

C78 ENS M20.10
C78 ENT M30.10
C78 ENT M50.11
C78 ENT M55.10

**TECHNICAL AND REPAIR
MANUAL**

JUNE 2007 EDITION

TECHNOLOGICAL EXCELLENCE

**IVECO
MOTORS**



FOREWORD

We strongly recommend that you carefully read the indications contained in this document: compliance with these indications protects the engine from irregular operation, assures reliability, safeguards sea-going and protects maintenance personnel from accident hazards.

The indications contained in this document pertain to the C78 ENS M20.10, C78 ENT M30.10, C78 ENT M50.11 and C78 ENT M55.10 marine engines and complement the IVECO MOTORS-FPT "Marine Diesel Engines Installation Handbook". You should refer to this for anything that is not explained herein.

Technical engineers and fitters must comply with work safety regulations. They must implement and adopt the methods foreseen for personal safety while carrying out maintenance or checks.

There is a reminder of the safety rules in Section 12 of the present publication.

There is a reminder of the regulations for engine handling at the end of Section 6 of the present publication.

To start the engine, you must adhere to the procedure stated at the end of Section 5 of the present publication.

To get best engine performance you must conform with its intended mission profile. The engine must not be used for purposes other than those stated by the manufacturer.

IVECO MOTORS-FPT is available for a prior examination of any requirements regarding special installations, should this be necessary.

In particular

- ❑ Use of unsuitable fuels and oils may compromise the engine's regular operation, reducing its performance, reliability and working life.
- ❑ Exclusive use of IVECO MOTORS-FPT Original Parts is a necessary condition to maintain the engine in its original integrity.
- ❑ Any tampering, modifications, or use of non-original parts may jeopardize the safety of service personnel and boat users.

To obtain spare parts, you must indicate:

- Commercial code, serial number and the indications shown on the engine tag;
- The number of the spare part. This can be found in the spare part catalog.

The information provided below refers to engine characteristics current at the date of publication.

IVECO MOTORS-FPT reserves the right to make modifications at any time and without advance notice, to meet technical or commercial requirements or to comply with local legal and regulatory requirements.

**We refuse all liability
for any errors and omissions.**

The reader is reminded that the IVECO MOTORS-FPT Technical Assistance Network is always at the Customer's side with its competence and professionalism.

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Indications for consultation

The several engine versions are usually explained with common images and descriptions. In cases of considerable differences, they are explained separately.

The specific characteristics of the C78 ENS M20 engine electric system are described in Section 9.

Sections 1-2-3 are intended for sales personnel, to provide them with an exact knowledge of the product's characteristics and enable them to accurately meet the Customer's requirements.

The remaining sections are intended for the personnel that has the task of performing both ordinary and extraordinary maintenance; by referring carefully to the chapter devoted to diagnosis, they too will be able to provide an effective service of technical assistance.

This manual keeps the original contents unchanged over time. In section 11 there is a chronological list of the modifications and updating which characterizes the normal evolution of the products.

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SECTION 1

OVERVIEW

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