1978 Sachs Westlake (Sachs 504-1D Engine) Moped

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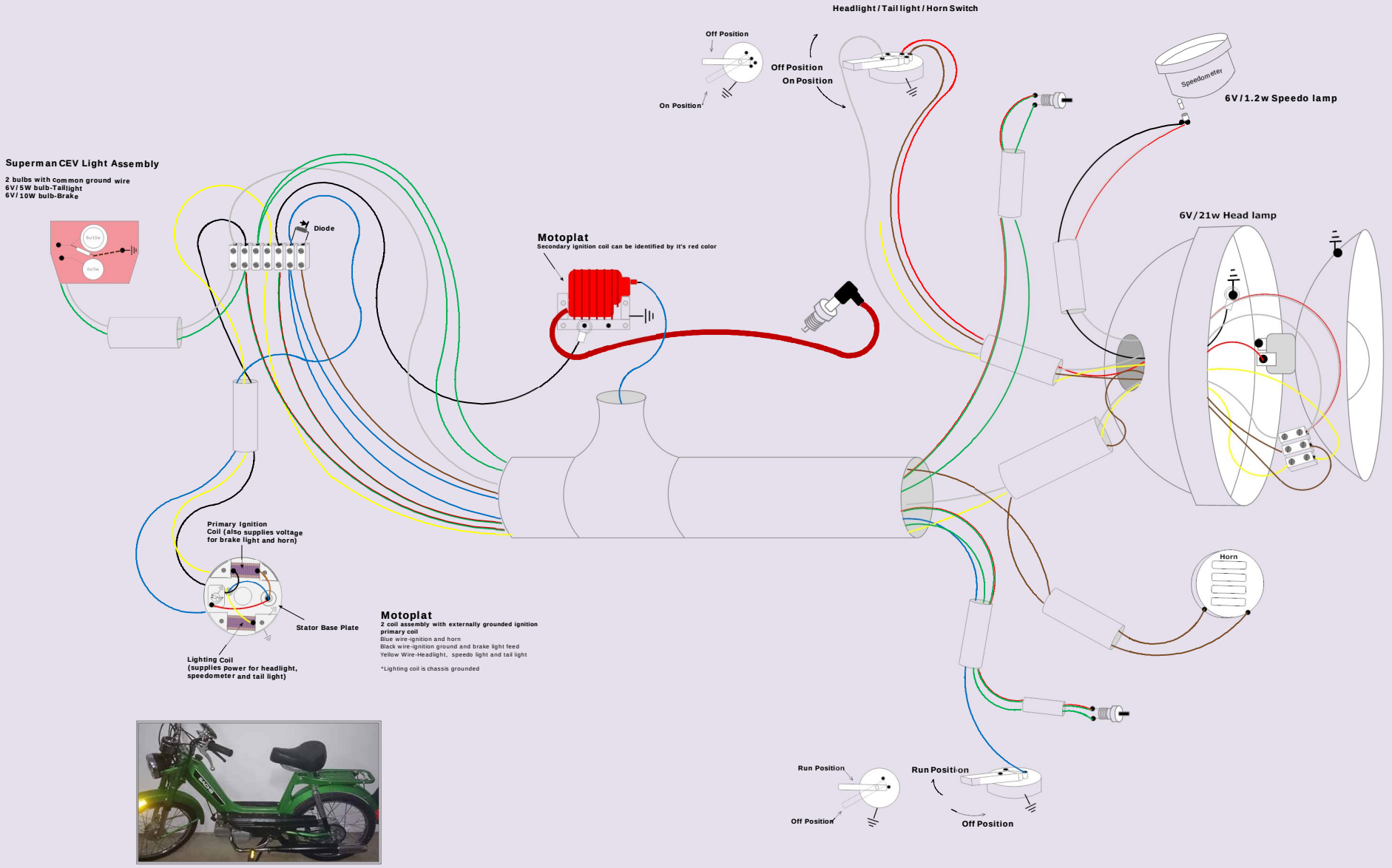

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Brake Light Circuit

The brake lights work by removing the ground from the hot side of the circuit. The brakes are wired hot directly to the terminal block but wires coming from the brake light switches keep the circuit grounded preventing the light from working. When the levers are squeezed, the switch(s) interrupt the grounding of the circuit and allow the light to illuminate

(Sachs uses a 6.8 ohm/10 watt resistor between the green brake feed wire and the ground. If this resistor is bad or missing, the engine will stop if the bulb is burned out and the brakes are squeezed.

Superman CEV Light Assembly

2 bulbs with common ground wire
6V/5W bulb-Taillight
6V/10W bulb-Brake

Gray
Green

Ignition Circuit

The Westlake uses a Motoplat ignition instead of the much more common Bosch. The magneto is a 2 coil type with the ignition primary coil being externally grounded. The blue wire is the feed to the secondary ignition coil and the black wire serves as the ground feed and also is the voltage supply for the brake lights. The horn also gets its power from the blue ignition lead

The OFF/Run switch on the RH side of the handlebar has a single lead going to it from the ignition. The switch itself is grounded to the chassis through the clamp. When the switch is placed in the off position, it grounds out the secondary coil and prevents the ignition from firing.

Diode

Motoplat
Secondary ignition coil can be identified by it's red color

Blue

Tail Light Circuit

The tail light gets its power from the headlight circuit. At the LH switch, the gray wire sends power all the way back to the tail light.

Blue
Yellow
Black

Primary Ignition Coil (also supplies voltage for brake light and horn)

Ignition coil has an external ground. The coil is isolated from the chassis ground. The black wire serves as the ground side and the blue wire is the feed side.

Condenser

Contact Point Assy

Stator Base Plate

Lighting Coil (supplies power for headlight, speedometer and tail light)

Motoplat
2 coil assembly with externally grounded ignition primary coil
Blue wire-ignition and horn
Black wire-ignition ground and brake light feed
Yellow Wire-Headlight, speedo light and tail light

*Lighting coil is chassis grounded

Headlight / Tail light / Horn Switch

Off Position
On Position
Yellow
Gray
Red
Brown

LH Brake Light Switch
Switch is a N/O type (normally open) in it's relaxed state (Position when brake lever is squeezed)

Green/Red
Green

Speedometer

6V/1.2w Speedo lamp

Black
Gray w/Red

Headlight Circuit

The headlight circuit receives its power from the bottom coil in the magneto assembly. The yellow wire is fed up to the LH switch and is distributed to the headlight, tail light and speedometer light.

6V/21w Head lamp

Black
Gray w/Red
Red
Gray
Yellow
Brown

Horn

Horn Circuit

The horn receives its current from the blue ignition wire. Pressing the horn button on the LH switch completes the ground and the horn makes noise. There is a diode on the terminal strip that prevent current flowing back through to the ignition and grounding out that circuit.

Green/Red
Green

RH Brake Light Switch
Switch is a N/O type (normally open) in it's relaxed state (Position when brake lever is squeezed)

Blue

Run Position
Off Position

Engine Shutoff Switch
Single Wire/Case is grounded to handlebars

1978 Sachs Westlake (Sachs 504-1D Engine) Moped

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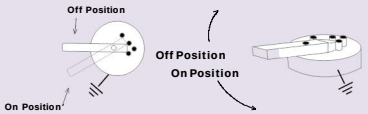
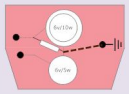
Headlight / Tail light / Horn Switch



6V/1.2w Speedo lamp

Superman CEV Light Assembly

2 bulbs with common ground wire
6V/5W bulb-Taillight
6V/10W bulb-Brake



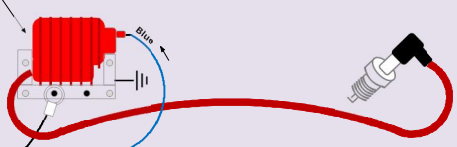
Ignition Circuit

The Westlake uses a Motoplat ignition instead of the much more common Bosch. The magneto is a 2 coil type with the ignition primary coil being externally grounded. The blue wire is the feed to the secondary ignition coil and the black wire serves as the ground feed and also is the voltage supply for the brake lights. The horn also gets its power from the blue ignition lead

The OFF/Run switch on the RH side of the handlebar has a single lead going to it from the ignition. The switch itself is grounded to the chassis through the clamp. When the switch is placed in the off position, it grounds out the secondary coil and prevents the ignition from firing.

Motoplat

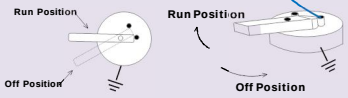
Secondary ignition coil can be identified by it's red color



Motoplat

2 coil assembly with externally grounded ignition primary coil
Blue wire-ignition and horn
Black wire-ignition ground and brake light feed
Yellow Wire-Headlight, speedo light and tail light

*Lighting coil is chassis grounded



Engine Shutoff Switch

Single Wire/Case is grounded to handlebars

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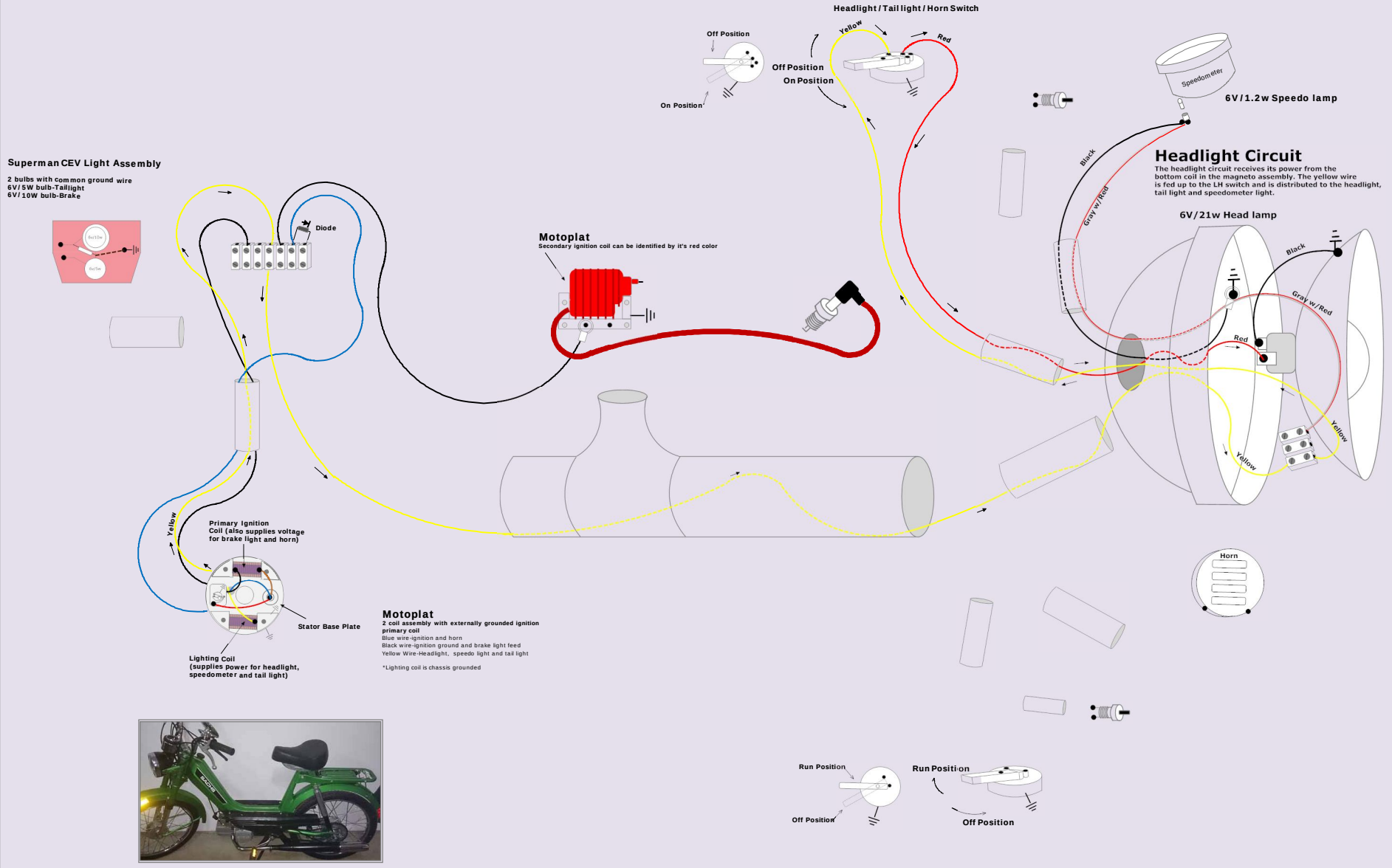

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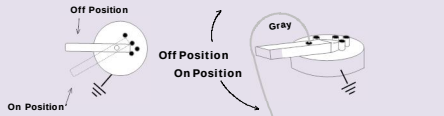
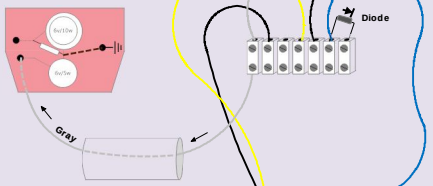
Headlight / Tail light / Horn Switch



6V/1.2w Speedo lamp

Superman CEV Light Assembly

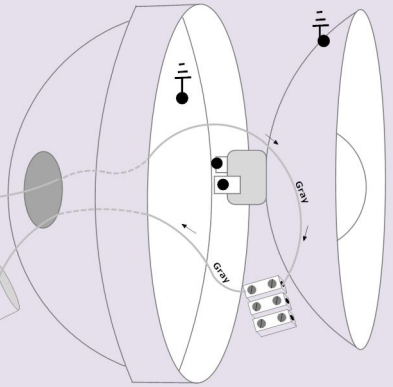
2 bulbs with common ground wire
6V/5W bulb-Taillight
6V/10W bulb-Brake



Motoplat

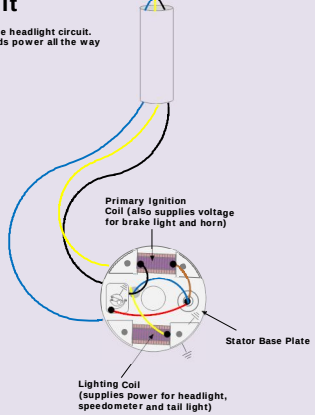
Secondary ignition coil can be identified by it's red color

6V/21w Head lamp



Tail Light Circuit

The tail light gets its power from the headlight circuit. At the LH switch, the gray wire sends power all the way back to the tail light.



Motoplat

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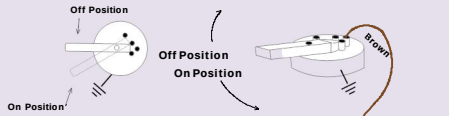
Headlight / Tail light / Horn Switch



6V/1.2w Speedo lamp

Superman CEV Light Assembly

2 bulbs with common ground wire
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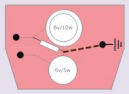
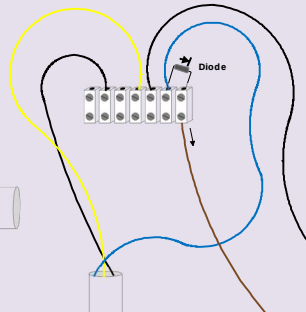
6V/10W bulb-Brake

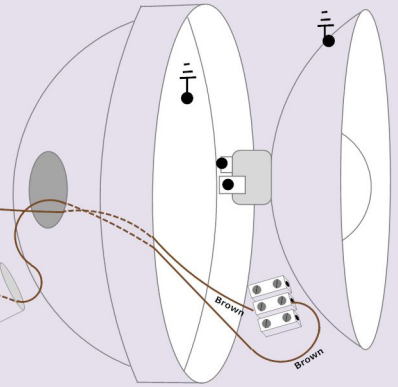


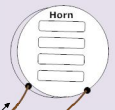


Motoplat

Secondary ignition coil can be identified by it's red color

6V/21w Head lamp





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Horn Circuit

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Brake Light Circuit

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Superman CEV Light Assembly

2 bulbs with common ground wire
6V/5W bulb-Taillight
6V/10W bulb-Brake

Diode

Green

Motoplat
Secondary ignition coil can be identified by it's red color

Headlight / Tail light / Horn Switch

Off Position
On Position
Off Position
On Position

LH Brake Light Switch
Switch is a N/O type (normally open) in it's relaxed state (Position when brake lever is squeezed)

Green/Red
Green

Speedometer

6V/1.2w Speedo lamp

6V/21w Head lamp

Horn

Primary Ignition Coil (also supplies voltage for brake light and horn)

Stator Base Plate

Lighting Coil (supplies power for headlight, speedometer and tail light)

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Green/Red
Green

RH Brake Light Switch
Switch is a N/O type (normally open) in it's relaxed state (Position when brake lever is squeezed)

Run Position
Off Position
Run Position
Off Position