Legacy XL Stationary Panel Installation Overview

Please note, the following is not meant to be used during the installation of the Legacy XL Stationary Panel Kit. This is a brief overview of the process for prospective installers to preview. Detailed, comprehensive installation instructions will be provided with the purchase of the Legacy XL Stationary Panel Kit.

The Legacy XL Stationary Panel is a replacement stationary panel for Cessna 172 E through M models. Installation can be completed in approximately 40 hours. The following gives a brief overview of what the installation process entails. Installation can be completed using industry standard methods as outlined in AC 43.13B. All sheet metal installation procedures follow guidance found in Chapter 4 Section 4, procedures for standard metal repairs.

To begin the installation, remove all components that are installed in the existing stationary panel. All wiring that is run through the stationary panel must be removed so that the stock stationary panel is completely bare.

The windshield must then be removed (this is a good time to think about replacing that!), a handful of rivets drilled out from the fuselage skin, and the upper skin must be cut all the way across. The stationary panel and the upper skin can be removed as one.

The Legacy XL Stationary Panel is then riveted back into place utilizing the same holes that the stock stationary panel riveted into. The Legacy XL Stationary Panel does not require removing any support components such as yoke supports, and only requires minor modification to the parking brake housing.

The replacement upper skin is necessary due to the slight raise in height over the stock stationary panel. The upper skin is installed using acceptable methods found in AC 43.13B and requires no special tools or methods to install. There is some preparation to install the upper skin required. First attach the upper skin to the upper supports of the stationary panel with clecos and lay the upper skin along the remaining existing skin. Drill holes to match those in the new upper

skin in the existing area. This is where the new skin will attach to the existing fuselage skin. Remove the upper skin to debur and countersink the holes.

Rivet the upper skin first to the stationary panel, and then to the existing skin, matching the new holes that were drilled.

Once the replacement stationary panel is in place, wiring and avionics components can begin to be installed, and other removed components can be reinstalled. We recommend upgrading or replacing some components that are required to be removed. See the following pages for photo references and a list of recommended upgrades.



A Cessna 1973 Cessna 172M before starting upgrade



Any plastic panels, shock panels, instruments, and avionics, and components must be removed



Once all wiring, instruments, avionics, and components are removed from the stationary panel, it will look like this.



The stationary panel has a few rivets along the sides to be drilled out, and the upper skin will need to be cut along the lower edge. This can be done quite simply following our detailed instructions provided with the purchase of the stationary panel kit.



Once the upper skin is cut and rivets removed, skin and stationary panel can be removed.



New stationary panel is riveted into place utilizing the same rivet holes in the fuselage that the original panel was mounted to



Rivet the new upper skin to the existing overlap left behind, and to the top edge of the new stationary panel.



Once all the structure is attached, wiring can begin. The five configurable cover panels are mounted to the stationary panel and your new Legacy XL Stationary Panel kit is complete.

Due to the extensive nature of the Legacy XL Stationary Panel installation, there are many parts on your aircraft that must be removed to make installation possible. During reinstallation, we recommended the following be purchased new and installed, as there will never be a better time to replace some of your aging components!

#### Throttle

McFarlane Vernier Throttle (Great for Use with Auto Pilot!)

Cessna 172 E-H: Purchase from <u>Aircraft Spruce & Specialty</u> – or – Purchase from <u>McFarlane Aviation Products</u>

Cessna 172 I-M: Purchase from <u>Aircraft Spruce & Specialty</u> – or – Purchase from McFarlane Aviation Products

### McFarlane Standard Throttle

Cessna 172 E-H: Purchase from <u>Aircraft Spruce & Speciality</u> – or – Purchase from McFarlane Aviation Products

Cessna 172 I-M: Purchase from <u>Aircraft Spruce & Speciality</u> – or – Purchase from <u>McFarlane Aviation Products</u>

### Mixture

McFarlane Vernier Mixture

Cessna 172 E-M: Purchase from <u>Aircraft Spruce & Speciality</u> – or – Purchase from <u>McFarlane Aviation Products</u>

### Carb Heat Cable

McFarlane Carb Heat Cable

Cessna 172 E-H: Purchase from <u>Aircraft Spruce & Specialty</u> – or – Purchase from McFarlane Aviation Products

Cessna 172 I-M: Purchase from <u>Aircraft Spruce & Speciality</u> – or – Purchase from <u>McFarlane Aviation Products</u>

## Cabin Heat and Cabin Air Cable

McFarlane Cabin Heat

Cessna 172 E, F, G, H: Purchase from McFarlane Aviation Products

Cessna 172 I,K: Purchase from McFarlane Aviation Products
Cessna 172 K-M: Purchase from McFarlane Aviation Products

#### McFarlane Cabin Air

Cessna 172 E, F, G: Purchase from McFarlane Aviation Products
Cessna 172 H, I, K: Purchase from McFarlane Aviation Products
Cessna 172 L, M: Purchase from McFarlane Aviation Products

# Lighting

MaxDim Duo Dimmer – Replaces Old Rheostat Light Switch Purchase from Aircraft Spruce & Speciality

### Windshield

The Windshield must be removed as part of the installation procedure. This is a great time to replace it.

Purchase from Great Lakes Aero Products

### **Circuit Breakers**

Klixon Push-Pull Type Circuit Breakers – Purchase from <u>Aircraft Spruce & Speciality</u>

E-T-A 60 Amp Alt Circuit Breaker – Purchase from Edmo
Klixon 60 amp Alt Circuit Breaker – Purchase from Aircraft Spruce & Speciality

# Flap Indicator

Visual Instruments Flap Position Indicator Kit – Includes digital flap position indicator and new flap position transmitter
Purchase from Aircraft Spruce & Speciality

## **Compass**

SIRS Navigator Pedestal Mount Compass
Purchase from Aircraft Spruce & Speciality

We also recommend the following products to allow a cleaner installation all around:

Stainless Steel Firewall Penetration Kit – Purchase from <u>Aircraft Spruce & Specialty</u> Doubletee Firewall Fittings – Purchase from <u>Doubletee Products</u>