

# MOTOR

# JANUARY

# 1991

## TECHNICAL

**8 Trouble Shooter** A wrench wonders where all the oil pressure went in his AMC Eagle; after all, 3 psi at highway speeds seems a bit low, even for an old bird. Plus, dealing with a succession of Caddy fuel pump failures.

**11 Trade Secrets** Dread those difficult days? Bob has 'em, too. Like the car that leaked gas all over the shop, the guy screaming about an oil leak and a customer whose differential lockup turned into a "grand" problem.

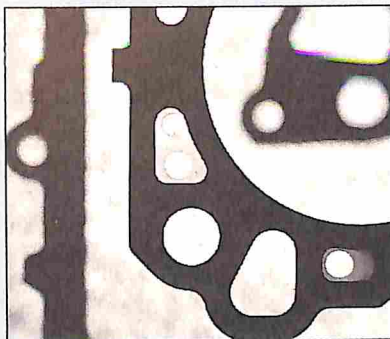
**14 Eye On Electronics** If you wanted to fix electric gizmos, you would have gone into TV repair, right? Mike understands, and has some good advice for bridging the knowledge gap between things mechanical and electronic.

**35 TRW Tech Training** Videos and evening clinics are fine, but nothing beats hands-on training at a well-equipped school. Here's how one company fills the technician's need for knowledge.

**43 Service Slants** Sick starter drives on GM's big V6 and two V8s, Mitsubishi brake modulator mire, Chrysler turbo motor tantrums, the ABCs of CV service with ABS, plus other fixes.

**46 Foreign Service** Here's how to check Toyota throttle position and O<sub>2</sub> sensor voltages and pull fault codes from the underhood connectors. All you need is a high-impedance voltmeter and some inside information.

## COVER STORY



**18 Sealing Science** Today's high-tech engines require new kinds of gaskets. You can't put a new-wave engine back together with a sheet of cork and some gasket goop. Bimetal engines and lightweight castings that are easily distorted now require a new breed of nonasbestos gaskets—molded rubber, expanded graphite, laminated Kevlar and steel, aluminum and even plastic! Here's the lowdown, straight from the gasket makers themselves, on how to deal with these new designs, plus a progress report on reformulated RTVs and thread-locking compounds. Cover photo of gaskets from Ford's new modular 4.6-liter V8 by Jim Richards.

## REPORTS

**6 Editor's Report** Did you know that many of those aerosol flat-fixers contain explosive propane gas? Neither did the mechanic who got blown across the shop while trying to fix a flat! Here's how to repair tires without blowing yourself up.

**24 Automechanika** Special correspondent Ian Wagstaff reports on new shop products with a foreign accent from the world's largest auto trade show. How large was it? Would you believe 55 acres of tools and equipment from 2600 companies?

**29 Motor Tech Training Guide** In order to keep up with today's galloping automotive technology, you need professional training. Here are 65 sources of aftermarket tech training, plus tips on where to find even more.

**39 Newsbreak** New looks for the '92 Ford full-size van and Chevy/GMC Suburban, lean-burn exhumed, the next Eldo and Seville, five-speed automatics, an all-new van and a 15° V6 from VW, plus other industry news from around the world.

**49 Washington Hotline** The new Clean Air Act is a tough act for automakers to follow, but reduced emission warranties are good news for independent shops. An upgraded side-impact rule will add weight and cost to smaller cars and lower their fuel economy, too. Plus the latest EPA and NHTSA recalls.

## DEPARTMENTS

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## SPACE AGE GASKETS

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