

TRAM CAR RESTORATION

Presenter: Graham Jones

Session Chair: Lindsay Richardson

Session Secretary: Keith Stodden

Introduction

The topic on which I have been asked to talk to you, today, is "Tramcar Restoration". My paper perhaps, deals more with the Bodywork than Painting and the Electrical side of the Restoration.

Starting The Project

Restoration really starts when the decision is made to actually restore the Tramcar. The main decision to be made is which period to restore it to. This will depend on historical documents, such as drawings, photographs, and any written articles that are available. You should make it known to all other museums that have the same class of tramcars, or modified versions, asking for information that they may have.

If a Restoration Project is to proceed smoothly it must be organised. One person should be made Project Leader with a responsible person to lead each group (i.e. Electrical, Mechanical, Body and Paint.). The Project Leader would be the one to collect the information, sort and pass on to each Section Leader.

Quality or Standard should be set to ensure that the vehicle is as near to the condition it would have been in when first entering services.

Research

Three points:

1. The Tramcar itself.
2. Photographs of the actual tramcar or similar tramcars from other services.
3. Drawings, Documents, Colours of the system the vehicle served.

The Tramcar

As the Tramcar is dismantled, its life will be shown, as new timbers, timber splices, replaced panels from wooden to metal, will tell of collisions or other repairs carried out through its working life.

Photographs

Every photograph you can obtain of the tramcar, or of similar design, should be obtained from all sources; your museum archives, the collections of private individuals, or again from other museums which have similar vehicles.

Drawings, Written Documents

It is of great assistance if you can obtain a copy of the original drawings, specifications, or other documents relating to the tramcar being restored. Unfortunately drawings for most of the old vehicles being restored do not now exist.

Drawings often differ from the tramcar being restored as some modifications done have not been recorded.

Dismantling Of Tram

This can often be mistaken as the easiest part of the restoration project. If this attitude is taken, then the rest of the restoration program will have many problems.

Care should be taken when removing every piece of the body, as it can tell many stories of the past life of the tram, such as collisions or modifications, carried out over the years.

Pieces broken on removal should be glued and nailed back together as they then are used for patterns when rebuilding commences. Each piece on removal should be correctly numbered or marked to make assembly easier.

Melbourne and Metropolitan Tramway Board practice was standing inside the centre of double bogie cars facing number one end - parts are Left Hand and Right Hand. On facing number two end - parts are Left Hand and Right Hand.

On Melbourne's later built Comeng vehicles, it is outside facing number one end is Right Hand, Left Hand, and facing number two end, Right Hand, Left Hand.

When dismantling of the tram starts, the decision as to how much is to be removed has to be made.

All interior woodwork and other items should be removed to prevent damage.

When dismantling it pays to only remove the portions of the body you can work on in the immediate future. In most cases trams have two of everything and by working on a limited area you always can check on the remaining parts for guidance.

In coach making all joints should be tight. In the body framing glue should not be used. In original body frames red or white lead was used. As this practice is not now allowed, I would suggest that a thick coat of paint or pink primer be used.

When joinery is required I believe the old animal glue is the best for sashes and interior doors.

The body work, electrical and air, should all be completed prior to painting. Then interior stripped and refitted on completion of painting.

You now have completed the restoration task and hand it back to your Traffic Section to put into service.

Questions

L Millar asked whether a tram should be restored for use in road traffic, or to look good as a static exhibit?

Answer: It was stressed that the decision must be made at the start, but that the quality must be the highest possible.