



City of Richmond

Report to Council
Closed

To Closed Council- Jan 24, 2006

To: Richmond City Council **Date:** January 17th, 2006

From: Mayor Malcolm D. Brodie **File:** 10-6510-05-01/2006-Vol 01
Chair, General Purposes Committee

Re: **STEVESTON INTERURBAN TRAM #1220 - OWNERSHIP**

The General Purposes Committee, at its closed meeting held on Monday, January 16th, 2006, considered the attached report, and recommends as follows:

Committee Recommendation*That:*

- (1) *Staff be authorized to negotiate purchase of Steveston Interurban Tram #1220 ("the Tram") for up to \$400,000, to be funded from the Council Provision Account, with the purchase price to include the archival material and artefacts relating to trams in Richmond, if possible;*
- (2) *Upon successful completion of the purchase, litigation in regards to the Tram be ceased, so long as the litigation is ceased without cost to any party;*
- (3) *Arrangements be made to move the Tram to a temporary location by March 31, 2006; and*
- (4) *(a) The question as to the potential locations for the tram be referred to staff;*
(b) Staff provide additional information regarding the cost of storage and storage options for the tram;
(c) Staff report on the time and funding requirements to upgrade the tram to a static display; and
(d) Staff contact RAVCO about the possibility of incorporating a static display into one of the future Canada Line stations.

Mayor Malcolm D. Brodie, Chair
General Purposes Committee

Attach.

VARIANCE

Please note that staff recommended the following:

- (a) for Part (1):
 - (1) Staff be authorized to negotiate purchase of Steveston Interurban Tram #1220 ("the Tram") for up to \$400,000; and
- (b) the following for Part (2),
 - (2) Upon successful completion of the purchase, litigation in regards to the Tram be ceased;

and that the Committee added Part (4).



City of Richmond

Report to Committee

To: General Purposes Committee
From: Kate Sparrow
Director, Recreation & Cultural Services
Re: **Steveston Interurban Tram #1220 - Ownership**

To closed Council - Jan 24, 2006
To closed General Purposes - Jan 16, 2006
Date: January 3, 2006
File: 10-6510-05-01

Staff Recommendation

That:

1. Staff be authorized to negotiate the purchase of the Steveston Interurban Tram #1220 ("the Tram") for up to \$400,000 to be funded from Council provision;
2. Upon successful completion of the purchase, litigation in regards to the Tram be ceased; and
3. Arrangements be made to move the Tram to a temporary location by March 31, 2006.

K Sparrow

Kate Sparrow
Director, Recreation & Cultural Services
(4129)

Attach. 1

| FOR ORIGINATING DIVISION USE ONLY | | | | |
|-----------------------------------|--|--|--|--------------------------|
| ROUTED TO: | | CONCURRENCE | CONCURRENCE OF GENERAL MANAGER | |
| Law | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> | <i>[Signature]</i> | | |
| Finance | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> | | | |
| Parks | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> | | | |
| REVIEWED BY TAG | | YES | NO | |
| | | <input checked="" type="checkbox"/> <i>[Signature]</i> | <input type="checkbox"/> | |
| | | REVIEWED BY CAO | YES | NO |
| | | | <input checked="" type="checkbox"/> <i>[Signature]</i> | <input type="checkbox"/> |

Staff Report

Statutory Closed Meeting Criteria:

This report meets the following statutory closed meeting criteria:

90(1)(g) litigation or potential litigation affecting the municipality

Origin

At the Special Closed Council Meeting on Monday, March 7th 2005, the following resolution was adopted:

That:

- (2) *senior staff, with respect to Interurban Car #1220, be authorized to negotiate a settlement to acquire the Tram on the best possible terms, and that the settlement reflect such matters as:*
- i) the ownership interest of the City in the Tram;*
 - ii) the current condition of the Tram;*
 - iii) the cost of further litigation;*
 - iv) what the recipient plans to do with the funds upon receipt;*
- and is to be forwarded to Council for approval accordingly.*

This report addresses the results of the negotiation process and reviews options for future actions.

Analysis

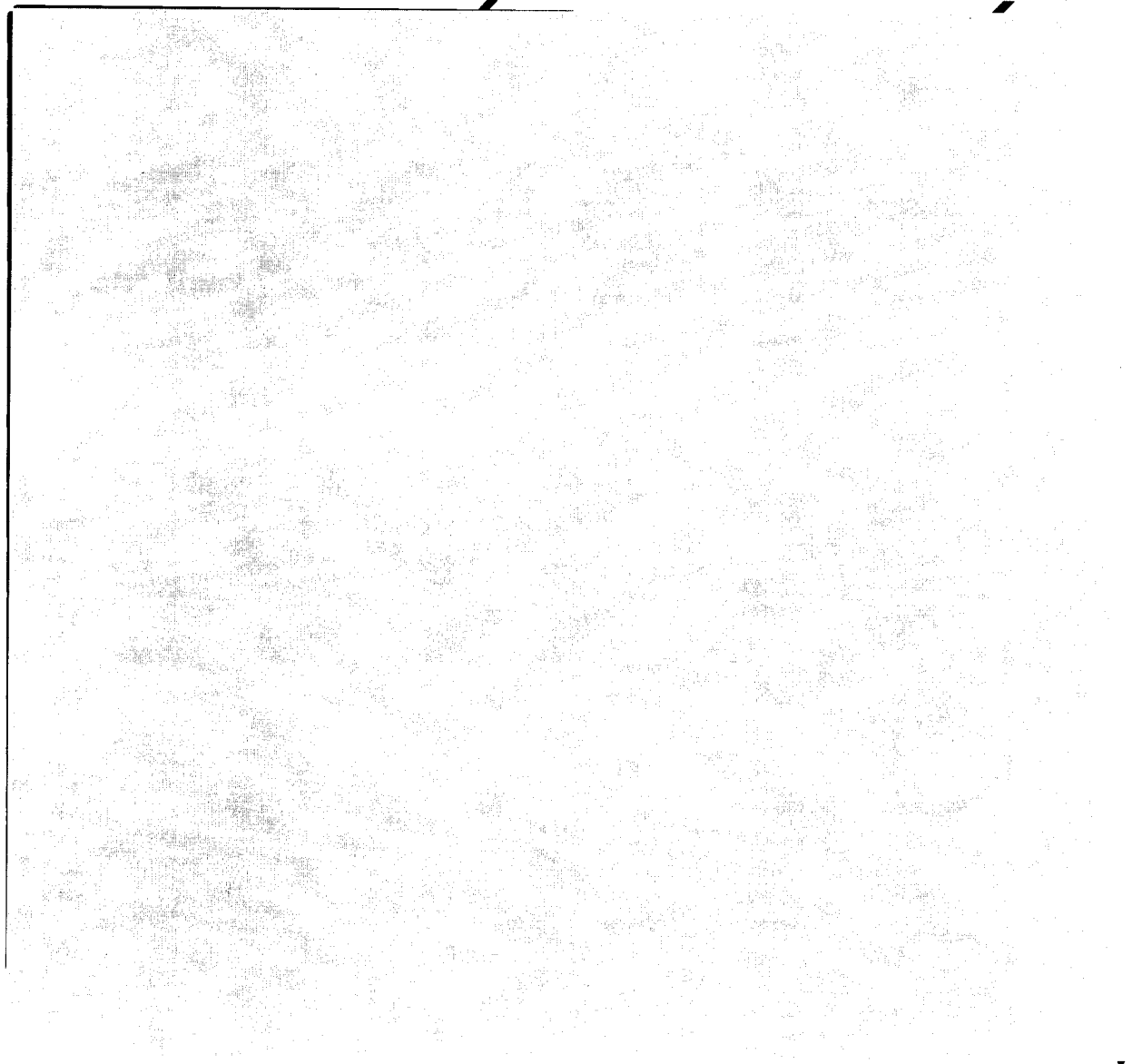
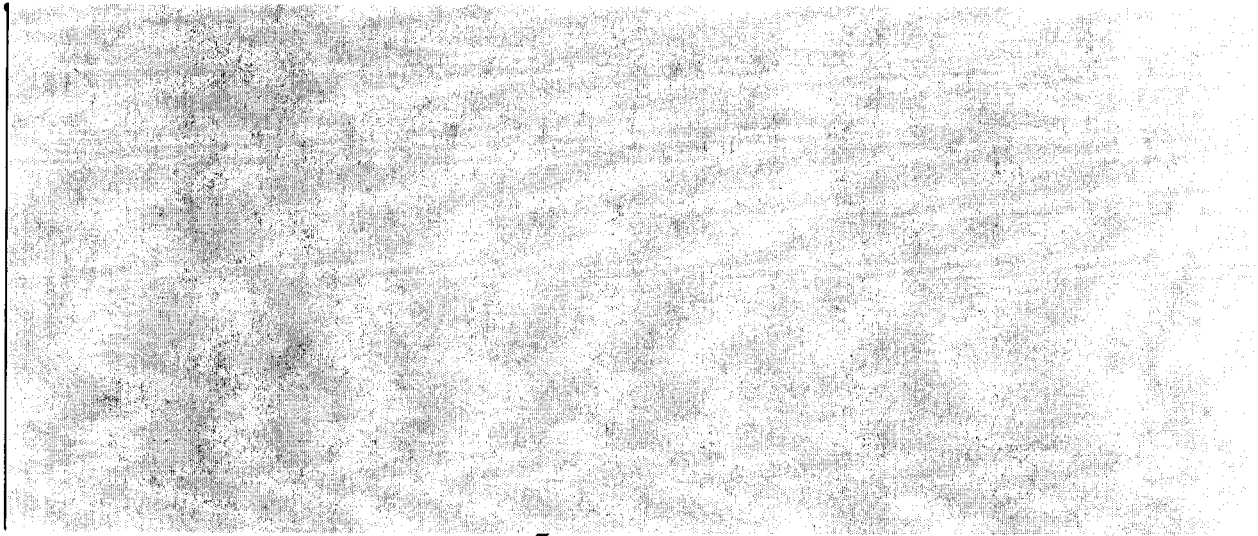
Condition of the Tram

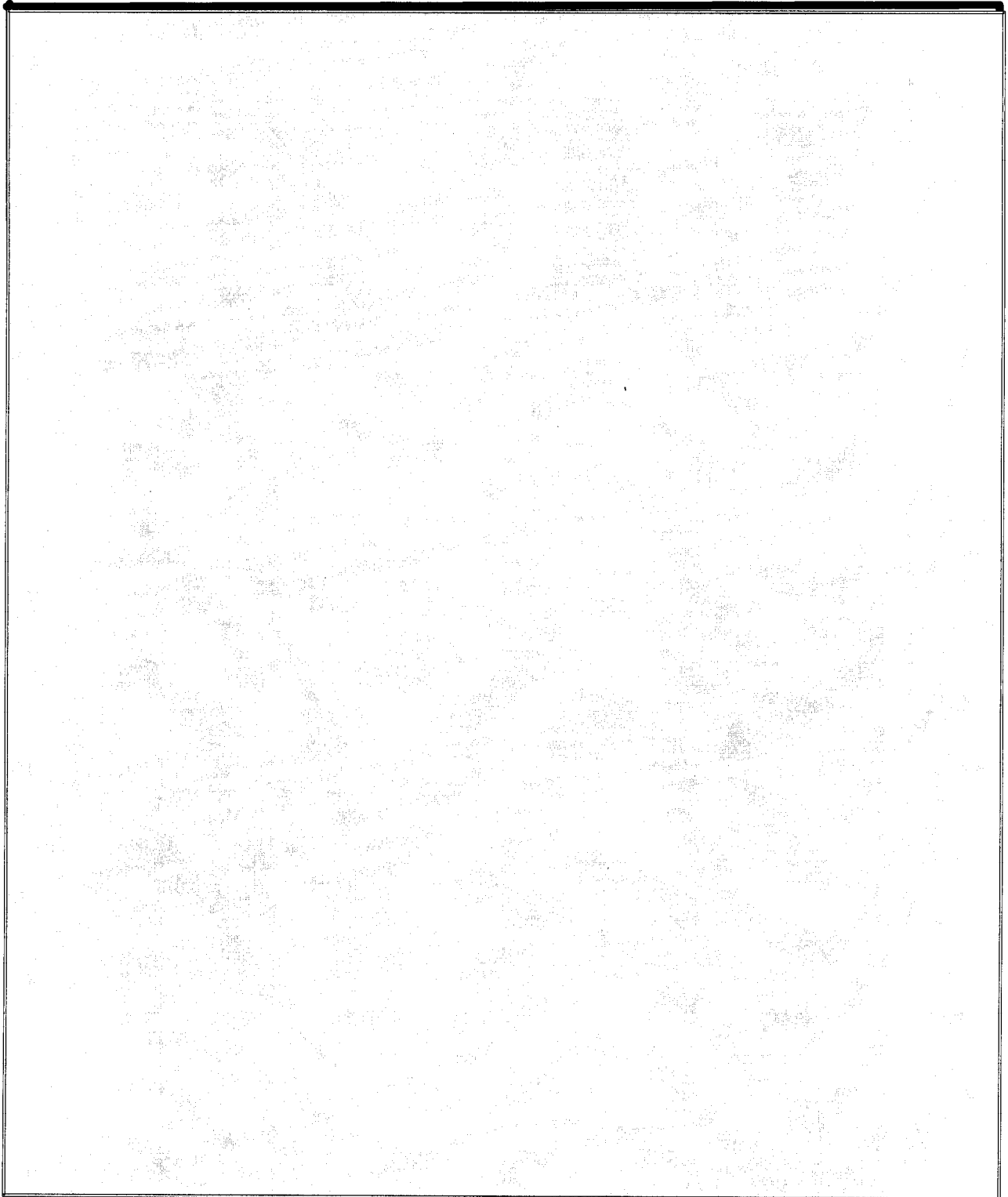
In order to ensure that the valuation provided by SIRS in the amount of \$400,000 was correct, City Heritage Staff engaged the services of a colleague from the City of Vancouver Engineering Department to conduct a thorough assessment of the condition of the Tram. Mr. Chris Homewood is an engineering technician charged with the care and upkeep of the two similar interurban tram cars that Vancouver operates at False Creek. The general condition report (Attachment 1) indicates that the Tram is in good condition although significant restoration is still required.

Staff also conducted a review of valuations for insurance purposes and has concluded that the estimated value of \$400,000 provided by the Steveston Interurban Restoration Society (SIRS) is reasonable.

Static Display Sites

As a result of decisions on routing options for the Tram, staff were directed to investigate options for a static display in consideration of its significant historical value. Several locations in Steveston village, on the Britannia Shipyard site and within or in conjunction with a Canada Line station are being evaluated and will be reported out at the conclusion of the ownership issue. As an interim measure, staff are negotiating temporary storage options for the Tram as it needs to be removed from Steveston Park to accommodate the water park construction scheduled to begin approximately April 1, 2006.





Financial Analysis

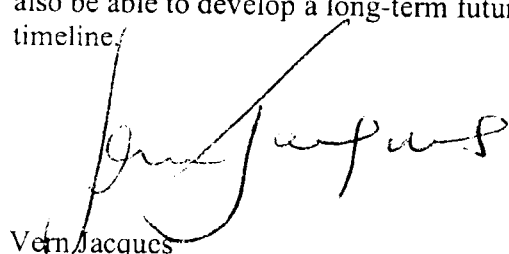
- There is a total of approximately \$127,500 in two capital accounts that were approved for tram projects that can be applied or redirected by Council to other priorities.
- Funding for purchase of the Tram can be from Council provision; excess casino revenues prior to 2003; or from surplus arising from the 2005 operating budget.

Financial Impact

Funding of \$400,000 will be required for the purchase of the Tram. Costs of restoration and display development will be addressed in future capital processes.

Conclusion

Purchase of the Tram will allow the City to secure an important historical artefact in Richmond. The City will also be able to develop a long-term future for the Tram according to its own priorities and timeline.



Vern Jacques
Manager, Community Recreation Services
(4158)

VRJ:md



City of Richmond
Recreation & Cultural Services

Memorandum

Confidential

To: Cathy Volkering Carlile
General Manager - Parks, Recreation &
Cultural Services
Phyllis L. Carlyle
City Solicitor

Date: July 11, 2005

From: Connie Baxter
Supervisor, Richmond Museum and Heritage
Services

File:

Re: Steveston Interurban Tram Car #1220 - Condition Report

On June 29, 2005, Richmond Museum & Heritage Services Curator, Jennifer Breckon accompanied Chris Homewood, C. Tech from the City of Vancouver to conduct a general condition report for BCER Interurban Tram Car #1220. The report is attached

As you will see in the report, the car is in good condition although it is not fully restored. The original restoration report and estimate provided by Steveston Interurban Restoration Society in 2002 (REDMS #844012) proved to be consistent with the assessment of the vehicle. The only discrepancies are that the market value quoted by SIRS of \$1.5 million is high, the City of Vancouver currently insures both their trams for \$1 million each and SIRS estimate that the car is almost 80% finished may be slightly generous in my opinion. All that considered, the estimate of \$400,000 is reasonable.

I would highly recommend that the City of Richmond negotiate to acquire Car #1220. The importance of the BC Electric Railway and particularly the Interurban Passenger Service to the settlement and development of this city and province cannot be understated, nor can the fact that only 7 coaches like this remain.

I would also recommend that any related BC Electric Railway artifacts and/or archival material owned by the Society be acquired as well although access to that material was not part of this condition assessment.

Connie Baxter
Supervisor, Richmond Museum and Heritage Services

CB:cb

pc: Vern Jacques, Manager, Community Recreation Services

General Condition Report

Interurban Tram Car #1220

June 29, 2005

Report Prepared By:
Jennifer Breckon, Curator
Richmond Museum and Heritage Services

Technical Expertise Provided By:
Chris Homewood, C.Tech
City of Vancouver

Object Description:

Car #1220 was built in 1912 by the St. Louis Car Company. It was designed to seat 64 passengers in smoking and non-smoking sections. The 35-tonne car is steel and wooden frame construction. The tram is currently located in a shed, behind the Steveston Community centre, near the corner of No. 1 Road and Moncton Street.

General Condition:

- ☐ Excellent: strong; fully complete; no weaknesses; no previous damage; not deteriorated.
- ☐ Very Good: minor components missing; small surface damage; not deteriorated.
- ☒ **Good: largely intact; may have components missing; evidence of surface damages, wear from use, fading, minor rust and/or stains.**
- ☐ Fair: clear signs of use; major components missing; damaged; evidence of major dents, cracks, worn fabrics, rot, rust, etc.
- ☐ Poor: incomplete specimen; only major structural components remaining; major structural damage to the object; parts may be corroded, rotten etc.

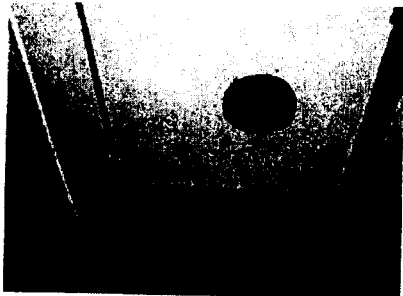
Detailed Inspection:

This inspection begins at the A end interior of the car working down the interior to the B end. The exterior inspection began on the left side of B end and worked down to A end, around to right side of the car and back towards the B end.

Interior Photos and Comments



- Snap switches at A end.
- Top three switches and the round black switch not working.
- Bottom round brass switches appear OK.
- Snap switches are difficult to find and are not easily repaired if the porcelain is broken.



- Brass ventilator covers required.
- Some observed onsite.
- Appears as if approximately 7 are required.



- A end Whistle valve not working.



- A end master control switch not moving internal parts are worn but can be repaired.
- Master controller switch is missing and replaced with a snap switch (centre).
- Circuit breaker switch complete.



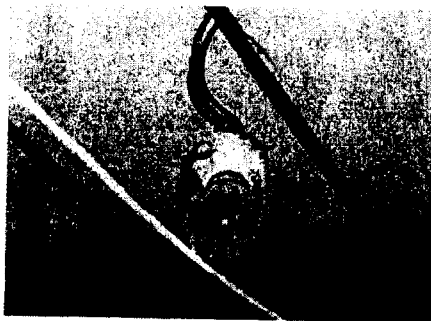
- Knife switch for "Bus Line" operation missing.



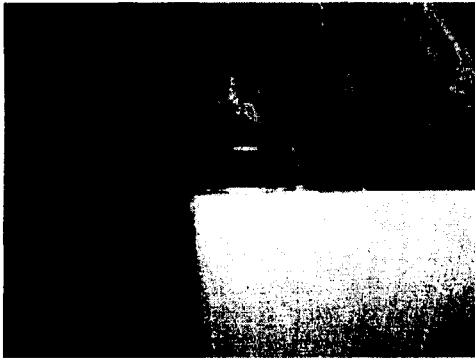
- A end controller appears to be working.
- Need to determine if “fingers” inside controller are complete and making proper contact.
- Valves appear OK, however they may leak.
- B end controller same as above.
- A controller key and brake handle will be required for operation.



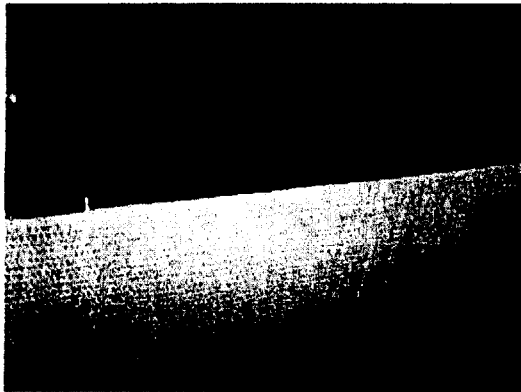
- Original duplex air gauge. May not work but can be rebuilt.



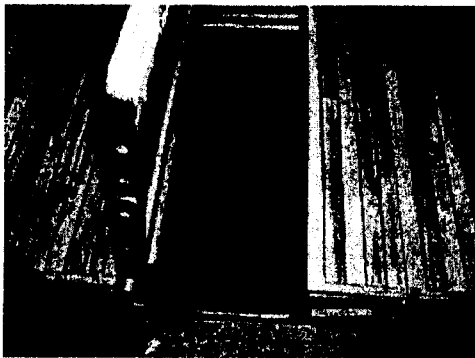
- Light fixtures on Vancouver’s tram 1231 are all porcelain as in this picture.
- The fixtures observed inside the motorman cab at both ends of the car were metal.



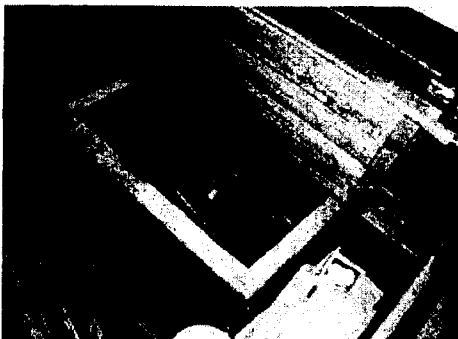
- Brass seat handles. SIRS has reproduced these.
- Difficult to find originals.
- Burnaby Village Museum has castings of 1231 part.
- Bench seat in A end needs to be recovered.



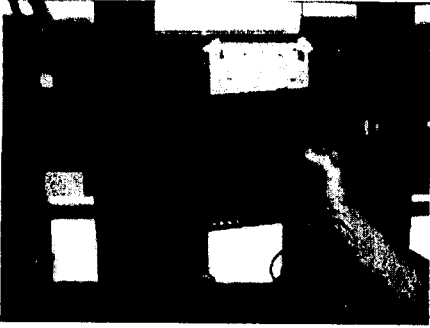
- Strap for top edge of seats.
- Hides and secures seam of rattan.
- More will be needed.
- Difficult to find originals.
- Stock quarter round brass strapping can be substituted for top edge of seats if required.



- Original floorboards.
- Nice feature.
- Vancouver had to replace theirs.



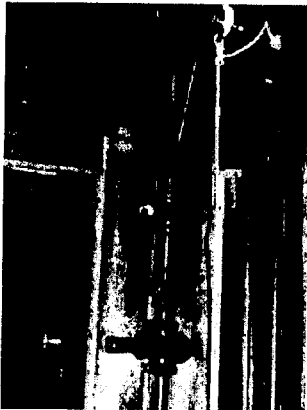
- Governor
- Regulates the compressor motor which controls the pressure in the air tanks.
- May not be working.
- Vancouver had to replace theirs with a slightly newer (1920's vintage) S-6-A model.



- Heater covers present.



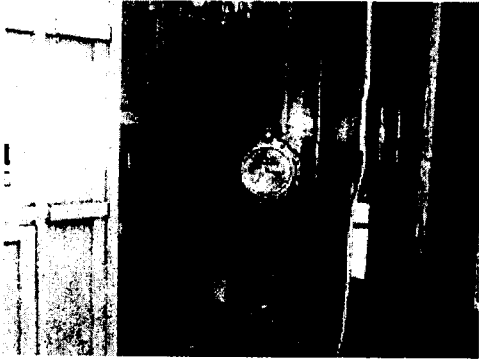
- Emergency brake valve.
- Likely not working.



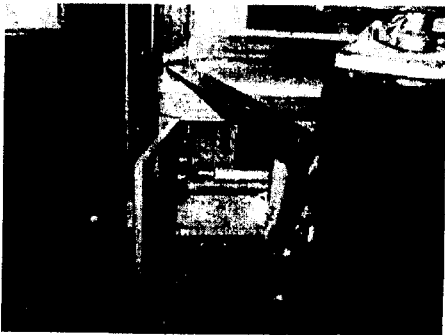
- B end whistle valve also not working.



- B end master controller switch and circuit breaker switch complete.



- B end duplex air gauge needles are stuck indicating it requires rebuilding.

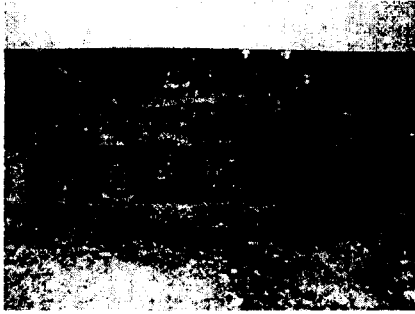


- Canvas roller with name of the line missing.
- Fairly easy to recreate with modern canvas roll.

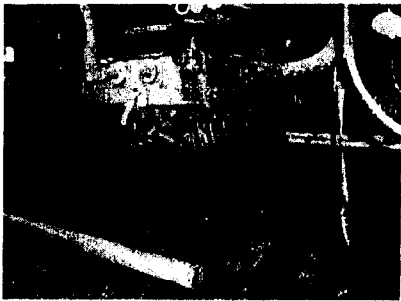


- B end fuse panel and snap switches missing.

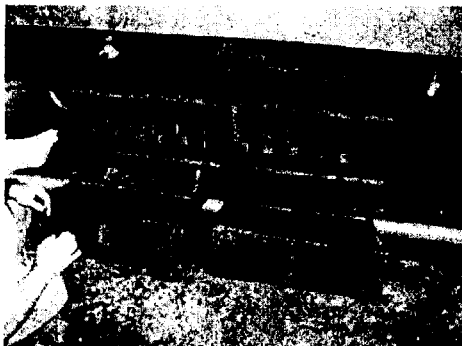
Exterior Photos and Comments



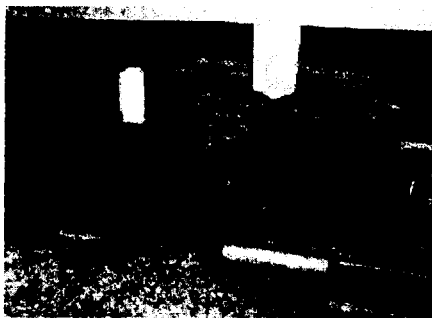
- Truck at B end.
- 2 traction motors per truck complete with armatures.
- 75 hp per engine.



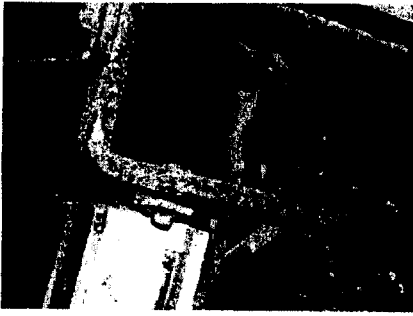
- Reverser looks complete.
- Does require cleaning and all contactors checked and adjusted to ensure they are making proper contact.



- Contactors at B end
- All “fingers” and contacts appear to be present. Questionable if it is working.
- Does require cleaning and all contactors checked and adjusted to ensure they are making proper contact.



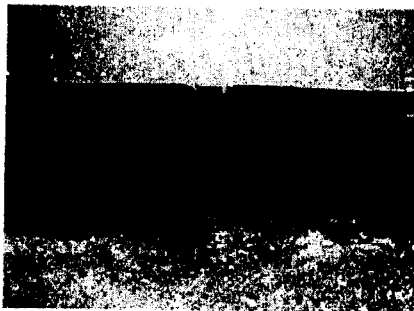
- Overload circuit breaker protection.
- All is intact.
- Vancouver’s remote reset by means of the solenoid is not working and could be the same situation here. Can be reset manually.



- Kicking coil is original.
- Vancouver had theirs rewound. May be a similar situation here.



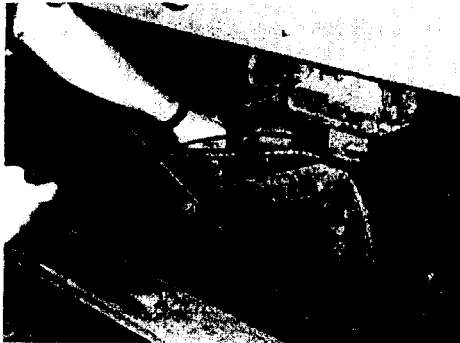
- Journal bearings at A end truck.
- 4 per truck.
- All are complete on A end truck.
- Currently, all have a waste wool packing (method of getting oil up on bearing).
- Require a special made journal pack for lubrication rather than waste wool packing.
- B end truck (no picture) Journal bearings same as above.



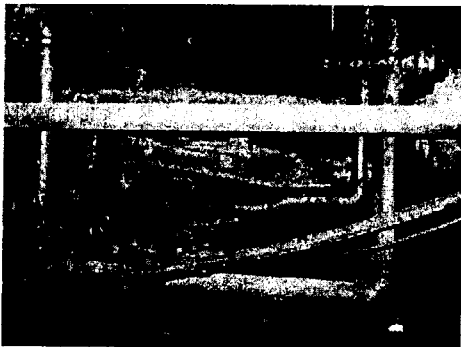
- A end truck.
- 2 traction motors per truck complete with armatures.
- Axle 1: crown and pinion gear is complete and teeth look in good condition, gear grease looks original although very thick; no brushes in commutator; armatures are original and look relatively clean; generally speaking traction motor looks good but may not be working.
- Axle 2: crown and pinion gear is complete and teeth look in good condition, gear grease looks original although very thick; no brushes in commutator; armatures are original and look relatively clean; generally speaking traction motor looks good but may not be working.
- Motor and suspension bearing housings were inspected and all had waste wool packing and remnants of lubricating oil. Did not inspect the bearing surfaces but with the presence of the waste wool would assume they are in good condition.
- B end truck (no picture) condition is same as above.
- Traction motors and axles 3 & 4 in similar condition to A end.



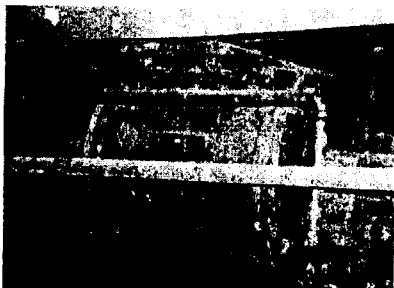
- A end electrical connections present.
- Mounting harness required.



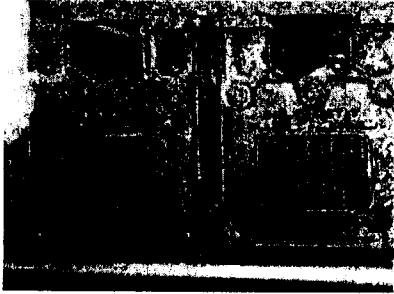
- Compressor pump and motor.
- No brushes in compressor motor.
- Armature original.
- Oil in pump looks to be original although too thick.
- Vancouver required to rebuild compressor motor at an approximate cost of \$2000.
- Intake valve for compressor is present and complete.



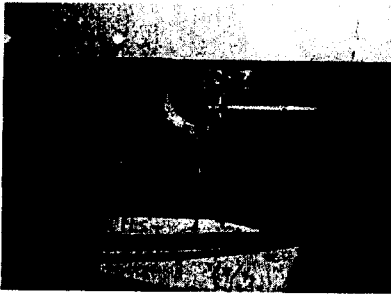
- Triple valve controls flow of air to brake cylinder.
- Questionable whether it is working.
- Only way to determine if it is working is to put air to it.



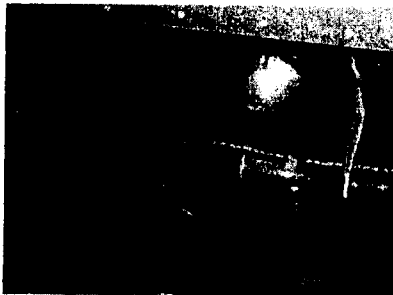
- Brake cylinder appears to be in OK shape.
- A large leather gasket in the brake cylinder may be dried out and require replacing.



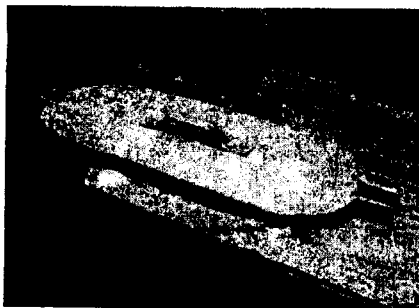
- Individual resistor grids (5 in total) collectively called the circuit rheostat.
- Complete and all is intact.
- The resistors can become brittle and result in breakage.
- Somewhat rare but spare resistors are available.



- Auxiliary air tank.



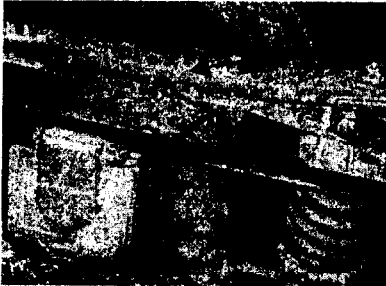
- Main air tank. Supplies air to all plumbing including the brake cylinder.
- There should be two, only one present.
- Brake linkage not complete as the cars sits now.
- Pieces were spotted laying around car. Linkage was removed when car body lifted off the trucks.



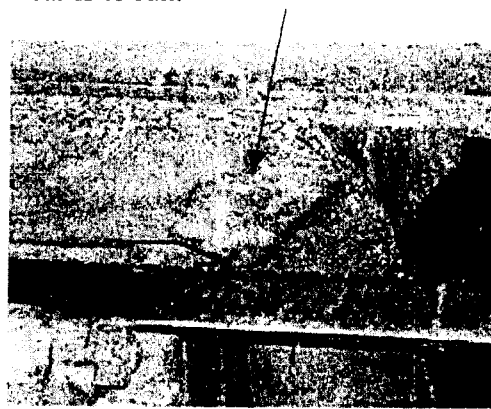
- Commutator cover plate from B end motor #3.
- Homemade not original.



- B end cables are complete but need mounting harness.
- All cabling looks to be original with the insulation worn and frayed and will have to be completely rewired to run.



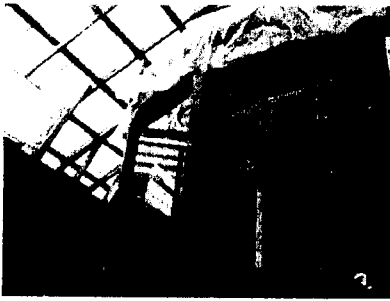
- B end, left side truck repairs.
- May not be acceptable by BC Safety Authority if the car is to run.



- A end truck on right side similar repairs as to the B end truck.



- B end glad hands and train line hoses and valves are complete.
- Valves original and likely are leaking.
- Draw bars and couplers complete both ends.
- Pilots or cow catchers are missing on both ends.

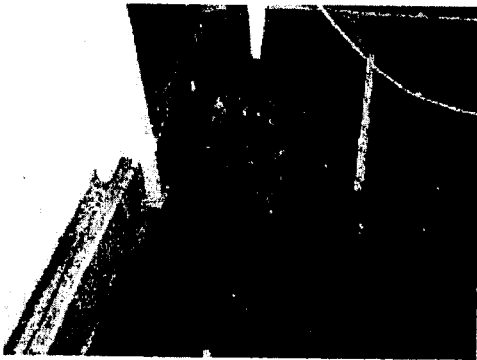


B end exterior.

- All pieces appear to be in place with the exception of the plug in for the headlight.
- Whistle is present.

A end exterior (no pictures)

- Whistle is missing as well as the plug in for headlight.
- Two headlights stored inside the car along with flag holders.



- Trolley pole base.
- Only one noted. Two required.
- These are difficult and expensive to locate.



- Trolley pole.
- Only one noted. Two required.
- Can be manufactured fairly easily.
- Replacement wheels and harps are available.

Other Condition Comments

- Small bits and pieces of hardware through out the car are missing. Originals need be located or modern replicas made. Burnaby Village Museum has created moulds for various pieces of hardware missing from its car. These moulds could be used to create replica hardware for car #1220. The missing pieces of hardware include but are not limited to the following:
 - Door and window hardware
 - Window railings
 - Match strikers (on the walls of smoking section)
 - Vent Covers
 - Hat racks
- Roll up blinds for all the windows are required. The original style and mechanism for operating the blinds can be difficult to locate.
- At both the A and B ends the springs and gaskets for all the bearing lubrication doors on the trucks are broken or missing.
- The brake line pressure control valves are present under the seats in the smoking section of the car.
- Many of the valves and gauges are original, however when air is put to them it is quite likely that many will not be working or will leak.
- Outside of tram requires a paint job and a new roof cover. The undercarriage including trucks, plumbing, brake levers etc. require painting.
- In order to operate the car along a line, the wheels of the car will have to be turned (i.e. turned on a lathe to create the correct wheel profile). In order to turn the wheel a minimum thickness of approximately 1 inch of tread is required to be left on the wheel after turning. Wheel #1 (A end) and Wheel #3 (B end) are at their limits and likely cannot be turned. Wheel #2 (A end) is marginal and it is possible it could be turned. Wheel #4 (B end) is in very good shape. There is considerable tread left on the wheel and it could be turned.
- All electrical components including motors, wiring, contacts, switches etc. need to be tested for shorts by means of a meggar test. Motors need to be cleaned, inspected and certified for operation by a suitable heavy duty motor rebuilder. Given the condition of the exposed wiring a complete rewiring of the car is required. All contactors need to be inspected and adjusted to ensure proper contact is being made.
- All lubricants for moving parts including journal bearings, motor bearing, compressor, crown and pinion gears etc. need to be drained and replaced with new prior to operating.
- All plumbing needs to be checked for air leaks. Excessive scale in the piping will need to be blown out or piping replaced. Valves will need to be cleaned of scale as scale in a valve will cause it to leak as the valve will not seat properly alternatively the valves could be replaced.