Consolidated Chassis Management LLC (CCM)

Maintenance & Repair Procedures Manual

Version 4.1

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Section 1- Introduction

1.0 Purpose of Manual

This manual is to be used in conjunction with the current edition ***IICL Guide for Container Chassis Inspection and Maintenance Fourth Edition*** **(IICL Chassis Guide)** to ensure that all equipment managed by Consolidated Chassis Management (CCM) is maintained in a safe, operable manner, and in full compliance with FMCSA standards. It is the purpose of this manual to provide guidance to CCM staff and M&R vendors, on the policies and procedures for repairing and maintaining CCM managed equipment.

1.1 Safety

CCM is dedicated to the safety of its employees, representatives, suppliers, contractors and the general public. It is our objective to ensure that all equipment is repaired and operated in the safest manner possible.

To that end, CCM requires that all parties repairing or causing CCM equipment to be repaired, ensure that all Occupational Safety and Health Administration (OSHA) and state safety requirements and procedures be observed at all times while inspecting and/or repairing equipment.

1.2 CCM SYSTEMATIC MAINTENANCE PROCEDURE

The following procedures are to be followed by CCM staff and M&R vendors to ensure that CCM managed chassis are systematically inspected and repaired as necessary to ensure compliance with applicable FMCSA (49 CFR 393 – 396) regulations. The associated records of all inspections and repairs of the chassis must be retained and communicated to CCM.

M&R VENDORS

Whenever a chassis is repaired, with the exception of chassis tires only or a chassis being repaired through a roadability lane, the M&R vendor must complete a Systematic Maintenance Check ("SMC") to visually inspect the entire chassis for any roadability defects. The inspector will either certify that the chassis does not need any additional repairs, or will identify items that require further repair as guided by the nine component categories below.

1. Brakes, and all components thereof
2. Lights - Lighting devices, lamps , markers, and conspicuity marking material
3. Wheel - Wheels, rims, lugs, tires
4. Air Line - Air line connections, hoses, and couplers

5. Coupling - King pin upper coupling device
6. Frame - Rails or support frames
7. Bolster - Tie down/bolsters front and rear
8. Fastener - Locking pins, twist locks, clevises, clamps, or hooks
9. Slider - Sliders or sliding frame lock

Once the SMC is completed and all identified defects, if any, have been repaired, the SMC shall be recorded in the CCM M&R system. By entering the SMC in chassis.com, the vendor is certifying that the chassis meets all FMCSA roadability criteria.

It is incumbent upon the M&R vendors to develop and implement a quality program to ensure that the SMC is performed and all CCM M&R policies and procedures are complied with.

CCM POOL MANAGEMENT

The CCM Pool Manager will audit the repair and inspection records to ensure the SMC is recorded with the repair invoice in the CCM M&R system. The Pool Manager will address repairs invoiced without an SMC with the M&R vendor. This procedure will ensure inspections are properly performed and reported by the M&R vendor.

CCM, or its agents, will conduct field audits of the CCM M&R vendor's compliance with this procedure.

Each month, the Pool Manager will identify all active chassis in the pool that have not had an SMC reported within the last 6 months. The Pool Manager will locate these chassis and after placing a hold on the chassis arrange for an inspection to be performed.

Section 2 – Identifying the Need for Repair

2.0 General Inspection Requirements

While the SMC is an essential part of the safe operation of an intermodal chassis, valuable input must also be provided by the driver operating the equipment over the road. Problems appearing from wear, in coupling as well as suspension, tracking, and brakes can often be more readily identified by the driver, therefore, input from the driver is considered essential and must be recorded and fully investigated whenever such a report is provided through a Driver Vehicle Inspection Report (**DVIR**). Please see the DVIR and DVER procedures that are included in this manual.

2.1 Inspection Criteria

All equipment is to be **inspected** in accordance with applicable U.S. Federal regulations governing chassis including but not limited to **49 CFR 390-396**, **571.108** and **571.121. Repairs** are to be to IICL

standards for chassis. For a more detailed description of these regulations please refer to the IICL Chassis Guide section 1.3 in its entirety. Inspectors and their employers should also be aware of the latest version of the criteria for "Out Of Service" (OOS) as provided by the Commercial Vehicle Safety Alliance (CVSA) and enforced by state police agencies.

This guide provides suggested criteria for determining what is a repairable and the preferred methods and extent of repair. It should always be remembered, however, that the overriding consideration in all inspections and repair operations is the ensured safe operation of the chassis.

2.2 Determining Repair Worthiness

Any defect, whether caused by damage or wear is to be repaired if it affects the safe operation of the unit. In some occasions of major damage the repairs may be suspended pending the possible scrapping or termination of the chassis.

2.3 Definitions of Wear & Damage

Wear damage is one or more defects caused by continuous deterioration in the physical condition of the chassis resulting from normal use. For examples of wear please refer to the ***IICL Chassis Guide Section 4.***

2.4 Chassis Repair Criteria

The following tables contain a list of components and corrective actions taken. The components are classified as follows:

- Table A – Structure
- Table B – Landing Gear
- Table C – Securing Devices
- Table D – Slider Assemblies
- Table E – Brake System
- Table F – Electrical System
- Table G – Tires
- Table H – Wheel Group
- Table I – Suspension
- Table J – Miscellaneous

NOTE: Items which are required in accordance with FMCSA 49 CFR 393 & 396 and Appendix G to 49 CFR, Chapter III, Subchapter B are indicated in the table with "*"

Also note that while these criteria are largely similar to the IICL Chassis guide, there are some differences with regard to nonstructural high frequency repair items. All criteria are based on the premise that all equipment should be inspected and maintained to FMCSA Standards and repairs made to the standards contained in the current edition of the IICL Container Chassis Manual.

Table A Structure Criteria (excluding landing gear)

Component	Condition	Action Required
All mainframe components, including crossmembers	* Missing / loose components / fasteners	Repair/replace
	*Cracked, broken, loose, fastenings	Repair/replace
	*Any condition, loaded or empty, that causes frame or body to be in contact with any moving component	Repair/replace as necessary after determination of cause
Kingpin	Cracked/ chipped / distorted. Any movement in any direction; distortion / unusual wear that affects operation	Replace
	Worn Beyond Wear Limits	Replace
Upper Coupler	Broken welds or cuts	Repair
	Cut/torn/cracked components	Repair/replace
	Uneven wear/dished/bulged/or distorted upwards	If power unit fifth wheel cannot engage kingpin, Repair/replace
	Blockage of drain holes	Unblock
	Severe corrosion	Repair/replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR , Chapter III and Subchapter B**

Table A Structure Criteria (excluding landing gear) (Cont.)

Component	Condition	Action Required
Main rails - main rail gussets	Any deformation such as a bends, bows, dents, etc.	If damage prevents a container from properly securing to the chassis, would cause damage to the container if left unrepaired, or prevents the chassis from tracking properly, repair/replace
	Cracked/broken welds	Reweld
	Cut or torn Component	If damage prevents a container from properly securing to the chassis, would cause damage to the container if left unrepaired, or prevents the chassis from tracking properly, repair/replace
	Elongation of hole in web for passage of landing leg shaft	If elongated to more than 5in. (125mm) in diameter or within 1" (25mm) of main rail flange, repair
Bolsters	Cracked or broken welds	Repair
	Cut or Torn Component	Repair
	Any deformation such as a bends, bows, dents, etc.	If container cannot be secured to the chassis, Repair
	Severe Corrosion	Repair

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR , Chapter III and Subchapter B**

Table A Structure Criteria (excluding landing gear) (Cont.)

Component	Condition	Action Required
Bolster gussets	Cracked/broken welds	If cracks exceed 20% of total weld area or it is felt that component will come off during use, reweld
	Cut or torn Component	If damage prevents a container from properly securing to the chassis, or would cause damage to the container if left unrepaired, Repair/replace
	Any deformation such as a bends, bows, dents, etc.	If damage prevents a container from properly securing to the chassis, or would cause damage to the container if left unrepaired, Repair/replace
Crossmember	Cut or torn	Cuts in upper or lower flange that would contact the container and cause damage or extend into the vertical plane of the crossmember, repair/replace
	*Cracked/broken welds in upper or lower flange at main rail or gusset	Repair only in conjunction with FMCSA/FHWA inspection
	*cracked/broken welds in the radius or the vertical plane of any crossmember	Repair

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table A Structure Criteria (excluding landing gear) (Cont.)

Component	Condition	Action Required
Crossmember (cont'd)	Any deformation such as a bends, bows, dents, etc.	If damage prevents a container from properly securing to the chassis, would cause damage to the container if left unrepaired, or disturbs the vertical welds to the main Repair/replace
	Severe Corrosion	Repair/replace
Crossmember gussets	Cut Component,	Cuts in upper or lower flange that would contact the container and cause damage repair/replace
	Cracked, Broken welds	If cracks exceed 20% of total weld area or it is felt that component will come off during use, reweld. Minor cracks between crossmember and gusset upper flange are to be repaired only in conjunction with FMCSA/FHWA Inspection.
Under-ride Protection ("ICC bumper")	Cut component, cracked/broken welds	Repair
	Missing(if provided originally) or partially removed	Repair/Replace
	Any deformation such as a bends, bows, dents, etc.	Deformed over 2.0 in. (50mm) **outside** rear plane of unit OR if not within 22in. (560mm) of road service, OR if touching springs/ tires/ any moving component under any condition including loading - repair/replace OR bent inward where vehicle behind cannot see the conspicuity markings

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table A Structure Criteria (excluding landing gear) (Cont.)

Component	Condition	Action Required
Light Box	Torn/cracked/severe corrosion	Repair/replace
	Loose	Resecure
	Bent	If affecting the visibility of the lighting OR the securing of the lighting OR if touching tires or any other moving component under any condition including loading, repair
Mud flaps	Cut or torn	If cut 3 inches horizontally at the mount bracket - replace
	Holed	If hole is more than 2in. (50mm) in diameter, replace
	Loose or missing fasteners	If more than one fastener missing, repair/replace
	Improper length	Repair/replace
Mud flap Bracket	Cut or torn	If it can no longer properly secure with mud flap without damaging it, repair/replace
	Cracker or broken welds	Repair
	Any deformation such as a bends, bows, dents, etc.	If deformation causes the mud flap or brackets to touch the tires, or ground, repair/replace
Dock bumpers	Missing(if provided originally) or partially removed	No action

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table B Landing Leg Criteria

Component	Condition	Action Required
All landing gear Components	Missing or loose parts or fasteners	Repair/replace
	Holed, cut, or torn	Replace
	Cracked/broken weld	Repair/replace
NOTE: Landing leg upper tube can be re-welded to the landing gear mounting plate provided there is no distortion to the leg tube.		
Landing leg brace (diagonal or cross brace)	Any deformation such as a bends, bows, dents, etc.	If deformation causes toeing of legs in any direction, or impairs operation of legs, Replace with 3 inch "C" channel
	Cracked/kinked	Repair/replace
Landing legs	Uneven height	Repair
	out of alignment	Repair
	Any deformation such as a bends, bows, dents, etc.	If operation is impaired, repair/replace
Gearbox	Inoperable in one and or both gears	Repair/replace
Cross shaft	Any deformation such as a bends, bows, dents, etc.	If operation is impaired, repair/replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table B Landing Leg Criteria (Cont.)

Component	Condition	Action Required
Crank handle	Any deformation such as a bends, bows, dents, etc.	If handle cannot be secured to chassis or leg brace OR if the handle is too short to operate landing gear when container is mounted, replace
Crank handle retainer	Any deformation such as a bends, bows, dents, etc.	If inoperable or missing, repair/replace
Sand shoes/sand pads/wheels	Any deformation such as a bends, bows, dents, etc.	If shoe(or wheel) does not rest firmly on the ground when landing gear is extended and it does not fully support the chassis, repair/replace
	Axle openings elongated or torn	If the hole is enlarged or otherwise distorted where there is risk if the shoe falling off, replace
Sand Shoe Axle	Seized/Ability of the sand shoe to swivel is impaired	If shoe(or wheel) does not rest firmly on the ground when landing gear is extended and it does not fully support the chassis, repair/replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table C Securing Device Criteria

Component	Condition	Action Required
Securing devices (safety devices), including twist locks, locking pins, twist lock collars, springs, twist lock handles and handle retainers(ALL locking devices must be operable)retainers or springs	*Missing component, handles, or retainers	Replace
	*Unattached, inoperable or incapable of secure attachment	Repair
	*Cracked or broken components or welds	Repair
	*Seized or frozen	Repair
	Any deformation such as a bends, bows, dents, etc.	If securement operation is impaired, replace
	Loose fasteners	Repair
	*Bent handles which are not operable and/or protrude beyond the envelope of chassis when in locked position	Repair
	*Any vertical movement of twist locks greater than one (1) inch.	Repair
	*Any horizontal movement of twist lock greater than ½ inch from the 90 degree angle when locked	Repair

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table D Slider Assembly Criteria

Component	Condition	Action Required
Adjustable Axle Assemblies(sliding sub frames or sliding tandems) - all components	*Missing, unengaged or loose parts or fasteners, including lock pins	Repair/replace
Slider frame	*Cut/torn/cracked/broken	Repair
	Any deformation such as a bends, bows, dents, etc.	If slider operation or securement is impaired, repair
Locking(indexing) pins	*Cracked, chipped, or broken	Repair
	Any deformation such as a bends, bows, dents, etc.	If pins do not engage index holes and a minimum of .25in.(6mm) exclusive of chamfered edge of pin, past face of rails after engagement, repair
Indexing Holes	Elongation	If more than .125in. (3mm) in longitudinal travel, repair
	Cracked or deformed around perimeter of hole	Repair
Stops	Cracked, broken, distorted, worn-out	Repair/replace
	cracked or broken weld	Repair
Safety Devices, including lock pins, indexing holes and stops	*Missing or cannot be engaged	Repair/replace
	*Unattached or incapable of attachment	Replace

NOTE: Extendable chassis of adjustable length and or with sliding axle assemblies should be carefully inspected to ensure that the mechanism is in proper working order, that all locking pins are properly engaged and that the flexible airlines and electrical harnesses are properly routed and secured to prevent chaffing , regardless of load before, during or after adjustment of chassis length

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table E Brake System Criteria

Component	Condition	Action Required
Service brakes	*Absence of braking action on any axle required to have brakes upon application of service brakes	Determine cause and repair/replace components as required to achieve proper braking action
	* Missing Brake	Replace
Parking Brake	*Absence of braking action on vehicle or combination upon actuation of parking brake control, (including driveline hand controlled parking brakes)	Determine cause and repair/replace components as required to achieve proper braking action
All mechanical brake system components, including shoes, return springs, anchor pins, spiders, cam shafts and bushing, rollers, pushrods, air chambers, and all mounting or support brackets and fasteners	• Missing, loose, bent, broken, frozen	• Repair/replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table E Brake System Criteria (Cont.)

Component	Condition	Action Required
Glad-hands	Cracked broken or leaking	Repair replace
	Twisted, turned or loose	If not in vertical position repair
	Clogged leaking or nonfunctional	Repair replace
	Any audible leak	Repair/replace
	Cracked or damaged by heat	Replace
	Missing	Replace
Glad-hand gaskets	Cut, torn, cracked, burned, folded	If leaking, replace
	Missing, loose, bent, broken, frozen	Replace
Antilock brake systems	*ABS malfunction indicator lamp remaining lit more than 5 seconds, or illuminated at any time while chassis is moving at road speed	Repair
	*ABS malfunction indicator lamp does not operate during a bulb check; bulb or lens broken	Repair
Air Line Tubing	* Crimped collapsed or broken	Repair/replace
	Cut or torn	Repair/replace
	Clogged , leaking or otherwise non functional	Repair/replace
	* Any audible leak	Repair/replace
	*Cracked or heat damaged	Repair/replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table E Brake System Criteria (Cont.)

Component	Condition	Action Required
Air hoses	Crimped	Repair replace
	Cut or torn	Repair/replace
	Obstructed, leaking or otherwise nonfunctional	Repair/replace
	* Cracked, crimped or broken	Repair/replace
	* Abraded/chafed through outer reinforcement ply	Repair/replace
	* any bubbling or swelling when charged with air	Repair/replace
	* Any audible leak	Repair/replace
	* Improper connections or previous repairs (use of screw type hose clamps not permitted)	Repair/replace
	* Improperly routed/secured, touching axles or other moving components when chassis is laden or empty	Repair/replace
Relay Valve	Cracked or broken	Repair/replace
	Obstructed, leaking or otherwise nonfunctional	Repair/replace
Air Tank(s)	Puncture of any type (cut, tear etc.)	Replace
	air leaks at fittings	Repair/replace
	Broken/cracked mounts	Repair
	Loose/missing fasteners	Repair/replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table E Brake System Criteria (Cont.)

Component	Condition	Action Required
Air/spring brake chamber	* Inoperable	Replace
	* Any audible air leakage	Replace
	Severe Corrosion	Replace

NOTE: Appropriate caution must be observed at all times in the inspection and handling and replacement of spring brake chambers. *Under no circumstances* should an attempt be made to open a spring brake chamber during inspection

Component	Condition	Action Required
Slack Adjusters	*Cracked, broken, stripped, or otherwise nonfunctional or mismatched (auto slack combined with manual on same axle) **See notes below**	Repair/replace
	Seized or stiff	Repair/replace
Brake linings/pads and shoes (See note below regarding applicable U.S. Fed Regs)	*Excessive or uneven wear	.25in.(6mm) or less pad/lining thickness at shoe center, replace
	Cracked/chipped through the thickness of the pad/lining at the shoe edge	Replace
	Cracked/chipped/broken parallel to the shoe edge	If the crack is more than .0625in. (1.6mm) wide OR more than 1.5in. (38mm) long - replace
	* Lining/pad loose rivets broken/missing	Replace

NOTE: Chassis manufactured after October 20, 1994 *must* have automatic slack adjusters in all braking positions.
NOTE 2: Manual and/or automatic slacks cannot be mixed on the same axle. If chassis is manufactured after October 20, 1994, slacks *must* be automatic.

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table E Brake System Criteria (Cont.)

Component	Condition	Action Required
Brake linings/pads and shoes (See note below regarding applicable U.S. Fed Regs.) (Cont.)	* Saturated with oil or grease or otherwise contaminated/glazed	Replace
	*Lining separated from the shoe	If more than .0625in (1.6mm) replace
	*Lining has vertical cracks	If the crack extends across the face or through the thickness of the lining, replace
	*Lining has horizontal cracks	If the crack or void exceeds 1/16th in width OR exceeds 1.5 in. in length, replace
Brake drums	* Cracks on the outer surface that open on application of the brakes	Replace
	* Deep scoring (NOT hairline heat checking)	Replace
	* Any missing sections or in danger of coming off	Replace
Brake Adjustment	* Any single past the brake readjustment limit by .25in.(6mm) or more	Repair in accordance with the USDOT Readjustment limits
	* Any two brakes on the same chassis that exceed the readjustment limit by any amount	

NOTE: Please refer to IICL Chassis Guide Appendix A, Tables 1, 2, and 3 for more detailed information on US Fed. Requirements regarding brake readjustment and maximum allowable stroke. Stroke is to be measured with power unit engine off and air tank/reservoir pressure of 90PSI with the brakes fully applied. ***BRAKE REPAIRS ARE TO BE PERFORMED ONLY BY QUALIFIED MECHANICS.***

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Electrical System

Table F

Component	Condition	Action Required
Receptacle (7way plug)	Missing/loose parts or securements	Repair/replace
	Bent/distorted/missing pins	If not making good secure connection with plug or not providing sufficient contact, repair/replace
	Broken pins /insulation	Repair/replace
	Intermittent/no/faulty ground	Repair/replace
	Corroded	Clean/replace
	exposed wiring/connections	Repair/replace
Clearance/ marker/ Identification/ stop/turning/running license plate light bulbs and lens	*missing, burned out broken	Repair/replace
	*Insufficient illumination	Repair/replace
Clearance /marker/ Identification/ stop/turning/running license plate light assemblies	*Missing or inoperable	Repair/replace
	*broken or cracked	If damage affects the ability of the component to secure the lens and bulb or the securement of the assembly to the chassis, repair/replace
	Accumulating moisture	Repair/replace
Reflectors	*Broken/chipped, cracked through, missing or broken	Repair/replace
Wiring	Short Circuit	Repair
	Bare cut or frayed insulation	If bare wire is exposed - repair
	Dangling loose	Resecure/repair

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table F Electrical System (Cont.)

Component	Condition	Action Required
All lighting equipment and reflectors as required in 49 CFR 393 or FMVSS108	* Inoperable for any reason or missing	Repair/replace

Note: detail listing of lighting requirements provided in IICL Chassis guide Appendix B

Table G Tire Criteria

Component	Condition	Action Required
Tires	* Audible or manual detection of air leak OR tire is received with less than 65 psi air pressure	Repair/replace
	*Belt or body ply material is visible through tread or sidewall	Replace
	* Tread depth is 2/32nds in. (2mm) or less at any point measured in a major tread grove	Replace
	* Any tread or sidewall penetration that when probed indicates penetration of belt or cord	Replace
	* Any cut on sidewall or in the tread where the body or belt cord material has been cut, exposed or penetrated	Replace
	Visible blisters or knots	Replace
	Severe weather checking if more than .25in.(6mm) deep	Replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table G Tire Criteria (cont.)

Component	Condition	Action Required
Tires (Cont.)	Blown out or Impact break	Replace
	Missing	Replace
	Flat/Slid flat tires	If lowest point of the tire measures 2/32in.(2mm) or less replace
	Adjacent tires with a mismatch in height of more than 3/8 inch	Exchange or replace tires to match heights of tires
	Abnormal/uneven wear	If lowest spot on the tire as measured in a major tread is 2/32in.(2mm) or less replace NOTE: Regardless of variance in tread depth, chassis suspension and alignment should be checked for defects
	Contact of adjacent tires (Kissing)	Determine cause and repair/replace as necessary
	Incompatible tires (mixing radial and bias tires on same axle)	Exchange or replace tires to mate correct types of tires
	Tire contacts the container or any other part of the chassis or the container when loaded or empty	Research cause and repair/replace as necessary
	Over/under inflated per stated specification	Adjust air pressure as appropriate to achieve uniform 90 PSI
	Tires not marked for multi position or trailer use only	Replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table G Tire Criteria (cont.)

Component	Condition	Action Required
Valve Stems	Pinched, cut, kinked, flattened, crushed where stem is leaking air , impedes air flow, or will not seat a valve cap	Replace
	Clogged/obstructed	Clean and install new valve cap
Valve caps	Missing or broken	Replace with pressure caps only
Rims/rim base/Lock Rings	Improperly mated parts	Replace
	* Cracked/broken	Replace
	*Bent Flange away from bead more than 3/8”	Replace
	*Bent Flange away from bead less than 3/8” in more than two places	Replace
	*Bent flange TOWARDS head regardless of depth	Replace
	*Bent or deformation of web or base	Replace
	*Improper seat or gap between lock ring and rim for the circumference of the rim	Replace
	*Any cracks to welds in rim or lock ring	Replace
	*Lock ring gap exceeds ½”	Replace
	Heavy rust, corrosion or pitting	Replace
	Warped / distorted/ bent to expose bead, compromise the seal, or integrity of the tire or present a hazard	Replace
	Elongated bolt holes (Budd rims)	Replace
	Any welded repairs on a rim or lock ring	Replace
	Mismatched types	Replace as required
	Valve stem locators worn to less than ¼ inch in height	Replace
Rim spacer	Distorted or crushed	Replace
	Improper tire clearance	replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table H Wheel Group Criteria

Component	Condition	Action Required
Wheels	* Cracked or broken	Replace
	* Elongated bolt holes	Replace
Fasteners	Broken/missing stripped, loose bent mismatched or otherwise ineffectual	Replace
Hubcaps (Oil Bath)	Cut/cracked/ broken	Replace
	Leaking oil	Check gaskets and plug and repair/replace as necessary
	Oil level low	Add as required and check for leaks
Inner hubs (oil bath)	Low oil level	Add as required and check for leaks
	Leaking inner seal	Evidence of fresh moist leakage, replace
	Contaminated Oil	Drain all oil from hub, clean components as necessary and replace
Hubcaps (grease)	Cut/torn/ cracked/broken/warped	Replace
	Leaking grease	Replace
	Contaminated grease	Remove, clean & inspect bearing and hub, repair/replace as necessary and repack
Bearings & Races	Cracked/pitted/worn/burned/scored	Replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table I Suspension Criteria

Component	Condition	Action Required
All Components	Missing/ Loose components or fasteners	Repair/replace
	Welds cracked/broken	Repair
	Cut/torn/cracked/broken/ inoperative	Replace
	Heat Dots that turn black	Inspect and repair as required per CCM Heat Dot Procedure
Radius Rods (All - fixed or adjustable)	Any visible bend/bow/dent/etc. affecting the operation or alignment of the chassis	Replace/re-align
	Worn Bushings	Replace
Adjustable Radius Rods	Stripped threads	Replace
Axles	Any visible bend/bow/dent/deformation affecting the operation or alignment of the chassis	Repair/replace
	Spindles bent/burned/ out of round (IPR)	Repair/replace
Springs	Distorted/worn out	Repair/replace
	Broken/missing	Repair/replace
Spring Hangers & Equalizers	Inoperable	Repair/replace
	Worn Bushings	replace bushings
	Bends/bows/dents/ major deformities	If axle alignment or suspension operation is affected, repair/replace

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table I Suspension Criteria (Cont.)

Component	Condition	Action Required
Spring hangers and all other axle positioning components	* Cracked/bent/broken/missing/loose (possible cause of axle shifting from set operating position	Repair/replace
	Severe corrosion	Replace
Leaf springs	*Any broken leaf (applies to all designs regardless of amount of leaves included in assembly)	Replace
	* Any missing leaf(multi-leaf units)	Replace
	* Any leaves displaced or shifted that results in contact with a tire, rim, wheel, brake drum or frame	Repair/replace
Seats & U bolts,	*Loose/ broken/ stripped/missing/cracked	Replace
Any component part of the tracking/suspension assembly or any associated fasteners	* Cracked/broken/ loose/stripped or missing	Repair/replace

NOTE: Whenever any work is done to the undercarriage of a chassis, check the torque of all fasteners. Use the decal that should be affixed to the side of the chassis for correct torque. Also, check (and repair if necessary) the alignment after any work to spring hangers, springs, radius rods, etc. that could affect the tracking of the chassis.

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Table J Miscellaneous

Component	Condition	Action Required
Coupling Devices i.e. pintle hook assembly	* Cracks	Replace
	* any previous welded repairs to the Pintle hook	Replace
	* Pintle hook horn with a loss of 20% or more of original thickness	Replace
	* Latch Insecure	Repair
Coupling Devices i.e. mounting of pintle hook assembly to frame	* Missing/stripped/improper fasteners	Replace
	* Cracks on mounting surface extending from point of attachment	Replace
	* Loose mounting	Repair
Coupling Devices i.e. frame crossmember providing pintle hook attachment	*Cracked	Replace
	Broken Welds	Repair
All Conspicuity Markings are required by 49CFR393 or FMVSS 108	*Missing, cut or damaged with more than 50% missing or non-reflective. Missing at ICC Bumper horizontal bar.	Replace
Owner's marks and ID	worn/defaced/ missing/illegible	repair/replace
Foreign markings	If present	Remove
Registration Holder	Holed/torn/missing/loose/Non watertight	repair/replace
	Distorted/bent	If documents cannot be inserted or removed or will not allow the cover to close securely and in a water tight fashion - repair/replace
Registration	Expired/illegible/missing invalid	Contact owner for replacement
License plate mounting	loose missing improper securement	replace
License plate	Expired/missing/illegible/invalid	Contact owner for replacement

*** Items included in inspection requirements of U.S. FMCSA 49 CFR 393 and396, Appendix G to 49 CFR, Chapter III and Subchapter B**

Section 4 – Chassis Induction Procedures

4.1 Chassis Induction Procedure

4.1.1 Chassis Induction Report (CIR) Requirement

All Chassis accepted into a Pool shall have a Chassis Induction Report (CIR) completed and filed with CCM before the earlier of 120 days from the date of acceptance or the FMCSA expiration date. A copy of the CIR can be found on CCM's website, http://www.ccmpool.com. Copies of all CIRs will be maintained by CCM for as long as a chassis is active in the pool.

4.1.2 Chassis Stencil

Once a successful CIR has been completed, Chassis will be stenciled in a contrasting color with letters denoting the Pool designation (such as "GCCP") measuring 4 inches in height on the side rails and 2 inches in height on the front and rear bolsters.

4.1.3 FMCSA Inspection

Chassis having an FMCSA inspection set to expire within 90 days of induction survey will require a full FMCSA inspection in addition to the CIR.

4.1.4 FMCSA Expiration Date Stencil

All Chassis must have the FMCSA expiration date (month and year) stenciled on the front bolster, i.e., "FMCSA DUE 12 13" if space permits or "DUE 12 13" if not, using a contrasting 2" stencil.

4.1.5 CIR Verification

CCM may audit the vendor to verify that the CIR was performed, that all necessary repairs have been made, and that the Chassis meets all requirements for Pool use.

4.2 Chassis Excluded from Pool

4.2.1 CIR or FMCSA Failed Inspection

A Chassis that fails a CIR or FMCSA inspection shall not be admitted into service until all defects are repaired and the Chassis meets all Pool and FMCSA standards.

4.2.2 Unapproved Chassis Type

In the event that a vendor performs a CIR on a chassis type or specific unit not approved for use in the Pool, the vendor will not be paid for such transaction. Any pool stencil applied mistakenly due to completion of a CIR on a chassis type not approved for Pool use will be removed by painting over such stencil with a matching paint color, at no cost to the pool. The Pool Manager shall delete said Chassis from the fleet file and notify the Contributor to remove the Chassis.

4.2.3 Minimum Maintenance Acceptance Criteria for Chassis in Pool Operations

Chassis exhibiting any of the conditions listed below as discovered during the initial acceptance inspection will not be accepted into the pool.

4.2.3.1 Corrosion

Any chassis with excessive corrosion/deterioration (rust through and/or rust jacking) to one or more primary component. Primary components to include:

- Bolsters
- Main rails
- Bogie rail
- Coupler plate assembly
- Suspension components

4.2.3.2 Design

Chassis with the following designs will not be allowed in the pool:

- Chassis with Non west coast axle settings
- Three or four hole hub cap axles
- Old style suspensions with Cast hangers
- Chassis with more than 3 leaf springs
- Flush back, non-sliding 23 foot chassis
- Chassis with worn brakes, regardless of type
- Chassis with four single stage brake chambers (no spring brakes)
- Chassis with Budd type wheels
- Forty foot chassis with main rails of less than 12 inches in height
- 20 Foot chassis with main rails of 10 inches high or less
- Chassis with gooseneck rails exceeding six inches in height
- Open faced or “C” channel front bolsters
- Chassis with small capacity single tank brake system
- Chassis with square axles and/or screw on type hubcaps

4.2.3.3 Other Considerations

- Chassis with other design and / or manufacturing defects as may be determined
- Chassis with major damages not deemed economically feasible to repair
- Total Loss chassis

4.3 Chassis moving between pools

If a member is moving a chassis between CCM operated pools (i.e. from SACP to MCCP), cooping into the new pool requires only a CIR, inspection and replacing stenciling on the chassis to the new pool.

Section 5 – Chassis Removal Procedure (Decooping)

Termination or Move to another Pool
CCM will authorize a survey to be performed on each unit to determine the condition of the unit. CCM will:

- Require a CIR be completed detailing the condition of the chassis at the time of decooping.
- Authorize repairs of DAMAGED components required to bring the chassis to FMCSA compliance.
  - Wear and tear items are not to be repaired by the pool at offhire.
- Authorize to have the pool markings removed from the chassis.
- CCM will advise the equipment owner that the chassis has been prepared for removal from the fleet and the chassis is to be removed from GIER as the pool is no longer IEP.

The Contributor may decide to repair a chassis being terminated and bill the Pool for any repairs needed to bring the chassis to FMCSA compliance. ***Repairs to bring a chassis to FMCSA compliance will NOT include tire repairs as owners may have special tire provisions within their contracts.***

Sale or Scrap Chassis
Chassis being removed from the pools for sale or scrap are NOT to be brought to FMCSA compliance, unless specifically requested by the owner. Sale and scrap chassis are usually sold or scrapped in "as is, where is" condition.

Once a chassis owner declares a chassis as either sale or scrap, a CIR should be completed, pool markings removed and the chassis decooped from the pool. CCM staff will ensure chassis is to be removed from GIER as the pool is no longer the IEP.

Section 6 – Tire Procedures

6.1 Tire Specifications – Recap Tires

Below are the minimum specifications for recap tires used by the pools:

6.1.1 Casing Standards for Recapping.

- No casings may be capped more than twice previously for a total of three caps/casing. Casing construction must be a 14 ply rating (8 ply and 2 breakers).
- 12 ply rated casings are acceptable and may be capped once previously
- No section repairs larger than a B-4 allowed
- No more than two(2) section repairs either B3 or B4 or a combination thereof are allowed per tire
- Tire repairs can be no closer than twenty four (24) inches apart
- Maximum nail hole repairs up to 3/8" in. diameter is acceptable

- No more than 2 repairs of any kind allowed in same quadrant of a tire
- Repairs cannot touch
- Total of eight (8) repairs combined nail hole and section repairs are allowed in a tire
- No skids or buffing through body ply fabric
- No wear beyond breaker
- All buzz outs in tread area can be no larger than one (1) inch in diameter and must be filled with appropriate undertread gums, wicked and reinforced where necessary
- Where buffing through one ply of breaker is necessary, total area of removed breakers is not to exceed twenty four (24) inches per tire. In no one area may both breakers be removed more than six (6) consecutive inches
- No indication of heat damage
- No run flat or overload breaks
- No ply separations
- Oxidation on the sidewalls of tires is not to exceed 3/16" in depth. Surface rubber not to flake
- No cuts or snags in shoulder areas requiring undertread repair are allowed
- No unrepaired sidewall cuts or snags that expose cord
- No sidewall spot repairs if damage penetrates the 1st ply
- No damaged fabric on beads. Light chafing and abrasion is acceptable
- Must comply with all USDOT regulations regarding recapped tires, including but not limited to those regarding markings; current recapper must stamp DOT on sidewall, including date stamp adjacent to the MFG DOT code

6.1.2 Recap Information.

- Only a top cap is acceptable.
- Only 14PR Load Range "G" casings capped not more than twice previously or
- 12PR load range "F" casings previously recapped not more than once are acceptable
- Highway tread – 11/32" depth or better required
- Casing must be repaired per 6.1.1

6.2 Tire Specifications – OEM tires

Brands Acceptable:	Leopard, New Pride, Security, Super Cargo or equivalent, as defined by CCM
Type/Size:	10.00X20 14 PR Bias, Tube type or 11x22.5 12 PR Bias
Section Width:	11 inches
Tread Width:	7 inches minimum
Tread Arc Width:	7 inches minimum
Tread Radius:	11 inches minimum
Tread Depth at Centerline:	0.38 inch minimum
Under Tread at Centerline:	0.16 inch minimum
Durometer Hardness:	60 minimum/65 typical

Tread Rubber Type:	To match standard USA highway use truck tires
Tread Design:	5 rib highway tread shoulder flutes spaced evenly around the tire circumference matching the tread pattern
Position:	Trailer Use Only
Ply:	6 sidewall ply: 8 ply minimum
Ozone Resistance Rating (ASTMD-1149-99 Standards)	0 (no cracks at 24 hrs; at 48 hrs; at 72 hrs
Endurance Testing:	Minimum 63 hours + before failure
Cleated Wheel (FMVSS 119):	Minimum 90 + hours before failure
Markings:	All coding as required by DOT shall be molded contiguously onto one side of the tire

TUBE TYPE TIRES

Size:	1000 x 20
Load Range:	G
Rim Size:	20 X 7.5
Load Capacity Dual Application, 90 psi)	5355 pounds Minimum
Tire Weight:	76 lbs. Minimum
Ave. Plunger Energy:	24,280 in. lbs.
Plunger Breaking Energy:	26,553 in. lbs.
Tube Material:	Butyl Rubber Blend only
Pricing:	Tube, flap, pressure cap, FET and delivery included

TUBELESS TYPE TIRES

Size:	11.00 X 22.5
Load Range:	G
Rim Size:	22.5 X 8.25
Load Capacity (dual Application, 90 psi)	5,355 lbs. Minimum
Tire Weight:	85 lbs. Minimum
Ave. Plunger Energy:	24,280 in. lbs.
Plunger Breaking Energy:	26,553 in. lbs.
Liner Material:	Chloral Butyl Inner Liner
Pricing:	FET and delivery included

6.3 CCM Tire Tube Handling and Inspection Criteria

One of the leading causes of tube damage is mishandling during the removal and installation processes. This situation is particularly true in facilities that employ tire machines for removing the tires from the rims. Unless proper care is taken to protect the valve stem during these operations, they can be severely bent or sheared off by the machine during use. To ensure that damage to the valve stem is minimized, it is recommended that:

- The valve core should be removed from the stem to allow evacuation of all air from the tube. The use of a tube deflator is highly recommended
- Valve stems should be pushed inside the rim stem slot and behind the flap prior to dismounting of the tire to ensure that it is not pinched between the rim and separator arm during operation

6.3.1 Tube Inspection. All tubes are to be inspected prior to reinstallation in either repaired or replacement tires. Criteria for inspection and reuse of tubes are as follows

- All tubes must be visually inspected for major obvious defects such as:
  - Sheared/kinked/flattened valve stems
  - Tears/cuts/chaffing in the tube material at the base of the valve stem
  - Proper sizing - i.e. 9.00x20 tubes
  - *Severely* folded tubes (indicates excessive tube growth)

Any tube found to exhibit one or more of the conditions listed are not to be reused. ***Minor*** folds in tubes are not to be considered damage and should be tested to determine if there is excessive porosity in the material or if the material is overly stretched and weakened.

All tubes identified with no visual defects are to be aired to 10PSI and submerged in water (if possible) to detect any holes or porosity in the tube material.

6.3.2 Tube repair. Used tubes may be repaired under certain conditions. Following are the repairs allowed to CCM used tubes.

- Bent valve stems can be straightened provided they have not been kinked.
- Tubes may be patched by recappers only with proper testing and repair facilities
- Tubes may be patched no more than twice per tube

All tubes purchased or returned to CCM ***MUST*** be accompanied by a sealing metal valve stem cap.

NOTE: Due to the unavailability of proper testing equipment M&R repair vendors **are not** allowed to repair tubes. Tube repairs are to be performed by trained tire/tube professionals only.

6.4 Tire Airing Program (TAP)

The Tire Airing program is designed to ensure tires are properly aired in accordance with all tire manufacturer specifications and State and Federal regulations.

6.4.1 Acceptable Range of Tire PSI. Tires will be aired to 90 PSI, unless otherwise specified by CCM Corporate M&R. An acceptable range is +/- 5 PSI of the PSI required for that Pool. Tires outside this range will be considered as unacceptable.

6.4.2 Required Tire Airing.

Tires will be aired to the required PSI whenever any of the following occurs:

- At the time of an FMCSA annual safety inspection, regardless of when tires were previously aired. Also the TAP Form must be completed and inserted into the document holder of the chassis along with the FMCSA document.
- Whenever a chassis has repairs where the total number of man hours required to complete the repairs are 4 hours or more.
- When a chassis requires three or more tire replacements at one time, all tires are to be aired to 90 PSI. TAP Form is to be inserted in chassis document holder.
- Ninety (90) days have elapsed since the last TAP.
- At a driver's request on an outbound move. The vendor will complete the TAP Form, and is exempt from the three month rule above. Driver must sign the work order showing he requested the tire airing.

6.4.3 TAP Form. The form exhibited below as "Form A" is to be completed whenever tires are aired as required under section 6.4.2. The form is to be completed showing tire pressure in each tire, the date the tires were aired, the M&R vendor who aired the tires and the mechanic's name. The form is to be placed in the document holder on the chassis.

6.4.4 Tap Decal. A Tap Decal is to be placed adjacent to the document holder on the main rail of the chassis. The Tap Decal is to be updated each time tires are aired. Once the Tap Decal on the chassis is filled, the M&R vendor must replace the Tap Decal with a new one. Tap Decals are available through CCM.

6.4.5 M&R Vendor Invoicing. Prior to airing tires the M&R Vendor must check the document holder for a TAP Form. If the TAP Form is in the document holder and shows tires were aired within the last three months, or the Tire Air Pressure decal shows tires were aired within the last three months, tire airing is not required. Unless there is clear evidence of a problem with a tire aired within the last three months, the time to air the tires will not be paid. If the date on the TAP Form and/or the date on the decal are older than three months, tires must be aired and the TAP updated.

FORM A – TIRE AIR PRESSURE FORM

CCM **Tire Air Pressure Form**			
Unit #			
PSI		PSI	
LRO:		RRO:	
LRI:		RRI:	
LFO:		RFO:	
LFI:		RFI:	
Date:			
Vendor:			
Mechanic:			

6.5 Replacement Tire Program – General Overview

6.5.1 Tire Mark Up (for inventory handling)

Tire Mark Up of 10% on recaps and 8% on OEM tires when vendors purchase tires from the pool tire vendor and install those tires on CCM operated pool chassis.

6.5.2 Invoicing and Usage. Invoices for all tire purchases are to be paid within 30 days of issuance. Late payments made after 30 days may be subject to penalties and could result in the vendor losing CCM M&R business.

RECAP and OEM tires purchased from CCM suppliers cannot be used on any equipment other than CCM operated chassis. Casings and/or recap tires are the property of CCM and cannot be used on anything other than CCM operated equipment. There are NO exceptions to this policy.

6.5.3 Tire Ordering Procedures

6.5.3.1 Tire Inventory. M&R vendors are required to have a sufficient number of tires in inventory at all times (recommended at least one to two weeks supply) to ensure the needs of the chassis pools managed by CCM are met. An M&R vendor should never run out of tires. When an M&R vendor finds he is running low on tires, he will email the tire vendor, with CCM in copy, and order tires for his inventory. The M&R vendor will issue a Purchase Order to the tire supplier. Unless otherwise directed by CCM, the M&R vendor will always order recap tires as a first priority. If the recap tire vendor does not have enough recaps to fill the order, the M&R vendor may purchase OEM tires to complete the balance of his order, at the direction of the pool manager.

6.5.3.2 M&R Vendor Reporting Requirements & Responsibilities. In order to receive the Tire Mark Up, the M&R vendors must provide the following:

- Reordering tires from the tire vendors as required to maintain adequate inventory levels
- Receiving all OEM and recap tires on behalf of the CCM
- Provide count of adjustment/rejected tires being returned to recapper broken down by brand. Possible adjustments should be in a separate pile and a separate pick up ticket is required.
- Count of tires being returned to recapper for disposition.
- Write the chassis number, Why Made Code and tire location from which the tire was removed legibly on each casing
- Check quality of tires received, advise count and report to the pool manager any returned tires that fail a quality check
- Provide the CCM Tire Log each week to CCM. The log should include the chassis number, on and off tire DOT number, position of the tire, Why Made Code, brand and any other data as deemed necessary by CCM.

6.5.3.3 CCM Responsibilities and Reporting Requirements. It is the responsibility of CCM to:

- Assist vendors with the tire suppliers for service levels on delivery and removal of tires
- Review tire supplier casing reports to maximize the use of recapped tires

- Perform inspections of casings at vendors locations
- Audit of the tire supplier to ensure specifications are being met
- Identify recovery level of casings
- Ensure adjustments are received at no cost to the pool and report to CCM Corporate M&R monthly on adjustments/rejections by supplier.
- Reconcile tire prices charged to the pool by vendor to actual purchase price charged by the pool. Cost to the pool should be actual cost of tire (OEM and/or recap) plus Markup.

6.5.3.4 Recapper Reporting Requirements. In order to determine the effectiveness of the tire program and identify potential mishandling of equipment, recappers must provide the pool manager and CCM management a report monthly providing an analysis of the casings picked up by location. The report should contain the following information categorized as follows:

- **Tires Delivered** – To include all tires delivered to a location, recap or repaired.
- **Adjustments** – To include all recapped tires found to have failed due to defect in material or workmanship while in use regardless of recapper
- **Salvage** – To include all tires picked up that, while not capable for CCM use, may be recapped for other customers
- **Repaired Tires** – To include all tires that had required repairs only and were returned to service without recapping
- **Report Format** – Please refer to Attachment B for preferred report format

Section 7.0 Repair Management/Auto Approval Limits

Since the equipment is contributed to CCM from various members, it is important to remember that each of the contributing parties has their own unique set of requirements on how to handle the maintenance of their heavily damaged equipment and older units with advanced deterioration. Due to these differences, it is essential that the amounts and type of repairs are monitored, and the input of the contributor be sought in determining whether a heavily damaged or deteriorated unit is to be repaired, or removed from the pool.

Approval Limits

Due to the operational variances of each pool, the approval limits as well as the time allowed for contributor approval varies from pool to pool.

NOTE: Application of the approval limits are at the discretion of CCM and are subject to modification or elimination. Application of approval limits are also subject to modification or elimination based on individual vendor performance. Always check with CCM to determine the applicable approval limits for a particular vendor within a pool

Section 8.0 Damage Recovery

In order to contain M&R costs, and proactively prevent the damage from reoccurring, efforts must be made to identify the causes of damage and to recover the cost of repair wherever possible. To this end the following procedure is recommended.

All equipment entering a facility is subject to an inspection either physically or by OCR or AGS.

Any damage to the chassis discovered during this inspection that was not evident at the time of pick-up is to be invoiced to the handling carrier unless occasioned by normal wear and tear or latent defect of the vehicle or component thereof.

Note – Under the **UIIA Interchange Agreement Section 3.c.1 and 2** billing of damages to the motor carrier must also include an invoice by an M&R vendor to the Line/Pool as proof of repair, and must be issued within 165 calendar days of receipt at a conventional (manned) gate or within 120 calendar days of receipt at an Automated Gate System (unmanned or OCR) facility.

When billing for damages, all billing must contain a copy of the receiving interchange or images (AGV/OCR) with damages noted as well as a copy of the original repair invoice (or electronic equivalent) showing repairs were completed.

Terminal Handling Damage

Damages that occur after the receipt of the equipment into a facility is the responsibility of the facility operator unless the identity of the handling party responsible for the damage can be positively identified. Each Pool may have a specific procedure for each terminal.

Definition of Terminal Responsibility

The items listed below are damage items that, if not noted on the in-gate interchange, need to researched and if necessary invoiced to the appropriate party:

- Major damage to main rails and bolsters that affects ability to secure a container or tracking of the unit.
- Major damage to the landing gear that affects the load bearing capacity of the equipment, i.e. legs bent sideways or forward or backwards and/or a destroyed gearbox.
- Stacking damage to slack adjusters, brake chambers, crossmembers, pushrods, S-cams, electrical harness and/or airlines and hoses.
- Airline/electrical line spring holders.

- Handling Damage during normal operations including bent or missing pin locks or twist locks, bent under-ride protector (ICC bumper) and/or missing glad hands.
- Tires cut through one or more ply of cord on tread or sidewall, slid flat tires and/or tires missing.
- Missing components

Assignment of responsibility

- Once damage has been identified, pool manager will examine all available documentation
  - Interchange/J1
  - DVIR
  - Load orders
  - Stacking orders (if applicable)
  - Pictures
  - Customs inspection orders

After reviewing all available documentation the pool manager should assign responsibility for the damages if the source of the damage can be clearly identified.

It should also be noted that in the case of water terminals, terminal handling and cut tires may be billable to the stevedore using the chassis for vessel work. If adjacent equipment identified as having caused the damage OR if the damaged unit was used in a stevedoring operation, the stevedore should be billed not the terminal.

Any damages noted on the interchange should be billed to the appropriate motor carrier handling the equipment at the time of damage.

Notification

Once the damage has been properly researched, and cause identified, terminal/ramp manager is to be presented the accumulated supporting documentation and pictures and provided an opportunity to inspect the unit to verify damages, subject to the terms of license and access agreements.

Billing

Ramp manager will issue J2 for the damages or will make arrangements for the terminal operator to have the damages corrected. If a J2 is issued, the original J2 must accompany the repair order and all supporting documentation when billed.

If the Terminal operator is instructed to make repairs, repairs must meet minimum IICL repair criteria. Copies of all repair orders must be provided to CCM and appropriate IEP for inclusion in FMCSA required Maintenance Record.

Section 9 Proper Wheel End Maintenance Procedure

In order to ensure proper maintenance of wheel end assemblies, the following procedures must be followed at all times whenever a wheel end assembly is to be removed or worked on in any way.

REMOVE AND REFIT WHEEL ASSEMBLY

Remove the jam nut, washer and adjusting nut.

Remove the outer bearing.

Pull Wheel.

Remove wheel seal and inner bearing.

Discard the old wheel seal.

Clean bearings in a parts washer. **NOTE: Keep the bearings separate if you are washing bearings at the same time. The same bearing must go back into the same wheel. Allow the parts to dry completely.**

Once clean, check the bearings for the following conditions:

The Roller ends are worn
The Rib is worn
The Roller cage is damaged
The Roller ends and Ribs are scored
The Bearing is discolored
The Cage, Cup, Cone or Rollers are grooved
The Races or Rollers are bruised with deep indentations
The Races or Rollers are etched
The Races or Rollers are spalled (chips or scales)
The Races or rollers are gouged or nicked
The Races or rollers are brindled (indentations)
The Races or Rollers are cracked.

Inspect the cups, while still in the wheel, for the same issues.

If any of the above conditions exist, replace the bearing and cup as a set.

Clean the axle spindle with a solvent cleaner. Hand dry. Inspect the spindle for damages before applying a coat of grease.

Inspect the brakes and other wheel end components for wear or defects. If there are any defects in the brake lining or if there is less that 50% brake lining remaining, replace the brakes at this time. Brake hardware kits should include Heavy Duty Springs.

Clean out all of the old lubricant from the hub. Wipe the hub cavity clean.

Pack the hub cavity with **Shell Gadus S3 V220C Grease.**

Pack grease all around the interior of the hub cavity up to the smallest diameter of the bearing cups.

Grease the cleaned bearings. This should be done with a grease packer to ensure complete and even penetration.

Install inner bearing/cup and seal.

STEMCO SEAL is specified, either Voyager or Guardian. If these parts are not available, contact CCM for replacement part.

Install the wheel hub onto the axle.

Install outer bearing.

Push the wheel assembly and turn at the same time to make sure that the wheel is on correctly.

WHEEL END BEARING ADJUSTMENT

It is critical that this procedure is done properly and a **TORQUE WRENCH MUST** be used.

Install the adjusting nut with the pin facing outward.

Tighten the adjusting nut to 200 lb/ft (Using a torque wrench) while rotating the wheel in both directions.

Loosen the nut one complete turn and then re-torque to 50 lb/ft while rotating the wheel.

Back off ¼ turn.

Install the lock washer. If the pin and washer hole do not align try flipping the washer around. If necessary, you may need to slightly adjust the parts to align them.

Install the Jam Nut. Torque to 350 lb/ft.

Check the wheel end for play using a dial indicator. If within .001” and .005” proceed.

Clean and apply a light coat of grease to the inner surface of the hub cap and the adjusting nut. Apply new hub cap gasket.

Verify that all remnants from the old gasket are removed and the gasket mounting surface is clean.

Re-install hubcap using new lock washers.

Torque hubcap bolts snuggly to 12 to 16 ft. lbs.

Do not over tighten.

Check that the brakes are properly adjusted.

Clean the work area including the hub, wheel, rim, etc. of any old grease.

For: POSITIVE BEARING ADJUSTMENTS and CASTELLATED NUTS, Please refer to the Meritor Manual, Sections 10 and 11.

For other types of axles please refer to your Meritor Maintenance Manual 14, Trailer Axles or contact equipment owner.

Section 10 VARIOUS CCM M&R POLICIES

Brakes and Wheels

When worn or broken brake shoes are replaced on one side of an axle, the brake shoes on the opposite side of the same axle can remain provided they have 50% or more wear remaining. If less than 50% remain on the opposite side, then replace both sides.
When a damaged or worn wheel is replaced on one side of an axle, the wheel on the other side of the same axle is not to be replaced unless it is worn, cracked, or damaged.

Light Replacement

All lights, including stop/tail and marker lights, are to be replaced with flange mounted sealed beam lights. **Grommet mounted lights are not allowed as replacement parts on CCM managed chassis.** Flange mounted lights must have a minimum of three fasteners. Fasteners are to be stainless steel POP rivets.

FMCSA Inspection and Brake Certifications

All mechanics performing FMCSA Periodic Annual inspections and/or performing any brake work on chassis must be certified to make those inspections/repairs per FMCSA regulations. M&R vendors must complete both the Annual Vehicle Inspector certification (page 52 hereof) and the Brake Inspector

certification (page 53 hereof) for each mechanic it employs or utilizes to make those repairs. A copy of the form is to be kept at the vendor's facility and another given to the pool manager. The pool manager will keep the forms and will check to ensure only mechanics certified to make brake repairs or FMCSA Periodic Annual inspections are performing those tasks.

Section 11 CCM AUDIT SAFETY CHECKS

Below is a list of some common safety violations for which everyone should be on lookout when performing audits. The absence of finding such violations does not mean the repairer / facility is safe, just that they were not found. Failure to spot these items does not constitute CCM endorsement or certification of vendors practices.

- Inadequate / inappropriate protective clothing for workers including shoes, hard hats, gloves and protective glasses
- Difficulty being seen – lack of reflective vests
- Mechanic's failure to chock chassis wheels when working underneath
- Precariously lifting container high off bolster while working on bolster / pin / lock
- Using a box or crate to support a chassis / axle as opposed to proper jack stands
- Not caging tires when airing, not airing safely with extension chucks, standing in front of tire when airing, not having auto-pressure shutoff, transporting and handling fully-inflated tires
- Failing to inspect rim lock rings, failing to read markings and match lock rings & rim bases, OR using heavily corroded, damaged, dented, bent rims and lock rings
- Not caging spring brakes – attempting to adjust spring break clamps – taking spring brakes apart
- Smoking near combustibles
- Standing in water when welding or using electrical tools
- Crawling into stacks of chassis for inspection or repair – for any purpose
- Walking in between or behind mounted containers/chassis, especially when there are tractors / hostlers operating backing into the chassis or adjacent chassis
- Not yielding to container handlers / forklifts / hostlers - you can see them better than they are able to see you
- Walking underneath a container being repositioned or standing under a straddle carrier with or without a container.

CCM and the pool managers reserve the right and will conduct audits of the M&R vendors for compliance with this manual. It is incumbent upon the M&R vendors to develop and implement a quality program of self-audits to ensure these policies and procedures are followed.

Section 12 M&R Vendor Self Audit Process

All M&R Vendors working on CCM managed chassis are required to control quality and safety through self-audits of work performed on CCM equipment. Self-audits are the best way to ensure quality control and 100% involvement is required. Vendors will not be penalized for poor self-audit results. Vendor is expected to fix any problems uncovered in their own audits. Vendors must train and/or discipline mechanics to ensure improvement and maintain the highest level of quality. The purpose of the self-audit is to ensure that CCM audits and post-inspections are positive. Poor results found during CCM audits could likely result in penalties or sanctions, including possible cancellation of the M&R Vendor Agreement. Poor results found by CCM will certainly result in a requirement for heavier management involvement and increased self-audits. Poor CCM audits are avoidable through a quality self-audit program.

1. Vendor Management to observe conditions in their shops, facilities or assigned ramps for safety compliance, part supplies, proper tools & equipment and quality of repairs.
2. Vendor Management to perform post-inspections on an adequate quantity of mechanics' work orders or repair estimates in order to ensure chassis are being repaired properly and charges to the pool are accurate. CCM may specify how many inspections are required, based upon CCM's audit results of the vendor. A minimum of 10% of the work orders require a Supervisor's signature, including Roadability and mounted chassis areas. This Supervisor is responsible for the work completed by mechanics under his supervision.
3. Vendor Management to keep records of each chassis inspection and provide a summary report to CCM monthly reports. More detailed records may be required depending upon CCM's audit results of the vendor. CCM may specify more detailed records needed such as photos, invoice copies, work order copies, etc.
4. Vendor Management shall maintain their inspection details and use the Chassis Audit Inspection form provided by CCM. Depending upon CCM's audit results, vendor may be required to maintain specific forms to demonstrate full quality control is in place.
5. Vendor management to conduct post-inspections in conjunction with the self-audit process. Included at the end of this document is a form developed by CCM that details the severity of violations. It shows which are OOS violations, citations or CCM requirements and includes the FMCSR section for each type of repair. It is recommended that mechanics and supervisors all have a copy of this form with them when conducting audits or inspections on CCM equipment.
6. All Wheel End Repairs require a supervisor's verification that work was completed properly. The mechanic and supervisor must sign the work order to confirm verification and the mechanic's and supervisor's name must be included on the invoice (comment section).
7. Any sub-par audits should be maintained in the mechanic's personal file as well as any training or disciplinary actions.

Section 13 TIRE SAFETY

The proper handling of tire and rims is an important safety matter that affects everyone involved in the maintenance and management of the equipment as well as the general public.

In accordance with CCM's concern for the safety of all, please note the following and attached procedures to be observed for safe handling and installation of tires on chassis in service with the pools.

We encourage all of you to review these procedures and include a review of tire safety procedures in your regular audit and safety processes.

Please note that for further information on this subject we recommend that you visit the link below from the Accuride Corporation web site and review their on-line safety manual. The link is:

http://www.accuridecorp.com/files/2012/10/Accuride-Wheels-Rim_Wheel-Safety-and-Service-Manual-ACC7-0002-Rev-4-06-22-12.pdf.

Please also note that all repair vendors should observe all OSHA and DOT guidelines regarding the safe handling of tires and two piece rims.

If you have any questions on the material contained please contact the CCM M&R Technical Manager or the CCM Director or Maintenance at your earliest opportunity.

Section 14 USED RIM INSPECTION PROCEDURE

I. GENERAL:

1. All inspections are to be performed by qualified mechanics and / or personnel.
2. Always follow Industry safety procedures, including but not limited to eye and ear protection.
3. Follow ALL OSHA (Occupational Safety and Health Administration) safety procedures for tire and rim handling and rim to lock-ring matching.
4. Follow ALL TMC (Technology and Maintenance Council) recommended practices for out of service conditions. This procedure and its contents are in accordance with TMC recommended practice #RP-222-B
5. This procedure should be done ONLY to rims that have a 100% deflated tire (removed valve core) or the rim is dismounted from the tire. ***NEVER check a rim while mounted with an inflated tire.***
6. This procedure is only applicable to 7.5 x 20 two piece open demountable truck trailer rims.

II. PROCESS:

1. Do a complete visual check of the rim. If any of the following exist, remove the rim from service and scrap. **(Note: Special attention should be given to the circumference of the rim base at the lock-ring seat)**

- Bent flange AWAY from bead beyond 3/8". No more than 2 bends per rim.
- Bent flange TOWARDS bead, not acceptable.
- Bent web or base not acceptable.
- Rim and lock-ring have heavy rust, corrosion, or pitting,
- Any deformation, cracks, welds, or repairs to rim or lock-ring.
- Lock-rings which are round, bent out of shape, or worn and no longer fit properly.
- Unable to read identification marks.
- Gap or improper seat between lock-ring and rim shoulder for the circumference of the rim.
- Damaged, missing, welded, or altered stops.

2. Do a physical check of the rim with a "chipping" hammer:

- Strike the rim with the pointed side of the hammer around the perimeter of the rim base.
- Alternate strikes along the width of the rim base.
- Give special attention to strikes on the lock-ring side of the rim base.
- The sound of each strike should be "deep and hard".
- If any of the following occurs, remove the rim from service and discard:
    1. Strikes have improper or unusual sound.
    2. Excessive rust chips from striking.
    3. Fractures, punctures, or dents occur during striking.

NOTE: ***If a rim has borderline inspection results, or is questionable in anyway whatsoever, remove from service and scrap.***

Section 15 DVER RECEIPT PROCEDURE

The following procedure will be used when a DVER is received from the Motor Carrier (MC), given to CCM and finally to the M&R vendor (MRV) for resolution. In all instances the PM for each pool must receive the DVER. Under no circumstances will CCM allow a MC to turn a DVER in to an M&R Vendor or attempt to turn one in at an unmanned gate.

SCENARIO 1

DVER IS EMAILED FROM THE MC TO THE PM

1. Driver receives a DVER during a roadside inspection.
2. Driver gives the DVER to his dispatcher.
3. Dispatcher emails DVER to the CCM pool location, within 24 hours of his receipt of DVER.
4. CCM staff monitors gate transactions to determine when chassis in question returns to a facility.
    a. CCM staff will instruct terminal operator to advise when unit is received at gate.
5. Once unit is received, CCM staff will give DVER to the designated M&R Vendor (MRV) on the facility for repair.
6. CCM will place hold on equipment (if able to do so in the terminal operating system) AND will instruct MRV to place OOS sticker on the front bolster or on the 7 way plug.
7. Once repairs are completed, MRV will notify CCM and remove OOS sticker and replace with green OK or available decal/sticker.
    a. MRV will provide CCM with documentation repairs were completed immediately upon completion of the repairs.
8. CCM staff will remove unit from hold in TOS (if applicable).
9. MRV will include copy of DVER with invoice for repairs (added as an attachment in chassis.com)
10. CCM notifies issuing agency that repairs were completed and submits required documentation.
11. CCM will keep a registry of ALL DVER's received on a spreadsheet. The spreadsheet will show the following information:
    a. Date of DVER
    b. DVER identification number
    c. Chassis Number
    d. Trucking Company and DOT number (if available)
    e. Description of infraction from DVER
    f. Date DVER infraction was actioned (repaired or inspected only). If no repair was required:
        i. State reason, i.e. no damage was found to be in violation per DVER (it could be the MC repaired the unit prior to return)
    g. Invoice number and date of repair.
    h. Amount of repair
    i. Repair vendor
    j. Date DVER sent back to issuing agency

SCENARIO 2

DVER IS RECEIVED WITH NO DEFECTS

In the event a "NO DEFECT" DVER is received, either through the mail, from a Motor Carrier, etc., that NO DEFECT DVER is to be kept on file at the CCM office and not discarded.

Section 16 Procedure for Clearing Driver Vehicle Inspection Reports (DVIRs)

Identified below are scenarios where equipment enters a terminal, has a DVIR with a reported defect (RCD) and the procedures that CCM staff require of the Terminal Operator and M&R Vendor.

The Terminal Operator may or may not have the capability to place units OOS (apply gate holds). These procedures will address all options. M&R Vendors and Terminal Operators should communicate with CCM to confirm which scenario applies to their operation.

CCM has designated specific M&R Vendors to act upon addressing any Roadability Component Defect (RCD) reported via a Driver Vehicle Inspection Report. M&R Vendors are assumed to be registered in the designated M&R system with its preferred method (i.e. email or EDI) to receive notices of DVIRs with defects (RCDs).

FOR MOTOR CARRIERS

Motor Carriers should instruct their drivers to turn in DVIR's with defects. This will help CCM properly maintain the equipment. Drivers should be especially cognizant of defects they discover to brakes or wheel alignment and should report these defects without hesitation when entering a facility.

WHAT IS REQUIRED TO CLEAR A DVIR?

DVIR'S can be cleared using one of the following scenarios:

1. M&R Vendor completes the repairs as noted on a DVIR and submits an invoice to the designated M&R system using the Repair Type "DVIR". The M&R system will automatically clear DVIR's with one (1) RCD.
2. Some systems, namely chassis.com, will NOT automatically clear a DVIR with more than one (1) RCD. Those will have to be cleared manually by the M&R Vendor.

3. All repairs made pursuant to a DVIR shall be completed in the designated M&R system using the Repair Type “DVIR”.

SCENARIO 1:

DVIR IS DELIVERED ELECTRONICALLY TO THE TERMINAL OPERATOR TO PUT THE CHASSIS OOS IN ITS TERMINAL OPERATING SYSTEM

1. M&RV will receive message from DRS that unit is being returned to terminal with RCD on DVIR.
2. M&RV will coordinate with Terminal Operator to advise when unit is received and location of unit on terminal.
    a. M&RV will locate chassis and place RED OOS sticker on the bolster or in the 7 way plug.
3. M&RV will inspect and repair RCD damages or note that repairs are not required.
    a. If M&RV cannot find damages to repair from the DVIR, he will generate an inspection report indicating the same, and enter the inspection into the designated M&R system using the “DVIR” Repair Type.
    b. M&RV will also ensure the entire chassis is acceptable per the CCM Systematic Maintenance procedure.
    c. If the cost to repair the chassis is higher than the M&RV auto limit, the M&RV has to obtain approval for the repair from CCM.
    d. All repairs, once completed, are to be entered into the designated M&R system using the Repair Type “DVIR”.
4. M&RV will remove the OOS sticker and replace with a GREEN ‘OK’ or available sticker.
5. M&RV will advise Terminal Operator to make unit available in TOS.
6. M&RV will invoice the pool for the inspection (no repairs) or repairs and prioritize the invoice processing to the "top of the pile".

SCENARIO 2

DVIR IS DELIVERED TO THE M&R VENDOR TO PUT THE CHASSIS OOS

1. When possible, the unit should be placed in OOS status by the M&RV directly into the TOS.
2. M&RV will locate unit, place a RED OOS sticker on the front bolster or on the 7 way plug.
3. M&RV will inspect and repair RCD damages or note that repairs are not required.
    a. If M&RV cannot find damages to repair from the DVIR, he will generate an inspection report indicating the same, and enter the inspection into the designated M&R system using the “DVIR” Repair Type.

b. M&RV will also ensure the entire chassis is acceptable per the CCM Systematic Maintenance procedure.
c. If the cost to repair the chassis is higher than the M&RV auto limit, the M&RV has to obtain approval for the repair from CCM.
d. All repairs, once completed, are to be entered into the designated M&R system using the Repair Type "DVIR".

4. M&RV will remove the OOS sticker and replace with a GREEN 'OK' or available sticker.
5. If possible, the M&RV will make the unit available in TOS.
6. M&RV will invoice the pool for the inspection (no repairs) or repairs and prioritize the invoice processing to the "top of the pile".

CCM POOL MANAGERS AND M&R MANAGERS

CCM managers must ensure DVIR's are cleared from the designated M&R system within seven (7) days (one week) of receiving notification of a DVIR with RCD's. When using chassis.com as the designated M&R system, follow the guidelines below:

1. Log in to the designated M&R system DVIR screen.
   a. Enter "Date From" going back several months (to the beginning of the pool using the designated M&R system) to ensure all open DVIR's are captured.
   b. Enter "Defects" – YES; and "Release" – NO
   c. Under "Inspection Type", Click - End of Trip DVIR
   d. Click "Search".
   e. Click "EXCEL" to move open DVIR's to an EXCEL spreadsheet.
2. With the cursor on Line 1, click Data, then Filter, to sort data.
3. Once the data is sorted, proceed with each location to find open DVIR's. ***The designated M&R system will have to be checked against the DVIR date for any repairs performed after the date of the DVIR***.
4. Once a repair is found that should clear a DVIR, ensure the M&R vendor clears the DVIR using the "DVIR" repair type.
5. CCM staff can also clear a DVIR by going to the DVIR screen in the designated M&R system. From there click DVIR then Release DVIR. Enter the DVIR number from the spreadsheet and click Search. Once the DVIR is found, check it on the far left and enter a reason for clearing the DVIR on the far right. Click release and the DVIR will clear.

CCM management should view the list of DVIR's received daily and advise the facility M&R Vendor(s) of receipt of same. CCM management should ensure Vendor repairs the chassis and clears the DVIR as soon as possible.

ANNUAL VEHICLE INSPECTION – INSPECTOR CERTIFICATION

M&R VENDOR: _____ DATE: _____

LOCATION: _____

City, state zip _____

Name of Inspector: _____ Employee ID: _____

396.19 Inspector Qualifications

It shall be the M&R vendor's responsibility to ensure that the individual(s) performing an annual inspection under 396.17 is qualified as follows:

1. Understands the inspection criteria set forth in 49 CFR Part 393 and Appendix G of this subchapter and can identify defective components.
2. Is knowledgeable of and has mastered the methods, procedures, tools and equipment used when performing an inspection; and
3. Is capable of performing an inspection by reason of experience, training, or both as follows:

I AM QUALIFIED TO PERFORM AN ANNUAL INSPECTION OF INTERMODAL EQUIPMENT BASED ON THE FOLLOWING:

(Check and complete the appropriate sections)

_____ a). Successfully completed a State or Federal sponsored training program or has a certificate from a State which qualifies this person to perform Intermodal equipment safety inspections.

Name for Program/Certificate _____ Date _____

Location _____

OR

_____ b). Have a combination of training or experience totaling at least one (1) year. Training and/or experience may consist of:

1. _____Participation in a truck manufacturer sponsored training program or similar commercial training program designed to train students in truck operations and maintenance.
   Name of Program _____How Long? _____Mo _____ Yrs

   OR
2. _____Experience as a mechanic or inspector working on Intermodal Equipment;
   Name of M&R Vendor for which you worked_____ Total Mo/Yrs_____

   OR
3. _____Experience as a mechanic or inspector in truck/chassis maintenance at a commercial garage, leasing company or similar facility;
   Name of Facility: _____Total Mo/Yrs _____

   OR
4. Experience as a commercial inspector for a State or Federal agency.
   Name of Government Agency _____ Total Mo/Yrs _____

Signature of Inspector _____ Date _____

I hereby certify that the mechanic/inspector mentioned above meets the requirements for a qualified inspector to perform the annual vehicle Inspection in compliance with the US Department of Transportation regulations for qualified inspectors.

Name of Owner/Supervisor (Print) _____

Signature of Owner/Supervisor _____ Date _____

BRAKE INSPECTOR CERTIFICATION

M&R VENDOR: _____ DATE: _____

LOCATION: _____

NAME OF BRAKE INSPECTOR (PLEASE PRINT): _____

396.25 Qualifications of brake inspectors:

(a) Intermodal Equipment Providers (IEP) must ensure that all inspections, maintenance, repairs or service to the brakes of its Intermodal equipment are performed in compliance with the requirements of this section.

(b) For the purpose of this section, a brake inspector means any employee of an M&R vendor working on Intermodal equipment who is responsible for ensuring all brake inspections, maintenance, service, or repairs to any Intermodal equipment subject to the IEP's control, meet the applicable Federal standards.

(c) No IEP may require or permit any person who does not meet the minimum brake inspector qualifications of paragraph (d) of this section to be responsible for the inspection, maintenance, service or repair of any brakes on its Intermodal equipment.

(d) The IEP must ensure that each brake inspector is qualified.

I am a qualified Brake Inspector based on the following:

1. I understand the brake service or inspection task to be accomplished and can perform that task, and
2. I am knowledgeable of and have mastered the methods, procedures, tools, and equipment used when performing an assigned brake service or inspection task; and
3. I am capable of performing the assigned brake service or inspection by reason of experience, training or both as follows:
    a. I have successfully completed an apprenticeship program sponsored by a State, Federal agency or labor union, or a training program approved by a State or Federal agency, or have a certificate from a State, which qualifies me to perform the assigned brake service or inspection task.
    Name of Program/Certificate: _____

    OR

    b. I have brake-related training or experience or a combination thereof totaling at least **ONE YEAR**. Such training or experience shall consist of:
    i. Participation in a training program sponsored by a brake or vehicle manufacturer or a similar commercial training program designed to train students in brake maintenance or inspection similar to the assigned brake service or inspection tasks:
    Name of Program/Certificate: _____ How Long? _____Mo _____Yrs

    OR

    ii. Experience performing brake maintenance or inspection similar to the assigned brake service or inspection task in a M&R vendor maintenance program:
    Name of Employer _____How Long? _____Mo _____Yrs

    OR

    iii. Experience performing brake maintenance or inspection similar to the assigned brake service or inspection task at a commercial garage, fleet leasing company or similar facility:

Name of Employer _____How Long? _____Mo _____Yrs

Signature of Brake Inspector: _____ Date: _____

Signature of Company Rep: _____ Date: _____

Acknowledgements

This manual contains the procedures and policies of CCM in force at the time of publication. By signing below, you acknowledge that you have read, understand, and agree to comply with the policies and procedures contained herein.

Repair Vendor	**CCM**
_____	_____
Company Name	**LOCATION**
_____	_____
Title	**Title**
_____	_____
Name(Print)	**Name(Print)**
_____	_____
Signature	**Signature**
X_____	**X**_____