



IntelliChlor Salt Chlorine Generator (SCG) Replacement Parts (For EasyTouch®, IntelliTouch® Pool & Spa Control System with IntelliChlor® SCG)



Installation Guide

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

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IMPORTANT WARNING AND SAFETY INSTRUCTIONS



SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS PRODUCT (UNIT) IS NOT INSTALLED AND USED CORRECTLY.



INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THIS PRODUCT. This Guide provides installation and operation instructions for the product. Consult Pentair Water Pool and Spa, Inc. with any questions regarding this product.



This product is intended for use in swimming pool applications only.



Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.



IMPORTANT NOTICE - Attention Installer: This Installation Guide ("Guide") contains important information about the installation, operation and safe use of this product. This Guide should be given to the owner and/or operator of this equipment.

Attention User: This Guide contains important information that will help you in operating and maintaining this product. Please retain it for future reference.

Before installing this product, read and follow all safety warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions.



This product is designed and manufactured for safe and reliable service when installed, operated and maintained according to the information and installation codes referred to in this Guide. This is a safety alert symbol. When you see this symbol in this manual or on the product, look for one of the following signal words; **DANGER, WARNING, CAUTION** and **NOTICE** and comply with the information. Be alert to the potential hazard. Ensure to read and comply with all of the warnings and cautions in this manual.

Risk of Electrical Shock or Electrocutation!



EasyTouch and IntelliTouch replaceable parts must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property.

Introduction

This manual describes how to remove and install the EasyTouch and IntelliTouch IntelliChlor Salt Chlorine Generator (SCG) replacement parts.

Summary Installation Steps

- Before removing and replacing part first switch OFF the main power to the EasyTouch/IntelliTouch load center.
- To access the SCG transformer, SCG circuit board and connection cable, parts of the EasyTouch/IntelliTouch load center must first be removed. Refer to “**Load Center Parts Removal**”, on page 1.
- After replacing the SCG parts, switch the power on to the EasyTouch/IntelliTouch load center and verify that the GREEN SCG circuit board power LED is on.

IntelliChlor® SCG Power Supply Replacement Parts: Removal and Installation



WARNING! When installing electrical products in the EasyTouch/IntelliTouch load/power center, basic precautions should always be followed, including the following:



DANGER: RISK OF ELECTRIC SHOCK, WHICH CAN RESULT IN SERIOUS INJURY OR DEATH. Before attempting removal and installation of replaceable parts in the EasyTouch/IntelliTouch load/power center, be sure that all power to the circuit supplying power to the load/power center is disconnected/turned off at the main house panel circuit breaker.

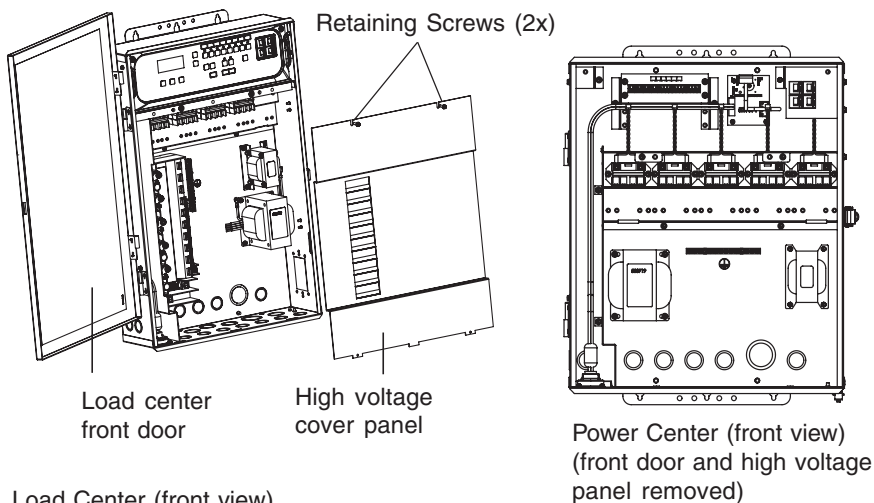
Read Safety Precautions and Important Instructions (page 1). Before attempting any electrical wiring, be sure to read and follow Safety Instructions. Wiring should only be performed by a qualified professional.

Load Center Parts Removal to access SCG replacement parts

The following procedure describes how to remove the EasyTouch/IntelliTouch load center parts to access the SCG transformer, circuit board and connection cable.

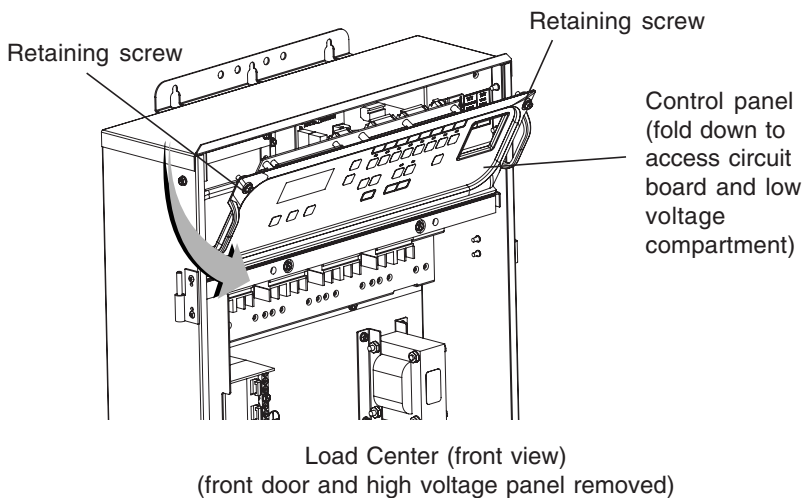
To remove the EasyTouch/IntelliTouch load center high voltage panel:

1. **SWITCH OFF AC POWER AT THE MAIN HOUSE PANEL CIRCUIT BREAKER** before removing the high voltage panel from the load/power center.
2. Unlatch the front door and open the door.
3. Loosen the two retaining screws securing the high voltage front panel. Remove the panel from the load/power center.



Load Center (front view)
(front door and high voltage panel removed)

4. Loosen the two retaining screws securing the automation control panel. Lower the control to allow access the low voltage compartment behind the control panel.



5. **After removal and installation procedures are complete:** Close the control panel and secure with the two retaining screw. Reinstall the high voltage panel and secure with the two retaining screw. Close and latch the front door.

Required Tools

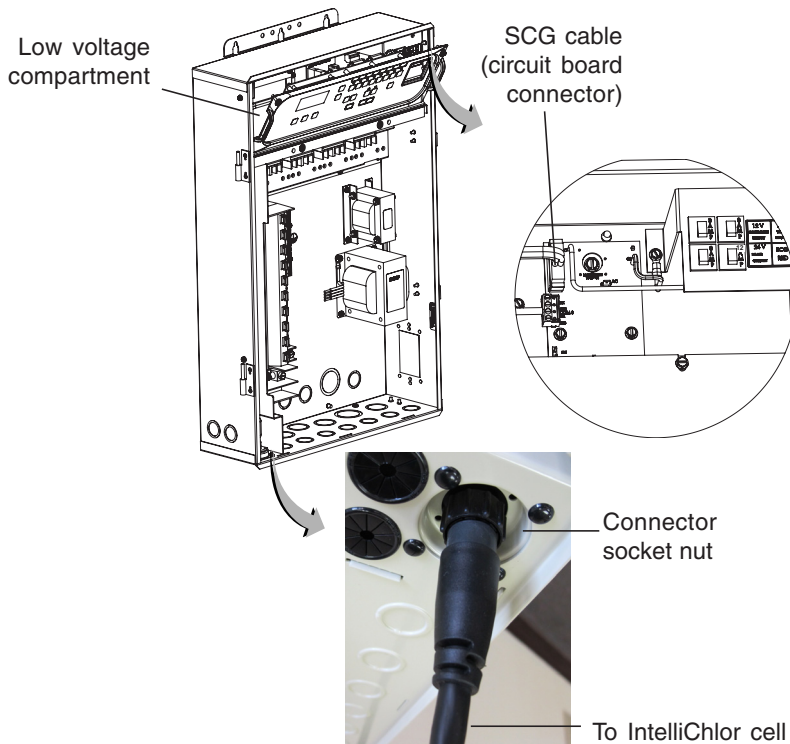
- Medium size flat blade screwdriver or 1/4" and 5/16" sockets.
- 0-30 lb-in torque wrench.

SCG Power Cable Removal and Installation

WARNING Before removing and installing the SCG circuit board, first be sure to switch OFF the main AC power to the load/power center.

Note: Before removing the SCG connection cable, remove the high voltage panel and fold down the control panel (see page 1). To remove and replace the SCG connection cable:

1. **Removal:** Carefully disconnect the cable from the SCG circuit board.
2. Remove the two push rivets securing the connector to the bottom of the load center.
3. **Installation:** Install the cable connector onto the enclosure. Secure the connector with the two push rivets previously removed.
4. Route the cable up through side of the enclosure into the low voltage compartment. Connect the cable connector to the SCG circuit board.



SCG Circuit Board Removal and Installation

WARNING Before removing and installing the SCG circuit board, first be sure to switch OFF the main AC power to the load/power center.

Note: Before removing the SCG circuit board, first remove the EasyTouch/IntelliTouch load center high voltage panel and fold down the control panel (see page 1).

To remove and install the SCG circuit board - see Figure 1 and 2 on page 7 & 8:

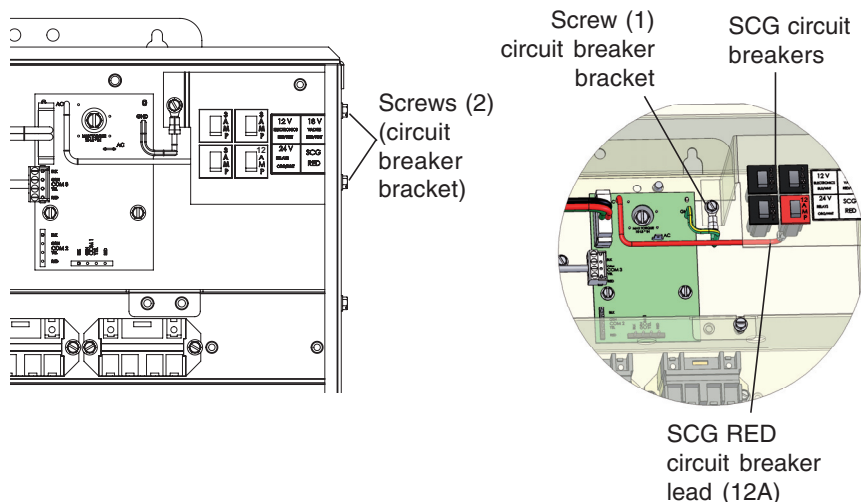
1. Carefully disconnect the RED lead from the SCG breaker.
2. Disconnect the COM port plug, power connector, RED transformer lead, and the GREEN ground lead from the enclosure base.
3. Remove the three (3) screws securing the SCG circuit board.
1. **Circuit board installation (Caution! Torque screws to 10 lb-in max.):** Secure the circuit board with the three (3) screws previously removed. Secure the GREEN ground lead to the enclosure base.
2. Connect the RED transformer lead (1/4" quick-disconnect) onto the rear of the 12 A circuit breaker.
3. Connect the other red transformer wire (3/16" quick-disconnect) onto the circuit board terminal.
4. Connect the COM port SCG power plug, transformer RED lead and the ground terminal lead to the enclosure base.

Circuit Breaker Assembly Removal and Installation

WARNING Before removing and installing the circuit breaker assembly, first be sure to switch OFF the main AC power to the EasyTouch/ IntelliTouch load/power center.

Note: Before removing the circuit breaker assembly, first remove the EasyTouch/ IntelliTouch high voltage panel and fold down the control panel (see page 1). To remove and install the circuit breaker assembly (see Figure 1 & 2, page 7 & 8.

1. **Removal:** Remove the three (3) screws securing the SCG circuit breaker bracket to enclosure to gain access to the four (4) circuit breakers and wiring.
2. **Installation:** To replace circuit breaker bracket, reverse removal instructions above. Be sure to reattach SCG circuit board GREEN GROUND lead if present.



SCG Transformer Removal and Installation



WARNING Before removing and installing the SCG transformer, first be sure to switch OFF the main AC power to the load/power center.

To remove the SCG transformer assembly (see Figure 1 & 2, page 7 & 8):

1. Remove the screw securing the green ground wire and the circuit breaker bracket to the enclosure.
2. Remove the two remaining screws securing the circuit breaker bracket to the enclosure to access the circuit breaker leads.
3. Disconnect RED transformer wire (1/4" quick-disconnect) from the rear of the 12 A circuit breaker.
4. Disconnect the other RED transformer wire (3/16" quick-disconnect) from the circuit board terminal.
5. Remove the transformer ground wire screw.
6. Disconnect all the SCG transformer primary leads.
7. Remove the three remaining screws securing the transformer. Remove the transformer from the enclosure.

To install the transformer assembly (see Figure 1 & 2, page 7 & 8):

1. Mount the transformer onto the back panel of the enclosure. Secure the transformer with three #8-32 x 3/8" screws.
2. Install the GREEN transformer ground lead screw and remaining screw.
3. Connect the red transformer wire (1/4" quick-disconnect) onto the rear of the 12 A circuit breaker.
4. Connect the other RED transformer wire (3/16" quick-disconnect) onto the circuit board terminal.
5. Install the circuit breaker bracket onto the enclosure and secure with two #8-32 x 3/8" screws.
6. Secure the green circuit board ground wire to the enclosure with #8-32 x 3/8" screw.
7. Connect the transformer primary AC wires as required. See "Figure 3: SCG Transformer AC Wiring Diagram" on page 9 for transformer AC wiring information.

See IMPORTANT NOTE below for required SCG transformer filter pump relay connection information:

IMPORTANT! IntelliChlor (SCG) AC Wiring Instructions: When using the IntelliChlor salt chlorine generator and an IntelliFlo pump (or 2-speed pump) with a Pentair Water Pool and Spa® IntelliTouch®, EasyTouch® automation control system, the IntelliChlor AC power center wires must be connected to the PUMP SIDE OF THE MAIN FILTER PUMP RELAY located in the load/power center. This ensures that the IntelliChlor cell produces chlorine only when the main filter pump is on. This method does not require a separate ground fault circuit-interrupter (GFCI) to protect the circuit.

CAUTION: Do not overtighten rectifier mounting screw (Tighten 10 lb-in max.)

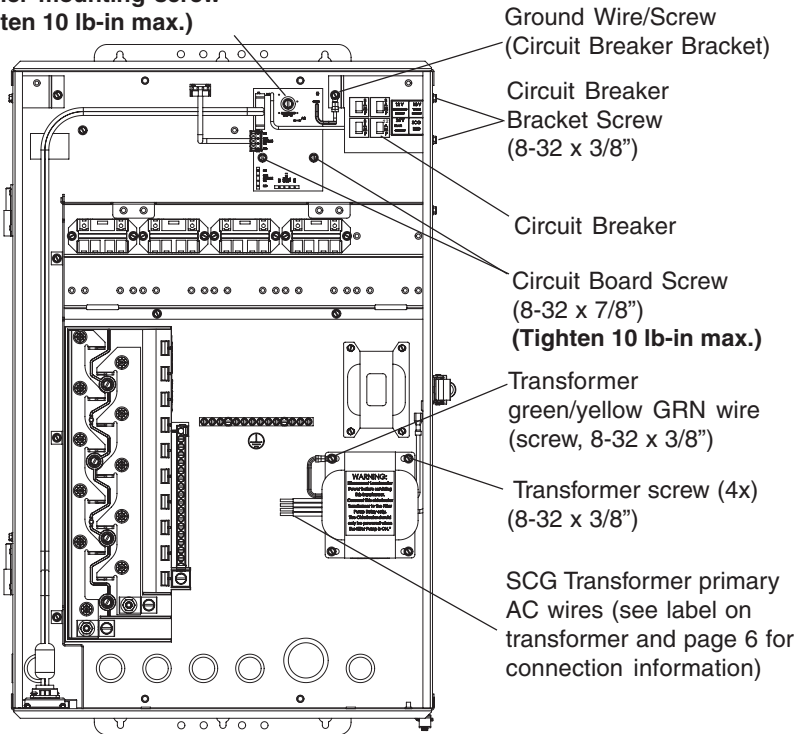
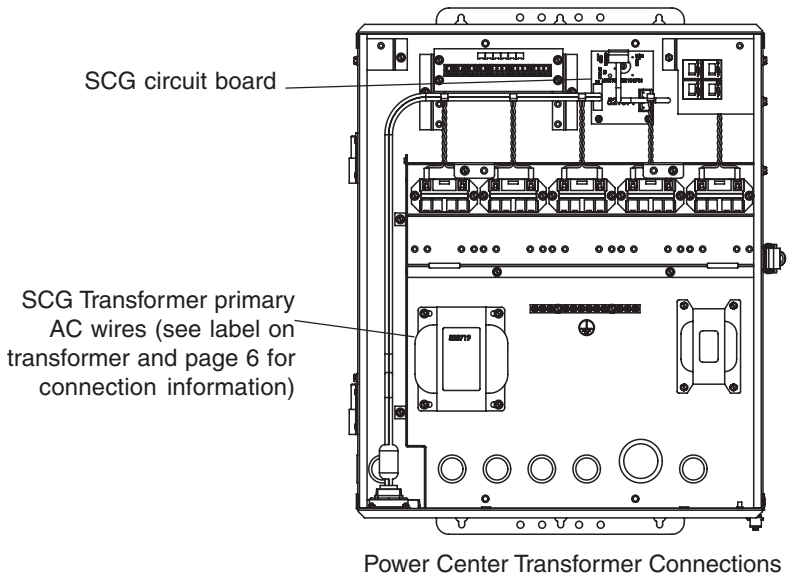


Figure 1: Load Center Transformer Connections



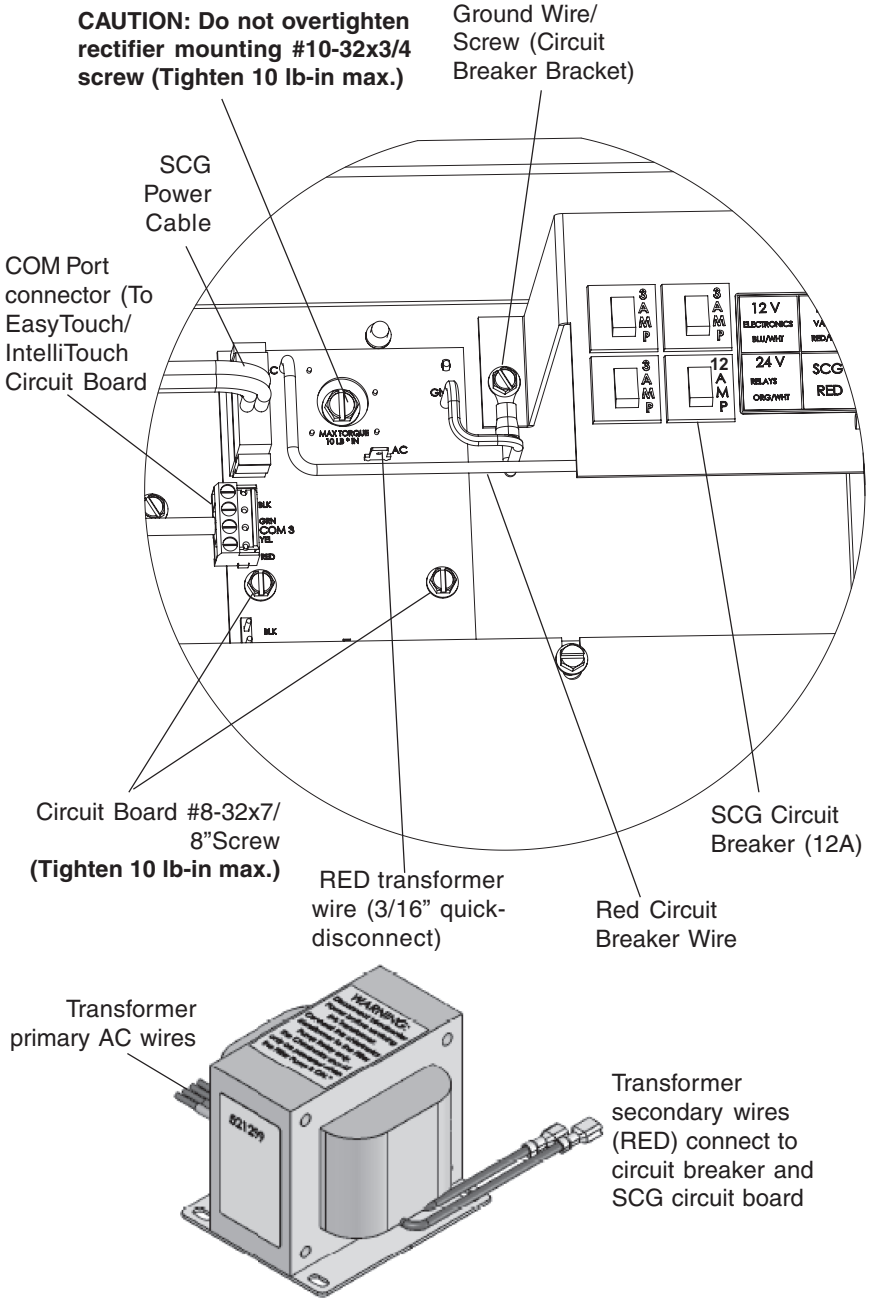


Figure 2: SCG Circuit Board / Transformer Connections

SCG Transformer High Voltage Wiring

IMPORTANT! IntelliChlor® (SCG) AC Wiring Instructions: When using the IntelliChlor salt chlorine generator and an IntelliFlo® pump (or 2-speed pump) with an EasyTouch and IntelliTouch automation control system, the IntelliChlor AC power center wires must be connected to the PUMP SIDE OF THE MAIN FILTER PUMP RELAY located in the load/power center. This ensures that the IntelliChlor cell produces chlorine only when the main filter pump is on. This method does not require a ground fault circuit-interrupter (GFCI) to protect the circuit.

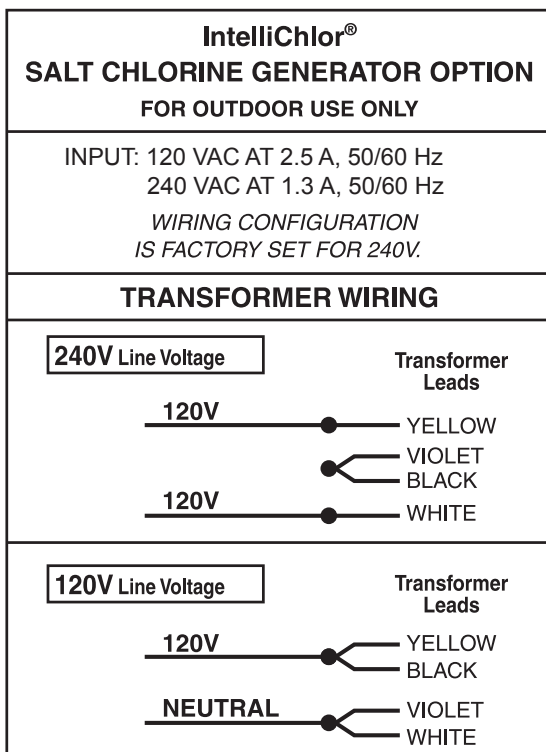


Figure 3: SCG Transformer AC Wiring Diagram

IntelliChlor SCG Power Supply Replacement kit Contents

Description	Part Number
SCG Transformer	P/N 521299
SCG Circuit Board	P/N 521091
SCG Power Cable	P/N 520721
SCG COM Cable	P/N 521327
SCG Circuit Breaker	P/N 521142



P/N 521093 Rev A