

PLUS+1® Controllers

HMC 211-014



Mobile machine management

Danfoss PLUS+1® controllers are elements of the flexible, powerful, expandable, and affordable family of mobile machine management products. These devices are general-purpose controllers that are equally suited for use as a member of a distributed machine control system, with intelligence in every node, or as a stand-alone controller.

Product parameters

Supply voltage	9 to 36 Vdc
Operating temperature (ambient)	-40°C to 70°C [-40°F to 158°F]
Storage temperature	-40°C to 85°C [-40°F to 185°F]
Programming temperature	0°C to 70°C [32 °F to 158°F]
IP rating (with mating connector attached)	IP 69 (front) IP 67 (rear)
Weight	0.23 kg [0.50 lb]
Maximum current, sourcing	11.5 A
Maximum current, sinking	11.5 A

Cable Assmby HMC to TME Adapter:

Part	Order Number
Cabin Station Adaptor Cable Part number	11225615
Remote Station Adaptor Cable Part Number	11225618

BILDER

Replacement Information

The part number you will need for this is **9139 633 05**. This will provide both, Cab and Remote stations along with the two adaptor cables.

TME (Transit Mixer Electronic) has been replaced with HMC211-014. The controllers (Cab and Remote) both have the same software installed so switching there locations will not matter. The only important thing to connect specifically is the adaptor cable in the correct location. Within three power cycles the units will find there final CAN note numbers, by there own. After this, the system is working.

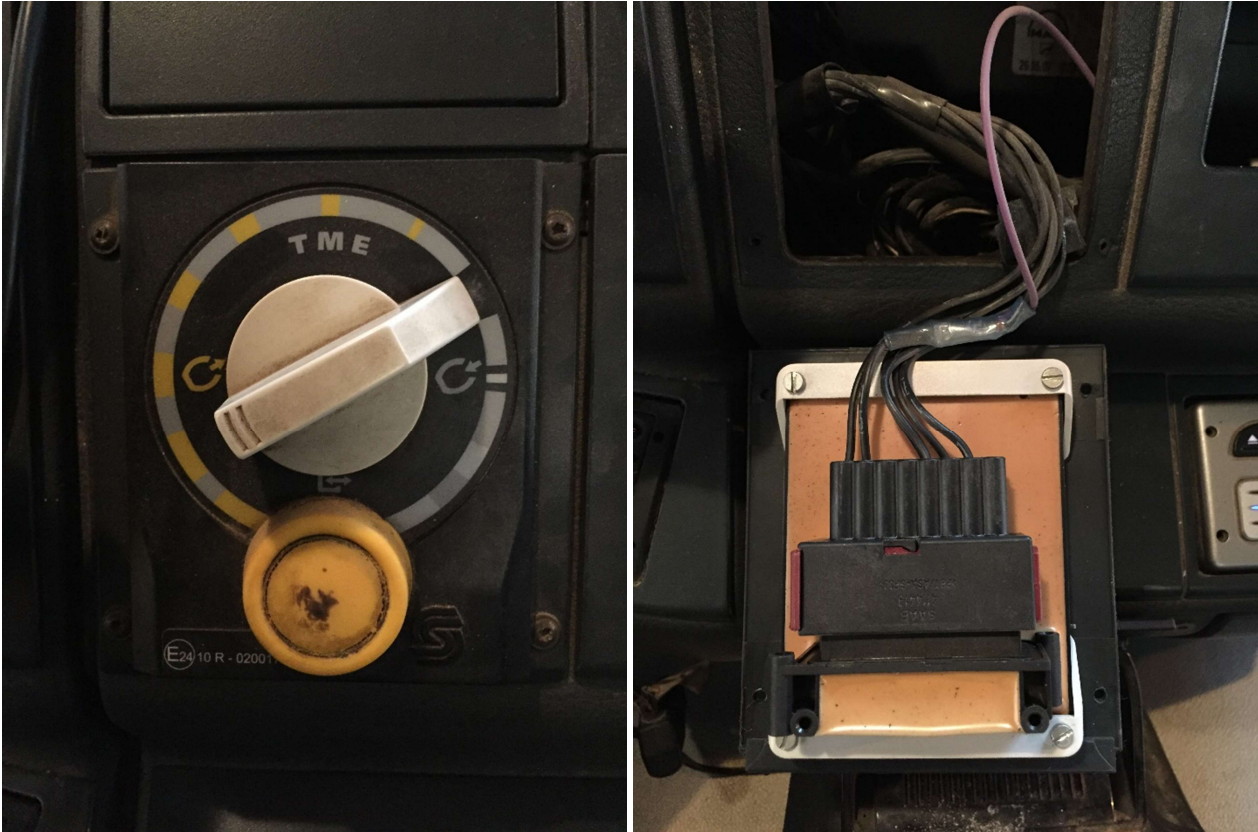
Because of some fundamental hardware changes (analog vs. CAN) when one unit (TME Cab or Remote) needs to be replaced, bothe TME to be replaced by HMC and adaptor cables at the same time. A lot of this comes from the need of a CAN bus between the two units. The older TME controllers did not use CAN so the adaptor cable will provide the needed CAN communication wires between the two units along with the CAN termination resistors.

Without the CAN bus communication between the Cab and Remote controllers, they will not be able to communicate with each other, and the system will not function.

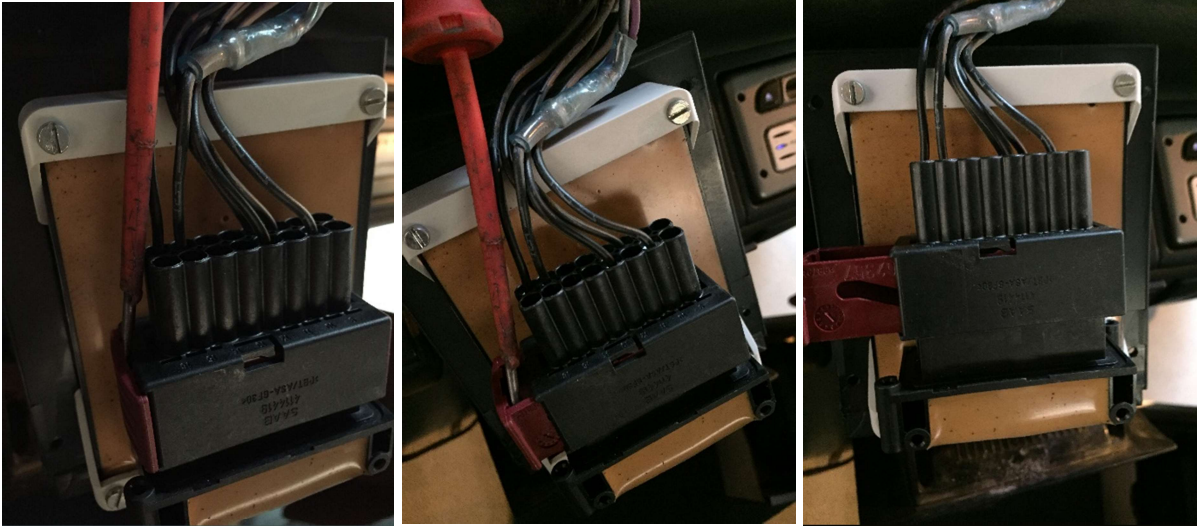
Replacement Process

Before beginning this process make sure the key switch to the vehicle is turned off to prevent any shorting of wires and potentially damaging the controllers.

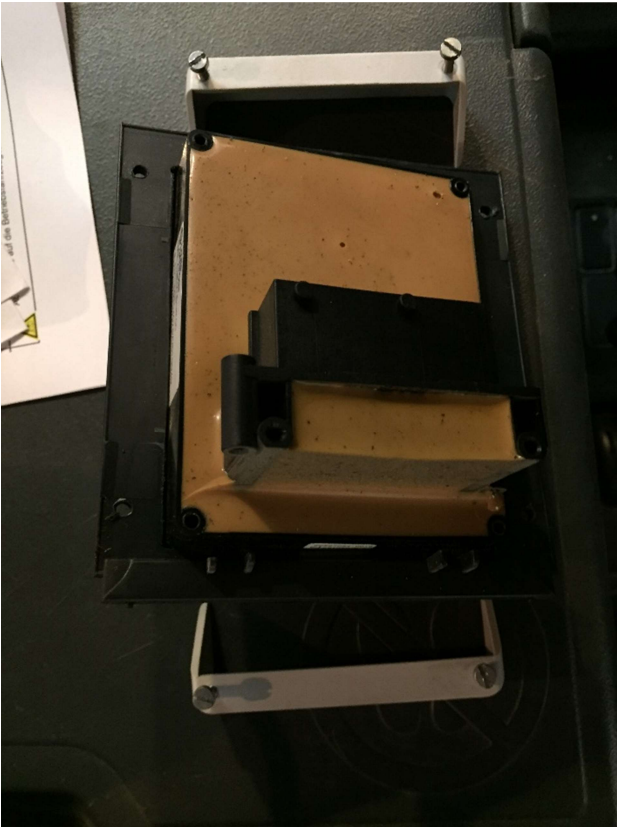
Dismount Cabin Controller:



To replace the product, first remove the 4 screws TX 8 from the plastic enclosure the Cab station are mounted in, unplug the TME controller, remove the 4 torx screws from the mounting bracket, then remove the controller from the system. Than, you can pull the TME out carefully.

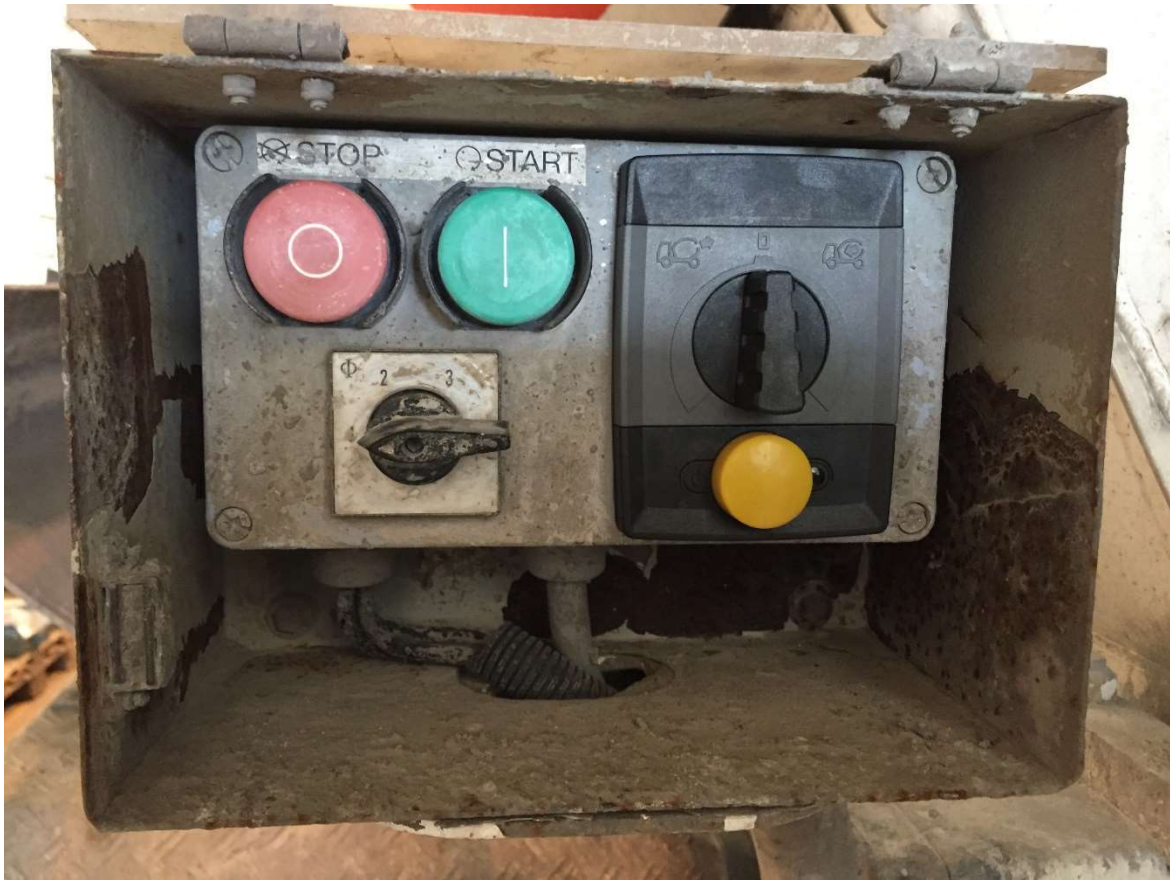


With a screw driver you can remove the plug.

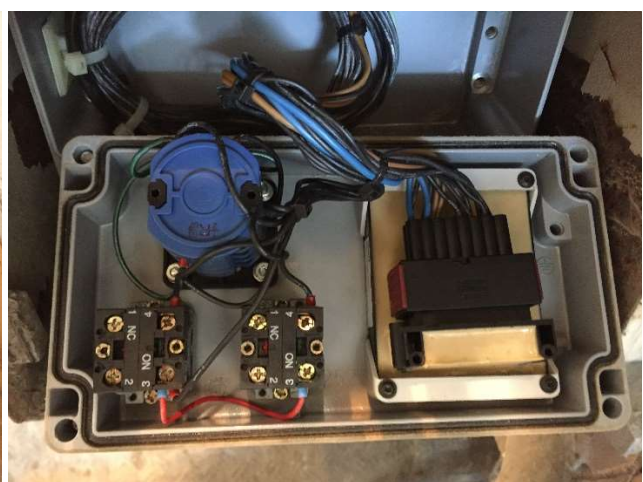


Remove the plastic bezels carefully from the TME. Check the orientation (up side / down side).

Dismount Remote Controller:



To replace the product, first remove the 4 screws from the plastic enclosure the Remote station are mounted in, unplug the TME controller, remove the 4 torx screws from the mounting bracket, then remove the controller from the system



Unscrew the cover of the electronic case and turn it around.

Take off the plug (compare with above images).

Unscrew the two brackets of the TME (TX 8) and take it out of the cover.

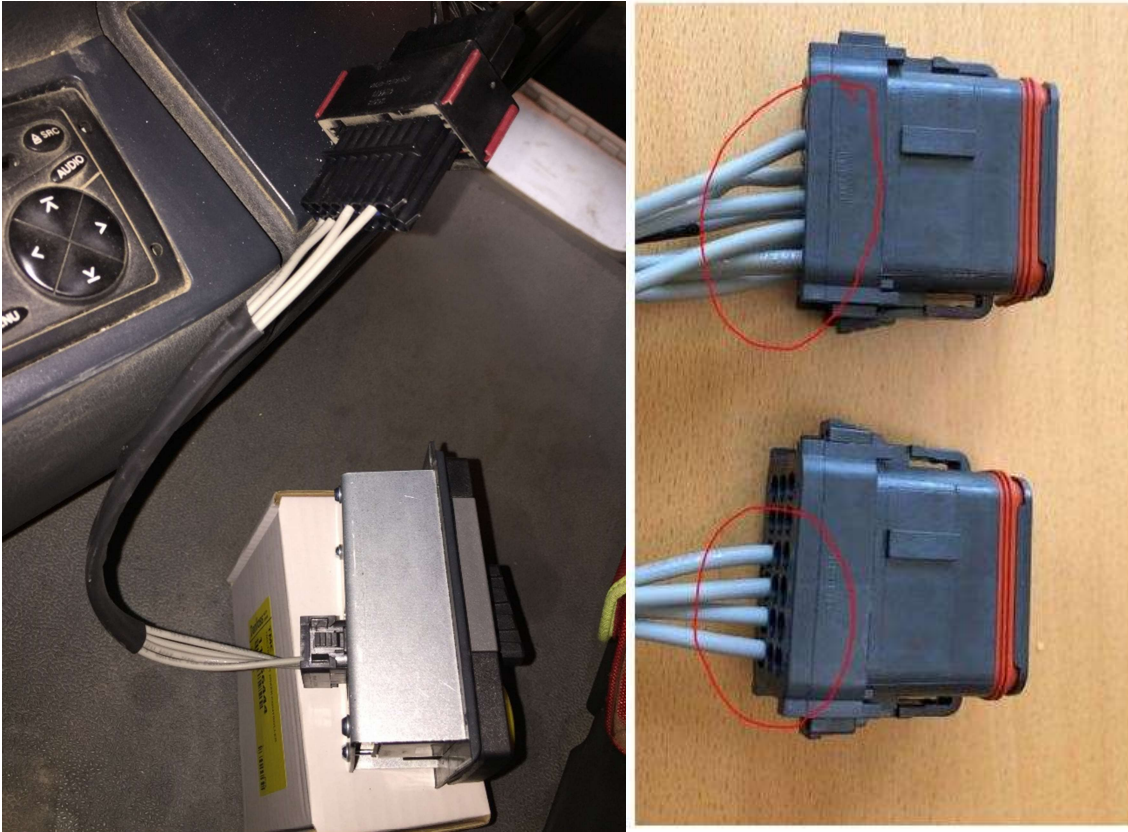
Install of the cabin HME:



Mount the bezel onto the HMC. Check the orientation.



Next install the mounting bracket to the HMC211 using the new with the 4 included torx screws TX10. Torque the screws just carefully. (The old ones will not fit into the plastic enclosure on the machine.)



Using the correct cable assembly (11225615 for cabin). The cabin station has 4 wires to the connector. Install them in the correct location. Then carefully tuck the adaptor cable into the plastic enclosure.

Image depicts Remote station (Top) and Cabin station (Bottom)

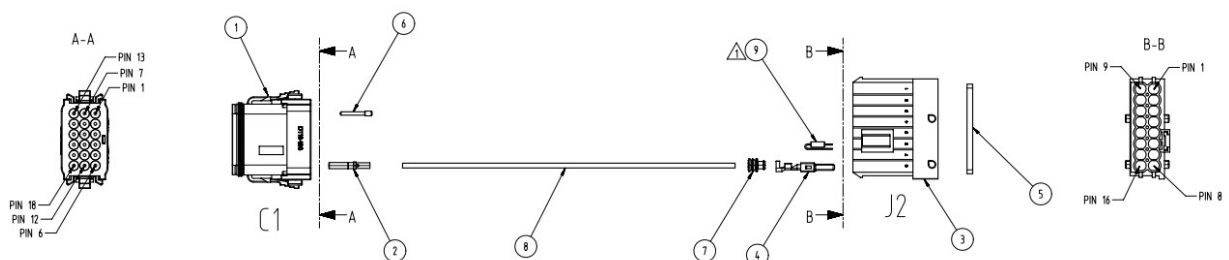


Image depicts technical drawing of optional cables with deutsch connector and Sub-D 16 connector



Could be that you need to disassemble other components (e.g. cup holder) of the dashboard for the moment to mount the HME easily.



Place the HME to its position to check. It could be that the corners of the cavity inside the dashboard are needed to be grinded carefully by 2 [mm].



Put the HMC in place and screw in the TX 8 screws.

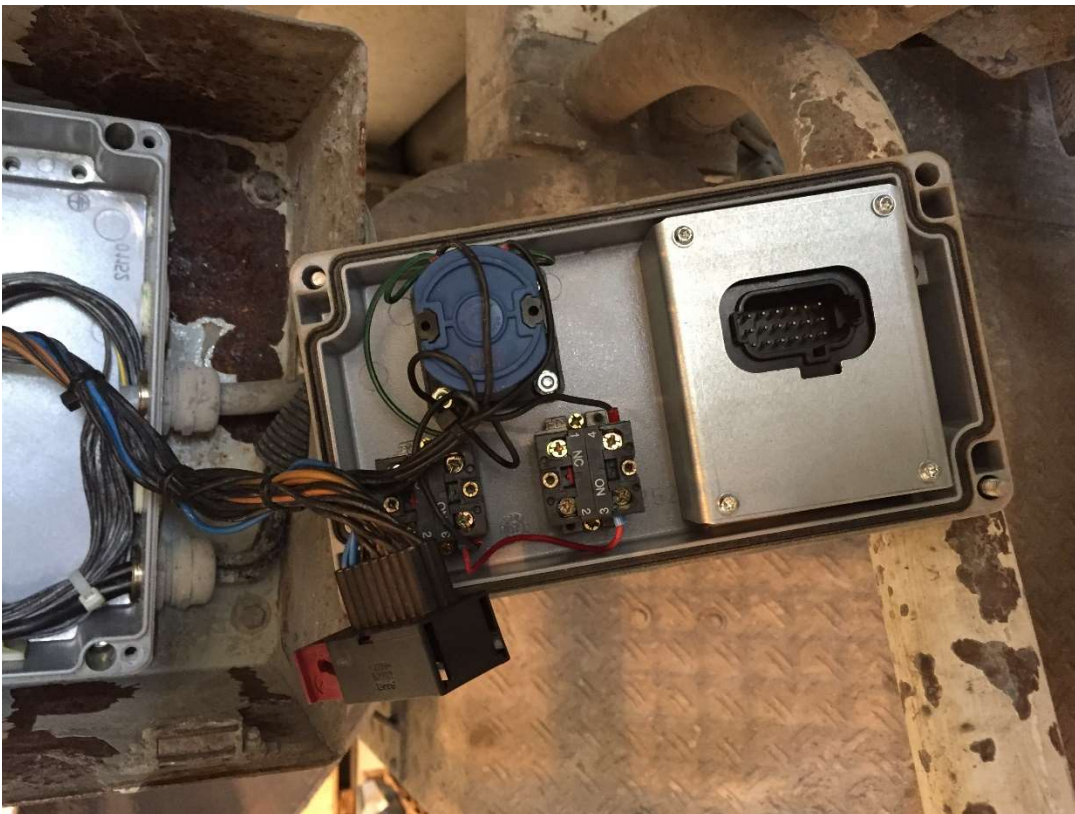


Don't forget to put the other components back in place.

Install the Remote station:



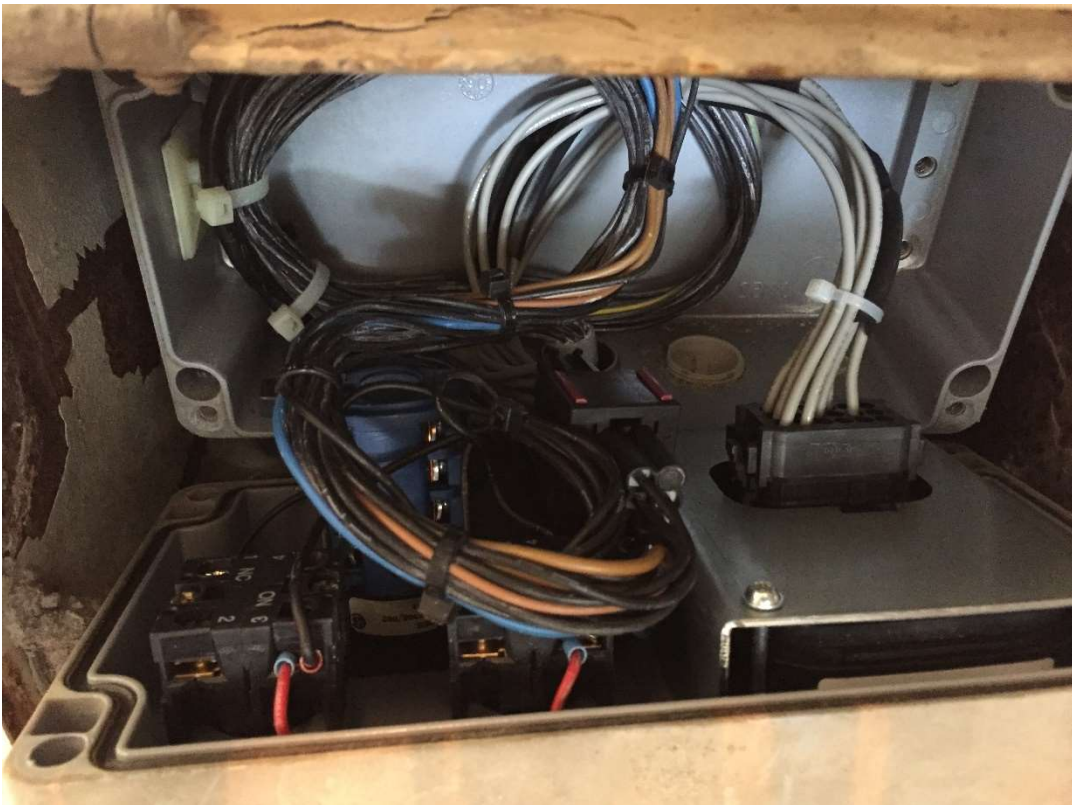
Place the HMC into the cover.



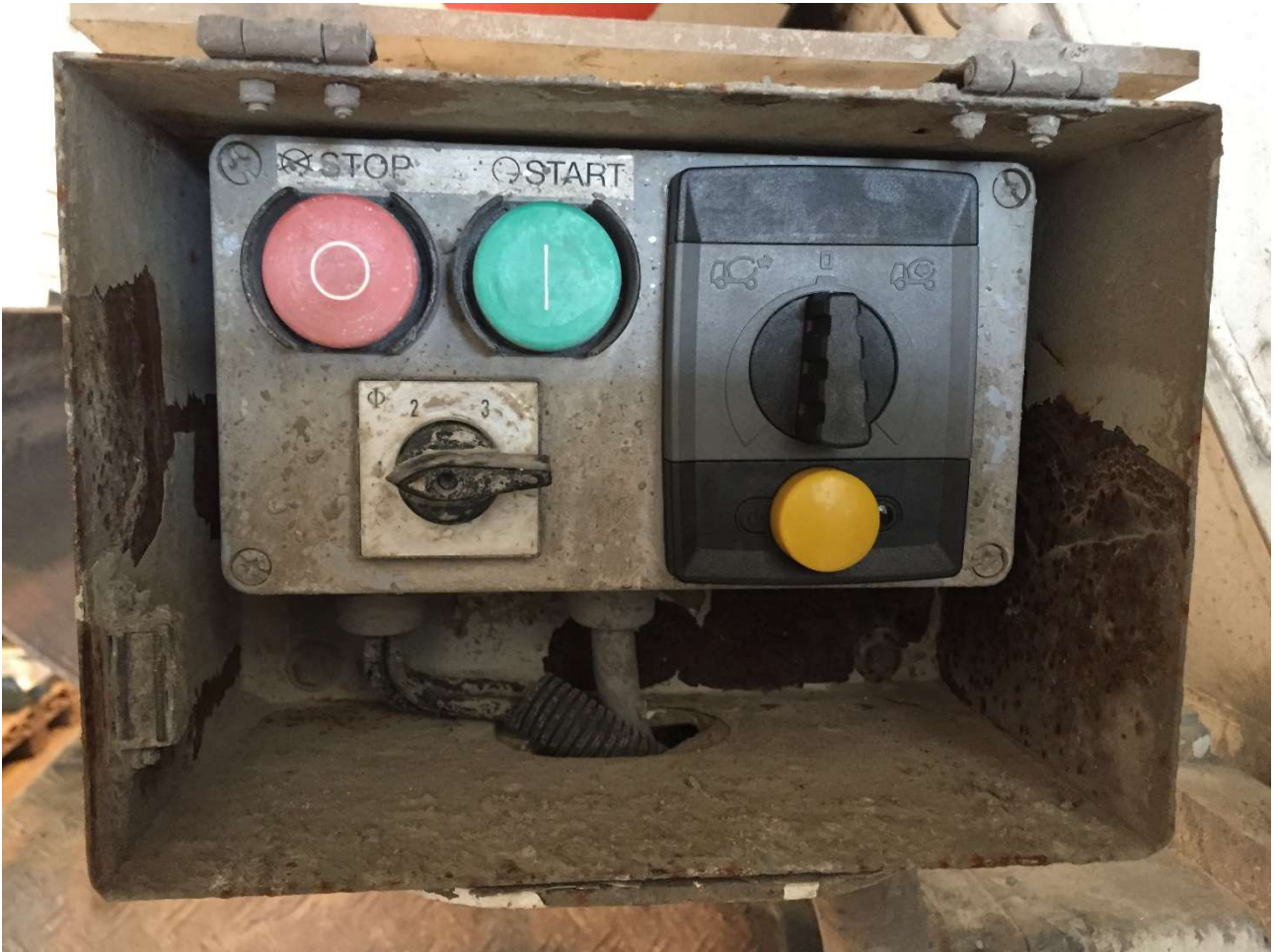
Mount the bracket and fix it with the screws TX 10.



Using the correct cable assembly (11225618 for remote). The Remote station has 9 on one end, and 11 on the other end (See picture provided).



Arrange the wires for an easy mounting of the cover. Close the cover carefully.



Torque the four screws of the cover.

System start:

Switch the ignition ON – OFF – ON – OFF and ON. Each condition should be hold for at lease fife seconds.
Now the system is operational.