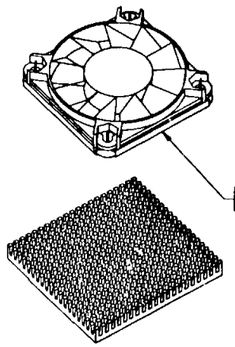
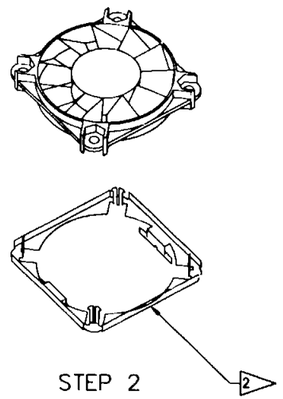
LTR	ZONE	REVISION	DATE	EQUIP TYPE	APPROVAL
A		ADDED -702	03/3/97		E. LOOS
	PL	CHANGED NEXT ASSY NUMBER TO SDC46115675.	03/4/97		
			03/4/97		
	A6	REMOVED "AND TEST" FROM GENERAL NOTE 3.	03/4/97		
	B8	REMOVED "10.5 INCHES OF" FROM FLAG NOTE 8.	03/20/97		
			03/21/97		
	C6	ADDED FLAGNOTE 24.	03/21/97		
		SHEET 2.	03/21/97		
	C7	MOVED ITEM CALLOUT NUMBER 2			
	A6,7	MOVED RETAINER BRACKETS.			
	B8	ADDED FLAG CALLOUT 24.			

8/27/97 A QH



STEP 1



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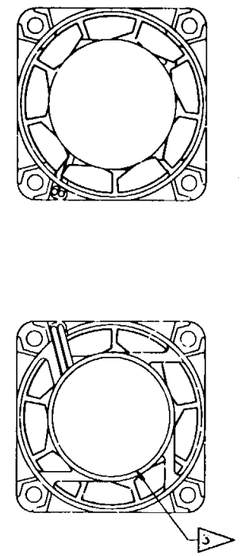

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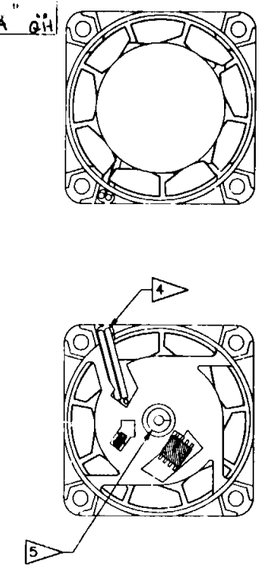


STEP 4

18 DOW CORNING, MIDLAND, MA.

17 THERMALLOY INC., DALLAS, TX.

16 PART 2388B-TCM62S COMBINED WITH PART PF36 IS EQUIVALENT. PART 2388B-TCM62S-PF34 IS EQUIVALENT WHEN THE Z-SPRING IS REPLACED WITH PART PF36.

15 PARKS, CORP., SOMERSET, MA.

14 REPLACE POWER WIRES INTO THE SUPPORT NOTCH IN THE FAN CASE. STAKE WIRES TO FAN HOUSING AS THEY EXIT THE SUPPORT NOTCH USING ADHESIVE (ITEM 8). DO NOT LET ADHESIVE EXTEND BEYOND THE ENVELOPE OF THE FAN HOUSING.

13 REPLACE BLACK RETAINER AROUND FAN SHAFT.

12 REPLACE FAN IN HOUSING.

11 REPLACE THE SCREWS NEXT TO THE MOTOR COILS.

10 REPLACE THE CIRCUIT BOARD INTO THE PLASTIC HOUSING.

9 PRIME PER NHB 5300.4 (3J) PARA 3J402 USING PRIMER (ITEM 6). APPLY CONFORMAL COATING (ITEM 5) THINNED WITH NAPTHA (ITEM 7) CIRCUIT SIDES OF BOARD .003-.009 THICK PER NHB 5300.4 (3J), PARA 3J600.

8 DESOLDER AND REMOVE OLD WIRES FROM CIRCUIT BOARD OF (ITEM 1) (CAREFUL NOT TO REMOVE ADJACENT COMPONENTS) AND REPLACE WITH NASA APPROVED WIRES (ITEMS 2 AND 3) SOLDER TO BOARD USING SOLDER (ITEM 4).

7 PULL THE CIRCUIT BOARD OUT OF PLASTIC HOUSING.

6 REMOVE THE SCREWS NEXT TO THE MOTOR COILS.

5 REMOVE RETAINER FROM AROUND FAN SHAFT. THEN PUSH THE FAN SHAFT TO REMOVE THE FAN FROM THE HOUSING.

4 TAKE POWER WIRES OUT OF THE SUPPORT NOTCH IN THE FAN CASE.

3 PEEL OFF AND DISCARD MANUFACTURERS STICKERS (A BLUE AND WHITE STICKER AND A BLACK STICKER BELOW IT).

2 REMOVE CLIP FROM FAN

1 REMOVE FAN FROM HEAT SINK. SET HEAT SINK AND Z-SPRING ASIDE.

NOTES:

24 AFTER RE-ASSEMBLY OF FAN, POWER UNIT WITH +12VDC ±0.5VDC. VERIFY CURRENT DRAW 0.12 TO 0.16A. START-UP CURRENT DRAW SHOULD NOT EXCEED 0.25A. CYCLE ON/OFF MINIMUM 3 TIMES AND CHECK FOR ANY FUNCTIONAL IMPAIRMENTS (I.E. HUB SHOULD ROTATE FREELY). RUN CONTINUOUSLY FOR 10 MINUTES MINIMUM.

23 CONNECT RED WIRE TO PIN 1. AND BLACK WIRE TO PIN 2.

22 AMP INC., HARRISBURG, PA.

21 APPLY STAKING ADHESIVE (ITEM 8) ON EACH SIDE TO SECURE FAN CLIP TO FAN.

20 DO NOT REASSEMBLE FAN AND Z-SPRING ONTO HEAT SINK, BAG PARTS.

19 REINSTALL FAN CLIP ON THE WIRE-EXIT SIDE OF THE FAN, IN THE ORIENTATION SHOWN IN DETAIL A. NOTE THE POSITION OF THE FAN WIRES RELATIVE TO THE RETAINER BRACKET OF THE FAN CLIP.

6. BAG AND TAG PER JSC-SPEC-M-1, PARA 3.7.9.
5. THIS ASSEMBLY CONTAINS NO FRACTURE CRITICAL ELEMENTS.
4. CLEANLINESS REQUIREMENTS PER SN-C-0005 LEVEL GC.
3. FABRICATE IN ACCORDANCE WITH LS-60035.
2. SOLDER PER NAS 5300.4 (3A-2).
1. INTERPRET PER JSCM 8500.

NOTES: UNLESS OTHERWISE SPECIFIED

ALTERED ITEM DRAWING

-702	-701	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	ITEM
-	2	770666-1	CONTACTS		22	10
-	1	770602-2	CONNECTOR, 2 PIN		22	9
AR	AR	3145	ADHESIVE		18	8
AR	AR	2713	THINNER, NAPTHA		15	7
AR	AR	1204	PRIMER		18	6
AR	AR	3140	CONFORMAL COATING	RTV SILICONE	18	5
AR	AR	63/37.025PJREL15	SOLDER		QQ-S-571	4
7"	12"	M22759/22-26-2	WIRE, STRANDED RED	26AWG TFE TEFLON	MIL-W-22759	3
7"	12"	M22759/22-26-0	WIRE, STRANDED BLACK	26AWG TFE TEFLON	MIL-W-22759	2
1	1	2388B-TCM62S-PF36	CPU FAN & HEAT SINK		16 17	1
-		-702	COOLING FAN			
	-	-701	COOLING FAN			-702

DIMENSIONAL TOLERANCE UNLESS NOTED OTHERWISE 0 ± .1 .000 ± .010 00 ± .03 ANGULAR ± 0
SURFACE FINISH IN MICROINCHES 125 UNLESS NOTED OTHERWISE

NEXT ASSY SDG46115675

SIGNATURES	DATE
DR E. LOOS	02/05/97
ENG H. CHARLES	02/26/97
CH R. BULAND	03/04/97
APPF. BOOKER	03/31/97
DC R. BUSSEY	03/20/97
MAT'L R. GABIOLA	03/05/97
STRESS F. YUNG	03/09/97
AUTHME TERSTROEM	04/01/97

NATIONAL AERONAUTICS & SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER HOUSTON, TEXAS

CPU COOLING FAN ASSEMBLY, HRF-WS
ALTERED ITEM DRAWING

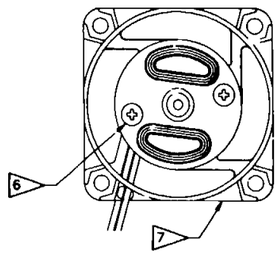
CODE IDENT NO 21356 | SIZE D | DWG NO SDG46115657 | REV A
SCALE 2/1 | EAS B104 | SHEET 1 OF 2

CALC WT
MOD FILE
DRW FILE dwg

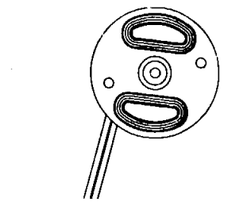
EQUIP TYPE
☒ FLT HDWR
☐ OTHER (SPECIFY USE)
☐ APPLICABLE USE

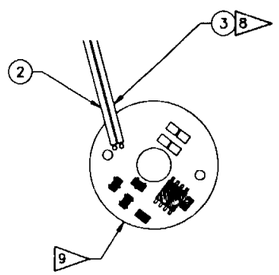
376

LTR	ZONE	REVISION	DATE	EQUIP TYPE	APPROVAL
A		SEE SHEET 1.			

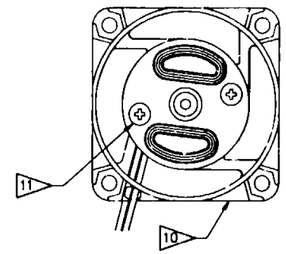


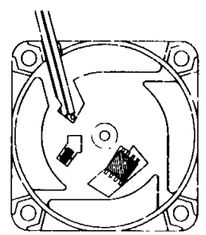
STEP 5





STEP 6





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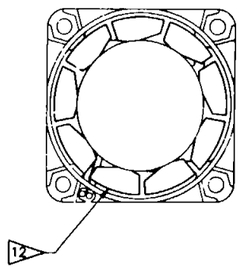
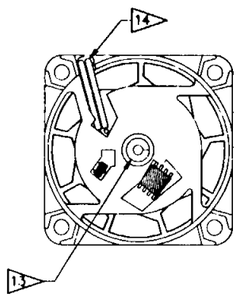
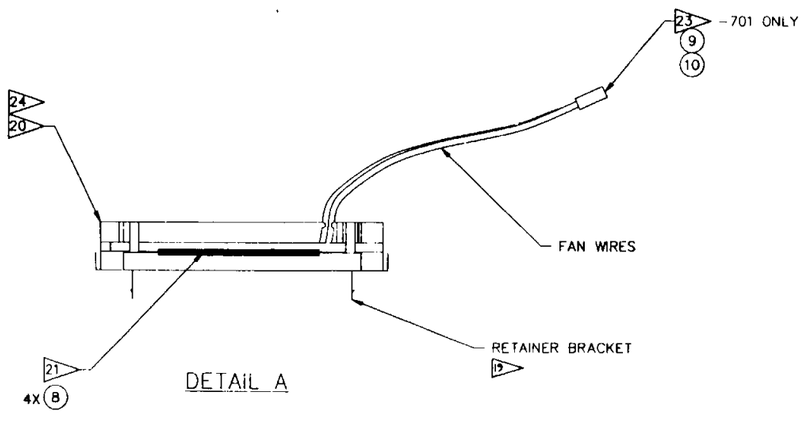




STEP 8



DETAIL A

DIMENSIONAL TOLERANCE UNLESS NOTED OTHERWISE	SIGNATURES	DATE
.0 ± .1 .000 ± .010	DR E. LOOS	02/05/97
.00 ± .03 ANGULAR ± 0	ENG H. CHARLES	02/26/97
SURFACE FINISH IN MICROINCHES RMS UNLESS NOTED OTHERWISE	CH R. BULAND	03/04/97
	APPR. BOOKER	03/31/97
NEXT ASSY SDG46115675	QR R. BUSSEY	03/20/97
	MAT'L R. GABIOLA	03/05/97
EQUIP TYPE ☒ FLT HDWR ☐ OTHER (SPECIFY) USE ☐ APPLICABLE USE	STRESS F. YUNG	03/09/97
	AUTH WETTERSTROEM	04/01/97

CALC WT:
MOD FILE:
DRW FILE: dwg

NATIONAL AERONAUTICS & SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER HOUSTON, TEXAS

CPU COOLING FAN ASSEMBLY, HRF-WS ALTERED ITEM DRAWING

CODE IDENT NO	SIZE	DWG NO	REV
21356	D	SDG46115657	A

SCALE 2/1 EAS B104 SHEET 2 OF 2