# REVISION LIST

## CHAPTER 23: BAGGAGE COMPARTMENT

The following list of revisions will allow you to update the Legacy construction manual chapter listed above.

Under the “Action” column, “R&R” directs you to remove and replace the pages affected by the revision. “Add” directs you to insert the pages shown and “R” to remove the pages.

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<th>REVISION # &amp; DATE</th>
<th>ACTION</th>
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<td>23-1 through 23-15</td>
<td>0/02-15-02</td>
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<td>23-1</td>
<td>2/06-30-04</td>
<td>R&amp;R</td>
<td>Updated parts list.</td>
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<td>Updated parts in figure 23:C:1.</td>
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<td>3/12-15-04</td>
<td>R&amp;R</td>
<td>Updated table of contents with page numbers and parts list.</td>
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<td>6/08-10-07</td>
<td>R&amp;R</td>
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Chapter 23 Baggage Compartment

Contents

1. INTRODUCTION ............................................................................................... 1
2. PARTS LIST ....................................................................................................... 1
3. CONSTRUCTION PROCEDURES .................................................................. 3
   A. CONTROL TUBE Cover .............................................................................................. 3
   B. BULKHEAD COVER ................................................................................................... 5
   C. OVERHEAD CONSOLE* ............................................................................................ 6
      Installing Floorboard Access Panels ...................................................................................... 8
   E. OXYGEN SYSTEM (optional) .................................................................................... 15

1. INTRODUCTION

The baggage compartment or the area between the aft spar and the baggage bulkhead is also the area for the elevator control tube, flap motor, hydraulics, and wiring. To finish off the baggage compartment we supply a control tube closeout and bulkhead cover.

Optional installations:

The overhead console installs just aft of the rollover closeout. The closeout is tailored to fit head set jacks and lights.

The optional floorboards install between the control tube closeout and the fuselage sides. They provide for a flat surface as well as additional storage room underneath.

Note:
Optional Parts available through:
(*) Lancair Avionics
(**) Kit Components, Inc.

<table>
<thead>
<tr>
<th>#</th>
<th>PART NO. (P/N)</th>
<th>QTY</th>
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<td>3) 4035-2</td>
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<tr>
<td>4) K1000-3</td>
<td>7</td>
<td>Nutplate</td>
<td></td>
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<td>5) K3000-3</td>
<td>4</td>
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<tr>
<td>6) MSC-32</td>
<td>22</td>
<td>Rivets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) AN525-10R8</td>
<td>11</td>
<td>Screw, Washer Head</td>
<td></td>
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| BULKHEAD COVER  |
| 1) 4041 | 1 | Baggage Bulkhead Cover |  |
| 2) K1000-3 | 9 | Nutplate |  |
| 3) MSC-32 | 18 | Rivets, Pop |  |
| 4) AN526-1032R8 | 9 | Screw, Machine |  |
| 5) AN960-10 | 9 | Washer, Flat |  |

| OVERHEAD CONSOLE (OPTIONAL)  |
| 1) 4030 | 1 | Overhead Console | Yes |
| 2) 4901-02 | 1 | Overhead Light Retainer Ring .09" | Yes |
| 3) 4901-01 | 1 | Overhead Console Insert | Yes |
| 4) 101-0085 02106A192 | 4 | Bolt, Allen | Yes |
| 5) MOD1 | 2 | Cabinet Light | Yes |
| 6) AN365-440A | 4 | Locknuts | Yes |
| 7) K3000-08 | 4 | Nutplates | Yes |
| 8) S3989 | 1 | Overhead Light | Yes |
| 9) MSC-32 | 8 | Rivets, Pop | Yes |
| 10) MS35206-21A | 4 | Screws | Yes |
| 11) AN960-10 | 4 | Washers | Yes |

<p>| FLOORBOARDS (OPTIONAL)  |
| 1) 4350-01 | 1 | Left Floorboard, Baggage Compartment | Yes |
| 2) 4350-02 | 1 | Right Floorboard, Baggage Compartment | Yes |
| 3) 4351-01 | 1 | Left Aft Access Panel | Yes |
| 4) 4351-02 | 1 | Right Access Panel | Yes |
| 5) 4351-03 | 1 | Left Forward Access Panel | Yes |</p>
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<tr>
<th>#</th>
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<th>DESCRIPTION</th>
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<td>9</td>
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**OXYGEN SYSTEM (OPTIONAL)**

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<th>DESCRIPTION</th>
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<td>1</td>
<td>4932</td>
<td>1</td>
<td>Oxygen System</td>
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**Note:**
Optional Parts available through:
(*) Lancair Avionics
(**) Kit Components, Inc.
3. CONSTRUCTION PROCEDURES

A. CONTROL TUBE Cover

A 1. Fit the access panels to their openings.

Note: The reason we don’t install the two forward holes of the top cover all the way in the front is because you will not be able to access the holes due to the angle of the seat back.

The control tube closeout isolates the control tube and encloses the hydraulic lines and the flap motor.

A 2. Turn the control tube closeout upside down and backdrill the access panels through the holes provided in the flanges.

A 3. Install the hardware securing the access panels.

<table>
<thead>
<tr>
<th>Top Cover:</th>
<th>Aft Cover:</th>
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<tbody>
<tr>
<td>Screws, AN525-10R8</td>
<td>Screws, AN525-10R8</td>
</tr>
<tr>
<td>Nutplates, K1000-3</td>
<td>Nutplates, K3000-3</td>
</tr>
<tr>
<td>Rivets, MSC-32</td>
<td>Rivets, MSC-32</td>
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</table>

A 4. Trim the flange width to 5/8".
A 5. Fit the control tube closeout. The closeout fits between the aft spar and the baggage bulkhead. The distance between these parts may vary slightly from aircraft to aircraft. As necessary trim the forward flange of the closeout. (Typical trimming shown shaded in Fig. 24:A:1). Apply 3 BID in this area as necessary after bonding console in.


If you plan on installing the optional floorboards it is a good idea to check the fit now. This will ensure that the center console is properly centered.
B. BULKHEAD COVER

The bulkhead cover closes out the aft end of the “cockpit.” The holes for the screws are already pre-drilled. Start by fitting the bulkhead cover. For now provide .05” clearance between the cover and the joggle. Install the nutplates.

Nutplate K1000-3 (9 pcs.)

Washer, Flat AN960-10 (9 pcs.)

Machine Screw AN526-1032R8 (9 pcs.)
C. OVERHEAD CONSOLE*

The overhead console is available through KCI.

Overhead Console
Figure 23:C:1

- Nutplate, K3000-08, (4 pcs.)
- Pop Rivet, MSC-32, (8 pcs.)
- Allen Bolt, 101-0065 (4 pcs.)
- Overhead Light Retainer Ring, 09° 4901-02, (1 pc.)
- Overhead Console Insert, 4901-01, (1 pc.)
- Overhead Light, 83980, (1 pc.)
- Overhead Console 4030 (1 pc.)
- Bose Type Connector
- Trim console to scribe lines.
- David Clarke Type Connector
- Trim console to scribe lines.

Overhead Light Retainer Ring .09”
4901-02, (1 pc.)

Overhead Console Insert, 4901-01, (1 pc.)

Cabin Light, MOD 1 (2 pcs.)
Remove material as necessary to make light fit along the bottom and upper surface.

The MODI cabin lights install from the inside of the overhead console with:
1. MS35206-21A screws, (4 pcs.)
2. AN365-440A locknuts, (4 pcs.)
3. AN960-08 washers, (4 pcs.)
D. FLOORBOARDS*

The optional floorboards may require some trimming to fit into place. Before bonding the floorboards into place, the access panels are installed. Note that the right access panel is typically installed with screws. This is the compartment for items not removed on a regular basis. It is a good place for oxygen, ELT, stormscope, TCAS and other equipment.

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Baggage Compartment Floorboard

Figure 23:D:1

Note that these screws are not installed in the corner as it would not be possible to access the screws up against the aft seat.
Installing Floorboard Access Panels

D 1. Trim the floorboard’s (P/N 4350-01/02) access panel joggles to 5/8" width and sand the edges flat.

D 2. Trim and fit the access panels (P/N 4351-01/02/03) onto the joggles.

Continuous Hinge
MS20001 (1 pc.)

Forward Access Panel
4351-03 (ref.)

Machine Screw
MS24693-S50 (8 pcs.)

Aluminum Rivets
AN426A3-4 (16 pcs.)

Nutplates
K1000-08 (8 pcs.)

Continuous Hinge
MS20001 (1 pc.)

8'

8'

A/C Up

P/N

It might be necessary to
deckre this part if the hinge sits
on the core.

Center the hinge on
the access panel’s edges.

Drill same size
holes (#20) on opposite
side of hinge.

Underside Of
Access Panel
Installing the Hinge on the Left Floorboard Aft Access Panel

Figure 23:D:3

- Continuous Hinge MS20001-5 (2 pcs.)
- Nutplates K1000-08 (12 pcs.)
- Rivets AN426A3-4 (24 pcs.)
- Machine Screw MS24693-S50 (12 pcs.)

It might be necessary to decoro this part if the hinge sits on the core.

Drill same size holes on opposite sides of hinges.

Machine Screw MS24693-S50 (12 pcs.)

Continuous Hinge MS20001-5 (2 pcs.)

SECTION AA
Securing Access Panel to Floorboard

Figure 23:D-4

Drill holes through the floorboard by using the holes you drilled earlier.

Trim joggles.

Floorboard

It may sometimes be necessary to decorate on this area if the hinge sits on the core.

Core

Access Panel

Trim the joggles to accommodate hinges.
Trim the access panels to fit the locks.

**LAYOUT FOR FORWARD ACCESS PANEL**

Forward Access Panel

5.7" 1.75"

Lock’s Centerline for reference.

Lock’s Centerline for reference.

**Installing the Hartwell Trigger Locks**

**Figure 23-D-5**

Arch this end a bit to conform with lock’s profile.

Trim outline

Reference Line
Lock’s Centerline

0.65" 0.8" 1

0.44" 1.12" Edge

Core Area

Rivets AN426AD3-4 (16 pcs.)

It might be necessary to decore this area to get a flat surface for the locks.

**LAYOUT FOR AFT ACCESS PANEL**

Lock’s Centerline for reference.

Lock’s Centerline for reference.

4.24 11.45 5.83
Trimming Joggles to Accomodate Hartwell Locks

Figure 23-D:6

Trim floorboard joggle to accommodate lock.

Decore if lock sits on the core.

Decore and glass with 2 BID cloth.

Floorboard

Access Panel

Core Area

Coreless Area

Joggle

Access Panel
Installing Screws for the Right Baggage Floorboard Access Panel

Figure 23:D:7

NOTE: These screws were intentionally not located at the corner due to the seat backs angle that would interfere with the screwdriver when the screws are removed.

SCREW LOCATIONS

Located at the midpoint of the two end screws.

Set at corner.

Machine Screw
MS24693-6S50 (6 pcs.)

Aluminum Rivets
AN426A3-4 (12 pcs.)

Nutplates,
K1000-08 (6 pcs.)
While bonding, the access panels must be installed to ensure proper alignment.

Trim if necessary. It is okay to leave this end open if you trimmed it. This will be attached to the surrounding surfaces with bid tapes after bonding if cut. Prep these surfaces before bonding.

Once aligned, drill alignment holes through the bonding flange and into the fuselage side. These holes are used for clecos during the bonding process. We suggest installing a few wood blocks (see VIEW AA) for initial alignment while bonding.

Bond the floorboards using Standard Bonding Procedures.

**NOTE:** A couple of woodblocks make the initial alignment easier.
E. OXYGEN SYSTEM (optional)

The recommended oxygen system for the Lancair Legacy is Mountain High’s on demand pulse system. A kit developed for the Lancair Legacy is available through Lancair Avionics. Refer to http://www.mtn-high.com to learn more about how the system works.

In this section, we show a typical installation. Refer to the Mountain High installation instructions and wiring diagrams.

Electrical Connections:
Refer to the wiring instructions supplied with the oxygen system.

Oxygen System - General Overview
Fig. 23:E:1

- EDS Distribution Unit: We suggest you mount the unit out of the way behind you where you can reach it.
- Oxygen tank: We suggest installing the tank underneath the floorboards on the left or the right side. We recommend installing the largest tank possible. We suggest the 50 cubic foot P/N KFO 50.
- There are 2 oxygen flow lines running from the regulator to the distribution units. The green lines supply oxygen for normal operation and the red for the bypass for emergency operation.
- Mount the handle for the emergency bypass in a convenient location.
- Not Shown: The remote mount fill station for the tank. Mount in a convenient location referring to Mountain High’s instructions.