



JPB Board of Directors
Meeting of August 5, 2021

Correspondence as of July 9, 2021

Subject

- 1 Caltrain Employees
- 2 Stadler EMU interim revenue service (Plan B)
- 3 All-Limited Schedule

From: [senait beyene](#)
To: [Public Comment](#)
Subject: July 3 /2021. 7:00 to 8: 20
Date: Saturday, July 3, 2021 8:16:57 AM

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I think you need women employee for inside Caltrain guset.
Caltrain employee get stubern or not leaving alone for nothing

But not all off them

I am sorry I like use clatrain

Thank you

From: [Roland Lebrun](#)
To: [Board \(@caltrain.com\)](#)
Cc: [MTC Info](#); [SFCTA Board Secretary](#); [Baltao, Elaine \[board.secretary@vta.org\]](#); [cacsecretary \[@caltrain.com\]](#); [SFCTA CAC](#)
Subject: Stadler EMU interim revenue service (Plan B)
Date: Tuesday, July 6, 2021 12:02:07 AM
Attachments: [EMU RFP Section 5 Couplers.pdf](#)

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Dear Caltrain Board,

Further to the recent announcement that the first EMUs will be delivered in 2022 but that electrification (including signaling) may not be fully operational until mid-2025, I believe that the time has come for the Board to consider a diesel-electric hybrid alternative during the transition to fully-electrified revenue service.

Background

- Gallery railcars are over 35 years-old (5 years above life expectancy) <https://www.caltrain.com/about/statsandreports/commutefleets.html>
- There is no existing secure storage capacity for EMUs while the current railcars are in service
- The Stadler warranty period will start when the EMUs are delivered (NOT when they enter revenue service)
- **The EMUs were designed with coupler adapters designed to rescue a stranded train in an emergency** (EMU RFP Section 5 attached for your convenience).

"5.4 COUPLER ADAPTER

*If automatic couplers are provided, **the Contractor shall supply coupler adapters for coupling to the existing diesel fleet.** Each cab car shall be equipped with one coupler adapter to allow it to be connected to a conventional AAR Type-E, F, or H coupler. The removable adapter shall have a maximum weight of 65 pounds and be located outside of the car and in a position such that it will require minimal effort for the Operator to remove, install and replace the adapter in its holder. It shall be able to withstand 100,000 pounds in buff or draft without permanent deformation. The operator shall be able to manually install or remove the adapter alone and without tools. **It is anticipated that the adapter will be used during emergency or rescue situations only.**"*

Proposed testing plan

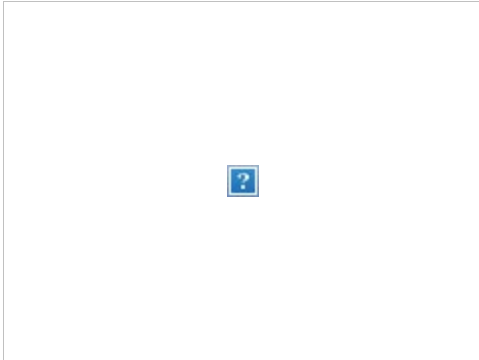
The proposal is to send two Caltrain locomotives (one F40 and one MP36) to the FRA's testing facility in Pueblo, Colorado and **certify that the coupler adapters, as designed, are capable of supporting safe and reliable revenue service in push/pull mode for a minimum of three years**, as follows: six push and six pull 7-car EMU tests at the following speeds: 65, 70, 75, 80,

85, 90 MPH for a total of 12 tests/locomotive.

The above 24 tests will be repeated with an 8-car EMU consist (total 48 tests).

The objective of these tests is to certify the following:

- That hybrid consists can be operated **safely and reliably in revenue service** at speeds of 60-79 MPH
- The existing F45 and MP36 locomotives are powerful enough to push/pull 7 and 8-car EMU consists **loaded at 150% of capacity** (Baby Bullet and special event service)
- The optimal consist configurations for Baby Bullet, Express and Local service (observed acceleration/deceleration curves)
- **That the coupler adapters, as designed, will survive the delivery trip from Salt Lake City and/or Pueblo to the JPB** <https://www.railwayage.com/passenger/intercity/first-siemens-brightline-cars-depart-sacramento/>



First Siemens Brightline trainset departs Sacramento - Railway Age

Siemens announced Dec. 14 that its first Brightline trainset, comprised of two locomotives and four coaches adorned in Brightline Blue, is complete and has left the company's manufacturing hub in Sacramento, Calif.. The first trainset is

www.railwayage.com

Respectfully submitted for your consideration.

Roland Lebrun

CC

MTC Commissioners
SFCTA Commissioners
VTA Board of Directors
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SECTION 5 - COUPLERS, DRAWBARS AND DRAFT GEAR

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5.1 GENERAL

The coupler system shall be service proven and shall meet the requirements of all applicable FRA regulations, and APTA and AAR Standards and Recommended Practices. All like vehicle types shall have identical coupler systems. The coupler system shall be either a conventional system, using an APTA Type-H Tightlock coupler or an automatic system that will make all mechanical, pneumatic, and electrical trainline connections. Semi-permanent couplers, such as drawbars, may also be proposed for use at non-cab ends of cars.

The coupler connections shall permit operation of up to eight vehicles in a train under normal conditions through electric and pneumatic trainlines. If automatic couplers are used, coupler controls shall be located in each operator's cab and outside the vehicle near each automatic coupler.

The coupler and draft gear shall have the strength needed to allow, under emergency conditions, a train of eight vehicles with an AW3 passenger load to push or pull an inoperable train of up to eight vehicles with an AW3 passenger load, without damage to the coupler or its anchorage.

Pushback couplers shall meet all the requirements of APTA PR-CS-RP-019-11, Pushback Couplers in Passenger Rail Equipment.

The Contractor shall provide a complete System Functional Description (SFD) for all systems, subsystems, components and devices, contained within this specification section. The SFD shall be in the form of a narrative description, with attendant electrical schematics and mechanical drawings, sufficient for the JPB to fully understand every aspect of the design and operation of the equipment specified in this section, and to make an engineering-based decision as to its acceptability for the Caltrain application.

5.2 CONVENTIONAL COUPLERS

Where conventional couplers are provided, they shall be of an APTA Type-H Tightlock design. Electric and pneumatic connections shall be made through use of inter-car jumpers utilizing AAR pneumatic fittings and Amtrak style electric connectors.

There shall be no permanent deformation in the couplers or in any other component during a 4 mph collision. Reference Section 3.1.4.1.1 for the parameters of this collision scenario.

5.2.1 MECHANICAL

5.2.1.1 Coupler and Yoke

Type-H Tightlock couplers and yokes shall comply with APTA Recommended Practice RP-M-003-98. Each coupler shall have an automatic horizontal centering device that aligns an unloaded coupler to carbody centerline. It shall be possible for two cars to automatically couple on a maximum degree horizontal curve shown on the Caltrain profile and alignment charts. An override of the centering device shall be provided to allow coupling in tight curves.

The gathering range of the coupler shall not be less than 3 3/8 inches in all directions with the coupler at the nominal operating height. The coupler gathering range shall be sufficient for two

cars to automatically couple on tangent track when each coupler is maintained within the tolerance stated in Section 5.2.1.3, and each coupler is positioned at the opposite limit of the gathering range. Tests shall be conducted to confirm the gathering range.

5.2.1.2 Draft Gear

The draft gear shall have rubber cushioning which shall be effective in both buff and draft in normal train operation.

For alternative structural compliance designs, a push-back, release function shall be incorporated. The draft gear shall not engage non-recoverable energy absorption below 4 mph (reference CEM collision Scenario 1 of Section 3.1.4.1.1). At speeds over 4 mph, the coupler will push back and engage the energy absorption device. The Contractor shall provide calculations detailing the energy management of this feature. A telltale device shall be incorporated to provide obvious indication that the function has been triggered.

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

5.2.1.3 Coupler Carrier

Each coupler shall have a carrier that maintains nominal coupler height while allowing vertical dynamic motion. The coupler carrier shall be designed to adequately and consistently support the coupler through its full range of vertical and horizontal movement, and shall maintain the coupler at a nominal height of 34.5" ATOR. The coupler carrier and centering device shall be adjustable to allow maintenance personnel to correct for wheel, truck, suspension, and carbody wear. The coupler location shall be maintained within ± 0.75 inches vertically and ± 0.75 inches horizontally of its nominal, centered position on level, tangent track with new wheels under all static conditions from AW0 to AW3. Coupler adjustment shall not be required more frequently than 92-day intervals.

5.2.1.4 Uncoupling Lever

Uncoupling levers shall be provided that comply with APTA Standard SS-M-016-06 and 49 CFR 238. The uncoupling lever shall not cause unintentional uncoupling as a result of any possible coupler movement.

5.2.1.5 Energy Absorption

For alternative structural compliance designs, an energy absorption feature shall be provided that will automatically engage when the push-back release function is triggered. The minimum stroke of the system shall be sufficient to allow the anti-climbers to fully engage. The device shall have a replaceable cartridge or be of a self-resetting hydraulic design.

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

The Contractor shall submit all energy-absorption system design information, including an energy-absorption analysis and actual test results showing applied force, compression distance traveled, and calculations demonstrating the performance of the energy absorption system.

5.2.2 ELECTRICAL

Electrical connectors shall be provided at the cab ends to maintain trainline continuity when EMU's are coupled. Intercar jumper cable assemblies shall be provided for each connector. The control system shall automatically reconfigure the trainlines and car ends after the cars are coupled and intercar jumpers connected.

The Contractor shall provide an special MU jumper cable between locomotive and the EMU to release the EB brakes and activate any other trainlines as needed to fully use the pneumatic brake pipe to safely tow and brake a dead 8 car EMU with functioning pneumatic brakes for maintenance and emergency operations.

5.2.3 PNEUMATIC

Pneumatic hoses shall be coupled manually and shall comply with applicable AAR standards. Each end of each vehicle shall be equipped with a 1-1/4 in self-locking ball type AAR approved angle cock on the air brake trainline pipe. Each end of every vehicle shall be provided with a 1 inch self-vented cut-out cock with a locking handle on the main reservoir trainline pipe. The system shall be compatible with JPB locomotives for rescue. Unintentional uncoupling and break-aparts shall cause emergency brakes to be applied.

5.3 AUTOMATIC COUPLERS

Where automatic couplers are provided, they shall provide fully automatic mechanical, electrical and pneumatic connections between mating cars.

There shall be no permanent deformation in the couplers or in any other component during a 4 mph collision. Reference Section 3.1.4.1.1 for the parameters of this collision scenario.

5.3.1 MECHANICAL COUPLER

5.3.1.1 General

The mechanical coupler shall be slack free and self-locking. The coupler shall be supported such that nominal coupler height is maintained while allowing vertical dynamic motion. The Contractor shall provide technical specifications, drawings, schematics, maintenance instructions and any other information requested by JPB to determine the suitability of the mechanical head.

The Contractor shall provide all special tools, as necessary for the maintenance and repair of the coupler and coupler mechanism.

5.3.1.2 Geometric Requirements

The coupler, drawbar, and draft gear shall be designed and constructed such that coupled cars shall be able to negotiate the horizontal and vertical curves on all classes of track, as specified in Section 2.2.2. This requirement shall remain valid when one car has worn wheels and deflated air springs and the other has new wheels and the air springs are at their up-stop limits.

The coupler support and centering device shall be adjustable to allow maintenance personnel to correct for wheel, truck, suspension, and carbody wear. The coupler location shall be maintained within ± 0.75 inches vertically and ± 0.75 inches horizontally of its nominal

position on level, tangent track with new wheels under all static conditions from AW0 to AW3. Coupler adjustment shall not be required more frequently than 92-day intervals.

The gathering range of the coupler shall not be less than 3 3/8 inches in all directions with the coupler at the nominal operating height. The coupler gathering range shall be sufficient for two cars to automatically couple on tangent track when each coupler is maintained within the above stated tolerance, and each coupler is positioned at the opposite limit of the gathering range. Tests shall be conducted to confirm the gathering range.

5.3.1.3 Coupler Head

The coupler head shall be slack free and self-locking.

5.3.1.4 Strength

The coupler, draft gear and anchorage to the carbody shall comply with the requirements of APTA PR-CS-RP-019-12. This shall include a draft strength capable of handling the normal and rescue operations described in Section 2.3.7.

All parts of the coupler assembly on which it is possible for a person to stand shall withstand a vertical load of 400 lbf (1780 N) without deformation.

5.3.1.5 Energy Absorption

For alternative structural compliance designs, an energy absorption feature shall be provided that will automatically engage when the push-back release function is triggered. The minimum stroke of the system shall be sufficient to allow the anti-climbers to fully engage. The device shall have a replaceable cartridge or be of a self-resetting hydraulic design.

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

The Contractor shall submit the energy-absorption system design information, including an energy-absorption analysis and actual test results showing applied force, compression distance traveled, and calculations demonstrating the performance of the energy absorption system.

5.3.1.6 Self Centering

Each coupler shall have an automatic horizontal centering device that aligns an unloaded coupler to carbody centerline. An override of the centering device must be provided to allow coupling in tight curves. When coupled, the centering device shall not prevent coupler movement necessary for normal operation.

5.3.1.7 Draft Gear

The draft gear shall have cushioning which shall be effective in both buff and draft in normal train operation.

For alternative structural compliance designs, a push-back, energy absorbing function shall be incorporated. The draft gear shall not engage non-recoverable energy absorption below 4 mph (reference CEM collision Scenario 1 of Section 3.1.4.1.1). At speeds over 4 mph, the coupler will push back and engage the energy absorption device. The Contractor shall provide calculations detailing the energy management of this feature. A telltale device shall be incorporated to provide obvious indication that the function has been triggered

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

5.3.2 ELECTRICAL COUPLER

5.3.2.1 Electric Coupler Head

Each coupler assembly shall be provided with an electrical coupler head or heads. The electrical portion of the coupling equipment shall perform the following functions:

- a) Sense the uncoupled state and control the car relays needed to establish the adjacent car end as a train end
- b) When coupled to another vehicle, sense the coupled state and control the car relays to establish the car end as middle, or coupled end
- c) Sense an unintentional uncoupling through the use of a loop circuit and apply emergency brakes in the train
- d) Provide for isolation by Cab control or local manual control

There shall be a minimum of 10 percent spare contacts in the electric coupler head.

Electric coupler contacts and trainlines shall be symmetrically arranged about the vertical centerline so that they may be reversed with respect to any other car and the specified functions will not be affected.

The electrical coupler heads shall be heated, if required, to operate correctly over the full temperature range described in Section 2.2.5, environmental conditions.

The mounting of the electric coupler head on the mechanical coupler shall provide for easy removal and replacement of the entire assembly without the removal of any other adjacent component.

The Contractor shall submit a design analysis report on the electrical coupler to confirm compliance with the requirements of this Section.

5.3.2.2 Trainline Circuits

The circuit assignments shall be selected by function such as, but not limited to, ATC, Door, Communications and MU Operation (propulsion, braking, auxiliary power and battery, cab control, data bus network, etc.).

5.3.2.3 Electrical Contact Requirements

Butt-type or pin and socket contacts shall be used.

5.3.2.3.1 Butt Contacts

Butt-type contacts for high energy (battery level) signals shall be silver plated. Contacts for low energy (train bus, etc) signals shall be gold plated.

The contact tips shall be replaceable by removal through the front of the coupler block without disassembling the coupler or its wiring.

The contacts shall mate with a wiping action. Fritting currents shall be employed where necessary to maintain low resistance pin contact for data bus and other low voltage, low current sensitive circuits. The disconnect operation shall be rapid to avoid damage by arcing.

5.3.2.3.2 Pin and Socket Contacts

The electrical coupler head shall be retractable. The electric heads shall not mate until mechanical coupling has been achieved, and shall un-mate prior to mechanical uncoupling.

Guide pins shall be provided to ensure that pin and sockets are correctly aligned.

Contacts shall have sufficient lead-in to ensure that they will always mate correctly under worst case conditions of guide pin wear.

Fritting currents shall be employed where necessary to maintain low resistance pin contact for data bus and other low voltage, low current sensitive circuits.

Electric coupler head mating forces and speed shall not be greater than necessary.

The Contractor shall supply details of the design that describes how misalignment and mismatching of contacts is avoided.

5.3.2.4 Contact Springs

No current shall flow through the contact springs.

5.3.2.5 Current Interruption Protection

To prevent electric coupler pin contacts from arcing during uncoupling, a separate set of switching functions shall be included for the automatic disconnect of all circuits which might cause arcing damage, prior to separation of the current carrying contacts.

5.3.2.6 Connections

Each contact, except spares, shall be permanently marked to identify its actual circuit designation by engraving its identification on the contact block. Spares shall be identified with decals only, designating "SPARE" and its number.

Connections to the back of the electrical coupler contacts shall be non-corroding, designed to prevent interference between adjacent connections, and shall be accessible for maintenance. Cable entry to the electrical coupler shall be waterproof.

Connections from the electrical coupler head to the carbody mounted trainline junction box shall be by means of flexible cables with multi-way, locking type connectors at the carbody ends.

Sufficient conductors shall be provided to wire all coupler contacts, including all spares, back to the junction box.

The method of connection and support shall minimize stress in all operating positions and shall prevent chafing of the cables. Strain relief bushings shall be used in this regard.

The connections shall permit removal and replacement of the complete electrical coupler without disturbing the mechanical and pneumatic portions of the coupler.

5.3.2.7 Housing

The housing shall be provided with an opening on the bottom, covered with a removable plate of sufficient size to make connections and to inspect and repair the terminals, cross-connections and other internal parts of the coupler.

5.3.2.8 Contact Holder

The electrical coupler contact block shall be of a non-hygroscopic material, of adequate strength to withstand, without damage, mechanical forces imposed by normal revenue service.

The design of the insulating block, contacts and edge seals shall preclude the entry of water and debris of any kind into the electrical housing, and shall be mechanically stable over the full range of temperatures defined in Section 2.2.5.

An elastomeric gasket shall be attached to the perimeter of the electric coupler contact block. When the electrical heads mate during coupling, the gasket material shall form a waterproof seal to protect the contacts. This gasket shall also form a waterproof seal with the electrical head cover when it is in the closed position.

Dielectric strength shall meet the requirements of Section 16.17.3 for wiring insulation resistance from pin-to-pin and from pin-to-ground. Creepage distance between adjacent contacts and between the contacts and any metal part connected to the carbody shall be in accordance with EN50124.

The contact block shall be removable for repairs or replacement.

5.3.2.9 Electric Coupler Cover

Each electric coupler shall be provided with a waterproof cover which shall protect the coupler contacts from dirt, dust, water and ice when it is closed in the uncoupled position. The cover shall be spring-closed and shall automatically open as the electric heads mate during coupling and shall close as the electric heads separate during uncoupling. The cover shall not be damaged by maintenance personnel using the cover as a step. A prop rod or other hold-open device shall be provided.

5.3.2.10 Electrical Isolation

Electrical isolation shall be possible without mechanically uncoupling by activating the Trainline Isolation Bypass switch in the cab. This shall cause the electric heads to retract after proper electrical isolation has occurred automatically. It shall not be necessary to return the Trainline Isolation Bypass switch to its normal position in order to mechanically uncouple using the "UNCOUPLE" pushbutton.

5.3.2.11 Non-Cab End

5.3.2.11.1 Electrical Connections

Intercar electrical connections utilizing semi-permanent jumper cables with connectors at each end, connected to car junction boxes are required. Since the disconnection of the inter-car connectors is a manual process, means shall be provided to safely remove all circuits with potential differences of more than 50 volts and/or currents in excess of 10 amps prior to disconnection.

5.3.3 PNEUMATIC COUPLER

The coupler shall be capable of making all necessary connections for trainlining the main reservoirs and the control pressure (brake pipe). Car-to-car brake pipe connections shall be made automatically when couplers are fully engaged mechanically and locked. Connections shall be provided in the coupler for the control pressure pipe, main reservoir pipe and any other connections necessary for the automatic coupling and uncoupling of the cars. Manually operated, self-locking, non-vented cut-out cocks shall be provided at each end of each pneumatic pipe that is trainlined.

A readily replaceable, self-closing valve shall be provided which shall automatically close off the emergency pipe and main reservoir pipe when cars are uncoupled and open between coupled cars. The design of the coupler and controls shall ensure that during intentional uncoupling the emergency brakes shall apply on the cars being parked. The uncoupling operation shall not cause an emergency brake application on the controlling car and shall not result in the loss of brake pipe air. Unintentional uncoupling and break-aparts shall cause emergency brakes to be applied.

Provisions shall be made to prevent undesired buildup of air pressure in the uncoupling cylinder due to uncoupling valve leakage.

The air connections at the rear of the coupler head shall be tapped for standard iron pipe size connections. All piping and fittings on or about the coupler shall be of approved materials. The air line at the face of the coupler shall be free-flow connected by means of spring loaded rubber gasketed bushings or approved equal. These gaskets shall be retained to prevent their becoming dislodged during uncoupling.

All piping and fittings on or about the coupler shall be of approved materials.

To prevent debris from entering the pneumatic trainlines, a tappet valve shall be provided in the face of the coupler for each pneumatic trainline. The tappet valve shall automatically open upon mechanical coupling and automatically close upon mechanical uncoupling.

5.3.4 CONTROL

5.3.4.1 General

Coupler design shall permit automatic coupling when bringing cars together. If the displacement of the couplers is within the gathering range specified, coupling shall occur when the couplers come into full contact.

Coupler control shall be arranged so that the complete uncoupling operation can be performed only from an active coupler control station at the uncoupling location.

Single point failures in the uncoupling control shall not produce uncoupling. Uncoupling must be manually initiated, and protected by a key-switch. Uncoupling shall only be possible at no motion.

5.3.4.2 Coupler Control

The electric and pneumatic control system shall provide the functional features to permit automatic coupling and uncoupling of the cars from within the adjacent cab car-end. Manual, electric and pneumatic coupling and uncoupling features shall also be provided.

Auxiliary equipment shall be supplied as part of the coupler equipment to energize in both cars the activating relays and magnet valves performing the following functions:

- a) Sense the uncoupled state and operate the drum switch accordingly, or equivalent. Close the loop circuits and open all other switched trainline circuits; close the air trainlines and open the coupler hook.
- b) Sense the coupled state and operate the drum switch accordingly, or equivalent. Open the looping circuits, restore continuity of trainlines and open the air trainlines. Manual means must also be provided by which specified air and electric trainlines can be opened or closed
- c) Provide a manual means by which specified trainlines can be broken.

5.3.4.3 Automatic Coupling/Uncoupling

5.3.4.3.1 Coupling

When contact with a second coupler is made, the couplers shall automatically couple mechanically and pneumatically (if applicable).

Once mechanically coupled, the ISOLATE/TRAINLINE switch in one coupled cab should be momentarily moved to the TRAINLINE position to make the electrical trainlines in the opposite cab. This operation should be repeated in the other coupled cab to complete the coupling process.

Coupling of a live train to a “dead” (no air) train should commence with the electrical coupling, and not require that the dead train be fully pneumatically charged before the electric portions of the couplers functionally engage. This may be effected via the use of a pilot valve on the live train. The rationale for this requirement is to energize the air compressor controls on the dead train so as not to rely on the live train alone to pneumatically charge the dead train. All of this shall occur automatically upon coupling.

Once a cab is detected as coupled, it shall no longer be an Operating cab.

5.3.4.3.2 Uncoupling

The uncoupling operation shall be electrically controlled from the adjacent Operator's console. During uncoupling, the emergency brakes shall be automatically applied on the cars to be parked and remain released on the cars to be moved.

In the event of an unintentional uncoupling, an emergency brake application to all sections of the train shall be caused by exhausting the emergency pipe.

The uncoupling control shall be interlocked such that its activation is restricted to a powered Operator's console with the car speed below the no-motion detection point of the no-motion detection system. The couplers shall be controllable only from the cab control panels adjacent to the point of separation. Coupler control shall not be trainlined. The uncoupling sequence shall be as follows:

- d) A cab adjacent to the coupler where the uncoupling is to occur is activated.
- e) The UNCOUPLE pushbutton in the active cab is depressed and latches electrically after a predetermined length of time (adjustable). This causes the electric heads to retract after proper electrical isolation has occurred automatically. Subsequently, mechanical uncoupling is initiated. Once this sequence commences, it shall continue to the fully uncoupled state even if the UNCOUPLE button is released. It shall not be necessary to operate the car in forward, to buff the couplers, to achieve mechanical uncoupling.
- f) The reverser is placed in REVERSE and the train backs away from the opposing, uncoupled portion of the train.

5.3.4.3.3 Manual Operation Requirements

Devices shall be provided to permit the cars to be mechanically uncoupled without the use of tools in the event of a power loss or control failure. Sufficient mechanical advantage shall be provided to allow JPB personnel to manually operate these devices in an emergency using a force of 60 pounds or less.

It shall be possible to manually turn the drum switch to effect electrical isolation. All manual functions shall be independent and be capable of being operated in any sequence or combination.

If a manually retractable electric coupler head is provided, it shall not require more than 35 pounds force to engage or disengage.

5.4 COUPLER ADAPTER

If automatic couplers are provided, the Contractor shall supply coupler adapters for coupling to the existing diesel fleet. Each cab car shall be equipped with one coupler adapter to allow it to be connected to a conventional AAR Type-E, F, or H coupler. The removable adapter shall have a maximum weight of 65 pounds and be located outside of the car and in a position such that it will require minimal effort for the Operator to remove, install and replace the adapter in its holder. It shall be able to withstand 100,000 pounds in buff or draft without permanent deformation. The operator shall be able to manually install or remove the adapter alone and without tools. It is anticipated that the adapter will be used during emergency or rescue situations only.

5.5 REQUIRED CONTRACT SUBMITTALS

The Contractor shall submit for JPB review and approval those documents identified in the CSR that demonstrate compliance with this section. Refer to section 1.7.

5.6 CITED REFERENCES

The following standards or references were cited in this Section:

STANDARD	TITLE
EN50124	European Standard, "Railway applications. Insulation coordination. Basic requirements. Clearances and creepage distances for all electrical and electronic equipment"

PCEP Procurement of Bi-Level EMU Vehicles

STANDARD	TITLE
APTA RP-M-003-98	American Public Transportation Association, "Recommended Practice for the Purchase and Acceptance of Type H-Tightlock Couplers"
APTA SS-M-016-06	American Public Transportation Association, "Standard for Safety Appliances for Rail Passenger Cars"
49 CFR 238.205	Code of Federal Regulations, "Rail Passenger Equipment Safety Standards" Anti-climbing mechanism.
49 CFR 238.207	Code of Federal Regulations, "Passenger Equipment Safety Standards" Link between coupling mechanism and car body.
APTA PR-CS-RP-019-12	American Public Transportation Association, "Recommended Practice for Pushback Couplers in Passenger Rail Equipment"

From: [Thomas Shanks](#)
To: [Public Comment](#)
Subject: All-Limited Schedule
Date: Wednesday, July 7, 2021 10:58:58 AM

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I live near the Lawrence Caltrain station. The all-Limited weekday schedule prevents me from getting to work near San Mateo station in a reasonable timeframe. When will Caltrain return to a normal schedule?

Thomas Shanks
Santa Clara, CA