

## **D1010 Western Campaigner**

Hi I'm Gordon and I have been tasked with looking after 1010 along with Leroy Ford

I'm completely new to the internet and this is my first attempt to inform you of the latest situation.

Two years ago we had a major problem with B end transmission. This turned out to be seized bearings on the primary input drive shaft. The cooler group was lifted out and the transmission top casing lifted off. This exposed the shaft in question and it was removed. See the adjoining photos.

The transmission itself turned over all ok much to every-ones relief. The replacement bearings were sourced from within the preservation movement, and the shaft was refitted and the transmission top casing refitted. Meanwhile the oil had been drained and the cone filters removed for cleaning. Also, the heat exchanger, which had also been away for repair was refitted.

The cooler group was refitted after some refurbishment and painting. The loco failed again during the gala due to a blown oil pressure switch. This happened as the train when was pulling out of Williton and it was fouling the crossing. Some smart work by the staff removed D1010 and it was shunted to the North Yard. Julien Weston, the loco's electrician, sourced some new switches and they were wired in. Julien also did some rewiring of other components namely getting the compressors running with their respective engines, so that an air supply could be maintained if one or other of the engines failed. When the engines were started for the ensuing gala a water leak found in the cooler group. A weld repair was done in situ but was not entirely successful but a decision was made to run the loco. Also, during start up a leak was found in the vac system and a flexible hose as changed. The loco worked its allotted turns until the last train for the day when it was found to be rather sluggish in its acceleration, particularly on B engine ,so to avoid any further possible damage to the loco it was failed at Williton on its last run of the day .Some slick signalling work and shunting saw 1010 removed and replaced with D7017 which then took the train onto B/Lydeard. Discussions took place as to what the problem might be, and the manuals read and reread. The conclusion was that one of the control pistons had jammed, thus the loco was pulling too high a ratio in the converters. A bit like you trying to start your car off in third gear. The cover was removed to expose the valves ,and yes ,the primary valve was jammed half way down the bore .After much back and neck twisting we got the offending valve out. Credit to Leroy Ford in being able to get into position to work. A sliver of metal was found to have caused the problem.

A tool was made to extract the valves. All parts were cleaned reassembled refitted. The next major task was to investigate the poor vacuum to the brake pipe. It was decided to remove both exhausters for service. Number One unit was found to have a damaged bearing .

A replacement bearing was sourced and fitted. Both units had the vanes inspected and these were found to be in good condition. The units were reassembled and filled with fresh oil of a lighter grade to overcome any chance of the vanes sticking. These are now awaiting suitable weather for the removal of the protective sheeting and a shunt under the crane so they can be lifted back into position

### **Saturdays 9<sup>th</sup> and 16<sup>th</sup> February 2013**

After the testing of the exhauster's it was decided to have a good clean up of the interior of the loco before the exhauster's were lifted back in .We have also got a problem with the overhead crane, being that it is not travelling correctly. This needs to be rectified before we lift the exhausters in, so in the meantime we have been cleaning up the insides and painting them as required. We have also been cleaning up the inside areas of A end cooler group and its associated transmission covers, which need new hinges fitting. Whilst working in this area we found a damaged hose to the Hydrostatic fan drives so this has been replaced. That's it for now, just waiting for better weather so we can get the winter covers off and get the units lifted in.

### **Saturday 2<sup>nd</sup> March.**

As reported above, we have been carrying out tidy up jobs to the interior of the loco. Leroy has been painting out

the cabs as required, whilst I continued with A end cooler group. As I came to the end back plate a hole opened up in the roof tank. This had to be allowed to drain down the water that was left over from draining down for the winter. A repair will be made to this leak next week.

### **Saturday 9<sup>th</sup> March**

As reported last week a repair was carried out on the leak found in A end cooler group. Fingers crossed that this is a successful repair. Further work was carried out on the cooler group, namely the refitting of the internal transmission covers, which had new hinges fitted painted. There is one more to fit, and then a final spruce up with the paintbrush.

### **Wednesday 27<sup>th</sup> March**

A cherry picker hoist was delivered to site and Neil was able to access the crane. As thought the brake on the transverse motor had seized on. This was dealt with and the unit serviced as required and given a coat of paint. 1010 was shunted under the crane, the centre roof panel removed, and the two serviced exhausters lifted into place. The roof was refitted and the loco sheeted over. Leroy and I then went on to bolt the exhausters into their frames whilst Neil was dealing with changing light bulbs in the main shed.

### **Saturday 30<sup>th</sup> March**

Leroy had been busy Friday and had piped up the exhausters, and had them electrically connected and they were run on the batteries but only pulled about 19ins of vacuum so a search was on to find any leaks. This resulted in the removal of the cab floor plates and opening up the indicator blinds to access the main vac. pipe. This may mean having to cut out a section of bodywork to access the holed pipe.

### **Saturday 6<sup>th</sup> April**

Further investigations took place with regards to the vac leak. All the floor boards were taken out along with seats. The exhausters were run up to show up where the leak was. It was found to be in the section of pipe that runs under the floor from one side to the other. As the gala was getting close, it was decided to carry out a temporary repair, a bodge job really.

### **Saturday 13<sup>th</sup> April.**

Material was acquired and an attempt was made to temporarily repair the vac leak. This was reasonably successful and we managed to get 20 inches of vac. Seats and floor boards were refitted along with the seats and the cab cleaned up.

### **Saturday 27<sup>th</sup> April and Saturday May 4<sup>th</sup>.**

I was on holiday over these weekends and in the meanwhile, the repaired cooler group was lifted back in and piped up.

### **Saturday 11<sup>th</sup> May.**

The electricians check over the circuits as necessary and carried out repairs as required. Meanwhile the loco was prepped ready for a test run, after normal running on the railway had finished for the day. Unfortunately this did not take place, as the loco s acting as ballast were not available, may be next week.

### **Saturday 18<sup>th</sup> May.**

The loco had been shunted onto No.1 road and it was prepared ready for a test run as before. The battery box doors were opened up and the water levels of the batteries were checked and topped as required. All battery doors were then secured and the loco was ready for its test run. This was carried out with the class 47 and the Hymek as



ballast and back up. Two runs to Blue Anchor and back to Washford were undertaken and proved successful.

### **Saturday 25<sup>th</sup> May and Saturday 1<sup>st</sup> June.**

A clean up of the interior of the loco was undertaken, all oil levels checked and topped as necessary, and both engines barred over in readiness for a start up. This all went as planned and everything checked out o.k. the loco was ready for the gala.

### **Friday 7<sup>th</sup> June.**

Early to depot and get D 1010 started up ready for its duties. Correct time of off shed and with D832 carried out its programmed diagram without any real problems, we just had a bit of assistance with the vac on one trip.

### **Saturday 8<sup>th</sup> June.**

The loco was stabled at Minehead overnight, so travelled down to loco by road along with other train crew At Minehead loco was already being warmed up by Leroy and when started up it was posed alongside D832 for a photo call. It then worked nonstop to B/Lydeyard and then down to Norton Triangle. There we left the train and ran round the triangle and split from D832 the train was worked back by the two Class 33s. We then ran up to B/Lydeyard left D832 in the yard and then worked down to Minehead solo. The last trip for D1010 was to return to Williton as pilot to a Class 33 where we detached at the outer home signal and ran into No.1 yard road, job done. Robert Tiller the group's president rode the loco for part of the day and I hear he had his hand on the handle for part of the day, well done Bob.

The BBQ followed in the evening and as you can imagine there were plenty of smiles going around.

### **Saturday 15<sup>th</sup> June**

This week was come down after the gala, so it was a bit low key around the shed .a general tidy up took place and on the loco front an attempt was made to open one of the battery doors on the Western. This proved to warrant further work and it was decided to leave this job until later in the season, as the loco still had duties to carry out in September.

### **Saturday 22<sup>th</sup> . June**

Pipe material was sourced from local firm and the plastic fuel lines were replaced .this was because the original pipes were work hardened and discoloured. The fuel pump was ran up and the air bled out at all four locations.

### **Saturday 29<sup>th</sup> June.**

The end roof panel above the pre-heater was removed for access to the water tank gauges. Both of these were taken out and the glasses cleaned, and in the left hand position an indicator gauge was fitted. The header tanks were refilled and no leaks were found. Meanwhile I had hit my head on the inspection door, so it was deemed an appropriate time to modify said door. This was duly done. Meantime Neil and Martin set about removing the seats and floor plates to get at the leaking vac pipe. This was successfully done and the results of the poor vacuum is there to be seen.

### **Saturday 6<sup>th</sup> July.**

A suitable length of hose had been sourced and the old vac line was cut into the necessary sections to effect a repair .along with Martin and Andrew the flange end was cut off and a new joint made .The boss was removed and welded back onto a new section of pipe .The remaining old section under the floor was removed .Martin refitted the flanged section back into the loco ,and this was joined to the welded section by the flexible hose ,and also the removed piece was also replaced with flexible ,through the floor plate and coupled up behind the front valance. The exhausters were run up and a vacuum of 21ins was recorded. A good job done by all concerned. The floor plates were duly refitted along with the seats, and the cab area cleaned up.

### **Friday 12<sup>th</sup> July.**

Loco was due to work the DMU diagram but owing to circumstances beyond our control the Hymek took over these duties.

### **Saturday 13<sup>th</sup> July.**

A small water leak had appeared in B end cooler group .This area was cleaned up and it was repaired. Hopefully this will last the rest of the season and the locos scheduled diagrams. The water levels were checked and pre start up checks carried out. The preheater was put into service while we had a cup of tea. And then the engine was started. Whilst engine was running a positioning shunt was under taken so that the loco is first in line ready for its D M U diagram next Saturday.

### **Saturday 20<sup>th</sup> July.**

The loco was prepped ready for service, and when warm enough its engines were started up and allowed to settle down. The fuel system was bled of air as necessary and loco was ready for its duties. It left the yard at 10-00am and travelled light engine to B/Lydeard. We had to pick up our designated set of coaches, which meant splitting the first three off the set in the sidings. We then shunted into No.2 platform to await our first departure of the day. The diagram to be worked was the usual DMU one. The loco was being driven by Neil, second man Martin, Cameron as trainee and myself Gordon, as engineer. Needless to say, apart from visits to the engine room for visual checks, and occasional wipe with a cloth everything ran smoothly. The loco ran its diagram with no trouble and gave all the Western followers who rode the train a good day out, plenty of clag!! On behalf of the DEPG may I say thank you for your support while we have wrestled with getting the loco into service. I was informed by a member that on Saturday, 1010 was the only running Western in country. Thank you.

### **Saturday 27<sup>th</sup> July**

This was to be a quiet day on shed and some tidy up jobs were carried out, namely the repair of the battery door lock. This was removed and freed up and greased as required refitted to its door. Whilst the doors were open all the battery levels were checked .They were found to be slightly low so all cells were topped up with required amount of distilled water.

### **Saturday 3<sup>rd</sup> August.**

Another work day on shed, this time just a general tidy up around the loco, and a bit of spruce up with the paint brush. The areas concerned were the water filling pipe, the fuel filler connection point and the electrical connection points for battery charging and shed connection for internal lights.

### **Saturday 10<sup>th</sup> August**

Another quiet day at the shed, a quick check over of the loco, and left ready for any visitors who wanted a look around inside for their donation to our funds. I had a brief walk through and instruction on the intricacies of the Warship with instruction by Martin, who is its maintenance engineer. This was in preparation for the loco hauling the Quantock Belle diner train on the following Saturday.

### **Saturday 17<sup>th</sup> August.**

I did not attend the dept. today as me and my wife were riding on the Quantock Belle diner later in the evening. Very nice it was too.

### **Saturday 24<sup>th</sup> August.**

I did not attend depot today as it was my model railway clubs annual exhibition.

### **Saturday 31<sup>st</sup> August.**

Arrived at shed to find 1010 out in service. Started to paint Hymek 7018s fan when I was requested to ride 1010 as its engineer so I boarded the loco at Williton and rode up to B/Lydeard where we had a layover, so loco was put on shed .I had been told that the small compressor had failed and had been electrically isolated, and that there was a slight leak on a brake cylinder B bogie rear offside .These jobs are to be attended to when the loco has completed its designated turn off duties. We have a replacement compressor in stock so if it turns out to be a major fault that cannot be fixed in situ, then we shall have to change the complete unit.

### **Sunday 8<sup>th</sup> September**

1010 was in traffic on the above day, working the D M U diagram. We had a slight problem with a sticking reverser on shed, but a quick work over with a spanner and off we went .Once the unit had warmed up and the oil had got around we had no more problems during the day .A small air was noted on B end brake cylinder which

will be checked and sorted out at the end of the season. The loco completed the day's duties with no other problems.

### **Saturday 14<sup>th</sup>.September.**

Loco was on shed today so we decided to have look to see if there was a simple solution to the compressor fault .The air filters on side of the loco were inspected and one was found to have oil in it when it should in fact be empty .both of these filters were removed ,taken into the workshop and cleaned .Both filters were reassembled and refitted and the secondary filter was emptied of muck and also cleaned out .The muck in this filter was probably carried over into the compressor valves and caused them to stick and not function properly and therefore not produce air.

### **Saturday 21<sup>st</sup>.September.**

Loco was pre heated and started up ready for its next tour of duties. A shunt was undertaken with the Class 47 to release 1010 from the kick back siding in front of the steam shed. We travelled light engine to B/Lydeard to pick up our train of three coaches and ran to platform 1 to await our departure. As nearly always it attracted a lot of attention and several people were allowed into the cabs to have their photos taken .The loco then worked its designated diagram for the day with no faults .We returned home to Williton depot after a good day of running and leaving the Western Campaigner followers with broad smiles on their faces. This was the last designated outing for 1010 this year, so on behalf of the DEPG may I thank you all for your support of our efforts in keeping these locos running, not only the Hydraulics but also the Electrics too. Thank you.

### **Saturday 28<sup>th</sup> September.**

This week 1010 was not in service and as we had the results of the oil analysis back, which showed high iron content, we were requested to remove the oil filters. This was the two rotary and one glassing filters .they were taken into the workshop for cleaning and checking for any iron particles. Nothing of any note was found in the two rotary filters, but the Glassing filter was chock a block with debris, so was duly cleaned out .all three filters were refitted to the engine ,and it put on pre heat to run up and check. The engine oil was topped up ,the engine barred over, and when it had reach its temperature it was started and checked for leaks. It was left running to put some juice back into the batteries and it was then shunted in No 4 road in front of the Swindon Shed, as the Class 47 was positioned ready for its next duties.

### **Saturday 5<sup>th</sup> October.**

This weekend was the late steam gala, which was themed on the Cambrian Coast Lines with a total of four Manor class locos taking part. Because of this, there was not any work done to the locos over the weekend, apart from showing visitors around the shed and the locos and in mine and Leroy's case ,giving guided tours of the Western with quite a lot of enthusiasts taking the opportunity to do so.

### **Saturday 12<sup>th</sup> October**

This week we drained the two filters on B engine to check for any unwanted particles of metal or gunge. Having topped up the engine oil and carried out pre start up checks both engines were put on pre heat over the lunch break. With both endings running the electricians then adjusted the charging rate as the panel dial had been showing a high rate of charge. Also the large compressor was checked and found to have some loose pipe work, by which time it was to late in day to continue.

### **Saturday19th October.**

As requested all the batteries were checked and topped up with water as they needed it .Further checks were then made on the problem with the large compressor .Having got under the loco Leroy removed the top cover on the unit and found the High Pressure Cylinder Head to be badly damaged .Neil then inspected the damage ,and proceeded to remove the broken parts ,thus condemning the compressor as unservicable. Apart from the head being cracked, the piston was also holed. Following discussions, it was decided that we would move No1 Exhauster to make room for a replacement compressor to fit inside the loco alongside the exhausters. A start was made ,and No1 exhauster was detached from the floor and its pipe work and moved into its new place. We now await the arrival of our Wide van from Minehead which contains the replacement compressor. Once at the shed it can be checked over and serviced before an attempt is made to fit it into the loco.

For personal reasons I was not at the depot for three weeks.

### **Saturday 16<sup>th</sup> November.**

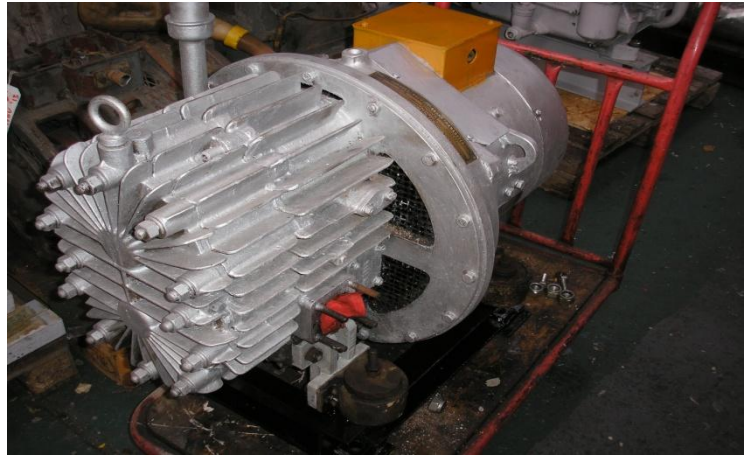
As I was not at the depot on this weekend, this is a report of work carried out by other personnel, Neil.

The engine water levels were lowered to an extent to allow Anti Freeze to be put into the cooling system this was duly done and the engines ran up to circulate the said Antifreeze around the systems. A sample of water was taken from both engine systems and placed in the freezer cabinet in the mess room.

### **Saturday 23rd November.**

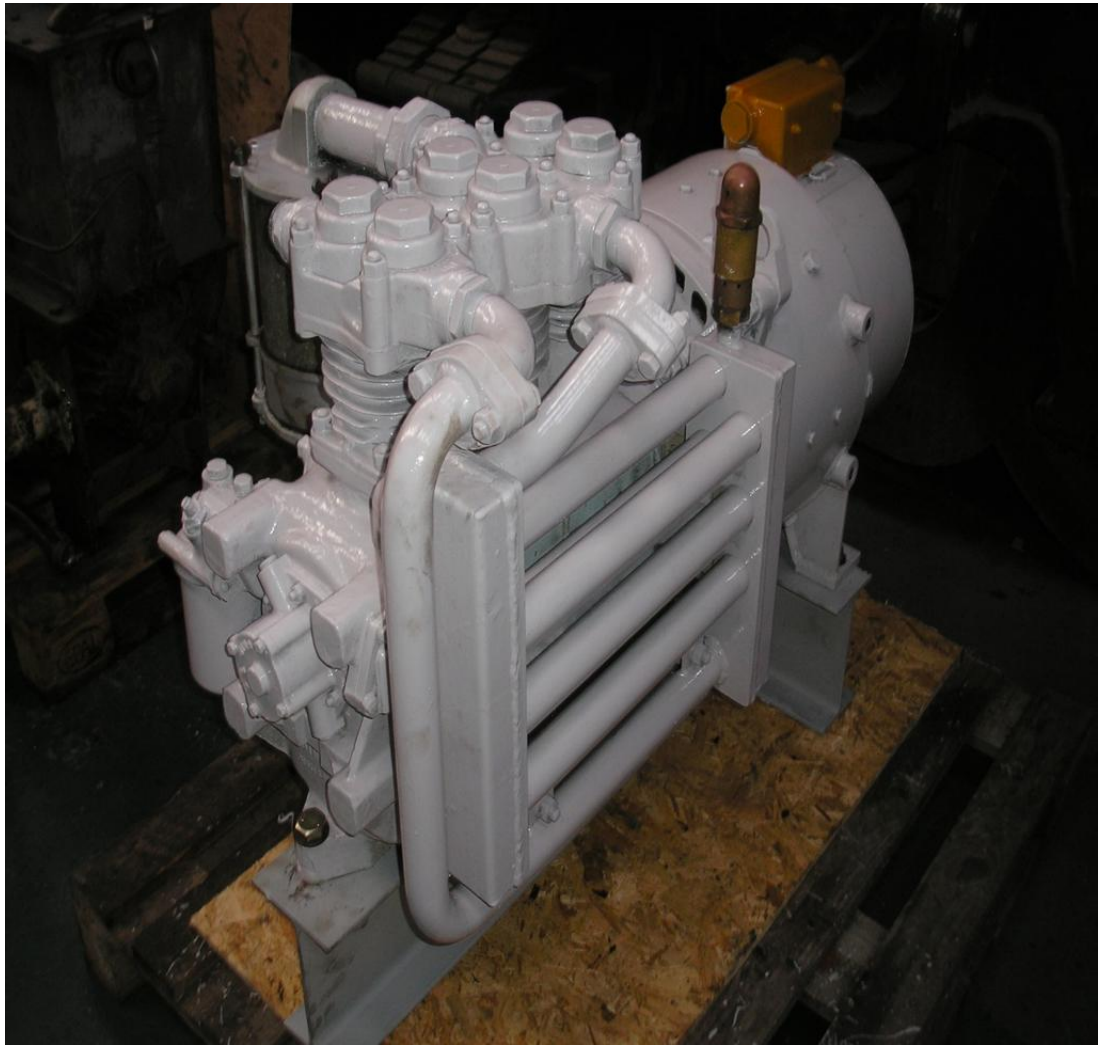
When Neil arrived at the depot the Antifreeze samples were taken from the freezer and checked ,and both samples were found to be still liquid after being kept at 16 to 20 degrees below for the preceding week. Also, having had rain during the week it was found that the drain trays under the pre heater boilers were full of water indicating that the drain lines were blocked .These were removed and replaced with larger bore pipes.

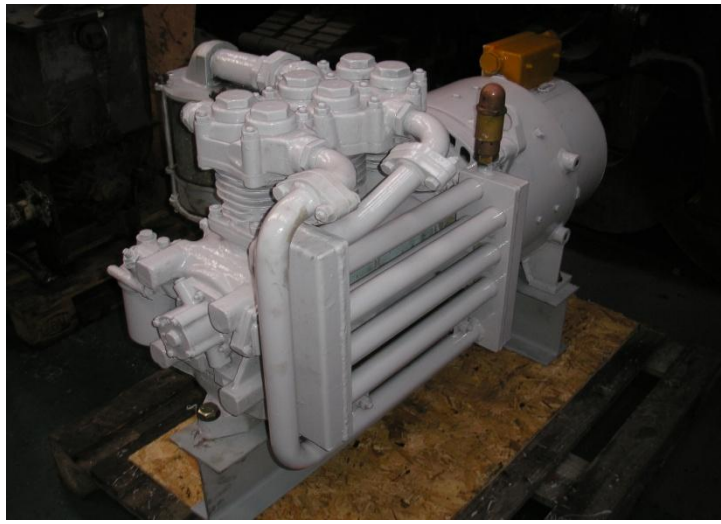
December has arrived and the pending festivities are taking up most people's time this month. The annual dinner was again an enjoyable evening, with the wives being treated ,for allowing us boys to play with our big toys. Other commitments during the early part of January also kept me away from the depot until the 18<sup>th</sup> January when I worked on the replacement exhausters to go into D1010. these are of a different type to those that are fitted at the present. Also as earlier reported, a large compressor has been brought into the workshop and checked over and it was run up and found to be in sound condition. Roy cleaned it up as necessary and then painted it. Meanwhile I have been cleaning up the replacement exhausters and fitting them to their frames .They too have been test run and await final painting and testing with vacuum gauge before fitting into the loco.



The above pictures show the damaged high pressure head from the compressor that is fitted under the A end .The next pictures show replacement exhausters, these are of the Northey type ,and the bottom picture is of the replacement compressor ,which for ease of maintenance is to be fitted inside the loco, along the exhausters. As can be seen, they have been cleaned up and painted and test run ready for installation as and when we can get 1010 into the workshop. This space is taken at present by 821 Greyhound which is to have top end attention to one of its engines ready for the gala later in the year.

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### **Saturday 1<sup>st</sup> March**

The loco was prepped and put on, ready for a start up later in the day. This was duly done although we had to put the batteries on charge for a short time, while we sorted out the possibility of lifting the old exhausters out. The overwinter sheets were removed and also the centre roof section was moved back. An attempt was made to lift the exhausters out using the forklift truck with the crane hook extension fitted, but we could not get enough height to clear the body side. Both engines were started and they settled down nicely. Neil carried out air checks to check that the locos brakes were operable in readiness for a move to B/Lydeard next week for under frame inspections. He also fitted a air gauge into system at A end so we can check that we are getting enough air to the transmission changeover solenoids.

Saturday 8<sup>th</sup> March. The loco was again pre heated and started up and a shunt under taken to get the loco in place for its trip to B/Lydeard. We set off for B/Lydeard towing the class 47 plus the class 33 with 1010 doing the work, the first time it pulled a train since last year. All was going well until Neil noticed B end water temperature go to high and shut down B engine. A quick look discovered a hose had come loose and leaked water dreading antifreeze. On arrival at Lydeard we shunted over the pits and was met by a gentleman who carried out the necessary checks and measurements to give the loco its Worthy to Run Certificate. Whilst over the pit I went around the grease nipples and gave them a shot of grease. When the time came to return to Williton, we coupled up to the 33 to enable us to get air for our brakes, as we could not run B end engine, which has the small compressor attached, because of the low water level. Neil also fiddled a relay to us control status and leaving the 47 behind we duly towed the 33 back to Williton and put both locos on shed.

### **Saturday 15<sup>th</sup> March.**

The loss of water on B end engine last week was further investigated and a hose connecting the inter/cooler to a drain line was in a very bad state, and requires changing. We did not have the correct type of hose available so we were unable to affect a repair. We were unable to do much else at this time so both Leroy and myself helped with other jobs as requested. I assisted with the drilling out of broken studs on Hymek 7018 in the shed, this in readiness for the refitting of the body skirts.

### **Saturday 22<sup>nd</sup> March**

A new section of hose had been sourced and a repair was made to the intercooler drain line as required. It was also noticed that another hose was also in a poor condition and so this was also changed. The B end was refilled with water, and put onto pre/heat, in readiness for a start up to check out the repairs as satisfactory. The batteries were given a boost charge while the loco was warming up and the engine was started and allowed to settle down. Brake and reversing checks were carried out, and the loco moved under its own power. The engine was left running to get some heat into it and as there was to be some shunting moves later in the day it could move under its own power. These moves were duly carried out and the loco was stabled back in No.1 road and shut down and closed up.