

HP Indigo Division Installation Instructions

Ink Pump Motor Replacement

Purpose

This document details the procedure to replace the ink pump motor in the event that the ink pump motor is defective.

Installation instruction details

Item	Details
Objective	Spare Parts Replacement
Scope	HP Indigo press 3000, HP Indigo press 3050, HP Indigo press 3200, HP Indigo press 3250, HP Indigo press 4000, HP Indigo press 4050, HP Indigo press 4500, HP Indigo press 3500, HP Indigo press 5000, HP Indigo press 5500 UltraStream 2000, HP Indigo press 1050, HP Indigo press 1000, e-Print Pro+, TurboStream, Platinum, HP Indigo press s2000, Omnius MultiStream, HP Indigo press ws2000, Omnius WebStream
Document number	CA293-01900
Kit number	CA297-00150
Date	27-Apr-08
Related ECO	10713
Security level	HP confidential

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Overview

This document details the procedure to replace the ink pump motor as a spare part, in the event of a ink pump motor becoming defective.

This document describes the replacement for the ink pump motor in the presses listed in the section *Scope* on the front page. The diagrams and pictures detailed apply to an older ink pump motor version installed with the new TCU, found in the HP Indigo press 3050. However, the replacement of the motor in presses with an older TCU is similar. The variations in the TCU and screw types found in different presses do not detract from the correct basic installation and orientation procedure described in this document.

Prerequisites

None

Estimated installation time

½ hour per ink pump

Special skills

None

Special jigs and tools

None

Parts list

Spare parts kit contents

Ink pump motor kit P/N CA297-00150

Part Number	Part name
3140-1110	Ink pump motor
CA140-02380	Ink pump motor base plate
MBA-0420-50	Allen screws

Pre-installation procedure

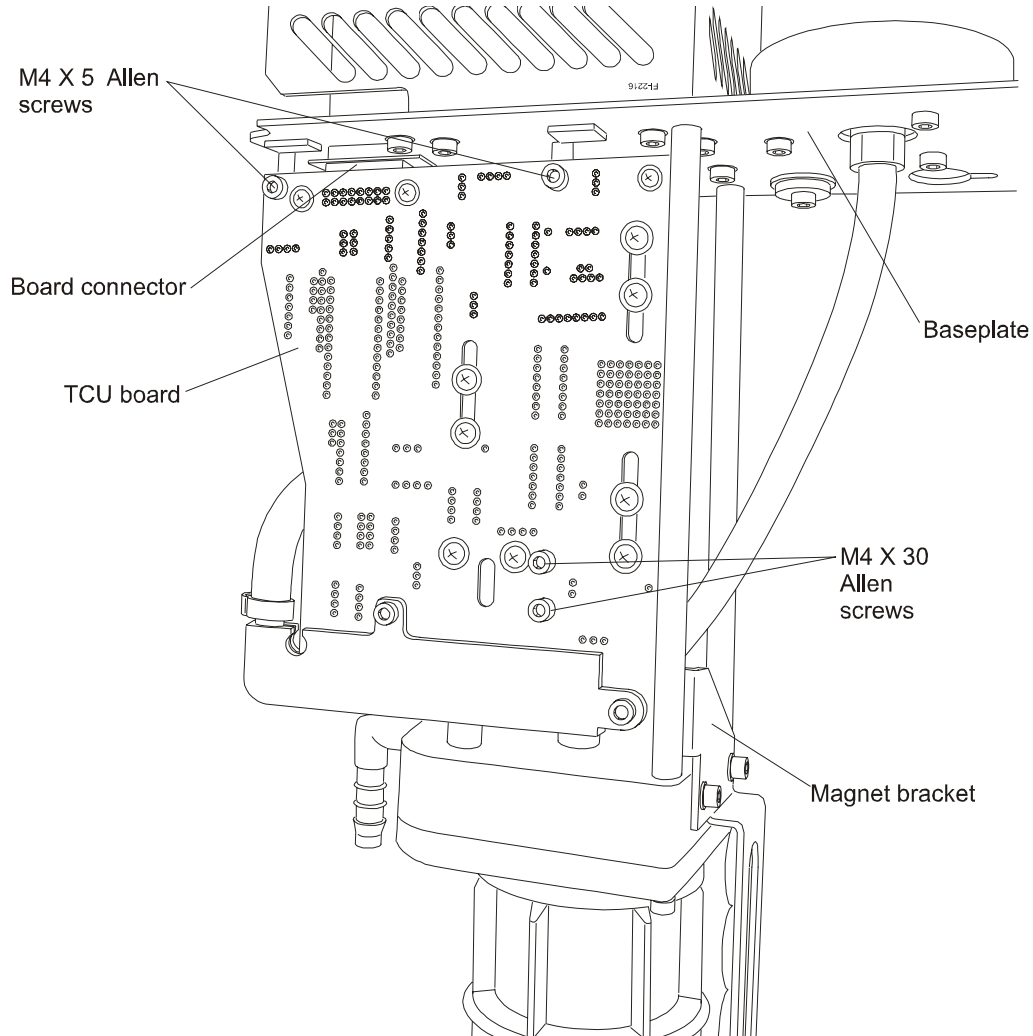
1. Turn the press and UPS off.
2. Remove the faulty ink pump assembly to the cleaning station.
3. Thoroughly clean the ink pump assembly.
4. Lay the ink pump assembly on a flat surface.

Procedure

Disassembly

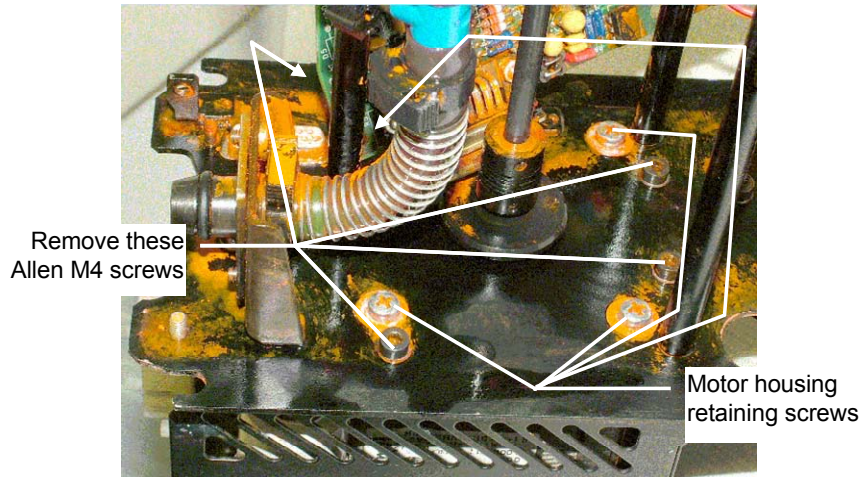
1. Release the screw securing the ink can holder.
Place the ink can holder for later reinstallation.

Figure 1 Tank control unit (TCU)



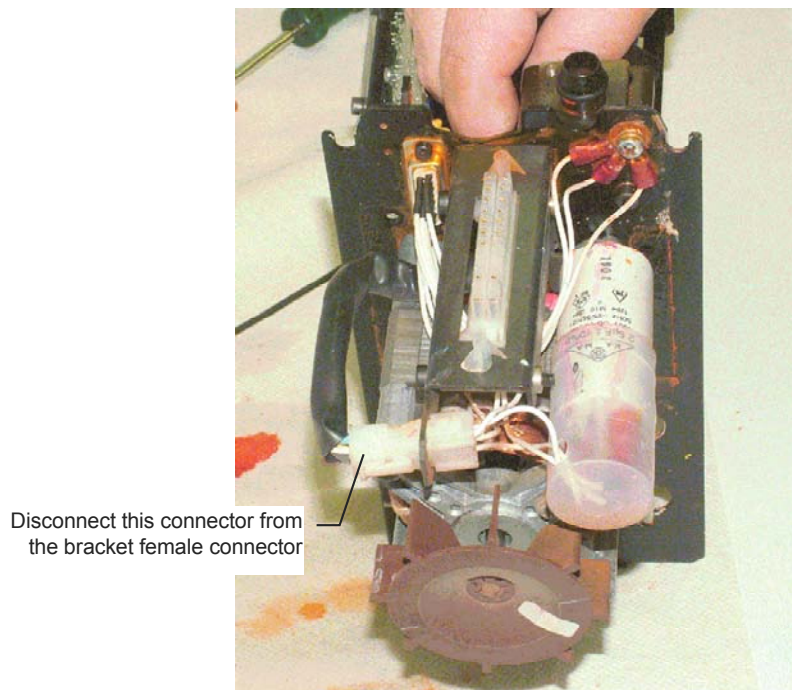
2. To release the TCU board:
 - a. Remove the two Allen screws securing the board to the base plate (Figure 1).
 - b. Use a 3 mm Allen wrench to remove the two Allen M4 x 30 securing the board to the density sensor bracket (Figure 1).
 - c. Remove the two Allen M4 screws securing the magnet bracket (Figure 1).
Pull magnet bracket away from the TCU board to release the board.
 - d. Gently disconnect the TCU board connector and release the board.

Figure 2 Removing the ink pump motor cover



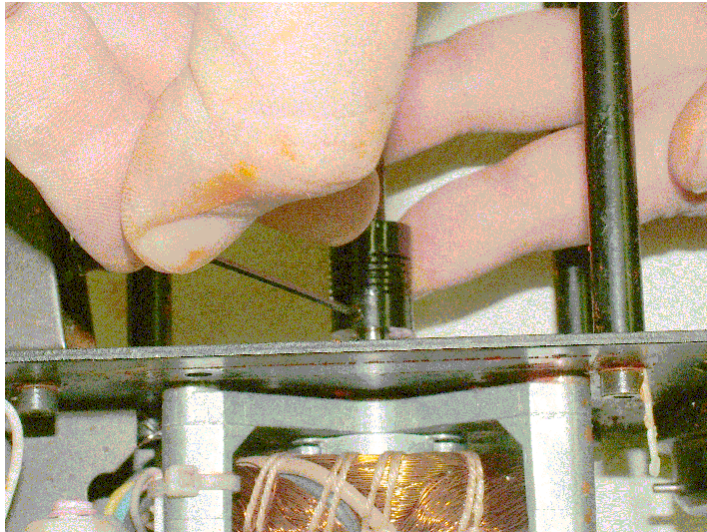
3. Remove the four Allen M4 screws securing the ink pump motor cover (Figure 2). Remove the cover. Save the cover, and screws for later reinstallation.

Figure 3 Disconnecting the main electric power molex



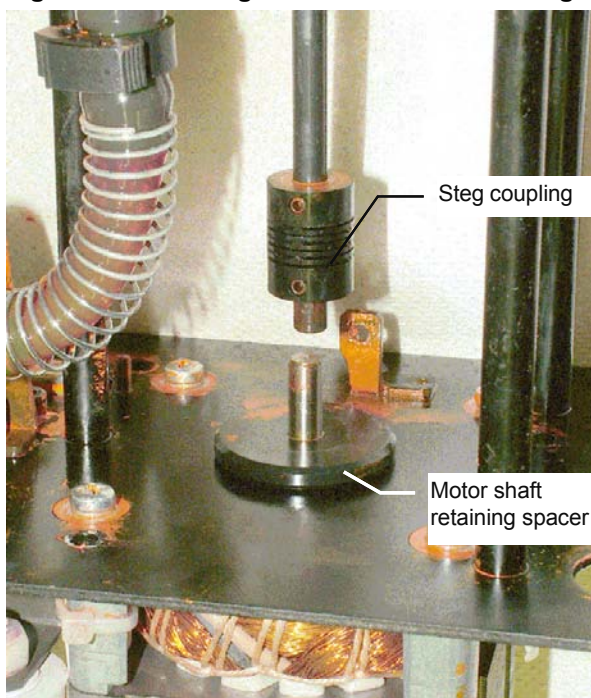
4. Disconnect the main electric power male molex connector from the bracket female connector shown in Figure 3.

Figure 4 Releasing the motor shaft steg coupling



5. Use 1.5 mm or 1.27 mm (for older versions) Allen key to release the two set screws securing the steg coupling to the motor and propeller shaft (Figure 4).
6. Use slight force to pull the steg coupling away from the motor shaft.

Figure 5 Removing the motor shaft retaining washer



7. Remove the motor shaft retaining spacer shown in Figure 5. Save the spacer for later reinstallation.
8. Remove the four Phillips screws securing the ink pump motor to ink pump frame (Figure 2). Remove the motor and discard the motor and propeller.

Assembly

Figure 6 New ink pump motor

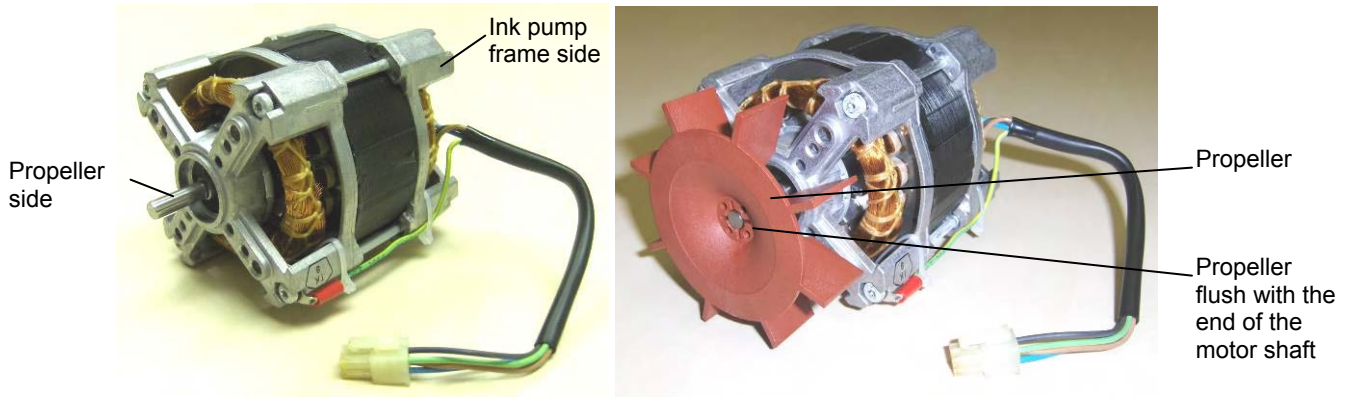
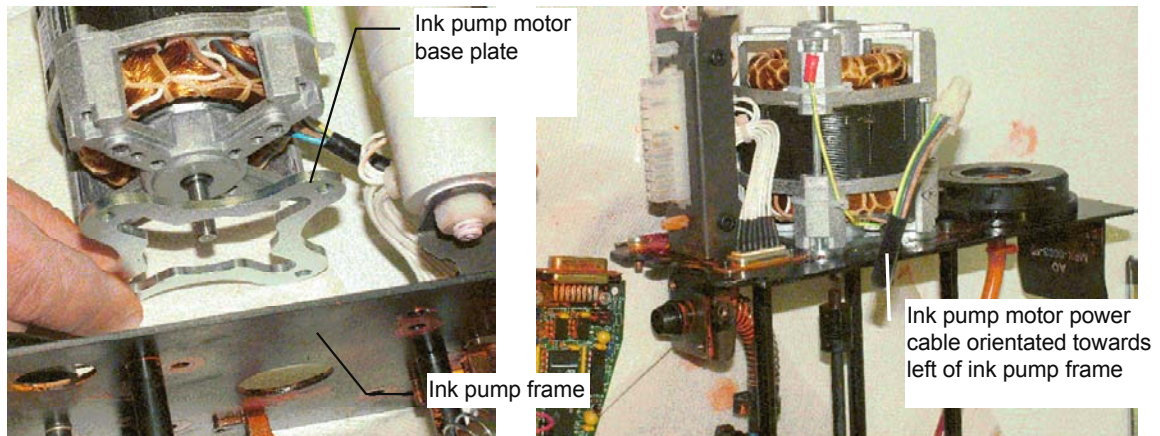


Figure 7 Mounting the new ink pump motor



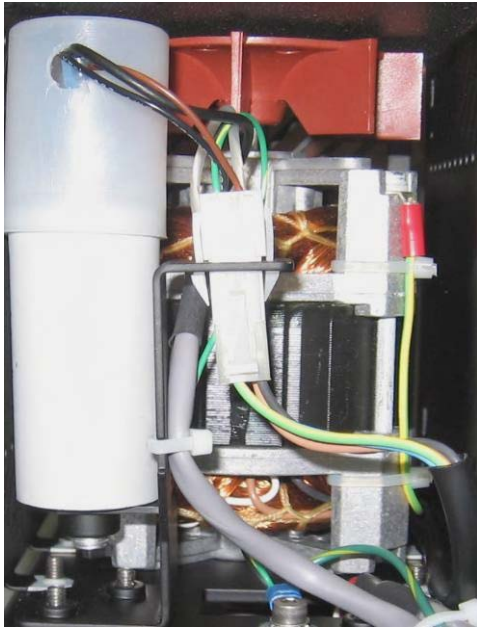
1. At the front of the motor, install the propeller on the motor shaft.
Make sure that the propeller is flush with the end of the motor shaft.

NOTE: The propeller must be installed on the non-power cable side of the motor.

2. Insert the ink pump motor base plate (P/N CA140-02380) between the new ink pump motor (P/N 3140-1110 - Figure 6) and the ink pump frame at the same position as the original motor (Figure 7).

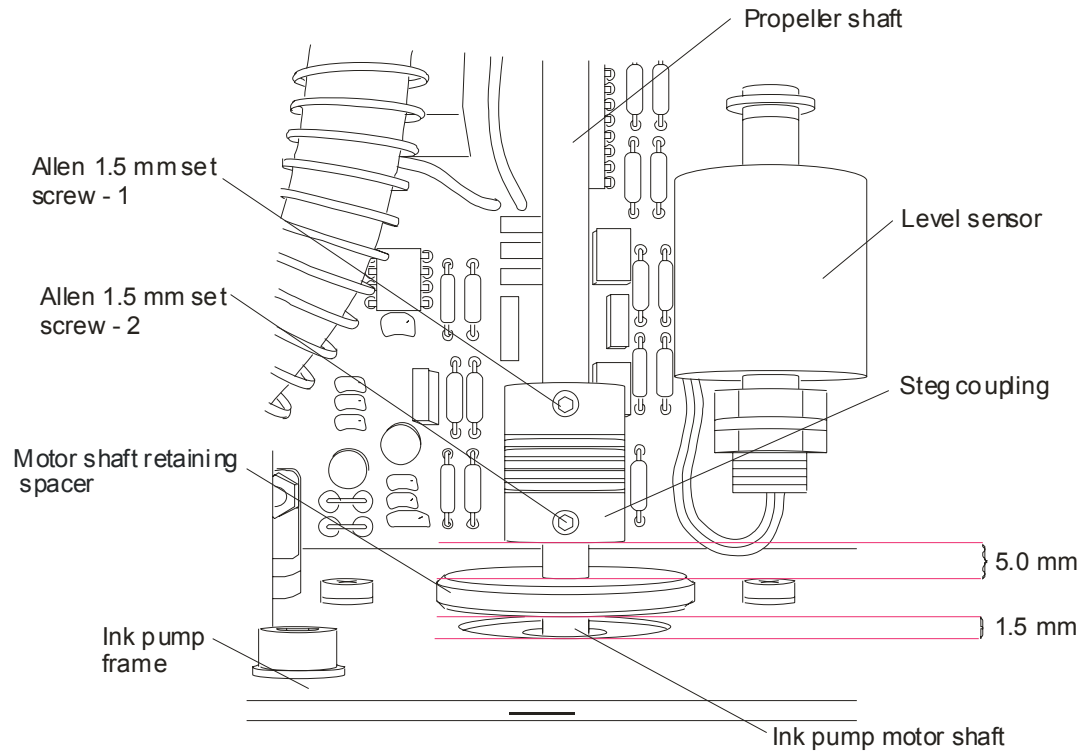
Make sure that the ink pump motor electric power cable exit from the motor is facing left relative to the front of the ink pump assembly (Figure 8).

Figure 8 Position of the electric power cable



NOTE: Make sure that no cables can touch the propeller.

3. Install the ink pump motor using the new four Allen screws (P/N MBA-0420-50).
4. Connect the electric power male molex connector to the female connector at the connectors' bracket.

Figure 9 Installing and aligning the steg coupling and spacer

5. Mount the motor shaft retaining spacer on the motor shaft in its original position (Figure 9). Make sure that the spacer sits about 1.5 mm from the surface of the ink pump frame (Figure 9). Use a 1.5 mm Allen key to measure the gap.
6. Insert the steg coupling over the new ink pump motor shaft (Figure 9). Make sure that the gap between the end of the steg coupling and the top of the motor shaft retaining spacer is about 5.0 mm. Use a 5.0 mm Allen to measure the gap. Tighten the 1.5 mm Allen set screw (Figure 9 - 2) to secure the steg coupling over the motor shaft.
7. Pull the steg coupling and propeller shaft downwards towards the filter and tighten the second 1.5 mm Allen set screw (Figure 9 - 1).
8. Make sure that the top of the motor shaft is flush with the top of the propeller. The shaft should not protrude from the propeller top surface and should rotate freely.
9. Reinstall the cover using the original four Allen M4 screws.
10. Mount and reinstall the TCU board using the original screws.
11. Mount and secure the magnet bracket in its original position. Verify that all three level sensors are moving freely without interruption from the ink pump hoses.
12. Reinstall the ink can holder
13. Reinstall the ink pump assembly in the ink cabinet.

Test procedure

1. Power up the press.
2. Check and adjust the ink flow.
3. Print and verify the quality of the print.



HP Indigo Division Installation Feedback

Complete this form after installation, fax it to the address below, and file it in the press logbook:

Att: Customer Support
Eli Mantel
Hewlett-Packard Company, Indigo Division
Fax: +972-8-938-5517
e-mail: Yuval.Caspi@hp.com Use e-mail if fax unavailable.

Date (d Mon yr):	Kit number: CA297-00150 - Ink Pump Motor Replacement
Press serial number:	CE name :
Customer name	
Country/state:	Tel:

If any parts listed in the BOM are missing or faulty, enter the following information from the Quality Control label on the packing box: Indigo Quality Control no.: _____ Date: _____
Detail the missing or faulty parts in the general remarks field below.

Please answer the following questions:

Was any operator instruction required and has it been done?

How much time did you spend on the following?

installation procedure

testing and final adjustments

Were the instructions in this document sufficiently clear?

Were there sufficient, easy-to-understand graphics?

Did you need any additional tools or accessories not described in this document?

Were there any specific difficulties or problems during installation?

General remarks:

Thank you for your cooperation

Revision history

Revision	Description
00	Initial document
Responsible engineer	Eli Mantel
Group manager	Neev Elbaz
Product engineering	Yokhay Shalem
Documentation manager	Ronit Shugal
Configuration control	Charles Margy
Written by	Gershon Levy
01	Update to ink pump motor propeller.
Responsible engineer	Yuval Caspi
Group manager	Gil Landshut
PQE	Mishel Yeshayahu
Documentation manager	Ronit Shugal
Configuration control	Na'ama Konnor Gal
Written by	Shaul Glickman

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