4. Repairing of U- or W-phase modules with spare part +V991 phase module kit

a) Uninstalling of redundant boards

NOTICE! Remove every unnecessary board. They can be used as spare parts in other modules. Boards that can be removed are *NPOW-XX, NGPS-XX* and in 690V modules *NRED-61.*
Remove boards *with bottom plate*. Then it is easy to remove also *the supply cables (+) and (-) of NPOW-XX* and in 690V modules *NRED-61.* The supply cables are connected to the capacitor bank. In certain models the *cable of discharging resistor* is also connected to the capacitor bank. Check that the cable is fastened properly.
Undamaged *bottom plate of NPOW-XX board* can be reused from faulty phase module. The bottom plate is mounted to the both sides of the module with four or six screws.

b) In urgent cases

In urgent cases remove only the following cables of NGPS-XX and NPOW-XX boards:
NGPS-XX : X3 ----------> NINT-XX : X414
NPOW-XX : X32 ----------> NINT-XX : X42
Do not remove any boards. Let also NPOW-XX and for 690V modules NRED-61 remain connected. These boards do not influence on the operation of the drive. This case is described *as an option*, because removing of the supply cables of NPOW-XX and NRED-61 can last long.
IMPORTANT! Spacer modifications for U/W phase modules must be done in all cases, see following chapter c.

c) Configuring control pcb section from V-phase to U / W phase module

All new phase modules are delivered as a V-phase.
NOTICE! This method is different from one described in original ACX644 instruction 63987751. Follow steps 1-6 in order to ensure correct operation of the modules.

1. Disconnect control wires and remove the NINT-XX assembly (figure 1).

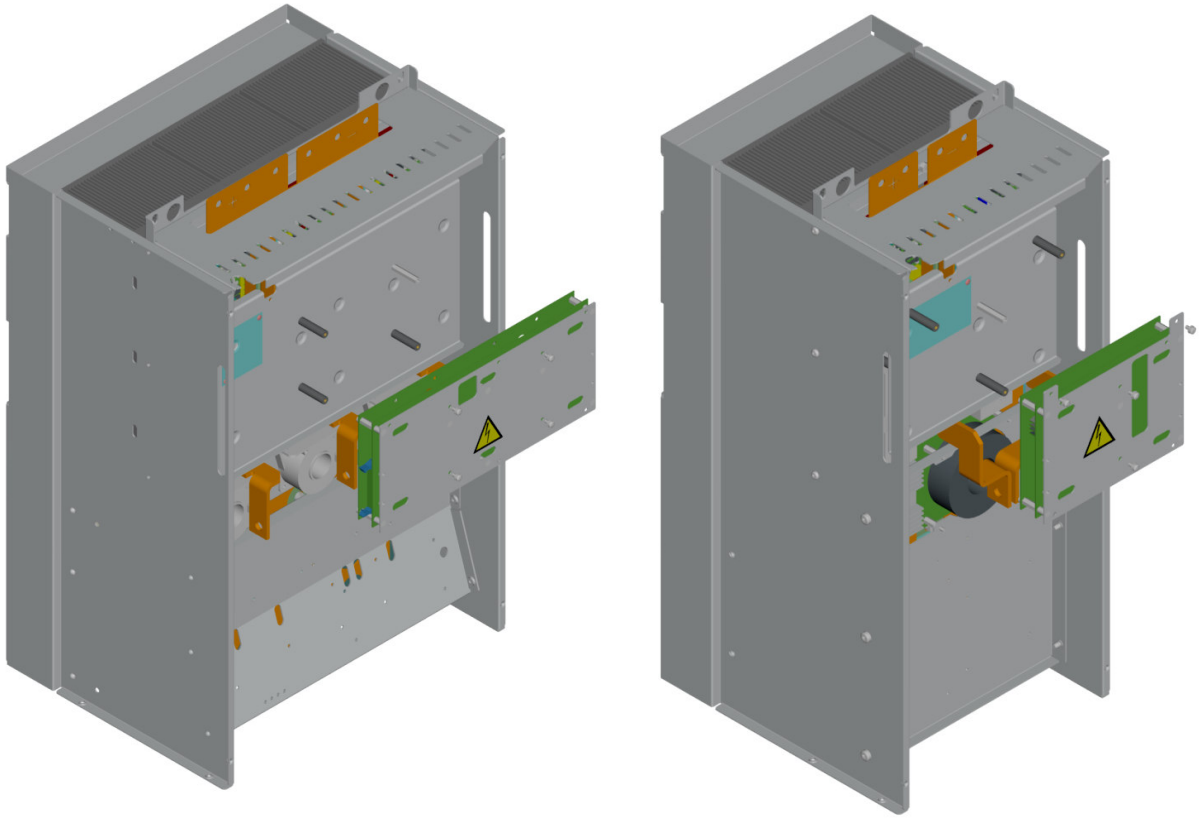


Figure 1. Remove 4 pcs M4x8 and the control pcb assembly
Left: R12i, right: R10i/R11i

2. Remove the NINT-XX subassembly. Replace the NINT-72C/73C with NXPP-02C/03C (figure 2).

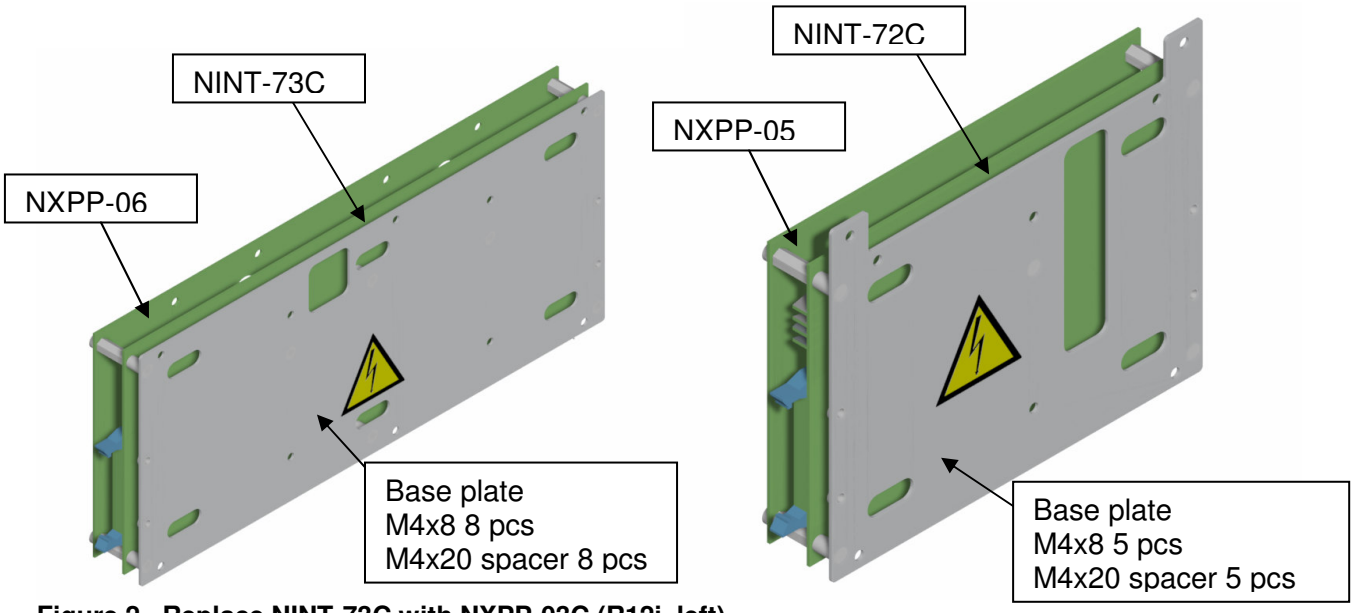


Figure 2. Replace NINT-73C with NXPP-03C (R12i, left)
Replace NINT-72C with NXPP-02C (R10i/R11i, right)

3. Remove the shield plate (figure 3). When removing note the positions of different spacer screws.

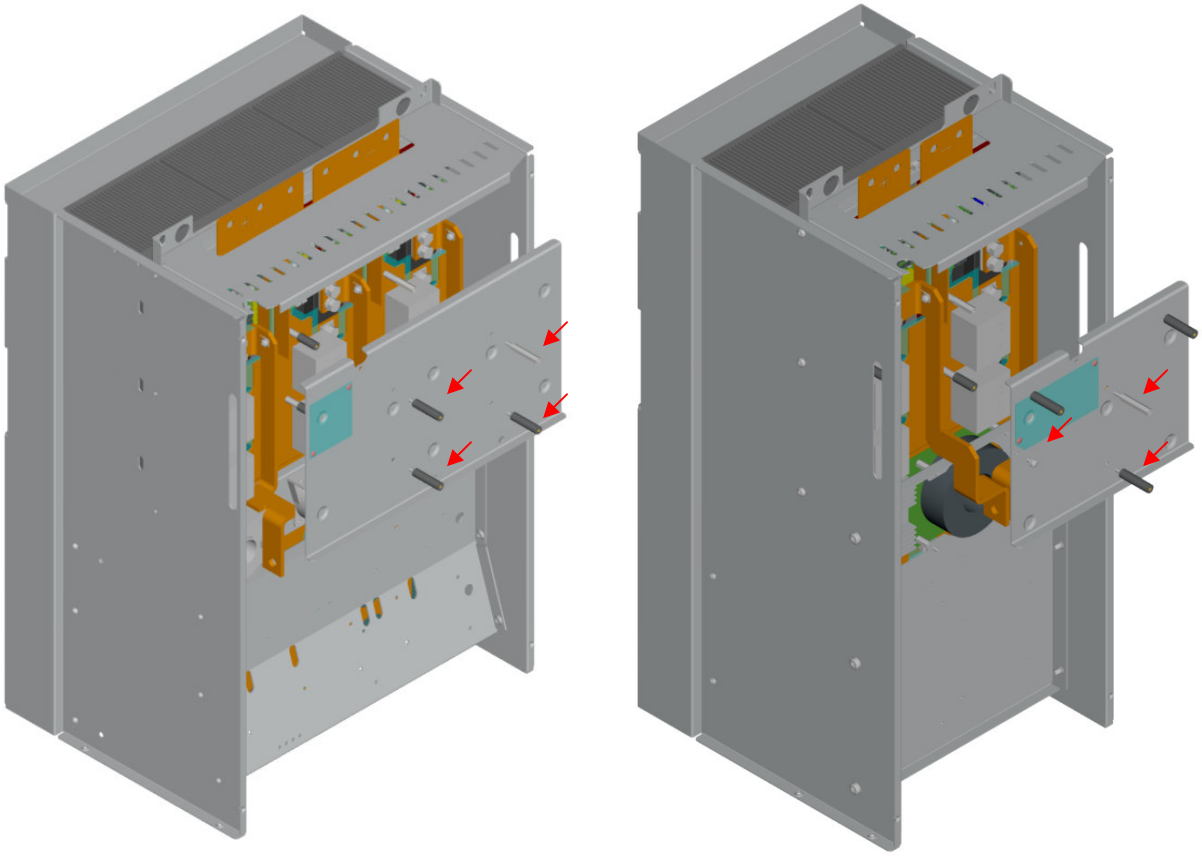


Figure 3. Remove the shield plate.
R12i (left): Remove 3 insulating spacers, 1 metal spacer and the shield plate.
R10i/R11i (right): Remove 1 insulating spacer, 1 metal spacer, 1 M4x8 screw and the shield plate.

4. Replace the metal spacer with a provided insulating spacer as shown in figure 4.

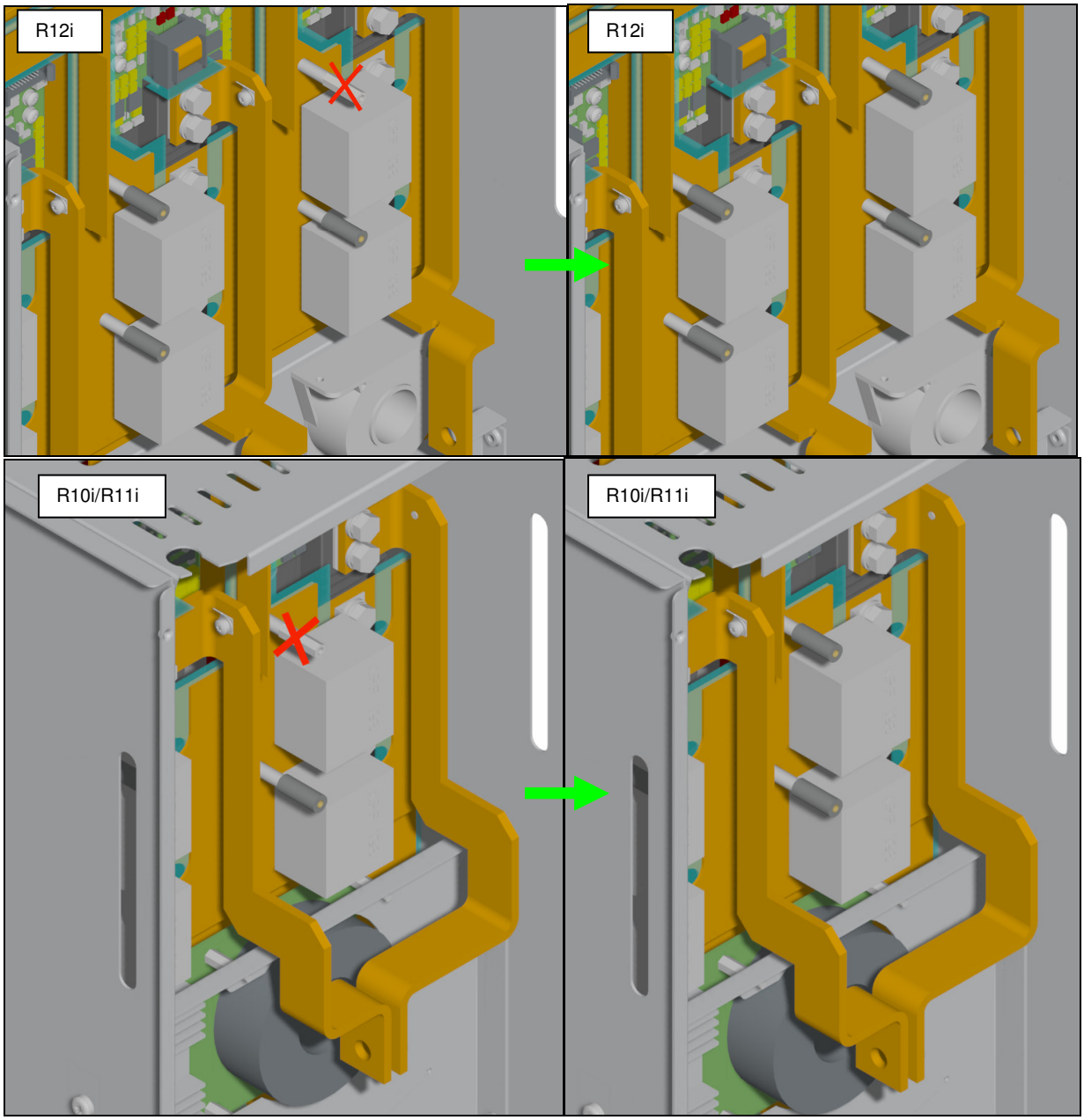


Figure 4. Replace 1 metal spacer with an insulating spacer.

5. Re-assemble the module by making steps 1-3 in reverse order.

6. Replace the *old NINT-XX board* of the V-phase module with the *new one from the new phase module*. This is done for precaution. Check the *current adjustment jumpers (S2…S4)* of NINT-XX that they are applicable for power plate ratings. The current adjustment procedure is explaned in the NINT-XX board configuration manual (3AFE 6149 8842).