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DOUBLE WASP & R-2800
DESIGNATED ENGINES

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*Similar to Military counterpart in certain respects.

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*Similar to Military counterpart in certain respects.

ENGINE MODEL	Type P & W A Army Navy	Double Wasp SA-G	Double Wasp S1A2-G	Double Wasp A4-G	Double Wasp S1A4-G	Double Wasp S1A4-G	Double Wasp S1A4-G	Double Wasp S2A4-G
SPECIFICATION	Number	PW-8000	PW-8001	8034	PW-8032A	PW-8032A	PW-8032A	PW-8033A
RATINGS	Take Off	1800/2600	1800/2600	1850/2600	1850/2600	1850/2600	1850/2600	1625/2600
	Military			1850/2600/2700 1500/2600/14000	1850/2600/2700 1500/2600/14000	1850/2600/2700 1500/2600/14000	1850/2600/2700 1500/2600/14000	1625/2600/6500 1250/2600/16800
	Normal	1500/2400/7500	1500/2400/3600 1500/2400/10000 1500/2400/15000	1500/2400/7500 1450/2400/13000	1500/2400/7500 1450/2400/13000	1500/2400/7500 1450/2400/13000	1500/2400/7500 1450/2400/13000	1450/2400/8500 1200/2400/16000
	Max. Cont.							
	Cruise							
FUEL	Grade	100	100	100	100	100	100	90
CURVES	Spec. Oper.	T-352	T-332	T-577	T-525 T-687	T-525 T-687	T-525 T-687	T-524
WEIGHT, DRY	Pounds	2150	2375	2300, 2300, 2280	2300	2280	2300	2300
PROP. SHAFT	Ratio Spline	2:1 50	2:1 50	.400, .500, .5625 50	5:2 50	16:9 50	2:1 50	.400, .500, .5625 50
CYLINDERS	Comp. Ratio	6.66:1		6.7:1	6.65:1	6.65:1	6.65:1	6.7:1
IMPELLER	Ratio				7.6:1 - 9.45:1	7.6:1 - 9.45:1	7.6:1 - 9.45:1	
CARBURETOR	Model	Stromberg	Stromberg	PT-13F1	PT13F1-4	PT13F1-11	PT13F1-4	PT13F1
MAGNETOS	Model	Scintilla	Scintilla	DF-3	DF18RN	DF18RN	DF18RN	DF3
INST. DWG.	Number	R-28851	R-28293	R-38781	R-38781	R-38781	R-38781	R-38781
DIMENSIONS	Diameter Length	52.00 59.14	52.00 94.47	52.00 75.56	52.50 75.72	52.50 75.72	52.50 75.72	52.25 75.56
A.T.C.	Number							
AIRPLANE	Installations				Vickers Warwick I		Vickers Warwick I	
NOTES		None manufactured.	None manufactured.	None manufactured.				.400 available with reverse rotation at 40 lb increase in weight. None manufactured.

ENGINE MODEL	Type P & W A Army Navy	Double Wasp A5-G	Double Wasp SSA5-G	Double Wasp S1A6-G	Double Wasp S2A6-G	Double Wasp 2SB-G	Double Wasp 2SB-G	Double Wasp TSB1-G
SPECIFICATION	Number	PW-8020	PW-8045	PW-8030	PW-8031A	PW-8057	8063	8054
RATINGS	Take Off	1850/2600	1850/2600	1850/2600	1625/2600	2000/2700	2000/2700	2000/2700
	Military	1850/2600/1000 1700/2600/12500 1600/2600/21000	1850/2600/1000 1700/2600/12500 1600/2600/21000	1850/2600/2700	1625/2600/6500	2000/2700/1500 1600/2700/13500	2000/2700/1500 1600/2700/13500	2000/2700/1500
	Normal	1600/2400/3500 1540/2400/13500 1460/2400/21500	1600/2400/3500 1540/2400/13500 1460/2400/21500	1500/2400/7500	1450/2400/8500	1600/2400/5700 1450/2400/13000	1600/2400/5700 1450/2400/13000	1625/2550/6500
	Max. Cont.							
	Cruise							
FUEL	Grade	100	100	100	90	125	100/130	100/130
CURVES	Spec. Oper.	T-490	T-643	T-555	T-554	T-727	T-727 Inst. 1664	T-699
WEIGHT, DRY	Pounds	2445	2445	2265	2265	2300 (5:2, 2:1) 2280 (16:9)	2290 (5:2) 2270 (16:9)	2260 (2:1) 2240 (16:9)
PROP. SHAFT	Ratio Spline	5:2, 2:1, 16:9 50	5:2, 2:1, 16:9 50	2:1 50	5:2, 2:1, 16:9 50	5:2, 2:1, 16:9 50	5:2, 16:9 50	2:1, 16:9 50
CYLINDERS	Comp. Ratio		6.7:1	6.7:1	6.7:1	6.65:1	6.65:1	6.65:1
IMPELLER	Ratio					7.60:1, 9.89:1	7.60:1, 9.89:1	7.60:1
CARBURETOR	Model	PT13	PT13F1 downdraft PT13D2 updraft	PT13F1	PT13F1	PT13G1	Optional	Optional
MAGNETOS	Model	DF3	DF3	DF18RN	DF3	DF18LN	Optional	Optional
INST. DWG.	Number	R-39468	R-39468	R-41813	R-41813	R-49696	R-49696	
DIMENSIONS	Diameter Length	52.00 88.52	52.25 88.31	52.50 75.72	52.25 75.56	52.50 75.72	52.50 75.72	52.50 75.72
A.T.C.	Number						231	
AIRPLANE	Installations							
NOTES		None manufactured.	5:2 available with reverse rotation at 40 lb increase in weight. None manufactured.	None manufactured.	5:2 available with reverse rotation at 40 lb increase in weight. None manufactured.	None manufactured.	None manufactured.	None manufactured.

ENGINE MODEL	Type P & W A Army Navy	Double Wasp 2SB3-G	Double Wasp SSB2-G	Double Wasp SSB2-G	Double Wasp 2SC-G	Double Wasp TSC2-G	Double Wasp 2SC13-G	Double Wasp 2SC14-G
SPECIFICATION	Number	8097	PW-8090	PW-8070	PW-8055	PW-8066	8084	8101
RATINGS	Take Off	2000/2800	2000/2700	2000/2700	2000/2800/2700	2100/2800	2100/2800	2100/2800
	Military	2000/2800/2000 1600/2800/16000	2000/2700/1000 1800/2700/15500 1650/2700/22500	2000/2700/1000 1800/2700/15500 1650/2700/22500		2100/2800/3000	2100/2800/1000 1600/2800/16000	2100/2800/3000 1700/2800/16000
	Normal	1675/2600/7000 1450/2600/18000	1675/2550/5500 1625/2550/17000 1550/2550/21500	1675/2550/5500 1625/2550/17000 1550/2550/21500	1700/2550/5000 1450/2400/13000	1700/2600/8500	1700/2600/7000 1450/2600/18500	1700/2600/8500 1500/2600/18500
	Max. Cont.							
	Cruise							
FUEL	Grade	100/130	125	100/130	100	100/130	100/130	100/130
CURVES	Spec. Oper.	T-906	T-766	T-766	T-712C	T-841 Inst. 1714	T-839 Inst. 1693	T-953
WEIGHT, DRY	Pounds	2200	2480 2460 (16:9)	2480	2310	2320, 2315, 2322	2355, 2350, 2357	2364, 2359, 2366
PROP. SHAFT	Ratio Spline	.450 50	5:2, 2:1, 16:9 50	2:1 50	5:2 50	.350, .450, .5625 60A	.350, .450, .5625 60A	.350, .450, .5625 60A
CYLINDERS	Comp. Ratio	6.75:1	6.65:1	6.65:1	6.7:1	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	7.29:1, 9.45:1	7.8:1, 6.46:1, 7.93:1	7.8:1, 6.46:1, 7.93:1		7.29:1	7.29:1, 9.45:1	7.29:1, 9.45:1
CARBURETOR	Model	PR-58B	PT-1304	Optional	PT-13F1	Optional	Optional	Optional
MAGNETOS	Model	DF18LN or DF18LU	DF18RN	Optional	DF3	Optional	Optional	Optional
INST. DWG.	Number	R-90901	R-49692	R-52017		93601	51664	93601
DIMENSIONS	Diameter Length	52.75 76.50	52.50 88.47	52.50 88.47	52.44 76.25	52.80 78.39	52.80 76.39	52.80 78.39
A.T.C.	Number						231	
AIRPLANE	Installations						*Convair Model 110	
NOTES		Similar to 2SB-G except light cases. None manufactured.	None manufactured.	None manufactured.	None manufactured.	None manufactured.	*Exp. transport known as Flying Laboratory. Prototype for Model 240.	None manufactured.

ENGINE MODEL	Type P & W A Army Navy	Double Wasp 2SC14W-G	Double Wasp 2SC15-G	Double Wasp 2SC15-G	Double Wasp SSC22-G
SPECIFICATION	Number	8103	8105 2100/2800/3000	8105 App. A	8085
RATINGS	Take Off	2100/2800/(dry) 2400/2800 (wet)	1700/2800/10000-16000 2400/2800 (wet)	2100/2800/3000 1700/2800/10000-16000	2100/2800 2100/2800/1000
	Military	2100/2800/3000 1700/2800/16000	2100/2800/3000 1700/2800/16000		1900/2800/14000 1800/2800/23000
	Normal	1700/2600/8500 1500/2600/18500	1700/2600/7300 1500/2600/17500	1700/2600/7300 1500/2600/17500	1700/2600/7000 1630/2600/18000
	Max. Cont.		1800/2600/6000 (stand-by 1600/2600/16000)	1800/2600/6000 (stand-by 1600/2600/16000)	1550/2600/25000
	Cruise				
FUEL	Grade	100/130	100/130	100/130	100/130
CURVES	Spec. Oper.	T-953	T-964	T-964	T-840 Inst. 1716
WEIGHT, DRY	Pounds	2364, 2359, 2366	2355, 2350, 2357	2356, 2350, 2357	2565, 2560, 2567
PROP. SHAFT	Ratio Spline	.350, .450, .5625 60A	.350, .450, .5625 60A	.350, .450, .5625 60A	.350, .450, .5625 60A
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	7.29:1, 9.45:1	7.29:1, 9.45:1	7.29:1, 9.45:1	7.5:1, 6.3:1, 7.8:1
CARBURETOR	Model	Optional	Optional	Optional	Optional
MAGNETOS	Model	Optional	Optional	Optional	Optional
INST. DWG.	Number	51664	93601	93601	76442
DIMENSIONS	Diameter Length	52.80 78.39	52.80 78.39	52.80 78.39	52.80 94.03
A.T.C.	Number	(231) for 2400 bhp only			
AIRPLANE	Installations				
NOTES		None manufactured.	None manufactured. Spec. 8105 Appendix A applies when water injection equipment is not incorporated.	None manufactured. For airplane placarding. Spec. 8105 applies when water injection equipment is incorporated.	None manufactured.

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

ENGINE MODEL	Type P&W A Air Force Navy	Double Wasp CA3	Double Wasp CA5	Double Wasp CA15	Double Wasp *CA15A	Double Wasp CA17
SPECIFICATION	Number	8111	8116	8112	8112 (App. D)	8117
RATINGS	Take Off	2100/2500/3000(dry) 2400/2500 (wet)	2300/2600/600(dry) 2400/2500 (wet)	2100/2800/3000 2400/2800 (wet)	2100/2800/3000 2400/2800 (wet)	2300/2500/600(dry) 2400/2800 (wet) 1900/2600/10000(wet)
	Military					
	Normal			1800/2600/6000 1600/2600/16000	1800/2600/6000 1600/2600/16000	1800/2600/6500 1600/2600/16000
	Max. Cont.	1800/2600/6000 1900/2600/4000	1800/2600/6500 1900/2600/4500	1900/2600/4000 1600/2600/16000	1800/2600/6000 1600/2600/16000	1900/2600/4500 1700/2600/14500
	Cruise					
FUEL	Grade	100/130	115/145	100/130	100/130	115/145
CURVES	Spec. Oper.	T-995 Inst. 1747	T-1003 Inst. 1749	T-996 Inst. 1745	T-996 Inst. 1745	T-1004 Inst. 1748
WEIGHT, DRY	Pounds	2322, 2317	2322, 2317	2365, 2350	2350	2365, 2350
PROP. SHAFT	Ratio Spline	.450 60A	.350, .450 60A	.450 60A	.450 60A	.350, .450 60A
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	7.29:1	7.29:1	7.29:1, 9.45:1	7.29:1, 9.45:1	7.29:1, 9.45:1
CARBURETOR	Model	PR-58E5-[illegible]	PR-58E5-[illegible]	PR-58E5 **PR-58E5-8,-9	PR-58E5-8,-9	PR-58E5-[illegible]
MAGNETOS	Model	DLN-10	DLN-10	DLN-10	DLN-10	DLN-10
INST. DWG.	Number	95301	95301	95301	95301	95301
DIMENSIONS	Diameter Length	52.80 78.39	52.80 78.39	52.80 78.39	52.80 78.39	52.80 78.39
A.T.C.	Number	231	231	231	231	231
AIRPLANE	Installations	Martin 240(NWA)		Convair Model 110 **Convair Model 240 Douglas DC-6 (477B) *Douglas DC-6A Martin Mercury 202	Douglas DC-6	*Convair 110
NOTES			Structurally identical to CA3. Sold as CA5 but redesignated by Navy to -46 W.	*Converted to CB16.	*Supercharger drive shaft C'weights are incorporated to eliminate propeller vibration.	*CA17's converted to CA15's. Structurally identical to CA15 except for carburetor setting.

ENGINE MODEL	Type P&W A Air Force Navy	Double Wasp CA18	Double Wasp *CA18A	Double Wasp CA19
SPECIFICATION	Number	8124	8124 (App. A)	8125
RATINGS	Take Off	2400/2800 (wet) 2100/2800/3000(dry) 1900/2600/10000(wet)	2400/2800 (wet) 2100/2800/3000(dry)	2400/2800 (wet) 2300/2900/600 (dry) 2100/2600/9000(wet)
	Military			
	Normal	1600/2600/6000 1600/2600/14500	1600/2600/6000 1600/2600/14500	1800/2600/6500 1600/2600/14500
	Max. Cont.	1900/2600/4000 1675/2600/13500	1800/2600/6000 1675/2600/13500	1900/2600/4500 1800/2600/11500
	Cruise			
FUEL	Grade	100/130	100/130	115/145
CURVES	Spec. Oper.	T-1016 Inst. 7277	T-1016 Inst. 7277	T-1017 Inst. 7322
WEIGHT, DRY	Pounds	2350, 2355	2350	2350, 2355
PROP. SHAFT	Ratio Spline	.450 60A	.450 60A	.450, .350 60A
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	7.29:1, 9.1:1	7.29:1, 9.1:1	7.29:1, 9.1:1
CARBURETOR	Model	PR-58E5-4 *PR-58E5-8	PR-58E5-8	PR-58E5
MAGNETOS	Model	DLN-10	DLN-10	DLN-10
INST. DWG.	Number	95301	95301	95301
DIMENSIONS	Diameter Length	52.80 76.39	52.80 76.39	52.80 78.40
A.T.C.	Number	231	231	231
AIRPLANE	Installations	Aero Sud Ouest SO-30-P "Bretagne" Breguet BR-763 "Deux Ponts" **Convair XT-29 Convair 240 *Douglas DC-6 Martin Mercury 202	Douglas DC-6	
NOTES		**CA18 redesignated -97. Structurally similar to CA15 except for high gear impeller ratio.	*Supercharger drive shaft c'weights are incorporated to eliminate propeller vibration.	Structually similar to CA18 except for carb. setting. None manufactured.

REVISED 7/2/56

ENGINE MODEL	Type P&W A Air Force Navy	Double Wasp CB1	Double Wasp CB2	Double Wasp CB3	Double Wasp CB4	Double Wasp CB5
SPECIFICATION	Number	8133	8135	6140	6141	6144
RATINGS	Take Off	2400/2800/4000 wet 2300/2800/3500 dry	2500/2800/2500 wet 2300/2800/3500 dry	2400/2600/4000 wet 2050/2700/6000 dry 1950/2600/8000 dry (alt)	2500/2800/2500 wet 2200/2600/4500 dry	1900/2600/7000
	Military		2500/2600/2500 wet 2300/2600/3500 dry			
	Normal	1900/2600/7000	1900/2600/7000	1600/2600/6500	1800/2600/6500	1900/2600/7000
	Max. Cont.			1800/2600/6500	1900/2600/7000	
	Cruise					
FUEL	Grade	115/145	115/145	100/130	108/135	115/145
CURVES	Spec. Oper.	T-1063	T-1086	T-1126 Inst. 14829	T-1127	T-1149
WEIGHT, DRY	Pounds	*2357	*2357	*2357	*2357	2320
PROP. SHAFT	Ratio Spline	.450 or .4375 60A	.450 60A	.450 60A	.450 60A	DD 60A
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	7.29:1	7.29:1	7.29:1	7.29:1	7.29:1
CARBURETOR	Model	PR-58E5	PR-58E5	PR-58E5-4	PR-58E5	PR58E5
MAGNETOS	Model	DLN-10 L.T.	DLN-10 L.T.	DLN-10 L.T.	DLN-10 L.T.	DLN-10 L.T.
INST. DWG.	Number	136701	136701	136701	136701	172301
DIMENSIONS	Diameter Length	52.80 81.40	52.80 81.40	52.80 81.40	52.80 81.40	52.80 81.40
A.T.C.	Number		Military	264	264	Military
AIRPLANE	Installations		Hamilton Standard Test. Aero-Nord Model 2501	Martin 404 (E.A.L.) Martin 240 (NWA)		
NOTES		Similar CA except 3" longer due to larger impeller. *Includes torquemeter Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb. None manufactured.	Similar CA except 3" longer due to larger impeller. *Includes torquemeter. Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb.	Similar CB16 except single speed. *Includes torquemeter Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb.	Similar CB17 except single speed. *Includes torquemeter Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb.	Similar CB2 except DD and ratings. Designed for no more than 20° tilt from horizontal. None manufactured.

ENGINE MODEL	Type P&W A Air Force Navy
SPECIFICATION	Number
RATINGS	Take Off
	Military
	Normal
	Max. Cont.
	Cruise
FUEL	Grade
CURVES	Spec. Oper.
WEIGHT, DRY	Pounds
PROP. SHAFT	Ratio Spline
CYLINDERS	Comp. Ratio
IMPELLER	Ratio
CARBURETOR	Model
MAGNETOS	Model
INST. DWG.	Number
DIMENSIONS	Diameter Length
A.T.C.	Number
AIRPLANE	Installations
NOTES	

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

ENGINE MODEL	Type P & W A Air Force Navy	Double Wasp CB11	Double Wasp CB12	Double Wasp CB13	Double Wasp CB14	Double Wasp CB15	Double Wasp CB16	Double Wasp CB17
SPECIFICATION	Number	8131	8130	8131	8136	8137	8138	8139
RATINGS	Take Off	2400/2700/4000 wet 1900/2700/10000 dry	2400/2600/4000 wet 2050/2700/6000 dry	2400/2600/4000 wet 2300/2800/3500 dry	2500/2800/2500 wet 2300/2800/3500 dry	2500/2800/2500 wet 2300/2800/3500 dry	2400/2600/4000 wet(L) 2050/2700/6000 dry(L) 1950/2800/8000 dry(L) (alt.)	2500/2300/2500 wet (L) 1900/2600/13000 wet (H) 2200/2600/4500 dry (L)
	Military				2500/2800/2500 wet 2300/2800/3500 dry 1700/2600/18000 dry	2500/2800/2500 wet 2300/2800/3500 dry	2550/2600/13500 wet(H)	
	Normal	1800/2600/10500 1700/2400/15000	1800/2600/8500 1600/2400/16000	1900/2600/7000 1700/2600/18000	1900/2600/7000 1700/2600/18000	1900/2600/7000 1700/2600/14500	1800/2600/8500 1600/2600/16000	1800/2600/8500 1700/2600/14500
	Max. Cont.	1800/2600/10500 1700/2400/15000	1800/2600/8500 1700/2400/14500				1600/2600/6500 1700/2600/14500	1900/2600/7000 1750/2600/13500
	Cruise							
FUEL	Grade	100/130	100/130	115/145	115/145	115/145	100/130	108/135
CURVES	Spec. Oper.	T-1076	T-1075 Inst. 14783	T-1076	T-1087	T-1114	T-1115 Inst. 14817	T-1116 Inst. 16459
WEIGHT, DRY	Pounds	2390	*2390	*2390	*2390	*2390	*2390	*2390
PROP. SHAFT	Ratio Spline	.450 or .350 60A	.4375 or .450 60A	.4375 or .450 60A	.4375 or .450 60A	.450 60A	.450 60A	.450 60A
CYLINDERS	Comp. Ratio		6.75:1	6.75:1	6.75:1	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio		7.29:1, 9.1:1	7.29:1, 9.1:1	7.29:1, 9.1:1	7.29:1, 8.56:1	7.29:1, 8.56:1	7.29:1, 8.56:1
CARBURETOR	Model	PR-58E5	PR-58E5	PR-58E5	PR-58E5	PR-58E5	PR-58E5	PR-58E5
MAGNETOS	Model	DF-18LN	DLN-10	DLN-10	DLN-10	DLN-10	DLN-10	DLN-10
INST. DWG.	Number		136701	136701	136701	136701	136701	136701
DIMENSIONS	Diameter Length	52.80 1.40	52.80 81.40	52.80 81.40	52.80 81.40	52.80 81.40	52.80 81.40	52.60 81.40
A.T.C.	Number				Military.	Military		264
AIRPLANE	Installations				Chase XC-123		Brewster BR-765 Convair C-131-D Convair R4Y-1Z Convair 340A,B Convair 440 Douglas A-26 **Douglas DC-6A Douglas DC-6B Martin 202A, 404 Martin B-26C	Aero-Nord Model 2503 Convair 440 Douglas DC-6A Douglas DC-6B
NOTES		This engine desig. cancelled and spec. no. used for CB13. None manufactured.	Similar CA except 3" longer due to better supercharging. *Includes torquemeter. Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb. None manufactured.	Similar CA except 3" longer due to better supercharging. *Includes torquemeter. Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb. None manufactured.	Similar CA except 3" longer due to better supercharging. *Includes torquemeter. Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb.	Similar CB14; lower high blower ratio and ratings. *Includes torquemeter. Additional Weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb. None manufactured.	Similar CB12 except increase in normal and max. cont. rpm's and high blo ratio. *Includes torquemeter Additional weight: water regulator 13 lb. Fireseal Diaphragm 3 lb. **Original CB16 was converted CA15.	Similar CB13 except ratings and high blower ratio. *Includes torquemeter Additional weight: Water regulator 13 lb. Fireseal Diaphragm 3 lb.

ENGINE MODEL	Type P & W A Air Force Navy	Double Wasp CB18
SPECIFICATION	Number	8142
RATINGS	Take Off	2500/2800/2500 wet 2300/2800/3500 dry
	Military	
	Normal	1900/2600/7000 1700/2600/14500
	Max. Cont.	1900/2600/7000 1800/2600/13000
	Cruise	
FUEL	Grade	115/145
CURVES	Spec. Oper.	T-1129
WEIGHT, DRY	Pounds	2390
PROP. SHAFT	Ratio Spline	.450 60A
CYLINDERS	Comp. Ratio	6.75:1
IMPELLER	Ratio	7.29:1, 8.58:1
CARBURETOR	Model	PR-58E5
MAGNETOS	Model	DLN-10
INST. DWG.	Number	136701
DIMENSIONS	Diameter Length	52.80 81.40
A.T.C.	Number	
AIRPLANE	Installations	
NOTES		Similar CB17 except ratings, fuel and 1100 max. cruise hi gear. None manufactured.

REVISED 7/2/56

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

ENGINE MODEL	Type P&WA / Air Force / Navy	Double Wasp CE4	Double Wasp **CE16	Double Wasp CE21	Double Wasp VSE11-G
SPECIFICATION	Number	6113	6114	6115	6106
RATINGS	Take Off	2300/2600	2300/2600	2300/2800	2200/2600
	Military	2400/2600 wet 2300/2800/600 dry	2300/2800/500 1800/2800/14500	2300/2800/1000 2000/2800/17500 1650/2800/24000	2200/2800 1600/2800/22000
	Normal	1600/2600/6500	1500/2600/6500 1600/2600/16000	1500/2600/5500 1700/2600/19000 1600/2600/25500	1720/2600 1450/2600/22000
	Max. Cont.				
	Cruise				
FUEL	Grade	115/145	115/145	115/145	115/145
CURVES	Spec. Oper.	T-997 Inst. 1746	T-999	T-1000	T-981
WEIGHT, DRY	Pounds	*2335, *2330	*2365, *2360	*2548, *2543	2515
PROP. SHAFT	Ratio Spline	.350, .450 60A	.350, .450 60A	.350, .450 60A	.450 60A
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	7.29:1	7.29:1, 9.45:1	7.5:1, 6.3:1, 7.8:1	6.97:1, 11.06:1
CARBURETOR	Model	PR-58E5-5	PR-58E5-5	PR-58E5-5	CE-64CPC-6
MAGNETOS	Model	DF-18LH	DF-18LN	DF-18LU-4	Optional
INST. DWG.	Number	95301	95301	97701	96801
DIMENSIONS	Diameter Length	52.60 78.39	52.60 78.39	52.60 94.03	52.60 92.71
A.T.C.	Number				
AIRPLANE	Installations				
NOTES		*Includes torquemeter. None manufactured.	*Includes torque-meter. **Was originally CA16 but changed to CE because of E rear. None manufactured.	*Includes torque-meter. None manufactured.	None manufactured.

ENGINE MODEL	Type P&WA / Air Force / Navy	Double Wasp VSSE21-G	Double Wasp E12	Double Wasp E22
SPECIFICATION	Number	6107	6120	6121
RATINGS	Take Off	2250/2600	2250/2600/S.L.	2300/2800/S.L.
	Military	2250/2800 1600/2800/30000	2250/2600/S.L. 1600/2600/22000	2300/2800/S.L. 1800/2800/30000
	Normal	1900/2600 1500/2600/30000	1720/2600/S.L. 1450/2600/22000	1900/2600/S.L. 1500/2600/30000
	Max. Cont.			
	Cruise			
FUEL	Grade	115/145	115/145	115/145
CURVES	Spec. Oper.	T-982	T-1009	T-1010
WEIGHT, DRY	Pounds	2650	*2560	*2686
PROP. SHAFT	Ratio Spline	.450 60A	.450 60A	.450 60A
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	6.70:1, 9.65:1	7.29:1, 10.55:1	6.70:1, 9.66:1
CARBURETOR	Model	CE-64CPC-6	PR-6452	PR-6452
MAGNETOS	Model	Optional	DF-18LN	DF-18LN
INST. DWG.	Number	96901	96801	96901
DIMENSIONS	Diameter Length	52.80 98.03	53.00 92.70	53.00 98.4
A.T.C.	Number			
AIRPLANE	Installations			
NOTES		None manufactured.	*Includes torque-meter. None manufactured.	*Includes torque-meter. None manufactured.

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

ENGINE MODEL	Type P&WA	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force	*-1			*-5		-7	
	Navy		X-2	X-4	-	-6		*-8, -8W
SPECIFICATION	Number			EP-21	A-6019-C	N-8042	A-6021-B	N-8056
RATINGS	Take Off	1800/2600	1800/2600	1850/2600	1850/2500	1850/2600	1850/2600	2000/2700
	Military	1500/2400/7500			1850/2500/2700 1500/2500/14000			2000/2700/1000 1800/2700/15500 1650/2700/22500
	Normal		1500/2400/17500	1600/2400/3500 1540/2400/13500 1460/2400/21500	1500/2400/7500 1450 /2400/13000	1500/2400/7500 1450/2400/13000	1500/2400/25000 with turbo	1675/2550/5500 1625/2550/17000 1550/2550/21500
	Max. Cont.							
	Cruise							
FUEL	Grade	100	100	100	100	100	100	100
CURVES	Spec.	T-382			T-489	T-612		T-843
	Oper.	T-515			T-660	T-660	T-661	Inst. 1687
WEIGHT, DRY	Pounds			2500	2270	2300	2270	2480
PROP. SHAFT	Ratio	2:1	2:1	2:1	2:1	2:1	16:9	2:1
	Spline	50	50	50	50	50	50	50
CYLINDERS	Comp. Ratio	6.65:1	6.65:1	6.66:1	6.65:1	6.65:1	6.65:1	6.65:1
IMPELLER	Ratio	7.60:1	6.8:1, 6.46:1, 8.64:1	7.8:1, 6.46:1, 8.64:1	7.6:1, 10:1	7.6:1, 9.45:1		7.8:1, 6.46:1, 7.93:1
CARBURETOR	Model	PT13B2	PT13D2	PT13D2-5	PT13F1-12	PT13F1-3		PT13D4-6 (-8) PT13D6-6 (-8W)
MAGNETOS	Model			DF18RN	DF18RN	DF18RN		DF18RN
INST. DWG.	Number	R-8000	R-40409	R-44839	R-37258	R-43735		R-50425
DIMENSIONS	Diameter			52.50	52.06	52.06	52.00	52.50
	Length			88.81	75.72	75.72	75.64	88.47
A.T.C.	Number							
AIRPLANE	Installations	Convair XA-19B	Vought XF4U-1	Vought XF4U-1	Douglas B-23 Martin B-26 Martin B-26A Martin B-26B Martin XB-26D **Curtiss XC-46	Vought XTBU-1		Brewster F3A-1 Goodyear FG-1 Vought F4U-1 Vought F4U-1C Vought F4U-1P(W) Vought F4U-2
NOTES		*Also sold commercially.	Two-stage, two-speed, exp. Navy Test Engine.	X-2 (A2-G) with A5-G supercharger.	*Also sold commercially. Also built by Ford. Similar -1 except carb. and two-speed. **Replaced by R-2800-43.		Similar -5 except single speed with turbo.	Updraft carb. *-8 and -8W also built by Nash.

ENGINE MODEL	Type P&WA	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force	-9	*-10	-11		-13		-15
	Navy		*-10, -10W		-12		*-14W	
SPECIFICATION	Number		N-8056	A-8026-F		A-8037-A	N-8092	A-8026-F
RATINGS	Take Off		2000/2700	2000/2700	2000/2700		2100/2800	2000/2700
	Military		2000/2700/1000 1800/2700/15500 1650/2700/22500	2000/2700/25000 with turbo			2100/2800/28.5	2000/2700/25000 with turbo
	Normal	1675/2550/5500 1625/2550/15000	1675/2550/5500 1625/2550/17000 1550/2550/21500	1625/2250/3500 1625/2250/25000 with turbo	1625/2550	1000/2400/S.L. (Part throttle)	1700/2600/26.0	1625/2250/3500 1625/2250/25000 with turbo
	Max. Cont.							
	Cruise							
FUEL	Grade		100	100		100	100/130	100
CURVES	Spec.		T-843	T-578		T-582	T-898	T-578
	Oper.		Inst. 1687	T-770			Inst. 1695	T-770
WEIGHT, DRY	Pounds		2480	2415		2265	2315	2430
PROP. SHAFT	Ratio		2:1	5:2	15.5:9	2:1	.450:1	5:2
	Spline		50	50	Dual Rotation		60A	50
CYLINDERS	Comp. Ratio		6.65:1	6.65:1	6.6	9:1	6.75:1	6.65:1
IMPELLER	Ratio		7.8:1, 6.46:1, 7.93:1	6.46:1	7.6	6.46:1	7.29:1	6.46:1
CARBURETOR	Model		PT13G2-10 (-10) PT13G6-10 (-10W)	PT13F1		PT13F1	PR58E2-2, -3	PT13F1
MAGNETOS	Model		DF18RN	DF18RN		DF3	DF18LN	DF18RN
INST. DWG.	Number		R-52017	R-41637			87101	R-46239
DIMENSIONS	Diameter		52.50	52.00		52.00	53.00	52.00
	Length		88.47	80.00		75.72	76.50	80.00
A.T.C.	Number							
AIRPLANE	Installations		Curtiss P-60A (-10) Curtiss XP-60E (-10) Grumman F6F-3E Grumman F6F-3P (-10) Grumman F6F-3N (-10) Grumman F6F-3N (-10) Grumman F6F-3P (-10) Grumman F6F-5,5E (W) Grumman F6F-5N (-10W) Grumman F6F-5P (-10W) Northrop P-61 (10W) Northrop P-61,A (-10) Northrop XP-61 (-10) Northrop YP-61 (-10)	*North American XB-28 (Torquemeter) *North American XB-28A	Hamilton Standard Exp.		Goodyear FG-3 **Northrop XP-61D Republic YP-47M Vought F4U-3	*North American XB-28 *North American XB-28A
NOTES		None manufactured.	Downdraft Carb. *Also sold to Army. -10 and -10W also built by Nash.	*Left engine was R-2800-15. Torque Indicator Exp. XB28A crashed.		Wright Field S.L. Test Engine with torquemeter.	*Built at K.C. Ratings not intended for use with turbo at S.L. **Replaced by -57. Goodyear built.	*Right engine was R-2800-11. XB28A crashed. Similar -11 except CC rotation.

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

ENGINE MODEL	Type P&WA	XR-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force		-17	-18W*		-19		*-21
	Navy	-16		-18, -18W	-18WA		-20	
SPECIFICATION	Number	N-8077	A-8026F	N-8082	N-8082, App. C		N-8079	A-80360
RATINGS	Take Off	2000/2700	2000/2700	2100/2800	2100/2800			2000/2700
	Military	2000/2700/1500 2000/2700/25000 with turbo	2000/2700/25000 with turbo	2100/2800/1000 1900/2800/14000 1800/2800/23000	2100/2800/1000 1900/2800/14000 1800/2800/23000		2000/2700/1500 1600/2700/13500	2000/2700/1500 2000/2700/25000 with turbo
	Normal	1625/2550/6500 1625/2550/25000 with turbo	1625/2250/3500 1625/2550/25000 with turbo	1700/2600/7000 1630/2600/18000 1550/2600/26000	1700/2600/7000 1630/2600/18000 1550/2600/26000		1600/2400/5700 1450/2400/13000	1625/2550/6500 1625/2550/25000 with turbo
	Max. Cont.							
	Cruise							
FUEL	Grade	125	100	100/130	100/130		100	100
CURVES	Spec.	T-606	T-578	T-637	T-637		T-827	T-567
	Oper.	Inst. 1719	T-770	1701	Inst. 1701			T-771, Inst. 1719
WEIGHT, DRY	Pounds	2265	2420	2560	2560		2300	2265
PROP. SHAFT	Ratio	2:1	2:1	.450:1	.45:1		2:1	2:1
	Spline	50	50	60-A	60-A		50	50
CYLINDERS	Comp. Ratio	6.65:1	6.65:1	6.75:1	6.75:1		6.65:1	6.65:1
IMPELLER	Ratio	7.6:1	6.46:1	7.50:1, 6.30:1, 7.80:1	7.50:1, 6.30:1, 7.80:1		7.63:1, 9.89:1	7.6:1
CARBURETOR	Model	PT13G1-9	PT13F1	PR58E1-1 (-18) PR-58E2-2, -3 (-18W)	PR58E2-2, -3		PT13G1	PT13G1-13
MAGNETOS	Model	DF18RN	DF18RN	DF18LU	DF18LU		DF18RN	DF18RN
INST. DWG.	Number	R-58030	R-47872	R-78401	94401		*R-73201	R-41961
DIMENSIONS	Diameter	52.50	52.00	52.80	52.80		52.50	52.50
	Length	75.72	80.00	93.77	93.77		75.72	75.72
A.T.C.	Number							
AIRPLANE	Installations	Grumman XF6F-2 Vought F4U-3		Curtiss YP-60E Goodyear FG-4 Grumman XF6F-6 Vought F4U-4 Vought F4U-4E Vought F4U-4N Vought F4U-4P Vought XF4U-4 Vought XF4U-4B Vought F4U-7				Curtiss P-47G Republic P-47C Republic P-47D Republic RP-47B Republic RP-47C Republic XP-47E Republic XP-47F Republic XP-47K
NOTES			Similar -11 except red. gear and torque indicator exp. nose.	*Also sold to Army No -18's manufactured.	Similar to -18W. Includes lengthened conn. rods and cyl. bbls. long master rod secondary c'bances redis. piston with reloc. piston pin hole and longer skirt; also rev. helicoil spark plug inserts.	Was to be similar -11 except two speed & dual rotation. None manufactured. Replaced by -29.	Drilled Crankcase. *Drawing was not released, planned for Vought TBU-1, none manufactured. Same as -27 except incorporating case harness.	*Also sold commercially. Also built by Ford. Similar -17 except super ratio and acc'y. section.

ENGINE MODEL	Type P&WA	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force		-23		-25		***-27	
	Navy	*-22, -22W		-24 & X-24		-26		-28
SPECIFICATION	Number	N-8081	A-8047	N-8082 App. A	A-8052-C	N-8089	A-8051-B	N-8091
RATINGS	Take Off	2100/2800	2000/2700	2100/2800	2000/2700	2000/2700	2000/2700	2100/2800
	Military	2100/2800/1000 1600/2800/16000	2000/2700/1000 1875/2700/12500 1800/2700/19500	2100/2800/1000 1900/2800/14000 1800/2800/23000	2000/2700/1000 1875/2700/12500 1800/2700/19500	2000/2700/1500 1600/2700/13500	2000/2700/1500 1600/2700/13500	2100/2800/1000 1600/2800/16000
	Normal	1700/2600/7000 1450/2600/18500	1675/2550/5500 1625/2550/15000 1550/2550/21500	1700/2600/2700 1630/2600/18000 1550/2600/26000	1675/2550/5500 1625/2550/15000 1550/2550/21500	1600/2400/5700 1450/2400/13000	1600/2400/5700 1450/2400/13000	1700/2600/7000 1450/2600/18500
	Max. Cont.							
	Cruise							
FUEL	Grade	100/130		100/130	100	100/130	100/130	100/130
CURVES	Spec.	T-836	T-677	T-837	T-697	T-696	T-696	T-836
	Oper.	Inst. 1693		Inst. 1701	Inst. 1687		Inst. 1720	Inst. 1693
WEIGHT, DRY	Pounds	2359	2377 without reduction gear box	2650	2527	2300	2300	2364
PROP. SHAFT	Ratio	.45:1	Two speed at 2700	.444:1	2:1	16:9	**2:1	.5625:1
	Spline	60A	50-70 Dual Rotation	40-60 Dual Rotation	50	50	50	60A
CYLINDERS	Comp. Ratio	6.75:1	6.65:1	6.75:1	6.65:1	6.65:1	6.65:1	6.75:1
IMPELLER	Ratio	7.29:1 low 9.45:1 high	7.8:1, 6.46:1, 7.93:1	7.50:1, 6.30:1, 7.80:1	7.8:1, 6.46:1, 7.93:1	7.6:1, 9.89:1	7.6:1, 9.89:1	7.29:1 low 9.45:1 high
CARBURETOR	Model	PR-58E1-1 (-22) PR58E2-2, -3 (-22, -22W)	PT13G2-10	PR58E2-2	PT13F1-118 (Exp.)	PT-13G1-9	PT-13G1-9	PR-58E1-1
MAGNETOS	Model	DF18LN	DF18LN	DF18LU	DF18RN	DF18RN	DF18RN	DF18LN
INST. DWG.	Number	R-77201	R-48374	R-82001	R-49422	R-83601	R-50901	R-86901
DIMENSIONS	Diameter	52.80	52.50	52.80	52.50	52.50	52.50	52.80
	Length	78.134	90.00	105.90	89.31	75.72	75.72	78.134
A.T.C.	Number							
AIRPLANE	Installations	Convair (TBU) TBY-2 (-22) Fairchild C-82, A (-22) Grumman F7F-2, -2N, -2P (W) Grumman F7F-1N (-W) Grumman XF7F-1 (-22) Grumman XF6F-1 (W) Martin XPBM-5, PBM-5 (-22) Vought XTBU-1 (-22) Grumman F7F-3(W)					Douglas JD-1 Douglas B23 Douglas A-26, B, C Douglas XA-26A, B, C Douglas XFA-26C Fleetwings XA-39 Grumman XF6F-1 Grumman XF6F-4 Grumman F7F-1N *North American XB-28A	Curtiss SB2C-6
NOTES		No manifold pressure regulator in Army installations. *-22 also built at K.C. -22W built at K.C. only.	None manufactured. Engine Designation cancelled in favor of -29 without two speed reduction gear. Submerged pusher with reverse flow cooling. Redesignated -29.	For XR-2800-24, App. B of N-8082 changes prop ratio to .50:1 Inst.dwg. to R-85001 and dry weight to 2640. None manufactured.	Two stage, two-speed 5 engines Exp.	None built. Planned for PV-2. Same as -31 except incorporating case harness.	*Used with -11 and -15 noses and -21 ratings. **British used 5:2 reduction gear. ***Also sold commercially. Also built by Ford.	8 engines converted to -34W.

REVISED 5/15/55

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

E

ENGINE MODEL	Type P&WA	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force	-29			-31			
	Navy		-30W (semi-production)	-30W (production)	*-31	-32W (semi-production)	-32W (production)	-33
SPECIFICATION	Number	A-8047E	N-8095	N-8118	A-8051B App. A	N-8094	N-8119B	A-8066B
RATINGS	Take Off	2000/2700	2300/2800	2250/2800/S.L.	2000/2700	2300/2800	2300/2800/S.L.	2000/2700
	Military	2000/2700/1000 1675/2700/12500 1800/2700/19500	2300/2800 1600/2800/22000	2250/2800/S.L. 1600/2800/22000	2000/2700/1500 1600/2700/13500	2300/2800 1800/2600/30000	2300/2800/S.L. 1800/2600/30000	2000/2700/25000
	Normal	1675/2550/5500 1625/2550/15000	1720/2600 1450/2600/22000	1720/2600/S.L. 1450/2600/22000	1600/2400-5700 1450/2400/13000	1900/2600 1500/2600/30000	1900/2600/S.L. 1500/2600/30000	1625/2550/6500 without turbo
	Max. Cont.							
	Cruise							
FUEL	Grade	100	115/145	115/145	100/130	115/145	115/145	125
CURVES	Spec.	T-677	T-1006	T-1006	T-696	T-1007	T-1007	T-749
	Oper.	T-710, Inst. 1687	Inst. 7250	Inst. 7330	Inst. 1720		Inst. 7326	
WEIGHT, DRY	Pounds	2377 with reduction gear box.	*2585	*2560	2280	*2715	*2705	2265
PROP. SHAFT	Ratio	.597:1	.450:1	.450:1	16:9	.450:1	.450:1	5:2
	Spline	60A Dual Rotation	60A	60A	50	60A	60A	50
CYLINDERS	Comp. Ratio	6.5:1	6.75:1	6.75:1	6.65:1	6.75:1	6.75:1	6.65:1
IMPELLER	Ratio	7.6:1, 6.46:1, 7.93:1	6.97:1 min. 10.55:1 max.	7.29:1 min. 10.55:1 max.	7.6:1, 9.69:1	Main 6.7:1 Dual 9.65:1 max,	6.70:1 min. 9.66:1 max.	7.6:1
CARBURETOR	Model	PT-13G2-10	Ceco 64CP02-1	PR-64B2-1	PT-13F1, PT-13F5-8 PT-13G1-9	Ceco 64CP02-2	PR-64B2-2	PT-13G1
MAGNETOS	Model	DF-18LN	DF-18LN	DF-18LN	DF-18RN	DF-18LN	DF-18LN	DF-18RN
INST. DWG.	Number	R-46374	66601	98401	R-52178	92501	96501	R-51417
DIMENSIONS	Diameter	52.50	52.60	53.00	52.50	52.60	53.00	52.50
	Length	90.00	93.50	92.75	75.72	96.50	96.50	75.72
A.T.C.	Number							
AIRPLANE	Installations	Northrop XP-56	Grumman F7F-5 Grumman XF8F-2	Grumman F8F-2 Grumman XF8F-3	Lockheed PV-1 Lockheed PV-2,A,B,C,D Lockheed RB-34 Lockheed RB-34A,B	Vought F4U-5	Vought F4U-5	
NOTES		Was -23. 4 built. Submerged pusher with reverse flow cooling and cooling fan.	*Includes torquemeter. Variable Speed, Variable Intermediate with fixed High Ratio Main Imp. Couplings. *Weight Increases: Front Ex. Pipes 24.5 lb. Water Equip. 10 lb.	*Water injection regulator 10 lb increase in weight. *Front exhaust pipes 24.5 lb increase. *Weight includes torquemeter.	*Also sold to Navy and commercially. Also built by Ford.	*Includes torquemeter. Dual Auxiliary Blower. Variable Speed. Dual Aux. Stage Impellers with Variable Speed Main. Weight Increases: Front Ex. Pipes 24.5 lb. Water Equip. 10 lb.	*Weight includes torquemeter. Weight Increases: Front Ex. Pipes 24.5 lb. Water Equip. 10 lb.	None manufactured.

ENGINE MODEL	Type P&WA	P-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force	-34		-35		-37		
	Navy	-34, -34W **(-34W4)	-34A, -34WA	(Semi-production)	-36		-36W	-39
SPECIFICATION	Number	N-8081 App. A	N-8081, App. B	None	N-8091 App. A	A-8075C	N-8082D	A-8019-C (App. A)
RATINGS	Take Off	2100/2800	2100/2800	2000/2700	2100/2800	2100/2800	2100/2800	1850/2600
	Military	2100/2800/3000 1700/2800/16000	2100/2800/3000 1700/2800/16000	2000/2700/1500 2000/2700/25000 with turbo	2100/2800/3000 1700/2800/16000	2000/2700/1500 1600/2700/13500	2100/2800/1000 1900/2800/14000 1800/2800/23000	1850/2600/2700 1500/2600/14000
	Normal	1700/2600/S.L. 1700/2600/8500 1500/2600/18500	1700/2600/S.L. 1700/2600/8500 1500/2600/18500	1625/2550/3500 1625/2550/25000 with turbo	1700/2600/8500 1500/2600/18500	1700/2550/S.L. 1700/2550/5000 1450/2550/14500	1700/2600/7000 1630/2600/18000 1550/2600/26000	1500/2400/7500 1450/2400/13000
	Max. Cont.							
	Cruise							
FUEL	Grade	100/130	100/130	100	100/130	140	100/130	100
CURVES	Spec.	T-960	T-960	T-771	T-960	T-603	T-837	T-489
	Oper.	Inst. 1731		Inst. 1719			Inst. 1701	T-660
WEIGHT, DRY	Pounds	2356.5	2356.5		2364	2355	2560	2300
PROP. SHAFT	Ratio	.45:1	.45:1	2:1	.5625:1	.45:1	.45:1	2:1
	Spline	60A	60A	50	60A	60	60A	50
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.65:1	6.75:1	6.75:1	6.75:1	6.65:1
IMPELLER	Ratio	7.29:1 9.45:1	7.29:1 9.45:1	6.46:1	7.29:1 9.45:1	7.60:1 9.89:1	7.50:1, 6.30:1, 7.80:1	7.6:1, 10:1
CARBURETOR	Model	PR58E1-1 (-34) PR58E2-2 (-34,-34W)	PR58E2-2 PR58E2-3	PT13G1-121	PR58E1-1	PT13G3-126 (Exp.)	PR58E2-3	PT13F1-12
MAGNETOS	Model	DF18LN	DF18LN	DF18RN	DF18LN	DF18LN	DF18LU	DF-18RN
INST. DWG.	Number	R-77201	94501	R-52925	R-86901	R-56627	100701	F-56090
DIMENSIONS	Diameter	52.80	52.80	52.06	52.60	52.60	52.60	52.06
	Length	78.134	75.134	75.72	78.134	78.134	93.77	75.72
A.T.C.	Number							
AIRPLANE	Installations	Convair TBY-2 Curtiss C-46F(-34) Curtiss XC-46D(-34) Curtiss XG15C-1(-34W) *Douglas XA-26D(-34W) Eastern XTBM-3(-34W) Fairchild C-82(-34) Fleetwings BTK-1(-34W) Grumman F7F-3N,-3P(-34W) Grumman F7F-4(-34W) Grumman F8F-1, 1B(-34W) Grumman XF8F-1(-34W) Grumman XTB3F-1(-34W) Martin P8M-1A(-34) **Martin RM-1(404) Martin RM-1(404)-34W		Republic XP-47B (Torquemeter)		Brewster XA-32,A		Martin B-26A Martin B-26B Martin XB-26D
NOTES		*-34W in nose and DaDav. M1 jet in fuselage. Same as -22W with a new diffuser of less capacity, giving high gear, higher altitude performance. Approx. 440 M.P. regulators in Army -34W installations. -34 and -34W built by K.C. only.	None manufactured. Similar to -34,-34W. Includes lengthened conn. rods and cyl. bbls, long master rod secondary c'balances, redesigned piston with reloc. piston pin hole and longer skirt; also revised helicoil spark plug inserts.	"B" engine with "A" power section. Replaced by -21.	None manufactured. Same as a -28 with a new diffuser of less capacity giving high gear, higher altitude performance.	4 Exp. engines built. One sold commercially.	None manufactured. Similar to -16WA with stronger propeller shaft, provision for double acting governor, internal water injection system.	Similar -5 (S1A4-G) except for "B" engine crankshaft on 5 engines.

**Modified (?)-34 by Airports for Coast Guard Martin RM-1. (4) denotes 404).

REVISED 7/2/56

"CE"

ENGINE MODEL	Type P&WA	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force		-41		*-43		-45	
	Navy	-40, -40W		-42W		-44, -44W		-46, -46W*
SPECIFICATION	Number	N-8081, App. C	A-8051-B App. C	N-8110-A	A-8038-D App. F	N-8127 C		N-8129
RATINGS	Take Off	2100/2800	2000/2700	2300/2800	2000/2700	2300/2800		2300/2800/600 dry
	Military	2100/2800/3000 1700/2800/16000	2000/2700/1500 1600/2700/13500	2300/2800/1000 2000/2800/17500 1650/2800/24000	2000/2700/1500 1600/2700/13500	*2300/2800/31.25		2300/2800/600 dry
	Normal	1700/2600/8500 1500/2600/16500	1600/2400/5700 1450/2400/13000	1300/2600/5500 1700/2600/19000 1600/2600/25500	1600/2400/5700 1450/2400/13000	*1800/2600/26.5		1800/2600/6500
	Max. Cont.							
	Cruise							
FUEL	Grade	100/130	100/130	115/145	100	115/145		115/145
CURVES	Spec.	T-960	T-696	T-992	T-804	T-1033		T-1071
	Oper.		Inst. 1720	Inst. 7325	Inst. 1720	Inst. 7334	Inst. 1720	Inst. 7334
WEIGHT, DRY	Pounds	2358.5	2300	2543	2300	***2343.5		*2327
PROP. SHAFT	Ratio	.45:1	2:1	.45:1	2:1	.350	5:2	.450
	Spline	60A	50	60A	50	60A	50	60A
CYLINDERS	Comp. Ratio	6.75:1	6.65:1	6.75:1	6.65:1	6.75:1		6.75:1
IMPELLER	Ratio	7.29:1 9.45:1	7.6:1, 9.89:1	7.5:1, 6.3:1, 7.6:1	7.6:1, 9.89:1	7.29:1		7.29:1
CARBURETOR	Model	PR-58E2-2 PR-58E2-3	PT-13G1-9	PR-58E5-5	PT-13G1-9	PR-58E5-5	*PT-13G1-9	PR-58E5-6
MAGNETOS	Model	DF-18LN	DF-18RN	DF-18LU-4	DF-18RN	DF-18LN	DF-18RN	DF-18LN
INST. DWG.	Number	99201	R-56093	R-107101	R-56697	116801	R-75810	135201
DIMENSIONS	Diameter	52.80	52.50	52.80	52.50	53.00	52.50	53.00
	Length	78.14	75.72	94.03	75.72	78.50	83.60	75.50
A.T.C.	Number							
AIRPLANE	Installations		Martin B-26B-2	Vought F4U-4B	Curtiss C-46 Martin AT-23A,B(JM-1) Martin B-26B,B1,B3,B4, B-10 thru B-75 Martin B-26C(JM-1) Martin XB-26D Martin B-26E,F,G Martin TB-26N (JM-2) Martin TB-26N	**North American AJ-1 Savage **TO-2 **AJ-2P		Grumman AF-1S(-46W) Grumman AF-2S(-46W) Grumman XAF-1S(-46W) Grumman XAF-2S(-46W)
NOTES		None manufactured. Similar to -34A, -34WA. Stronger propeller shaft, provision for double acting governor, internal water injection system.		Similar -38W. Provision for improved water injection, stronger prop.shaft, double acting governor.	*Built by Ford only	*31.25 and 26.5 based on 100 F, C.A.T. and 31 in. back press. No -44 built. **With two -44W and one J-33 W/injection removed during modification. ***Includes torquemeter. Weight increases: Fire Seal Diap. 3 lb Water Reg. 13 lb (-44W only).	Two engines shipped to Wright Field. *Fuel injection calls for -140 setting NACA tested one engine. Converted from -41. No installation.	*Sold as CA5. *Includes torquemeter. Weight increases: Front Ex. Pipes 24.5 lb Water Regulator 13 lb (-46W only). No -46 manufactured.

ENGINE MODEL	Type P&WA	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force	*-47		-49			*-51	***-52W
	Navy		-42		-50	-50A		****-52WA
SPECIFICATION	Number	A-8051-B App. D	N-21320	A-8051-B applies	N-2143-B	N-2143-B	A-8038-D	N-2145A
RATINGS	Take Off	2000/2700	2300/2800/3500	2000/2700	2100/2700/5000 **1950/2600	2100/2700/5000 *1950/2600	2000/2700	2500/2800/2500 wet 2200/2800/4500 dry
	Military	2000/2700/1500 1600/2700/13500	2300/2800/1500	2000/2700/1500			2000/2700/1500 1600/2700/13500	
	Normal	1600/2400/5700	1900/2600/7000	1600/2400/6700	1900/2600/7000 **1800/2600	1900/2600/7000 *1800/2600	1600/2400/5700 1450/2400/13000	1900/2600/7000 1700/2600/14500
	Max. Cont.							
	Cruise							
FUEL	Grade	100	115/145	100	115/145	115/145	100	115/145
CURVES	Spec.	T-696	T-1022	T-696	T-1150	T-1150	T-804	T-1159
	Oper.	Inst. 1720	Inst. 7398	Inst. 1720 low blower only	Inst. 16510	Inst. 16510	Inst. 1720	Inst. 16472
WEIGHT, DRY	Pounds	2300	*2367	2300	*2300	2300	2300	*2390
PROP. SHAFT	Ratio	5:2	.450	5:2	D.D.	D.D.	2:1	.450
	Spline	50	60A	50	60A	60A	50	60A
CYLINDERS	Comp. Ratio	6.65:1	6.75:1	6.65:1	6.75:1	6.75:1	6.65:1	6.75:1
IMPELLER	Ratio	7.63:1, 9.89:1	7.29:1	Blower selector 7.6:1 wired to low blower position	7.29:1	7.29:1	7.6:1, 9.89:1	7.29:1, 8.58:1
CARBURETOR	Model	PT-13G1-9	PR-58E5-5	PT-13G1-9	PR-58E5-26	PR-58E5-26	PT13G1-9	PR-58E5-13 PR-58E5-16
MAGNETOS	Model	DF-18RN	DF-18LN	DF-18RN	DLN-10 (L.T.)	DLN-10 (L.T.)	DF-18RN	DLN-10 (L.T.)
INST. DWG.	Number	R-70500	R-145301	R-56093	172301	172301	R-56697	176801
DIMENSIONS	Diameter	52.50	53.00	52.50	53.00	53.00	52.50	53.00
	Length	75.72	81.50	75.72	81.50	81.50	75.72	81.50
A.T.C.	Number							
AIRPLANE	Installations	Vickers Warwick II	Grumman XTB3F-1S Grumman AF-2W Grumman AF-2S	*Hughes (D2A) XA-37	Bell HSL-1 Sikorsky S-56 Sikorsky HR2S-1 Sikorsky HR2S-1W Sikorsky N37A	Bell HSL-1	Curtiss R5C-1,-2 Curtiss C-46A Curtiss C-46D1, D5 Curtiss C-46E Curtiss C-46F Curtiss C-46G	**Douglas R6D-1 Douglas C-118A
NOTES		Same as -31 except prop. gear ratio. *Sold commercially.	*Wt. Increases: #24.5 Front Exhaust pipes. Wt. includes Torquemeter. No. fireseal.	-41 with 5:2 reduction. Turbo installed later. *Cancelled.	Similar -48 but direct drive L.T. Ign. *Fireseal 2.9# extra. No. Ex. Flanges or torquemeter. **Alternate rating with 100/130 fuel.	Similar -50 except ratings, additional mounting studs, double diap. fuel feed valve and supply with vac. relief valve. *Alternate rating with 100/130 fuel.	Same as -43 with new engine mounts, planned for Fairchild XC-82 but -22 engines installed instead. *Built by Ford only.	*Fireseal diap. 3# & W/Reg. 13# extra. Includes torquemeter. **Sold with DWG817 but redesignated by Navy to -52W, ***Also Nash built. Basically similar -99W except incorp. 1 Hi-Speed (3:1) gen. dr. ****No clutch selector valve.

REVISED 7/2/56

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

ENGINE MODEL	Type P & W A	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force	-53		-55	**-57	*-59
	Navy		-54			
SPECIFICATION	Number	A-8080	N-8143-B	*A-8087	A-8088-E	A-8038-D App. G
RATINGS	Take Off	2000/2700	2100/2700/5000 **1950/2600	2100/2800	2100/2800	2000/2700
	Military	2000/2700/1000 1600/2700/15500 1650/2700/22500		2100/2800/1000 1900/2800/14000 1800/2800/23000	2100/2800/28.5	2000/2700/1500 2000/2500/25000 with turbo
	Normal	1675/2550/5500 1625/2550/17000 1550/2550/21500	1900/2600/7000 **1800/2600	1700/2600/7000 1630/2600/18000 1550/2500/25000	1700/2600/28.5	1625/2550/6500 1625/2600/25000 with turbo
	Max. Cont.					
	Cruise					
FUEL	Grade	125	115/145	100/130	100/130	125
CURVES	Spec.	T-843	T-1150	T-837	T-838	T-587
	Oper.	Inst. 1687	Inst. 16510	1701	Inst. 1695	Inst. 1719
WEIGHT, DRY	Pounds	2580	*2300	2550	2315	2290
PROP. SHAFT	Ratio	2:1	D.D.	.444:1	.450:1	2:1
	Spline	40-60 Dual Rotation	60A	40/60 Dual Rotation	60A	50
CYLINDERS	Comp. Ratio	6.65:1	6.75:1	6.75:1	6.75:1	6.65:1
IMPELLER	Ratio	7.80:1, 6.46:1, 7.93:1	7.29:1	7.50:1, 6.30:1, 7.80:1	7.29:1	7.6:1
CARBURETOR	Model	PT-13G2-10	PR-58E5-26	PR-58E2-2	PR-58E2-2	PT-1305-13
MAGNETOS	Model	DF-18RN	DLN-10 (L.T.)	DF-18LN	DF-18LN	GRS-18LG-P1
INST. DWG.	Number	R-52017	172301	R-78301	R-78601	R-86501
DIMENSIONS	Diameter	52.50	53.00	52.80	52.80	52.50
	Length	104.18	81.00	106.16	78.39	75.72
A.T.C.	Number					
AIRPLANE	Installations	Curtiss P-60A Curtiss XP-60A Curtiss XP-60C	Sikorsky S56	Curtiss XP-60F (Converted to YP-60E with R-2800-18W	*Northrop P-61D,C Republic XP-47J Republic XP-47L Republic P-47M Republic XP-47N Republic P-47N	*Republic P-47D,C Republic XP-47L
NOTES		-53 was -10 but converted to incorporate dual rotation, single speed reduction gear.	Similar -50 except for mounting studs additional. Ign. *Fireseal 2.7# extra. No. Ex. Flanges or torquemeter. **Alternate rating with [illegible] fuel	*Not guaranteed. Two engines delivered to Wright Field.	**Also built by Chevrolet and K.C. One -57 sold commercially. *Goodyear built the only two to be mf'd. (D) engines replaced by -77	Similar to -21 with G.E. Tubular Harness and water injection. *Also built by Ford.

DESTROYED

ENGINE MODEL	Type P & W A	R-2800	R-2800	R-2800
	Air Force	-61	*-63	*-65
	Navy			
SPECIFICATION	Number	(Similar to -57)	(A-8038-D applies)	A-8096 A
RATINGS	Take Off	2100/2800	2000/2700	2000/2700
	Military	2100/2800/1000 without turbo 2100/2800/30000 with turbo	2000/2700/1500 2000/2700/25000 with turbo	2000/2700/1000 1800/2700/15500 1650/2700/22500
	Normal	1700/2600/S.L. 1700/2600/7000 without turbo	1625/2550/6500 1625/2550/25000 with turbo	1675/2550/5500 1625/2550/17000 1550/2550/21500
	Max. Cont.	1700/2600/30000 with turbo		
	Cruise			
FUEL	Grade	100/130	125	100
CURVES	Spec.	T-838	T-587	T-843
	Oper.	Inst. 1695	Inst. 1719	Inst. 1687
WEIGHT, DRY	Pounds	2400	2265	2508
PROP. SHAFT	Ratio	.500:1	2:1	2:1
	Spline	40-60 Dual Rotation	50	50
CYLINDERS	Comp. Ratio	6.75:1	6.65:1	6.65:1
IMPELLER	Ratio	7.29:1	7.6:1	7.80:1, 6.46:1, 7.93:1
CARBURETOR	Model	PR-58E2-2	PT-1305-13	PT-1306-10
MAGNETOS	Model	DF-18LN	DF-18RN	S-18LG P1
INST. DWG.	Number	R-81901	R-41981	R 87601
DIMENSIONS	Diameter	52.80	52.50	52.50
	Length	90.26	75.72	88.47
A.T.C.	Number			
AIRPLANE	Installations	Republic XP-47J	Republic P-47D,C Republic XP-47L	Northrop P2T-1 Northrop XP-15,A Northrop P-61A,B Northrop XP-61E
NOTES		One engine only. Shipped without nose .45:1 nose installed converting to -57.	Similar to -21 with water injection. *Also built by Ford.	Similar to -10 with G.E. Tubular Harness and water injection. *Also built by Nash.

REVISED 7/2/54

ENGINE MODEL	Type P&W A	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air force Navy	-67	-69	*-71	*-73	**-75	*-77	*-79
SPECIFICATION	Number	A-8051	(A-8036-D applies)	A-8051-B App.E	A-8068-E App.E	A-8036-C App.H	A-8068-E App.C	A-8051-B App.F
RATINGS	Take Off	2000/2700	2000/2700	2000/2700	2100/2800	2000/2700	2100/2800	2000/2700
	Military	2000/2700/1500 1600/2700/13500	2000/2700/1500 1600/2700/13500	2000/2700/1500 1600/2700/13500	2100/2800/26.5	2000/2700/1500 1600/2700/13500	2100/2800/26.5	2000/2700/1500 1600/2700/13500
	Normal	1600/2400/5700 1450/2400/13000	1600/2400/5700 1450/2400/13000	1600/2400/5700 1450/2400/13000	1700/2600/26.5	1600/2400/5700 1450/2400/13000	1700/2600/26.5	1600/2400/5700 1450/2400/13000
	Max. Cont.							
	Cruise							
FUEL	Grade	100/130	100	100/130	100/130	100/130	100/130	100/130
CURVES	Spec.	T-696	T-804	T-696	T-838	T-804	T-838	T-696
	Oper.			Inst. 1720	Inst. 1695	Inst. 1720	Inst. 1695	Inst. 1720
WEIGHT, DRY	Pounds	2300	2300	2325	2351	2325	2321	2325
PROP. SHAFT	Ratio	2:1	2:1	2:1	.450:1	2:1	.450:1	2:1
	Spline	50	50	50	60A	50	60A	50
CYLINDERS	Comp. Ratio	6.65:1	6.65:1	6.65:1	6.75:1	6.65:1	6.75:1	6.65:1
IMPELLER	Ratio	7.6:1, 9.69:1	7.6:1, 9.69:1	7.6:1, 9.89:1	7.29:1	7.6:1, 9.69:1	7.29:1	7.6:1 7.89:1.
CARBURETOR	Model	PT-13G5-9	PT-13G5-9	PT-13G1-9	PR-58E2-2	PT-13G1-9	PR-58E2-2	PT-13G5
MAGNETOS	Model	DF-16RN	DF-16RN	S-16LG-P1	S-16RG-P1	S-16LG-P1	DF-16LN	S-16LG-P1
INST. DWG.	Number	R-50901	R-56697	R-91301	90801	R-91401	91601	92001
DIMENSIONS	Diameter	52.50	52.50	52.50	52.80	52.50	52.80	52.50
	Length	75.72	75.72	75.72	78.394	75.72	78.39	75.72
A.T.C.	Number							
AIRPLANE	Installations			Douglas JD-1 Douglas A-26B,C Douglas XA-26C Douglas XFA-26C	Northrop P-15A Northrop XP-15A Northrop P-61C Northrop XP-61F Republic P-47N	Curtiss C-46A Curtiss C-46D-10 Curtiss C-46E(R5C-2) Curtiss C-46F Curtiss C-46G *Curtiss XC-113	Northrop P-61C Northrop XP-61D Republic P-47K Convair T-29A Chase C-123B	Douglas JD-1 Douglas A-26B Douglas A-26C Douglas XA-26C Douglas XFA-26C
NOTES		Similar to -27 with water injection. None manufactured.	Similar to -43 with water injection. None manufactured.	Similar to -27 with G.E. Tubular Harness. *Built by Ford only.	Similar to -57 with G.E. cast injection harness and double acting propeller governor. *Built by Chevrolet only.	*-75 in right nacelle (G.E.) TG-100 jet in left nacelle. Similar to -51 with G.E. Tubular Harness. **Built by Ford only.	Similar to -57 with double acting governor. *Built by Chevrolet only.	Similar to -27 with water injection and G.E. Tubular Harness. *Built by Ford only.

ENGINE MODEL	Type P&W A	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force Navy	*-81	***-83, -83A *****-83WA	*-85, -85A	-85XA	-87	-89	-91
SPECIFICATION	Number	A-8068-E App.D	A-8104-A	A-8104-A App. A	(A-8104-A App. A applies)	A-8068-E App. E	A-8104-A App. B	A-8104-A App. C
RATINGS	Take Off	2100/2800	2100/2800	2100/2800	2100/2800	2100/2800	2100/2800	2100/2800
	Military	2100/2800/28.5	2100/2800/3000 1700/2800/16000	2100/2800/3000 1700/2800/16000	2100/2800/3000 1700/2800/16000	2100/2800/28.5	2100/2800/3000 1700/2800/16000	2100/2800/3000 1700/2800/16000
	Normal	1700/2600/26.5	1700/2600/7300 1500/2600/17500	1700/2600/7300 1500/2600/17500	1700/2600/7300 1500/2600/17500	1700/2600/26.5	1700/2600/8500 1500/2600/18500	1700/2600/8500 1500/2600/18500
	Max. Cont.							
	Cruise							
FUEL	Grade	100/130	100/130	100/130	100/130	100/130	100/130	100/130
CURVES	Spec.	T-838	T-965, T-960F	T-965, T-960F	T-965, T-960F	T-838	T-965, T-960F	T-965, T-960F
	Oper.	Inst. 1695	Inst. 1731	Inst. 1731	Inst. 1731			
WEIGHT, DRY	Pounds	2345	*2384	2375.5	2375.5	*2351	2384	2375.5
PROP. SHAFT	Ratio	.45:1	.450:1	.450:1	.450:1	.450:1	.450:1	.450:1
	Spline	60A	60A	60A	60A	60A	60A	60A
CYLINDERS	Comp. Ratio	6.75:1	6.75:1	6.75:1	6.75 :1	6.75:1	6.75:1	6.75:1
IMPELLER	Ratio	7.29:1	7.29:1 9.45:1	7.29:1 9.45:1	7.29:1 9.45:1	7.29:1	7.29:1 9.45:1	7.29:1 9.45:1
CARBURETOR	Model	PR-58E2-2	PR-58E2-2	PR-58E2-2	PR-58E2-2	PR-58E2-2	PR-58E2-2	PR-58E2-2
MAGNETOS	Model	S-16RG-P1	S-16RG-P1	S-16RG-P1	S-16RG-P1	S-16RG-P1	S-16RG-P1	S-16RG-P1
INST. DWG.	Number	90801	93101	93101	93101	90801	93101	93101
DIMENSIONS	Diameter	52.80	52.80	52.80	52.80	52.80	52.80	52.80
	Length	78.39	78.13	78.13	78.13	78.39	78.13	78.13
A.T.C.	Number							
AIRPLANE	Installations	Republic P-47N	****Bought AF-123 Curtiss XC-46B Douglas A-26D,DC-6B Douglas A-26F **Douglas XA-26F Lockheed C-69E *****If with water & power control: Purchased by Navy from Capital Airlines as -83A.	Fairchild C-82A,N Martin 202 (-85)	Douglas XC-112A			
NOTES		Similar to -57 with G.E. Cast Harness. *Built at K.C. only.	+Includes torquemeter Similar -34W with provision for double acting governor. G.E. Cast Ignition Equipment. No R.H. Auxiliary Drive. Manifold Pres. Regulator. **With 1-15 jet (G.E.) ***Built by Chevrolet only. -83A has DF-16LN (N.T.) no water regulator. ****Test flown 10-14-49 Trenton	Similar -34 with provision for double acting governor. G.E. Cast Ignition Equipment. No R.H. Auxiliary Drive. No Manifold Pressure Regulator. *Built by Chevrolet only. -85A was -34 except G.E. ign. & single acting governor.	Like -85 with additional high speed generator drive in place of L.H. power take-off.	None manufactured. *Includes torquemeter. Similar to -73 Includes lengthened conn. rods and cyl. bbls. long master rod secondary C'balances. redesigned piston with reloc. piston pin hole and longer skirt: also revised heliccil spark plug inserts.	None manufactured. Provision for double acting governor. Similar to -83 with lengthened conn. rod and cyl.bbl., long M.R. secondary C'balances. redesigned piston pin hole and longer skirt: also revised heliccil spark plug inserts.	None manufactured. No manifold pressure regulator. Similar to -85 with lengthened conn.rod and cyl.bbl., long M.R. secondary c'balances. redesigned piston with relocated piston pin hole and longer skirt: also revised heliccil spark plug inserts.

PRATT & WHITNEY AIRCRAFT ENGINES
MODEL DESIGNATIONS and CHARACTERISTICS

ENGINE MODEL	Type P & W A	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800	R-2800
	Air Force	-93	*-95	*-97	*-99W	*-101		
	Navy							-103W
SPECIFICATION	Number			A-8134A	A-8146C			A-8147
RATINGS	Take Off			2400/2800/S.L.wet(L) 1900/2600/10000 wet(H) 2100/2800/3000 dry(L)	2500/2800/2500 wet(L) 2300/2800/3500 dry(L)			2500/2800/2500 wet(L) 2200/2800/4500 dry(L)
	Military				2300/2800/3500			
	Normal			1800/2600/6000 1600/2600/14500	1900/2600/7000 1700/2600/14500			1900/2600/7000 1700/2600/14500
	Max. Cont.							
	Cruise							
FUEL	Grade			100/130	115/145			115/145
CURVES	Spec.			T-1085	T-1207			T-1253
	Oper.			Inst. 7362	Inst. 16801			
WEIGHT, DRY	Pounds			**2350	**2390			*2390
PROP. SHAFT	Ratio		.450:1	.450:1	.450:1			.450:1
	Spline			60A	60A			60A
CYLINDERS	Comp. Ratio			6.75:1	6.75:1			6.75:1
IMPELLER	Ratio			7.29:1, 9.1:1				
CARBURETOR	Model		PR-5885-8	PR-5885-11	PR-5885-22			PR-5885-22
MAGNETOS	Model			DLN-10 (L.T.)	DLN-10 (L.T.)	S-1690-P1		DLN-10 (L.T.)
INST. DWG.	Number		95301	145901	195601			249601
DIMENSIONS	Diameter			53.00	53.00			53.00
	Length			78.50	81.50			81.50
A.T.C.	Number							
AIRPLANE	Installations		**Douglas C-118	***Chase XC123 Convair T-29A,B Convair VT-29	Chase C-123B Convair T-29C,D Convair C-131A Fairchild C-123B Stroukoff XC-123E	Beech T-36A		Convair C-131B
NOTES		None manufactured.	*Sold as CA15 App."B" **Presidential DC-6 Designed by Truman as "Flying White House". Later called Independence. Low ratio right gen. dr. High ratio Left gen. dr. Water Injection High Tension Ign. Fire Seal Diap. Right Vac. Drive 5" pad. Left Vac. Drive 1 7/8" pad.	Similar Convair 240 except navigation trainer. *Originally sold as Double Wasp CA18 with modifications. **Includes torquemeter. ***Crashed at Elgin Field.	*Also Nash built **Fireseal Diaphragm 3# W/Reg. 13's extra. Incl. Torquemeter. Basically similar -52W except incorp. a Hi Speed (3:1) gen. dr.	*Converted -57 with G.E. harness and 2 Hi Speed (3.003:1) gen. drives.		102 of -99W converted by PAC to -103W. Similar -99W except substitution of Hi Speed gen. dr. to -52W Lo Speed gen. dr. and ratings. *Fireseal Diaphragm 3# W/Reg. 13's extra. Incl. Torquemeter.

ENGINE MODEL	Type P & W A							
	Air Force							
	Navy							
SPECIFICATION	Number							
RATINGS	Take Off							
	Military							
	Normal							
	Max. Cont.							
	Cruise							
FUEL	Grade							
CURVES	Spec.							
	Oper.							
WEIGHT, DRY	Pounds							
PROP. SHAFT	Ratio							
	Spline							
CYLINDERS	Comp. Ratio							
IMPELLER	Ratio							
CARBURETOR	Model							
MAGNETOS	Model							
INST. DWG.	Number							
DIMENSIONS	Diameter							
	Length							
A.T.C.	Number							
AIRPLANE	Installations							
NOTES								

REVISED 7/2/54

CURVE INDEX – DOUBLE WASP COMMERCIAL ENGINES

	CA3	CA15	CA18	CB2	CB3	CB4	CB16	CB17	MILITARY
APPROXIMATE MILITARY COUNTERPART		-95	-97	-48				-52W,-99W,-103W	
SPECIFICATION NO.	8111	8116	8124	8135	8140	8141	8138	8139	
INSTALLATION DRAWING NO.	95301	95301	95301	136701	136701	136701	136701	136701	
A.T.C. NO.	231	231	231	MILITARY	264	264	264	264	
SPECIFICATION CURVE NO.	T-995	T-1003	T-1016	T-1096	T-1126	T-1127	T-1115	T-1116	
SPECIFIC OPERATING INSTRUCTION NO.	O.I. 82	O.I. 80	O.I. 84	O.I. 91	O.I. 112		O.I. 108	O.I. 113	
FUEL GRADE	100/130	100/130	100/130	115/145	100/130	108/135	100/130	108/135	
LOW & HIGH BLOWER GEAR RATIOS	7.29:1	7.29:1 & 9.45:1	7.29:1 & 9.1:1	7.29:1	7.29:1	7.29:1	7.29:1 & 8.58:1	7.29:1 & 8.58:1	
IMPELLER DIAMETER IN.	11.5	11.5	11.5	12.5	12.5	12.5	12.5	12.5	
HUMIDITY EFFECT ON BHP	7239 →								
% BEST POWER BHP VS F/A-20°SA	7243 →								
% BEST POWER BHP VS F/A-35°SA	7242 →								
% BEST ECONOMY BSFC VS F/A-20°SA	7236 →								
EXHAUST BACK PRESSURE CORRECTION CURVES:									
REPORT NO. PWA INST. 198									
(A) MFHP VS RPM	7234 →								
(B) F_A VS P_X/P_M	7231 →								
(C) PHP VS P_X-P_M (MOTORING)	7225 →								
(D) PHP VS P_X-P_M (FIRING)	7228 →								
CHT CORRECTION CURVE	16792 →								
BACK PRESSURE CORRECTION CURVE	8749 - FOR ALL CA ENGINES →			16433 - FOR ALL CB ENGINES →					
OPERATING CURVE - AUTO RICH	1747-2,-12,-102	1745-2,-4,-12,-14	7277-2,-4	7398-2	14829-2	16750-2	14817-2,-4	16459-2,-4	
OPERATING CURVE - AUTO LEAN	1747-1,-11,-101	1745-1,-3,-11,-13	7277-1,-3	7398-1	14829-1	16750-1	14817-1,-3	16459-3,-4	
OPERATING CURVE - BEST POWER - LOW BLOWER	1745-1B*	1745-1B	7277-1B	16639-1B*	16639-1B	16639-1B*	16639-1B	16459-1B	
OPERATING CURVE - BEST POWER - HIGH BLOWER		1745-3B	7277-3B				16639-3B	16459-3B	
FUEL FLOW VS BHP AT BEST ECONOMY - LOW	1745-1F*	1745-1F	7277-1F	16639-1F*	16639-1F	16639-1B*	16639-1F	16459-1F,-102F	
FUEL FLOW VS BHP AT BEST ECONOMY - HIGH		1745-3F	7277-3F				16639-3F	16459-3F,-302F	
AIRFLOW CURVE - STANDARD CONDITIONS	16513-1	16513-1,-2	16513-1	16506-1*	16506-1	16506-1*	16506-1,-2	16506-1,-2	
AIRFLOW CURVE - 100°F CAT. - 31" HG BACK PRESS.	1747-203								
CARBURETOR SETTING CURVES:									
PR-58-E5-4	7282	7282	7282						
PR-58-E5-5				7256					7256
PR-58-E5-15							16613	16613	16613* (SAME AS MIL.-16)
PR-58-E5-16									17239(-52W)
PR-58-E5-17							16711	16711	
PR-58-E5-19		16862	16862						
PR-58-E5-22									16826(-99W & -103W)
PR-58-E5-25		16976	16976						
PR-58-E5-27					16887	16887*	16887	16887	
PR-58-E5-174							16618		
PR-58-E5-29							16386	16386	
OVERHAUL ACCEPTANCE CURVES:									
WET TAKE-OFF									
TORQUE PRESSURE CORRECTION	4	4	4		17	17	17	10	
POWER ACCEPTANCE	5	5	5		18	18	18	11	
SUPERCHARGER PERFORMANCE	6	6	6		19	19	19	12	
PART THROTTLE SUPERCHARGER PERF.					13†	13†	13†	13	
DRY TAKE-OFF									
TORQUE PRESSURE CORRECTION	1	1	1	7	14	14	14	7	22
POWER ACCEPTANCE	2	2	2	20	15	15	15	8	23
SUPERCHARGER PERFORMANCE	3	3	3	21	16	16	16	9	24
MINIMUM FUEL FLOW CURVES									
PR-58-E5-15							16619	16619	
PR-58-E5-16									17292(-52W)
PR-58-E5-17				16869*	16869	16869*	16869	16869	
PR-58-E5-19		16719	16719						
PR-58-E5-22									17293(-99W & -103W)
PR-58-E5-25		16972	16972						
PR-58-E5-27				16868*	16868	16868*	16868	16868	
PR-58-E5-29							18387	18387	

↑——↑ SIMILAR ENGINE-RATING & FUEL GRADE DIFFER
*APPLICABLE
†PARTIALLY APPLICABLE

PRATT & WHITNEY MILITARY R-2800 SERIES, 5E-8

Model	L-2800-27,-27M1,-31,-31M1, -43,-51,-51M1,-71,-75, -75M1,-79	R-2800-21,-21M1,-51M3,-51M4, -59,-59M1,-63,-75M2,-75M3	R-2800-31M2,-51M2	R-2800-34,-34M1,-83,-83A, -83AM3,-83AM4,-83AM4A, -85,-85A,-85XA	R-2800-57,-73,-77, -83AM2,-83AM12, -101
Type 18RA - reduction gearing	2:1 except 16:9 on -31,-31M1	2:1	2:1 except 16:9 on -31M2	20:9	--
Similar civil model series	B	--	--	C & CA	--
Rating (With low imp. gear ratio):	7.6:1	--	7.29:1	--	--
Max. continuous, hp, rpm, in.Hg., at:					
Rated press. alt. (ft.)	1700-2550-43.0-5600	--	1700-2550-43.5-4800	1800-2600-44.0-5500	--
Sea level press. alt. (ft.)	1700-2550-44.0-S.L. or 1600-2400-41.5-5300	--	1700-2550-45.0-S.L. or 1600-2550-41.5-4800	1800-2600-45.0-S.L. (or for -83AM4A only) 1900-2600-46.5-1900	-- —
	1600-2400-43.2-S.L.	--	1600-2550-43.0-S.L.	1900-2600-47.5-S.L.	—
Takeoff (5 min.), hp, rpm, in.Hg., at:	(Dry)			(Dry)	
Rated press. alt. (ft.)	2000-2700-61.0-1800	--	--	2100-2800-62.6-3400	--
Sea level press. alt. (ft.)	2000-2700-62.0-S.L.	--	--	2100-2800-64.0-S.L. (With ADI for models -34M1, -83AM3,-83AM4,-83AM4A only)	-- (With ADI)
				2400-2800-56.0-1000	--
				2400-2800-56.5-S.L.	--
Rating (With high imp. gear ratio):	9.59:1	—	—	9.45:1	—
Max. continuous, hp, rpm, in.Hg., at:					
Rated press. alt. (ft.)	1460-2400-43.0-13300	—	—	1600-2600-46.0-16200	—
Low critical press. alt. (ft.)	1460-2400-43.5-9000	—	—	1600-2600-46.5-10000 or 1500-2500-42.0-16000	—
				1600-2600-43.0-10000	
Fuel (Min. grade aviation gas.)	Grade 100/130	--	--	--	--
Bore and stroke, in.	5.75 x 6.00	--	--	--	--
Displacement, cu. in.	2804	--	--	--	--
Compression ratio	6.65:1	--	--	6.75:1	--
Weight (dry), lbs.	See NOTE 3	--	--	--	--
C.G. location (dry)					
Fwd. of mounting pad C.L., in.	14.1	--	--	—	—
Fwd. of mounting lug rear edge., in.	—	—	—	11.8	--
Above prop. shaft C.L., in.	.2	--	--	--	--
Propeller shaft, SAE No.	50	--	--	60-4	--
Carburetion	Stromberg PT-1301 or G6 carburetor	--	PR-58E2 carburetor	--	--
Ignition, Dual	Scintilla DF-18RN on models -27, -27M1,-31, -31M1,-43,-51,-51M1 G.E. S18-LG-P on models -71,-75,-75M1 & -79	Scintilla DF-18RN on models -21,-21M1, -51M3,-51M4,-63 G.E. S18-LG-P on models -59,-59M1,-75M2,-75M3	Scintilla DF-18RN	DF-18-LN(high tension) or DLN-10(low tension) GE-S18LG for models -83,-85 only	DF-18-LN(high tension) or DLN-10(low tension) GE-S18LG for model -73 only
Ignition Timing, OBTC	20	--	--	--	--
NOTES	1,2,3,4,5,7,9,10,11	1,2,3,4,5,7,9,10,11	1,2,3,4,5,7,9,10,11	1,2,3,4,5,6,8,9,10, 11,12	1,2,3,4,6,8,9,10,11,12

ENGINE LISTING

Revised December 16, 1957

PRATT & WHITNEY MILITARY R-2800 SERIES, 5E-8 (Continued)

Model	R-2800-57M1, -83AM10	R-2800-83AM6,-83AM9	R-2800,-52WM1,-83AM5	R-2800-52W,-83AM7, -103W	R-2800-83AM8,-83AM11	R-2800-83AM13,-83AM14
Type 18RA - reduction gearing	16:9(2:1,-57M1 only)	20:9	- -	- -	- -	16:9
Similar civil model series	B & C	C & CA	CB16	CB17	C & CB	B, C & CB
Rating (With low imp. gear ratio):	7.29:1	- -	- -	- -	- -	- -
Max. continuous,hp,rpm,in.Hg., at:						
Rated press. alt. (ft.)	1700-2600-41.5-8000	1800-2600-44.0-6600	1800-2600-48.5-8200	1900-2600-50.0-7100	1675-2600-42.0-12000	1700-2600-43.0-11500
Sea level press. alt. (ft.)	1700-2600-44.0-S.L.	1800-2600-46.0-S.L.	1800-2600-48.5-S.L.	1900-2600-51.5-S.L.	1675-2600-45.0-S.L.	1700-2600-46.0-S.L.
Takeoff (5 min.),hp,rpm,in.Hg.,at:	(Dry)	(Dry)	(Dry)	(Dry)	(Dry)	(Dry)
Rated press. alt. (ft.)	2000-2700-50.5-4800	2100-2800-52.5-3400	2060-2700-53.0-6900	2200-2800-59.0-5200	1950-2800-51.0-9800	2000-2700-52.0-7700
Sea level press. alt. (ft.)	2000-2700-52.0-S.L.	2100-2800-54.0-S.L.	2050-2700-55.0-S.L.	2200-2800-60.0-S.L.	1950-2800-53.0-S.L.	2000-2700-53.5-S.L.
			1950-2800-51.0-9800			
			1950-2800-53.0-S.L.			
	—	(With ADI)(-83AM9 only)	(With ADI)	(With ADI)	(With ADI)	—
Rated press. alt. (ft.)		2400-2800-56.0-1000	2400-2800-59.0-6000	2500-2800-61.5-3700	2250-2800-55.0-7000	—
Sea level press. alt. (ft.)		2400-2800-56.5-S.L.	2400-2800-59.5-S.L.	2500-2800-62.0-S.L.	2250-2800-56.5-S.L.	
Rating (With high imp. gear ratio):	9.45:1(-83AM10 only)	9.1:1	8.58:1	- -	- - (-83AM11 only)	- - (-83AM13 only)
Max. continuous,hp,rpm,in.Hg., at:						
Rated press. alt. (ft.)	1600-2600-45.0-16200	1675-2600-47.0-13500	1700-2600-47.5-16800	1750-2600-49.5-15000	1600-2600-44.0-16000	- -
Low critical press. alt. (ft.)	1600-2600-46.5-10000	1675-2600-49.0-8000	1700-2600-48.5-10000	1750-2600-51.5-10000	1600-2600-46.5-10000	- -
Takeoff (5 min.),hp,rpm,in.Hg.,at:	—	(With ADI)(-83AM9 only)	—	(With ADI)	—	—
Rated press. alt. (ft.)		1900-2600-48.0-10900		1900-2600-48.0-15700		
Low critical press. alt. (ft.)		1900-2600-49.5-8000		1900-2600-50.5-10000		
Fuel (Min. grade aviation gas.)	100/130	- -	- -	108/135	100/130	- -
Bore and stroke, in.	5.75 x 6.00	- -	- -	- -	- -	- -
Displacement, cu. in.	2804	- -	- -	- -	- -	- -
Compression ratio	6.75:1	- -	- -	- -	- -	- -
Weight (dry), lbs.	(See NOTE 5)	- -	- -	- -	- -	- -
C.G. location (dry)						
Fwd. of mounting pad C.L., in.	—	—	—	—	—	—
Fwd. of mounting lug rear edge, in.	11.8	- -	11.6	- -	- -	- -
Above prop. shaft C.L., in.	.2	- -	- -	- -	- -	- -
Propeller shaft, SAE No.	50	60-A	- -	- -	- -	- -
Carburetion	PR-58E2 carburetor	PR-58E5 carburetor	- -	- -	- -	- -
Ignition, Dual	DF-18-LN(high tension) or DLN-10(low tension)	- -	- -	- -	- -	- -
Ignition timing, °BTC	20	- -	- -	- -	- -	- -
NOTES	1,2,3,4,5,6,9,10,11,12	1,2,3,4,5,6,8,9,10,11,12	1,2,3,4,5,8,9,10,11,12	1,2,3,4,5,8,9,10,11,12	1,2,3,4,5,6,8,9,10,11,12	1,2,3,4,5,6,9,10,11,12

NOTE 1. Maximum permissible temperatures are as follows:

Model	Cylinder Head, °F	Cylinder Barrel, °F.	Oil Inlet, °F.
R-2800 B Series	500(Spark plug gasket)	340	200 (205 with P/Ns. 79160 and 79151 oil pump drive gears and AEF P/N 20-102 intercylinder oil drain.)
R-2800 C & CA Series	500 Low blower (Wall type) 450 High blower for 1600 BHP & 1675 BHP (Wall type) 500 High blower for 1500 BHP (Wall type)	350	212
R-2800 CB Series	500 (Wall type)	350	212

NOTE 2.

	Max.	Min.	
Fuel Pressure, psi	17	14	With 5# discharge nozzle spring
	25	21	With 10# discharge nozzle spring
Oil Pressure, psi	100	60	

NOTE 3. The following accessory drives are provided:

R-2800-B series engines (basic drives - note exceptions below)	Drive Ratio (Times crankshaft)	Rotation (C,clockwise; CC, counter clockwise)	Max. Torque (in.lbs.) Continuous	Max. Torque (in.lbs.) Static	Max. Overhang (in.lbs.)
Starter	1.0	C	5500	30000	340
Generator (optional on right or left rear)	1.4	C	1300	12000	300
Vacuum pump (optional on right or left gen. drive)	1.4	C	185	2250	—
Fuel pump	.864	CC	356	1380	10
1st pump auxiliary (right side)	1.4	C	186	2250	40
2nd pump auxiliary (left side)	1.4	CC	185	2250	40
Propeller governor	1.0	C	110	440	—

R-2800-21,-59,-63 engines incorporate right and left generator drive pads on rear cover without pump drive adapters and side auxiliary drives.
R-2800-43,-61,-75 engines incorporate dual pump drive adapter (over left generator drive) providing 2 angular side drive pads similar to 2nd aux. & generator type drive at rear.
R-2800-27,-71,-79 engines incorporate a pump drive adapter (over left gen. drive) similar to 1st auxiliary.