

PARAVION TECHNOLOGY, INC.
2001 AIRWAY AVENUE
FT. COLLINS, COLORADO 80524

REPORT NO. PR-206PX-900M

INSTALLATION INSTRUCTIONS

FOR

206PX-100 PEDAL EXTENSION INSTALLATION

AND

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

REVISIONS

<u>REV.</u>	<u>DATE</u>	<u>DESCRIPTION</u>	<u>BY</u>
N/C	06/23/99	Original	P.R.
A	10/05/99	Added Appendix A	P.R.
B	08/21/02	Added reference to 407PX-202 Pedal Assembly for 206PX-100-3/-4 Installation.	G.P.
C	01/28/08	Added Note reference bolt torque procedure, paragraph 1.5	REB

LIST OF REFERENCES

1. 206PX-100 Pedal Extension Installation
2. BHT-206A/B-SERIES-MM-1
3. BHT-ALL-SPM

TABLE OF CONTENTS

<u>ITEM</u>	<u>PAGE</u>
Revisions	i
List of References	ii
Table of Contents	iii
1.0 206PX-100 INSTALLATION INSTRUCTIONS	1

LIST OF TABLES

TABLE

I	Weight and Balance Data, 206PX-100 Pedal Extension Installation	2
---	-----------------------------------------------------------------	---

LIST OF APPENDICES

APPENDIX

A	Instructions for Continued Airworthiness
A-0	

1.0 206PX-100 INSTALLATION INSTRUCTIONS

- 1.1) DISCONNECT P/N 206-001-020 CONTROL TUBE ASSEMBLY FROM BELL CRANK IN ACCORDANCE WITH APPLICABLE BELL REPAIR AND OVERHAUL MANUAL.
- 1.2) REMOVE PEDAL SUPPORT AND PEDALS FROM AIRCRAFT. DISASSEMBLE P/N 206-001-703 PEDALS AND P/N 206-001-701 LINKS. DISASSEMBLE THE PEDALS FROM THE P/N 206-001-713 PEDAL SUPPORT.
- 1.3) REMOVE EXISTING FOAM PAD FROM BETWEEN SUPPORT ASSEMBLY MOUNTING EARS. DRILL 0.250 DIA. HOLES THROUGH OUTER ARMS OF P/N 206-001-713 PEDAL SUPPORT IN ACCORDANCE WITH DRAWING 206PX-100.
- 1.4) USING EXISTING HARDWARE, AND ITEM 13 OR ITEM 14 WASHERS, AS REQUIRED TO FILL GAP, ASSEMBLE 206PX-200-1 LINK ARM ASSEMBLIES TO MODIFIED SUPPORT IN PLACE OF P/N 206-001-703 PEDALS. POSITION RAISED FACE ON LINK ARM ASSEMBLY AWAY FROM CENTER OF SUPPORT ASSEMBLY AND SECURE THE BELL CRANK LINKAGE TO THE LINK ARM ASSEMBLY WITH THE HARDWARE SHOWN. THIS ALLOWS CLEARANCE BETWEEN ATTACHMENT HARDWARE AND PEDAL SUPPORT.
NOTE: USING WASHERS TO FILL GAP, CENTER LINK ARM IN THE PEDAL SUPPORT OPENING TO ASSURE BOLT CLEARANCE FROM PEDAL SUPPORT ASSEMBLY.
- 1.5)1. ASSEMBLE 206PX-201-1 CHANNELS TO 206PX-200-1 LINK ARM ASSEMBLIES WITH WASHERS INSIDE THE CHANNEL TO FILL GAP. INSERT AN4-17 BOLTS WITH NAS1149F0432P WASHERS ON EACH SIDE OF CHANNEL. USE AN320-4 NUTS AND MS24665-132 COTTER PINS TO COMPLETE ASSEMBLY.

NOTE: Torque bolt/nut to 50 in-lb. Test for smooth bearings operation and assure that bolt does not turn in channel. Reduce torque if necessary to achieve smooth bearing operation. Torque must be sufficient to ensure bolt does not rotate in channel during pedal operation.

- 1.6) ASSEMBLE 206PX-203-1 ROD ASSEMBLIES TO MODIFIED SUPPORT AND TO 206PX-201-1 CHANNELS USING WASHERS ON EACH SIDE OF THE BEARINGS, SECURE USING AN4-11/AN4-12 BOLTS, NAS1149F0432P/NAS1149F0463P WASHERS INSIDE THE CHANNEL, AND AN310-4/AN320-4 NUTS RESPECTIVELY. LOCK NUTS TO BOLTS WITH MS24665-132 COTTER PINS. USING CONTACT CEMENT OR EQUIVALENT REINSTALL FOAM PAD, IT MAY BE NECESSARY TO TRIM PAD FOR PROPER FIT.

NOTE: ADJUST ROD ASSEMBLIES TO POSITION THE CHANNELS PARALLEL WITH THE FLOOR, TIGHTEN THE JAM NUTS.

- 1.7) INSTALL P/N 206-001-701 LINKS TO 206PX-200-1 LINK ARM ASSEMBLIES USING AN4-14 BOLTS, NAS1149F0463P WASHERS, EXISTING WASHERS, AND CASTELLATED NUT. LOCK BOLT ASSEMBLY WITH MS24665-132 COTTER PIN.
- 1.8) REMOVE P/N 206-070-589 HEEL RESTS. TRIM HEEL RESTS AND SUPPORT FOR PEDAL ASSEMBLY CLEARANCE (REF.: VIEW B-B). MATCH DRILL HEEL FLANGES (P/N 206PX-204-1 & -2) TO $\varnothing 0.201$ FOR INSTALLATION UNDER HEEL REST. REINSTALL HEEL RESTS WITH THE APPROPRIATE HEEL FLANGE USING EXISTING

206PX-100 INSTALLATION INSTRUCTIONS (CONT'D)

- 1.9) REINSTALL PEDAL SUPPORT AND CONTROL TUBE ASSEMBLY IN ACCORDANCE WITH BHT-206A/B-SERIES-MM-1 AND BHT-ALL-SPM.
- 1.10) IF NECESSARY RELOCATE THE MANUFACTURER’S NAMEPLATE ON THE CENTER CONSOLE TO ASSURE THAT THE INBOARD PEDAL ASSEMBLY CANNOT BIND (-2 INSTALLATION ONLY).
- 1.11) AFTER COMPLETING THE ABOVE STEPS, THE PEDAL ASSEMBLIES (206PX-202-1 OR 407PX-202-1) SHOULD BE MOVED TO THE LOCATION MOST COMFORTABLE FOR THE PILOT OPERATING THE CONTROLS. NOTE THAT THE ROLL PIN PROTRUDING FROM THE PEDAL ASSEMBLY MUST FACE FORWARD. ES34100-1 PIN MUST BE INSERTED IN THE PEDAL SHAFT. THE LOCK RING IN THE PIN MUST BE SNAPPED OVER THE PEDAL SHAFT (REF.: DRAWING 206PX-100).
- 1.12) UPDATE AIRCRAFT’S WEIGHT AND BALANCE DATA AND THE EQUIPMENT LIST IN THE FLIGHT MANUAL SUPPLEMENT.

TABLE I
WEIGHT AND BALANCE DATA
206PX-100 PEDAL EXTENSION INSTALLATION

INSTALLATION	NET WEIGHT INCREASE (lbs)		NET MOMENT CHANGE (in-lb)			
			LONGITUDINAL		LATERAL	
	A/B	L-SERIES	A/B	L-SERIES	A/B	L-SERIES
206PX-100-1	+3.40	+1.84	123.08	66.61	-37.40	-20.24
206PX-100-2	+3.40	+1.84	123.08	66.61	+47.60	+25.76

APPENDIX A
INSTRUCTIONS
FOR
CONTINUED AIRWORTHINESS
206PX-100 PEDAL EXTENSION

1.0 INSPECTION AND MAINTENANCE

- 1.1 The objective of Pedal Extension inspection and maintenance is to assure that the pedals move freely through full travel, and that excessive component wear has not occurred.
NOTE: Pedal Extension installation can be removed as a unit or as individual components. The instructions found in BHT-206-MM-1 and BHT-206-MM-8 are generally applicable, except where specific differences occur due to 206PX-100 components. Refer to BHT-206-IPB and Dwg. 206PX-100 for parts breakdown.
- 1.2 Refer to Installation Drawings for inspection and maintenance of Anti-Torque pedals and link arm assemblies. Examine each component for dents, scratches, corrosion, or other damage. Refer to BHT-206-MM-8 for acceptable bearing wear, corrosion, and mechanical damage limits. If any of these limits are exceeded it is cause for component replacement. Refer to BHT-ALL-SPM for additional maintenance procedures.
- 1.3 Examine Heel rests for deformation, scratches, corrosion, or fastener looseness. Refer to BHT-206-MM-1, BHT-206-MM-8, BHT-ALL-SPM, and this document, for component replacement. Replace any defective parts
- 1.4 Refer to BHT-206-MM-1 and BHT-206-MM-8 procedures for detail inspection of the remaining Pedal Extension Installation components.
- 1.5 Report any structural discrepancies to Paravion Technology, Inc. Replacement parts are available.

2.0 INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

Tables AI and AII outline the inspection, maintenance, and troubleshooting guidelines for the 206PX-100 Pedal Extension Installation.

TABLE AI

(Reference: Dwg. 206PX-100-X and BHT-206-MM-8)

ANNUAL/100 HOUR INSPECTION	
ITEM (Part Number)	INSPECTION REQUIREMENT
LINK ARM ASSEMBLY (206PX-200-1)	Examine for dents, cracks, scratches, corrosion, or any other damage. Replace the item if deformation, dents, cracks or excessive corrosion are present.
CHANNEL (206PX-201-1)	
PEDAL ASSEMBLY (206PX-202-1) OR (407PX-202-1)	
ROD ASSEMBLY (206PX-203-1)	
HEEL FLANGE (206PX-204-1)	Examine for deformation, scratches, and corrosion. Check for loose fasteners. Replace any defective components.

TABLE AII

(Reference: Dwg. 206PX-100-X and BHT-206-MM-8)

TROUBLESHOOTING PROCEDURES		
PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
BINDING/ROUGH OPERATION	CORROSION, LOOSE FASTENER, DENTS, ROUGH BEARINGS	PERFORM THE INSPECTIONS OUTLINED IN TABLE I. REPLACE ANY DEFECTIVE COMPONENTS. TIGHTEN ANY LOOSE FASTENERS.
SLACK/EXCESSIVE LOOSENESS	LOOSE FASTENERS, DEFECTIVE OR WORN COMPONENTS	PERFORM FULL INSPECTION OF THE COMPONENTS AND FASTENERS. REPLACE ANY DEFECTIVE COMPONENTS, AND TIGHTEN ANY LOOSE FASTENERS.

NOTE: ALL DEFECTIVE COMPONENTS ARE TO BE RETURNED TO PARAVION TECHNOLOGY, INC. FOR REPLACEMENT.