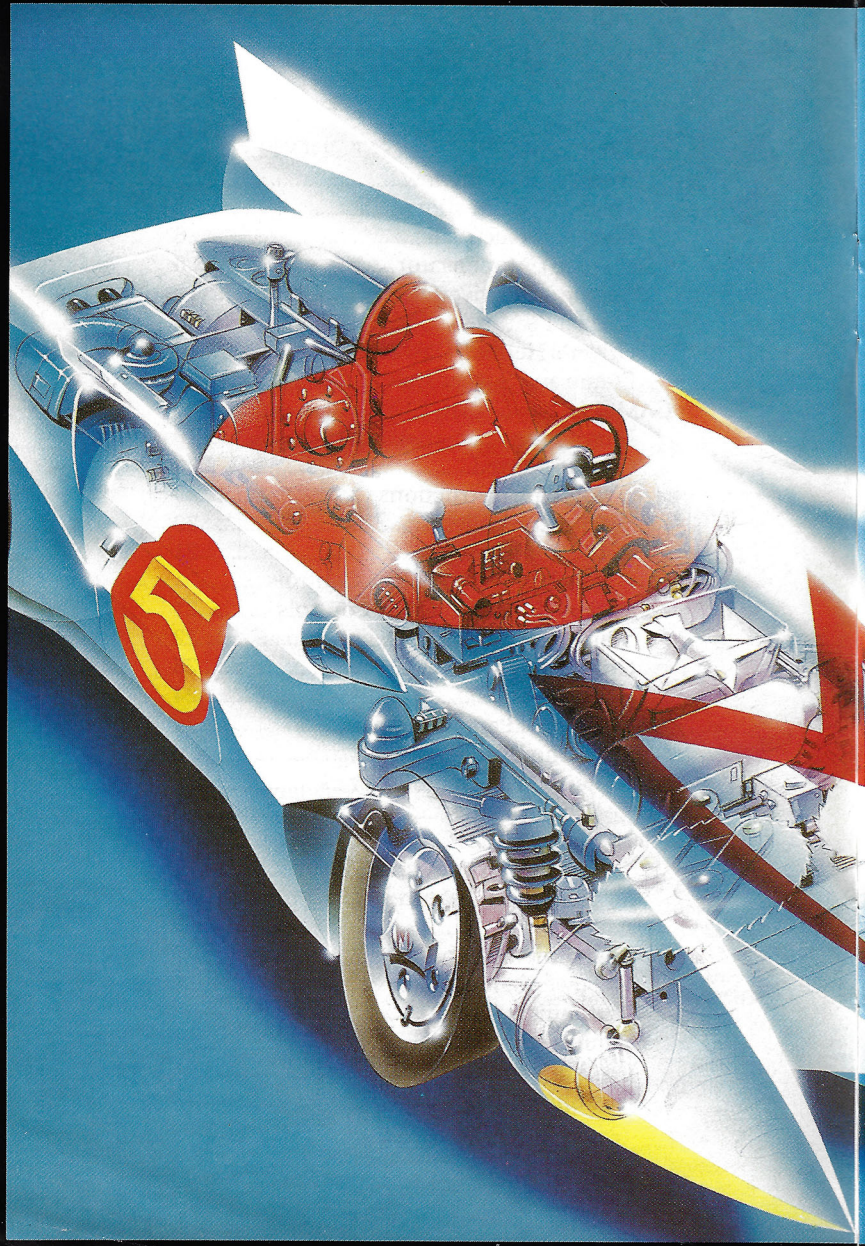

HISTORY AND OVERVIEW

When the MACH 5 Gran Tourismo Prototype appeared on the racing scene, it was hailed as the most technologically advanced racing machine on the track. Recognized leaders in the automotive industry acknowledged its designer and builder, "Pops" Racer, as an automotive genius. Because creating the MACH 5 depleted Racer's personal resources, he accepted Genelite Motors Corporation's long-standing sponsorship offer. In exchange for funding his research, Racer agreed to offer GMC first refusal of new developments on the MACH 5 project. After several years of productive and profitable research, creative differences led Racer to strike out on his own, funding his research from private donations and track purses won by his son, "Speed" Racer.

The MACH 5 is recognized as the leading race car in its class, and its advanced design and technical abilities are truly awesome. Many of Pops Racer's designs have already appeared in the private sector as practical applications are discovered. The heat shielding developed to protect the driver's cockpit is currently being tested for use in the Space Transport System program, and American SimuFlight Technologies, Inc., is currently testing Racer's g. Force Compensator Unit for applications in the flight simulation industry.

The MACH 5 is always on the cutting edge of technology, utilizing advances not yet available to the

public. Its classification as "Prototype" refers not only to itself but also to many of its components. Various companies have approached Racer and offered him the chance to test their own newly-developed technologies on the MACH 5. After extensive research into a company and its product, and drawing up a detailed contract to protect Racer's ownership of the MACH 5 and its components, Racer adds a new feature to the already impressive automobile. At the end of the first quarter this year, Xavier Industries, a giant in the microcomputer industry, announced it would be working with the Racer organization to develop an on board computer system utilizing their revolutionary data bus, the Omega-Bus TM. Much of the equipment tested has become a permanent fixture on the MACH 5.

CREDITS - SPECIFICATION SECTION

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MACH 5 SPECIFICATIONS

GENERAL	
Vehicle MFR	Pops Racer
Bodytype	2-pass, 2-door retractable Hdtp coupe
Drive System	Mid-engine 2-4WD
Base Price	N/A
Options	N/A
ENGINE	
Type	Forges alloy aluminum/titanium turbine engine
Displacement	N/A
Induction System	Harris Comptronic FI
Output Shaft & Impeller Blades	4140 stainless/titanium forged alloy
Reduction Gearing	Carbon steel/titanium
Max. Engine Speed	60,000 RPM
Max. Power (SAE NET)	5,000 @ 42,000 RPM
Max. Torque (SAE NET)	4,795 lb/FT @ 37,500 RPM
Emissions Control	Dual NO_2 catalyst, NO_2, 0 sensor
Recommended fuel	92 RON unleaded or equivalent
DRIVE TRAIN	
Transmission	5-SPD manual
Trans Ratio	(1st) 3.44 : 1
	(2nd) 2.45 : 1
	(3rd) 1.68 : 1
	(4th) 1.14 : 1
	(5th) 0.90 : 1
Axle Ratio	3.88 : 1
Final Drive Ratio	3.23 : 1
CAPACITIES	
Turbine Engine	12.75 QTS.
Fuel Tank	21 GAL.
Luggage	5.2 cubic FT.
Oxygen Bottles	2 @ 100 lbs.

MACH 5 SPECIFICATIONS

SUSPENSION

Front	Independent double-wishbone, dual-longitudinal torsion bars, adjustable hydraulic shocks, anti-roll bar
Rear	Independent lower trailing arms, transverse leaf springs, anti-roll bar

STEERING

Type	Computer-assisted Rack-and-Pinion
Turns, Lock-To-Lock	3.2
Turning Circle, Curb-To-Curb	37.3 FT

BRAKES

Front	11.0 IN internally-ventilated computer-assisted discs
Rear	11.0 IN internally-ventilated computer assisted discs

WHEELS AND TIRES

Wheel Size	16 x 8 IN
Wheel Type	Cast aluminum/magnesium alloy
Tire Size	245/50VR 16 uni-directional
Tire MFR & Model	Experimental Inflatable (XIF™)
Tire Construction	N/A

DIMENSIONS

Curb Weight	3,150 lbs.
Weight Distribution (%) F/R	44/56
Wheel Base	92.0 IN
Overall Length	180.0 IN
Width	69.5 IN
Height	34.0 IN
Track, F/R	60.0/60.0 IN
Ground Clearance	4.0 IN

CALCULATED DATA

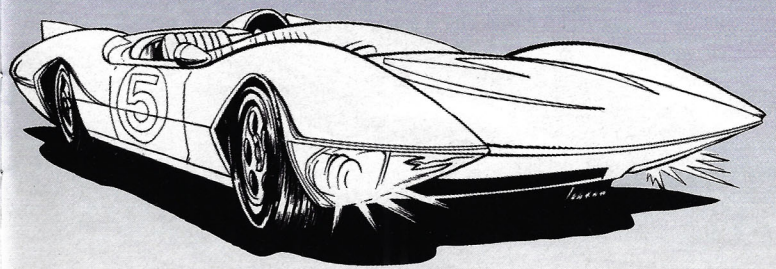
Power-To-Weight Ratio	.63lb/HP
Top Speed	220 + MPH (approx.)
Skidpad: Lateral Acceleration	.96g. +
Fuel Economy (MPG)	17
EPA Rating (city/hwy)	16/24

ACCELERATION SPECS

(0 - 30 MPH)	2.64 sec
(0 - 40 MPH)	3.86 sec
(0 - 50 MPH)	5.12 sec
(0 - 60 MPH)	6.32 sec
(0 - 70 MPH)	7.49 sec
(0 - 80 MPH)	8.65 sec
(0 - 90 MPH)	9.87 sec
(0 - 100 MPH)	11.02 sec
Standing Time 1/4 Mile	11.51 sec/104.3 MPH
Passing Time	(40 - 60 MPH) 3.21 sec.
	(50 - 70 MPH) 3.56 sec.

BRAKING

(30 - 0 MPH)	33.2 FT
(60 - 0 MPH)	132.0 FT
(90 - 0 MPH)	196.0 FT

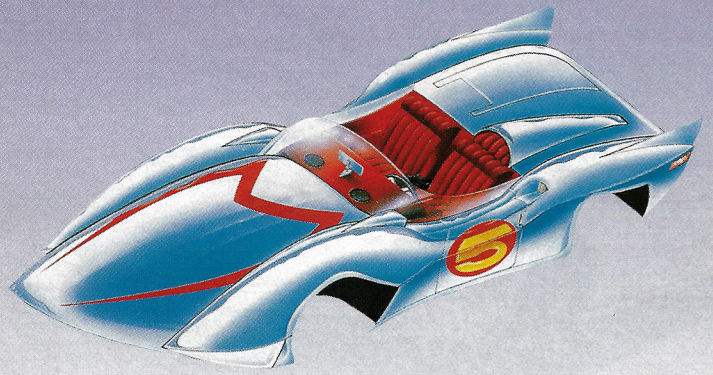


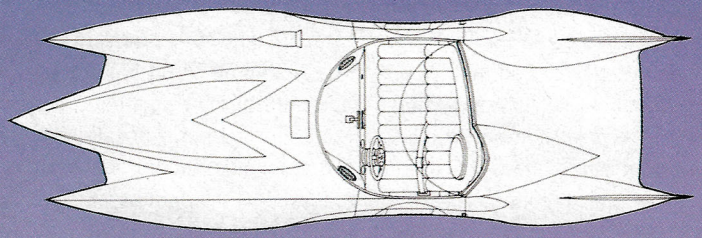
BODY AND ELECTRICAL

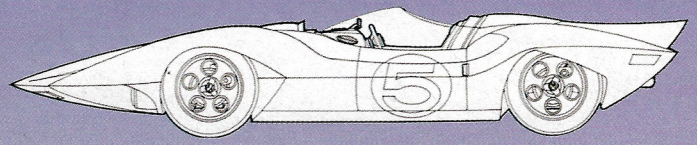
At first glance the MACH 5 impresses with its sleek, aerodynamic design. Surely a more beautiful automobile remains to be built. But it is onlywhen the car is analyzed piece by piece, that the beauty of its design can be properly appreciated. These next few pages provide a brief description of the components making up this remarkable automobile.

In the late 1940's, the United States Government discovered a nickel/titanium alloy and called it "Memorite." This alloy can be forged into a desired shape. Should the metal be damaged, quickly raising or lowering the metal's temperature ±7 degrees will cause the metal to revert to its original shape.

The MACH 5 body, reminiscent of the fantastic automobiles designed by Pininfarinna, is composed of forged Memorite 9000. Its white color comes not from paint but from the Memorite 9000 itself. Memorite 9000 can be tinted in a wide range of colors, thus eliminating part of the weight



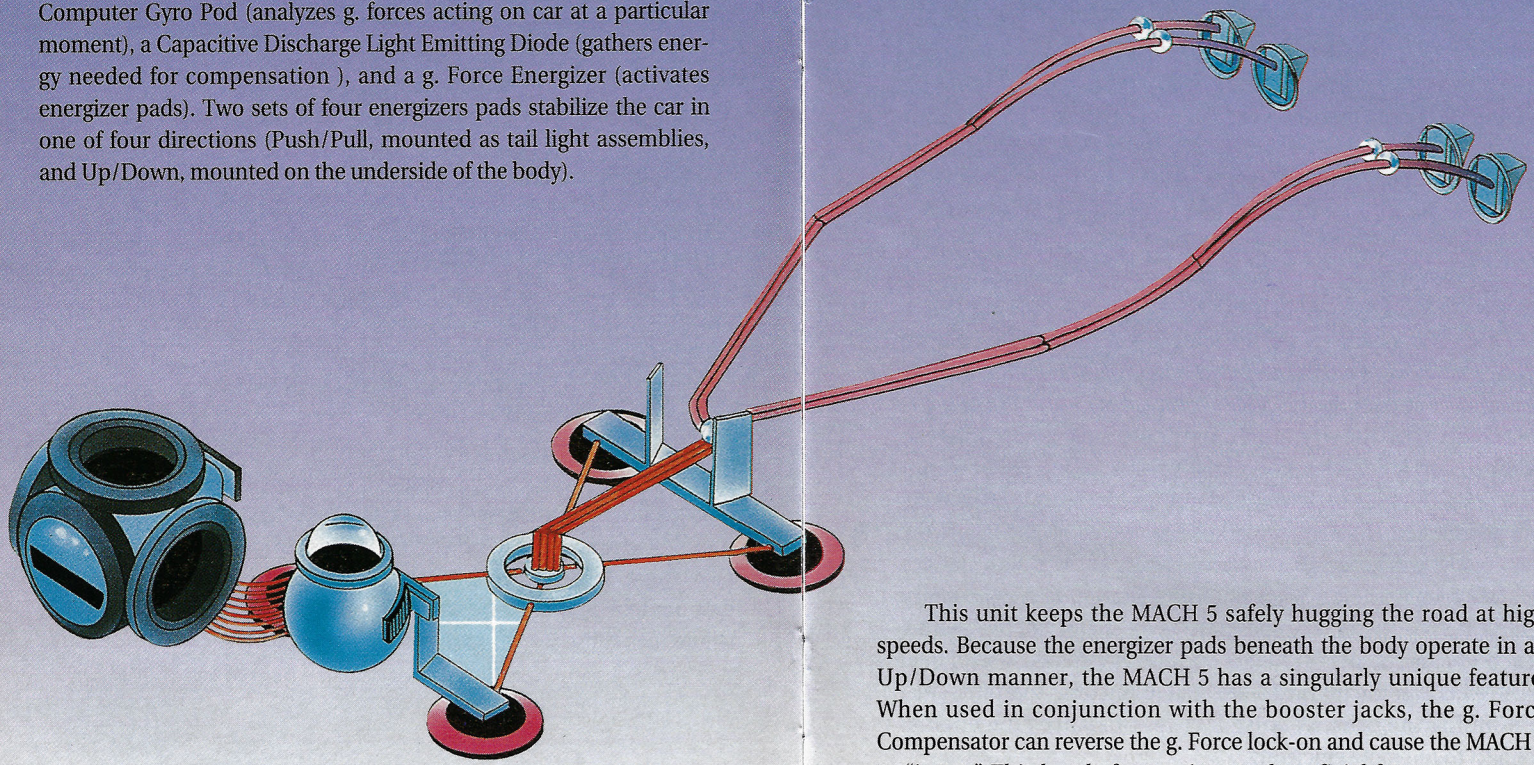




Because the MACH 5 pulls an incredible amount of power, the main electrical load is balanced and run through a multi-fuse system, passing into a secondary backup system for safety. GenSystems, Inc., is testing super conductive materials for possible incorporation in the near future. Fuse lights on the dash warn the driver when a primary fuse has blown, giving him sufficient time to pull over before power failures can cause system shut-downs.

g. FORCE COMPENSATOR

g Force Compensator Unit. One of the most remarkable features of the MACH 5 is its g. Force Compensator Unit, developed by Pops Racer himself. The unit consists of a Computer Gyro Pod (analyzes g. forces acting on car at a particular moment), a Capacitive Discharge Light Emitting Diode (gathers energy needed for compensation), and a g. Force Energizer (activates energizer pads). Two sets of four energizers pads stabilize the car in one of four directions (Push/Pull, mounted as tail light assemblies, and Up/Down, mounted on the underside of the body).

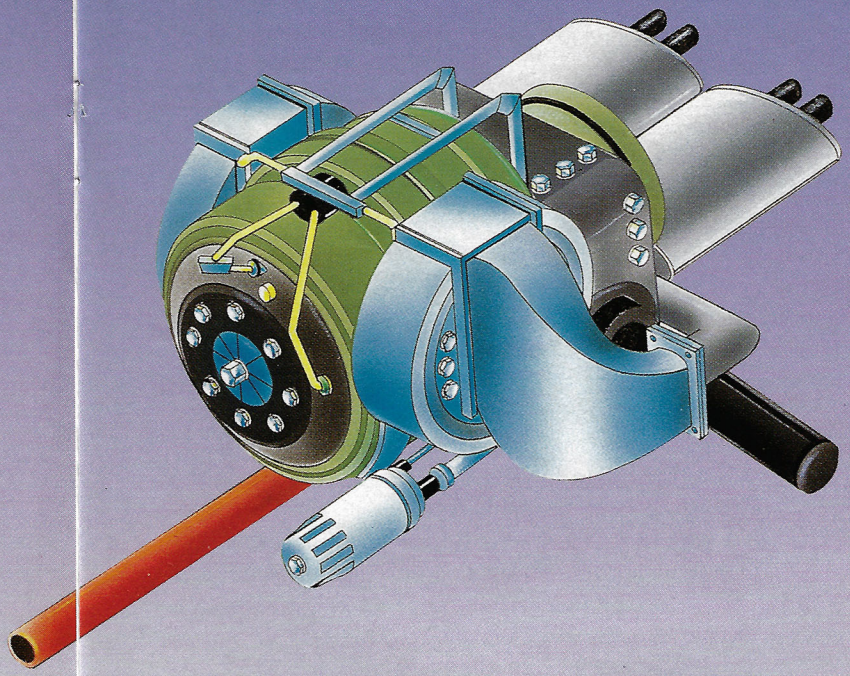


This unit keeps the MACH 5 safely hugging the road at high speeds. Because the energizer pads beneath the body operate in an Up/Down manner, the MACH 5 has a singularly unique feature. When used in conjunction with the booster jacks, the g. Force Compensator can reverse the g. Force lock-on and cause the MACH 5 to "jump." This handy feature is most beneficial for cross-country racing, when unexpected road hazards such as water, rocks and animals have caused many drivers to spin out.

Engine. The MACH 5 engine is Pops Racer's pride and joy, and rightfully so. The turbine housing is forged aluminum, and the hosing, impeller blades and shafts are 4140 stainless steel/titanium alloy. Maxing out at 60,000 RPS, it has a gross horsepower rating of 5000 at 42,000 RPM output shaft speed. This high-powered air-cooled turbine engine has 80% fewer working parts than the conventional, piston-type engine, thus eliminating the number of engine rebuilds between races and from ordinary use. Engine braking problems, one of the largest obstacles in applying turbine engines to automobiles, has been eliminated due to an engine vacuum assistance system developed by Racer.

Because it operates on a high-heat principle, the engine more efficiently atomizes fuel and oxygen. Due to the heat build-up caused by this powerful engine, special shielding (not shown) was developed to protect the driver's compartment and electrical components. This shielding also waterproofs the engine compartment.

Drivetrain. The drivetrain, naturally, has been enhanced to compensate for the stress created by this extremely powerful engine. Planetary Gear Drive Corporation worked on improving power distribution and several valid designs were rejected before the current model was acceptable to Racer. (Many of these early designs have since found a home in upcoming generation of cross-country freight vehicles). The differentials have been enhanced, the gearing adjusted to compensate for higher speeds. The stainless steel dual exhaust splits past the transaxle into dual resonators. Apart from further muffling the exhaust noise this split balances the engine, enabling it to run more efficiently.



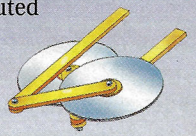
The Independent Rear Suspension (IRS) Transaxle, a revolutionary new design, is composed of forged aluminum-titanium alloy. The transaxle and transfer case enable the MACH 5 to operate on a computer-enhanced four-wheel drive principle. The gears in the transaxle case are custom-ground from carbon steel, as are the axles themselves.

Button A activates powerful ion-drive jacks to boost the car for repairs. The jacks are composed of segmented Memorite 9000. The weight of the car against the jacks helps keep the elevated car stable. These jacks make on-track repairs easier.

When used with the g. Force Compensator, the jacks contribute to the "jumping" effect. The jacks "push" the car forward as the g. Force lock-on is reversed, pushing the car up. Releasing the jacks and reversing the lock-on are performed almost simultaneously; otherwise, the weight of the moving automobile would shear off the extended jacks and destroy the car, along with its unfortunate drive.

Button B activates UniTire Corporation's XIF™ (Experimental Inflatable) tire and assembly, developed exclusively for the MACH 5 racing car. A rim compression band fits in the back of the rim on the tire bead. This rim rotates within the tire. The XIF tire air transfer bar inflates the gripper tread, thus enabling the MACH 5 to travel over a wide range of terrain. The link between tire and rim is the secret for the XIF's success.

To compensate for enhanced wheel performance, this button also causes 5,000 HP to be evenly distributed between all four wheels.



Button C activates twin rotary blades. These titanium blades are equipped with carbon-steel teeth, enabling the driver to cut down obstacles in the car's path.

Button D causes the driver's compartment to be encased in a bullet-proof airtight canopy. The canopy glass is designed along the same principles as the glass used in high-altitude aircraft. The infragreen glass operates on similar principles to infrared glass, but requires less light for operation. The canopy is also airtight, a necessity during underwater operations. (Oxygen is supplied by tanks under the bonnet.)

Button E enables the headlights to be controlled by the driver. When this button is pressed, the position of the driver's left eye is monitored and the position is used to target the left headlight. (The right headlight rotates in a pre-determined pattern.)

Button F activates turbothrusters which power the MACH 5 during underwater operations. Waste exhaust gases from the primary power plant or turbine engine spin the turbothrusters. This button also activates a periscopic camera which relays images to a small viewing screen on the dashboard.

Button G deploys an airborne probe. Xavier Industries has worked closely with Racer on improving the probe. Specifically its range and capacity.

Whimiscally fashioned like a bird, the probe now operates as a tight-range, low-orbit communications satellite. It links the on board computer system with a mainframe and relays information between the two. The probe also boosts communication between the MACH 5 and its home base.

DRIVER'S HELMET/DASHBOARD DISPLAYS

The racing helmet, created by Fisch Safety Equipment, combines the latest in safety materials and techniques. The helmet shell is a triple-layered carbon resin, high-heat, warpless material currently being tested for use in automobile engines. Triple-layering the resin enhances its natural anti-stress factors. The helmet is lined with a combination of coarse-weave nylon and foam. The extended visor is made of the same material as the windshield/canopy; infragreen glass. A series of small vents located across the forehead area permit air to flow between the carbon resin and nylon/foam layers, cooling the internal circuitry and the driver as well.

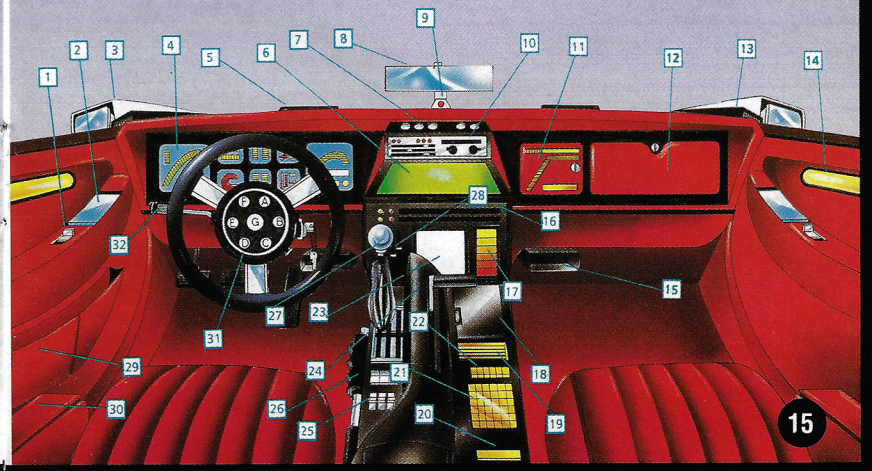
Receivers and a microphone are built into the unit, enabling hands-free communication. Because the receivers are fitted extremely close to the ears, their output decibel level has been limited to minimize the possibility of deafening feedback. The microphone is a fine mesh patch mounted on the inside of the visor close to the mouth area. The mike links the driver with the on-board computer, which is programmed to respond to specific voice commands.

In addition to hooking up to the on-board computer for the headlight direction, an additional feature which was added later is the sensors which monitor the driver's blood pressure, pulse and brain wave activity. This information is consistently monitored should the driver fall ill or black out. If this happens, the emergency override takes control of the car. A radar is activated to determine a clear, safe path. The emergency override then slows the car until it is stopped, cuts the power to the engine and transmits a homing signal.

1 Manual Door Lock (L&R)
2 Door Handles (L&R recessed)
3 Side-view Mirrors (L&R)
4 Gauge Cluster
5 Windshield Defroster (L&R)
6 Radar (100 mile radius)
7 Heater, Defroster and Air Conditioning Switch Panel
8 Rear-view Mirror/Television Monitor
9 220-cycle AC infrared Transmitter/Receiver (To/From Helmet)
10 AM/FM Stereo Cassette Deck
11 Probe Rear Housing (Locks with energy emission gauge, altimeter gauge and 1-hour limited clock)
12 Glove Compartment
13 Sidelight Defroster (L&R)
14 Courtesy Lights (L&R)
15 Heater/Air Conditioner/Fresh Air Ducts
16 Dual Disk Drives
17 Computer Power Level Indicator Lamp
18 Fuse Box for MACH 5 and computer
19 Electrical Systems Indicator Lamp (Ammeter)
20 Computer Keyboard Space Bar
21 Computer Keyboard
22 Communications Switches (Helmet, Microphone, Probe, Monitor Systems)
23 Vicinity/Location Map
24 Turbo Aqua-Jets (Forward/Reverse Thrust Acceleration)
25 Driver's Power Seat Adjustment Controls
26 Parking/Emergency Brake
27 5-Speed Shifter
28 Vicinity/Location Map Fine Tuning Controls
29 Document/Map Pouch (Driver's side only)
30 Arm Rest/Underwater Joy stick (Joystick hidden when not in use)
31 Special Features Steering Wheel Hub
32 Turn Signal & Headlight Dimmer with Windshield Wiper/Washer Control Switch
33 Hazard Flasher

NOTE: Materials used in the interiors include: seats, leather; door panels, Fiberglas™ and leather; carpeting, nylon short-loop weave, dash, vinyl.

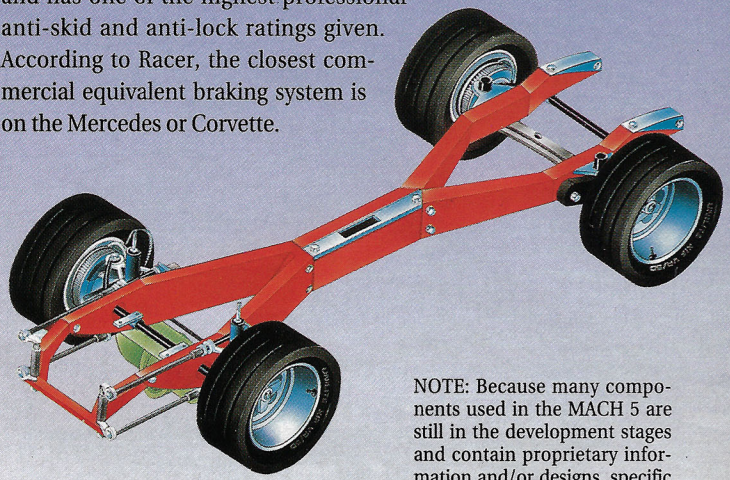
•Fiberglas is a trademark of Owens-Corning Fiberglas Corporation.



FRAME AND SUSPENSION / BRAKES

Like the body, the frame is also composed of forged Memorite 9000. The MACH 5 utilizes a double wishbone suspension similar to that used by Chapparral and Indy racers. The components however, have been enhanced. All pieces are forged aluminum and bushing components are nylon. The Front-end consists of multi-longitudinal torsion bars to elevate ride height and jounce characteristics.

The MACH 5's advanced design may appear to cry out for an advanced braking system as well, but this racing machine uses a modified disc brake system on all four wheels. The rotors are turned 4140 stainless steel billets. The braking system is computer-assisted, and has one of the highest professional anti-skid and anti-lock ratings given. According to Racer, the closest commercial equivalent braking system is on the Mercedes or Corvette.



NOTE: Because many components used in the MACH 5 are still in the development stages and contain proprietary information and/or designs, specific details may have been omitted.

GAMEPLAY INSTRUCTIONS