



Winning Tech Tip entries have been selected by the editors of *Import Service* as well as the technical staff at NAPA Echlin. Winning entrants will each receive \$100.00 from NAPA Echlin and a special NAPA Echlin jacket.

A cash prize of \$2500.00 will be awarded at the end of the year to the entrant who submits the best 1992 Tech Tip. The first runner-up will receive \$1000.00 worth of NAPA Echlin products.

So tear out those Tech Tip cards and start mailing us your Tech Tips. We'll print the best ones each month. Everyone will benefit from the shared information.

TIMING BELT SALES AID

We use several sections of worn and broken timing belts as sales aids at our shop. Many auto manufacturers recommend a timing belt replacement at a specified mileage. You can't show an owner his timing belt without partially dismantling the engine, so it may be difficult to explain why the belt needs to be replaced when his vehicle reaches the specified mileage.

Our worn timing belt assortment is kept in the front office. When a vehicle that has reached the factory recommended timing belt replacement interval comes in for service, we show the owner our used timing belt assortment. We have found this to be an excellent way to explain the need to inspect or replace his timing belt before it breaks, leaving him stranded or causing engine damage.

Joe Ingalls
Goodguys Tire Center
Clovis, California

PLASTIC REPAIRS

A fast drying glue like Super Glue can be combined with baking soda to produce strong plastic repairs. Use the following steps to rejoin two pieces of broken plastic:

- Remove all dirt and grease from the plastic break and the surrounding area.
- Rough up the area around the break with sand paper.
- Apply glue to the broken plastic pieces, then hold them together in their proper position.
- While holding the pieces together, add a bead of glue to both sides of the repair joint.
- Generously sprinkle baking soda over the beads of glue. This causes the glue to dry and harden instantly.

R.D. Bossow
Sound Auto
Oak Harbor, Washington

AUXILIARY VALVE CARBON BUILDUP

Carbon deposits on the small auxiliary intake valves may cause cold driveability problems on auxiliary valve equipped Honda engines. The carbon deposits absorb part of the rich fuel mixture as it enters the auxiliary valve prechambers, preventing effective combustion. The engine may stall or run poorly until it warms up. At that point the deposits stop absorbing fuel.

Inspect for vacuum leaks, and check the choke operation and ignition advance to eliminate them as possible causes for the engine's cold driveability

problems first. If these systems check out, clean the main and auxiliary intake valves. Valve cleaning solvents will do the job for mild deposit buildups. Cylinder head removal and manual valve cleaning may be necessary if the auxiliary valves have very heavy carbon deposits.

Ralph Dubs
Dubs' Import
Mason, Ohio

SUBARU BRAKE ADJUSTMENT TOOL

A 1/4-inch drive socket can be used to adjust the rear drum brakes on two wheel drive Subaru models equipped with manual rear brake adjusters. Use the following procedure:

- Slip the 1/4-inch "square" end of the socket over the brake adjusting screw.
- Now slip a hex bit or Allen wrench into the six point end of the 1/4-inch drive socket. For example, if you're using a 10 mm 1/4-inch drive socket, insert a 10 mm hex bit. Any size hex bit will do the job, as long as the hex bit size matches the 1/4-inch drive socket size.
- Attach a ratchet to the hex bit and you're ready to adjust the brakes. The 1/4-inch drive socket will turn the rear brake adjusting screw without damaging it.

Paul De Guiseppi
P'n'P Auto Service
Eagleville, Pennsylvania

HONDA TIMING BELTS

Front end or left front collision damage may cause immediate or subsequent timing belt failures on Honda models. The force of the collision impact may be transmitted through the left engine mount. This engine mount is surrounded by the timing belt and is bolted to raised pads that are cast into the engine block.

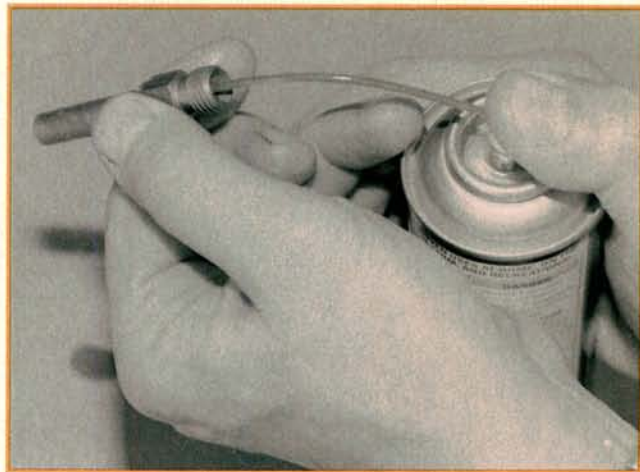
The block mounting surfaces are very brittle and pieces may break off following a collision. I have seen these pieces fall between the crankshaft gear and the timing belt, jamming the belt and causing it to break.

If the timing belt has broken, be sure to inspect the block for a broken mounting surface before installing a new belt. Repair the block as necessary and make sure that all broken metal pieces are removed from inside the timing belt covers to prevent later problems.

Paul Brow
All Car Specialist
San Gabriel, California

CIS INJECTOR CLEANING

A can of spray lubricant and a plastic spray nozzle can be used to clean and check the spray pattern on CIS fuel injectors. The plastic spray nozzle fits snugly into the inlet end of the injector and the aerosol pressure in the spray lubricant can is strong enough to open the injector.



Spray lubricants like WD-40 are also great cleaners and are less hazardous to work with than gasoline. If the injector has a bad spray pattern, tap the sediment out of the inlet end, or use a rubber tipped air gun. It may take several repetitions of the cleaning cycle before the injector starts spraying properly. We have quickly and easily cleaned many CIS injectors using this method.

Gary Moore
International Auto Repair
American Fork, Utah

AUDI SHIFT LOCK WIRING

Improperly routed shift lock wiring may cause the number 12 fuse to blow on 1984-87 Audi 4000 and 5000 models equipped with dealer installed shift lock mechanisms. The dash instruments and backup lights will stop working when the fuse blows.

Check the shift lock wiring at the floor shifter. The wiring may have been rubbed through by the shifter, causing the fuse to blow as the vehicle is shifted into gear. If the shift lock wiring is not damaged, also check the wiring at the left trunk lid hinge. Wires may break inside the protective insulation and short against each other. The fuse will usually blow when the vehicle is driven over rough roads or when the trunk lid is raised.

Glen Lockett
Crown Motors
Tyler, Texas