

MOTOR

NOVEMBER

1990

TECHNICAL

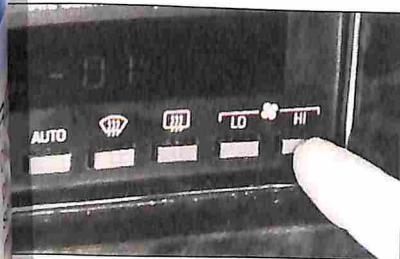
10 Trouble Shooter Whether they're used on turbocharged or supercharged engines, intercoolers help bring a breath of fresh air to the intake charge. Here's how they work and why.

14 Trade Secrets Our heroassyfoots around a couple of real cool cats and a pair of bad cats to solve their '86 Cougar's hesitation problem. It coulda been a regular at-astrophe.

8 Eye On Electronics You can use a computer for more than just storing data or managing your shop. With either of these two unique programs, you can use your PC or laptop computer for engine diagnostic work.

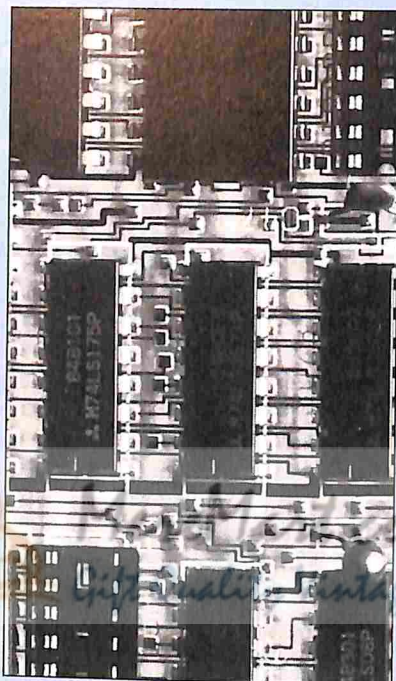
19 Service Slants Oily hesitation in 3.0 Chrysler V6s, Ford wheel rim ring dings, Quad 4 rattle and knock, cranky-starting Toyotas and other unlikely fixes, straight from the manufacturers.

2 Foreign Service Diagnosing Mitsubishi and captive Chrysler imports with Jet Valve engines can be tricky. Jet Valve problems often mimic more common ailments. These tips should demystify the job.



29

ON THE COVER



22 Shop Management Software Tired of running your shop out of your coverall pockets? Computer programs can banish all those little bits of paper, get you organized, avoid waste and add to profits. See related stories on pages 8 and 18. Cover photo of a computer memory board by Jim Richards.

29 Diagnosing The '91s Our annual look at on-board diagnostics for new cars shows that Detroit has gone further than ever before with computer-controlled engines and transmissions. This year's hot setup is reprogrammable PROMs.

REPORTS

8 Editor's Report Can electronic data storage replace yards of heavy repair manuals? It can, if you're willing to pay the price and the whole shop is willing to cooperate by working with a PC.

35 Newsbreak High-tech Cad-dys on the horizon, a reskinned Taurus/Sable for '92, Honda leaves Motown holding the (air) bag, active suspension arrives...at a cost, plus other automotive tidbits from our Detroit bureau.

50 Washington Hotline A new insurance industry report shows that downsized cars are not as safe in a crash as the "dinosaurs" they replaced. Also: The latest EPA emissions and NHTSA safety-related recalls.

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**ANNUAL
ELECTRONICS ISSUE**

COMPUTER SOFTWARE
FOR:

- SHOP MANAGEMENT
- ENGINE DIAGNOSIS
- REPAIR INFORMATION

ALSO:
NEW-CAR DIAGNOSIS

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