

Automotive fast fixes

With all the complexity of today's vehicles, it's nice to know you can still use your toolbox for more than a stepstool. In the following pages we'll show you some quick repairs and improvements that'll give you that old feeling of automotive mastery.

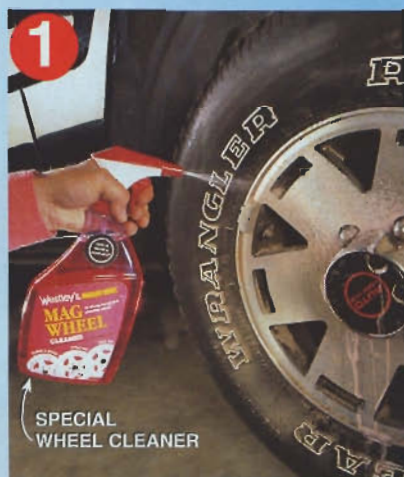
By Paul Brand,
Bob Lacivita,
David Radtke
and Mark Thompson

Polishing/Brightening Aluminum

New aluminum wheels and trim look great but are among the first to lose that new-car shine. Over time, oxidation can really dull and darken their appearance.

To restore the shine, use the right product. Special polishes specifically formulated for aluminum are available at auto parts stores. These polishes work only on alloy wheels that don't have a protective clearcoat. Check with your dealer if you're not sure whether your wheels are coated.

BEFORE polishing, clean the wheels thoroughly with a spray cleaner designed for aluminum wheels. It works fast and eliminates elbow grease and scrubbing pads. Spray carefully; don't get it on your car's finish. Rinse thoroughly to eliminate streaks.



SPECIAL WHEEL CLEANER

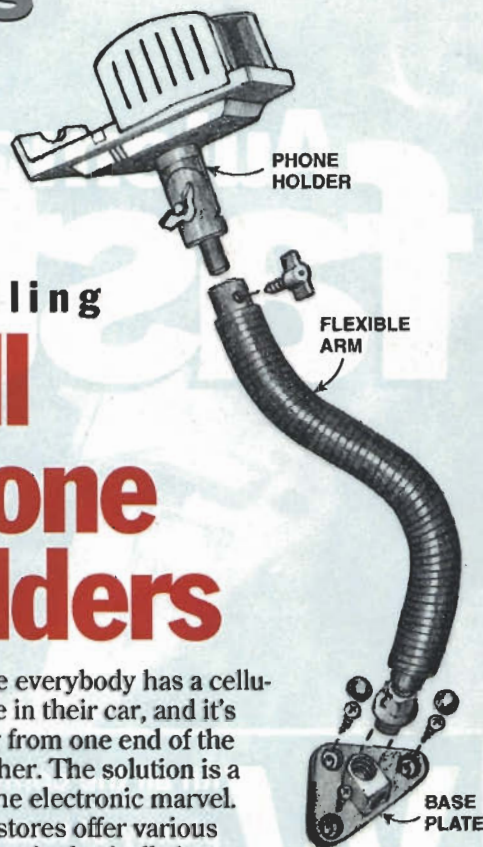


ALUMINUM PASTE POLISH

POLISH your aluminum wheels and other trim with special aluminum polishes. Here are a few that work great: 3M Mag & Aluminum Polish, Mothers Mag and Aluminum Polish, and The Original Nevr Dull Magic Wadding Polish. All are widely available.

Installing Cell Phone Holders

Seems like everybody has a cellular phone in their car, and it's often sliding from one end of the car to the other. The solution is a holster for the electronic marvel. Electronics stores offer various styles, but they're basically just a base plate and a flexible "arm" with a holder at one end. Installation is simple. Here's how:



HAVE someone hold the base in various spots to determine the best location. You want it accessible, but not in the way of accessories or controls. It's best to mount the base plate to the floor, but it can be mounted on any solid surface as long as there's at least 1 in. of clearance behind the mounting location.

2 DRILL three holes using the base as a template, and then mount it with the supplied screws (place a dab of clear caulk on the screws to seal the holes). Attach the phone holder to the flexible arm as shown, then put the arm on the base and make any final adjustments.



SECRET AGENT DOUBLE PLAY

G I V E A W A Y



Simply purchase a FRAM DOUBLE GUARD OIL FILTER and you'll receive in the mail a free BLOCKBUSTER® GIFTCARD™ — a \$6 value! See participating FRAM DOUBLE GUARD retailers for details.



Plus, you'll be automatically enrolled in the SECRET AGENT SWEEPSTAKES

with a Grand Prize of a brand new Ford Mustang GT Convertible!! You'll also be eligible to win one of 2,000 "GOLDENEYE" videos!



Offer lasts from August 15, 1996 to October 31, 1996.

FRAM®
AlliedSignal

Teflon is a registered trademark of DuPont.



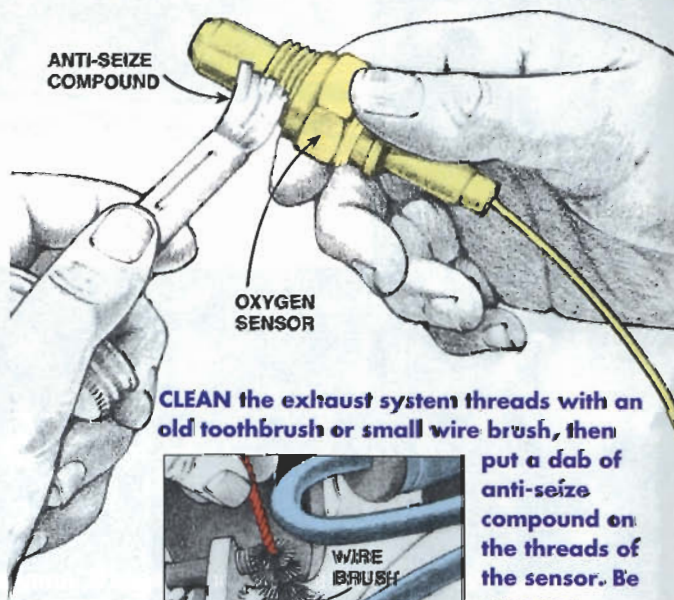
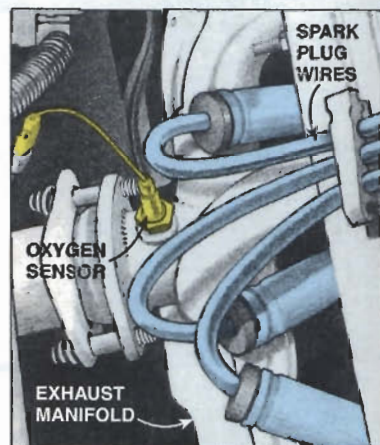
Automotive **fastfixes**

Oxygen Sensor

Replacement: Why & How

The oxygen (O₂) sensor is an essential part of your vehicle's engine controls, and one of the easiest to replace. Screwed into the exhaust system, it feeds the engine computer information that lets it maintain the perfect air/fuel ratio of 14.7:1. But the oxygen sensor only has a lifespan of from 50,000 to 75,000 miles, and one that's gone bad will cause poor fuel economy, loss of power, rough idle and increased emissions. Replacing it is simple:

DETACH the electrical connector, making sure not to lose the connector seal. You may need a special wrench or socket (about \$5 at any auto parts store) to reach it. Make sure the engine is cool, and unscrew the oxygen sensor. It may be a struggle, so be persistent. A corrosion-loosening lube may help.

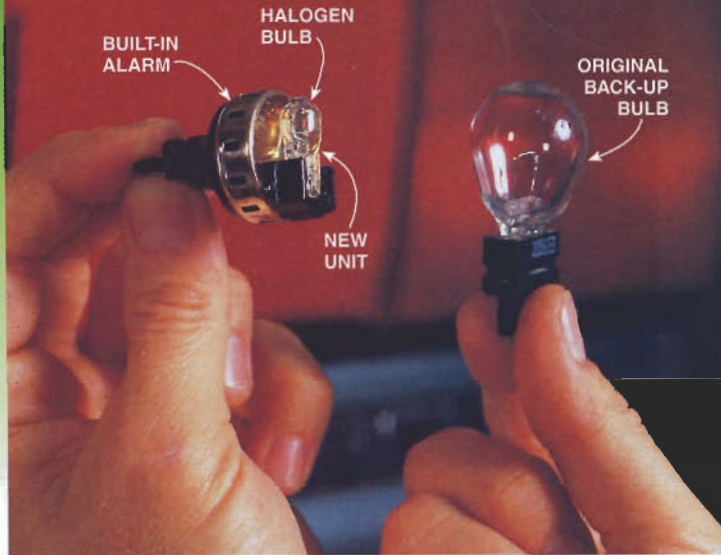


CLEAN the exhaust system threads with an old toothbrush or small wire brush, then put a dab of anti-seize compound on the threads of the sensor. Be sure you don't touch the sensor tip or get any of the compound on the louvered end. Thread the new sensor into place until it's finger-tight, then torque to 30 ft.-lbs. Do not overtighten!



on the louvered end. Thread the new sensor into place until it's finger-tight, then torque to 30 ft.-lbs. Do not overtighten!

Installing A Back-up Alarm



Do you live in a busy neighborhood with kids and pets around? Does a blind spot keep you from seeing as you back down the driveway? Get peace of mind by installing a back-up warning alarm. It will send out an audible alarm when your vehicle is put in reverse. Available at most auto parts stores, they cost about \$15 and install in minutes.

REMOVE the taillight lens assembly or pull the socket out of the lamp housing (with sedans, you usually get at the area through the trunk; with vans, pickups and sport utility vehicles, by removing the taillight lens). Replace the standard bulb with the back-up alarm and bulb assembly.

Engine Coolant



If you remove the coolant recovery cap on your new GM vehicle and see orange, don't be alarmed. It's not a buildup of rust but a new coolant called Dex-Cool. It's standard in many '95 and '96 GM vehicles. Dex-Cool contains a unique corrosion inhibitor that delivers a five-year or 100,000-mile service life; that's three to four times longer than other coolants. Other manufacturers will soon have compatible coolants on the shelves (Prestone's Extended Life is one).

If your vehicle contains **Dex-Cool**, you *must* top it off with the same or a compatible brand. Other coolants will dilute the mixture and void the warranty. This high-tech coolant will cost you about five bucks more a gallon, but it easily pays for itself over the long run.

You've probably seen coolants advertised that are called "**non-toxic**" or **low-toxic**. A popular brand is **Sierra**. These coolants are a bit less toxic but are *not* non-toxic. Never leave them in reach of children or open to pets. Also, these coolants are propylene-glycol based and don't transfer heat as well, which makes them less efficient.

Forget Engine Tuneups! Think Emission Tuneup

Vehicles built in the last few years are designed to go 100,000 miles between engine tuneups. Depending on how frequently you change cars, you might never have to do a traditional spark plug-n-stuff tuneup. Sounds great, but now your focus should be on the various filters that need attention much sooner—every 15,000 miles or so. If your owner's manual doesn't show the actual replacement steps, invest in one of the repair guides available at bookstores and auto parts stores.

NOTE: Be very careful here!
Absolutely no smoking or open flames anywhere near.

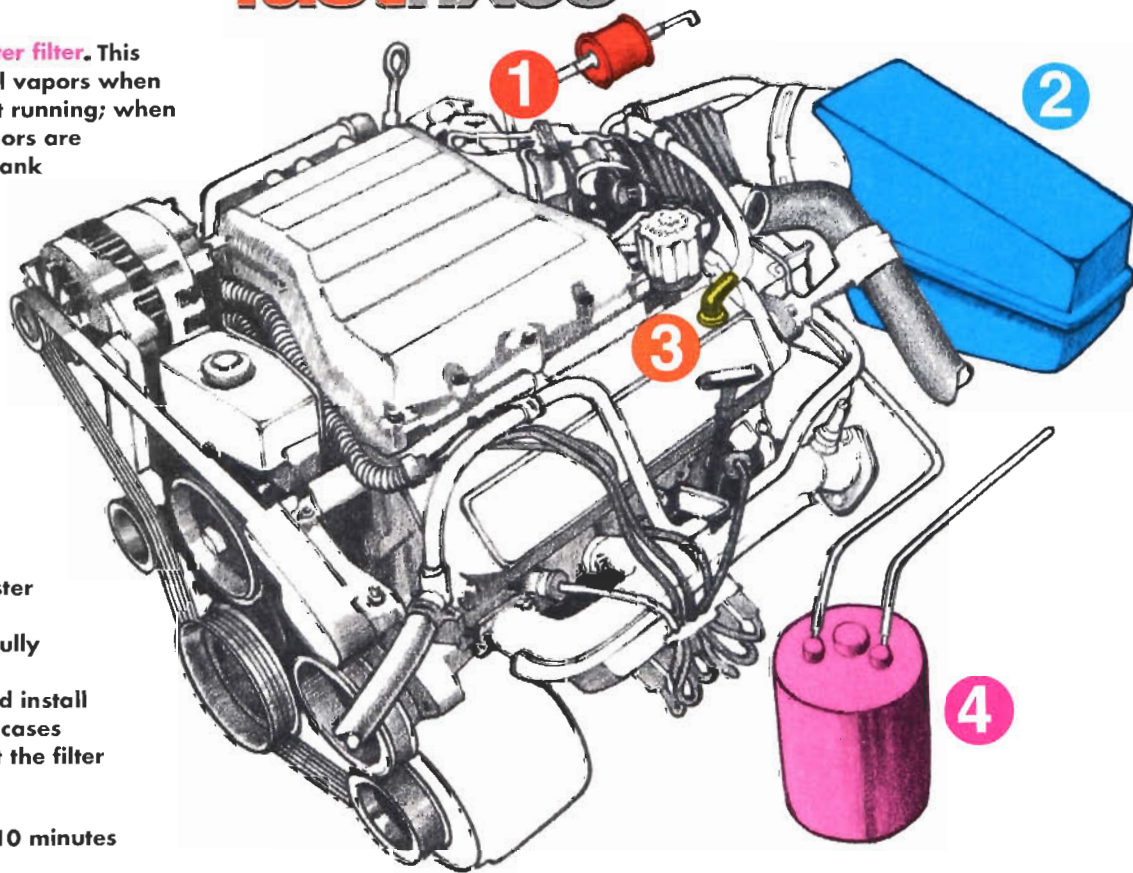
1 Fuel filter. Nowadays, most fuel filters are separate canisters, often closer to the fuel tank than the engine. Usually, you need to relieve the fuel tank pressure. There may be a valve for this, but you can always do it by removing the fuel pump fuse (see your owner's manual), starting the engine and letting it run until it dies. Before removing the old filter, clean off the connections with a rag and some degreaser to keep dirt from getting into the fuel lines. Loosen the connections, remove the old filter, and install the new one with the arrow facing AWAY from the fuel tank. Start the engine and check for leaks.
Cost/Time: \$10 to \$30/10 to 20 minutes

2 Air filter and breather element. Remove the cover and any fresh air ducts. Clean the air cleaner compartment of debris before removing the retaining clip on the breather. Install the new parts. Don't buy anything except name brand replacements. Make sure the replacement parts fit and seal tightly or dirt will bypass the filter.
Cost/Time: \$15/20 minutes

3 PCV valve. The first emission device most engines ever had, it's usually located in a rocker cover or the engine block. Carefully remove the valve from its grommet by twisting and pulling until it's free from the hose. Replace the valve with the exact brand and part number.
Cost/Time: \$5/5 minutes

4 Charcoal canister filter. This filter stores fuel vapors when the engine isn't running; when it is, the trapped vapors are returned to the fuel tank and eventually burned as fuel. The canister is about the size of a coffee can, usually made of black plastic, and typically located across from the battery. Remove the screws that hold it in place (usually the hoses attached to the canister don't have to be removed), and carefully turn it upside down. Remove the filter and install a new one. In some cases you may have to cut the filter to fit.

Cost/Time: \$3/5 to 10 minutes



FREE!

16-Page Color Window Treatment Selection Guide



Courtesy of Comfortex Corp., Cobleskill, NY



This booklet will help you select the proper window covering for your windows, doors and sunspaces and includes helpful ideas for porches, pools and patios. 16 pages of color photos and complete information to help you find a nearby dealer for the products you select.



For FREE booklet, call 1/800-874-3007 or mail coupon below to: Phifer Booklet, P.O. Box 1700, Tuscaloosa, AL 35403-1700.

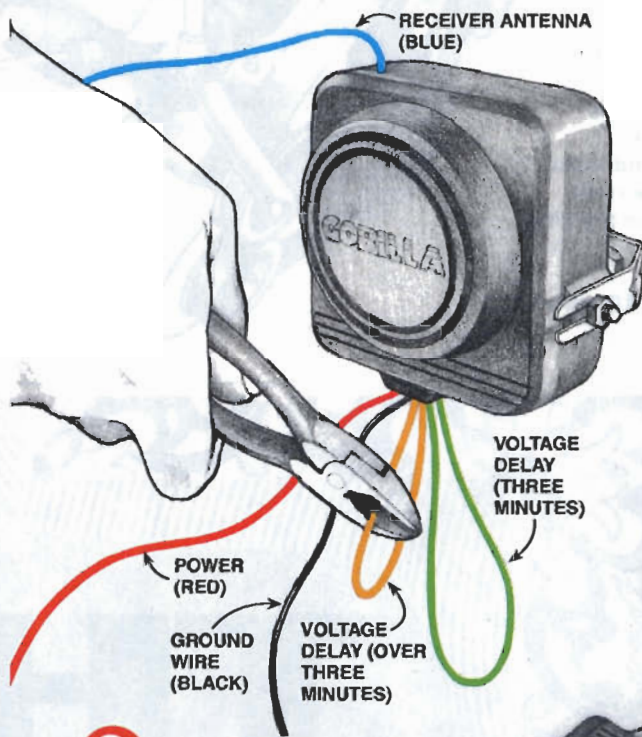
Name _____
 Address _____
 City _____ ST _____ Zip _____

 **PHIFER WIRE PRODUCTS INC.**

©Phifer Wire Products, Inc., 1994

DIY Auto Security Systems

Auto security systems can be basic and cheap (less than \$75) with just a siren and motion sensor, or complex and pricey (over \$500). The expensive ones can disable the ignition system, yell "Please step away from the car," lock the doors automatically, and trigger a transmitter to call you for help. These high-end systems need professional installation, but you can install the basic systems yourself. It's easy (really!), requiring only an hour and tools you already have.



1

MOUNT the basic one-piece/one-wire unit, where it can be well grounded (that is, near or on metal), close to the front of your vehicle so the built-in siren will be loudest. Find a spot that's reasonably protected from both moisture and engine or radiator heat. Try to use an existing bolt or screw to hold it in place, rather than drill any holes. If necessary, run a separate wire to ground the unit.

2

Cutting wires? See installation notes below

PLACE a heavy rag over the siren before connecting the red wire to the positive cable or terminal of the battery. Adjust the shock/motion sensor according to the manufacturer's instructions, and arm the unit with the remote key pad to test it. Remove the rag once you're satisfied the alarm is working properly. You're done.

TWO INSTALLATION NOTES: (1) On units that have an antenna wire, make sure it's straight and as far away from metal as possible. (2) If your vehicle has an electric cooling fan that runs when the ignition is off, clip the over-three-minute delay wire as shown above. If you have headlights that shut off automatically and no fan delay, clip the three-minute delay wire.

Door Mirror

Replacement

A broken door mirror isn't only a hassle, it's dangerous. You can find replacement mirror glass for about \$8 at an auto parts store. It's precut for most popular sizes; measure your glass size before you head to the store.



WEAR gloves when you remove the old glass. Stubborn chunks may require a pliers. If the glass is just cracked, don't bother removing it. You can use the double-sided tape over the old mirror.



CAREFULLY place the glass onto the caulk and adhesive tabs. Once the tabs are on, they don't let go. **TFH**

Art Direction • BOB UNGAR
Illustrations • RON CHAMBERLAIN
Photography • BILL ZUEHLKE

SEPTEMBER 1996 71

Spend time driving your car, not waxing it.

NEW!

Field Glaze®

All-Natural Carnauba Spray Wax



*Spray,
Wipe,
Shine!*



zymöl®

To order:
(800) 999-5563

Also available at select auto accessory and Natural Food stores everywhere.

<http://www.zymol.com>

©1996, zymöl Enterprises Inc.



No Match



With Ronsonol, you're getting two products instead of one.

Ronsonol lighter fuel is also excellent for removing grease, oil stains, tar and labels.

For fueling or cleaning — there is simply **NO MATCH.**

RONSON®

"The people who keep improving flame"

— Since 1886 —

RONSON CORPORATION — SOMERSET, NJ, USA