Norsafe as

Lifeboatbuilder since 1903

OPERATION/MAINTENANCE MANUAL

7.5 M MAGNUM RIGID RESCUE BOAT

CUMMINS BT 5,9 - M 210Hk
WITH HAMILTON 273HSRX

U.S. COAST GUARD APPROVED

IMPORTANT NOTICE!
During the warranty period, all necessary spare parts must be supplied by NORSAFE as. The use of spare parts supplied by other suppliers violates and forfeits the warranty.

NORSAFE AS

WWW.NORSAFE.NO

P.O.BOX 115

N-4818 FÆRVIK

NORWAY

PHONE + 47 37 08 65 55
TELEFAX + 47 37 08 65 88
TELEX 21448 OFTRA N

SECTION 1

TECHNICAL SPECIFICATION

7.5 M MAGNUM RIGID RESCUE BOAT

1.1 Principal dimensions

Length overall, including waterjet guard	**= 7,87 m**
Breadth overall	**= 2,90 m**
Draught with 3 persons	**= 0,50 m**
Total Davit load with 3 persons	**= 2.525 kg**
Total davit load with 15person	**= 3.425 kg**
Fuel capacity	**= 187 Ltrs**
Speed with 3 persons	**= 30 knots**
Max. cruising range with 3 persons (2400 revs).	**= 140 (NM)**

1.2 Certification

Approved under section V regulation 47 Solas 1974 including 1983 amendments.

1.3 General description

The craft has been designed and constructed for offshore use in rough water. It will provide high sustained speeds in harsh offshore environments.

The hull is a deep V with convex sections. This combination gives a very smooth ride and excellent hull strength. The form of the hull ensures superb handling and manoeuvrability and an exceptionally dry ride.

The combination of fire retardant G.R.P. hull and topsides with a large heavy duty fender surround, results in a very stable and seaworthy boat.

The craft is self-bailing and inherently buoyant. The boat has a carrying capacity of fifteen persons, which includes an area for positioning a stretcher.

The layout is arranged with a continuous main deck set at chine level with seating provided for the crew.
The boat has been specifically built to fulfill a search and rescue function and to meet the latest I.M.O.
regulations for fast rescue boats.

The fendering system, consists of closed cell foam blocks covered with a P.V.C. skin, bolted to the boat. A secondary, heavy duty P.V.C. skin is then lashed over the fender for additional protection.

This design of the fender, give excellent shock absorbing characteristics and provides additional buoyancy with an added effect of improved stability. This system cannot be punctured and give protection to the transom of the boat.

The engine is a CUMMINS BT 5,9-M 6 cylinder marine diesel engine, 210 HP at 2600 rpm. The engine is fitted with a wet exhaust system, led aft through a rubber tube. A special outlet through the transom prevents water from entering the exhaust pipe from the outside in upright and capsized condition.
Fresh air supply to the engine room is taken from an air intake mounted on top of the engine casing. This intake is designed to be automatically self-closing should the boat capsize.
The propulsion is a HAMILTON 273 waterjet making the boat suitable for use in shallow waters and high speed in adverse conditions.

The water jet unit is protected by a sturdy tube fitted to the transom.

Two totally independent start battery systems are installed. An automatic system ensures charging of both batteries, whether the boat is in the davit or in use.

An 187 Litre capacity, diesel fuel tank of St. Steel is located under the deck forward of the engine compartment. A hatch is fitted in the deck for easy access to the fuel filler cap and the fuel shut of valves.

The engine's fresh water cooling system is equipped with a heater powered by the ship's main power supply. The engine & fuel tank compartment bilge-water, drains aft and is discharged through the transom by an automatic, electric bilge pump. In addition to the electric bilge pump there is mounted a manually operated bilge pump on the transom.

The boat is equipped with the required loose equipment details of which can be found later in this manual.

Towing bollards is installed P&S on the transom. A remotely controlled painter release arrangement is mounted on the bow of the boat. At the forward end a spray canopy is provided to give the occupants a degree of protection from the elements.

Single point lifting arrangement is accomplished by means of a four-leg framework. The lifting frame is secured to the longitudinal GRP beams by bolts. An approved release hook with a ring for the davit wire is installed.

The capsize reversal equipment on the stern consists of: An aluminium gantry carrying an inflatable bag fitted with a non-return valve and pressure release valve. An automatic system shuts down the engine and the fuel supply in case of a capasizal. The engine case and the air duct are designed to prevent entry of water.

The console is designed to give maximum protection for crew engine and instrumentation. The engine compartment hatch forms' the forward part of the console. The centre part contains the steering wheel, instrumentation and an electrical compartment in watertight enclosures.
The battery box and inspection hatch for the water jet and drive shaft are located in the crew saddle.
All fittings are of size, strength, material and location best suited to the application without having any sharp corners, edges or protrusions.
Any part of the deck is within reach of a secure handgrip.