

Let Northwest Rail Electric help you with all your passenger railcar systems needs. Starting with generating hotel services power, distributing power and power management, our extensive experience in passenger car systems can solve the most difficult problems. Allow us to show you how you can accomplish more with less generating and distribution capacity, saving fuel and capital.

We also excel at heating, ventilation and air conditioning systems: HVAC control systems to keep your passengers comfortable from Alaska and Canada in the winter to Arizona and Florida in the summer. In addition to temperature comfort our systems can also maintain humidity to keep your dome windows clear and provide further comfort for your passengers.

Our automation systems allow automatic transfer and control of critical systems when part of the power system shuts down.

Recent projects have ranged from a single tourist line coach, installing HEP on a 24 car trainset and complete systems for a 20 unit trainset. Let us help you with all your power, HVAC, and control systems.

Cadillac Trainline Connectors
manufactured by Clements National Company are design engineered for reliability and durability to provide many years of customer satisfaction.

Clements National has been manufacturing electrical plugs and connectors to satisfy the requirements of Amtrak, commuter railroads, car and locomotive builders and rebuilders, fleet and private rail car operators since 1991. Our products have been designed and engineered to serve this market efficiently into the 21st Century.

Available From:

NORTHWEST RAIL ELECTRIC, INC.

E-mail: rjackson@nwrail.com

Web Site: <http://www.nwrail.com>

Portland Office:

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(503) 231-4808
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HEP
PRODUCTS
FROM
NW

RAIL
ELECTRIC
INC.



Amtrak Approved HEP Parts:

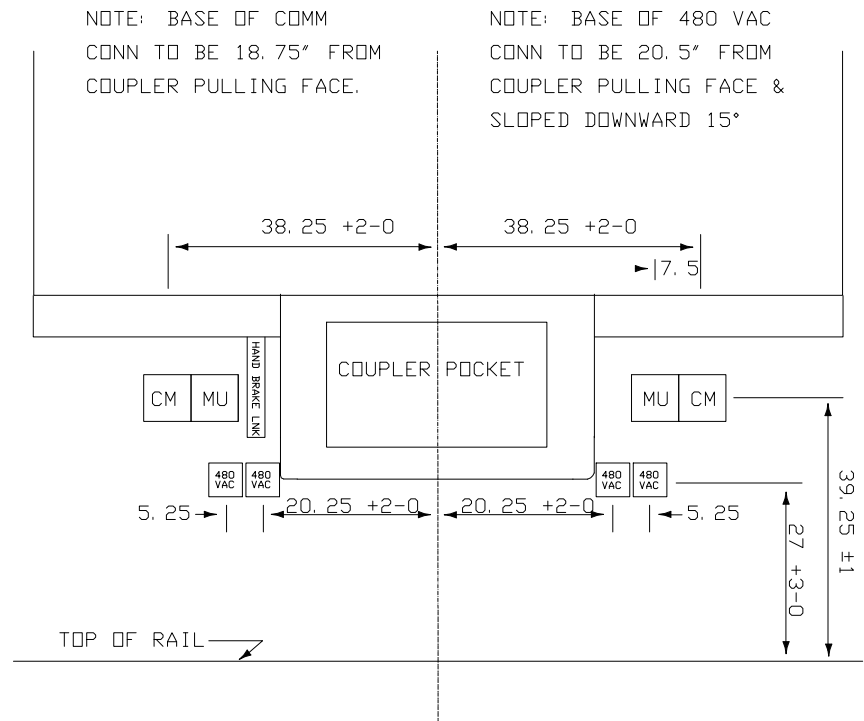
Power Connectors
Communication Connectors
Multiple Unit Connectors
Electrical Lugs
Junction Boxes
Wire
Splice Boots
Rubber Wire Cleats
Communication and HEP Mounting Boxes
HEP Connector Mounting Plates

Amtrak and General HEP Products:

ITEM	PART #
FIXED JUMPER	MPA-1SR-0085
RECEPTACLE	MRA-1-0024
RECEPTACLE HOUSING	MRA-H
27 POINT COMM RECEPTACLE(180")	CRA-27180-AMTK
27 POINT COMM JUMPER	CPA-2760-AMTK
MU 27 POINT RECEPTACLE(180")	CRA-27180-MUBK
MU 27 POINT JUMPER	CPA-2760-MU
MAIN HEP JUNCTION BOX	NW16289
27 POINT JUNCTION BOX	NWCOMJCTBX
SINGLE COM/MU MOUNTING BOX	1-1017
COM AND MU MOUNTING BOX	1-1071
HEP MOUNTING PLATE	HPMTGPL
INSULATING SLEEVE	NW-8007
NEOPRENE #4/0 6 WIRE CLEAT	914008
CORD GRIP	ZB-20
#4/0 LUG	326803
STAINLESS STEEL CLEAT CLAMP	NW4008C
WESTINGHOUSE AMTRAK-APPROVED CIRCUIT BREAKERS	ASSORTED RATINGS

Selected Specialized Tourist Railroad HEP Products:

ITEM	PART #
HEP MOUNTING PLATE - SINGLE RECEPTACLE FOR "QUARTER HEP"	HPMTGPLS
NEOPRENE #4/0 3 WIRE CLEAT - FOR "QUARTER HEP" AND OTHER SPECIALIZED APPLICATIONS	NW2034
INSULATING SLEVE, SPLICE FOR 2x #4/0 AND #2 CAR TAP	NW-8008
INSULATING SLEVE, SPLICE FOR 3x #4/0, FOR CASES WHEN RECEPTACLE, JUMPER AND CAR TAP IN SAME LOCATION	NW-8707
SPECIALIZED WIRE CLEATS	CUSTOM MADE
Single Receptacle HEP Mounting Plate	HPMTGPLS
Half-HEP Junction Box	1-1116



Design Benefits of Clements HEP Connectors:

- Floating silver-plated copper contacts, self-aligning for easy mating, resist excessive voltage drop.
- Class M stranding tin-plated copper wire cables assure maximum flexibility under adverse conditions.
- All plug and receptacle cable assemblies are integrally molded to assure maximum water tightness.
- Leading edge bevel of receptacle skirt maintains continuous low mating forces, aluminum support ring prevents roll-over.