

Summary Report for Individual Task
551-88M-1510
Operate the M1070A1/M1000 Semitrailer Combination with a Disabled Bogie
Status: Approved

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

Destruction Notice: None

Foreign Disclosure: FD5 - This product/publication has been reviewed by the product developers in coordination with the Fort Lee, VA foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

Condition: In an Operational Environment, given an M1070A1 Truck Tractor and M1000 HET semitrailer with simulated or actual disabled bogie and the mission to use the semitrailer for transport, semitrailer basic issue items (BII) to include the axle isolation chain assembly, necessary tools to cage the brakes of the effected bogie, assistance from other crewmen as necessary, and a level area to park the semitrailer to perform operation. Some iterations of this task should be performed in MOPP 4.

Standard: Properly cage the brakes of the disabled bogie, lower the platform, and prepare the disabled bogie to allow semitrailer movement IAW with applicable references without damaging equipment or injuring personnel.

Special Condition: None

Safety Risk: Medium

MOPP 4: Sometimes

Task Statements

Cue: You must move your disabled M1000 Semitrailer to a safe location where repairs can be made.

DANGER
None

WARNING
None

CAUTION
None

Remarks: Reference TM 9-2330-381-13, WP 0024

Notes: None

Performance Steps

DANGER

The tractor/semitrailer combination, either loaded or unloaded, is limited to operating with only one disabled bogie. The following procedure specifically identifies how to prepare the semitrailer for transport. If this procedure is not strictly followed, severe damage to equipment may result.

Safety:

1. Cage brakes at affected suspension (bogie) assembly.
2. Lower platform until suspension (bogie) assembly is completely compressed.
3. Loosen and turn adjustment nuts on eyebolts until adjustment nuts are threaded completely down threaded portion of eyebolts.
4. Route hook of streetside chain along streetside bogie assembly between both hydraulic and air brake line and upper suspension arm into opening in upper suspension arm casting.
5. Position chain assembly bracket underneath square opening of axle casting. Ensure that streetside chain is on streetside of parking brake chamber.

CAUTION

When installing the axle isolation chain assembly on the bogie, ensure that the chains DO NOT contact any hydraulic line or air brake hoses. Any contact of chains on the line and hoses may cause chafing or parting of lines/hoses, loss of air brake pressure, loss of hydraulic fluid, and damage to equipment.

6. Route hook along curbside of bogie assembly between both hydraulic and air brake line and upper suspension arm into opening in upper suspension arm casting.
7. Position chain assembly bracket so that bottom rear edge of square axle casting sits between blocks and pins of chain assembly bracket.
8. Remove slack in chains by tightening adjustment nuts on eyebolts.

WARNING

Ensure the suspension isolation valve at the affected bogie is closed (handle facing outward) prior to adjusting the platform height or the suspension chains may break. Failure to follow this warning may cause serious injury or death to personnel and damage to equipment.

9. Pull suspension isolation valve handle outboard to CLOSED position to isolate affected bogie.

Note:

10. Except at isolated bogie, ensure that all remaining suspension isolation valves are in OPEN position.
11. Raise platform to normal running height of 43 inches.

CAUTION

The brakes on the disabled bogie must be released without contacting the brake drum or damage to equipment may result.

12. Rotate dual tire assembly in both directions and check for brake drag or contact with brake drum. If necessary turn nut clockwise until dual tire assembly spins freely without brake drag or contact with brake drum.

WARNING

Because of minor load instability while driving with a disabled bogie, especially when carrying a payload, turning speeds must be reduced to 85 percent of the maximum safe turning speeds. Example: At 15 mph (24 kph), maximum turn speed should be reduced to 13 mph (21 kph) maximum turn speed. Failure to follow this warning may result in injury to personnel.

13. DO NOT EXCEED maximum speed of 30 mph with semitrailer tire pressure 95 psi for all tires, excluding tires of affected bogie.

Note: The tractor/semitrailer combination with a disabled bogie, while loaded or unloaded, must be driven at reduced speeds.

14. Inflate remaining tires in affected suspension group, excluding tires on affected bogie to 100 psi.

Note: Semitrailer tires within the same suspension group as the affected bogie may be inflated to 100 psi (689 kPa) to allow for a slight increase in driving ability. • Suspension groups are determined using the suspension controls on the hydraulic control panel consisting of curbside front, streetside front, and rear.

15. DO NOT exceed maximum speed of 40 mph with tire pressure at 100 psi for tires within a suspension group, excluding tires on affected bogie.

16. Park semitrailer, apply parking brakes, and chock wheels.

17. Lower platform until suspension (bogie) is completely compressed.

18. Loosen and turn four adjustment nuts on eyebolts until nuts are threaded completely down threaded portion of eyebolts.

19. Unhook two hooks from opening in upper suspension arm. Move hooks out from under hydraulic hose and pneumatic hose on upper suspension arm.

20. Open suspension isolation valve handle.

21. Raise platform to normal running height of 43 inches.

22. Lower both front and rear support legs.

23. Uncage brakes at affected bogie.

24. Remove axle isolation chains from bogie. Restow axle isolation chains.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the soldier GO if all performance measures are passed. Score the soldier NO-GO if any performance measure is failed. If any performance measure is failed, tell the soldier what was done wrong and how to do it correctly.

Evaluation Preparation: SETUP: Brief the Soldier on task specifications. Provide a M1070A1 with specially-prepared M1000 semitrailer, assistant driver, hearing protection, seasonal uniform.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Caged brakes at affected suspension (bogie) assembly.			
2. Lowered platform until suspension (bogie) assembly was completely compressed.			
3. Loosened and turned adjustment nuts on eyebolts until adjustment nuts were threaded completely down threaded portion of eyebolts.			
4. Routed hook of streetside chain along streetside bogie assembly between both hydraulic and air brake line and upper suspension arm into opening in upper suspension arm casting.			
5. Positioned chain assembly bracket underneath square opening of axle casting. Ensured that streetside chain is on streetside of parking brake chamber.			
6. Routed hook along curbside of bogie assembly between both hydraulic and air brake line and upper suspension arm into opening in upper suspension arm casting.			
7. Positioned chain assembly bracket so that bottom rear edge of square axle casting sits between blocks and pins of chain assembly bracket.			
8. Removed slack in chains by tightening adjustment nuts on eyebolts.			
9. Pulled suspension isolation valve handle outboard to CLOSED position to isolate affected bogie.			
10. Except at isolated bogie, ensured that all remaining suspension isolation valves were in OPEN position.			
11. Raised platform to normal running height of 43 inches.			
12. Rotated dual tire assembly in both directions and checked for brake drag or contact with brake drum. If necessary turned nut clockwise until dual tire assembly spins freely without brake drag or contact with brake drum.			
13. DID NOT EXCEED maximum speed of 30 mph with semitrailer tire pressure 95 psi for all tires, excluding tires of affected bogie.			
14. Inflated remaining tires in affected suspension group, excluding tires on affected bogie to 100 psi.			
15. DID NOT exceed maximum speed of 40 mph with tire pressure at 100 psi for tires within a suspension group, excluding tires on affected bogie.			
16. Parked semitrailer, applied parking brakes, and chocked wheels.			
17. Lowered platform until suspension (bogie) was completely compressed.			
18. Loosened and turned four adjustment nuts on eyebolts until nuts were threaded completely down threaded portion of eyebolts.			
19. Unhooked two hooks from opening in upper suspension arm. Moved hooks out from under hydraulic hose and pneumatic hose on upper suspension arm.			
20. Opened suspension isolation valve handle.			
21. Raised platform to normal running height of 43 inches.			
22. Lowered both front and rear support legs.			
23. Uncaged brakes at affected bogie.			
24. Removed axle isolation chains from bogie. Restowed axle isolation chains.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	TC 21-305-9	TRAINING PROGRAM FOR THE HEAVY EQUIPMENT TRANSPORTER SYSTEM	No	No
	TM 9-2320-427-10	OPERATORS MANUAL FOR TRACTOR, TRUCK, M1070A1 (NSN: 2320-01-564-6882)	Yes	Yes
	TM 9-2330-381-14	OPERATORS, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR HEAVY EQUIPMENT TRANSPORTER SEMITRAILER, 70 TON, M1000 (NSN 2330-01-303-8832) (EIC: CXU) {TM 09295A-14/1}D	Yes	No

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 FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. 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 FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. Ensure adherence to all WARNING and CAUTION statements in the technical manuals for this operation. Specific statements are listed below.

WARNING:

Make sure suspension isolation valve at the affected bogie is closed (handle facing outward) prior to adjusting platform height or the suspension chain can break and cause injury to personnel and damage to equipment.

WARNING:

When installing the axle isolation chain assembly on the bogie, make sure that the chains do not contact any hydraulic lines or air brake hoses. Contact of chains on the lines and hoses may cause chafing or parting of lines/hoses, loss of air brake pressure, loss of hydraulic fluid, and damage to equipment.

WARNING:

Because of minor load instability while driving with a disabled bogie, especially when carrying a payload, turning speeds must be reduced to 85 percent of the maximum safe turning speeds or injury to personnel and damage to equipment may result. (Example: A 15 mph (24 kph) turn speed should be reduced to 13 mph (21 kph) maximum turn speed.)

WARNING:

Ensure both streetside and curbside front bogie wheels are chocked. After the parking brakes are released, the semitrailer may roll uncontrolled and cause injury to personnel or damage to equipment.

WARNING:

If the semitrailer is coupled to a tractor, the gooseneck isolation valve handle must be in the RUN position (handle pushed forward). If semitrailer is uncoupled and gooseneck needs adjusting, verify that front support legs are lowered and supporting the platform and all personnel are clear of gooseneck before operating gooseneck isolation valve or injury to personnel may result.

CAUTION:

The suspension shut-off valve handle must be pulled outward to the ADJUST position prior to operating any platform/gooseneck valve handles. The suspension shut-off valve isolates the suspension and prevents operation. If the valve handle is not properly positioned for intended operation, severe damage to equipment may result.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks :

Task Number	Title	Proponent	Status
551-88M-1518	Load Disabled Tracked/Wheeled Vehicle onto a Heavy Equipment Transporter.	551 - Transportation (Individual)	Analysis Completed

Supported Collective Tasks : None