



## 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 <u>24C4D-1</u>	Model <u>J34-WE-34</u>	Model <u>W-340</u>
	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:	<u>24C4D-1</u>	<u>J34-WE-34</u>	<u>W-340</u>
	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:

<u>24C4D-1, J34-WE-34</u>	<u>W-340</u>
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

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- 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, Section 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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