

Spec item #: L-06	SPECIFICATION	TCMSB Field # 3E015, 3E016
L-06 : Steering gear motor overhauls		

Part 1: SCOPE:

- 1.1 The intent of this item is to remove the following 2 steering gear . Motors to be brought to contractor's shop for complete reconditioning and to replace the reconditioned units in good order to their original location, upon completion:

Part 2: REFERENCES:

2.1 Equipment Data

Location: Port Steering Gear compartment
Motor: Baldor
75HP, 1780 RPM
575V/3/60Hz
Frame: 365T
Serial number: A1501052034
ABS : 3E016

Location: Stbd Steering Gear compartment
Motor: Baldor
75HP, 1780 RPM
575V/3/60Hz
Frame: 365T
Serial number: A1501052035
ABS: 3E015

Part 3: TECHNICAL DESCRIPTION:

- 3.1 Contractor is responsible for all ancillary services necessary to complete the specification item. This includes, but is not limited to, strip out, cramage, staging , cleaning, debris removal and disposal, etc. Unless otherwise stated all materials to be contractor supply
- 3.2 Prior to commencement of work, the following information is to be recorded. Motor rotational direction, peak startup motor current , running current at all speeds and motor balance/vibration.
- 3.3 Megger readings of each phase of all motors to be conducted at 500VDC. Information to be delivered to the ship's Sr. Electrical Officer
- 3.4 Motors are to be electrically isolated by ship's Electrical Officer and locked out prior to removals commencing. Contractor to abide by ship's ISM Safety Lockout Procedures.

- 3.5 Each motor to be removed and transported to Contractor's shop for servicing. Any removal necessary to facilitate the removal of the fan/motor unit is the responsibility of the Contractor. Contractor to be responsible for cost and replacement of any damages.
- 3.6 Each motor to be dismantled for inspection, cleaning and bearing renewal. Bearings to be SKF or equivalent sealed bearings as per original. Motor exterior surfaces to be mechanically cleaned. All exterior surfaces of motor brackets, fans and axial tubes are to be grit blasted and mechanically cleaned to bare metal. All surfaces to be primed and painted to marine standards and match the surrounding.
- 3.7 Upon completion, checks for vibration, alignment and proper rotation are to be performed. Motor start current readings, megger readings and motor balance/vibration to be taken and recorded as before, as well as the numbers to identify the new bearing installed on each end of each motor. Typewritten copy and electronic copy to be passed to ship's Senior Electrical Officer and to Chief Engineer with all information listed as above.
- 3.8 Any paint work disturbed as a result of cutting, burning or welding is to be wire brushed clean and coated with primer.
- 3.9 Upon completion of all work all disturbed items to be installed in good order, as per original. All dirt and debris resulting from this work is to be disposed of ashore.

Part 4: PROOF OF PERFORMANCE:

- 4.1 The motors shall be run up and proven operational for a period of 1 hr.
- 4.2 All work to be to the satisfaction of the Chief Engineer and the Sr. Electrical Officer.

Part 5: DELIVERABLES:

- 5.1 One hard copy and one electronic copy off all readings and overhaul reports to be passed to ship's Senior Electrical Officer and to Chief Engineer with all information listed as above.