SLIDEDRIVER II REPLACEMENT PUMP PACK INSTRUCTIONS

Replace the pump pack when it does not function properly and tech support recommends replacement. These instructions apply to SlideDriver II pump packs. The pump pack you receive may look different than the illustrations, but the steps involved in assembling and installing the pump pack are the same.

Do not remove solenoid coils or pressure sensor from the old pump pack. SlideDriver II replacement pump packs include solenoid coils and the pressure sensors.

SAFETY INFORMATION

Use PPE including eye protection, gloves, and safety toe shoes.

Have rags handy to absorb any fluid residue.

Check and verify the replacement pump pack assembly and the model being replaced are equivalent.



DANGER

To avoid risk of injury or death, disconnect the gate operator from the main power source prior to performing any of the following service procedures!

COMPONENTS

- Pump pack
- Solenoid coil(s)
- Pressure sensor
- Motor shaft coupling, key, and set screw

TOOLS

- % in ratchet wrench
- ¾ in wrench
- Hex key
- Blue thread locker

NOTICE

The SlideDriver II pressure relief valve is factory set and does not need to be adjusted.

Contact Information:

Visit <u>support.hysecurity.com</u> for installation manuals, replacement part instructions, wiring diagrams, part diagrams and more.

Obtain the serial number of your operator before contacting your distributor or <u>Nice | HySecurity Technical Support.</u>

REMOVE PARTS

- Loosen the screws that secure the cover to the SlideDriver II chassis and remove the cover.
- Set the power switch to OFF.
- Unclamp the drive wheels.

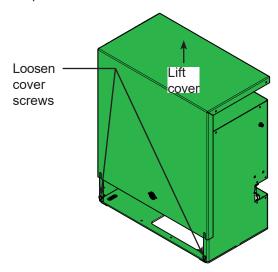


Figure 1. Remove the Cover

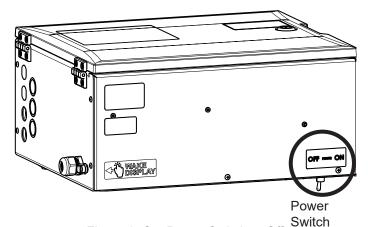


Figure 2. Set Power Switch to Off

- 4. Check that the pump pack you received from HySecurity is the same as the unit you are replacing. Refer to the pump pack illustrations in the Digital Installation Manual and:
 - Verify that the brake assemblies match on the old and replacement pump packs.
 - Check that the replacement pump pack is equipped with a digital pressure sensor.
 - Verify that the valve options match on the old and replacement pump pack.
- Disconnect the two hoses from the quick disconnects (QDs). Label the hoses for correct operator handing after reassembly.

REPLACEMENT PUMP PACK INSTRUCTIONS

- Disconnect pressure sensor from VFD or I/O Expansion Module. Note the location of the wires.
- 7. (VFD models only) Mark the polarity on the solenoid wires to connect them to the new pump pack and disconnect them from the old pump pack.
- 8. Place blocks on chassis floor under the pump pack as required to ensure motor and pump pack can be set down without straining motor cable.
- 9. Lift motor and pump pack out of bracket mount and set assembly on blocks or floor of operator (Figure 3).

Note: To remove the motor and pump pack from the chassis entirely, disconnect the wires in the motor junction box. Label the wires to reconnect them later.

NOTICE

When you lift the motor and pump pack assembly out of the chassis, be careful not to bend the valve stems! Broken or bent valve stems due to routine maintenance are not covered by the Limited Warranty.

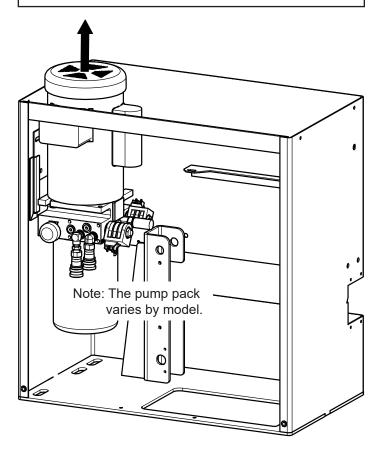


Figure 3. Remove Motor and Pump Pack

10. Remove the two bolts and washers holding the motor to the pump pack with a 9/16 in wrench. The bolts are secured with blue thread lock so additional torque may be required (Figure 4).

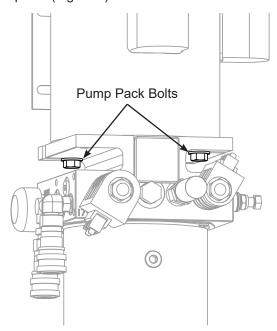


Figure 4. Remove Pump Pack Bolts

11. Gently rock the motor and lift to separate it from the pump pack. Then set the motor back in the bracket mount.

NOTICE

Do not use a pry bar or a screwdriver to separate the pump pack from the electric motor as damage may occur to the motor's shaft.

- 12. Set old pump pack aside.
- 13. Loosen the set screw on the coupling then slide the motor coupling and metal key off of the motor shaft. Discard the key and coupling (Figure 5).

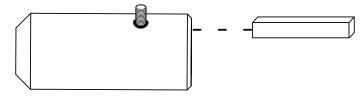


Figure 5. Motor Coupling, Set Screw, and Key

REPLACEMENT PUMP PACK INSTRUCTIONS

INSTALL NEW PARTS

- Unpack the replacement pump pack and remove parts (breather cap, motor coupling, motor shaft key).
- Loosen the set screw on the coupling.
- 3. Set the motor shaft key in the motor shaft cutout.
- 4. Align the motor shaft key, motor shaft, and coupling then slide the coupling on to the motor shaft. Tap the coupling with a plastic or rubber mallet to make sure the coupling is seated on the motor shaft and key.
- 5. Apply blue thread locker to the coupling set screw and install it in the coupling.
- 6. Move the replacement pump pack close to the motor and remove the red dust cover from the pump pack manifold.
- 7. Inspect the pump pack shaft to confirm it is coated with anti-seize grease. Call Technical Support if there is no grease or apply a generous amount of Permatex aluminum anti-seize to the inside spine of the motor coupler.

- 8. If necessary, lift the motor out of the bracket mount.
- 9. Align the motor and pump pack to each other and to the chassis as shown (Figure 6). QDs will be perpendicular to the motor mount plate and under the motor junction box.

CAUTION

DO NOT place hands or fingers between the pump pack and motor.

10. Lower the motor and coupling into the pump pack. Turn the motor until the teeth in the coupling and on the pump pack shaft are aligned. Slide the motor into the pump pack until the bottom of the motor is flush with the top of the pump pack.

Note: The coupling and pump pack shaft may be a tight fit. Maneuver the motor until it is flush with the pump pack. Do not force the motor down or use a hammer.

- 11. Apply blue thread locker to the end of the mounting bolts.
- 12. Install the bolts and washers and hand tighten in an alternating pattern to tighten them evenly. Make sure the bolts are tightened securely.

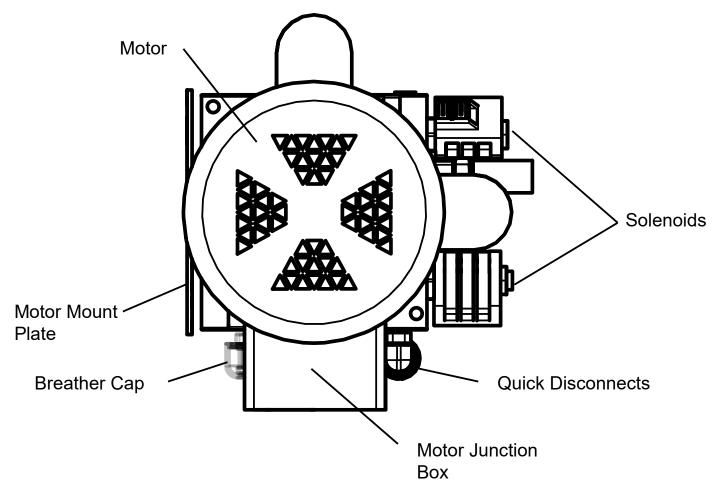


Figure 6. Motor and Pump Pack Alignment

REPLACEMENT PUMP PACK INSTRUCTIONS

COMPLETE INSTALLATION

- Carefully, lift the motor and pump pack assembly and lower it into the wall bracket.
- 2. Connect the two hoses to the QDs. Confirm hose orientation for operator handing.
- 3. Remove the vent plug from the replacement pump pack and install the new breather cap. Install the new vent plug in the old pump pack to prevent spillage during transportation and discard the old breather cap.
- 4. Install solenoid coil(s) and secure with 3/4 in nuts.

NOTICE

Do not over tighten the nut on the valve stem. A damaged or bent valve stem will not work properly and may not be covered by the warranty.

5. Connect pressure sensor, solenoid coil(s), and motor power wires using the labels from disassembly.

Note: Take extra care to match the connection polarity to a solenoid with a flyback diode.

NOTICE

See Digital Installation manual to confirm pressure sensor and solenoid coil wiring diagrams. See motor data plate or contact technical support to confirm motor junction box wiring.

- 6. Set the power switch to ON.
- Test the operator to make sure that the motor turns counterclockwise (viewed from the top). If the motor is not turning counterclockwise, rewire it for proper rotation.

Note: For DC motors, switch the power cables. For 3Ø AC motors, pick two main power wires in the motor electrical connection box and switch them.

Note: Error 2 will appear if the pressure sensor is not connected.

- 8. Test the operator again to make sure the gate moves in the open direction with an OPEN command or close direction with a CLOSE command. Swap the hydraulic hoses if the gate moves in the wrong direction. See Digital Installation Manual for more information on swapping the hydraulic hoses.
- 9. For operators with brake valves, adjust the new brake valves (see Digital Installation Manual).

RETURN PUMP PACKS

Save hydraulic fluid sample if it appears abnormal and ship with old pump pack. Dispose of excess hydraulic fluid according to applicable codes.

The replacement pump pack shipped from HySecurity is wrapped in plastic and mounted on a board. If the replacement is under warranty, use the shipping materials to wrap the old pump pack and ship it per the RMA instructions. Damage incurred during shipping may be grounds for refusal of an RMA.