

1. Approving National Aviation  
Authority/Country:

2.

## AUTHORIZED RELEASE CERTIFICATE

3. Form Tracking Number:

890003239074Y15

FAA/United States

## FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

312861893

4. Organization Name and Address: Honeywell International Inc

1 Cliff Garrett Drive  
Anniston AL 36201

Repair Station  
ZX4R716M

5. Work Order/Contract/Invoice Number:

4600113961  
312861891  
Page 1 of 1

6. Item:	7. Description:	8. Part Number:	9. Eligibility:*	10. Quantity:	11. Serial / Batch Number:	12. Status / Work:
001	PRESSURE REGULATING & S/O VALVE	7646B000	N/A	1	A351042-8	OVERHAULED

### 13. Remarks :

THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:

CMM 30-21-01 Rev 16, FEB/10/2010

SB 30-309 Rev 2, APR/01/1994

SB 30-326 Rev 1, MAY/01/2003

SB 30-9533 Rev 1, OCT/02/1992

SB RB.211-30-D621 Rev OR, MAY/01/2003

ORI M00038 COMPLIED WITH.

REFERENCE OPERATOR ORDER NUMBER 1011

### SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED

HONEYWELL CERTIFIES THAT THE WORK SPECIFIED IN BLOCKS 12/13 WAS CARRIED OUT IN ACCORDANCE WITH EASA PART 145 AND, WITH RESPECT TO THAT WORK, THE COMPONENT IS CONSIDERED READY FOR RELEASE TO SERVICE UNDER EASA PART 145 APPROVAL NUMBER: EASA 145.4127

14. Certifies the items identified above were manufactured in conformity to:		19. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulation specified in Block 13	
<input type="checkbox"/> Approved design data and are in a condition for safe operation.		Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.	
<input type="checkbox"/> Non-approved design data specified in Block 13			
15. Authorized Signature:	16. Approval/Authorization No.:	20. Authorized Signature:	21. Approval/Certificate No.:
		B - <i>Brian Boyle</i>	ZX4R716M
17. Name (Typed or Printed):	18. Date (m d y):	22. Name (Typed or Printed):	23. Date (m d y):
		Brian Boyle	FEB 08 2013

### User / Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Block 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

# Honeywell

Commercial

Repair Station # ZX4R716M

## Configuration And Findings Evaluation

Repair Order: 2013-312861891-001  
312861893  
Customer P/O: 4600113961  
Part Number: 7612B000  
Mods: 413FC-CA449-CA450

Customer: 331109 ROLLS ROYCE PLC  
Orig Cust:  
Part Desc: PRESSURE REGULATING AND SHUT  
Serial No: A351042-8

Series/Issue/Amdts:

Quantity: 1  
Aircraft tail #:   
Model #:   
TIMES / CYCLES  
Time Since New:   
Time Since Overhaul:   
Time Since Repair:   
Ship Date:   
Aircraft S/N#:   
Engine S/N:   
HH.DD (HH:MM)  
Date on:   
Date off:   
Received Date: 20 SEP 2012  
Date off:   
Alternate S/N:   
Cycles Since New:   
Cycles Since Overhaul:   
Cycles Since Repair:

## CUSTOMER REASON FOR RETURN

EX STORE-TO BE MADE SERVICABLE

## GENERAL CONDITION AS RECEIVED (HIDDEN DAMAGE)

Condition Received Text:

Unit received internally and externally dirty. All nicks, dents, and scratches non-detrimental to the function of the valve.

Reason for return Code: OTHER (DESCRIBE IN REMARKS)

Removal Type: Unscheduled

## DETAIL DISASSEMBLY / EVALUATION FINDINGS

Failure Description:

Unit fails port leakage check requirement. Maximum port leakage allowed is 0.54 LB, actual leakage is 0.69 LB.

Findings:

Unit fails port leakage due to worn valve body and head valve.

Related Area: Non-conformance: PORT LEAKAGE HIGH

Recurrent Failure:

Failed Part

Part Name

Condition:

Primary Failure

7575B012

HEAD, VALVE, PRESS. REG AND SHUT

Crack(s)/Cracked

Yes

7573B140

VALVE BODY ASSEMBLY

Worn

Yes

Failure Description:

Valve fails full opening pressure check. Valve should be fully open by 2.0 LB, actual full open pressure was 6.9 LB.

Findings:

Head valve rings worn, regulator datum, seat, and spring worn.

Related Area: Non-conformance: EXCEEDS OPENING PRESSURE

Recurrent Failure:

Failed Part

Part Name

Condition:

Primary Failure



Commercial

**Honeywell**

Repair Station # ZX4R716M

**Configuration And Findings Evaluation**

Repair Order: 2013-312861891-001  
312861893  
Customer P/O: 4600113961  
Part Number: 7612B000  
Mod: 413FC-CA449-CA450  
Series/Issue/Amdts:  
Customer: 331109 ROLLS ROYCE PLC  
Orig Cust:  
Part Desc: PRESSURE REGULATING AND SHUT Serial No: A351042-8

Quantity: 1 Ship Date: Received Date: 20 SEP 2012

7646B120	SEAT ASSEMBLY, VALVE	Worn	Yes
7573B070	HEAD ASSY, VALVE	Worn	Yes
7573B054	SPRING, COMPRESSION	Worn	Yes
7612B020	PISTON RING ASSY	Worn	Yes
7612B033	BEARING RING	Worn	Yes
7612B010	PISTON RING ASSY	Worn	Yes
7612B034	BEARING RING	Worn	Yes

**SERVICE BULLETINS / AUTHORIZING DOCUMENTS**

**Authorizing Technical Document**

Doc#: 30-309 Rev: 2 Date: 04/01/1994  
Doc#: 30-326 Rev: 1 Date: 05/01/2003  
Doc#: 30-9533 Rev: 1 Date: 10/02/1992  
Doc#: RB.211-30-D621 Rev: OR Date: 05/01/2003  
Doc#: CMM 30-21-01 Rev: 16 Date: 02/10/2010

**WORK PERFORMED / COMMENTS TO CUSTOMER**

**Workscope Performed / Summary of Actions Taken**

Overhauled and modified.  
Primary failure due to excessive leakage. Disassembled, cleaned, modified, and overhauled per cmm.  
Replaced rings, gaskets, bolts, regulator head, spring, datum, filter, valve housing, reworked outlet cover, solenoid, indicator plate assembly due to wear and modification per S/B's. Unit was modified due to we do not have the capabilities to repair or recertify a 7612B000, so unit was modified to a 7646B000 per S/B's 30-309 ref.(Rolls Royce SB30- 9533)and 30-326 ref.( Rolls Royce SB30-D621) "Reported fault not confirmed"

Action Taken Code	Overhaul Modified
Customer Confirmed Removal Reason:	No
Evaluation Type	Evaluated - Significant Fault Found

**FINAL CONFIGURATION**

Part No: 7646B000



S/N: A351042-8



Series/Issue/Amdts:

Mod: 413FC-CA449-398FC-A14986



MECHANIC/ANALYST Grover Heath

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DATE: 03 DEC 2012

## ANALYTICAL CHECK SHEET FORM

**Honeywell**Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716MCustomer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570 Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8 Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7612B000	A351042-8	M	0	PRESSURE REGULATING AND SHUT	5005682570
OUT	7646B000	A351042-8	M			

REWORK CODE :

CONDITION CODE :

ACN PORT LEAKAGE HIGH

ACCT IND :

AAR EXCEEDS OPENING PRESSURE

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	5769C000		R	1	VALVE, SOLENOID	5005891678
OUT	5769C000-002		R			

REWORK CODE :

350 351

CONDITION CODE :

6110 See comments

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	3001S04504002AH		U	4	SCREW, CAP SCKT	
OUT	3001S04504002AH		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	SP122A		U	4	WASHER	
OUT	SP122A		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	5769C040		U	1	COIL ASSEMBLY	
OUT	5769C040		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	5711C027		U	1	CORE	
OUT	5711C027		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :



## ANALYTICAL CHECK SHEET FORM

**Honeywell**

Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716M

Customer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000

Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570      Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8      Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	..5590C070		U	1	SLIDER, ASSY	
OUT	5590C070		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	..5769C020		U	1	SEAT ASSEMBLY	
OUT	5769C020		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	..3001S04506005CH		U	2	SOCKET HEAD SCREW	
OUT	3001S04506005CH		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	..3001S04506007CU		U	2	SCREW, CAP SOCKET	
OUT	3001S04506007CU		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	..SP126B		U	1	WASHER	
OUT	SP126B		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	..1060S044		U	1	UNION	
OUT	1060S044		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

## ANALYTICAL CHECK SHEET FORM

**Honeywell**Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716MCustomer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570 Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8 Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B094		U	2	BOLT, MACH DBLE HEX	
OUT	7646B094		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B093		U	2	BOLT, MACH DBLE HEX	
OUT	7646B093		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B095		N	1	GASKET	
OUT	7646B095		N			

REWORK CODE :

CONDITION CODE :

6360 100% upon Removal

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	1242S053		U	4	BOLT	
OUT	1242S053		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	A206A14		N	2	SCREW	
OUT	A206A14		N			

REWORK CODE :

CONDITION CODE :

4300 Stripped

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B153		U	1	HOUSING	
OUT	7573B153		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :



## ANALYTICAL CHECK SHEET FORM

**Honeywell**Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716MCustomer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570 Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8 Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	1001S076		U	1	NUT	
OUT	1001S076		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B057		N	1	ADJUSTER- DATUM UNIT	
OUT	7646B133		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B054		N	1	SPRING, COMPRESSION	
OUT	7646B096		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B070		N	1	HEAD ASSY, VALVE	
OUT	7646B150		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B120		N	1	SEAT ASSEMBLY, VALVE	
OUT	7646B140		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B058		N	1	GASKET	
OUT	7646B058		N			

REWORK CODE :

CONDITION CODE : 6360 100% upon Removal

ACCT IND :

ANALYST REMARKS :

## ANALYTICAL CHECK SHEET FORM

**Honeywell**Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716MCustomer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570 Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8 Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	.1010Q140		N	1	FILTER, ASSY	
OUT	1010Q140		N			

REWORK CODE :

CONDITION CODE : 7220 Dirty / Contamination

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	AS20625		N	1	NUT	
OUT	AS20625		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	.7573B029		N	1	BUSH	
OUT	7573B029		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	.1424S047		N	1	WASH, COPPER	
OUT	1424S047		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	.7573B083		N	1	SHAFT	
OUT	7573B083		N			

REWORK CODE :

CONDITION CODE : 690 Rust  
6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	.7573B084		N	1	WASHER	
OUT	7573B084		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :



## ANALYTICAL CHECK SHEET FORM

Honeywell

Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716MCustomer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570 Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8 Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B026		U	1	PLATE	
OUT	7573B026		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	AS21536		N	6	BOLT, 1/4X28	
OUT	AS21536		N			

REWORK CODE :

CONDITION CODE : 6110 See comments

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B033		N	3	GASKET	
OUT	7573B033		N			

REWORK CODE :

CONDITION CODE : 6730 Worn  
6710 See comments

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B085		R	1	POSITION INDIC PLATE	5005891779
OUT	7646B984		R			

REWORK CODE : 350

CONDITION CODE : 6110 See comments

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B056		N	1	PLATE, ID	
OUT	7646B056		N			

REWORK CODE :

CONDITION CODE : 6110 See comments

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B112		U	1	BODY	
OUT	7646B112		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

## ANALYTICAL CHECK SHEET FORM

Honeywell

Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716MCustomer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570 Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8 Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B086		R	1	OUTLET	5005891882
OUT	7646B983		R			

REWORK CODE : 350

CONDITION CODE : 6110 See comments

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	AS21407		U	9	BOLT	
OUT	AS21407		U			

REWORK CODE :

CONDITION CODE :

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B039		N	1	GASKET	
OUT	7573B039		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7575B012		N	1	HEAD, VALVE, PRESS. REG AND SHUT	
OUT	7575B012		N			

REWORK CODE :

CONDITION CODE : 3560 Crack(s)/Cracked

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7612B020		N	1	PISTON RING ASSY	
OUT	7612B020		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7612B033		N	1	BEARING RING	
OUT	7612B033		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :



## ANALYTICAL CHECK SHEET FORM

Honeywell

Repair Facility :Honeywell R&O, Anniston, AL Repair  
Station No :ZX4R716MCustomer PO : 4600113961  
Notification No: 000312861891  
Outline No : 7612B000  
Mod To Outline. :7646B000Customer : 331109 ROLLS ROYCE PLC  
Service Order No : 5005682570 Sales Order No : 4238141  
Serial No: A351042-8  
Mod to S/N : A351042-8 Model No. :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7612B010		N	1	PISTON RING ASSY	
OUT	7612B010		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7612B034		N	1	BEARING RING	
OUT	7612B034		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B023		N	1	PRESSURE PICK-UP	
OUT	7573B023		N			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND :

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7573B140		N	1	VALVE BODY ASSEMBLY	
OUT	7646B070		R			

REWORK CODE :

CONDITION CODE : 6780 Worn

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :

	Material	Serial No.	Disp	Qty	Description	Service Order #
IN	7646B010		N	1	POSITION INDIC ASSY	
OUT	7646B010		N			

REWORK CODE :

CONDITION CODE : 6110 See comments

ACCT IND : 58 MOD - charge per S/B

ANALYST REMARKS :