

Department of Transportation — Federal Aviation Administration
Supplemental Type Certificate

Number SA3523WE

This certificate, issued to Walker Engineering Company

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3 of the Civil Air Regulations, 3A15, Revision 58.*

Original Product — Type Certificate Number: 3A15

Make: Beech

Model: H35, J35, K35, M35, N35, P35, 35-33, 35-A33, 35-B33, and 35-C33

Description of Type Design Change:

Installation of an air/oil separator in the engine breather system in accordance with FAA-sealed Walker Engineering Company Drawing DIW-3000, Revision "C", dated October 25, 1977, or later FAA-approved revisions.

Limitations and Conditions:

This approval should not be extended to other specific airplanes of these models on which other previously approved modifications are incorporated, unless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 9, 1977

Date reissued:

Date of issuance: November 25, 1977

Date amended:



By direction of the Administrator
Robert C. Fullerton
(Signature)

Jr Chief, Aircraft Engineering Division
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

FOR FAA USE ONLY
OFFICE IDENTIFICATION

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE	BEECHCRAFT	MODEL	M-35
	SERIAL NO.	D-6401	NATIONALITY AND REGISTRATION MARK	USA N9850R
2. OWNER	NAME (As shown on registration certificate)		ADDRESS (As shown on registration certificate)	
	CHARLES M. OPENSHAW		2023 W. KRISTAL WAY PHX. AZ. 85027	

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE		
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION	
AIRFRAME	***** (As described in item 1 above) *****					
POWERPLANT	CONTINENTAL	IO-470C	72121-0-C		X	
PROPELLER						
APPLIANCE	TYPE					
	MANUFACTURER					

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
KENNETH F. TEKUT 16417 N. 48TH DRIVE GLENDALE, AZ. 85306	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC <input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC <input type="checkbox"/> CERTIFICATED REPAIR STATION <input type="checkbox"/> MANUFACTURER	26308016

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
11-25-83	Kenneth F. Tekut

7. APPROVAL FOR RETURN TO SERVICE

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is APPROVED REJECTED

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
11-25-83	26308016IA	Kenneth F. Tekut

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

INSTALLATION OF AN AIR/OIL SEPARATOR IN THE
ENGINE BREATHER SYSTEM IN ACCORDANCE WITH
WALKER ENGINEERING DRAWING DLW-3000 REVISION "C"
DATED 25 OCT 1977 and STC # SA3523WE

END

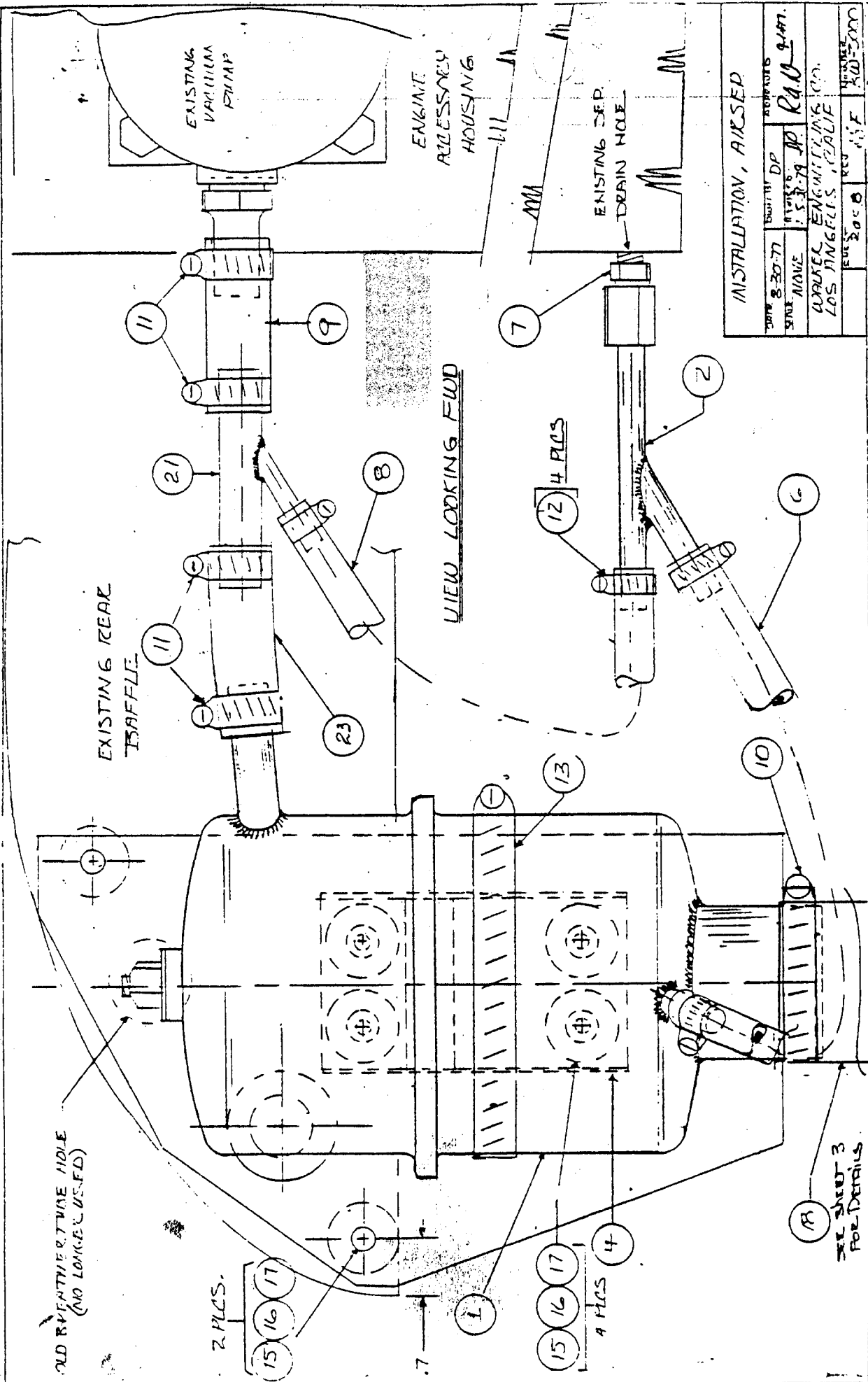
ADDITIONAL SHEETS ARE ATTACHED

KW-3000 AIR SEP
INSTALLATION

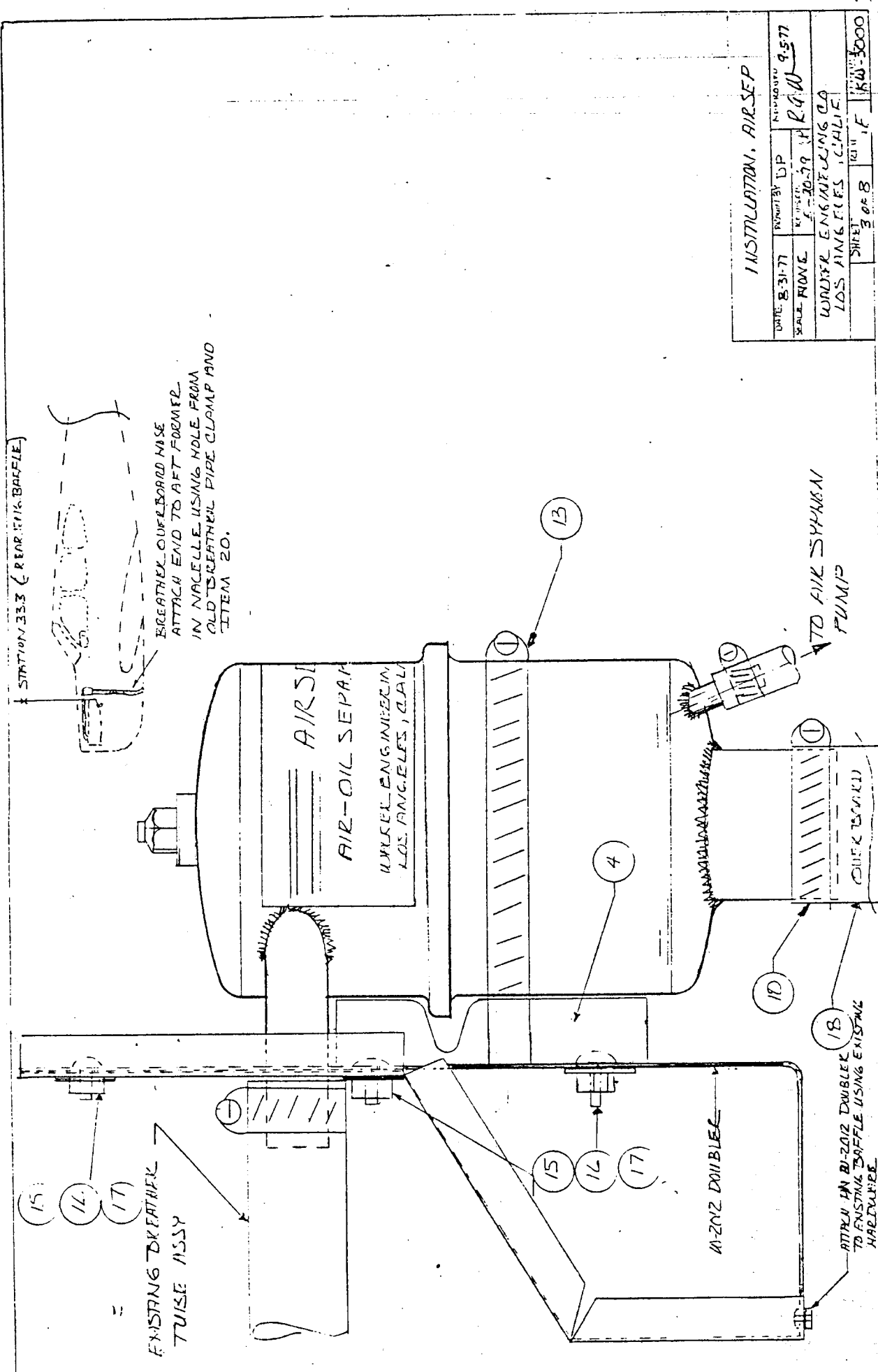
YP. INSTALLATION

FOR MODELS:
BEECHCRAFT H35,
J35, K35, M35, N35
P35, 35-33, 35-A33
35-1333, 35-033

INSTALLATION, AIR SEP		
DATE 8-30-77	DWN BY DP	APPROVED
SCALE NONE	REVISOR 5-30-79 TA	R.G.W.
WALKER ENGINEERING CO. LOS ANGELES, CALIFORNIA		
SHEET 1 OF 8	REV F	NUMBER KW-3000



INSTALLATION, AIRSEP	
DATE: 8-30-77	BY: [signature]
APPROVED: [signature]	DP: [signature]
SPEC: ANGLE	REV: 5-3-79
DRWEL ENGINEERING CO.	REV: R40
LOS ANGELES, CALIF	REV: 9-8-77
EVS: 2008	REV: 4-1-77
REV: 2000	REV: 4-1-77



INSTALLATION, AIR-SEP

DATE: 8-31-77	DRAWN BY: D.P.	REVISED BY: R.A.W.	NO. 9-577
SCALE: NONE	DATE: 8-30-77	BY: R.A.W.	
WHEEL ENGINEERING CO. LOS ANGELES, CALIF.			
SHEET 3 OF 8		NO. 11 F. KW-5000	

INSTALLATION INSTRUCTIONS

1. Remove the existing air/oil Separator, lines and attaching parts.
2. Remove the existing breather tube assy. from the rear engine baffle to the lower cowl flap area.
3. MISSING Align the doubler (item 3) with the lower edge of the rear engine baffle and duplicate the four (4) holes that are already drilled in the doubler. NOTE: The doubler will cover up the old breather tube hole in the rear engine baffle. (See Sheet 2)
4. Secure the doubler (item 3) to the rear engine baffle, in the upper right and lower left corner, using 1 ea of the items 15, 16 and 17 in each corner. (See sheet 2)
5. Secure the universal bracket (item 4) to the doubler and the rear engine baffle using 1 ea. of the items 15, 16 and 17, in the two top holes only. (See sheet 2)
6. Duplicate the lower holes in the universal bracket through the doubler. Place the large clamp (item 13) between the doubler and the universal bracket. Secure the universal bracket and the large clamp to the doubler using 1 ea of the items 15, 16 and 17. See sheet 2.
7. The extreme lower end of the doubler (item 3) will be in the close proximity of a screw and nut, duplicate the hole through the doubler and then reinstall the original hardware, attaching the doubler to the rear engine baffle. (See sheet 3)
8. Duplicate the 1.25 inch hole through the rear engine baffle using the installed doubler (item 3) as guide. (See sheet 3)
9. Deleted.
10. Install 1 end of the 1/2 inch hose (item 9) over the outlet fitting of the vacuum pump, and secure it in place using 1 ea of the item 11.

<i>INSTALLATION - AIRSEP.</i>			
DATE <i>8-7-77</i>	DRAWN BY <i>DA</i>	APPROVER <i>RAW 9-14-77</i>	
SCALE <i>FULL</i>	REVISION <i>5-21-79. RP</i>		
<i>WALTER ENGINEERING CO. LOS ANGELES, CA.</i>			
	SHEET <i>5028</i>	REV <i>F</i>	NUMBER <i>KW-3000</i>

INSTALLATION INSTRUCTIONS PAGE 3

21. ~~DELETED~~

22. ~~DELETED~~

23. Connect the large overboard flex duct (item 18) to the large outlet tube of the AIRSEP, using 1 ea of the item 10 to secure the duct.
24. Connect the lower end of the flex duct (item 18) to the keel structure, at the same point where the old breather tube was attached. Attach using 1 ea. of the item 20 and the original hardware. (See sheet 3). NOTE: The overboard duct should not extend into the airstream or below the lower engine cowl former.
25. Reroute the existing breather tube that is forward of the rear engine baffle to the remaining inlet tube of the AIRSEP, and secure with the existing hoses and clamp.

NOTE: HOSES SHALL BE LOCATED AT LEAST 4 INCHES FROM ANY HEAT SOURCE LIKELY TO CAUSE VAPORIZATION OF THE OIL.

INSTALLATION - AIRSEP			
DATE 9-7-77	DRAWN BY DP	APPROVED	9-14-77
	5-20-77 DP	RAW	
WALKER ENGINEERING COMPANY LOS ANGELES, CALIF.			
REV	F	DATE	7-10-3000

DRAWING LIST
DLW-3000

<u>DWG NO</u>	<u>CHANGE</u>	<u>TITLE</u>
W-2000	A	Can, Top
W-2001	A	Can, Bottom
W-2002	B	Cone, Inner
W-2003	A	Gasket
W-2005	C	Chart, Inlet Tube
W-2006	B	Chart, Outlet Tube
W-2007	A	Decal (Name)
W-2008	E	Pump, Air Syphon
W-2009	C	Assy, Air Outlet Tube
W-2010	B	Filament, Stainless Steel
W-2011	B	Bracket, Universal
W-2012	B	Doubler
W-2013	A	Decal (Cleaning Inst)
W-2014	B	Stud
W-2015	B	Brace
W-2016	B	Decal (thec. info)
W-2017	A	Grid.
W-2018	D	Fitting
W-2020	V	Hose chart (SAE 100R6)
W-2050	C	Assy, Top Can
W-2051	D	Assy, Bottom Can
W-3000	B	Assy, AIRSEP
KW-3000	E	Instructions, installation

SUMMARY DRAWING - AIRSEP.

DATE 9-8-77	DRAWN BY DP	REVISION
SCALE NONE	REVISION 5-30-77 DP	RAW 9-16-77
WORKER INDUSTRIES CO LAS ANGELES, CALIF		
REV 15=3	REV F	NUMBER DLW-3000

LOG OF REVISIONS

<u>REV LTR.</u>	<u>DATE</u>	<u>DESCRIPTION OF CHANGES</u>
A	9-16-77	Recision A of the following drawings W-2005, W-2006, W-2008, W-2011 W-2012, W-2014, W-2016, W-2020, W-2050 W-2051, W-3000, KW-3000 W-2004 Canceled
B	10-14-77	Revision A of the following drawings W-2000, W-2001, W-2002, W-2003, W-2007 W-2009, W-2010, W-2013, W-2015, W-2017 W-2018, W-2019 Revision B of the following drawings W-2008, W-2011, W-2020, KW-3000 W-2016, W-2012
C	10-25-77	Revision B of the following drawings W-2005, W-2009, W-2018, W-2050, W-2051 Revision C fo the following Drawings W-2008, KW-3000,
D	1-5-78	Revision D of the following drawings: W-2008 and K-3000. Revision E of W-2020 Rev C of W-2018, W-2051
E	4-10-78	Rev A of W-2014, Rev B of W-2002, W-2006 W-2010, W-2015, W-3000. Rev C of W-2009 W-2050. Rev D of W-2018, W2051. Rev E of W-2008, KW-3000. W-2019 (SPRING) Deleted.
F	5/20/79	Revision V of W-2020; Revision F of Kw-3000.

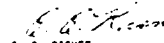
SUMMARY DRAWING - AIR SEP			
DATE 4-8-77	DATE 9-16-77	DP	REV. R/W 9-16-77
SCALE NONE	REV. 5-20-79	SP	
WALKER ENGINEERING CO LOS ANGELES, CALIF			
	SHEET 3 OF 3	REV. F	UNLESS DLW-3000

PRODUCTION APPROVAL LISTING - SUPPLEMENT NO. 1
 FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL
 Walker Engineering Company

Part Name and Number	Design Data and Approval Means	Eligible for Installation on
Air/Oil Separator P/N 1000-10	FAA sealed Walker Engineering Company Master Drawing List No. 1000-1001-1, Revision W/C, or later FAA approved revisions approved under SIC SA3935WE dated March 5, 1979	Various 17700
Air/Oil Separator P/N 1000-1002-1	FAA sealed Walker Engineering Company Master Drawing List No. 1000-1002-1, Revision W/C, or later FAA approved revisions approved under SIC SA3935WE dated March 5, 1979	Various 10200A, 10200B, 10200C, 10200D, 10200E, 10200F, 10200G, 10200H, 10200I, 10200J, and 10200K
Air/Oil Separator P/N 1000-1002-1	FAA sealed Walker Engineering Company Master Drawing List No. 1000-1002-1, Revision W/C, or later FAA approved revisions approved under SIC SA3935WE dated March 13, 1979	Various 10200 and 10200K
Air/Oil Separator P/N 1000-1003-1	FAA sealed Walker Engineering Company Master Drawing List No. 1000-1003-1, Revision W/C, or later FAA approved revisions approved under SIC SA3935WE dated March 5, 1979	Various 10200, 10200K, 10200L, 10200M, and 10200N
Air/Oil Separator P/N 1000-1000-11	FAA sealed Walker Engineering Company Master Drawing List No. 1000-1000-11, Revision W/C, or later FAA approved revisions approved under SIC SA3935WE dated March 12, 1979	Various 1000 and 10200

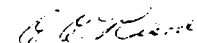
PRODUCTION APPROVAL LISTING - SUPPLEMENT NO. 1
 FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL
 Walker Engineering Company

Part Name and Number	Design Data and Approval Means	Eligible for Installation on
Air/Oil Separator P/N 1000-1001-1	FAA sealed Walker Engineering Company Master Drawing List No. 1000-1001-1, Revision W/C, or later FAA approved revision approved under SIC SA3935WE dated February 7, 1979	Various PA-12-260, PA-12-700, PA-125-300, and PA-129-100
Air/Oil Separator P/N 1000-1002-2	FAA sealed Walker Engineering Company Master Drawing List No. 1000-1002-2, Revision W/C, or later FAA approved revision approved under SIC SA3935WE dated February 7, 1979	Various 205, 205A, and 206


 C. C. RESNER
 Chief, Manufacturing Inspection Branch
 January 18, 1980

PRODUCTION APPROVAL LISTING - SUPPLEMENT NO. 2
 FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

Part Name and Number	Design Data and Approval Means	Eligible for Installation on
Air/Oil Separator P/N 1002-4	FAA sealed Walker Engineering Co. Drawing List No. 1000-1002-4, Rev. W/C, or later FAA approved revision approved under SIC SA3935WE dated May 15, 1979	Various 1000-117A, 1000-4, L-17B, and Navion 7L-17C
Air/Oil Separator P/N 1000-12	FAA sealed Walker Engineering Co. Drawing List No. 1000-1000-12, Rev. W/C, or later FAA approved revision approved under SIC SA3935WE dated June 1, 1979	Various A. J. D. S. F. S. and 4


 C. C. RESNER
 Chief, Manufacturing Inspection Branch
 June 5, 1980