


REV	A	APPLICATION			REVISIONS	
		PRODUCT LINE	REV	DESCRIPTION	DATE	APPROVED
SH	1	IDU-III	A	Initial Release per DCN W2815	3-3-05	R. Durall Cindi Baker
DWG. NO.	150-045285					

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<b>APPROVALS</b>	<b>DATE</b>			<b>TITLE:</b>	
DRAWN Leslie Evans	2/22/05	<b>SERVICE INSTRUCTION WSI IDU-III-2  (ENCODER KNOB REPLACEMENT)</b>			
CHECKED C. Baker	2/22/05				
PRODUCT MANAGER R. Durall	2/22/05				
ENGINEER C. Baker	2/22/05	SIZE A	CAGE CODE <b>1B7G3</b>	DWG NO. <b>150-045285</b>	REV <b>A</b>
ISSUED R. Talken	3-3-05	SCALE: NONE		DO NOT SCALE DRAWING	
<b>Typed signatures indicate approval. Handwritten signature approval of this document is on file at Wulfsberg Electronics, Prescott, Arizona.</b>					



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## **SERVICE INSTRUCTION**

**EQUIPMENT:** IDU-III

**DATE:** 03-03-2005

**INSTRUCTION NUMBER:** WSI IDU-III-2 Revision A

### **EFFECTIVITY**

This service instruction applies to the following:

LRU P/N	HDWR Mod	SWID
401-045500-[ ]	0101	ALL

### **REASON**

This modification replaces the original encoder knobs with new knobs. The original knobs have a tendency to slide on the encoder shaft when pressing on the knob, causing the "Enter" function or the button dimming function not to work after time.

### **DESCRIPTION**

Remove old knobs (Rev A) and install new knobs (Rev B or higher).

### **COMPLIANCE**

Recommended.

### **WARRANTY INFORMATION**

This modification is an enhancement and is not covered under warranty.

### **APPROVAL**

This modification does not affect the original approval.

### **MANPOWER**

Not Applicable.

### **REFERENCES**

System Installation Instructions, 150-045264.

## **MATERIAL INFORMATION**

The parts required to modify this unit in accordance with this Service Bulletin are available from Chelton Flight Systems at (208) 389-9959.

## **PARTS REQUIRED**

<b>ITEM</b>	<b>QTY</b>	<b>U/M</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>REF</b>
1	1	ea	180-045101-01 Rev B or later	ENCODER KNOB, LEFT IDU-III	Fig. 2
2	1	ea	180-045102-01 Rev B or later	ENCODER KNOB, RIGHT IDU-III	Fig. 2
3*	REF	REF	177-045027	KNOB RETAINING COLLAR	

\*Supplied w/knobs, but may be ordered separately if required.

## **MODIFICATION PROCEDURE**

### **CAUTION**

ANY DISASSEMBLY/ASSEMBLY OF THIS UNIT MUST BE DONE AT A STATIC SAFE WORKSTATION. REMOVED MODULES SHOULD BE PLACED IN ANTISTATIC BAGS WHEN NOT INSTALLED IN THE UNIT.

**NOTE:** *It is not required to remove the IDU from the tray to perform this modification.*

## **IDU MODIFICATION**

1. Remove original right-hand knob (P/N 180-045102-01) by grasping the knob with fingers and pulling straight out from IDU. This knob has a smooth, plastic finish (see Figure 1).

**NOTE:** *Original retaining collar may stay on encoder shaft after knob is removed. Remove old collar as required.*

2. Install new retaining collar (Item 3, supplied with Item 2) into new right-hand knob (Item 2) (P/N 180-045102-01 Rev B or later).

**NOTE:** *Collar will be loose in knob until knob and collar are placed on the encoder shaft.*

3. Install new right-hand knob (Item 2) (P/N 180-045102-01 Rev B or later) by lining encoder key slot with knob and pushing knob until fully seated. This knob has a rubberized finish (see Figure 2).
4. Remove original left-hand knob (P/N 180-045101-01) by grasping the knob with fingers and pulling straight out from the IDU. This knob has a smooth, plastic finish (see Figure 1).

**NOTE:** *Original retaining collar may stay on encoder shaft after knob is removed. Remove old collar as required.*

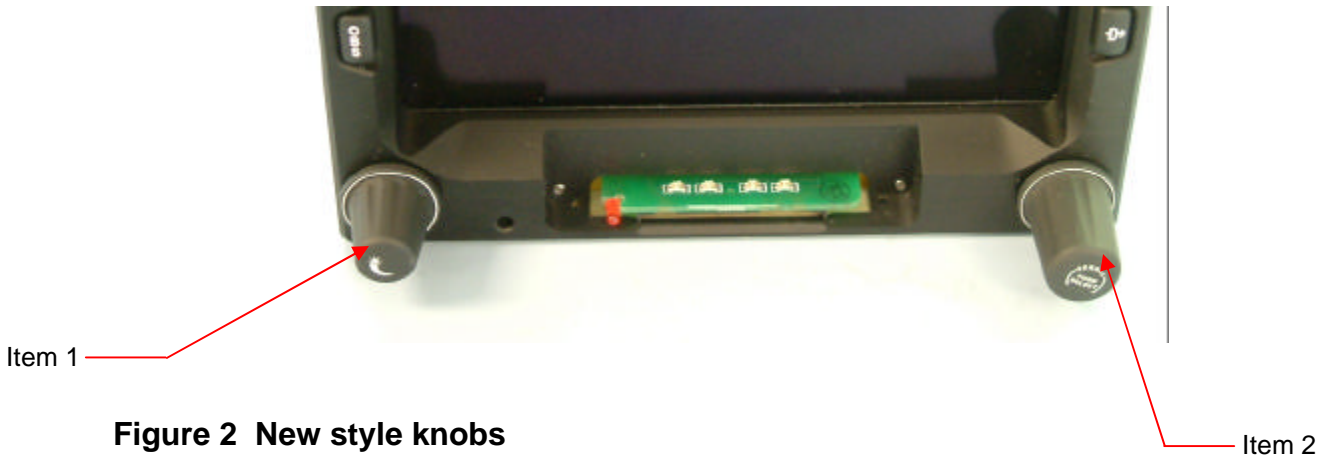
5. Install new retaining collar (Item 3, supplied with Item 1) into new left-hand knob (Item 1) (P/N 180-045101-01).

**NOTE:** Collar will be loose in knob until knob and collar are placed on the encoder shaft.

6. Install new left-hand knob (Item 1) (P/N 180-045101-01 Rev B or later) by lining encoder key slot with knob and pushing knob until fully seated. This knob has a rubberized finish (see Figure 2).



**Figure 1 Old style knobs**



**Figure 2 New style knobs**

## **TESTING PROCEDURE**

1. Apply power to IDU; verify IDU completes initialization and self test.
2. Press and turn left-hand encoder, verify button backlighting increases and decreases intensity as knob is turned.
3. Press the right-hand encoder; verify the IDU displays the PFD or MFD page.
4. (PFD) Rotate the right-hand encoder to change baro scale, then press the right-hand encoder and verify the changed baro scale is accepted. Proceed to step 7.
5. (MFD) Press the right-hand encoder and verify the IDU changes from the Navigation page to the PFD page.
6. (MFD) Press the right-hand encoder again and verify the IDU changes from the PFD page to the Navigation page.
7. Remove power from the IDU.