

MODELS: Wright Cyclone R and GR-1820G-5, -5E and Military R-1820-22

T.C. NUMBER: T.C. 154

Model - Cyclone Type - 9RA	R-1820G-5, -5E Direct drive	GR-1820G-5, -5E 16:11 reduction gearing
Rating (with low impeller gear ratio):	7.14:1	--
Maximum continuous, hp, rpm, in.Hg., at:		
Rated pressure altitude (ft.)	850-2100-34.0-6000	--
Sea level pressure altitude	850-2100-35.7-8.L.	--
Take-off (5 minutes), hp, rpm, in.Hg.	1000-2200-41.0	--
Rating (with high impeller gear ratio) (See NOTE 2)	10:1	--
Maximum continuous, hp, rpm, in.Hg., at:		
Rated pressure altitude (ft.)	750-2100-33.5-15200	--
Take-off (one minute), hp, rpm, in.Hg., at:		
Rated pressure altitude (ft.)	810-2100-38.0-7000	--
Fuel (minimum octane aviation gasoline)	87 (See NOTE 3)	--
Bore and stroke, in.	6.125 x 6.875	--
Displacement, cu. in.	1823	--
Compression ratio	6.45:1	--
Weight (dry), lbs.	1115, 1139	1210, 1234
Propeller shaft, SAE No.	40	50
Carburetion	Stromberg NA-F7F or NA-F7J with 2-3/8 in. venturi, Holley C.G. 1375 C, E, F, H or Chandler-Evans 1375 LA-1 carburetor	--
Ignition, dual	Scintilla SF9L1, SF9L2, SF9LN1, SF9LN2, SF9L3 or SF9L4 magnetos	--
NOTES	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6
Certification basis	Type Certificate No. 154	
Production basis	None. The manufacturer does not hold a production certificate for the production of engines under this type certificate and, therefore, each engine so produced is subject to a detailed inspection for workmanship and conformity with the approved data by a Civil Aeronautics Administration Agent. In addition, the engine must have a satisfactory run-in including 5 hours at rated power and speed. Upon satisfactory completion of the above, the agent will tag the engine with Tag Form ACA 186.	

NOTE 1. Maximum permissible cylinder head, barrel, and oil inlet temperatures 500 degrees F., 300 degrees F., and 200 degrees F., respectively.

NOTE 2. The high ratio may be used for maximum continuous, at any altitude although more power is obtained from the low ratio below 7000 ft. The high ratio is not intended for take-off below 7500 ft.

NOTE 3. 80 Octane fuel may be used provided 29 in.Hg. and 1900 rpm are not exceeded.

NOTE 4. Models R-1820G-5E and GR-1820G-5E engines differ from the R-1820G-5 and GR-1820G-5 models respectively only in that they incorporate the G-100 series steel crank case.

NOTE 5. Eligible with torquemeter No. 413516 with weight increase of 12 lbs.

NOTE 6. Military model R-1820-22 is identical to model GR-1820G-5. When installed in certificated aircraft, the designation GR-1820G-5 and T.C. No. 154 should be added to the engine designation plate.