# **SPECIFICATIONS**

Displacement	439cc
Fuel Type	≥87 octane, ≤10% ethanol, unleaded gasoline, propane
Dry Weight	77 lbs
Maximum Torque	27 ft. lb @ 2500 rpm
Compression Ratio	8.4:1
Bore X Stroke	92 mm x 66 mm
Engine Oil Capacity	37.2 oz. (1.1 L)
Fuel Tank Capacity	1.4 gal. (5.325 L)
Lowest Idling Speed	1800 rpm ± 300 rpm
Dimensions	LENGTH 20 in.
	WIDTH 18 in.
	HEIGHT 19 in.
Engine Type	4-Stroke OHV Forced-Air
Ignition System	Non-contact transistor
Lubrication Mode	Splash
Starting Type	Electric / Recoil
Shaft Rotation	Counter-clockwise
Shaft Size	1" diameter, 2-3/4" long, 1/4" key-way
Shaft End	3/8" size 24 UNF - drilled and tapped
Center of Shaft to Base	5"
Gasoline Consumption	≤370 g/kWh
Bearing Type	Stainless steel ball bearing
Cylinder Sleeve Type	Cast iron sleeve
Fuel Delivery System	Carburetor

## **SPECIFICATIONS (CONTINUED)**

### **Adjustment, Torque, and Timing Specifications**

#### **Adjustment Specification**

Spark Plug Clearance	.027031 in. (0.7-0.8 mm)
Spark Plug Type	F6RTC (Torch) F6TC (Torch) BPR6ES (NGK) RN9YC (Champion) WR7DC (Bosch) W20EPR-U (Denso)
Valve Clearance (Cold)	Intake: .006 in $\pm$ .001 in. (0.15 mm $\pm$ 0.02 mm) Exhaust: .008 in $\pm$ .001 in. (0.20 mm $\pm$ 0.02 mm)
Carburetor Idling	1800 ± 300 rpm

#### **Torque Value**

Cylinder head bolt	29.50 ± 2.21 ft. lb (40 ± 3 N·m)
Flywheel bolt	70 ± 5.9 ft. lb (95 ± 8 N.m)
Crankcase bolt	18 ft. lb. (24 N·m)
Tie-rod bolt	9 ft. lb. (12 N·m)

#### **Timing Distribution**

Intake Open (Timing)	BTDC 10°
Intake Closed (Timing)	ABCD 20°
Exhaust Open (Timing)	BBDC 30°
Exhaust Closed (Timing)	ATDC 10°