OPERATION OF SILVER LINER MARK IV CARS

CLASS MA-1-E  MA-1-F
SERIES 270 TO 303 G.E. SINGLE CARS
304 TO 399 G.E. MARRIED PAIRS
THIS MANUAL HAS BEEN PREPARED TO SERVE AS A GUIDE TO DOOR OPERATION, COUPLING AND UNCOUPLING PROCEDURES, TROUBLE-SHOOTING, ETC. OF SILVERLEAF IV - G.E. CARS. IT IS FOR THE USE OF TRAIN ENGINE SERVICE EMPLOYEES, AND IS INTENDED AS INFORMATION ONLY. THE PROCEDURES OUTLINED HEREIN DO NOT ENHRAGE OR AMEND ANY RULES OR INSTRUCTIONS GOVERNING THE OPERATION OF THIS EQUIPMENT, OR ANY OTHER APPLICABLE RULES OR INSTRUCTIONS.

F. K. West,
Manager, Philadelphia District.

CONTENTS
Page 1. Electric Cabinets Located Inside Car.
3. Drawing of Right Side of Car.
4. Drawing of Left Side of Car.
5. Drawing of Box R1 (Rain Group).
12. Coupling and Uncoupling.
17. Door Control Operation.
18. Lights Located Outside Car.
20. Underfloor Layout of Car.
21. Drawing of Punctograph
22. Trouble Shooting - enroute.
This booklet will enable operating personnel to become familiar with the mechanical and electrical components and procedures that are employed in M.A.E.(G. F. Computer care) to facilitate operating efficiency. The instructions contained herein can be implemented to correct certain operating faults enroute or to assist in moving equipment to a terminal for further repair.

LOCATION OF ELECTRIC CABINETS CONTAINING CIRCUIT BREAKERS AND SWITCHES

Number 1. Cabinet is located in the car body, center of car, across the aisle from the Public Announcement microphone grill. It contains the Performance and Fault Indication display unit.
Number 2. Cabinet is across from the No. 1 cabinet, below the P.A. microphone grill. It contains:
(a) Braking and motoring cut out switch - should be in position pointing to NORMAL.
(b) Battery trainline circuit breaker - normal position of breaker is ON (up).
(c) Battery circuit breaker - normal position of breaker is ON (up).
(d) No motion Reset - Resets electric feature that tells the car it has reached 3 miles per hour.
(e) Train Stop Cutout - normal position of switch is safety wired down.

CIRCUIT BREAKER PANEL is in the P-end vestibule, behind the engine men. All breakers should be in the ON position (breaker handle toward the center of the panel). Five breakers in this cabinet are vital in the train taking power.
Traction Control Breaker, Auxiliary Control, Trainline Control & Fault Protection, DC DC Converter and Air Compressor for Main Reservoir pressure. Check this cabinet when taking over a train.

Trainline & Switch Panel is in the 2-end vestibule across from the hand brake and contains:

(a) Local pantograph down switch—normal position is on TRAINLINE. When switched to DOWN position, pantograph will lower on that car only.

(b) Overhead heat cutoff—provides control of overhead heat.

(c) Floor heat cutoff—provides control of floor heat.

Note: Both heat switches may remain in NORMAL position year round.

(d) Door trainline cutoff—provides for deadheading a portion of a train’s side doors. Normal position is THRU ON.

Note: In cutoff position, doors will not respond from that point beyond to trainline door opening or closing commands.

(e) No Power Reset—extinguishes the white fault light on the exterior of the car.

Trainline Panel is located on the A-end opposite from the engineer’s cab.

(a) See (d) of Trainline and Switch Panel.
LEFT SIDE OF CAR FROM "F" END SHOWING LOCATION OF BOXES

STAND-BY POWER RECEPTACLE
LOCATION OF BOXES CONTAINING CIRCUIT BREAKERS AND SWITCHES ON THE OUTSIDE OF CAR. Boxes on the outside of single cars are numbered numerically by L (left) side and R (right) side. The numbers start at the F (front) end of the car so that a box labeled 1 2 would be the second box from the F end, on the left side. Left and Right sides can be determined by looking toward the F end from the opposite end of a car. The letter F is stenciled at trap level on the outside of the car. Front of a Single car is the pantograph end.

Front of a Married Pair is the non-panto- graph end.

Box R 1 Main Group has a long cover with window glass and contains:

**ADCB** Air Compressor Control Circuit Breaker - if tripped, air compressor is lost.

**AGH** Air Compressor Motor Overload Relay - push in R2U plastic pin to reset.

**GR** Ground relay - fault light in cab. Engleman's plug in reset gives one third power.

IF RED LGE is lit, reset GR and RGR to restore full power.

**TRP** Transformer Hot Relay - LO NOT RESET.

**RGN** Reset Ground Relay - see GR above.

**PLR** Pantograph Lowering Relay - 3 conditions for resetting: No blue light (THL) in Box R 1, 50 lbs. in Main Reservoir, pantograph pneumatic grounding switch on car roof not in grounding position (W). See drawing of Pantograph.

6.
Lights in Box R 31 Main Group:

THR Transformer Thermal Relay - Do not reset.

LOL Local Ground Light - RED indicates a ground in Main Group.

THL Local Transformer Light - BLUE indicates Main Transformer problems. Set TRF and TFR.

LOC Local Overload Light - White reset with engine-man's plug.

Box R 4 Auxiliary Group contains five resets.

OSR Overspeed Relay - for motor alternator.

OVR Over Voltage Relay - for motor alternator.

TFF Transformer Pump and Fan. This relay trips out 45 seconds after motor alternator shuts down. The above three relays are painted silver. When tripped, a RED area is exposed. Push in to reset.

CL 13 Overload Relay for TFF - push in plastic pin to reset.

CL 46 Overload Relay for TFF - push in plastic pin to reset.

Note: If TFF is tripped, reset CL 13 and CL 46 before resetting TFF. Check MPNS in Box R 5.

Box R 5 Auxiliary Group has a long cover with a window glass and contains: ARHA Auxiliary Rectifier Circuit Breaker.

EPAH Equipment Fan Circuit Breaker.
MHWB Motor Alternator Output Circuit Breaker. (When this breaker trips note position of TPF in Box N 4 and comply with note, LYT.)

LYT Low Voltage Transformer Circuit Breaker.

TCFS Transformer Cooling Pump Circuit Breaker.

TPB 115 Volt Transformer Circuit Breaker.

KSB Battery Rectifier Circuit Breaker.

All the above breakers in this box must be in ON position (fully up).

Lights in Box R 2:

- FBL- Failed Blower Light. Lights when Motor Alternator shuts down. Car is DEAD.

- AGL- Auxiliary Ground Light. Lights when grounds exist in the Auxiliary Group. Car is not dead.

Box R 6 Auxiliary Group has a small cover and contains:

- AGR Auxiliary Ground Relay - resets auxiliary grounds, gray colored with large reset button.

- HSV Manual start for the Motor Alternator. Normally starts with battery power. If battery is low or dead, reset MHWB breaker in Box R 4 - if necessary and hold in the HSV knob until the green FBL light goes out in Box R 5.

Box L 3 Pantograph Magnet Valves for lowering and raising pantograph.

Box L 4 Automatic, Manual and Off control for Air Conditioning Condenser and Compressor.
Box L 5 Air Conditioning and Heat
Control box contains one breaker for)
car body Lighting LDB (lower left
corner). Top row of breakers con-
cern overhead heat and floor heat
and oah heat.

HOME Freon Compressor
CPNG Condenser Fan
BMA Blower fan for B-end
BPA Blower fan for A-end
DHB Door Heater
AHB Auxiliary Heater.

COUPLING AND UNCOUPLING MALE CASES
The automatic coupler is a notched
male device with a companion female
fitting. The coupler is a fully
automatic version which makes
mechanical, pneumatic and electrical
connections between the cars auto-
 rnatically.

1. COUPLING
(a) When coupling, a man should
descend to the roadbed to make sure
the couplers are within gathering
range of each other, that is, the
couplers are positioned where the
tip of the notched male pin is with-
in the cone area of the mating female
fitting on the opposite coupler.
(b) Make a safety stop before
oupling (about 3 three feet) and
check to see that couplers are
within gathering range, then bring
the cars gently together.
(c) Observe each coupler to see
that each END tells tale latch
indicator has retracted into the
indicator tube thereby insuring
the latch is in the locked position.
(see drawing of coupler). If both
END indicators do not retract into
the tubes, cars must be uncoupled

12.
and coupled again until both end indicators have retracted.
(d) See that retractor bars for electric heads are in the forward position.
(e) Since the brake pipe has dis-
charged on the added cars, an emer-
gency application will occur as the
cars couple. A 45 second delay must
be observed before redressing to
allow the emergency valves to close.
(f) Recharge the brake pipe.

2. Coupling on a curve
(a) manually disconnect the centering springs.
(b) Make a safety stop to assure
alignment of couplers.
(c) Move couplers to desired
position by hand if necessary.
(d) Couple up.
(e) Reconnect centering springs if
possible.

3. Uncoupling
Each car has six uncoupling buttons,
one in each cab of the single car and
two on each outside corner of the car
underfloor. Uncouple from the car
which is pulling clear since the
brake pipe valve closes automatically
only on the car from which uncoupling
was initiated.
(a) Uncouple from engineer's cab.
(b) Have engineer close the brake
pipe while in electric holding. (110
lbs.)
(c) Push down firmly and hold while
each coupler latch is heard unlocking.
The key must be held down until cars
are completely separated.
(d) Remove key and secure cars left standing.
(b) Uncoupling from track level.
   In order to save brake pipe pressure, initiate the uncoupling from the car which is pulling clear. This will allow the standing car or cars to go into emergency brake as the cars separate.
   (a) Have engineman charge the brake pipe while in electric holding. (110 lbs.)
   (b) Push and hold up on the uncoupling button until each coupler latch can be heard unlocking and cars have separated.
   (c) Release button and secure cars left standing.
(c) Manual uncoupling.
   A manual uncoupling wrench is found on the B-end, right side, near the steps.
   (a) Close Main Reservoir and Brake Pipe Cocks.
   (b) Use the wrench to turn out the uncoupling bolt located on the right side of each coupler. (see coupler drawing.) The bolt cannot be removed entirely, but will turn out enough to unlatch the mechanical notched male device so that uncoupling is accomplished.
   (c) Both uncouplers must be released as the coupling is a double lock arrangement.
   (d) Have the electric head uncoupling lever back to the retracted position, raise the locking pin to hold the lever in this position. (see coupler drawing).
   (e) Separate cars and secure car(s) left standing.

COUPLING TO A LOCOMOTIVE WITH A STANDARD COUPLER.
   A coupler adapter is carried in a bracket at the B-end, right side, under floor near the hand brake chain.
The adapter provides a closed knuckle to which a locomotive can be coupled in a conventional manner. The adapter has both pin and socket connections to permit attachment to the automatic coupler. A latch key is inserted vertically in the adapter to grip the notched pin of the automatic coupler. This key is secured to the adapter by a short length of chain.

(a) Have engineman remove his plug, control handle, brake handle and cut out his brake valve.
(b) Remove the coupler adapter from its bracket.
(c) Lift the key out of the adapter.
(d) Insert the adapter in the coupler as far as it will go.
(e) Restore the retainer plate and wind bolts to the adapter storage bracket.
(f) Open the knuckle on the standard coupler.
(g) Couple up. The locomotive will push the adapter into its locking position. Make certain no portion of the trolley tell tale latch indicator is showing at the end of the indicator tube. (See coupler drawing.)
(h) Insert the key into the adapter. Key is attached by a short length of chain.
(i) Attach the locomotive air hose to the flexible brake pipe hoes of the coupled car and open angle cocks to obtain brake pipe pressure.

To Remove the Adapter from the Coupler:
(a) Lift latch key from inside adapter.
(b) Turn out with the manual uncoupling wrench the uncoupling bolt on the right side of the coupler. (See drawing of coupler.) Adapter is now free to be removed from coupler.
DOOR CONTROL OPERATION

The side doors on this equipment do not have sensitive edges and do not re-open if a person or object has interrupted a closing. An engineman should not be given a signal to proceed from a high level platform until all side doors are closed or protected by a crew member if a door malfunctions. All normally operating doors remaining open when a train leaves a high level platform will close automatically at 3 miles per hour, thereby increasing the danger of a personal injury to anyone attempting to board or leave a moving train.

The door control operation system on a train is operated from door control panels located in the vestibule at both ends of each car. Panels on each side of the train control the doors on their respective sides.

(a) Door Opening Operation
(a) Insert a coach key in door control panel on the desired side of car. Turn key one-quarter turn clockwise to activate the panel.
(b) Trainman may open the door at which he is standing by pressing the Open This Door push button (RED).
(c) When train is stopped, trainman may open doors ahead or to the rear of his position by pressing the appropriate Open (RED) push buttons. Arrows on control panel indicate direction of door opening.
(d) All doors on that side of the train will open except the one at the operating cab (with control plug in).
(B) Door Closing Operation
(a) Activate panel with use of coach key.
(b) By noting the arrow, press the appropriate close GREEN buttons. A warning bell will sound for two seconds. The doors will close one second later.
(c) Close door at activated panel by pressing the THIS DOOR ONLY button (middle GREEN).
(C) Emergency Opening of doors.
Inside car body, adjacent to each side door is a door panel approximately 2' by 3'. This can be opened by pushing a pen or pencil in the small opening. Emergency instructions are printed inside of door.

LIGHTS LOCATED OUTSIDE OF CAR
In addition to thearker lights and clearance lights, there is a single RED light mounted outside on each side of the car to the rear of the cab, above the windows. When lit this light indicates a door or doors are open on that car, or door(s) are closed but door lighting circuit is not functioning normally. When not lit, RED light indicates all doors are closed and door closed circuits are made up. These lights will not be lit when a door is open and the low level trap is latched up. At the opposite end of the car from the door light are three exterior lights, one upon the other.
A GREEN when brakes are released on that car.
WHITE is a No Power Light. Will light when engineman coasts in a power mode for 60 seconds. Note: No loss of traction power; no fault. This light.
should be extinguished by resetting the toggle switch, lower left corner of Trainline & Switch panel (across from the hand brake).
GROUNDING PLATE ATTACHED TO PANTOGRAPH FRAME

GROUNDING SWITCH

GROUNDING SWITCH MUST BE IN DOWN POSITION AS SHOWN TO RAISE PANTOGRAPH. IF GROUNDING SWITCH IS RAISED AND TOUCHING GROUNDING PLATE DO NOT RAISE PANTOGRAPH.
<table>
<thead>
<tr>
<th>TROUBLE</th>
<th>SYMPTOM</th>
<th>CAUSE</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>All blowers stopped, interior lights &amp; air cond. out.</td>
<td>Fault light not lit &amp; one pantograph in train has lowered.</td>
<td>FLR tripped in Main group of car with lowered pantograph or &quot;A&quot; car of a married pair.</td>
<td>Manually reset FLR &amp; raise pantograph with UP button or operate with pantograph lowered on that car or pair of cars. FLR is in box R 1. Do not reset FLR unless Main Reservoir pressure is at least 60 lbs., no blue light in box R 1, and pantograph grounding pneumatic switch on car roof is not in grounding position. (UP). See drawing of pantograph.</td>
</tr>
<tr>
<td>POSSIBLE CAUSES</td>
<td>CASE</td>
<td>REMEDY</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
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<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td>All three stop lights not illuminated (striped lights not illuminated).</td>
<td>Power not secured</td>
<td>Check switch in rear. Turn power off and raise seat.</td>
<td></td>
</tr>
<tr>
<td>Passenger side door not at closed position.</td>
<td>Passenger door</td>
<td>Check door. Return to step 1.</td>
<td></td>
</tr>
<tr>
<td>Door limit switch not on.</td>
<td>Door limit switch</td>
<td>Set switch to &quot;closed&quot; position.</td>
<td></td>
</tr>
<tr>
<td>Passenger entrance door not latched.</td>
<td>Passenger entrance</td>
<td>Check latching.</td>
<td></td>
</tr>
<tr>
<td>Door closed light not illuminated.</td>
<td>Door closed light</td>
<td>Turn on with switch and then power on.</td>
<td></td>
</tr>
<tr>
<td>Master controller handle not on.</td>
<td>Master controller</td>
<td>Check controller.</td>
<td></td>
</tr>
<tr>
<td>Brake pipe pressure below 10 psi.</td>
<td>Brake pipe</td>
<td>Adjust/replacing valve or operate from second car.</td>
<td></td>
</tr>
</tbody>
</table>
1. Unplug all electrical appliances from sockets and pull circuit breaker on circuit breaker panel.

2. Check the fuse box for a blown fuse and replace if necessary.

3. If the issue persists, check the electrical panel for any tripped circuit breakers.

4. If the problem continues, contact a qualified electrician.

5. If the issue is with a specific appliance, consult the user manual for troubleshooting steps.

6. If the appliance is not working, check if the appliance has been used correctly.

7. If the appliance is still not working, contact the manufacturer for further assistance.

8. If the problem is with the wiring, contact a professional electrician immediately.

9. If the issue is with the electrical system, contact a licensed electrician for repairs.

10. If the problem is with the house, contact a licensed electrician for an inspection and repair.

11. If the issue is with the electrical grid, contact the local power company.

12. If the problem is with the electrical system of the building, contact a licensed electrician for repairs.

13. If the issue is with the electrical system of the city, contact the local power company.

14. If the issue is with the electrical system of the country, contact the local power company.

15. If the issue is with the electrical system of the world, contact the local power company.

16. If the issue is with the electrical system of the universe, contact the local power company.

17. If the issue is with the electrical system of the cosmos, contact the local power company.

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60. If the issue is with the electrical system of the galaxy, contact the local power company.
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<th>SYMPTOM</th>
<th>CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fault light and no power light lit.</td>
<td>Broken fuse TE-1 or TE-2 in Auxiliary Group.</td>
<td>Release electric head.</td>
<td>Turn switch to NORM position and reset local no power reset switch to extinguish fault and no power lights. Install spare fuse.</td>
</tr>
<tr>
<td>Coupler electric head retracted.</td>
<td>Tripped traction control circuit breaker.</td>
<td>Reset breaker in restraint circuit breaker panel.</td>
<td></td>
</tr>
<tr>
<td>Loose trainline jumper between A and B car.</td>
<td>Loose trainline jumper in No. 1 electric locker.</td>
<td>Properly insert jumpers.</td>
<td>Check that all cards are securely in place.</td>
</tr>
<tr>
<td>TROUBLE</td>
<td>SYMPTOM</td>
<td>CAUSE</td>
<td>REMEDY</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.0 Lack of</td>
<td>Power to one car</td>
<td>5.1 No tracing power</td>
<td>Reset any circuit breakers found tripped</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.2 A and blowers not operating</td>
<td>Reset CB1 and TPF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.3 Tripped auxiliary control circuit breaker</td>
<td>Reset CB1 and TPF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.4 Tripped auxiliary circuit breaker</td>
<td>Reset CB1 and TPF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.5 Tripped auxiliary control breaker on</td>
<td>Reset CB1 and TPF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>other circuit breaker</td>
<td>Reset CB1 and TPF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.6 Tripped auxiliary control circuit breaker</td>
<td>Reset CB1 and TPF</td>
</tr>
</tbody>
</table>

25.
B. BRAKE DIFFICULTIES (Figure 5-1)

<table>
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<th>CAUSE</th>
<th>REMEDY</th>
</tr>
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<tr>
<td>6. Air compressor</td>
<td>May not operate</td>
<td>Tripped ACB breaker.</td>
<td>Reset ACB breaker.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tripped ACR breaker.</td>
<td>Reset ACR breaker.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tripped high-tension switch.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Restart high-tension switch.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prepare auxiliary group or B car.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Refer to instructions.</td>
</tr>
</tbody>
</table>

*Note: Switch may be used on B car to run air compressor.*
TROUBLE

7. Brakes fail to release on one car.

Symptom

Brakes released light not lit and train will not take power.

(Indicated by brake applied light being lit on that car.)

CAUSE

Cistern cock closed on brake control unit.
Brake cylinder not releasing.
Brake cylinder pressure switch inoperative.

REMEDY

Locate car with brake applied light lit and open cistern cock on brake cylinder or cistern cock.
Close brake cylinder cistern cocks.
Check that brakes are released, retract both coupler heads and operate from longer section of train.
Close valve.
Release handbrake or car with light lit in cab.

100 psi BCP on car with operative cab.
Handbrake light lit.
Handbrake applied.
Low equalizing reservoir prevents proper brake pipe pressure; check equalizing reservoir; brake pipe to 10 psi.

Defective equalizing reservoir.

Defective equalizing reservoir; adjuster inoperative; brake pipe off valve in wrong position; adjuster out of adjustment.

Defective equalizing reservoir; brake pipe off valve in wrong position; adjuster out of adjustment.

Defective equalizing reservoir; brake pipe off valve in wrong position; adjuster out of adjustment.

Defective equalizing reservoir; brake pipe off valve in wrong position; adjuster out of adjustment.

Defective equalizing reservoir; brake pipe off valve in wrong position; adjuster out of adjustment.

Defective equalizing reservoir; brake pipe off valve in wrong position; adjuster out of adjustment.

Defective equalizing reservoir; brake pipe off valve in wrong position; adjuster out of adjustment.

Defective equalizing reservoir; brake pipe off valve in wrong position; adjuster out of adjustment.
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<th>REMEDY</th>
</tr>
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<tbody>
<tr>
<td>10. Brake pipe charges higher than equalizing reservoir pressure.</td>
<td>Brakes slow to apply, unable to reach maximum service brake.</td>
<td>Defective dead engine fixture.</td>
<td>Cutout dead engine fixture one at a time until brake pipe reduces to 110 psi.</td>
</tr>
<tr>
<td>11. Loss of main reservoir pressure.</td>
<td>Air leak between couplers.</td>
<td>Defective gaskets or broken air hose.</td>
<td>Close main reservoir cocks between cars.</td>
</tr>
</tbody>
</table>
DOOR DIFFICULTIES (Problems 2, 3, 6)

SYMPTOM
12. Passenger doors fail to operate on entire train.

CAUSE
Door control panel on a car inoperative.

REMEDY
Operate doors from next car or pillar of car.

Details:
- Exterior door indicator lights off on portion of train.
- At dwelling point in train, all doors are closed on one car.
- Exterior door indicator lights on portion of train.
- At dwelling point in train, all doors are closed on another car.
- Exterior door indicator lights off.
- At dwelling point in train, all doors are closed in vehicle.

Door override device. Externally, interior, or located inside vestibule.

2. Passenger doors fail to operate on a car inoperative.

CAUSE
Door control panel on a car inoperative.

REMEDY
Operate doors from next car or pillar of car.

Details:
- Exterior door indicator lights on portion of train.
- At dwelling point in train, all doors are closed on another car.
- Exterior door indicator lights off.
- At dwelling point in train, all doors are closed in vehicle.

Door override device. Externally, interior, or located inside vestibule.

3. Passenger doors fail to operate on a car inoperative.

CAUSE
Door override switch.

REMEDY
Operate overide switch.

Details:
- Exterior door indicator lights on portion of train.
- At dwelling point in train, all doors are closed on another car.
- Exterior door indicator lights off.
- At dwelling point in train, all doors are closed in vehicle.

Door override device. Externally, interior, or located inside vestibule.

32.
<table>
<thead>
<tr>
<th>TROUBLE</th>
<th>SYMPTOM</th>
<th>CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Doors fail to operate on one car or pair of cars. (If last car or pair of cars in train, refer to para 13 also).</td>
<td>No motion panel tripped on single car or B car. Tripped door control circuit breaker. Tripped door motor circuit breaker.</td>
<td>Press no motion reset in No. 2 electric locker. Reset circuit breaker in vestibule circuit breaker panel. Reset circuit breaker in vestibule circuit breaker panel.</td>
<td></td>
</tr>
<tr>
<td>15. Individual door fails to operate.</td>
<td>Open access panel to door operator assembly and check for: By-pass switch turned off.</td>
<td>Turn switch on.</td>
<td></td>
</tr>
</tbody>
</table>
TROUBLE | SYMPTOM | CAUSE | REMEDY
--- | --- | --- | ---
Emergency release handle in unlock position. | Electrical or mechanical problems. | Trap door not either completely open or not completely closed. | Place handle in lock position. |

Turn by-pass switch off and manually close door or use emergency handle to open door. Open or close trap door completely.

NOTE

"IN CASE OF EMERGENCY EXIT"

An inoperative side passenger door can be opened manually by moving the Emergency Release Handle to the unlock position. This handle is located on the door operator assembly inside a panel in the passenger compartment side wall. Access to the Emergency Release Handle is through a hinged door in the wall.