

Essential Tools & Parts

These are the items that I don't go to the grocery store without. Most of it will fit in a shoebox under the back seat. If one needs more tools than this on the side of the road, the car probably needs a tow truck. As a general rule, I recommend carrying the following even if one don't know how to use them, because strangers often come along who do.

See you on the road.

- Robbie





Breaker Bar w/19mm Socket

Allen Wrenches

style for tight spots.

Get the 1/2" size, about 18" long. You'll use this for lug nuts, and I like a one inch extension to keep your fingers from getting dirty on the tires.

I prefer the 3/8" drive socket style, from 3mm to 8mm.

2mm to 4mm sizes are nice to have in regular Allen wrench

Channel Locking Pliers

Get one small and one large pair. When the rubber handle grips come off, a drop of super-glue will be handy. Welcome to the new economy...

Crescent Wrench

Also known as a "metric nut-rounder," it can get you out of a bind, but always try for the correct wrench first.



Dental Picks

These are excellent for cleaning small parts, applying distributor grease, and spelunking for dropped nuts.

Digital Volt/Ohm Meter

A "pen type" voltmeter is compact, and won't confuse you with a dial of useless settings.

Gloves

Some people love grease under their fingernails. For the rest of us, gloves exist.

Flashlight

Don't get fancy here. (And no, your smart phone doesn't count.)



Feeler Gauges

You can carry the whole set, but you really only need .006" for valves, .016" for points, and .026" for spark plug gaps.

Jack

Stock jacks only work on rust-free cars on flat ground. A bottle jack is a lovely way to lift one wheel off the ground while you use the stock jack as a redundant safety. (Buses get 10-ton jacks, bug get 6-ton.) You DID remember to inflate the spare tire, right?



Knife

You camper owners probably shouldn't use the kitchen cutlery to splice wires and fuel hose. I use a box cutter for the quick-change, ultra-sharp blades, but a real pocket knife is handy too.

Magnet and Mirror on a Stick

You can get flexible shafts, built-in LED lights, and pocket clips. None of those features appeal to me.

Needle Nose Pliers

I like the kind that have a wire-cutting jaw; one less tool to carry.

Noid Light (Fuel-injected engines only)

Volkswagens <u>with fuel injection</u> should use a Bosch 2 noid light to check for injection pulses during a no-start.

Paper Towels

Blue shop towels don't leave fuzzy residue in your engine like kitchen towels do.

Screwdrivers

Did you know Philips screwdrivers are sized, just like wrenches? Sizes one through three are handy. Flat-head screwdrivers are measured in width, so get 1/8" for carburetor adjustments, 1/4" for general work, and 3/8" for tin screws. A stubby flat-head is mandatory; I keep a stubby Philips onboard too. NEVER use an undersized screwdriver.









Socket Set with Ratchet

8mm-19mm sockets, with your choice of ratchet wrench. 3/8" drive works for most things except lug nuts. A three inch extension is mandatory, I carry a few others. Like the wrenches, leave the unused sizes at home.

Tire Pressure Gauge

The dial gauges are a little more accurate, though you have to remember to reset some of them between readings. If you get a plastic stick-type, compare it to a high-quality gauge for accuracy.

Vice Grip Pliers

Get a large and small pair in the all-metal design; they're easier to keep clean.



Wrenches, Open End and Offset Box

Leave the 9mm, 16mm, and 18mm wrenches at home, your car doesn't have any fasteners in these sizes. Type 4 engines also need a 22mm wrench for the alternator nut. Ratcheting heads are a luxury, and often don't fit into tight spaces. Single carburetor cars need a curved "carburetor wrench" too.

Parts

Belt

Type 1 engines do not pass go, do not collect \$200 without a properly installed fan belt. You will cook an engine in minutes on the highway without one. I generally don't carry a belt with a Type 4 engine unless I'm going out of cell service.

Bulbs

Sealed beam headlights are bulky and obnoxious, so I recommend the H4 housing and bulbs, genuine Hella brand only. You'll have smaller spare bulbs and better illumination, while staying within the stock electrical system capacity. Rear/signal "1057" bulbs are commonly available, but most stores are closed at night...

Carburetor Rebuild Kit

Take the parts out of the ridiculously large box, give away the components that don't fit your carb, and seal the good stuff up in two plastic baggies. (Sharp parts! One is almost sure to rip.)

Distributor

If you set the points and timing, then remove the distributor clamp with the distributor attached, it will be ready to drop in with no setup at all. Hopefully you can find the same model as your existing distributor, so there will be no cap/rotor compatibility issues.

Electrical Connectors and Wire

Fifteen feet of 14AWG wire in your choice of color will allow you to troubleshoot and bypass faulty components.

Fuel Injection Spares

I always carry two head temp sensor (TS2) replacements and a double relay.

Fuel Line

You inspect your fuel lines at every oil change for cracks right? So you should never need this... But if you run out of gas or need to troubleshoot a fuel problem, it will help immensely.

Fuel Pump and Filter

If your pump is rebuildable and you are handy, a rebuild kit will suffice. All others should have a fuel pump and at least one filter onboard at all times.

Fuses

Eight amp (white) and sixteen amp (red) Bosch/torpedotype fuses are used in air-cooled VWs. Never use a higher amperage fuse than specified.

Chemicals

Engine Oil

Check your oil every fuel stop, after the engine has been off for a few minutes. Wipe dipstick, reinsert, pull, and read. Level below halfway should be topped off. A little over full is fine, but don't go nuts.

Glass Cleaner

Along with the paper towels, you may find enlightenment in squeaky clean glass every morning like I do.

GumOut Brand Carburetor Cleaner Spray

Parts cleaner, tool washer, paint stripper, bear spray... The list goes on!

Hand Cleaner

Even with gloves, you may find the orange pumice cleaners to be helpful after a roadside repair.

SuperLube Synthetic Grease

Almost everything on your car, aside from wheel bearings and axle joints, can be lubricated with this plastic-safe synthetic grease. Tubes are available that fit nicely in a small tool box.