

Published: 20 January 2021

Topic: USED RIM INSPECTION PROCEDURE

In an effort to prevent rim failures caused by the corrosion and deterioration of rims, CCM requires rims to be inspected every time the tire and tube are removed for any reason. To this end, as a reminder of the requirements set forth in the CCM M&R Manual, the following procedure should be employed by all companies performing tire repairs on CCM pool equipment.

I. GENERAL

1. All repair vendors and/or service providers are required to certify that all mechanics and service personnel involved in the mounting, dismounting, repair, transportation and handling of tires for the pool and/or its repair vendors and service agents are properly trained in the inspection and maintenance of multi-piece rims as described in **OSHA 29 CFR 1910.177 and 29 CFR 1910.178**.
2. All repair vendors and or service providers agree that unless a mechanic/service agent is properly trained in the afore mentioned OSHA Standards as well as all CCM tire and rim maintenance procedures and safety guidelines, they will not be allowed to service, mount, dismount, maintain, repair or handle and tire, or rim from a CCM managed chassis.
3. Always follow ALL OSHA and CCM safety procedures, including but not limited to personal protection equipment, such as eye guards and hearing protection etc.
4. Adhere to ALL **OSHA (Occupational Safety and Health Administration)** safety procedures for tire and rim handling and rim to lock ring matching per the above named OSHA publications
5. Follow ALL **TMC (Technology and Maintenance Council)** recommended practices for **Rim - Out of Service Conditions** as described in practice **#RP-222-B** of the **TMC Intermodal Recommended Practices Manual**
6. Follow all CCM Procedures and specifications regarding tire and rim and inspection procedures as may be periodically published
7. Rim inspections and service must only be performed on rims that are dismounted from the tire or that have a fully deflated tire on them with the valve core removed. **NOTE: Under no circumstances is a rim to be serviced or inspected when mounted to an inflated tire.**
8. This procedure is applicable only to 7.5" x 20" two piece Dayton style demountable truck trailer rims.

II. Visual Inspection

1. A complete visual inspection of the entire rim is to be made paying particular attention to the rim base at the lock ring seat around the entire circumference of the rim. If any of the following conditions are observed the rim must be immediately removed from service and scrapped.
 - a. Any three piece rims discovered are to be immediately scrapped. CCM will not remount or reuse 3 piece rims for any reason
 - b. Flange bent away from the bead by 3/8th inch or more
NOTE: rims may have no more than 2 bent areas regardless of amount of deflection
 - c. Any bend in the flange towards the bead is unacceptable
 - d. Any bends in the base or web of the rim is unacceptable
 - e. Any rim or lock-ring without marking or with illegible marks are to be removed from service
 - f. Rim or lock-rings that have heavy rust, corrosion, scaling or pitting are unacceptable (see attached pictures)
 - g. Any deformation, cracks, broken welds or repairs to the rim and/or lock ring are not acceptable
 - h. Lock ring gap must be less than ½ inch. Any gap of more than ½ is to be removed from service
 - i. All lock rings must seat properly. No gap or improper seating between the lock ring and the rim shoulder at any point around the circumference of the rim is allowed. Any rim / lock-ring that exhibits improper seating is to be removed from service
 - j. Valve locators must be present. If they are not present the rim barrel must be replaced.
NOTE: Valve stem locators cannot be replaced or repaired (see attached picture)
 - k. Any lock rings that are sprung must be replaced

III. Physical Inspection

1. After a complete visual inspection is performed, the pointed end of a chipping hammer should be employed to check the rim as follows
 - a. The rim should be struck around the perimeter of the rim base
 - b. Strikes around the base should be alternated with strikes along the width of the base
 - c. Special attention should be paid to lock-ring side of the rim and the lock-ring channel in particular
 - d. Each strike should sound solid and "deep"
 - e. If any of the following conditions are noted the rim should be removed from service
 - i. Fractures, punctures, and or dents occur as a result of the strikes
 - ii. Excessive rust chips or scaling from hammer strikes
 - iii. Strikes have an unusual, hollow, or unusual sound
- NOTE: Safety is the prime consideration of this process. If there is any doubt about the quality of the rim and/or lock-ring, it should be removed from service.

IV. Disposition of Rims Removed from service

1. Not all rims removed from service need to be disposed of. Under certain circumstances rims can be refurbished or repaired to bring them back into compliance and return them to service. The following conditions may be corrected as indicated below
 - a. No matching characters or illegible matching characters on lock-ring – replace lock ring
 - b. Minor corrosion(rust but no heavy pitting or signs of metal loss) or no paint on rim base or lock-ring – refurbish rim base and lock-ring

NOTE: refurbishment of rims should only be undertaken by companies approved by CCM Technical Services
2. All rims removed from service for any of the following conditions cannot be repaired and must be replaced
 - a. Any condition as described in **II 1. a-g** as described above
 - b. Missing valve stem locators
 - c. Missing or illegible matching characters
 - d. Rim bases where matching lock-rings cannot be sourced
 - e. Pitting from corrosion to either rim base or lock-ring
 - f. Scaling on either rim base or lock-ring
 - g. Loss of metal due to corrosion of rim base or lock-ring
 - h. Any condition as described in

All rims removed from service for the conditions noted above are to be destroyed or disposed of through a reliable scrapping service. Under no circumstances are these rims to be sold or otherwise allowed to be returned to service.

3. All multi-piece rims that are permanently removed from service are to be replaced with **tubeless 8.25X22.5 rims only**. CCM Technical services will work with select re-cappers and tire suppliers to provide tubeless rims in certain areas.

Please direct all questions regarding this matter to CCM Chassis Technical Service Manager via one of the contacts provided below.



