



Installation Instructions

DGK25F\FU AutoStart



1000000291

Kit Contents:

- (1) AutoStart Module and Panel Decal
- (1) Wiring Harness



- (1) Terminal Strip
- (2) 8-32x3/4" stainless steel screws
- (4) 8-32 stainless steel flat washers
- (2) 8-32 stainless steel lock nuts
- (1) 2-Position Toggle Switch w/mounting
- (1) Decal - AutoStart On\Off
- (1) 1/8"x 7/16" Grommit
- Black Cable Ties



- (1) DGK25F\FU AutoStart Terminal Strip and Grommit Installation Template

Tools & Materials Required:

- **Masking tape**
- **Measuring tape**
- **Scissors**
- **Safety knife**
- **Center punch**
- **Deburring tool**
- **1/8" drill bit**
- **3/16" drill bit**
- **5/16" drill bit**
- **13/64" drill bit**
- **Drill (electric or cordless)**
- **11/32 socket & 1/4 drive**
- **10 mm socket - 3/8 drive**
- **17 mm socket - 3/8 drive**
- **3/8 impact driver with 3" extension**
- **13 mm combination ratchet wrench**
- **#2 Phillips screwdriver**
- **Needle Nose Pliers**
- **Wire cutter\stripper & crimper**
- **Heat Gun or equivalent**
- **Clear silicone sealant**

NOTES

INSTALLATION INSTRUCTIONS

- Step 1: Verify Kit Contents
- Step 2: Read through installation instructions before beginning the procedure.

NOTE: Make sure your machine has a RELAY MODULE installed before attempting. If your machine DOES NOT have this installed, contact customer service. (Figure 1)

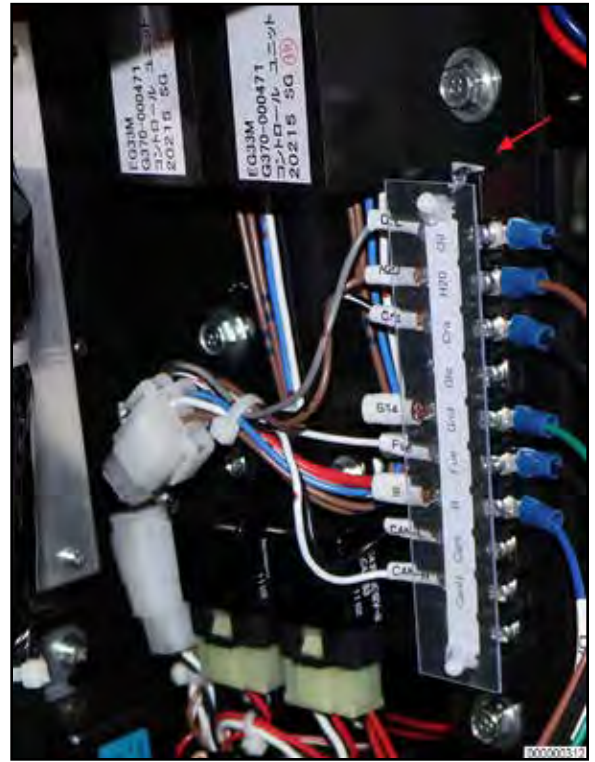


Figure 1

- Step 3: Release the Right Enclosure rear door latch, then open both right enclosure doors. (Figure 2)



Figure 2

- **Step 4:** Turn the wingnut on the **NEGATIVE** battery terminal counter-clockwise to remove. (Figure 3)



Figure 3

- **Step 5:** Remove the lockwasher then the **NEGATIVE** battery cable. Position the negative battery cable out of the way, then reinstall lockwasher and wingnut to battery terminal. (Figure 4)



Figure 4

- **Step 6:** Release the Latch on the Front Enclosure Control Cabinet Door, to access the controls. (Figure 5)



Figure 5

- **Step 7:** Carefully remove the all Black Vinyl decal located just to the right of the **THROTTLE** toggle switch. **DO NOT** use any chemicals to remove. Avoid scratching the control panel surface (Figure 6)



Figure 6

- **Step 8:** Clean the control panel surface in preparation for installing the new AutoStart Decal. There should be no residual adhesive or debris on the surface.
- **Step 9:** Locate the AutoStart Decal in the kit. Carefully remove the adhesive release film from the back of the decal. Carefully align and match up the holes in the decal with those in the control panel. Place the decal onto the control panel surface, gently pressing the surface of the decal to ensure it is making full contact. (Figure 7)



Figure 7

- **Step 8:** Release the Control Panel by turning the two knobs at the top upper corners; turn each counter-clockwise till completely released. (Figure 8)
- **Step 9:** Locate the AutoStart module and two (2) mounting screws provided with it.



Figure 8

- **Step 10:** Place the AutoStart module so that the LED indicator bulbs are in each of their corresponding holes in the Control Panel. Using the provided screws, attach the AutoStar module to the Control Panel through the decal mounting holes. **DO NOT OVER-TIGHTEN.** (Figure 9)

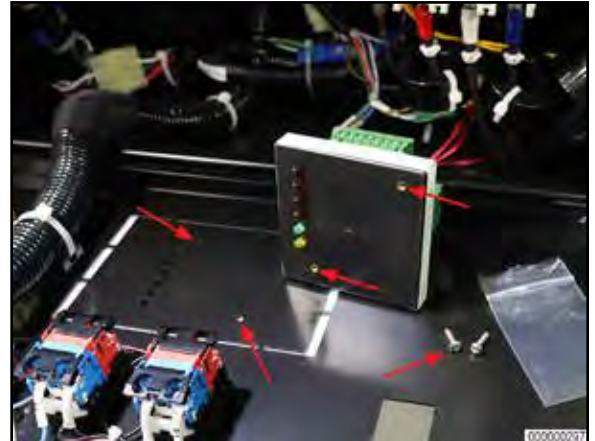


Figure 9

- **Step 12:** Select the wiring harness from the kit; cut the two cable ties keeping the wires buddled together. (Figure 10)



Figure 10

- **Step 13:** Take the longest section of wiring harness, labeled "Terminal Strip" and route this through the back of the control cabinet. The wiring harness labeled "Toggle Switch" is to be routed down through the bottom of the control cabinet as shown. Don't worry about the exact placement for now, just need to get the wire harnesses out of the way. (Figure 11)



Figure 11

- **Step 14:** There are nine (9) wires with Seven (7) with Flat pin connections on the ends, and two (2) female Disconnects, each with a different descriptive wire tag. Locate each of the corresponding connections on the AutoStart Module terminal blocks. Using a very small flat blade screwdriver secure each of the flat pin wires into place. Place the two Female Disconnects onto the corresponding Male power blade Connections. (Figure 12)

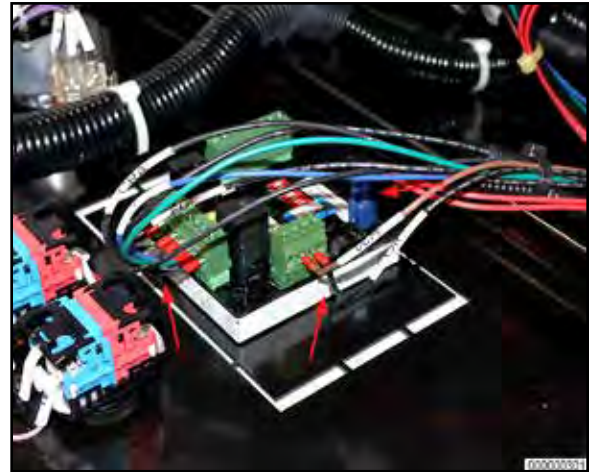


Figure 12

- **Step 16:** There are six (6) wires with Spade connectors on the ends of the wires, each with a different descriptive wire tag. Locate each of the corresponding connections on the Relay Module terminal strip. Secure each of the spade connector wires into place. (Figure 13)

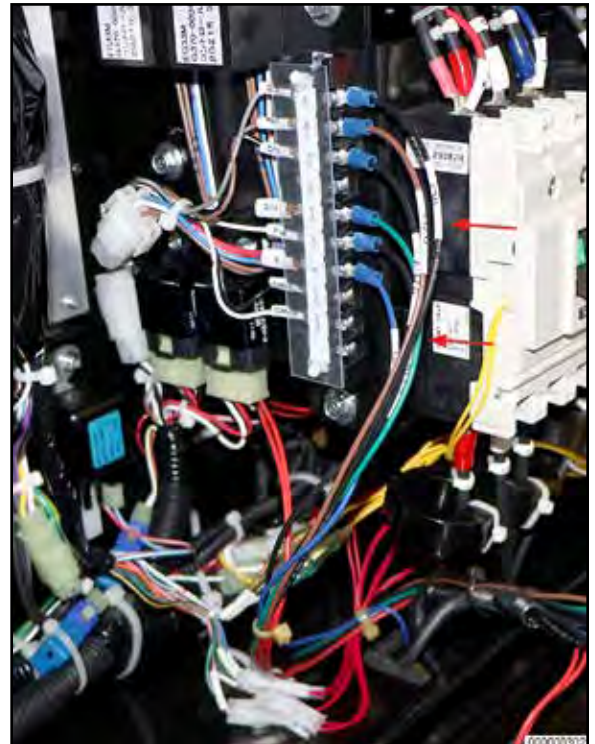


Figure 13

- **Step 17:** Locate two (2) RED wires with Ring Terminals on the wire ends, these will be labeled "Breaker". Route these two wires under and up behind the single phase breaker on the right side of the controls cabinet.
- **Step 18:** Remove both the Positive and Negative power lead fastener screws from the top of the Single Phase Breaker. Combine one ring terminal with the Positive cable and secure with a previously removed screw. Repeat the process for the Negative side of the breaker. (Figure 14)



Figure 14

- **Step 19:** Unlatch and open the Right Enclosure Doors.
- **Step 20:** Looking to left of the Battery Tender (if equipped) or towards the backside of the Control Cabinet, a small plastic hole plug can be found. Remove the hole plug and discard. (Figure 15)



Figure 15

- Step 21: Locate the AUTOSTART ON\OFF Decal provide in the kit.
- Step 22: Clean the surface surrounding the hole inside the control cabinet to make certain their is no dirt or debris on the panel surface.
- Step 23: Remove the center circle from the decal.
- Step 23: Remove the release film on the AUTOSTART ON\OFF decal. Carefully align the hole in the decal with the hole in the Control Cabinet wall and keeping the bottom of the decal aligned horizontal as possible, place the decal onto the control cabinet surface as shown. (Figure 16)



Figure 16

- Step 24: Install the toggle switch into the hole of the Control Cabinet wall as shown. Make sure the switch is installed\oriented to coorespond with the correct On\Off position. (Figure 17)
- Step 25: Locate the wire harnesses that were routed through the bottom of the control cabinet. One harness will be labeled "Toggle Switch". Connect the two wires from this harness to the terminals of the toggle switch installed in step 24.

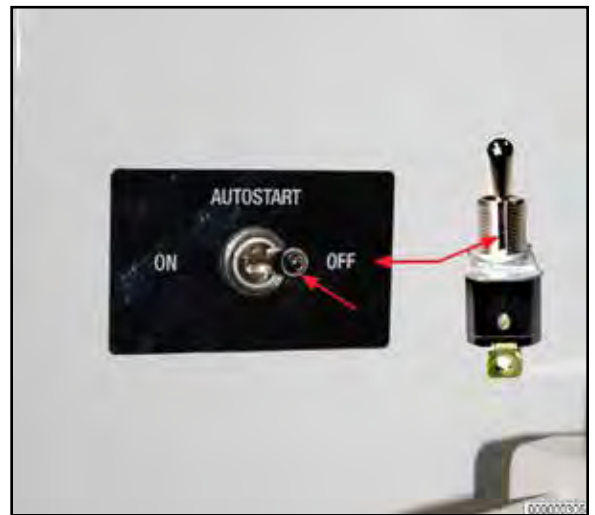


Figure 17

- Step 26: Release door latch on Left Enclosure Left Door then open door. (Figure 18)



Figure 18

- **Step 27:** Using a 10 mm socket and impact driver, remove two (2) bolts securing the Left Enclosure Side Door to the Enclosure Frame. (Figure 19) Retain bolts for reinstallation.



Figure 19

- **Step 28:** Using a 10 mm socket and impact driver, remove eight (8) bolts securing the Left Enclosure Side Door Rear Cover. (Figure 20) Retain bolts for reinstallation.

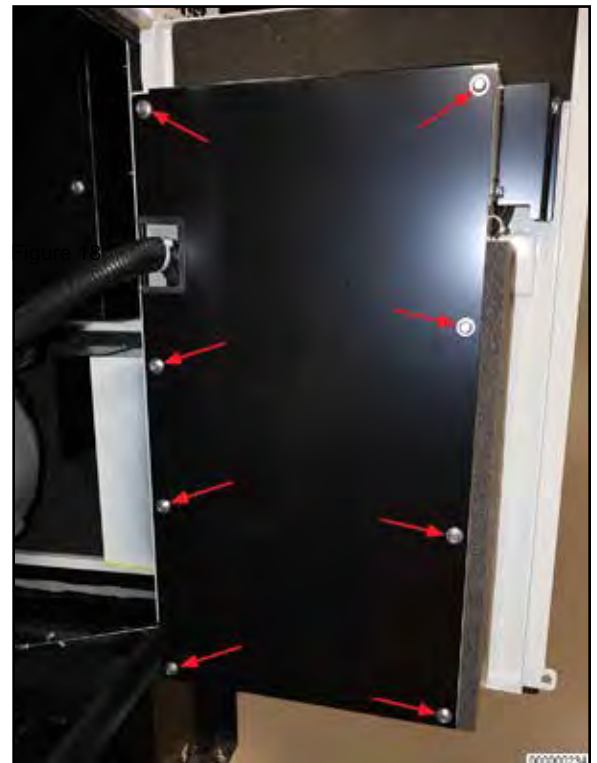


Figure 20

- **Step 29:** Locate the Terminal Strip\Grommet Template included with the kit. Prepare template for use by cutting on the dashed lines.
- **Step 30:** Using masking tape, attach template to the door surface, below the recepticals as shown. (Figure 21)



Figure 21

- **Step 21:** Using center punch and hole location indicated on template, transfer hole center locations to the door surface.

NOTE: All drilling is intended to be done with template remaining taped in place.

- **Step 22:** Drill a pilot hole in all three (3) hole locations using 1/8" drill bit and drill.
- **Step 23:** Enlarge all three (3) holes using 13/64" drill bit and drill.
- **Step 24:** Enlarge Grommet hole using 7/16" drill bit and drill.
- **Step 25:** Remove and discard the template.
- **Step 26:** Deburr all holes.
- **Step 27:** Install grommet into 7/16" grommet hole. Make certain the grommet edges sit flush with surface. (Figure 22)



Figure 22

- **Step 22:** Route the remaining wire harness labeled "Terminal Strip" from under the Control Cabinet along the existing wire harness routed to the Power Output Terminals as shown. Secure the wire harness in place using as cable tie. (Figure 23)



Figure 23

- **Step 23:** Inserting one spade connector at a time, route both wires through the grommet installed into the door panel as shown. (Figure 24)



Figure 24

- **Step 24:** Attach the terminal strip to the door panel using the two (2) machine screws, four (4) flat washers and two (2) lock nuts supplied in the kit, using a #2 Phillips screw driver and 11/32 socket or wrench as shown. (Figure 25)
- **Step 25:** Attach the two terminal strip wires to the terminal strip using a #2 Phillips screwdriver as shown in Figure 25.



Figure 25

- **Step 25: Reinstall Left Enclosure Side Door Rear Cover, securing in place using a 10 mm socket and impact driver, and eight (8) bolts previously removed bolts. (Figure 26)**



Figure 26

- **Step 26: Close the Left Enclosure Side Door and secure it to the Enclosure Frame using a 10 mm socket, impact driver and the two (2) previously removed bolts. (Figure 27)**



Figure 27

- **Step 27:** Return to the Right Enclosure side - remove the wingnut and lockwasher from the battery terminal.
- **Step 28:** Reattach the **NEGATIVE** battery cable to the **NEGATIVE** battery terminal, then secure using the lockwasher and wingnut. (Figure 28)
- **Step 29:** Close Right Enclosure Doors making sure latch is fully engaged.
- **Step 30:** Close the Front Enclosure Control Cabinet Door, making sure the door latch is fully engaged.

Installation of the AutoStart is now complete.



Figure 28