

=== 15CA 2056 RECOM - CLEANING EXPOSED FRAMES ===



P01 - The 15CA 2056 project continued with the WAP-down (high pressure hot water + degreaser wash) of the now fully-exposed frames of the 15CA for inspection and to prepare for further paintwork. Hannes Bester, who is bound and determined to make this locomotive the show-boat of the Reefsteamers fleet, is seen at the spray nozzle.



P02 - These are the exposed frames. All four sets of axles slots are bridged by their keeps and the locomotive is firmly jacked-up at all four corners. Hannes isn't going to have time to do the entire loco as originally planned, so he will focus on these inaccessible parts. The rest, we will do as a team at steam up time and during the running in period.



P03 - George, visiting from the UK, set to work to clean up the inter-buffer area and to scrape out the rubbish and crumbs out from under the cab floor. The paintwork at the rear end is poor, as new paint was applied over rust & dirt.



P04 - The WAP high pressure washer was misbehaving and smoking the place out. We lost a bit of time with fault diagnostics. While the water pump is electrically operated, the machine burns diesel fuel to flash-heat the jet water.



P05 - The 15CA's tender has been shunted out of the way for access to the 15CA track. It is on the 12AR track now but far back enough not to obstruct future boiler tube work.

== 15CA 2056 RECOM - DRIVER AXLE BEARINGS REMOVED ==



P06 - Cart horse duty - the heavy axle 'boxes' have all been marked and removed from the newly processed axles and hauled into the Fitters Shop. (Tough little ponies, these...)



P07 - The axle bearings are worn at their crowns (left in the picture) which means the axles are not running true. The skew axles are imposing uneven wear on the thrust faces, and the small, but vital, driver axle side-play is reduced.



P08 - Just prior to putting a protective layer of grease onto the axle journals, the bare steel of the freshly-peeled wheels are already starting to rust with the morning dew-fall. (In the words of House Stark of Westoros, 'Winter is Coming.')



P09 - The axle boxes will be going to Valard Bearings to have their liners melted out and new white metal liners and thrust bearings cast. Valard Bearings do bearing work for us at no charge, and for which we are quite grateful.

= 15CA 2056 - PROFILE CUTTING ON LEADING DRIVER AXLE =



P10 - The fourth and final driver axle was being turned in the 1921 Craven wheel lathe for most of the day. The restored lathe is performing quite well both mechanically and electrically. The motor draws a steady 45 amps and the lathe doesn't strain on heavy loads.



P11 - Dawie's pet fitter was here for the day too, a forlorn rescue picked up from the SATS Millsite Shops. Both gents are wearing safety goggles. We've found the lathe generally aims the spiral swarf towards the floor. But on the thicker cuts, you get the dangerous and unpredictable pings and chips that fly upwards towards the operator.



P12 - The idler shaft bearing continued to leak and a simple catch bottle was set up to capture the oil and chuck it back in through the top hatch. The bearing is about 0.5 mm oversize, letting the gear oil sneak through. It isn't a serious problem and it will be re-lined again once the 15CA project is completed. (Note the fresh sawdust on the floor.)



P13 - The big lathe picked up a bit of a chatter as it did during last week's session. The vibration from one side can feed into the other. The fault turned out to be simple – the tool tower racking bolts weren't tight enough. They need to be checked and tightened regularly. Lesson learned.

=== 15F 3052 BRASS PLATES and BOILER RECOM WORK ===



P14 - Sporting new cast wing plates, Sandstone's 15F 3052 has since had the boiler tubes all beaded over at the firebox end ready for the coded welding. Most of the boiler fixtures have since been reinstalled for the coming steam test, but many needed to have wasted steel studs replaced.



P15 - No.3052 was officially named 'Brakpan' by SAR&H back in 1945, when she was still a new engine. She ran as 'City of Germiston' for a while too. She is nowadays called 'Avril' after David Shepherd's wife, but she now bears her original SAR name as well, to commemorate her history.



P16 - This photo shows why most SAR engines are black – other colours really show the dirt. 15F 3052 will retain her grey navy-blue lined deflectors and white wheel rims (not our standard) as per owner David Shepherd's request. This is the livery she wore when handed over to him in 1991.



P17 - The 15F 3052 is now properly bolted in between a pair of newly baked brass name plates and no longer has an identity crisis. (She 'borrowed' 3046's plates for a while!)



P18 - So this is where the loco workshop action is. 15F 3052 on the right is being recommissioned on paid contract from Sandstone Estates during the week days, and 15CA 2056 on the left is being recommissioned by volunteers.



P19 - Traversing the smokebox front plate over that cruciform bracing was a tight squeeze and it JUST fitted. The plate needs to be descaled and repainted. We no longer use graphite paint, so this will be black etch primer,



P20 - The rear of the smokebox plate, complete with cinder shield. The similar front plate that Hannes had been grinding down was for the 15CA show-boat project, not for this 15F 3052 locomotive, as I had earlier reported in error.

===== COACH LIFTING FINALLY STARTS! =====



P21 - Coach lifting is underway on one of the Sandstone Day sitters. The old fashioned bar frame bogie had already been withdrawn from under the jacked-up and was undergoing inspection, lubrication and service.



P22 - These old bogies have sliding pads on the shoulders of their bolster beams, and they need cleaning and lubrication. The collars around the bolster pin are nasty to uncouple at arm's length when starting the job



P23 - The bogie bolster pivot that has to be exposed and serviced at intervals. Notice the indented pads on either side, into which the sliding bearers of the previous picture engage.



P24 - This coach needs axle work as there has been dragging damage to the wheel treads. So this isn't a one-day job. The wheel lathe CAN turn C&W axles but using two carrier dogs instead of four. (As per loco axles)



P25 - The gantry is booked for its own refurbishment project in the future. It needs descaling, repainting, new signage and removal of obsolete fixtures. The plinths need to be boxed in and recast. And Engineering Manager Ackerman is looking at various forms of powered traverser, as the chain is neither practical or safe for very heavy loads such as these axles. (The crawler shaft runs counter to the traverse, so the chain often runs awkwardly in a figure 8.)



P26 - Talented photographer, Ian Morison (more talented than I) is now adding to my documentary photography with his own angles for the times I am absent and with the use of a better camera too. He quite enjoyed the smoky effects from that WAP machine.

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