DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

E-265
Revision 9

Westinghouse
24C4D-1
J34-WE-34
J34-WE-36
W-340

August 8, 2012

TYPE CERTIFICATE DATA SHEET NO. E-265

Engines of models described herein conforming with this data sheet (which is a part of type certificate No. E-265) and other approved data on file with the Federal Aviation Administration meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Civil Air Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder	Neptune Aviation Services, Inc. 2 Corporate Way Missoula, Montana 59808
Type Certificate Holder Record	Neptune, Inc. 5225 Hwy 10 West, Box 17 Missoula, MT 59802 Steward-Davis, Inc. 3200 Cherry Avenue Long Beach, California

Model	24C4D-1	J34-WE-34, -1, -2	W-340, -1, -2
Type - Turbojet	Axial flow, eleven stage compressor; double annular combustion chamber, two stage turbine	- -	- -
Ratings			
Maximum continuous static thrust, lb., rpm, at sea level	2650 - 11800	- -	3000 - 12000
Takeoff static thrust (5 minutes), lb., rpm, at sea level	3250 - 12500	- -	3400 - 12500
Fuel control	Holley B5805	- -	Holley PB5805
Fuel	Aviation gasoline (MIL-F-5572)	Aviation gasoline (MIL-F-5572) JP-3 (MIL-F-5624)	- - - -
Oil	(MIL-O-6801) grade 1010	- -	- -
Principal dimensions			
Length overall, in.	120 (with exhaust nozzle)	- -	111.5 (less exhaust nozzle)
Height, in.	35.2	- -	- -
Weight (dry), lb. (with single lever control, all accessory drives, engine lubrication systems, but less generator, hydraulic pump and tachometer generator)	1233	1233	1184
C.G. location fwd of rear engine mount, in.	11	11	8
Ignition	Two igniter (P/N 62G488) and two ignition coils (P/N 23F856)	- -	Scintilla TLN-10 ignition and two igniters (P/N 64G876)

	or Scintilla TLN-10 ignition unit and two igniters (P/N 64G876)		
NOTES	1,2,3,4,5,6,7,11	1,2,3,4,5,6,7,8,9,10,11	1,2,3,4,5,6,7,10,11,12,13

"- -" indicates "same as preceding model."
"—" indicates "does not apply.'

Certification basis

Regulations & Amendments	Model	Date of Application	Date Type Certificate No. 265 Issued
CAR 13 effective 8-1-41 as amended by 13-1	24C4D-1	4-28-50	5-19-50
CAR 13 effective 6-16-56	W-340 (J34-WE-36)	4-18-55	8-10-56
CAR 13 effective 6-15-56 as amended by 13-1, 13-2, , 13-3	J34-WE-34	4- 3-58	9-19-60

NOTE 1.

Maximum permissible temperature limits: Measured exhaust gas temperatures	Model 24C4D-1	Model J34-WE-34	Model W-340
Takeoff	1260°F*	1260°F*	*
Maximum continuous	1175°F*	1175°F*	*
Oil inlet temperature	190°F	190°F	210°F
Turbine inlet temperature	1490°F	1490°F	1525°F

*Each W-340 engine and any engine model having Engine Bulletin No. 294 incorporated will have individual turbine outlet temperature maximum values corresponding to the maximum turbine inlet temperature for takeoff on a 100°F. day. Maximum continuous power is obtained at maximum continuous rpm with the exhaust nozzle set for a 100°F. day and the gas outlet temperature resulting, although this temperature will be lower than at takeoff.

NOTE 2.

Fuel and oil inlet pressure limits:	24C4D-1	J34-WE-34	W-340
Fuel: Minimum at fuel line connection to engine	10 p.s.i.g.	- -	- -
Operating fuel inlet gage pressure	20 ± 10 p.s.i.g.	- -	- -
Oil: Minimum at oil line connection to engine	4 p.s.i.a.	- -	- -
Operating oil gage pressure	20 - 170 p.s.i.	- -	120 ± 35 p.s.i. 20 p.s.i. (idle)

"p.s.i.a." means lb. per sq. in. absolute
"p.s.i.g." means lb. per sq. in. gage

NOTE 3. The engine ratings are based on static sea level conditions of 59°F, 29.92 in. Hg. and dry air using no air bleed or power to drive aircraft accessories, with limiting gas temperatures as in Note 1, and jet nozzle sizes as follows:

24C4D-1, J34-WE-34	W-340
173 ± 5 sq. in. tabbed to size corresponding to 1490°F. or T.O. turbine inlet temperature on a hot day (100°F).	185 ± 5 sq. in. tabbed to size corresponding to 1525°F. for T.O. turbine inlet temperature on a hot day (100°F.)

NOTE 4. The following accessory drive provisions are available:

	Rotation*	Speed (Ratio to Turbine)	Cont. Torque (in.-lb.)	Static Torque (in.-lb.)	Maximum Overhang (in.-lb.)
Starter (W-340)	C	1.0	**	6000	300
Starter (24C4D & J-34-WE34)	C	1.0	470	5400	300
Generator (W-340)	C	.667	500	2200	400
Generator (24C4D & J-34-WE34)	C	.669	500	2200	400
Hydraulic pump (W-340)	CC	.264		2500	75
Hydraulic pump (All)	CC	.264	600	1650	75
Hydraulic pump (W-340)	CC	.667	35	600	75
Tachometer (24C4D & J34-WE34)	CC	.3364	7	50	
Tachometer (W-340)	CC	.3364	15	70	

*C - Clockwise; CC - counter clockwise
**1200 in.-lb. at 1500 rpm

NOTE 5. All models are equipped with Type E-2 electric starter at the additional weight of 41 lb.

NOTE 6. Models 24C4D and J34-WE-34 have no provisions for anti-icing the engine inlet and are not approved for use in icing conditions. Model W-340 is satisfactory for operation in icing conditions.

NOTE 7. These engines must be installed with suitable compressor section external armor to preclude possible secondary damage in the event of compressor blade failure.

NOTE 8. The use of 5% alcohol in fuel is approved for the J34-WE-34 engine.

NOTE 9. Military model J34-WE-34 engines produced by the Aviation Gas Turbine Division, Westinghouse Electric Corporation and built to Westinghouse Parts Lists 58J59-1, -2, -3, -4, -6, -9, -11, -14, and -17 are eligible. Engines built to Westinghouse Parts Lists 43J745-2 and -3 are eligible if modified to the 58J59-1 configuration by incorporating the engine bulletins listed in Table II, Setion II of T.O. AN 02B-110ABA-3 dated 1 April 1957. All J34 models must have Engine Bulletins 124 and 129 incorporated.

NOTE 10 The J34-WE-34-1, J34-WE-36-1 and the W340-1 engines incorporate Steward-Davis accessory gear box drive shaft SDD-472. The -2 engines incorporate Steward-Davis accessory gear box drive shaft SDD-410A.

NOTE 11. These engines must comply with Steward-Davis, Inc. Service Bulletin No. 215 Revision "A" dated August 1, 1964, or later FAA approved revision, before eligible for installation on certificated aircraft.

NOTE 12. The model W-340 engine is defined by Westinghouse Drawing 103T850.

NOTE 13. Military model J34-WE-36 engines produced by the Aviation Gas Turbine Division, Westinghouse Electric Corporation and built to Westinghouse Parts List 58J300-24 are eligible with the same ratings and limitations which apply to the civil model W-340.

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