



Installing Your 1394C Power Connector Key Kit

Catalog Number 1394C-CONN-KEY

Introduction

This publication provides installation instructions for the 1394C power connector key kit (catalog number 1394C-CONN-KEY). Use this document in conjunction with the *1394 Digital AC Multi-Axis Motion Control System User Manual* (publication 1394-5.0).

Systems this Kit Applies to

This kit applies to the following 1394C system modules:

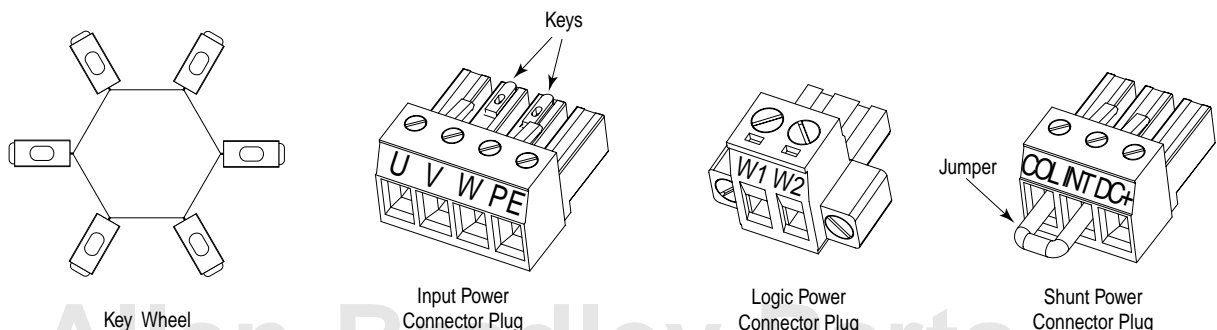
- 1394C-SJT05-A
- 1394C-SJT05-C, -C-RL
- 1394C-SJT05-T, -T-RL
- 1394C-SJT05-L, -L-RL
- 1394C-SJT10-A
- 1394C-SJT10-C, -C-RL
- 1394C-SJT10-T, -T-RL
- 1394C-SJT10-L, -L-RL

What this Kit Contains

This kit contains:

- One key wheel (with six keys).
- One input power connector plug (keyed, with terminals labeled U, V, W, and PE).
- One logic power connector plug (with terminals labeled W1 and W2).
- One shunt power connector plug (with jumper and terminals labeled COL, INT, and DC+).

Figure 1
Kit Contents



Allen-Bradley Parts

Installing the Key Kit

Installation of your 1394C power connector key kit involves the replacement of the system module power connector plugs and the insertion of keys into specified system module terminals.

The replacement plugs are keyed and labeled to prevent an improper power connection. Follow the procedure starting below to install your 1394C power connector key kit.



ATTENTION: The 1394 system module contains ESD (Electrostatic Discharge) sensitive parts and assemblies. Static control precautions are required when installing, testing, servicing, or repairing this device. Component damage can result if ESD control procedures are not followed. If you are not familiar with static control procedures, refer to *Guarding Against Electrostatic Damage* (publication 8000-4.5.2), or any other applicable ESD Protection Handbook.

Removing the Power Connector Plugs

To remove the three power connector plugs:

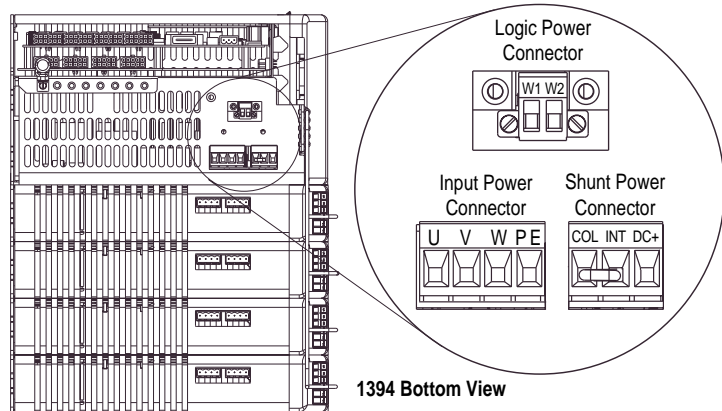
1. Remove all 24V control power, contactor enable power, and 360/480V AC input power from the system.



ATTENTION: This product contains stored energy devices. To avoid hazard of electrical shock, wait five minutes or verify that all voltage on the system bus network has been discharged before attempting to service or repair this unit. Only qualified personnel familiar with solid state control equipment and safety procedures in publication NFPA 70E or applicable local codes should attempt this procedure.

- If not already done, label each of the wires leading to the three connectors using small strips of tape. Refer to Figure 2 for connector locations.

Figure 2
1394C Power Connectors



Note: If an external shunt resistor is not connected, a jumper is installed (between COL and INT) as shown in the figure above.

- Remove the three power connector plugs from the bottom of the 1394C system module.

Replacing the Logic Power Connector Plug

To replace the logic power connector plug:

- Loosen the screws in the old logic power connector and remove the wires from each terminal (refer to Figure 2 for connector location).
- Insert the wires into the replacement connector plug (supplied in the kit) as shown in the table below.

Insert the wires labeled:	Into the connector plug terminals labeled:	Tighten to this torque value:
W1	W1	0.56-0.62 N-m (5.0-5.6 lb-in.)
W2	W2	

- Gently pull on each wire and make sure it does not come out of its terminal. Re-insert and tighten any loose wires.

Replacing the Input Power Connector Plug

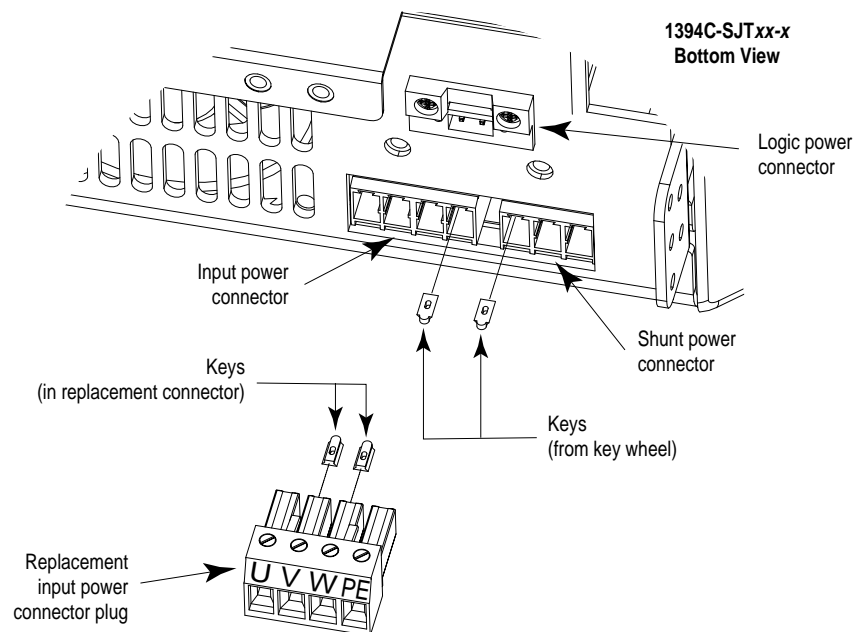
To replace the input power connector plug:

1. Loosen the screws in the old input power connector plug and remove the wires from each terminal (refer to Figure 2 for connector location).
2. Insert the wires into the replacement connector plug (supplied in the kit) as shown in the table below.

Insert the wires labeled:	Into the connector plug terminals labeled:	Tighten to this torque value:
U	U	0.56-0.62 N-m (5.0-5.6 lb-in.)
V	V	
W	W	
PE	PE	

3. Gently pull on each wire and make sure it does not come out of its terminal. Re-insert and tighten any loose wires.
4. Verify that keys are inserted into the beveled slots above terminals V and W of power connector plug, as shown in the figure below. If necessary, insert keys from the key wheel supplied in the kit.

Figure 3
Inserting Keys into Connectors



Replacing the Shunt Power Connector Plug

To replace the shunt power connector plug:

1.

If the 1394-SR10A shunt resistor is:	Then:
Installed	1. Loosen the screws in the old shunt power connector plug and remove the wires from each terminal (refer to Figure 2 for connector location). 2. Go to main step 2.
Not installed	Go to main step 3.

2. Remove jumper from the replacement connector plug (supplied in the kit) and insert the wires as shown in the table below.

Insert the wires labeled:	Into the connector plug terminals labeled:	Tighten to this torque value:
COL	COL	0.56-0.62 N-m (5.0-5.6 lb-in.)
DC+	DC+	

3. Gently pull on each wire (or jumper) and make sure it does not come out of its terminal(s). Re-insert and tighten any loose wires.

Inserting Keys into the System Module Connectors

1. Insert a key into the beveled slot above the input power connector terminal on the far right. This terminal lines up with the connector plug terminal labeled PE (refer to Figure 3 for key placement).
2. Insert a key into the beveled slot above the shunt power connector terminal on the far left. This terminal lines up with the connector plug terminal labeled COL (refer to Figure 3 for key placement).

Re-applying Power to Your 1394C System

To re-apply power to your 1394C system:

1. Re-connect the three connector plugs as shown in the table below (refer to Figure 2 for connector locations).

Connect the plug labeled:	Into this system module connector:
W1 W2	Input logic connector
U V W PE	Input power connector
COL INT DC+	Shunt power connector

2. Re-apply power to your system.
3. Check for proper operation. Refer to your *1394 Digital AC Multi-Axis Motion Control System User Manual* (publication 1394-5.0) for additional start-up information.

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