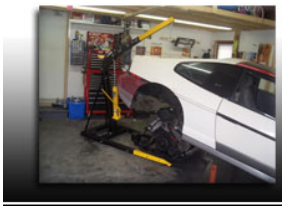

Tech Articles

By: Ray Dyreson

Cool Tips

Driving our Fieros is fun. But working on them is enjoyable too. Most of the Fiero enthusiasts I have met do at least some of their car's repairs and maintenance themselves. To do this you need some tools. Most of us have the basics, wrenches, sockets, screwdrivers, hammers, and pliers etc., but there are some special tools that may be specific to the Fiero, or a particular job that will make a repair easier or faster. Kent Moore made the GM special tools that are needed for major jobs that most of us don't get into. I won't be discussing these but rather the inexpensive or free tools that you can use on the simple repairs most of us will be doing. Here are some little tool tips that might make working on your Fiero more fun.

#1. I would bet that almost everybody does their own oil changes. To remove the oil filter most use the curved pliers that squeeze the filter case and loosen it. This works, but sometimes is hard to get into a good position to clamp and twist the filter for removal. Also, this tool is not good at tightening the filter. I suggest using a filter socket that fits onto the filter and removes or installs it by gripping the flats on the filter case. Of course this requires an exact fit so one socket will not fit all filter sizes. A multiple assortment of different sized oil filter removal sockets is very inexpensive and you can use the other sockets for other cars. Harbor Freight (www.harborfreight.com) sells an inexpensive set.

#2. The parking brake cable ends are held into brackets at the handle, both calipers and at the adjuster by three springy tabs on the cable end that contract and slide through the bracket holes, which then snap up to retain the cable. Retracting the three tabs all at once to slide the cable back out can be tricky. Some people use hose clamps while others use screwdrivers or pliers. Using these can be frustrating. I use a 3" long piece of ½ " I.D. copper tubing. Just slide this onto the cable end and with a light tap it will easily retract all three spring tabs at once. Then merely pull the cable out of the bracket. The tubing can't be any longer or it will interfere with the brake caliper cable lever.

#3. When changing the rear brake calipers or left and right parking brake cables it will be necessary to remove and reinstall the cable return springs. This can be done using clamps, screwdrivers and cuss words, but it is best done using a tool made for removing door hinge springs on GM cars, including the Fiero. This is Kent Moore # J-36604 (www.handsontool.com), but is also available as Lisle # 87675 (www.lislecorp.com), Dorman # 38386 (www.dormanproducts.com), or Harbor Freight #H95344. Open the jaws on the tool and engage the spring, then tighten the tool's bolt to compress the spring and remove it. If leaving the spring off for a period of time, play it safe and relax the spring so it doesn't go flying if it is bumped.

#4. The front wheel bearings on '84-'87 cars should be cleaned and the grease repacked regularly. This is a simple job well within most enthusiasts' abilities. Many cars I see have hammer marks in the grease caps where they were beat back on. While these dents don't hurt anything, it just looks tacky. New caps are sold in pairs by Dorman Products as part # 13976. They are a tight fit though and may need some massaging to install. To get them on without damage, I made a tool from a 6" long piece of 1 ½" schedule 40 water pipe. This has an inside diameter matching the stiff outer ring of the grease cap allowing it to be tapped on leaving the center dome area undamaged. I welded a thick washer on top to be able to tap it with a hammer on center.

#5. There are many small fasteners on the Fiero that require a ¼" drive socket to remove dash panels, fender liners, etc. Some are best accessed using a ratchet and some with a screwdriver type driver. I used both for years until I saw one of my shop mechanics using a little swivel head ratchet. I bought one at Harbor Freight for about $5.00 and now use it all the time. It will take the place of the ratchet and driver handle leaving more space in your travelling tool box.

#6. Having multiple Fieros to keep on the road I have had to remove and/or replace several gas tanks. Storing tanks for repair or future use leaves them susceptible to inside rust and critter invasions. You can tape over the openings but the tape doesn't always stick well and it gets brittle with age. I found most aerosol spray can tops that have an inside ring in them will press onto the filler neck pipe. To plug the top fuel sender hole I use a disposable plastic margarine container. Some have a grooved surface that won't seal so be sure to get a smooth one. The taper of the surface will hold it in the tank OK. For the vent tube I haven't found anything better than a plastic ½" tubing

cap that comes on new tubing, pipes etc.

#7. Many of the more critical electrical connections use what GM calls “Weatherpack” connectors that have a rubber seal to keep out moisture. They also have a molded in flexible plastic clip on one side that keeps the two halves firmly connected. Going together these work slick and lock with a click. Getting them to come apart after 30 years is another story. The plastic gets brittle and if you pull up on it with your finger to release and then pull on it to separate the connector, the plastic breaks. Use a removal tool that will lift the clip just enough to release but not enough to break. The tool is double ended so it will either pull or push the connector apart depending on how you can access it. Kent Moore makes one but more readily available is a Lisle brand tool # 13120 that sells for about $10.

#8. Tightening the alternator belt on the V6 can be a problem. There is not a good place to use a pry bar to get the belt tight and hold it there while you tighten the bolts. The bolt boss on the alternator has flats for an open end wrench but it is easy to slip off and still hard to hold tension while tightening the bolts. I made a belt tightener using Paul McKibben’s instructions on the Internet from two wood blocks and a ¼-20 double eyebolt turnbuckle. This will set the belt tension and hold it there while the bolts are tightened. Then slacken the turnbuckle and remove the tool. Total tool cost will be about $ 4.00. For details see www.fierosails.com/belt.html.

#9. When removing the rocker panels you must drill out the rivets in the door threshold. These are hidden under three plastic trim plugs on top of each rocker. I had trouble drilling out the rivets without the drill bit wandering off center and nicking the edge of the plastic rocker trim plug area. I cut two pieces of 3/4” wide 1/8” thick strip steel, one 2 1/4” long and one 8 1/2” long. Drill a 7/16” hole 1/2” from one end of the short piece and another 3/16” hole 3” from the end of the long one. These will now set into the openings where the trim plugs were. I hold them down with duct tape. The rivets will be visible in the holes to drill out and if the drill wanders off center it will hit the plate instead of the plastic rocker.

#10. Ever tried to remove a windshield wiper arm with two screwdrivers or pliers? These arms are held onto a splined shaft by two strong springs in the arm that cause the tight fitting arm to tilt slightly and jam onto the shaft plus a spring tab to lock it on. Line the arm up straight with the shaft and it lifts straight off. Lisle makes a $ 4.00 tool # 65750 for this that works with just a squeeze, a wiggle and a lift, and without damage to the arm or the cowl panel underneath.

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PITTSBURGH
PRO


13120
ELECTRICAL
CONNECTOR
Disconnect electrical connectors without damage.
Engage the tool tip behind the connector clip. Push or pull to disconnect. Works on Weather Pack and other automotive electrical connectors.
Double-ended to fit different access angles.
MADE IN USA
LISLE CORPORATION