



MECHANICAL SYSTEMS REMANUFACTURING INC.

Exceeding expectations since 1987



ASSOCIATION
OF AMERICAN
RAILROADS



RAIL PRODUCTS CATALOG



American Welding Society

Mississauga, Ontario
1740 Drew Road,
Mississauga, Ontario
L5S 1J6,
Canada
(905) 673-5733

Buffalo, New York
212 Ohio Street, #1,
Buffalo, NY,
14204,
USA
(800) 752-4593



ABOUT MSR

MSR is a dedicated AAR certified overhaul shop. We have been serving the North American rail industry since 1987 with new and reconditioned parts.

REPAIR AND RECONDITIONING

MSR specializes in the refurbishment and repair of railroad equipment, including; couplers, dampers, snubbers, disc brake calipers, diaphragms, handbrakes, door motors and other ad hoc needs in the rail industry.

MANUFACTURING

MSR is a key supplier of manufactured tie plates, brake heads, carrier beams, spring assemblies and custom fabrication for transit agencies and railroads across North America.



ASSOCIATION OF AMERICAN RAILROADS

MSR is an AAR M-212 approved shop (couplers & yokes) and has met the AAR Quality Assurance Program as specified in M-1003



ISO 9001 : 2015

MSR has a proven and established quality management system that is in conformance with the International Quality Systems Standard ISO 9001:2015



AUTHORIZED KONI REPAIR SHOP & DEALER

As a KONI authorized repair shop, we can provide new as well as recondition your existing dampers and snubbers



CWB CERTIFIED WELDERS

MSR welders are AWS certified to 15.1 equivalency and CWB certified to CSA standard W47.1 Div 3 and undergo regular training and re-certification specific to railroad repair and rail parts overhaul



MECHANICAL SYSTEMS REMANUFACTURING INC.

To Our Present and Future Customers,

On behalf of our entire team at MSR, I'm sincerely grateful for the opportunity to showcase our products and capabilities in our latest catalog.

For over 30 years, MSR has served the North American rail industry with new and reconditioned parts. At MSR, we pride ourselves on being adaptable, collaborative and highly responsive to our customers' needs.

Our team of associates are well-positioned to be a knowledgeable business partner to you, leveraging our experienced and certified staff of welders and machinists, to deliver high quality, cost effective new and reconditioned products and solutions.

It remains our commitment to provide all our customers with safe and dependable products, exceptional service, and timely deliveries.

Thank you for the opportunity to serve your needs. Should you have any questions regarding our new catalog or our product line, please feel free to contact a member of the MSR team.

Please also feel free to visit our website at www.msr-rail.com.

Sincerely,

Bob McKeracher
President



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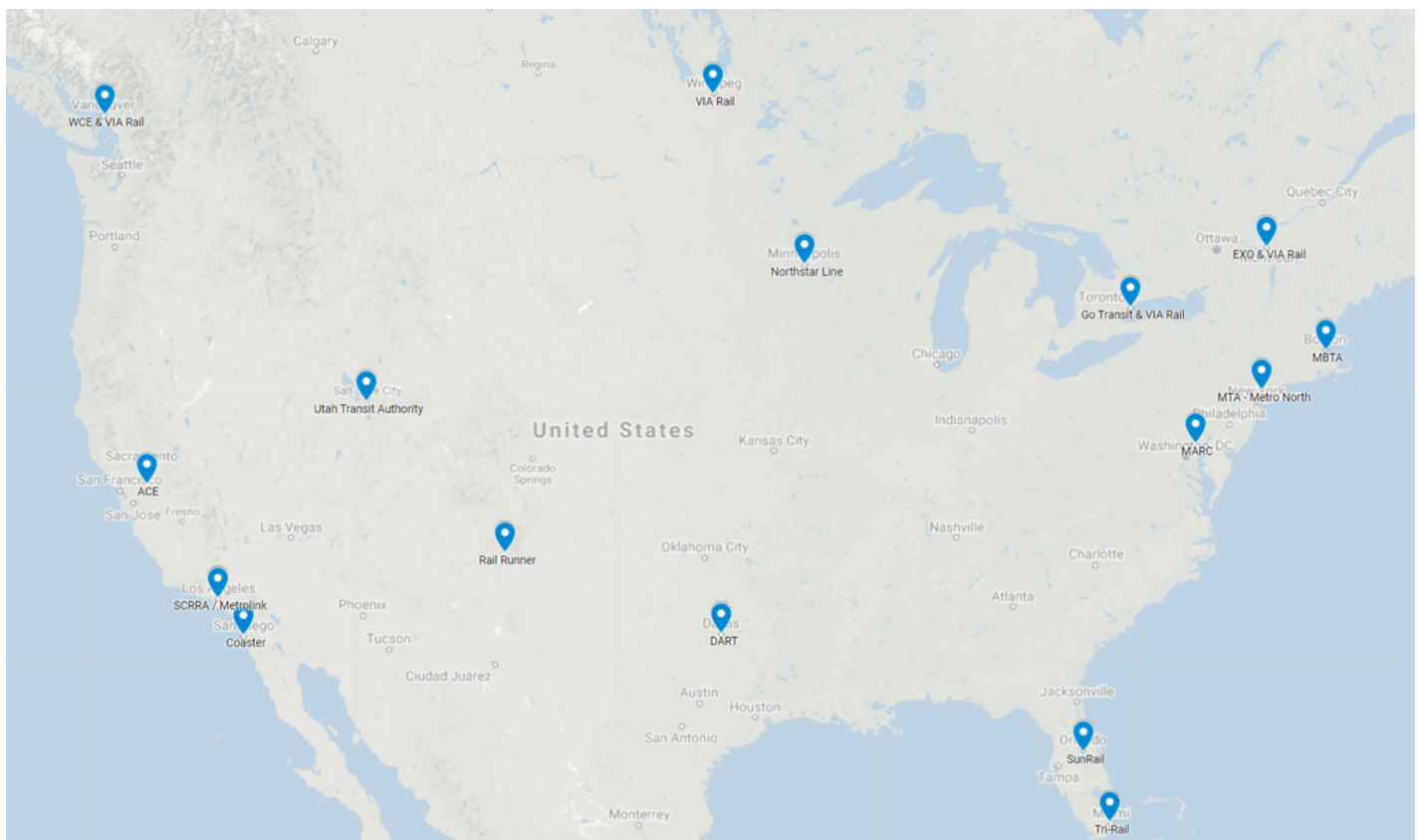
REPRESENTATIVE PROJECTS

The following lists present a representative sample of passenger rail overhaul projects that MSR has participated in over the past several years, by transit authority, along with an indicative list of the products MSR overhauled.

TRANSIT AUTHORITY

GO Transit (Metrolinx), Toronto, Canada
VIA Rail, Various Locations, Canada
West Coast Express, Vancouver, Canada
EXO, Montreal, Canada
Metrolink (SCRRA), Los Angeles CA
Coaster, San Diego CA
Almont Express Corridor, Stockton, CA
Utah Transit Authority, Salt Lake City UT

MARC, Baltimore MD
MBTA, Boston MA
MTA - Metro North, NY
Sunrail, Orlando FL
Tri-Rail, Miami FL
Northstar Line, Minneapolis MN
Rail Runner Express, Albuquerque NM
DART, Dallas TX



MSR Line Card

Door Systems & Access

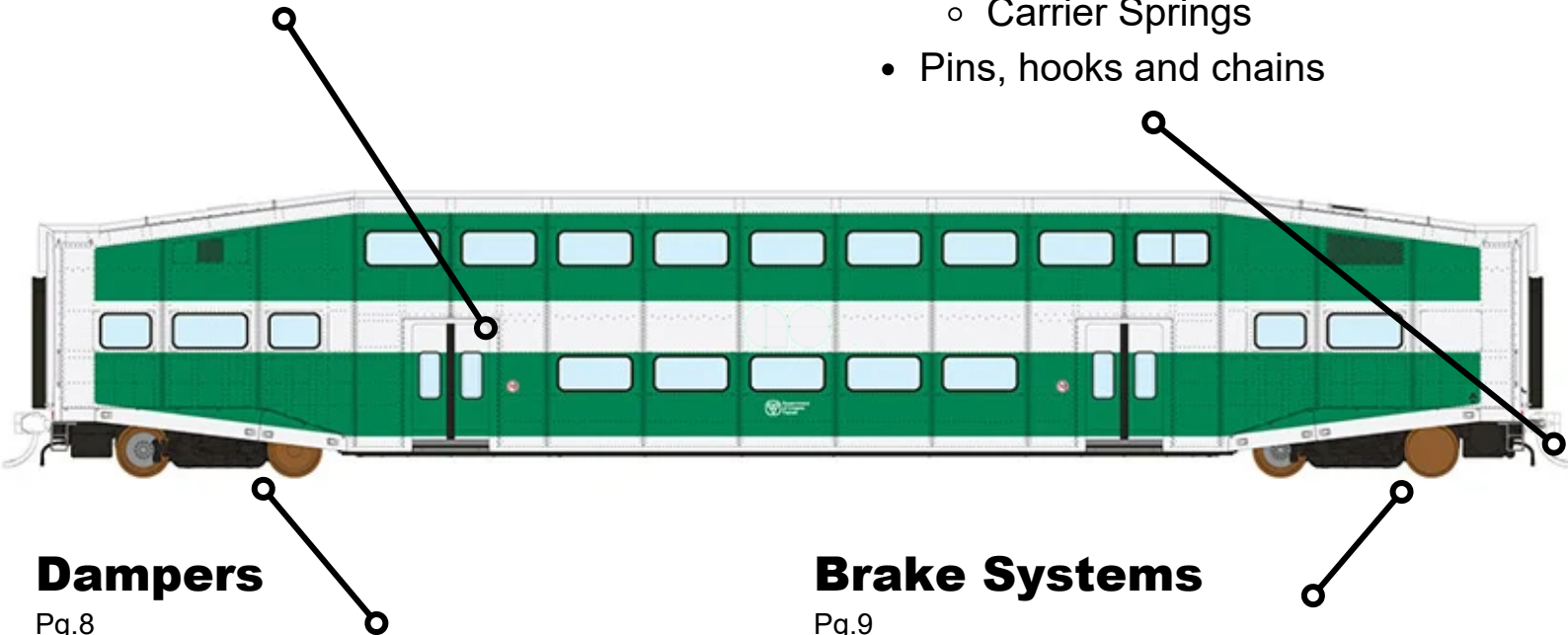
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- Pneumatic Door Operators
- Crew Control Panels
- Staff Key Switches
- Emergency Pull Boxes
- Side Door Steps

Couplers & Draft Gears

Pg.7

- Coupler Reconditioning
- Draft Gear Reconditioning
- Coupler Carrier Assemblies
 - Carrier Beams
 - Carrier Guides
 - Carrier Springs
- Pins, hooks and chains



Dampers

Pg.8

- New Dampers
- Damper Overhauls
- Bearings & Isolation hardware

Brake Systems

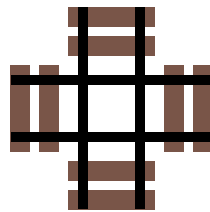
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- Lever Style Handbrake Reconditioning
- Replacement Brake Heads
- Brake Disc Caliper Overhauls

Track Components

Pg.11

- Tie Plates
- Refurbished Frogs
- Refurbished Diamond Crossings
- Inert Retarders & Parts
- Targets, Flags Keepers



End of Car Diaphragms

Pg.12

- End of Car Diaphragms Midlife Overhauls

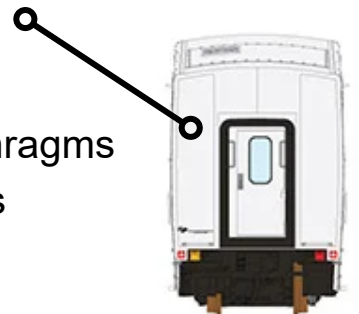
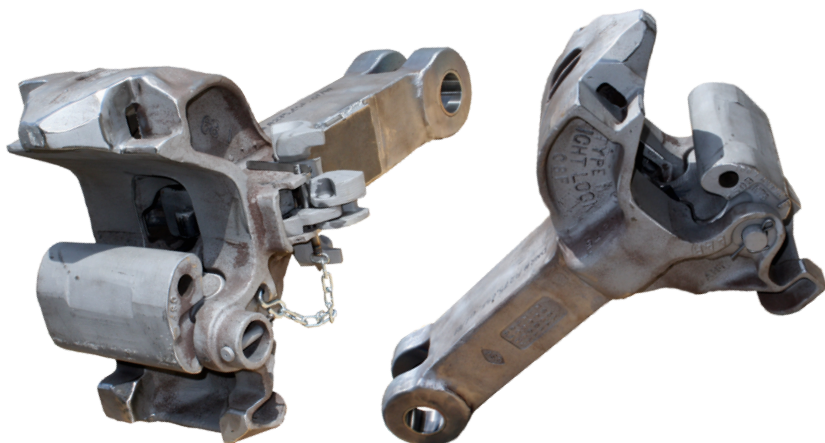


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COUPLERS AND DRAFT GEARS



Coupler Reconditioning

Type 'H' Tightlock, Coach and Locomotive Couplers
Type 'F' Locomotive Couplers

Draft Gear Assembly Reconditioning

Various Coach Configurations
Locomotive Draft Gears



Coupler Carrier Assemblies

Recondition/Requalify Customer Supplied Cores
Supply Manufactured/New



Carrier Beams



Carrier Guide



Carrier Spring



MECHANICAL
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DAMPERS



Custom manufactured bearings

New Dampers

MSR can supply New Dampers when Replacements or Pool Stock are required



Damper Overhauls

MSR provides complete overhauls/rebuilds using OEM Certified Parts



ITT



MECHANICAL
SYSTEMS
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BRAKE SYSTEMS

Lever Style Handbrake Reconditioning

Overhauls for Coaches, Cabs and Locomotives



Brake Disc Caliper Overhauls

Overhauls include replacement pins and bushings



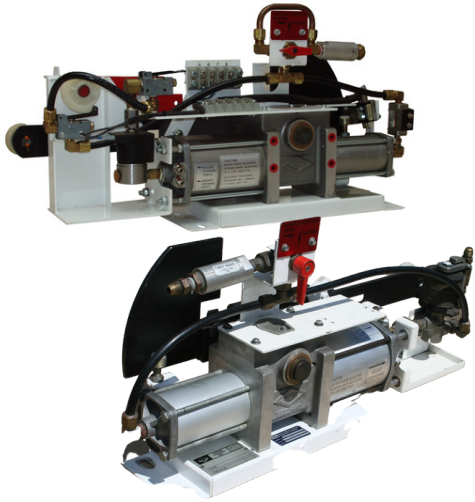
Replacement Brake Heads

Ready for installation



MECHANICAL
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DOOR SYSTEMS & ACCESS



Pneumatic Door Operators
Complete Overhauls for Various Types



Crew Control Panels
Service Failure Repairs and Complete Overhauls



Staff Key Switches
Service Failure Repairs and Overhauls

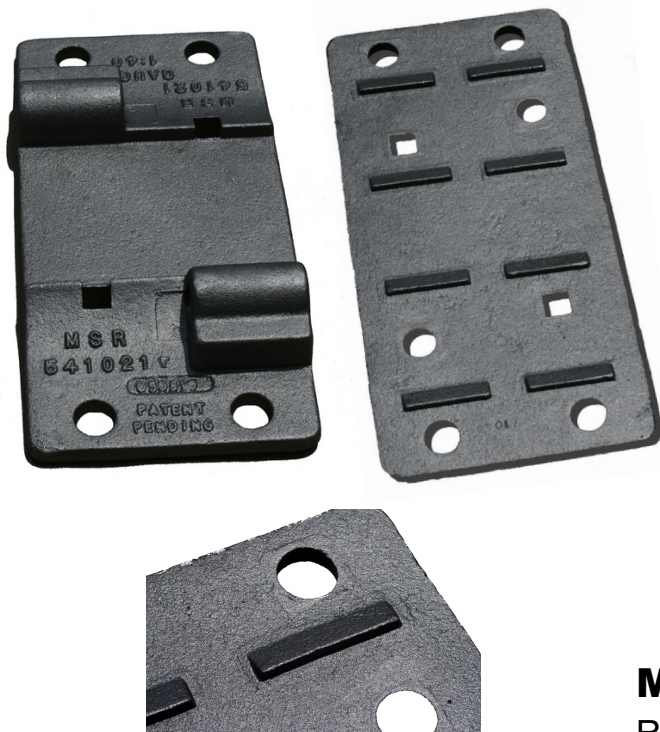


Emergency Pull Box
Supply Manufactured/New



Side Door Steps
Manufactured New

TRACK COMPONENTS



MSR Tie Plate

Cleated for increased lateral stability. Used on turnouts, bridges and fueling tracks



Inert Retarders

Complete assemblies or spare parts



Manganese Inserts/Crossings/Frogs

Rebuilt to new or specified tolerance



Target Kits

Mainline or Yard/Siding
Track Standard Compliant



MECHANICAL
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REPAIRED PARTS



End of Car Diaphragms

Midlife overhaul with new wear plates, renewed rubber and springs

End Door Locks

Washroom Door Locks

Returned to Like New Functioning



Illustrative list of other spare parts available

- Cab Car Controller Handle
- Side Door Seal Retainer, Cover or Spacer
- Side Door Guide, UHMW
- Portable Wheelchair Ramp, Repaired
- Side Door Sill Locating Plates
- Coupler Locking Assembly c/w Locking Pin, S-Hook and Chain
- Drag rods and Tie rods
- Lockable Storage Box, 10" x 10" x 10"
- Keeper 1.25" X 3" c/w 13/16" Hole, Zinc Plated
- Sill Step Capping Plate
- Overhead Raceway Cover, Coach
- Tear Drop Washer, SS
- Pedestal Liner, Coped
- Coupler Carrier Bump Pad
- Shim Side Bearing
- Washers (circular and teardrop), shims, springs
- Shoulder Bolt $\frac{3}{4}$ " x 4" c/w $\frac{1}{2}$ "-13 Thread $\frac{3}{4}$ " Long

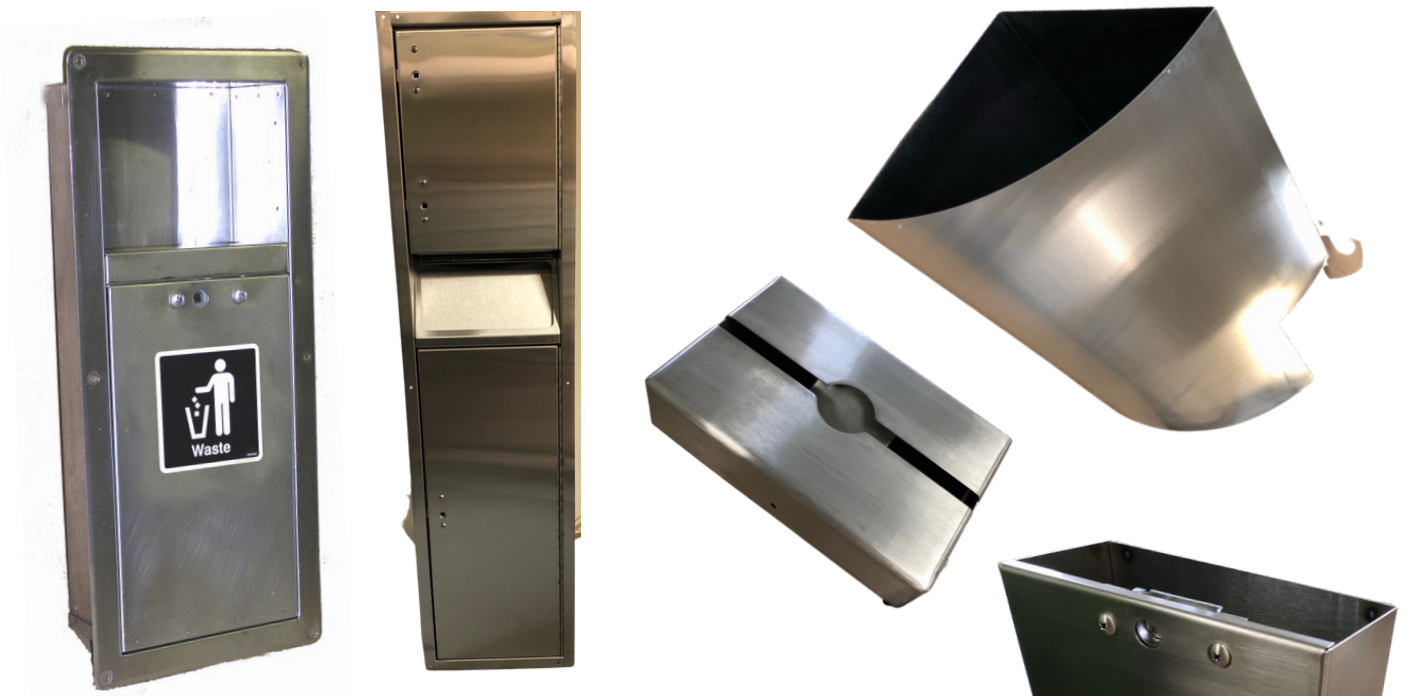
Fresh Air/Circulating Fans

Complete Rebuild - All Moving Parts Renewed



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FABRICATED SOLUTIONS

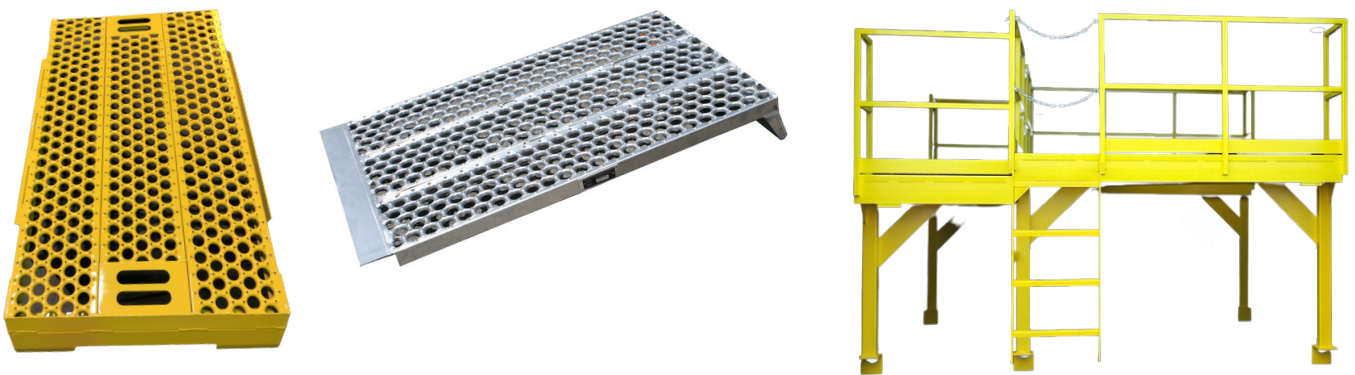


Waste Receptacles [and other accessories]

Washroom, Vestibule, Locomotive

Track Bridges and Custom Riggings

For Crossing Indoor Maintenance Tracks, pit covers, platform requirements



MECHANICAL
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NOTES

NOTES

MSR MECHANICAL SYSTEMS REMANUFACTURING INC.

THANK YOU

Please contact the following MSR
associates with any questions:

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