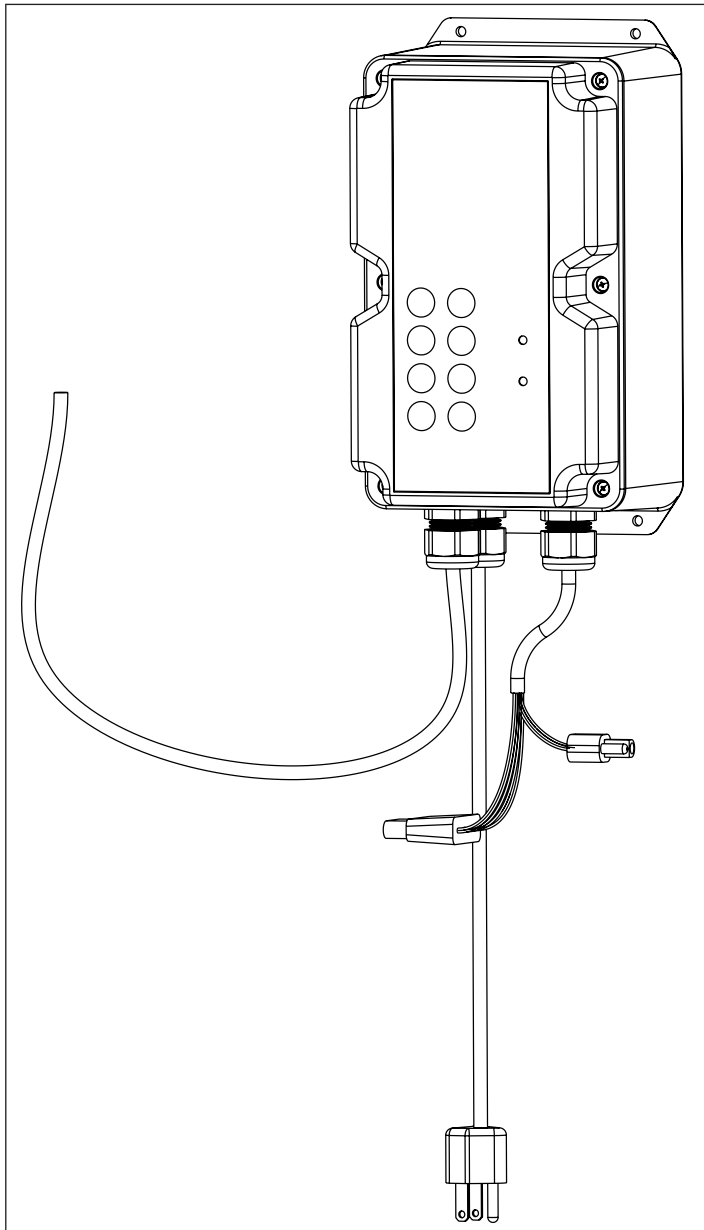


### SK5310277 Control Unit Box for AC - 120V



#### CONTROL SYSTEM FOR 110 VOLT AC DIRECT DRIVE WINCHES

The **SK5310277** kit is a complete replacement kit for the electrical control system in all 110 volt AC direct drive winch systems. The kit does not include the remote fobs. The existing fobs can be reprogrammed to work with the new system.

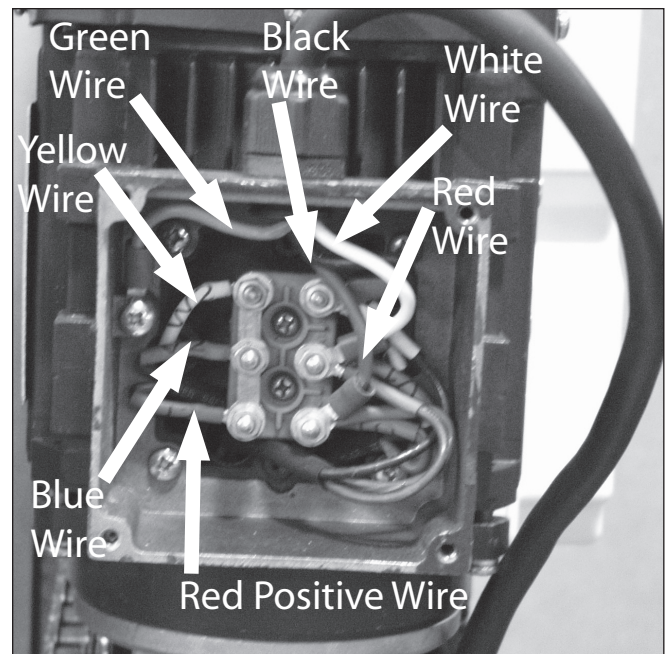
#### INSTALLATION INSTRUCTIONS

##### Removing the Old Control System

##### WARNING:

The old control box contains high voltage capacitors that can create a severe electrical shock. Never attempt to open the old control box when removing.

- Disconnect the power supply to the direct drive winch system.
- Remove the front winch cover by removing the four screws that attach it to the winch case.
- Locate the control box. It has a power cord that runs from the control box to the box on the side of the motor.
- Remove the cover from the box on the motor.



- There are four wires in the power cord: black, white, red and green. Remove the nuts on the terminals holding them in place. The green wire is attached with a grounding screw. Remove the complete cord from the motor box.
- Disconnect the four pin plug connecting the control box to the wire harness.
- Remove the four screws securing the control box to the winch case. The control box can now be removed and replaced with the **SK5310277** control kit.

##### Installing the New Control Box

- Mate the mounting holes in the new control box with the holes in the case.
- Secure it to the winch case with the four mounting screws removed earlier.
- Connect the four pin plug of the new control box into the wire harness.

- Route the motor cord to the motor and insert it into the motor box.
- Attach the new wires to the terminals.
  - Black wire is attached to the top right terminal.
  - White wire is attached to the right center terminal.
  - Red wire is attached to the right bottom terminal.
  - Green wire is attached to the left side of the box with a grounding screw.
- Tighten all nuts on the terminals securely to assure a positive connection.
- Replace the cover and secure with the screws removed earlier.
- Replace the front winch cover and secure with the screws removed earlier.
- The installation is now complete except for the programming.

## 120 VAC DRIVE/CONTROL/REMOTE

### OPERATING PROCEDURES

#### POWER SUPPLY

The unit must be connected to a 120V AC ground fault protected receptacle (GFI) before it can be programmed.

#### KEYBOARD OPERATION

To enable the touch pad function, enter the factory or user-defined 4 digit code. The preset factory code is the sequence "1-2-3-4".

The numbers entered into the touch pad do not have to be changed if numbers are entered by mistake. The only requirement is that the four digit sequence of numbers be entered into the system during the number entering process.

Do not press the code button anytime before or after the code is entered into the system. Doing so will disable the touch pad so the keyboard functions will not operate.

When you start entering numbers onto the touch pad, the **GREEN-LED** light will light up. When the correct sequence of four numbers is entered into the system anytime during the number entering process, the **RED-LED** will light up. Once the **RED-LED** is lit, the **UP**, **DOWN**, and **LIGHT** function keys on the touch pad will operate. The remote controls are disabled when the **RED-LED** is lit.

Once the touch pad has been activated using the sequence numbers as just described, the touch pad will stay activated for approximately 2 minutes. It will then return to an inactive mode.

Pressing the code button will activate the remote control and disable the touch pad at the same time. The touch pad and remote control can never be operated at the same time.

#### TOUCH PAD FUNCTIONS

**UP BUTTON** - Hoist platform will raise

**DOWN BUTTON** - Hoist platform will lower

**LIGHT BUTTON** - An accessory light (if installed) can be turned on and off by pressing the light button. The light will automatically turn off after approximately 5 minutes.

The lift will operate continuously while the **UP** or **DOWN** button is pressed.

#### CHANGING FACTORY CODE

Factory code is "1 2 3 4". To operate the system from the touch pad you must enter this code or reprogram by first pressing and holding the code key and then pressing the 2 key. The red **LED** will begin to flash. Next enter your own desired 4 digit code. The **LED** light will automatically go out after the last number (4th digit) of the new code has been entered. Your system has then accepted the new

code. To change the code, simply repeat the process.

### KEY FOB REMOTE CONTROLS PROGRAMMING NEW OR REPROGRAMMING

#### EXISTING REMOTES

To program a key fob to the internal receiver, press and hold the code button and then press the 1 button. The **RED - LED** will activate.

Once activated, press the light button on the key fob once. Next, test the **UP** and **DOWN** functions on the key fob to be sure the receiver has accepted the programming. A total of 4 key fobs may be programmed per unit.

#### CHANGING THE MOTOR DRIVE FREQUENCY

(affects speed/torque)

The motor speed has been preset at the factory to 50 HZ. Use the following instructions to change the motor speed in the **UP**-mode.

#### TO INCREASE THE MOTOR SPEED

(Reduce the Motor Torque)

- Press the **Code** button.
- Press and hold the "**UP- arrow**" button while pressing the 4 button on the touch pad. The **Green LED** light will flash when the frequency changes. The frequency will increase by 5 HZ, the number of flashes of the light will identify the frequency.

*(See the chart below)*

- Press in the four digit code. Press the **UP** button to check the new frequency setting of the motor
- Repeat the above steps each time for the frequency to be increased by 5 HZ. The maximum frequency setting is 70 HZ and will be identified by 7 flashes of the **Green LED** light.

*(See the chart below)*

#### TO REDUCE THE MOTOR SPEED

(Increase the motor torque)

- Press the **Code** button.
- Press and hold the "**DOWN- arrow**" button while pressing the 4 button on the touch pad. The **Green LED** light will flash when the frequency changes. The frequency will decrease by 5 HZ the number of flashes of the light will identify the frequency.
- Press in the four digit code. Press the **UP** button to check the new frequency setting of the motor.
- Repeat the above steps each time to reduce the frequency by 5 HZ. The minimum frequency setting is 40 HZ and will be identified by 1 flash of the **Green LED** light.

*(See the chart below)*

#### Number of Flashes Drive Frequency - Chart

1	40 Hz
2	45 Hz
3	50 Hz
4	55 Hz
5	60 Hz
6	65 Hz
7	70 Hz

*All drives will come preset at 50 Hz from the factory.*

#### DOWN MOTOR SPEED

The motor speed for lowering the hoist is preset at the factory and can not be adjusted. The downward speed is faster than the 70 HZ which is the maximum speed in the **UP** mode.

Should you experience an electrical problem, contact your local electrician or **ShoreStation** dealer for service.