



## AC Maintenance Guide

# SECURITY ADVICE

This Maintenance Guide for Ecotap AC charging stations describes the maintenance rules that must be accurately respected to maximize the performance and lifespan of Ecotap charging stations, and to guarantee the safety of your installation.

## GENERAL

- Charging stations must be installed in accordance with the installation rules described in the instructions. In the event of an external shock, Ecotap charging stations must not be connected or used.
- Incorrect installation and/or use may lead to electric shock or fire hazards. Charging stations must be used under normal conditions, i.e., they must not be subjected to values of Voltage / Current / Frequency / Temperatures other than those specified in the instructions.
- Any modification or repair of the charging station not authorized by Ecotap cancels the full scope of the responsibilities, replacement rights and guarantees.
- Use only the accessories recommended by Ecotap in the commercial catalogue and in the manuals.
- In order to constantly guarantee the highest levels of performance of our products, they may be subject to change. Please check the accuracy of the product specifications during maintenance operations and refer to the relevant instructions. For any questions or requests for clarification, please contact your Ecotap assistance contact
- The installation, use and maintenance of a charging station must be carried out by qualified, trained, and authorized personnel, in accordance with the rules in force in each country.

## RISK OF ELECTRIC SHOCK, BURNS AND EXPLOSION

- Wear PPE (Personal Protective Equipment) necessary for interventions on live products.
- Respect the safety rules related to electrical work.
- Improper electrical and mechanical use of equipment can be dangerous and risky and can result in bodily injury or property damage.
- Check that the charging station is properly grounded.
- Turn off all power supplies at the charging station before intervening on it.
- Before re-energizing the terminal, make sure that all physical protections have been put back in place (example: door, trim).

**Failure to strictly follow procedures and warnings may result in premature failure, explosion, or fire of the equipment.**



# MAINTENANCE

## GOAL OF THE MAINTENANCE

During use, your charging station may be exposed to various factors such as low or high temperature variations, overvoltages, ambient pollution (e.g. dust, humidity, animal waste...), operating wear and tear (contactor...), etc. It is also important to regularly update the firmware of your charging station so that it can work properly with electric vehicles marketed after its initial commissioning. Carrying out the various maintenance operations at the recommended intervals will ensure optimal operation of the charging station and maximize its lifespan.

## MAINTENANCE PLANNING

OPERATIONS	DESCRIPTION	INTERVAL
<b>1/5 - ASSEMBLY</b>		
Clean the external charging station	Clean the external mechanical part with water and soft solvent product using a soft cloth. It's not recommended to use high pressure water to clean.	6 months or every intervention
Check seal of GSM/GPS antenna	The watertight seal of the antenna should be checked. If a problem is observed, please contact the service assistance. No need to open the charging station.	1 year
Clean the interior charging station	Clean the internal part, remove dust, dirt, and possible insects inside of the charging station. Need to open the charging station.	6 months or every intervention
Check seal of plexiglass plates	Check plexiglass position and if the seal is not removed. If the plexiglass is not at the good position, it must be put in place to guarantee the non-accessibility to the electrical active part. Need to open the charging station.	1 year
Check for leaks inside of the charging station	Check for signs of water and corrosion inside of the charging station. Check if any components are compromised because of water infiltration. If a problem is observed, please contact the service assistance. Need to open the charging station.	6 months or every intervention
Supplement hydro argyle balls	For ground charging station mounting. Check whether there are sufficient hydro argyle balls at the bottom of the charging station. Recommended at least 5cm layer. Need to open the charging station.	1 year
Check the ground connection	Check the different ground connection between the Earth cable to the different mechanical part. If needed adjust the earth connection.	1 year or every intervention
Secure electrical connection with torque screwdriver	Check the torque value on the different connection. Power connection (PH2/PZ2 screws) must be at 2.5N.m, signal connection (PH1/PZ1 screws) must be at 1.5N.m. Need to open the charging station.	1 year
Check tubing or cap for drainage	Check the presence of tubing or a cap on the drainage port of the T2 socket. The tube should clean, and no water should be blocked inside. If needed clean the tube. Need to open the charging station.	6 months or every intervention
Check the HMI plastic plate	Apply pressure on the HMI plastic part to check the fixation to the charging station body. The HMI plastic plate must not move and must not be unglued. If a problem is observed, please contact the service assistance. Need to open the charging station.	1 year
Check the rubbers	Check the rubbers quality, it should be continuous strip, it should not have more than 1mm between two strips. If a problem is observed, please contact the service assistance. Need to open the charging station.	1 year
Check for corrosion and rust on the charging station	Check the presence of corrosion on the external and internal mechanical part. If a problem is observed, please contact the service assistance. Need to open the charging station.	1 year

OPERATIONS	DESCRIPTION	INTERVAL
<b>2/5 - MECHANICAL</b>		
Check for damages and blemishes on charging station	The appearance of the charging station should be checked. Check the sticker position and if they are still glued correctly. Check the integrity of the mechanical parts (panel, body, door access...). If a problem is observed, please contact the service assistance. No need to open the charging station.	1 year or every intervention

OPERATIONS	DESCRIPTION	INTERVAL
<b>3/5 - COMPONENTS</b>		
Check the Residual Current Device	Push the test button of the RCD to create leakage current and switch off the RCD. If a problem is observed, please contact the service assistance. No need to open the charging station.	1 year
Check wiring connection	Check the good connection of the connector (Servo motor on the T2 socket, connector on the controller, etc.). If needed reconnect the connector. A charge test must be done. Need to open the charging station.	1 year or every intervention
Check the fuse holders/MCB	Check the good integrity of the fuse holder / MCB present in the charging station. The plastic should not have presence of brown color or deformation. Need to open the charging station.	1 year or every intervention
Change power contactor	Change the power contactor relay, using the same model and characteristics, to prevent any problem due to the maximum number of switching operation. If a problem is observed, please contact the service assistance. Need to open the charging station.	5 years

OPERATIONS	DESCRIPTION	INTERVAL
<b>4/5 - MEASUREMENT</b>		
Voltage measurement check	Check the voltage value, make the measurement between: <ul style="list-style-type: none"> <li>• Phase to Phase;</li> <li>• Phase to Neutral;</li> <li>• Phase to Earth;</li> <li>• Neutral to Earth (close to OV RMS);</li> </ul> Need to open the charging station.	1 year or every intervention

OPERATIONS	DESCRIPTION	INTERVAL
<b>5/5 - FUNCTIONALITY</b>		
Test the charging station	Check the functionality of the charging station. Test by making a full charge process with at least 2kW charger. No need to open the charging station.	1 year or every intervention

We strongly recommend that you keep an up-to-date maintenance booklet for each charging station with an indication of the verification and maintenance operations carried out.

## SERVICE RECORDS

COMMISSIONING DATE		/	/
MAINTENANCE		CONTROL	COMMENTS
After 6 months	Date / Visa		
After 1 year	Date / Visa		
After 2 years	Date / Visa		
After 3 years	Date / Visa		
After 4 years	Date / Visa		
After 5 years	Date / Visa		
After 6 years	Date / Visa		
After 7 years	Date / Visa		
After 8 years	Date / Visa		
After 9 years	Date / Visa		
After 10 years	Date / Visa		
After 11 years	Date / Visa		
After 12 years	Date / Visa		
After 13 years	Date / Visa		
After 14 years	Date / Visa		
After 15 years	Date / Visa		



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