

# SUZUKI DT8C, DT8C SAIL, DT9.9C and DT9.9C SAIL

## CONDENSED SERVICE DATA

NOTE: Metric fasteners are used throughout outboard motor.

### TUNE-UP

|                        |                                 |
|------------------------|---------------------------------|
| Hp/rpm                 | 8/4700-5700<br>(6.0 kW)         |
|                        | 9.9/5300-5700<br>(7.4 kW)       |
| Bore                   | 54.0 mm<br>(2.13 in.)           |
| Stroke                 | 46.0 mm<br>(1.81 in.)           |
| Number of Cylinders    | 2                               |
| Displacement           | 211 cc<br>(12.9 cu. in.)        |
| Spark Plug             | NGK B6HS-10                     |
| Electrode Gap          | 0.9-1.0 mm<br>(0.035-0.039 in.) |
| Ignition Type          | CDI                             |
| Ignition Timing        | 11° ATDC at 600 rpm (1)         |
| Maximum Timing Advance | 28° BTDC at 2000 rpm            |
| Carburetor Make        | Mikuni B24                      |
| Compression Ratio      | 7.2:1                           |
| Idle Speed (in gear)   | 600-650 rpm                     |
| Fuel:Oil Ratio         | See Text                        |

(1)—On 1988 DT9.9C models, ignition timing is 12 degrees ATDC at 600 rpm.

### SIZES-CLEARANCES

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Piston Ring End Gap             | 0.15-0.30 mm<br>(0.006-0.012 in.)     |
| Wear Limit                      | 0.8 mm<br>(0.030 in.)                 |
| Piston-to-Cylinder<br>Clearance | 0.052-0.067 mm<br>(0.0020-0.0026 in.) |

### SIZES—CLEARANCES CONT.

|  |   |
|--|---|
| Wear Limit                                       | 0.147 mm<br>(0.0058 in.)                |
| Piston Pin Diameter                              | 11.995-12.000 mm<br>(0.4722-0.4724 in.) |
| Wear Limit                                       | 11.980 mm<br>(0.4716 in.)               |
| Cylinder Bore Diameter                           | 54.000-54.015 mm<br>(2.1260-2.1266 in.) |
| Piston Diameter                                  | 53.940-53.955 mm<br>(2.1236-2.1242 in.) |
| Allowable Crankshaft<br>Runout                   | 0.05 mm<br>(0.002 in.)                  |
| Allowable Connecting Rod<br>Small End Side Shake | 4.0 mm<br>(0.157 in.)                   |

### TIGHTENING TORQUES

|                      |                               |
|----------------------|-------------------------------|
| Crankcase Screws     | 20-26 N·m<br>(15-19 ft.-lbs.) |
| Cylinder Head Screws | 21-25 N·m<br>(15-18 ft.-lbs.) |
| Flywheel Nut         | 80-90 N·m<br>(59-66 ft.-lbs.) |
| Standard Screws:     |                               |
| 5 mm                 | 2-4 N·m<br>(18-35 in.-lbs.)   |
| 6 mm                 | 4-7 N·m<br>(35-62 in.-lbs.)   |
| 8 mm                 | 10-16 N·m<br>(7-12 ft.-lbs.)  |
| 10 mm                | 22-35 N·m<br>(16-26 ft.-lbs.) |

## LUBRICATION

The power head is lubricated by oil mixed with the fuel. All models are equipped with automatic oil injection. The recommended oil is Suzuki Outboard Motor Oil or a good quality NMMA certified TC-W oil. Recommended fuel is unleaded gasoline with a minimum octane rating of 85.

On a new or rebuilt engine, the first tank of fuel should be mixed with a recommended oil at a 50:1 ratio and used in addition with the oil injection system to ensure sufficient lubrication during engine break-in. Gasoline and oil should be thoroughly mixed in a separate container. After first tank of fuel is depleted, switch to straight gasoline in fuel tank.

Recommended lower unit lubricant is Suzuki Outboard Motor Gear Oil or a good quality SAE 90 hypoid gear oil. Gearcase capacity is 175 mL (5.9 oz.). Gearcase oil should be changed after initial 10 hours of operation and after every 100 hours of operation thereafter. Reinstall drain and vent plugs securely, using new gaskets if necessary to ensure a watertight seal.

## FUEL SYSTEM

**CARBURETOR.** A Mikuni B24-15 carburetor is used on 8 hp models and a Mikuni B24-18 carburetor is used on 9.9 hp models. Refer to Fig. SZ7-1 for exploded view of carburetor assembly. Initial adjustment of pilot screw (2) from

a lightly seated position is 1-1/2 to 2 turns out on Model DT8C and 1-3/4 to 2-1/4 turns out on Model DT9.9C. Final adjustment should be made with engine at normal operating temperature and running in forward gear. Adjust idle speed to 600-650 rpm in forward gear.

Main fuel metering is controlled by fixed main jet (15). Standard main jet size for normal operation is #105 on Model DT8C and #137.5 on Model DT9.9C. Standard pilot jet (5) size for normal operation is #85 on Model DT8C and #65 on Model DT9.9C.

To check float level, remove float bowl (10) and invert carburetor. Measure float level from carburetor body-to-float bowl mating surface to top of float at a point 180 degrees from inlet valve as shown in Fig. SZ7-2. Float level should be 23-