

# Service Manual

## EasyLoad



On the next pages we explain the Electrical system of the EasyLoad.

Also you wil find some service attention points





## Sliding left right

Make sure the pins are in and working!!!

And fixed in the right position

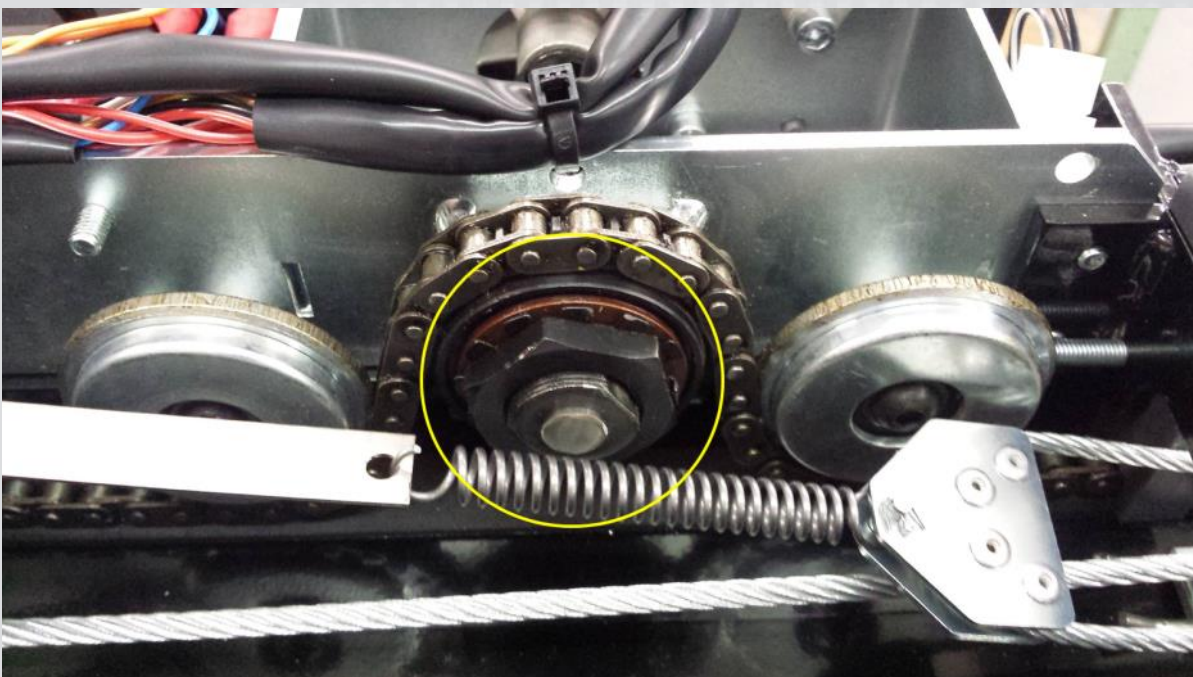


## Moving in and out.

Make sure the clutch is working properly

The adjustment is sealed to prevent damage

You have to clean it when the fuses are blown when sliding in and out.



Partnumber:

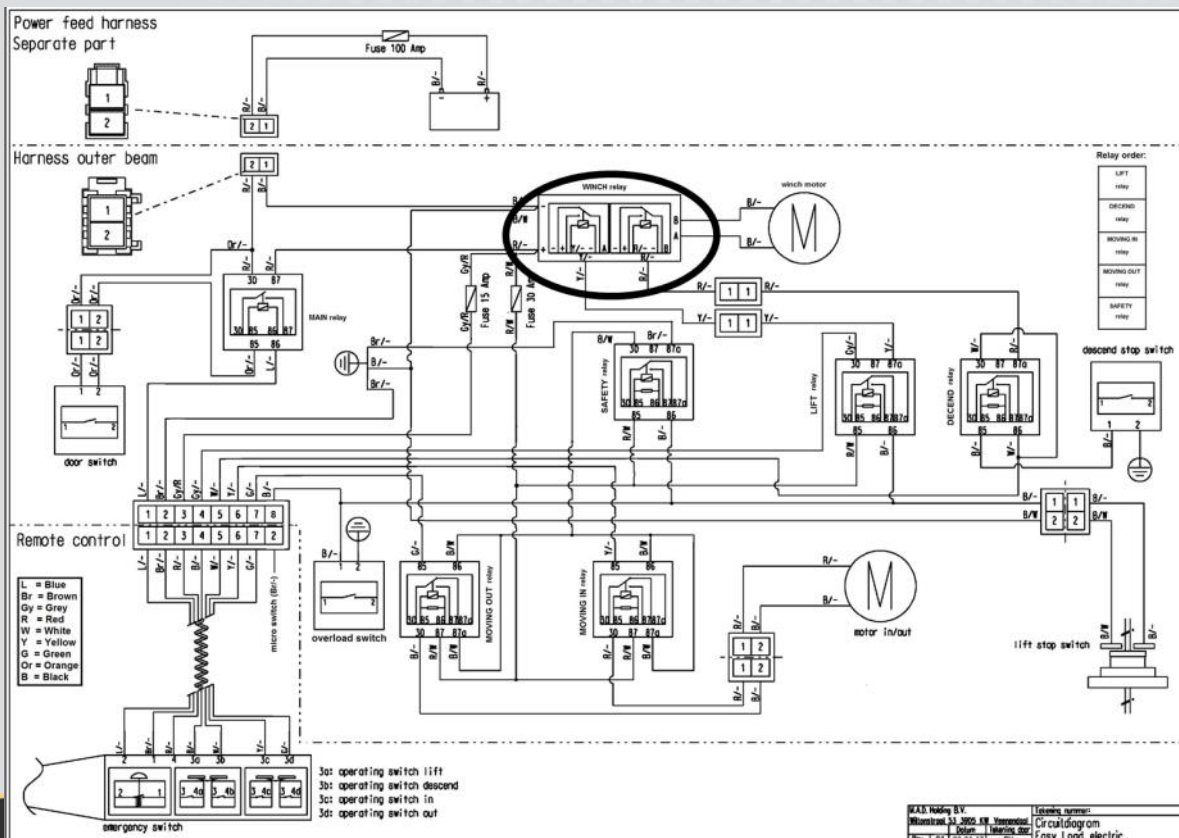
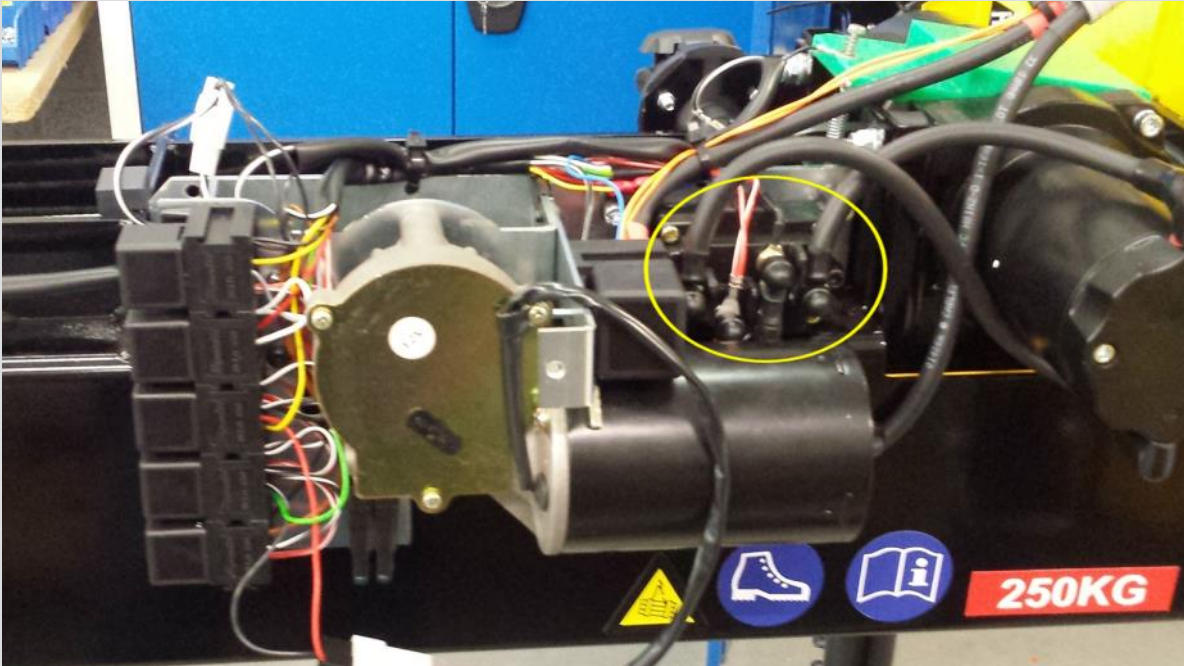
EC99007 clutch complete

EC99015 SHAFT COUPLER 500KG



## Winch Relay

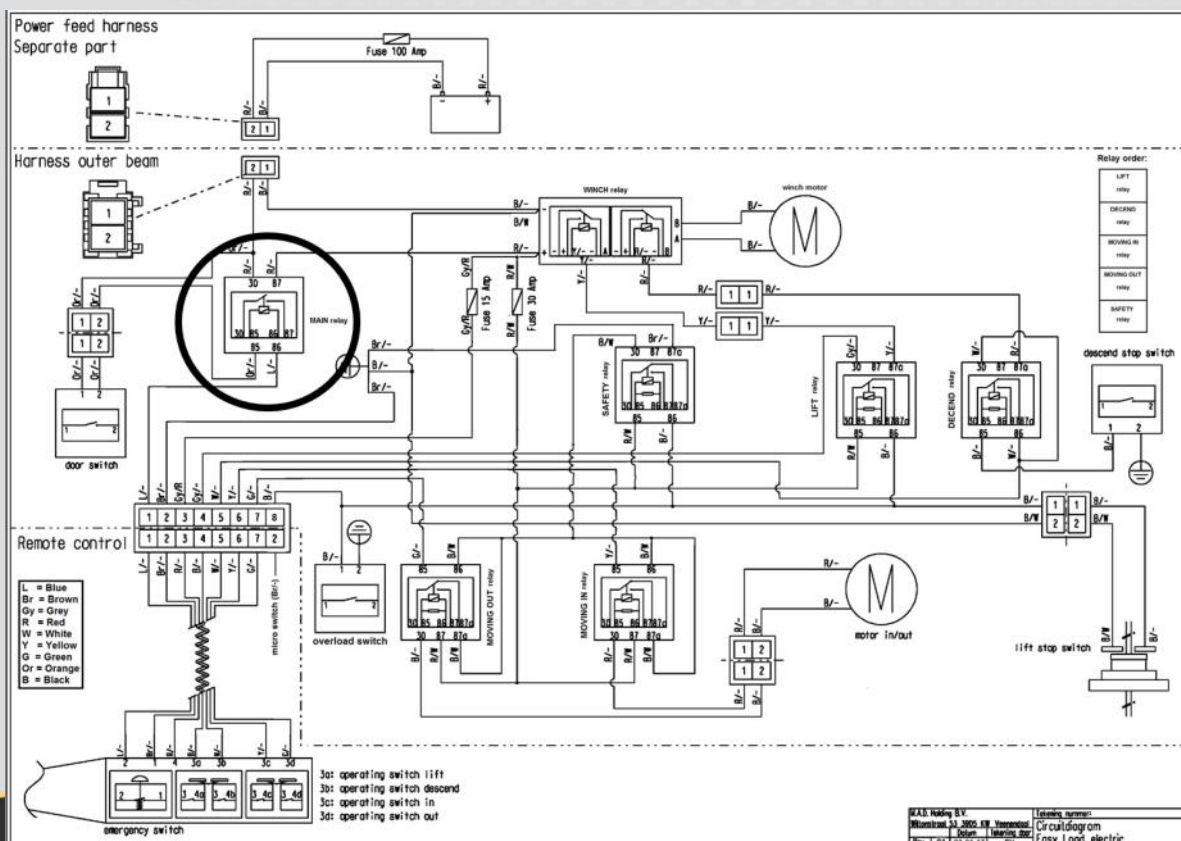
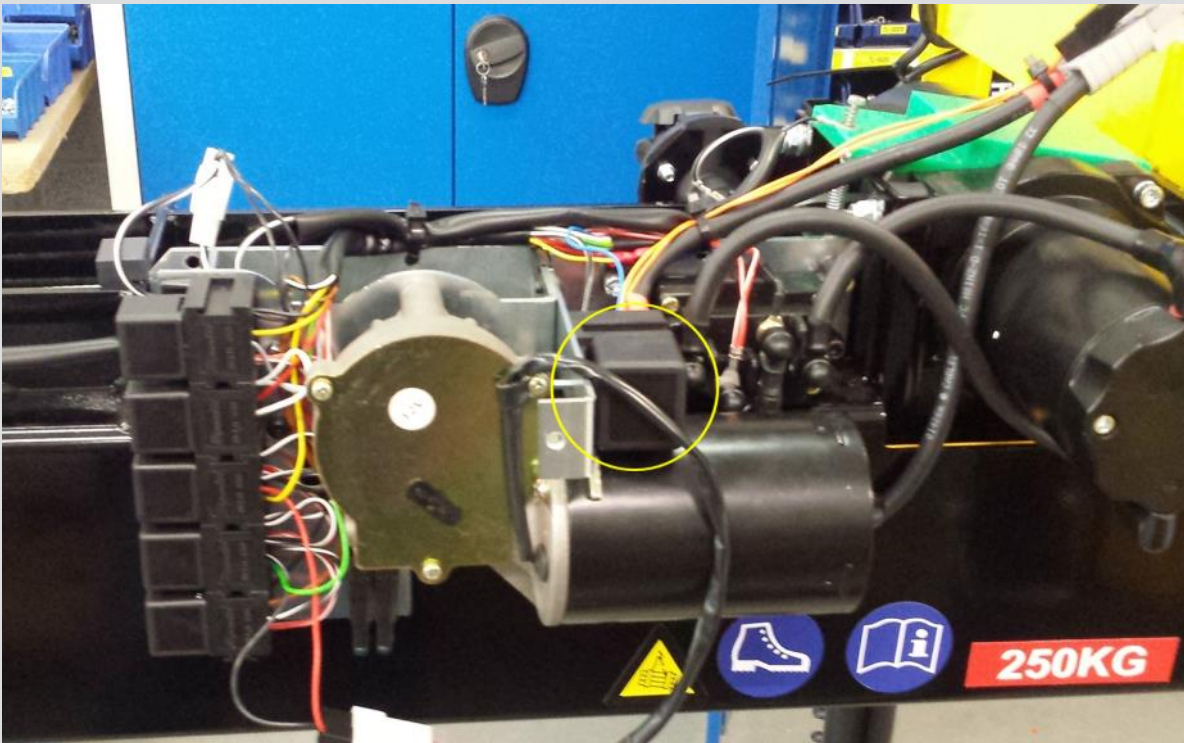
This Relay switches between up and down.



## Main Relay

This Relay takes care of the 12V/24V power supply.

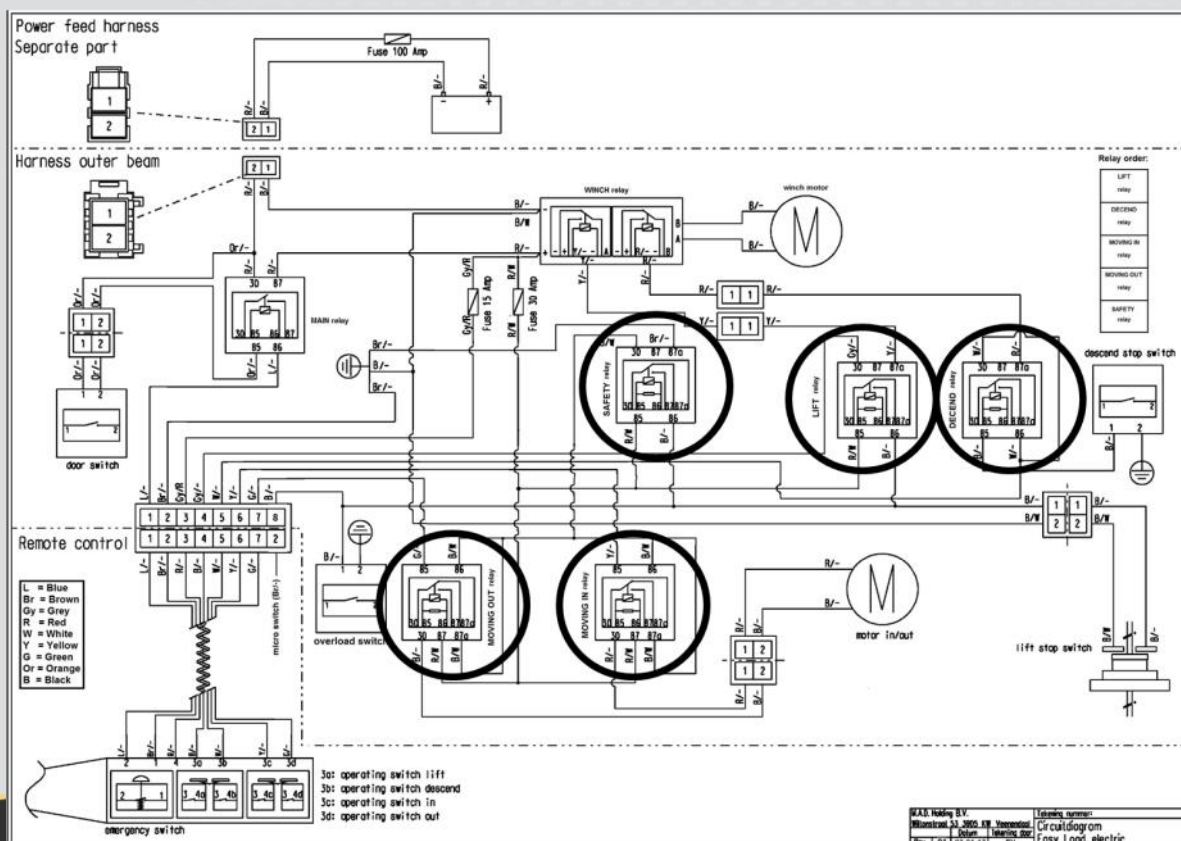
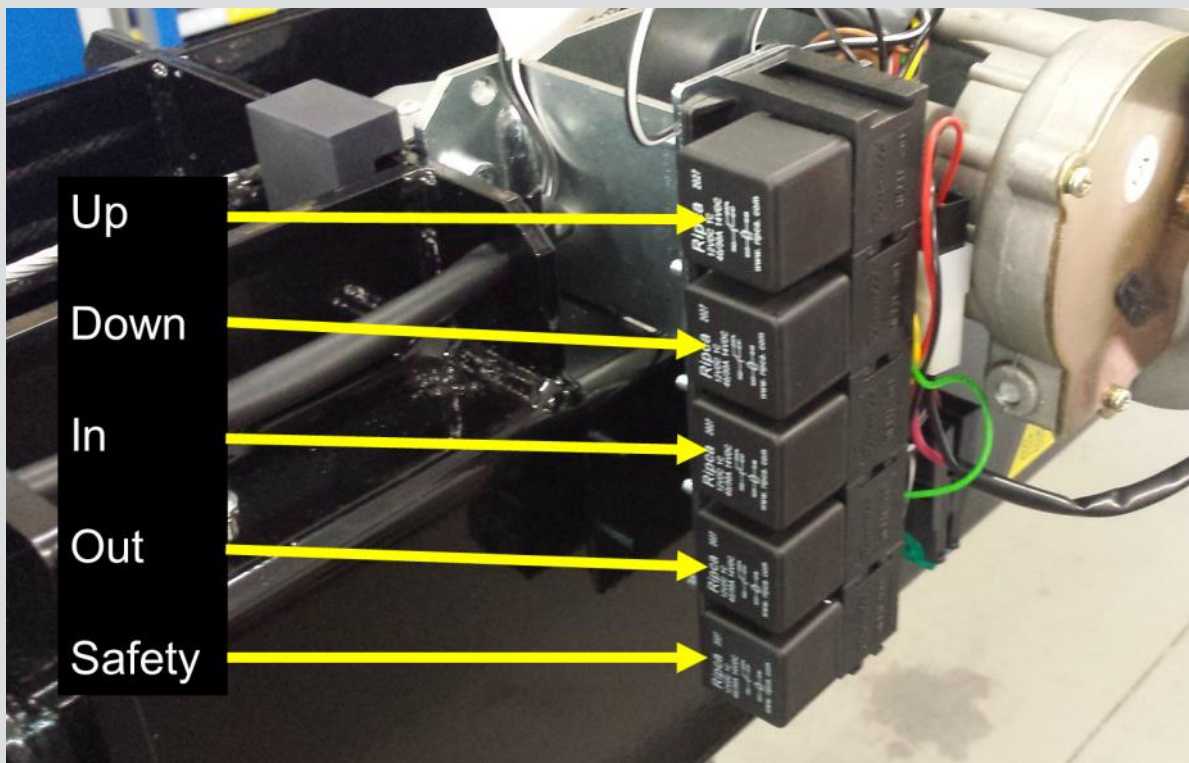
Controlled by door switch and/or emergency stop





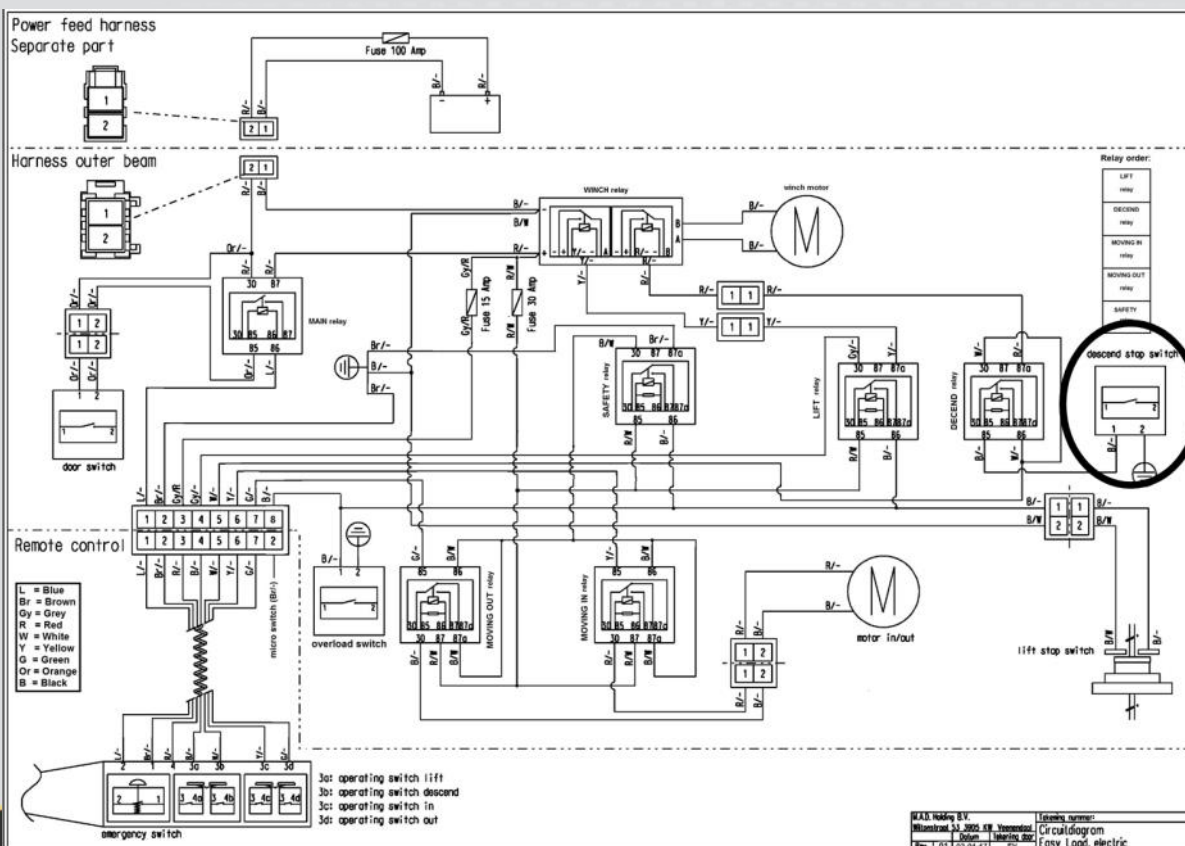
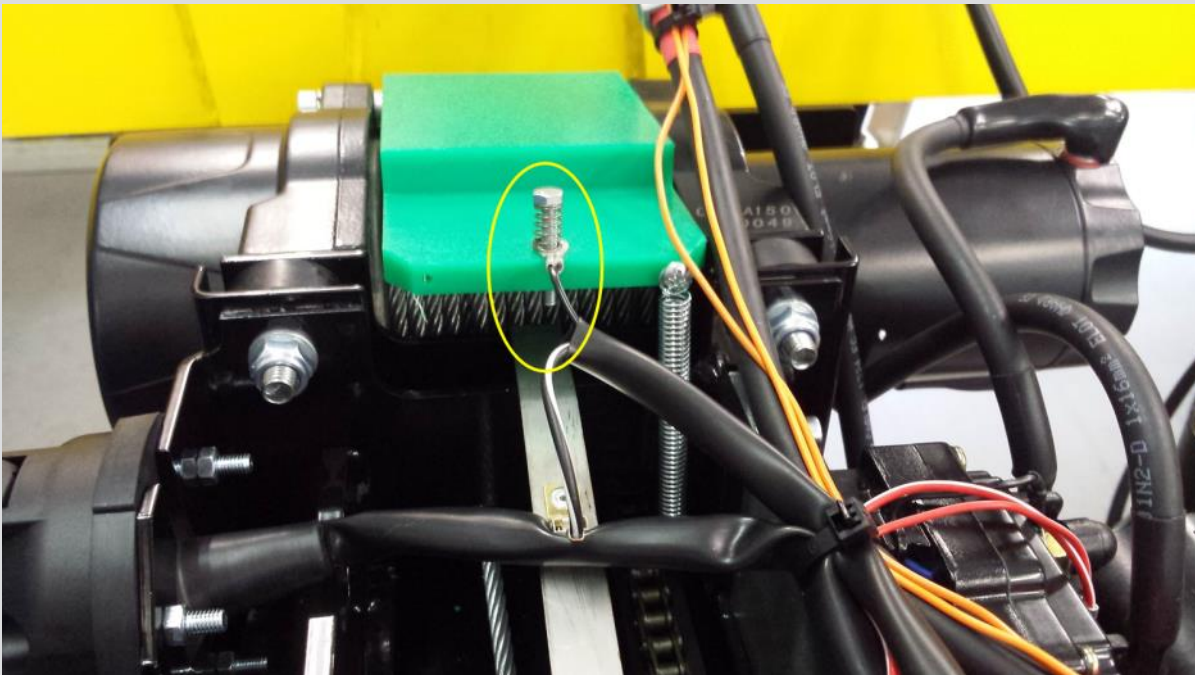
## Relays, 5 pin.

Switch Up, Down, In , Out and stop.



## Safety switch winch

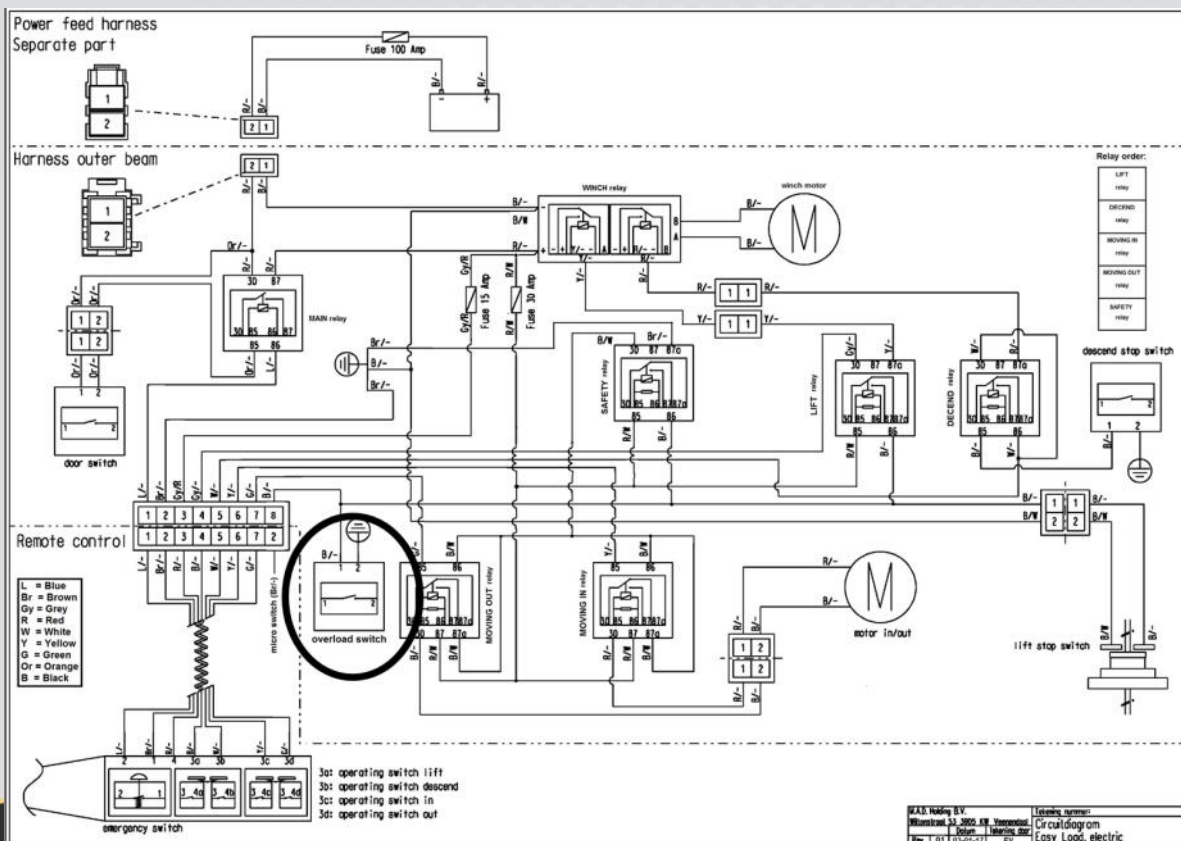
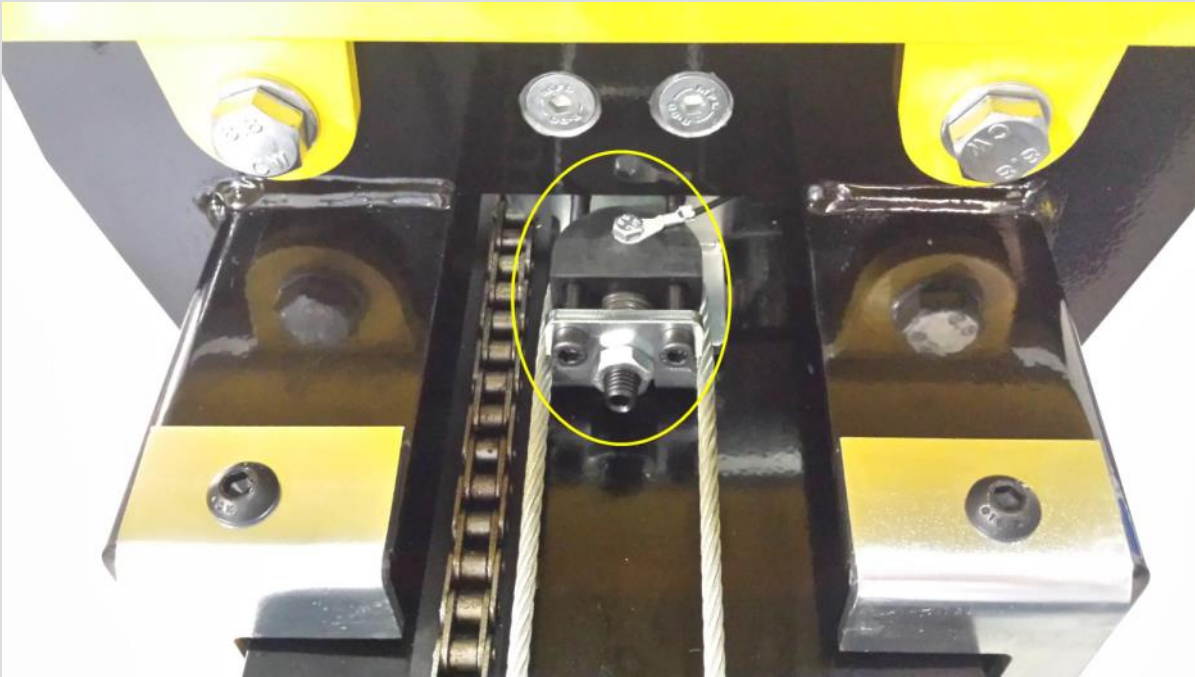
This switch ensures that one layer of cable will always remain on the drum of the winch.





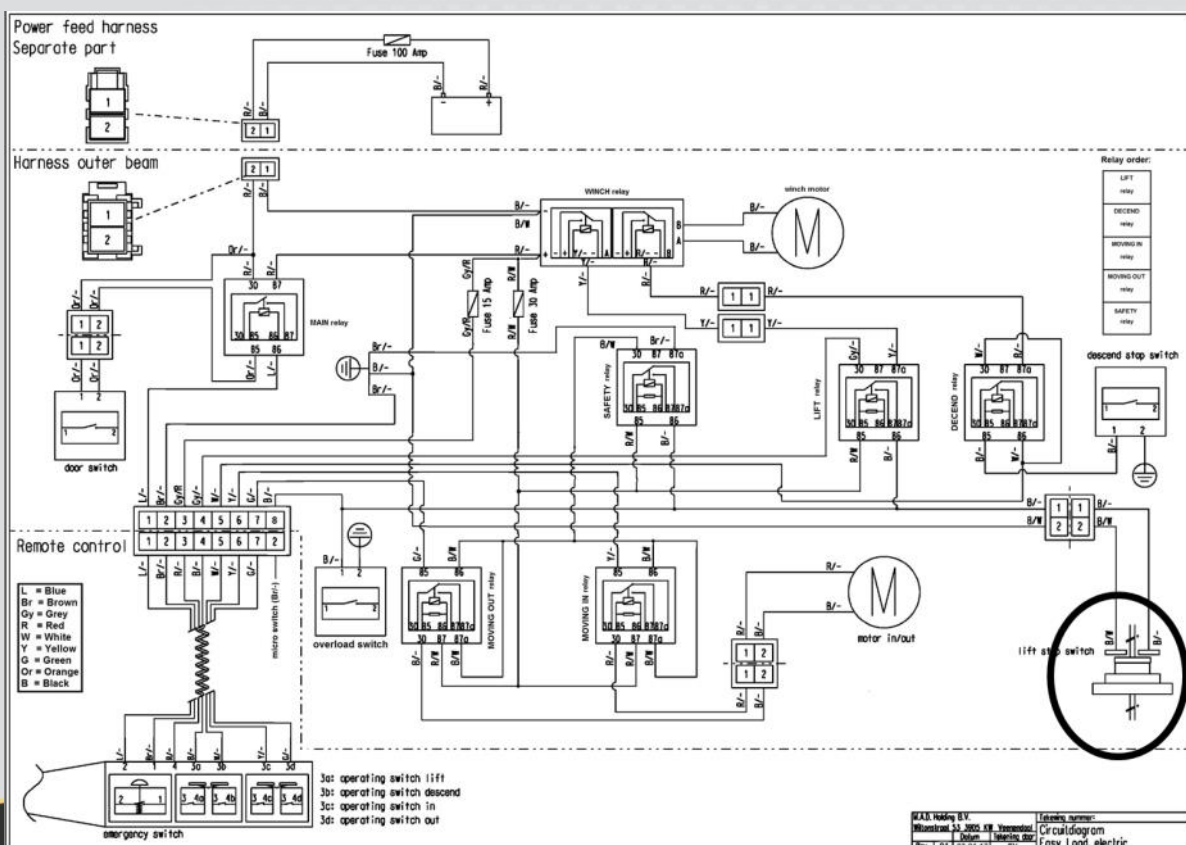
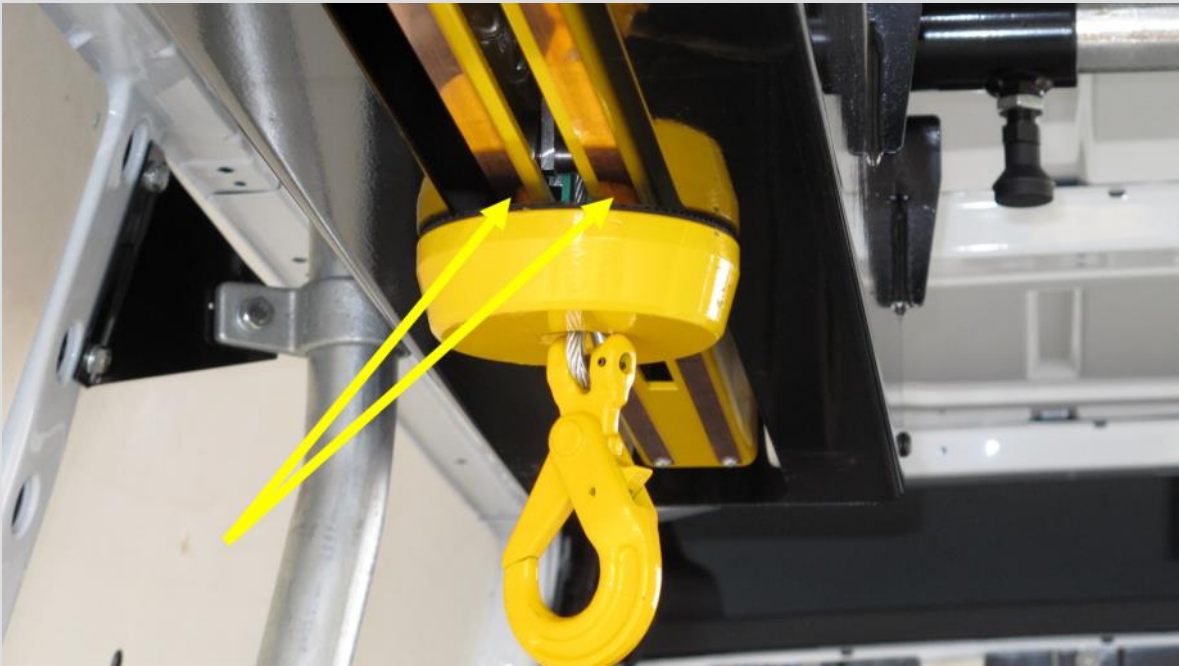
## Maximum weight Capacity

This switch stops the winch from going up when the weight is too high.



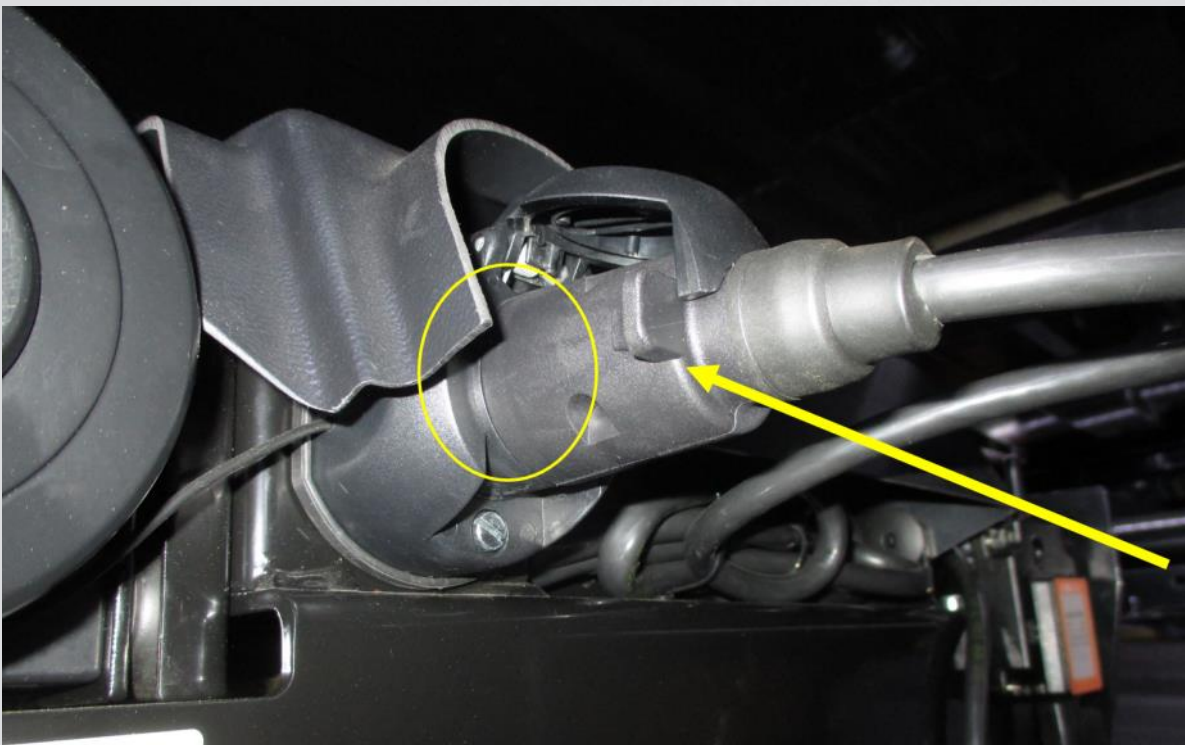
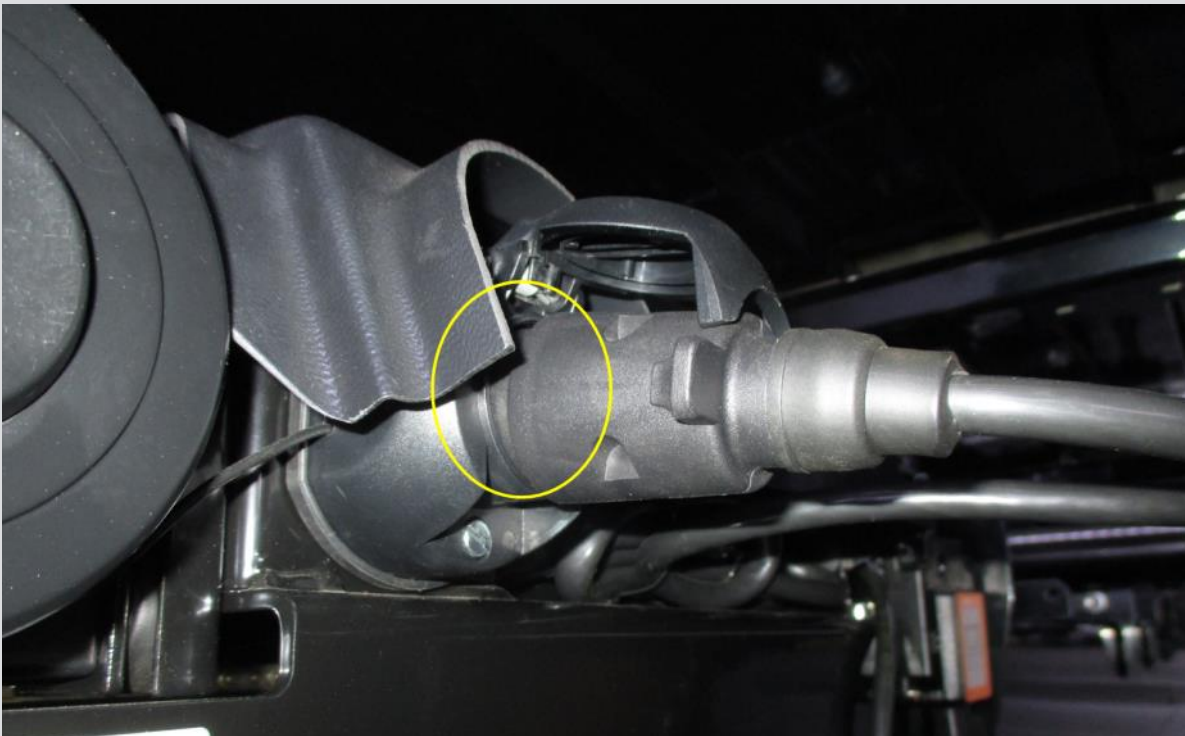
## Lift Stop switch

When the weight of the hook makes contact with the two copper stripes the winch stops and the beam will not go in and out.



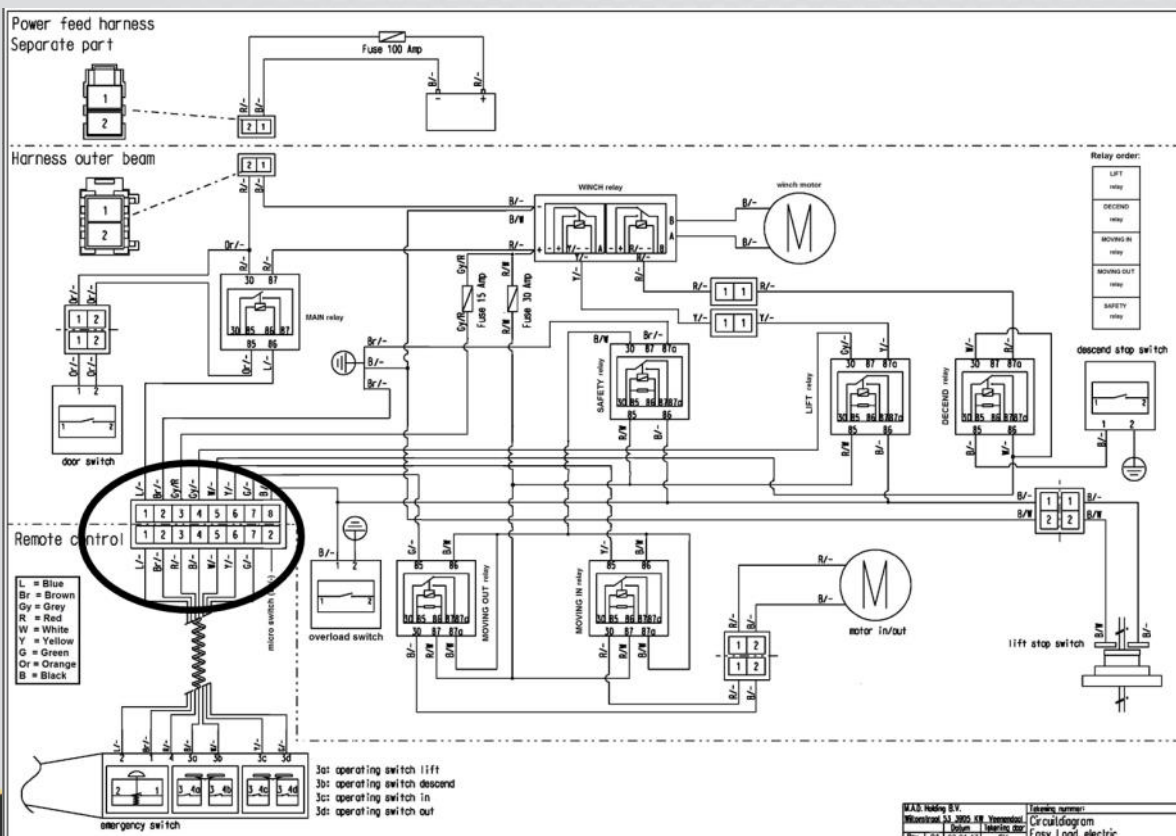
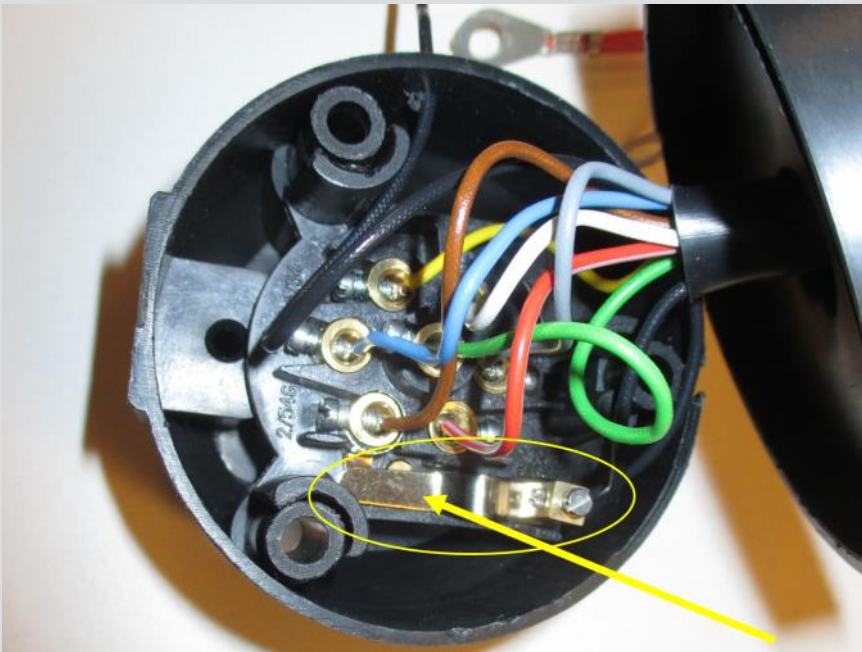


Make sure the Connector is put in properly



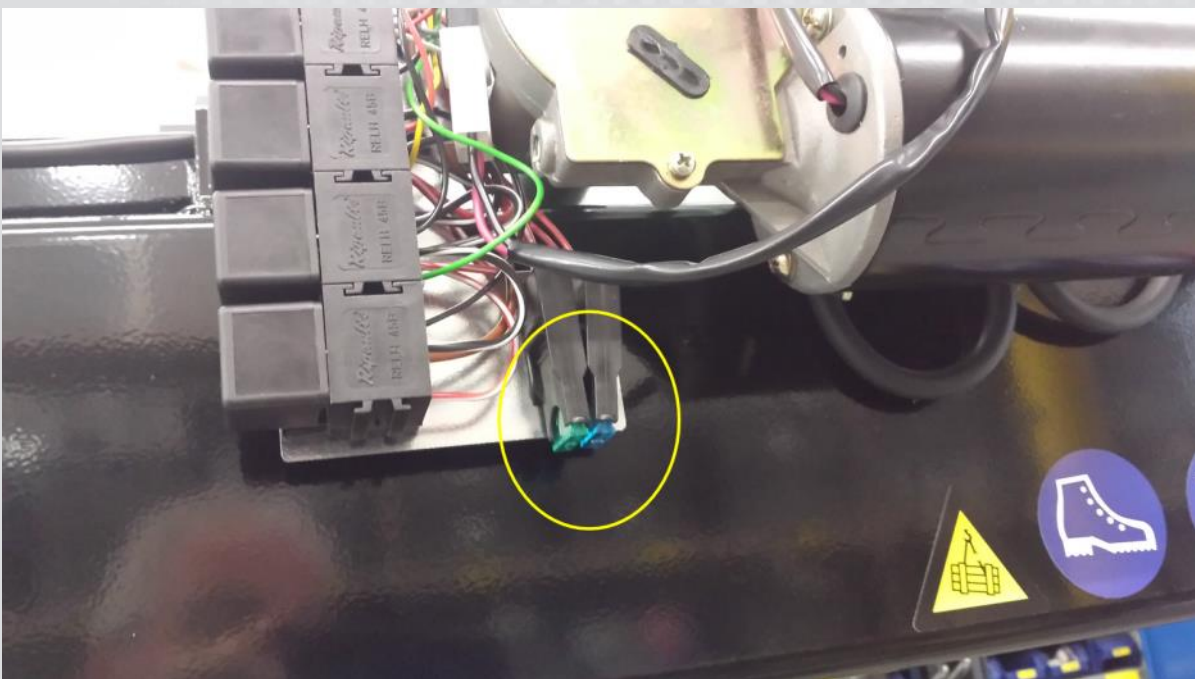
There is a switch inside the connector that makes ground.

The winch doesn't go up anymore.



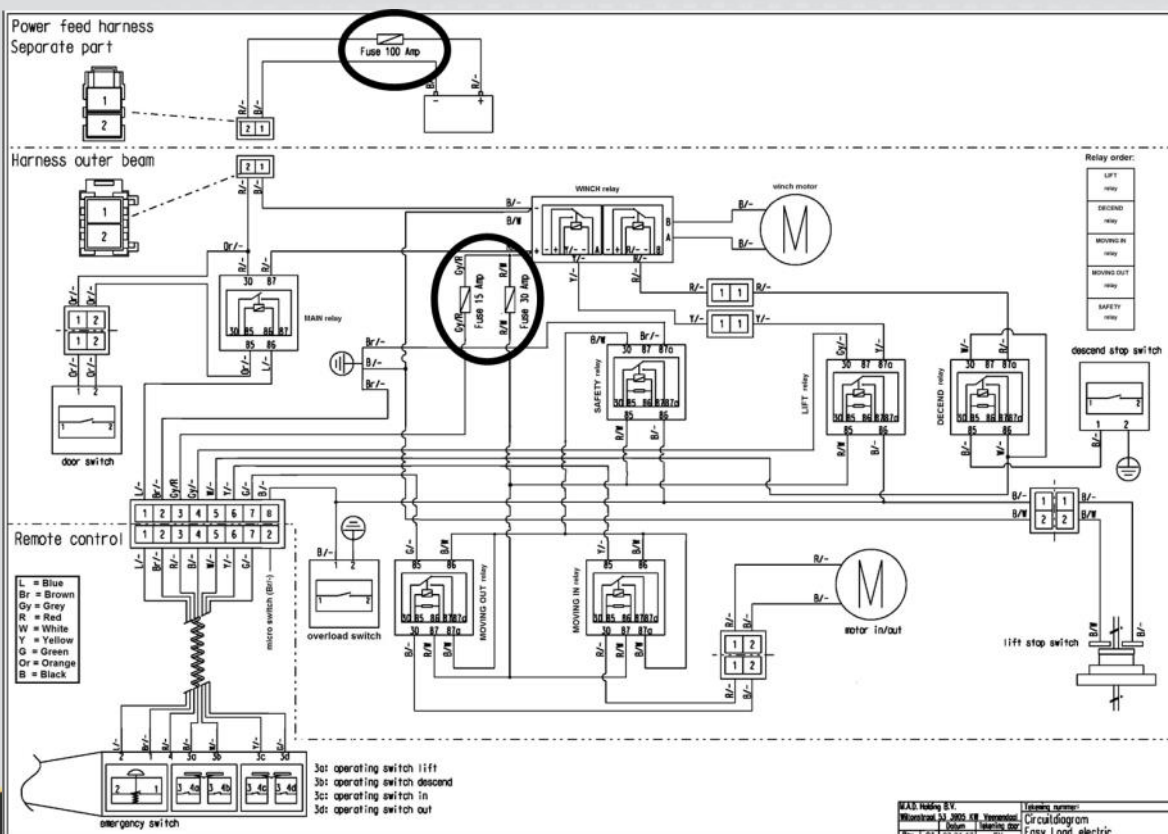
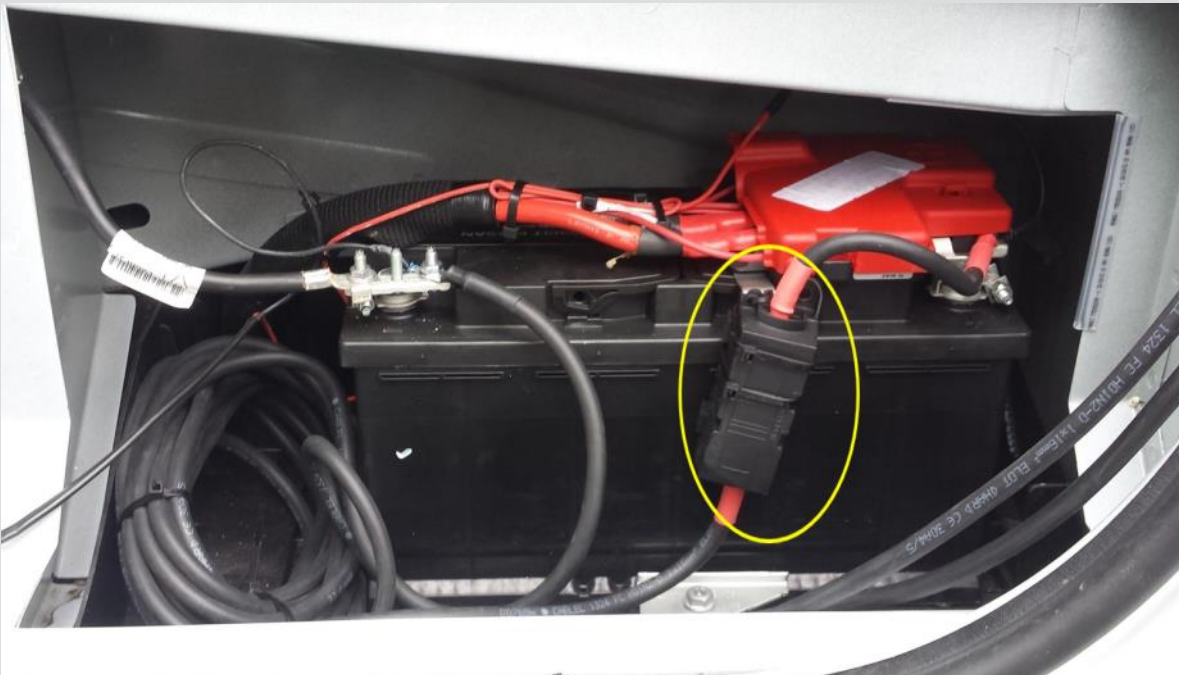


Where are the fuses?



One 30A and one 15A fuse

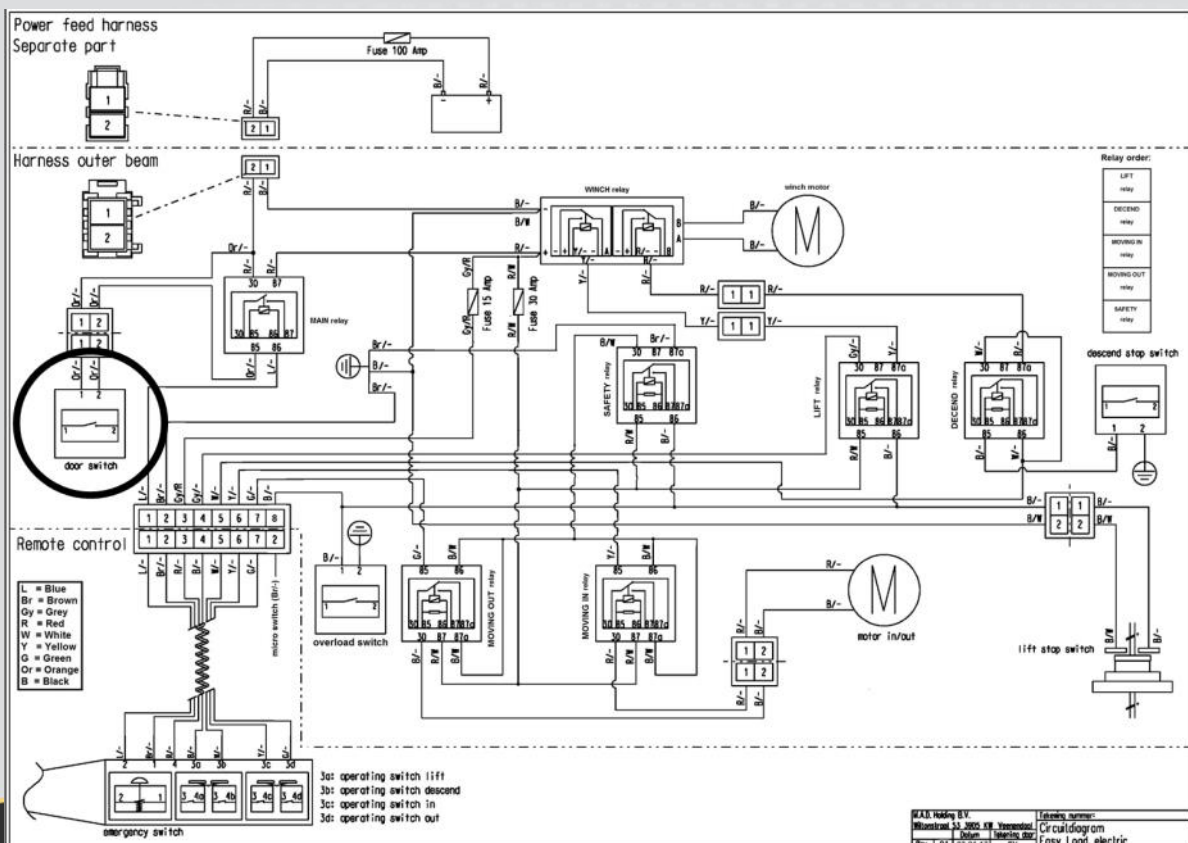
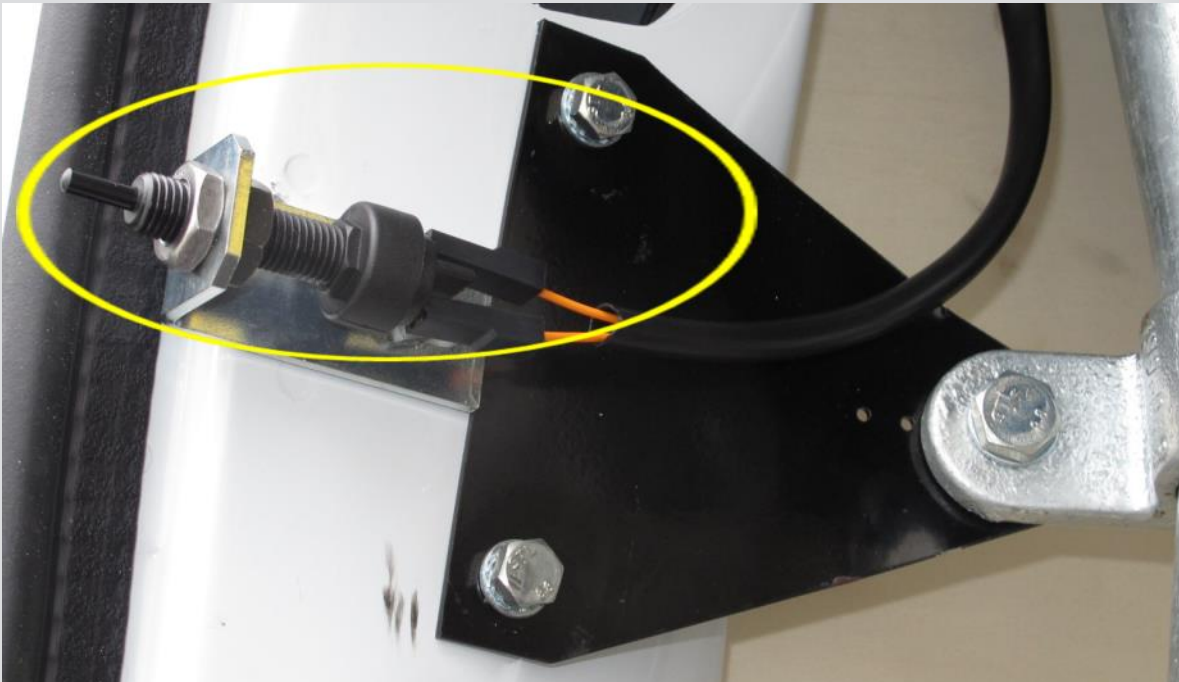
The main fuse, 100A, is near the battery





## Door switch.

This switch makes sure that the system can not drain the Battery



## Trouble Shooting:

Before you start make 100% sure that you have a good Battery

We have the experience that a lot of problems are caused by a bad battery



## Trouble Shooting:

Hook is not going down:

- No Electrical power– check battery, Main fuse, main relay, press button
- Green plate on winch makes ground
- Door switch is not working properly

Hook is not going up:

- Connector is not full in the socket
- Overload switch is activated, making ground
- Damaged Copper stripe on inner beam



## Check Damaged Copper strips on the innerbeam



Take of connector left.  
When it is not going up  
put it back again



Take of connector right.  
When it is not going up  
put it back again

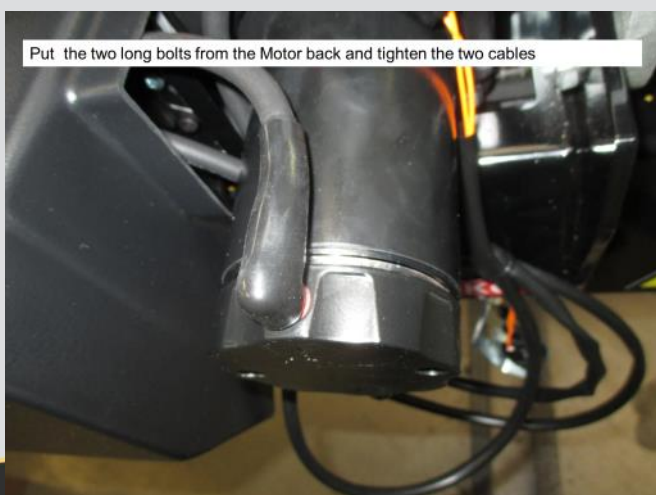
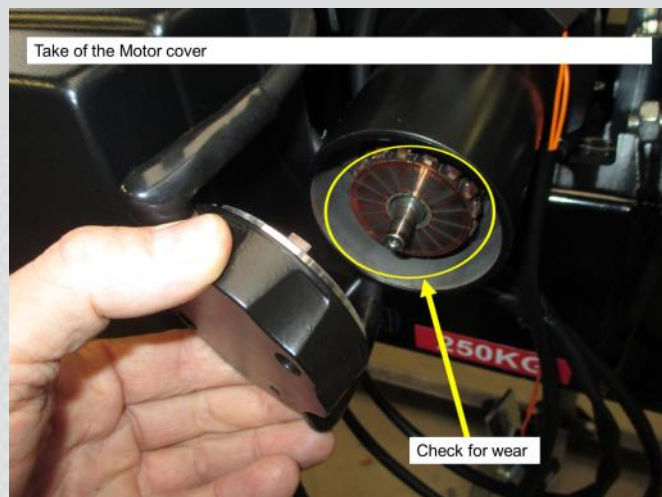




The copper can be making ground on the inner beam, so please check this



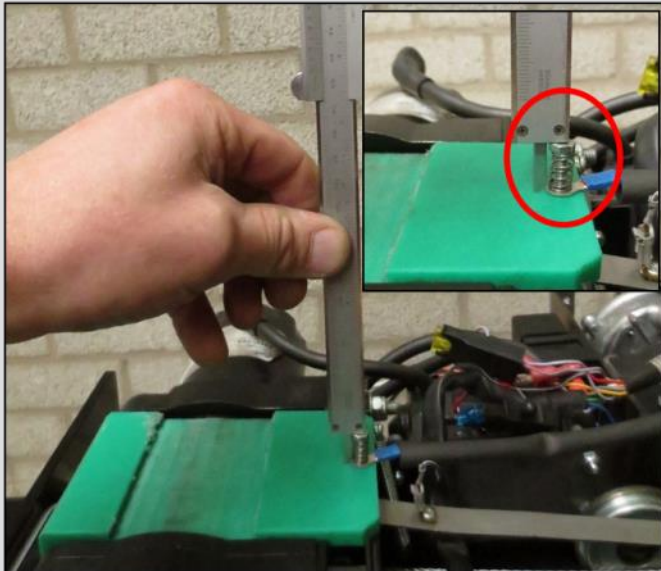
## Changing the Carbonbrushes of the winch



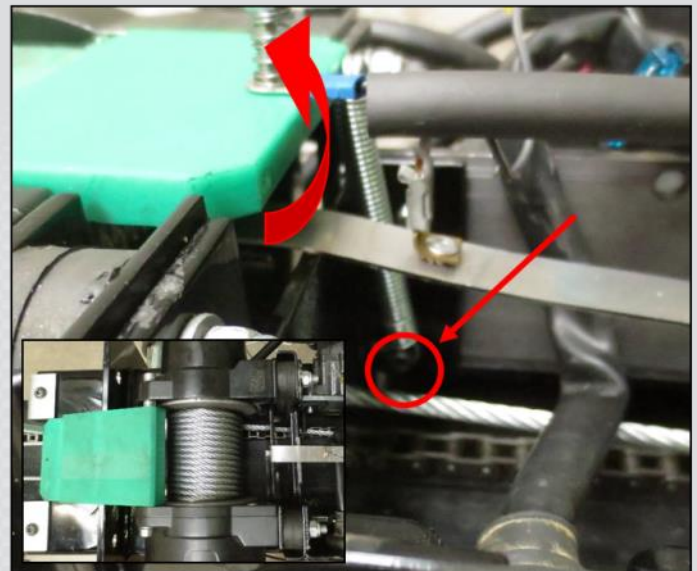
Torque 8-10Nm



## Changing the hoist cable



Measure the length of the m4 bolt



Take of the spring and turn the plate

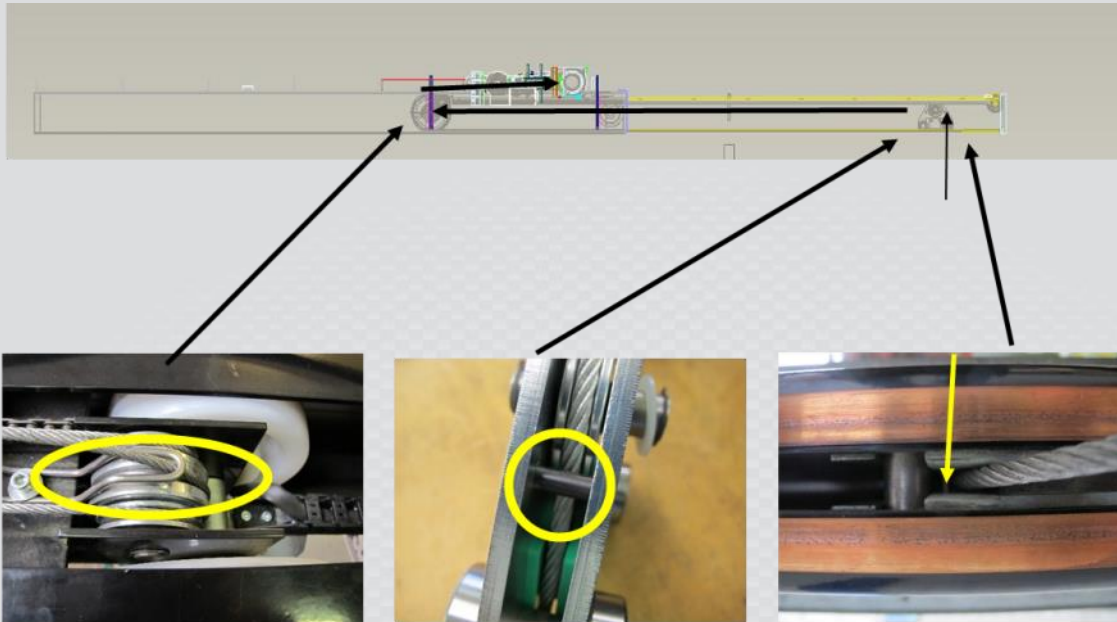


Loosen the hex bolt in the winch drum

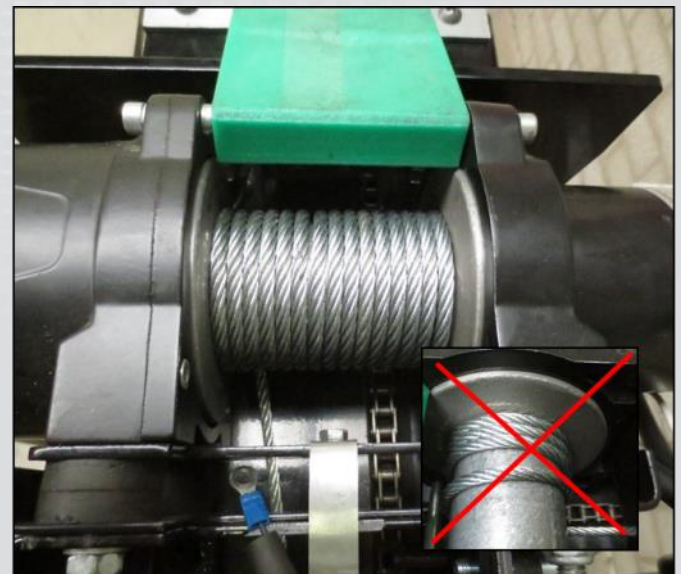


Loosen the four bolts of the top plate



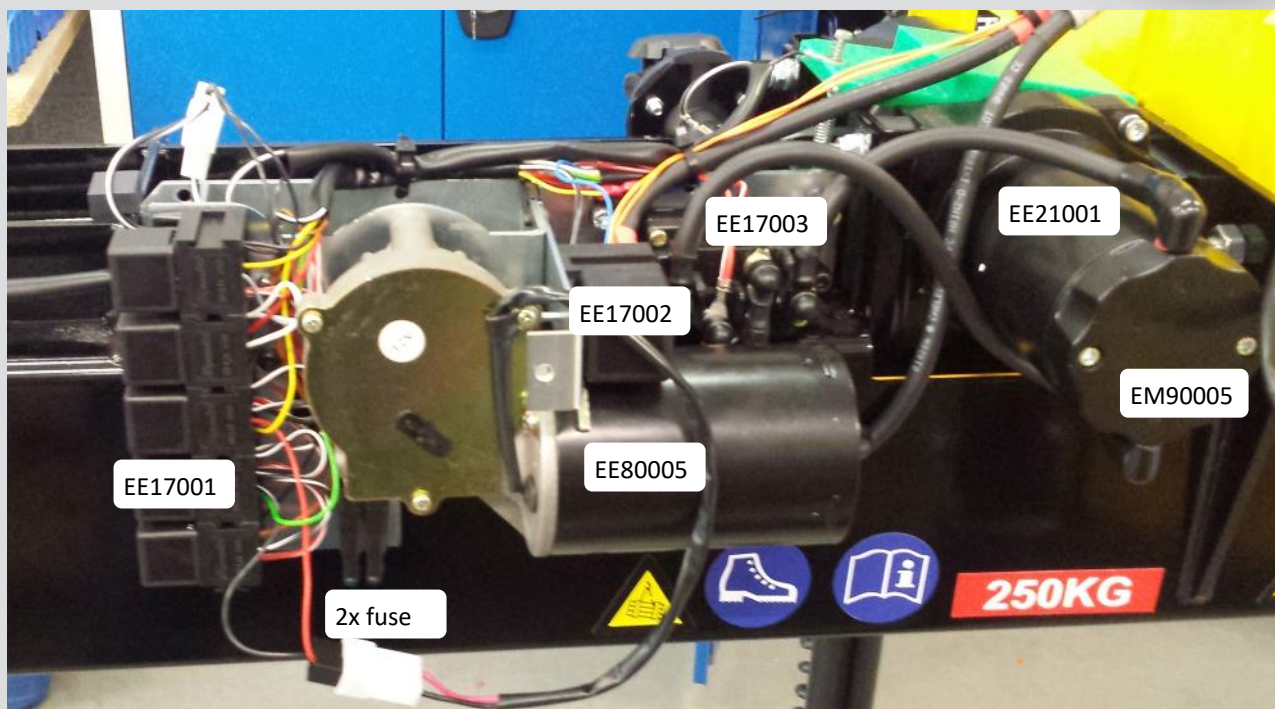


Make sure the cable is running smoothly around the wheels



Stick the new cable in the drum, tighten the bolt    Make sure the cable is correct on the drum

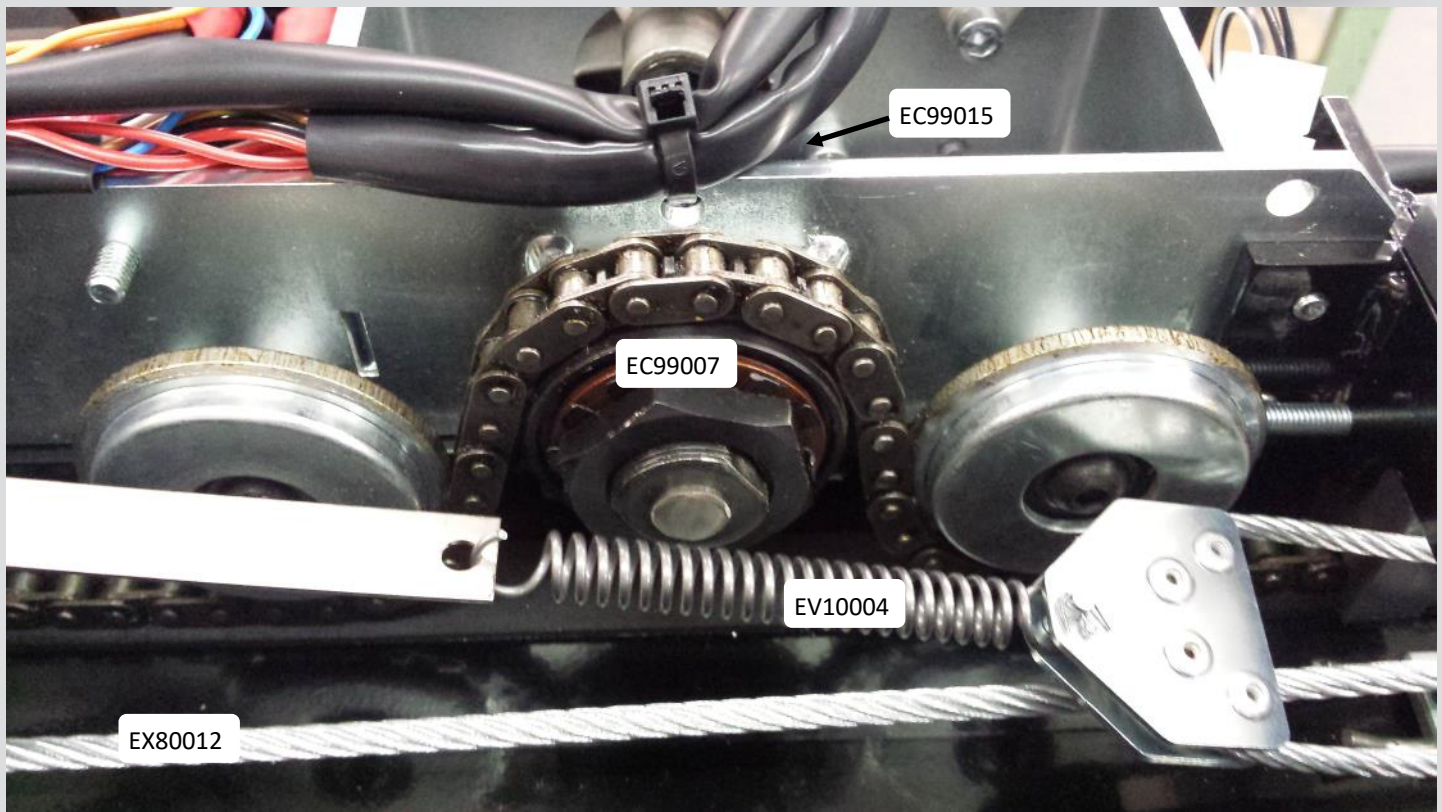
## Partnumbers:



|         |                           |         |                               |
|---------|---------------------------|---------|-------------------------------|
| EE17001 | RELAY 5-PIN 12VDC/40A     | EE17007 | RELAY 5-PIN 24VDC/30A (BOSCH) |
| EE17003 | RELAY WINCH 12V           | EE17006 | RELAY WINCH 24V               |
| EE17002 | RELAY 4-PIN 12VDC/150A    | EE17005 | RELAY 4-PIN 24VDC/80A         |
| EE17012 | RELAY WINCH 12V BIG WINCH |         |                               |
| EE21001 | WINCH 12V                 | EE21003 | WINCH 24V                     |
| EE21005 | WINCH 12V BIG (501)       | EE21006 | WINCH 24V BIG (501)           |
| EE80005 | LINEMOTOR 12 V            | EE80006 | LINEMOTOR 24V                 |

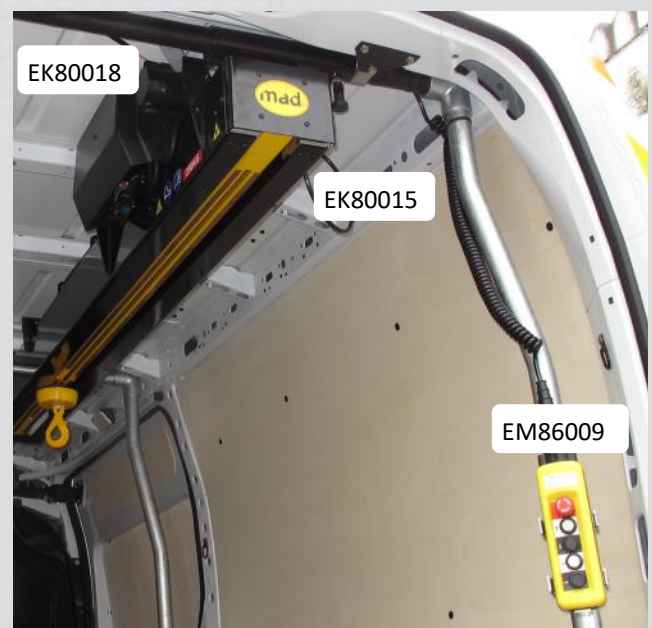


# Partnumbers:



|         |                                  |
|---------|----------------------------------|
| EC99007 | CLUTCH COMPLETE                  |
| EV10004 | PULL SPRING                      |
| EX80012 | HOIST CABLE 500KG                |
| EX80010 | HOIST CABLE 250KG                |
| EX80011 | HOIST CABLE 250KG (2 MTR. EXTRA) |
| EM86009 | CONTROLLER COMPLETE              |

|         |                            |
|---------|----------------------------|
| EC99015 | SHAFT COUPLER 500KG        |
| EK80018 | COVER EASYLOAD ELECTRONICS |
| EK80015 | SNAP LOCK COVER            |



## Partslist Replacement parts for EasyLoad:

1-1-2018

| Partnumber | Discription                                    | Price |
|------------|--|-------|
| EC99007    | CLUTCH COMPLETE                                |       |
| EC99015    | SHAFT COUPLER 500KG spie                       |       |
| EE01005    | DOOR SWITCH                                    |       |
| EE17001    | RELAY 5-PIN 12VDC/40A                          |       |
| EE17002    | RELAY 4-PIN 12VDC/150A                         |       |
| EE17003    | RELAY WINCH 12V                                |       |
| EE17005    | RELAY 4-PIN 24VDC/80A                          |       |
| EE17006    | RELAY WINCH 24V                                |       |
| EE17007    | RELAY 5-PIN 24VDC/30A (BOSCH)                  |       |
| EE18006    | FUSE 100A                                      |       |
| EE18007    | FUSE 150A                                      |       |
| EE21001    | WINCH 12V                                      |       |
| EE21003    | WINCH 24V                                      |       |
| EE21005    | WINCH 12V BIG (501)                            |       |
| EE21006    | WINCH 24V BIG (501)                            |       |
| EE80005    | LINEMOTOR 12 V                                 |       |
| EE80006    | LINEMOTOR 24V                                  |       |
| EK80015    | SNAP LOCK RELAYCOVER                           |       |
| EK80018    | RELAYCOVER                                     |       |
| EM80002    | EINDKAP VOOR                                   |       |
| EM86009    | CONTROLLER COMPLETE                            |       |
| EM90002    | REPAIRKIT HOIST CABLE EASYLOAD 500 9,75m kabel |       |
| EM90003    | REPAIRKIT HOIST CABLE EASYLOAD 7,25m           |       |
| EM90005    | COAL BRUSHES                                   |       |
| EM99908    | MOUNTINGKIT FRAME EL 500KG DRIEHOEK 130        |       |
| EM99909    | MOUNTINGKIT FRAME EL 500KG DRIEHOEK 90         |       |
| EM99902    | MOUNTINGKIT FRAME EL 250KG DRIEHOEK 130        |       |
| EM99903    | MOUNTINGKIT FRAME EL 250KG DRIEHOEK 90         |       |
| EV10004    | PULL SPRING TRAVELLERCABLE                     |       |
| EX80010    | HOISTCABLE 250KG STANDARD                      |       |
| EX80011    | HOISTCABLE 250KG + 2 METER                     |       |
| EX80012    | HOISTCABLE 500KG                               |       |



## EasyLoad Compact



