

551-88U-2410
Inspect Maintenance of Lube Oil System Components
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the Transportation School, Fort Lee, VA foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Conditions: Assigned as a Railway Specialist given the requirement to advise COCOM/ HN personnel on checking maintenance of lube oil system components, given PPE, a complete risk assessment, all applicable publications, forms, records, tools, materials, personnel, and equipment, day or night, in all weather conditions, in an operational environment. Some iterations of this task should be performed in MOPP 4.

Standards: Check maintenance of lube oil system components without injury to personnel or damage to equipment.

Special Conditions: None

Safety Risk: Low

MOPP 4: Sometimes

Task Statements

Cue: Your ERC team has been tasked to advise COCOM/ Host Nation personnel on how to check maintenance of lube oil system components.

DANGER

None

WARNING

None

CAUTION

Working around live tracks is always dangerous. Follow all safety procedures outlined in the GCOR and ATP 4-14.

Remarks: Observe personnel to ensure the following inspection steps are performed.

Notes: None

Performance Steps

1. Check lube oil system components for low lubricating oil pressure.
 - a. Check engine oil supply.
 - b. Check oil dilution or viscosity.
 - c. Check lines.
 - d. Check line strainers.
 - e. Check supply line cooler.
 - f. Check spring-loaded relief valve.
 - g. Check lubricating oil pump.
 - h. Check bearing wear.
2. Check maintenance system components for absence of oil pressure at pump inlet.
 - a. Check scavenging system valve.
 - b. Check for oil line connections.
 - c. Check scavenging strainer.
3. Check lube oil system components to see if there is little or no oil consumption.
 - a. Check top of cylinder heads.
 - b. Check fuel lines.
4. Check lube oil system for excessive use of lubricating oil.
 - a. Check rings.
 - b. Check pistons.
 - c. Check separator screen.
 - d. Check water side of cooler.
 - e. Check for internal oil leaks.
 - f. Check grade of oil.
5. Check lube oil components for dilution of lubricating oil.
 - a. Check fuel jumper tubes.
 - b. Check injector filter cap.
 - c. Check piston rings.
 - d. Check injectors.
 - e. Check valves in fuel lines.

- f. Check top of cylinder heads.
6. Check Lube oil system components for high lubricating oil temperature.
- a. Check oil.
 - b. Check water pressure
 - c. Check oil cooler.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all performance steps are passed (P). Score the Soldier NO-GO if any performance step is failed (F). If the Soldier fails any step, show what was done wrong and how to do it correctly.

Evaluation Preparation: Ensure that all materials required to perform the task are available. Tell the Soldier that he/she will be evaluated on checking maintenance of lube oil system components.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Checked lube oil system components for low lubricating oil pressure.			
2. Checked maintenance system components for absence of oil pressure at pump inlet.			
3. Checked lube oil system components to see if there was little or no oil consumption.			
4. Checked lube oil system for excessive use of lubricating oil.			
5. Checked lube oil components for dilution of lubricating oil.			
6. Checked lube oil system components for high lubricating oil temperature.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	ATP 4-14	EXPEDITIONARY RAILWAY CENTER OPERATIONS http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp4_14.pdf	Yes	No
	EMD 645E	EMD 645E Maintenance Instructions	Yes	Yes
	GCOR	General Code of Operating Rules (GCOR), Seventh Edition	Yes	No

TADSS : None

Equipment Items (LIN):

LIN	Name
NA1520	Case, Ear Plug
DA3045	Boots, Safety
HA4052	Safety Glasses, Revision Sawfly E
DA159T	Vest Safety RV-1
J68064	GLOVES LTHR MN WORK 1

Materiel Items (NSN) :

Step ID	NSN	LIN	Title	Qty
No materiel items specified				

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card. AR 200-1 delineates TRADOC responsibilities to integrate environmental requirements across DOTMLPF and ensures all training procedures, training manuals, and training doctrine includes sound environmental practices and considerations. The Army's environmental vision is to be a national leader in environmental and natural resource stewardship for present and future generations as an

integral part of all Army missions. Environmental protection is never completed. Continuously be alert to ways to protect our environment and reduce waste.

Leaders must ensure that their unit has an active and strong environmental program. They must understand the laws and know what actions to take. Leaders bring focus, direction, and commitment to environmental protection. Commanding officers should ensure the following environmental programs are in place and are being maintained:

- Hazardous materials program.
- Hazardous waste program.
- Hazardous communications program.
- Pollution prevention and hazardous waste minimization recycling program.
- Spill prevention and response plan program.

Safety: In a training environment, leaders must perform a risk assessment in accordance with current Risk Management Doctrine. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW current CBRN doctrine. All operations will be performed to protect and preserve Army personnel and property against accidental loss. Procedures will provide for public safety incidental to Army operations and activities and safe and healthful workplaces, procedures, and equipment. Observe all safety and/or environment precautions regarding electricity, cable, and lines. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required IAW AR 385-10, the Clean Air Act (CAA) and the CAA amendments, and the OSHA Hazard Communication standard.

Accidents are an unacceptable impediment to Army missions, readiness, morale, and resources. Decision makers at every level will employ risk management approaches to effectively preclude unacceptable risk to the safety of personnel and property affiliated with this task.(a) Take personal responsibility.(b) Practice safe operations.(c) Recognize unsafe acts and conditions.(d) Take action to prevent accidents.(e) Report unsafe acts and conditions.(f) Work as a team.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None

Knowledges :

Knowledge ID	Knowledge Name
K-551-P-0072	Knowledge of locomotive lube oil system components and function

Skills : None

ICTL Data : None