

# SPECIFICATIONS 1

## MODEL — F18GL / F18GLD

### BASIC MODEL SPECIFICATIONS

|   |  |
|---|--|
| Type .....  | 4-cycle, overhead valve                          |
| Aspiration .....                                      | Turbocharged – Intercooled                       |
| Number of cylinders .....                             | In-Line 6  |
| Bore x Stroke .....                                   | 5.98 x 6.5 in. (152 x 165 mm)                    |
| Displacement .....                                    | 1096 in <sup>3</sup> (18.0 liters)               |
| Compression ratio (standard) .....                    | 11:1   |
| Compression ratio (low) .....                         | 8.7:1  |
| *Speed range – continuous and intermittent duty ..... | 1000 – 1800 rpm                                  |
| Piston speed – @ 1800 rpm .....                       | 1950 ft/min (9.91 m/sec)                         |
| Low idle .....  | 650 – 750 rpm                                    |
| Flywheel housing .....                                | SAE No. 0 (Same as SAE No. 0 Except Metric Taps) |
| Firing order .....                                    | 1-5-3-6-2-4                                      |

### BEARINGS – MAIN

|   |   |
|---|---|
| Number .....                                      | 7   |
| Diameter x width .....                            | 5.32 x 1.81 in. (135 x 46 mm)                 |
| Total main bearing projected effective area ..... | 67.4 in <sup>2</sup> (434.9 cm <sup>2</sup> ) |

### BEARINGS – CRANKPIN

|   |   |
|---|---|
| Diameter x width .....                                | 4.53 x 1.81 in. (115 x 46 mm)                 |
| Total crankpin bearing projected effective area ..... | 49.2 in <sup>2</sup> (317.4 cm <sup>2</sup> ) |

### COOLING SYSTEM

|   |                                   |
|---|-----------------------------------|
| Jacket capacity, engine only .....                                | 16 gallons (60 liters)            |
| Maximum inlet head, Jacket water pump – H <sub>2</sub> O .....    | 28 ft. (8.5 m)                    |
| Normal operating temperature range with 7 psi pressure cap .....  | 174 – 195° F (79 – 91° C)         |
| **Jacket water inlet, nominal pipe size flange .....              | 3.0 inches ANSI 125 lb. (76.2 mm) |
| **Jacket water outlet, nominal pipe size flange .....             | 3.0 inches ANSI 125 lb. (76.2 mm) |
| Auxiliary water capacity, engine only .....                       | 6 gallons (23 liters)             |
| Maximum inlet head, auxiliary water pump – H <sub>2</sub> O ..... | 50 ft. (15.2 m)                   |

### EXHAUST SYSTEM

|  |                                 |
|--|---------------------------------|
| Maximum permissible back pressure – H <sub>2</sub> O ..... | 15 in. (381 mm)                 |
| Exhaust outlet, nominal pipe size flange .....             | 8.0 in. ANSI 125 lb. (203.2 mm) |

### FUEL SYSTEM

|  |                             |
|--|-----------------------------|
| *GL – 11:1 CR and 8.7:1 CR – Natural gas pressure to regulator min. to max. .... | 26 – 50 psi (179 – 345 kPa) |
| GLD – Natural gas pressure to regulator – H <sub>2</sub> O .....                 | 8 in. (203 mm)              |
| GL – Natural gas inlet pipe size .....   | 2.0 in. NPT (50.8 mm)       |
| GLD – Natural gas inlet pipe size .....  | 2.0 in. NPT (50.8 mm)       |

### GOVERNOR

|                              |                   |
|------------------------------|-------------------|
| Regulation SG Governor ..... | 2 – 7 % (Approx.) |
|------------------------------|-------------------|

### INDUCTION SYSTEM

|  |                 |
|--|-----------------|
| Maximum permissible restriction – H <sub>2</sub> O ..... | 15 in. (381 mm) |
|--|-----------------|

### LUBRICATION SYSTEM

|   |                             |
|---|-----------------------------|
| Lube oil sump capacity, including filter and cooler ..... | 22 gallons (83 liters)      |
| ***High Capacity, including filter and cooler .....       | 44 gallons (166 liters)     |
| Normal lube oil pressure .....                            | 67 – 83 psi (462 – 572 kPa) |
| Maximum safe tilt angle .....                             | See S3549-J                 |

### STARTING SYSTEM

|                                      |                    |
|--------------------------------------|--------------------|
| Electric starting – DC voltage ..... | 24                 |
| Air pressure starting – max. ....    | 150 psi (1034 kPa) |
| Number of teeth on ring gear .....   | 150                |

### MISCELLANEOUS

|  |                    |
|--|--------------------|
| Heaviest engine part, cylinder block assembly .....              | 1150 lb. (522 kg)  |
| Heaviest engine part, top overhaul, cylinder head assembly ..... | 80 lb. (36 kg)     |
| Recommended minimum spacing between engines .....                | 36 in. (914 mm)    |
| Recommended minimum overhead clearance .....                     | 6 ft. (2 m)        |
| Weight, dry approximate .....                                    | 5725 lb. (2600 kg) |

\* Consult the current price book for options which affect this specification.

\*\* When no jacket water pump is provided see the current Installation Drawing for more information.

\*\*\* Engines shipped after April 15, 2003 are equipped with standard high capacity oil pan.



|                                       |                              |                            |
|---------------------------------------|------------------------------|----------------------------|
| SPECIFICATION – MODELS F18GL / F18GLD | EN: 128435<br><br>DATE: 1/04 | Ref.<br><u>S</u><br>7774-5 |
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