

A Practical Course for Engineers Working on Board Ships



《轮机英语》

Marine Engineering English



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Model 4:

Lesson 36 Stand-by Engine

备 车



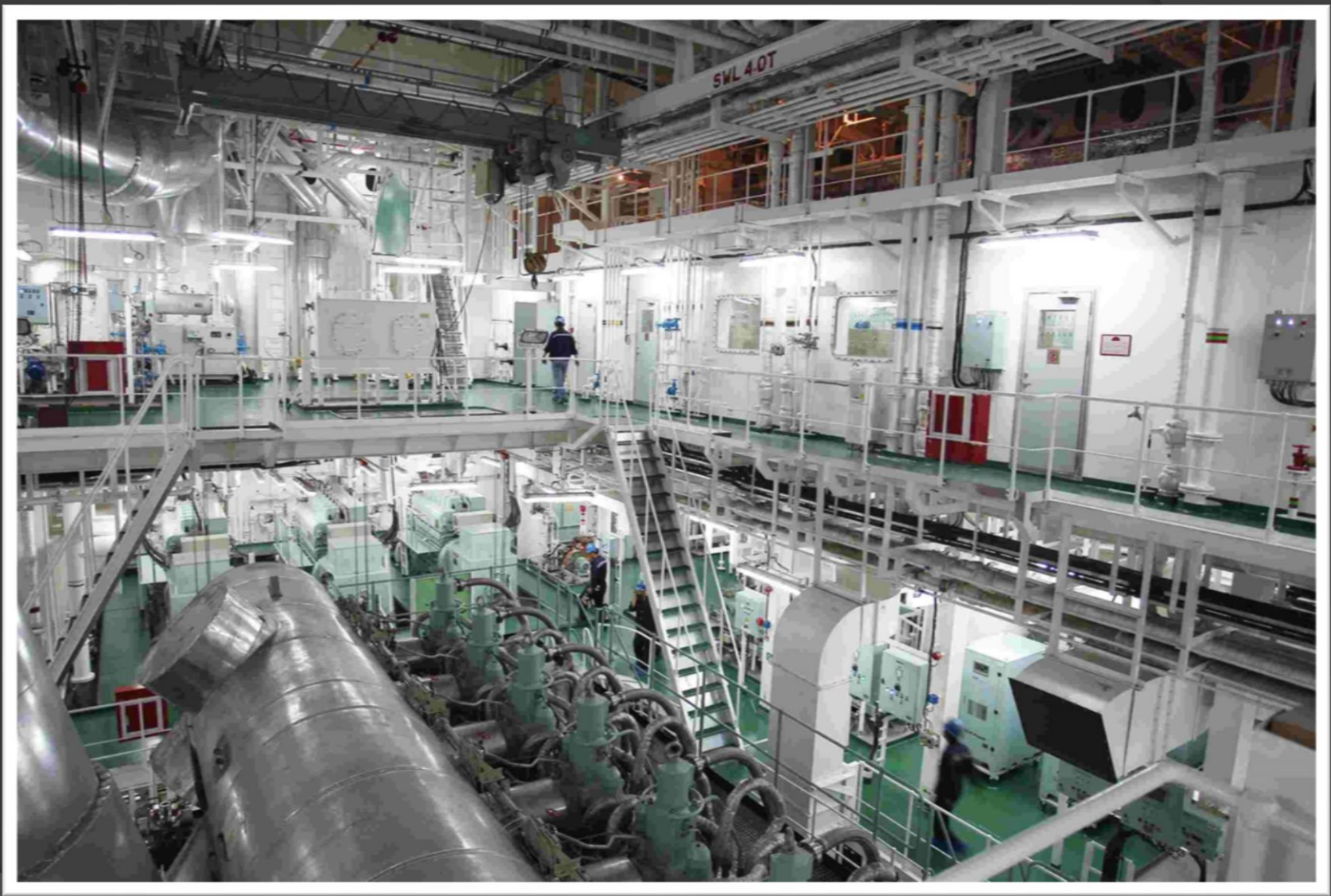
Lesson 36 Stand-by Engine Text

何谓“备车”

What is the meaning?

- Stand-by
- Engine

“the main engine is to be prepared for running”





When **instructions** have been received that the **main engine** is to be **prepared for running**, the following procedure for any make of marine diesel engine should be followed:

指令
主机
准备运行

当主机将要准备运行的指令被收到，下列的步骤，对于任何型号的船用柴油机来说，应该被遵守：



Check that the fuel, lubricating oil and cooling water are at **working level** and drain any water or sludge from all lubricating oil and fuel tanks. The purified fuel tanks are to be **raised** to the required temperature

检查
工作液位

提升（加热）

检查燃油、滑油、冷却水处于工作液位，从滑油柜放残掉任何水和渣子，日用柜需要被加热到要求的温度。



Switch on the power to **various auxiliaries** and to the **control console**.

各种辅助
设备
控制面板

合上开关，送电给。。。



Check that all **valves** in the various systems are **operational** and check the jacket water and lubricating pumps. Any leaks to be rectified immediately.

阀门
可用的，
可操作的

检查各个系统中的阀门处于可操作状态，检查。。。。



Start up **jacket water pumps** and check pressure. Bring into operation the **heating system of the cooling water**. The temperature of the cooling water returns from the jackets, **liners** and pistons should be raised gradually to 60° C (140° F) . The warming through period should extend over a period of approximately four hours.

缸套水泵
冷却水的
加热系统

缸衬，
气缸内套

起动缸套水泵并检查压力，起动冷却水的加热系统。
(加热不能太快，温度要缓慢上升)



Check through the **crankcase**, etc.
for any **tools**, obstructions, or
waste **material** and remove same
and make sure that everything is
correct.

曲轴箱
工具
材料

彻底检查曲轴箱，（看看里面有没有落下的）工具、
废材料。。。



Start up **lubricating oil pumps** and check that at **working pressure**, oil flows uniformly from all the bearings and then closed up the crankcase.

滑油泵

工作压力

起动润滑油泵并且检查工作压力，滑油均匀的从轴承流出，然后关闭曲轴箱



On engines having **oil cooled pistons** the **lubricating oil pre-heater** must be put into operation and the rate of heating so arranged that the temperature of the **piston cooling oil** returns are 32 to 35° C over a period of at least two hours.

油冷活塞

滑油预热器

活塞冷却油

在具有油冷活塞的发动机上，滑油预热器必须投入运行（加入速率也不能太快，要缓慢）



If hoppers or **sight glasses** are fitted check that there is an **adequate flow of coolant** through each piston, cylinder head, cylinder jacket, **turbocharger** casing and injector.

观察镜

充足的液流

如果（管路上）装有观察镜，观察一下是否有充足的冷却介质流动到每个活塞，气缸盖。。。



Check that any **vents** in the systems are clear to allow the free flow of air from the **cylinder cooling passages** and turbochargers.

放气口

气缸冷却通道

there be句型；目的状语从句；方式状语从句
有很多种类的锅炉应用在几乎每种类型的船上，
通过加入给水，来产生蒸汽。



The **charge air coolers** should also be vented. Unvented spaces encourage the formation of steam, **corrosion**, erosion and **local overheating**.

增压空气
冷却器

腐蚀
局部过热

增压空气冷却器也应该被放气。没有被放过气的空间会容易形成水汽、腐蚀和局部过热



Start up **priming pumps**, check pressure. The oil system should be cleared of air by means of the various air **vent cocks or valves**. With the fuel oil is at about the **working pressure**, check for leakages. .

引水泵

放气拷克
或者放气阀

工作压力

起动引水泵并检查压力。油系统也要放气。。。
加到工作压力后，检查泄漏



If the engine can be started and maneuvered on **high viscosity** fuel, the temperature of the reaching the injectors should be raised to such a point that the viscosity is less than the **required value**, i. e. 27 centistokes.

高粘度

要求的值

厘斯，
粘度单位

如果发动机能够用高粘度油来起动和操纵，那么到达喷油器的燃油温度必须提高到这样一个值，此时的粘度必须低于要求的值，比如27



Check that the level of oil in the turbochargers is correct. Ensure that **starting and control air** valves are shut off and **engage the turning gear.**

起动空气
和控制空气

合上盘车机

检查涡轮增压器。。。
合上盘车机



Before taking out the turning gear, and with some one **hand-operating** the **cylinder lubricators** at regular intervals, and with indicator cocks open, and with the control gear in the “stop” position, give the engine **at least one complete turn**

手动操纵

气缸注油器

至少一转

一边手动注气缸油，一边盘车。。。。



Pump up the **starting air reservoirs** to their **maximum pressure** and drain the air reservoirs and air system. The **scavenge drains** should be cracked open.

起动空气瓶

最大压力

扫气放残口

把起动空气瓶打满到最大压力，并且放残。

cracked open: 稍微打开一道



Check the **engine room telegraph** for **proper functioning** and at the same time check telephones to the **bridge** and Chief Engineer's office.

机舱车钟
功能正常
驾驶台

检查机舱车钟是否功能正常，同时检查到。。的电话



Check the **reversing** and control **gear**,
running direction **safety interlocks**,
automatic shut-down devices, and
alarm devices for correct functioning.

倒车，换向
齿轮、机构
安全互锁

检查换向机构和控制机构，运行方向安全互锁装置，
自动停车装置和警报装置是否功能正常。



Open **shut-off valves** for starting air tank; close the drain valve on the **starting air manifold**. Check and if necessary, **adjust** oil, water and fuel pressure and temperatures.

截止阀

起动空气总管

调整

打开起动空气瓶的（出口）截止阀，关闭总管路上的放残阀。检查，如果有必要就调整。。。。



Switch the controls on the **auxiliary blower** to the **automatic position** and start the **fuel booster pump**.

辅助鼓风机

自动位置

燃油增压泵

把辅助鼓风机的控制打到自动为，起动燃油增压泵。



Inform bridge that engine room would like to turn engine over slowly on air. Start the engine on air **briefly** on both direction and then close all **indicator cocks**.

通知驾驶台
短暂的
示功拷克

通知驾驶台，机舱将要试车。。。。



Finally, before “stand-by” is rung on the engine telegraph, it is usually to give the main diesel engine a brief trial on power ahead and astern.

“备车”车令响

机舱车钟

正倒车

最后，在“备车”车令响之前，通常给主机一个简短的正倒车试车。