

Install power supply

For Rosemount™ 700XA Gas Chromatograph



Safety information

NOTICE

The analyzer electronics and oven assembly, when housed inside a purged enclosure, meet the certifications and classifications identified in the Specifications section of the Product Data Sheet, which is located on the Emerson website: emerson.com.

⚠ WARNING

Safety compliance

Failure to follow the safety instructions may cause injury to personnel. The seller does not accept any responsibility for installations of the device or any attached equipment in which the installation or operation thereof has been performed in a manner that is negligent and/or non-compliant with applicable safety requirements.

Install and operate all equipment as designed and comply with all safety requirements.

If the device is not operated in a manner recommended by the manufacturer, the overall safety could be impaired.

Observe all safety precautions defined in the gas Safety Data Sheet (SDS), especially for hazardous locations.

⚠ WARNING

Supply mains connection

The device is intended to be connected to supply mains by qualified personnel in accordance with local and national codes.

⚠ WARNING

Explosion

Failure to de-energize the analyzer may cause an explosion and severely injure personnel.

Before opening the analyzer, disconnect all electrical power and ensure that the area is free of explosive gases.

Keep cover tight while circuits are live.

Use cables or wires suitable for the marked "T" ratings.

Cover joints must be cleaned before replacing the cover.

Conduit runs to the enclosure must have sealing fitting adjacent to enclosure.

⚠ WARNING

Power

A suitable APPROVED switch and fuse or a circuit breaker shall be provided to facilitate the disconnection of mains power.

⚠ WARNING

Ventilation

Use the device in a well-ventilated area.

If you plan to place the device in a sealed shelter, always vent it to atmosphere with 0.25 in (6.4 mm) tubing or larger. This will prevent the build up of H₂ and sample gas.

⚠ WARNING

Leak testing

All gas connections must be properly leak tested at installation.

Do not turn on gas until you have completely checked the carrier lines for leaks.

⚠ WARNING

Precautionary signs

Failure to observe precautionary signs may result in injury or death to personnel or cause damage to equipment.

Observe and comply with all precautionary signs posted on the device.

⚠ WARNING

Toxic vapors

Exit ports may discharge dangerous levels of toxic vapors.

Use proper protection and a suitable exhaust device.

⚠ WARNING

Burns

Some parts of the analyzer may be heated to 248 °F (120 °C).

To prevent burns, do not touch any of the hot parts. All parts of an analyzer are always hot unless it has been switched off and allowed to cool down.

Before fitting, removing, or performing any maintenance on the analyzer, make sure that it has been switched off and allowed to cool for at least two hours.

When handling the analyzer, always use suitable protective gloves.

These precautions are particularly important when working at heights.

If burned, seek medical treatment immediately.

⚠ WARNING

Physical access

Unauthorized personnel may potentially cause significant damage to and/or misconfiguration of end users' equipment. This could be intentional or unintentional and needs to be protected against.

Physical security is an important part of any security program and fundamental to protecting your system. Restrict physical access by unauthorized personnel to protect end users' assets. This is true for all systems used within the facility.

NOTICE

Replaceable parts

Only a few parts inside the device are replaceable. Only trained service personnel should replace parts.

All replacement parts must be authorized by Emerson to ensure product certification compliance.

NOTICE

Equipment damage

If the device is heated without carrier flow, damage to the columns may occur.

NOTICE

Waste disposal

Waste electrical and electronic products must not be disposed of with household waste.

Please recycle where facilities exist.

Check with your local authority or retailer for recycling advice.

NOTICE

The device is certified by CSA and ATEX. See the certification tag on the device for specific details about its agency approvals. When the vapor regulators and flow switches are fitted, they must be suitably certified with the ratings Ex d IIC Gb T6/T4/T3 and for a minimum ambient temperature range: $T_a = -20\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$.

Where right angle bend cable adapters are used, they shall be appropriately certified and shall interface with enclosures via appropriate certified barrier glands.

Contents

Chapter 1	Replace AC/DC power supply.....	7
-----------	---------------------------------	---

1 Replace AC/DC power supply

The AC/DC power supply is mounted on the left wall of the lower enclosure adjacent to the card cage. To access it, remove the front panel and the switch panel or local operator interface (LOI) from the lower enclosure.

⚠ WARNING

Explosion

Failure to de-energize the analyzer may cause an explosion and severely injure personnel.

Before opening the analyzer, disconnect all electrical power and ensure that the area is free of explosive gases.

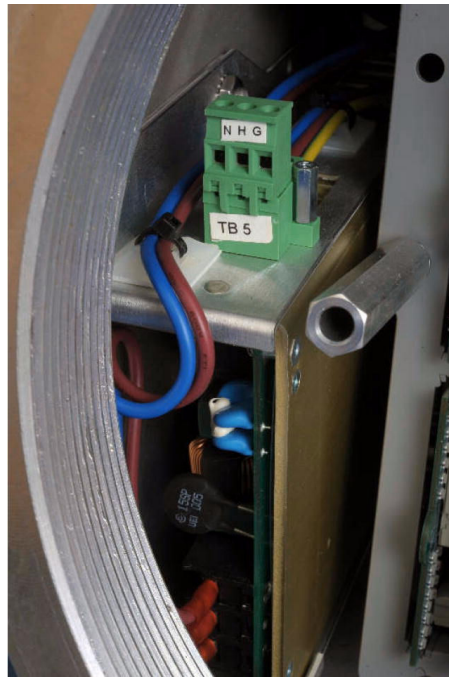
Keep cover tight while circuits are live.

Use cables or wires suitable for the marked "T" ratings.

Cover joints must be cleaned before replacing the cover.

Conduit runs to the enclosure must have sealing fitting adjacent to enclosure.

Figure 1-1: AC/DC power supply in lower compartment



Prerequisites

A Cross point #2 Phillips screwdriver is required to remove and replace the AC/DC power supply.

Procedure

1. Remove power from the gas chromatograph (GC).

2. Unscrew and remove the front panel.

Figure 1-2: Removing the front panel



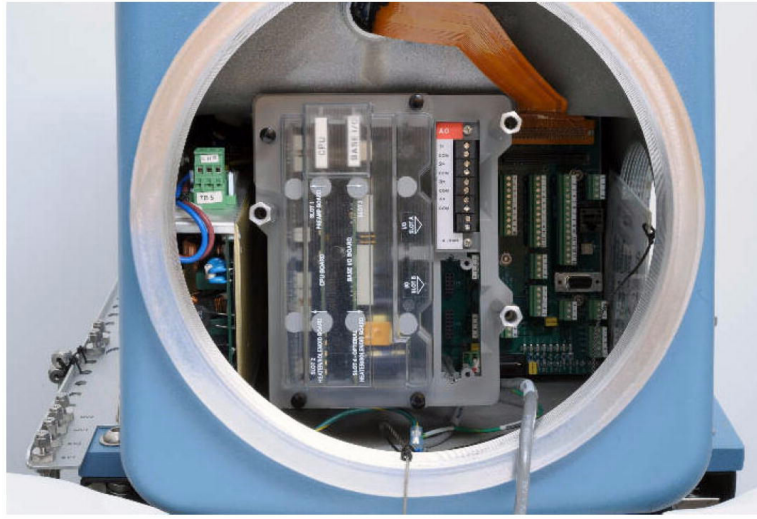
3. Unscrew and remove the switch panel or LOI to allow access to the card cage.

Figure 1-3: Removing the switch panel or LOI



4. If present, remove the clear cover from the card cage.

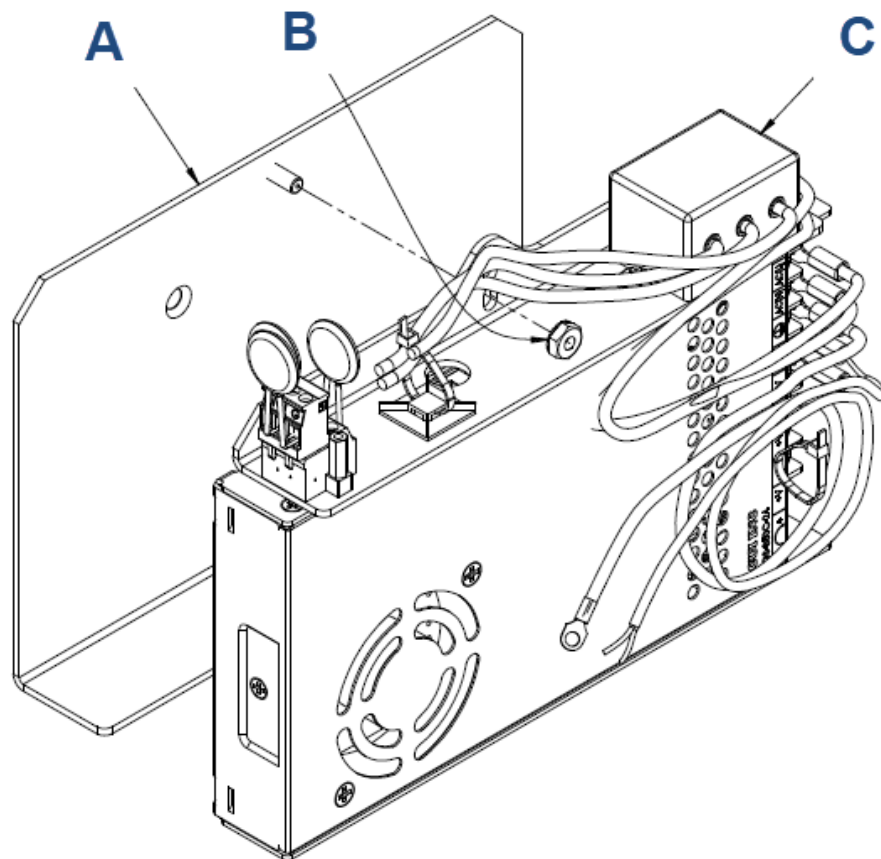
Figure 1-4: Card cage



5. Unplug all the cards in the card cage but do not remove them.
6. Unscrew the three switch panel connector posts. Remove the washers as well.
7. Lift the card cage with the boards and remove it from the lower enclosure.
8. Unscrew and remove the post closest to the power supply.
9. Unplug the connector at the top of the power supply on the left.
10. Unplug the low voltage cable connected along the lower edge of the backplane.
11. Disconnect the ground lead from the power supply at the chassis ground immediately inside the lower enclosure opening.
12. Remove the nut just above the power supply. Twist the power supply free of the attaching stud and lift it from its anchor plate. Remove the power supply carefully to avoid damage due to wire interferences.
13. Using a Phillips screwdriver, remove the two screws attaching the anchor plate to the inside of the enclosure.
14. Remove the anchor plate through the front opening of the enclosure.

15. The replacement power supply is shipped with the new anchor plate attached to it with a nut. Remove this nut to separate the new power supply and anchor plate.

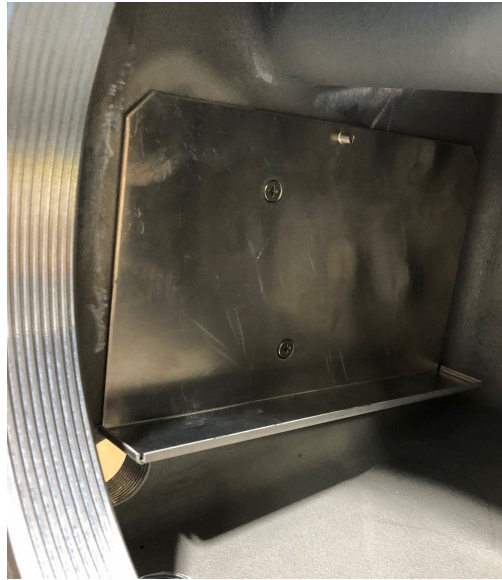
Figure 1-5: Replacement power supply



- A. Anchor plate
- B. Nut
- C. Replacement power supply

16. Place and mount the new anchor plate to the inside of the enclosure with the Phillips screws and a Phillips screwdriver.
The orientation of the new anchor plate will clear the threaded hole as shown in [Figure 1-6](#).

Figure 1-6: Power supply anchor plate in GC enclosure



17. Maneuver the new power supply into the anchor plate, ensuring that the wires are free to be connected.

For more information: [Emerson.com](https://www.emerson.com)

©2022 Emerson. All rights reserved.

Emerson Terms and Conditions of Sale are available upon request. The Emerson logo is a trademark and service mark of Emerson Electric Co. Rosemount is a mark of one of the Emerson family of companies. All other marks are the property of their respective owners.

ROSEMOUNT™

