

NOTE

The recommended full power operating range for your outboard motor is from 4500 - 5500 R.P.M. In order to get the best performance from your outboard the upper end of this range, from 5000 - 5500 R.P.M., is the engine speed to use in selecting the proper propeller. The R.P.M. should be measured with your expected average load in the boat.

SPECIFICATIONS

Model Numbers	135683 (20" transom) 135643 (20" transom)
*Horsepower (B.I.A.-certified)	135 hp at 5000 rpm
Full throttle operating range	4500 to 5500 rpm
Tank test with test wheel part number 386246	4800 rpm
Engine type	90° V-type, 4 cylinder, 2 cycle
Bore and stroke	3-1/2" bore x 2-19/32" stroke
Piston displacement	99.6 cubic inches
Piston ring sets (2 per set) standard	Part Number 385661
.020" oversize	Part Number 385662
.030" oversize	Part Number 385663
Diameter of ring	3.500 in. (standard)
Width of ring (upper)0895 - .0900 in.
(lower)0615 - .0625 in.
Piston ring lbs. compression recommended when compressed (upper)	1.0 - 3.0 lbs.
(lower)	3.3 - 4.9 lbs.
Piston less rings	
Standard	Part Number 386300
.020" oversize	Part Number 386330
.030" oversize	Part Number 386329
Crankshaft size	
Top journal	1.6204 - 1.6199
Center journals	1.3752 - 1.3748
Bottom journal	1.3784 - 1.3779
Connecting rod crank pin	1.3762 - 1.3757
Carburetion	2 carburetors - Float feed with fixed high and low-speed jets, Automatic, Manual lever and remote control choke
Float level setting	Remove float bowl, turn carburetor upside down so weight of float closes needle; float should now be parallel to gasket surface.
Carburetor high speed orifice plug	Part Number 320661 Hole Size .061 in.
Carburetor low speed orifice plug	Part Number 317473 Hole size .030
Inlet needle seat065 - .062 Use a #52 drill as gage
Cooling system	Thermostatically controlled recirculating system
Propeller gear ratio	13:25
Propeller supplied with Model 135643	Stainless steel 13" dia. x 19" pitch
Propeller supplied with motor	Aluminum 3 blade, 13" dia. x 19" pitch
Alternate propellers	Aluminum 3 blade, 13-1/4" dia. x 17" pitch Aluminum 3 blade, 14" dia. x 11" pitch Aluminum 3 blade, 14" dia. x 13" pitch Aluminum 3 blade, 13-3/4" dia. x 15" pitch Aluminum 3 blade, 13" dia. x 19" pitch Aluminum 3 blade, 12-3/4" dia. x 21" pitch Bronze 2 blade, 13-3/4" dia. x 21" pitch Bronze 2 blade cupped, 13-3/4" dia. x 21" pitch Bronze 2 blade cupped, 13-3/4" dia. x 23" pitch Stainless steel 3 blade, 13-3/4" dia. x 15" pitch Stainless steel 3 blade, 13-1/4" dia. x 17" pitch Stainless steel 3 blade, 13" dia. x 19" pitch Stainless steel 3 blade, 12-3/4" dia. x 21" pitch Stainless steel 3 blade, 12-3/4" dia. x 23" pitch
Speed control	Remote control - synchronized throttle and spark
Gear shift control	POWER PILOT - forward, neutral, reverse - remote control
Weight (without fuel tank) Model 135683	271 lbs.
Model 135643	303 lbs. (Fuel tank weight 11 lbs. net)
Fuel capacity	6 gallons
Starter	Electric and emergency rope
Starter amp draw when cranking (Prestolite)	180 amps maximum
(Bosch)	160 amps maximum
Starter RPM	250 RPM for ignition
Generator system	Flywheel alternator
Ignition (Magneto breakerless C.D.)	Power Pack
Timing	20° @ 4300-4600 RPM in gear
†Spark plug	Champion UL-77V
Spark plug torque	17-1/2" - 20-1/2" foot-pounds
Sensor air gap	Fixed
Ignition Coil	Part Number 581610

*Horsepower established at sea level. Allow 2% reduction per 1000' above sea level.

†Alternate for sustained slow speed operation - Champion L77J4 or AC-M40FFX with gap set to .040".