

# SLIDEDRIVER LIMIT SENSOR RETROFIT KIT

## KIT P/Ns

- MX5628 SlideDriver SD50VF
- MX5629 all other SlideDriver models

## PARTS

- Dual limit sensor(s) with wire harness
- Aluminum mounting bracket(s)
- Stop limit flags
- USB flash drive
- (SD50VF2/3) Slow down and stop limit flags
- (Post-2012 VFD) Modbus cable

## HARDWARE

- 8-32 x 7/16 pan head screws
- 8-32 nuts
- 5/16-18 screws
- 5/16-18 square nuts

## TOOLS

- 1/32 in drill bit
- Large Philips head screwdriver
- Two 1/16 in wrenches
- 1/32 in socket
- 1/4 in socket
- (SD50VF2/3) S.T.A.R.T. capable laptop and software

## REMOVE OLD PARTS

1. Loosen the screws that secure the cover to the SlideDriver chassis and remove the cover.
2. Position the gate as required for maintenance.
3. Set the power switch to OFF.
4. Carefully, unclamp the drive wheels.

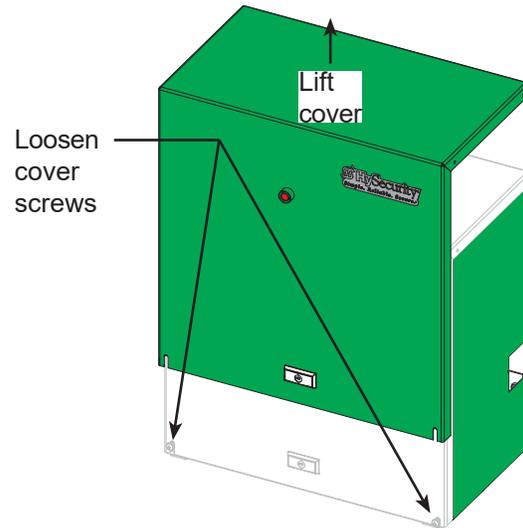


Figure 1. Remove the Cover

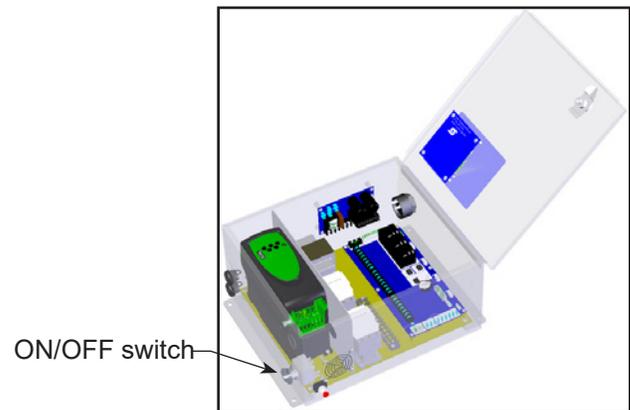


Figure 2. Set Power Switch to OFF

## NOTICE

The drive rail must not sag in the center or it will rub against dual limit sensors.

## CAUTION

Turn off power to the gate operator and take the necessary precautions to avoid electrical shock.

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5. Mark the inside ends of the stop ramps. Remove all limit ramps and screws (Figure 4).
6. Disconnect the limit switches from the SmartTouch Controller (Figure 8).
7. Remove the mounting screws from the limit switch and remove the limit switch.

Note: On SD50VF2/3 models, repeat step 5 through step 7 for the slow down limit switches.

## INSTALL NEW PARTS

### DUAL LIMIT SENSOR(S)

8. Use the included 8-32 bolts and nuts to install the bracket on the right side. Do not fully tighten.

Note: Any adjacent pair of limit sensor holes can be used, the recommended holes are the ones closest to the center of the operator to maximize the bracket adjustment range.

Note: On SD50VF2/3 models, repeat step 8 for the left dual limit sensor.

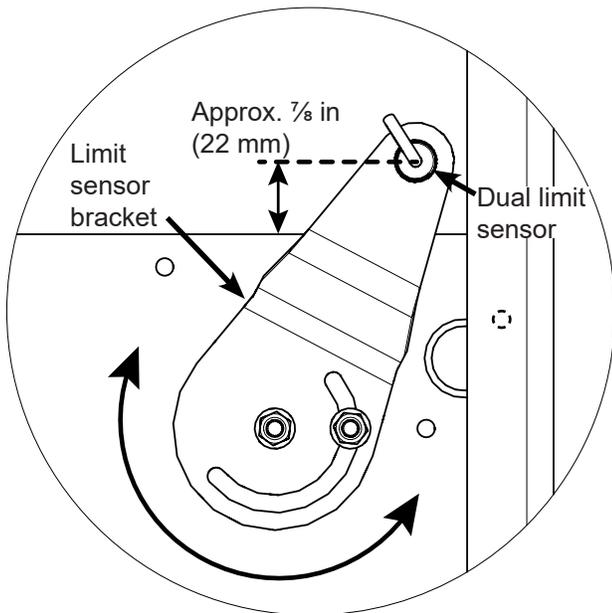


Figure 3. Set Power Switch to OFF

## NOTICE

### Limit Flag Handling (SlideDriver Retrofit Kit)

When facing the operator from the secure side of the gate, the black limit flag goes on the left side of the rail and the gray limit flag goes on the right side.

## LIMIT FLAGS AND LIMIT SENSOR ADJUSTMENT

9. Install the inside end of the limit flag on the marked position (drill a new hole in the limit track to temporarily hold the limit flag in place).

(SD50VF2/3) Install the middle of the 24 in limit flag on the marked position (drill 2 holes in the limit track approximately 12 in apart to temporarily hold the limit flag in place) (Figure 5).

Note: Existing slow down limit ramp holes may be used to install the limit flags if they are in an appropriate location.

10. Install a screw into the limit flag holes, thread a square nut onto each screw, and slide the limit flag onto the square nut (Figure 6).
11. Make sure the dual limit sensor is vertically centered on the limit flag face (Figure 7).
12. Set dual limit sensor spacing: loosen the two nuts ( $1\frac{1}{16}$  in) on the dual limit sensor, adjust the spacing between the dual limit sensor and stop limit flag face to  $\frac{1}{4}$  to  $\frac{3}{4}$  in (6 to 19 mm), and tighten the nuts to hold this spacing (Figure 7).
13. Repeat steps 8 through 12 for the limit flag(s) on the opposite end of travel.

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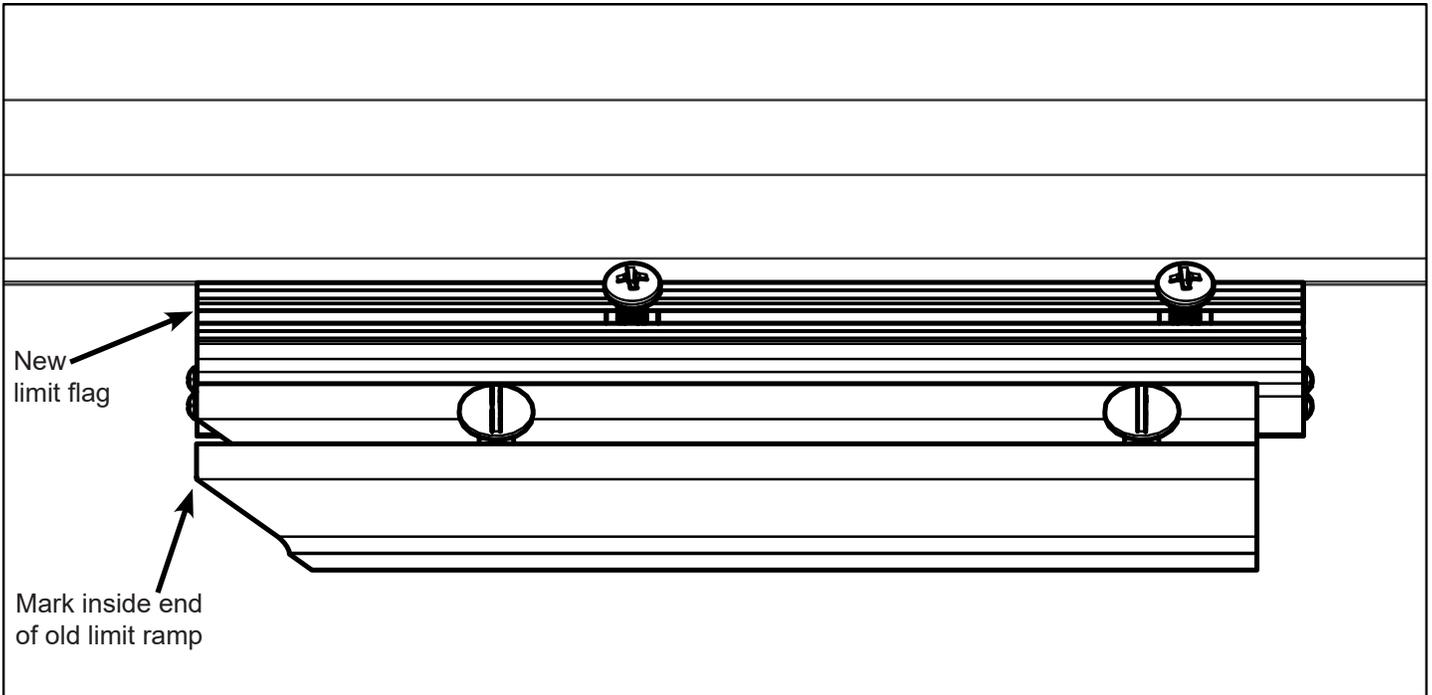


Figure 4. Align Stop Limit Flag

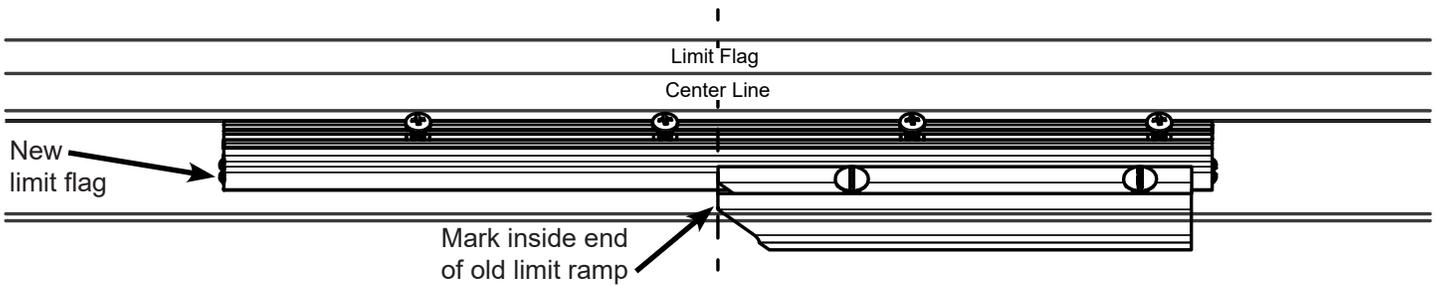


Figure 5. Align Slow Down Limit Flag

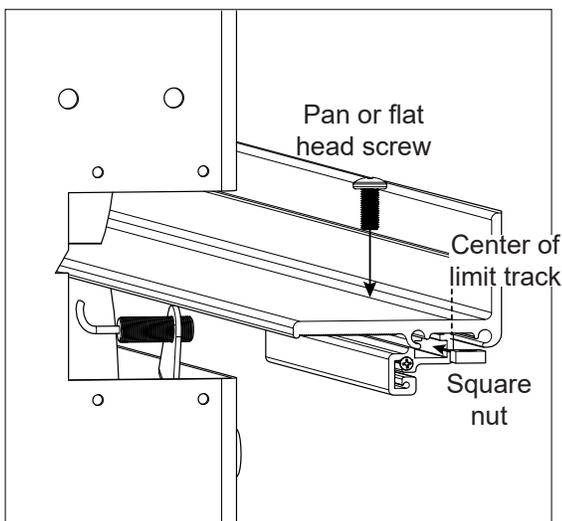


Figure 6. Limit Flag Fasteners

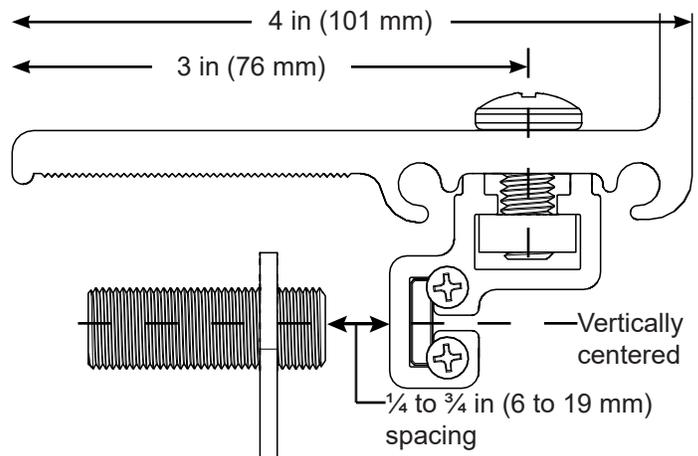


Figure 7. Align Dual Limit Sensor and Limit Flag

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## CONNECT LIMIT SENSORS TO SMARTTOUCH CONTROLLER

14. Connect the limit sensor plugs to the limit terminals on the STC board (Figure 8).

Note: See the limit flag handing NOTICE above for correct limit handing.

Note: On SD50VF2/3 models, connect the plug from the left and right limit sensor to the matching L/R terminal on the STC board (Figure 9).

15. (SD50VF2/3 only) Connect the 4-wire slow-down plug to the RPM terminal with the white wire from the left limit sensor below the wire from the right limit sensor (Figure 9).

16. Set the power switch to ON.

## UPDATE FIRMWARE WITH S.T.A.R.T. (SD50VF2/3 POST-2012 ONLY)

17. Use the retrofit firmware on the included USB flash drive or sent via email with the S.T.A.R.T. installer software to update the firmware on the SmartTouch Controller.

Note: SlideDriver models without a VFD do not require a firmware update.

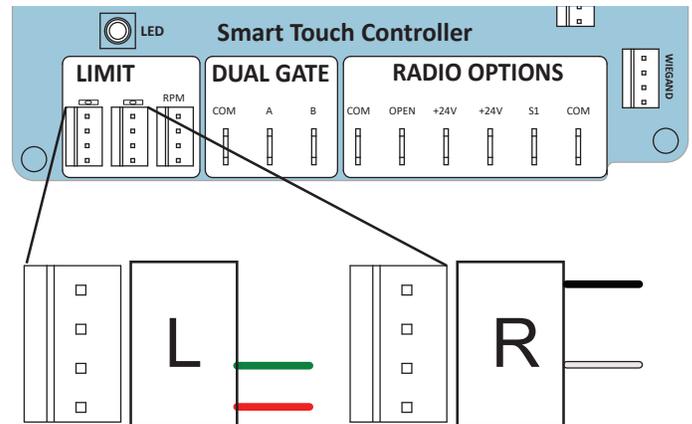


Figure 8. Connect the Limit Sensor(s)

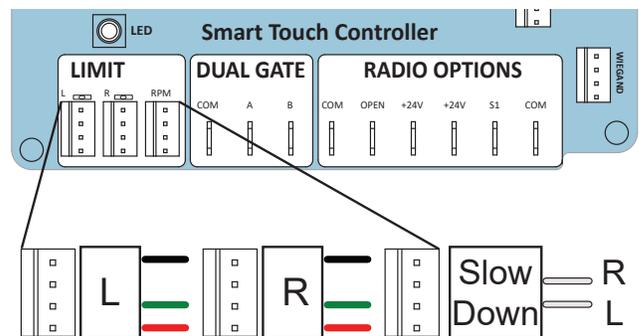


Figure 9. Connect the SD50VF2/3 Limit Sensor(s)

## NOTICE

### Pre-2012 VFDs

Contact HySecurity Technical Support at [support.hysecurity.com](mailto:support.hysecurity.com) for instructions to update pre-2012 VFDs. The modbus cable is required for this update.

## COMPLETE INSTALLATION

18. Manually move the gate to ensure each flag is detected and the board display shows the correct limit activations.
19. Test cycle the operator.
20. Adjust limit flag position until the gate stops at the right place.
21. Tighten the limit flag screws.
22. Install more screws spaced approximately 6 in (152 mm) along the limit flag. 2 screws for 12 in limit flags or 4 screws for 24 in limit flags.
23. Ensure all entrapment sensors are functioning properly, install cover, and return to normal operation.