

SERVICE INFORMATION NO. SI40-004/1

SUPERSEDES SERVICE INFORMATION NO. SI40-004

I. TECHNICAL DETAILS

1.1 Airplanes affected:

DA 40: airplanes equipped with KLN 94 GPS Navigation System

1.2 Subject:

KLN 94 GPS Navigation System

ATA-Code: None

1.3 Reason:

Incorporate Software 01/06 in GPS KLN 94 with serial numbers stated in the Honeywell Software Bulletin.

For detailed information see the attached **Honeywell Software Bulletin SWB KLN94-SW3**.

1.4 Information:

For detailed information about the affected equipment and a description of the necessary action see **SWB KLN94-SW3**.

II. OTHERS

This software update includes also the update which is published by Honeywell Software Bulletin KLN94-SW2.

Honeywell Software Bulletin SWB KLN94-SW3 is attached to this Service Information.

Software Bulletin

BULLETIN NO: KLN 94-SW3
KLN 94 GPS Navigation System

EFFECTIVITY

KLN 94 units P/N 069-01034-0101, S/N 6151 and below. Units with serial numbers above those stated have Software 0106 incorporated during original manufacturing or during the factory upgrade.

REASON

This bulletin gives information about Software 0106.

The first production KLN 94s out of manufacturing were released at Software 0103. Software 0103, 0104, and 0105 were released to production, and some units have been manufactured with each of the above mentioned software.

Software 0106 is all-inclusive, and contains all the changes necessary to update any previously produced KLN 94.

Software improvements are as follows:

1. The Nearest Intersection function has been restored to complete functionality. Prior to this release, if there were more than 32,768 intersections in the published database, two anomalies were noted:
 - Selection of the Nearest Intersection list might have been inaccessible. Also, the intersections were not displayed on the map unless they were part of the flight plan.
 - Intersection scanning (using the scan knob) did not work near the beginning or end of the alphabetical list.

NOTE

This problem was only experienced when the Americas Database was used. Atlantic and Pacific Databases did not exceed 32,768 intersections.

2. SUA (Special Use Airspace) Inner Rings have been implemented. Prior to this release, the SUA was displayed as a cylinder that went all the way to the ground.
3. Label 'z' (GPS altitude) was added to the Enhanced RS-232 Bus.

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DESCRIPTION

This modification consists of loading Software 0106 and a current database, and providing the owner with a new KLN 94 Pilot's Guide that specifies ORS 01, 02, and 03.

Due to the changes in the Nearest Intersection feature, a database cycle of 0211 or later must be used after the new software is incorporated. (Cycle 0211 is dated from Oct. 31st to Nov. 13th, 2002.)

The new software is loaded using the dataloader cable, a CD ROM, and a personal computer with our Windows Utility. The procedure is found in the KLN 94 Maintenance Manual; it is very similar to updating the database. If the software update is the only work being done, it is not necessary to remove the KLN 94 from the aircraft or complete a Return-to-Service Final Test.

COMPLIANCE

Recommended at the next scheduled maintenance period.

WARRANTY INFORMATION

Warranty credit or payment will be issued for this modification if the unit is still under the original new product warranty and the unit is modified by an appropriately rated Honeywell Service Center. A properly completed warranty claim for one (1.0) hour labor plus parts must be submitted.

For units that are out of warranty, warranty credit or payment will be issued for this modification if it is completed by 31 December 2003 by an appropriately rated Honeywell Service Center. A properly completed warranty claim for one (1.0) hour labor plus parts must be submitted. To insure warranty payment, the claim must be marked to show that the changes described in Software Bulletin KLN 94-SW3 were installed.

APPROVAL

This modification does not affect the original approval.

MANPOWER

One (1.0) hour labor to complete the modification.

REFERENCES

KLN 94 Maintenance Manual, P/N 006-15599-XXXX (found on CD ROM P/N 222-30469-XXXX).

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MODIFICATION PROCEDURE

Update the KLN 94 software according to the procedures in Section 5.2.3.1.4 of the KLN 94 Maintenance Manual. This procedure can be completed on the bench with a power supply or in the aircraft. Equipment needed is a dataloader cable, CD ROM P/N 222-30469-0006, and a personal computer with the Honeywell Windows Utility Program.

The Windows Utility Program is called the "GPS Database Loader" and is available on the software CD ROM called out in this bulletin and at our website, www.gpsdatabase.com. The most current version at the time of publication of this bulletin is Version 1.3. See Material Information on Page 4.

NOTE

If the KLN 94 is updated in the aircraft, the power to the KLN 94 **must be** cycled (i.e. turned off and then back on) after loading the new software and before using the KLN 94 again for navigation. The unit will not properly run the new software until the power is cycled.

IDENTIFICATION PROCEDURE

Because this application software is considered "field loadable", no external unit identification is required. All that is necessary is to verify the correct version of software on the AUX 14 Page on the KLN 94.

SW REVISION 0106 will be displayed on the top line.
Host 01013-0006 will be displayed on the second line.
Grph 01014-0006 will be displayed on the third line.

An entry should be made in the aircraft logbook to indicate that the KLN 94 Application Software has been updated. The recommended wording in the aircraft logbook is as follows:

KLN 94 Application Software is at SW Revision 0106 on (current date).

TESTING PROCEDURE

Because this is only an update of the operating software, and not a repair to a failed unit, it is not necessary to complete a Return to Service Final Test. An FAA Form 8130-3 or equivalent should not be necessary.

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MATERIAL INFORMATION

The parts needed to modify one KLN 94 according to this software bulletin are listed below:

Part Number	Qty	Description
222-30469-0006	1	KLN 94 CD ROM for Software 0106
006-18207-0000	1	KLN 94 Pilot's Guide, Rev. 2, 7/02, ORS 01/02/03

Service Center Setup Requirements

To install new unit software, a service center needs the following items. This is a one-time purchase requirement for the service center to set up for KLN 94 support. These parts are being added to the Category 1C Service Center requirements, and are not warranty reimbursable.

Part Number	Qty	Description
050-03612-0000	1	PC Interface Cable for faceplate jack
or	(See Note 1)	
050-03213-0000		PC Interface Cable for panel jack
	(See Note 2)	Database

NOTE 1

The PC Interface Cables and CD ROM called out in this bulletin can be used as many times as necessary to update KLN 94s. Only one cable and CD ROM per service center is required. For follow-on software updates, it will only be necessary to obtain a later version CD ROM.

PC Interface Cable P/N 050-03213-0000 can be used on a KLN 94 installation that started out as a KLN 89B installation and has the Database Loader Jack installed in the aircraft panel.

PC Interface Cable P/N 050-03612-0000 can be used on any KLN 94. The mating jack for this cable is located on the faceplate of the KLN 94.

NOTE 2

A current database of cycle 0211 or later is required for proper operation of IFR-Approved KLN 94s with this software update. Database Cycle 0211 became effective on October 31, 2002.

If the owner has a current subscription for the KLN 94 database, he will probably already have access to this database cycle. If the owner has an earlier cycle, a database update will be necessary before the Nearest Intersections function will work properly.

For a one-time database update to accommodate the software update, contact Navigation Services at the website gpsdatabase.com.

Email: Nav.database@honeywell.com
Phone: 1-800-247-0230
Phone: 913-712-3145
Fax: 913-712-3904