

**AAR Manual of Standards and Recommended Practices  
Couplers and Freight Car Draft Components**

Appendix H

M-212

**APPENDIX H  
GUIDELINES FOR SHOP CERTIFICATION INSPECTION  
RECLAMATION OF COUPLERS, YOKES, AND RELATED PARTS**

Description	M-212 Paragraph	Acceptable	Not Acceptable
<b>I. PRELIMINARY INSPECTION AND FURNACE</b>			
1. Are couplers having condemning cracks scrapped?	2.3		
2. Are required gages available?	Appendix H		
3. Are secondhand couplers separated?	2.0		
4. Are couplers properly sorted for heat treatment?	5.2.3		
5. Are couplers at proper temperature when straightened?	6.1.4.3		
6. Are furnace controls operable and accurate?	5.2.6		
7. Are yoke catalog numbers acceptable?	Table A.11		
8. Are yokes free of condemning cracks and wear?	3.3.2		
<b>II. WELDING</b>			
9. Are welders certified?	5.1.1		
10. Are gages available for shank length, squareness, and key size?	Table A.9		
11. Are welds of good quality and proper wire used?	5.1.4		
12. Is welding done only in allowable locations?	6.0		
13. Are couplers at correct temperature when welded?	3.2.1.2.2.1		
14. Are all shank wear plates removed?	3.2.1.2.2		
15. Is trimming and blending proper?	4.1.5		
16. Is heat treatment performed after repair or straightening?	5.1.5		
17. Are welds on shanks, butts, and keyways ground smooth?	5.3.1		
<b>III. HEAT TREATMENT</b>			
18. Has pyrometer been calibrated within 3 months?	5.2.6		
19. Is recorded temperature within range and held for proper time?	5.2.3.2		
20. Is date, quality, grade and manufacturer of coupler recorded on chart for each heat?	5.2.6		
21. Is heat treatment performed before application of shank wear plate?	4.2.1.2.2.3		
22. Are quenching and tempering requirements followed?	5.1.5.3		
23. Are castings separated by grade furnace batches?	5.2.3.1		
24. Are yokes properly heat-treated?	5.2.3.2		
<b>IV. BRINELL TEST</b>			
25. Is record of Brinell test complete?	5.2.4.3		
26. Are the required number of tests completed?	5.2.4.3		
27. Is Brinell test made properly and correct location?	Figure C.5		
<b>V. FINAL ASSEMBLY AND MARKING</b>			
28. Are reclamation marks in place and proper?	Figure C.4		
29. Are shank wear plates properly applied?	4.2.1.2.2		
30. Does assembled coupler properly operate?	Appendix D		
31. Are yokes properly stamped per Figure C.4?	Figure C.4		
32. Are CID Labels applied & entered into Umler correctly?	S-920 Section 16		

**AAR Manual of Standards and Recommended Practices  
Couplers and Freight Car Draft Components**

Appendix H

M-212

**APPENDIX H SUPPLEMENT  
REQUIRED GAGES**

<b>COUPLER BODY SECONDHAND ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
25005-D*			44250-6		
25623-1			44251-1A*		
34101-4			48496-1*		
34101-5A*			49353*		
36527-3 or 36527-2A			49354*		
43062-1A*			49355*		
44248-2C*			49360		
44248-3B*			49361*		
44250-5*					
<b>COUPLER BODY RECONDITONED ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
28393			49775-4		
44247-1			49775-5		
44248-1			49775-6		
44250-2A			49776-2A		
48496-2			50051-1		
49362			50051-2		
49775-1			50051-3		
49775-2			50052-1		
49775-3			50052-2		
<b>KNUCKLE SECONDHAND ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
24992-1			49363		
44250-3			49364-B		
<b>KNUCKLE PIVOT PIN SECONDHAND ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
49369			49556-1		
<b>KNUCKLE LOCK RECONDITONED ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
49365			49367		
49366			49367-1		
<b>YOKE SECONDHAND ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
44246-1			49373*		
49371*			49373-2*		
<b>YOKE RECONDITONED ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
34647-5			44246-4		
44246-2			44246-6		
44246-3			49372		

\* Indicates that the gauge is also required for reconditioned acceptance.

**AAR Manual of Standards and Recommended Practices  
Couplers and Freight Car Draft Components**

**Appendix H**

**M-212**

**APPENDIX H SUPPLEMENT  
REQUIRED GAGES (Continued)**

<b>DRAFT GEAR FOLLOWER SECONDHAND AND RECONDITIONED ACCEPTANCE</b>					
<b>GAGE</b>	<b>YES</b>	<b>NO</b>	<b>GAGE</b>	<b>YES</b>	<b>NO</b>
34643-3			49376		

\* Indicates that the gauge is also required for reconditioned acceptance.