

Forceful Laforza



The Laforza is a luxurious yet rugged Italian-penned sport utility that was ahead of its time. Sergio Hamernik, owner of Mercury Magnetics in Chatsworth, California uses his Laforza as a daily driver as well as a weekend tow rig. The intimidating sport utility was first available in 1989 via Laforza Automobiles. The trucks were designed and the frame, body and interiors were constructed by

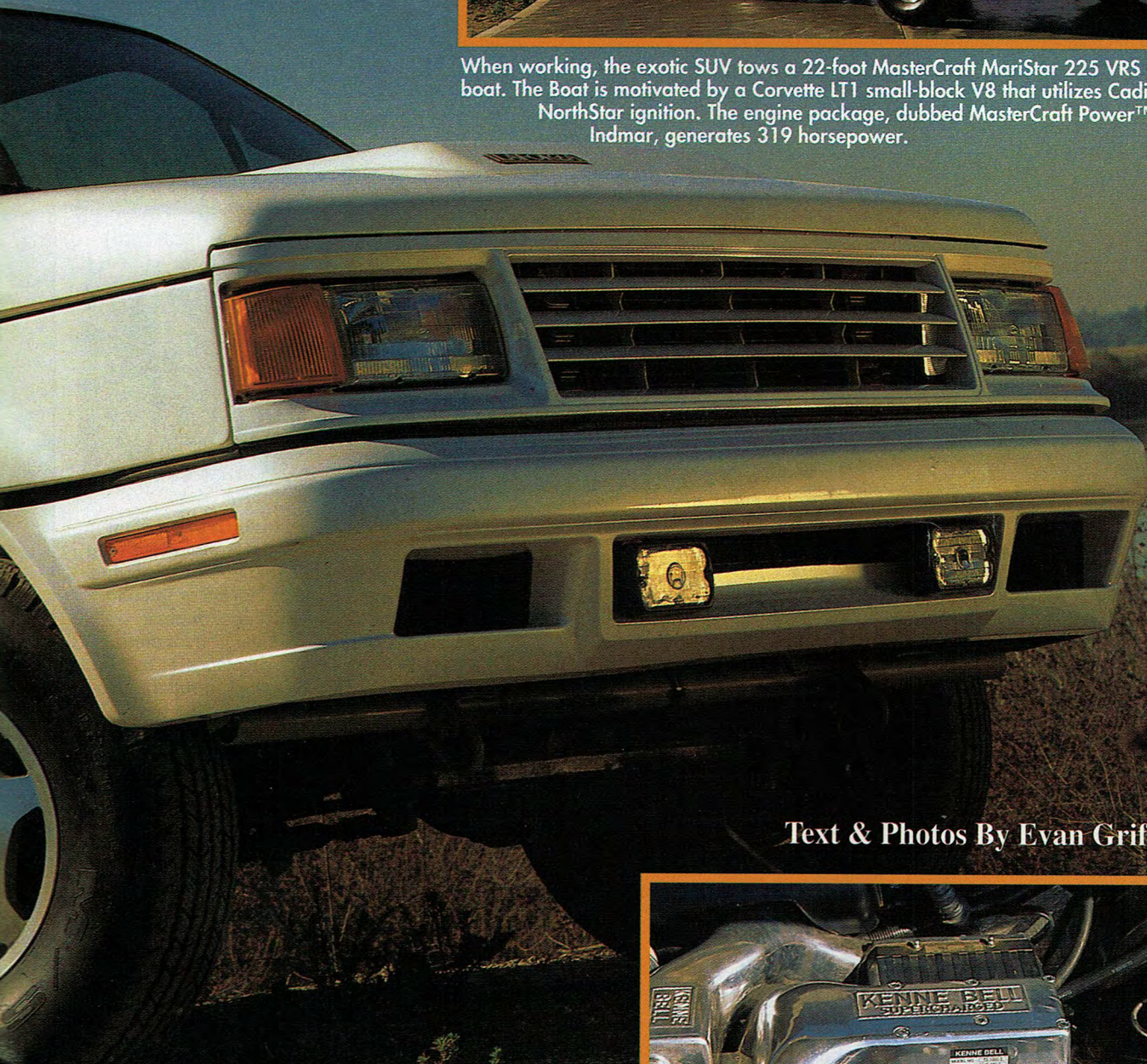
Pininfarina in Turin, Italy. The rolling chassis were shipped to Car & Concepts (later known as C&C) in Brighton, Michigan where the fuel-injected, 185-horse 5.0-liter Ford V8 engines and AOD four-speed automatic transmissions were installed. Production only lasted a few model years and there are only about 1000 units on the road.

Since the 5250-pound Laforza really challenged

TOWING Performance



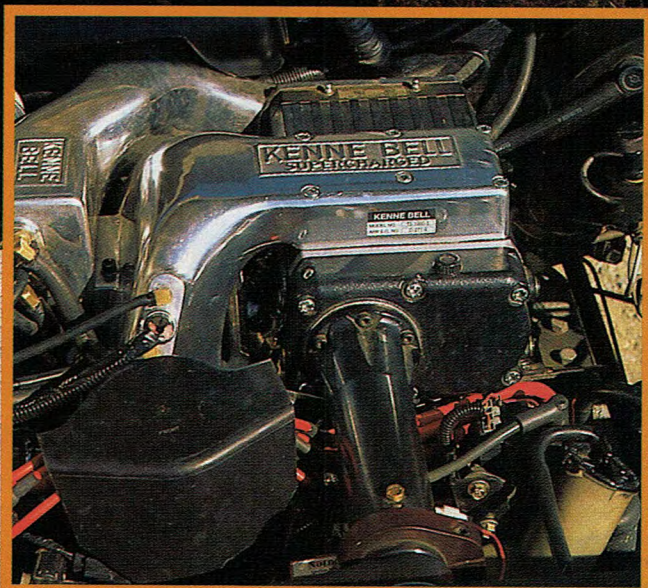
When working, the exotic SUV tows a 22-foot MasterCraft MariStar 225 VRS ski boat. The Boat is motivated by a Corvette LT1 small-block V8 that utilizes Cadillac's NorthStar ignition. The engine package, dubbed MasterCraft Power™ by Indmar, generates 319 horsepower.



Text & Photos By Evan Griffey

the Ford 5.0-liter, Sergio updated the engine to a '95-vintage SVO GT40 5.0-liter. This was the only option as even shoe-horning in a 351 meant major surgery. The 5.0 runs aluminum GT40 cylinder heads with valve actuation being handled by an E303 camshaft. The GT40 heads have been match ported and polished by Brett Stack of Santa Clarita, California and the GT40

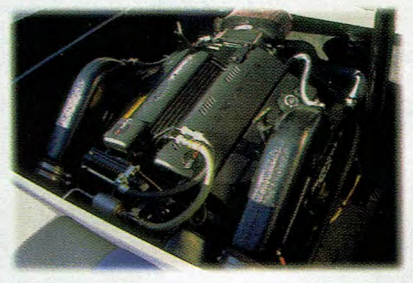
Sergio has updated the Laforza's factory Ford 5.0-liter with an SVO GT40 engine. The 5.0 has entered the ranks of forced induction complements of a Kenne Bell supercharger package featuring a Whipple twin-screw blower.



intake has been fitted with a Kenne Bell Ram Air kit to expedite airflow.

Before reaching the engine, incoming air is compressed by a Kenne Bell supercharger package featuring a Whipple twin-screw blower. The twin-screws compress the charge air since it is moved toward the combustion chamber. This method has two advantages. First, it does not chop the air. Chopping can heat the charge air, lessening the power gains as a cooler, denser charge makes more power. Secondly, the screw action is immediate which means the Whipple delivers gobs of low-end power with crisp throttle response at most any engine speed.

The ignition system consists of a NOLOGY Power Core ignition coil energy amplifier and a set of NOLOGY HotWires. The NOLOGY products transform the OEM ignition system into a high-intensity system. The ignition system and other engine functions are commanded by a Mustang Cobra ECU that houses a Kenne Bell performance chip. For fuel enrichment needs, the Kenne Bell kit incorporates a 190 lph in-tank fuel pump, a Kenne Bell fuel pressure regulator and a new twist in the fuel enrichment equation—a voltage control module. Developed by Kenne Bell, the module is a series type circuit which piggy-backs voltage via a pressure switch on the supercharger when boost pressure hits four psi. The module jumps output to the fuel pump from between 12 and 17 volts. A volume knob mounted in the cabin allows total adjustability of the voltage to the pump. Testing on the 5.0-liter's 190 lph fuel pump showed up to a 50-percent increase in fuel volume and allowed the engine to run eight psi of boost without a hiccup. Trying to do so previously would have caused pinging (light detonation). Essentially, the Boost-A-Pump allows the fuel pump to maintain the correct fuel pressure when the rail pressure is increased due to the regulator under high boost conditions. When the rail pressure is increased, it becomes harder for the fuel pump to supply adequate fuel volume to the rail. As a result, the rail pressure tapers off prematurely, robbing power. With the Boost-A-Pump, the fuel pump is shocked into delivering the extra volume of fuel needed to maintain the correct rail pressure at higher



The dash is laid out in a simple and logical manner. Along with a speedo and tach, the MariStar's instrumentation includes, fuel level, voltage, coolant temperature and oil pressure gauges. Controls for the engine hatch and V-drive are also conveniently located.

The 22-foot MasterCraft MariStar 225 VRS ski boat is motivated by a Corvette LT1 small-block V8 that utilizes Cadillac's NorthStar ignition. The engine package, dubbed MasterCraft Power™ by Indmar, generates 319 horsepower and has been improved with a roller cam and revised intake set-up for 1996. Through Mercury Magnetics, Sergio is currently developing a supercharger system for the LT1-powered MasterCraft.

TECH DATA

MASTERCRAFT MARISTAR 225 VRS

SPECIFICATIONS

| | |
|-----------------------------|-------------------------------|
| Centerline Length | .22'6" |
| Beam | .8' |
| Draft | .22.5" |
| Tow Bar Height To Waterline | .34" |
| Weight | .3000 lbs. |
| Engine | .MasterCraft Power™ by Indmar |
| Output | .319 Horsepower |
| Drive | .Walter V-Drive |
| Transmission | .Hurth |
| Fuel Capacity | .30 Gallons |

The Source

California Skier (dealer)
6634 Indiana Ave., Dept. TSU
Riverside, CA 92506
(909) 341-0990

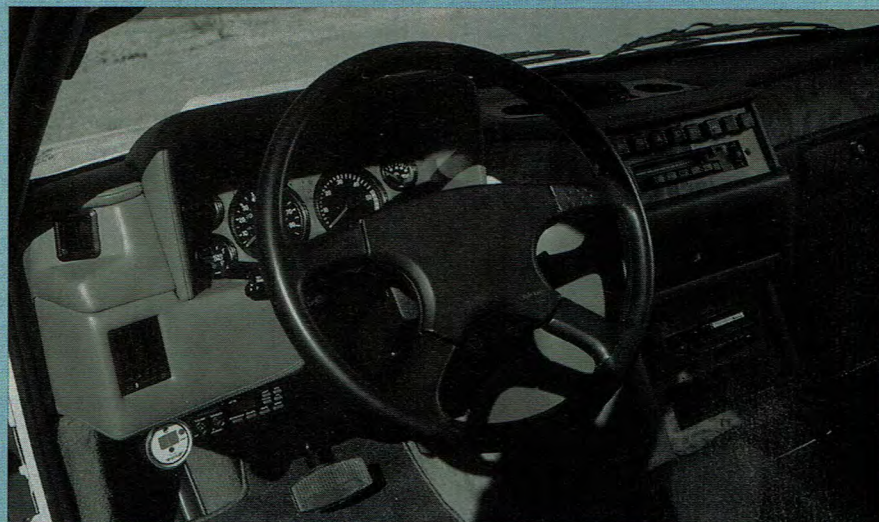
MasterCraft Boat Company
100 Cherokee Cove Dr., Dept. TSU
Vonore, TN 37885
(800) 482-2628

boost levels. Jim Bell of Kenne Bell says the Boost-A-Pump will be a welcome addition to performance enthusiasts who prefer forced induction because the Boost-A-Pump will negate the need to swap out in-tank pumps or add auxiliary pumps for many applications. However, Jim foresees a trend where enthusiasts who think more is better put the Boost-A-Pump on their 5.0 and for all intents and purposes drown the power out with too much fuel. Jim says there is no difference in power between an 11:1 air/fuel ratio and a 12:1 air/fuel ratio in a 5.0. In fact, throttle response and fuel economy suffer when too much fuel is added. He hopes the Boost-A-Pump will cut the time and expense of upgrading pumps and provide improved performance utilizing the stock 155 lph in-tank pump. Future uses of the voltage control module include cars, trucks and boats with high-end, high-power stereo systems that operate the stereo for long periods of time without running the engine—which puts a serious strain on the electrical system. Other possibilities may be upping the voltage to a vehicle's ignition or the entire electrical system. A J&S Electronics Safeguard detects detonation and backs off the timing in the Laforza before harm is done. The J&S unit is an option with the Kenne Bell supercharger system. Once combustion has occurred, spent gases exit by way of JBA shorty headers and a three-inch exhaust system that features a Flowmaster muffler.

The Laforza sports an independent front suspension that utilizes unequal length control arms, torsion bars and Bilstein shock absorbers to soften out the road. Out back, a live axle is suspended via a five-leaf spring set-up. This combination



The 5250-pound truck is an intimidator on the road. However, it is also a formidable off-road warrior. The Laforza's frame, body and interior were designed and built in Turin, Italy and shipped to the U.S. where the Ford powertrain (engine and transmission) was installed by Cars & Concepts of Brighton, Michigan.



The interior of the Laforza is surprisingly plush when you consider the aggressive look of the Italian-penned body panels.

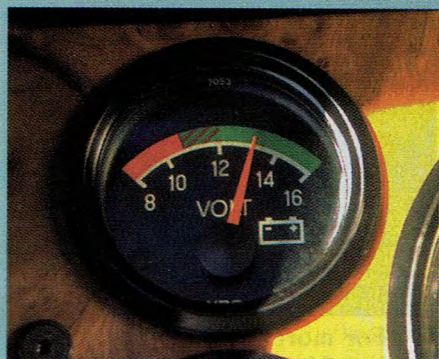
works equally as well on the road as it does on the trail combining luxury ride and off-road suspension travel. A Ford AOD automatic transmission and an Iveco positraction rearend with 3.90:1 gearing help put the power to the pavement. High- and low-range four-wheel drive actuation is handled by a Chrysler transfer case. The rolling

stock on this hard-working SUV consists of Michelin 275/70-16 radials (the biggest Sergio could fit) and the stock Laforza wheels.

On the inside, the Laforza interior puts the driver in the lap of luxury. Trimmed in burl wood and gray leather, the cab features a custom steering wheel from Momo and VDO gauges as factory equipment. The bucket seats are deep and plush and the Laforza puts you in a commanding driving position high above the traffic.

While on tow duty, the Pearl White exotic pulls a 22-foot Master-Craft MariStar 225 VRS ski boat. The Boat is motivated by a Corvette LT1 small-block V8 that utilizes Cadillac's NorthStar ignition. The engine package, dubbed MasterCraft Power™ by Indmar, generates 319 horsepower and has been improved with a roller cam and revised intake set-up for 1996. Through Mercury

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Here we see what happens to the voltage going to the fuel pump when the Boost-A-Pump's volume knob is turned up. More juice going to the pump means more fuel going through the injectors. When this additional fuel is mixed with the correct ratio of air, you get more power.

LAFORZA

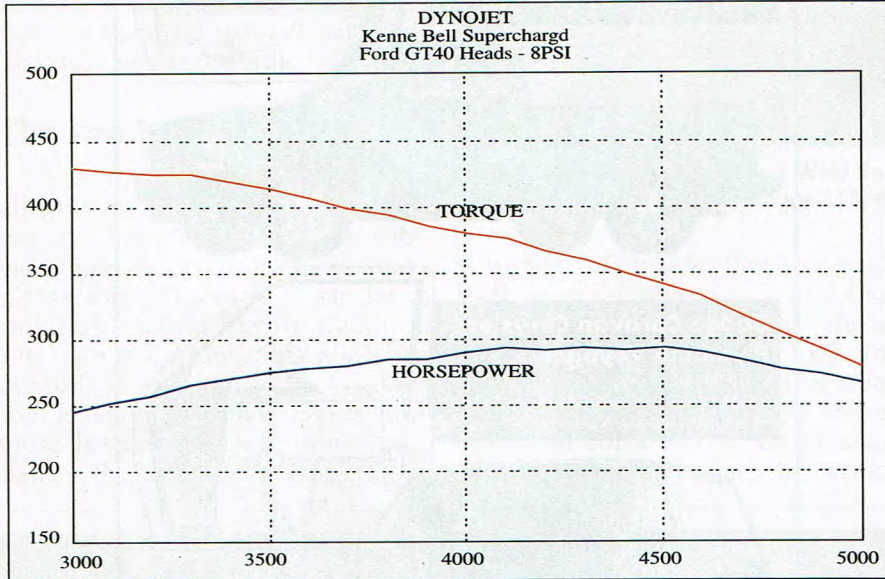
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Magnetics, Sergio is currently developing a supercharger system for the LT1-powered MasterCraft. Sergio purchased the MariStar through California Skier of Riverside, California and will be working closely with the dealership on the forced-induction system. The boat company plans to offer the blower package as an upscale, high-performance option in the future. Considering the weight of the Laforza and the added bulk of

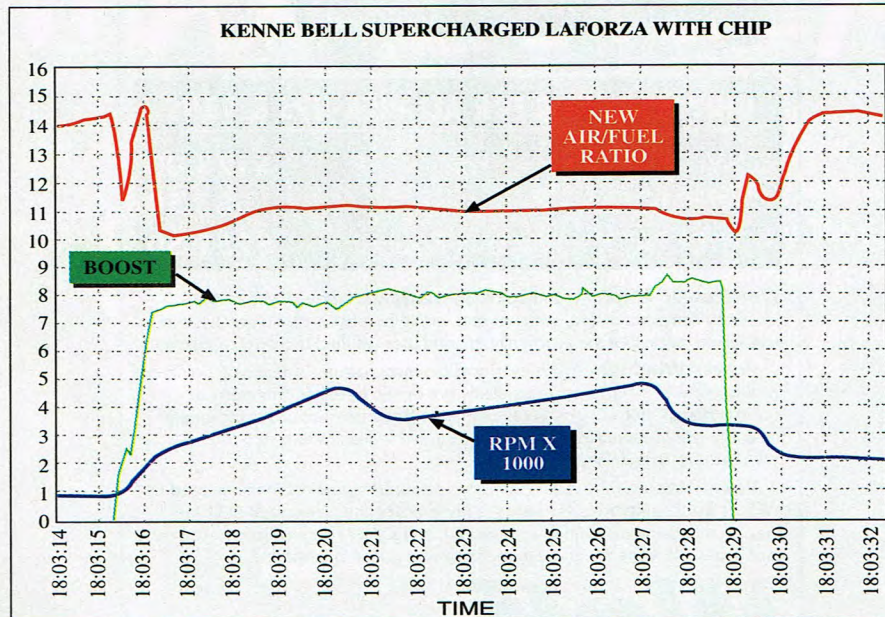
the boat (3000 lbs.), it is a good thing that Laforza went overkill on the truck's cooling system. The radiator is unobstructed. There are separated coolers for engine oil, transmission fluid and even the air conditioning compressor. Most of the coolers have their own fans.

The evolution of the truck has included more than R&D on the Boost-A-Pump. The SVO engine started its stint in the Laforza with cast-iron GT40 heads and a number of performance chips have been burned for the exotic SUV. We plan

to stay on top of the Boost-A-Pump and may have a tech story on the device in an upcoming issue. Sergio is more than satisfied with how the Laforza throws its weight around and reports all towing chores to date have been met enthusiastically. He is so happy with the white beast that he says turning the truck over to Jim Bell is becoming more and more difficult. □



Kenne Bell ran the Laforza on its Dynojet chassis dyno where it registered an impressive 295.3 horsepower at 4300 rpm and 432.1 lbs-ft of torque at 3000 rpm. The run was made with eight psi of boost.



Here we see the resulting air/fuel ratio with the Kenne Bell chip and Boost-A-Pump voltage control module. An 11:1 ratio was the target, as engine load changes, the Boost-A-Pump will allow adjustability of fuel flow by upping the voltage to the in-tank pump. This will keep the air/fuel ratio at the optimum power-generating levels at all times. A J&S air/fuel ratio display mount on the dash makes precise control easy.

TECH DATA

1989 LAFORZA

ENGINE SPECIFICATIONS

Engine configuration . . . Front engine, four-wheel drive
 Engine Type OHV V8
 Horsepower, SAE net 185 @ 3800
 Torque, SAE net lbs-ft 270 @ 2400
 Displacement ci/cc 302/4942
 Bore & Stroke 4.00 x 3.00 in.
 Compression Ratio 9.3:1
 Fuel Delivery Electronic Fuel Injection
 Valvetrain Hydraulic Lifters

EXTERIOR DIMENSIONS

Wheelbase 106.2 in.
 Overall Length 179.9 in.
 Overall Width 78.7 in.
 Track (fr/rr) 67.8/67.8 in.
 Min. Ground Clearance 6.8 in.
 Curb Weight (lbs) 5250

MISCELLANEOUS

Chassis . . . Full-length frame with rubber isolated body
 EPA Fuel Economy . . . 12 mpg City/18 mpg Highway

The Source

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 10743 Bell Ct., Dept. TSU
 Rancho Cucamonga, CA 91730
 (909) 941-6646

NOLOGY, Inc.
 7915 Silverton Ave., Dept. TSU
 San Diego, CA 92126
 (619) 578-4688