

MODELS: Wright Cyclone R and GR-1820G-3, -3B and Military R-1820-77

T.C. NUMBER: T.C. 171

Model - Cyclone	R-1820G-3, GR-1820G-3	R-1820G-3B, GR-1820G-3B
Type - 9RA	Direct drive, 16:11 reduction gearing	--
Rating:		
Maximum continuous, hp, rpm, in.Hg., at:		
Rated pressure altitude (ft.)	840-2100-35.0-8700	820-2100-35.3-8800
Sea level pressure altitude	760-2100-35.0-S.L.	820-2100-38.5-S.L.
Take-off (one minute), hp, rpm, in.Hg.	875-2200-38.5	800-2350-41.0
Fuel (minimum octane aviation gasoline)	87	--
Bore and stroke, in.	6.125 x 6.875	--
Displacement, cu. in.	1823	--
Compression ratio	6.45:1	6.2:1
Weight (dry), lbs.	1103, 1198	--
Propeller shaft, SAF No.	40, 50	--
Supercharging (impeller gear ratio)	8.30:1	--
Carburetion	Holley C.G. 1375 C, E, F or H, Stromberg NA-F7F with 2-3/8 in. venturi, Chandler-Evans 1375 DA-1 carburetor	--
Ignition, dual	Scintilla SF9L1, SF9L2, SF9LN, SF9LN1, SF9IN2, SF9L3 or SF9L4 magnetos	--
Ignition timing, degrees BIC	Right 20; left 15	--
NOTES	1, 2, 3, 4	1, 3
Certification basis	Type Certificate No. 171	
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. Eligible with original cylinder head number 65957 with the following rating:

Maximum continuous, hp, rpm, in Hg., at:	
Rated pressure altitude (ft.)	840-2100-36.0-8700
Sea level pressure altitude	760-2100-36.0-S.L.
Take-off (one minute), hp, rpm, in.Hg.	875-2200-39.0

NOTE 3. Eligible with torque meter number 413516 at weight increase of 12 lbs.

NOTE 4. Military model R-1820-77 is identical to model GR-1820G-3. When installed in certificated aircraft, the designation GR-1820G-3 and T.C. No. 171 should be added to the engine designation plate.