Newsletter September 2022

AGM

The AGM of the Gisborne City Vintage Railway Society Inc
will be held at the Engine Shed, Gisborne Railway Yard on
Tuesday 11th October 2022 starting at 7:30pm.
Visitors are welcome to attend to find out more about us and what we do.

Excursions

Planning is underway for the excursions for the 2022-2023 season.
Confirmed excursion details will be available on our website at www.gcvr.org.nz/bookings/ .

Tairawhiti Gisborne arranged a visit to Gisborne by the CEO of the New Zealand Cruise Association. He visited GCVR and other cruise package operators in the region. The promotional video that he was shown before starting his visits featured GCVR first (*as it should do*)!

Our first operating weekend of the new season will be Labour Weekend (22/23 October) with a public excursion on each day (departing at 12:30pm on Saturday and 1pm on Sunday) as well as the SteamPunk Convention Carnage. The "Carnage" starts at Gisborne Station at 4:30pm on Saturday 22nd October. The earlier than usual departure time on Saturday will give the maintenance crews time to re-water and re-coal Wa165 before the SteamPunk Carnage departure.

It has been confirmed that the train will NOT be able to reverse across to the port to pick up cruise ship passengers during the coming operating season, due to the condition of the Tauranganui River bridge. The bridge, owned by Gisborne Port, was built in 1923 and is in need of some repair work.

Discussions have been held relating to alternative embarkation areas. Our diesel shunter (TR23) was used to tow the Buffet car (FM9), (simply because it was the closest passenger car to TR23,) towards the port to a position opposite the Senator Motor Inn. This was to check the suitability of using that location for cruise ship passengers to board/alight from the train.

Currently Eastland Port staff are looking at modifying some ship boarding ramps to be used for boarding the train. These ramps are no longer used as most (if not all) ships have their own boarding ramps now.

Workshop Catch-up

Wa165 Maintenance

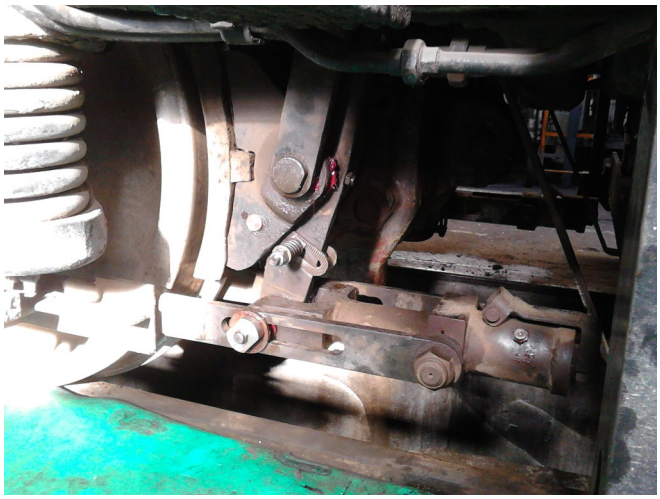
The last fire brick has been fitted into place – it caused more trouble than all of the others combined, as it had to be removed and trimmed three times before it slotted into place properly. Geoff was quite pleased to see it finally in place!

The remaining fire bars (Geoff removed some to make it easier for him to work inside the fire box) have been fitted ready for the first firing with the new bricks in place. They will not remain white with red bits for very long!

The boiler plugs have been re-fitted, the cab floor has been repainted and the wooden deck boards refitted.

Currently Joe is doing some work on the brakes.

DSC2759 Maintenance



Further to last months mention of the work required on one of the brake calipers, it was decided that they should all be closely examined.

5 (out of the 16) mounting pins were badly worn (*see below*) and have had to be replaced. The remaining mounting pins have all been lubricated.

Fortunately using their own personal workshop equipment as well as our workshop facilities, Joe and Danny have been able to manufacture replacement pins and washers.

(Photo Left) A worn mounting pin is at the top.

The replacement pin below it still has to have the head milled to a spanner fitting.

A lubricating hole will be drilled part-way along the length of the bolt and a grease nipple fitted to enable grease to be pumped into the brake mounts.

The first pin (in the photo on the previous page) came out relatively easily, but removing the other old, rusty, non-lubricated pins proved to be a real challenge.

In the end, a 60 tonne puller had to be used, which even stretched the threaded section of the pin shown (*photo left*) before the pin finally moved.

Fortunately the pins were so tight that they only came out slowly (not with a sudden explosive-type movement), even with the nearly 60 tonne pulling force used.

While working on the brake calipers, it was found that an axle suspension bearing dust guard had a broken locating pin, so Joe has made a replacement pin.

Wear marks on the dust guard suggest that the pin had been broken for a while, allowing the dust guard to rotate freely.

Left - One complete axle suspension bearing dust guard (the 2 sections bolt together)

Below - Close-up of broken and replacement locating pins

Further inspection revealed that another two complete dust guards (out of the eight normally installed) were missing, allowing dust and dirt etc. into the traction motors. We need to obtain replacement items.

Train Maintenance

The cables carrying the electrical power from the generator in the service wagon to the individual carriages have had their annual inspection.

Work has been completed on the annual carriage inspections, which includes inspecting the underside of the carriages and the bogies as well as performing brake tests. The Wa165 and DSC2759 inspections will be done once the brake servicing work has been completed on them.

Other Workshop Activity

Coal Storage.

As our supply of coal is getting down, we have been looking to order a new load of about 29 tonnes. That should keep us going for about 18 months. Unfortunately, the carbon tax has to be paid on it as soon as it comes out of the ground – not as we use it, so a big tax bill to be paid in advance! The coal that we use comes from the West Coast (near Greymouth). We have a standard freight

container that has been used in the past to store coal, but the floor was in a rather sad condition. The floor has been replaced and as the container does not have a top, pipes have been welded across the top to stop the sides from splaying out.

Refurbishment of our Joshua Heap Threading Machine

Thanks to Ross Marsden for this write-up.

A Joshua Heap Threading Machine, donated by NZ Farm Tools (Stanley Road, Gisborne), was moved into the GCVR workshop on Saturday, 9 May 2021. A new cutting oil circulation system was purchased, and an operations manual was purchased online from UK Lathes. Over a period of 15 months, the machine was cleaned, inspected, repaired and restored to working condition.
The vice was taken off the ways, disassembled, cleaned, reassembled and replaced on the ways. Two lock nuts for the vice were missing, and replacements were made. There is some visible wear and scoring on the ways and vice components under the ways, but we decided not to attempt to restore to original condition.

A gear change lever was received broken, and this was brazed to repair. A rack for the new cutting oil circulation system was constructed and fitted under the chip tray. The gearbox was drained and flushed with diesel and kerosene, and filled with 20 litres of new gear oil. The back chip guard was cleaned, painted and refitted to the machine. The head had a 1/2” x 13 tpi grub screw missing, and a replacement was made and fitted.

A start/stop contactor was tested and wired up to the 3 hp, 3 phase motor which is mounted on top of the gearbox. Power is transmitted to the gearbox by twin V-belts. The machine was test run (without cutting), and the 6 available output speeds were measured to understand the gear lever combinations. There are 6 cutting head speeds ranging from 30 rpm to 145 rpm at an increment factor of about 1.4. The gearbox runs very quietly. There are no oil slingers, but filled to below the split line, oil seems to be getting to where it needs to.

The head was examined in detail, and it was found to be set up to cut 5/8” x 11 tpi UNC thread. Some 5/8” stock was found, and on 30 July 2022, our new-to-us Heap Threading Machine successfully cut 4 threads on the ends of two short bars, thus creating two serviceable 5/8” studs. In operation, stock is fed into the rotating head (cutters closed) by advancing the vice along the ways. When about two full turns have been achieved, the stock is drawn into the head while it cuts threads without the operator needing to advance the vice. When the required thread length is attained, the vice operates a lever which opens the cutters, and threading stops. The stock is then removed from the vice, ready for another operation cycle.

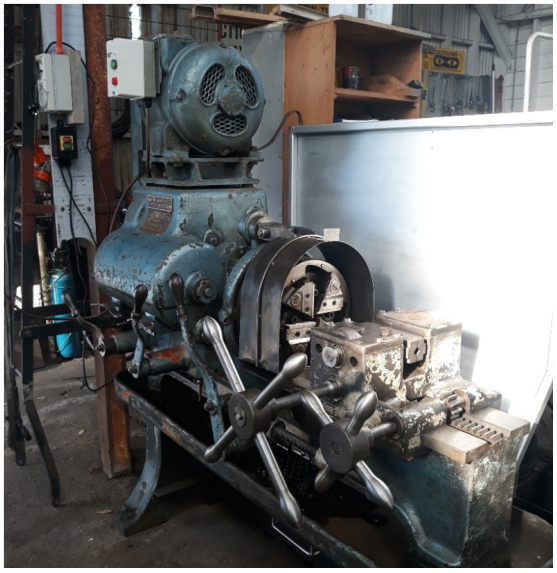


Photo 1:

Overall view showing motor, gearbox, cutting head and vice.

Controls from right to left: two gear levers in the gear box, lever to open and close the cutting head, vice jaw handles, and (smaller) vice traverse handles.

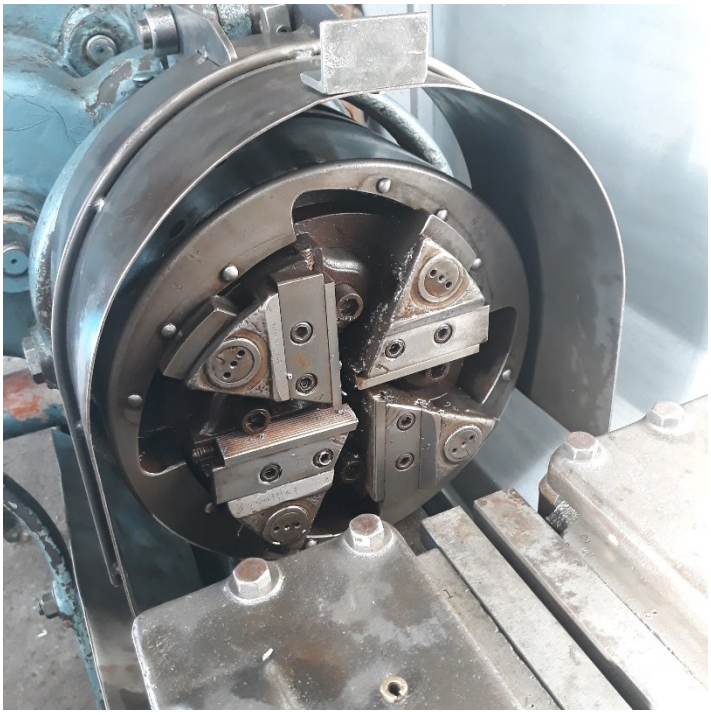


Photo 2:

A closer look at the cutting head in the open position.

The head rotates anti-clockwise, and the 4 tangential tools cut the thread in much the same way as a manual tool does.

The vice jaws are in the foreground, and these can hold stock ranging from 5/8” (16 mm) to 1 ¼” (32 mm).

Cutting tools for Whitworth, UNC, UNF and metric thread pitches were donated with the machine.

Photo 3:

The maker’s name plate.

No model number, no year; we reckon that the machine is from the late 1940s or early 1950s.

Railway Jigger.

As the hi-rail truck is off the road (and the rails) for some engine servicing, one of the jiggers has been pulled out of its container, cleaned up and given a test run. This was used for track inspections before the hi-rail truck was acquired.

Off-Site Work

Track Inspection.

Harvey Armstrong flew up from Christchurch to carry out a track inspection, which was from opposite the Senator Motor Inn (which is as close to the port as the train can go now) to Muriwai. This was done using the jigger.

The jigger at Coop Road

RNZAF C130H "NZ7003" landing at Gisborne

One of the "features" of the track inspection was having to wait for three aircraft to land at Gisborne (an Air New Zealand Q300, a light training aircraft and then NZ7003) before being able to cross the runway.

Bridge Repairs.

We have ring clamps being manufactured which are required for repairs to the wooden bridge. We have received grants from Marjorie Redstone Trust and J & T Hickey Charitable Trust Inc which will cover part of the cost of the repairs we need to make to the wooden bridges. C.R.Taylor Ltd are happy for us to remove the securing plates etc. ready for the replacement of the sleepers and then for us to secure the rails to the new sleepers once they have placed them in position. This will reduce the cost of the bridge repairs, however a crane is definitely required due to the weight of the sleepers. Although these bridges are owned by KiwiRail, we are required to maintain them as part of our lease agreement.

Muriwai.

Out at Muriwai, the ground beneath the shade sails has been slowly settling over the years creating uneven areas where the tables and chairs are placed.

Once again David Stokes & his family have offered to help us at Muriwai, this time by levelling the ground underneath the matting.

To enable this work to be done, Joe & Graham took the hi-rail truck to Muriwai and with the aid of the hiab crane, lifted the ground matting on to the back of the truck.

The matting was taken back to the engine shed, laid out on the turntable and water-blasted to clean it.

This was done before the hi-rail was taken off the road for engine servicing!

Fund Raising

Any ideas to Sally please, no matter how off-beat they may seem!

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That's it for this newsletter!

If you have anything to put in the next newsletter, please let me know. Any ideas welcome.

Graeme Scott

P.S. This and previous newsletters are also available to view at www.gcvr.org.nz/newsletters
If you or anyone you know would like to receive our newsletters direct to your/their email address, please send an email to gcvr.newsletter@gmail.com