TECHNICAL DATA LE PATRON 3 & 4

ENGINE

CYLINDER CAPACITY	602 cc / 74.0 x 70.0	652cc
BORING x STROKE	mm / 8.5 : 1 / / / /	77.0 x 70.0mm
COMPRESSION RATIO		9.0:1
VALVES PER CYLINDER	2	2
MAXIMUM POWER	36 HP	45 HP
MAXIMUM TORQUE	57 NM	85 NM

TRANSMISSION

DRIVE	FRONT WHEEL DRIVE
TYPE	MANUAL
NUMBER OF GEARS	4

SIZES & WEIGHTS

	LE PATRON 3 /	LE PATRON 4
L x W x H	354x144x110 /	345x144x110
B WITH SPOKED WHEELS	157CM / / / / / / / /	157 CM
WHEELBASE	236 CM	240 CM
TRACK WIDTH	126 CM	126 CM
TRACK WIDTH SPOKE WHEELS 131 CM		131 CM
THE NUMBER OF WHEELS	3	4
WEIGHT	420 KG	480 KG
LUGGAGE COMPARTMENT CONTENTS	280 LITERS	310 LITERS
FUEL TANK CONTENTS	27 LITERS	25 LITER

PERFORMANCE

TOP SPEED	150 KM/H		140 KM/H
FUEL CONSUMPTION	1:20	//	1:18

PRICES

CONSTRUCTION PACKAGE PRICE	VA	5000.00	EURO
PRICE NEW COMPLETE	VA	15000.00	EURO

CONSTRUCTION MANUAL "LE PATRON 3" & "LE PATRON 4"

03-09-2019 21st VOLUME

First read this manual in its entirety. We advise you to purchase a source of information for the technical part of the donor car.
Don't hesitate to call us if you have any questions, we will be happy to help you.

DONOR:

Use a donor (2cv, dyane, ami, etc.) with a complete license plate. If you do not have a complete license plate, please discuss with us what the options are. An Acadyane may no longer be used due to the wheelbase being shortened, these were still permitted until 01-01-2017. Make sure you suspend the license plate if there is no valid MOT certificate, it is not insured or if you do not wish to pay road tax, this also applies to cars older than 40 years!!!

If the old chassis is no longer usable, ensure that a preliminary investigation is carried out by the RDW before you start disassembly. The chassis number, including the chevron sign before and after, is normally 11 cm long, and the characters (17 letters and numbers in total) are 7 mm high, due to the re-imposition of the number by the RDW in the new chassis (with certificate). The RDW is the only one allowed to enter the number.
Replacing the chassis is considered a repair and therefore has no influence on the date of first admission.

PACKAGE:

We assume that, in addition to the Donor, you are in possession of a complete package for a standard "LE PATRON".

Our aim is to be able to supply all the parts you need or would like.
Ask for our extensive price lists for Patron, 2CV, general, mounting parts!!!
It will take you approximately 200 hours to build.

Once again if the chassis needs to be replaced by a new one, you must hand over the old and original chassis number during the inspection!!

Protects you and any fellow builders against dust when sawing/grinding/filing, etc.
Use safety glasses, dust mask, gloves and earplugs to protect your health.

Use the tool safely and for its intended purpose.

DISASSEMBLING THE DONOR

Never be tempted to run the engine without the clutch cable installed, as this could cause the lever to irreparably damage the pressure plate.

If you want to remove the drive shafts, do this while the car is still braking.

Disassemble and store unless otherwise stated:

1) Dispose of the doors/tailgate, keep locks and strike plates at the front and rear, if necessary to use if you are going to install doors.
2) You can remove the hood after you have removed the license plate, which must be reinstalled later. You may use the washer if you have opted for a large windscreen.

3) Remove front fenders with triangle (code indicator wiring).
4) Save sessions if you want to use them.
5) Battery including container and mounting (code wiring)
6) Rear license plate
7) Exhaust from 1st silencer
8) Odometer cable
9) Choke cable: do this carefully without breaking the plastic clamp part. Also remove the metal bracket from the carriage if you are going to use the original cable, which is welded saws.
It is easier to purchase a universal choke cable, which is longer, so it can be mounted in a more accessible place and can simply be secured in a round hole (we normally have this in stock).

10) Throttle cable, which will later prove to be too short, a rear brake cable from a bicycle will provide a solution, but use the spring mechanism mounted on the cable, as this prevents you from forcing the carburetor.

11) Disconnect the handbrake lever under the hood and then pull the lever inwards out of its guide. Don't forget the guide itself, it is spot welded to the body. You can drill away these spot welds so that the guide comes loose.
12) Clutch cable, adjust it with the adjusting nuts so that it can be easily disconnected at the pedals.

13) Gear lever, loosen the connection under the hood, and loosen the guide tube of the shift rod in the compartment, do not forget the plastic rings, these will later ensure that the guide tube absorbs the height difference of the shift rod on the box.
14) Fuel filler pipe
15) Steering rod complete
16) Headlight adjustment mechanism and drains.
17) Dashboard, pay extra attention to coding the wiring!!!
18) Dispose of heating cable.
19) Wiring harness, remove completely and code all mounting points. Pull the cable on the fuel tank outwards from the bottom.

We are now almost ready to remove the bodywork from the chassis.

Just the following points:

20) Loosen the two brake line fittings from the master brake cylinder.
21) Floor bolts, with which the carriage is attached to the chassis, also under the 4 plastic caps. 22) 23) Body, which can now be removed, save for the following parts:
First remove the pedal set with master brake cylinder reservoir.
24) Type plate.
25) Windshield wipers and motor if you want to use them on a large windshield.
26) Windshield washer tank if you want to use it for your large windshield.

Now the bodywork can be removed.

30) Headlights.
31) Ignition coil with brackets and spark plug cables.
32) Headlight bracket, dispose.
33) Dispose of both bumpers unless you want to use them again.

Dismantling engine block parts.

Disassemble and store unless otherwise stated.

34) Exhaust pipes with heat exchanger.
35) Dynamo including the adjustment mechanism. 36) 37) Manifold with carburetor (return manifold).
Oil filler pipe.

Place clean wipes in the vacated openings to prevent dirt from entering the engine block.

38) Cooling system, return pulley, remove remainder. Do not tighten the engine mounts yet. 39) Oil cooler, it often happens that the pipe breaks off at the fittings, this is not a problem, as you will be working with compression fittings later.

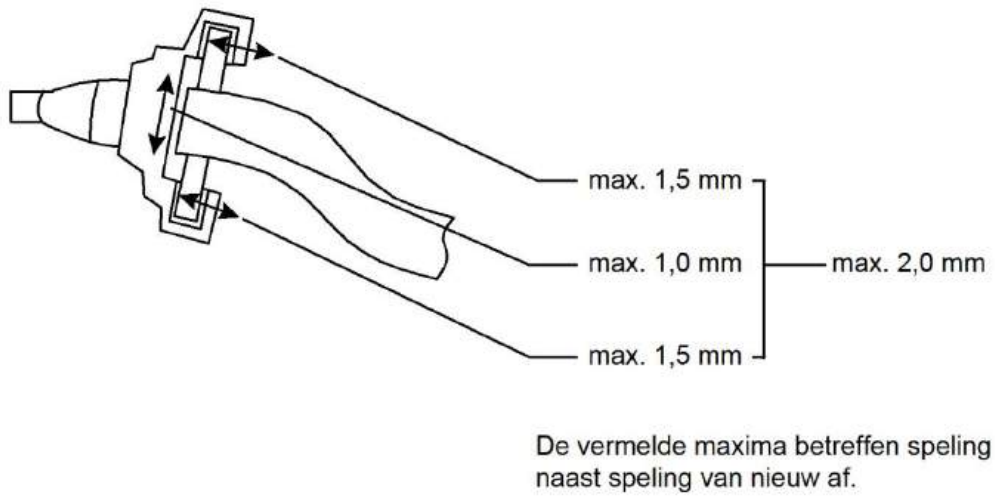
40) CHECK

Before you continue, we recommend that you check the following items:

A) Clutch plate Pressure group Pressure group bearing Clutch cable for wear, also check whether the gearbox/flywheel combination is correct, the old type flywheel 42 mm thick can be used on any gearbox, the new type 23.5 mm thick can only be used in combination with a new type of gearbox This gearbox can be recognized by the longer keyways of the drive shaft (shaft that slides into the clutch plate), which are 40 mm long instead of 23 mm on the old type.

B) Oil seals and gaskets for leaks.
C) Engine block supports Gearbox support for cracks.
D) Drive shaft boots and steering ball boots for leaks.
E) Steering ball joints for play, this can be adjusted if necessary.
F) Kingpins on radial play, this may not be more than 1.5 mm measured above or below the kingpin, the total from below and above may not be more than 2.0 mm.
The axial play, this may not be more than 1.0 mm in addition to the maximum play from new to 0.4 mm, so this amounts to a maximum of 1.4 mm.

Figuur 6



Figuur 6: Fuseespeling

G) Tires with a minimum profile of 1.6 mm. And check the inside of the rims to ensure that they are not damaged by rust in such a way that this could result in leakage, or whether they are touching the steering knuckle at the front.

Spoke wheels are not approved by the RDW, as the track width increases by more than 2%.

If you still want to install this, proceed as follows after the RDW inspection:

Shorten the studs so that they do not protrude through the supplied nuts when the adapter is mounted. Please note that there are left and right adapters, this is stated on the back: LH or RH. Tighten the 3 nuts for the adapter with locking agent (e.g. Locktite) to 80 NM (tighten evenly 40-60-80 NM).

After mounting, check that the hub of the rim does not touch the adapter/nuts or studs, you can do this with a piece of paper.

H) Shock absorbers must not show any leakage and must work properly.
Monroe shock absorbers, do not always work well on lowered kit cars. Look carefully at the installation manual.

I) Spark plugs Spark plug cables Contact points (If burned, also replace the capacitor)
J) Valve clearance.
K) Air filter (Use the original housing for RDW inspection for a 3-wheeler).
L) Exhaust must not leak (Use the original exhaust system).
M) Motor oil 15W40 or 10W40 quality at least SG (S stands for petrol engines G for the quality, the later in the alphabet the better) possibly add TSL.
N) Gearbox oil 80W GL4, or 80W90 GL4 EP (extreme/pressure).
O) Brake lines for corrosion, especially from front to back, even where they are protected by a hose. The two rear ones are also very vulnerable.

We make our brake lines themselves made of copper/nickel, these are more resistant to corrosion than the original.

P) Brake cylinders, brake calipers for leakage and ease of use.
Q) Brake pads Hand brake pads Brake shoes according to thickness of the lining.
R) Brake discs Brake drums by thickness (minimum brake disc thickness 6 mm, this is new 7 mm), grooves and runout.
S) Wheel bearings are free of play, they should also not be audible.
T) Check fuel hoses/pipe for leaks, install hose clamps at all connections.
YOU) Brake fluid, use LHM (green fluid) if you have disc brakes and make sure that all brake components are suitable for this fluid. Use regular brake fluid if you have front drum brakes; here too, all brake parts must be suitable for this fluid.

MAKE SURE TO CHECK THE BRAKE PARTS CAREFULLY, IF IN DOUBT, REPLACE!!

PREPARING THE CHASSIS.

41) Dismantle the petrol tank and possibly the bridge over it and store it.
42) Shorten the back
3-wheeler: 90 cm measured from the end of the chassis.
This corresponds approximately to 5 cm measured from the top and bottom chassis plate to the back.

4-wheeler: 50 cm measured from the end of the chassis. 3-
43) wheeler: remove the rear arms and install the supplied rear arm and stub. Please check whether the 3-digit number has been punched in and matches the number on the certificate.

Mount the torsion bar parallel to the axle. Secure the four bolts with a locking agent. 3-wheeler:
44) mount the supplied fuel tank as far back as possible against the rear axle.
4-wheeler: First install the fuel filler hose with bends on the tank before placing it **(see photo).**

20mm must be sawed off from the tank.
Take a piece of fuel filler hose of 50mm long.
First mount this piece on a right-angled 90 degree bend.
If you choose to mount on the side, make a 45 degree bend and see the drawing to determine the location of the hole.

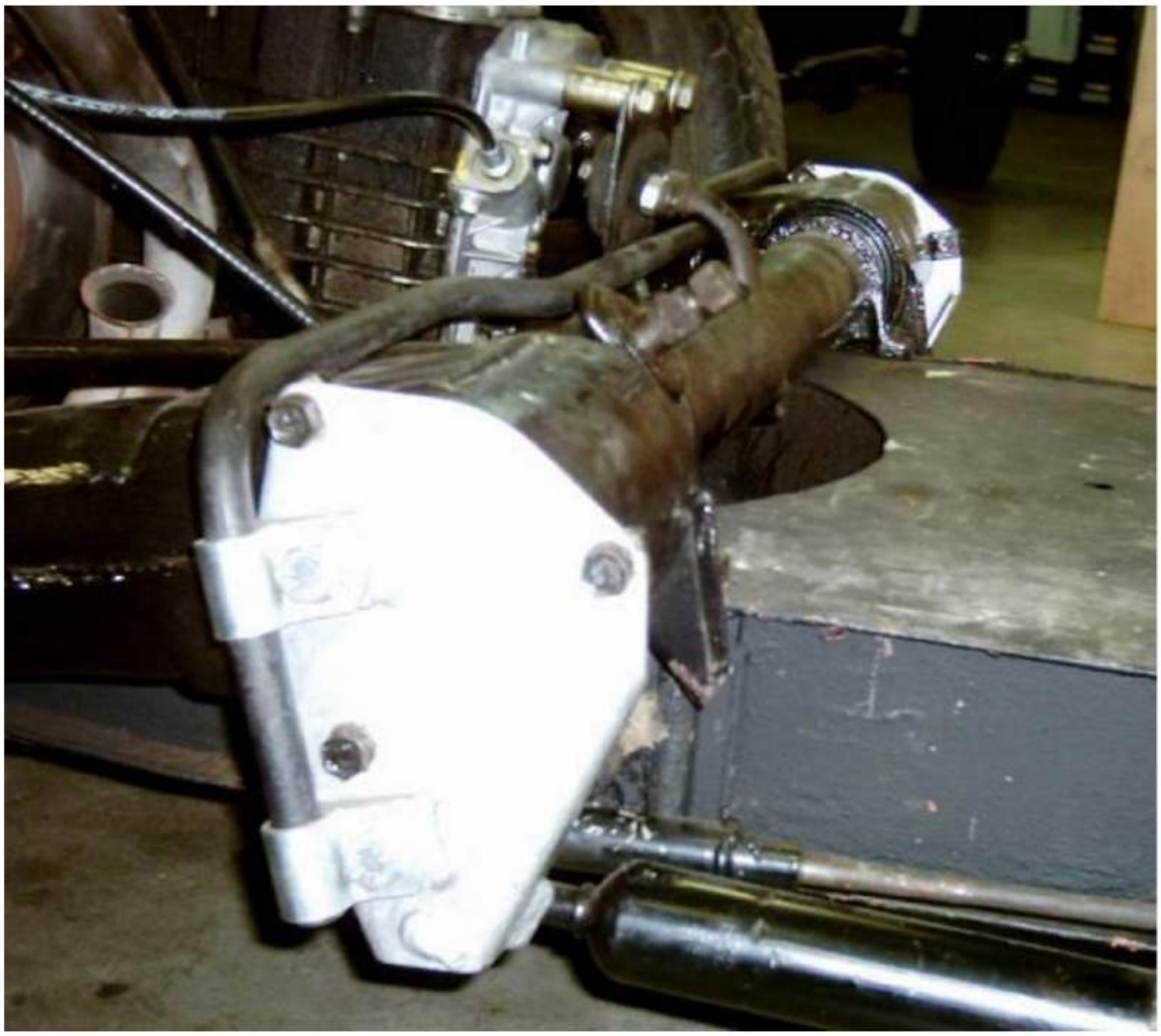
Mount this assembly on the tank, the rubber over the tank entrance and the bend in the tank entrance. This is not easy, but you can do it by using some silicone spray and possibly cutting at an angle, and possibly making the rubber flexible in hot water.
First mark 30mm on the tank, this is how far the rubber should go, then you know if it fits correctly.
The bend is then completely connected to the rubber.

Place the tank in its original location.

45) Install the fuel line using protection where it can touch the chassis.
46) Install the ground cable from the float to the chassis and the cable to the fuel gauge and the petrol line.
47) Install the brake line from front to back. **The rear brake lines do not yet connect to the brake cylinders,** they will later pass through the fender brackets. On the 3-wheeler, the line to the brake cylinder must be extended by approximately 10 cm (extension available, or better a completely new longer brake line) and can be connected to the original T-piece. The unused branch is closed with an M8 bolt and copper ring. Check **later** when bleeding whether this branch is liquid-tight.

48) On the 3-wheeler, mount the stabilizer bar at the front in the following way: turn the gearbox support over so that the thick rubber part faces forward. Replace the 2 bolts with M7

Mount the supplied side plates and mount the stabilizer bar with clamps, mounting the bar so that it is as close as possible to the arms. Check whether the clamps fit properly against the side plates, otherwise the rod will become stuck under tension and may bend.



49) Mount a 15mm thick block on each side of the edge of the chassis, in front of the front axle, under the stop of the wishbones so that the wishbones cannot drop too far when jacking up, so that the stabilizer bar does not damage the polyester.

You must deliver the following exchange parts clean:

* steering rod with guide bush.
* pulley (with or without cooling
fan). * intake/exhaust manifold.

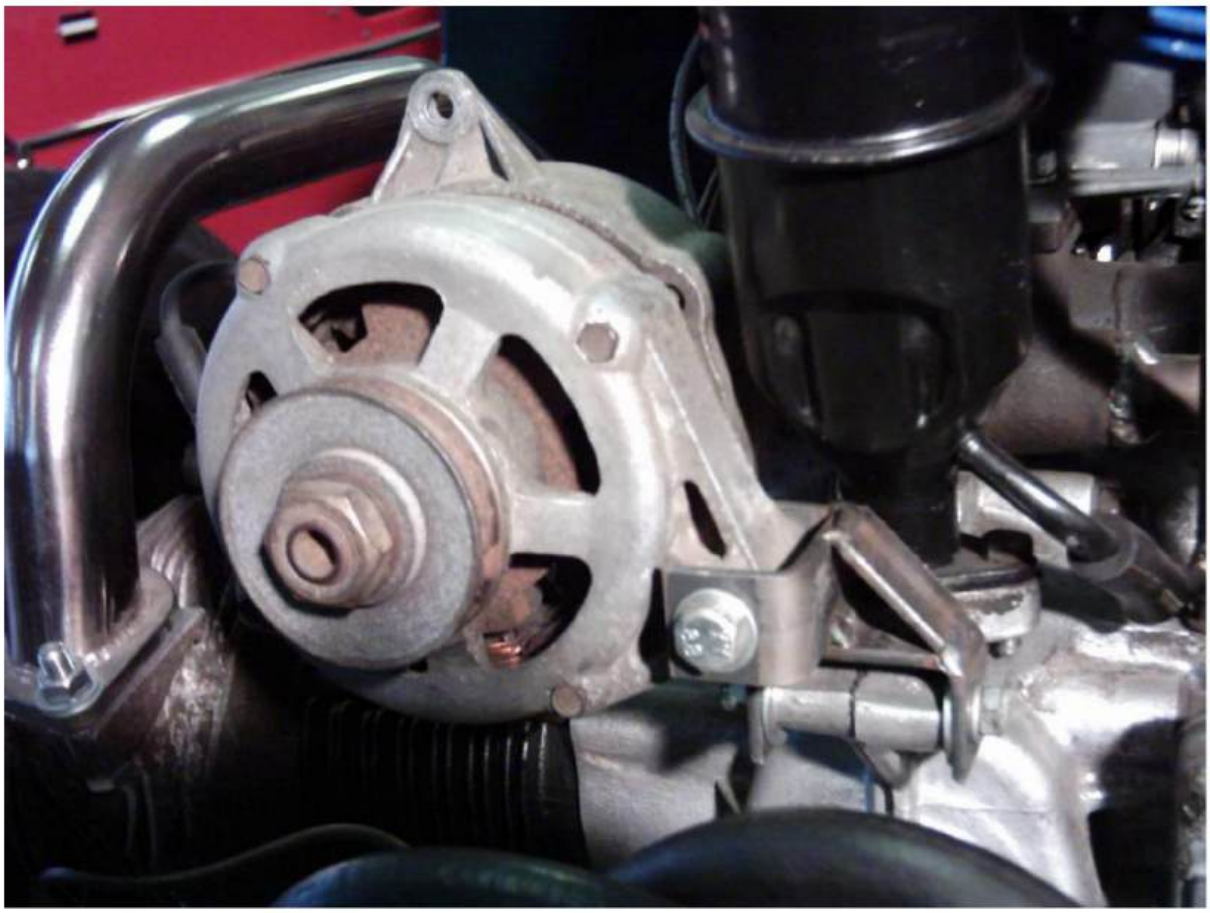
There are additional trade-in parts for a 3-wheeler, namely:

* cover plates for the front support arms.
* both rear wishbones (without bearings, bearing shells and brake parts)
* the petrol tank with float.

PREPARING THE ENGINE BLOCK.

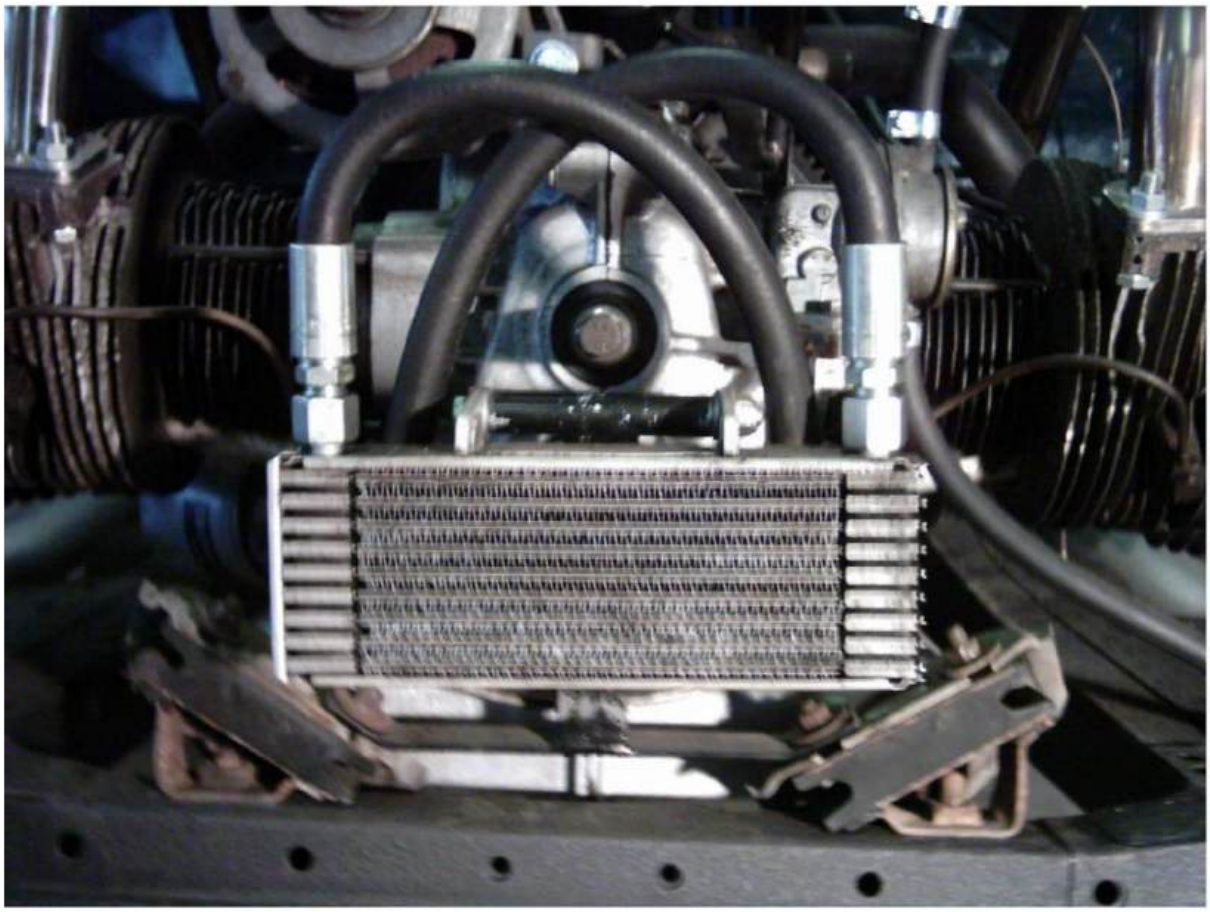
Please note that a Visa engine may not be installed for the RDW inspection, as you will then replace too many parts that are not from the original vehicle. This means that the old date of part 1 is not retained and the car is then considered a a new car is considered, which means you will not get approved. This is not a problem for an MOT inspection.

50) Install the modified manifold and carburetor, with new gaskets.
And place the headlight bracket on this.
51) Install the modified exhaust bends with new gaskets.
52) Install the modified pulley, paying attention to the conical side towards the crankshaft.
53) Install the alternator bracket on the old mounting point of the oil cooler.
Make sure there is an M8 body ring between the bracket and the block on both sides to ensure a flush fit.



54) Install the alternator with V-belt. Mount the bracket with rubber inlay on the
headlight bracket and connect it to the alternator earpiece.
55) Install the filler pipe with a new gasket (don't forget the small return hose).

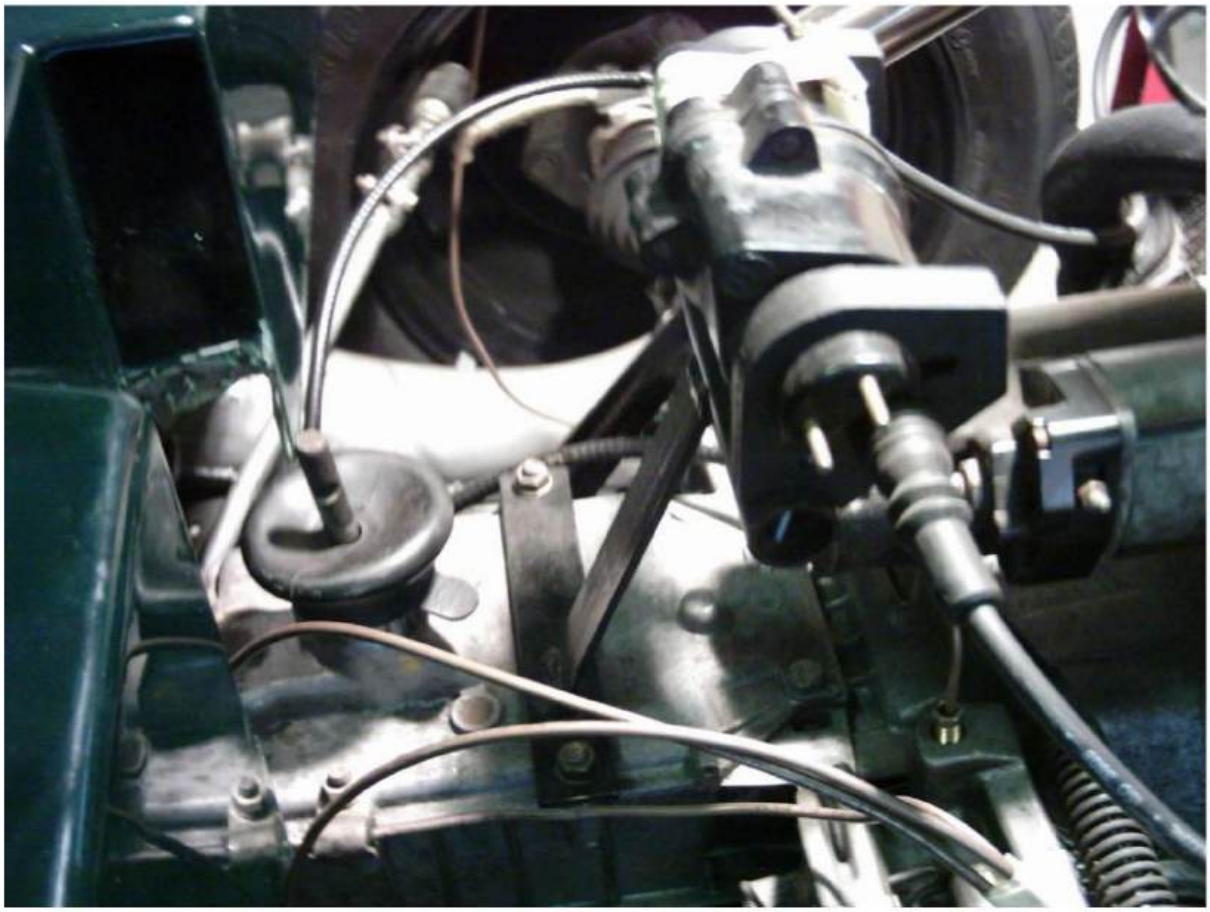
56) Install the oil cooler bracket to the inner studs of the engine mounts.



57) Install the oil cooler hoses with new rubbers.

58) Install the oil cooler, making sure that the pipes of the cooler are properly sized: 20 mm long. Now mark 15 mm on the 20 mm piece of pipe. Mount the swivel with cutting ring, approximately 2.5 mm of the pipe will protrude above the cutting ring, screw the swivel onto the hose barb, clamp the hose barb in the vice, hold the swivel in place up to the 15 mm mark and tighten the swivel firmly. the hose barb. Place the oil cooler with the pipes facing upwards. The hoses are supposed to cross each other to prevent kinks. Once the swivel with cutting ring has been tightened, it can no longer be moved, so make sure that it is in the right place the first time.

59) Install the ignition coil bracket on the gearbox. Use the 2 special lid bolts of the container. (Type of bolt/stud combination).



60) Install the ignition coil.

61) Install the supplied longer odometer cable in the gearbox.

62) You can also place the fuel cap on the side, on the sloping part where the rear lighting is also placed, but make sure you leave room for the lighting.

You only need a piece of hose of 25 cm and a 45 degree bend.

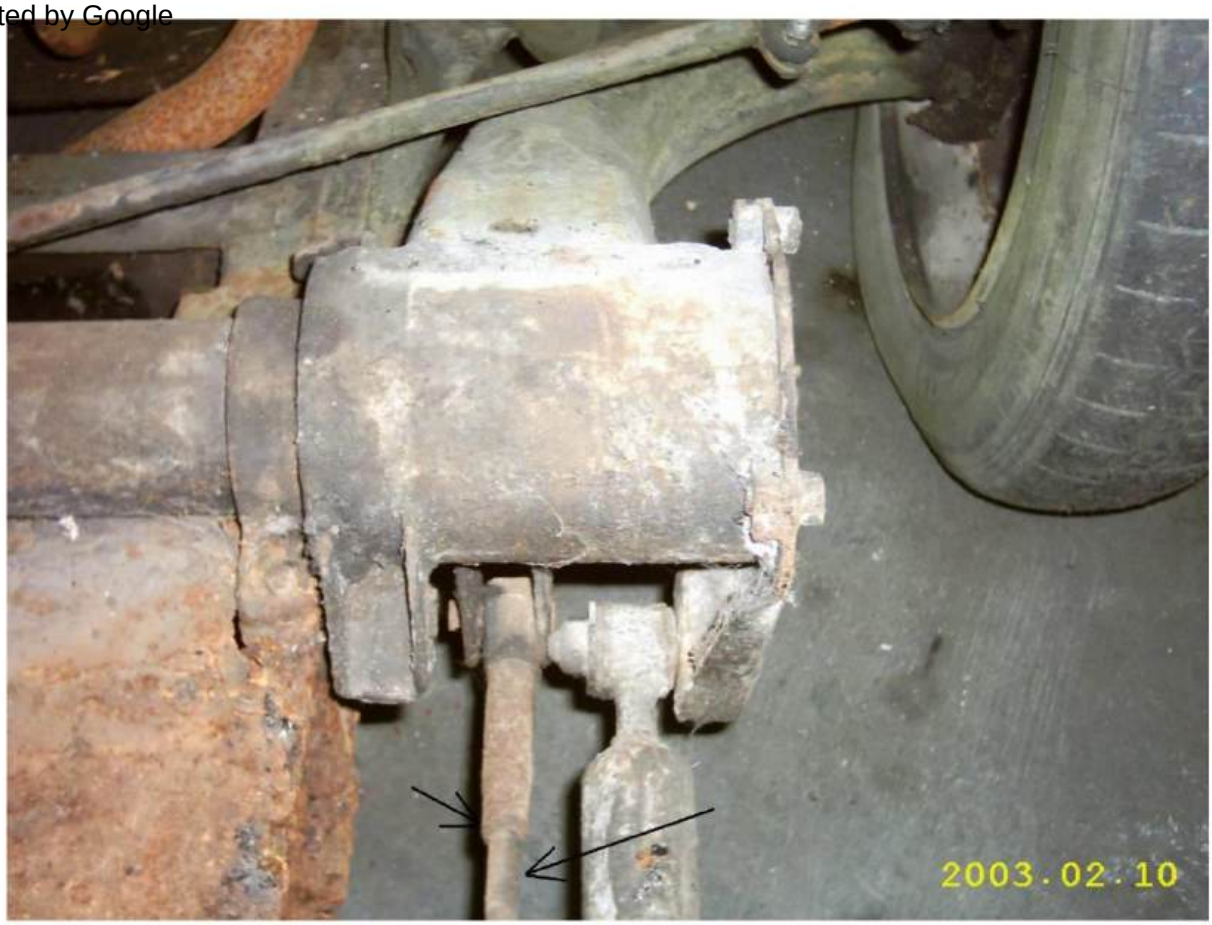
In the drawing you can see where the center of the hole should be, 8 cm from the back, and then leave 5 cm space on both the left and right.

THE ASSEMBLY OF THE BODY.

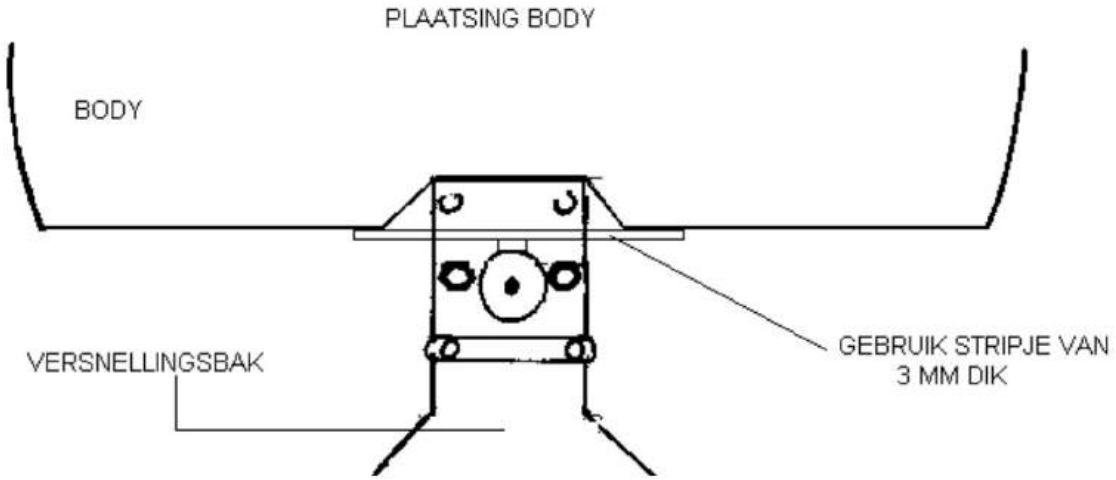
63) First mount the front panel to the body. Try it on the body first, if it does not fit flush to the body due to the mold seam, first remove the mold seam from this location. Drill 2 holes (6.5 mm) on both sides in the front panel where it is mounted to the body. Take into account sufficient space to place a washer under the bolt head and the location of the floor. Transfer the drilled holes from the front panel to the body. Make sure everything is properly aligned.

64) The chassis is now placed on boxes or blocks so that the wheels are released from the ground.
You must ensure that when the car is off the suspension, the rear arms do not touch the floor of the body or the tank in the case of a tricycle. Measure whether they do not extend above the chassis. If this is the case, this can easily be remedied by removing something from the arms.

65) Unscrew all 4 tie rods from the towing eyes. Make everything run smoothly. and screw the drawbars 20 mm into the drawbar eyes.



66) Mount chassis strap all around the chassis, where the body rests on the chassis, make holes in the chassis strap where the bolts go. Place the body on the base. Make sure that the body of the 3-wheeler does not rest on the rear wheel; if necessary, only mount a rim. At the 4-
When cycling, one must ensure that the body does not rest on the rear arms. Place the body so far forward that the 3 mm thick strip that you place at the front of the body is against the flat side on top of the box, just behind the gear lever entrance. **See drawing.**



67) Now check whether the body is placed straight on the chassis. This must be done visually in combination with the front piece, which must fit against the sides of the body and be just clear of the chassis at the front (round off the points of the chassis if necessary). . At the 3-cyclist, the rear wheel must end up in the center of the body (visually). For the 4-wheeler you can use the distance between the body and the wheels on either side as the criterion. Mark 4 holes (in the far corners) on the body at the bottom. Remove the body and drill the four holes 8.5 mm. Place the body and secure it with 4 M8 bolts and check again before continuing.

68) If a stabilizer bar has been installed, make sure that the front wheel arms can pivot freely. If this is not the case, you can remove the excess polyester. **Never remove too much polyester at once.**

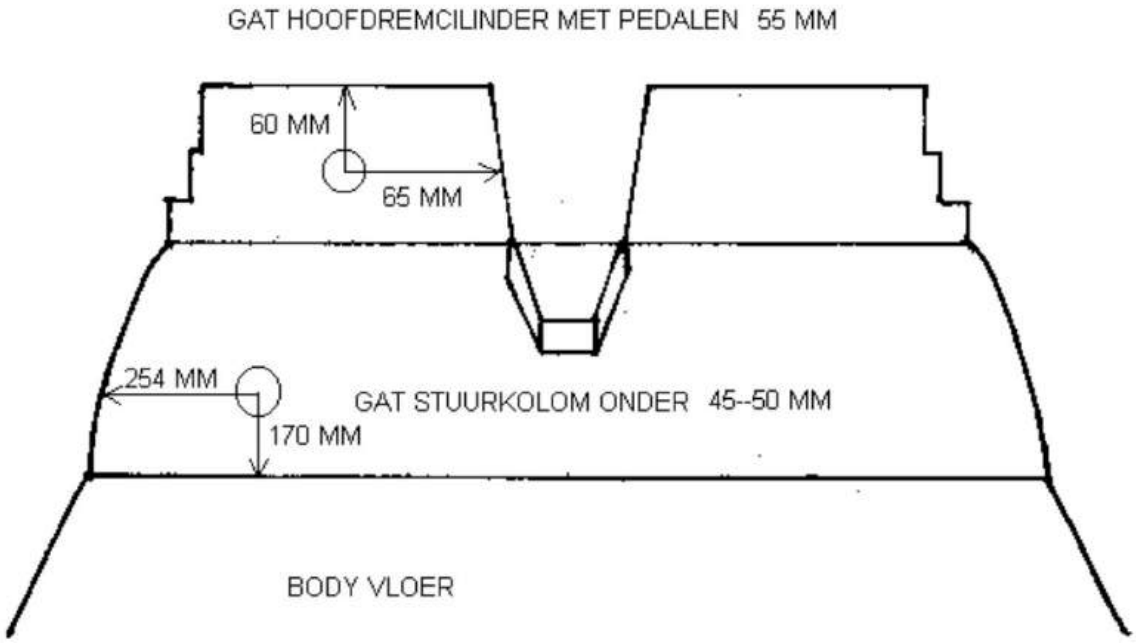
69) Jack up the chassis enough to clear the space with the drive shafts to place the front panel and install it. Watch out for damage and don't force anything.

70) Carefully lower the chassis again.

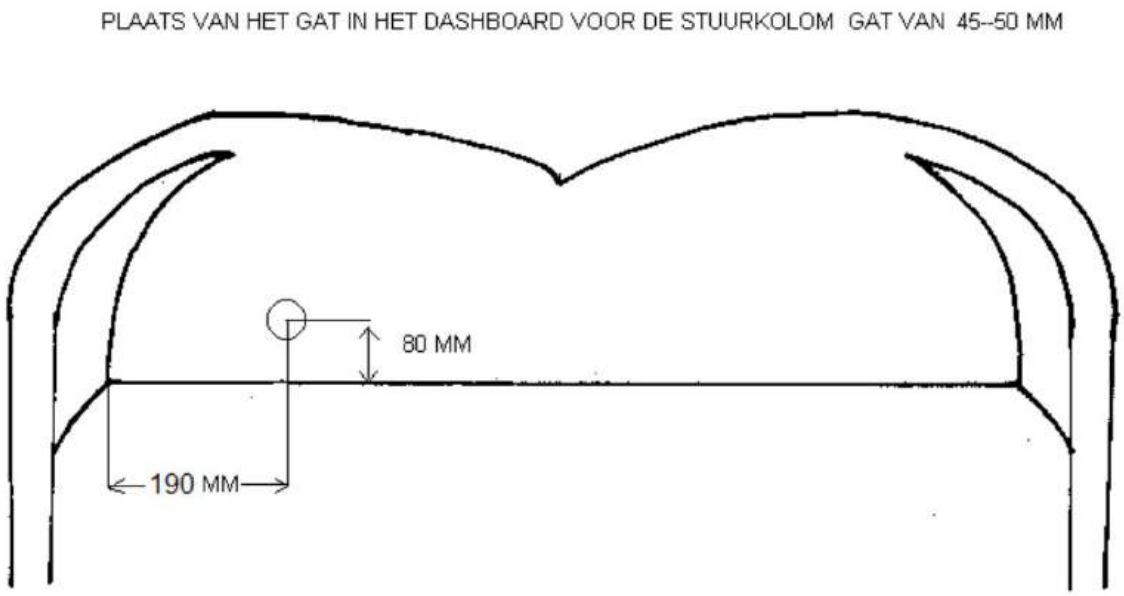
71) With the 3-wheeler you now determine where the hole for the rear wheel will be.
With the 4-wheeler you determine where the rear arms hinge through the body. Do this with the towing eye removed from the support arm, then remove the tilting blade with the 2 springs. Now remove the polyester step by step until the support arms have sufficient space to spring, you can at least continue upwards to 5 cm below the floor. Check whether the brake lines do not get stuck if the car deflects too far. If the body still hits, you can always remove a little more.

72) If the chassis number is on the bottom plate, determine its location on the bottom of the body.

73) Determine the place where the steering column goes through the body, first drill a small hole.



Determine the location where the steering column passes through the dashboard.



74) Determine and drill the rest of the mounting holes for the body.

75) Determine the passage of the fuel filler pipe in the floor and body **(see photo).**

You can end up in different places, depending on the length of the pieces of hose you use, if you go for side mounting then you go diagonally up to the hole made.
It is customary to connect a right-angled bend with a 50 mm hose to the tank, then a piece of hose and then a 45 degree bend, another piece of hose and then a right-angle bend upwards.
If you also use a right-angle bend instead of the 45 degree bend, you can end up further forward.

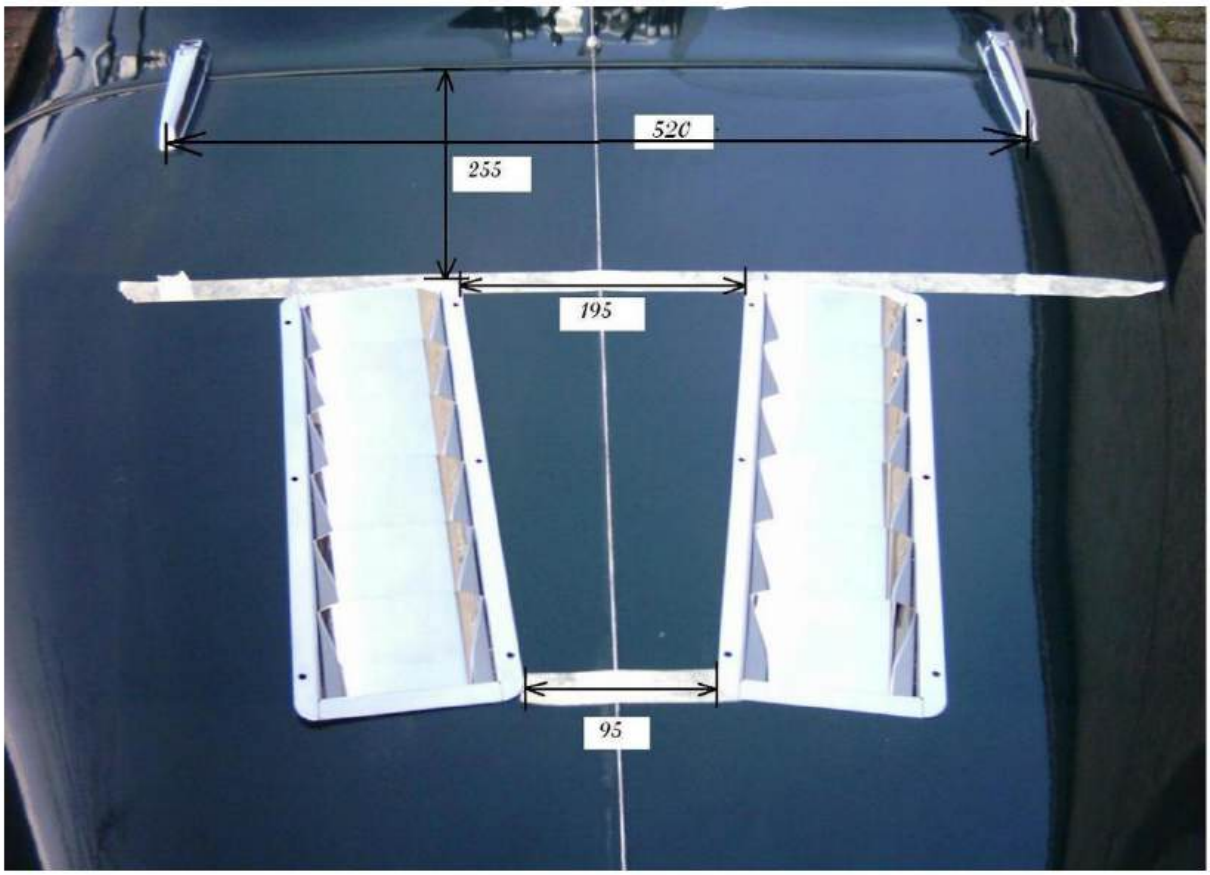
76) Now disassemble the body and remove the polyester specified in the 5 previous points.
77) Install the inner fender on the 3-wheeler and seal the edge.
78) Mount body to chassis with all bolts, 6 each side, including 2x M8 with normal M8 nut for seat frame, using chassis strap and lock nuts. And use body washers on the inside and washers on the bottom.

79) Remove the boxes or blocks and position the car at the desired height by turning in the tie rods. **PLEASE NOTE THAT THE RODS REMAIN AT LEAST 20 MM INTO THE TOWING EYES, SO DO NOT TURN OUT FURTHER.** If the cart is still too high, use our extended towing eyes. It is easier to turn the tie rods when the wheels are off the ground. Recommended height measured between the axle bolts: front = 15 cm, rear = 18 cm. Make sure that the front wishbones do not rest on the rubber stops or springs, if necessary remove the rubbers after the inspection.

80) Install the front panel, attaching it to the body only.

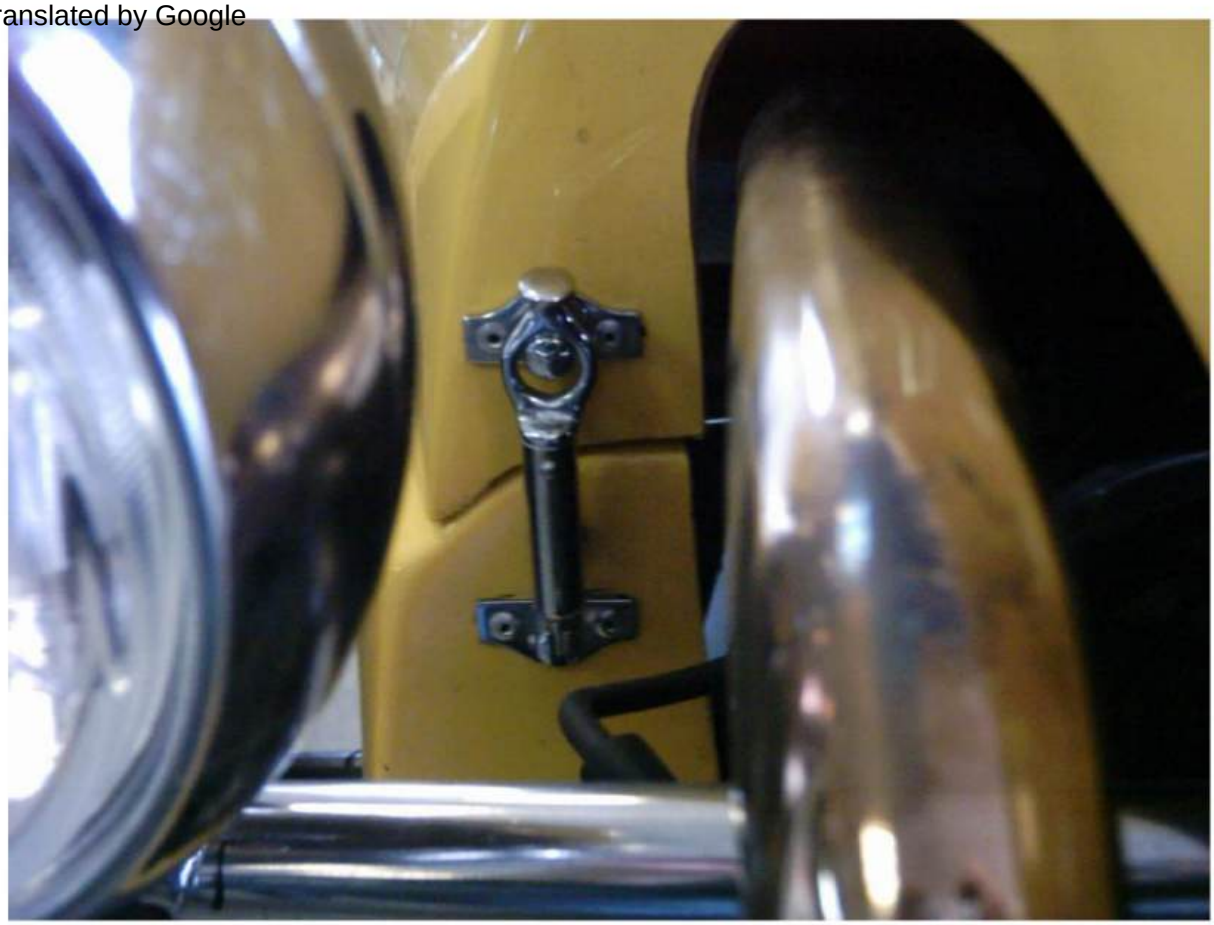
81) Place the hood, check that it fits properly everywhere. If necessary, remove as much polyester on the side of the body until the hood is flush with the body. Connect everything properly.
Before installing the hood, you must remove sufficient polyester from the hood so that the oil cooler is exposed. And so that the cooler is completely exposed to the wind.

82) Determine the location of the hood hinges, drill the holes and install the hinges. Use a center line and measure from this center line.

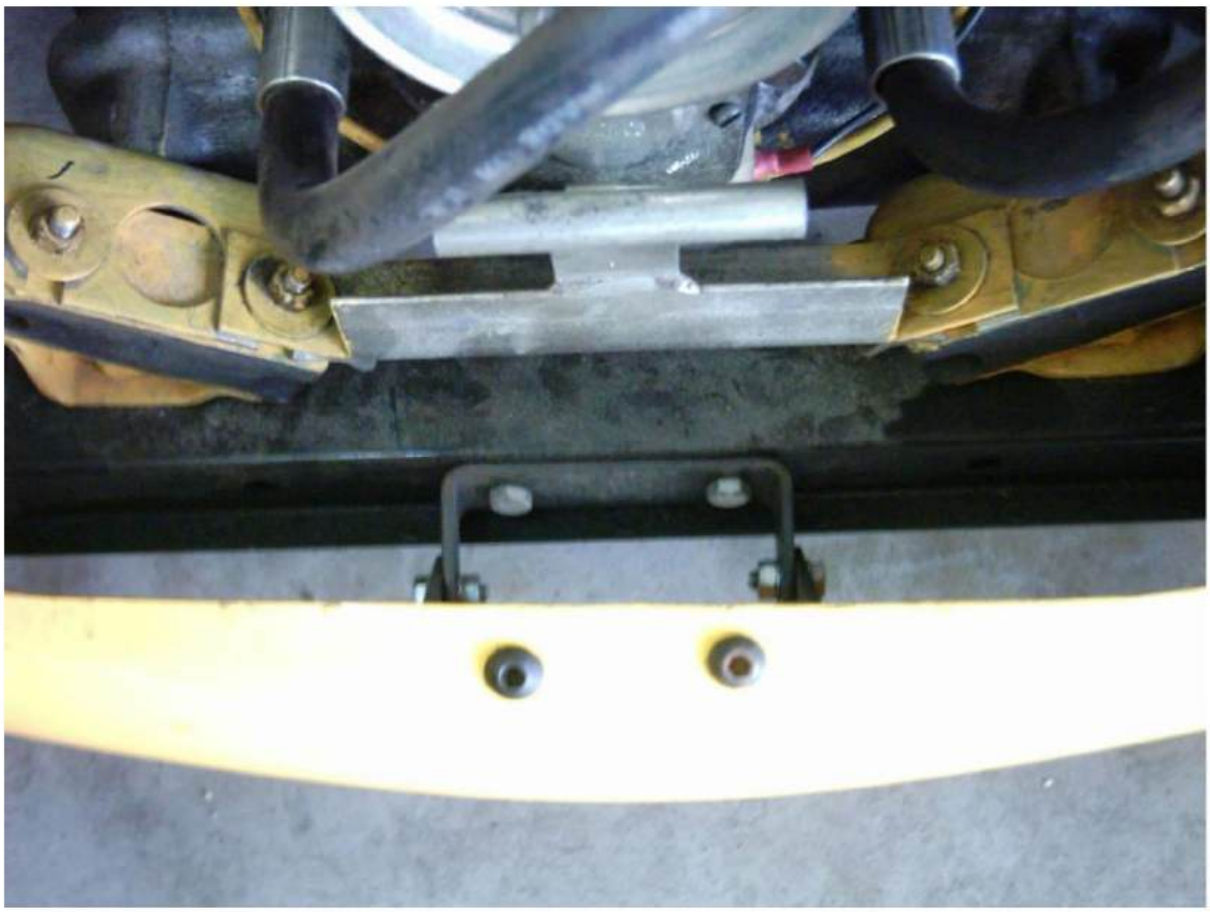


If necessary, place the louvres as indicated in the photo.

83) Determine the location for the hood springs behind the cylinders, drill the holes and install the hood springs. You have to make sure that there is tension.
Remove the rubber, this usually bothers you.



84) Attach the front panel to the front of the chassis, using the holes at the front of the chassis where the hood hook of the 2CV was attached.



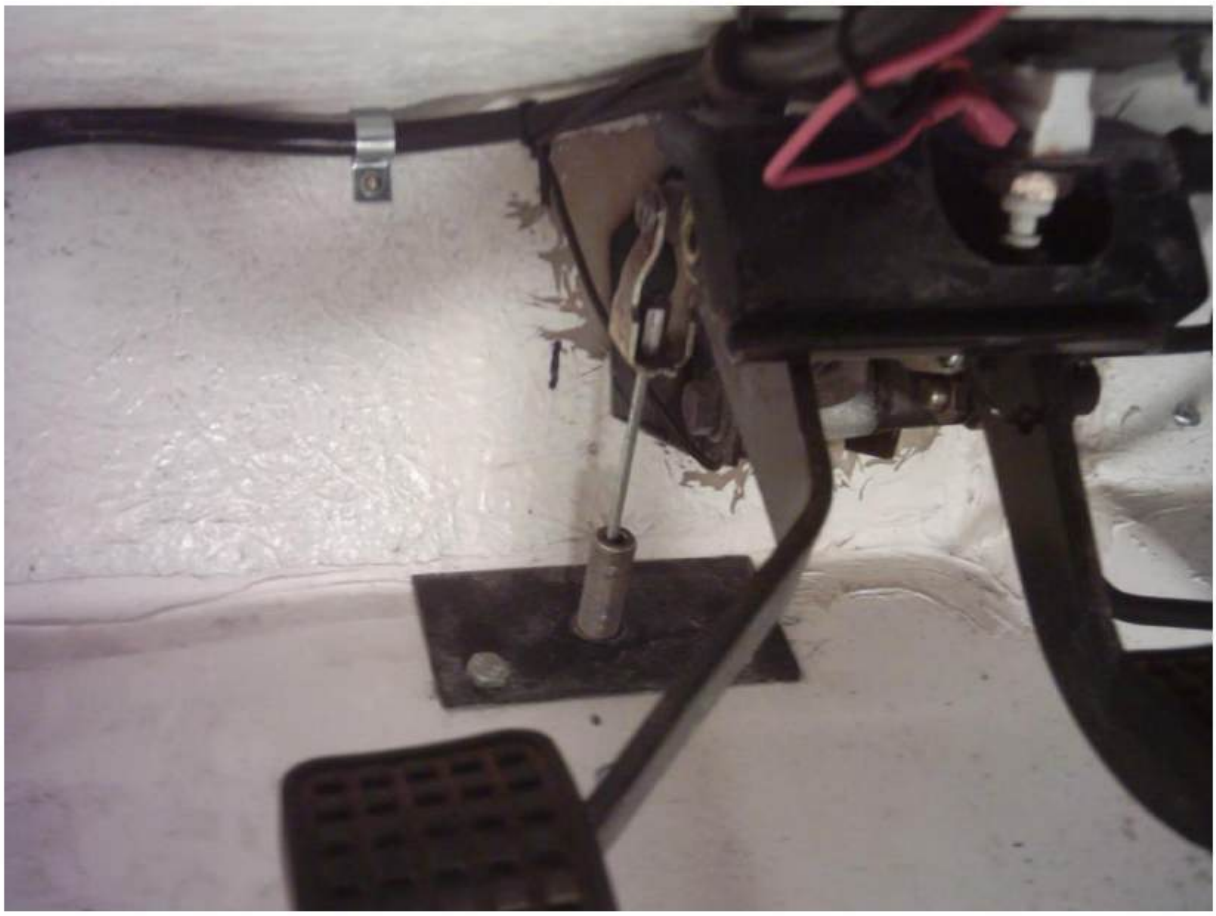
85) Place the bonnet telescope, distance from plate to the edge of the bonnet 580mm. Make a picture to make the surface a little larger so that you can firmly seal the telescope

on the hood. Take PU kit or the Simson that we supply.

THE FINISHING OF "LE PATRON"

86) Mount the steering column with the supplied inner bracket and clamps.

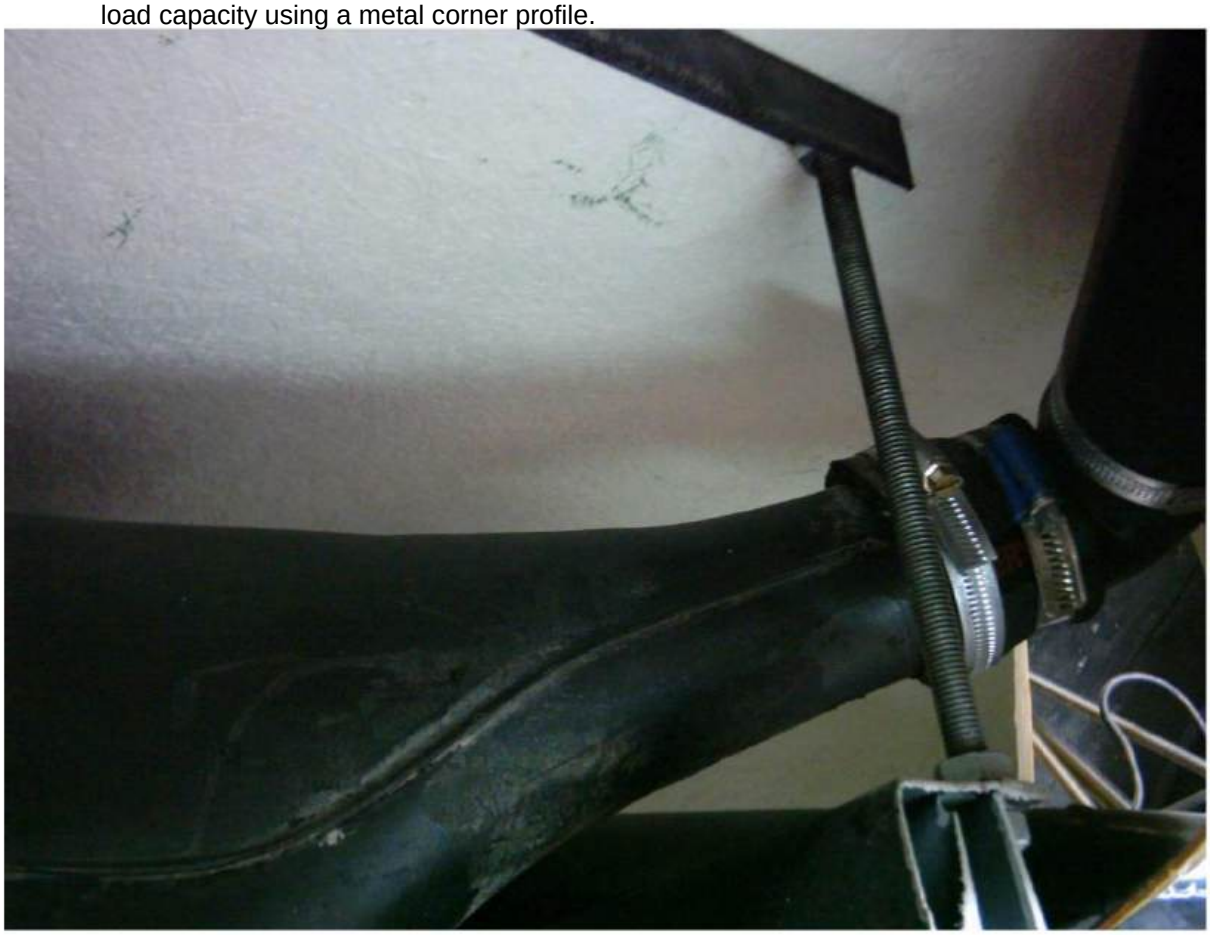
87) Mount the pedal set in the bracket without the master brake cylinder, place it on the inside against the bulkhead and mark the mounting points. The steering column should be in the middle of the brake and clutch pedals, bend the rod where the throttle cable is attached slightly. Now mark the place where the master brake cylinder goes through the body. From the inside, determine the location where the clutch cable passes through the sloping part of the body. First drill a small hole for the clutch cable and make sure that the clutch cable runs perpendicular to the slanted part through the body and is not crooked. Now remove/drill the marked parts and install the assembly with master brake cylinder (mounted with the 2 M9 bolts).
Now first attach the top 6 bolts and then the 2 front ones. The hole for the clutch cable can now be cut to size using files. Install the clutch cable, the nuts both on the engine side of the body, a plate also on the engine side and possibly another one on the inside as shown in the photo. Place the gearbox in 1st gear and adjust the cable so that the vehicle rolls freely when disengaged. Note that there must be some free play.



88) Install the modified exhaust manifolds, the intermediate pipes and the 1st silencer. Pay attention to the space compared to the polyester.

89) Install the headlights and indicators on the headlight bracket. Adjusting the headlights can be placed roughly on a wall, lowering the horizontal line 1cm per meter.

90) If you have doors or a dickey seat, make a support from threaded ends to the chassis, distribute the load capacity using a metal corner profile.



91) Attach the brake lines to the master brake cylinder, the one that goes to the rear goes on the end of a double master brake cylinder and the one that goes to the front goes between the cup. Connect the rear brake cylinder(s), fill and bleed. **NOTE USE LHM FOR DISC BRAKES AND DOT 4 FOR DRUM BRAKES FRONT.**

92) Install the rest of the exhaust taking the steering angle into account. Adjust this if necessary.
See photo for mounting the exhaust silencer.
Mount one corner bracket to the damper with a silent rubber in between.
The other on the floor of the body using large rings on the inside of the body.

And attach the two brackets together with the supplied M 8 bolts.

You can still use decorative cover plates to hide the silent rubbers from view.

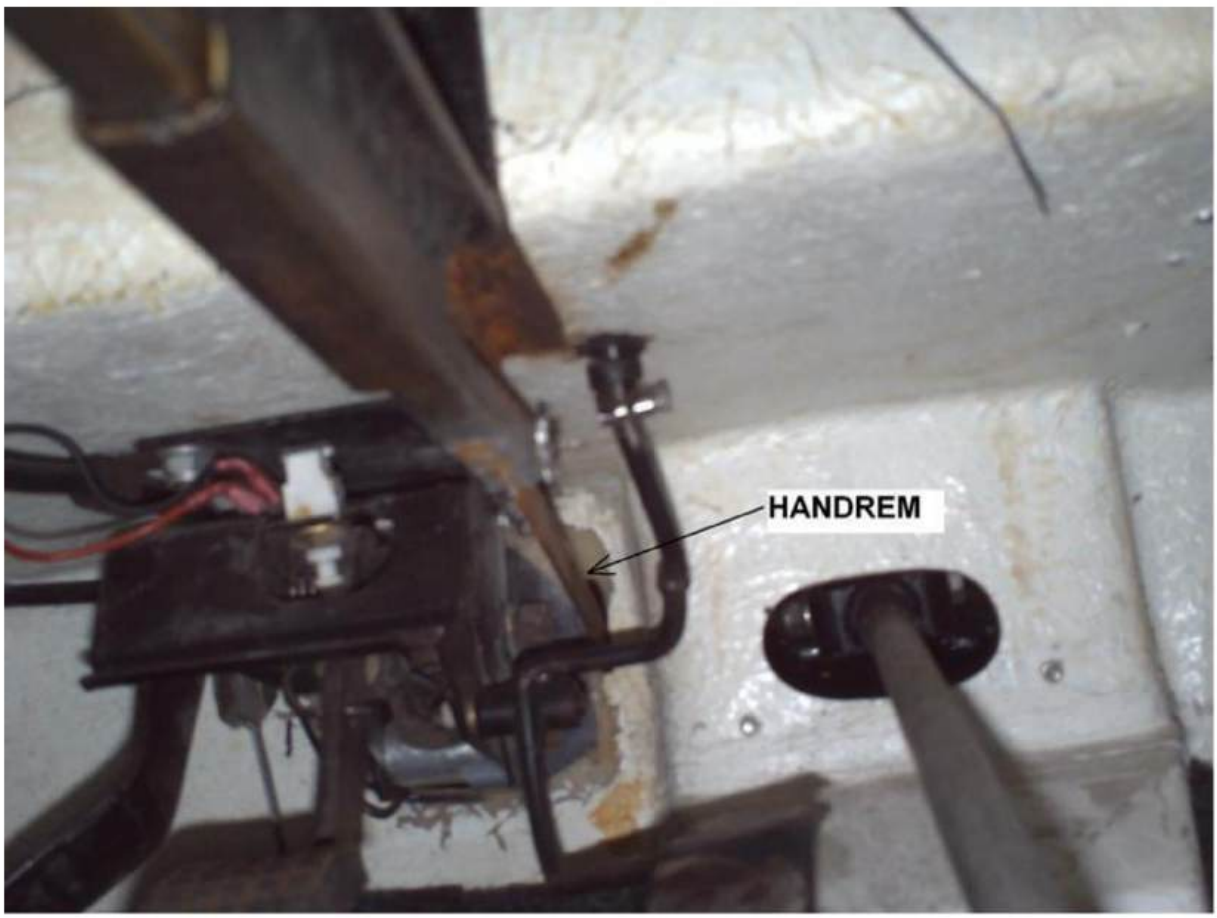
Only make any hole in the hood for the exhaust once you are sure that the exhaust is positioned correctly and is truly leak-tight.

93) Shorten the original inlet rubber by 3 to 3.5 cm and install it. Install the air filter housing, shorten and install the rod to the gearbox, this already provides sufficient strength to the whole. Install the hose between the oil filler bowl and the air filter housing.

94) Install the throttle cable, it goes down on the horizontal plane of the body. The hole can be made as with the 2cv, round with 2 notches, insert the cable, turn it a quarter turn and it is stuck. There are also new cables, a hole of 14 rounds is sufficient, press into the hole and it is stuck, always use the spring mechanism to prevent you from breaking the carburetor.

95) Install the gear lever, extend the rod, extend the handbrake with a piece of metal strip and the choke cable. We use the original mounting bracket to attach the choke cable. A longer version is available, possibly universal, where a normal hole will suffice.

If you have a floor gear, mount it with the supplied screw-in nuts and drill 4 holes of 9.5 mm. And screw the nuts into the floor.



96) Place the battery on top of the bulkhead. Make sure the battery is no higher than 17.5 cm, otherwise it will touch the hood. Do not connect the battery until the entire wiring harness has been installed. If necessary, adjust the louvres a little.

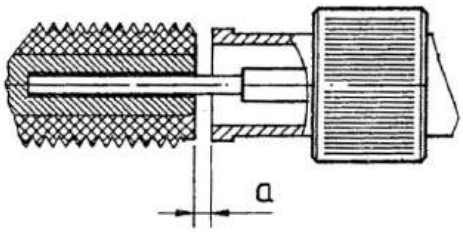
97) Install counter set/switches/indicator lights/ignition lock. (Speedometer with lighting obliged.)

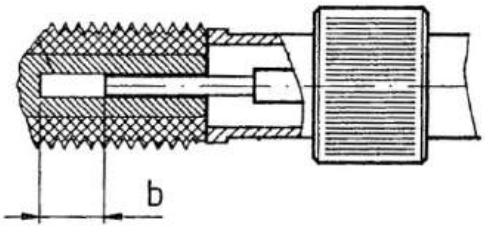
98) Install the odometer cable in the odometer, see drawing, and also pay attention to the pin thickness. If it does not suit you, adjust this with 1 or more rings in place a.

CONNECTION CABLE TO THE ODOMETER.

WRONG:

THE SQUARE PIN IS TOO DEEP AND COMES UNDER TENSION IN THE COUNTER.
THE CABLE SLEEVE IS NOT AGAINST THE COUNTER (A) AND THE ODOMETER IS BREAKED.

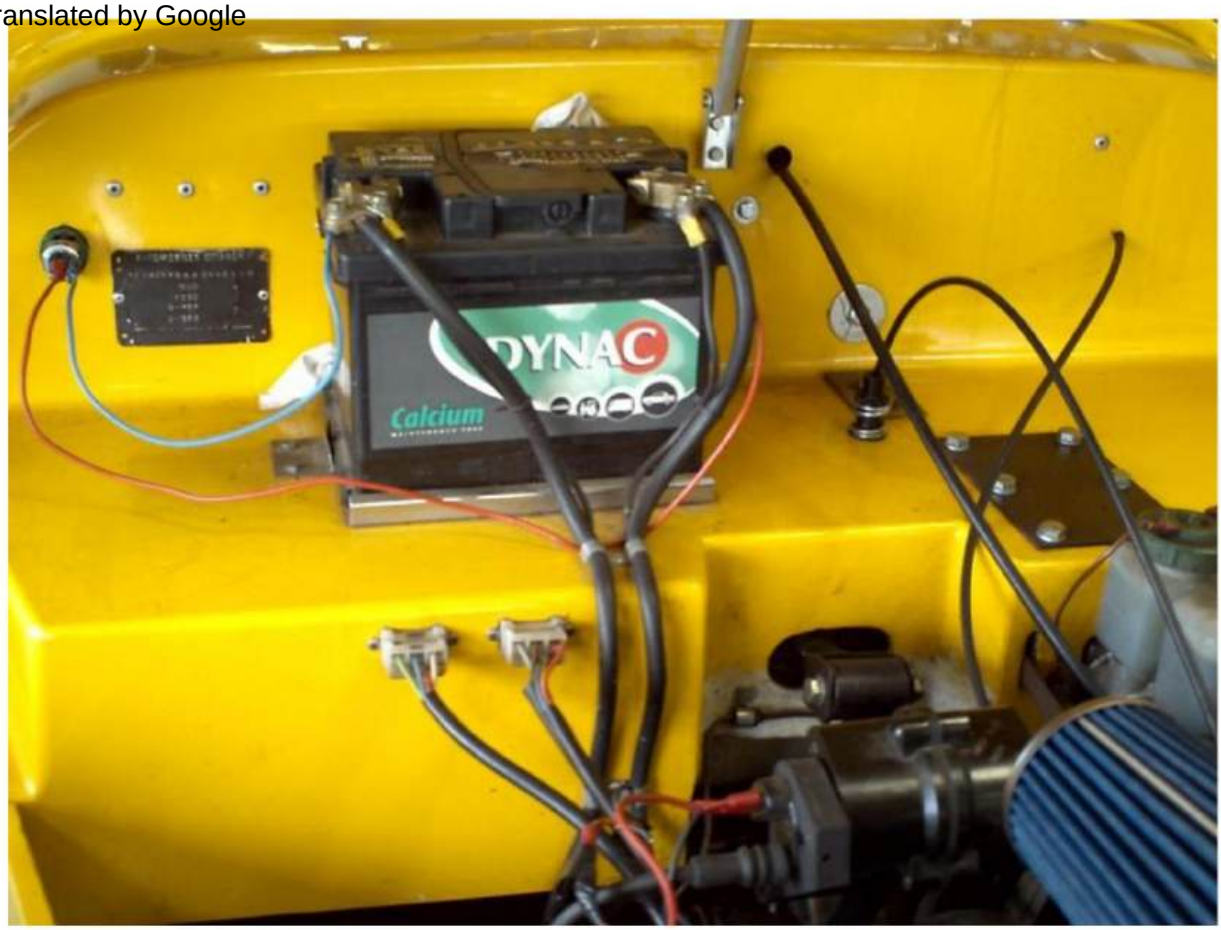




GOOD:
THE SQUARE PIN HAS THE NECESSARY CLEARANCE (B).

99) Install license plates, taking the rear license plate lighting into account.
100) Install the rear lights/reflectors/license plate lights. Pay attention to the position of the floor.
101) Install the cabling, it is best to use new cable, thicknesses are indicated in the diagram, but if you still use the old cable harness, lengthen or shorten it where necessary. **Make sure that all parts are massed if necessary.**

Do it neatly and use insulated clamps where there is voltage.
We have 2 schemes, the 1st scheme is a fairly simple scheme, the 2nd scheme is a very extensive scheme:



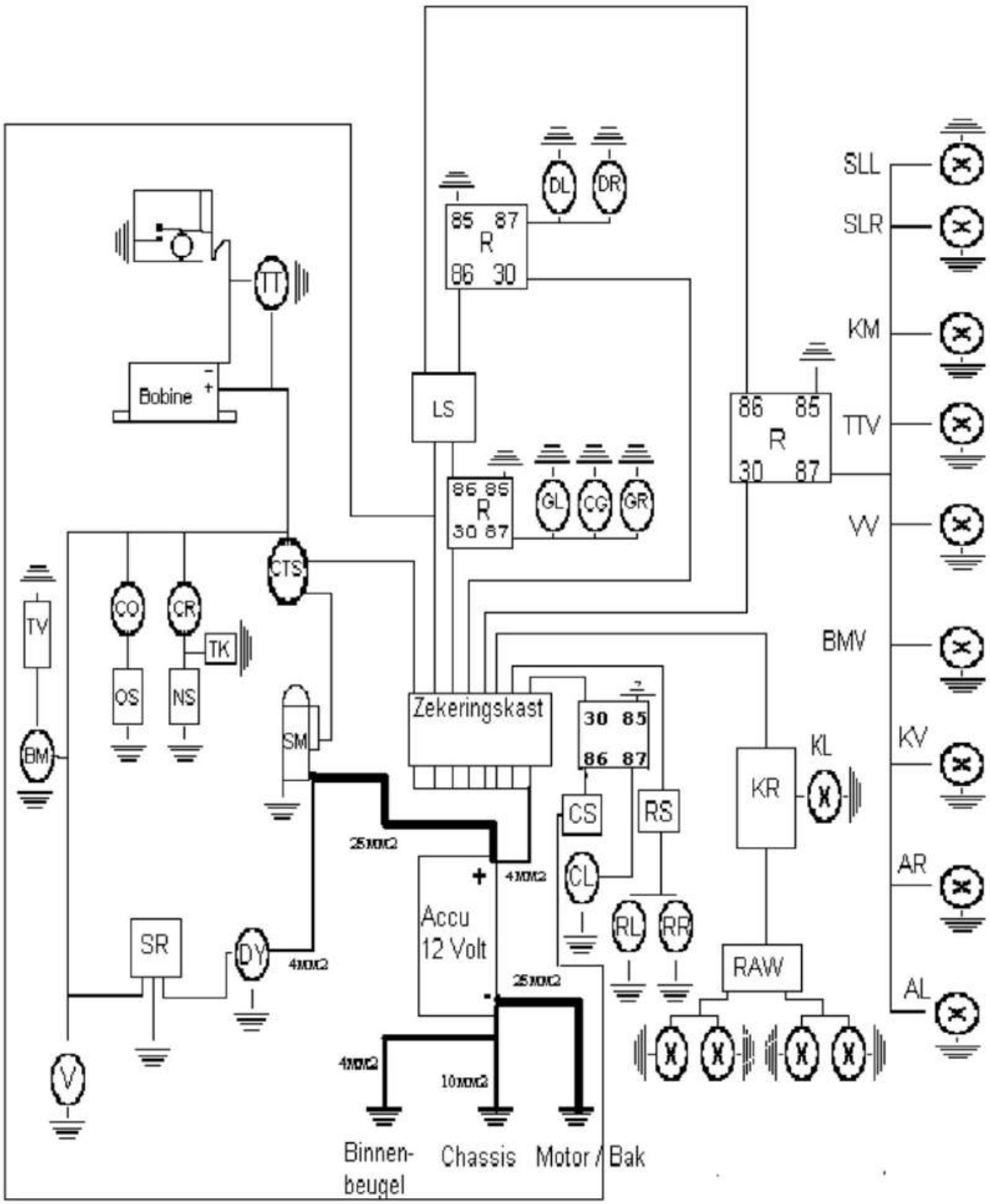
The 2 white plugs are for the entire electrical system of the engine and lighting.

Above left the Tom Tom connection, next to the body plate, so you don't have a huge plug on your dashboard.

The throttle cable can be seen here and goes above the bulkhead where the battery is also located.

Scheme 1:

Cable thickness 1.5 mm2 unless otherwise stated.



ALL TAIL LIGHT LEFT
AR TAIL LIGHT RIGHT
BM PETROL METER
BMV PETROL METER LIGHTING
CG HIGH BEAM INDICATOR LIGHT
CL HORN
CO INDICATOR LIGHT OIL PRESSURE
CP CONTACT POINTS
CR BRAKE FLUID INDICATOR LIGHT
CS HORN SWITCH
CTS IGNITION SWITCH *
DL LOW BEAM LEFT
DR LOW BEAM RIGHT
DY DYNAMO
GL HIGH BEAM LEFT
GREAT HIGH BEAM RIGHT
KL FLASHING LIGHT
ODOMETER LIGHTING
KR FLASHING LIGHT RELAY
KV LICENSE PLATE LIGHTING
LA LEFT REAR FLASHING LIGHT
LS LIGHT SWITCH *
LF LEFT FOR FLASHING LIGHT
NS BRAKE FLUID LEVEL SWITCH
OS OIL PRESSURE SWITCH
R RELAY 4 CONNECTIONS (3 PIECES)
RA RIGHT REAR FLASHING LIGHT
RAW TURN SIGNAL
RL BRAKE LIGHT LEFT
RR BRAKE LIGHT RIGHT
RS BRAKE LIGHT SWITCH
RV RIGHT IN FRONT OF FLASHING LIGHT
SLL CITY LIGHT LEFT
SM STARTER MOTOR
SR VOLTAGE REGULATOR *
SLR CITY LIGHT RIGHT
TK TEST BUTTON BRAKE FLUID LEVEL
TT TACH COUNTER *
TTV TACH COUNTER LIGHTING
TV TANK FLOAT
V VOLTMETER
VV VOLTMETER LIGHTING

* See later in the manual for specific information.

Scheme 2:

Part 1 Electrical installation of Le Patron

Table of contents:

(PS the diagrams are available in color and black/white)

Part 1 General information regarding the electrical equipment including overview of fuses and relays

In the diagrams the cables are made in the relevant color.
The cable number is indicated in a small circle, which is also made in the color of the cable. The color of the cable is also indicated in the text and black and white diagrams are available for those who do not have a color printer.

- A 7-pin was used for the cabling to the rear of Le Patron
  core cable containing 1.5 mm wires.
  This type of cable is used in trailer construction. This cable requires 6 cores to supply the rear.
  If necessary, the 7th core can be used for, for example, a red fog lamp or reversing lamp.
  Of course, other single wires can be used which can be packed in a sleeve so that other colors can be used. These diagrams are based on the colors that are in the 7-wire cable.

- There are five cable bundles in the diagrams, namely: Cable bundle V. This is the cable bundle in which all cables present at the front are combined to go towards the starter motor and beyond. At the beginning of this bundle, the cables with the same function, which appear on both the left and right, are first combined so that only one cable is included in the bundle for this function. This concerns high beam left and right, dipped beam left and right, parking lights left and right and the ground cables for the direction indicators and headlights.

- Then there is cable bundle M1 (engine compartment 1), which hardly changes composition compared to cable bundle V, only the cables relating to the starter motor go in and out.

• Next comes the cable bundle M2 (engine compartment 2), this bundle is also largely same as Cable bundle V, the cables that relate to the ignition coil go in and out here. There are two schemes available for the above: there is a scheme for using original contact points and there is a version for using a 123 or DG ignition (electronic ignition). Both options are indicated in the other schemes (3, 4 and 5). and can therefore be used for both contact points and ignition.

• Diagram 3 shows cable harness M2, using circles with color and cable number, which cables remain in the bundle to continue to Cable Bundle D (dashboard) This bundle also contains the same information so that it is clear which cables, in addition to the cables that come from the relays and fuses, go to the dashboard.

Diagram 3 includes a fourth relay to operate the horn. If a simple horn is used, this is not necessary.

• Diagram 3 also shows cable bundle A (rear), this is the aforementioned 7-wire cable that goes inside the body to the rear.
Diagram 4 also contains cables with the same function that are joined together and then go to cable bundle D. This concerns the ground cables that are connected to the instruments (both the instrument itself and the ground for the lighting of the instrument) and the various control lights and the power supply (+) for lighting the various instruments.

A connection is also made at one place (near the bulkhead or dashboard) for the cables of the front and rear direction indicators.
This also applies to the cables with the same functions at the relays in diagram 3. For example, a connection must be made at relay 1 for the power supply of the high beam and the indicator light for the high beam. At relay 3 the cables for the power supply of the side lights, the rear lights and the dashboard lights must be connected.

• In both diagrams 3 and 4, two cable numbers are mentioned in a slightly larger circle. The 1st number applies if contact points are mounted, the 2nd number applies if a 123 or DG ignition is present.

• Overview of the fuses:

Fuse 1 power supply ignition lock/starter switch
Fuse 2 power supply lighting switch
Fuse 3 power supply relay (1) high beam
Fuse 4 power supply relay (2) low beam
Fuse 5 power supply relay (3) other lighting
Fuse 6 power supply relay direction indicator
Fuse 7 power supply brake light switch
Fuse 8 power supply relay (4) horn

• Relay overview:

Relay 1 high beam control
Relay 2 control low beam

Relay 3 controls other lighting
Relay 4 horn control

Part 2 Overview of the composition of cable bundles Le Patron page 1

Cable bundle V (ear side) is the bundle between the front part of Le Patron and the location of the starter motor

Cable bundle M (engine compartment) 1 is the bundle from the starter motor to the location of the ignition coil
Cable bundle M(engine compartment) 2 is the bundle from the ignition coil to the bulkhead
Cable bundle D (ashboard) is the bundle from the bulkhead to the dashboard Cable bundle A
(rear) is the bundle from the bulkhead to the rear of Le Patron

Cable bundle	Cable-number	Color Function of the cable/connection
V 1 V 2 V 3		Black Ground for all front lamps and the - of the battery
V 4 V 5 V 6		Lilac City lights left and right to relay 3
V 7 V 8 4mm		Brown Low beam left and right to relay 2
Blue		Green High beam left and right to relay 1
Alternator to		White Right front turn signal to turn signal switch
starter motor		Yellow Front left turn signal to turn signal switch
(4mm wire)		Gray Dynamo to the voltage regulator
V 9 * Blue	Contact points to the – of the ignition coil	
V 10 Green	Oil temperature sensor to the oil temperature gauge	
V 11 V 12 *		Brown Oil pressure switch to the oil pressure control light
White 123	or DG ignition to the + of the ignition coil	
V 13 * Black 123	or DG ignition to the - of the ignition coil	
V 14 * Red 123	or DG ignition to the ignition lock * So contact points no. 9 and no. 12,	
13 and 14 are not included in the cable bundle. With the 123 or DG ignition, number 9 is not present, but 12,13 and 14 are.		
M1 Cable	1 to 7 and 9 to 14	Cable 8 (blue 4mm) goes out before M1 (to the starter motor) A thick black cable (25 mm) no. 16 also goes separately from the starter motor to the + battery.
M1 15 Yellow	Starter motor to ignition lock/start button M2 Cable 1 to 7 and Cable	
12 (white)	and 13 (black) go out	before M2 (or to + 9 to 11 and 14 and the – vd ignition coil) only with 123 or DG ignition
M2 17 *		Red + Ignition coil to the ignition switch (only at contact points)
M2 18		Black - Ignition coil to the tachometer
D		White Right front turn signal to turn signal switch.
D	5 6	Yellow Front left direction indicator to direction indicator switch.
D	10	Green Oil temperature sensor to oil temperature gauge
D	14 *	Red Ignition to ignition switch (* if applicable)
D	15	Yellow Starter motor to starter switch
D	17 *	Red + Ignition coil to ignition switch (* if applicable)
D	18	Black - Ignition coil to tachometer

Overview of the composition of cable bundles
Le Patron page 2

D	52	Blue	Fuse 2 to light switch
D	59	Yellow	Brake fluid level switch to the indicator light
D	64	Black	Ground from the battery to all instruments on the dashboard
D	51	Red	Fuse 1 to ignition switch/starter
D	65	Blue	Relay turn signal to the turn signal switch
D	66	Green	Turn signal relay to turn signal indicator light
D	67	Green	From relay 1 (high beam) to the light switch
D	68	Brown	From relay 2 (dim light) to the light switch
D	69	Lilac	From relay 3 (other lighting) to the light switch
D	70	Yellow	From relay 4 (horn) to the horn switch
D	72	Blue	From relay 1 (high beam) to high beam indicator light
D	73	Lilac	From relay 3 (other lighting) to lights of various board instruments
D	74	Red	Voltage regulator to the ignition switch
A30		Black	Battery ground to all lights (rear) and fuel tank float
A 31		Green	Left rear turn signal to turn signal switch
A32		White	Right rear turn signal to turn signal switch.
A33		Lilac	Tail light left and license plate lighting to relay 3
A34		Red	Brake Light left and right to the brake light switch
A35		Yellow	Tank float to fuel gauge

Part 3 Overview of electrical cabling and connections
Le Patron page 1

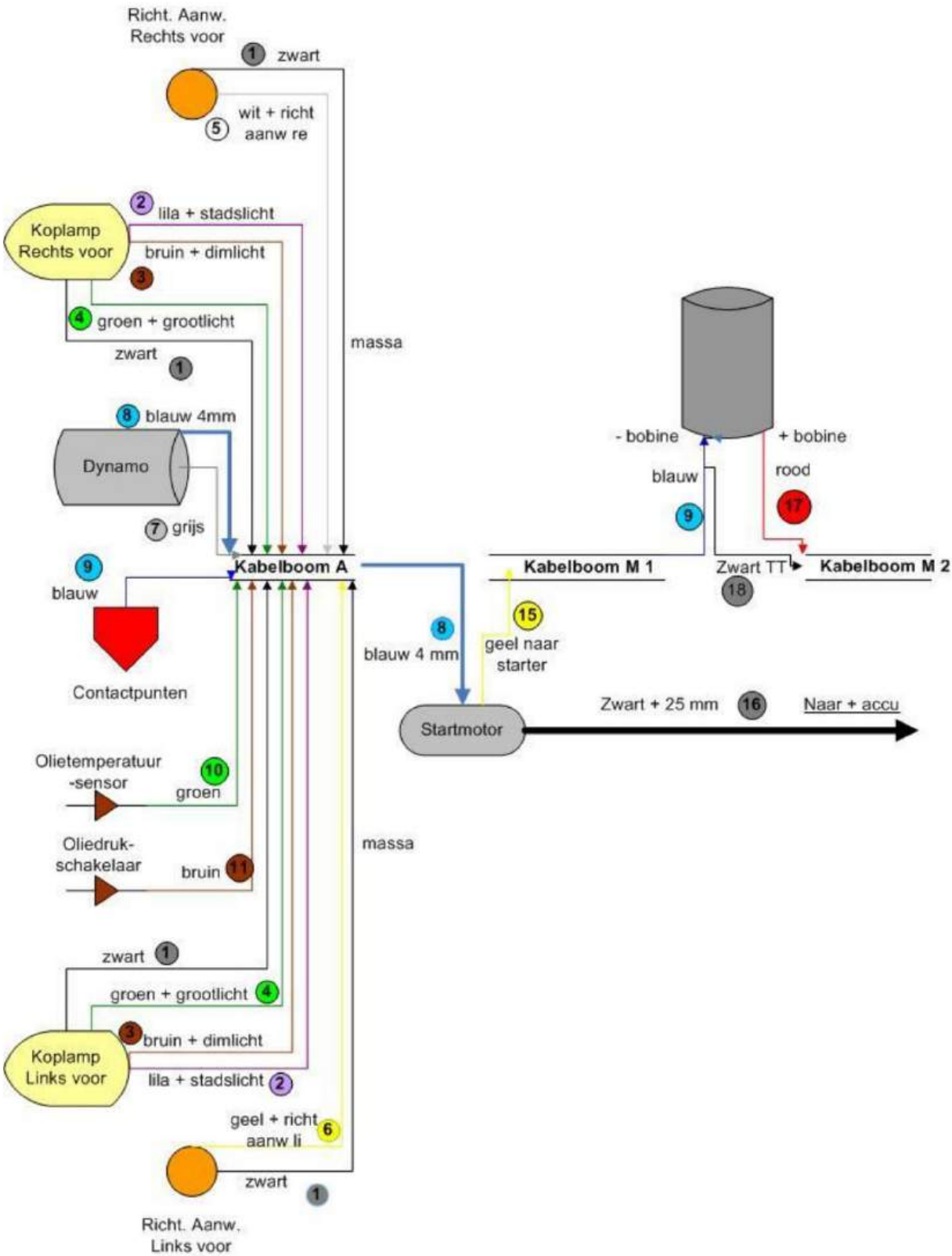
Cable-number	Color	Function of the cable/connection	Appears in schematic and wiring harness number
	black	Ground lamps at the front to ground bracket	1,2,3 kb V,M1,M2
1	lilac	City lights left and right to relay 3	1,2,3 kb V,M1,M2
2 3	brown	Low beam left and right to relay 2 green High	1,2,3 kb V,M1,M2
4		beam left and right to relay 1 white Direction sign. right	1,2,3 kb V,M1,M2
5		front to turn signal switch. yellow Direction sign. front left to switch direction.	1,2,3,4 kb V,M1,M2,D
6	gray	Dynamo and voltage regulator	1,2,3,4 kb V,M1,M2,D
7			1,2,3 kb V,M1,M2
8	blue	4mm Dynamo and starter motor	1.2 kb V
9	blue	Contact points and ignition coil	1kb V
10	green	Oil temperature sensor and oil temperature gauge	1,2,3,4 kb V,M1,M2,D
11	brown	Oil pressure switch and oil pressure indicator light	1,2,3,4 kb V,M1,M2,D

12	white Ignition and + ignition coil	2 kb V,M1
13	black Ignition and - ignition coil red	2 kb V,M1
14	Ignition and ignition lock yellow Starter	2,3,4 kb V,M1,M2,D 1,2,3,4
15	motor and starter black 25 mm	kb M1,M2,D
16	Starter motor and + battery red + Ignition coil	1,2,3
17	and ignition lock black - Ignition coil and	1,2,3,4 kb M2,D
18	tachometer black Ground lamps and	1,2,3,4 kb M2,D
30	petrol float at the rear to ground bracket green Direction sign. Left rear to switch	5.3 kb A
31	direction.	5,3,4 kb A,D
32	Forward direction Right rear to forward direction switch Tail light left and right	5,3,4 kb A,D
33	and number plate lighting to relay 3	5.3 kb A
34	white lilac red Brake light left and right rear to brake light switch yellow Fuel	5.3 kb A
35	level float and fuel gauge (ground signal) red From the + battery to	5,3,4 kb A,D
50	all fuses red From fuse 1 (20A) to the ignition lock	3-
51	blue From fuse 2 (7.5A) to the light switch green From fuse 3	3 kb D
52	(15A) to relay no. 1 for high beam brown From fuse 4 (15A) to relay	3 kb D
53	no. 2 for low beam lilac From fuse 5 (15A) to relay no. 3 for other lighting	3
54	blue From fuse 6 (7.5A) to relay for the direction indicator yellow From	3
55	fuse 7 (7.5A) to the brake light switch brake pedal yellow From fuse 8 (15A) to relay	3
56	4 for the horn yellow From the brake fluid level switch to the black indicator light	3
57	Ground from the ground bracket to all relays (1 to 4) black Ground of the ground	3
58	bracket to the brake fluid switch	3
59		3 kb D
60		3
61	level	3
62	black Ground from the ground bracket to the voltage regulator black Ground	3
63	from the ground bracket to the horn black Ground from the ground	3
64	bracket to all instruments on the dashboard blue From relay of the direction indicator. to	3 kb D
65	the direction indicator switch. green From the direction indicator relay to the direction	3 kb D
66	indicator light.	3 kb D

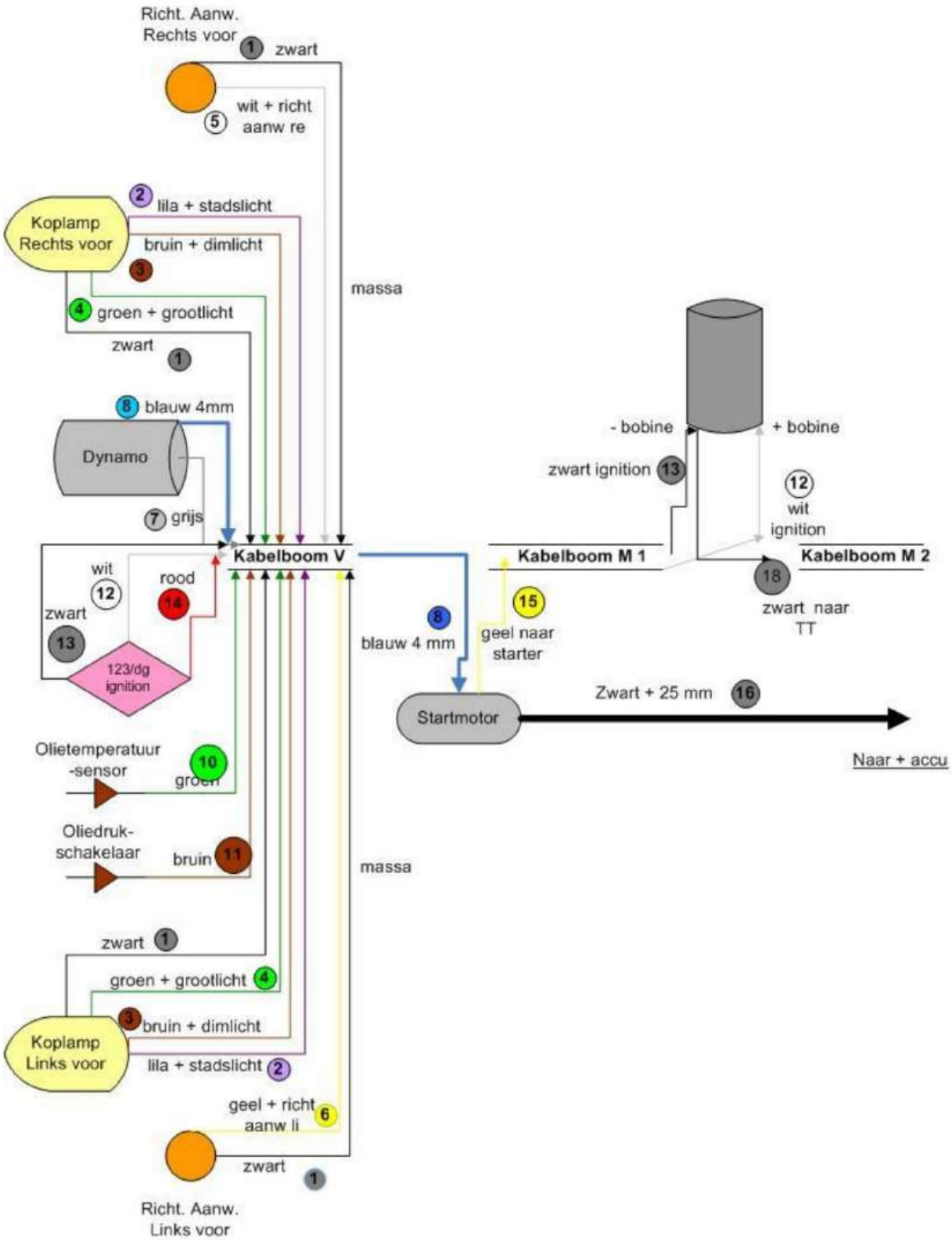
Overview of electrical cabling and connections
Le Patron page 2

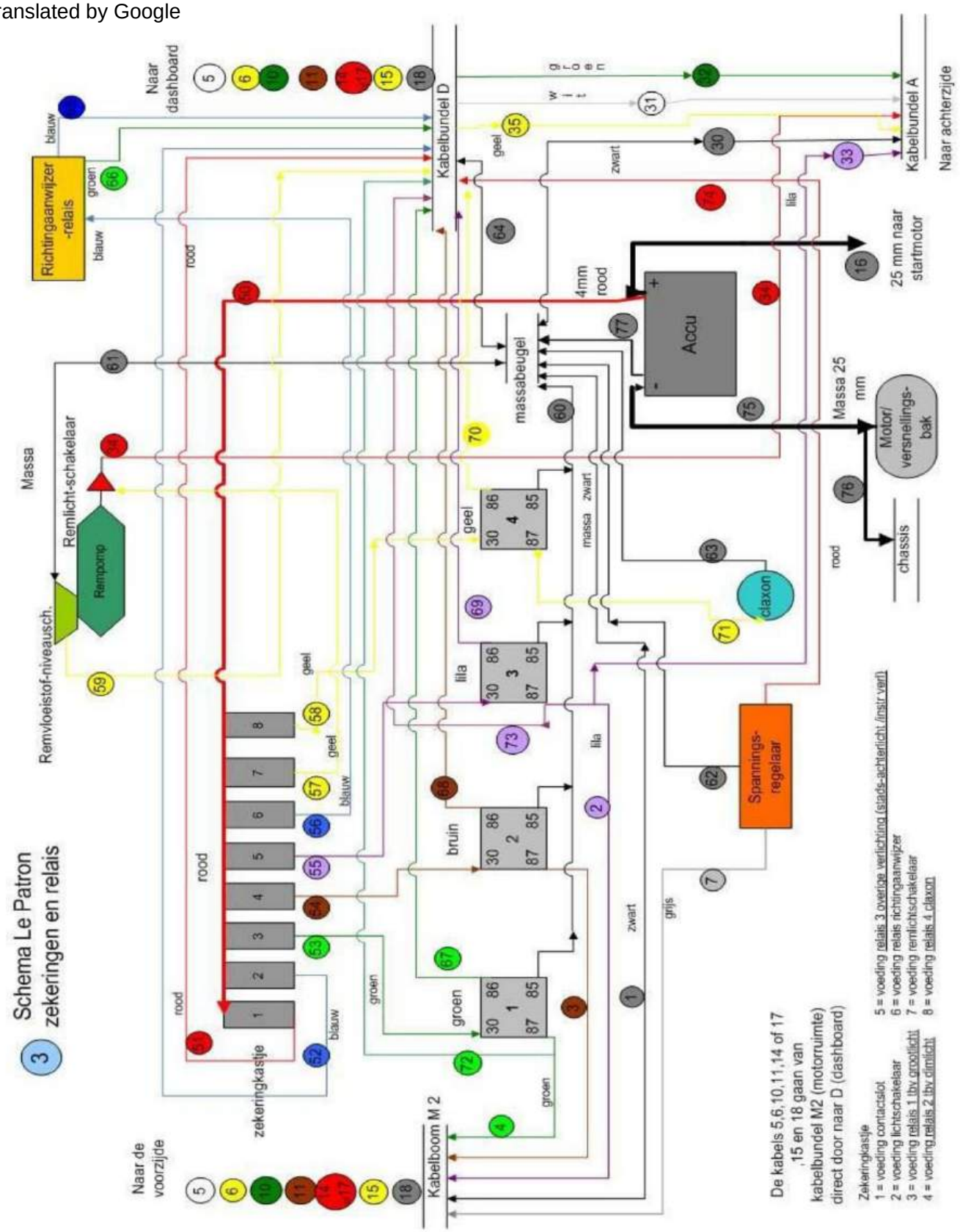
Cable-number	Color Function of the cable/connection	Appears in schematic and wiring harness number
67	green From relay 1 (high beam) to the light switch brown From relay 2	3 kb D
68	(low beam) to the light switch lilac From relay 3 (other lighting) to the	3 kb D
69	light switch yellow From relay 4 (horn) to the horn switch yellow From relay 4 (horn)	3 kb D
70	to the horn. blue From relay 1 (high beam) to the high beam indicator	3 kb D
71	light lilac From relay 3 (other lights) to div. board instr. and	3
72	lights	3.4 kb D
73		3.4 kb D
74	red From the voltage regulator to the ignition lock black From – battery	3.4 kb D
75	to engine/gearbox 25 mm. black From engine block/gearbox ground to	3
76	chassis 10 mm black From – battery to ground bracket red From + ignition switch to	3
77	horn, TT, meters and oil dr. lamp	3
80		4

1 Schema voorzijde Le Patron met originele contactpunten



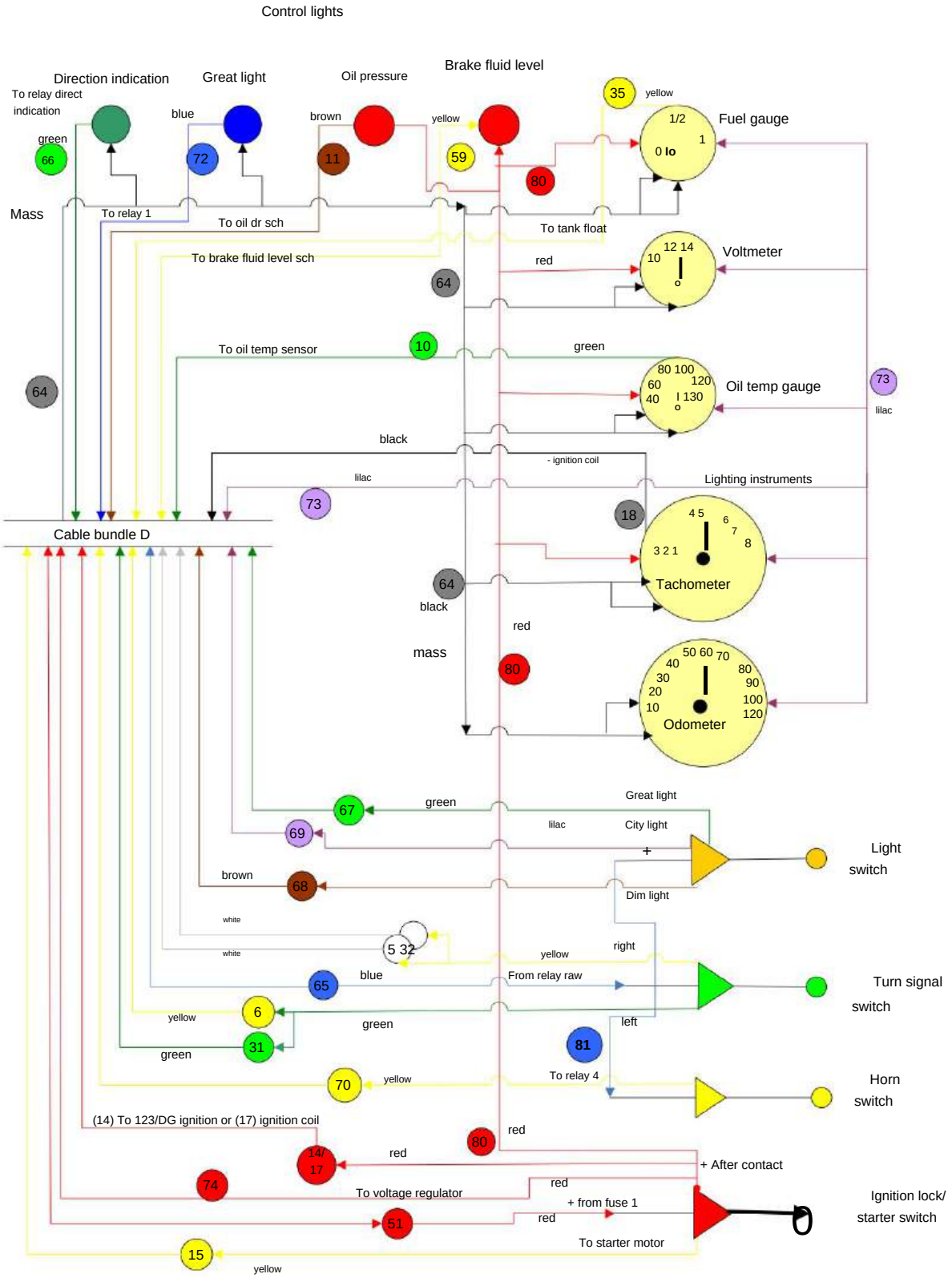
2 Schema voorzijde Le Patron met DG/123 ignition



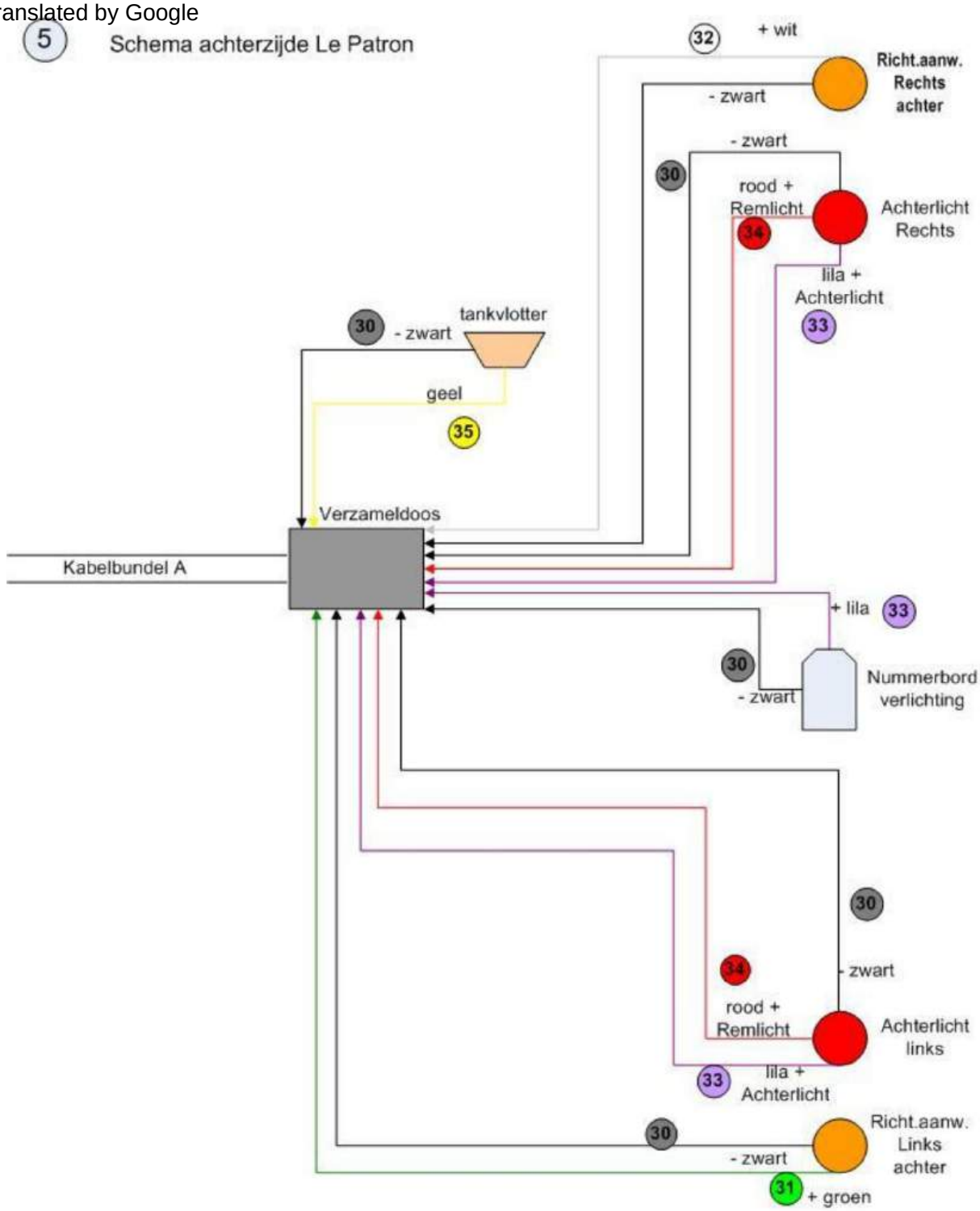


4

Schematic Dashboard Le Patron with contact points or ignition



5 Schema achterzijde Le Patron



101) Connect the battery. Check whether everything functions. It sometimes happens that the indicator light of the flashing light does not flash, then increase the wattage of the lamps or replace the flashing relay.

SPECIFIC ELECTRICAL INFORMATION:

FLASH RELAY ORIGINAL: BLACK + = POWER SUPPLY +
GREEN R = CONTROL LIGHT
LILAC C = SWITCH

FLASH RELAY GUILERA 3 AND 4 CONNECTIONS:

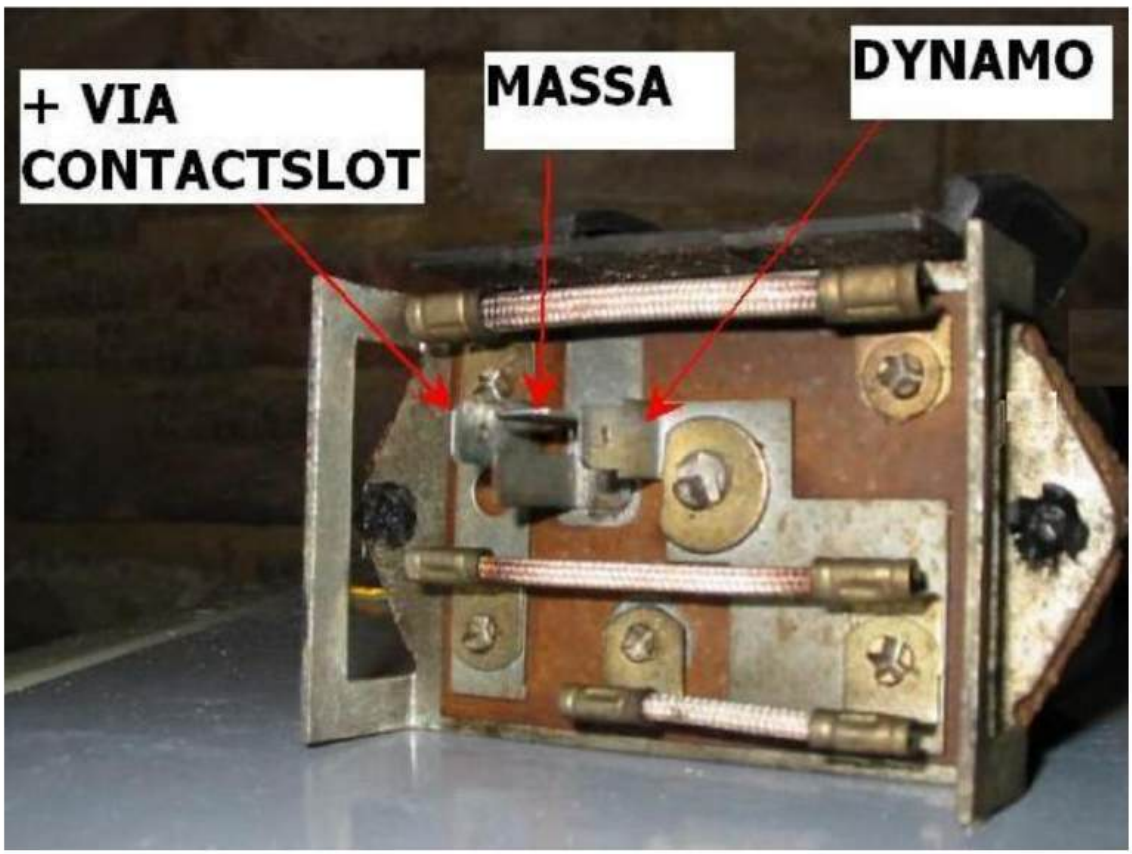
PLEASE NOTE THIS RELAY DOES NOT WORK IN COMBINATION WITH LEDS ACCORDING TO THE SCHEDULE.

+ = POWER SUPPLY
P = CONTROL LIGHT
L = SWITCH
_ = MASS

UNIVERSAL IGNITION SWITCH CONNECTIONS:

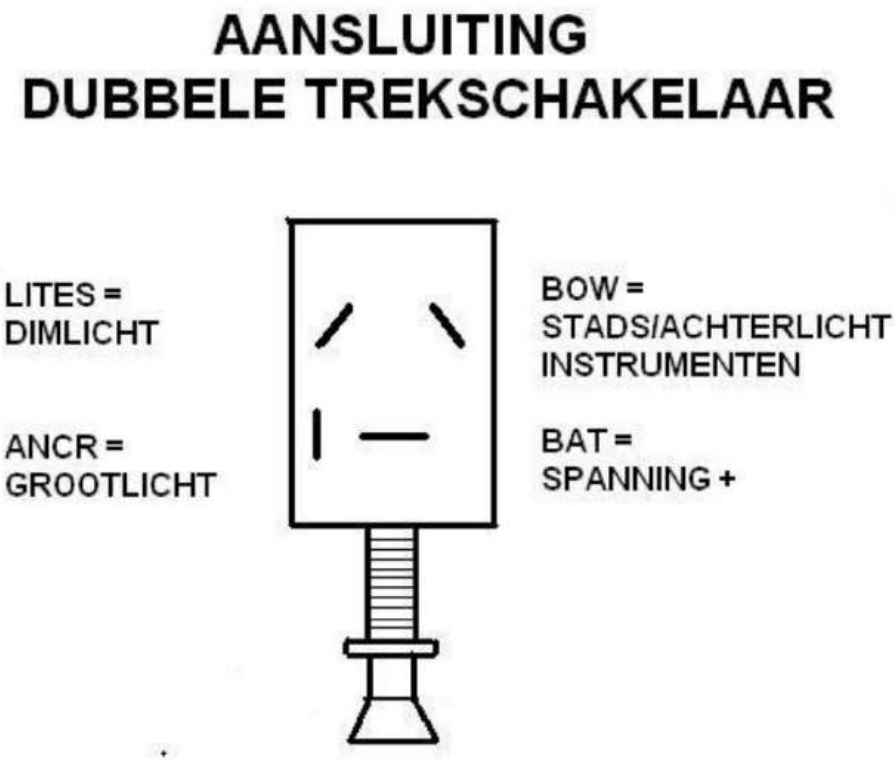
BAT/30	= BATTERY +
ST/50	= STARTER MOTOR (SMALL CONNECTION NL CONTROL CURRENT)
15	= IGNITION COIL (= + ALSO DURING STARTING)
54	= ACCESSORIES AND COMPONENTS WHICH ARE NONE DURING STARTING NEED POWER.

Voltage regulator connection for the 2cv type:



DASHBOARD ROTARY SWITCH FOR LIGHTING:

30 = + THREAD
58 = SIDE LIGHTS/TAIL LIGHTS/INSTRUMENT LIGHTS
56a = HIGH BEAM
56b = LOW BEAM

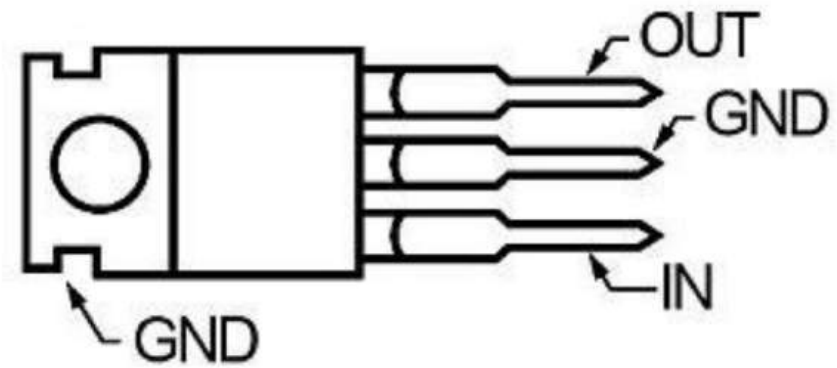


SIGNAL LIGHTS.

IF YOU USE SO-CALLED LEDS FOR SIGNAL LIGHTS, YOU MUST
PLEASE NOTE THAT THESE HAVE A + AND A -, THE COPPER COLORED SIDE IS THE +, CONNECT THE HIGH BEAM INDICATOR LIGHT (CG) AS SHOWN IN THE DIAGRAM AND NOT DIRECTLY TO THE LIGHT SWITCH (LS).

Instruments:

It may be wise to use a voltage stabilizer (200770) on the one hand so that the instrument does not receive too much tension, which could cause it to break irreparably, and on the other hand it may be necessary for a more accurate reading of the meter.



Convert temperature from fahrenheit to celcius:
0.555 X (t-32)
For example: 230 degrees fahrenheit:
0.555 X (230-32) = 0.555 X 198 = 109.89 degrees Celsius.

TACH COUNTER LE PATRON OR MMB DIFFERENT COLORS POSSIBLE:

RED/BLACK = + VOLTAGE VIA CONTACT
BROWN = – MASS
GREEN/RED = N = – IGNITION COIL, SIDE OF CONTACT POINTS

RED = + VOLTAGE VIA CONTACT
BROWN = – MASS
GREEN = N = – IGNITION COIL, SIDE OF CONTACT POINTS

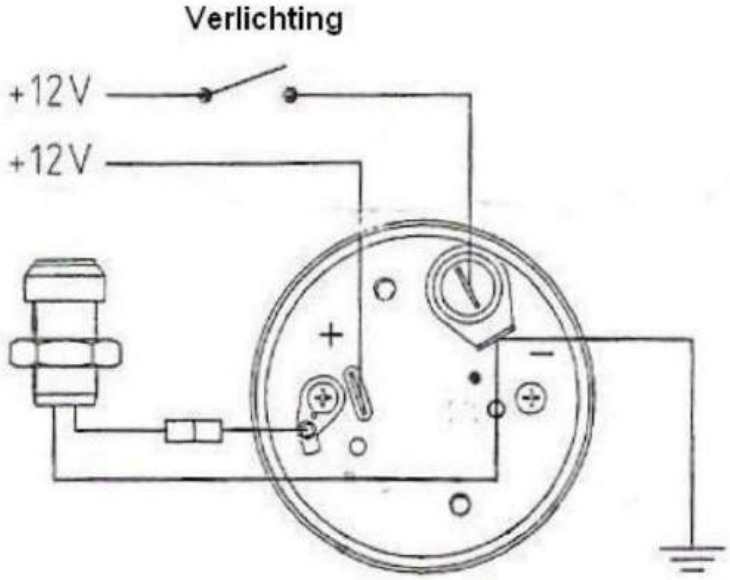
RED = + VOLTAGE VIA CONTACT
BLACK = – MASS
GREEN = N = – IGNITION COIL, SIDE OF CONTACT POINTS
WHITE = DO NOT USE FOR THE 2CV, ISOLATE

TACH COUNTER SMITS STYLE:

GREEN = +
BLACK = -
WHITE/BLACK = N = - IGNITION COIL

Connecting the temperature sensor, this goes into the hole of the oil drain plug.

Connecting a time clock, we have 2 versions:



Klokje

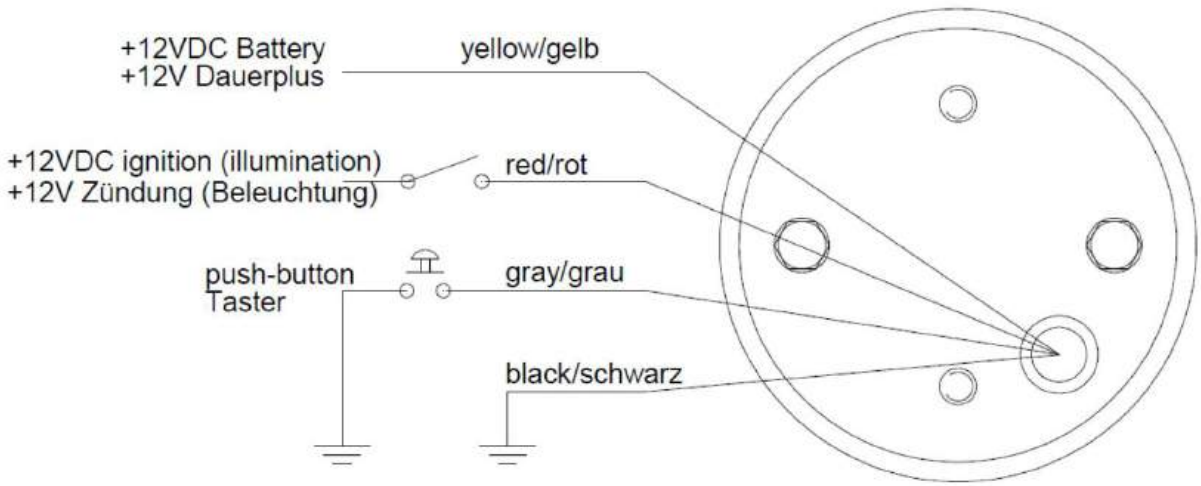
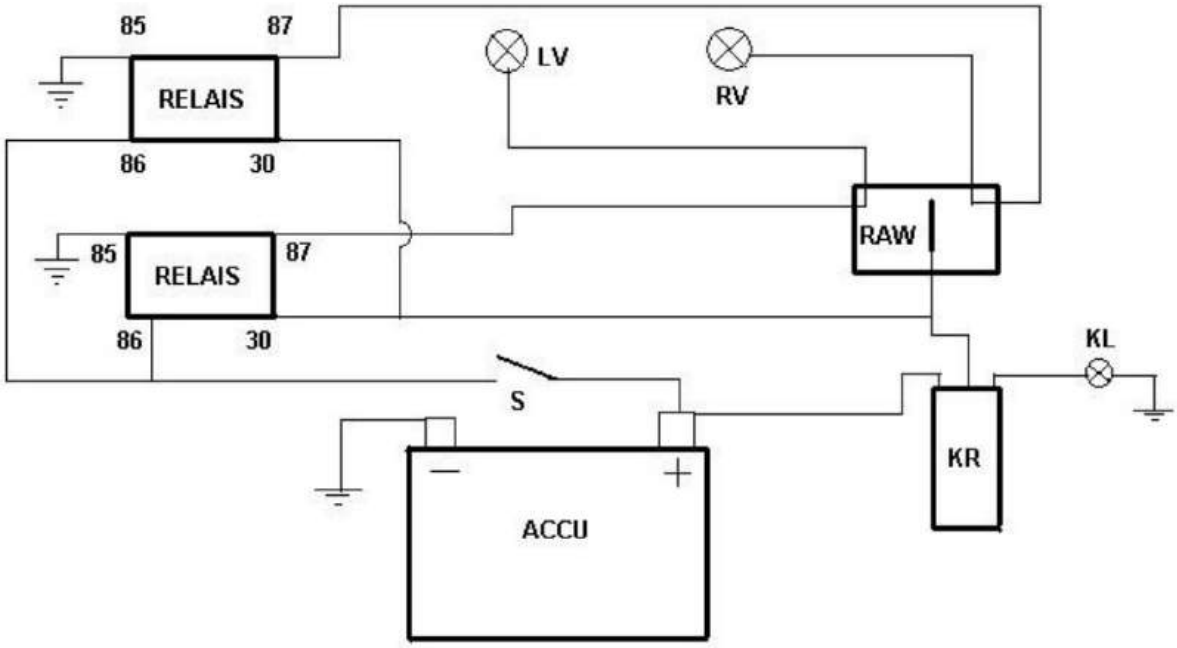
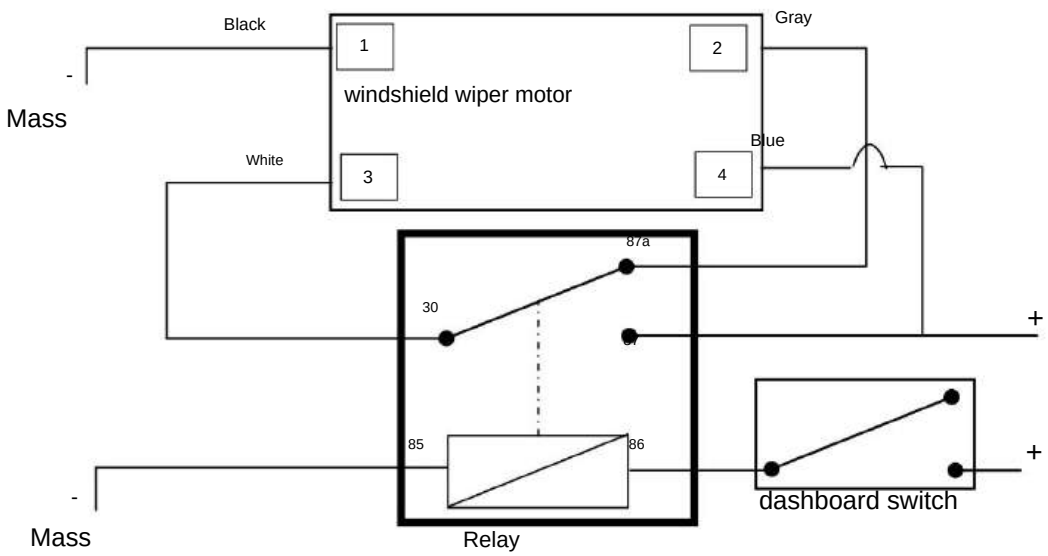


Diagram for installing a relay set (200828) for alarm lighting.
Please note that the flashing relay KR always has voltage.
S = Switch to switch on the hazard lights.



Wiper motor connection Le Patron.

Please note that the colors are the colors of the wires on the motor!!



START BEVEILIGING INDIEN MOTORKAP SLUITINGEN NIET VASTZITTEN.

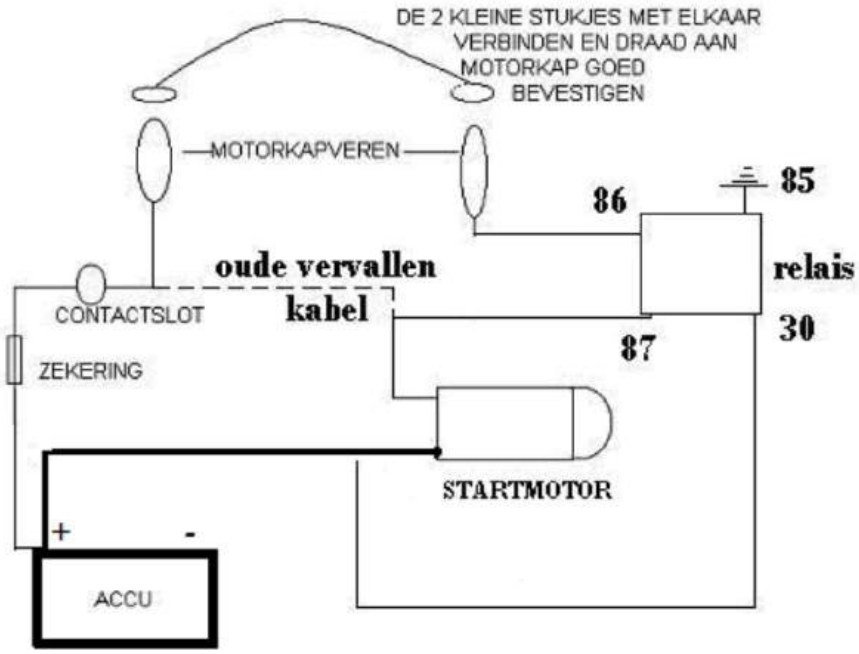
ER ZIJN NOGAL WAT MOTORKAPPEN OMHOOG GEKOMEN IN DE LOOP DER TIJD, MET DE NODIGE SCHADE EN MET DE NODIGE LETSELS.

DIT SCHEMA VOORKOMT STARTEN INDIEN DE MOTORKAP NIET VAST ZIT.

LET OP DAT HET BELANGRIJK IS DAT HET KLEINE GEDEELTE VAN DE MOTORKAPVEER BOVEN BEVESTIGD IS EN HET GROTE GEDEELTE ONDER.

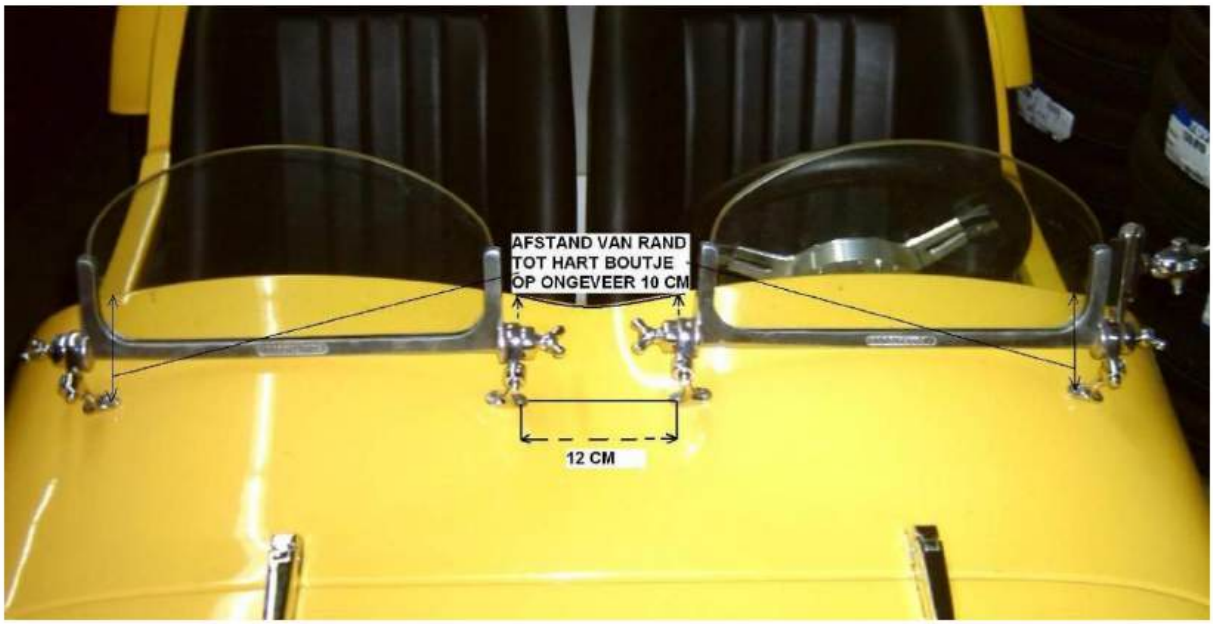
HET KAN NATUURLIJK VOORKOMEN DAT WANNEER JE DE SLUITING NIET VAST HEB ZITTEN EN DE MOTORKAPVEER MASSA MAAKT OP HET KLEPDEKSEL DAT DAN DE ZEKERING ER UIT KNALT. DIT IS IN ELK GEVAL MINDER ERG DAN EEN MOTORKAP OP JE HOOFD.

JE KUNT DIT EVENTUEEL VOORKOMEN DOOR ER VOOR TE ZORGEN DAT JE DE STUURSTROOM VANAF CONTACTSLOT AANSLUIT OP DE MOTORKAPVEER DIE DE KLEPDEKSEL NIET RAAKT, ER ZIT NAMENLIJK WAT AFSTAND VERSCHIL TUSSEN DE LINKER EN RECHTER MOTORKAP-VEER EN DE KLEPDEKSELS.



102) Run the engine and check that everything runs freely.
The slightest contact of moving parts can lead to cracking of the polyester.
103) Install the steering wheel.

104) Mount the aeroscreens, move the feet forward so that you have enough space to place a possible tonneau cover.



105) Install the mirrors, taking the visibility into account, and possibly the tonneau cover. Left mirror and interior mirror are mandatory.

106) Mount the grille for this you can use polyester reinforced with fiberglass or the construction glue that you use for the fenders.

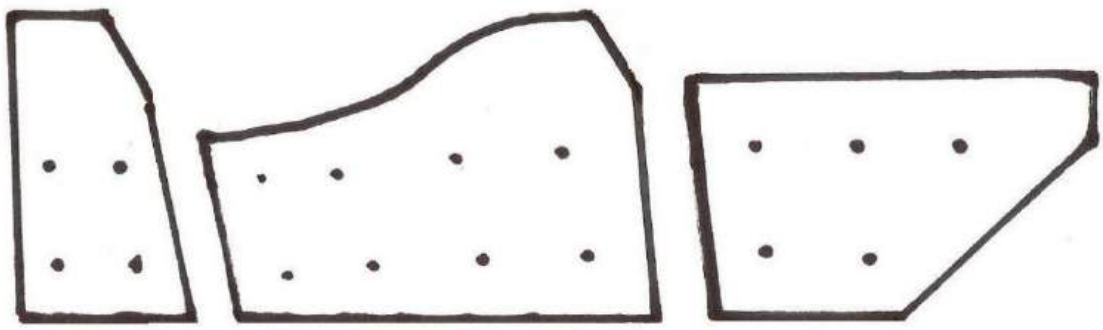
107) Mount the "Le Patron" badge, this is mandatory for the 3-wheeler. For the 4-wheeler you need one to place the "Citroen" emblem.

108) Install the interior trim before securing the seats.

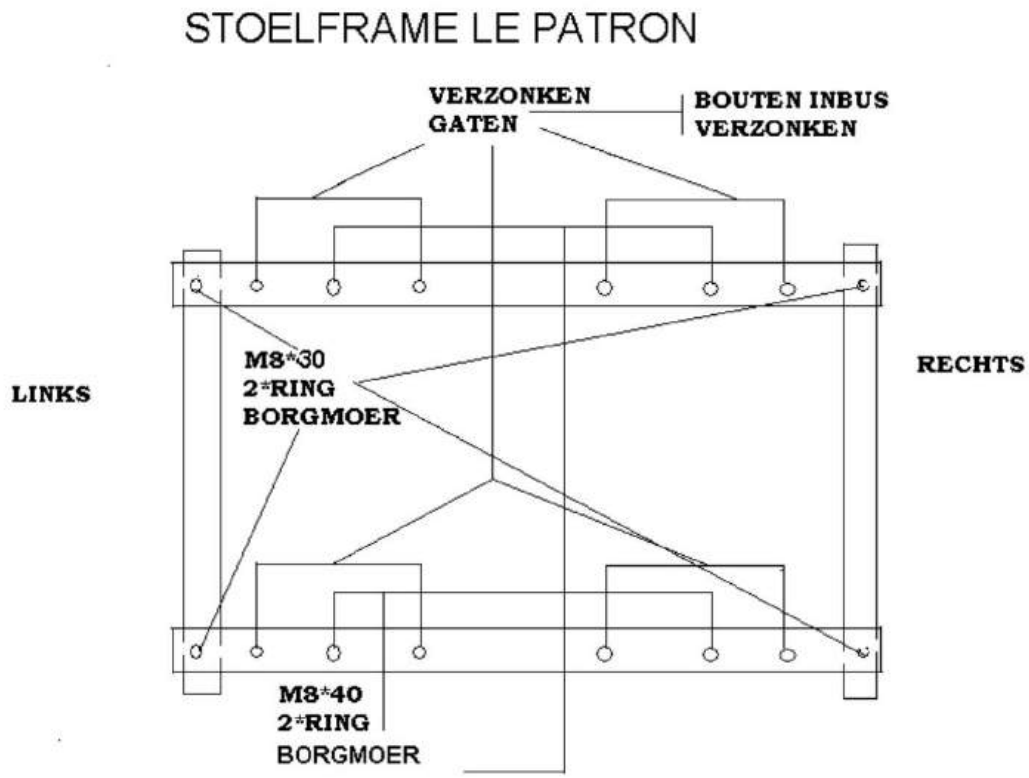
The inner lining of the type without doors can be inserted in such a way that it clamps between the edge of the body. If necessary, secure it here and there, for example with Velcro.

Secure the type with doors with the supplied screws, first mount a base of wooden slats, determine the correct thickness and glue them in place. Then screw the panels on, making sure that the screws do not get into the polyester!

Suggestion for the position of the screws:



109) Install the seats, they must be properly attached and, if hinged, they must lock into place automatically when folding back. For the cobra seats use 2 strips from left to right, and attach each strip with four M8 bolts, the two inner ones on the edge of the chassis, use two strips from front to back on the underside of the body to distribute the forces.



If you have a frame with rails on one side and folding on the other side, the side with rails is the left seat. To get both chairs at the same height, 4 M8 rings are included, which you place between the strip and the rails. The right seat is placed on the box profile and secured with the M8 allen bolts. First mount the seats on the frame and then place the assembly in the car, determine the position of the assembly by sliding the sliding seat back as far as the fixed seat, leaving some space between the body and the seats.

110) Install the mudguard brackets with mudguards, if necessary remove any excess weld seam from the rear wishbones to properly install the clamp. **Use the supplied construction adhesive (see specification at the back of the manual).** Use enough glue, see the photo. Once the fender is glued, it can only be loosened by cutting through the glue. The rearmost point of the rear fender should be placed at an angle of no more than 45 degrees to the road surface. **PLEASE MAKE SURE THAT THE CAR IS AT HEIGHT AND TAKE INTO ACCOUNT THE FRONT INDICATORS.**

RDW - INSPECTION.

1) Install seat belts properly for Belgium and Germany, possibly for the Netherlands.
2) Always install the interior mirror.
3) Only the 4-wheeler must be weighed by the RDW during the inspection. The spare wheel and jack should be present in the car during the weighing. The petrol tank must also be half full.

4) We recommend that you request a combined inspection from the RDW. The combined inspection is an **inspection for a change in equipment with an MOT inspection** in one. If this application presents problems, omit the APK. In consultation with the inspector, this is often still possible, if not, this can be done later when you receive the adjusted license plate. have received.
MOT regulations:
http://handboek.rdw.nl/regulation/apk/passengerautos/Paginas/default.aspx
If there is a re-impact, please also report this.
Make an RDW
appointment: https://www.rdw.nl/Particulier/Paginas/Kentekenkeuring-bij-de-RDW.aspx
Telephone RDW appointments **0900 0739.**
5) Make sure the car is insured. Club members can rent the car collectively
insurance at Emerpark http://emerpark.nl or tel.: 076.587.95.87.
We recommend that you have the car appraised and, if necessary, insure the hull; we can take care of the appraisal for you.
6) Keep the car in the suspension until it has been approved.
7) If problems arise during the RDW inspection or when handling the documents, you can contact Van den Bergh.

8) The entire license plate must be handed in as well as the old original stamped chassis number if a re-stamping must take place due to the use of a new chassis.

TAKE IT TO THE DMV

INSPECTION OF CHANGE OF EQUIPMENT:

CAR IN TECHNICAL GOOD CONDITION
APPOINTMENT FORM FROM THE RDW
LEGITIMATION
MONEY FOR THE INSPECTION (+/- 200 EURO)
FOR 3 WHEELER TYPE APPROVAL PAPER

REIMPACT:

CHASSIS NUMBER (IF RE-IMPACT)
CHASSIS APPROVAL DECLARATION

FOR EXTRA IMPORT:

PURCHASE INVOICE
SOFI NUMBER

RDW SHORT CHECKLIST IN BOLD IS INSPECTION REQUIREMENT, THE REST ARE SERVICE POINTS.

APPROVE **DISAPPROVAL** **NOT CHECKED**

BONNET CLOSURE GRILLE
TEST
DRIVE **CLUTCH**
HORN KM
COUNTER
ENOUGH PETROL
FOR THE INSPECTION HANDBRAKE MUST WORK
SUFFICIENTLY FRONT BRAKES SHOULD NOT SHOW TOO
MUCH DIFFERENCE AND WORK SUFFICIENTLY REAR BRAKES SHOULD NOT SHOW TOO MUCH DIFFERENCE AND WORK
SUFFICIENTLY WINDSCREEN WASHER IF LARGE WINDSCREEN WINDSCREEN DEMISTING INDI AND LARGE WINDSCREEN WIPER
IF LARGE WINDSCREEN MIRRORS LEFT AND INNER MIRROR
MANDATORY PEDAL RUBBER MUST BE PRESENT ON CLUTCH AND
BRAKE PEDAL AND NOT WORNED SEATS MUST BE PROPERLY
FITTED, IF FLAPPING AUTOMATIC LOCKING DOORS MUST BE OPENABLE
FROM OUTSIDE AND INSIDE (IF HANDLES PRESENT).

MUDGUARDS MUST NOT CONTACT ANYTHING WHEN STEERING WHEELS AND MUST NOT BE TOO HIGH. ADJUST HANDLEBAR DEVICE IF A MUDGUARD BUGS SOMETHING WHEN STEERING WHEELS BELTS PROPERLY ATTACHED IF FITTED (Netherlands not required, Belgium and Germany required)

CHASSIS NUMBER & ENGINE NUMBER MUST BE ORIGINAL AND LEGIBLE PRODUCTION NUMBER CHASSIS
MUST BE PRESENT AND READABLE IF REFLECTORS FRONT REFLECTORS WITH E-QUALITY CITY LIGHTS MAY ALSO BE
ADJUSTED IN THE NETHERLANDS IN COMBINATION
WITH DIM AND HIGH BEAM DIMI DSLIGHT KM LIGHTS IN COMBINATION WITH CITY LIGHTS BRAKE LIGHTS REAR
INDICATORS REAR REFLECTORS
WITH E-QUALITY
APPROVED LICENSE PLATES (NOT
NECESSARY FOR IMPORTS FROM BELGIUM)

PROJECTING / DANGEROUS PARTS MUST NOT BE PRESENT CO < 1.5 CHOKE SPRING **BATTERY**
MUST BE
PROPERLY ATTACHED
RECHARGING WIRING + CONNECTIONS INSULATED BRAKE
FLUID LEVEL
BRAKE LINES CORROSION **& FIXING & REAR WHEEL DEVICE**
IN CONNECTION WITH THE BODY
& V/A HR FUEL SYSTEM HOSE CLAMPS, CON CHECK LEAKAGE, FRONT AND REAR EXHAUST MOUNTING & LEAKAGE OIL LEAKAGE AND OIL LEVEL GEARBOX OIL CHASSIS **+ SECURES BODY AXLE COVERS AND STEERING BALL COVERS MUST NOT CONTAIN ANY HOLE OR TEAR.**

SHOCK ABSORBERS MUST FUNCTION **PROPERLY**
AND RIMS MUST NOT SHOW ANY HAZARDOUS DAMAGE
TIRES MUST HAVE AT LEAST 1.6 MM PROFILE

TIRE PRESSURE AROUND 1.8 BAR FOR THE NETHERLANDS
WHEELBASE 240 +/- 1%
TRACK WIDTH MUST BE ORIGINAL
ALIGNMENT
ENGINE MOUNTS, GEARBOX MOUNT AND BUSHINGS IN GOOD CONDITION.
STEERING GEAR SHOULD NOT SHOW TOO MUCH PLAY

AXIAL KNUCKLE CLEARANCE MAXIMUM 1.4 MM
TIGHTEN THE DRIVE SHAFT BOLTS PROPERLY TO A TORQUE OF 50 NM
STEERING BALL PLAY MAXIMUM 1 MM
WHEEL BEARINGS MUST SHOW NO AUDIBLE WEAR. UNDERPRESSURE
IDLE MINIMUM 5 CM WATER COLUMN

You don't pay BPM!

You are not liable for tax on the conversion or import due to the age of the donor car.

If you have any tips, ideas or criticism regarding this manual, please do not hesitate to let us know. After consultation we can change the text.

Van den Bergh Weverstraat 17 a 4061 AP Ophemert TEL. 0344 651284 FAX 0344 652445

Appendix product information of the construction adhesive for the fender brackets:

INDUSTRIAL SPECIAL GRADE E

Samson

ISR 70-03

The Simson Industrial Special Range is a series of high-quality products specially developed for industrial applications.

PRODUCT

Simson ISR 70-03 is a good compromise of an adhesive and a sealant. Simson ISR 70-03 is suitable for making elastic structural connections, where high strength is also required. Simson ISR 70-03 is based on Silyl Modified Polymer (SMP).

APPLICATIONS

_ Elastic bonding and sealing in e.g. bus, caravan, train and truck construction.
_ Bonding and sealing in sunroofs for the automotive industry.
_ Bonding roofs on buses, trains, etc.
_ Bonding aluminum or polyester corner profiles on trailers.
_ Bonding polyester parts to metal frames.
_ Bonding floor systems.
_ Sealing welded seams.

CHARACTERISTICS

_ Solvent, isocyanate and PVC free.
_ Very good UV resistance and aging resistance.
_ Generally good adhesion to various surfaces without the use of a primer.
_ Permanently elastic at temperatures between –40°C and +120°C.
_ Neutral, odorless and fast curing.
_ Paint compatible with most industrial paint systems on both alkyd resin and dispersion bases (due to the wide variety of industrial paints, a paint compatibility test is recommended).
_ Can be painted over after skin formation (wet on wet); this has no influence on the curing speed.

ATTACHMENT

In general, Simson ISR 70-03 shows good adhesion without primer on clean, dry, dust and grease-free surfaces of aluminum, stainless steel, galvanized steel, copper, brass, powder-coated metal, most painted metal surfaces, glass, PVC, (glass fiber reinforced) polyester, lacquered wood. No adhesion to untreated polyethylene, polypropylene and Teflon. In cases where high adhesion requirements are required due to high thermal or physical loads, especially under humid conditions, the use of Simson Primer M is recommended. Simson Primer M is a so-called 'wash primer' and degreases and treats the bonding surface in one step. Simson Primer P is recommended for untreated wooden surfaces and other porous surfaces. For more information about Simson Primer M and Simson Primer P, please refer to the specific technical data sheets.

For surfaces not mentioned and additional information, consult Bostik Findley.

PROCESSING

Simson ISR 70-03 can easily be sprayed with a hand or air pressure caulking gun at temperatures between +5°C and 35°C. In sealing applications, Simson ISR 70-03 must be finished or smoothed within 10 minutes (at 20°C/50%RH) using a spatula/putty knife, possibly moistened with a soap solution.

INDUSTRIAL SPECIAL GRADE E

Samson

ISR 70-03

Avoid penetration of the soap solution between the joint side and sealant as this can cause loss of adhesion. In bonding applications, the surfaces to be bonded must be bonded within 15 minutes (at 20°C/50%RH) after application of Simson ISR 70-03. In general, an adhesive thickness of 2 mm is recommended.
At a temperature of 20°C and a relative humidity of 50%, Simson ISR 70-03 can be sprayed over with most industrial paints after 10 minutes. The best adhesion of paint layers is achieved if spraying is done within 4 hours after application of Simson ISR 70-03. Cleaning tools or removing uncured residue of Simson ISR 70-03 is done using a clean dye-free cloth moistened with Simson Cleaner 14. It is recommended to test the surfaces in advance for possible attack by Simson Cleaner 14.

TECHNICAL CHARACTERISTICS Basic raw

material Silyl Modified Polymer (SMP)
Curing method , humidity **Density** approx.
1.4 g/ml **Skin formation time**
approx. 10 min. (20°C/50%RH)
Open time < 15 min.* (20°C/50%RH)
Hardening after 24 hours approx. 3 mm (20°C/50%RH)
Shore A hardness approx. 55 (DIN 53505)
Volume change < 3% (DIN 52451)
Initial strength approx. 300 Pa (Physica Rheometer MC100) (max. load to be applied per m2 of uncured adhesive without sagging)
Tensile stress (100%) approx. 1.7 MPa (DIN 53504/ISO 37)
Tensile stress at break approx. 2.6 MPa (DIN 53504/ISO 37)
Elongation at break approx. 250% (DIN 53504/ISO 37)
Shear stress approx. 2.5 MPa (DIN 53283/ASTM D1002)
(Alu-Alu; glue thickness 2mm, test speed 50 mm/min.)
Tear propagation strength approx. 16 N/mm (DIN 53515/ISO 34)
(Type C, test speed 500 mm/min.)
E-Modulus(10%) approx. 3.3 MPa (DIN 53504/ISO 37)
Solvent content 0%
Isocyanate content 0%
Temperature resistance - 40°C to +120°C
Temperature resistance +180°C (max. 30 min.)
Processing temperature +5°C to +35°C **UV and weather resistance** very good **Colors (standard)** white, gray, black **Packaging**
290 ml cartridges, 600 ml sausages, other packaging types on request.
* Also available with a longer open time on request.

STORAGE STABILITY Simson ISR 70-03 has a shelf life of 12 months in unopened packaging at temperatures between +5°C and +30°C (cartridges 18 months).

SAFETY PRECAUTIONS No special safety precautions. Consult the safety data sheet.

TRANSPORT CLASSIFICATION Not applicable.

Simson ISR 70-03