

'Beautiful BT'

Hymac 580BT Restored to 'As New'

Rare Hymac 580BT gets the full works by Julian Carder and what a stunner it is, says Jeremy Rowland



Julian Carder's latest restoration was of great interest to me, not just because it was a Hymac but a 580BT, similar to the machine that I am currently restoring myself. I first saw the excavator in question back in August 2017 when it arrived by low-loader from South Wales where Martyn Williams had loaded it up. This Hymac 580BT was not the machine that Julian had originally purchased for himself back in 2016 but another machine to restore

for John Rattigan, who has worked in the construction industry for many years and who had at one time owned ten Hymac machines ranging from cast-pad 580 machines to 580BT and finally 580C excavators.

The excavator carried an original 'F' registration plate which dates to 1967 but out of interest when I referenced the Hymac's serial number which is H581020106BT to records that I have, this dates the machine to the second

quarter of 1968. The Hymac 580BT was manufactured from late 1967 through to 1970 when it was replaced by the improved 580C.

Looking around the machine I noticed that the boom hoist rams were the later external cap type as opposed to the internal cap rams fitted to my machine which is a later build. The main thing was that the digger was all there and although she had been stored in a barn for a number of years, there was



The Hymac 580BT as she arrived on the low-loader from South Wales - all there but she had suffered from the ravages of time stood in a barn



This rear shot of the excavator on the low-loader show the registration number that dates the machine as a very early example; the 580BT appeared in late 1967 with production lasting till 1970



A nearside view of the excavator; the two pipes trailing from the boom and dipper arm were piped into the machine's auxiliary hydraulic circuit to power a hydraulic hedge cutter

the inevitable rotten tinwork you would expect to find on any machine of this vintage.

This restoration represents the first steel-tracked 360 hydraulic excavator that has been restored by Julian but as I looked at this machine prior to the restoration, then I just knew that when it was finished it would look and be the part. This is unlike the restoration which I am currently carrying out on my machine which does not involve a full strip down. I knew that this excavator would be totally stripped and rebuilt so I was very interested in the work being carried out.

It did not take Julian and his helpers very long to get the Hymac stripped down for assessment and there was no stone left unturned during this restoration. The hydraulic pumps, track drive motors, spool valves and control levers were sent to Hymac expert Tony Flint for strip down and rebuild, the steel hydraulic pipes were all replaced with newly manufactured replacements all of which were internally plated to prevent corrosion and I took advantage of this to get some new steel pipes manufactured for my Hymac 580BT at the same time. Naturally all of the flexible hydraulic hoses were

replaced with brand new ones, including the spring type guarding on the feed to the front end rams.

Another donor machine was located which yielded some good spare parts; other parts such as undercarriage rollers which were seized and were beyond economic redemption were replaced with brand new items sourced locally from ItsTrac at Willenhall, as were the track chains. The donor Hymac had the better of the two cabs so this was repaired as required before being shot blasted and painted. A good second-hand rotary distributor was sourced and



This offside view of the machine shows the rot along the bottom of the cab, quite normal for a machine that is now fifty years old



Left: Within a week of being unloaded the Hymac was already well stripped in this photo supplied by Julian Carder **Right:** A rear shot of the upper works with the rear counterweight removed; note the old dynamo fitted to this machine, no alternator here (Photo courtesy Julian Carder)



Left: The original cab from the Hymac - although this was replaced it is interesting to note that it still retains all of its glass as many older excavators tend to get their cab glass broken and not replaced **Right:** With the brake cylinder refitted only the brake adjustment and refitting the cover plate are left to be done. (Photos courtesy Julian Carder)



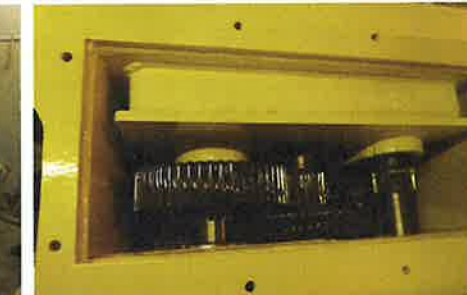
Left: A rear photo of the upper platform painted and ready for fitting back on the excavator (Photo courtesy Julian Carder)



Middle: A front view of the platform showing the new cab floor (always a favourite to rot through) and the repaired boom mounting 'A' frame (Photo courtesy Julian Carder) **Right:** The reconditioned Commercial hydraulic triple in-line gear pump stands on end next to the three spool valves that were all reconditioned and tested by Tony Flint, the items are primed ready for undercoat to be applied



Left: A close up of one of the three spool valves fitted to all of Hymac's 580 machines, these are connected by control rods to the operator's control levers in the cab **Middle:** The undercarriage in the paint booth with the undercoat applied; the Staffa motor and slew ring have also been fitted, the motor rotates the machine's upper works when the slew function is operated **Right:** Peering inside one of the two track drive gearboxes after refurbishment, on occasion these gears have been known to fail on older machines





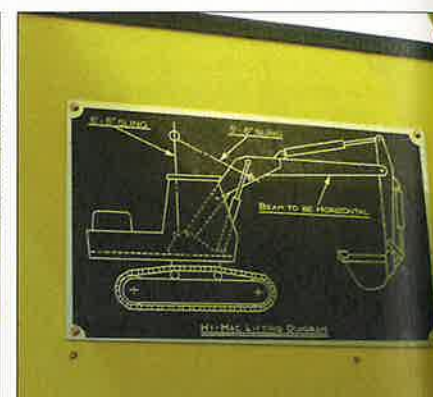
Left: Painted parts drying in the paint booth including the control operating levers and foot pedals; painting parts off the machine can enable a better finish as no area gets missed **Middle:** With the tracks fitted back on the machine and the upper platform refitted the 580BT slowly starts to take shape **Right:** The centrally-mounted rotary distributor fitted back into place; this was a good second hand unit which only required resealing



Julian inspecting the work recently carried out on the excavator; two of the three hydraulic pump to the hydraulic filter pipes have been fitted and the pick-up tank lies beneath them



The restored boom and dipper arm ready to be fitted back onto the Hymac. You can see the old cab in the background



Left: From the newly cushioned seat to the internal identification plates the inside of the cab is as pristine as the outside **Middle:** Looking from inside the cab the engine's bonnet cover is everything that you would expect from such a restoration, even down to the chrome protection cover caps **Right:** Fitted on the outside of the cab next to the boom is the excavator lifting instructions; a full set of the different instruction badges were made for the Hymac

new seals fitted before it was stripped and rebuilt ready to be refitted back onto the machine. The old Ford 2703E engine was tired and Julian located a good unit that did not require much work to make it as good as new; this was installed in the machine and sounds as sweet as you would expect one of these engines to be.

The boom and dipper arm were sent out for repair as were the hydraulic cylinders; the operators seat was fitted with new cushions while the mechanism was freed off, shot blasted and zinc plated. The seat mounting base was manufactured new, the base has a tendency to rot and so I also got a

new seat base made for my machine at the same time, this helps to reduce cost as it was cheaper for Julian to get three made than one, one for his own machine, one for my machine and one for John Rattigan's example. I did visit the machine during its restoration and was as ever impressed by the quality of work being carried out. The wiring loom was newly made and the fuse holders were new items, Julian managed to find where they were being sold! As usual the high standard of work carried out was evident.

Finally the day arrived when I went to see the finished machine; it was a

lovely sunny evening back in May and the Hymac 580BT that stood before me could have just rolled off the Rhymney Engineering production line. It certainly had the 'wow' factor and was a far cry from the machine that I had seen back in the August of 2017. The Hymac gleamed in the evening sun it was started and worked in the air, I too got a quick play on the excavator and was very impressed with what I saw and experienced; the digger was complete with all the nice touches that have made Julian Carder's restorations noteworthy. My thanks go to Julian as always for his help and hospitality. **CPM**

The finished machine is totally incredible and unrecognisable from the machine that I saw back in August 2017



This nearside three-quarter view of the Hymac 580BT shows the high quality of the restoration job, the digger looks like new



The man behind the restoration; Julian Carder stands next to the Hymac 580BT on which he has carried out a high quality restoration



Looking at the idler end of the undercarriage, this shows the hard work that has gone into this restoration; all paintwork was touched up once again before final delivery to the customer

