

Instruction for exchange of circuit breaker in the switchgear AX1

1. Necessary tools.



- Ratchet handle with torx 40.
- Chisel for torx 30.
- Chisel or ring wrench, 8 millimetre.
- Screwdriver.
- Ring wrench, 13 millimetre.
- Pliers.

2 Assembling of elevating gear

2.1 Assembling of elevating gear.



2.2



2.3 Mount the support wheel.



2.4 Adjust the support wheel, (250 millimetre)



2.5 Use the handle to fasten the wheel.



2.6 Pull the locking pin on both sides.



2.7 Mounting the lifting beam.



2.8 Lock the lifting beam with the locking pin.



2.9 Mounting the lifting beam on the hydraulic cylinder.



2.10 Ready for use.



3 Dismantling the door

3.1 Dismantling the door.



3.2 Unbolt the locking clip.



3.3 Remove the locking clip so the door falls down.



3.4



4 Take the switchgear out of service

4.1 Take the switchgear out of service. Open all circuit breakers and move the disconnecter to earth pos. Close then all circuit breakers to earth the cables.

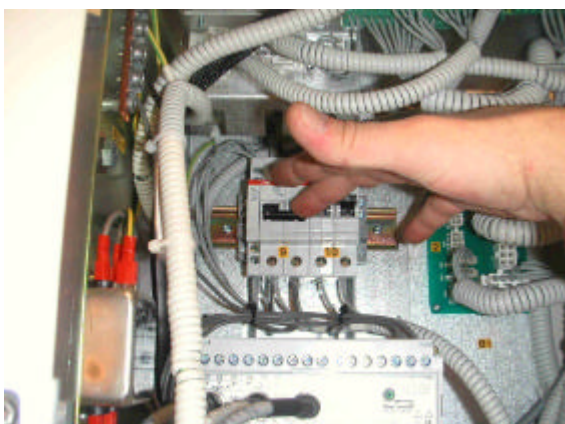
4.2 Check that the bus bar are dead.

4.3 Connect the bus bar to earth.

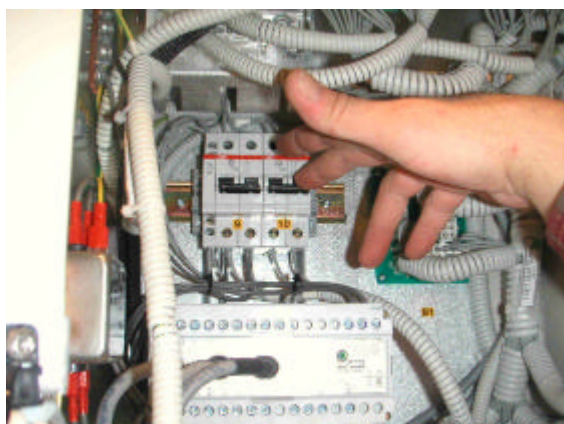
4.4 Notice that the cables out from the cubicle will not be connected to earth when the circuit breaker is dismantled. For that reason you have to connect a portable earthing devise.

5 Dismounting the circuit breaker

5.1 Switch off the aux power for the REF with the miniature circuit breaker +B1.9



5.2 Switch off the power for the spring charge motor with the miniature circuit breaker +B1.10



5.3 Open the circuit breaker with the mechanical push button.



5.4 Close the circuit breaker with the mechanical push button.



5.5 Open the circuit breaker with the mechanical push button.



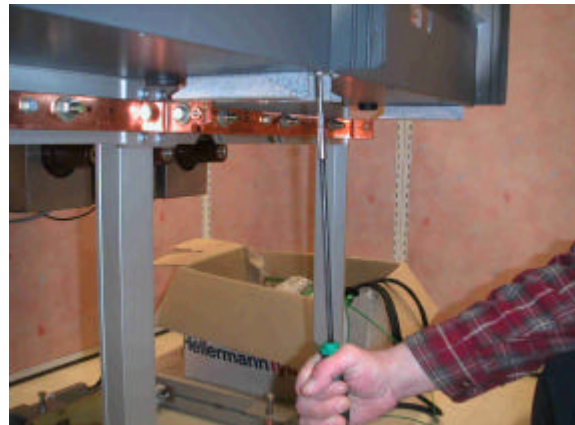
5.6 Check that the spring in the operating unit is unstrained.



5.7 Dismount the cover for the operating unit.



5.8 Dismount the cover.



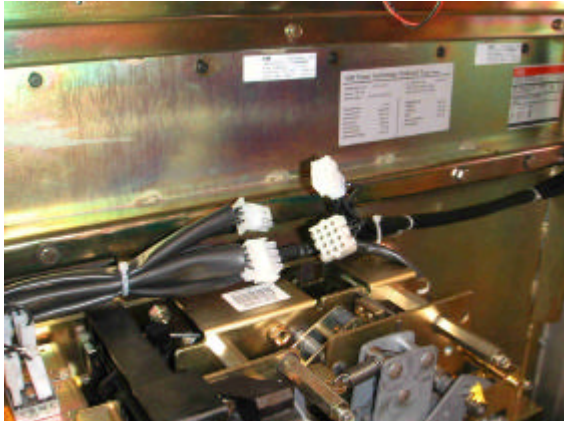
5.9 Dismount the plastic rivet. Save the plastic rivet to the mounting of the cover.



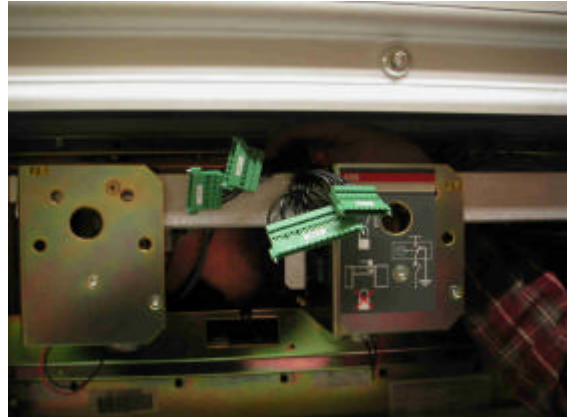
5.10



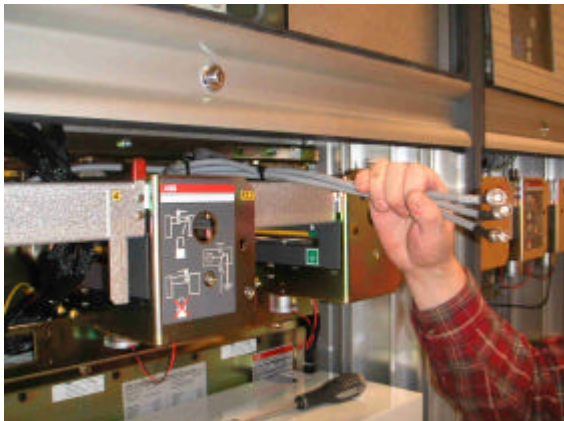
5.11 Disconnect the terminal XF11-XM11 and XF12-XM12.



5.12 Disconnect the terminal XF60, XF61, XF62 and XF63.



5.13 If the circuit breaker have current measuring you have to disconnect the sensor cables.



5.14 Dismount the operating unit.



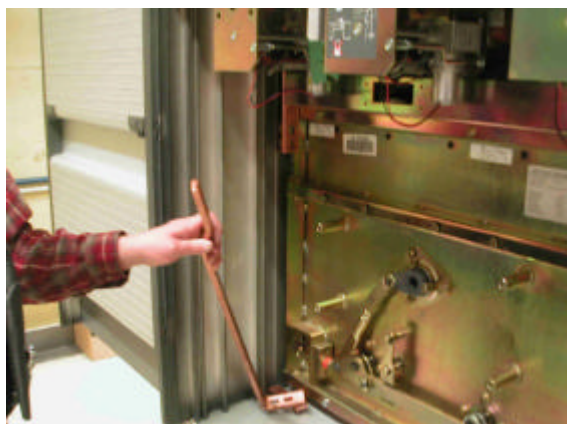
5.15 Remove the operating unit.



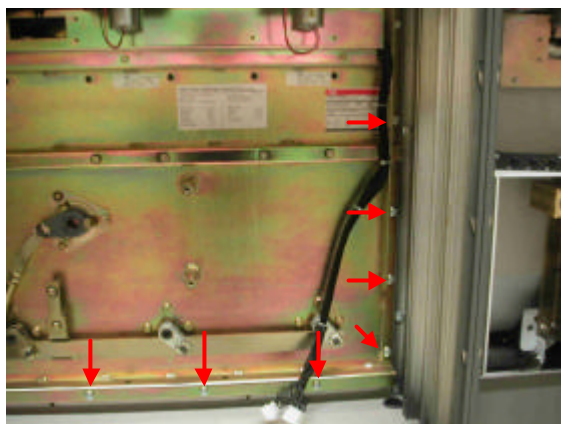
5.16 Dismount the earthing bar.



5.17



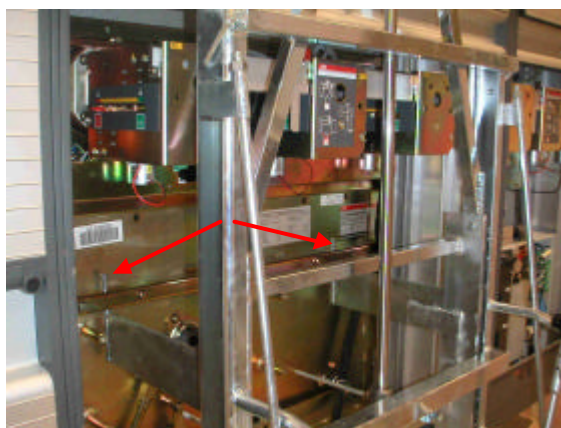
5.18 Unbolt the circuit breaker. Leave 2 screws so the breaker not will fall down.



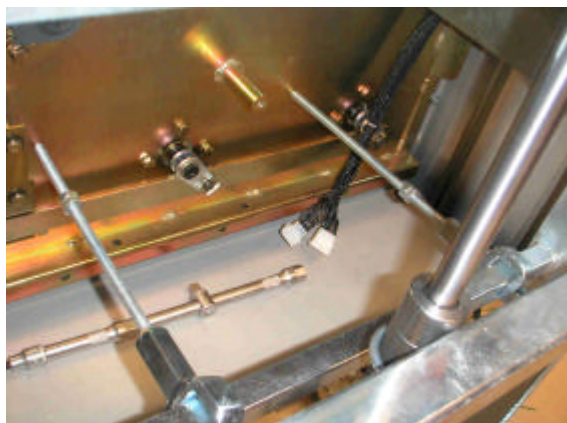
5.19 Close the door to the low voltages box.



5.20 Hook on the circuit breaker to the elevating gear.



5.21 Secure the adjustable screw so the circuit breaker will hang vertically.



5.22 Unbolt the two remaining screws that holds the circuit breaker.



5.23 Pull out the circuit breaker about 100-150 millimetre.



5.24 Let the circuit breaker go down about 30-40 millimetre so it not will grab the cubicle.
WARNING: The hand wheel is sensitive. Be careful so you don't get jammed.



5.25 Pull out the circuit breaker from the cubicle.
WARNING: Be careful the elevating gear can tip over.



5.26 Remove all rubber sealing.



5.27



6 Mounting of the circuit breaker

6.1 Unpack the circuit breaker and dismount the cover and operating unit. NOTICE: The circuit Breaker must be in open position and the spring unstrained before you dismount the operating unit



6.2 Hook on the circuit breaker to the elevating gear.



6.3 Use the Fomblin to lubricate the contact surface.



6.4 Fomblin typ OT 20



6.5



6.6 Remove all rubber sealing from the old circuit breaker.



6.7 Mont the rubber sealing in the cubicle.



6.8 Lift the circuit breaker to the right position otherwise the contact springs get broken.



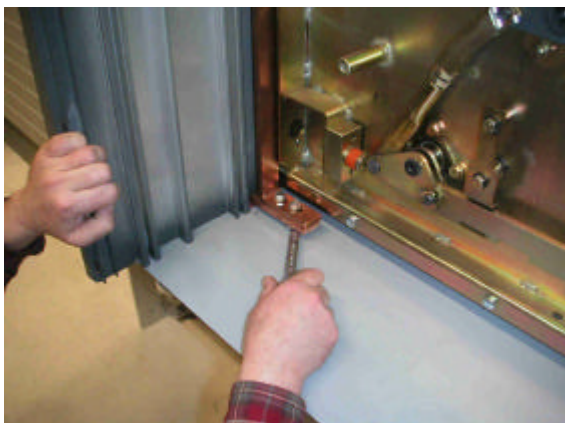
6.9 Press the circuit breaker in to the cubicle. It needs two person to do this.
WARNING: Be careful so the contact springs not get broken.



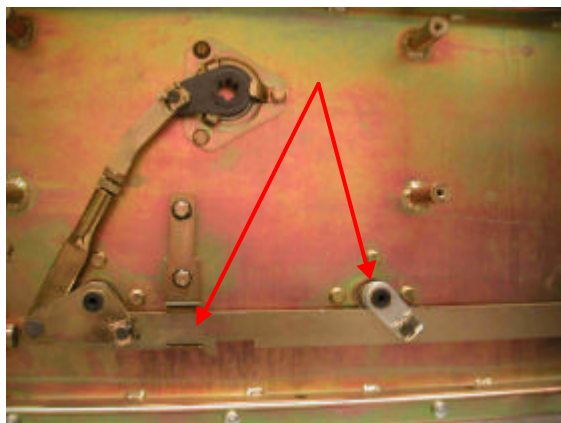
6.10 Use a dynamometric wrench to fasten the circuit breaker (24 Nm)



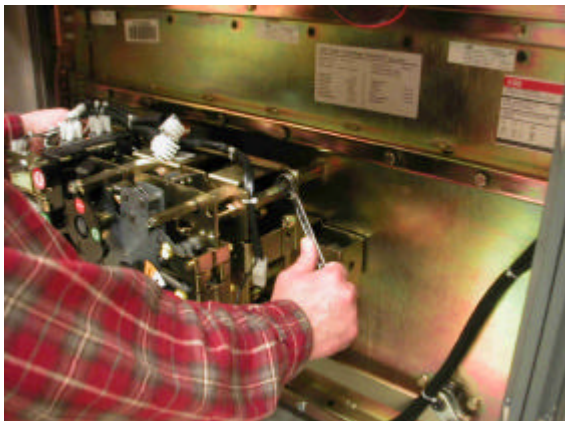
6.11 Mount the earthing bar



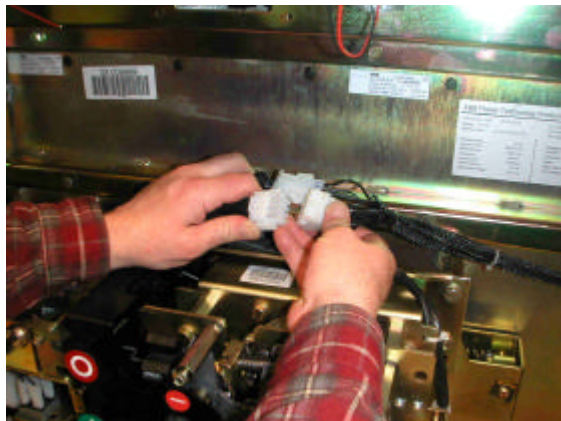
6.12 Before you mount the operating unit, check the circuit breakers position.



6.13 Mount the operating unit.



6.14 Connect the terminal XF11-XM11 and XF12-XM12.



6.15 Connect the terminal XF60, XF61, XF62 och XF63.



6.16 If the circuit breaker have current measuring you have to connect the sensor cables to the REF.



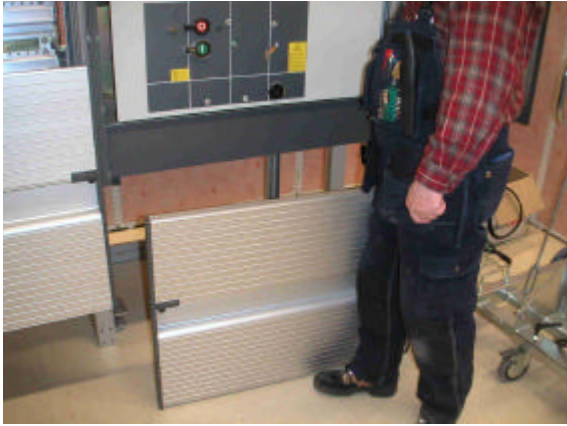
6.17 Mount the cover.



6.18 Mount the plastic rivet.



6.19 Mount the door.



6.20 Switch on the aux power for the REF with the miniature circuit breaker +B1.9 and wait for the REF to start.



6.21 Switch on the aux power for the spring charge motor with the miniature circuit breaker +B1.10. Now the spring will charge.



6.22 Mount the door.



Ready