**MODELS:** Gladden Products, Kinner R-5 Series 2, R-55, R-56, Military R-540-1, -3

**T.C. NUMBER:** T.C. 153

<table>
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<tr>
<th>Models - Kinner</th>
<th>R-5 Series 2</th>
<th>R-55</th>
<th>R-56</th>
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<tr>
<td>Type - 5RA</td>
<td>Direct drive</td>
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**Rating:**

- Maximum continuous, hp, rpm, at S. L.
- Pressure altitude: 160-1850-S.L.
- Take-off, hp, rpm, at full throttle: 160-1850

**Fuel (minimum octane aviation gasoline):** 73

**Bore and stroke, in.:** 5.00 x 5.50

**Displacement, cu. in.:** 540

**Compression ratio:** 5.5:1

**Weight (dry), lbs.:** 335, 346, 362

**C.G. location (dry):**
- Forward of mounting face, in.: 5.2, 5.5, 5.7
- Propeller shaft, SAE No.: 1 (Taper), 20
- Carburetion: Stromberg NAR-6 carburetor with 1-15/16 in. venturi or Holley 419 carburetor with 1-49/64 in. venturi

**Ignition, dual:** Scintilla PN-5D or SB-5 magnetos with Apollo impulse coupling (retard 25 degrees)
- Bendix SB-5L magnetos with Apollo impulse coupling (retard 25 degrees)

**Ignition timing, degrees BTC:**
- Right magneto, 25; Left magneto, 27

**Spark plugs:**
- BG-417, S, SU485, Champion C-26, Bendix-Scintilla 437

**NOTES**
- Type Certificate No. 153
- Production Certificate No. 601

**NOTE 1.** Maximum permissible cylinder head, barrel, and oil inlet temperature, 550 degrees F., 300 degrees F., and 200 degrees F., respectively.

**NOTE 2.** The following accessories are eligible as noted and their additional weights included drives:

<table>
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<tr>
<th>Generator (use adapter No. 1308)</th>
<th>Weight (lbs.)</th>
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<tr>
<td>Eclipse Model G3</td>
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<tr>
<td>Leece-Neville Model G2</td>
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</tbody>
</table>
Starter
Eclipse Model E-80 25
Eclipse Model Y-150 23
Eclipse type 390 Model 2 16
Heywood air 9
Geared adapter for electric starters 3

Fuel Pump
Pesco type 4100 4
Evans Model E-7 4

Vacuum Pump
Eclipse Model AP-8 10

NOTE 3. Model R-56, similar to model R-55, incorporates automatic valve gear lubricator, revised pistons and master rod, roller front main bearing, and a 7-1/2 order crankshaft torsional vibration damper on the rear counter weight.

NOTE 4. Military models R-540-1 and R-540-3 are identical to models R-55 and R-56 respectively. When these engines are installed in certificated aircraft, the corresponding civil designation and Type Certificate No. 153 should be added to the engine nameplate.