

The New Motor Generation MHP2



Exchange and Modification Information



MHP2

External Identification of MHP2 to MHP1

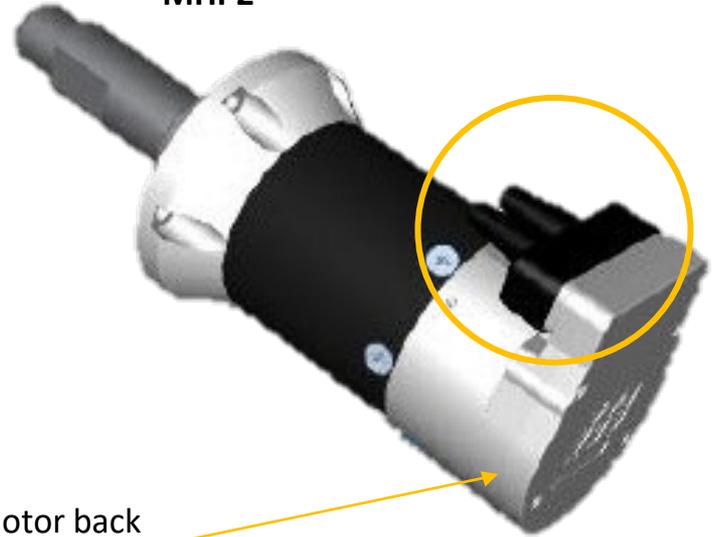
MHP1



The MHP1 cable exit is pointed away from the motor shaft.

Redesign of motor back side

MHP2



The new MHP2 cable exit is pointed in the direction of the shaft.

MHP2, (MicroDrive barriers)

What will change due to the new MHP2 motor generation?

MHP-144A-E**100** (round gear box)
AccessPro; ParkingPro; Toll; TollPro

MHP-144A-E**101** (square gear box)
Access; Parking

MHP-**244**A-E100

MHP-144A-E**103** (square gear box)
Access-L

MHP-**244**A-E103

MHP-145A-E**100** (round gear box)
Access Pro-L ; Access Pro-H

MHP-**245**A-E100



MHP2 (MicroDrive barriers)

What will change due to the new MHP2 motor generation?

MHK-166B-E100

Access-XL, ACCESS-XL2

MHK-166B-E101

Access-XXL

MHP-144A-F100

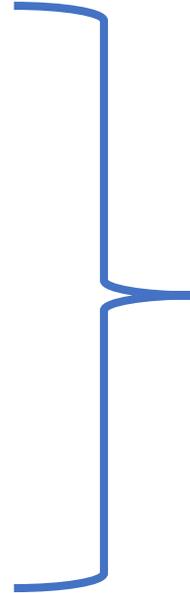
Toll HiSpeed

MHP-144A-F101

Toll HiSpeed2

MHP-144A-E106

Toll PRO2



Testing is ongoing and the new motor changes will take place at a later date.

MHP2 (MicroDrive barriers)

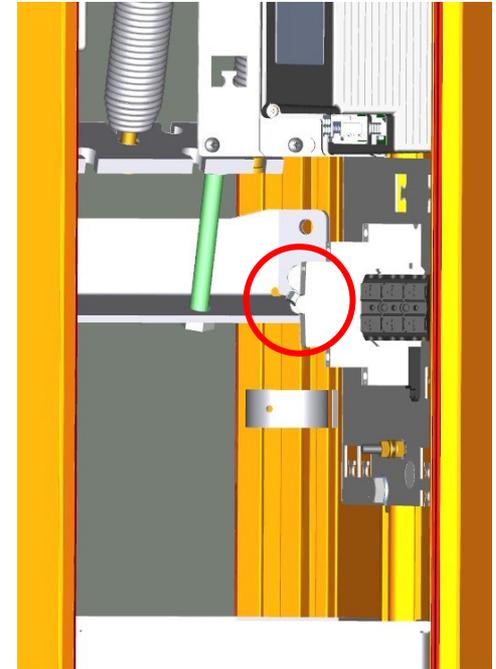
The mechanical conversion from MHP1 to MHP2

Please put the arm in “open” position



Lever system position
when arm is up

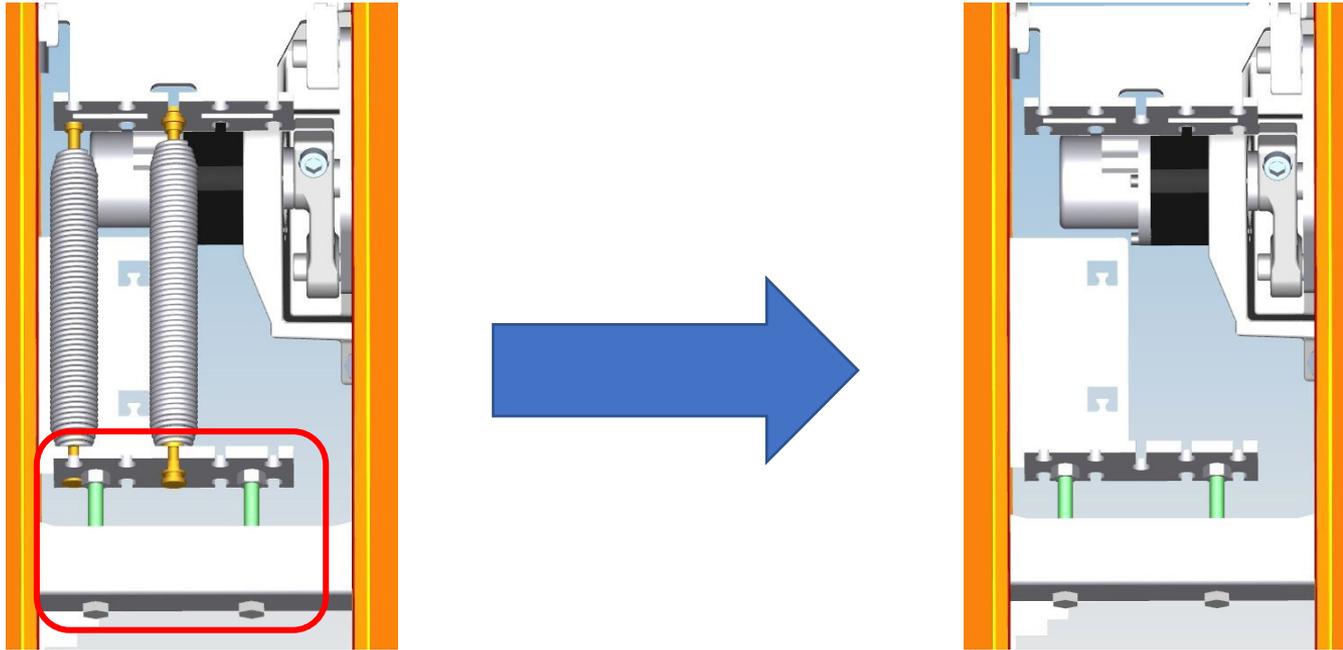
Then make sure, that the barrier
is disconnected from line
voltage. To do this, the main
switch must be switched off.
Then the arm must be removed.



MHP2 (MicroDrive barriers)

The mechanical conversion from MHP1 to MHP2

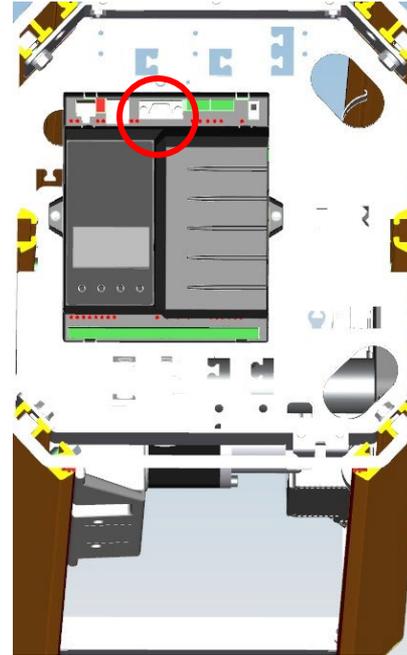
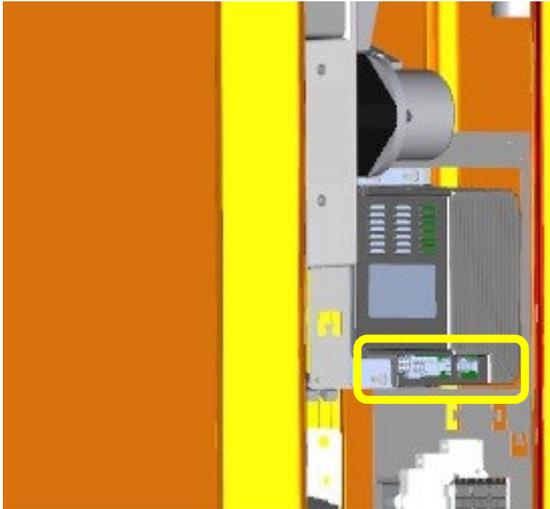
Then the springs must be relaxed via the tensioning bolts in order to remove them.



MHP2 (MicroDrive barriers)

The mechanical conversion from MHP1 to MHP2

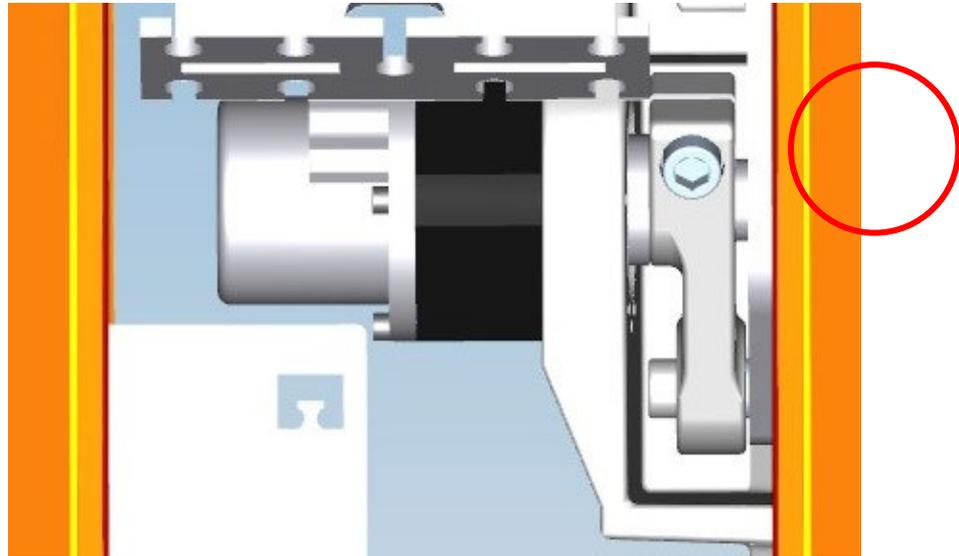
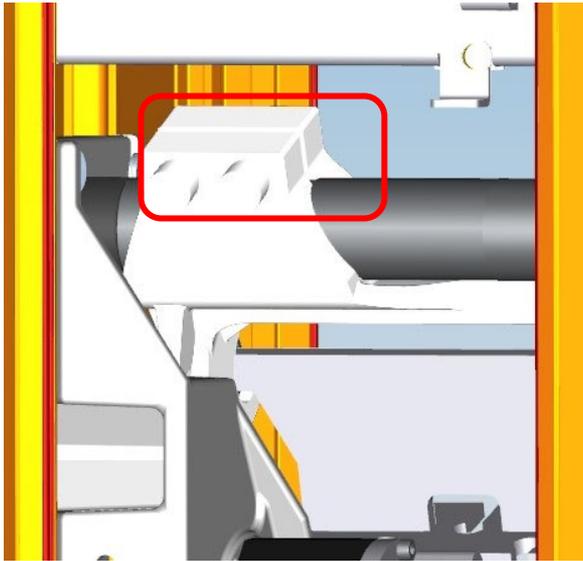
Then remove the motor electrical connections on the power supply and the MGC.



MHP2 (MicroDrive barriers)

The mechanical conversion from MHP1 to MHP2

Then loosen the screws of the flanges on the barrier shaft and the lever system

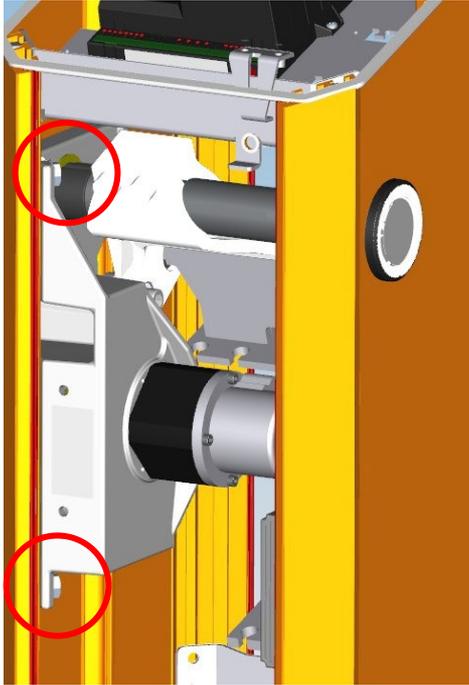


NOTE! Replace the flange in the same position (**arm in open position**)

MHP2 (MicroDrive barriers)

The mechanical conversion from MHP1 to MHP2

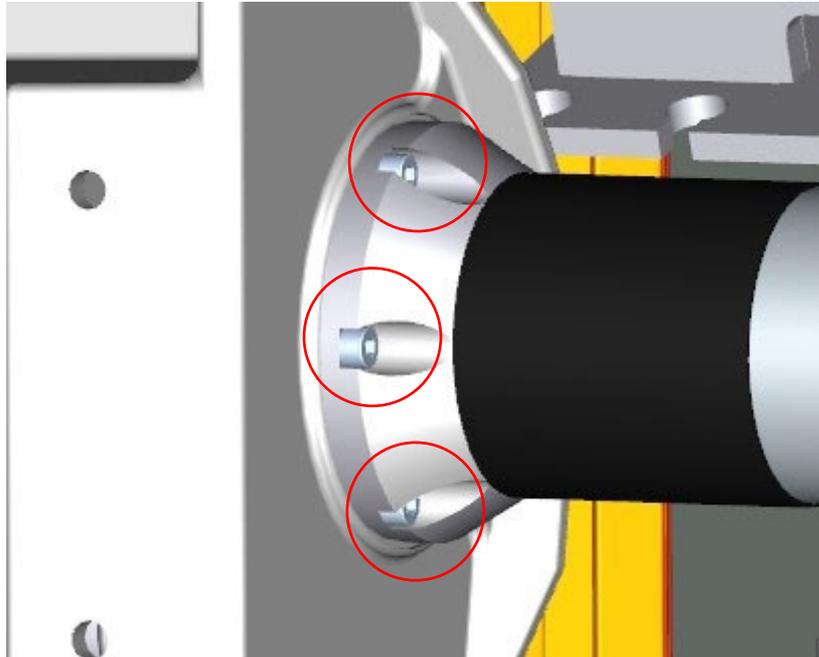
Loosen, do not remove, the 4 screws on the drive unit base plate and remove shaft spacer



MHP2 (MicroDrive barriers)

The mechanical conversion from MHP1 to MHP2

In the last step before dismantling the MHP1 geared motor, all the screws must be removed, the gear motor can then be removed from the barrier.

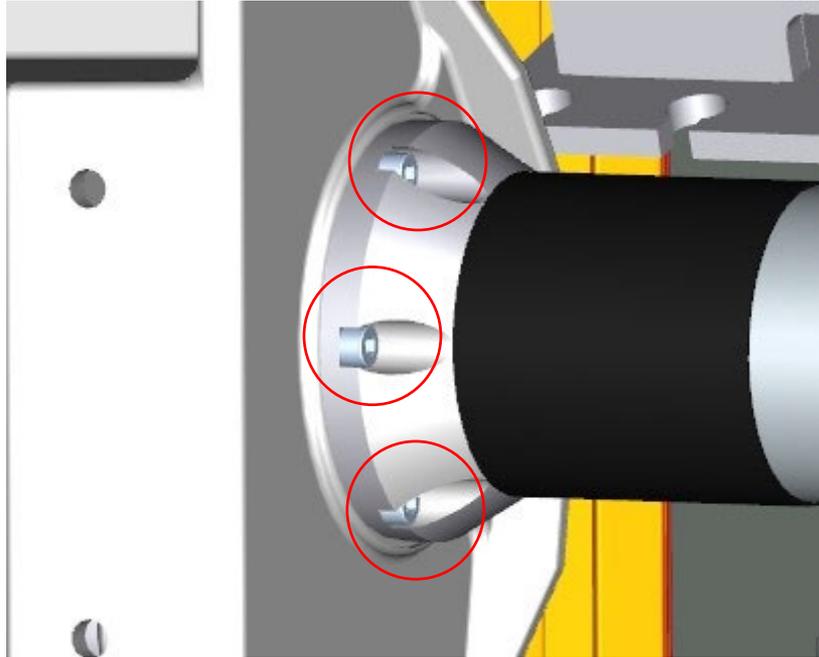


MHP2 (MicroDrive barriers)

The mechanical conversion from MHP1 to MHP2

Then, in reverse order, mount the new MHP2 drive unit

! Caution, the screws of the motor gear unit must be secured with Loctite 241!



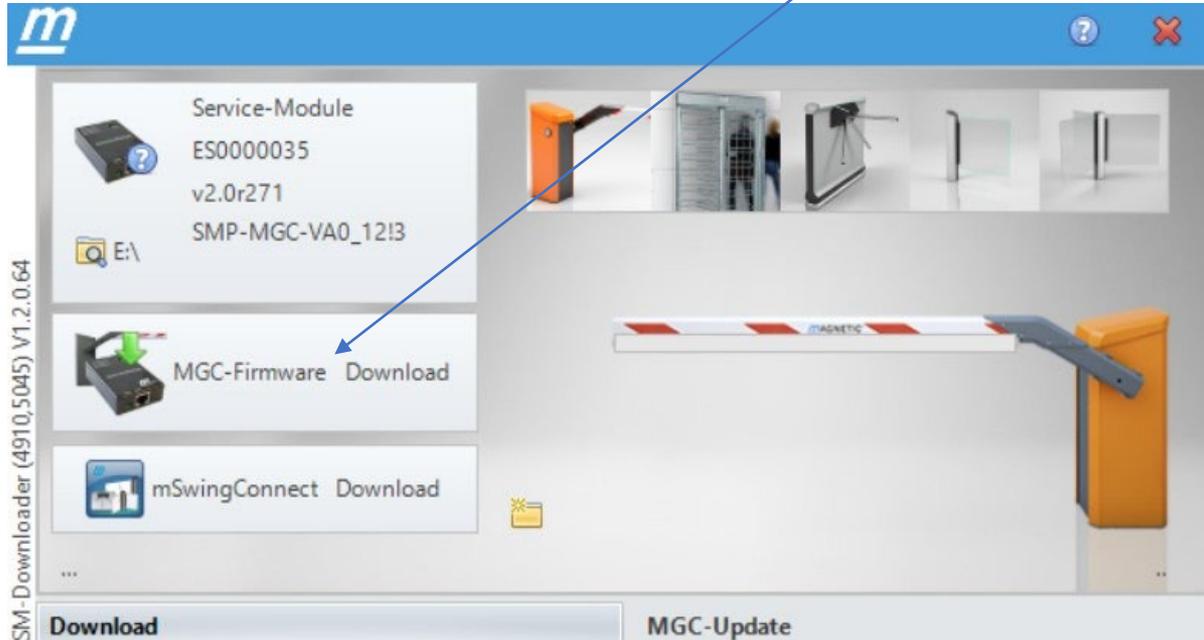
New firmware **must** be installed after the replacement. An SM01 Service module must be used to update the firmware on the MicroDrive controller. Connecting a laptop to the SM01 simplifies the process.

When replacing MHP1 with MHP2, firmware packages from version SMP-MGC-VA0_2x **must** be installed!

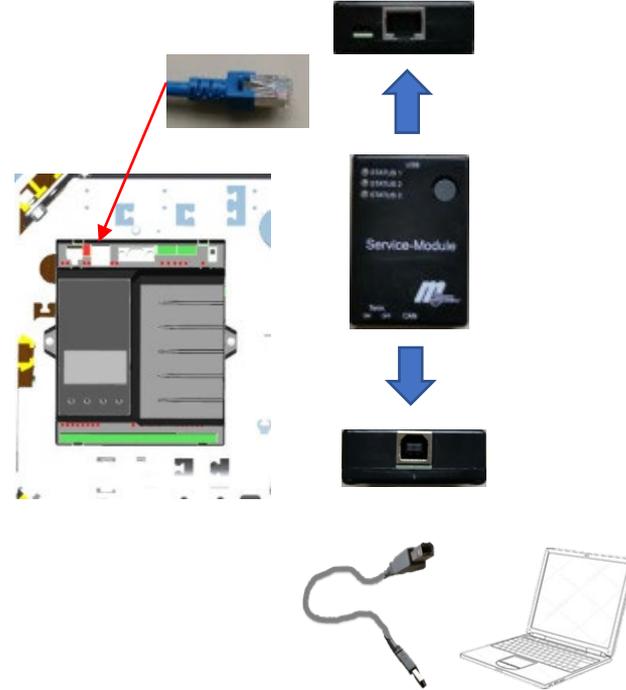
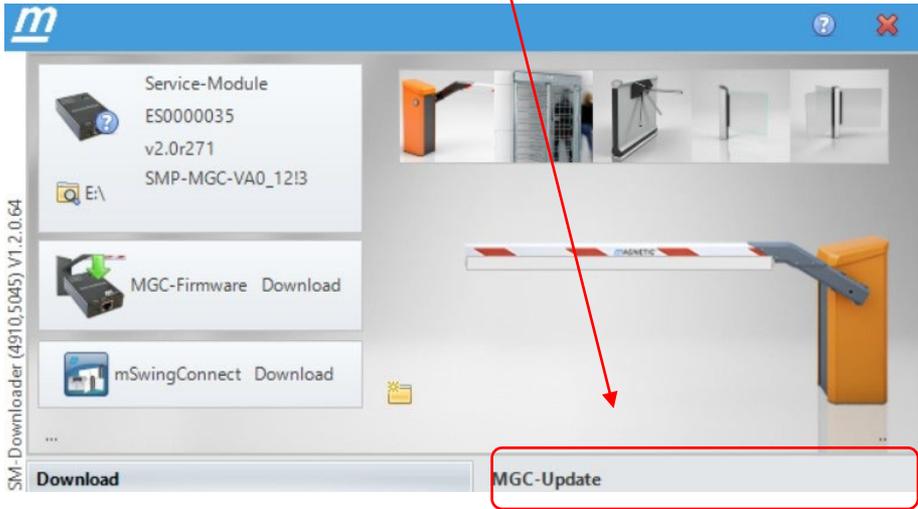
In addition, the “Motor Gateway” was renamed to “Safety Controller”.

Update via computer and SM01 service module

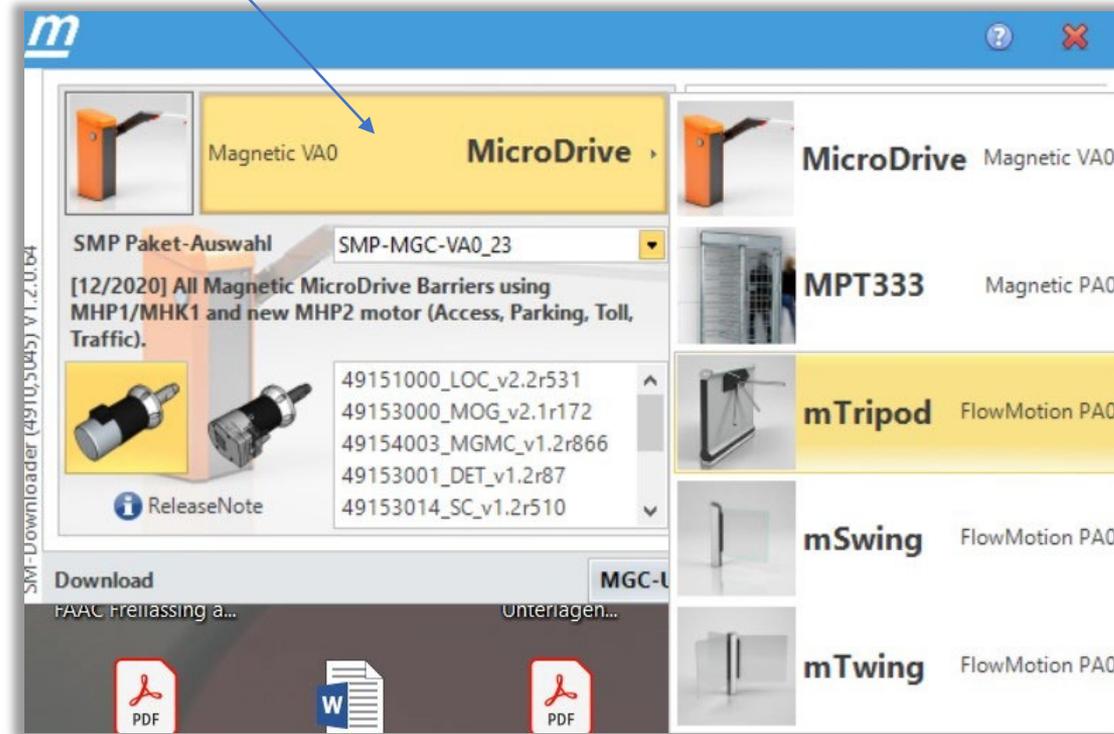
1. Plug the SM01 to the Laptop and download the latest firmware updates using the SM_Downloader software



2. Connect the MGC controller to the Laptop via the SM01
3. Then switch to the firmware page by clicking in this area

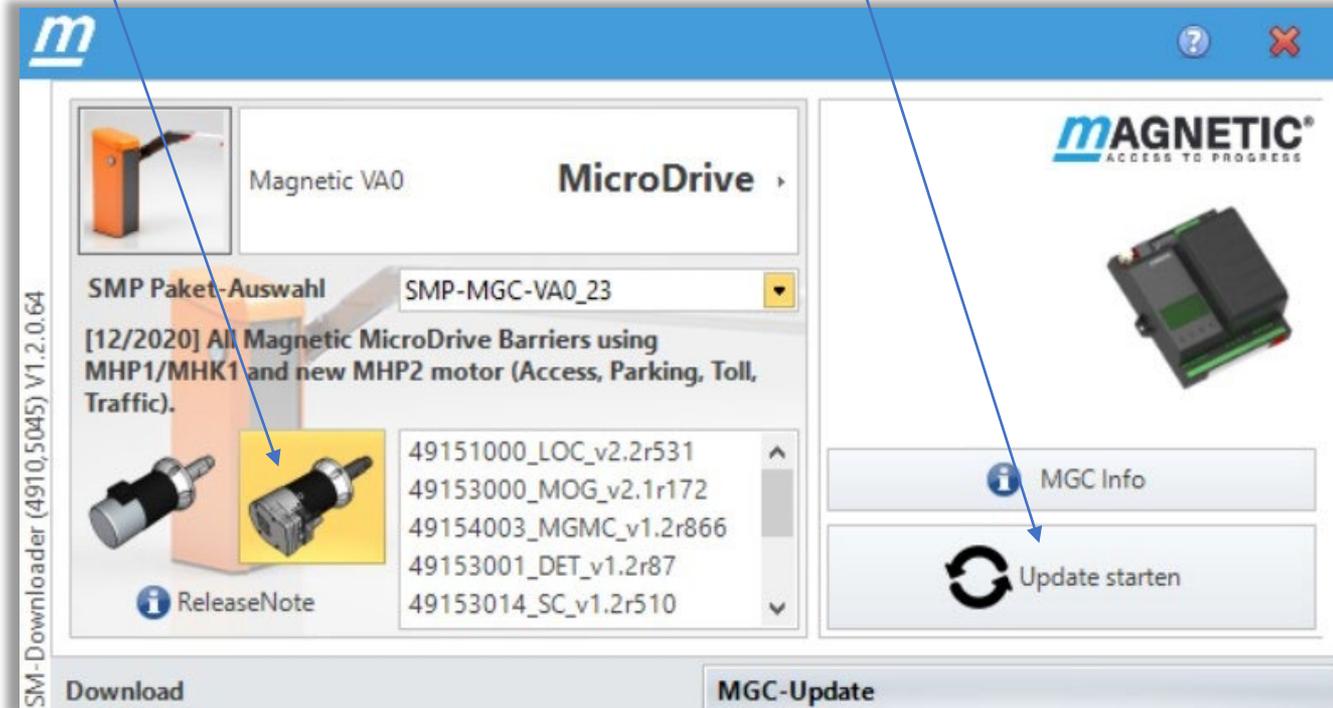


4. Use this area to select the product (MicroDrive)



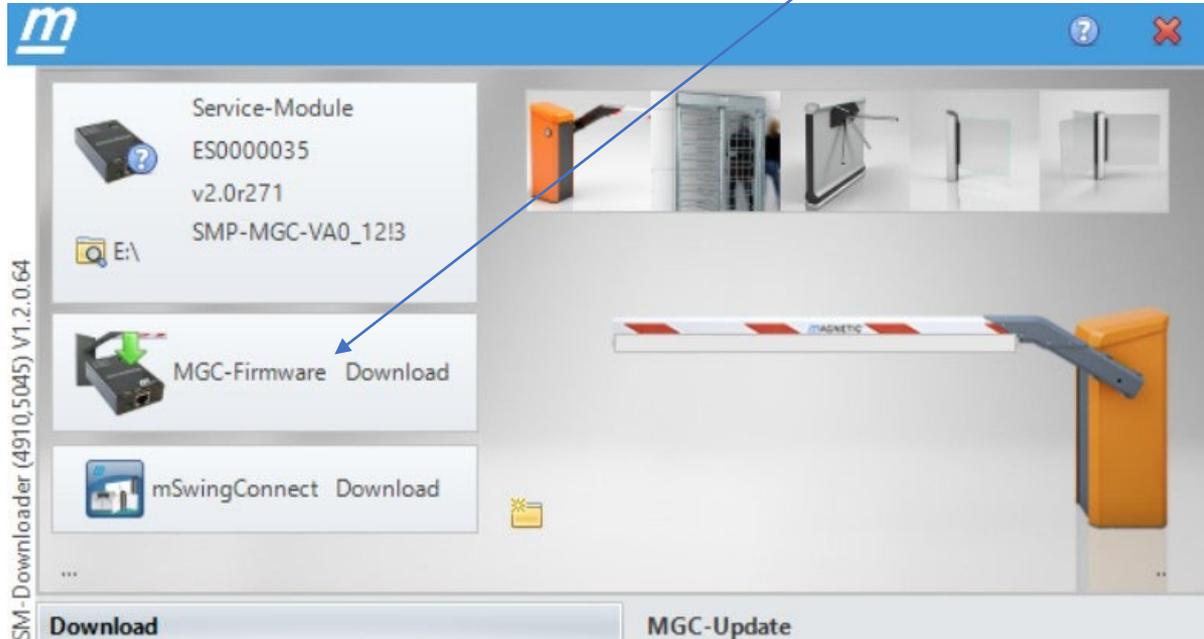
5. Click on the symbol of the new motor ...

6. ... then start the update

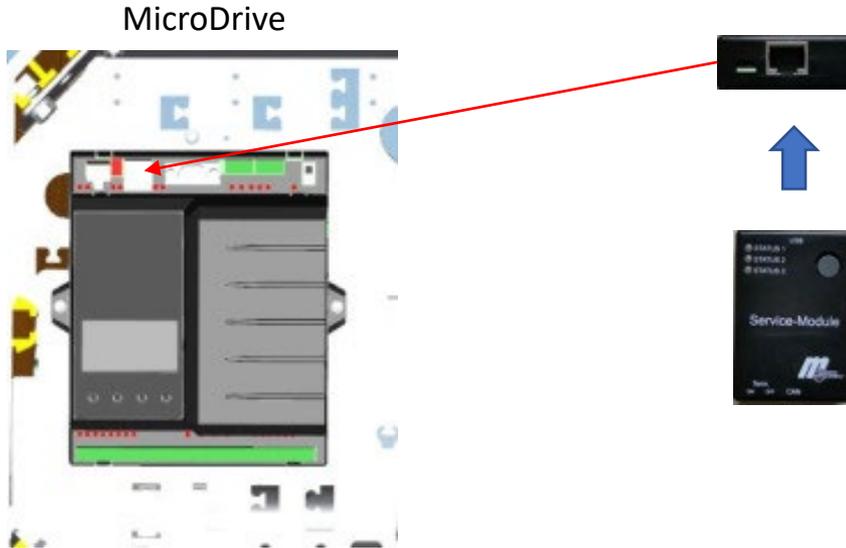


Update via SM01 service module **only**

1. The latest firmware must first be loaded onto the SM01 via a PC connection



2. Unplug SM01 from the computer
3. Connect the SM01 to the MGC controller



In the main menu of the MGC you then must switch to the “Factory setting” menu

Operating view → Main menu → Factory Settings

- Select “User setting as factory setting” in the menu

In the main menu of the MGC, switch to the “Service Module” menu

Operating view → Main menu → Service Module

- Select “**Package switching**” and then select the firmware “**PREPARE_FOR_MHP2**”
- Then press the push button on the SM01 and wait until the red LED next to socket X12 flashes at 1Hz
- Perform a reset on the barrier (press both middle buttons of the MGC at the same time)
- In the “Package switching” menu, select the firmware “SMP-MGC-VA0_XX” for MicroDrive
- Then press the push button on the SM01 again
- If a success message is shown on the display, the update is finished

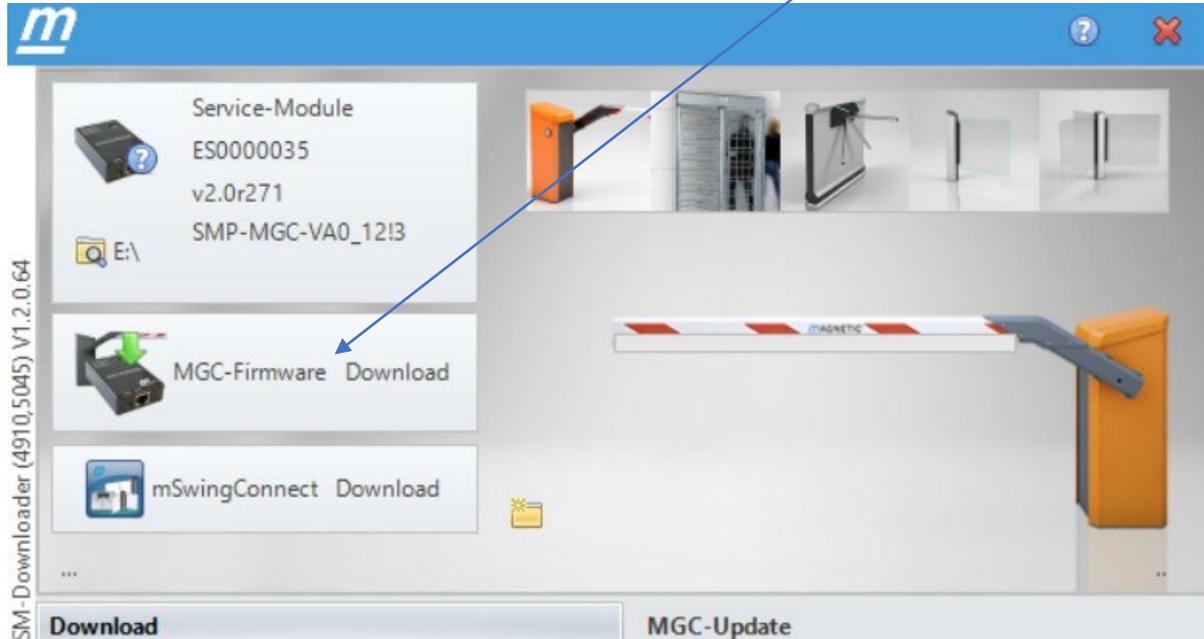
MHP2

Reprogramming MHP2 back to MHP1



What if you are replacing an MHP2 motor with an MHP1?

1. The latest firmware must first be loaded onto the SM01 via a PC connection

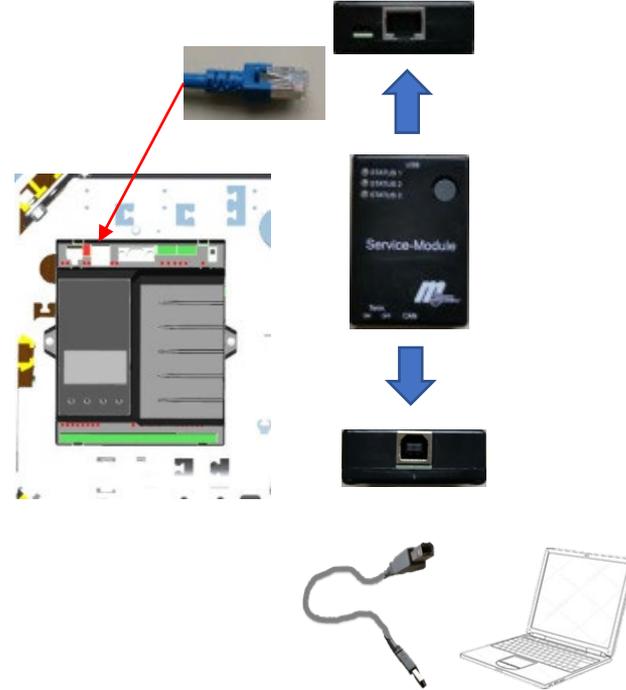
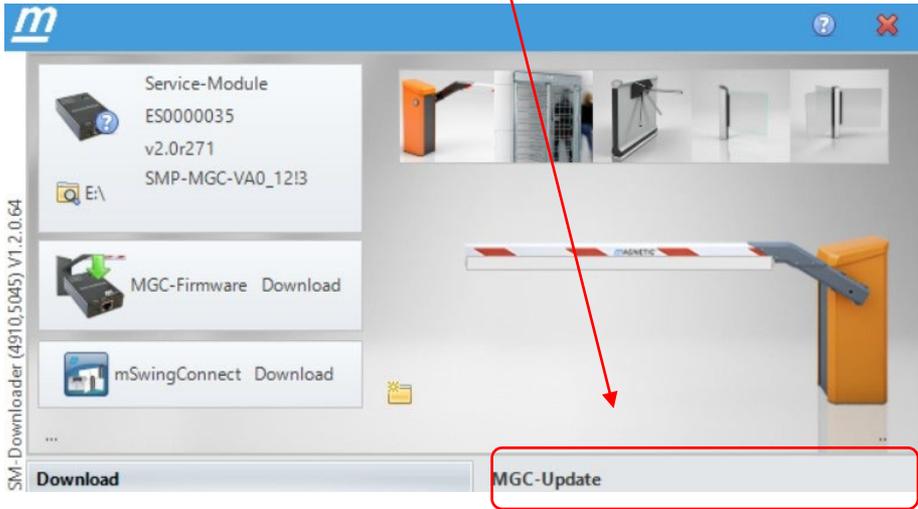


MHP2 to MHP1

Update with Laptop

2. Connect the MGC controller to the Laptop via the SM01

3. Then switch to the firmware page by clicking in this area



MHP2 to MHP1

Update with Laptop

m ? X

Magnetic VA0 **MicroDrive**

SMP Paket-Auswahl SMP-MGC-VA0_23

[12/2020] All Magnetic MicroDrive Barriers using MHP1/MHK1 and new MHP2 motor (Access, Parking, Toll, Traffic).

49151000_LOC_v2.2r531
49153000_MOG_v2.1r172
49154003_MGMC_v1.2r866
49153001_DET_v1.2r87
49153014_SC_v1.2r510

SM-Downloader (4910,5045) V1.2.0.64

ReleaseNote

MAGNETIC ACCESS TO PROGRESS

Start the update

MGC Info

Update starten

Download MGC-Update

In the main menu of the MGC you then must switch to the “Factory setting” menu

Operating view → Main menu → Factory Settings

- Select “User setting as factory setting” in the menu

In the main menu of the MGC, switch to the “Service Module” menu

Operating view → Main menu → Service Module

- Select “**Package switching**” and then select the firmware “**PREPARE_FOR_MHP1**”
- Then press the push button on the SM01 and wait until the red LED next to socket X12 flashes at 1Hz
- Perform a reset on the barrier (press both middle buttons of the MGC at the same time)
- In the “Package switching” menu, select the firmware “SMP-MGC-VA0_XX” for MicroDrive
- Then press the push button on the SM01 again
- If a success message is shown on the display, the update is finished