CHAPTER 6

MAINTENANCE

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1 Maintenance Information

1.1 Recommendation

The transmitter is designed to provide years of operation with little maintenance. Rohde & Schwarz recommends to perform the following maintenance tasks as a precaution:

- Software updates for the NETCCU®, the exciter and the amplifier, if required (for improved performance and for retrofitting options)
- Replacing the two rack fans after approx. 40000 operating hours
- Replacing the two fans in the exciter after approx. 40000 operating hours

1.2 Maintenance of Subcontractor Products

Subcontractor products such as external air filters must be maintained in accordance with the maintenance instructions of the individual manufacturer/product.

CHAPTER 7

TROUBLESHOOTING

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1 Information

Troubleshooting information will be provided at a later date.

CHAPTER 8

SERVICE

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1 Required Test Equipment and Tools

The specified tools and test equipment include only those items needed for removing system components and carrying out simple checks on them.

Depending on the service work to be performed, you will require the following tools:

- Screwdriver No. 0
- Screwdriver No. 1
- Screwdriver No. 2
- Phillips screwdriver No. 0
- Phillips screwdriver No. 1
- Phillips screwdriver No. 2
- Torx screwdriver No. 8
- Torx screwdriver No. 9
- Torx screwdriver No. 20
- Hexagonal socket No. 3
- Hexagonal socket No. 6
- Open-end wrench No. 7
- Open-end wrench No. 8
- Open-end wrench No. 13
- Multimeter

2 Overview

You can remove and exchange the following instruments and transmitter components if errors occur:

- Power distribution
  - Main switch
  - Motor protection switch
  - Automatic line fuse
  - Power distribution board
  - Auxiliary power supply
- Transmitter control unit
  - NETCCU®
  - Rack controller
- Exciter components
  - Exciter
  - Exciter switch (in the case of exciter standby)
- Output stage components
  - Amplifiers
  - Absorber
- Harmonics filter
- Cooling system
  - Fans
  - Starting capacitor
  - Differential pressure gage
  - Temperature sensors
- Transformer (optional)

3 Preparatory Work

3.1 Safety

ATTENTION!
You need to pay particular attention to safety during service work. As a matter of principle all service work must be carried out by qualified personnel on components that are free of any voltage. Heavy components such as amplifiers must always be replaced in twos.

Note *Full information on the subject of safety can be found in the section "Safety".*

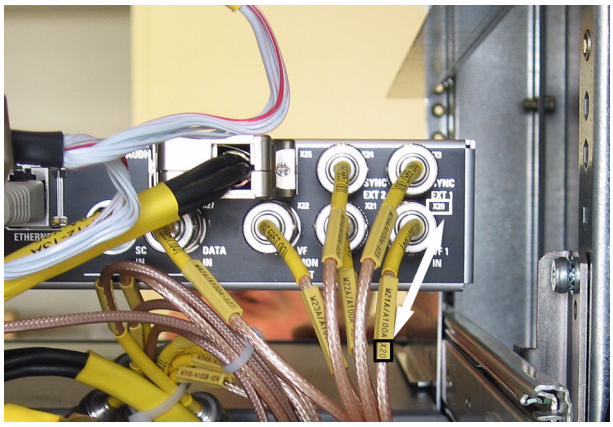
3.2 Rack Cabling

The standard components of the NW820x transmitter are fully cabled together on delivery. You need to reconnect the separate replacement instruments during service work.

Each cable has a yellow collar at each end, inscribed with the cable number (**W...**) and the intended purpose (module number **A...**, connector number **X...**). This makes it easier to connect the cable concerned to the intended slot or connection point, since the modules are provided with an engraved or self-adhesive circuit diagram.

For easy connection of replacement instruments or devices proceed as follows:

1. Find the plug (connector) number from the yellow collar on the cable.
2. Find the same number on the instrument you wish to connect (by looking for the female connector or circuit diagram).



3. Insert the plug connector into the corresponding female connector.

3.3 Removing the Front Panel/Rear Panel

To remove the front panel/rear panel proceed as follows:

☞ Using a Torx screwdriver, remove the front or rear panel.

Fig. 1 *Ground terminal of a front panel/rear panel*