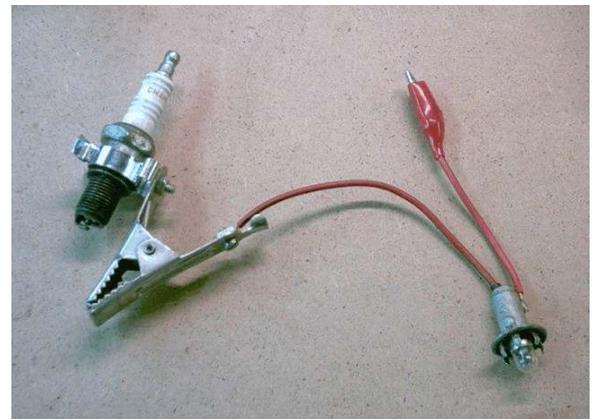


## ON-THE-ROAD REPAIR KIT

This is my emergency tool set that I carry in my pannier bag even on short trips; too much hassle to take out the tools that I probably won't need, and the weight is no problem. But of course you are free to leave some items at home if you are not venturing far away, and if potential help nearby. When I specify Gedore tools, that's not because I have shares, but because I could buy them with 40% off list price through my employer... But there are similar tools in the Facom, Snap-On and other catalogues.

- ring spanners; 1/4"x 3/16" and 5/16"x 3/8" will suit most nuts and bolts on an M20
- 10" adjustable spanner (check that it will fit the front and rear wheel nuts)
- plug spanner
- 7" mole grips (handy if you loose your gear change lever....)
- combination pliers
- Gedore D30: 7/16" AF socket, Gedore 3081 with 3/8" square, Gedore 3090/3 3" extension, Gedore 3090/5 5" extension . All these are indispensable to extract the rear brake drum flange bolts !
- valve removal tool
- 2 short tyre levers; the 8" Gedore no. 38 are fine
- a small hammer
- an "Eclipse" hacksaw, or at least half a 12" hacksaw blade
- tyre repair kit with self adhesive patches.
- steel wire (the kind that flower shops use)
- gaffer tape
- a small multi-meter
- two spare plugs of your favourite type
- plug holder with small control bulb
- a bag with assorted nuts and bolts (CEI and WW of course, but a few metric ones might be useful)
- a small screwdriver and a larger one
- feeler gauges
- a small bottle of strong Loctite
- Spare light bulbs; I only need the main (dual filament) one, all the others have been replaced by LED's
- Inner tube 3.25-19
- Head gasket, gearbox outer cover gasket
- Small gear change return springs (if one of these breaks you cannot select gears)
- Kickstart return spring.
- Kickstart cotter pin and nut.
- rear stand spring removal tool
- Throttle cable, advance/retard cable, clutch cable, valve lifter cable: you can store these with some twisting in the head lamp shell
- some solderless nipples
- roll of insulation tape



- some Lucas bullet connectors, a piece of resin core solder and a cigarette lighter, and a few connectors
- a small torch, or even better, one of these modern LED contraptions you put on your head
- a small powder-type fire extinguisher
- a few length electric wire,
- fuses
- an emergency small tyre repair kit that fills your tube with foam to get you home; the tube becomes useless but it's always better when it is night time, pouring in rain or snowing, or you're in a hurry.
- links and split links for the primary and rear chains, some spare spring clips
- chain link tool
- chain assembly tool; this one is home-made using a small machinists clamp, but there certainly are ready-made ones in the shop.
- a spare gearbox mainshaft key (K139). Very hard to find if you drop it during a roadside repair!
- spare exhaust valve (I never needed one but keep Murphy's Law in mind); a spare valve spring and cotters don't add much to the total weight, so add them.
- spare dynamo pickup and brushes
- a short bungy with two hooks; excellent to temporarily replace your kickstart spring when it fails
- a pair of cotton gloves
- a piece of carpet tile to catch that occasional drop of oil



In addition, I always carry a small supply of first aid materials: plasters, sticking plaster, iodine, bandage, Aspirin.... And of course a cell/mobile phone.

### ***Ignition timing tools set***

A handy set of tools I always carry with me. On the left you see:

- the magneto pinion extractor tool; you can make it yourself, but unless you are an ace with the lathe, I strongly recommend buying one; they are not very expensive!
- the Allen key for my modified cylinder head timing bolt,
- a kebab skewer,
- the home-made piston stop,
- the small hook to pull the contact points slightly apart for the paper,
- the Magdyno spanner,
- additional magneto spanner set,
- a package of cigarette papers (these will last you several lifetimes) and
- a reserve contact breaker set.



The use of these tools to set your ignition is explained in the file "Ignition setting.pdf"

Hans Muller,

with thanks to Ian Wright who was kind enough to check the list and had valuable additions

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