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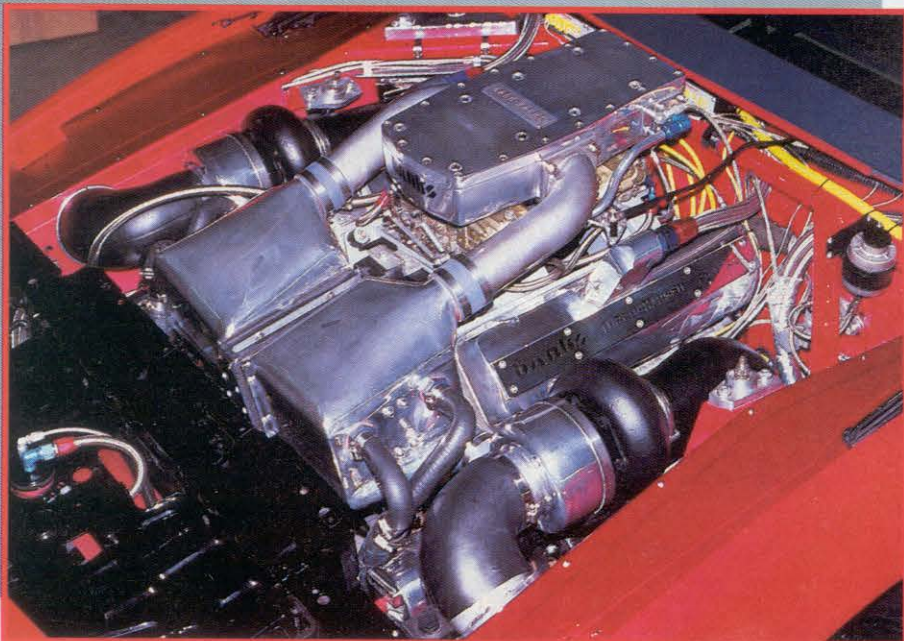
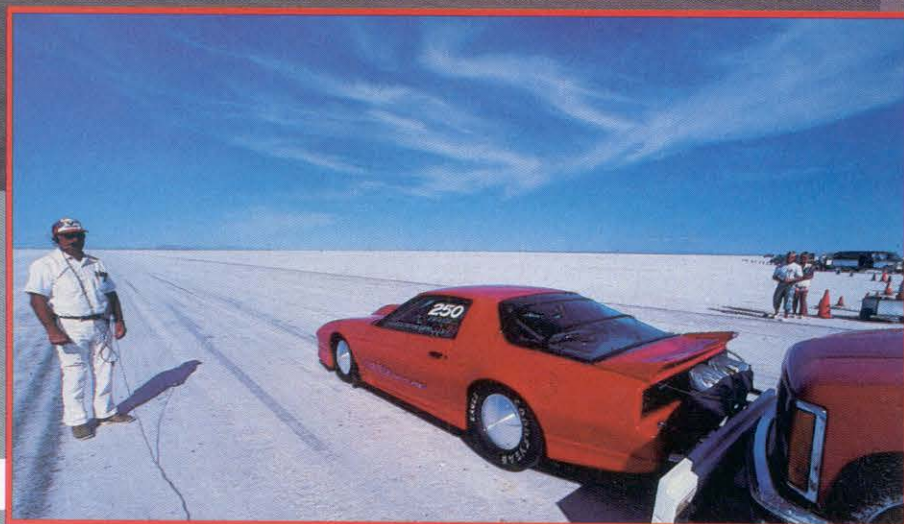
# Salt Shaker

**GALE BANKS  
ENGINEERING'S 1988  
PONTIAC TRANS AM IS THE  
WORLD'S FASTEST STREET  
MACHINE!**

By John Baechtel

On station somewhere near the three-mile marker you see it long before you hear it. Racing across the pure white horizon, a small red dot speeds crazily toward you, pursued by a pearlescent plume of salt spray. Then, like distant thunder announcing a storm, the primal scream of a turbocharged big-block begins to build, brief interruptions signaling the gear changes before it settles into a deep, steadily increasing roar. Turbocharged cars don't make a lot of noise, but this one delivers an unmistakable vibration through the air. Something





awesome is about to happen.

The Bonneville salt flats are about as close as most of us will ever come to standing on another planet. An overwhelming sense of isolation slowly gives way to profound admiration for the pure, majestic beauty of the salt, and the geological forces that caused it. They say it's the only place on earth where you can actually see the curvature of the earth, and it's damn sure the only place where you'll see a Pontiac Trans Am rip by you at speeds almost beyond comprehension. The speed limit sign at Bonneville says 1000 mph, and so far there's never been a single speeding citation handed out. But that doesn't mean the impossible can't happen.

The red blur is really moving now, and there's no mistaking the sleek aerodynamic profile of a 1988 Pontiac Trans Am GTA emerging from one horizon and disappearing over the other in well under a minute. At nearly 12 seconds per mile, it is unquestionably the world's fastest street machine. As driver Don Stringfellow climbs out of the car four miles farther down the course, the official speed report confirms a 277-mph average through the third measured mile. The car's on-board inertial dynamometer indicates an excess of 1600 horsepower being produced as the car exited the final mile at more than 283 mph. Something awesome has just happened!



A Pontiac Firebird has just established an official new land speed record of 268.033 mph for production-based cars. If this were easy, Gale Banks Engineering of Azusa, California, wouldn't be the only team trying to do it. With sponsorship and technical support from Pontiac Motor Division, the team of Banks, Stringfellow, and Geisler have their sights set on 300 mph in a production-based vehicle, a formidable goal that even experienced Bonneville veterans don't think is possible. The degree of difficulty is proportionately high, something on the order of a NASA space shot. Every detail has to be absolutely perfect. Last year when Banks obliterated the AA/Gas Coupe record by more than 60 mph, they didn't think the car's NASCAR oval track tires would hold up or provide the handling and stability necessary to carry that kind of speed down the salt. Veteran driver Don Stringfellow quickly proved them wrong, pronouncing the Banks Trans Am the most stable, easy-to-drive Bonneville car he has driven.

Yet skepticism remains. While the unprecedented performance established in 1986 put much of it to rest, it's still a lofty goal, but the kind of staggering technological challenge that Banks thrives on. Ask Banks to launch a Trans Am to the moon, and he's likely to ask whether you'd like smoking or non-smoking with a window or an aisle.

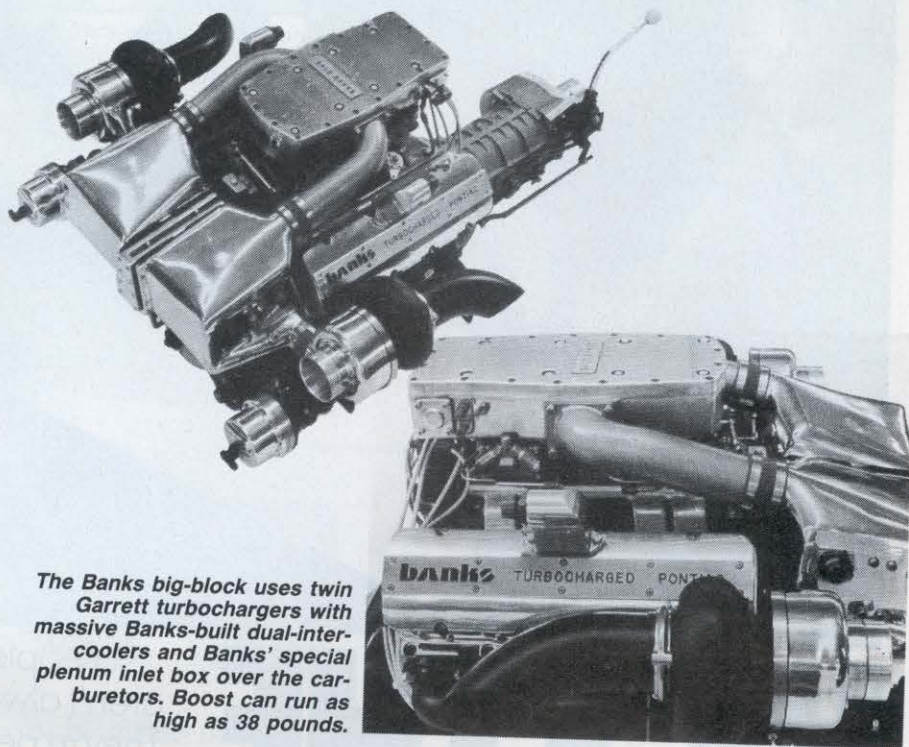
The rules are rigidly structured, and Banks' car reflects them perfectly. This is no aerodynamically perfect bullet groomed in the wind tunnel; it's an unmodified production body running at near-production ride height with the stock factory aero package. Banks horsepower boosts it into the stratosphere of speed and Pontiac's incredibly aerodynamic production styling provides its astonishing high-speed stability. Of all the cars originally considered for the project, the Pontiac Trans Am rated the highest chance of success based on its aerodynamics alone. The Trans Am is as stable at 280 mph as it is at 60 mph, and that represents a major miracle of modern automotive design—the near-perfect shape.

Banks uses a proven 454-cubic-inch version of his awesome twin-turbocharged GM marine big-blocks to make the Trans Am go ballistic. Boosted to 25 pounds for the current record run, it will pack nearly 38 pounds of boost on the 300-mph attempt. Key elements of this essential powerplant are the twin Garrett turbochargers, Banks-fabricated high-flow intercoolers, and Pontiac Motorsports' high-port/high-flow aluminum big-block racing cylinder heads. Gale says the engine is good for about 2200 horsepower in full afterburner, but he's rather modest about the turbocharging expertise that makes this possible.

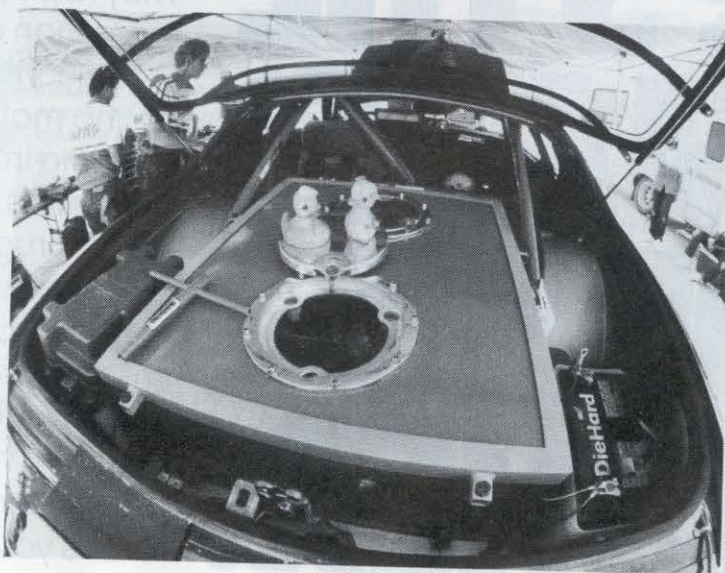
A third key factor in the car's phe-



*Banks studies the instruments while Stringfellow warms up the motor in the pits. Banks' first-class operation is reflected by sharp crew uniforms and orderly pit layout.*

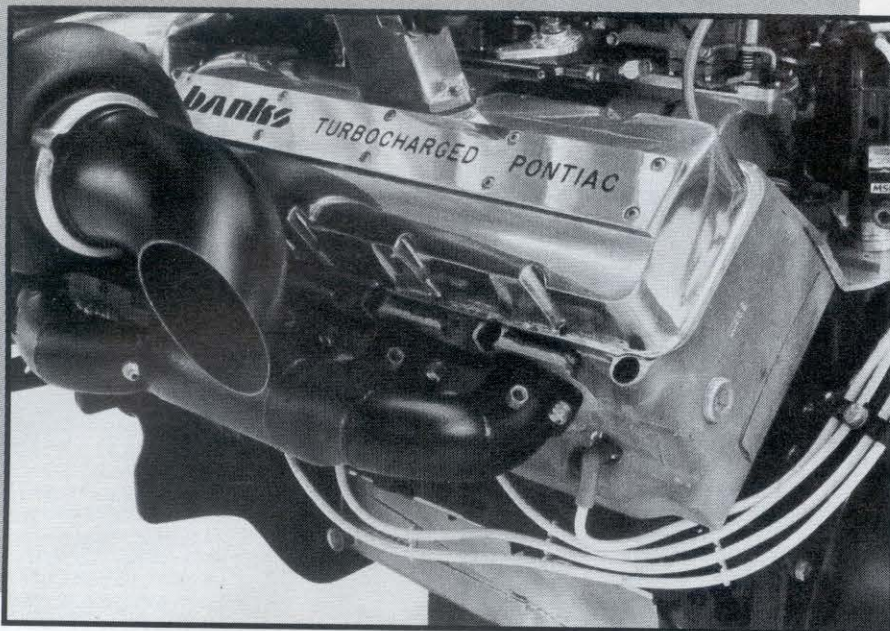


*The Banks big-block uses twin Garrett turbochargers with massive Banks-built dual-intercoolers and Banks' special plenum inlet box over the carburetors. Boost can run as high as 38 pounds.*

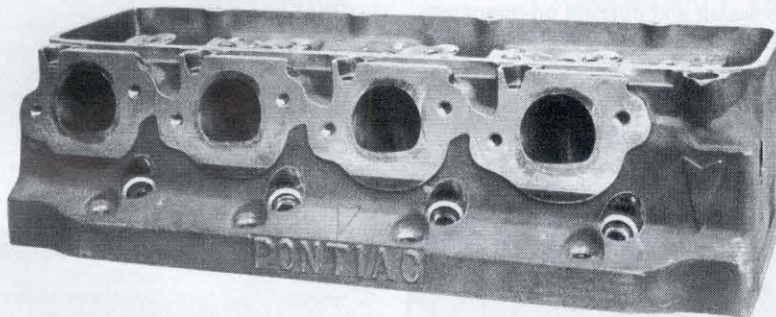


*The huge 90-gallon cooling tank in the back of the car is packed with ice to provide adequate engine cooling and to cool the inlet charge via the air-to-water intercoolers. Ducks are traditional good luck charms that always accompany the car.*

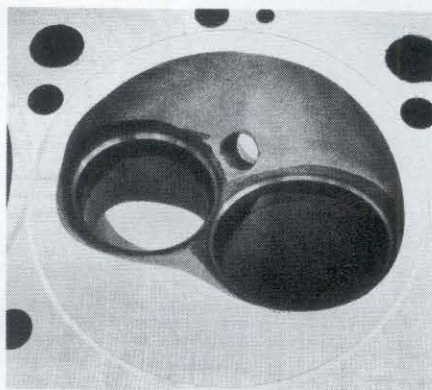
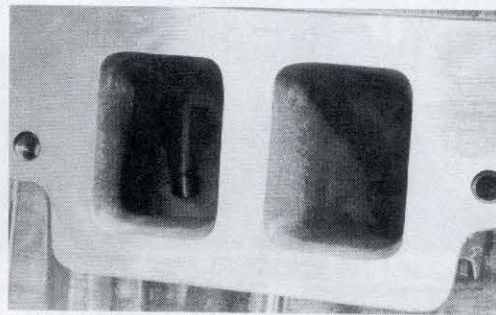




*Extra thick-wall exhaust manifolds have individual cylinder temperature probe fittings for the on-board computer.*

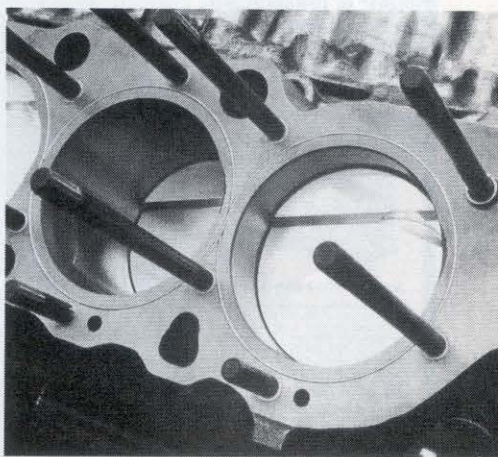


*Pontiac's aluminum big-block racing cylinder heads PN10045427 are used because their tremendous flow potential matches the high-flow capacity of the Garrett Indy car turbochargers. Heads were ported and prepped by Larry Olson at EPD Cylinder Heads in Carson City, Nevada. Inset photo shows gigantic intake port.*



*Head surface features receiver groove for the stainless steel O-ring installed in the block. Chambers are equalized in volume, polished, and treated to a wide-seat, endurance-type valve job that transfers tremendous heat from the valves to the water jacket.*

*Banks' reverse deflector pistons ride on Carillo connecting rods and TRW piston rings. Deck surface is O-ringed for optimum sealing and heads are installed with Pontiac-specified stud kit from B&B Performance Products.*



(continued)

nomenal success is the immaculately prepared Lamb Components chassis. Highly regarded chassis and brake designer Roger Lamb built the chassis and suspension with absolute precision. It's got brakes equal to the task of stopping a 300-mph freight train, and the modified Lamb strut and 4-link suspension offer all the feel and control a driver would want. Lamb also aided in the initial placement and mounting of the DNE (Doug Nash Engineering) 5-speed transmission and Long overdrive to minimize driveline drag and ensure essential balance and component integrity at unheard of drivetrain speeds.

Backing up this mechanical alliance of high-speed componentry is veteran Bonneville pilot Don Stringfellow, long-standing member of the elite 200-mph club and current record holder in the AA/GC class. Stringfellow and Banks have a special relationship. He trusts Gale Banks implicitly and Banks values Stringfellow's safety above all else. Their approach to 300 mph is professional, methodical, and precise. Banks won't pull the trigger if the bullet's not safe, and while he frets incessantly about final details before a run, Stringfellow, the "Iceman," has nodded off behind the wheel, trying to catch a few winks before driving the Banks street machine faster than any man alive.

The Banks Trans Am is indeed a street machine in every sense of the word. It has good idle quality, good driveability, good looks, and it really hauls. It also has full carpeting and upholstery, factory bucket seats, full stereo sound system, and power windows. As true hot rodders and street machiners, we thrive on excess. We love things that really kick tail, and with Sammy Hagar screaming "I Can't Drive 55" on the stereo, Stringfellow, Banks, and Pontiac are kicking tail and taking names in the world's fastest street machine.



# SPEC SHEET/ GALE BANKS ENGINEERING'S '88 PONTIAC TRANS AM

## ENGINE:

Type.....	Banks turbocharged GM big-block V8
Bore & Stroke.....	4.250 x 4.00-inch
Displacement.....	454 cubic inches
Compression Ratio.....	7.5:1
HP @ rpm.....	2200 @ 7200 (max. available hp)
Torque @ rpm.....	1850 @ 6000 (max. available torque)
Cylinder Heads.....	Pontiac Super Duty aluminum racing heads
Induction System.....	Twin Garrett TEO-691 turbochargers
Wastegates.....	Banks/special high-performance units
Manifold.....	Modified Banks/EPD dual 4-barrel
Carburetors.....	Twin Holley 1050-cfm annular discharge 4-barrels with Banks special plenum
Pistons.....	Banks reverse deflector turbo pistons
Connecting Rods.....	Carillo
Ignition.....	MSD electronic, multi-fire

## DRIVETRAIN:

Transmission.....	DNE (Doug Nash Engineering) 5-speed with Long overdrive
Clutch.....	McLeod dual disc
Axle Ratio.....	2.14:1

## CHASSIS:

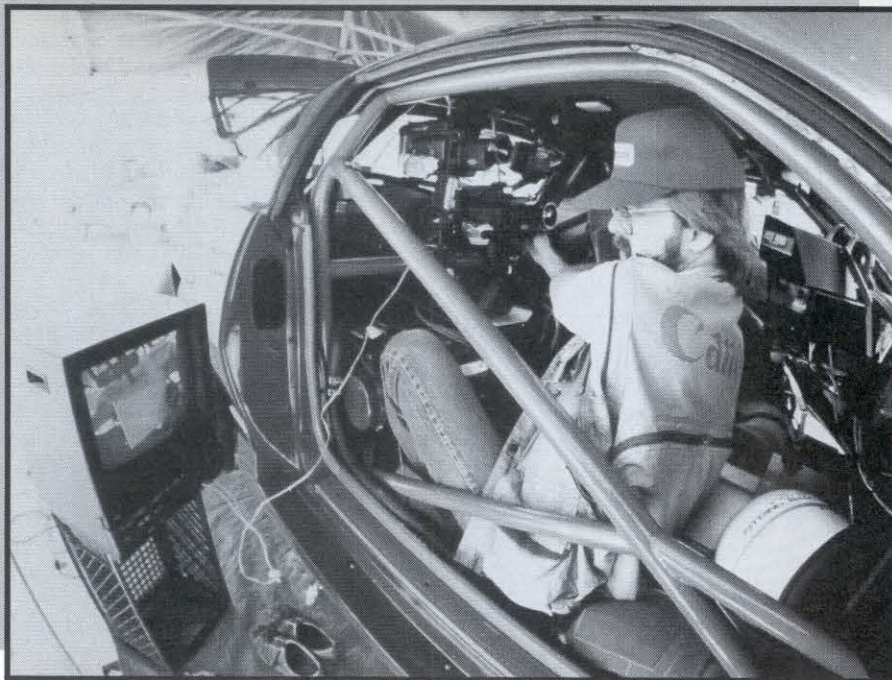
Front Suspension.....	Lamb Components strut assembly
Rear Suspension.....	Lamb Components 4-link with 9-inch Ford rearend
Brakes.....	Lamb four-wheel disc brake system
Wheels.....	D.B. Hopkins/American Racing Wheels
Tires.....	Goodyear special NASCAR tires

## GENERAL:

Weight.....	4800 pounds
Fire System.....	Dual Phoenix
Data Acquisition.....	Cehco Mem-Re-Temp on-board computer data recording system

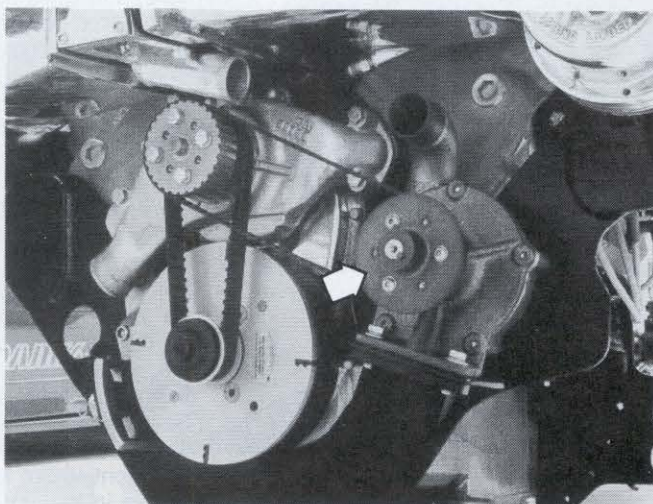
## PERFORMANCE:

Power-to-weight.....	2.4 lbs./hp
Flying Mile.....	277.329 mph

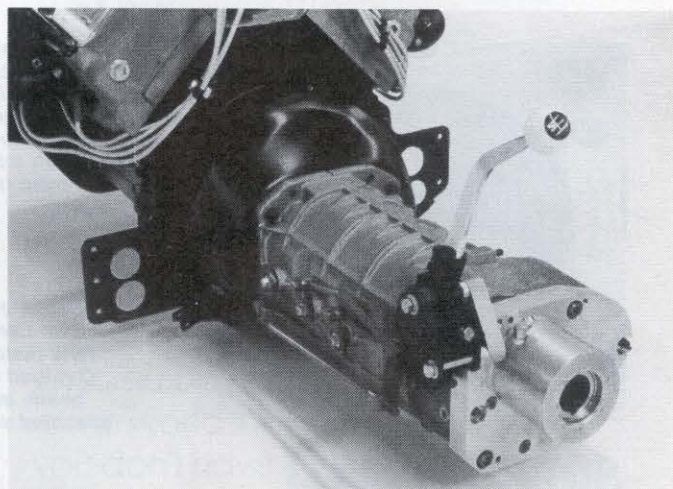
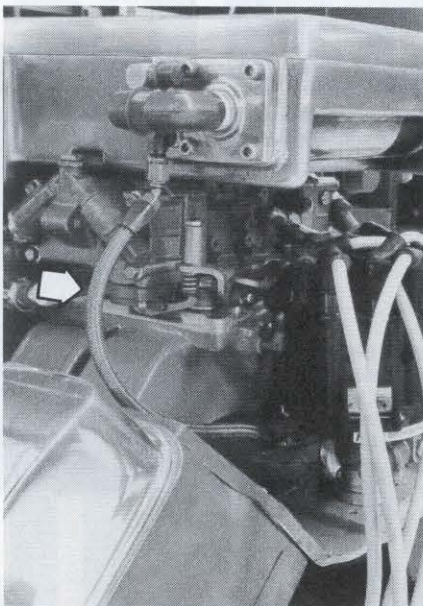


Technicians from Canon U.S.A. were on hand to install and operate on-board video and still camera equipment.

Banks' modified auxiliary water pump (arrow) for the intercoolers moves 122 gallons per minute, while the stock-type engine coolant pump has been modified with a special Banks impeller and other changes that provide 80 gallons per minute.



The base of the distributor is pressurized with boost from the plenum (arrow) to blow out ionized air that promotes spark scatter.



DNE (Doug Nash) 5-speed and Long overdrive withstood the thrust of more than 1450 lbs.-ft. of torque with some discomfort, but no failures occurred. HR