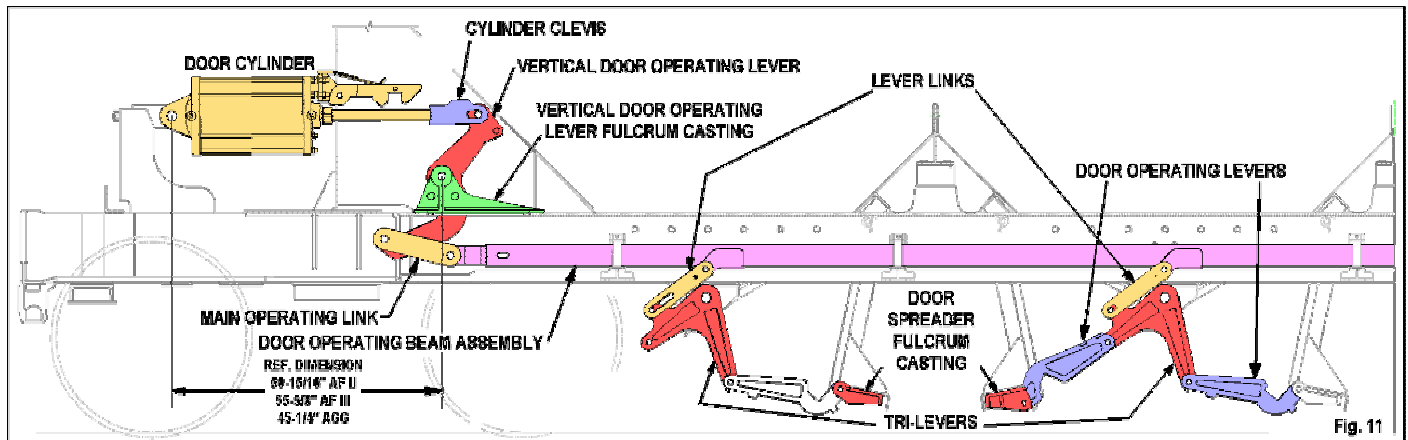


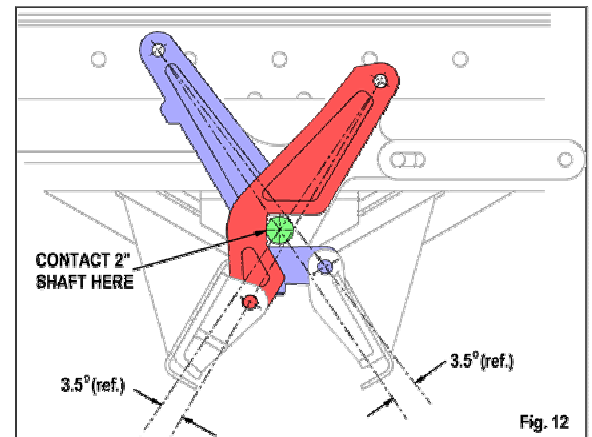
Section 6 Procedure for *INITIAL* Setup of Doors

While periodic readjustment of the door system is not necessary, FreightCar America recognizes the possibility that reconstruction of the door system may be necessary due to damage, such as that caused by derailment. Therefore, FreightCar America has included this section for your use.

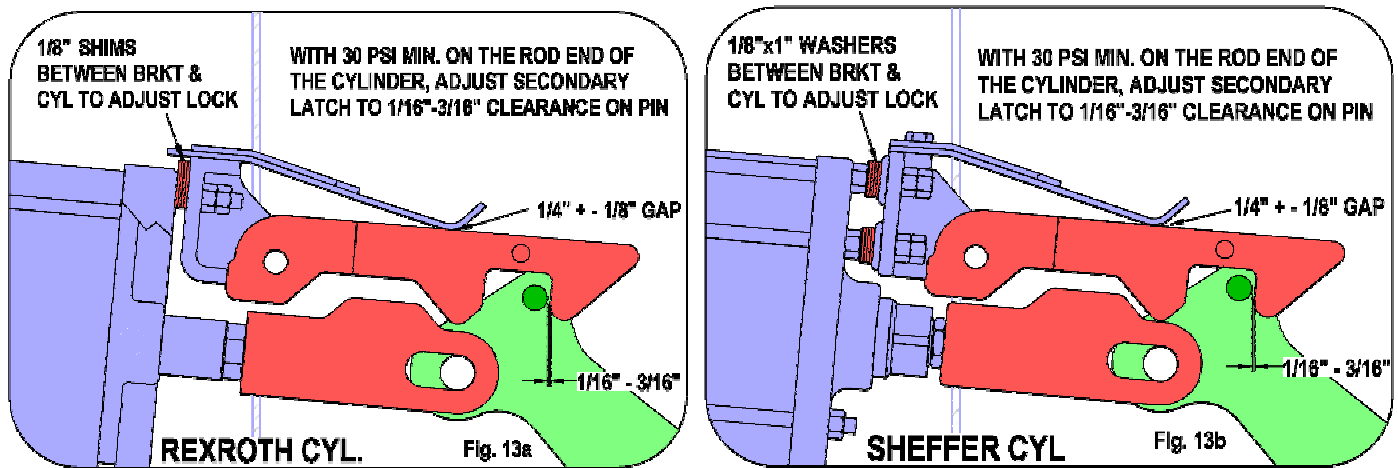
- 6.1 PURPOSE: To establish a procedure for the proper set up and adjustment of the MegaFlo door system.
- 6.2 PROCEDURE: Begin with the door cylinder and (5) tri-levers connected to the door operating beam only (doors disconnected).
 - 6.2.1 Apply air directly to door cylinder to obtain "closed" position of doors.
 - 6.2.2 The pin in tri-lever must be between 0" to 1/2" away from the closing end of the slot in the lever link (G,A,C,F,D). Note the links are marked (G,A,C,F,D) and they must be in this proper sequence starting at the cylinder end of the operating beam.
 - 6.2.2.1 If all levers meet specifications, then proceed to step 6.4.
 - 6.2.2.2 If only some levers meet specifications, the incorrect ones must be adjusted before proceeding to step 6.4.
 - 6.2.2.3 If all (5) levers **DO NOT** meet specifications, then follow step 6.3.
- 6.3 This step only applies when all (5) Tri-levers do not meet step 6.2.2.
 - 6.3.1 Adjust door cylinder clevis until step 6.2.2 is obtained. The amount of threads exposed between clevis and cylinder rod may range from 3/8" min. to 3/4" max.
 - 6.3.2 If tolerances are not obtained after this adjustment, this could indicate a mis-located vertical door operating lever fulcrum casting or an out of tolerance operating beam (hole to hole dimension). Analyze the problem and correct before proceeding to step 6.4.
- 6.4 Connect operating levers to door spreader fulcrum castings as shown on Figure 11.
 - 6.4.1 Use 1" diameter pins.
 - 6.4.2 All levers and fulcrums should be pinned at this point.



- 6.5 Close and adjust doors.
 - 6.5.1 Each pair of door lips **MUST CONTACT** each other at one point and have less than a 1/8" NO-GO gage gap at any given point. See Figure 3.
- 6.6 Final inspection of door operating levers.
 - 6.6.1 Both operating levers must be over-center. See Figure 12. One of the two operating levers must contact the two inch shaft. The other operating lever must be within 1/4" of contacting the two inch shaft. If these conditions apply, both operating levers will be over-center. Note: Only one side of an operating lever touching the shaft is acceptable.



- 6.6.2 Perform final verification of steps 6.7 to 6.9.
- 6.7 Air test door system.
- 6.7.1 Verify that all door hinge fasteners and apron fasteners are secured and all specified welds have been applied.
- 6.7.2 Open and close doors with 70 PSI max. air pressure. Perform this process twice.
- 6.7.3 If system passes test, verify door lips as stated in step 6.5 and proceed to step 6.8.
- 6.7.4 If system fails test, determine problem and correct. Some areas to check may include: Apron and door interference, binding or misaligned connections at cylinder, and operating beam connector interference with center sill. Verify door lips as stated in step 6.5. and proceed to step 6.8.
- 6.8 Adjust secondary lock. Note: This procedure is for initial set up, it is not necessary to readjust at each periodic maintenance cycle, unless the lock is not engaged over the pin.
- 6.8.1 Check and adjust lock with air in the cylinder (30 psi minimum on the push rod side) so that there is 1/16" min. to 3/16" max. gap between latch lock and lever pin. Apply spacers as required to obtain proper adjustment.



- 6.9 Complete a final inspection and perform a final air test as outlined in **Section 5**.