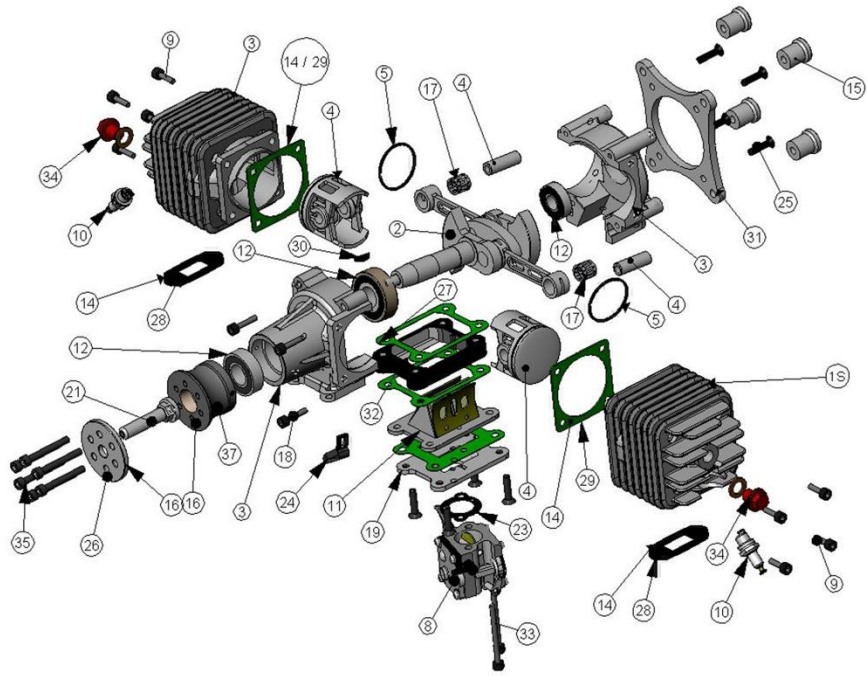
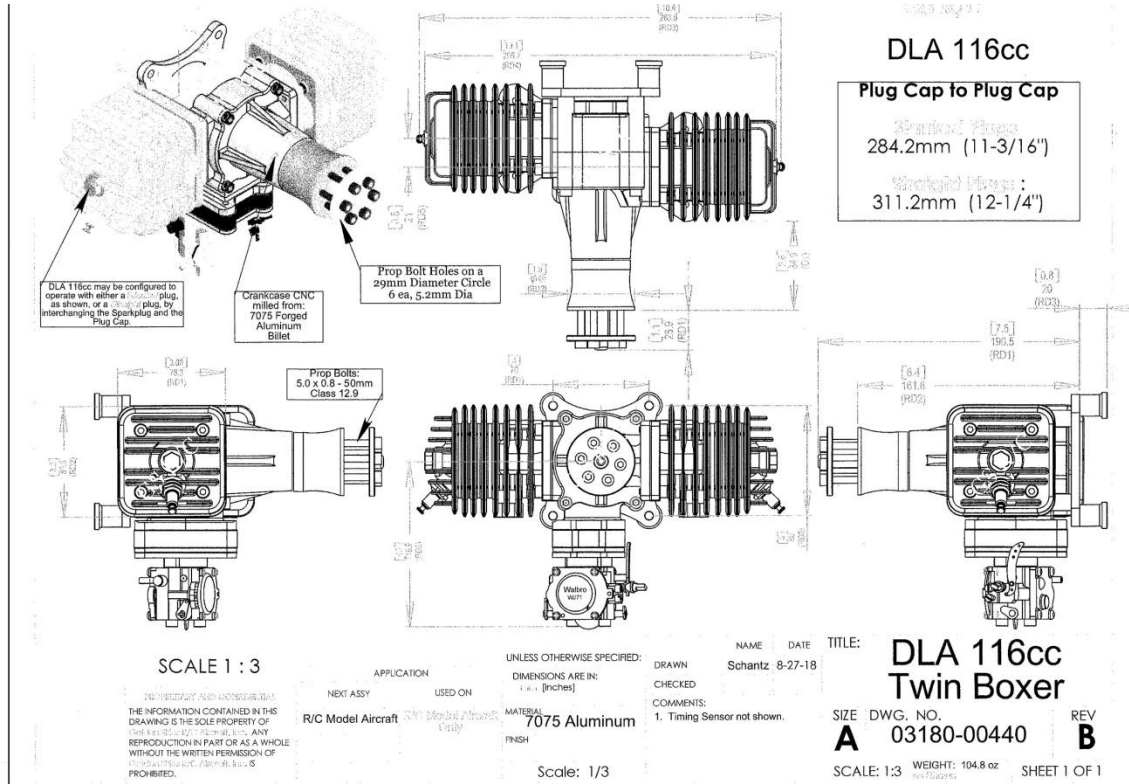


# GOLDEN SKIES R/C AIRCRAFT, Inc.

## Technical Notes: DLA 116 cc Gas Engine



Straight Spark-plug Configuration: Plug-Cap to Plug-Cap = 12-1/4" (~311 mm)  
 Slanted Spark-plug Configuration: Plug-Cap to Plug-Cap = 11-3/16" (~284 mm)

# GOLDEN SKIES R/C AIRCRAFT, Inc.

## Specifications:

### **DLA 116 cc** (7.08 in<sup>3</sup>) Gas Engine

|                                  |  |
|----------------------------------|--|
| Power:                           | 11.8 HP @ 7,500 rpm  |
| Displacement:                    | 116 cc (7.08 in <sup>3</sup> )   |
| Idle Speed:                      | ~ 1,600 rpm  |
| Static Thrust:                   | 59.9 pounds @ 100 m (~ 328 ft Altitude) (Pulling Force)<br>52.5 pounds @ 1800 m (~5,900 ft Altitude) |
| Propellers (Recommended):        | 26 x 10 / 12, 27 x 10, 28 x 8 /10  |
| RPM Range:                       | ~1,300 to ~7,400 rpm   |
| Carburetor:                      | Walbro™, (Typ: WJ-71), Diaphragm Pump  |
| Spark Plug:                      | CM-6 Special Iridium   |
| Muffler Volume:                  | 116 cc (7.08 in <sup>3</sup> )   |
| Cylinder Diameter (Bore) Stroke: | 46.0 mm / 35 mm (1.811 in / 1.38 in)   |
| Compression Ratio:               | 7.8 : 1  |
| Gas                              | 89 – 92 Octane, unleaded (“Regular”)   |
| Gas : Oil Ratios:                | 30 – 40:1 Break-in Trial Run; 40 – 50 : 1 Normal Flying  |
| Weights:                         | Engine: 91.7 oz, Muffler (2): 8.11 oz, Ignition: 6.35 oz<br>(Total: 106.1 oz = 6.63 lbs)             |
| Ignition:                        | Fully Advancing, Auto, <u>C</u> apacitive <u>D</u> ischarge <u>I</u> gnition                         |
| Ignition Power:                  | 6.6 to 8.4 VDC, 2S – LiPO Unregulated  |

## Support Information:

|                                |   |
|--------------------------------|---|
| Ignition Battery:              | 2-S, LiPo, (2,100 - 2,700 mAh Typical), un-regulated.<br>6-S, NiMH, (2,100 mAh Typical), un-regulated   |
| Break-in Propeller (Suggested) | 26 x 10 Sail  |
| Intake Manifold:               | 4-Leaf Reed Valve, V-Configuration  |
| Items Included in Retail Pkg:  | Engine, Muffler (2) / Gasket & Bolts, CD Ignition, Sparkplug (2),<br>Stand-off Mounts (Machined), Operations Manual (on Website),<br>Bolts–Mounting, Spiral-Nylon Wire Sleeve |

|         | Mount Dimensions |        | Mounting Bolts    | Stand-Offs        | Prop Bolts        | Muffler Bolts     |
|---------|------------------|--------|-------------------|-------------------|-------------------|-------------------|
|         | X (mm)           | Y (mm) |                   |                   |                   |                   |
| DLA 116 | 70               | 80     | 5.0 x 0.8 - 55 mm | 15.3 OD x 20 L mm | 5.0 x 0.8 - 50 mm | 5.8 x 0.8 - 16 mm |

## Suggested Items:

|                                      |                               |
|--------------------------------------|-------------------------------|
| <a href="#">Gas Tank</a>             | Pilot's Choice                |
| <a href="#">Fuel Point™</a>          | (From Golden Skies R/C)       |
| <a href="#">Gas Line</a>             | (From Golden Skies R/C)       |
| <a href="#">Ignition Kill Switch</a> | Pilot's Choice                |
| <a href="#">Propeller</a>            | (Sail, From Golden Skies R/C) |
| 2-Cycle Oil                          | Pilot's Choice)               |
| Gas Line Filter                      |                               |
| Mounting Template                    | (From Golden Skies R/C)       |
| Propeller Drill-bit Guide            | (From Golden Skies R/C)       |
| <a href="#">Spinner</a>              | (From Golden Skies R/C)       |
| Battery, Ignition                    | (From Golden Skies R/C)       |
| Tachometer                           | (From Golden Skies R/C)       |