PROPERTY DAMAGE, SEVERE INJURY AND/OR DEATH COULD RESULT FROM:

(1) FAILING TO FOLLOW THE INSTRUCTIONS CONTAINED IN THIS MAINTENANCE MANUAL;
OR
(2) REPAIRING, MODIFYING OR ALTERING ANY BARBER/SCT PRODUCT IN A MANNER THAT IS NOT INCLUDED IN THIS MAINTENANCE MANUAL.

IF YOUR SPECIFIC APPLICATION:

(1) REQUIRES A DEVIATION FROM THE INSTRUCTIONS CONTAINED IN THIS MAINTENANCE MANUAL;
(2) REQUIRES A REPAIR, MODIFICATION OR ALTERATION OF A BARBER/SCT PRODUCT THAT IS NOT INCLUDED IN THIS MAINTENANCE MANUAL;
OR
(3) RAISES ANY QUESTION ABOUT THE INSTRUCTIONS SPECIFIED IN THIS MAINTENANCE MANUAL,
PLEASE CONTACT YOUR BARBER/SCT REPRESENTATIVE FOR SPECIFIC INSTRUCTIONS REGARDING YOUR APPLICATION.

TO CONTACT YOUR BARBER/SCT REPRESENTATIVE:
PLEASE SEE THE “STANDARD CAR TRUCK COMPANY CONTACT INFORMATION” PAGE AT THE START OF THE FULL MANUAL.
Section 1

General Information

- Truck Component Diagrams
- AAR Code Numbers
- Bolster and Side Frame Marking Diagrams
- Bolster and Side Frame Nomenclature
- Standard Car Truck Company Trademarks
- Foundry Identification Marks
- AAR Interchange Rules
- Reference Publications for Trucks
Barber Stabilized Truck Component Diagram

Always Use Original Barber Parts
## AAR Code Numbers – Side Frames

### CODE NUMBER EXAMPLE

<table>
<thead>
<tr>
<th>CODE SPACE NUMBER</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4&amp;5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>CODE NUMBER</td>
<td>F</td>
<td>9</td>
<td>S</td>
<td>07</td>
<td>A</td>
<td>N</td>
<td>U</td>
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- **SIDE FRAME** 6 1/2" X 12" JOURNAL
- **BARBER S-2**
- **STANDARD DESIGN** - 3 11/16" SPRING TRAVEL
- **UPRIGHT TENSION MEMBER** - GRADE "B" STEEL
- **NARROW PEDESTAL**
- **UNIT BRAKE BEAM BRACKET**
- **NO SPECIAL FEATURES AT CENTER AREA**

- **ALL CODE NUMBERS MUST CONTAIN NINE SYMBOLS**
- **THE CODE NUMBER WILL BE HYPHENATED AS FOLLOWS: F9S-07AN-UA**
- **A SPACE MAY BE USED IN PLACE OF A HYPHEN WHEN MARKING A CASTING**

SEE DRAWINGS EC-3034 AND EC-3038 FOR AAR CODE DESIGNATING SIDE FRAME AND BOLSTER DESIGN FEATURES. (AAR MANUAL OF STANDARDS AND RECOMMENDED PRACTICES, SECTION D-PART II).
### CODE NUMBER EXAMPLE

<table>
<thead>
<tr>
<th>CODE SPACE NUMBER</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<td>21</td>
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- **BOLSTER** 6 1/2” X 12” JOURNAL
- **BARBER S-2**
- **STANDARD DESIGN**
- **GRADE "B" STEEL - ROD THRU - L.H. D.L. BRACKET**
- **D.L. BRACKET PIN HOLE LOCATION**
- **5 HOLE SIDE BEARING PAD**
- **BRAKE ROD OPENING ARRANGED FOR EITHER CONVENTIONAL OR WABCOPAC BRAKES**

- ALL CODE NUMBERS MUST CONTAIN NINE SYMBOLS
- THE CODE NUMBER WILL BE HYPHENATED AS FOLLOWS: F9S-07AN-UA
- A SPACE MAY BE USED IN PLACE OF A HYPHEN WHEN MARKING A CASTING

SEE DRAWINGS EC-3034 AND EC-3038 FOR AAR CODE DESIGNATING SIDE FRAME AND BOLSTER DESIGN FEATURES. (AAR MANUAL OF STANDARDS AND RECOMMENDED PRACTICES, SECTION D-PART II).
Bolster Marking Diagram

**Journal Size** | **Dim. “A”**
---|---
5 x 9 | 3 1/2
5 1/2 x 10 | 3 3/4
6 x 11 | 4 1/4
6 1/2 x 12 | 4 1/2
6 1/2 x 9 | 4 1/2
7 x 12 | 5

**BOTTOM OF BOLSTER**

NOTES:
1. MARKING LOCATION SHOULD CONFORM GENERALLY TO THE AREAS INDICATED.
2. AAR IDENTIFICATION NUMBER MUST BE CAST INTEGRAL TO THE CASTING.

**NOTE:**
ALL MARKINGS TO BE IN RAISED LETTERS OR FIGURES NOT LESS THAN 3/4’ HIGH, PREFERABLY 1’ HIGH, UNLESS OTHERWISE SPECIFIED.
Notes:
1. All markings to be in raised letters or figures not less than 3/4" high, preferably 1" high.
2. Marking location should conform generally to the areas indicated.
3. AAR identification number must be cast integral to the casting.
4. If side frame is a combination, type of truck may be omitted if properly coded.
Bolster Nomenclature

1. Top or Compression Member
2. Bottom Center Member
3. Diagonal Tension Member
4. Side Wall Lightner Holes
5. Brake Rod Holes
6. Dead Lever Lug (Left Hand Shown)
7. Dead Lever Lug Mounting Hardware
8. Center Plate Bearing Surface
9. Center Plate Rim
10. Center Post
11. King Pin Well
12. Side Bearing Pads
13. Ends
14. Spring Seats
15. Spring Seat Lugs
16. Columns
17. Outer Column Guides – Gibs
18. Inner Column Guides – Gibs
19. Side Bearing Retainer Holes
20. Bolster Pocket
21. Bolster Pocket Slope Surfaces
22. Bolster Pocket Side Walls
23. Bolster Pocket Wear Plate
24. Side Bearing Pocket
25. Center Plate Horizontal Wear Liner
26. Center Plate Vertical Ring Wear Liner
27. Lands
Side Frame Nomenclature

1. Top Member Center
2. Compression Members
3. Compression Member Flanges
4. Bottom Center
5. Diagonal Tension
6. Tension Member Flanges
7. Columns
8. Windows
9. Top Ends
10. Sides of Column
11. Lower Bolster Opening
12. Spring Seat Flanges
13. Spring Seat Ribs
14. Retainer Key Slot
15. Inner Pedestal Legs
16. Pedestal Roof
17. Outer Pedestal Legs
18. Bolster Anti-Rotation Lugs
19. Parting Line – Top Member
20. Top End Openings
21. Unit Guide (Brake Beam) Brackets
22. Bottom Center Drain Holes
23. Parting Line – Bottom Member
24. Top Member Bridge
25. Wear Plate Retainer Holes
26. Column Face
27. Column Wear Plate Retainer Beads
28. Spring Seat
29. Spring Seat Bosses or Lugs
30. Pedestal Thrust Lugs
31. Column Wear Plate
Look for these symbols to know it is a quality BARBER component from Standard Car Truck Company.

© Registered Trademark in United States, Canada, and Mexico to Standard Car Truck Company.
# Foundry Identification Markings

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</table>

**Always Use Original Barber Parts**

Wabtec, Standard Car Truck
6400 Shafer Court – Ste 450, Rosemont, Illinois 60018, U.S.A.
Phone (847) 692-6050  Email: SCTTechCustomerService@Wabtec.com

Rev. 7/23
The purpose of this maintenance manual is, where applicable, to supplement the Association of American Railroads (AAR) Interchange Rules Field Manual for:

Rule 47 – Truck Bolsters
Rule 48 – Truck Side Frames
Rule 50 – Truck Springs (Coil, Elliptic, Snubbers and Package)
Rule 88 – Mechanical Requirements for Acceptance
Rule 90 – Cars and/or Car Parts Prohibited In Interchange

In the event of conflict, the AAR “Field Manual” and “Office Manual” of Interchange Rules shall supersede this manual.
Reference Publications for Freight Car Trucks

AAR Publications

Rules of Interchange for Railroad Cars
- Office Manual
- Field Manual

Manual of Standards & Recommended Practices
- Section A – Specifications, Standards and Practices
- Section B – Couplers and Freight Car Draft Components
  - Part II – Drawgear Inspection and Maintenance Manual
- Section C – Car Construction, Fundamentals and Details
  - Part II, Volume 1 – Specifications for Design, Fabrication and Construction of Freight Cars
  - Part III – Specifications for Tank Cars
- Section D – Trucks and Truck Details
- Section E – Brakes & Brake Equipment
  - Part II – Maintenance Requirements for Freight Car Air Brake Control Valves and Equipment
- Section G – Wheels and Axles
  - Part II – Wheel and Axle (Shop) Manual
- Section H – Journal Bearings & Lubrication
  - Part II – Roller Bearing (Shop) Manual
  - Part III – Lubrication (Shop) Manual
- Section L – Lettering & Marking of Cars
- Section S – Casting Details
  - M-214 – Classification and Repair Procedures for Used and Reconditioned AAR Approved Side Frames and Bolsters Applicable to Interchange Service
  - Part II – Code for Designating Design Features for Side Frames and Truck Bolsters
  - Part III – Coupler and Yoke Details

Supplement to the Manual of Standards & Recommended Practices

Circulars

Multi Level Manual

Interchange Rules – Arbitration Cases

Miscellaneous Publications
- The Car & Locomotive Cyclopedia
- FRA Safety Standards

Where to Obtain Publications

AAR Publications
- Central Operations Group
  - 50 “F” Street N.W.
  - Washington, D.C. 20001-1564
  - Phone: 202/639-2211
  - Fax: 202/639-2156

TTCI
- Technical Standards
  - 55500 DOT Road
  - Pueblo, Co 81001
  - 719-584-0750

Car & Locomotive Cyclopedia
- Railway Educational Bureau
  - 1809 Capitol Avenue
  - Omaha, Nebraska 68102
  - Phone: 402/346-4300

Railroad Freight Car Safety Standards
- Railway Education Bureau
  - 1809 Capitol Avenue
  - Omaha, Nebraska 68102
  - Phone: 402/346-4300

Always Use Original Barber Parts