

MOBILE BARRIER TRAILER (MBT-1)



**CUSHION &
BARRIER**

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The Mobile Barriers Trailer (MBT-1)

42' to over 100' of Mobile Work
Zone Protection.

Modular. Efficient. Interchangeable
right/left configurations. FHWA
Accepted at TL-2 & TL-3 under both
NCHRP 350 & MASH criteria.



*Crash Video, Report, FHWA Acceptance
& Other Information at*

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SETUP – Trailer & Wall Assembly

090512



Lock truck brakes and prepare to separate.

Remove wall sections and the ballast box from the tractor end. Ballast box on caboose end can remain in place. Lift wall sections by D rings. Ballast boxes have internal loops. Remove 4 bolts securing ballast box before lifting.

CAUTION: Use forklift, loader, or crane rated to assemble or disassemble Trailer. Equipment rated to 10 tons or more is recommended. Each wall section weighs over 5,000 lbs. Ballast boxes can weigh over 8,000 lbs depending on the amount of sand and moisture. Movement of platforms and/or caboose may involve more. Exercise caution. Make sure chains are secure and people are clear before attempting to lift or move.



The rear axel assembly ("caboose") has separate valves at the rear to open and close the air lines to the brakes (the "brake valves"). Brake valves must be OPEN (pointed out) for normal operation and when installing and/or removing wall sections. The Brake valves should only be closed to move caboose from one end of the trailer to the other, and then be reopened again for normal operation (see separate instructions).



Install and pin platform stand and castor. Castor goes on tractor end. Stand goes on caboose end.

Disconnect hoses and power lines at joint.

Loosen bolts.



Remove safety pin from connecting dowel and drive tractor and associated platform forward to separate. Drive forward only far enough to insert desired wall sections.





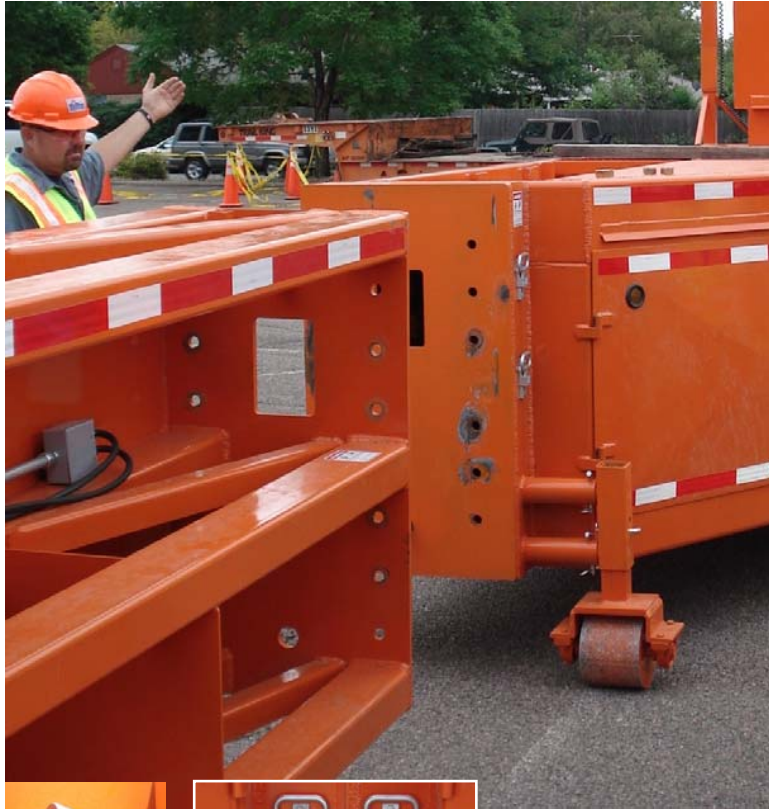
Install wall section(s) from rear platform forward.



1. Align top (long) dowel.
2. Align bottom (short) dowel.
3. Slide wall together and insert safety pin in upper dowel.
4. Tighten bolts. Apply upper pressure to wall if necessary to take pressure off and make it easier to tighten bolts. **CAUTION: Torque to 900 lbs. Periodically check and retighten as needed. Use ONLY 1" Grade 8 fine thread bolts. REPLACE after crashes or if worn.**
5. Lower and pin wall stands for support. Typically lower stand nearest end being assembled. Make sure surface is solid. Drop additional stands for additional stability.



Repeat process to install additional wall sections and/or attach platform. Reverse process to remove.

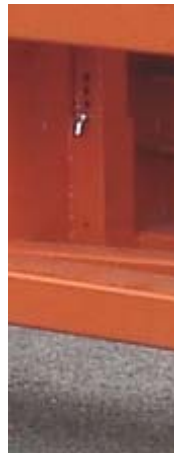


Reassemble.

Back tractor and platform. Align dowels and slide together. Use forklift to help align if necessary. **AGAIN - CAUTION:** Torque to 900 lbs. Periodically check and retighten as needed. Use **ONLY 1" Grade 8 fine thread bolts.** **REPLACE** after crashes or if worn.



Remove platform stand and castor, and raise wall stands. Use forklift to take pressure off as needed.



Reattach hoses and power lines.





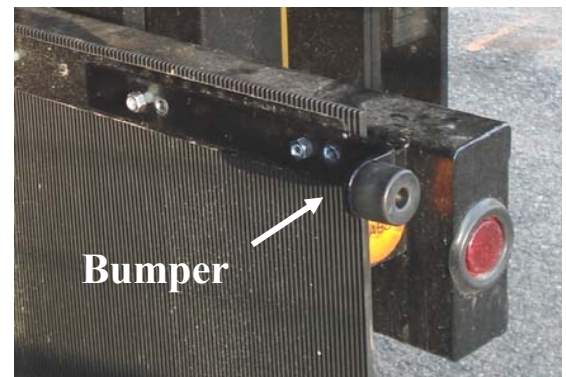
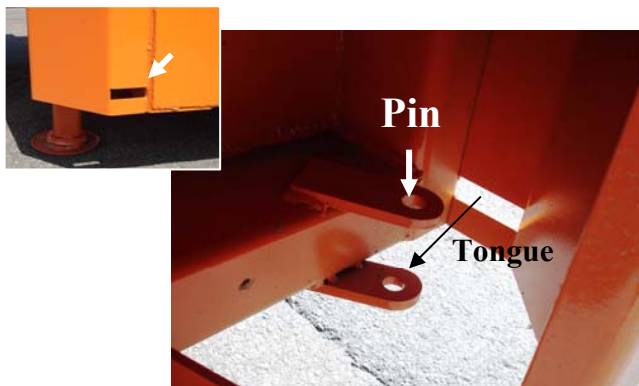
Set ballast box in place and bolt back down.

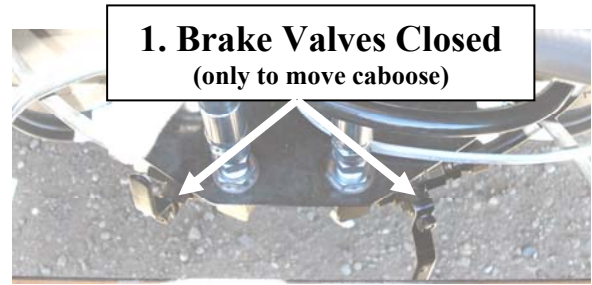
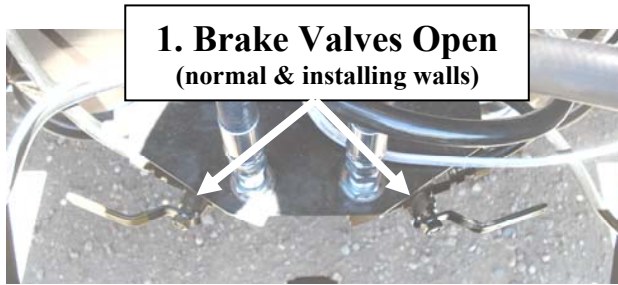


Add rear axel guard if not already in place (this can also be installed at beginning of assembly process).



Insert tongue of axel guard through lower corner slot. Pin and clip from inside. Special 7/8" pin is provided. Check that there is adequate clearance between axel guard and tires for tires to turn freely without rubbing. Bumper can be adjusted in or out as appropriate. Trailer can be moved and run at speed with axel guard properly installed.





Check Rear Connections:

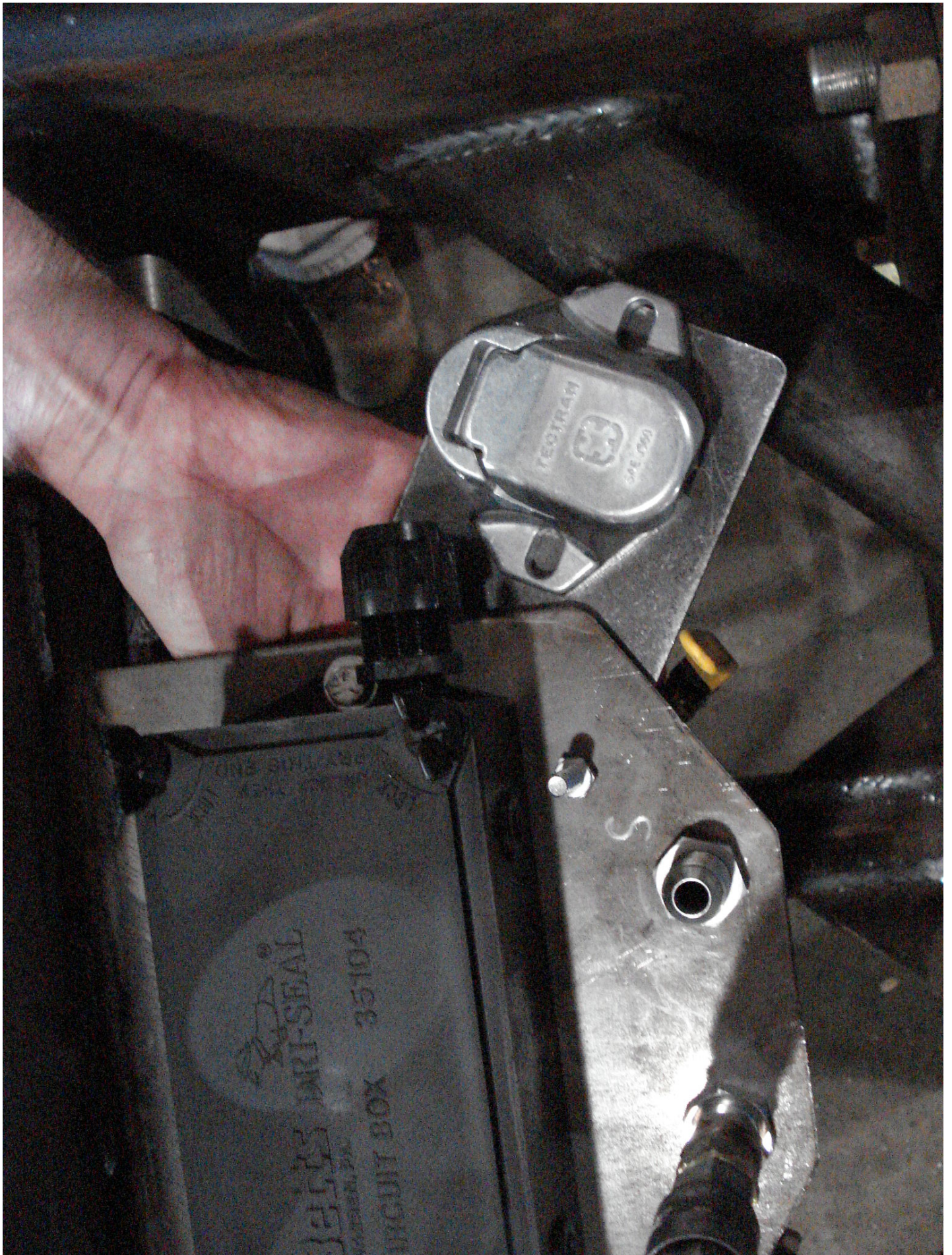
1. Brake valves must be OPEN (pointed out) for normal operation and when installing and/or removing wall sections. The Brake valves should only be closed to move caboose from one end of the trailer to the other, and then be reopened again for normal operation (see separate instructions).

2. Caboose bolts should be tight. Turn eccentric bolt within receptacle to tighten, and then torque nut to 300 LBS. See also separate Caboose instructions for more information.

3. Caboose air and power lines should be plugged into connections at rear of trailer.



TRAILER REGISTRATION is typically located in a clear covered enclosure on a platform end or inside the back center of the caboose.



SETUP – Caboose (repositioning/reconfiguring for Right/Left Setups)

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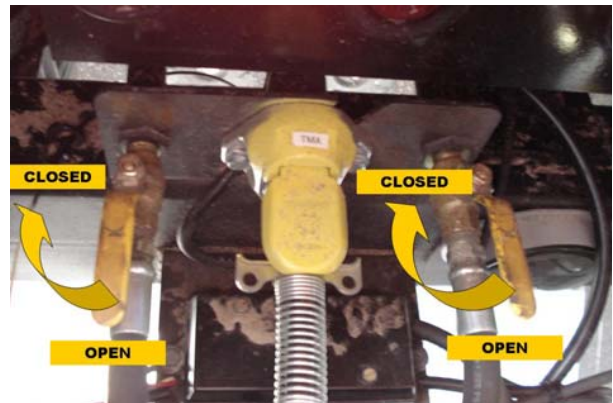
Hard Level Surface

It is recommended that you reposition or move the caboose on relatively firm level surfaces. It can be done on lesser surfaces but relatively level asphalt or concrete is recommended.

Disconnect TMA and roll away (see separate instructions). With TMA removed, proceed as follows.

Lock tractor brakes only (do not lock trailer brakes) and close rear brake air valves in Caboose before turning tractor off.

You want to maintain normal operating pressure in the lines prior to closing the caboose brake valves. You are essentially locking in normal pressure to allow the caboose to roll freely to the other end once removed from the trailer. If you lock/set the trailer brakes or turn the tractor off before closing the valves, the rear brakes will lock and you will not be able to move the caboose (either because the brakes are on due to the pressure you've closed in the lines, or because of the lack of pressure which will cause the emergency brakes come on).



The valves are at the back of the caboose as shown in the accompanying picture. Close valves by rotating the two yellow handles as shown. **CAUTION:** When the brake valves are closed per the instructions above, the trailers brakes will not be on. Exercise caution and set trailer jacks as provided below to stabilize and secure.



Set trailer jack stands.

Set the trailer jack stands at both ends of trailer.

Disconnect cables & hoses.



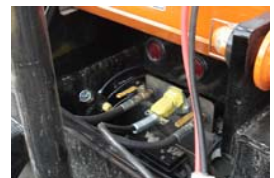
Reduce air in both sides to 5 lbs.

(see separate instructions for trailer/wall setup – increase pressure if needed to compensate for uneven surface but do not exceed 100 psi)

Lower jack stands enough to take pressure off Caboose Main Pins

Remove Caboose Main Pins

Pull and/or tap out. Use pry bar if necessary.



Lower jack stands further to take pressure off caboose.

Remove Caboose from under platform.

Hitch and receiver are provided to assist in pulling caboose out and around to the other end. Hitch is built into TMA QD. Caboose should roll out easily. If not, check that jack stands are down and pressure is off caboose, and/or confirm that brakes are not locked (see instructions above).



Reverse to Reattach at other end.

Align and push caboose under opposite platform. Engage king pin first. Then center/align nose in front vertical/horizontal guide. Fully seat. Make sure rear main caboose pins are aligned. Use pry bar if necessary.



Insert rear main caboose pins. Use pry bar and rubber mallet, board or hammer if necessary.

Reconnect hoses and cables.

Raise jack stands.

Re-OPEN brake valves. BRAKE VALVES MUST BE OPEN for normal operation for the brakes to work.

