

THE SERIES-E

MODEL: EPC1585S
2013+HiLux
NAGS FY95056PK5



POWR Slider

C.R. Laurence™
AUTOMOTIVE PRODUCTS



2013+ TOYOTA HILUX (ALL CABS)

Installation Instructions for the Professional Installer

Preparation and Precaution

This rear sliding window is designed to be glazed to the cab opening with urethane auto glass adhesive. **Do not attempt to install with a rubber gasket or silicone.** Please read this entire instruction sheet carefully before beginning installation, and note all cautions. Use caution during removal / installation of the interior trim (i.e. window trim, door threshold plate, etc.). Take necessary precautions to prevent scratches or breakage of the plastic components or the window assembly. Make sure that all components are installed securely and will not rattle or interfere with any moving parts. Sharp edges should not be left exposed. We recommend that safety glasses be worn while using power tools or working on tempered glass.

Tools and Equipment Required

- Medium Slotted Screwdriver **Cat. No. BD144**
- 10 mm Socket
- Low Voltage Test Light **Cat. No. KD129**
- Utility Knife **Cat. No. 99**
- 1/2" Masking Tape **Cat. No. 40312**
- High Ratio Cartridge Caulking Gun **Cat. No. AB26**
- Urethane Primer Dauber **Cat. No. PT1U409**
- Urethane Auto Glass Adhesive **Cat. No. 1217349**
- Urethane Pinchweld Primer **Cat. No. 1214006**
- General Purpose Solvent and Adhesive Cleaner **Cat. No. CRL2032**
- Wildcat Urethane Cut-out Knife **Cat. No. AK10**
- Wildcat Blade **Cat. No. AKB300**
- Chisel Blade **Cat. No. FKB146**
- Safety Glasses **Cat. No. SH610**
- Hook Tool **Cat. No. CP253**
- Putty Knife **Cat. No. 4243**

NOTE: Window must be installed using an approved automotive urethane bonding system, following the procedures recommended by the urethane manufacturer. C.R. Laurence recommends our 1217349 Urethane, 1214006 Urethane Pinchweld Primer, and CRL2032 General Purpose Solvent and Adhesive Cleaner.



STEP 1: VEHICLE PREPARATIONS

1. Using a 10 mm socket remove the upper seat belt brackets.
2. Remove the upper side plastic panels by pulling out at the bottom first, then downward to release the top of the trim panel from the roof locator opening.
3. Remove the lower plastic trim panels by pulling outward.
4. Starting at the bottom of the back wall plastic trim panel, pull outward to release the fasteners.
5. Using the appropriate tool, remove the two fasteners from the headliner over the rear window.

STEP 2: REMOVE THE GLASS

1. Cut the back glass from the body using a standard cold knife with a 3/4" (19 mm) blade.
2. Start at a bottom corner, cut up the side to the middle of the top, then stop and back out blade to starting position. (Four plastic spacers, two on top and two on the bottom, are used at the factory to align the glass in the opening and are easily bypassed by the cut-out blade).
3. Insert blade at opposite corner and cut up the side to the top to complete this cut.
4. Apply tape in two locations on the top of the glass to hold the glass from falling when cutting out the bottom.
5. Cut across bottom of window to complete the removal.

NOTE: If using a power tool from the interior, extra care must be given to not damage the paint. Marking your removal blade with a permanent marker for the depth of blade being used is a good measure to prevent paint damage.

STEP 3: PREPARE THE CAB

Trim excess urethane from the pinchweld, leaving a thin skin of adhesive remaining to bond with the new adhesive. The Fein Chisel Blade is ideal for this purpose as the side of the blade guides it along the pinchweld to provide better control and avoid damage to the exterior perimeter of the window opening to protect the paint surface. The operator must also use extra care to control the tool.

NOTE: Primer should be applied to any exposed body metal that will not be covered by the urethane adhesive.

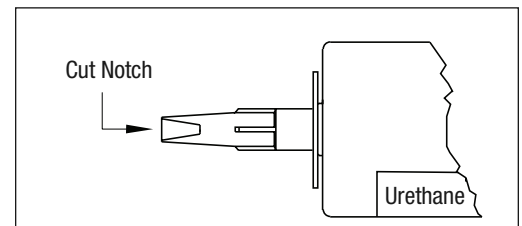
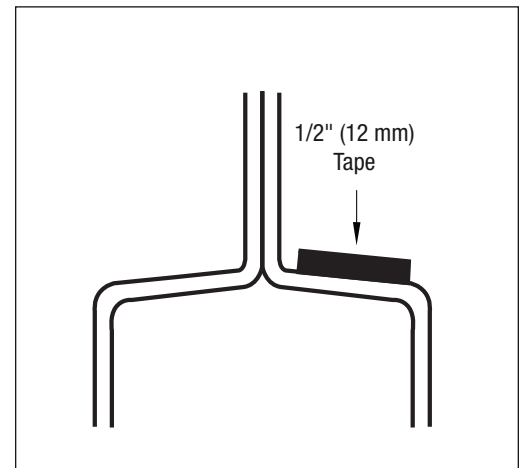
Apply 1/2" (12 mm) masking tape around the entire window opening, between the cab exterior and the original adhesive on the pinchweld, to prevent the new urethane adhesive from bonding to the cab metal. The slider frame will conceal the tape. If an accident or vandalism requires the window to be replaced, the tape will act as a release agent for the adhesive and the window may be removed by cutting it out.

STEP 4: APPLY THE ADHESIVE

It is important to check the fit of the slider before applying adhesive. Place the window into the cab opening and check for a flush fit. Old adhesive or uneven pinchweld may interfere with the window frame and hold the frame flange away from the cab. Interference should be corrected before application of the adhesive.

Trim a "V" notch into the nozzle making the top of the "V" equal to the height of the body when nozzle is placed on the pinchweld. Apply the bead of urethane over the old adhesive on the pinchweld; pull the caulking gun, rather than pushing the adhesive ahead of the nozzle. This will lay the bead down in a raised standing shape and ensure complete contact with the window frame with no voids. Go back and fill any low spots along the top or side of the pinchweld.

NOTE: It is important that the raised urethane bead come within 1/4" (6 mm) of pinchweld depth for contact with the window frame.



STEP 5: POSITIONING AND SECURING THE SLIDER

1. Being careful to avoid touching the bonding surface, carefully pick up the POWR-Slider and bring it to the cab opening. Position the bottom of the slider in the opening first. See Diagram 1.
2. Have a helper to support the POWR-Slider from outside.
3. After making sure that the slider is level and well into the opening, bend over the installation/alignment tabs to keep it properly located. See Diagram 2.
4. While your helper puts pressure on the slider from the truck bed, fold the bend over tabs around the pinchweld with the aid of a rigid bent Putty Knife. See Diagram 3. These tabs secure the slider while the urethane cures and allows the truck to be driven immediately after installation.

Diagram 1

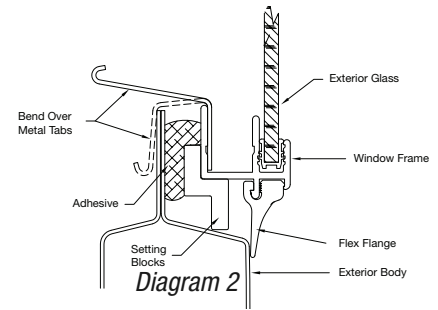
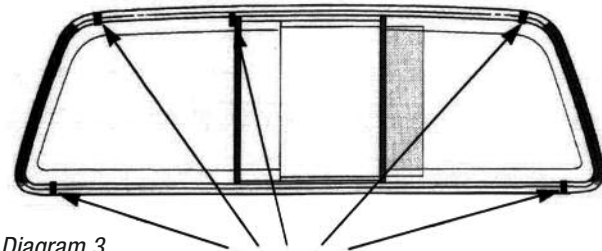


Diagram 3



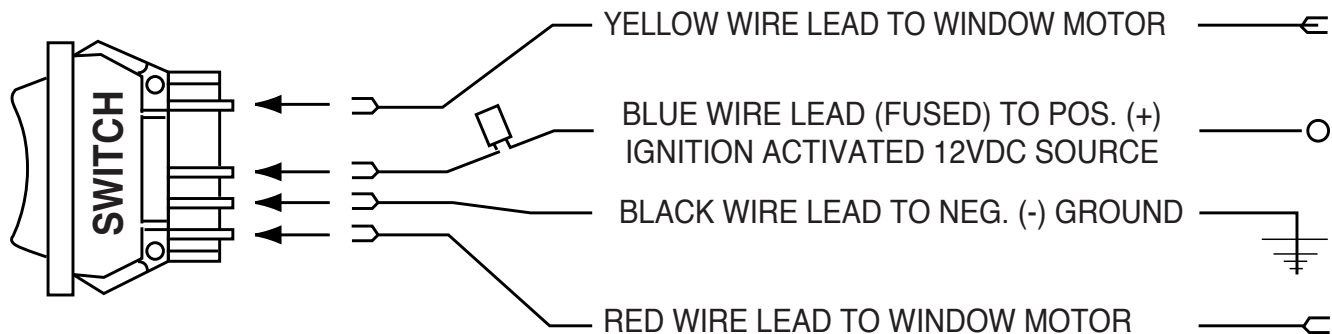
BEND OVER TABS

STEP 6: CLEAN UP

Remove any smears of urethane from the cab interior. Your Series-E POWR-Slider installation is now complete. Although the urethane adhesive will not be fully cured for several days, with the bend over tabs in place the window is secure, and the vehicle may be driven away. However for a period of four hours do not abruptly close the vehicle doors with all windows closed. The air pressure could blow out the fresh urethane and cause a leak.

STEP 7: ROUTING MICRO DRIVE WIRE HARNESS AND CONNECTING POWER SWITCH

1. Locate a suitable flat surface spot in the dash for mounting the POWR-Slider switch. The area behind the switch should be unobstructed. **CAUTION:** Before drilling, check for proper clearance to make sure that you are not drilling into any other components behind the dash.
2. As an alternate to the above, you will find an under-dash mounting plate in the kit.
3. Use the inside part of the POWR-Slider switch frame to trace the cut-out with a pencil.
4. Drill all four corners of the tracing with a 1/8" drill bit and connect by drilling additional holes between the four corners.
5. File any uneven surfaces from the inner edge of the cut-out. Insert the POWR-Slider switch and frame to check for proper fit.
6. Locate a 14-gauge wire from the steering column wire harness and confirm with test light that it is ignition activated (key on/off). Using supplied Wire Connector, tap into it and connect the blue wire from slider to this connection.
7. Using self-tapping screw, mount the ground wire (black) to metal body panel.
8. Push all four color-coded wires through dash and connect to switch. Then install the switch into dash with frame attached.
9. Route Micro Drive wires (yellow and red) behind parking brake panel, under threshold cover to rear of truck. Continue to route wires behind back wall panel and exit at the rear edge of carpet to rear firewall.



STEP 8: INTERIOR TRIM

Replace all interior trim and fasteners in reverse order of removal.

CAUTION:

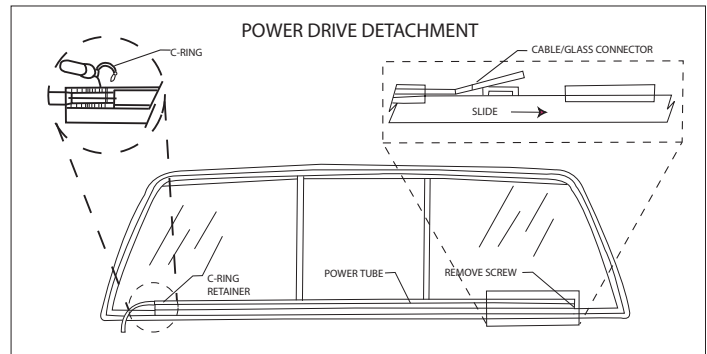
For a period of four hours do not abruptly close the vehicle doors with all the windows closed. The air pressure could blow out the fresh urethane and cause a leak. The enclosed Mirror Hang Tag should hang from rear-view mirror or other noticeable place. These precautions should be followed for 48 hours after the installation of the POWR-Slider.

POWR-Slider™

The POWR-Slider drive system has been redesigned for a more compact size, increased reliability, easier installation and servicing. Please review the following Power Drive Mounting and Removal Procedures.

DETACHMENT PROCEDURE

The new drive system is designed for easy detachment from the slider. To remove the drive cable from the vent glass, the slider must be in full open position. First remove the small screw from the end of the power tube on the slider. Then slide the short section of the tube toward the corner of the slider. With the cable to glass connector exposed, lift the connector off of the glass clip. Then go to the other end of the power tube and remove the C-RING retainer. The C-RING is easy to remove by inserting a small paper clip through the hole on the C-RING and lifting it out. The paper clip will also help prevent the loss of the small C-RING. The drive cable can then be extracted from the power tube. Then to re-attach the power drive, follow the instructions in reverse.



STEP 9: INSTALLING THE MICRO DRIVE UNIT

1. Locate Micro Drive at lower corner of rear firewall.
2. With Micro Drive unit lying on floor, attach to floorboard or wall with brackets provided.
3. Route Micro Drive cable behind passenger fascia panel, creating a generous loop to avoid kinks on cable.

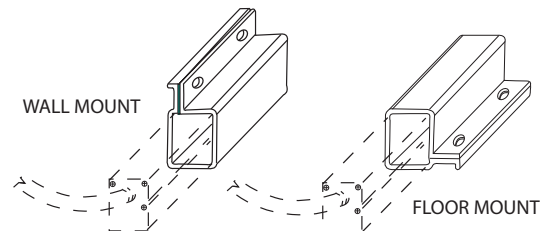
POWER DRIVE MOUNTING

Motor mounting tabs and screws are provided to secure the power drive. Install the tabs into the slots that run the length of the power drive. Slots are provided to install the tabs for screw mounting to the floor or the wall. Install the tabs in the desired position at each end of the power drive. Use the holes in the tabs to locate and drill 1/8" (3.2 mm) pilot holes, install and tighten the screws (see diagram).

CAUTION:

Always check to make sure that you are not drilling into any other components such as seat belts, speaker wires, fuel lines, brake lines, etc.

The installation kit also includes three cable retainers and screws. Use as necessary to secure the cable for a neat appearance.



To make your POWR-Slider™ installation easier and faster, we have included two new Micro Drive mounting brackets. To meet any installation requirement, both the wall and floor mount brackets are enclosed.

To install the new plastic bracket, push the bracket's open slot over the drive cable. Then slide the bracket over the Micro Drive as shown in the diagram. Use the screws provided to secure the drive.

STEP 10: LEAK TEST

To test the slider installation, gently spray water over the top of the cab and inspect the vehicle interior for evidence of leaks. If a leak develops, determine the exact location and reseal from the interior by applying additional urethane adhesive as needed.

STEP 11: FUNCTIONAL TEST

1. Start the vehicle by turning the ignition to "ON".
2. Push POWR-Slider switch to open and close window.
 - a. Make sure there are no obstructions to the track on the vent glass.
 - b. Make sure window opens and closes completely.
3. If unit fails to operate, follow troubleshooting procedures listed below.
 - a. Use shower nozzle or garden hose to simulate rain shower on window.
 - b. Check inside cab for leaks.

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	CORRECTION(S)
No power to slider	Fuse burnt out	Replace fuse
No power to slider	Switch and wiring not properly connected	Re-check connecting steps of installation instructions. Check power and ground to motor.
No power to slider	Wiring damaged	Retrace wiring and repair as needed
Window has power but will not open or close	Window has obstruction in vent channel	Inspect vent channel and remove foreign objects
Window opens or closes partially	Vent glass fit in frame is too tight due to handling	Check and fix alignment of vent glass to frame channel and weatherstrip
Window leaks	Voids on urethane adhesive	Determine exact location and reseal from the interior where needed
Window leaks	Weephole restricted	Inspect and clear weepholes