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MARINE CORPS SYSTEMS COMMAND PROGRAM MANAGER INFANTRY COMBAT EQUIPMENT



55 MFE NON-GASOLINE BURNING OUTBOARD ENGINE

Overview The 55-hp Non-Gasoline Burning Outboard Engine (NBOE) is the replacement motor for the 55-hp Small Craft Propulsion System (SCPS). This NBOE is a multi-fuel engine which can run on gasoline, JP5, JP8 and diesel fuel. The NBOE complies with the DoD "single battlefield fuel" directive and requirements for use on amphibious ships. The Combat Rubber Reconnaissance Craft (CRRC) is the Marine Corps' primary small craft for conducting clandestine surface insertion of reconnaissance teams and amphibious raid forces and is powered by a single NBOE.

Features: 55 hp at 5750 RPM, full throttle 5500 to 6000 RPM, idle RPM 750 ± 50; Engine Management Module (EMM) controlled weight 270 lbs; Lubrication Evinrude/Johnson XD100; engine type in-line, two-cylinder, two-cycle. EMM is used for every function of running the engine, including the multi-fuel function. Heavy fuels: JP5, JP8, Jet A, kerosene; gasoline-based fuels: gasoline, gasohol, 87AKI (R+M)/2 or 90 RON minimum; emergency fuels: diesel DFM-F76, bio-diesel. Although not a submersible engine, a crankcase draining system has been developed for extreme operational conditions.

Components: N/A

Concept of Distribution: Organic to active and reserve Marine reconnaissance battalions, force reconnaissance companies, and Marine Raider regiments and battalions.

Fielding Status: Fielded

Requirements Document(s): N/A

Training: Marines graduating from formal school training for the Small Craft Mechanics Course are awarded the Military Occupational Specialty (MOS) 1342. Marines graduating the CRRC Coxswains Course are awarded MOS 0316. These MOSs are responsible for the operation and maintenance of NBOE. Marines assigned MOS 1342 conduct corrective and preventive maintenance for the rubber craft and MOS 0316 conduct corrective and preventive maintenance for the NBOE. Training and Education Command (TECOM) has assumed responsibility for the formal school training.

Manual(s): 55 MFE Tech Manual Evinrude P/N 5007808
TM 10717B-OI, Parts List with Illustrations
SL-3-11785A Diagnostic Kit for NBOE
SL-3-11797A, Outboard Engine Maintenance Kit

Supply/Logistics:

Nomenclature: ENGINE, OUTBOARD MULTI-FUEL
ID No: 10717B
NSN: 2805-01-555-6505
SAC: 2
AAC: U
IED: N/A

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