

356 TRIP SPARES AND TOOLS by Paul Risinger

Paul Risinger is a long distance member of 356CAR who resides in Woodinville, Washington. He has generously made this article available to 356CAR for publication.

INTRODUCTION

I am constantly amazed at the bravery and/or innocence of vintage car drivers who take off on trips with nothing stowed for emergencies. As conscientiously as we take care of our 356s in most cases, we sometimes forget that they aren't the maintenance-free cars of today. Remember, they are 40-60 years old! We can experience unforeseen or hidden problems and even have new parts that fail very early. Some vintage cars owners often go on extended trips in groups and sometimes even have a mechanic with a portable shop following them. While we do not need this, we should be prepared, because it does happen to us. Usually, even a Porsche dealership does not have the necessary parts and/or knowledge to help you. They are geared for new uber allus, not old!

If you are just driving your car around town, you need nothing more than a cell phone and a credit card. On the occasional short trips, a tool kit, a good tested jack and AAA or equivalent travel card is all you need to add. However, if you go on extended trips, especially on weekends, you or your group will eventually have some excitement on the road. In fact, we witness it often if the group is of any size.

The objective of this article is to be prepared enough to get through a problem and to a safe destination, home or at least to some mechanical help. The first thing of importance is to check your car, especially brake lines, etc., plus general condition before you go. You would be surprised at how many of us just jump in and go. This list of spares and tools is intended to get you to safe harbor, but are not the same as a portable shop. If you experience a major problem you will only be able to deal with it to a point before seeking the professional, however you may be the help needed with the information, parts and tools you carry. That being said, everyone would have a slightly different take on what would be the appropriate contents. We take no wounding of pride in your changes or your additions or subtractions. Do as you think best! This is just our opinion, with kibitzing by people I respect.

I have divided this article into different sections: Information and Help, Tools, Parts, Vendors and Reviewers. The vendors (marked with the ***) mentioned at the end of the article are people or companies with whom I have no connection. I just like their products and them for trying to help us Keep the Faith!

INFORMATION & HELP

If you have diagnosed the problem and have decided that you cannot do the repair, then who should you contact? If a non-Porsche 356 shop can do the repair, then here are your helpers: You should always carry good sources of general information on the car such as the owner's manual that can help with adjustments. The following books have also proven helpful:

1. The old book *Porsche Technical Manual* by Elfrink, which I found at Performance Products*** for \$19.16 (in yellow, the last edition I believe of 1991), or you may even have an earlier version that applies to your car. Still in publication, updates were made through the 356 years as new models came out. An alternative is of course the somewhat bulky *Porsche 356 Shop Manual* and separately bulky, multi-volume *The 356 Parts Manuals* for your model. For alternative sources of manuals try Block's Books*** or Charlie White***.
2. A copy of the "356 Registry Magazine"*** is for help or vendors and a must have. One or more of the following catalogs: NLA***, Parts Obsolete*** (no catalog, but phone for used parts as well), Stoddard***, International Mercantile***, and/or several other of the many vendors (too numerous to list) for parts. The phone numbers are also helpful as many of these suppliers do not list all parts they have. Think overnight delivery by FedEx, UPS or even bus.
3. Travel Assistance lists from "356 Registry Magazine". Carry a newer copy with you for help. Look up the *Travel Assistance Network* by calling the present keeper of it. You will find it on the inside cover under the heading Club Services in the 356 Registry magazine. Also, remember other sources that are somewhat local, your own 356 club or PCA region club roster included.
4. For listings of more clubs, the page of regional officers torn out of PCA's Porsche Panorama is helpful as well as listings local emergency contacts across the nation and/or your PCA local region's magazine if you belong to these clubs.
5. A colored wiring diagram of your car. (B also applies to C chassis.) Many problems are caused by oxidized poor connections and grounds. Diagrams are available from Ron Domkowski*** and Charlie White*** among others.

TOOLS

Safety Tools

Halon Fire Extinguisher (2 lb.+) or less efficient Halotron type are essential. All others damage the car! Halon Extinguishers can be

found at various manufacturers. A good car or home source I use is: H3r*** (Always remember: When using starting fluid, if a carb fire breaks out and has not spread, then try to restart and/or quickly accelerate the engine as it will suck the fire inside and put it out. But if the engine is running and it is not a carb only fire, then *turn off the engine!* The fuel pump is working (especially added electric ones) and you are creating the spark and feeding the fire!)

“Four in One” tire gauge-flashlight,-belt cutter-glass hammer or “Life Hammer” are in tool and equipment magazines. Some Griott-type catalogs have them as well. (Just once upside down in England in a 6’ ditch of water and grass in a new 911 taught us to carry this tool *inside the vehicle!*). And it is especially needed in those newer automatic window cars that some of you have. Gets you out of the car in fire and water traps.

Flares, emergency lights and/or triangles and a first aid kit. Use a real one, not the one bandage type. Include burn and bleeding medication, wet towelettes to wash off areas. You know what is needed. Ours is in a small, rubberized pillow from BMW. REI and other camping outfitters are another good source for portable first aid kits.

Cell Phone (not always effective on the road), credit card, auto club or insurance towing card (*use for flat bed only.*) Towing companies often have manufacturers’ listings on how to tow each car. Your 356 is not in it because of age. The factory recommends flat beds.

General Tools

Use your Porsche tool kit that came with the car. Or if not, then there are good inexpensive replica kits put out by two 356 SoCal places. One is Peter McNulty***, (I use this on the road because of the value of the original ones.) Another good contact for these tool kits is Bill Perrone at The Parts Shop***. You can see what should be in your car by looking on the web at Charlie White’s*** or Eric Cherneff’s*** web sites.

What should you have for your specific car? Add a hubcap puller for non-disc brake cars. A 15mm/13mm open end wrench on C cars. Also check with your club’s mechanics for the best places to jack up your car and *write it down!* The following is important! Have a good mechanic tell you the condition of your jack if it is original. These originals can break in bad jacking positions at the lift casting or the pole end castings. My father had one bend and explode over on a 912 when he was not on a good flat, hard surface. Remember the surface you use to jack your car up is also important.

Add 2 wheel blocks (2” x 4” x 6”) for jacking braces on opposite side tires or on tires at the other axle as necessary to keep the car from

rolling. Scissor jacks also work with a block of wood on it. A new alternative and perhaps a better solution is to get a jack from an '85 or later 944. They are of good quality aluminum. Jim Breazeale of EASY*** has sold many of them recently to 356ers. You can make an 8"x8"x1" wood block and put a hole the size of the top of the jack in the block. Then you can use it at any of the jacking points your mechanic recommends. There are VW and other steel jacks like this in some Japanese cars. See the dismantlers.

Specialty Tools & Supplies

If you are going to do more long distance driving or belong to a club where a group looks to you when trouble arrives, here are the tools and some supply items I would carry:

- 1 Each *box end* wrenches to bleed brakes, 11mm for disc brakes and 7mm for drum brakes
- 1 3/8" metric ratchet/socket set of 6mm to 19mm sizes w/extensions
- 1 3/8" "wobbly" extension w/ or w/o spark plug socket, or sparkplug socket
- 1 8" section of 5/16" ID fuel hose for twisting out spark plugs
- 1 2" size Channel lock pliers
- 1 Needle nose pliers
- 1 *Hold it* type of slotted screwdriver for points, etc.
- 1 Combination-screwdriver (blade/cross point)
- 1 Combination electrical wire cutter/stripper/crimper with miscellaneous connectors for your car
- 1 Generator Brush Tool (self made of stiff wire w/hook end)
- 1 6 mm Allen Wrench (for '58 or later front bearing adjustments) bike shops and Sears have them *or*
- 2 27mm open end wrenches for pre '58 front wheel bearings
- 2 12 & 20 penny nails (not galvanized) & aluminum golf tees for use as fuel plugs, pins, blockers, etc.
- 1 Small common file or burnisher to clean points
- 1 Piece of sandpaper & a 3M abrasive pad in a zip-lock bag (not steel wool as it burns in electrical cleaning)
- 1 Utility knife for cutting tubing, etc. or utility tool w/knife
- 2 36" flexible test leads, red and black colors, w/alligator clips (16-18 stranded wire gauges preferred)
- 1 12"+ of shrink tubing to cover hot connectors or runs (8-16 gauge wires size) or electrical tape listed below
- 3 Clean shop towels and small rags, plus many towelettes and waterless soap for hands

- 1 Paper matchbook to use as a points gauge setting in an emergency or just a matchbook cover if you have a disposable cigarette lighter in your tool kit
- 4 2 sizes of paper clips
- 1 Paper towel roll for all purposes
- 2 Large plastic garbage bags
- 1 New super glue or JB Weld for metal, rubber, and plastic
- 1 Sample size penetrant oil (e.g. Break Free or TriFlon; *not* WD-40)
- 1 C or D flashlight w/ magnet if possible and 2 spare batteries; better yet a new headband type LED or halogen light to wear w/ extra batteries. They are available through Mac Tools, SnapOn Tools or larger tool shops.
- 1 Small magnet or pencil type magnet
- 1 Test light with alligator clips; can be made w/ socket/bulb/wire/clips w/ 6 or 12V bulb or Volt, Ohm, Milliamp Meter (i.e. VOM Meter +)
- 1 Duct tape of 2 yards max wrapped around a soup can
- 2 1 meter of 2.5mm insulated wire around soup can
- 1 1 meter of locking wire also wrapped around soup can
- 1 2 meters maximum of electrical tape wrapped around soup can & sealing wires to can; put small items into can and tape lid w/ list taped to top

Optional Tools

- 1 Set of jumper cables
- 1 Strap-on battery bypass to start w/ 12V system; use placed around the battery or booster cables
- 1 Distributor inductive style timing light or use test light for static timing in a pinch
- 1 Tow strap (optional - not in my kits!)

PARTS

While you can make up your own parts kits, I think you will find that it is expensive and you have to get inventive to carry the parts safely. I used a set of parts originally specified by Steve Douglas of 356CAR and my main trouble was carrying and finding items when someone broke down.

This article will cover both setups such as Steve's do-it-yourself type and a professionally prepared kit sold by Dawn Perry of 356CAR. If you want a bag w/ parts *compiled for your specific vehicle*, she assembles and sells a kit that comes with a great bag that can also accommodate your tools. I add to mine because I use one kit to cover

my B, C and 912. Hence I carry extra clutch cables with left hand nut, Zenith and Solex carburetor kits, spark plugs, fuel pump kits, etc.

Remember that VW has some of our parts as well, although in many cases they have a different part number on them. However, the Bosch numbers hold true for both. You will notice that there is no emphasis here on brake fluid, tire inflators, etc. fluids and gases. They are so general and usually can be found in the least of gas stations so it is not necessary to carry them. Oil is a different matter.

NOTE: The parts shown below that are marked with an "*" are not in the prepared kit. The parts marked with a "#" are in the tools listed above as well as in the kit.

356 Travel Kit (uses as a base the "356 TRAVEL KIT" prepared by Dawn Perry)

- 4 Spark plugs (note your heat range); W7BC for most normal and S cars; W6B for S-90, SC & 912 (W6Bs in kit are colder but can be used)
- 1 Distributor points set
- 1 Distributor condenser
- 1 Distributor cap
- 1 Distributor rotor
- 1 Plug wire set
- 1 Generator brush set
- 1 Set of generator pulley halves
- 1 Fan belt
- 3 Generator pulley shims
- 4 Each 8 and 16 amp fuses
- 2 25 amp fuses
- 1 Master cylinder brake light switch
- 1 Oil pressure switch
- 1 Each type light bulb (except headlight)
- 1 Split type axle boot kit
- 1 3M abrasive pad *
- 1 1 electrical jumper wire/ alligator clips #
- 2 Valve cover gaskets
- 1 Oil drain plate gasket kit
- 1 Each oil canister supply and return line
- 1 Oil canister top bolt washer
- 1 Oil canister top gasket
- 1 Tube Wurth DP 300 (a Petroleum Impervious sealant)
- 1 Fuel pump rebuild kit

- 1 Carburetor rebuild kit
- 1 Each left and right carburetor linkage ball end
- 1 Fuel filter (in-line plastic type)
- 1 Meter fuel hose (I use 2 meters*)
- 2 Fuel hose clamps (I have needed and use 4*)
- 1 1/2 meter stainless steel safety wire#
- 1 Clutch cable w/ cable adjusting nut or clevis
- 1 2 each, 2 sizes nylon tie wraps
- 2 8x1.25x12mm nuts (numerous applications)
- 2 8mm spring washers
- 2 6x1.0x10mm regular and/or Nyloc nuts
- 2 6mm wide area flat washers
- 2 6x1.0 sheet metal screws and washers
- 2 6x1.0x18mm bolts
- 1 Axle nut cotter key
- 1 Small parts box for all small parts
- 1 Excellent travel bag for parts that fits under hood for all models

End of Kit

Additional Optional Parts*

- 1 Generator woodruff key & hub
- 1 1 quart of your oil in plastic bottle
- 1 Set of 2 or 3 plastic gear shift parts (at shifter tower) for your model. I had a shifter on a "C" I was restoring in my hand crossing a major bridge in rush hour because the pin came out and the plastics were broken. This is not unique.
- 1 Pin for shifter tower fastener
- 1 Set of plastic shift parts for the transmission gearshift coupler
- 1 Schraeder air valve and valve cap
- 2 Each of 8mm x1.25mm bolts sizes 20, 25, 30, 35 long and 6 each 13/14mm nuts #
- 1 Strong cotton cord and Loctite 574 Gasket seal from the Rolls Royce Patents for aircraft
- 1 Assorted washers for 8mm bolts and screws
- 1 912 fuel pump spacer gasket in addition to 356 version
- 1 Bleed screw set and accelerator pump for your carburetor (if not in your repair kit)
- 2 Meters of fuel hose (preferably new type US)

Heavy Traveling & with Groups*

- 1 Ignition Coil for 6V and/or 12V (GM or Ford in an emergency)

- 1 Spare distributor for your car, perhaps updated by Gearhead Inc. (Don Marks) to today's gas. Note there are several distributor models used *or* your spare 009 type, etc.
- 1 6V voltage regulator (note the silver ones fail randomly)
- 1 Set of front inner/outer wheel bearings; also rear bearings and seals. (These require a special tool to install.) Pre-grease everything and package in plastic wrap to be neat.
- 1 Fuel pump (new style as old is NLA)

Really Pushing the Envelope*

- 1 Assortment of engine and exhaust gaskets
- 1 Generator w/ fan attached. While this is a large item, you can have difficulty with the fan assembly in the field
- 1 6V Bosch Starter w/ solenoid and a 17mm wrench to hold the starter bolt behind the fan; also can be held with a little gum, clay, etc. while working or get the V tool for this application from a dealer or VW parts shop. Some have a magnet to hold the bolt in place.
- 1 Master cylinder

On the road, the heavier duty parts for traveling with a group belong to the professional or the guys who can overhaul an engine in the parking lot with a Porsche Tool Kit. They do not need this advice. Of course if you suspect you may have an impending failure carry the spare!

VENDORS

356 Registry Magazine is the source of all good things for our 356s at www.356Registry.org

Blocks Books

Manuals, electrical update parts, etc.
7925 Coldspring, W. Bloomfield, MI, 48322-4214
248-535-1449 and blocklab@aol.com

Jim Breazeale of EASY (European Auto Salvage Yard)
Porsche dismantler for parts and jacks listed above
4060 Harlan St., Emoryville, CA, 94608
510-653-3279, easypor@sbcglobal.net and www.easypor.com

Eric Cherneff

Information on what each tool kit should contain
www.356.ca/tools/travelkits.htm

Ron Domkowski

Electrical schematics

Arlington Heights, IL, 60005,
847-394-3393 and rond18@juno.com

Gary & Rod Emory of Parts Obsolete
Porsche parts up to 1988 on most models (Ships for problems!)
13851 SE Eola Village Road, McMinnville, OR 97128,
503-835-2300 and gary@partsobsolete.com

H3r
Manufacturers of Halon and Halotron extinguishers for homes &
vehicles safety
www.h3r.com/products/home_vehicle.htm

Don Marks of Gearhead
Distributor and jack overhauls
Amity, OR
503-835-8410
Never trust an original jack that has not been examined and
approved by a professional mechanic or restorer. They have created
many problems, as they have a tendency to explode or bend under
pressure. The rest are probably because the user did not read up on
how to use these jacks in the owner's manuals.

Pete McNulty (on the Board of Porsche 356 Club in Southern
California)
Manufacturer of 356 parts such as replica tool kits, tire belts, interior
luggage belts, Optima battery housings, etc.
949-487-2492, 949-400-9319 (cell) and pmcnulty98@aol.com

Performance Products (previously Automotion)
Porsche parts
800 Haskell Ave., Van Nuys, CA, 91406-1321
800-789-1879, www.PerformanceProducts.com

Dawn Perry of Dawn's Restoration and Repair
"THE TRAVEL BAG" for 356s
916-447-3665

Bill Perrone of The Parts Shop
Original and reproduction tool kits, 356 parts
15725 Chemical Lane, Huntington Beach, CA 92649
714-894-3112

Brad Ripley of NLA Ltd.
Specializes in 356 parts, tools and supplies only (Ships for problems!)
595 Spice Island Dr. #2, Sparks NV, 89431 and PO Box 41030, Reno,
NV, 89504
800-438-8119 and www.nlaparts.com

Stoddard Imported Cars

Porsche's answer for all parts for all Porsches with many different substitutes for obsolete parts and standard parts.

38845 Mentor Ave., Willoughby, OH, 44094-0908 and PO Box 908,
Willoughby, OH, 44094-0908

800-342-1414 and www.Stoddard.com

Terry at International Mercantile

Specialty manufacturer of rubber and vinyl parts for vintage Porsches

PO Box 2818, Del Mar, CA, 92014-5818

800-356-0012, internationalmercantile@hotmail.com and

www.netsv.com/im/

Charlie White (Der White)

Manuals, books, tool kit descriptions, electrical schematics, etc.

8639 E. Via de los Libros, Scottsdale, AZ, 85258

480-367-8097/8639, derwhite@aol.com and

members.aol.com/_ht_a/derwhite/

Derwhites356LiteraturePage.htm

REVIEWERS

We want to thank the following individuals for their sage advice and help with reviews, emails, and phone calls. While some who did not know they were helping, most did!

Clark Anderson of 356CAR and PCA for his extensive drive train help and repair shop experiences at Garretson some years ago as well as his development and restoration of all kinds of 356 tools, parts and engines at his Metric Motors.

Ted Blake of 356CAR in Sacramento and Ted Blake Restorations, 2701 21st St., Sacramento, CA, 95818; 916-455-5010.

Jim Breazeale of EASY for information regarding alternate jacks

Steve Douglas of 356CAR for his travel, general and repair lectures, as well as for his 356 leadership in Northern California. SOQUELGLEN@Prodigy.net

Dawn Perry of 356CAR and Dawn's Restoration and Repair in Sacramento, CA

Pete McNulty of Porsche 356 Club in SoCal for his knowledge and help with peripheral 356 parts and accessories

Wolfgang Reif of PCA, owner of German Competition Motors, 25437 Mission Blvd., Hayward, CA, 94544; 510-537-5955. A long time 356 repair shop, mentor and restorer in Northern CA.

Jim Shuh of 356 Group Northwest for his knowledge of 356 restorations and tools.

Don Marks of Gearhead on distributors, Porsche jacks, carburetors, etc.

Written by: Paul N. Risinger of 356CAR, 356 Group Northwest, and PNWR of PCA, pnr@aol.com. (Please start any email title with *Tools-Parts* or it probably won't be found.)

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