

**Exercise Sheet Plan Template
(Trainees Copy)**

Course Title	New MLC for Engine Officers Function 3
Exercise No. 1	A4.1 - A
Exercise Title	Managing safe and effective maintenance and repair procedures of main propulsion
Duration	30 minutes briefing, 7 hours exercise proper, and 30 minutes debriefing
Function	Maintenance and repair at the management level
Competence	Manage Safe and Effective Maintenance and Repair Procedures
KUP	Manage Safe and Effective Maintenance and Repair Procedures
Intended Learning Outcome/s	At the end of the exercises, the trainee must be able to manage and monitor the safe and effective maintenance and repair procedures of the following in accordance with operational manual and technical specifications through a given scenario.
Training Equipment / Materials	<ul style="list-style-type: none"> • Appropriate PPE • Generator engine cylinder liner of 240 mm bore • Aux engine piston & piston rings at least 150mm bore • Inside micrometer caliper to measure cylinder liner bore
Scenario Description	The vessel is in anchorage area. As per PMS, V-type main engine has been dismantled as it was due for routine maintenance. The 2nd Eng'r was task to do inspection of the piston and piston rings and cylinder liner bore, measure dimensions and clearances. Make recommendations from the result of the inspection in order to restore to operating condition.
Initial Condition	The vessel is in anchorage area. As per PMS, V-type main engine has been dismantled for routine maintenance.
Exercise Procedure	
Trainee's Action	<ul style="list-style-type: none"> • Manage safe and effective maintenance of the main propulsion • Monitor the adherence to safe working practices of any particular engine room maintenance or repair activity in accordance with legislative requirements, codes of practice, permit to work, and environmental concerns.

Date

Trainee's Name & Signature

Note: This sample practical Exercise Sheet was used during the conduct of pilot testing, MTI may enhance this taking into account the Resources they have.

PISTON RING No.	Piston Ring Width			BUTT "d" CLEARANCE	RING "e" HEIGHT	Piston ring / Groove Clearance
	"a"	"b"	"c"			
1	7.65	7.7	7.7	18.8	6.75	0.10

