

We've seen Toyotas posing as Chevrolets and Mitsubishi's posing as Chryslers in these pages. Now it's time to look at one of Ford Motor Company's crossover cars—the Mercury Tracer.

Those of you not yet familiar with the Tracer, may be surprised to trace its bloodlines back to the Mazda GLC/323. While Ford has given the little car its own touch of design and styling, beneath the surface the Tracer is very Japanese.

Time does fly. It's been over five years since I saw my first new Tracer roll off the truck. That means that there are a lot of them out of warranty with enough mileage on the odometer to make them good candidates for routine maintenance and repair at your shop.

Like other crossover cars, the Tracer has gone through several changes since its introduction. DOHC engines have also been used, and Ford engines can

currently be found under the hood. But the 1.6 liter Mazda engine got things rolling at the start, and we'll concentrate on the early production cars you may see most often.

Instead of doing a lot of high tech "stuff" on the Tracer, we'll concentrate on some common maintenance money makers to help you turn a profit in a hurry, and look at some problem areas to keep in mind.

Our coverage of seized camshafts and cylinder head replacements is not intended to replace the shop manual. There's no way we could fit in everything you need to know to complete the repair. But we wanted you to know about a few of the ins and outs of the repair, above and beyond the info contained in the OE manual. Please refer to the manual for specs and procedures not included here.

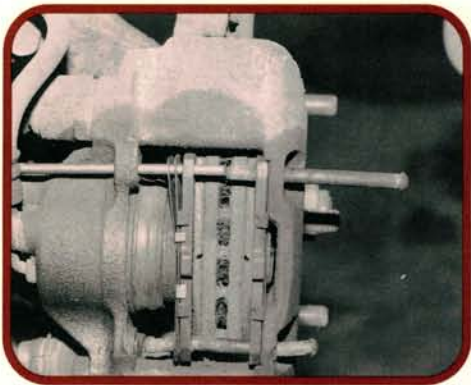
—By Ralph Birnbaum

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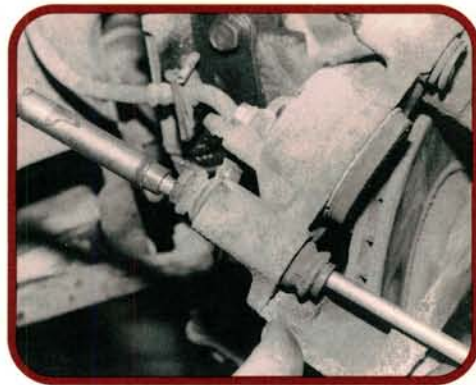
Let's start under the car with a look at the brakes on our Tracer. Our 1988 car uses the same captive rotor/hub assembly system which dates back to the GLC. There are a few changes: The rotors are vented, and the caliper design is different. But the rotor is still captive!

**2**

The drive hub must be removed from the knuckle to replace the rotors. Double taper roller bearings support the hub as they did with the GLC. For a detailed description of bearing and hub service procedures, please refer to the April 1991 issue of *Import Service* entitled "Stop It".

**3**

The caliper assembly on the Tracer is different from the GLC. Simple pad replacement may not be so simple when the brake pad retainer pins are as badly rusted as these were. The brake pad retainer pins in this car had to be forcefully evicted, and were ruined in the process.

**4**

If you're doing a "pads only" brake job, make sure the caliper isn't frozen on its slides. The calipers bolt to the knuckles. Caliper bolts pass through slide tubes mounted in rubber sleeves in the caliper body. On our car (at 70,000 miles) one of the slide tubes is seized, and must be driven out.

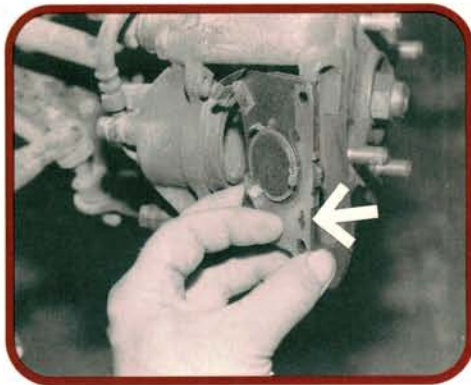
**5**

Fortunately, the slide tube isn't ruined. A good cleaning with a wire brush and an application of brake grease set things right again. Make sure the protective rubber boots on the slides aren't torn before reinstalling the slides. The boots snap into the groove on the slide (arrow) to keep water out.

**6**

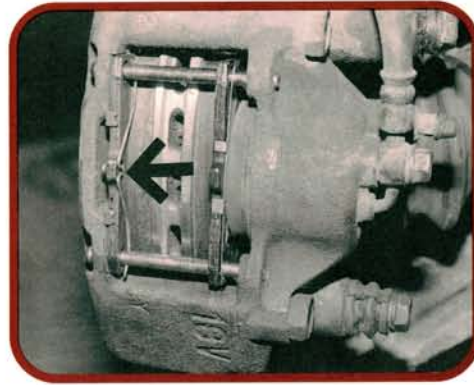
We talked with several techs and came away with the impression that sticking caliper pistons are not a common problem. But the backing shims for the pads should be replaced if they're damaged. We also take time to clean the knuckle and install new anti-rattle clips (arrows) for the inboard brake pads.

# Tracer



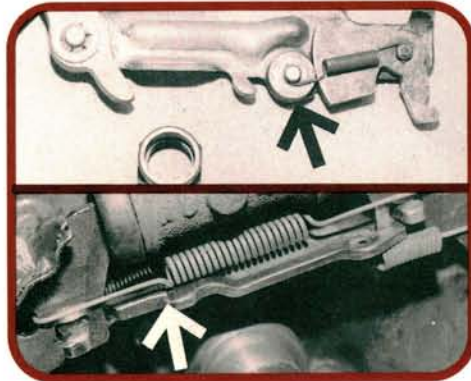
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Backing shims for the brake pads are marked for installation with an arrow (arrow). Corrosion damage has ruined all the brake hardware. If winter roads in your area are saltier than anchovies, you may want to include all new brake hardware in your repair estimate.



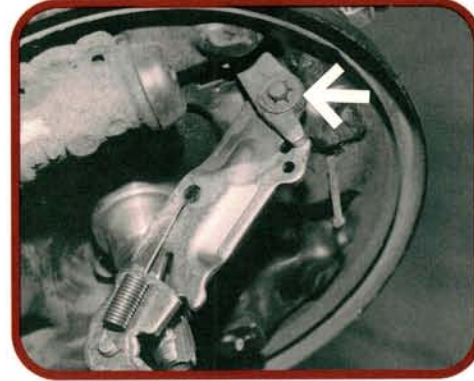
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Finally, make sure the brake pad pin retainer wire is properly installed as shown (arrow). Torque the caliper bolts, and pump up the pads. Check the brake fluid level before you finish. A low fluid level in the master cylinder reservoir caused by worn pads may be back at the full mark now.



9

The rear drum setup is basically the same as the one on a GLC, with minor modifications. The self adjusting mechanisms work the same, but instead of a toothed arm and roller (arrow) used on the GLC (upper photo), the Tracer eliminates the roller (lower photo).



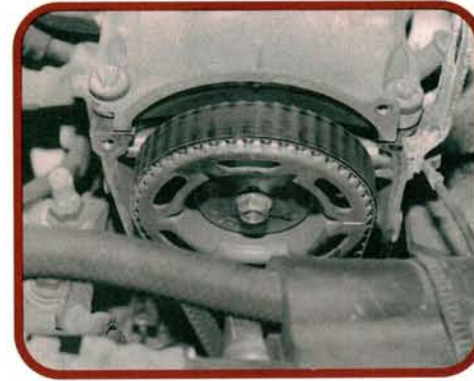
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Some things never change, even from Mazda to Mercury. The pivots for the hand brake mechanisms which were often overlooked on a simple reline of GLC rear brakes, are frozen with corrosion on the Tracer as well. Clean and lightly lube them until the mechanism pivots smoothly again.



11

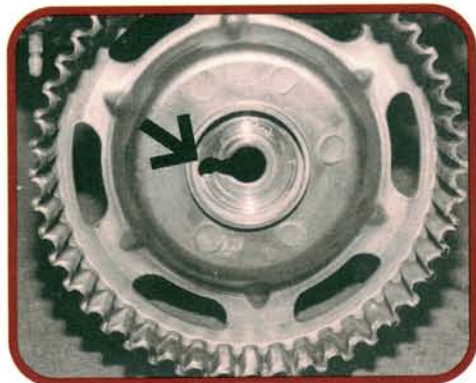
Another difference between the GLC and the Tracer has to do with the rear axle nuts. The nuts are staked into a groove in the stub axle to keep them from turning (always replace them). But the Tracer, unlike the GLC, uses one left hand (right side) and one right hand thread (left side) on the axles.



12

Seized camshafts are a problem on both 323 and Tracer 1.6 liter engines. Symptoms go as follows: The engine starts cold, then stalls within the first minute and won't restart. Several dealers told us that this happens most often in very cold weather. Some saw multiple failures on the same day.

# Tracer



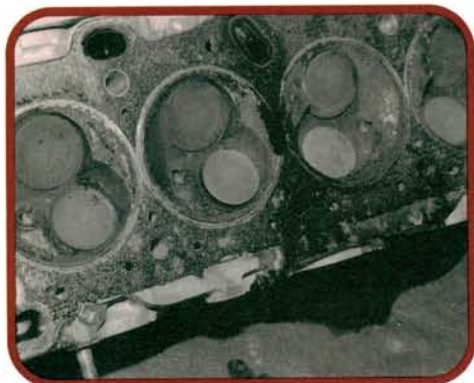
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When the cams seize, either the timing belt breaks or the stamped cam sprocket spins on the cam snout. If you're having a bad day, you may find both. Something has to give. This sprocket spun. The cam bolt snapped, and the locator dowel in the cam trashed the inside of the sprocket (arrow).



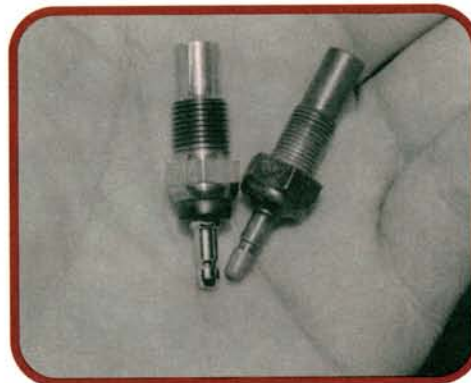
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Why does this happen? Sorry, but nobody seems to have an answer they'll share with us. The oil filter from this '89 proves that black holes aren't just found in outer space. The engine was asked to go 20,000 miles without an oil change. The asphalt sealer in the crankcase was an invitation to disaster.



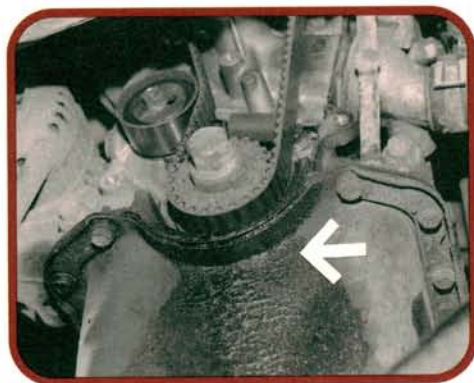
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The replacement cylinder heads for these engines are modified. The new heads are bare heads. The number of parts you can transplant will depend on their condition. At the least, plan on a valve grind and rocker assembly transplant. This engine has hydraulic lash adjusters which are plugged with sludge.



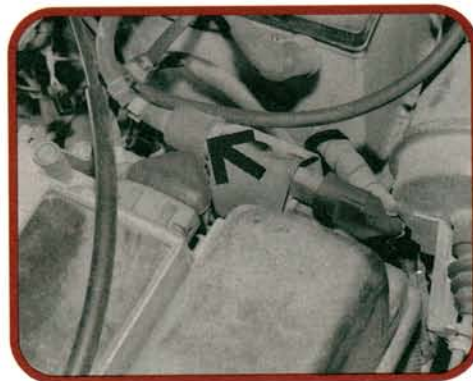
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If you're installing a new style cylinder head, note that the old temperature sender (right) doesn't fit the new head. The diameter of the old switch is slightly smaller than the tapped hole in the new head. Check with your local parts department for a new switch when you order a head.



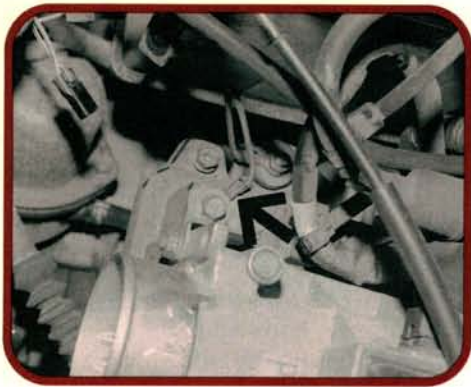
17

This Tracer needs a new crankshaft seal. But don't assume that oil in this area (arrow) has to be coming from the crankshaft. Check inside the cam belt cover for signs of a camshaft oil leak. Oil from the cam can trickle down the front of the engine behind the cover and end up in the same place.



18

The ignition coils on these cars didn't seem to cause any special problems. But we had several reports of no starts accompanied by coil arcing at the coil wire terminal. In most cases, the cause was high plug wire resistance. In damp weather, the coil secondary voltage looks for an easier path to ground.



# 19

If you remove the air flow meter for any reason, be sure you reinstall this ground wire. Early 323 models suffered intermittent driveability problems caused by a bad air flow meter ground. Dealer installed ground straps later became factory installed.



# 20

Caps and rotors are also a good place to look for an intermittent miss or no-start. The same distributor rotor problems found on the 323 can also be found in this Tracer. The rotors do go bad over time, and can either short to ground or simply go open. The problem caused can be intermittent.



# 21

One final note. Rattling noises from the catalytic converter may lead you to replace the catalyst. The outer catalyst heat shield is made in two pieces which bolt together. But there's another metal shield inside which is welded to the catalyst. If the welds break, the inner shield rattles.