



The completed dumper combination looking immaculate. The guard over the hydraulic pump was fabricated from new (under the front grill) (Photo Jeremy Rowland)

SHAWNEE POOLE — SHINES AGAIN —



The Shawnee Poole as purchased

Jeremy Rowland has the story of Julian Carder's restoration of this Rhodesian-designed hauler for Paul McGuigan

The Shawnee Poole was essentially an articulated rear dump hauler combination that utilised a standard farm tractor for the power unit. The key to the success of these outfits was the hitch between the tractor and dump trailer that had been designed and patented by Harold Poole during the mid-1950s. Harold Poole had been involved with 'off-road' military logistics. The 'Poole' hitch was designed in such a way that the weight of the load being carried was much better placed over the tractor drive wheels, thus ensuring greater traction. The 'goose-neck' was designed to enable the tractor drive wheels to pass underneath it to enable a much tighter turning circle.

Shawnee Poole trailers were manufactured by Harold Poole in Rhodesia and by 1972 over 4000 dumpers had been produced and sold worldwide; the first unit was used in the

construction of the mighty Kariba dam that was built in 1955 across the Zambezi river. The Shawnee Poole tractor/dumper combination was built under license in the UK by Steelfab Ltd, who were at that time located in Cardiff. One of the popular choice of tractors was the Fordson Major, often to be found in this successful dump truck combination which formed the articulated dump truck of its day.

Paul McGuigan, who's fantastically restored Hymac 880 I covered in *Classic Plant & Machinery* some while ago now, was keen to obtain a Shawnee Poole outfit similar to the one that his grandfather had once operated, and to get it restored to as good as new condition. Eventually a suitable candidate for restoration and preservation became available from a vendor in Wales who had owned the machine for the last ten years, having purchased it himself from a Cheffins auction. Paul opted to get the

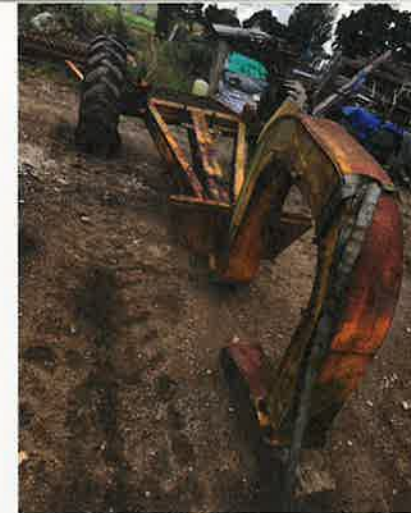
Shawnee Poole restored by Julian Carder, so the dumper was transported to him for a full strip-down and restoration. The Shawnee had suffered from the ravages of time, this example being built in 1961. The two main components were separated to enable the project to be more easily undertaken.

The dumper body proved to be rotten through with rust and was beyond saving, so once what was left of the side and bottom plates had been removed, measurements were taken to enable a new dumper body to be fabricated. The dumper chassis was found to be in reasonable condition although the two telescopic hoist rams and damper needed to be full stripped down and refurbished. The trailer has a two-cylinder air brake system, the cylinders of which were in a poor state of repair as were the brakes themselves. These were totally stripped down for repair, in addition



◀ The poor condition of the dumper body is evident in this photo; the bottom of the body had rotted into holes and the main support ribs and cross members were also badly corroded (Photo Julian Carder)

▶ Stripped of the tipping body the chassis of the dumper was in much better condition, although much work was required to renovate the brakes. The 'goose neck' part of the hitch can be clearly seen here (Photo Julian Carder)



▲ The newly fabricated right-hand side of the dumper's tipper body

◀ A close up shot of the bottom of the dumper body and supports show the poor condition it was in; the only way forward was to fabricate a completely new tipping body.

▶ Having seen better days the two tipping rams and damper are ready to be sent to a specialist for refurbishment (Photos courtesy of Julian Carder)



Looking down on top of the trailer 'A' frame, the two air brake cylinders can be seen along with the actuating arms which operate 'S' cam type brakes (Photo Julian Carder)



Beneath the tilted dumper body you can see the two refurbished air brake cylinders and beneath the closest one is the compressed air reservoir mounted out of sight in the chassis 'A' frame. (Photo Jeremy Rowland)

◀ Awaiting strip down, shot blasting then refurbishment are the two air brake cylinders; the mechanical side of the brakes also required much attention (Photo Julian Carder)



The worn trailer brake shoes; much money and effort were spent getting the brakes working properly and to 'as new' condition (Photo Julian Carder)



Left: The air compressor, hand valve and release valve removed ready for reconditioning
Right: Fully rebuilt and waiting to be refitted to the Fordson tractor, the air compressor for the braking system is belt-driven directly off the transmission (Photos Julian Carder)



Looking rather forlorn is the donor tractor that was purchased for the cab; without any drawings of the original cabs available or even good clear photos, the cab presented a challenge (Photo Julian Carder)



Left: The left-hand new wing has been fitted into position and the cab is being jugged ready to get it into position; note the Poole hitch that can be seen here bolted to the underside of the tractor's drive axle
Middle: The repaired cab frame sits on the two newly fitted wings
Right: The trailer's offside brake drum and hub assembly refitted and painted as the restoration progresses (Photo Julian Carder)



repairs were needed to the 'S' cam brake actuators, one of which had also been fitted incorrectly by a past owner. Like many accomplished digger loaders, the Shawnee Poole utilises a hydraulic pump driven off the engine front pulley to power the hydraulic tipping rams; this was also refurbished and a new guard to surround it was fabricated.

The dumper as purchased by Paul did not have an operator's cab fitted. Paul wanted a cab on the restored machine as his grandfather's machine had one fitted. This presented a problem for Julian in as much as there were no drawings available of the original cab. Another Fordson Major tractor which had a cab fitted was obtained to use for spare parts. The cab from this old tractor had seen better days, the plastic roof was paper thin where it had decayed over time, this was repaired with glass fibre and the repaired frame was secured to the two new wings already fitted to



Most of the work on the trailer has now been finished; the Poole hitch has been placed facing backwards in this photo, but the two ends of the fork are bolted underneath the tractor's drive axle to give maximum tractive effort (Photo Julian Carder)

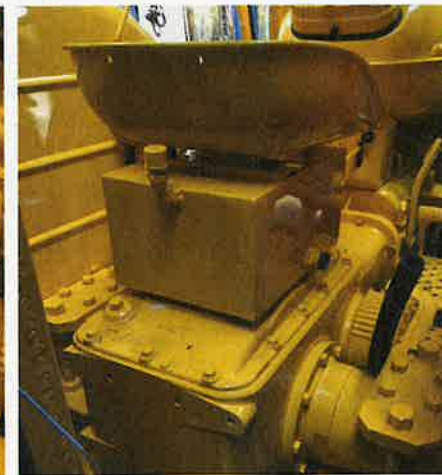
the tractor. Julian further modified the dumper outfit, at Paul's request, to keep it looking as close to his grandfather's machine as possible. This involved moving both the hydraulic oil tank and compressed air reservoir that were mounted on either side of the tractor's bonnet cover. To do this a new hydraulic

oil tank was designed by Julian using cardboard templates to simplify the design process. After much deliberation it was decided that the newly fabricated hydraulic oil tank would sit underneath the driver's seat, while the compressed air reservoir would be fitted in between the two main support members of the trailer's 'A' frame chassis.

Compressed air for the air braking system is provided by an air compressor driven directly off the side of the clutch/transmission case; this compressor was also fully refurbished along with the control valves. The rebuild naturally comes complete with the nice little touches that make these restoration jobs stand out, in this instance Julian already possessed a pair of genuine Shawnee Poole plates which have been fitted to add that authentic touch to the dumper. My thanks as always goes to Julian Carder for some of the photographs and information in this article. **CP&M**



Left: The newly designed and fabricated hydraulic oil tank rests in position; the driver's seat will later be attached to the top of this tank. The tipper control spool valve is visible in the top left of the photo
Right: Finally, the hydraulic oil tank is finished with the driver seat fastened to it (Photos courtesy of Julian Carder)



Like new now, the inside of the cab shows the very basic layout of machinery common to this era (Photo Jeremy Rowland)



This nearside view of the dumper gives a clearer view of the Poole hitch bolted underneath the tractor's drive axle (Photo Jeremy Rowland)



An offside view of the inside of the cab (Photo Jeremy Rowland)



The dumper body fully raised; these machines were essentially the first articulated dump trucks of their day (Photo Jeremy Rowland)



Finishing touches were still being applied to the dumper as I took this shot of the newly-fabricated dumper body (Photo Jeremy Rowland)

