

CHAPTER 1. GENERAL

1-1. Specifications and performance

Model 20 H.P., 25 H.P.

Dimensions:

Overall length 600 mm. (23.622 ins.)

Overall width 320 mm. (12.598 ins.)

Overall height 1,075 mm. (42.322 ins.)

Transom height (Boat transom)

Standard 381 mm. (15 ins.)

Long 508 mm. (20 ins.)

Weight (Std.):

20 H.P., 25 H.P. 38 kgs. (83.77 lbs.)

20 H.P., 25 H.P., 42 kgs. (92.59 lbs.)

Performance:

Speed range at full throttle

20 H.P. 4,500~5,500 r.p.m.

25 H.P. 4,700~5,700 r.p.m.

Engine

Type Two-stroke

Number of cylinders 2

Displacement

20 H.P. 392 c.c. (23.912 cu. in.)

25 H.P. 430 c.c. (26.230 cu. in.)

Bore and stroke

20 H.P. 64 mm. x 61 mm. (2.520 x 2.402 ins.)

25 H.P. 67 mm. x 61 mm. (2.638 x 2.402 ins.)

Compression ratio

20 H.P. 6.7 : 1

25 H.P. 7.3 : 1

Intake system Reed valve

Scavenging system Schnürle

Exhaust system Under water

Lubrication system Fuel-oil mixture

Cooling system Water cooled (with thermostat)

Starting system Recoil hand starter

Ignition system Flywheel magneto

Ignition timing (B.T.D.C. with full-throttle)

20 H.P. ... 2.35 ± 0.45 mm. (0.093 ± 0.0178 ins.)

(20° ± 1.5°)

25 H.P. ... 3.35 ± 0.45 mm. (0.132 ± 0.0178 ins.)

(24° ± 1.5°)

Spark plug

20 H.P. B-6HS (N.G.K.)

25 H.P. B-7HS (N.G.K.)

Carburetor

20 H.P. Y-22A (T.K.)

25 H.P. Y-25B (T.K.)

Drive unit:

Shift handle position Forward-Neutral-Reverse

Reduction system Bevel gears (straight)

Reduction ratio 1.77 (23/13)

Clutch type Clutch dog

Propeller rotation Clockwise

Propeller safety device Shear pin

Bracket:

Tilt positions 5 stages

Tilt angles 4~20°

Tilt-up angles 75°

Fuel and oil:

Fuel Gasoline/oil mixture

Oil for pre-mixing Two-stroke outboard motor oil

Mixing ratio 50 : 1 (break-in period 25 : 1)

Fuel tank capacity 24 liters (6.34 gals.)

Gear oil Mariner Super Duty

Starting motor

Output 0.6 kW.

Voltage 12V.

Type S108-36 (Hitachi)

Solenoid

Voltage 12V

Type DS-10B-713

Options:

Remote control Available

Rectifier Available

Propeller (B x D x P) 3 x 241 mm. x 292 mm.

(3 x 9-1/2 ins. x 11-1/2 ins.)

3 x 234 mm. x 286 mm.

(3 x 9-1/4 ins. x 11-1/4 ins.)

3 x 234 mm. x 270 mm.

(3 x 9-1/4 ins. x 10-5/8 ins.)

2 x 247 mm. x 254 mm.

(2 x 9-3/4 ins. x 10 ins.)