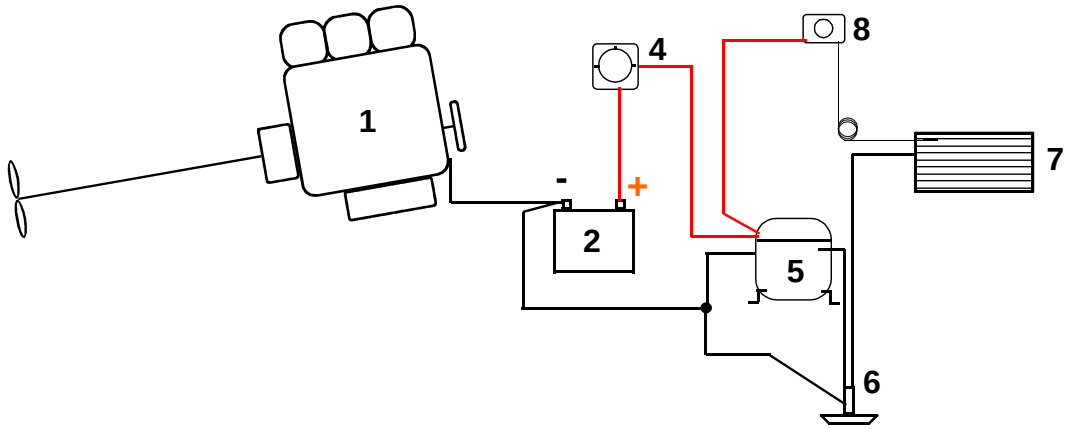
SINGLE MAIN BATTERY SWITCH ON POSITIVE

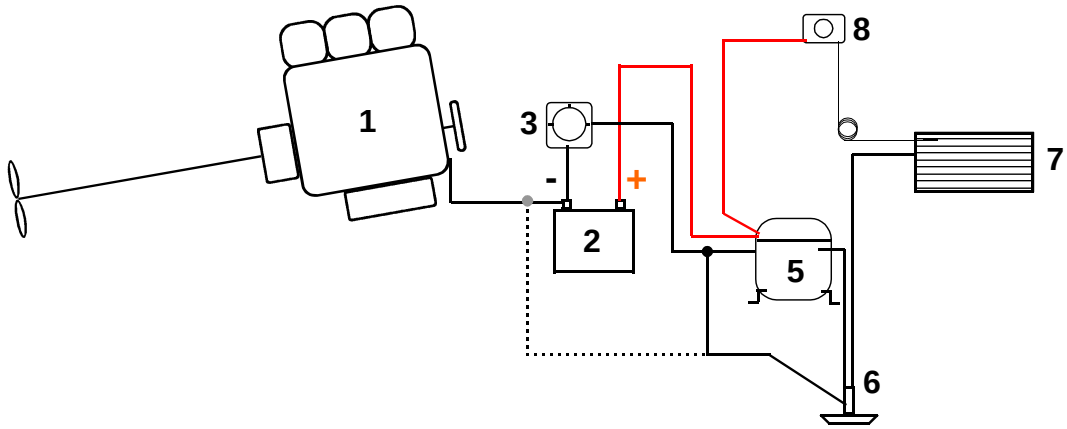


Technical analisys

This is the safest installation with a single battery switch on positive.
The keel cooler is linked directly to the battery negative. Any possible link from positive to negative will blow the protective fuse as the keel cooler is permanently linked to negative.
When the battery switch is in OFF position all the circuit becomes negative. No risk.

Ref	Description
1	Engine
2	Battery
4	Positive Battery Switch
5	Frigomatic Compressor
6	Keel Cooler
7	Evaporator
8	Thermostat

BATTERY SWITCH ON NEGATIVE

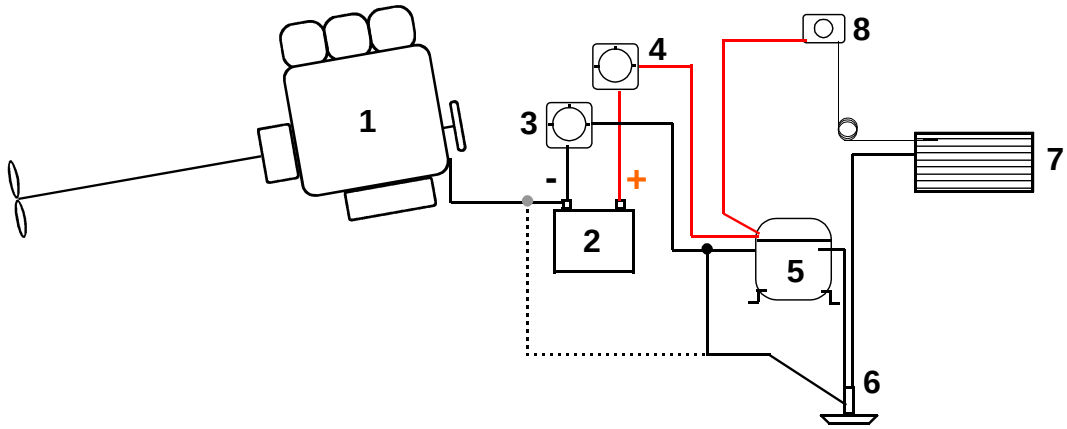


Technical analisys

This is a very dangerous installation with a single battery switch on negative.
The keel cooler is not linked directly to the battery negative. Any possible link from positive to negative will blow the protective fuse until the main switch is in ON position.
When the battery switch is in OFF position all the circuit becomes positive thru the lamps and coils in the circuit and the keel cooler also becomes positive.
In this case the keel cooler will be corroded away by ELECTROLISYS.
The dotted line shows the correct installation with the keel cooler connected DIRECTLY to the battery negative.
However this installation is wrong because when the battery switch is in OFF position there might be a small but continuous current flow thru the circuit because the negative to the engine is never disconnected and the positive is always connected..

Ref	Description
1	Engine
2	Battery
3	Negative Battery Switch
4	Positive Battery Switch
5	Frigomatic Compressor
6	Keel Cooler
7	Evaporator
8	Thermostat

BATTERY SWITCH ON POSITIVE & NEGATIVE



Technical analisys

This is the installation with a double battery switch on positive and negative. There are two mistakes in this layout:

1) NO direct link of the keel cooler to the battery negative. This is very dangerous. The dotted line shows the correct installation with the keel cooler linked DIRECTLY to the battery negative.

2) Double switch leaves the chance to open only one switch. If this happens, then the keel cooler (6) becomes positive while the engine remains negative. The ELECTROLISYS will be very quick. Any possible link from positive to negative will blow the protective fuse until both switches are in ON position. If both switches are put in OFF position the system is still safe. The two switches must be mechanically linked to prevent that one switch is ON and the other is OFF.

Ref	Description
1	Engine
2	Battery
3	Negative Battery Switch
4	Positive Battery Switch
5	Frigomatic Compressor
6	Keel Cooler
7	Evaporator
8	Thermostat