy. Although equipped with automatic transmission, the Typhoon returned an average of 18.3 mpg for 1200 miles of test driving. The staff lightfoot got just over 20 mpg for a tankful, so there's no reason to expect less than that for average driving with a well-tuned, broken-in car. This figure compares very favorably with that from a previously tested Classic Six (January, '63) which was equipped with a more efficient manual transmission.

Also in the interests of direct comparison, we can evaluate acceleration figures from another Classic test, that of the V-8 (and automatic) equipped model tested in the March issue, along with those of the previous Six and the new Six:

	New Six	Old Six	V-8
0–30 mph, sec.	4.3	5.3	4.7
0–50	9.3	13.2	8.8
0–70	17.6	28.2	15.6
Standing ¼ mi.	19.3	20.3	18.8
speed at end, mph	73	61	77
Fuel consumption, mpg	18–21	19–22	15–18

It must be noted in this comparison that the V-8 was also equipped with a 2.87:1 axle ratio, which tended to reduce accelerative ability. However, it is apparent that the new 7-main Six is a good strong performer, nearly capable of matching the motivation of its stronger replacement. While the V-8 is traditionally smoother than the 6-cyl., this new Rambler Six is so unobtrusive in its operation as to virtually preclude this basis for selection of the V-8. In fact, the Six moves the car so smoothly and well that we wonder why anyone would pay the $105 premium for the V-8, unless he had to have extra power to haul a station wagon body or pull a trailer.

The Six has another benefit over the V-8, in weight distribution and balance of the car. The V-8 is over 300 lb. heavier than the Six and virtually all this excess weight is concentrated over the front wheels of the car, affecting both cornering power and rear-wheel traction. At their respective curb weights, the new Six has its 3065 lb. distributed to put 55.3% on the front wheels, 44.7% on the rear, while the Eight's 3430 lb. (it had air conditioning and power boosters, too) was spread to 58.7% front, 41.3% rear.

This bias of weight toward the front gives the Classic its traditionally strong understeering characteristics during all cornering movements. While this makes the car stable in a straight forward direction, it causes the driver undue effort when he has to turn. We feel that the addition of an anti-roll bar at either the front (such as is used with the V-8s) or the rear would increase the body's resistance to "tipping" and make driving more comfortable to both driver and passenger. Rambler tries to compensate for the extra effort required with a 17-in. steering wheel, one of the largest on any U.S. car. The power steering option also reduces driver effort, but doesn't improve the understeering or body roll.

SUBJECTING THE Typhoon to our usual 2-stop brake test (from 80 mph) turned up two interesting items: 1) the Classic Six, which has Wagner servo-action brakes rather than the Bendix duo-servo units of the V-8s, stops in a straight line, without having one or another wheel lock-up and skid; but, 2) it takes a good deal of pedal pressure and a seemingly long time to halt the car. The decelerometer measured 17 and 20 ft./sec./sec. rates on the successive stops, which would rank the Classic's brakes at the low end of the average for U.S. cars. However, our V-8 test showed the Bendix units much more prone to fade and skid under similar conditions with not much increase in deceleration. Significantly, AMC will offer a front disc brake option in '65 for about $70. This, we think, would be money well spent.

As our evaluation was done on a production-line '64 Typhoon, our comments on body finish must be limited to that. It was particularly noted that the quality of finish, and the quality of assembly, had vastly improved in this model. The various pieces generally fit together as they were supposed to, paint and trim

seemed adequately applied for a car of this cost category and overall there was an aura of neatness that hasn't been apparent in previous Ramblers.

Styling changes in the '65s lengthen the overall dimension of the car to 195 in., a 5-in. increase built into the trunk overhang. The trunk lid is carried down to the rear bumper for easier access and the spare is moved over the axle housing, all of which add up to 1.5 cu. ft. more stowage volume.

In common with the Ambassador (see Page 63), the '65 Classic shares the extended rocker panel and floor pan sill, making possible the more contemporary slab-sided styling. This change results in a 2-in. increase in width at that point and larger, stronger box section construction of that member. Passenger compartment width, however, remains unchanged although there is one improvement in front seating position: The tilting seatback now has a smaller adjustment in the first notch, permitting slight changes in angle while driving.

One other significant change has been made for the '65s, the installation of extra-low-profile tires. These are 6.95-14s on the Classics, mounted on 5-in. rims. Low profile 15-in. tires are optional. Inside the car, the horizontal-style speedometer is continued in a greatly improved instrument panel layout.

Even without the new convertible, the Classic is bound to have more appeal to the young in spirit with its more contemporary lines and its new basic powerplant. And that engine, as we have seen, is destined to keep Rambler's coterie of gas misers in good spirits, even as it puts more spirit into their driving. ■

CAR LIFE ROAD TEST

1964 RAMBLER
Classic Typhoon

SPECIFICATIONS

List price	$2509
Price, as tested	2923
Curb weight, lb.	3065
Test weight	3405
distribution, %	55.3/44.7
Tire size	6.50-14
Tire capacity, lb. @ 24 psi	3520
Brake swept area	254.4
Engine type	IL-6, ohv
Bore & stroke	3.75 x 3.50
Displacement, cu. in	232
Compression ratio	8.5
Carburetion	1 x 1
Bhp @ rpm	145 @ 4300
equivalent mph	101
Torque, lb.-ft.	215 @ 1600
equivalent mph	34

DIMENSIONS

Wheelbase, in.	112.0
Tread, f & r	58.2/58.6
Overall length, in.	190.0
width	71.3
height	53.5
equivalent vol, cu. ft	419
Frontal area, sq. ft.	21.2
Ground clearance, in.	6.0
Steering ratio, o/a	28.4
turns, lock to lock	6.0
turning circle, ft.	37.0
Hip room, front	2 x 21.5
Hip room, rear	60.1
Pedal to seat back, max	40.5
Floor to ground	10.0
Luggage vol, cu. ft	13.7
Fuel tank capacity, gal.	19

EXTRA-COST OPTIONS

Automatic trans., radio, heater, wsw tires, accessory groups.

GEAR RATIOS

3rd (1.00) overall	3.15
2nd (1.47)	4.63
1st (2.40)	7.56
1st (2.40 x 2.12)	16.1

CALCULATED DATA

Lb./bhp (test wt)	23.5
Cu. ft./ton mile	102
Mph/1000 rpm	23.3
Engine revs/mile	2580
Piston travel, ft./mile	1510
Car Life wear index	38.9

SPEEDOMETER ERROR

30 mph, actual	27.2
60 mph	56.4
90 mph	85.7

FUEL CONSUMPTION

Normal range, mpg	18-21

PERFORMANCE

Top speed (4050), mph	95
Shifts, @ mph (auto.)	
3rd ( )	
2nd (4000)	64
1st (4000)	39
Total drag at 60 mph, lb.	153

ACCELERATION

0-30 mph, sec.	4.3
0-40	6.5
0-50	9.3
0-60	12.6
0-70	17.6
0-80	26.0
0-90	38.7
Standing ¼ mile, sec.	19.3
speed at end, mph	73