	STAT	ION	]						BOE	ING CARD NO.	
	TAIL NO.		-		$\mathcal{A}$	RAFIA			29-R	01	
		TF	SAS 767							INE CARD NO.	
	DA	IE			TASK CARD						
SKIL	-L	WORK AR	EA	RELATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION	
AIR	PL TASK	W/B FAI	IRING	TIT	LE		STRUCTURAL ILLUSTRATION	REFERENCE	003 AP	APR 22/08	
RE	PLA	СE	SYSTEM	C AIR DRIV	IR DRIVEN PUMP				AIRPLANE ENGINE		
		ZONES					ACCESS PANELS		NUT		
19	195				195RL	195SL NOTE					
MECH	INSP								٩	MPD ITEM NUMBER	
		REPLA	CE THE SY	STEM C AIR	DRIVEN	PUMP.			29-11-03-4A		
									•		
		AIRPL	NE NOTE:	THIS TAS	K IS AP	PLICABLE TO AL	L AIRPLANE				
				MODELS E	ХСЕРТ Т	HE 767-400ER.					
		ACCESS	S NOTE:	SPECIAL AC	CESS 10	04 REQUIRES A	CESSING THE				
				PER MM REF	32-00-	15.	WEEL DOORS				
		THIS	CARD IS	NOT A SCHE	DULED M	AINTENANCE TAS	K. IT IS A	1	-		
			ONENT CHA	NGE CARD A	ND IT I HEDINED	S PROVIDED FOR	OPERATOR				
		APPEN	NDIX A OF	THE 767 M	AINTENA	NCE PLANNING I	ATA (MPD)				
		CHANC	ENI, D622 Ge cards.	21001, FOR /	A DESCR	IPIION OF THE	COMPONENT				
		1. <u>Rer</u>	nove the	ADP for th	<u>e Cente</u>	<u>r Hydraulic Sy</u>	<u>/stem_</u>				
		Α.	Equipme	ent							
			(1) Ge	eneral Boom	Hoist	- A20001-79 (F	ecommended)				
			(2) Ho	oist Adapte	r - A29	001-1					
		В.	Referer	nces							
			(1) AM	IM 06-41-00	/201, F	uselage Access	Doors and Pane	ls			
			(2) AM	IM 29-11-00	/201 <b>,</b> M	ain (Left, Rig	ht and Center)	Hydraul	ic Sys	tems	
			(3) AM	IM 29-11-00	/501 <b>,</b> M	ain (Left, Rig	ht and Center)	Hydraul	ic Sys	tems	
			(4) AM	IM 32-00-15	/201 <b>,</b> M	ain Gear Door	Locks				
			(5) AM	IM 36-00-00	/201, P	neumatic – Ger	neral				
EFF	ECT	IVITY					SYSTEM C ATD N		IMP		
	-					KEFLALE	SISIEM CAIR D		טויור <u>י</u>		
						29-11-03-4A	29-R01	PAGE 1	OF 14	AUG 22/99	

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AIRLINE CARD NO.

MECH	INSP										
		C.	Remove th	e ADP (Fig. 402	)						
			<u>WARNING</u> :	USE THE PROCED LOCKS. THE DO TO PERSONS OR	PROCEDURE IN AMM 32-00-15/201 TO INSTALL THE DOOR THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURIES DNS OR DAMAGE TO EQUIPMENT.						
			(1) Oper (AMM	the door for t 32-00-15/201).	he right wheel	well and in	stall a door	lock			
			(2) Remo (AMM	ve the pressure 29-11-00/201).	e from the center hydraulic system and reservoir •						
			(3) Remo	ve the pneumati	c power (AMM 3	6-00-00/201)					
			(4) Oper D0-N	this circuit b OT-CLOSE tag:	reaker on the	overhead pan	el, P11, and	install a			
			(a)	11D31, HYDRAUL	JLIC AIR PUMP						
			(5) At t (AMM	he aft, left wi 06-41-00/201).	ng-body fairin	g, open the	ADP access p	anel, 195SL			
			(6) Disc valv	onnect the air e (5) (Fig. 401	pressure line (8) from the ADP modulating 1).						
			(7) Disc	onnect the elec	trical connect	or (9).					
			(a)	To prevent ina clamps that ar	advertent damage, disconnect the wire bundles and re connected to the ADP and tubing.						
				1) Inspect th in Service	e ADP wiring for external chafing as recommended E Letter 767-SL-29-28-A.						
			(8) Remo conr	ve the nuts (7) ect the bonding	), the screws (5), and the washers (6) that g jumper assemblies (3) to the ADP.						
			(9) Loos the	en the clamp (1) clamp (13).	3) on the air	inlet side o	f the ADP an	d remove			
			(10) Loos to c	en the clamp (4 ne side.	) on the exhau	st duct (3)	and slide th	e clamp (4)			
EFF	ECTI	VITY -			REPLACE	SYSTEM C AI	R DRIVEN PUM	P			
					29-11-03-4A	29-r01	PAGE 20	F 14 APR 22/0	36		

SAS CARD

AIRLINE CARD NO.

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MECH	INSP		
		(11)	Disconnect the self-seal fittings (7) at the ADP and install caps on the ADP ports.
			<u>NOTE</u> : To prevent fluid loss, do not disconnect the hydraulic lines (10, 11, 12) from the self-seal fittings (7). Disconnect the self-seal fittings only where they attach to the unions on the ADP. Do not disconnect the fittings at the B-nut near the hydraulic line.
		(12)	Install the hoist with the adapter under the ADP.
			NOTE: The ADP weighs approximately 110 pounds.
		(13)	Use a strap to hold the ADP (8) to the hoist adapter (Fig. 402).
		(14)	Move the hoist up a small distance to remove the weight of the ADP from the mounting bolts.
		(15)	At the bottom aft attachment, remove the two screws (17) from the bolt head retainer (19) and remove the retainer (19).
		(16)	At the top and bottom aft attachments, remove the bolt (21), nut (9), washers (10), and bushings (12, 20).
			<u>NOTE</u> : Identify the bolts (21), nuts (9), washers (10), and bushings (12, 20) for the installation procedure.
		(17)	Remove the two bolts (14), washers (15), and plate assembly (16) at the top aft attachment.
		(18)	Lower the ADP a small distance to get better access to the forward attachment.
		(19)	At the forward attachment, remove the bolt (13), nut (9), washers (10), and bushings (11, 12).
		(20)	Lower the ADP away from the airplane and remove it from the hoist.
		(21)	Install plugs in the ADP ports.
	2	. <u>Install</u>	the ADP for the Center Hydraulic System
EFF	ECTIV	ITY	REPLACE SYSTEM C AIR DRIVEN PUMP

29-11-03-4A 29-R01

		29-R01								
			SAS 767	AIRLINE CARD NO.						
			TASK CARD							
MECH	INSP									
		Α.	Equipment							
			(1) General Boom Hoist - A20001-79 (Recommended)							
			(2) Hoist Adapter - A29001-1							
			(3) Bonding Meter							
		В.	Consumable Materials							
			(1) D00633 Grease - BMS 3-33 (Preferred)							
			(2) DOOO13 Grease - MIL-PRF-23827 (Supersedes MIL-G-2	3827) (Alternate)						
			(3) DOOO15 Grease - BMS 3-24 (Alternate)							
			(4) AOO247 Sealant – BMS 5–95							
			(5) BOO316 Solvent – Aliphatic Naphtha							
			(6) GOOO34 Cotton Wiper - Cheesecloth BMS 15-5							
		с.	Parts							
EFI	FECTIVI	ТҮ	REPLACE SYSTEM C AIR DF	IVEN PUMP						
			29-11-03-4A 29-R01 F	AGE 4 OF 14 AUG 22/07						

AIRLINE CARD NO.

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	AMM		A	IPC				
FIG	ITEM	NOMENCLATURE	SUBJECT	FIG	ITEM			
401	6	Pump Assembly	29-11-03	01	240			
	13	Clamp	36-11-01	60	140			
402	3	Jumper Assembly	29-11-03	01	4			
		Screw						
	6	Washer						
		Nut						
	10							
	11	Bushing			05			
	12	Bushing			85			
	13	Bolt			60			
14 15 16		Bolt			53			
		Washer			65			
		Plate Assembly		1	100			
	17	Screw		1	54			
	18	Washer			70			
	19	Retainer			110			
	20	Bushing			90			
	21	Bolt			68 73			
	22	Washer						
D.	Reference         (1)       AMM         (2)       AMM         (3)       AMM         (4)       AMM         (5)       AMM         (6)       AMM	es 06-41-00/201, Fuselage Access 12-12-01/301, Hydraulic System 12-13-05/301, Air Driven Pump 12-25-01/301, Exterior Cleanin 20-10-21/601, Electrical Bondi 20-10-22/701, Metal Surfaces - 24-22-00/201, Electrical Power	Doors and Panels s g ng Cleaning/Painting – Control					
	(7) AMM	29–11–00/201, Main (Left, Right and Center) Hydraulic Systems						

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~ • •	A BOEING
SAS	767
	TASK CARD

AIRLINE CARD NO.

					TASK CARD					
MECH	INSP									
			(9)	AMM 29-11-00/501, ma	ain (Left, Rig	ht and Center) Hydrauli	c Systems			
			(10)	AMM 32-00-15/201, Ma	ain Gear Door	Locks				
			(11)	AMM 36-00-00/201, P	neumatic – Gen	eral				
		Ε.	Inst	all the ADP (Fig. 40)	402)					
			(1)	Put the ADP on the	he lift adapter of the hoist.					
			(2)	Use a strap to hold	the ADP to th	the hoist adapter (Fig. 402).				
			(3)	Move the ADP into t	he mounting po	sition with the hoist.				
			(4)	Apply a thin layer and bushings (11, 1)	of grease to a 2).	ll mating surfaces of t	he bolt (13)			
			(5)	Install the bushing	(12) with gre	ase.				
			(6)	At the forward atta put the bushings (1 position.	ittachment, (11, 12) and washers (10, 22) in the correct					
			(7)	Install washers (24	) to get the g	ap shown.				
			(8)	Insert a bolt (13) a more than the torqu	and tighten th e necessary to	e nut (9) to 95-135 pou turn the nut on the bo	nd-inches lt.			
			(9)	Adjust the hoist to attachments.	align the ADP	to the top and bottom	aft			
			(10)	At the top aft atta washers (15) and bo (AMM 20-10-23/401).	chment, instal lts (14) and i	l the plate assembly (1 nstall new safety wire	6) with two			
			(11)	Apply a thin layer of and bushings (12, 20	of grease to a D).	ll mating surfaces of t	he bolt (21)			
			(12)	Install a bushing (	12) with greas	e.				
			(13)	At the top and botto put the bushings (1) position.	om aft attachm 2, 20) and was	ents, hers (10, 22) in the co	rrect			
			(14)	Install washers (24	) to get the g	ap shown.				
EFFECTIVITY					REPLACE	SYSTEM C AIR DRIVEN PU	MP			

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MECH	INSP											
		(15	) Insert a bolt (21 more than the tor	) and tighten th que necessary to	e nut (9) to turn the nut	95–135 poun : on the bol	d-inches t.					
		(16	) Apply a fillet se	al at the head e	end of the bol	.ts (13, 21)	-					
		(17	) At the bottom aft position and inst new safety wire (	attachment, put all with washers AMM 20–10–23/401	attachment, put the bolt retainer (19) in its all with washers (18) and screws (17) and install MM 20–10–23/401).							
		(18	) Remove the strap the hoist.	that holds the A	at holds the ADP to the hoist adapter and remov							
		(19	) Connect the self-	seal fittings (7	'), to the ADF	, (6) (Fig.	401).					
			(a) Torque the p 500-700 poun	ressure line sel d-inches.	.f-seal fittir	ıg (11) to t	he ADP (6)					
			(b) Torque the s 400-500 poun	upply line self- d-inches.	•seal fitting	(12) to the	ADP (6)					
			(c) Torque the c (6) 250-300	ase drain line self-seal fitting (10) to the ADP bound inches.								
		<u>CA</u>	<u>UTION</u> : QUICKLY CLEA HYDRAULIC FL	N THE INSTALLATI UID CAN CAUSE DA	ON AREA OF AL	.L HYDRAULIC \IRPLANE EQU	FLUID. IPMENT.					
		(20	) Clean all hydraul (AMM 12–25–01/301	ic fluid from th ).	uid from the installation area							
		(21	) Connect the air p	ressure line (8)	to the ADP m	odulating v	alve (5).					
		(22	) To connect the bo	nding jumpers to	the ADP, do	these steps	:					
			(a) Use the solv bonding surf	ent and the chee aces (AMM 20-10-	esecloth to cl 22/701).	.ean and dry	the					
			<u>NOTE</u> : The b good	onding surfaces electrical grour	must be clear nd path.	ı and dry to	provide a					
		(b) Install the washers (6), the screws (5), and the nuts (7) that connect the bonding jumpers to the ADP.										
EFI	FECTI	VITY		REPLACE	SYSTEM C AIR	DRIVEN PUM	P					
				29-11-03-4A	29-R01	PAGE 70	F 14 APR 22/08					

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AIRLINE CARD NO.

MECH	INSP		
			(c) Use the bonding meter to measure the resistance between each bonding jumper terminal and the ADP near the bonding jumper connection. (AMM 20–10–21/601).
			<u>NOTE</u> : If necessary, you can remove a small area of the surface finish to make the measurement.
			(d) If the resistance is greater than 0.0025 ohms, then disassemble the bonding jumper connection, repeat the cleaning and assembly steps, and measure the resistance again.
			(e) If you removed some of the surface finish from the ADP, then repair the surface finish.
		(23)	Connect the electrical connector (9) to the modulating valve (5).
			(a) Reconnect the wire bundles and clamps to the ADP and tubing.
			<ol> <li>Reroute ADP wiring to prevent external chafing as recommended in Service Letter 767–SL–29–28–A. Make sure to keep wires at least 0.5–inch from the ADP assembly and supporting structure.</li> </ol>
		(24)	Put the exhaust duct (3) in its position and install the clamp (4).
		(25)	Move the inlet duct clamp (13) to the inlet joint and tighten the clamp (13).
		(26)	Examine the oil level in the ADP gearbox and add oil if it is necessary (AMM 12–13–05/301).
		(27)	Do the servicing steps to the reservoir for the center hydraulic system (AMM 12–12–01/301).
		(28)	Pressurize the reservoir for the center hydraulic system (AMM 29–11–00/201).
		(29)	Supply electrical power (AMM 24-22-00/201).
		(30)	Supply pneumatic power (AMM 36-00-00/201).
		(31)	Do the ADP Overspeed Shutdown Test (AMM 29-11-00/501).
			<u>NOTE</u> : If the ADP does not operate, reset the ADP TEST/RESET switch (AMM 29-11-00/501).
EFF	ECTIV		
			KEPLALE STSTEM CATE DRIVEN PUMP
			29-11-03-4A 29-R01 PAGE 8 OF 14 APR 22/08



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SAS 767 TASK CARD

AIRLINE CARD NO.

MECH	INSP											
		(32)	Make sure there are ADP.	no leaks at t	he hydraulic co	onnectior	ns to the					
		(33) Put the C DEMAND HYD PUMPS AIR switch, on the hydraulic control panel, in the AUTO position.										
		(34)	(34) Make sure the slats and flaps are in the fully retracted (zero degree) position.									
		(35)	(35) Make sure the speed brakes are stowed.									
		(36)	(36) Make sure the L, R, and C AIR SUPPLY ISLN valves are open.									
		(37)	Make sure air condit	ioning packs,	cargo heat, ar	nd anti-i	ice are off.					
		<u>WARN</u>	<u>NG</u> : SLATS AND FLAPS WILL EXTEND WHEN THE FLAP HANDLE IS REPOSITIONED. TO AVOID INJURY TO PERSONNEL, MAKE SURE THE SLAT AND FLAP AREAS ARE CLEAR BEFORE MOVING THE FLAP HANDLE.									
		(38) Put the FLAP handle to the 5–30 position, on the P10 control stand.										
		(39)	Make sure system pre motion.	pressure remains above 2500 psi throughout flap								
			<u>NOTE</u> : A momentary p	pressure drop	does not indica	ate test	failure.					
		(40) Put the FLAP handle in the zero (FLAPS UP) detent position.										
		(41)	Put the C DEMAND HYD panel, to the OFF po	PUMPS AIR sw psition.	itch, on the hy	/draulic	control					
		(42)	Make sure the PRESS panel, is illuminate placed in the OFF po	light for the ed for 1 to 3 osition.	ADP, on the hy seconds after 1	/drualic the ADP s	control switch is					
		(43)	Make sure the C HYD O to 160 psi.	PRESS indicat	ion on EICAS EL	_EC/HYD c	lisplay reads					
	(44) If you replaced the ADP because of a mechanical failure or other condition which could add contamination, you must flush the hydraulic system (AMM 29–11–00/201).											
	ECIIVIIY			REPLACE	SYSTEM C AIR I	RIVEN PU	JMP					
				29-11-03-4A	29-R01	PAGE 9	OF 14 APR 22/08					

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29-r01



AIRLINE CARD NO.

_										
м	IECH	INSP								
			<u>CAUT</u> 1	<u>ION</u> :	QUICKLY CLEAN HYDRAULIC FLUI	THE INSTALLATI D CAN CAUSE DA	ON AREA OF ALL MAGE TO THE AJ	- HYDRAULIC   RPLANE EQUI	LUID. MENT.	
			(45)	Clea (AMM	n all hydraulic 12-25-01/301).	fluid from th	e installatior	n area		
			(46)	Clos fair	e the ADP acces ing (AMM 06-41-	s panel, 195SL 00/201).	, at the aft,	left wing-bo	ody	
			<u>WARN</u>	<u>ING</u> :	USE THE PROCED THE DOORS OPEN PERSONS OR DAM	URE IN AMM 32- AND CLOSE QUI AGE TO EQUIPME	00-15/201 TO F CKLY AND CAN ( NT.	REMOVE THE DO CAUSE INJURIN	OOR LOCK ES TO	S.
			(47)	Remo for	ve the door loc the right wheel	k for the land well (AMM 32–	ing gear door 00-15/201).	and close tl	ne door	
			(48)	Remo 24-2	ve the electric 2-00/201).	al power if it	is not necess	sary (AMM		
			(49)	Remo (AMM	ve the pneumati 36-00-00/201).	c power if it	is not necessa	ary		
		ECTT								
	LI 1'		**!!			REPLACE	SYSTEM C AIR	DRIVEN PUMP		
						29-11-03-4A	29-R01	PAGE 10 OF	14 APR	22/08



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	STAT	TION										BOE	ING CARD NO.
	TAIL NO.					$\langle n \rangle$	B	DEIN	ſG			29-R	02
	DA	ATE		SAS	5	e e e e e e e e e e e e e e e e e e e		767				AIRL	INE CARD NO.
					TASK CARD								
SKI		WORK ARE	EA	RELATED	TASK			INTERVAL			PHASE	MPD REV	TASK CARD REVISION
ENG	IN TASK	ENGIN/S	TRUT		TI	TLE			STRUCTURAL I	LLUSTRATION REI	FERENCE	003 AP	AUG 22/08 PLICABILITY
RE		CE	ENGI	NE DRIVEN	I HYD	RAULIC	C PUMP	(EDP)				AIRPLAN	E ENGINE
		ZONES							ACCESS PANEL	.S		ALL	ALL
41	0 4	420		41	4AR	416AF	r 418	AR 424AR	426AR	428AR			
MECH	INSP	_		i								٩	MPD ITEM NUMBER
		REPLAC	E THE	ENGINE-D	RIVE	N HYDR	RAULIC	PUMP (EDI	·).			29–1	1-05-4A
		THIS COMPO CONVE APPEN DOCUM CHANG	CARD ONENT INIENC IDIX A IENT, D IE CAR	IS NOT A CHANGE CA E DURING OF THE 7 622TOO1, DS.	SCHE RD A UNSC 767 M FOR	DULED ND IT HEDULE AINTEN A DESC	MAINT IS PR ED MAI NANCE CRIPTI	ENANCE TA: OVIDED FOI NTENANCE / PLANNING I ON OF THE	SK. IT IS R OPERATO ACTIVITIE DATA (MPD COMPONEN	A R S. SEE ) T			
		1. <u>Rem</u>	<u>iove t</u>	<u>he Engine</u>	<u>-Dri</u>	<u>ven P</u>	ump (E	<u>DP)</u> (Fig.	401)				
		Α.	Equi	pment									
			(1)	Containe capacity	er (f / - C	or hyd ommerd	drauli cially	c fluid), Available	1-gallon e				
		в.	Refe	rences									
			(1)	AMM 29-1	1–00	/201,	Main	(Left, Rig	ght and C	enter) Hy	/draul	ic Sys	tems
			(2)	AMM 71-1	1-04	/201,	Fan C	owl Panel	6				
			(3)	AMM 71-1	1–06	/201,	Core	Cowl Pane	ls				
			(4)	AMM 78-3	31-00	/201,	Thrus	t Reverse	r System				
		c.	Proc	edure									
			(1)	Remove t reservoi	he p rs (	ressur AMM 29	re fro 9-11-0	m the lef <sup>.</sup> 0/201).	t and rig	ht hydrau	ulic s	ystems	and
			(2)	Open the DO-NOT-C	ese c CLOSE	ircuit tags:	t brea :	kers on tl	he overhe	ad panel,	, P11,	and a	ttach
				(a) 11L	.14,	HYDRAU	ULIC L	ENG PUMP	DEPRESS				
EFF	ECI	TATIX _					REP	LACE	ENGINE	DRIVEN HY	DRAUL	IC PUM	P (EDP)
							29	-11-05-4A	29-R02	PA	AGE 1	OF 11	APR 22/07

29-R02		
AIRLINE	CARD	NO.

			BOEING CARD NO.
		( PAEINE	29-R02
	S		AIRLINE CARD NO
	Ŭ	TASK CARD	
	(h)		
	(0)	TILZS, HIDRAULIC R ENG FUMF DEFRESS	
(3)	0pen	the fan cowl panels (AMM 71–11–04/201).	
<u>WARN</u>	<u>ING</u> :	DO THE THRUST REVERSER DEACTIVATION PROCEDURE OPERATION OF THE THRUST REVERSER. ACCIDENTAL THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR EQUIPMENT.	TO PREVENT THE OPERATION OF THE DAMAGE TO
(4)	Do t Main	his procedure: Thrust Reverser Deactivation fo tenance (AMM 78-31-00/201).	r Ground
(5)	0pen	the core cowl panels (AMM 71-11-06/201).	
<u>WARN</u>	<u>ING</u> :	OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN THRUST REVERSERS. IF YOU DO NOT OBEY THE INST TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.	YOU OPEN THE RUCTIONS INJURY
(6)	0pen	the thrust reverser (AMM 78-31-00/201).	
(7)	Disc valv	onnect the electrical connector (9) from the dep e (8).	pressurization
(8)	Hold it d	a container below the pump (4) to catch the hydrains from the pump hydraulic connections.	draulic fluid if
<u>CAUT</u>	<u>ION</u> :	BE CAREFUL WHEN YOU DISCONNECT THE SUPPLY HOSE AND A CLOSED HOSE. DO NOT COIL THE HOSE. A CL CAUSE FAILURE OF THE PUMP.	TO PREVENT KINKS LOSED HOSE CAN

(9) AIRPLANES WITHOUT A RIPPLE DAMPER;

Disconnect the check valve (11) from the adapter (21) on the pump (4).

(10) AIRPLANES WITH A RIPPLE DAMPER;

Disconnect the check valve (11) from the ripple damper (28) on the pump.

2

8 6

8

MECH INSP

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AIRLINE CARD NO.

					TASK CARD		
MECH	INSP						
			<u>NOTE</u> :	Do not disco check valves disconnect t hoses.	nnect the hydr (11, 13)or t hese hoses, hy	aulic hoses (1, 2, 3) he self-seal fitting (′ draulic fluid can drain	from the 10). If you n from the
		(1)	1) Discon pump (	nect the self 4).	-seal fitting	(10) from the elbow (2)	7) on the
		(1)	2) Discon (4).	nect the case	drain hose (3	) from the adapter (17	) on the pump
		<u>C.</u>	AUTION: D C G	O NOT LET THE ONTAMINATION EARBOX.	HYDRAULIC FLU BY HYDRAULIC F	ID FLOW INTO THE GEARBO LUID CAN CAUSE DAMAGE	DX. TO THE
		(1)	3) Loosen gearbo	the four nut x approximate	s (7) which at ly three turns	tach the pump (4) to th	ne engine
			<u>NOTE</u> :	If you must the shell of the nut.	loosen the nut the nut to re	s (7) more than three t lease the self-locking	turns, hit property of
		(1)	4) Turn t larger	he pump (4) c ends of the	lockwise until slots on the p	the nuts (7) can go tl ump.	nrough the
		(1)	5) Remove	the pump (4)	from the engi	ne gearbox.	
		(1)	6) Remove	the elbow (2	7) at the supp	ly port of pump (4).	
		(1	7) AIRPLA	NES WITH A RI	PPLE DAMPER;		
			Remove pump (	the ripple d 4).	amper (28) fro	m the pressure port of	the
		(1)	8) AIRPLA	NES WITHOUT A	RIPPLE DAMPER	;	
			Remove	the adapter	(21) from the	pressure port of the pu	ump (4).
		(1)	9) Remove	the union (1	5) from the su	pply port on the pump	(4).
		(2	)) Remove	the adapter	(17) at the ca	se drain port of the pu	ump (4).
EFF	ECTIV	VITY			REPLACE	ENGINE DRIVEN HYDRAUL	IC PUMP (EDP)

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AIRLINE CARD NO.

29-R02

BOEING 767

SAS



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29-R02

SAS **BOEING** 767 TASK CARD

AIRLINE CARD NO.

				TASK CARD
MECH	INSP			
			(4)	AMM 71-00-00/501, Power Plant - General
			(5)	AMM 71-11-04/201, Fan Cowl Panels
			(6)	AMM 71-11-06/201, Core Cowl Panels
			(7)	AMM 78-31-00/201, Thrust Reverser System,
		D.	Proc	edure
			(1)	Lubricate the components which follow with hydraulic lubricant or hydraulic fluid:
				(a) AIRPLANES WITHOUT A RIPPLE DAMPER;
				0-rings (16, 18, 20, 22, 24)
				(b) AIRPLANES WITH A RIPPLE DAMPER;
				0-rings (16, 18, 20, 29, 31)
				(c) AIRPLANES WITHOUT A RIPPLE DAMPER;
				Backup rings (19, 23)
				(d) AIRPLANES WITH A RIPPLE DAMPER;
				Backup rings (19, 30)
				(e) The threads on the union (15)
				(f) AIRPLANES WITHOUT A RIPPLE DAMPER;
				The threads on the adapter (21)
				(g) AIRPLANES WITH A RIPPLE DAMPER;
				The threads on the ripple damper (28)
			(2)	Install the O-ring (16) on the union (15).
			(3)	AIRPLANES WITHOUT A RIPPLE DAMPER;
				Install the O-rings (22, 24) and backup ring (23) on the adapter (21).
			(4)	AIRPLANES WITH A RIPPLE DAMPER;
EFF	ECTI	VITY -		REPLACE ENGINE DRIVEN HYDRAULIC PUMP (EDP)
				29-11-05-4A 29-R02 PAGE 5 OF 11 AUG 22/01

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BOEING CARD NO.
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		(Å	RAEIA	1 <b>F</b>	29-R02
		SAS C	767		AIRLINE CARD NO.
		0/10	TASK CARD		
MECH INSP					
		Install the O-rings damper (28).	s (29, 33) and	backup ring (3	0) on the ripple
	(5)	Install the O-rings (17).	(18, 20) and	backup ring (1	9) on the adapter
	(6)	Install the union ( the union (15) to 8	15) in the sup 55–945 pound–i	ply port of th nches (95–106	e pump (4). Tighten Nm.).
	(7)	AIRPLANES WITHOUT A	RIPPLE DAMPER	;	
		Install the adapter Tighten the adapter	• (21) in the p • (21) to 713-7	ressure port o 87 pound-inche	f the pump (4). s (79-88 Nm.).
	(8)	AIRPLANES WITH A RI	PPLE DAMPER;		
		Install the ripple Tighten the ripple	damper (28) in damper (28) to	the pressure 713-787 pound	port of the pump (4). -inches (79-88 Nm.)
	(9)	Install the elbow ( pump (4). Tighten Nm.).	27) on the uni the elbow (27)	on (15) in the to 855-945 po	supply port of the und-inches (95–106
	(10)	Lubricate the O-rin	ng (6) with eng	ine oil.	
	<u>CAUT</u>	<u>ION</u> : MAKE SURE YOU O-RING PREVENT	INSTALL THE O- S LEAKAGE OF O	RING ON THE PU IL FROM THE EN	MP DRIVE SPLINE. THE GINE GEARBOX.
	(11)	Install a new 0-rin	ng (6) on the p	ump drive spli	ne.
		<u>NOTE</u> : Do not put g lubricates t	grease on the p he drive shaft:	ump drive shaf spline.	t, the engine oil
	(12)	Make sure the seal gearbox is clear.	drain adjacent	to the pump (	4) on the engine
	(13)	If necessary, clean	n the seal drai	n on the engin	e gearbox.
	(14)	Lubricate the surfa silicone grease.	aces of the pum	p (4) and the	engine gearbox with
		<u>NOTE</u> : The grease w surfaces of	vill prevent a the pump (4) a	bond between t nd the engine	he gasket (5) and the gearbox.
EFFECTIVITY			REPLACE	ENGINE DRIVEN	HYDRAULIC PUMP (EDP)
			29-11-05-4A	29-R02	PAGE 6 OF 11 AUG 22/03

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AIRLINE CARD NO.

MECH	INSP			
			(15)	Make sure the gasket (5) is in good condition.
			(16)	If necessary, install a new gasket (5) on the engine gearbox.
			(17)	If the pump (4) is not filled with hydraulic fluid, add fluid through the case drain port.
			(18)	Put the pump (4) on the engine gearbox and carefully engage the pump drive shaft with the engine drive shaft.
			(19)	Turn the pump (4) to let the nuts (7) go through the larger ends of the slots on the pump.
			(20)	Turn the pump (4) counterclockwise until the small ends of the slots in the pump are hard against the studs on the engine gearbox.
			(21)	Tighten the nuts (7) to 260-320 pound-inches (29-36 Nm).
			<u>CAUT</u>	<u>ION</u> : DO A CHECK OF THE EDP SUPPLY HOSE FOR A KINKED OR CLOSED CONDITION. DAMAGE TO THE HOSE IS NOT EASY TO FIND BECAUSE OF THE SHEATHING WHICH COVERS THE HOSE. A KINKED OR CLOSED HOSE CAN CAUSE FAILURE OF THE EDP.
				MAKE SURE THE SELF-SEAL FITTINGS ON THE HYDRAULIC HOSES ARE TIGHTENED CORRECTLY. FITTINGS WHICH DO NOT HAVE SUFFICIENT TORQUE CAN LIMIT THE FLOW OF HYDRAULIC FLUID.
			(22)	Do the steps that follow to connect the hydraulic hoses (1, 2, 3) to the pump (4).
				<u>CAUTION</u> : MAKE SURE THAT THE HYDRAULIC HOSES DO NOT RUB ON THE ADJACENT ENGINE COMPONENTS. IF THE HOSES RUB ON THE ENGINE COMPONENTS, THE WEAR CAN CAUSE LEAKAGE OF HYDRAULIC FLUID.
				(a) Put each hydraulic hose (1, 2, 3) in a position which gives the maximum clearance between the hoses and the adjacent engine components.
				<u>NOTE</u> : Make sure the minimum clearance between the EDP hoses and the engine components is 0.50 inches.
EFF	ECTI	VITY		REPLACE ENGINE DRIVEN HYDRAULIC PUMP (EDP)
				29-11-05-4A 29-RO2 PAGE 7 OF 11 AUG 22/01
1				

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AIRLINE CARD NO.

MECH INSP					
		(b)	Hold the hydra tighten the he	aulic hoses (1, ose fittings.	, 2, 3) in position until you
		(c)	Tighten the so 855-945 pound	elf-seal fittir -inches (95–106	ng (10) on the supply hose (2) to 6 Nm.).
		(d)	Tighten the e pound-inches	lbow on the cas (29–33 Nm.).	se drain hose (3) to 266-294
			<u>NOTE</u> : When ye case do check the flo Otherw wrong p and cas	ou replace the rain check valv valve is instal ow direction ar ise the case dr place can block use the EDP fau	case drain line together with the we, please make sure the case drain led near the EDP connection so that grow shows the flow out of the EDP. rain check valve installed in the to the fluid flow in the case drain alt.
		(e)	AIRPLANES WIT	H A RIPPLE DAMF	PER;
			Tighten the e pound-inches	lbow on the pre (79–88 N.–m.)	essure hose (1) to 713-787
		(f)	AIRPLANES WIT	HOUT A RIPPLE [	AMPER;
			Tighten the cl 713-787 pound	heck valve (11) —inches (79—88	on the pressure hose (1) to Nm.).
	(23)	Conn valv	ect the electr e (8).	ical connector	(9) to the pump depressurization
	(24)	Make	sure the hydra	aulic reservoir	• is full (AMM 12-12-01/301).
	(25)	Remo over	ve the DO-NOT- head panel, P1	CLOSE tags and 1:	close these circuit breakers on the
		(a)	11L14, HYDRAU	LIC L ENG PUMP	DEPRESS
		(b)	11L23, HYDRAU	LIC R ENG PUMP	DEPRESS
	<u>CAUT</u>	<u>ION</u> :	QUICKLY CLEAN HYDRAULIC FLU	ALL HYDRAULIC ID CAN CAUSE DA	FLUID FROM THE GEARBOX SURFACES. MAGE TO THE ENGINE GEARBOX HOUSING.
	(26)	Clea (AMM	n all hydrauli 12-25-01/301)	c fluid from th	ne engine and the engine area
EFFECTIVITY				REPLACE	ENGINE DRIVEN HYDRAULIC PUMP (EDP)

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AIRLINE CARD NO.

				TASK CARD		
MECH	INSP					
		(27)	Run the engine (AMM	71-00-00/501)	•	
		(28)	Make sure these cir	cuit breakers	on the P11 panel are cl	osed:
			(a) 11L9, LEFT EN or LEFT	GINE OIL PRESS ENGINE OIL PR	ESS EICAS REF	
			(b) 11L36, RIGHT E or RIGH	NGINE OIL PRES T ENGINE OIL P	S RESS EICAS REF	
			(c) EICAS (6 locat	ions)		
		(29)	Push the ELEC/HYD s show the ELEC/HYD M (P2 panel).	witch on the E aintenance pag	ICAS maintenance panel e on the lower EICAS di	(P61) to splay unit
		(30)	Make sure the hydra	ulic system be	comes stable at 2800 to	3200 psi.
		(31)	Make sure there are gearbox connections	no leaks at t to the pump (	he hydraulic hose or en 4).	gine
		(32)	Push the L (R) PRIM	ARY HYD PUMPS	ENG switch to the OFF p	osition.
		(33)	Let the hydraulic s	ystem pressure	decrease.	
		(34)	Make sure the engin	e driven pump	PRESS indicator light c	comes on.
		(35)	Push the L (R) PRIM	ARY HYD PUMPS	ENG switch to the ON po	osition.
		(36)	Make sure the hydra	ulic pressure	becomes stable at 2800	to 3200 psi.
		(37)	Make sure the engin	e driven pump	PRESS indicator light g	oes off.
		(38)	If operation is not	necessary, st	op engine run (AMM 71-0	0-00/501).
		<u>WARN</u>	IING: OBEY THE INSTRUCT THRUST REVERSE TO PERSONS OR	UCTIONS IN AMM RS. IF YOU DO DAMAGE TO EQUI	78-31-00/201 WHEN YOU NOT OBEY THE INSTRUCTI PMENT CAN OCCUR.	CLOSE THE ONS INJURY
		(39)	Close the thrust re	verser (AMM 78	-31-00/201).	
		(40)	Close the core cowl	panels (AMM 7	1-11-06/201).	
		(41)	Do the activation p (AMM 78-31-00/201).	rocedure for t	he thrust reverser	
				<b></b> ,		
	CUIT	V I I		REPLACE	ENGINE DRIVEN HYDRAULI	C PUMP (EDP)

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AIRLINE CARD NO.



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BOEING



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	STAT	ION	]								BOE	EING CARD NO.
	TAIL NO.				(	5	BOEI	VG			29-R	.03
	DA	TE		SAS	$S \mathcal{V}$		767				AIR	LINE CARD NO.
	DA						TASK CARI	)				
SKI	LL	WORK AR	EA	RELATED	TASK		INTERVAL			PHASE	MPD REV	TASK CARD REVISION
AIR	PL	W/B FAI	RING								003	APR 22/06
RF	TASK	F	ADP	PRESSURE		R &	SOV	STRUCTURAL ILLUSTR	RATION REF	ERENCE	APPLICABILITY AIRPLANE ENGINE	
		70NES									NOT	E ALL
19	95	LONES		19	95tl							
MECH	INSP	_									I	MPD ITEM NUMBER
		REPLAC THIS COMPC CONVE APPEN DOCUM CHANG	CARD ONENT NIENC DIX A ENT,D GE CAR	ADP PRES IS NOT A CHANGE CA E DURING OF THE 7 622TOO1, DS.	SSURE REG SCHEDULE ARD AND I UNSCHEDU 767 MAINT FOR A DE	ULA DM TI ULED ENA	TOR AND SHUTC AINTENANCE TA S PROVIDED FC MAINTENANCE NCE PLANNING IPTION OF THE	FF VALVE. SK. IT IS A R OPERATOR ACTIVITIES. S DATA (MPD) COMPONENT	SEE		29–1	1-30-4A
		AIRPLA	NE NO	TE: THIS MODE	S TASK IS ELS EXCEP	AP T T	PLICABLE TO A HE 767-400ER.	LL AIRPLANE				
		1. <u>Rem</u>	<u>iove t</u>	<u>he Regula</u>	ator and	Shu	<u>toff Valve</u> (F	ig. 401)				
		Α.	Refe	rences								
			(1)	AMM 06-4	1-00/201	, F	uselage Acces	s Doors and F	Panels			
			(2)	AMM 24-2	22-00/201	, E	lectrical Pow	er – Control				
			(3)	AMM 36-C	0-00/201	<b>,</b> P	neumatic – Ge	neral				
		В.	Proc	edure								
			(1)	Supply e	electrica	lp	ower (AMM 24-	22-00/201).				
		(2) Put the C ISLN valve and the APU valve overhead panel, P5, to the OFF positio					valve switch	hes on	the	pilots	, I	
			(3) Open these circuit breakers on the overhead panel, P11, and attach DO-NOT-CLOSE tags:							ittach		
				(a) 11D	031, HYDR	AUL	IC AIR PUMP					
				(b) 11s	514, ISOL	VA	LVE PWR C					
EFF	ECTI	VITY					REPLACE	ADP PRESSUR	RE REG	ULATO	R & SO	V
							29-11-30-4A	29-R03	PA	GE 1	0F 6	AUG 22/01

AIRLINE CARD NO.

29-R03

SAS	A BOEING
	767
	TASK CARD

					TASK CARD
MECH	INSP	-			
					(c) 11S23, APU BLEED POWER
				(4)	Remove pneumatic power (AMM 36-00-00/201).
				(5)	Remove the access panel, 195TL, for the regulator and shutoff valve (AMM 06–41–00/201).
				(6)	Open the access panel, 195SL, for the air driven pump (AMM 06-41-00/201).
				(7)	Pull the insulation flaps loose from the adhesive to remove the insulation jacket from the valve.
				(8)	Disconnect the electrical connector from the valve.
				(9)	Disconnect the bonding jumper(s) from the valve.
				(10)	Disconnect the air pressure line from the valve.
				(11)	Loosen the clamps at each end of the valve and remove the valve.
		2.	Ins	tall	the Regulator and Shutoff Valve (Fig. 401)
			Α.	Cons	umable Materials
				(1)	Adhesive (optional):
					(a) A00087 Adhesive - RTV 102
					(b) A00303 Adhesive - RTV 174
			в.	Refe	rences
				(1)	AMM 06-41-00/201, Fuselage Access Doors and Panels
				(2)	AMM 24-22-00/201, Electrical Power
				(3)	AMM 36-00-00/201, Pneumatic
			с.	Proc	edure
				(1)	Put the regulator and shutoff valve in the position shown in Fig. 401, Detail D.
				(2)	Install the clamps at each end of the valve and tighten the clamps to 45–55 pound-inches.
EFF	ECTI	VIT	Y •		REPLACE ADP PRESSURE REGULATOR & SOV

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AIRLINE CARD NO.

			TASK CARD
MECH	INSP		
		(3)	Connect the bonding jumper(s) to the valve.
		(4)	Connect the electrical connector to the valve.
		(5)	Connect the air pressure line to the valve.
		(6)	Put the insulation jacket around the valve with the insulation flap down.
			(a) Attach the insulation jacket by pressing the hook and loop of the velcro tape together.
			(b) If the insulation jacket does not have velcro tape, apply the adhesive to the flap along the joints in the insulation as shown in Fig. 401, Detail C.
		(7)	Supply pneumatic power (AMM 36-00-00/201).
		(8)	Supply electrical power (AMM 24-22-00/201).
		(9)	Remove the DO-NOT-CLOSE tags and close these circuit breakers on the overhead panel, P11:
			(a) 11D31, HYDRAULIC AIR PUMP
			(b) 11S14, ISOL VALVE PWR C
			(c) 11S23, APU BLEED POWER
		(10)	Push the ELEC/HYD switch on the EICAS maintenance panel.
		(11)	Put the C HYD PUMPS ELEC 1 and 2 switches on the hydraulic control panel to OFF.
		(12)	Put the C ISLN valve and the APU valve switches on the pilots' overhead panel, P5, to ON.
		(13)	Put the C HYD PUMPS AIR switch on the hydraulic control panel to ON.
		(14)	Make sure the center system pressure is 2800 to 3200 psi.
		(15)	Put the ADP TEST/RESET switch on the left miscellaneous equipment panel, P36, to the TEST position. Release the switch and let it go back to the NORMAL position.
		(16)	Make sure the ADP stops and does not start again.
EFF	ECTIV	/ITY	
			REFERCE AUF FRESSURE REGULATOR & SUV

29-11-30-4A 29-R03



29-R03

	A BOEING
SAS	767
	TASK CARD

AIRLINE CARD NO.

MECH INS	P								
		(17)	Put the ADP TEST/RE position. Release position.	SET switch on the switch and	the P36 panel I let it go ba	to the ck to th	RESET e NORMAI	-	
		(18)	Make sure the cente	r system press	sure is 2800 to	o 3200 p	si.		
		(19)	Put the C HYD PUMPS	AIR switch to	OFF.				
		(20)	Install the access (AMM 06–41–00/201).	panel, 195TL,	for the regul	ator and	shutof	f val	ve
		(21)	Close the ADP acces (AMM 06-41-00/201).	s panel, 195SL	, for the air	driven	pump		
		(22)	Remove electrical p	ower if it is	not necessary	(AMM O6	-41-00/2	201).	
		(23)	Remove pneumatic po	wer if it is n	ot necessary	(AMM 06-	41-00/20	01).	
EFFEC	TIVITY			REPLACE	ADP PRESSURE	REGULAT	OR & SO	/	
				29-11-30-4A	29-R03	PAGE	4 0F 6	APR 2	22/06

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29-R03



S	TATION	]							BOE	ING CARD NO.
Т	AIL NO.	_		(	$\boldsymbol{\Lambda}$	RAEIA			29–0	01-01-1
	DATE	_	SA	S X	QL-	767			AIR	LINE CARD NO.
	DATE					TASK CARD				
SKILL	WORK AR	REA	RELATE	ED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	STRUT	1				10		11212	011	DEC 22/03
CHEC	K/INSP	SYS	L EDP/A		SS & R	ETURN FILTER	STRUCTURAL ILLUSTRATION N	EFERENCE	AIRPLAN	E ENGINE
	ZONES					-	ACCESS PANELS		ALL	ALL
437	ZONES			437BL 4	437BR		ACCESS TANLES			
MECH IN	SP		ł						I	MPD ITEM NUMBER
	INSPE DIFFE	CT SYS RENTIA	STEM L H	YDRAULIC URE INDI	EDP CATOR	& ACMP PRESSUF S.	RE FILTERS 29-11	I-00-6A	29–1 29–1	1-00-6A 1-00-6E
	TNODE	<b></b>			DETU	DN ETLTED MODI	UES 20-11		ı	
	DIFFE	RENTIA	AL PRESS	URE INDI	CATOR	S.	JLES 29-1	1-00-6E		
	1 5-	ffanar	tial Dm		n di aa	tono Inonosti	n Fon the Dress			f tha
	1. <u>D1</u>	gine-D	Driven P	<u>essure i</u> ump (EDF	P), Al	ternating Curr	rent Motor Pump (	(ACMP),	<u>and</u>	<u>t the</u>
	Ai	r−Dri\	<u>ven Pump</u>	(ADP) a	and Fo	r the Return H	ilters in the Le	eft, Ric	ht, a	<u>nd</u>
	<u>Lei</u>	<u>nter f</u>	<u>iyarauli</u>	<u>c System</u>	<u>ns</u>					
	Α.	Refe	erences							
		(1)	AMM 06	-43-00/2	201, E	ngine and Nace	elle Strut Access	s Doors	and P	anels
		(2)	AMM 29	-11-15/4	401, L C	eft and Right omponents	System Return Fi	ilter Mo	odule	and
		(3)	AMM 29 <sup>.</sup>	-11-16/4	401, C	enter System F	Return Filter Moo	dule and	l Comp	onents
		(4)	AMM 29	-11-17/4	401, L P	eft and Right ressure/Case [	System Engine–Dr Drain Filter Modu	iven Pu ule and	ımp (E Compo	DP) nents
		(5)	AMM 29 <sup>.</sup>	-11-18/4	401, A P	lternating Cur ressure/Case [	rrent Motor Pump Drain Filter Modu	(ACMP) le and	Compo	nents
		(6)	AMM 29	-11-19/4	401, C D	enter System A rain Filter Mo	Air-Driven Pump ( odule and Compone	(ADP) Pr ents	essur	e/Case
		(7)	AMM 32	-00-15/2	201, L	anding Gear Do	oor Locks			
		(8)	AMM 32	-00-20/2	201, L	anding Gear Do	ownlocks			
	в.	Proc	edure							
EFFEC	TIVITY								. DET!	
	-					UNEUK/ INSP	STO L EUP/AUMP	rress 0	A KEIU	
						29-11-00-6A	29-001-C1-1 F	PAGE 1	0F 5	AUG 22/01

29-001-01-1



AIRLINE CARD NO.

ME			
FIL.	CH INSP		
		(1)	For the center hydraulic system, make sure the downlocks are installed on the nose and main landing gear (AMM 32–00–20/201).
		<u>WARNI</u>	ING: USE THE PROCEDURE TO INSTALL THE DOOR LOCKS (AMM 32-00-15/201). THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(2)	For the center hydraulic system, open the doors for the landing gear and install the door locks (AMM 32–00–15/201).
		(3)	For the left hydraulic system, open the access panels, 437BL and 437BR, for the hydraulic system (AMM 06–43–00/201).
		(4)	For the right hydraulic system, open the access panels, 447BL and 447BR, for the hydraulic system (AMM 06–43–00/201).
		(5)	Make sure the red indicator button did not come out on each differential pressure indicator.
		(6)	If the indicator button came out, replace the filter element and reset the indicator button as follows:
			(a) EDP filter element (AMM 29-11-17/401).
			(b) ACMP filter element (AMM 29-11-18/401)
			(c) ADP filter element (AMM 29-11-19/401)
			(d) Return filter in the left and right system (AMM 29–11–15/401)
			(e) Return filter in the center system (AMM 29-11-16/401)
		(7)	For the left hydraulic system, close the access panels, 437BL and 437BR, for the hydraulic system (AMM 06–43–00/201).
		(8)	For the right hydraulic system, close the access panels, 447BL and 447BR, for the hydraulic system (AMM 06–43–00/201).
E	FFECTIVITY		CHECK/INSP SYS L EDP/ACMP PRESS & RETURN FILTER
			29-11-00-6A 29-001-C1-1 PAGE 2 OF 5 DEC 22/03





AIRLINE CARD NO.

29-001-c1-1

MECH	INSP	
		WARNING: USE THE PROCEDURE TO REMOVE THE DOOR LOCKS (AMM 32-00-15/201). THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(9) For the center hydraulic system, remove the door locks from the landing gear doors and close the doors (AMM 32–00–15/201).
EFF	ECTI	
		29-11-00-6A 29-001-C1-1 PAGE 3 OF 5 AUG 22/01




5	STATION	1							BOE	ING CARD NO.
TAIL NO.		-	29–0	29-001-c1-2						
	NATE		SAS	s &		- 767			AIRI	LINE CARD NO.
	DATE			-		TASK CARD				
SKILL	WORK AF	REA	RELATED	TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL		2		TITIF		10	STRUCTURAL THEUSTRATION R	11212	011	
CHEC	CK/INSP	SYS	R EDP/AC	MP PRES	5 & R	ETURN FILTER			AIRPLAN	E ENGINE
	ZONES						ACCESS PANELS		ALL	ALL
447			44	47BL 44	47BR					
										MPD ITEM NUMBER
MECH IN	ISP									
	INSPE DIFFE	CT SYS RENTIA	STEM R HYI Al pressui	DRAULIC RE INDI(	EDP CATOR	& ACMP PRESSUR S.	RE FILTERS 29-11	-00-6A	29–1 29–1	1-00-6A 1-00-6E
	INSPE	CT SYS RENTIA	STEM R HYI Al pressur	DRAULIC RE INDIO	RETU CATOR	RN FILTER MODU S.	JLES 29–11	-00-6E		
	1. <u>Di</u> En	<u>tterer</u> qine-D	<u>ntial Pres</u> Driven Pur	<u>ssure Ir</u> mp (EDP)	<u>ndica</u> ), Al	<u>tors Inspectio</u> ternating Curr	on For the Pressu Pent Motor Pump (	<u>ire Filt</u> (ACMP),	<u>ers o</u> and	<u>f the</u>
	Ai	r-Driv	/en Pump	(ADP) ar	nd Fo	r the Return F	ilters in the Le	eft, Ric	ht, a	<u>nd</u>
	<u>Lei</u>	<u>nter F</u>	<u>iydraulic</u>	Systems	5					
	Α.	Refe	erences							
		(1)	AMM 06-4	43-00/20	01 <b>,</b> E	ngine and Nace	elle Strut Access	Doors	and P	anels
		(2)	AMM 29-7	11-15/40	01, L C	eft and Right omponents	System Return Fi	lter Mc	dule	and
		(3)	AMM 29-7	11-16/40	D1, C	enter System F	Return Filter Mod	lule and	l Comp	onents
		(4)	AMM 29-7	11-17/40	01, L P	eft and Right ressure/Case D	System Engine–Dr Drain Filter Modu	iven Pu le and	ımp (E Compo	DP) nents
		(5)	AMM 29-7	11-18/40	01, A P	lternating Cur ressure/Case D	rrent Motor Pump Drain Filter Modu	(ACMP) Ile and	Compo	nents
		(6)	AMM 29-7	11–19/40	D1, C D	enter System A rain Filter Mo	Air-Driven Pump ( odule and Compone	ADP) Pr ents	essur	e/Case
		(7)	AMM 32-0	00-15/20	)1, L	anding Gear Do	oor Locks			
		(8)	AMM 32-0	00-20/20	D1, L	anding Gear Do	ownlocks			
	в.	Proc	edure							
EFFEG	CTIVITY						SYS R EDP/ACMP	PRFSS &	, RETII	RN FTITER
						29-11-00-6A	29-001-c1-2 P	PAGE 1	0F 5	AUG 22/01

BOEING CARD NO. 29-001-C1-2

SAS

AIRLINE CARD NO.

			TASK CARD
MECH	INSP		
		(1)	For the center hydraulic system, make sure the downlocks are installed on the nose and main landing gear (AMM 32–00–20/201).
		WARN	ING: USE THE PROCEDURE TO INSTALL THE DOOR LOCKS (AMM 32-00-15/201). THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(2)	For the center hydraulic system, open the doors for the landing gear and install the door locks (AMM 32–00–15/201).
		(3)	For the left hydraulic system, open the access panels, 437BL and 437BR, for the hydraulic system (AMM 06–43–00/201).
		(4)	For the right hydraulic system, open the access panels, 447BL and 447BR, for the hydraulic system (AMM 06–43–00/201).
		(5)	Make sure the red indicator button did not come out on each differential pressure indicator.
		(6)	If the indicator button came out, replace the filter element and reset the indicator button as follows:
			(a) EDP filter element (AMM 29-11-17/401).
			(b) ACMP filter element (AMM 29-11-18/401)
			(c) ADP filter element (AMM 29-11-19/401)
			(d) Return filter in the left and right system (AMM 29–11–15/401)
			(e) Return filter in the center system (AMM 29–11–16/401)
		(7)	For the left hydraulic system, close the access panels, 437BL and 437BR, for the hydraulic system (AMM 06–43–00/201).
		(8)	For the right hydraulic system, close the access panels, 447BL and 447BR, for the hydraulic system (AMM 06–43–00/201).
EFF	ECTIV	ITY —	CHECK/INSP SYS R EDP/ACMP PRESS & RETURN FILTER
			29-11-00-64 29-001-01-2 PAGE 2 OF 5 DEC 22/03



29-001-c1-2



AIRLINE CARD NO.

MECH	INSP						
		<u>WARNING</u> :	USE THE PROCEDUR THE DOORS OPEN A PERSONS OR DAMAG	RE TO REMOVE AND CLOSE QUI GE TO EQUIPME	THE DOOR LOCKS CKLY AND CAN C/ NT.	(AMM 32-00- AUSE INJURY	15/201). TO
		(9) For t remov doors	the center hydrau we the door locks Gamm 32-00-15/2	ulic system, s from the la 201).	nding gear door	rs and close	the
EFF	ECTI	VITY		HECK/INSP	SYS R EDP/ACM	PRESS & RE	TURN FILTER
				29-11-00-6A	29-001-c1-2	PAGE 3 OF	5 AUG 22/01
L			OPPLETARY - Converight (C)	- Uppubliched Work -	See title page for detai		





ST	ATION								BOE	ING CARD NO.
TAI	IL NO.		(	$\mathbf{X}$	3 <i>0   E</i>	7.	G		29–0	02-01-1
	DATE		SAS X		767				AIRI	LINE CARD NO.
		TASK CARD								
SKILL	WORK AR	EA RI	ELATED TASK		INTE	RVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	STRUT 1		TITLE		3C			13636	002	
CLEAN	N	SYS L HYD	RESERVOIR PRESS AIR FILTER					AIRPLAN	E ENGINE	
	ZONES						ACCESS PANELS		ALL	ALL
437			437BL 4	37BR						
MECH INSP	Р		4						I	MPD ITEM NUMBER
	CLEAN AIR FI	SYSTEM L H LTER.	YDRAULIC R	ESERVO	IR PRESSUR	RIZA	TION MODULE	n Modul	29–1	1-25-4A
	A.	Reference	S					<u>n nouu </u>	<u>.c</u>	
		(1) AMM	06-43-00/2	201, Eng	gine and M	lace	lle Strut Access	Doors	and P	anels
		(2) AMM	29-11-00/2	201, Ma	in (Left,	Rig	ht and Center) H	ydrauli	c Sys	tems
		(3) AMM	36-00-00/2	201, Pn	eumatic –	Gen	eral			
		(4) AMM	78-31-00/2	201, Th	rust Rever	rser	System			
	В.	Prepare f	or Removal							
		<u>WARNING</u> :	DO THE TH OPERATION THRUST RE EQUIPMENT	IRUST RI I OF THI EVERSER	EVERSER DE E THRUST F CAN CAUSE	EACT REVE E IN	IVATION PROCEDUR RSER. ACCIDENTA JURY TO PERSONS	E TO PR L OPERA OR DAMA	EVENT	THE OF THE
		(1) Do t Main	his proced tenance (A	lure: MM 78-3	Thrust Rev 31-00/201)	/ers ).	er Deactivation	for Gro	ound	
		(2) Remo	ve pneumat	ic pow	er (AMM 36	5-00	-00/201).			
		(3) For the	the left s hydraulic	system, system	open the (AMM 06-4	асс 43-0	ess panels, 437B 0/201).	L and 4	37BR,	for
		(4) For the	the right hydraulic	system system	, open the (AMM 06-4	e ac 43-0	cess panels, 447 0/201).	BL and	447BR	, for
EFFECT	TIVITY				CLEAN		SYS L HYD RESER	VOIR PR	ESS A	IR FILTER
					29-11-25-	-4A	29-002-01-1 P	AGE 1	OF 4	AUG 22/01



AIRLINE CARD NO.

SP			· · ·
		(5)	Remove the pressure from the left and right hydraulic systems and the reservoirs (AMM 29–11–00/201).
	с.	Remo	ve the Filter Element (Fig. 401)
		(1)	Remove the cap from the reservior pressurization module.
		(2)	Remove the filter element.
2.	<u>Ins</u>	<u>tall</u>	the Filter Element in the Reservoir Pressurization Module
	Α.	Cons	umable Materials
		(1)	DOOO54 Hydraulic System Lubricant, MCS 352B
		(2)	BO1003 Solvent – General Cleaning of Composites (Series 83)
		(3)	A00363 Sealant - RTV 162
	Β.	Refe	rences
		(1)	AMM 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels
		(2)	AMM 20-30-83/201, Airplane Structure Cleaning Solvents (Series 83)
		(3)	AMM 29–11–00/201, Main (Left, Right and Center) Hydraulic Systems
		(4)	AMM 36-00-00/201, Pneumatic - General
		(5)	AMM 78-31-00/201, Thrust Reverser System
	С.	Inst	all the Filter Element (Fig. 401)
		(1)	Remove the sealant remaining on the filter cap and the adjacent surface of the reservoir pressurization module.
		(2)	Clean the hole in the reservoir pressurization module for the filter element.
		(3)	Clean the filter element with solvent, Series 83 (AMM 20–30–83/201) and fully dry the filter element.
		(4)	Apply hydraulic lubricant to the new O-rings and the threads of the cap.
		(5)	Assemble the filter element, the O-ring, and the filter sleeve.
TIVIT	Y -		CLEAN SYS L HYD RESERVOIR PRESS AIR FILTER
	2. TIVIT	sp С. 2. <u>Ins</u> А. В. С.	SP (5) C. Remo (1) (2) Install A. Cons (1) (2) (3) B. Refe (1) (2) (3) B. Refe (1) (2) (3) (4) (5) C. Inst (1) (2) (3) (4) (5) C. Inst (1) (2) (3) (4) (5) TIVITY

29-11-25-4A 29-002-01-1 PAGE 2 OF 4 APR 22/06

SAS **BOEING** 767 TASK CARD

AIRLINE CARD NO.

29-002-01-1

_					TASK CARD		
MECH	INSP						
			(6)	Install the filter a module.	assembly into	the reservoir pre	essurization
			(7)	Install the cap on	the reservoir	pressurization mo	odule.
			(8)	Tighten the cap to	75-95 pound-in	ches.	
			(9)	Safety the cap with	wire.		
			(10)	Apply a bead of sea reservoir pressuriz	lant to the jo ation module.	int between the c	ap and the
		D.	Put	the Airplane Back to	Its Usual Con	dition	
			(1)	Pressurize the rese (AMM 29-11-00/201).	rvoir in the l	eft or right syst	:em
			(2)	Make sure there are reservoir pressuriz	no air pressu ation module.	re leaks at the c	ap on the
			(3)	Remove the air sour (AMM 29-11-00/201).	ce which you u	sed to pressurize	the reservoir
			(4)	For the left system the hydraulic system	, close the ac m (AMM 06–43–0	cess panels, 437E 0/201).	BL and 437BR, for
			(5)	For the right system the hydraulic system	m, close the a m (AMM 06-43-0	ccess panels, 447 0/201).	'BL and 447BR, for
			(6)	Do the activation p 78-31-00/201).	rocedure for t	he thrust reverse	r (AMM
	 	\/TTV					
	CUII	VII			CLEAN	SYS L HYD RESERV	OIR PRESS AIR FILTER
					29-11-25-4A	29-002-01-1 PA	GE 3 OF 4 AUG 22/01



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STATION		]							BOE	ING CARD NO.	
TAI	IL NO.	-	(	$\boldsymbol{\mathcal{T}}$	://				29–0	02-01-2	
	NATE		SAS X			767			AIRI	INE CARD NO.	
	DATE				TAS	K CARD					
SKILL	WORK AR	EA R	ELATED TASK			INTERVAL	PHASE	MPD REV	TASK CARD REVISION		
		2	TITLE		30		STRUCTURAL TILLUSTRATION RE	13636	002	DEC 22/08	
CLEAN	N	SYS R HYD	RESERVOIR	RESERVOIR PRESS AIR FILTER					AIRPLANE E		
	ZONES						ACCESS PANELS		ALL	ALL	
447			447BL 4	47BR							
MECH INSF	P								P	IPD ITEM NUMBER	
	CLEAN AIR FI	SYSTEM R H	IYDRAULIC R	RESERVO	IR PR	ESSURIZ	TION MODULE		29–1	1-25-4A	
	1. <u>Ren</u> A.	Reference	<u>lter Eleme</u> s	<u>ent tro</u>	<u>m the</u>	Reservo	<u>Dir Pressurizatio</u>	<u>n Modul</u>	<u>.e</u>		
		(1) AMM	06-43-00/2	201, En	gine	and Nace	elle Strut Access	Doors	and P	anels	
		(2) AMM	29-11-00/2	201, Ma	in (L	.eft, Rig	ght and Center) H	ydrauli	c Sys	tems	
		(3) AMM	36-00-00/2	201, Pn	eumat	ic - Ger	neral				
		(4) AMM	78-31-00/2	201, Th	rust	Reverser	System				
	В.	Prepare 1	or Removal								
		WARNING:	DO THE TH OPERATION THRUST RE EQUIPMENT	IRUST R I OF TH EVERSER -	EVERS E THR CAN	ER DEACT UST REVE CAUSE IN	IVATION PROCEDUR RSER. ACCIDENTA JURY TO PERSONS	E TO PR L OPERA OR DAMA	EVENT TION GE TO	THE OF THE	
		(1) Do t Mair	his proced tenance (A	lure: \MM 78-	Thrus 31-00	st Revers 1/201).	er Deactivation	for Gro	ound		
		(2) Remo	ove pneumat	ic pow	er (A	MM 36-00	)-00/201).				
		(3) For the	the left s hydraulic	system, system	open (AMM	1 the acc 1 06-43-0	cess panels, 437B 00/201).	L and 4	37BR,	for	
		(4) For the	the right hydraulic	system system	, ope (AMM	en the ad 1 06-43-0	cess panels, 447 00/201).	BL and	447BR	, for	
EFFECT	TIVITY				CLEAN	1	SYS R HYD RESER	VOIR PR	ESS A	IR FILTER	
				- 1	29–1	1-25-4A	29-002-01-2 P	AGE 1	OF 4	AUG 22/01	



				THOR CARD
MECH	INSP	-		
				(5) Remove the pressure from the left and right hydraulic systems and the reservoirs (AMM 29–11–00/201).
			С.	Remove the Filter Element (Fig. 401)
				(1) Remove the cap from the reservior pressurization module.
				(2) Remove the filter element.
		2.	<u>Ins</u>	all the Filter Element in the Reservoir Pressurization Module
			Α.	Consumable Materials
				(1) D00054 Hydraulic System Lubricant, MCS 352B
				(2) B01003 Solvent – General Cleaning of Composites (Series 83)
				(3) A00363 Sealant - RTV 162
			Β.	References
				(1) AMM 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels
				(2) AMM 20-30-83/201, Airplane Structure Cleaning Solvents (Series 83)
				(3) AMM 29–11–00/201, Main (Left, Right and Center) Hydraulic Systems
				(4) AMM 36-00-00/201, Pneumatic - General
				(5) AMM 78-31-00/201, Thrust Reverser System
			С.	Install the Filter Element (Fig. 401)
				(1) Remove the sealant remaining on the filter cap and the adjacent surface of the reservoir pressurization module.
				(2) Clean the hole in the reservoir pressurization module for the filter element.
				(3) Clean the filter element with solvent, Series 83 (AMM 20-30-83/201) and fully dry the filter element.
				(4) Apply hydraulic lubricant to the new O-rings and the threads of the cap.
				(5) Assemble the filter element, the O-ring, and the filter sleeve.
EFF	ECTI	VIT	Y -	CLEAN SYS R HYD RESERVOIR PRESS AIR FILTER
				29-11-25-4A 29-002-01-2 PAGE 2 OF 4 APR 22/06

BOEING CARD NO. 29-002-01-2



AIRLINE CARD NO.

					TASK CARD			
MECH	INSP						'	
			(6)	Install the filter module.	assembly into	the reservoir	pressuriza	ation
			(7)	Install the cap on	the reservoir	pressurizatior	n module.	
			(8)	Tighten the cap to	75-95 pound-in	iches.		
			(9)	Safety the cap with	wire.			
			(10)	Apply a bead of sea reservoir pressuriz	lant to the jo ation module.	oint between th	ie cap and	the
		D.	Put	the Airplane Back to	Its Usual Con	dition		
			(1)	Pressurize the rese (AMM 29-11-00/201).	rvoir in the l	eft or right s	ystem	
			(2)	Make sure there are reservoir pressuriz	no air pressu ation module.	ıre leaks at th	ie cap on <sup>-</sup>	the
			(3)	Remove the air sour (AMM 29-11-00/201).	ce which you u	ised to pressur	ize the r	eservoir
			(4)	For the left system the hydraulic syste	, close the ac m (AMM 06-43-0	cess panels, 4 0/201).	37BL and	437BR, for
			(5)	For the right syste the hydraulic syste	m, close the a m (AMM 06–43–0	occess panels, 00/201).	447BL and	447BR, for
			(6)	Do the activation p 78-31-00/201).	rocedure for t	he thrust reve	erser (AMM	
EFF	ECTI	VITY			CLEAN	SYS R HYD RES	ERVOIR PR	ESS AIR FILTER
					29-11-25-4A	29-002-01-2	PAGE 3	OF 4 AUG 22/01

2 9 0



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	STAT	ON									BOE	ING CARD NO.
	TAIL NO.					$\boldsymbol{\alpha}$	BAE	<b>/ A</b>	Æ		29–0	03–01
				S	AS	Kr 1	767		-		AIR	LINE CARD NO.
	DATE		TASK CARD									
SKIL	L	WORK ARE	A	REL	ATED TASK		INT	ERVAL		PHASE	MPD REV	TASK CARD REVISION
AIR	PL	CREW CA	BIN				2C		(#)	12424	013	AUG 22/07
FUI	FUNCTIONAL		HYDR	AULIC	SYSTEMS	INTER	RNAL LEAKAG	iE)	STRUCTURAL ILLUSTRATION	I REFERENCE	AF AIRPLAN	PLICABILITY E ENGINE
		ZONES							ACCESS PANELS		ALL	ALL
21	14	37 447			149BL	437BR	447BR					
MECH	INSP										I	MPD ITEM NUMBER
		CHECK (LEFT, (#) CM MS AD DE NOTE:	GROSS CENT R FRE G-3 A JUSTE VELOP EXCE LIMI SYST TO I BECO FOR THE OTHE CENT PERM LEAK APPR	INTER ER & R QUENCY NALYSI D AS A PED FRE PT FOR TFOR TFOR THE 76 LEFT A R 767 ER HYD ITS TH CAGE CH	RNAL LEA RIGHT). SIGHT). SFREQU SFREQU NY MRB GUENCY THE 16 THE LEF SE THE 76 THE LEF SE BEFOR E THAN S7-400ER ND RIGH MODELS. ORAULIC IE LEAKA IECK AND IMIT.	KAGE OF OO HOUF IENCY OF ITEM UN IS REAG 7-400EF T, CENT M. THI E A SUE THE 6.0 5, THE 1 SYSTEM GE TO 1 NOT BE	F EACH HYDR RS. F 2C APPLIE NTIL THE 12 CHED. R, THE INTE TER, AND RI IS RATE PER BSEQUENT LE O GPM APPRO INTERNAL LE INTERNAL LE IS 2.5 GPM INCREASE BE ECOME MORE	AULI S AN 2000- RNAL GHT MITS AKAG VED AKAG SAM AKAG I- T FORE THAN	C SYSTEM D MAY BE HOUR CMR LEAKAGE HYDRAULIC THE LEAKAGE E CHECK AND NOT LIMIT. E LIMITS FOR E AS FOR THE E LIMIT FOR THE HIS RATE A SUBSEQUENT I THE 4.0 GPM	T	29–1	1–00–6F
		1. <u>Hyd</u>	rauli	<u>c Syst</u>	<u>em Gros</u>	<u>s Inter</u>	nal Leakad	<u>ie Ch</u>	<u>eck</u>			
		Α.	Gene	eral								
	(1) This hydr syst syst repa limi and of a comp					re does rstem. not be ore that onents u rsequer draulic is star o get c	s a gross i The total more than an the appr until the l nce in whic c systems i rted, do no correct res	nter syst the oved eaka h yo s no t st sults	nal leakage cho approved leakage leakage flow i ge is less that u do a test of t important. I op until the p	eck for ea ge flow m rates rep n the app the lef When the rocedure	each ch hyd rates. olace oroved t, cen leak is	raulic If a or ter, check
EFF	ECTI	VITY -					FUNCTIONA	L	HYDRAULIC SYS	TEMS (IN	TERNAL	LEAKAGE)
							29-11-00	)-6F	29–003–01	PAGE 1	OF 17	AUG 22/07

29-003-01

SAS **BOEING** 767 TASK CARD

AIRLINE CARD NO.

MECH	INSP									
			(2)	Ther tech	e ar niqu	e two techn e and the f	iques to measu lowmeter techr	re flow rates; ique.	; the mult	imeter
				(a)	Mul	timeter tec	hnique			
					1)	The multim pumps (ACM	eter technique P) to measure	e uses the alte the hydraulic	ernating o flow rate	current motor
					2)	A clamp-on the ACMP E then conne that flows Fig. 607 c	ac current pr LCU in the P31 cted to the cu in the wire t hanges the cur	obe is install or P32 panel. Irrent probe to the pump mot rent to a hydr	led around The mul measure cor. A gr naulic flo	d one wire at timeter is the current aph shown in w rate.
				(b)	Flo	wmeter tech	nique			
					1)	The flowme rates dire or a hydra the pressu pressure f	ter technique ctly while the ulic service c re line betwee ilter module (	uses a flowmet system is pre art. The flow n the pressure Fig. 603A).	cer to mea essurized wmeter is e source a	asure flow with an ACMP installed in and the
					2)	If you use values and procedure	the flowmeter ignore the mu steps.	technique, wr lltimeter value	ite the f s specifi	lowmeter ed in the
		Β.	Equi	pment						
			(1)	This	equ	ipment is u	sed with the m	ultimeter tech	nnique:	
				(a)	Dig 27	ital Multim YEL, or equ	eter – John Fl ivalent	uke Model		
				(b)	Cla Mod	mp-on AC Cu el 80i 600	rrent Probe -	John Fluke		
					<u>NOT</u>	<u>E</u> : The ac the mul	current probe timeter.	is used with		
			(2)	This mult	equ imet	ipment is u er techniqu	sed with the f e:	lowmeter techr	nique (opt	ional to the
				(a)	F lo 7.0 the 300	wmeter - co GPM range indication D psi	mmercially ava with a precisi , specified fo	ilable, 0.2 to on of ±3% of r operation at		
		TV -					•	r		
EFF	ECIIVI	IY -					FUNCTIONAL	HYDRAULIC SYS	STEMS (INT	ERNAL LEAKAGE)
							29-11-00-6F	29-003-01	PAGE 2	OF 17 DEC 22/03

29-003-01

AIRLINE CARD NO.



MECH INSP

2 9 0

	(b) Hydraulic service cart – commercially available, with 15 micron full filter, which can supply 6 GPM at 3000 psi, with hydraulic fluid, fire resistant, BMS 3–11.
	<u>NOTE</u> : The service cart is not necessary if the ACMP is used to pressurize the hydraulic system.
c.	References
	(1) AMM 06-41-00/201, Fuselage Access Doors and Panels
	(2) AMM 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels
	(3) AMM 24-22-00/201, Electrical Power - Control
	(4) AMM 29–11–00/201, Main (Left, Right, and Center) Hydraulic Systems
	(5) AMM 32-00-15/201, Landing Gear Door Locks
	(6) AMM 32-00-20/201, Landing Gear Downlocks
	(7) AMM 32-44-00/501, Parking Brake System
	(8) AMM 34-21-00/201, Inertial Reference System
D.	Prepare for Gross Internal Leakage Check
	(1) Look at the nameplate on the ACMPs and make a record of the manufacturer.
	<u>NOTE</u> : "Abex" pumps may have Abex, Parker or Parker/Abex on the nameplate. "Vickers" pumps may have Eaton or Eaton/Vickers on the nameplate.
	(2) Make sure all hydraulic pump switches on the pilots' overhead panel, P5, are in the OFF position.
	(3) Supply electrical power (AMM 24-22-00/201).
	(4) Make sure the persons on the ground can speak with those in the control cabin.
	(5) Make sure landing gear downlocks are installed (AMM 32-00-20/201).
 ECTIVITY	FUNCTIONAL HYDRALII TO SYSTEMS (INTERNAL LEAKAGE)

29-003-01

	A BOEING
SAS	767
	TASK CARD

AIRLINE CARD NO.

			TASK CARD
MECH	INSP		
		(6)	Put chocks on the main landing gear.
		(7)	Make sure the flaps and slats are fully retracted.
		(8)	Make sure the thrust reversers are retracted and the thrust reverser levers are in the retracted position.
		<u>CAUT</u>	ION: DO NOT OPERATE THE HYDRAULIC PUMPS WITHOUT A MINIMUM QUANTITY OF FUEL IN THE TANKS OR AFTER THE OVERHEAT LIGHT COMES ON. IF THE HYDRAULIC SYSTEM HEAT EXCHANGERS ARE NOT COVERED WITH FUEL, THE HYDRAULIC FLUID CAN BECOME TOO HOT.
		(9)	Make sure the left and right main fuel tanks each contain at least 600 gallons of fuel.
		(10)	Make sure the brakes are released.
		(11)	Make sure the RESERVE BKS & STRG switch on the main instrument panel, P1, is in the OFF position and the amber VALVE light is off.
		(12)	Make sure the speedbrake handle on the control stand panel, P1O, is in the DN position.
		(13)	Make sure these circuit breakers on the overhead panel, P11, are closed:
			(a) EICAS (6 locations)
		(14)	Do the EICAS Message Display Procedure to show alert, status, and maintenance message lists (AMM 31–41–00/201).
			<u>NOTE</u> : The above referenced procedure will provide instructions on how to show EICAS messages and hydraulic quantity, pressure and temperature on data on EICAS.
		(15)	Align the inertial reference system to permit the autopilot to be engaged during some leak check procedures (AMM 34–21–00/201).
		(16)	Open this circuit breaker on the main power distribution panel, P6, and attach a DO-NOT-CLOSE tag:
			(a) 6J8, RAM AIR TURBINE PWR
		E. Left	Hydraulic System Gross Internal Leakage Check
EFF	ECTI	VITY	
1			I ONCITONAL INDIAOLIC SISILIIS (INTLANAL LEARAGE)

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AIRLINE CARD NO.

MECH	INSP										
		(1)	If t	he multimeter t:	cechnique is us	ed, do these	steps:				
			<u>WARN</u>	<u>IING</u> : BE CAREFL INTO THE POWER PAN TO PERSON	JL WHEN THE CLA POWER PANEL. NELS. CONTACT NEL OR DAMAGE	MP-ON AC CUR HIGH VOLTAGE WITH HIGH VO TO EQUIPMENT	RENT PROBE IS INSTALLE S CAN BE PRESENT IN TH LTAGE CAN CAUSE INJURY	ED HE Y			
			(a)	Do these steps current probe:	s to install th	e multimeter	and the clamp-on ac				
				1) If practic power pane	al, remove ele el (AMM 24-22-0	ctrical powe 0/201).	r while you access the	9			
				2) Get access panel.	s to the left s	ystem ACMP E	LCU M895 in the P32				
				3) Put the cl wires whic	amp-on ac curr ch connect to t	ent probe ar he load side	ound one of the three of the ELCU.				
				4) Connect th	ne multimeter t	o the clamp-	on ac current probe.				
				5) If necessa	ary, supply ele	ctrical powe	r (AMM 24-22-00/201).				
		(2)	If t	he flowmeter te	flowmeter technique is used, do these steps:						
			(a)	Remove the pre reservoir (AMM	Remove the pressure from the left hydraulic system and reservoir (AMM 29–11–00/201).						
			(b)	Open the aft s (AMM 06-43-00/	strut hydraulic 201).	access pane	l, 437BR				
			(c)	If the ACMP wi the flowmeter and the ACMP p	ill be used to in the pressur pressure/case d	pressurize t e line betwe Irain filter	he system, then insta en the left system ACM module.	ll ¶P			
			(d)	If the hydraul hydraulic syst return lines t flowmeter inst	tic service car cem, then conne to the left sys called in the c	t will be us ect the servi tem ground p art pressure	ed to pressurize the ce cart pressure and ower connections with line (Fig. 603A).	а			
		WARN	<u>ING</u> :	KEEP PERSONS A CAN MOVE. INJ WHEN HYDRAULI(	AND EQUIPMENT A JURY TO PERSONN C POWER IS SUPP	WAY FROM HYD IEL OR DAMAGE 'LIED.	RAULIC COMPONENTS THAT TO EQUIPMENT CAN OCCU	Г JR			
FFF	FCTIVI	ту —			1						
					FUNCTIONAL	HYDRAULIC S	YSTEMS (INTERNAL LEAK/	<b>\GE)</b>			
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SAS 767 TASK CARD

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			TASK CARD								
MECH	INSP										
		(3)	Pressurize the left hydraulic system:								
			(a) To pressurize the hydraulic system with the ACMP, put the L HYD PUMP-ELEC pump switch to the ON position.								
			(b) To pressurize the hydraulic system with the service cart, operate the hydraulic service cart to pressurize the left system to 3000 psi.								
		(4)	Put the LEFT STAB TRIM valve switch on the P10 panel to CUTOUT.								
		(5)	Put the YAW DAMPER R switch on the P5 panel to ON.								
		(6)	Put the WING and TAIL FLT CONTROL SHUTOFF switches L on the P61 panel to ON.								
		(7)	Push the A/P ENGAGE L CMD switch on the mode control panel on the P55 panel.								
		(8)	Put the LEFT STAB TRIM VALVE switch on the P10 panel to NORM.								
		(9)	Make sure the left thrust reverser is retracted and the thrust reverser lever is in the retract position.								
		(10)	For the multimeter technique, write the multimeter value and find the equivalent flow from figure 607.								
			<u>NOTE</u> : This multimeter value is eqivalent to the total left system leakage.								
		(11)	For the flowmeter technique, write the flowmeter value.								
			<u>NOTE</u> : The flowmeter value is the total left system leakage.								
		(12)	Push the A/P DISENGAGE switch on the mode control panel on the P55 panel.								
		(13)	Put the YAW DAMPER R switch on the P5 panel to OFF.								
		(14)	If the total left system leakage is more than 4.5 GPM, do the Full Hydraulic System Internal Leakage Check and Isolation of Components with High Leakage procedure.								
   F E E	FCTIVITV										
			FUNCTIONAL   HYDRAULIC SYSTEMS (INTERNAL LEAKAGE)								
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SAS 767 TASK CARD

AIRLINE CARD NO.

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			TASK CARD							
MECH	INSP									
		(15)	Replace components as necessary to decrease the gross system leakage below 4.5 GPM.							
			<u>NOTE</u> : This leakage rate permits the leakage to increase before a subsequent leakage check and not become more than the 6.0 GPM approved limit.							
		(16)	After the components are replaced, do the Left Hydraulic System Gross Internal Leakage Check again to make sure the leakage rate is less than 4.5 GPM.							
		(17)	Remove the pressure from the hydraulic system:							
			(a) If the hydraulic system was pressurized with the ACMP, then put the L HYD PUMP-ELEC pump switch to the OFF position.							
			(b) If the hydraulic system was pressurized with the service cart, operate the hydraulic service cart to decrease the pressure in the system to zero.							
		(18)	If the flowmeter technique was used, do these steps:							
			(a) If the hydraulic system was pressurized with the ACMP, then remove the flowmeter from the ACMP pressure line and reconnect the ACMP pressure line.							
			(b) If the hydraulic system was pressurized with the cart, then disconnect the service cart and flowmeter and install the caps on the airplane ground power connections.							
			(c) Close the aft strut hydraulic access panel, 437BR (AMM 06-43-00/201).							
		(19)	If the multimeter technique was used, do these steps:							
			WARNING: BE CAREFUL WHEN THE CLAMP-ON AC CURRENT PROBE IS REMOVED FROM THE POWER PANEL. HIGH VOLTAGES CAN BE PRESENT IN THE POWER PANELS. CONTACT WITH HIGH VOLTAGE CAN CAUSE INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.							
			(a) Do these steps to remove the clamp-on ac current probe:							
	<ol> <li>If practical, remove electrical power while you access the power panel (AMM 24-22-00/201).</li> </ol>									
	ECIIVI	I T	FUNCTIONAL HYDRAULIC SYSTEMS (INTERNAL LEAKAGE)							

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AIRLINE CARD NO.

MECH INSP										
		1)	If praction power pane	cal, remove ele el (AMM 24-22-0	ctrical power 0/201).	r while y	ou acces	s the		
		2)	Get acces panel.	s to the center	system ACMP	ELCU M89	7 in the	931 P31		
		3)	Put the c wires whic	lamp–on ac curr ch connect to t	ent probe aro he load side	ound one of the E	of the t LCU.	:hree		
		4)	Connect tl	he multimeter t	o the clamp-o	on ac cur	rent pro	be.		
		5)	If necess	ary, supply ele	ctrical power	r (AMM 24	-22-00/2	201).		
	<u>WARN</u>	I <u>ING</u> : KE Ca Wh	EP PERSONS / N MOVE. IN EN HYDRAULI(	AND EQUIPMENT A JURY TO PERSONN C POWER IS SUPP	WAY FROM HYDF EL OR DAMAGE LIED.	RAULIC CO TO EQUIP	MPONENTS MENT CAN	; THAT I OCCUR		
	(3)	Pressur	ize the cen <sup>.</sup>	ter hydraulic s	ystem:					
	(a) To pressurize the hydraulic system with the ACMP, put the PUMP-ELEC 1 pump switch to the ON position.							• C HYD		
		<ul> <li>(b) To pressurize the hydraulic system with the service cart, operate the hydraulic service cart to pressurize the center system to 3000 psi.</li> <li>(4) Push the A/P DISENGAGE switch on the mode control panel on the P55 panel.</li> </ul>								
	(4)									
	(5)	Put the	Put the WING FLT CONTROL SHUTOFF switch C on the P61 panel to OFF.							
	(6)	Turn th	e control wl	heel fully left	and then fu	lly right				
	(7)	Make su	re the aile	rons do not mov	e.					
	(8)	Put the	TAIL FLT C	ONTROL SHUTOFF	switch C on t	the P61 p	anel to	ON.		
	(9)	Put the C STAB TRIM valve switch on the P10 papel to CUT OUT								
	(10)	Make su is in t in the	re the towin he bypass po center posi	the towing handle on the nose gear metering valve module bypass position. If necessary, put the nose gear wheels iter position.						
EFFECTIVITY				FUNCTIONAL	HYDRAULIC SY	YSTEMS (I	NTERNAL	LEAKAGE)		
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SAS	767
	TASK CARD

AIRLINE CARD NO.

			TASK CARD								
MECH	INSP										
		(11)	Put the YAW DAMPER L switch on the P5 panel to ON.								
		(12) Put the WING FLIGHT CONTROL SHUTOFF switch C on the P61 papel to (									
		(13)	Push the A/P ENGAGE C CMD switch on the mode control panel on the								
			P55 panel.								
		(14)	Put the C STAB TRIM valve switch on the P1O panel to NORM.								
		(15)	For the multimeter technique, write the multimeter value and find the equivalent flow from figure 607.								
	<u>NOTE</u> : This multimeter value is eqivalent to the total o leakage.										
		(16)	For the flowmeter technique, write the flowmeter value.								
			<u>NOTE</u> : The flowmeter value is the total center system leakage.								
		(17)	Push the A/P DISENGAGE switch on the mode control panel on the P55 panel.								
		(18)	Put the YAW DAMPER L switch to OFF on the P5 panel to OFF.								
		(19)	If the total center system leakage is more than 4.5 GPM, do the Full Hydraulic System Internal Leakage Check and Isolation of Components with High Leakage procedure.								
		(20)	Replace components as necessary to decrease the gross system leakage below 4.5 GPM.								
			<u>NOTE</u> : This leakage rate permits the leakage to increase before a subsequent leakage check and not become more than the 6.0 GPM approved limit.								
	(21) After the components are replaced, do the Center Hydraul Gross Internal Leakage Check again to make sure the leak less than 4.5 GPM.										
		(22)	(22) Remove the pressure from the hydraulic system:								
EFF	ECTI	VITY	FUNCTIONAL HYDRAULIC SYSTEMS (INTERNAL LEAKAGE)								

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				TASK CARD						
MECH	INSP									
			(a)	If the hydraulic system was pressurized with the ACMP, put the C HYD PUMPS-ELEC 1 pump switch to the OFF position.						
			(b)	If the hydraulic system was pressurized with the service cart, operate the hydraulic service cart to decrease the pressure in the system to zero.						
		(23)	If t	he flowmeter technique was used, do these steps:						
			(a)	If the ACMP was used to pressurize the system, do these steps:						
				<ol> <li>Remove the flowmeter from the ACMP pressure line and connect the ACMP pressure line.</li> </ol>						
				WARNING: REFER TO AMM 32-00-15/201 FOR THE LOCK REMOVAL PROCEDURE. FAST MOVEMENT OF THE DOORS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.						
				<ol> <li>Remove the landing gear door lock and close the right wheel door (AMM 32-00-15/201).</li> </ol>						
			(b)	If the hydraulic service cart was used to pressurize the system, do these steps:						
				<ol> <li>Disconnect the service cart and install the caps on the airplane ground power connections.</li> </ol>						
				<ol> <li>Close access panel 149BL on the keel beam between the main wheel wells (AMM 06-41-00/201).</li> </ol>						
		(24)	If t	he multimeter technique was used, do these steps:						
			(a)	Do these steps to remove the clamp-on ac current probe:						
				<ol> <li>If practical, remove electrical power while you access the power panel (AMM 24-22-00/201).</li> </ol>						
				2) Remove the clamp-on ac current probe from the wire at the ACMP ELCU and close up the P31 panel.						
		G. Rig	nt Hyd	raulic System Gross Internal Leakage Check						
		(1)	If t	he flowmeter technique is used, do these steps:						
EFF	ECTIVI	ГҮ		FUNCTIONAL HYDRAULIC SYSTEMS (INTERNAL LEAKAGE)						
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MECH INSP

- (2) If the multimeter technique is used, do these steps:
  - WARNING: BE CAREFUL WHEN THE CLAMP-ON AC CURRENT PROBE IS INSTALLED INTO THE POWER PANEL. HIGH VOLTAGES CAN BE PRESENT IN THE POWER PANELS. CONTACT WITH HIGH VOLTAGE CAN CAUSE INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.
  - Do these steps to install the multimeter and the clamp-on ac (a) current probe:
    - 1) If practical, remove electrical power while you access the power panel (AMM 24-22-00/201).
    - 2) Get access to the right system ACMP ELCU M896 in the P31 panel.
    - 3) Put the clamp-on ac current probe around one of the three wires which connect to the load side of the ELCU.
    - 4) Connect the multimeter to the clamp-on ac current probe.
    - 5) If necessary, supply electrical power (AMM 24-22-00/201).

KEEP PERSONS AND EQUIPMENT AWAY FROM HYDRAULIC COMPONENTS WARNING: THAT CAN MOVE. INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

(3) Pressurize the right hydraulic system:

2	EFFECTIVITY	FUNCTIONAL	HYDRAULIC	SYSTEMS (INTERNAL LEAKAGE)
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		TASK CARD							
MECH INSP									
		(a) To pressurize the hydraulic system with the ACMP, put the R HYD PUMP-ELEC pump switch to the ON position.							
		(b) To pressurize the hydraulic system with the service cart, operate the hydraulic service cart to pressurize the right system to 3000 psi.							
	(4)	Put the WING and TAIL FLT CONTROL SHUTOFF switch R on the P61 panel to ON.							
	(5)	Push the A/P ENGAGE R CMD switch on the mode control panel on the P55 panel.							
	(6)	Make sure the right thrust reverser is retracted and the thrust reverser lever on the pilots control stand is in the retract position.							
	(7)	For the multimeter technique, write the multimeter value and find the equivalent flow from figure 607.							
		<u>NOTE</u> : This multimeter value is eqivalent to the total right system leakage.							
	(8)	For the flowmeter technique, write the flowmeter value.							
		<u>NOTE</u> : The flowmeter value is the total right system leakage.							
	(9)	If the total right system leakage is more than 4.5 GPM, do the Full Hydraulic System Internal Leakage Check and Isolation of Components with High Leakage procedure.							
	(10)	Replace components as necessary to decrease the gross system leakage below 4.5 GPM.							
		<u>NOTE</u> : This leakage rate permits the leakage to increase before a subsequent leakage check and not become more than the 6.0 GPM approved limit.							
	(11)	After the components are replaced, do the Right Hydraulic System Gross Internal Leakage Check again to make sure the leakage rate is less than 4.5 GPM.							
	(12) Push the A/P DISENGAGE switch on the mode control panel on the P5 panel.								
	,								
EFFECIIVITY	I <u> </u>	FUNCTIONAL HYDRAULIC SYSTEMS (INTERNAL LEAKAGE)							

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STATION		]									BOE	EING CARD NO.
TAIL NO.					$\langle \! \rangle$	BØ	EIN	G			29–0	03–02
	DATE		S	AS	e c	7	<b>'</b> 67				AIR	LINE CARD NO.
						TASK	CARD					
SKILL	WORK AR	ËA	REL	ATED TASK			INTERVAL			PHASE	MPD REV	TASK CARD REVISION
AIRPL	CREW CA	BIN				20		(#)		12424	017	APR 22/09
FUNC	TIONAL	ELE	/ATOR A		ER PCA	's		STRUCTURAL I	LLUSTRATION RE	FERENCE	AIRPLAN	NE ENGINE
	ZONES					-		ACCESS DANEL	s		ALL	. ALL
211	324 335	5 345	5	324GL	324JL	324LL	335EB	335GB	335HB 34	45EB 3	45GB	345HB
MECH INS	P										I	MPD ITEM NUMBER
	CHECK POWER (#) CM MS AD DE	INTE CONTE IR FRE GG-3 A JUSTE VELOF	RNAL LE ROL ACT EQUENCY ANALYSI ED AS A PED FRE	AKAGE C UATORS IS 12C S FREQU NY MRB QUENCY	OF ELEV/ (LEFT, )OO HOUF JENCY OF ITEM UN IS REA( ernal Le	ATOR AND CENTER, RS. 2C APP NTIL THE CHED.	RUDDER AND RI LIES AN 12000-	GHT). ID MAY BE HOUR CMR	r and Ruc	lder Po	29-1 wer	1-00-6G
	<u>Cor</u>	ntrol	<u>Actuat</u>	ors		<u>cakaye c</u>	ILECK OI	Lievalu				
	Α.	Gene	eral									
	(1) The leakage check procedure using the rudder actuator lock set calculates the sum of the leakages in the empennage with the rudder and elevator PCAs off null for each hydraulic system. The leakage rates must not be more than the approved leakage flow rates. If a system has more than the approved leakage flow rates, replace or repair components until the leakage is less than the approved limits. The sequence in which you do a test of the left, right, and center hydraulic systems is not important. When the leak check of a system is started, do not stop until the procedure is completed, to									et rudder eakage If a or ht, and eck of a eed, to		
	(2) When you do trouble-shooting, it is not necessary to do a check of all the systems. In the system with high leakage, feel for hot tubing or actuators and listen for fluid leakage. This method wil isolate the defective components in a subsystem which has too much internal leakage. Use approved tools to find heat, vibration, or sound. Before you do an internal leakage check, make sure persons will not be injured or equipment will not be damaged when the powered components move.								ck of ot od will o much o, or ersons			
	(3) There are two techniques to measure flow rates, the multimeter technique and the flowmeter technique.								r			
			(a)	Multime	eter teo	chnique						
EFFEC	ΤΙVΙΤΥ					FUNCTI	ONAL	ELEVATO	R AND RUI	DER PC	A'S	
						29-11	-00-6G	29-003-	02 P/	AGE 1	0F 28	APR 22/09

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							THOR CARD					
MECH	INSP											
					1)	The multim pumps (ACM	eter technique P) to measure	uses the alt the hydraulic	ernating flow ra	g current ate.	t moto	or
					2)	A clamp-on the ACMP E then conne that flows Fig. 607 c	ac current pr LCU in the P31 cted to the cu in the wire t hanges the cur	obe is instal or P32 panel rrent probe t o the pump mo rent to a hyd	led arou . The r o measur tor. A raulic	und one w multimete re the cu graph sh flow rate	vire a er is urrent nown i e.	it : in
				(b)	Flo	wmeter tech	nique					
					1)	The flowme rates dire or a hydra the pressu pressure f	ter technique ctly while the ulic service c re line betwee ilter module (	uses a flowme system is pr art. The flo n the pressur Fig 603A).	ter to r essurize wmeter - e source	measure t ed with a is insta e and the	flow an ACM lled i e	1P i n
					2)	If you use values as specified	the flowmeter flow numbers a in the procedu	technique, w nd ignore the re.	rite the multime	e flowmet eter valu	ter Jes	
		В.	Equi	pment								
			(1)	This	equ	ipment is u	sed with the m	ultimeter tec	hnique:			
				(a)	Dig 27	ital Multim YEL, or equ	eter – John Fl ivalent	uke Model				
				(b)	Cla Mod	mp-on AC Cu el 80i 600.	rrent Probe -	John Fluke				
					<u>NOT</u>	<u>E</u> : The ac the mul	current probe timeter.	is used with				
			(2)	This mult	equ imet	ipment is u er techniqu	sed with the f e):	lowmeter tech	nique (d	optional	to th	ıe
				(a)	Flo 7.0 the 300	wmeter – co GPM range indication O psi	mmercially ava with a precisi , specified fo	ilable, 0.2 t on of ±3% of r operation a	o t			
EFF	ECTI	νιτγ					FUNCTIONAL	ELEVATOR AND	RUDDER	PCA'S		
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AIRLINE CARD NO.



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SAS 767 TASK CARD

AIRLINE CARD NO.

	_		
MECH	INSP		
		(1)	Look at the nameplate on the ACMPs and make a record of the manufacturer.
			<u>NOTE</u> : "Abex" pumps may have Abex, Parker or Parker/Abex on the nameplate. "Vickers" pumps may have Eaton or Eaton/Vickers on the nameplate.
		(2)	Make sure all hydraulic pump switches on the pilots' overhead panel, P5, are in the OFF position.
		(3)	Supply electrical power (AMM 24-22-00/201).
		(4)	Make sure the persons on the ground can speak with those in the control cabin.
		(5)	Make sure the landing gear downlocks are installed (AMM 32–00–20/201).
		(6)	Put chocks on the main landing gear.
		(7)	Make sure the flaps and slats are fully retracted.
		(8)	Make sure the thrust reversers are retracted and the thrust reverser levers are in the retracted position.
		<u>CAUT</u>	ION: DO NOT OPERATE THE HYDRAULIC PUMPS WITHOUT A MINIMUM QUANTITY OF FUEL IN THE TANKS OR AFTER THE OVERHEAT LIGHT COMES ON. IF THE HYDRAULIC SYSTEM HEAT EXCHANGERS ARE NOT COVERED WITH FUEL, THE HYDRAULIC FLUID CAN BECOME TOO HOT.
		(9)	Before you pressurize the hydraulic systems with the ACMPs, make sure the left and right main fuel tanks each contain at least 600 gallons of fuel so that the heat exchangers in the fuel tanks do not become too hot.
			<u>NOTE</u> : This minimum fuel requirement is not applicable when the hydraulic systems are pressurized with an external ground service cart.
		(10)	Make sure the brakes are released.
		(11)	Make sure the RESERVE BKS & STRG switch on the main instrument panel, P1, is in the OFF position and the amber VALVE light is off.
EFF	ECTI	VITY	FUNCTIONAL ELEVATOR AND RUDDER PCA'S

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M	IECH	INSP			
				(12)	Make sure the speedbrake handle on the control stand panel, P1O, is in the DN position.
				(13)	Make sure these circuit breakers on the overhead panel, P11, are closed:
					(a) 11C6, FLT CONT ELEC 1L AC
					(b) 11C7, FLT CONT ELEC 1L DC
					(c) 11C8, FLT CONT ELEC 2L AC
					(d) 11c9, FLT CONT ELEC 2L DC
					(e) 11G10, RUDDER RATIO
					(f) 11G17, FLT CONT ELEC 1R AC
					(g) 11G18, FLT CONT ELEC 1R DC
					(h) 11G26, FLT CONT ELEC 2R AC
					(i) 11G27, FLT CONT ELEC 2R DC
					(j) 11H14, SLAT SHUTOFF
					(k) 11J14, FLAP SHUTOFF
					(l) EICAS (6 locations)
				(14)	Push the ELEC/HYD switch on the engine indicating and crew alerting system EICAS maintenance panel.
			E.	Left Usin	Hydraulic System Internal Leakage Check of Elevator and Rudder PCAs g a Rudder Actuator Lock Set (Fig. 604)
				<u>NOTE</u>	This procedure calculates the sum of the leakages in the empennage with the rudder and elevators off null. The off null leakage can change with the direction of surface movement.
				(1)	Open access panels 324LL, 324JL, and 324GL for the rudder PCAs (AMM 06-42-00/201).
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	277	CUI	VIII		FUNCTIONAL ELEVATOR AND RUDDER PCA'S
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MECH	INSP	-	
		(2)	Install the locks on all three rudder power control actuators PCAs (Fig. 603) (AMM 27–21–02/201).
			<u>NOTE</u> : You must use only PCA locks that have flanges at the two ends.
		(3)	If the multimeter technique is used, do these steps:
			WARNING: BE CAREFUL WHEN THE CLAMP-ON AC CURRENT PROBE IS INSTALLED INTO THE POWER PANEL. HIGH VOLTAGES CAN BE PRESENT IN THE POWER PANELS. CONTACT WITH HIGH VOLTAGE CAN CAUSE INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.
			(a) Do these steps to install the multimeter and the clamp-on ac current probe:
			<ol> <li>If practical, remove electrical power while you access the power panel (AMM 24-22-00/201).</li> </ol>
			<ol> <li>Get access to the left system ACMP ELCU M895 in the P32 panel.</li> </ol>
			<ol> <li>Put the clamp-on ac current probe around one of the three wires which are connected to the load side of the ELCU.</li> </ol>
			4) Connect the multimeter to the clamp-on ac current probe.
			5) If necessary, supply electrical power (AMM 24-22-00/201).
		(4)	If the flowmeter technique is used, do these steps:
			(a) Remove the pressure from the left hydraulic system and reservoir (AMM 29–11–00/201).
			(b) Open the aft strut hydraulic access panel, 437BR (AMM 06–43–00/201).
			(c) If the ACMP will be used to pressurize the system, then install the flowmeter in the pressure line between the left system ACMP and the ACMP pressure/case drain filter module.
EF	ECTI	VITY	FUNCTIONAL FLEVATOR AND DUDDED DCALS
			LEVATOR AND RODDER FOR 3
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					TASK CARD				
MECH	INSP								
			(d)	If the hydraul hydraulic syste return lines to flowmeter insta	ic service car em, then conne o the left sys alled in the c	t will be use ct the servic tem ground po art pressure	d to press e cart pro wer connec line (Fig	surize the essure and ctions wit . 603A).	≩ 1 th a
		<u>WARNING</u> :		KEEP PERSONS AND EQUIPMENT AWAY FROM HYDRAULIC COMPONENTS THAT CAN MOVE. INJURY TO A PERSON OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.					
		<u>C</u>	<u>AUTION</u> :	PRESSURIZE ONL LOCKS ARE INST LOCKS.	Y THE LEFT HYD ALLED TO DECRE	RAULIC SYSTEM ASE THE LOADS	WHILE TH ON THE RU	E RUDDER F UDDER PCA	PCA
		(5	5) Pres	surize the left	hydraulic sys	tem:			
			(a)	To pressurize PUMP-ELEC pump	the hydraulic switch to the	system with t ON position.	he ACMP,	put the L	HYD
			(b)	To pressurize operate the hydrogeneric system to 3000	the hydraulic draulic servic psi.	system with t e cart to pre	he servico ssurize tl	e cart, he left	
		(6	5) Put over	the YAW DAMPER   head panel, P5,	L switch on th to the INOP p	e yaw damper osition.	control pa	anel on	
		(7	') Push cente	the A/P DISENG er glareshield	AGE switch on panel, P55.	the mode cont	rol panel	on the	
		(8	3) Put to O	the WING FLT CO FF. Make sure	NTROL SHUTOFF the amber swit	switch L on r ch light is o	ight side n.	panel, Pé	51,
		(9	) Make ON.	sure the TAIL	FLT CONTROL SH	UTOFF switch	L on the I	P61 panel	is
		(10	)) Put	the LEFT STAB T	RIM valve swit	ch on the P10	panel to	CUTOUT.	
		(11	) Pull	the control co	lumn fully aft	-			
EFF	ECTI	VITY			FUNCTIONAL	ELEVATOR AND	RUDDER P	CA'S	
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MECH INSP		
	(12)	For the multimeter technique, write the multimeter value as Value No. 1 and find the equivalent Flow No. 1 from figure 607.
		<u>NOTE</u> : Make sure the recorded multimeter value is the stabilized value, and not the transitional value.
	(13)	For the flowmeter technique, write the flowmeter value as Flow No. 1.
		<u>NOTE</u> : Make sure the recorded flowmeter value is the stabilized value, and not the transitional value.
	(14)	Put the control column to the neutral position.
	(15)	Push the control column fully forward.
	(16)	For the multimeter technique, write the multimeter value as Value No. 2 and find the equivalent Flow No. 2 from figure 607.
		<u>NOTE</u> : Make sure the recorded multimeter value is the stabilized value, and not the transitional value.
	(17)	For the flowmeter technique, write the flowmeter value as Flow No. 2.
		<u>NOTE</u> : Make sure the recorded flowmeter value is the stabilized value, and not the transitional value.
	(18)	Put the control column to the neutral position.
	(19)	Open this circuit breaker on the P11 panel and attach DO–NOT–CLOSE tag:
		(a) 11G10, RUDDER RATIO
	(20)	Put the TAIL FLT CONTROL SHUTOFF switch L on the P61 panel to OFF.
	(21)	For the multimeter technique, write the multimeter value as Value No. 3 and find the equivalent Flow No. 3 from figure 607.
		<u>NOTE</u> : Make sure the recorded multimeter value is the stabilized value, and not the transitional value.
EFFECTIVITY		FUNCTIONAL FLEVATOR AND RUDDER PCA'S

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AIRLINE CARD NO.

MECH	INSP			
			(22)	For the flowmeter technique, write the flowmeter value as Flow No. 3.
				<u>NOTE</u> : Make sure the recorded flowmeter value is the stabilized value, and not the transitional value.
			(23)	Calculate the empennage off null leakage for the elevators with the trailing edge down (Fig. 604, Step 1).
			(24)	Calculate the empennage off null leakage for the elevators with the trailing edge up (Fig. 604, Step 2).
				NOTE: The calculated leakage is the sum of the leaks through these components: <ul> <li>elevator feel unit</li> <li>rudder ratio changer actuator</li> <li>piston seals</li> <li>load relief valves</li> <li>anticavitation check valves of the elevator and rudder PCAs</li> <li>autopilot and yaw damper shutoff valves.</li> </ul>
				<u>NOTE</u> : A large negative value shows there are leaks through the tail flight control shutoff valves to the return line when they are closed. The location of the internal leak usually releases heat and/or flow noise when the elevators are off null.
			(25)	If the empennage off null leakage is more than 1.0 GPM, a test of each of the PCAs is necessary. If a PCA has a leakage rate more than 1.0 GPM, the PCA must be replaced. Component leakage can be isolated by the procedure which follows:
				(a) Remove the pressure from the left hydraulic system and reservoir (AMM 29–11–00/201).
				(b) Disconnect the hydraulic pressure line from a PCA and install a plug which can hold 3000 psi in the pressure line.
				(c) Install a cap on the PCA pressure port.
				(d) Do the left hydraulic system empennage off null leakage check again. This leakage value will be smaller than the leakage value which was calculated before. The difference between these leakage values is the leakage rate of the PCA which is disconnected.
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		111		FUNCTIONAL ELEVATOR AND RUDDER PCA'S
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MECH	INSP				
		(26)	Remove the pressure	e from the hydr	aulic system:
			(a) If the hydrau the L HYD PUMI	lic system was P-ELEC pump swi	pressurized with the ACMP, then put tch to the OFF position.
			(b) If the hydrau operate the hy the system to	lic system was ydraulic servic zero.	pressurized with the service cart, e cart to decrease the pressure in
		(27)	If the multimeter	technique was u	sed, do these steps:
			WARNING: BE CAREFU FROM THE POWER PAU TO PERSOU	JL WHEN THE CLA POWER PANEL. NELS. CONTACT NNEL OR DAMAGE	MP-ON AC CURRENT PROBE IS REMOVED HIGH VOLTAGES CAN BE PRESENT IN THE WITH HIGH VOLTAGE CAN CAUSE INJURY TO EQUIPMENT.
			(a) Do these step:	s to remove the	clamp-on ac current probe:
			1) If practic power pane	cal, remove ele el (AMM 24-22-0	ctrical power while you access the 0/201).
			2) Remove the ACMP ELCU	e clamp–on ac c and close up t	urrent probe from the wire at the he P32 panel.
		(28)	If the flowmeter to	echnique was us	ed, do these steps:
			(a) If the hydrau remove the flo the ACMP pres	lic system was owmeter from th sure line.	pressurized with the ACMP, then e ACMP pressure line and reconnect
			(b) If the hydrau disconnect the on the airpla	lic system was e service cart ne ground power	pressurized with the cart, then and flowmeter and install the caps connections.
			(c) Close the aft (AMM 06-43-00,	strut hydrauli /201).	c access panel, 437BR
		(29)	Put the YAW DAMPER	L switch on th	e P5 panel to ON.
		(30)	Put the WING and T/ panel to ON.	AIL FLT CONTROL	SHUTOFF switches L on the P61
		(31)	Remove the DO-NOT-( P11 panel:	CLOSE tag and c	lose this circuit breaker on the
EFF	ECTI	VITY		FUNCTIONAL	ELEVATOR AND RUDDER PCA'S

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		TASK CARD
MECH	INSP	
		(a) 11G10, RUDDER RATIO
		(32) Put the LEFT STAB TRIM VALVE switch on the P10 panel to NORM.
		(33) Remove the rudder lock set tool from all rudder PCAs (Fig. 603). (AMM 27–21–02/201).
		(34) Install access panels 324LL, 324JL, and 324GL (AMM 06-42-00/201).
		F. Center Hydraulic System Internal Leakage Check of Elevator and Rudder PCAs (Fig. 605)
		<u>NOTE</u> : This procedure calculates the sum of the leakage in the empennage with the rudder and elevators off null. When you operate the rudder pedals, push at the pedal pivot points (The bottoms of the pedals) to prevent brake operation. The off null leakage can change with the direction of surface movement.
		(1) If the flowmeter technique is used, do these steps:
		(a) Remove the pressure from the center hydraulic system and reservoir (AMM 29–11–00/201).
		(b) If the ACMP is used to pressurize the system, do these steps:
		WARNING: REFER TO AMM 32-00-15/201 FOR THE LOCK INSTALLATION PROCEDURE. FAST MOVEMENT OF THE DOORS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT IF THE LOCKS ARE NOT INSTALLED CORRECTLY.
		1) Open the right wheel well door and install the landing gear door lock (AMM 32–00–15/201).
		2) Install the flowmeter in the pressure line between the center system ACMP C1 and the ACMP C1 pressure/case drain filter module.
		(c) If the hydraulic service cart is used, do these steps:
		<ol> <li>Open the access panel 149BL on the keel beam between the main wheel wells for access to the center system ground power connections (AMM 06-41-00/201).</li> </ol>
EFF	ECTI	VITY FUNCTIONAL ELEVATOR AND RUDDER PCA'S

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MECH	INSP		
		(5)	Put the WING FLT CONTROL SHUTOFF switch C on the P61 panel to OFF.
		(6)	Turn the control wheel fully left and then fully right through five cycles to bleed remaining pressure that is downstream of the shutoff valve.
		(7)	After you have bled the remaining pressure, make sure that the ailerons do not move when you move the control wheel.
		(8)	Put the TAIL FLT CONTROL SHUTOFF switch C on the P61 panel to ON.
		(9)	Put the C STAB TRIM valve switch on the P10 panel to CUTOUT.
		(10)	Make sure the towing handle on the nose gear metering valve module is in the usual position. If necessary, put the nose landing gear wheels in the center position.
		(11)	Push the left rudder pedal fully forward and pull the control column fully aft and hold.
		(12)	For the multimeter technique, write the multimeter value as Value No. 1 and find the equivalent Flow No. 1 from figure 607.
			<u>NOTE</u> : Make sure the recorded multimeter value is the stabilized value, and not the transitional value.
		(13)	For the flowmeter technique, write the flowmeter value as Flow No. 1.
			<u>NOTE</u> : Make sure the recorded flowmeter value is the stabilized value, and not the transitional value.
		(14)	Put the rudder pedal and the control column to the neutral position.
		(15)	Push the right rudder pedal fully forward and push the control column fully forward and hold.
		(16)	For the multimeter technique, write the multimeter value as Value No. 2 and find the equivalent Flow No. 2 from figure 607.
			<u>NOTE</u> : Make sure the recorded multimeter value is the stabilized value, and not the transitional value.
EFF	ECTIVI	ТҮ	FUNCTIONAL ELEVATOR AND RUDDER PCA'S
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	TASK CARD

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MECH INSP		
	(17)	For the flowmeter technique, write the flowmeter value as Flow No. 2.
		<u>NOTE</u> : Make sure the recorded flowmeter value is the stabilized value, and not the transitional value.
	(18)	Put the rudder pedal and the control column to the neutral position.
	(19)	Put the TAIL FLT CONTROL SHUTOFF switch C on the P61 panel to OFF.
	(20)	Move the control column forward and then aft to bleed remaining pressure that is downstream of the shutoff valve.
	(21)	After you have bled the pressure, make sure the elevators do not move while you move the control column.
	(22)	For the multimeter technique, write the multimeter value as Value No. 3 and find the equivalent Flow No. 3 from figure 607.
		<u>NOTE</u> : Make sure the recorded multimeter value is the stabilized value, and not the transitional value.
	(23)	For the flowmeter technique, write the flowmeter value as Flow No. 3.
		<u>NOTE</u> : Make sure the recorded flowmeter value is the stabilized value, and not the transitional value.
	(24)	Calculate the empennage off null down/right leakage (Fig. 605, Step 1).
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MECH	INSP	-						
			(25)	Calculat	e the empen	nage off null	up/left leakage (Fig. 605, Step 2).	
				<u>NOTE</u> : T - - - -	he calculat hese compon elevator f piston sea load relie and elevat autopilot	ed leakages ar nents: eel computer als of and anticavi cor PCAs and yaw damper	re the sum of the leakages through itation check valves of the rudder r shutoff valves.	
				NOTE: T a o t l	he location nd/or flow ff null. A hrough the ine when th	n of the intern noise when the Large negativ tail flight co ney are closed.	hal leak usually releases heat e tail flight control surfaces are ve value shows that there are leaks ontrol shutoff valves to the return	
			(26)	If the e each of than 1.0 isolated	mpennage of the PCAs is GPM, the P by the pro	f null leakage necessary. I PCA must be rep ocedure which f	e is more than 1.0 GPM, a test of If a PCA has a leakage rate of more blaced. Component leakage can be follows:	
				(a) Rem res	ove the pre ervoirs (AM	essure from the M 29-11-00/201	e center hydraulic system and ).	
				(b) Dis plu	connect the g which can	e hydraulic pre n hold 3000 psi	essure line from a PCA and install a i in the pressure line.	
			(c) Install a cap on the PCA pressure port.					
				(d) Do aga val the dis	the center in. This l ue which wa se leakage connected.	hydraulic syst eakage value w as calculated b values is the	tem empennage off null leakage check will be smaller than the leakage before. The difference between leakage rate of the PCA which is	
			(27)	Remove t	he pressure	e from the hydr	aulic system:	
				(a) If the	the hydraul C HYD PUMP	ic system was P-ELEC 1 pump s	pressurized with the ACMP, then put switch to the OFF position.	
				(b) If ope the	the hydraul rate the hy system to	ic system was draulic servic zero.	pressurized with the service cart, ce cart to decrease the pressure in	
			(28)	If the f	lowmeter te	echnique was us	sed, do these steps:	
EFF	ECTI	VITY					ELEVATOR AND DUDDER DCATS	
						TUNCTIONAL	LELVATOR AND RODDER FCA 3	

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		TASK CARD	
MECH	INSP		
		(a) If the ACMP was used to pressurize the system, do these steps:	
		<ol> <li>Remove the flowmeter from the ACMP pressure line and connect the ACMP pressure line.</li> </ol>	
		WARNING: REFER TO AMM 32-00-15/201 FOR THE LOCK REMOVAL PROCEDURE. FAST MOVEMENT OF THE DOORS CAN CAUSE INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.	
		<ol> <li>Remove the landing gear door lock and close the right wheel well door (AMM 32-00-15/201).</li> </ol>	
		(b) If the hydraulic service cart was used to pressurize the system, do these steps:	
		<ol> <li>Disconnect the service cart and install the caps on the airplane ground power connections.</li> </ol>	
		<ol> <li>Close the access panel 149BL on the keel beam between the main wheel wells (AMM 06-41-00/201).</li> </ol>	
		(29) If the multimeter technique was used, do these steps:	
		(a) Do these steps to remove the clamp-on ac current probe:	
		<ol> <li>If practical, remove electrical power while you access the power panel (AMM 24-22-00/201).</li> </ol>	
		2) Remove the clamp—on ac current probe from the wire at the ACMP ELCU and close up the P31 panel.	
		(30) Put the YAW DAMPER R switch on the P5 panel to ON.	
		(31) Put the WING and TAIL FLIGHT CONTROL SHUTOFF switches C on the P61 panel to ON.	
		(32) Put the C STAB TRIM valve switch on the P1O panel to NORM.	
EFF	ECTIVITY	FUNCTIONAL ELEVATOR AND RUDDER PCA'S	
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MECH	INSP							
		G.	Right Hy	draul	ic System I	nternal Leakag	e Check of El	evator and Rudder PCAs
			<u>NOTE</u> : T W r p c	his pr ith th udder edals: hange	rocedure ca ne rudders pedals, pu ) to preven with the d	lculates the s and elevators sh at the peda t brake operat irection of su	um of the lea off null. Wh I pivot point ion. The off rface movemer	akages in the empennage nen you operate the ss (the bottoms of the null leakage can nt.
			(1) If	the f	lowmeter te	chnique is use	d, do these s	steps:
			(a)	Remo rese	ove the pre ervoir (AMM	ssure from the 29-11-00/201)	right hydrau	llic system and
			(b)	Oper (AMI	n the aft s 1 06-43-00/	trut hydraulic 201).	access panel	447BR
			(c)	If the ACMF	the ACMP wi flowmeter P and the A	ll be used to in the pressur CMP pressure/c	pressurize th e line betwee ase drain fil	ne system, then install en the right system ter module.
			(d)	If syst to inst	the hydraul tem, then c the right s talled in t	ic service car onnect the ser ystem ground p he cart pressu	t will be use vice cart pre ower connecti re line (Fig.	ed to pressurize the essure and return lines ons with a flowmeter 603A).
			(2) If	the mu	ultimeter t	echnique is us	ed, do these	steps:
			WAR	<u>NING</u> :	BE CAREFU INTO THE POWER PAN TO PERSON	L WHEN THE CLA POWER PANEL. ELS. CONTACT NEL OR DAMAGE	MP-ON AC CURF HIGH VOLTAGES WITH HIGH VOL TO EQUIPMENT.	RENT PROBE IS INSTALLED CAN BE PRESENT IN THE TAGE CAN CAUSE INJURY
			(a)	Do t curi	these steps rent probe:	to install th	e multimeter	and the clamp-on ac
				1)	If practic power pane	al, remove ele l (AMM 24-22-0	ctrical power 0/201).	while you access the
				2)	Get access panel.	to the right	system ACMP E	ELCU M896 in the P31
				3)	Put the cl wires whic	amp-on ac curr h connect to t	ent probe arc he load side	ound one of the three of the ELCU.
	 := ^ T T							
		V I I				FUNCTIONAL	ELEVATOR AND	RUDDER PCA'S
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	TASK CARD

MECH	INSP										
					4)	Connect th	e multimeter t	o the clamp-or	n ac current probe.		
					5)	If necessa	ry, supply ele	ctrical power	(AMM 24-22-00/201).		
			<u>WARN</u>	<u>ING</u> :	KEEI Can Whei	P PERSONS A MOVE. INJ N HYDRAULIC	ND EQUIPMENT A URY TO PERSONN POWER IS SUPP	WAY FROM HYDR/ EL OR DAMAGE <sup>-</sup> LIED.	AULIC COMPONENTS THAT TO EQUIPMENT CAN OCCUR		
			(3)	Pres	suri	ze the righ	ıt hydraulic sy	stem:			
				(a)	To j Pumi	pressurize P-ELEC pump	the hydraulic switch to the	system with tl ON position.	he ACMP, put the R HYD		
				(b)	To j opei sys	pressurize rate the hy tem to 3000	the hydraulic draulic servic ) psi.	system with th e cart to pres	he service cart, ssurize the right		
			(4)	Push pane	the l.	A/P DISENG	AGE switch on	the mode cont	rol panel on the P55		
			(5)	Put	the WING FLT CONTROL SHUTOFF switch R on the P61 panel to OFF.						
			(6)	Turn	the control wheel fully left and then fully right.						
			(7)	Make	sur	e the ailer	ons do not mov	e.			
			(8)	Make ON.	sur	e the TAIL	FLT CONTROL SH	UTOFF switch H	R on the P61 panel is		
			(9)	Push full	the left rudder pedal fully forward and pull the control column y aft and hold.						
			(10)	For No.	the multimeter technique, write the multimeter value as Value 1 and find the equivalent Flow No. 1 from figure 607.						
			(11)	For No.	the flowneter technique, write the flowmeter value as Flow 1.						
			(12)	Put posi	t the rudder pedals and the control column to the neutral sition.						
			(13)	Push colu	the mn fu	right rudd ully forwar	ler pedal fully d and hold.	forward and p	oush the control		
EFF	ECTI	VITY -					FUNCTIONAL	ELEVATOR AND	RUDDER PCA'S		
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SAS 767 TASK CARD

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MECH	INSP		
		(14)	For the multimeter technique, write the multimeter value as Value No. 2 and find the equivalent Flow No. 2 from figure 607.
		(15)	For the flowneter technique, write the flowmeter value as Flow No. 2.
		(16)	Put the rudder pedals and the control column to the neutral position.
		(17)	Put the TAIL FLT CONTROL SHUTOFF switch R on the P61 panel to OFF.
		(18)	Push one rudder pedal and then the other and make sure the rudder does not move.
		(19)	For the multimeter technique, write the multimeter value as Value No. 3 and find the equivalent Flow No. 3 from figure 607.
		(20)	For the flowneter technique, write the flowmeter value as Flow No. 3.
		(21)	Calculate the empennage off null down/right leakage (Fig. 606, Step 1).
		(22)	Calculate the empennage off null up/left leakage (Fig. 606, Step 2).
			<ul> <li><u>NOTE</u>: The calculated leakages are the sum of the leakages through these components:         <ul> <li>piston seals</li> <li>load relief and anticavitation check valves of the rudder and elevator PCAs</li> <li>autopilot servos and shutoff valves.</li> </ul> </li> </ul>
			<u>NOTE</u> : A large negative value shows that there are leaks through the tail flight control valves to the return line when they are closed. The location of the internal leak usually releases heat and/or flow noise when the tail flight control surfaces are off null.
		(23)	If the empennage off null leakage is more than 1.0 GPM, a test of each of the PCAs is necessary. If a PCA has a leakage rate of more than 1.0 GPM, the PCA must be replaced. Component leakage can be isolated by the procedure which follows:
			(a) Remove the pressure from the right hydraulic system and reservoirs (AMM 29–11–00/201).
EFF	ECTIVITY		FUNCTIONAL ELEVATOR AND RUDDER PCA'S
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CARD NO.



MECH       INSP       (b) Disconnect the hydraulic pressure line from a PCA and plug which can hold 3000 psi in the pressure line.       (c) Install a cap on the PCA pressure port.         (d) Do the right hydraulic system empennage off null leaka again. This leakage value will be smaller than the leakage value will be sma	-003-02
MECH       INSP         (b)       Disconnect the hydraulic pressure line from a PCA and plug which can hold 3000 psi in the pressure line.         (c)       Install a cap on the PCA pressure port.         (d)       Do the right hydraulic system empennage off null leaka again. This leakage value will be smaller than the leakage value will b	
TASK CARD (b) Disconnect the hydraulic pressure line from a PCA and plug which can hold 3000 psi in the pressure line. (c) Install a cap on the PCA pressure port. (d) Do the right hydraulic system empennage off null leaka again. This leakage value will be smaller than the leakage	AIRLINE CARD NO.
MECH INSP (b) Disconnect the hydraulic pressure line from a PCA and plug which can hold 3000 psi in the pressure line. (c) Install a cap on the PCA pressure port. (d) Do the right hydraulic system empennage off null leaka again. This leakage value will be smaller than the leak	
<ul> <li>(b) Disconnect the hydraulic pressure line from a PCA and plug which can hold 3000 psi in the pressure line.</li> <li>(c) Install a cap on the PCA pressure port.</li> <li>(d) Do the right hydraulic system empennage off null leaka again. This leakage value will be smaller than the smaller than the leakage value will be smaller than the smaller than the leakage value will be smaller than the smaller than t</li></ul>	
<ul> <li>(b) Disconnect the hydraulic pressure line from a PCA and plug which can hold 3000 psi in the pressure line.</li> <li>(c) Install a cap on the PCA pressure port.</li> <li>(d) Do the right hydraulic system empennage off null leaka again. This leakage value will be smaller than the smaller tha</li></ul>	
<ul><li>(c) Install a cap on the PCA pressure port.</li><li>(d) Do the right hydraulic system empennage off null leaka again. This leakage value will be smaller than the leakage.</li></ul>	install a
(d) Do the right hydraulic system empennage off null leaka	
value which was calculated before. The difference bet these leakage values is the leakage rate of the PCA wh disconnected.	age check eakage ween nich is
(e) Push the A/P DISENGAGE Switch on the mode control pane P55 panel, to return the A/P DISENGAGE switch to the n position.	el, on the normal
(24) Remove the pressure from the hydraulic system:	
(a) If the hydraulic system was pressurized with the ACMP, the R HYD PUMP-ELEC pump switch to the OFF position.	, then put
(b) If the hydraulic system was pressurized with the servi operate the hydraulic service cart to decrease the pre the system to zero.	ce cart, essure in
(25) If the flowmeter technique was used, do these steps:	
(a) If the hydraulic system was pressurized with the ACMP, remove the flowmeter from the ACMP pressure line and r the ACMP pressure line.	, then econnect
(b) If the hydraulic system was pressurized with the cart, disconnect the hydraulic service cart and flowmeter an the caps on the airplane ground power connections.	, then nd install
(c) Close the aft strut hydraulic access panel, 447BR (AMM 06-41-00/201).	
(26) If the multimeter technique was used, do these steps:	
WARNING: BE CAREFUL WHEN THE CLAMP-ON AC CURRENT PROBE IS FROM THE POWER PANEL. HIGH VOLTAGES CAN BE PRESE POWER PANELS. CONTACT WITH HIGH VOLTAGE CAN CAUS TO PERSONNEL OR DAMAGE TO EQUIPMENT.	REMOVED NT IN THE SE INJURY
(a) Do these steps to remove the clamp-on ac current probe	:
EFFECTIVITY FUNCTIONAL ELEVATOR AND RUDDER PCA'S	6

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AIRLINE CARD NO.

										ΑΝΡ							
MECH	H INSP	_															
				,	1) I F	[f pr bower	racti r pan	cal, el (A	remove MM 24-	e ele -22-0	ctrica 0/201).	l power	while	you	acce	ss tł	ie
				Ĩ	2) R A	Remo\ \CMP	ve the ELCU	e cla and	mp-on close	ac cu up ti	urrent he P31	probe panel.	from t	he wi	ire a	t the	9
		(	27)	Put th to ON	ne WI	ING a	and T	AIL F	LT COM	NTROL	SHUTO	FF swit	ch R o	n the	e P61	pane	el
		(	28)	Remove	e ele	ectri	icalı	power	, if <sup>.</sup>	it is	not ne	ecessar	y (AMM	24-2	22-00	/201)	
EF	FECT							FUN	CTION	AL	ELEVA	FOR AND	RUDDE	R PCA	\'S		
								29	-11-00	)-6G	29-003	3–02	PAGE	21 (	DF 28	APR	22/06



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29-003-02	

AIRLINE CARD NO.

**BOEING** 767 TASK CARD

	NO. FLOW NO	0.	Value M	lo.	Flow N	No.
1_	1		16		16	
2	2		17		17	
3	3		18		18	
4	4		19		19	
5	5		20		20	
6	6		21		21	
7	7		22		22	
8			23		23	
9			24		24	
10	10		25		25	
11	11		26		26	
12	12		27		27	
13	13		28		28	
14	14		29		29	
15	15		30		30	
Step	)			Leakage	e L	Approved Leakage Flow
Step No.	)			Leakage Flow	e L L	Approved Leakage Flow Limit
Ster No. 1.	Empennage Off Null TI (Flow No. 2)	E Down Lea — (Flow N	kage Io. 3)	Leakage Flow	A e L L	Approved Leakage Flow Limit 1.0 GPM
Step No. 1. 2.	Empennage Off Null TH (Flow No. 2) Empennage Off Null TH (Flow No. 1)	E Down Lea – (Flow M E Up Leaka – (Flow M	kage lo. 3) nge lo. 3)	Leakage Flow =	e L L	Approved Leakage Flow Limit 1.0 GPM 1.0 GPM
Step No. 1. 2. 3.	Empennage Off Null TH (Flow No. 2) Empennage Off Null TH (Flow No. 1) Total Left System Lea Flow No. 4	E Down Lea – (Flow N E Up Leaka – (Flow N akage	ukage lo. 3) uge lo. 3)	Leakage Flow =	2 L L 	Approved Leakage Flow Limit 1.0 GPM 1.0 GPM 4.5 GPM 1
Ster No. 1. 2. 3. 4.	Empennage Off Null TH (Flow No. 2) Empennage Off Null TH (Flow No. 1) Total Left System Lea Flow No. 4 System Relief, EDP CH Isolation Valves Leal	E Down Lea - (Flow M E Up Leaka - (Flow M akage heck, Shut kage	kage lo. 3) nge lo. 3) coff and	Leakage Flow =		Approved Leakage Flow Limit 1.0 GPM 1.0 GPM 4.5 GPM 1
Ster No. 1. 2. 3. 4.	Empennage Off Null TH (Flow No. 2) Empennage Off Null TH (Flow No. 1) Total Left System Lea Flow No. 4 System Relief, EDP CH Isolation Valves Lead Flow No. 5	E Down Lea — (Flow N E Up Leaka — (Flow N akage heck, Shut kage	wage lo. 3) nge lo. 3) coff and	Leakage Flow = =		Approved Leakage Flow Limit 1.0 GPM 1.0 GPM 4.5 GPM 1 1.0 GPM
Ster No. 1. 2. 3. 4.	Empennage Off Null TH (Flow No. 2) Empennage Off Null TH (Flow No. 1) Total Left System Lea Flow No. 4 System Relief, EDP CH Isolation Valves Leal Flow No. 5	E Down Lea - (Flow M E Up Leaka - (Flow M akage heck, Shut kage allowance not become	which permits	Leakage Flow = = = the leakage 6.0 GPM ap	to incomproved	Approved eakage Flow imit 1.0 GPM 1.0 GPM 4.5 GPM 1 1.0 GPM 1.0 GPM
Ster No. 1. 2. 3. 4.	Empennage Off Null TH (Flow No. 2) Empennage Off Null TH (Flow No. 1) Total Left System Lea Flow No. 4 System Relief, EDP CH Isolation Valves Leal Flow No. 5 The 4.5 GPM gives an a subsequent check and r	E Down Lea - (Flow M E Up Leaka - (Flow M akage heck, Shut kage allowance ft Hydraul Figur	which permits more than the ic System Leak	Leakage Flow = = = the leakage e 6.0 GPM ap cage Check 1)	e L L - - - to inci proved	Approved eakage Flow imit 1.0 GPM 1.0 GPM 4.5 GPM 1 1.0 GPM rease before a limit.

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AIRLINE CARD NO.

SAS

BOEING 767

Value No.	Flow No.	Value No.	Flow No.
1	1	21	21
2	2	22	22
3	3	23	23
4	4	24	24
5	5	25	25
6	6	26	26
7	7	27	27
8		28	28
9	9	29	29
10	10	30	30
11	11	31	31
12	12	32	32
13	13	33	33
14	14	34	34
15	15	35	35
16	16	36	36
17	17	37	37
18	18		
19	19		
20	20		
<u>Calculate the </u> Step No.	<u>Component Leakage Val</u>	<u>ues</u> : Le Fl	Approve akage Leakage ow Limit
1. Empennag (Flow No	e Off Null Dn/Right L . 2) – (Flow	.eakage No. 3) =	1.0 G
2. Empennag (Flow No	e Off Null Up/Left Le . 1) - (Flow	eakage No. 3) =	1.0 G

EFFECTIVITY FUNCTIONAL ELEVATOR AND RUDDER PCA'S 74351 29-11-00-6G 29-003-02 PAGE 25 OF 28 APR 22/06

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29-003-02

AIRLINE CARD NO.

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	TACK CADD

SAS

Write				
<u></u>	<u>the Multimeter Value and F</u>	<u>low Data</u> :		
Value	No. Flow No.	Value I	No. Flo	w No.
1	1	13	13	5
2	2	14	14	•
3	3	15	15	j
4	4	16	16	
5	5	17	17	
6	6	18	18	8
7	7	19	19	)
8		20	20	)
9	9	21	21	
10	10	22	22	
11	11	23	23	5
12	12			
1				
	Empennage Off Null Dn/Righ (Flow No. 2 ) – (Fl	t Leakage	=	1.0 GPM
2.	Empennage Off Null Dn/Righ (Flow No. 2) - (Fl Empennage Off Null Up/Left (Flow No. 1) - (Fl	t Leakage .ow No. 3) : Leakage .ow No. 3)	=	1.0 GPM 1.0 GPM
2.	Empennage Off Null Dn/Righ (Flow No. 2) – (Fl Empennage Off Null Up/Left (Flow No. 1) – (Fl Total Right System Leakage Flow No. 4	t Leakage ow No. 3) Leakage ow No. 3)	= =	1.0 GPM 1.0 GPM 4.5 GPM 1
2. 3. 4.	Empennage Off Null Dn/Righ (Flow No. 2) – (Fl Empennage Off Null Up/Left (Flow No. 1) – (Fl Total Right System Leakage Flow No. 4 Shutoff and Isolation Valv Flow No. 5	it Leakage ow No. 3) Leakage ow No. 3) re Leakage	= = =	1.0 GPM 1.0 GPM 4.5 GPM 1 1.0 GPM
2. 3. 4. 5.	Empennage Off Null Dn/Righ (Flow No. 2) - (Fl Empennage Off Null Up/Left (Flow No. 1) - (Fl Total Right System Leakage Flow No. 4 Shutoff and Isolation Valv Flow No. 5 Right Inboard Aileron Null (Flow No. 6) - (Fl	it Leakage ow No. 3) Leakage ow No. 3) re Leakage Leakage ow No. 7)	= = = =	<ol> <li>1.0 GPM</li> <li>1.0 GPM</li> <li>4.5 GPM 1</li> <li>1.0 GPM</li> <li>0.8 GPM</li> </ol>
2. 3. 4. 5. 6.	Empennage Off Null Dn/Righ (Flow No. 2) - (Fl Empennage Off Null Up/Left (Flow No. 1) - (Fl Total Right System Leakage Flow No. 4 Shutoff and Isolation Valv Flow No. 4 Right Inboard Aileron Null (Flow No. 6) - (Fl Left Outboard Aileron Null (Flow No. 7) - (Fl	it Leakage ow No. 3) Leakage ow No. 3) re Leakage ow No. 7) Leakage ow No. 8)	= = = =	<ol> <li>1.0 GPM</li> <li>1.0 GPM</li> <li>4.5 GPM 1</li> <li>1.0 GPM</li> <li>0.8 GPM</li> <li>0.66 GPM</li> </ol>
<ol> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>1 T s</li> </ol>	Empennage Off Null Dn/Righ (Flow No. 2) - (Fl Empennage Off Null Up/Left (Flow No. 1) - (Fl Total Right System Leakage Flow No. 4 Shutoff and Isolation Valv Flow No. 4 Shutoff and Isolation Valv Flow No. 5 Right Inboard Aileron Null (Flow No. 6) - (Fl Left Outboard Aileron Null (Flow No. 7) - (Fl he 4.5 GPM gives an allowa ubsequent check and not be	It Leakage ow No. 3) Leakage ow No. 3) Leakage ow No. 7) Leakage ow No. 8) nce which permits come more than th	= = = = = the leakage to e 6.0 GPM approv	<ul> <li>1.0 GPM</li> <li>1.0 GPM</li> <li>4.5 GPM 1</li> <li>1.0 GPM</li> <li>0.8 GPM</li> <li>0.66 GPM</li> <li>increase before ed limit.</li> </ul>
<ol> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>1 T s</li> </ol>	Empennage Off Null Dn/Righ (Flow No. 2) - (Fl Empennage Off Null Up/Left (Flow No. 1) - (Fl Total Right System Leakage Flow No. 4 Shutoff and Isolation Valv Flow No. 4 Shutoff and Isolation Valv Flow No. 5 Right Inboard Aileron Null (Flow No. 6) - (Fl Left Outboard Aileron Null (Flow No. 7) - (Fl he 4.5 GPM gives an allowa ubsequent check and not be Right Hyc	It Leakage ow No. 3) Leakage ow No. 3) Leakage ow No. 7) Leakage ow No. 8) Ince which permits come more than th draulic System Lea igure 606 (Sheet	<pre>= = = = = = the leakage to e 6.0 GPM approv kage Check 1)</pre>	<ul> <li>1.0 GPM</li> <li>1.0 GPM</li> <li>4.5 GPM 1</li> <li>1.0 GPM</li> <li>0.8 GPM</li> <li>0.66 GPM</li> <li>increase before ed limit.</li> </ul>
<ol> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>1 T s</li> </ol>	Empennage Off Null Dn/Righ (Flow No. 2) - (Fl Empennage Off Null Up/Left (Flow No. 1) - (Fl Total Right System Leakage Flow No. 4 Shutoff and Isolation Valv Flow No. 5 Right Inboard Aileron Null (Flow No. 6) - (Fl Left Outboard Aileron Null (Flow No. 7) - (Fl he 4.5 GPM gives an allowa ubsequent check and not be Right Hyc	t Leakage ow No. 3) Leakage ow No. 3) te Leakage ow No. 7) Leakage ow No. 7) Leakage ow No. 8) ince which permits come more than th draulic System Lea igure 606 (Sheet	<pre>= = = = = the leakage to e 6.0 GPM approv kage Check 1) ELEVATOR AND RUD</pre>	<pre>1.0 GPM 1.0 GPM 4.5 GPM 1.0 GPM 0.8 GPM 0.66 GPM increase before ed limit.</pre>

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	STA	TION		]							BOE	ING CARD NO.
	ТАТ						$\boldsymbol{\sigma}$	BAEI			29-0	04-01-1
S.				ς						AIRLINE CARD NO.		
	D	ATE			Ŭ		•	TASK CARD				
_	SKILL	W	ORK ARI	EA	RE	LATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD
	AIRPL	STR	UT 1		W-29-	-001-c1	-1	4A		10404	011	AUG 22/06
		K K	_	010					STRUCTURAL ILLUSTRATION R	EFERENCE	AP AIRPLAN	PLICABILITY E ENGINE
	CHECK	/1N5	Р	515	LHID	EDP/AC	MP CASE	DRAIN FILTER			ALL	ALL
	(77	ZONI	ES			(775)	(7700		ACCESS PANELS			
	437					437BL	437BR					
M	IECH INSP										м	IPD ITEM NUMBER
		_										
			SPEC	T SYS		HYDRAU	LIC EDP	& ACMP CASE DF	RAIN FILTERS		29–1 <sup>-</sup>	1-00-6B
						JJOKE I	NDICATO					
		1.	<u>Dif</u>	feren	<u>tial I</u>	Pressur	e Indica	ators Inspectio	on For the Case D	orain Fi	<u>lters</u>	<u>of the</u>
			Air	-Driv	en Pur	mp (ADP	) in the	<u>e Left, Right,</u>	and Center Hydra	ulic Sy	<u>stems</u>	
			٨	Pofe	ranca	c						
			Λ.	Kere	i ence.	3						
				(1)	AMM (	06-43-0	0/201,	Engine and Nace	elle Strut Access	Doors	and Pa	anels
				(2)	AMM 2	29–11–0	1/401,	Left and Right	System Alternati	ng Curr	ent	
							1	Notor Pump (Acr	1P)			
				(3)	AMM 2	29–11–0	2/401,	Center System / (ACMP)	Alternating Curre	ent Moto	or Pum	р
				(4)	AMM 2	29–11–0	3/401,	Center System /	Air-Driven Pump (	ADP)		
				(5)	AMM 2	29–11–1	7/401 <b>,</b>   	Left and Right Pressure/Case I	System Engine-Dr Drain Filter Modu	iven Pu le and	IMP (E Compo	DP) nents
				(6)	AMM 2	29–11–1	8/401, /	Alternating Cu Pressure/Case I	rrent Motor Pump Drain Filter Modu	(ACMP) Ile and	Compo	nents
				(7)	AMM 2	29–11–1	9/401,	Center System / Drain Filter Mo	Air-Driven Pump ( odule and Compone	ADP) Pr ents	essur	e/Case
				(8)	AMM	32-00-1	5/201 <b>,</b> I	Landing Gear Do	oor Locks			
				(9)	AMM	32-00-2	0/201 <b>,</b> I	Landing Gear Do	ownlocks			
			в.	Prep	are fo	or Insp	ection					
	I	I										
	EFFECT	IVIT	Y •					CHECK/INSP	SYS L HYD EDP/A	CMP CAS	E DRA	IN FILTER
								20-11-00-40	20_00/_01_1			
								27-11-00-0B	27-004-01-1 P	AUC I	VF 3	AUG 22/00

29-004-01-1



AIRLINE CARD NO.

MECH	INSP			
			(1)	For the center hydraulic system, make sure the downlocks are installed on the nose and main landing gear (AMM 32–00–20/201).
			<u>WARN</u>	<u>ING</u> : USE THE PROCEDURE IN AMM 32-00-15/201 TO INSTALL THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
			(2)	For the center hydraulic system, open the doors for the landing gear and install the door locks (AMM 32–00–15/201).
			(3)	For the left hydraulic system, open the access panels, 437BL and 437BR, for the hydraulic system (AMM 06–43–00/201).
			(4)	For the right hydraulic system, open the access panels, 447BL and 447BR, for the hydraulic system (AMM 06–43–00/201).
		С.	Insp	ect the Differential Pressure Indicator for the Case Drain Filter
			(1)	Examine the position of the red indicator button on the differential pressure indicator for each pump's case drain filter.
			(2)	If the red indicator button has extended out of the differential pressure indicator for a pump's case drain filter, do these steps:
				(a) Remove the case drain filter element for the applicable pump:
				1) EDP case drain filter element (AMM 29–11–17/401)
				2) ACMP case drain filter element (AMM 29–11–18/401)
				3) ADP case drain filter element (AMM 29-11-19/401)
				(b) Examine the case drain filter element, filter bowl and the fluid in the filter bowl for metal contamination to determine if you also need to replace the applicable hydraulic pump.
				<u>NOTE</u> : The criteria for determination of hydraulic pump replacement is in each pump's case drain filter element removal procedure (see previous step).
EFF	ECTIV	ITY -		CHECK/INSP SYS L HYD EDP/ACMP CASE DRAIN FILTER
				29-11-00-68 29-004-01-1 PAGE 2 OF 5 AUG 22/06

BOEING CARD NO. 29-004-01-1

SAS DEING 767 TASK CARD

AIRLINE CARD NO.

						THER CARD					
MECH	INSP										
				(c) I a	Install a new applicable pum	serviceable ca np.	ase drain filte	er element	for the		
				1	l) EDP case c	drain filter el	ement (AMM 29-	-11-17/401	)		
				2	2) ACMP case	drain filter e	element (AMM 29	9-11-18/40	1)		
				3	3) ADP case c	drain filter element (AMM 29–11–19/401)					
				(d) F c	Push the red i differential p	indicator butto pressure indica	on to reset its ator for the ca	s position ase drain	into the filter.		
		D.	Retur	n the	Airplane to N	lormal Configur	ation				
			(1)	For th close (AMM C	ne left hydrau the access pa 06–43–00/201).	ulic system, anels, 437BL ar	nd 437BR, for t	the hydrau	lic system		
			(2)	For th close (AMM (	ne right hydra the access pa 06-43-00/201).	aulic system, anels, 447BL ar	nd 447BR, for	the hydrau	lic system		
			WARNI	<u>NG</u> : L T F	JSE THE PROCED THE DOORS OPEN PERSONS OR DAM	DURE TO REMOVE I AND CLOSE QUI IAGE TO EQUIPME	THE DOOR LOCKS CKLY AND CAN ( NT.	S (AMM 32- CAUSE INJU	ОО-15/2О1). RY ТО		
			(3)	For th remove doors	ne center hydr e the door loo (AMM 32-00-15	raulic system, cks from the la 5/201)	nding gear doo	ors and cl	ose the		
EFF	ECTI	VITY				CHECK/INSP	SYS L HYD EDF	P/ACMP CAS	E DRAIN FILTER		
						29-11-00-6B	29-004-01-1	PAGE 3	OF 5 AUG 22/06		





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STATION														BOE	ING CARD NO.
TAIL NO.							$\alpha$		2/1	<b>FI</b> A				29–0	04-01-2
				S	SAS	XX		-	<b></b> 767				AIRI	INE CARD NO.	
	DATE				-		TASK	CARD							
SKILL		WO	RK ARE	A	RI	ELATED TASK				INTERVAL			PHASE	MPD REV	TASK CARD REVISION
AIRPL	_ S	TRU	т 2		W-29	-001-C	1–2		4A				10404	011	AUG 22/06
CHEC	rask CK / I I	NSP	,	SYS	R HYD	EDP/A	CMP CASE	E DF	RAIN F	ILTER	STRUCTURAL	ILLUSTRATION I	REFERENCE	AF AIRPLAN	PLICABILITY E ENGINE
		70NES				1					ACCESS DAN	FLS		ALL	ALL
447		LONL	•			447B	L 447BF	R			ACCESS TAN				
MECH IN	ISP													1	1PD ITEM NUMBER
		INS	PEC	т sys	TEM R	HYDRA	ULIC EDF	Р&	ACMP	CASE DR	RAIN FIL	TERS		29–1	1-00-6в
		DIF	FER	ENTIA	L PRE	SSURE	INDICATO	ORS.	-						
	1	-	Dif	feren	tial	Pressu	re India	cato	ors In	<u>ispectio</u>	on For t	<u>he Case I</u>	<u>Drain Fi</u>	lters	<u>of the</u>
			Eng	<u>ine-D</u>	<u>riven</u>	Pump	(EDP), /	<u>Alte</u>	<u>ernati</u>	<u>ng Curr</u> Bight	ent Mot	or Pump ter Hydr	(ACMP),	<u>and</u>	
			<u>A II</u>							<u>Kight</u>				5 ( CIII 5	
			Α.	Refe	rence	S									
	(1) AMM				D6-43-00/201, Engine and Nacelle Strut Access Doors and Panels										
		(2) AMM				29–11–01/401, Left and Right System Alternating Current Motor Pump (ACMP)									
				(3)	AMM	29–11–02/401, Center System Alternating Current Motor Pump (ACMP)									
				(4)	AMM	29–11–	03/401,	Cer	nter S	System A	\ir-Driv	en Pump	(ADP)		
				(5)	AMM	29–11–	17/401,	Left and Right System Engine–Driven Pump (EDP) Pressure/Case Drain Filter Module and Components							
				(6)	AMM	29–11–	29–11–18/401, Alternating Current Motor Pump (ACMP) Pressure/Case Drain Filter Module and Components								
				(7)	AMM	29–11–19/401, Center System Air–Driven Pump (ADP) Pressure/Case Drain Filter Module and Components									
				(8)	AMM	32-00-	15/201,	Lar	nding	Gear Do	oor Lock	s			
				(9)	AMM	32-00-	20/201,	Lar	nding	Gear Do	ownlocks				
	B. Prepare for					or Ins	pection								
	I														
EFFEC	CTIV	ΙΤΥ	-						СНЕСК/	INSP	SYS R	HYD EDP/	ACMP CAS	E DRA	IN FILTER
									29–11	-00-6в	29-004	-01-2 1	PAGE 1	0F 5	AUG 22/06

29-004-01-2 AIRLINE CARD NO.



(1) For the center hydraulic system,

С.

	gear	(AMM 32-00-20/201).
<u>WARN</u>	<u>ING</u> :	USE THE PROCEDURE IN AMM 32-00-15/201 TO INSTALL THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
(2)	For open (AMM	the center hydraulic system, the doors for the landing gear and install the door locks 32–00–15/201).
(3)	For open (AMM	the left hydraulic system, the access panels, 437BL and 437BR, for the hydraulic system 06–43–00/201).
(4)	For open (AMM	the right hydraulic system, the access panels, 447BL and 447BR, for the hydraulic system 06–43–00/201).
Insp	ect t	he Differential Pressure Indicator for the Case Drain Filter
(1)	Exam pres	ine the position of the red indicator button on the differential sure indicator for each pump's case drain filter.
(2)	If t	he red indicator button has extended out of the differential

make sure the downlocks are installed on the nose and main landing

- pressure indicator for a pump's case drain filter, do these steps: (a) Remove the case drain filter element for the applicable pump:
  - 1) EDP case drain filter element (AMM 29-11-17/401)
  - ACMP case drain filter element (AMM 29-11-18/401) 2)
  - ADP case drain filter element (AMM 29-11-19/401) 3)
- (b) Examine the case drain filter element, filter bowl and the fluid in the filter bowl for metal contamination to determine if you also need to replace the applicable hydraulic pump.
  - NOTE: The criteria for determination of hydraulic pump replacement is in each pump's case drain filter element removal procedure (see previous step).

EFFECTIVITY

MECH INSP

CHECK/INSP SYS R HYD EDP/ACMP CASE DRAIN FILTER

29-11-00-6B	29-004-01-2	PAGE	2 OF	5 AUG 22/06

BOEING CARD NO. 29-004-01-2

SAS DEING 767 TASK CARD

AIRLINE CARD NO.

MECH	INSP							
			(c)	Install a new applicable pum	serviceable ca p.	se drain filter	element for t	he
				1) EDP case d	rain filter el	ement (AMM 29-11	-17/401)	
				2) ACMP case	drain filter e	lement (AMM 29-1	1-18/401)	
				3) ADP case d	rain filter el	ement (AMM 29-11	-19/401)	
			(d)	Push the red in differential p	ndicator butto ressure indica	n to reset its p tor for the case	osition into drain filter	the
		D.	Return t	the Airplane to N	ormal Configur	ation		
			(1) For clc (AM	the left hydrau ose the access pa M 06–43–00/201).	lic system, nels, 437BL ar	d 437BR, for the	e hydraulic sy	stem
			(2) For clo (AM	the right hydra ose the access pa M 06-43-00/201).	ulic system, nels, 447BL ar	d 447BR, for the	hydraulic sy	rstem
			<u>WARNING</u> :	USE THE PROCED THE DOORS OPEN PERSONS OR DAM	URE TO REMOVE AND CLOSE QUI AGE TO EQUIPME	THE DOOR LOCKS ( CKLY AND CAN CAU NT.	AMM 32-00-15/ ISE INJURY TO	201).
			(3) For ren doc	the center hydr nove the door loc ors (AMM 32-00-15	aulic system, ks from the la /201)	nding gear doors	and close th	e
EFF	ECTI	VITY -			CHECK/INSP	SYS R HYD EDP/A	CMP CASE DRAI	N FILTER
					29-11-00-6в	29-004-01-2 F	AGE 3 OF 5	AUG 22/06





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STATION		N							BOE	ING CARD NO.
1	TAIL NO.		SAS BOEING							05–01
										AIRLINE CARD NO.
	DATE					TASK CAR	D			
SKILL		WORK ARE	REA RELATED TASK INTERVAL				PHASE	MPD REV	TASK CARD REVISION	
AIRPL		I/B FAI	RING			1A		10101	002	DEC 22/05
CHE	CK/1	INSP	SYS	C HYDRAULI	C ADP OIL	LEVEL		KEIEKENCE	AIRPLAN	IE ENGINE
		ZONES					ACCESS PANELS		NOT	E ALL
195				195	SL					
MECH IN	ISP								Ν	MPD ITEM NUMBER
		INSPEC AND DI AIRPLA	T SYS FFERE NE NO	TEM C HYDR NTIAL PRES TE: THIS MODEL	AULIC ADF SURE IND] TASK IS A S EXCEPT	P FOR PROPER G CATOR. APPLICABLE TO THE 767-400ER	EARBOX OIL LEVEL ALL AIRPLANE		12–1	3-05-3A
	1	. <u>Add</u>	Oil	<u>to the Gea</u>	rbox of t	<u>the Air Driven</u>	<u>Pump</u> (Fig. 301)			
		Α.	Gene	ral						
			(1)	The oil r hydraulic is approx the diffe replace t	eservoir pump and imately 1 rential p he oil fi	is in the bot d the air turb 100 cc (36 fl pressure indic ilter (AMM 29–	tom of the gearbo ine. The oil cap . oz.). If you o ator on the oil 1 11–31/401).	ox betwee bacity of can see f filter, y	en the f the che bu vou mu	gearbox tton on st
		В.	Cons	umable Mat	erials					
			(1)	D00071 Lu (o	oricating otional t	g Oil, MIL-PRF to MIL-PRF-236	-7808 99)			
			(2)	D00068 Lu (o	bricating ptional t	g Oil, MIL-PRF to MIL-PRF-780	-23699 8)			
		с.	Refe	rences						
			(1)	AMM 06-41	-00/201,	Fuselage Acce	ss Doors and Pane	els		
		D.	Acce	SS						
		(1) Location Zone 195 Wing-to-Body – Aft Lower Half (Left)								
EFFE	стіл						SYS C HYDRAIN 1			FI
						12-13-05-3	A 29-005-01	PAGE 1	0F 3	DEC 22/05
									J. J	

AIRLINE CARD NO.

29-005-01

	A BOEING
SAS	767
	TASK CARD

MECH	INSP		
			(2) Access Panel 195SL Air Driven Pump
		Ε.	Procedure
			(1) Open this circuit breaker on the overhead panel, P11, and attach a DO-NOT-CLOSE tag:
			(a) 11D31, HYDRAULIC AIR PUMP
			(2) Open the access panel, 195SL, for the air driven pump (AMM 06–41–00/201).
			(3) Remove the dipstick from the fill port.
			(4) Make sure the oil level on the dipstick is correct.
			(5) If it is necessary to add oil, put the oil into the fill port.
			<u>NOTE</u> : Do not overfill the ADP reservoir. If you overfill, oil should be drained back out.
			(6) Do a check of the oil level on the dipstick again.
			(7) Install the dipstick in the fill port.
			(8) Remove the unwanted oil on the gearbox with a rag.
			(9) Close the access panel, 195SL, for the air driven pump (AMM 06-41-00/201).
		(	10) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:
			(a) 11D31, HYDRAULIC AIR PUMP
FFI	FCTT	VITY <b>—</b>	
			CHECK/INSP SYS C HYDRAULIC ADP OIL LEVEL
			12-13-05-3A 29-005-01 PAGE 2 OF 3 APR 22/03



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STATION			]							BOE	ING CARD NO.	
	TAIL NO.		-			$\bigwedge$	BOEIN	I <b>G</b>		29–0	06-01	
DATE		-	SA	S		767			AIRI	LINE CARD NO.		
							TASK CARD					
SKILI	L	WORK AF	EA	RELAT	ED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION	
AIRF		R MAIN	GEAR		ттт	F	10			002		
СНЕ	ECK/	INSP	SYS	C ACMP/	ADP PRE	ESS & R	ETURN FILTER			AIRPLAN	E ENGINE	
		ZONES						ACCESS PANELS		ALL	ALL	
144	4 1	95			195SL	742						
MECH	INSP										MPD ITEM NUMBER	
	11101		יד פעס	ТЕМ С Н			& AND DRESSUE	E ETITERS 20	9-11-00-60	20_1	1-00-60	
		DIFFE	RENTIA	L PRESS	URE IND	DICATOR	S.			29–1	1-00-6E	
		INSPE DIFFE	CT SYS RENTIA	TEM C H	YDRAULI URE IND	IC RETU DICATOR	RN FILTER MODU S.	ILES 29	9–11–00–6E			
		1. Di <sup>.</sup>	fferen	itial Pr	essure	Indica	tors Inspectio	on For the Pro	essure Filt	ers o	<u>f the</u>	
		Enc	<u>gine-D</u>	oriven P		) <mark>P), Al</mark>	ternating Curr	ent Motor Pur	mp (ACMP),	and		
		<u>A1</u> <u>Ce</u>	nter H	<u>ydrauli</u>	c Syste	<u>and Fo</u> ems	<u>r the Return F</u>	<u>ilters in the</u>	e Lett, Ric	nt, a	<u>na</u>	
		Α.	Refe	erences								
			(1)	AMM 06	-43-00/	201, E	ngine and Nace	elle Strut Aco	cess Doors	and Panels		
			(2)	AMM 29	-11-15/	401, L c	eft and Right omponents	System Return	n Filter Mc	dule	and	
			(3)	AMM 29	-11-16/	401, C	enter System R	eturn Filter	Module and	l Comp	onents	
			(4)	AMM 29	-11-17/	401, L P	eft and Right ressure/Case D	System Engino Prain Filter I	e-Driven Pu Module and	ump (EDP) Components		
			(5)	AMM 29	-11-18/	401, A P	lternating Cur ressure/Case D	rent Motor Pu Prain Filter I	ump (ACMP) Module and	Compo	nents	
			(6)	AMM 29	-11-19/	401, C D	enter System A rain Filter Mo	ir-Driven Pur odule and Comp	mp (ADP) Pr ponents	essur	e/Case	
			(7)	AMM 32	-00-15/	/201 <b>,</b> L	anding Gear Do	or Locks				
			(8)	AMM 32	-00-20/	/201 <b>,</b> L	anding Gear Do	ownlocks				
		в.	Proc	edure								
EFFE	LCTI	VIFY					CHECK/INSP	SYS C ACMP/	ADP PRESS 8	RETU	RN FILTER	
							29-11-00-60	29-006-c1	PAGE 1	0F 5	AUG 22/01	
29-006-c1



AIRLINE CARD NO.

MECH	INSP	
		(1) For the center hydraulic system, make sure the downlocks are installed on the nose and main landing gear (AMM 32-00-20/201).
		WARNING: USE THE PROCEDURE TO INSTALL THE DOOR LOCKS (AMM 32-00-15/201). THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(2) For the center hydraulic system, open the doors for the landing gear and install the door locks (AMM 32–00–15/201).
		(3) For the left hydraulic system, open the access panels, 437BL and 437BR, for the hydraulic system (AMM 06-43-00/201).
		(4) For the right hydraulic system, open the access panels, 447BL and 447BR, for the hydraulic system (AMM 06-43-00/201).
		(5) Make sure the red indicator button did not come out on each differential pressure indicator.
		(6) If the indicator button came out, replace the filter element and reset the indicator button as follows:
		(a) EDP filter element (AMM 29-11-17/401).
		(b) ACMP filter element (AMM 29-11-18/401)
		(c) ADP filter element (AMM 29-11-19/401)
		(d) Return filter in the left and right system (AMM 29–11–15/401)
		(e) Return filter in the center system (AMM 29–11–16/401)
		(7) For the left hydraulic system, close the access panels, 437BL and 437BR, for the hydraulic system (AMM 06–43–00/201).
		(8) For the right hydraulic system, close the access panels, 447BL and 447BR, for the hydraulic system (AMM 06-43-00/201).
EFF	ECTIVIT	CHECK/INSP SYS C ACMP/ADP PRESS & RETURN FILTER
		29-11-00-6C 29-006-C1 PAGE 2 OF 5 DEC 22/03

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2 9 6

29-006-01



AIRLINE CARD NO.

MECH	INSP	
		<u>WARNING</u> : USE THE PROCEDURE TO REMOVE THE DOOR LOCKS (AMM 32-00-15/201). THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(9) For the center hydraulic system, remove the door locks from the landing gear doors and close the doors (AMM 32–00–15/201).
EFF	ECTI	VITY CHECK/INSP SYS C ACMP/ADP PRESS & RETURN FILTER
		29-11-00-6C 29-006-C1 PAGE 3 OF 5 AUG 22/01
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STATION									BOE	ING CARD NO.	
ТА	IL NO.					$\mathcal{O}$	BOEIN	IG		29–0	07–01
	DATE			S	AS			_		AIRL	INE CARD NO.
	DATE						TASK CARD				
SKILL	W	ORK ARE	EA	REL	ATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	RM	AIN	W/W				3C		13636	002	DEC 22/06
TA	SK				Т	ITLE		STRUCTURAL ILLUSTRATION	REFERENCE	AP AIRPLAN	PLICABILITY E ENGINE
CLEAN	N		SYS	C HYD	RESERV	OIR PRES	S AIR FILTER				
	ZONE	ES						ACCESS PANELS		ALL	ALL
144					742						
MECH INS	P									٩	1PD ITEM NUMBER
	CL AI 1.	EAN R FI <u>Rem</u>	SYSTE LTER.	M C HY	(DRAULI Lter El	C RESERV <u>ement fr</u>	OIR PRESSURIZ	ATION MODULE <u>pir Pressurizati</u>	on Modu	29–1 <u>_e</u>	1-26-4A
		Α.	Refe	erences	6						
			(1)	AMM 2	29-11-0	0/201 <b>,</b> M	ain (Left, Ri	ght and Center)	Hydraul	ic Sys	tems
			(2)	AMM 3	32-00-1	5/201 <b>,</b> L	anding Gear Do	oor Locks			
			(3)	AMM 3	32-00-2	0/201 <b>,</b> L	anding Gear Do	ownlocks			
		Β.	Prep	oare fo	or Remo	val					
			(1)	Make gear	sure t (AMM 3	he downl 2–00–20/	ocks are inst 201).	alled on the nos	e and ma	ain la	nding
			<u>WARN</u>	<u>IING</u> :	USE TH LOCKS. TO PER	E PROCED THE DO SONS OR	URE IN AMM 32 ORS OPEN AND DAMAGE TO EQU	-00-15/201 TO IN CLOSE QUICKLY AN IPMENT.	ISTALL TH ID CAN CA	HE DOO AUSE I	R NJURY
			(2)	Open (AMM	the do 32-00-	ors for 15/201).	the landing g	ear and install	the door	• lock	S
			(3)	Remov reser	ve the rvoir (	pressure AMM 29-1	from the cen 1-00/201).	ter hydraulic sy	rstem and	d the	
		с.	Remo	ove the	e Filte	r Elemen	t (Fig. 401)				
			(1)	Remov	ve the	cap from	the reservoi	r pressurization	module.		
			(2)	Remov	ve the	filter e	lement.				
	ſ										
EFFEC	TIVIT	Y T					CLEAN	SYS C HYD RESE	RVOIR PR	RESS A	IR FILTER
							29-11-26-4A	29-007-01	PAGE 1	OF 4	AUG 22/01

29-007-01



AIRLINE CARD NO.

MECH	INSP	_							
		2.	Ins	tall	<u>the Filter Element i</u>	<u>n the Reservoi</u>	<u>r Pressurizat</u>	ion Module	
			Α.	Consi	umable Materials				
				(1)	DOOO54 Hydraulic Sys	stem Lubricant	: - MCS 352B		
				(2)	B01003 Solvent - Ger	neral Cleaning	of Composite	s (Series 83)	
				(3)	A00363 Sealant – RT	V 162			
			в.	Refe	rences				
				(1)	AMM 20-30-83/201, A	irplane Struct	ure Cleaning	Solvents (Ser	ies 83)
				(2)	AMM 29-11-00/201, Ma	ain (Left, Rig	ht and Center	) Hydraulic S	ystems
				(3)	AMM 32-00-15/201, La	anding Gear Do	or Locks		
			с.	Inst	all the Filter Elemen	nt (Fig. 401)			
				(1)	Remove the sealant the reservoir press	remaining on t urization modu	he cap and th Ile.	e adjacent su	rface of
				(2)	Clean the hole in the lement.	he reservoir p	pressurization	module for t	he filter
				(3)	Clean the filter ele and fully dry the f	ement with sol ilter element.	vent, Series	83 (AMM 20-30	-83/201)
				(4)	Apply hydraulic lub cap.	ricant to the	new 0-rings a	nd the thread	s of the
				(5)	Assemble the filter	element, the	0-ring and th	e filter slee	ve.
				(6)	Install the filter module.	unit assembly	into the rese	rvoir pressur	ization
				(7)	Install the cap on	the reservoir	pressurizatio	n module.	
				(8)	Tighten the cap to	75-95 pound-ir	iches.		
				(9)	Pressurize the rese	rvoir in the c	enter system	(AMM 29-11-00	/201).
				(10)	Make sure there are reservoir pressuriza	no air pressu ation module.	ıre leaks at t	he cap on the	
				(11)	Safety the cap with	a lockwire.			
EFF	ECTI	ידוע	r -				SAS U MAN DE	SEDVAID DDESS	
						20-11-26-/.4	20_007_01	DACE 2 AE	/ DEC 22/04
1									

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29-007-01

SAS 767 TASK CARD

AIRLINE CARD NO.

									TAS	K CARD								
٢	IECH	INSP													<b>I</b>			
				(12)	Appl rese	y a be rvoir	ead o pres	f sea suriz	lant t ation	o the jo module.	oint b	etweer	n the	cap a	and th	9		
			D.	Put	the A	irpla	ne Ba	ck to	Its U	sual Cor	nditio	'n						
				(1)	Remo rese	ove the rvoir	e air (AMM	sour 29–1	ce whi 1-00/2	ch you ı 01).	used t	o pres	ssuri	ze the	e cent	er		
				WAR	NING:	USE THE I PERS(	THE P DOORS ONS O	ROCED OPEN R DAM	URE IN AND C AGE TO	AMM 32- LOSE QUI EQUIPME	-00-15 ICKLY ENT.	/201 T AND C/	TO REI An Cai	MOVE <sup>-</sup> USE II	THE DO NJURY	OR LO TO	CKS.	
				(2)	Remo door	ove the s (AMI	e doo M 32-	r loc 00–15	ks fro /201).	m the la	anding	gear	door	s and	close	the		
	EFF	ECLI	VIIY						CLEAN		SYS	C HYD	RESE	RVOIR	PRESS	AIR	FILTER	
									29–1	1-26-4A	29–0	07–01	I	PAGE	3 OF	4 DE	c 22/0	6



	STATION												BOE	EING CARD NO.	
	Т	AIL	10.					$\alpha$	BA	EIN	G			29–0	09-01
		DAT	-			S	SAS	XX		767				AIR	LINE CARD NO.
		DAT	-						TASK	CARD					
	SKILL		W	DRK ARE	A	RE	LATED TASK			INTERVAL			PHASE	MPD REV	TASK CARD REVISION
A	IRPL	_   F	RM	AIN	W/W	W-29	9-005-01		4A				10404	010	AUG 22/06
	CHEC	ask CK/C	INSI	Þ	SYS	с нүр	ACMP/A	DP CASE	DRAIN F	ILTER	STRUCTURAL ILLUST	RATION REI	FERENCE	AIRPLAN	NE ENGINE
			7016	s			1				ACCESS DANELS			ALL	. ALL
	144	19	95	.0			195SL	742							
ME	CH IN	SP												I	MPD ITEM NUMBER
			IN	SPEC	т ѕүѕ	TEM C	HYDRAL	JLIC ACM	P & ADP	CASE DR	AIN FILTERS			29–1	1-00-6D
			DI	FFER	ENTIA	L PRE	SSURE I	INDICATO	RS.					_, .	
			1.	Dif	feren	tial	Pressur	e Indic	ators Ir	nspectio	n For the C	ase Dr	ain Fi	lters	of the
				Eng	ine-D	riven	Pump (	(EDP), A	lternati	ing Curr	ent Motor P	ump (/	ACMP),	and	
				<u>Air</u>	<u>-Driv</u>	<u>en Pu</u>	mp (ADF	<u>) in th</u>	<u>e Left,</u>	Right,	and Center	Hydrau	<u>ulic Sy</u>	<u>stems</u>	<u>i</u>
				Α.	Refe	rence	S								
					(1)	AMM	06-43-0	0/201,	Engine a	and Nace	lle Strut A	ccess	Doors	and P	anels
					(2)	AMM 2	29–11–0	)1/401,	Left and Motor Pu	d Right µmp (ACM	System Alte P)	rnatir	ng Curr	ent	
					(3)	AMM 2	29–11–0	)2/401,	Center S (ACMP)	System A	lternating	Currer	nt Moto	or Pum	р
					(4)	AMM	29–11–0	)3/401,	Center S	System A	ir-Driven P	ump (A	ADP)		
					(5)	AMM 2	29–11–1	7/401,	Left and Pressure	d Right e/Case D	System Engi rain Filter	ne-Dri Modul	iven Pu Le and	mp (E Compo	DP) ments
					(6)	AMM 2	29–11–1	8/401,	Alternat Pressure	ing Cur e/Case D	rent Motor rain Filter	Pump ( Modul	(ACMP) Le and	Compo	onents
					(7)	AMM 2	29–11–1	9/401,	Center S Drain Fi	System A ilter Mo	ir-Driven P dule and Co	ump (A	ADP) Pr nts	essur	e/Case
					(8)	AMM (	32-00-1	5/201,	Landing	Gear Do	or Locks				
					(9)	AMM	32-00-2	20/201,	Landing	Gear Do	wnlocks				
				Β.	Prep	are f	or Insp	pection							
	I	I													
E	EFFEC	CTI	/ITY	( -					CHECK/	'INSP	SYS C HYD	ACMP//	ADP CAS	E DRA	IN FILTER
									29–11	-00-6D	29-009-01	PA	AGE 1	0F 5	AUG 22/06

29-009-01



AIRLINE CARD NO.

					TASK CARD				
MECH	INSP								
			(1)	For the center hyd make sure the down gear (AMM 32-00-20	raulic system, locks are insta /201).	lled on the r	ose and ma	ain la	nding
			<u>WARN</u>	<u>ING</u> : USE THE PROCE LOCKS. THE D <sup>4</sup> TO PERSONS OR	DURE IN AMM 32- OORS OPEN AND C DAMAGE TO EQUI	OO-15/2O1 TO LOSE QUICKLY PMENT.	INSTALL TH AND CAN C/	HE DOO AUSE I	R NJURY
			(2)	For the center hydropen the doors for (AMM 32-00-15/201)	raulic system, the landing ge	ar and instal	l the doo	r lock	S
			(3)	For the left hydram open the access par (AMM 06-43-00/201)	ulic system, nels, 437BL and	437BR, for t	:he hydrau	lic sy	stem
			(4)	For the right hydra open the access par (AMM 06-43-00/201)	aulic system, nels, 447BL and	447BR, for t	:he hydrau	lic sy	stem
		С.	Inspe	ect the Differentia	l Pressure Indi	cator for the	e Case Dra	in Fil	ter
			(1)	Examine the position pressure indicator	on of the red i for each pump'	ndicator butt s case drain	on on the: filter.	diffe	rential
			(2)	If the red indicate pressure indicator	or button has e for a pump's c	xtended out o ase drain fil	of the dif ter, do th	ferent hese s	ial teps:
				(a) Remove the ca	se drain filter	element for	the appli	cable	pump:
				1) EDP case	drain filter el	ement (AMM 29	9–11–17/40 <sup>,</sup>	1)	
				2) ACMP case	drain filter e	lement (AMM 2	29-11-18/40	J1)	
				3) ADP case	drain filter el	ement (AMM 29	v–11–19/40′	1)	
				(b) Examine the ca fluid in the if you also n	ase drain filte filter bowl for eed to replace	r element, fi metal contan the applicabl	lter bowl mination to le hydraul	and t o dete ic pum	he rmine p.
				<u>NOTE</u> : The cr replac remova	iteria for dete ement is in eac l procedure (se	rmination of h pump's case e previous st	hydraulic 9 drain fi 2ep).	pump lter e	lement
EFF	ECTI	VITY -				SYS C HYD AC	MP/ADP CA	SF DRA	IN FILTER
					20_11_00_65	20_000_01			
					27-11-00-00	29-009-01	FAGE Z	VF 2	AUG 22/00

2 9 7

29-009-01

	A BOEING
SAS	767
	TASK CARD

AIRLINE CARD NO.

MECH	INSP										
				(c)	Ins app	tall a new licable pum	serviceable ca p.	se drain fi	lter elemer	nt for	the
					1)	EDP case d	Irain filter el	ement (AMM 2	29-11-17/40	)1)	
					2)	ACMP case	drain filter e	lement (AMM	29-11-18/4	01)	
					3)	ADP case d	Irain filter el	ement (AMM 2	29–11–19/40	)1)	
				(d)	Pus dif	h the red i ferential p	ndicator butto pressure indica	on to reset itor for the	its positic case drair	on int n filt	to the ter.
		D.	Retu	rn th	e Ai	rplane to N	Iormal Configur	ation			
			(1)	For clos (AMM	the e th 06-	left hydrau e access pa 43–00/201).	ulic system, nnels, 437BL an	nd 437BR, for	r the hydra	aulic	system
			(2)	For clos (AMM	the e th 06-	right hydra e access pa 43-00/201).	ulic system, nels, 447BL an	nd 447BR, for	r the hydra	aulic	system
			<u>WARN</u>	<u>ING</u> :	USE THE PER	THE PROCED DOORS OPEN SONS OR DAM	URE TO REMOVE I AND CLOSE QUI IAGE TO EQUIPME	THE DOOR LO CKLY AND CA NT.	CKS (AMM 32 N CAUSE INJ	2-00-1 JURY 1	15/201). ro
			(3)	For remo door	the ve t s (A	center hydr he door loc MM 32-00-15	aulic system, ks from the la 7201)	nding gear o	doors and c	lose	the
EFF	ECTI	/ITY •					CHECK/INSP	SYS C HYD	ACMP/ADP CA	SE DF	RAIN FILTER
							29-11-00-6D	29-009-01	PAGE 3	5 OF	5 AUG 22/06
i i							-	1			



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	STAT	ION							BOE	ING CARD NO.		
	TAIL NO.				$\alpha$	BOEIN	G		29-0	10–01		
	DA	TE	_	SAS 2767								
						TASK CARD						
SKII		WORK A	REA	RELATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION		
AIR	PL TASK	CREW C	ABIN		NOTE (#) 99XXX   TITLE STRUCTURAL ILLUSTRATION REFERENCE							
0P	ERAT	TIONAL	ADP	SPEED TOPPI	NG SHUTE	OOWN CIRCUITRY			AIRPLAN	E ENGINE		
		ZONES					ACCESS PANELS		NOT	E ALL		
19	5 2	211		1955	L							
MECH	INSP	_							Μ	IPD ITEM NUMBER		
		OPERA (#) C	TIONAL MR FRE	LY CHECK AD Quency is 4	P SPEED 000 HOUF	TOPPING SHUTDO	WN CIRCUITRY.		29–1	1-00-5A		
		AIRPL	ANE NO	OTE: APPLIC 767-40	ABLE TO OER.	ALL 767 MODELS	EXCEPT FOR THE					
		INTER	VAL NC	DTE: SB 767 APPLIC THROUG HAVE N EQUIVA APPLIE	-29-4. ABLE TO H 13, 15 OT INCOF LENT. TH S TO OTH	CMR FREQUENCY AIRPLANE LINE 5 THROUGH 18, 20 RPORATED SB 767 HE MSG-3 FREQUE HER AIRPLANES.	DF 4000 HOURS I NUMBERS 7 D, AND 21 THAT -29-4 OR NCY OF 3C	S				
		1. <u>Op</u>	eratio	onal Test –	<u>Air-Driv</u>	ven Pump (ADP)	<u>Speed Topping S</u>	<u>hutdown</u> (	Fig.	501)		
		Α.	Equi	pment								
			(1)	Generator Hz to 2 MH Hewlett Pa	– Signa z – HP33 ckard (F	L, Sinewave, Ad 325B Recommended)	justable from 5					
				Generator Commercial	- Adjust ly Avai	table from 5 Hz lable (Alternat	to 2 Mhz - ive)					
			(2)	Digital Mu	lti-mete	er (True RMS rea	ading,5Hz to 10	KHz)				
		В.	Refe	erences								
			(1)	AMM 06-41-	00/201,	Fuselage Acces	s Doors and Pan	els				
			(2)	AMM 12-12-	01/301,	Hydraulic Syst	ems					
			(3)	AMM 24-22-	00/201,	Electrical Pow	er					
			(4)	AMM 31-41-	00/201,	EICAS						
EFF	ECTI	Ινιτγ				OPERATIONAL	ADP SPEED TOP	PING SHUT	DOWN	CIRCUITRY		
						29-11-00-5A	29–010–01	PAGE 1	0F 3	DEC 22/08		

AIRLINE CARD NO.

29-010-01

	A BOEING
SAS	767
	TASK CARD

MECH	INSP		
			(5) AMM 36-00-00/201, Pneumatic - General
		с.	Prepare for the Operational Test
			(1) Supply electrical power (AMM 24-22-00/201).
			(2) Push the ELEC/HYD switch on the EICAS maintenance panel on the right side panel, P61.
			(3) Make sure the reservoir in each hydraulic system is full (AMM 12-12-01/301).
		D.	Air-Driven Pump (ADP) Speed Topping Shutdown Test (Not to be confused with Overspeed Shutdown Test).
			(1) Supply pneumatic power (AMM 36-00-00/201).
			<pre>(2) Open the access panel, 195SL, for the air-driven pump (AMM 06-41-00/201).</pre>
			(3) Remove the electrical connector for the monopole sensor at the electrical receptacle box on the ADP modulating valve.
			(4) Connect the signal generator to the pins 1 and 3 on the electrical receptacle box on the ADP modulating valve.
			(a) Connect a True RMS reading volt meter to monitor the signal generator output amplitude.
			(5) Set the signal generator to produce a 0.90 volt RMS 4000 Hz sine wave; ensure that the signal generator is not set for a DC offset nor has an output terminal that is connected to chassis ground.
			NOTE: 0.90 volts RMS is equivalent to 2.55 volts peak-to-peak or 1.27 volts zero-to-peak.
			(6) Do the steps which follow with the C DEMAND HYD PUMPS AIR switch in the ON position and then do these steps again with this switch in the AUTO position:
			(a) Make sure these lights, on the hydraulic control panel, are off:
			1) SYS PRESS light for the center system
			2) PRESS light for the ADP.
EFF	ECTI	VITY -	OPERATIONAL ADP SPEED TOPPING SHUTDOWN CIRCUITRY

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AIRLINE CARD NO.

			TASK CARD	
MECH	INSP			
			(b) Slowly increase the frequency of the signal generator to 5150 Hz while maintaining the amplitude within 0.75 to 0 volts RMS (2.12 to 2.70 volts peak-to-peak).	).95
			(c) Make sure the ADP stops at a frequency between 4400 and 5150 Hz.	
			(d) Make sure the air-driven pump PRESS light is on.	
			(e) Slowly decrease the frequency of the signal generator to 4400 Hz while maintaining the amplitude within 0.75 to 0 volts RMS (2.12 to 2.70 volts peak-to-peak).	).95
			(f) Make sure the ADP starts and operates at a frequency between 4400 and 5150 Hz.	
		(7)	Put the C DEMAND HYD PUMPS AIR switch to the OFF position.	
		(8)	Remove the signal generator from the electrical receptacle box of the ADP modulating valve.	n
		(9)	Install the electrical connector, for the monopole sensor, on the electical receptacle box on the ADP modulating valve.	ıe
		(10)	Close the access panel, 195SL, for the air-driven pump (AMM 06-41-00/201).	
		<u>WARN</u>	ING: KEEP PERSONS AND EQUIPMENT AWAY FROM ALL CONTROL SURFACES A WHEEL WELLS WHEN HYDRAULIC POWER IS SUPPLIED. AILERONS, ELEVATORS, RUDDER, FLAPS, SLATS, SPOILERS, AND STABILIZER A FULLY POWERED SURFACES. WHEN YOU MOVE THE FLAP CONTROL LEV WITH THE HYDRAULIC SYSTEM PRESSURIZED, THE FLAPS AND FLAP D MECHANISMS WILL MOVE QUICKLY. INJURY TO PERSONS OR DAMAGE EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.	ND ARE /ER >RIVE TO
		(11)	Put the C DEMAND HYD PUMP AIR switch in the AUTO position.	
			NOTE: This will ensure that the flap position and the flap cont lever (commanded position) agree.	rol
		(12)	Remove pneumatic power, if it is not necessary (AMM 36-00-00/201	).
		(13)	Remove electrical power, if it is not necessary (AMM 24-22-00/20	)1).
EFF	ECTI	VITY	OPERATIONAL ADP SPEED TOPPING SHUTDOWN CIR	CUITRY

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TAIL NO.												BO	EING CARD NO.
							$\mathbf{A}$	RAFI		,		29-0	)13–01
					S	SAS	XX	767				AIR	LINE CARD NO.
	DAT	E			•		-	TASK CA	D				
SKILL		W	ORK AR	EA	RE	LATED TASK		INTERV	AL		PHASE	MPD REV	TASK CARD REVISION
ELEC	т	CRE	W CA	BIN				1C			1121	2 002	AUG 22/03
OPE	таѕк <b>Р                                    </b>	TON	۵1	1501	ATED	ACMP SI		UITOFE VALVE	STRUCT	TURAL ILLUSTRATIO	N REFERENCE	A AIRPLA	PPLICABILITY NE ENGINE
		2010		1002								NOT	E ALL
211		ZUNE	.5						ALLES	S PANELS			
MECH T	NSP												MPD ITEM NUMBER
	1131												
		0PI	ERAT	IONAL	LY CH	ECK IS	OLATED A	CMP SUPPLY SH	UTOFF	VALVE.		29–1	1-07-4A
		AI	RPLA	NE NO	TE:	THIS T <i>I</i> MODELS	ASK IS A EXCEPT	PPLICABLE TO FOR THE 767-4	ALL 76 00ER.	7 AIRPLANE			
		1.	<u>0pe</u>	ratio	nal T	<u>est - 3</u>	Supply S	hutoff Valve	(Fig.	401)			
			Α.	Refe	rence	S							
				(1)	AMM	24-22-(	0/201,	Electrical Po	wer				
				(2)	AMM	32-00-′	15/201,	Landing Gear	Door L	ocks			
				(3)	AMM	32-00-2	20/201,	Landing Gear	Downlo	cks			
			в.	Proc	edure								
				(1)	Supp	ly eleo	ctrical	power (AMM 24	-22-00	/201).			
				(2)	Make gear	sure d (AMM 3	the down 32-00-20	locks are ins /201).	talled	on the no	se and i	nain la	anding
				<u>WARN</u>	ING:	USE TH THE DO PERSON	HE PROCE DORS OPE NS OR DA	DURE IN (AMM N AND CLOSE ( MAGE TO EQUIF	32-00- UICKLY MENT.	15) TO INS AND CAN C	TALL TH	E DOOR JURY TO	LOCKS.
	(3) Open the doors for the landing gear and install the door locks (AMM/32–00–15/201).									S			
EFFE	СТІ	VITY	ſ					OPERATIONAL	ISO	LATED ACMP	SUPPLY	SHUTOP	F VALVE
								29-11-07-4	A 29-	013–01	PAGE	1 OF 3	8 AUG 22/01
								1					

29-013-01



AIRLINE CARD NO.

MECH	INSP								
		<u>CAUT.</u>	ION: DO NOT OPERATE THE HYDRAULIC PUMPS AFTER THE HYDRAULIC TEMPERATURE INDICATION IS MORE THAN 100°C (212°F) OR AFTER THE PUMP OVERHEAT LIGHT COMES ON. IF YOU CONTINUE TO OPERATE THE PUMPS, THE HYDRAULIC FLUID CAN BECOME TOO HOT.						
		(4)	Make sure there is not less than 600 gallons (4020 pounds/1827 kilograms) of fuel in each main fuel tank.						
		(5)	If the fuel tank contains less than 4020 pounds of fuel, do these steps:						
			(a) Stop the operation of the pump if the hydraulic temperature indication is more than 100°C (212°F) or if the pump overheat light comes on.						
			(b) Do not operate the hydraulic pump more than 10 minutes.						
			(c) After the operation of the pump, let the temperature of the pump decrease for 20 minutes with the pump off.						
		(6)	Put the RESERVE BKS & STRG switch on the P1 panel to the ON (closed) position.						
			<u>NOTE</u> : When the switch is in the ON position position, the ACMP C1 in the center hydraulic system will operate.						
		(7)	Make sure the position indicators on the supply and pressure shutoff valves, for the isolated ACMP, move to position 2.						
		(8)	the RESERVE BKS & STRG switch to the off (open) position.						
		(9)	Make sure the position indicators on the supply and pressure shutoff valves, for the isolated ACMP, move to position 1.						
		<u>WARN</u>	ING: USE THE PROCEDURE IN (AMM 32-00-15) TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.						
	(10) Remove the door locks from the landing gear doors and close the doors (AMM 32-00-15/201).								
		(11) Remove electrical power if it is not necessary (AMM 24-22-00/201).							
EFF	ECTI	VITY	OPERATIONAL ISOLATED ACMP SUPPLY SHUTOFF VALVE						

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S	STATION	]						BOE	ING CARD NO.	
TAIL NO.		-		Ø	BAEIA			29–0	13-02	
			SAS	K				AIRI	LINE CARD NO.	
	DATE		0/10	•	TASK CARD	)				
SKILL	WORK AR	EA	RELATED T	ASK	INTERVAL		PHASE	MPD REV	TASK CARD REVISION	
ELECT	CREW C	BIN			1C		11212	002	AUG 22/03	
	ask ΔΤΤΩΝΔΙ			TITLE PDESSIDE (	SHUTOEE VALVE	STRUCTURAL ILLUSTRATION F	REFERENCE	AF AIRPLAN	APPLICABILITY AIRPLANE ENGINE	
		1301		TRESSORE				ALL	ALL	
211	ZONES					ACCESS PANELS				
211										
MECH IN	SP							1	MPD ITEM NUMBER	
	00504							20.4	4 00 / 4	
	OPERA	IIONAL	LY CHECK .	ISOLATED AG	CMP PRESSURE S	HUIOFF VALVE.		29-1	1-08-4A	
	1. <u>Ope</u>	eratio	onal Test -	- Pressure	Shutoff Valve	(Fig. 401)				
	Α.	Refe	erences							
		(1)	AMM 32-00	D-15/201, L	_anding Gear D	oor Locks				
		(2)	AMM 32-00	D-20/201, L	_anding Gear D	ownlocks				
	в.	Proc	edure							
		(1)	Make sure gear (AMI	e the down M 32-00-20/	locks are inst /201).	alled on the nose	e and ma	in la	nding	
		WARM	<u>IING</u> : USE THE PERS	THE PROCED DOORS OPEN SONS OR DAM	DURE AMM 32-00 N AND CLOSE QU MAGE TO EQUIPM	-15/201 TO INSTAU ICKLY AND CAN CAU ENT.	L THE D JSE INJU	000R L IRY TO	OCKS.	
		(2)	Open the (AMM 32-(	doors for DO-15/201).	the landing g	ear and install t	the door	lock	s	
		(3)	Supply e	lectrical p	oower (AMM 24-	22-00/201).				
		(4)	Do the Ei maintenar	ICAS Messag nce message	ge Display Pro e lists (AMM 3	cedure to show a 1-41-00/201).	lert, st	atus,	and	
			<u>NOTE</u> : The above referenced procedure will provide instructions on how to show EICAS messages and hydraulic quantity, pressure and temperature data on EICAS.							
EFFEC	CTIVITY				OPERATIONAL	ISOLATED ACMP	PRESSURF	SHUT	OFF VALVE	
						20.047.00		05 7	NEC 22/04	
					29-11-08-4A	29-013-02	PAGE 1	01 3	DEC 22/01	

29-013-02



AIRLINE CARD NO.

-										
MECH	INSP									
		<u>CA</u>	<u>UTION</u> :	DO NOT OPERATE THE HYDRAULIC PUMPS AFTER THE HYDRAULIC TEMPERATURE INDICATION SHOWS MORE THAN 100°C (212°F) OR AFTER THE PUMP OVERHEAT LIGHT COMES ON. IF YOU CONTINUE TO OPERATE THE PUMPS, THE HYDRAULIC FLUID CAN BECOME TOO HOT.						
		(5)	) Make kilog	sure there is not less than 600 gallons (4020 pounds/1827 grams) of fuel in each main fuel tank.						
		(6)	) If tl step:	he fuel tank contains less than 4020 pounds of fuel, do these s:						
			(a)	Stop the operation of the pump if the hydraulic temperature indication shows more than 100°C (212°F) or if the pump overheat light comes on.						
			(b)	Do not operate the hydraulic pump more than 10 minutes.						
			(c)	After the operation of the pump, let the temperature of the pump decrease for 20 minutes with the pump off.						
		(7)	) Put posi	the RESERVE BKS & STRG switch on the P1 panel to the ON (closed) tion.						
			<u>NOTE</u>	: When the switch is in the ON position position, the ACMP C1 in the center hydraulic system will operate.						
		(8)	) Make valvo	sure the position indicators on the supply and pressure shutoff es, for the isolated ACMP, move to POSITION 2.						
		(9)	) Put	Put the RESERVE BKS & STRG switch to the off (open) position.						
		(10)	) Make valvo	sure the position indicators on the supply and pressure shutoff es, for the isolated ACMP, move to POSITION 1.						
	WARNING:			USE THE PROCEDURE AMM 32-00-15/201 TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.						
		(11)	) Remov (AMM	ve the door locks from the landing gear and close the doors 32–00–15/201).						
		(12)	) Remov	ve electrical power if it is not necessary (AMM 24–22–00/201).						
<u> </u>	ECII			OPERATIONAL ISOLATED ACMP PRESSURE SHUTOFF VALVE						

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STAT	TION								BOE	ING CARD NO.	
TAIL NO.		SAS BOEING								29-015-01 AIRLINE CARD NO.	
SKILL	WORK ARE	A	REL	ATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION	
AIRPL	CREW CA	BIN	B-29-	018-01	_	10	(#)	11212	014	DEC 22/08	
OPERAT	TIONAL	AUTO	& MAN	IUAL RAT	⊧ DEPLOY	MENT SYSTEMS	STRUCTURAL ILLUSTRATION R	EFERENCE	AP AIRPLAN	PLICABILITY E ENGINE	
	ZONES						ACCESS PANELS		ALL	ALL	
144 198 211 1981 742				742	NOTE						
MECH INSP									Ν	MPD ITEM NUMBER	
	OPERATIONALLY CHECK AUTO AND MANUAL RAT DEPLOYMENT SYSTEMS, 29-21-00-5A RAT HYDRAULIC PUMP AND DRIVE SYSTEM. (#) CMR FREQUENCY IS 6000 HOURS. THE MSG-3 FREQUENCY OF 1C APPLIES AND MAY BE ADJUSTED AS ANY MRB ITEM UNTIL THE 6000 HOUR CMR-DEVELOPED FREQUENCY IS REACHED.										
	ACCESS	NUTE	RET	RACTION REF 29-2	0F THE 1-00.	RAM AIR TURB	INE PER				
	1. <u>Sys</u>	tem T	est –	<u>RAT Hydr</u>	aulic	<u>Pump System</u>					
	Α.	Equi	pment								
		(1)	RAT S	afety Sc	reen -	B29001-46					
		(2)	RAT S (Nece used)	afety Sc ssary wh -	reen A en lif	dapter – B2900 ting fixture -	01-23 - A71015 is				
		(3)	Lifti Lifti Lifti	ng Fixtu ng Fixtu ng Fixtu	re – E re, He re, Bl	ingine Accesso in-Werner Mode ack Hawk Mode	ry, A71015-87; or el 74; or l 67554.				
		(4)	RAT C	ircuit B	reaker	Lock Set A27	010-11 (or Commer	cially	Avail	able)	
		(5)	Strob	oscopes	(Optio	nal)					
			(a)	Digital Bruel an 185 Fore Marlboro	Strobo d Kjae st Str ugh, M	escope – Type 4 r Instruments eet la., 01752 (Ree	913 , Inc., commended)				
	Digital Stroboscope – Commercially Available (Alternative)										
EFFECT	EFFECTIVITY					OPERATIONAL	AUTO & MANUAL R	O & MANUAL RAT DEPLOYMENT SYSTEMS			
						29-21-00-5A	29-015-01 F	PAGE 1 OF 20 DEC 22/02			
			BOEING PR	ROPRIETARY - C	opyright (	C) - Unpublished Work -	 · See title page for details				

AIRLINE CARD NO.



EFFECTIVITY

OPERATIONAL

29-21-00-5A

29-015-01

AUTO & MANUAL RAT DEPLOYMENT SYSTEMS

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	A BOEING
SAS	767
	TASK CARD

AIRLINE CARD NO.

				TASK CARD							
MECH	INSP	-									
			(2) Make pane	sure these circuit breakers on the main power distribution l, P6, are closed:							
			(a)	6C1, RAM AIR TURB MAN							
			(b)	6C2, RAM AIR TURB AUTO							
			(c)	6J8, RAM AIR TURBINE PWR							
			(3) Make gear	sure the downlocks are installed on the nose and main landing (AMM 32–00–20/201).							
			WARNING:	USE THE PROCEDURE IN AMM 32-00-15/201 TO INSTALL THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.							
			(4) Open (AMM	the doors for the main landing gear and install the door locks 32–00–15/201).							
		F.	F. Do the RAT Hydraulic Pump System Test								
		<u>CAUTION</u> : MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE RAT AREA BEFORE RAT RETRACTION OR EXTENSION. MOVEMENT OF THE RAT AND DOOR CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.									
			(1) Push pane	the RAM AIR TURB manual select switch on the pilot's overhead l, P5, to extend the RAT.							
			(2) Afte swit	r the RAT is fully extended, push the RAM AIR TURB manual select ch to the OFF position.							
			(3) Open circ	these circuit breakers on the P6 panel and insert the RAT uit breaker lock set:							
			(a)	6C1, RAM AIR TURB MAN							
			(b)	6C2, RAM AIR TURB AUTO							
			(c)	6J8, RAM AIR TURBINE PWR							
			(4) Push lock	forward on the RAT with your hand to make sure the RAT is ed in the extended position.							
EFF	ECTI	VITY -		OPERATIONAL AUTO & MANUAL RAT DEPLOYMENT SYSTEMS							

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SAS 767 TASK CARD

AIRLINE CARD NO.

29-015-01

MECH	INSP									
		N	<u>OTE</u> : T s a s R d c	o back-driv afety scree lternate me creen. Thi AT compartm iameter are lose to RAT	ve the RAT, the en around the R ethod may be us is method uses ment, by roping ea. This will blades.	e preferred met AT blades. Ho ed in place pl rope to secure off with a 20 keep personnel	hod is to u owever, an o ace of the the area b foot (6 me from enter	se the ptional, safety elow the ter) ing area		
		WARNIN	<u>G</u> : BEF (PR SEC DOO TUR EQU	ORE THE RAT EFERRED), C URED/ROPED- R TO PREVEN BINE BLADES IPMENT.	T IS BACK-DRIVE DR PUT A 20-FOC -OFF AREA (ALTE NT PERSONNEL EN S CAN CAUSE INJ	N, INSTALL THE T (6 METER) DI RNATE) BELOW T ITRY. THE FAST URY TO PERSONS	E SAFETY SCR AMETER THE RAT COMP MOVEMENT O OR DAMAGE	EEN ARTMETN F THE TO		
		(5) I s p ( (	f your ecured/ ersonne preferr Fig. 50	use the alt roped-off a l entry. ] ed), do the 1):	ternate method, area below the If you use the ese steps to in	put a 20 foot RAT compartmer RAT safety scr stall the RAT	: (6 meter) ( nt door to p reen method safety scree	diameter revent en		
		C	a) If the	the lifting safety scr	g fixture A7101 reen support wi	5 is used, sec th a nut and w	cure the ada washer.	pter to		
		(	b) Att	ach the sai	fety screen sup	port to the li	fting fixtu	re.		
		(	c) Put aro	the safety und the saf	/ screen on the fety screen.	support and t	ighten the	strap		
		(	d) Rem the	ove the bol safety scr	lts and move apart the forward and aft cages of reen.					
		(	e) Rem the	ove the top aft cage.	bolt, spacer,	and nut from	the brace w	hich is in		
		(	f) Loo sid	sen the knu e of the br	urled retainer bace in the aft	nut on the adj cage.	ustment scr	ew on each		
EFF	ECTI	VITY			OPERATIONAL	AUTO & MANUAL	. RAT DEPLOY	MENT SYSTEMS		
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MECH	INSP							1	
			(g)	Turn both adju the adjustment NOTE: This wi	stment screws screws. ll give cleara	to retract the nce to install	pads on	the en	d of n the
				RAT hyd	Iraulic pump.			C	
			(h)	Put the aft ca	ige on the RAT	hydraulic pump	•		
			(i)	Install the to the aft cage t	p bolt, spacer the RAT.	, and nut in t	he brace	to att	ach
			(j)	Turn both adju adjustment-scr	istment screws ew pads are ti	on the aft-cag ght against th	e brace u e RAT hyc	until t draulic	he pump.
			(k)	Tighten the kn in position.	ourled retainer	nuts to lock	the adjus	stment	screws
			<u>CAUT</u>	<u>ION</u> : SET THE S BEFORE YO TURBINE B GOVERNER	AFETY SCREEN F DU MOVE IT INTO BLADES, IT CAN MECHANISM.	ORWARD CAGE TO POSITION. IF CAUSE DAMAGE T	THE CORR THE CAGE O THE BLA	RECT HE E TOUCH ADES OR	IGHT ES THE THE
			(1)	Raise the forw fixture.	ard cage to th	e correct heig	ht with t	he lif	ting
			(m)	Carefully move that the cage	e the forward cage into position around the RAT so does not hit the turbine blades.				
			(n)	Install the bo safety screen.	olts to connect the forward and aft cages of the •				
			(o)	Loosen the str	ap and remove	it from around	the safe	ety scr	een.
			(p)	Lower the lift safety screen.	ing fixture an	d move the fix	ture away	/ from	the
		(6)	Pres	surize the cent	er hydraulic s	ystem (AMM 29-	11-00/201	).	
	<u>NOTE</u> : Do not use the ACMP's to pressurize the center system. The ACMP's do not supply sufficient capacity to backdrive the RAT.								
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		<u>CAUT</u>	<u>ION</u> : QUICKLY RELEASE THE GROUND-CHECKOUT-MODULE HANDLE IF THE TACHOMETER OVER-SPEED LIGHT COMES ON. IF THE SPEED BECOMES TOO HIGH, DAMAGE TO EQUIPMENT CAN OCCUR.						
		(7)	Move the control handle on the RAT checkout module in the right wheel well to the back—drive position.						
		(8)	Push and hold the lamp test switch on the RAT tachometer.						
		(9)	Make sure the red and green lights on the RAT tachometer are both on.						
		(10)	Release the lamp test switch on the RAT tachometer.						
		(11)	When the turbine blade speed has become stable, make sure the green light on the RAT tachometer is on, and the red light is off.						
		(12)	If the RAT tachometer red overspeed light comes on, quickly release the Ground-Checkout-module handle and consult the Fault Isolation section, under the heading "RAT overspeed light on while performing RAT system test.						
		(13)	If the green light on the RAT tachometer does not operate, you can do these steps to do a check of the speed of the RAT turbine blades:						
			(a) Release the control handle from the back-drive position.						
			(b) Remove the power from the center hydraulic system (AMM 29–11–00/201).						
			(c) Move the lifting fixture below the safety screen.						
			(d) Lift the safety screen support with the lifting fixture until the support touches the screen.						
			(e) Put the strap around the safety screen and tighten the strap.						
			(f) Remove the bolts and move apart the forward and aft cages of the safety screen.						
	<u>CAUTION</u> : REMOVE THE SAFETY SCREEN FORWARD CAGE CAREFULLY. IF THE CAGE TOUCHES THE TURBINE BLADES IT CAN CAUSE DAMAGE TO THE BLADES OR THE GOVERNER MECHANISM.								
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		INE CARD NO.
	TASK CARD	
MECH INSP		
	(g) Move the forward cage away from the RAT with the lifting fixture.	
	(h) Apply a strip of tape that is 1/2 by 2 inches, at one of locations:	these
	1) On the RAT turbine hub, from the center to the edge	
	2) On the end of one RAT turbine blade.	
	<u>CAUTION</u> : SET THE SAFETY SCREEN FORWARD CAGE TO THE CORRECT HE BEFORE YOU MOVE IT INTO POSITION. IF THE CAGE TOUCH TURBINE BLADES, IT CAN CAUSE DAMAGE TO THE BLADES OF GOVERNER MECHANISM.	IGHT IES THE THE
	(i) Raise the forward cage to the correct height with the lif fixture.	ting
	(j) Carefully move the forward cage into position around the that the cage does not hit the turbine blades.	RAT so
	(k) Install the bolts to connect the forward and aft cages of safety screen.	the
	(l) Loosen the strap and remove it from around the safety scr	•een.
	(m) Lower the lifting fixture and move the fixture away from safety screen.	the
	(n) Pressurize the center hydraulic system (AMM 29–11–00/201)	· _
	<u>NOTE</u> : Do not use the ACMP's to pressurize the center sys The ACMP's do not supply sufficient capacity to backdrive the RAT.	stem.
	(o) Move the control handle on the RAT checkout module, in th right wheel well, to the back-drive position.	ıe
	(p) Set the stroboscope to less than 1500 rpm.	
	(q) Monitor the speed of the RAT turbine blades while you ind the adjustment of the stroboscope from 1500 rpm to 9440 r	rease pm.
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			(r) Make a record of the highest speed at which the strip of tape shows as one stable mark in the light of the stroboscope.
			(s) Make sure this speed is between 3980 and 4720 rpm.
			<u>NOTE</u> : If the governor in the RAT hub does not control the speed corectly, a speed in the range of 1500 to 7500 rpm can occur.
		(14)	Do these steps as quickly as possible to do an accurate check of the RAT pressure light:
			(a) Release the control handle from the back-drive position.
			(b) Remove the pressure from the center hydraulic system (AMM 29–11–00/201).
			(c) Make sure the RAT green pressure light on the P5 panel is on until the center system pressure decreases to 1200 +/-300 psi.
		(15)	Make sure the RAT blades and hub stop.
			NOTE: It is possible that the RAT blades and hub will continue to turn slowly after you release the control handle. The cause of this condition is a check valve, in the RAT strut, which did not open while the speed of the RAT blades decreased. The check valve will open when you remove the hydraulic pressure. When you supply hydraulic pressure again, the RAT blades will not move. It is not necessary to reject parts because of this condition.
		(16)	If the RAT blades and hub continue to turn slowly when the handle is not in the back-drive position, do these steps:
			(a) Keep the center hydraulic system without pressure for not less than 2 minutes to permit the pressure to bleed from the RAT.
			(b) Do these steps:
			1) Pressurize the center hydraulic system (AMM 29–11–00/201).
			2) Make sure the RAT turbine blades and hub do not turn.
			3) If the turbine blades and hub turn, remove the pressure from the center hydraulic system and permit the pressure to fully bleed from the RAT.
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			(c) Do the above steps until the RAT turbine blades and hub do not turn when the center hydraulic system is pressurized.
			(d) Remove power from the center hydraulic system (AMM 29–11–00/201).
		(17)	Move the back-drive handle to the back-drive position and then release the handle.
		(18)	Make sure the spring puts the handle back in the usual position, quickly and smoothly, without binding or flutter.
		(19)	Safety the handle with wire.
		(20)	Make sure there is no leakage at the RAT swivel valves or hydraulic connections on the RAT and the checkout module.
		(21)	Make sure the RAT shaft seal leakage is no more than one drop in 30 minutes with the RAT not in operation.
		<u>CAUT</u>	<u>ION</u> : REMOVE THE RAT SAFETY SCREEN BEFORE YOU RETRACT THE RAT. IF THE RAT IS RETRACTED WITH THE SAFETY SCREEN IN POSITION, EQUIPMENT DAMAGE CAN OCCUR.
		(22)	If you used the alternate method of roping off the area, remove the rope. If you used the RAT safety screen method, do these steps to remove the safety screen (Fig. 501):
			(a) Move the lifting fixture below the safety screen.
			(b) Lift the safety screen support with the lifting fixture until the support touches the screen.
			(c) Put the strap around the safety screen and tighten the strap.
			(d) Remove the bolts and move apart the forward and aft cages of the safety screen.
			<u>CAUTION</u> : REMOVE THE SAFETY SCREEN FORWARD CAGE CAREFULLY. IF THE CAGE TOUCHES THE TURBINE BLADES IT CAN CAUSE DAMAGE TO THE BLADES OR THE GOVERNER MECHANISM.
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			(e) Move the forward cage away from the RAT and lower the cage with the lifting fixture.
			(f) Loosen the knurled retainer nut on the adjustment screw on each side of the brace in the aft cage.
			(g) Turn both adjustment screws to retract the pads on the end of the adjustment screws.
			<u>NOTE</u> : This will give clearance to remove the aft cage from the RAT hydraulic pump.
			(h) Hold the aft cage and remove the top bolt, spacer, and nut from the brace inside the cage.
			(i) Remove the aft cage from the RAT.
			(j) Install the top bolt, spacer, and nut in the brace which is in the aft cage.
			(k) Put the forward and aft cages together and install the attach bolts.
		(23)	Remove RAT circuit breaker lock set and close these circuit breakers on the P6 panel:
			(a) 6C1, RAM AIR TURB MAN
			(b) 6C2, RAM AIR TURB AUTO
			(c) 6J8, RAM AIR TURBINE PWR
		(24)	If you installed tape on the hub or blade of the RAT turbine, remove the tape.
		(25)	Do these steps to make sure the RAT turbine blades turn freely:
			(a) Manually twist the RAT turbine blades to the fine-pitch position. The blades should move under opposing spring pressure to the fine pitch stop.
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(b) Release manual force applied to oppose the spring pressure and allow the RAT turbine blades to turn fully back to the coarse-pitch position. If the blades fail to return to the coarse-pitch stop with only spring load, replace the RAT (AMM 29-21-01/401). Do not apply manual force to assist in returning the blades to the coarse-pitch position except as noted below. NOTE: The RAT turbine blades must be in the coarse-pitch position to make sure that RAT operates correctly when it is deployed and it does not interfere with other airplane structure when RAT is stowed. You can apply manual force to turn the RAT turbine blades back to the coarse-pitch stop as necessary when stowing an unserviceable RAT and moving the aircraft to a location where the RAT can be removed for repair. Application of manual force is not allowed for parts being returned to service. (26) Manually move the turbine hub to align the index mark on the hub with the index mark on the strut. Two persons are necessary to do the RAT retraction procedure. NOTE: One person operates the RAT retraction switch. The other person monitors the RAT movement to make sure the RAT blades do not touch the airplane structure. MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE RAT CAUTION: AREA BEFORE RAT RETRACTION. MOVEMENT OF THE RAT AND DOOR CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT. (27) Retract the RAT with the RAT retraction switch in increments of approximately 1/4 to 1/2 second. NOTE: The RAM AIR TURB switch on the P5 panel must be in the OFF position before the RAT can be retracted. If the blade-lock plunger does not engage the hub-lock collar, the RAT will not retract more than approximately 16 degrees. EFFECTIVITY OPERATIONAL AUTO & MANUAL RAT DEPLOYMENT SYSTEMS

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	TASK CARD

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	MECH	INSP										
					(28)	Stop the from the	e RAT retrac e fully exte	ction when the ended position.	RAT is approxi	mately 15 d	egrees	
					(29)	Make sur	re the blade	e-lock plunger	has locked the	turbine hu	b.	
					(30)	Retract retracte	the RAT wited.	th the retracti	ion switch unti	l the RAT is	s fully	
					(31)	Make sur	re the RAT ເ	unlocked light	on the P5 pane	l is off.		
					WARN	<u>ING</u> : USE The Per	E THE PROCEI E DOORS OPEI RSONS OR DAI	DURE IN AMM 32- N AND CLOSE QUI MAGE TO EQUIPME	-OO-15/2O1 TO R CKLY AND CAN C NT.	EMOVE THE D AUSE INJURY	OOR LOCK TO	<s.< td=""></s.<>
					(32)	Remove t doors (A	the door loo AMM 32-00-1	cks from the la 5/201).	anding gear doo	ers and close	e the	
					(33)	Remove e	electrical p	power, if it is	s not necessary	(AMM 24-22	-00/201)	)_
			2.	<u>Sy</u>	<u>stem T</u>	<u>est-RAT D</u>	Deployment S	System				
				Α.	Equi	pment						
					(1)	Protract	tor, commerc	cially availabl	e			
					(2)	Proximit A27092-8 necessar	ty Sensor Ad 34 (2 rectar ^y)	ctuator/Deactua ngular sensor a	ator Set - actuators are			
				в.	Refe	rences						
					(1)	AMM 24-2	22-00/201, 1	Electrical Powe	er			
					(2)	AMM 27-6	61-00/201, 9	Spoiler/Speedbr	ake Control Sy	stem		
					(3)	AMM 29-2	21-17/201, 1	Ram Air Turbine	e (RAT) Proximi	ty Switches		
					(4)	AMM 32-0	00-15/201, I	anding Gear Do	oor Locks			
					(5)	AMM 32-0	00-20/201, I	anding Gear Do	ownlocks			
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	TASK CARD

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			(6) AM	M 32-09-02/201, A	ir/Ground Rela	ys			
			(7) AM	M 34-11-00/201, P	itot-Static Sy	stem			
		с.	Prepare	for Test					
			(1) Ma pa	ke sure these cire nel, P6, are clos	cuit breakers ed:	on the main po	wer distri	bution	
			(a	) 6C1, RAM AIR T	URB MAN				
			(b	) 6C2, RAM AIR T	URB AUTO				
			(c	) 6J8, RAM AIR T	URBINE PWR				
			(2) Ma cl	ke sure these cire osed:	cuit breakers	on the overhea	d panel, P	11, are	
			(a	) 11U23 or 11U24	, LANDING GEAR	POSITION AIR/	GND SYS 2		
				<u>NOTE</u> : When mon find the location	re than one gr e named circui ns.	id location is t breaker at o	provided, ne of thes	you must e	
			(3) Su	pply electrical p	ower (AMM 24-2	2-00/201).			
			(4) Ma ge	ke sure the downlo ar (AMM 32-00-20/;	ocks are insta 201).	lled on the no	se and mai	n landing	
			<u>WARNING</u>	: USE THE PROCED LOCKS. THE DO TO PERSONS OR I	URE IN AMM 32- ORS OPEN AND C DAMAGE TO EQUI	00–15/201 TO I LOSE QUICKLY A PMENT.	NSTALL THE ND CAN CAU	DOOR SE INJURY	
			(5) Op (A	en the doors for MM 32-00-15/201)	the landing ge	ar and install	the door	locks	
			(6) Ma	ke sure the engin	es are not in	operation.			
		D.	Do the	RAT Deployment Sy	stem Test				
EFF	ECTIVI	тү -			OPERATIONAL	AUTO & MANUAL	RAT DEPLO	YMENT SYSTE	٩S
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			<u>CAUTION</u> :	MAKE SURE THAT THE PITOT LINE PRESSURE IS EQUIVALENT OR MORE THAN THE STATIC LINE PRESSURE. KEEP THE PITOT PRESSURE CHANGE BELOW 300 KNOTS FOR EACH MINUTE. MAKE SURE THAT DIFFERENTIAL PRESSURE STAYS BETWEEN O AND 10.19 INCHES OF MERCURY. YOU CAN CAUSE DAMAGE TO THE PITOT-STATIC SYSTEM.
			(1) Conr (AMN	nect the pitot test set to the right auxiliary pitot probe 1 34–11–00/201).
			(2) Adju (AMM	ust the pitot test set to a pressure equivalent to 50 ±10 knots 1 34–11–00/201).
			WARNING:	DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS CAN RETRACT QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
			(3) Do t move	the deactivation procedure for the spoilers (AMM 27–61–00/201) or all persons and equipment away from the spoilers.
			<u>WARNING</u> :	MAKE SURE YOU DO THE FLIGHT MODE SIMULATION CORRECTLY. IF THE PROCEDURE IS NOT DONE CORRECTLY, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.
			(4) Do t syst tilt (AMM	the Flight Mode Simulation procedure for the No. 2 air/ground tem. Use the technique which puts actuators on the main gear t sensors and the nose gear not-compressed sensors 1 32–09–02/201).
			(5) Make pane	e sure these circuit breakers on the main power distribution el, P6, are closed:
			(a)	6C1, RAM AIR TURB MAN
			(b)	6C2, RAM AIR TURB AUTO
			(c)	6J8, RAM AIR TURBINE PWR
			(6) Make	e sure that the RAT does not extend.
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	(7)	Remove the proximity switch actuators from these landing sensors:	gear
		(a) S267, Left Main Gear Tilt Sensor	
		(b) S268, Right Main Gear Tilt Sensor	
	(8)	Adjust the pitot test set to a pressure equivalent to an 100 ±10 knots (AMM 34–11–00/201).	airspeed of
	(9)	Put the proximity switch actuator on this landing gear s	ensor:
		(a) S267, Left Main Gear Tilt Sensor	
	(10)	Make sure the RAT extends in less than two seconds.	
	(11)	Remove the proximity switch actuator from this landing g	ear sensor:
		(a) S267, Left Main Gear Tilt Sensor	
	(12)	Manually turn the turbine hub to align the index mark ar hub with the index mark arrow on the strut.	row on the
	<u>CAUT</u>	ION: MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN AREA BEFORE RAT RETRACTION. THE MOVEMENT OF THE RA CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.	THE RAT T AND DOOR
	(13)	Retract the RAT with the RAT retraction switch in increm approximately 1/4 to 1/2 second.	ents of
		<u>NOTE</u> : The RAM AIR TURB switch on the P5 panel must be i position before the RAT can be retracted.	n the OFF
		If the blade-lock plunger does not engage the hub collar, the RAT will not retract more than approx degrees.	-lock imately 16
	(14)	Stop the RAT retraction when the RAT is approximately 15 from the fully extended position.	degrees
	(15)	Make sure the blade-lock plunger has locked the turbine	hub.
	(16)	Retract the RAT with the retraction switch until the RAT retracted.	is fully
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MECH	INSP									
			(17)	Put th	e proximity s	witch actuator	on this landi	ing gear s	ensor:	
				(a) S	268, Right Ma	ain Gear Tilt S	ensor			
			(18)	Make s	ure the RAT e	extends in less	than two seco	onds.		
			(19)	Make s downst	oure the clear op is as show	ance between t n in Fig. 502.	he RAT actuato	or arm and	l the	
			20)	If the (AMM 2	clearance is 9–21–17/201).	not correct,	adjust the RAI	ſ downlimi	t swit	ch
			(21)	Discon	nect the pitc	ot test set (AM	M 34-11-00/201	).		
			(22)	Put th	e airplane ba	ack to the grou	nd mode (AMM 3	82-09-02/2	201).	
		(	(23)	Do the deacti	activation p vation proced	procedure for t lure (AMM 27-61	he spoilers i1 -00/201).	f you did	the	
		(	(24)	Manual hub wi	ly move the t th the index	urbine hub to mark arrow on	align the inde the strut.	ex mark ar	row on	the
		(	(25)	Retrac approx	t the RAT wit imately 1/4 t	th the RAT retr to 1/2 second.	action switch	in increm	ients o	f
				<u>NOTE</u> :	The RAM AIR position bef	TURB switch on ore the RAT ca	the P5 panel n be retracted	must be i 1.	n the	OFF
					If the blade collar, the degrees.	e-lock plunger RAT will not r	does not engag etract more th	ge the hub nan approx	–lock imatel	y 16
			(26)	Stop t from t	he RAT retrac he fully exte	tion when the ended position.	RAT is approxi	imately 15	degre	es
			(27)	Make s	ure the blade	e-lock plunger	has locked the	e turbine	hub.	
		(	(28)	Retrac retrac	t the RAT wit ted.	h the retracti	on switch unti	il the RAT	is fu	lly
		(	(29)	Make s	ure the RAT L	INLOCKED light	on the P5 pane	el is off.		
EFF	ECTI	VITY -				OPERATIONAL	AUTO & MANIJAI	RAT DEPI	OYMENT	SYSTEMS
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		WARN	ING:	USE TH THE DO PERSON	IE PROCE DORS OPE IS OR DA	DURE II N AND ( MAGE T(	N AMM 32 CLOSE QU D EQUIPM	2-00-15 JICKLY 1ENT.	5/201 TO R AND CAN C	EMOVE AUSE	THE D INJURY	DOR L TO	OCKS.
		(30)	Remov doors	ve the s (AMM	door la 32–00–1	ocks fro 5/201)	om the	landing	ı gear doo	rs an	d clos	e the	1
		(31)	Remov	ve elec	trical	power,	if it i	is not	necessary	(AMM	24–22	-00/2	01).
EFF	ECTIV	/ITY				OPER	ATIONAL	AUTO	& MANUAL	RAT	DEPLOY	MENT	SYSTEMS
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			SAS	X				AIRL	INE CARD NO.
D	ATE		0/10	•	TASK CARD				
SKILL	WORK ARI	EA	RELATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	W/B FAI	RING	A-29-015-01		20	1	12424	013	APR 22/08
	K TNSP	RAT (	HECKOUT MOD	UIF FTIT	FRS	STRUCTURAL ILLUSTRATION RE	EFERENCE	AP AIRPLAN	PLICABILITY E ENGINE
	70NES					ACCESS DANELS		ALL	ALL
144	ZUNES		742			ALLESS PAINELS			
MECH INSP	_							Μ	IPD ITEM NUMBER
	INSPEC FILTER	T THE	RAT CHECKOU	T MODULE	E CASE DRAIN A	ND PRESSURE		29–2	1-11-4A
		(1)	Safety the	drain va	alve handle wi	th wire.			
	1 Rem	nove th	ne Filter Fl	ement Fr	com the RAT Ch	eckout Module			
		Pefer	ences						
		(4)	AMM 20 44 0	0/201 1					<b>4</b>
		(1)	AMM 29-11-0	U/201, M		gnt and center) H	yarauti	c sys	tems
		(2)	AMM 32-00-1	5/201 <b>,</b> L	anding Gear D	oor Locks			
		(3)	AMM 32-00-2	0/201, L	anding Gear D	ownlocks			
	В.	Prepa	are For Remo	val					
		(1)	Make sure t gear (AMM 3	he downl 2-00-20/	ocks are inst 201).	alled on the nose	and ma	in la	nding
		<u>WARN</u>	ING: USE TH THE DO PERSON	E PROCED ORS OPEN S OR DAM	DURE IN (AMM 3) I AND CLOSE QU IAGE TO EQUIPM	2-00-15) TO INSTA ICKLY AND CAN CAU ENT.	LL THE SE INJU	DOOR IRY TO	LOCKS.
		(2)	Open the do (AMM 32-00-	ors for 15/201).	the landing g	ear and install t	he door	lock	S
		(3)	Remove the reservoir (	pressure AMM 29-1	e from the cen 1-00/201).	ter hydraulic sys	tem and	l the	
		(4)	Open these DO-NOT-CLOS	circuit E tags:	breakers on t	ne overhead panel	, P11,	and a	ttach
			(a) 11D31,	HYDRAUL	IC AIR PUMP				
EFFECT	IVITY				CHECK/INSP	RAT CHECKOUT MO	DULE FI	LTERS	
					29-21-11-4A	29-018-01 P	AGE 1	0F 6	AUG 22/01

	A BOEING
SAS	767
	TASK CARD

AIRLINE CARD NO.

29-018-01

MECH	INSP				
				(	(b) 11L15, HYDRAULIC ELEC PUMP CTR 1
				(	c) 11L24, HYDRAULIC ELEC PUMP CTR 2
			с.	Remove	e the Filter Element (Fig. 401)
				(1) F	emove the filter cap from the checkout module.
				(2) F	emove the filter element from the module.
		2.	<u>Ins</u>	<u>tall th</u>	e Filter Element on the RAT Checkout Module
			Α.	Equipn	ient
				(1) ເ	Jltrasonic Cleaner – Commercially Available
				(2) A 4	Assembly Bullet, BLS-34533, Sundstrand Corp., 747 Harrison Ave., Rockford, Illinois
				(3) A 4	Assembly Bullet, BLS-34529, Sundstrand Corp., 747 Harrison Ave., Rockford, Illinois
				(4) s 4	Sizing Die, DAS-34534, Sundstrand Corp., 747 Harrison Ave., Rockford, Illinois
				(5) s 4	izing Die, DAS-34530, Sundstrand Corp., 747 Harrison Ave., Rockford, Illinois
			в.	Consum	nable Materials
				(1) [	000054 Hydraulic System Lubricant – MCS 352B
				(2) 9	Colvents (Optional)
				(	a) BOO521 Solvent – Freon TMS (Preferred)
				(	(b) B00175 Solvent - Trichloroethylene, stabilized - ASTM D4080 (Optional)
				(	c) BOO019 Solvent – Alcohol – TT-I-735 (Optional)
			С.	Refere	ences
				(1) A	MM 12–25–01/301, Exterior Cleaning
				(2) A	MM 29–11–00/201, Main (Left, Right and Center) Hydraulic Systems
EF	ECTI	VIT	Y T		CHECK/INSP RAT CHECKOUT MODULE FILTERS
					29-21-11-4A 29-018-01 PAGE 2 OF 6 APR 22/08

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AIRLINE CARD NO.

SAS	<b>BOEING</b> 767 TASK CARD

MECH	INSP			
			(3)	AMM 29-21-00/501, Ram Air Turbine System
			(4)	AMM 29–21–01/401, RAT Assembly and Components
			(5)	AMM 32-00-15/201, Landing Gear Door Locks
		D.	Inst	all the Filter Element (Fig. 401)
			(1)	Do a check of the condition of the filter.
				(a) Examine the filter for bright metal particles that you can identify as broken pieces which are not very small flakes or slivers caused by usual wear.
				(b) If you find a large quantity of bright metal particles, replace the hydraulic pump of the ram air turbine (AMM 29–21–01/401).
				(c) Examine the filter for pieces of the filter screen from the orifice plug in the checkout module.
				(d) If you find pieces of the filter screen, replace the checkout module.
			(2)	Clean the filter element with an ultrasonic cleaner which contains solvent.
			(3)	If you cannot remove the contamination or if the filter element has damage, replace the filter element.
			(4)	Apply hydraulic system lubricant or hydraulic fluid to the O-rings, the backup retainers, and the threads on the filter cap.
			(5)	Install a new O-ring on the filter cap.
			(6)	Use the assembly bullet as follows to install the O–ring and the backup retainers on the filter element (Fig. 402).
				(a) Use the assembly bullet BLS-34533 on the pressure filter element.
				(b) Use the assembly bullet BLS-34529 on the case drain filter element.
			(7)	Use the sizing die as follows to compress the backup retainers into the groove of the filter element (Fig. 402).
				(a) Use the sizing die DAS-34534 on the pressure filter element.
EFF	ECTI	VITY		
				CHECK/INSF KAT CHECKOUT MODULE FILTERS
				29-21-11-4A 29-018-01 PAGE 3 OF 6 AUG 22/01

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			( ROFING	29-018-01
			SAS 767	AIRLINE CARD NO.
			TASK CARD	
MECH	INSP			
			(b) Use the sizing die DAS-34530 on the case drain filt	er element.
		(	8) Install the filter element in the checkout module.	
		(	9) Install the filter cap on the module.	
		(1	D) Tighten the pressure filter cap to 30–35 pound-feet.	
		(1	1) Tighten the case drain filter cap to 15-20 pound-feet.	
		(1	2) Safety the two filter caps with wire.	
		E. P	ut the Airplane Back to Its Usual Condition	
		(	<ol> <li>Remove the DO-NOT-CLOSE tags and close these circuit bre overhead panel, P11:</li> </ol>	akers on the
			(a) 11D31, HYDRAULIC AIR PUMP	
			(b) 11L15, HYDRAULIC ELEC PUMP CTR 1	
			(c) 11L24, HYDRAULIC ELEC PUMP CTR 2	
		(	<ol> <li>Pressurize the center hydraulic system and the reservoir (AMM 29-11-00/201).</li> </ol>	
		(	3) Do the RAT hydraulic pump system test(AMM 29-21-00/501)	
		(	4) Make sure there are no leaks at the filter caps and the line connections on the module.	hydraulic
		(	5) Clean all hydraulic fluid from the area of the module (AMM 12–25–01/301).	
		W	ARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO REMOVE THE THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJU PERSONS OR DAMAGE TO EQUIPMENT.	DOOR LOCKS. RY TO
		(	<ol> <li>Remove the door locks from the landing gear doors and cl doors (AMM 32-00-15/201).</li> </ol>	ose the
		(	7) Remove hydraulic power if it is not necessary (AMM 29–11	-00/201).
EFI	FECTIV		CHECK/INSP RAT CHECKOUT MODULE FI	LTERS

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SI	TATION	]						BOE	ING CARD NO.
ТА	AIL NO.	_		$\mathcal{A}$	BOEIN	IG		29–0	19–01
	DATE	-	SAS			—		AIRI	LINE CARD NO.
	DATE				TASK CARD				
SKILL	WORK AR	EA	RELATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	CREW C	ABIN			10		11212	012	AUG 22/01
	ΑSK ΔΤΤΟΝΔΙ		TC DESEDV			STRUCTURAL ILLUSTRATION RE	FERENCE	AF AIRPLAN	PPLICABILITY E ENGINE
		IIIDRAOL		OIN QUAN				ALL	NOTE
144	<sup>ZONES</sup>	2 437 4	47 1004	198CR	437BL 447BR	ACCESS PANELS			
MECH INS	SP							ľ	MPD ITEM NUMBER
	OPERA RESER QUANT RESER ENGINE	FIONALLY /OIR QUAN ITY INDIC /OIR SIGH	CHECK THE ITITY INDI CATION ON IT GLASS. THIS TASK	SYSTEM CATING S THE EICA IS APPL	L, R, AND C H YSTEMS BY COM S/REMOTE GAGE ICABLE TO AIR	YDRAULIC PARING HYDRAULIC WITH THE PLANES EQUIPPED		29–3	3-00-5A
			WITH 4000	,7R4,8	OA AND 80C EN	GINES.			
	ACCES	S NOTE:	SPECIAL A LANDING G IN ACCORD PROCEDURE	CCESS 10 EAR DOOR ANCE WIT 32-00-1	U4 REQUIRES O S AND INSTALL H MAINTENANCE 5.	PENING THE ING SAFETY LOCKS MANUAL			
	1. <u>Ope</u>	erational	<u>. Test – H</u>	ydraulic	<u>Fluid Quanti</u>	ty Indicating Sys	<u>tem</u>		
	Α.	Referer	nces						
		(1) AM	IM 06-41-0	0/201, F	uselage Acces	s Doors and Panel	s		
		(2) AM	IM 06-43-0	0/201, E	ngine and Nac	elle Strut Access	Doors	and P	anels
		(3) AM	IM 24-22-0	0/201 <b>,</b> E	lectrical Pow	er – Control			
		(4) AM	IM 32-00-1	5/201 <b>,</b> L	anding Gear Do	oor Locks			
		(5) AM	IM 32-00-2	0/201 <b>,</b> L	anding Gear Do	ownlocks			
		(6) AM	1M 78-31-0	0/201, т	hrust Reverse	r System			
	В.	Access							
		(1) Lo	ocation Zon 144 198 437/447	nes Righ Wing Aft	t MLG Wheel Wo to Body – Af Nacelle Strut	ell t Lower Half Fairing			
EFFEC	TIVITY				OPERATIONAL	HYDRAULIC RESER	VOIR QL	IANTIT	Y - L,R,C
					29-33-00-5A	29-019-01 P	AGE 1	0F 5	APR 22/99

AIRLINE CARD NO.

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	A BOEING
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	TASK CARD

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MECH	INSP		
			(2) Access Panels 198CR Hydraulic Service Center 437BL Hydraulic System 447BR Hydraulic System
		C.	Prepare for Operational Test
			(1) Supply electrical power (AMM 24-22-00/201).
			WARNING: DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
			(2) Do this procedure: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).
			(3) For the left system, open the hydraulic system access panel, 437BL (AMM 06-43-00/201).
			(4) For the right system, open the hydraulic system access panel, 447BR (AMM 06–43–00/201).
			(5) For the center system, make sure the downlocks are installed on the nose and main landing gear (AMM 32–00–20/201).
			WARNING: USE THE PROCEDURE IN (AMM 32-00-15/201) TO INSTALL THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
			(6) For the center system, open the doors for the landing gear and install the door locks (AMM 32–00–15/201).
			(7) Open the hydraulic service center door, 198CR (AMM 06-41-00/201).
			(8) Make sure these circuit breakers on the overhead panel, P11, are closed:
			(a) 11L20, HYDRAULIC QTY
		D.	Do the Hydraulic Fluid Quantity Indicating System Operational Test.
EFF	ECTI	VITY	OPERATIONAL HYDRAULIC RESERVOIR QUANTITY - L,R,C

29-33-00-5A 29-019-01

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( BOFING	29-019-01
SAS 767	AIRLINE CARD NO.
TASK CARD	
MECH INSP	
(1) Push the ELEC/HYD switch on the EICAS maintenance pan	el.
(2) Move the fill selector valve to the position for the system (L, R, or C) on which you do the test.	hydraulic
(3) Make sure you can see the fluid level in the reservoi sight glass. Make sure you can not see the fluid lev overfill sight glass.	r at the refill el at the
(4) Make sure the HYD QTY (L, R, or C) indication on the display is between 0.65 and 1.24.	flight deck
(5) Make sure the indication on the hydraulic quantity in service panel is between 0.65 and 1.20.	dicator on the
(6) Move the fill selector valve to the OFF position.	
E. Put the Airplane back to Its Initial Condition.	
(1) Close the hydraulic service center door, 198CR (AMM O	6-41-00/201).
(2) For the right system, close the hydraulic system acce (AMM 06–43–00/201).	ss panel, 447BR
(3) For the left system, close the hydraulic system acces (AMM 06-43-00/201).	s door, 437BL
WARNING: USE THE PROCEDURE IN (AMM 32-00-15/201) TO REMOV LOCKS. THE DOORS CAN OPEN AND CLOSE QUICKLY AND INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.	E THE DOOR CAN CAUSE
(4) For the center system, remove the door locks from the doors and close the doors (AMM 32-00-15/201).	landing gear
(5) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).	
(6) Remove electrical power if it is not necessary (AMM 2	4-22-00/201).
EFFECTIVITY OPERATIONAL HYDRAULIC RESERVOTE	QUANTITY - L_R_C
29-33-00-5A 29-019-01 PAGE	3 OF 5 AUG 22/01

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AIRLINE CARD NO.



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STA	TION		]							BOE	ING CARD NO.	
TAI	L NO.					$\mathbf{A}$	RAFI			29-0	20–01	
				S	AS	X				AIR	LINE CARD NO.	
D	ATE			•			TASK CAR	2D				
SKILL	6	IORK AR	EA	REL	ATED TASK		INTERV	AL	PHASE	MPD REV	TASK CARD REVISION	
	LM	AIN	W/W		т	ITLE	4C	STRUCTURAL ILLUSTRAT	14848	007	APR 22/06	
DISCA	RD		RAM	AIR TU	RBINE	ISOLATIO	ON CHK VALVE			AIRPLAN	E ENGINE	
	ZON	ES						ACCESS PANELS		ALL	ALL	
143					732							
											MPD ITEM NUMBER	
MECH INSP	_											
		SCAR		AIR T	URBINE	ISOLATI	ON CHECK VAL	VE TO ENSURE		29–2	1–19–4A	
	FN			ATION.								
	TH OF	E FC	LLOWI	ING PRO	CEDURE	APPLIES	S TO THE ON-A	IRCRAFT PORTION				
		-										
	1.	<u>Ren</u>	<u>iove</u> t	the RAI	Isola	tion-Che	<u>eck Valve</u>					
		Α.	Refe	erences								
			(1)	AMM 2	9-11-0	D/201, M	Main (Left, F	ight and Center	) Hydrauli	c Sys	tems	
			(2)	AMM 3	2-00-1	5/201 <b>,</b> L	anding Gear	Door Locks				
			(3)	(3) AMM 32-00-20/201, Landing Gear Downlocks								
		Β.	Prep	oare Fo	r Remov	val						
			(1)	Make gear	sure tl (AMM 32	he downl 2-00-20/	ocks are ins 201).	talled on the n	ose and ma	in la	nding	
			WARM	<u>IING</u> :	USE THI THE DOO PERSONS	E PROCED ORS OPEN S OR DAM	DURE IN (AMM N AND CLOSE G NAGE TO EQUIF	32-00-15) TO IN UICKLY AND CAN MENT.	STALL THE CAUSE INJU	DOOR IRY TO	LOCKS.	
			(2)	0pen 32–00	the doo -15/20	ors for 1).	the landing	gear and instal	l the door	lock	s (AMM	
			(3)	Remov (AMM	e the 29-11-0	oressure DO/201).	e from the ce	nter hydraulic	system and	l rese	rvoir	
		с.	Remo	ove the	RAT I	solatior	-Check Valve	(Fig. 401)				
EFFECT	IVIT	γ·					DICCADD					
							DISCARD		INE ISULAI	TON C	TK VALVE	
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AIRLINE CARD NO.

MECH	INSP	-									
				(1)	Disconnect the hydr valve.	aulic line and	the tee fitt	ing from t	he c	check	
				(2)	Remove the bolt fro valve.	m the tab on t	he check valv	e and remo	ove t	he check	
		2.	Ins	tall	the RAT Isolation-Ch	<u>eck Valve</u>					
			Α.	Cons	sumable Materials						
				(1)	DOOO54 Hydraulic Sy	stem Lubricant	- MCS 352B				
			Β.	Refe	erences						
				(1)	AMM 12-12-01/301, H	ydraulic Syste	ms				
				(2)	AMM 12-25-01/301, E	xterior Cleani	ng				
				(3)	AMM 24-22-00/201, E	lectrical Powe	r – Control				
				(4)	AMM 29-11-00/201, M	ain (Left, Rig	ht and Center	) Hydrauli	c Sy	vstems	
				(5)	AMM 32-00-15/201, L	anding Gear Do	or Locks				
			С.	Inst	all the RAT Isolatio	n-Check Valve	(Fig. 401)				
				(1)	Apply hydraulic sys valve threads befor	tem lubricant e installation	or hydraulic	fluid to t	he c	check	
				(2)	Put the check valve	in position o	n the support	bracket.			
					(3)	Install the bolt an	d washer in th	e tab on the	check valv	/e.	
				(4)	Connect the hydraul	ic line and th	e tee fitting	to the ch	neck	valve.	
			D.	Put	the Airplane Back to	Its Usual Con	dition				
				(1)	Supply electrical p	ower (AMM 24-2	2-00/201).				
				(2)	Fill the hydraulic	reservoir (AMM	12-12-01/301	).			
				(3)	Pressurize the cent 29-11-00/201).	er hydraulic s	ystem and res	ervoir (AM	IM		
				(4)	Make sure there are	no leaks at t	he check valv	e connecti	ons.		
EFF	ECTI	VIT	Y -			DISCARD	RAM AIR TURB	INE ISOLAT	ION	CHK VALVE	
						29-21-19-4A	29-020-01	PAGE 2	OF	4 APR 22/06	



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SAS 767 TASK CARD

AIRLINE CARD NO.

MECH	INSP							
			<u>CAUTION</u>	<u>I</u> : QUICKLY CLEA CAN CAUSE DA	N THE AREA OF AL MAGE TO THE AIRP	L HYDRAULIC FL LANE EQUIPMENT	UID. HYDRAU	JLIC FLUID
			(5) Cl 12	ean all hydraul 2-25-01/301).	ic fluid from th	e area of the	relief valve	e (AMM
			WARNING	E: USE THE PROC THE DOORS OP PERSONS OR D	EDURE IN (AMM 32 EN AND CLOSE QUI AMAGE TO EQUIPME	-OO-15) TO REM CKLY AND CAN C NT.	OVE THE DOOF AUSE INJURY	R LOCKS. TO
			(6) Re do	move the door l pors (AMM 32-00-	ocks from the la 15/201).	nding gear doo	rs and close	e the
			(7) Re	emove hydraulic	power if it is n	ot necessary (	AMM 29-11-00	)/201).
			(8) Re	emove electrical	power if it is	not necessary	(AMM 24-22-0	0/201).
EFF	ECTI	VITY -			DISCARD	RAM AIR TURBI	NE ISOLATIO	N CHK VALVE
					29-21-19-4A	29-020-01	PAGE 3 OF	4 AUG 22/01

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	STATI	ON									BOE	ING CARD NO.
TAIL NO.						$\alpha$	BAEIN			29-02	21–01	
DATE			S	AS	Kr (	767			AIRL	INE CARD NO.		
	DAI	E						TASK CARD				
SKILL		WC	ORK ARE	A	REL	ATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRP		STAE	з со	MPT				10		11212	009	AUG 22/09
0PE	RAT	ION		POWE	R TRAN	ISFER U	NIT (PT	J) SYSTEM	STRUCTURE ILLUSTRATION N		AIRPLAN	ENGINE
		ZONE	s						ACCESS PANELS		NOT	E ALL
211	3	12				312AR						
		Γ									м	
MECH I	INSP										n	FU ITEN NONDER
		OPE SYS	ERAT STEM	IONAL -	LY CHE	CK THE	HYDRAUI	LIC POWER TRANS	FER UNIT (PTU)		29–27	2-00-5A
		AIF	RPLAI	NE NC	DTE: S N I E	B 767- IUMBERS NCORPO	29A0039 158, 10 RATING ENT.	. APPLICABLE 1 65, 202 AND ON THIS SERVICE BU	O AIRPLANE LINE AND THOSE ILLETIN OR			
		1.	0pe	ratio	onal Te	st - H	vdrauli	c Power Transfe	er Unit (PTU) Sys	stem		
				<b>6</b>								
			Α.	Gene	eral							
				(1)	This Trans	proced fer Un	ure doe: it (PTU)	s an operationa ).	l test of the Hy	/draulic	Power	•
			в.	Refe	erences	i						
				(1)	AMM O	6-42-0	0/201, 1	Empennage Acces	s Panels and Doc	ors		
				(2)	AMM 2	4-22-0	0/201, 1	Electrical Powe	r			
				(3)	AMM 2	27-61-0	0/201, 9	Spoiler/Speedbr	ake Control Syst	em		
				(4)	AMM 2	9–11–0	0/201,1	Main (Left, Rig	ht and Center) H	lydrauli	c Sys	tems
				(5)	AMM 3	2-09-0	2/201,	Air/Ground Rela	ys			
				(6)	WDM 2	9–33–1	1					
			С.	PTU	0perat	ion Te	st (Metl	hod 1)				
				(1)	Suppl	y elec	trical µ	oower (AMM 24-2	2-00/201).			
				(2)	Close	the f	ollowing	g circuit break	ers:			
					(a)	11L10,	HYDRAUI	LICS PTU CONT				
EFFE	CTI	VITY	-					OPERATIONAL	POWER TRANSFER	UNIT (P	ידע) אי	YSTEM
								29-22-00-5A	29-021-01 F	PAGE 1	OF 13	DEC 22/06
L					BOEING PR	OPRIETARY	- Copyright	(C) - Unpublished Work -	See title page for details	3 <b>.</b>		

BOEING	CARD	NO.
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AIRLINE CARD NO.

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SAS	767
	TASK CARD

MECH	INSP						
			(b) 11H11, LEFT STAB TRIM CONT				
		(3)	Pressurize the left, center and right hydraulic systems (AMM 29–11–00/201).				
		(4)	Set the following switches on the P61 panel to "ON":				
			(a) L FLT CONT SHUTOFF - TAIL				
			(b) C FLT CONT SHUTOFF - TAIL				
			(c) R FLT CONT SHUTOFF - TAIL				
		(5)	Set the "STAB TRIM L" and the "STAB TRIM C" switches to "NORM".				
		WARM	<u>VING</u> : MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE THE STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.				
		(6)	Position the Stabilizer at 6 to 7 units of trim.				
		(7)	Open the following circuit breakers:				
			(a) 11U23 or 11U24, LDG GR POS AIR/GND SYS 2				
		(8)	(8) Depressurize the left and center hydraulic systems (AMM 29-11-00/201).				
		(9)	Verify that the left system Isolation Shutoff Valve (V150) is in the closed position — "POS 2"				
		(10)	Operate the Captain's Stabilizer Trim Switch for 5 seconds in the Nose Down direction and then for 5 seconds in the Nose Up direction and verify that the PTU operates.				
			<u>NOTE</u> : PTU operation is verified by Stabilizer movement. If there is no Stabilizer motion, PTU does not operate!				
		(11)	Verify that the following light on the Hydraulic System Control panel M10 is not illuminated:				
			(a) HYD SYS L RESVR QTY (L10)				
EFF	ECTI	VITY	OPERATIONAL POWER TRANSFER UNIT (PTU) SYSTEM				

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SAS **BOEING** 767 TASK CARD

AIRLINE CARD NO.

		TASK CARD
MECH INSP		
	(12)	If the light is illuminated, open the following circuit breaker:
		(a) 11L20, HYDRAULIC QTY
	(13)	Pressurize the left hydraulic system and wait 20 seconds for the Isolation Valve to open (AMM 29–11–00/201).
	(14)	Operate the Captain's Stabilizer Trim Switch for 5 seconds in the Nose Down direction and then for 5 seconds in the Nose Up direction and verify that the Stabilizer operates but the PTU does not operate.
		<u>NOTE</u> : PTU operation can be detected by listening to the noise of the PTU motor and pump.
	(15)	Close the following circuit breaker:
		(a) 11L15, HYDRAULIC ELEC PUMP CTR1
	(16)	Install a temporary ground wire from Terminal G154 of TB176 in the E2–4 Shelf (WDM 29–33–11 sh2).
	(17)	Close this circuit breaker if it is open:
		(a) 11L20, HYDRAULIC QTY
	(18)	Operate the Captain's Stabilizer Trim Switch for 5 seconds in the Nose Down direction and then for 5 seconds in the Nose Up direction and verify that the PTU operates.
	(19)	Open the following circuit breakers:
		(a) 11H11, LEFT STAB TRIM CONT
		(b) 11H2O, STAB TRIM CONT R
	(20)	Operate the Captain's Stabilizer Trim Switch for 5 seconds in the Nose Down direction and the for 5 seconds in the nose up direction and verify that the PTU does not operate.
	(21)	Close the following circuit breakers:
		(a) 11H11, LEFT STAB TRIM CONT
		(b) 11H2O, STAB TRIM CONT R
EFFECTIVITY		OPERATIONAL POWER TRANSFER UNIT (PTU) SYSTEM

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	TASK CARD

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			TASK CARD	
MECH	INSP			
		(22	Open the following circuit breaker:	
			(a) 11L10, HYDRAULIC PTU CONT	
		(23	Operate the Captain's Stabilizer Trim Switch for 5 seconds in the Nose Down direction and the for 5 seconds in the nose up direction and verify that the PTU does not operate.	
		(24	Close the following circuit breakers:	
			(a) 11L10, HYDRAULIC PTU CONT	
			(b) 11U23 or 11U24, LDG GR POS AIR/GND SYS 2	
		(25	Remove the temporary ground wire from Terminal G154 of TB176 in the E2–4 shelf (if installed).	9
		D. P1	Operation Test (Method 2)	
		(1	Close the following circuit breakers.	
			(a) 11L10 HYDRAULICS PTU CONT	
			(b) 11H11 LEFT STAB TRIM CONT	
		(2	Supply electrical power (AMM 24-22-00/201).	
		<u>₩</u> #	NING: STAY OFF THE SERVICE ACCESS DOOR 312AR AND THE ELEVATOR CONTRO ACCESS DOOR, 313AL. YOUR WEIGHT CAN CAUSE THE SPRING-LOADED LATCHES TO RELEASE. IF YOU FALL THROUGH THE DOOR, INJURY CAN OCCUR.	DL
		(3	Open the access door, 312AR, for the pitch enhancement system (AMM 06-42-00/201).	
		(/	Pressurize the left, right and center hydraulic systems (AMM 29–11–00/201).	
		<u>₩</u> /	<u>NING</u> : MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE TH STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.	ΗE
	<b>–</b>			
EFF	ECTI	VITY	OPERATIONAL POWER TRANSFER UNIT (PTU) SYSTEM	

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		(5)	Operate the stabilizer trim through two full cycles with the Captain's or First Officer's stabilizer trim control wheel switches (Fig. 501) and do the steps which follow:
			<u>NOTE</u> : One cycle is a stabilizer movement from 1 unit of trim to 12 units of trim and back to 1 unit of trim on the stabilizer position indicator on the control stand panel, P10.
			(a) Make sure the stabilizer trim position indicator on the P10 panel moves.
			(b) Listen to the PTU in the stabilizer compartment to make sure it does not operate.
		(6)	Remove the power from the left and center hydraulic systems (AMM 29–11–00/201).
			<u>NOTE</u> : Keep the right hydraulic system pressurized.
		WARN	ING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE THE STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(7)	Operate the Captains stabilizer trim control wheel switches and make sure the stabilizer position indicator on the P10 panel does not move.
		(8)	Operate the First Officers stabilizer trim control wheel switches and make sure the stabilizer position indicator on the P10 panel does not move.
		(9)	Operate the stabilizer trim levers or the alternate stabilizer trim switches on the control stand and make sure that the stabilizer position indicator on the P10 panel does not move.
		(10)	Pressurize the left and center hydraulic systems (AMM 29–11–00/201).
			NOTE: Keep the right hydraulic system pressurized.
EFF	ECTIV	ІТҮ ———	OPERATIONAL POWER TRANSFER UNIT (PTU) SYSTEM
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SAS 767 TASK CARD

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	WARNIN	<u>G</u> : DO THE DEACTIV PERSONS AND EQ RETRACT QUICKL EQUIPMENT.	ATION PROCEDUR QUIPMENT AWAY F Y AND CAUSE IN	E FOR THE SPC ROM THE SPOIL JURY TO PERSC	DILERS OR MOVE A ERS. THE SPOID ONS OR DAMAGE TO	ALL LERS CAN D
	(11) D m	o the deactivation ove all persons ar	n procedure for nd equipment aw	the spoilers ay from the s	s (AMM 27-61-00. spoilers.	/201) or
	<u>WARNIN</u>	<u>G</u> : MAKE SURE YOU PROCEDURE IS N EQUIPMENT CAN	DO THE FLIGHT IOT DONE CORREC OCCUR.	MODE SIMULATI TLY, INJURY T	ON CORRECTLY.	IF THE AMAGE TO
	(12) D s	o the Flight Mode ystem (AMM 32–09–C	Simulation pro 02/201).	cedure for th	ne No. 2 air/gro	ound
	[		TABL	E 501		
		Captain's stabili First Officer's s Stabilizer trim l on the control s	izer trim contr stabilizer trim evers or the a stand	ol wheel swit control whee lternate stab	cches L switches Dilizer trim sw	itches
	(13) 0 s	perate the stabili witches in Table 5	izer trim throu 501, one at a t	gh 2 units of ime, and do t	<sup>:</sup> trim with eacl he steps which	h of the follow:
	(	a) Make sure the stand P10 pane	stabilizer pos el moves.	ition indicat	or on the cont	rol
	(	b) Listen to the does not opera	PTU in the sta ate.	bilizer compa	artment to make	sure it
	(14) R (	emove power from t AMM 29-11-00/201).	che left and ce	nter hydrauli	c systems	
	<u>N</u>	<u>OTE</u> : Keep the rig	ght hydraulic s	ystem pressur	ized.	
EFFECTIV	ІТҮ —		OPERATIONAL	POWER TRANSF	ER UNIT (PTU)	SYSTEM
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MECH	INSP			
		<u>WA</u>	NING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE STABILIZER IN THE STABILIZER COMPARTMENT STABILIZER TRIM. MOVEMENT OF THE STABIL TO PERSONS OR DAMAGE TO EQUIPMENT.	AWAY FROM THE BEFORE YOU OPERATE THE IZER CAN CAUSE INJURY
		(15	Operate the Captains stabilizer trim control sure the stabilizer position indicator on the	wheel switches and make P10 panel moves.
		(16	Operate the First Officers stabilizer trim co and make sure the stabilizer position indicat moves.	ontrol wheel switches cor on the P10 panel
		(17	Operate the stabilizer trim levers or the alt switches on the control stand and make sure t position indicator on the P10 panel does not	ternate stabilizer trim that the stabilizer move.
		(18	Pressurize the left hydraulic system (AMM 29-	-11-00/201).
			<u>NOTE</u> : Keep the right hydraulic system pressu	urized.
		WA	NING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE STABILIZER IN THE STABILIZER COMPARTMENT STABILIZER TRIM. MOVEMENT OF THE STABIL TO PERSONS OR DAMAGE TO EQUIPMENT.	AWAY FROM THE BEFORE YOU OPERATE THE IZER CAN CAUSE INJURY
		(19	Operate the stabilizer trim through 2 units of switches in Table 501, one at a time, and do	of trim with each of the the steps which follow:
			(a) Make sure the stabilizer trim indicator	on the P1O panel moves.
			(b) Listen to the PTU in the stabilizer comp does not operate.	partment to make sure it
		(20	Remove power from the left hydraulic system. hydraulic system (AMM 29–11–00/201).	Pressurize the center
			<u>NOTE</u> : Keep the right hydraulic system pressu	urized.
EFF	ECTI	VITY	OPERATIONAL POWER TRANS	SFER UNIT (PTU) SYSTEM
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		WARNING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE THE STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(21) Operate the stabilizer trim through 2 units of trim with each of the switches in Table 501, one at a time, and do the steps which follow:
		(a) Make sure the stabilizer trim indicator on the P1O panel moves.
		(b) Listen to the PTU in the stabilizer compartment to make sure it does not operate.
		WARNING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE THE STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
		(22) Operate the stabilizer trim with the Captain's or First Officer's stabilizer trim control wheel switches. While you operate the stabilizer trim, remove power from the center hydraulic system (AMM 29–11–00/201).
		(23) After a short time for the center system pressure to decrease, do the steps which follow:
		(a) Listen to the PTU in the stabilizer compartment to make sure it operates.
		(b) Monitor the movement of the stabilizer trim position indicator on the P1O panel to make sure the stabilizer trim rate decreases.
		(24) Release the Captain's and First Officer's stabilizer trim control wheel switches.
		(25) Listen to the PTU in the stabilizer compartment to make sure it stops when you release the stabilizer trim switches.
		(26) Pressurize the left hydraulic system (AMM 29–11–00/201).
		<u>NOTE</u> : Keep the right hydraulic system pressurized.
EFF	ECTIVIT	OPERATIONAL POWER TRANSFER UNIT (PTU) SYSTEM

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(27)	Stop for a minimum of 20 seconds, then do this step:
	(a) Make sure the position indicator and manual override lever on the left system isolation valve, in the stabilizer compartment, is in the position 1 (open position).
WAR	<u>NING</u> : MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE THE STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
(28)	Operate the stabilizer trim with the Captain's or First Officer's stabilizer trim control wheel switches. While you operate the stabilizer trim, remove power from the left hydraulic system (AMM 29–11–00/201).
(29)	After a short time for the left hydraulic system pressure to decrease, do the steps which follow:
	(a) Listen to the PTU in the stabilizer compartment to make sure it operates.
	(b) Monitor the movement of the stabilizer trim position indicator on the P10 panel to make sure the stabilizer trim rate decreases.
(30)	Release the Captain's or First Officer's stabilizer trim control wheel switches.
(31)	Listen to the PTU in the stabilizer compartment to make sure it stops when you release the stabilizer trim switches.
(32)	Pressurize the left hydraulic system (AMM 29–11–00/201).
	<u>NOTE</u> : Keep the right hydraulic system pressurized.
WAR	<u>NING</u> : MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE THE STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
EFFECTIVITY	OPERATIONAL POWER TRANSFER UNIT (PTU) SYSTEM

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MECH INSP	_	
	(3:	Operate the stabilizer trim with the Captain's or First Officer's stabilizer trim control wheel switches. While you operate the stabilizer trim, do the steps which follow:
		(a) Disconnect the connector D38 at the Quantity Transmitter for the left hydraulic system, M338 (WDM 29–33–11).
		<u>NOTE</u> : This gives a signal of a left reservoir low quantity.
		(b) Listen to the PTU in the stabilizer compartment to make sure it operates.
	(34	A Release the Captain's or First Officer's stabilizer trim control wheel switches.
	(3	5) Listen to the PTU in the stabilizer compartment to make sure it stops when you release the stabilizer trim switches.
	(30	6) Remove power from the left and right hydraulic systems (AMM 29-11-00/201)
	(3)	7) Connect the Connector D38 for the Quantity Transmitter, M338, for the left hydraulic system (WDM 29-33-11).
	(38	3) After at least 20 seconds, make sure the position indicator and manual override lever on the left system isolation valve in the stabilizer compartment is in position 2 (closed position).
	(39	9) Put the airplane back to the ground mode (AMM 32–09–02/201).
	(4(	)) Do the activation procedure for the spoilers if you did the deactivation procedure (AMM 27–61–00/201).
	(47	I) Close the access door, 312AR, for the pitch enhancement system (AMM 06-42-00/201).
	(42	2) Remove electrical power, if it is not necessary (AMM 24-22-00/201).
EFFECII		OPERATIONAL POWER TRANSFER UNIT (PTU) SYSTEM
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STATION										BOE	ING CARD NO.	
TAIL NO.						$\langle \rangle$	BOEIN	G		29–0	22–01	
	DATE			S	AS		767			AIRL	INE CARD NO.	
							TASK CARD		-1			
SKIL	L	WORK ARI	EA	REL	ATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION	
AIR	PL TASK	STAB CC	MPT		T	TTLE	40	STRUCTURAL ILLUSTRATION F	14848 REFERENCE	006 AP	AUG 22/09 PLICABILITY	
FUI	исті	ONAL	PTU	SYSTEM	I RETUR	N COMPE	NSATOR MODULE			AIRPLAN	E ENGINE	
		ZONES						ACCESS PANELS		NOT	E ALL	
21′	13	12			312AR							
		Γ										
MECH	INSP									ľ	IFD ITEM NOMBER	
		FUNCTI	ONALL	Y CHEC	K THE	PTU SYS	TEM RETURN COMF	ENSATOR MODULE.		29–2	2-00-5B	
		AIRPLA	NE NO	DTE: S N I E	SB 767- IUMBERS NCORPO	29A0039 158, 1 RATING ENT.	. APPLICABLE 1 65, 202 AND ON THIS SERVICE BU	O AIRPLANE LINE AND THOSE LLETIN OR				
		Α.	Equi	pment								
			(1)	Metal diame	. rod - eter, 6	commer inches	cially availabl long	e, 0.125-inch				
		В.	References									
			(1) AMM 06-42-00/201, Empennage Access Panels and Doors									
		(2) AMM 24-22-00/201, Electrical Power										
			(3)	AMM 2	29-11-0	0/201,	Main (Left, Rig	ht and Center) I	Hydrauli	c Sys	tem	
			(4)	AMM 2	29-22-0	0/201,	Pitch Enhancement System (PES)					
		С.	Proc	edure	(Fig 5	02)						
		<u>NOTE</u> : The pitch enhancement system must be at ambient temperature before you start this test. If the operation of the system increases the temperature of the hydraulic fluid, thermal contraction of the fluid when the temperature decreases can cause failure of this test.							before ses the the his			
			(1) Supply electrical power (AMM 24-22-00/201).									
EFF	ECTI	VITY					FUNCTIONAL	PTII SYSTEM DETI		FNSAT		
							20-22-00-50	20_022_01 r		0F 7	ADD 22/00	
							27-22-00-3B	27-022-01 1	AUE I	<b>U</b> F (	AFK 22/99	
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SAS 767 TASK CARD

AIRLINE CARD NO.

MECH	INSP						
			<u>WARN</u>	<u>ING</u> :	STAY OFF THE S ACCESS DOOR, 3 LATCHES TO REL OCCUR.	ERVICE ACCESS 13AL. YOUR WE EASE. IF YOU	DOOR 312AR AND THE ELEVATOR CONTROL IGHT CAN CAUSE THE SPRING-LOADED FALL THROUGH THE DOOR, INJURY CAN
			(2)	Open (AMM	the access doo 06-42-00/201).	r, 312AR, for	the pitch enhancement system
			(3)	Press	surize the left	hydraulic sys	tem (AMM 29-11-00/201).
			<u>WARN</u>	<u>ING</u> :	MAKE SURE ALL STABILIZER IN STABILIZER TRI TO PERSONS OR	PERSONS AND EQ THE STABILIZER M. MOVEMENT O DAMAGE TO EQUI	QUIPMENT ARE AWAY FROM THE COMPARTMENT BEFORE YOU OPERATE THE OF THE STABILIZER CAN CAUSE INJURY PMENT.
			(4)	Opera and b the o Offic	ate the stabili back to 1 unit control stand p cer's control w	zer trim from of trim on the anel, P10 (Fig heel switches.	1 unit of trim to 12 units of trim stabilizer position indicator on g. 501). Use the Captain's or First
			(5)	Remov	ve pressure fro	m the left hyd	Iraulic system (AMM 29–11–00/201).
			(6)	Put a the F	a metal rod int PTU return comp	o the access h ensator.	ole in the center of the housing of
			(7)	Кеер	a record of th	e depth of the	e piston in the housing.
			(8)	0pen D0–N(	this circuit b OT-CLOSE tag:	reaker on the	overhead panel, P11, and attach a
				(a)	11L10, HYDRAUL	ICS PTU CONT	
			(9)	Move hydra	the position is aulic system is	ndicator and m olation valve	nanual override lever on the left to position 2 (closed position).
			(10)	Do no hour	ot operate the	hydraulic syst	em or the stabilizer trim for one
			(11)	Put a the F	a metal rod int PTU return comp	o the access h ensator.	ole in the center of the housing of
			(12)	Кеер	a record of th	e depth of the	e piston in the housing.
EFF	ECTI	VITY				FUNCTIONAL	PTU SYSTEM RETURN COMPENSATOR MODULE

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AIRLINE CARD NO.

		TASK CARD							
MECH	INSP								
		(13) Compare this piston depth with the depth you wrote one hour before.							
		(14) The piston depth must not increase more than 0.25 inch.							
		(a) If the piston depth increases more than 0.25 inch, replace the PTU Return Compensator Module per AMM 29–22–02/401 or repair it per CMM 29–10–24.							
		(15) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:							
		(a) 11L10, HYDRAULICS PTU CONT							
		(16) Pressurize the left hydraulic system (AMM 29–11–00/201).							
		WARNING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE AWAY FROM THE STABILIZER IN THE STABILIZER COMPARTMENT BEFORE YOU OPERATE THE STABILIZER TRIM. MOVEMENT OF THE STABILIZER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.							
		(17) Operate the stabilizer trim through two full cycles with the Captain's or First Officer's stabilizer trim control wheel switches.							
		<u>NOTE</u> : One cycle is a stabilizer movement from 1 unit of trim to 12 units of trim and back to 1 unit of trim on the stabilizer position indicator on the P10 panel.							
		(18) Remove pressure from the left hydraulic system (AMM 29-11-00/201).							
		(19) Put a metal rod into the access hole in the center of the housing of the PTU return compensator.							
		(20) Keep a record of the depth of the piston in the housing.							
		WARNING: BE CAREFUL WHEN YOU LOOSEN THE HYDRAULIC LINE CONNECTIONS. THE REMAINING PRESSURE IN THE PITCH ENHANCEMENT SYSTEM (PES) CAN BE AS HIGH AS 100 PSI AND HAVE A FLUID VOLUME OF AS MUCH AS 5 CUBIC INCHES. A SPRAY OF FLUID FROM A CONNECTION CAN CAUSE INJURY TO PERSONS.							
EFF	ECTIV	FUNCTIONAL PTU SYSTEM RETURN COMPENSATOR MODULE							
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SAS CEING 767 TASK CARD

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				TASK CARD							
MECH	INSP										
			(21)	Slowly loosen the hydraulic line connection at the inlet port of the return compensator module to let the fluid, which is pressurized, bleed from the PTU system.							
			(22)	After the hydraulic fluid drains, tighten the hydraulic line connection at the inlet port of the return compensator module.							
			(23)	Put a metal rod into the access hole in the center of the housing of the PTU return compensator.							
			(24)	Keep a record of the depth of the piston in the housing.							
			(25)	Compare this piston depth with the depth you wrote before you bled the fluid from the compensator. The piston depth must increase by 1.0 ±0.1 inches.							
				(a) If the piston depth does not increase by 1.0 ± 0.1 inches, replace the PTU Return Compensator Module per AMM 29-22-02/401 or repair it per CMM 29-10-24.							
			(26)	Do the PES system fill and bleed procedure (AMM 29–22–00/201).							
			(27)	) Close the access door, 312AR, for the pitch enhancement system (AMM 06-42-00/201).							
			(28)	Remove electrical power if it is not necessary (AMM 24-22-00/201).							
EFF	ECTI	VITY		FUNCTIONAL PTU SYSTEM RETURN COMPENSATOR MODULE							
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AIRLINE CARD NO.



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STA	ATION							BOE	ING CARD NO.	
TAI	IL NO.			$\mathbf{A}$	BAEIA	1G		29–0	23–01	
	NATE		SAS	K	767	-		AIRL	INE CARD NO.	
L	DATE				TASK CARD					
SKILL	WORK AR	EA	RELATED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION	
AIRPL	STAB CC	MPT			4C		14848	009	APR 22/06	
			ASE DRATN	FTITE		STRUCTURAL ILLUSTRATION	REFERENCE	AP AIRPLAN	PLICABILITY E ENGINE	
	70150							NOT	E ALL	
312	LONES		312A	R		AULESS FAMELS				
MECH INSP			I					٩	MPD ITEM NUMBER	
	VISUAL FILTER CHECK AIRPLA	LY CHE ELEME IS COM	CK AND, IF NT AFTER T PLETED. TE: SB 767 NUMBER INCORP EQUIVA	NECESSAR HE PTU HY -29A0039. S 158, 16 ORATING T LENT.	RY, CLEAN THE F (DRAULIC SYSTEM) APPLICABLE TO 55, 202 AND ON THIS SERVICE BU	PTU CASE DRAIN OPERATIONAL AIRPLANE LINE AND THOSE JLLETIN OR		29–2	2-03-4A	
	1. <u>Rem</u>	<u>nove th</u>	<u>ie Case Dra</u>	<u>in Filter</u>	<u>Element</u>					
	Α.	Refer	ences							
		(1)	AMM 06-42-	00/201, E	Empennage Acces	s Panels and Do	ors			
		(2)	AMM 29-11-	00/201, M	Main (Left, Rig	ght and Center)	Hydrauli	c Sys	tems	
	в.	Prepa	nre for Rem	oval						
		(1)	Remove the systems an	pressure d the lei	e from the left ft system reser	;, right, and cenvoir (AMM 29-11)	nter hyd -00/201)	Irauli	с	
		<u>WARNI</u>	<u>NG</u> : STAY Acces Latch Occur	OFF THE S S DOOR, 3 ES TO REL	SERVICE ACCESS 313AL. YOUR WE LEASE. IF YOU	DOOR 312AR AND IGHT CAN CAUSE FALL THROUGH TH	THE ELEN THE SPRI E DOOR,	ATOR NG-LO INJUR	CONTROL ADED Y CAN	
		(2)	Open the a (AMM O6-42	ccess doo -00/201).	or, 312AR, for	the pitch enhan	cement s	ystem	(PES)	
	с.	Remov	ve the Case	Drain Fi	ilter Element (	Fig. 401)				
EFFECT	Ινιτγ				CHECK/INSP	PTU CASE DRAIN	FILTER			
					29-22-03-4A	29-023-01	PAGE 1	OF 4	AUG 22/01	





AIRLINE CARD NO.

29-023-01

						TASK CARD					
MECH	INSP	-									
				<u>WARNING</u> :	BE CAREFUL WHE PRESSURE IN TH VOLUME OF AS M FILTER BOWL CO	N YOU LOOSEN T E PES CAN BE A UCH AS 5 CUBIC NNECTION CAN C	HE FILTER BOW S HIGH AS 100 INCHES. A SI AUSE INJURY TO	THE REM PSI AND HA PRAY OF FLU 0 PERSONS.	AINING VE A FLUID ID FROM THE		
				(1) Slow press	ly loosen the f surized, bleed	ilter bowl to from the PES.	let the fluid	, which is			
				(2) Remov	ve the filter b	owl from the f	ilter head.				
				(3) Remov	ve the filter e	lement.					
		2.	<u>Ins</u>	tall the Ca	ase Drain Filte	<u>r Element</u>					
			Α.	Equipment							
				(1) Ultra	asonic Cleaner	- Commercially	Available				
			Β.	Consumable	e Materials						
				(1) DOOO5	54 Hydraulic Sy	stem Lubricant	- MCS 352B				
			С.	References	3						
				(1) AMM (	)6-42-00/201, E	Empennage Access Panels and Doors					
				(2) AMM 1	12-25-01/301, E	Exterior Cleaning					
				(3) AMM 2	29-22-00/201, P	Pitch Enhancement System (PES)					
			D.	Install th	ne Case Drain F	ilter Element	(Fig. 401)				
				(1) Clear clear	n the filter el ner.	ement, for the	case drain,	in an ultra	sonic		
				(2) Exam	ine the filter	element for da	mage.				
				(3) If yo damag	ou can not remo ge, replace the	ve the contami filter elemen	nation or if <sup>.</sup> t.	the filter	element has		
				(4) Apply threa	/ hydraulic lub ads of the filt	ricant or hydr er bowl and th	aulic fluid to e filter head	o the O-rin before ins	gs and the tallation.		
				(5) Insta	all new O-rings	in the filter	element and o	on the filt	er bowl.		
EFF	ECTI	VIT	Y -			CHECK/INSP	PTU CASE DRA	IN FILTER			
						29-22-03-4A	29-023-01	PAGE 20	F 4 APR 22/06		

ARD NO.

29-023-01

	A BOEING
SAS	767
	TASK CARD

AIRLINE CARD NO.

			TASK CARD									
MECH	INSP	-										
			(6) Install the filter element in the filter head.									
			7) Install the filter bowl in the filter head, and tighten the filter bowl to 75–100 pound-inches.									
			(8) Safety the filter bowl with wire.									
		Ε.	Put the Airplane Back to Its Usual Condition									
			(1) Do the fill and bleed procedure for the pitch enhancement system (AMM 29-22-00/201).									
			(2) Make sure there are no leaks at the hydraulic line and filter bowl connections to the filter head.									
			<u>CAUTION</u> : QUICKLY CLEAN THE AREA OF ALL HYDRAULIC FLUID. HYDRAULIC FLUID CAN CAUSE DAMAGE TO THE AIRPLANE EQUIPMENT.									
			(3) Clean all hydraulic fluid from the area of the filter module (AMM 12–25–01/301).									
			(4) Close the access door, 312AR, for the pitch enhancement system (AMM 06-42-00/201).									
	ECII	VTII	CHECK/INSP PTU CASE DRAIN FILTER									
			29-22-03-4A 29-023-01 PAGE 3 OF 4 AUG 22/01									



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	STAT	ION	7							BOE	ING CARD NO.
TAIL NO.		_		(	$\boldsymbol{\mathcal{T}}$	BOEIN	G		29–0	24–01	
DATE		_	SA	AS X	$\mathcal{O}^{\perp}$	767			AIRI	LINE CARD NO.	
							TASK CARD				
SKILL	-	WORK A	REA	RELAT	TED TASK		INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRP	<u>PL</u>	STAB C	OMPT				4C		14848	009	APR 22/01
FUN		ONAL	STAF	STI TZER		F RFI	TEE VALVE	STRUCTURAL ILLUSTRAT	ION REFERENCE	AIRPLAN	E ENGINE
		70150								NOT	E ALL
211	3	12			312AR			AUCESS FANELS			
MECH 1	INSP			•						Ν	MPD ITEM NUMBER
		FUNCT (INST AIRPL	IONALL ALLED ANE NC	Y CHECK ONLY ON DTE: SE NU IN EQ	C THE STA N AIRPLAN 3 767-29A JMBERS 15 NCORPORAT QUIVALENT	ABILIZ NES WI AOO39. 58, 16 TING T T.	ER TRIM RATE F TH PTU SYSTEM) APPLICABLE T 5, 202 AND ON HIS SERVICE BL	ELIEF VALVE - O AIRPLANE LI AND THOSE ULLETIN OR	NE	27-4	1–00–5E
		1. <u>St</u>	abiliz	<u>er Trim</u>	<u>n Relief</u>	Valve	Test				
		<u>NO</u>	<u>TE</u> : T	his is	a schedu	uled m	aintenance tas	šk.			
		Α.	Equi	pment							
			(1)	Hand P Availa	Pump, Pos able	sitive	Displacement	– Commerciall	у		
			(2)	Shutof Availa	ff Valve able	(2 Ne	cessary) — Con	mercially			
			(3)	Pressu Commer	ure Gauge rcially A	e, 200 Availa	psi (1400 kPa ble	) capacity –			
			(4)	Hose, Commer	1/4 inch cially A	n (6.4 Availa	millimeter) o ble	liameter -			
			(5)	Union,	, Flarele	ess Tu	be - MS21902				
			(6)	Beaker	~ with 1/	4 cc	graduations –	Commercially	Available		
		В.	Refe	erences							
			(1)	AMM 06	6-42-00/2	201, E	mpennage Acces	s Doors and P	anels		
			(2)	AMM 24	4–22–00/2	201, E	lectrical Powe	er – Control			
EFFE	ЕСТІ	VITY					FUNCTIONAL	STABTI TZER T	RIM RATE R	ELTEF	VALVF
							27-41-00-5E	29-024-01	PAGE 1	0F 9	APR 22/01

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AIRLINE CARD NO.

-			
MECH	INSP		
			(3) AMM 29–11–00/201, Main (Left, Right, and Center) Hydraulic System
			(4) AMM 34-11-00/201, Pitot Static Systems
		c.	Access
			<pre>(1) Location Zones</pre>
			(2) Access Panel 312AR Stabilizer Trim Ballscrew Actuator
		D.	Prepare for the Test
			(1) Supply electrical power (AMM 24-22-00/201).
			WARNING: STAY OFF THE SERVICE ACCESS DOOR, 312AR, AND THE ACCESS DOOR FOR THE CONTROLS BAY, 313AL. YOUR WEIGHT CAN CAUSE THE SPRING-LOADED LATCHES TO RELEASE. IF YOU FALL THROUGH THE DOOR, INJURY CAN OCCUR.
			(2) Open the access panel, 312AR, for the stabilizer trim ballscrew actuator (AMM 06-42-00/201).
			WARNING: KEEP PERSONS AND EQUIPMENT AWAY FROM ALL CONTROL SURFACES WHEN HYDRAULIC POWER IS SUPPLIED. AILERONS, ELEVATORS, RUDDER, FLAPS, SLATS, SPOILERS, AND STABILIZER ARE FULLY POWERED SURFACES. INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.
			(3) Supply power to the left hydraulic system (AMM 29-11-00/201).
			(4) Make sure the RIGHT and CENTER FLT CONT SHUTOFF TAIL valve switches on the P61 panel are OFF.
			(5) Put the LEFT FLT CONT SHUTOFF TAIL valve switch on the P61 panel to the ON position.
		Ε.	Stabilizer Trim Relief Valve Test
	LUII	VIII	FUNCTIONAL   STABILIZER TRIM RATE RELIEF VALVE

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SAS CARD

AIRLINE CARD NO.

					TASK CARD				
MECH	INSP								
		(1)	Do the the fre	steps that f e flow direc	ollow to make tion:	sure the reli	ef valve <sup>-</sup>	is oper	ı in
			(a) Pu th	t the LEFT S e NORM posit	TAB TRIM SHUTC	PFF valve swit	ch on the	P10 pa	anel in
			(b) Pu in	t the CENTER the CUTOUT	STAB TRIM SHU	ITOFF valve sw	itch on th	ne P10	panel
			(c) Op DO	en this circ -NOT-CLOSE t	uit breaker or ag:	the P11 pane	l and atta	ach a	
			1)	11C13, STA	B TRIM SHUTOFF	CENTER			
			(d) Ma	ke sure that	this circuit	breaker on th	e P11 pane	elis d	losed:
			1)	11c12, sta	B TRIM SHUTOFF	L			
			(e) Do th 12	the steps t rough one fu units of tr	hat follow whi ll up/down cyc im and back):	le the stabil le (approxima	izer is op tely 1 un <sup>.</sup>	perated it of t	ł rim to:
			1)	Slowly pre the simula (AMM 34–11	ssurize auxili ted air speed -00/201).	ary pitot sys from zero to	tem No. 1 300 knots	to cha	ange
			2)	Make sure pitot-stat	that the stabi ic pressure in	lizer trim ra ocreases.	te decreas	ses as	the
			3)	Slowly rem No. 1 unti	ove the pressu l the pressure	ıre from auxil e is zero (AMM	iary pito 34-11-00	t syste /201).	ŧm
			4)	Make sure pitot-stat	that the stabi ic pressure de	lizer trim ra creases.	te increas	ses as	the
		(2)	Do the the rel	steps that f ief valve be	ollow to make low the re-sea	sure there is it pressure:	no leaka	ge thro	ough
		(3)	Make su switche	re that LEFT s on the P61	, RIGHT, and C panel are OFF	ENTER FLT CON	T SHUTOFF	TAIL V	valve
			(a) Pu th	t the LEFT S e CUTOUT pos	TAB TRIM SHUTC	OFF valve swit	ch on the	Р10 ра	anel in
			(b) Op D0	en this circ -NOT-CLOSE t	uit breaker or ag:	n the P11 pane	l and atta	ach a	
EFF	ECTIVITY				FUNCTIONAL	STABILIZER T	RIM RATE F	RELIEF	VALVE
					27-41-00-5E	29-024-01	PAGE 3	0F 9	APR 22/0'

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SAS DEING 767 TASK CARD

AIRLINE CARD NO.

		TASK CARD
MECH	INSP	
		1) 11C12, STAB TRIM SHUTOFF L
		(c) Remove the power from the left and center hydraulic systems (AMM 29–11–00/201).
		WARNING: CAREFULLY LOOSEN THE HYDRAULIC RETURN LINE ON THE LEFT STCM. THE PTU SYSTEM CAN CAUSE A PRESSURE AS HIGH AS 100 PSI AND A FLUID VOLUME AS MUCH AS 5 CUBIC INCHES TO STAY IN THE LINE. A SPRAY OF FLUID FROM THE CONNECTION CAN CAUSE INJURY TO PERSONS.
		(d) At the relief valve end, slowly loosen the retaining nut of the hydraulic line which connects the left STCM to the relief valve and let the pressure decrease.
		(e) Disconnect the hydraulic line at the relief valve and seal the hydraulic line with a cap.
		(f) Connect the hand pump with a shutoff valve to the relief valve inlet as shown (Fig. 506).
		(g) Disconnect the other hydraulic line connected to the relief valve and move it out of the way.
		<pre>(h) AIRPLANES WITH RELIEF VALVES S/N 516 AND BEFORE; Do the steps that follow:</pre>
		1) Use the hand pump to pressurize the relief valve until it opens (105 – 110 psi (724 – 758 kPa)).
		<ol> <li>Allow the pressure to reduce to 90 +/- 5 psi (621 +/- 34 kPa), and use the hand pump to maintain this pressure.</li> </ol>
		<pre>(i) AIRPLANES WITH RELIEF VALVES S/N 517 OR GREATER; Do the steps that follow:</pre>
		<ol> <li>Use the hand pump to pressurize the relief valve until it opens (130 psi (896 kPa)).</li> </ol>
		<ol> <li>Allow the pressure to reduce to 105 psi (724 kPa), and use the hand pump to maintain this pressure.</li> </ol>
		(j) Maintain pressure on the valve for 10 minutes. Use a beaker to capture the hydraulic fluid that drips from the relief valve.
EFF	FECTIVITY	
		FUNCTIONAL STABILIZER TRIM RATE RELIEF VALVE
		27-41-00-5E 29-024-01 PAGE 4 OF 9 APR 22/01

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SAS CARD

				TASK CARD				
MECH	INSP							
			(k) Make sure the is less than 1	amount of hydr  .5 cc's.	aulic fluid ca	ptured in	the beak	er
			(l) If the amount than 1.5 cc's, (AMM 27-41-19/	of hydraulic f , replace the p (401).	luid captured ressure relief	in the bea valve	ker is m	ore
		F. Put	the Airplane Back to	o Its Usual Con	dition			
		(1)	Remove the hand pum	np from the rel	ief valve inle	t.		
		(2)	Connect the hydraul	lic line to the	relief valve.			
		(3)	Remove the DO-NOT-C P11 panel:	LOSE tags and	close these ci	rcuit brea	kers on	the
			(a) 11C12, STAB TR	≀IM SHUTOFF L				
			(b) 11C13, STAB TR	≀IM SHUTOFF CEN	TER			
		(4)	Put the LEFT and CE panel in the NORM p	NTER STAB TRIM	SHUTOFF valve	switches	on the P	10
		(5)	Remove electrical p	ower (AMM 24-2	2-00/201).			
		(6)	Close the access do	or, 312AR (AMM	06-42-00/201)	-		
EFF	ECTI	VITY		FUNCTIONAL	STABILIZER TR	IM RATE RE	LIEF VAL	VE
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	STAT	ON										BOE	ING CARD NO.
TAIL NO.			_	<b>A BOEING</b>							29–0	28–01	
				SAS 767						AIRLINE CARD NO.			
	DAT	E		Ŭ		•	TASK (	CARD					
SKILI	L	WORK	AREA	RE	LATED TASK		IN	ITERVAL		PI	HASE	MPD	TASK CARD
AIRF	<u>ъ</u> Г	R MAI	N W/W				4C			14	848	001	APR 22/06
	TASK					TITLE		_	STRUCTURAL ILLUSTRATI	ON REFERE	NCE	AP AIRPLAN	PLICABILITY E ENGINE
OPE	RAI	IONAL	SYS	I.CRI	ESERVO	IR PRESS.	S-0 VALV	E				ALL	ALL
		ZONES							ACCESS PANELS				
144	÷												
MECH	INSP											ŗ	IPD ITEM NUMBER
		OPER/		LY CHI	ECK SYS	STEM C RE	SERVOIR P	RESSU	RIZATION			29–1	1-28-5A
		50010	JFF VAI										
		1 0	nton I	Judnau	lic Por	convoir F	noccupiza	tion	Shutoff Value	Opono	tion	al Ta	c+
		1. <u>C</u>		<u>iyui au</u>	LIC KES	Servon r			Shutori vatve	<u>oper a</u>			<u>st</u>
		A	. Gene	eral									
			(1)	This	proced	dure will	. make sur	e the	center hydra	ulic s	yste	m res	ervoir
				can l	be pres	ssurized	when the	reser	voir pressuri	zatior	n shu	toff	valve
				15 11	n the r		pen posi	t ion.					
		В	. Ref	erence	s								
			(1) AMM 36-00-00/201, Pneumatics										
		C	. Acc	Access									
			(1)	(1) Location Zones 143 Main Landing Gear Wheel Well (Left) 144 Main Landing Gear Wheel Well (Right)									
		D	. Pro	Procedure									
			(1) Depressurize the pneumatic system (AMM 36-00-00/201).										
			(2) Depressurize the center hydraulic system reservoir:										
EFFE	ECTI	VITY					OPERATIO	NAL	SYST. C RESE	RVOIR	PRES	S. S-	0 VALVE
							20 14 2	0 5 4	20 029 04				
							29-11-2	о-са	27-020-01	PAGE	. 1	UF D	APK 22/06

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SAS CARD

AIRLINE CARD NO.

					TASK CARD					
MECH	INSP									
			(a)	Locate the rese landing gear wh	ervoir pressur meel well.	ization modul	e in the ri	ght main		
				<u>NOTE</u> : A depres bleed 'B pressuri depressu	ssurization va BLD' port on t zed air in th urization valv	lve (manual b he pressuriza e reservoir w e when it is p	leed valve) tion module ill vent ou pushed.	is in the . The t thru the		
			WARN	ING: PUT A RAG THE RESERV HYDRAULIC INJURY TO SKIN, FLUS TOUCHES YO MEDICAL AI	OVER THE RESE /OIR PRESSURIZ FLUID. A SPR PERSONS. IF SH THE SKIN WI DUR EYES, FLUS CD.	RVOIR DEPRESS ATION MODULE AY OF HYDRAUL THE HYDRAULIC TH WATER. IF H THE EYES WI	URIZATION V TO CATCH A IC FLUID CA FLUID TOUC THE HYDRAU TH WATER AN	ALVE ON SPRAY OF N CAUSE HES YOUR LIC FLUID D GET		
			(b)	Put a rag over spray of hydrau	the reservoir ılic fluid bef	depressuriza ore you depre	tion valve ssurize the	to catch a reservoir.		
			(c)	Push the reserv is fully depres	voir depressurization valve until the reservoir essurized (no longer hear sound of venting air).					
		(	3) Loca land	te the reservoir ing gear wheel w	r pressurization shutoff valve in the right main well.					
			(a)	Manually turn t shutoff valve t	the handle of to the actuate	the reservoir d 'closed' po	pressuriza sition.	tion		
			(b)	Release the han 'open' position	andle and make sure it returns to the fully normal on under spring action. handle operates smoothly with no tendency to					
			(c)	Make sure the h stick or bind.						
		(	4) Pres	surize the pneum	natic system (	AMM 36-00-00/3	201).			
EFF	ECTIV				OPERATIONAL	SYST. C RESE	RVOIR PRESS	. S-O VALVE		
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SAS **BOEING** 767 TASK CARD

AIRLINE CARD NO.

						TASK CARD					
MECH	INSP										
			(a)	Make sur between valve (i pneumati	e ther the re n the c duct	e are no external air leaks in the pneumatic line servoir pressurization module and the shutoff right main landing gear wheel well) and the APU (in the left main landing gear wheel well).					
				<u>NOTE</u> : T e l h p	here s xcept anding ole (o neumat	hould be no ai at the bleed o gear wheel we rifice) to cor ic lines.	r leaks in t prifice cap l ell. The cap stantly drai	he pneumatic ocated in the has a small n any water i	lines left main diameter n the		
			(b)	Manually shutoff lockpin.	turn valve	the handle on the reservoir pressurization to the actuated 'closed' position and engage the he center hydraulic system reservoir again:					
			(c)	Depressu	rize t						
				WARNING:	PUT ON T SPRA CAN TOUC HYDR WITH	A RAG AROUND T HE RESERVOIR F Y OF HYDRAULIC CAUSE INJURY T HES YOUR SKIN, AULIC FLUID TC WATER AND GET	THE RESERVOIR RESSURIZATIO FLUID. A S O PERSONS. FLUSH THE S DUCHES YOUR E MEDICAL AID	DEPRESSURIZA N MODULE TO C PRAY OF HYDRA IF THE HYDRAL KIN WITH WATE YES, FLUSH TH	ATION VALVE ATCH A AULIC FLUID ILIC FLUID R. IF THE IE EYES		
				1) Put catc the	a rag h a sp reserv	over the reser ray of hydraul oir.	voir depress ic fluid bef	urization val ore you depre	ve to ssurize		
				2) Push valv valv	the r e) for e vent	eservoir depre 60-70 seconds s air to the a	essurization , and make s mbient.	valve (manual ure the manua	bleed lbleed		
<u>NOTE</u> : If the reservoir pressurization shutoff value open prior to pneumatic system pressurization manual bleed value should vent air which indi the reservoir was pressurized. If the manual value does not vent air, then the shutoff val closed prior to pneumatic system pressurizati which indicates the reservoir was not pressur					llve was ion, the ndicates nual bleed valve was ation ssurized.						
EFF	ECTI	VITY				OPERATIONAL	SYST. C RES	ERVOIR PRESS.	S-O VALVE		
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AIRLINE CARD NO.



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OPERATIONAL

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SYST. C RESERVOIR PRESS. S-O VALVE

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