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Our thanks are also extended to the members of the community who have helped to keep the Society going.

The producers of this catalogue take due care but no responsibility is taken for any errors or omissions.

Steam Exhibits

S1 Fowler Ploughing Engine

No 4390. 16 hp Compound. A pair were supplied new to the SA Colony Government in 1882. Purchased by J D McTaggart in 1908 for work on the Nonning lease. Major overhauls in 1927 included new crankshafts and a half barrel shell which was drilled and hammer rivetted by station staff under supervision from Horwood Bagshaw. Used until 1942.

S2 Barrows Portable Engine

Number 22548 Manufactured by Barrows & Co of Banbury, England. 6 hp The portable steam engine was the first form of mechanical power available on the farm using a flat belt on the fly-wheel to drive plant and machinery such as grain threshers and shearing machines. These engines were known as 'portables' as they could be towed from place to place. Used in the Wilcannia district.

S3 Yorkshire Steam Wagon

Wagon No 34 of 1903 by the Yorkshire Patent Steam Wagon Company of Leeds England. It is the oldest known surviving Yorkshire in the world. Imported by T Russel of Geelong Vic and used by Smith & Timms in Adelaide SA before going to Whyalla SA for use in the construction of the town's first dam. It finished its working life in 1918.

S4 Vertical Steam Engine

Last used in about 1890 in A H Landseer's Flour Mill in Milang, SA. The first flour was shipped from this Mill on 11 February 1871. It is possible this engine was built in Goolwa SA as there were at least two companies producing steam engines there in the period between 1864 and 1888. The flywheel pulley is not original but was added for balance, and the original drive was by a long shaft from the engine into the Mill. A Pickering governor has also been added. The engine was salvaged from the Flour Mill for scrap metal.

S5 Vauxhall Donkey Pump

Circa 1870. A pump made by Alexander Wilson & Co 'Vauxhall Iron Works' who in later years were to become the well-known motor car manufacturers. Used to supply water to the boiler feed pump of the flour mill at Milang, SA.

S11 Aveling & Porter P-type Tandem Roller

Number 11974, 6 hp (developed by 19 bhp @ 300 rpm) and a working weight of 8 tons 6 cwt was bought new by the Adelaide City Council in 1927 for £1386 (\$2772) and used until 1959 when it was placed in the Glover Playground, South Terrace, Adelaide, SA. The unusual design was developed to work with the bituminous toppings that were becoming widely used in road making and to make steam power more competitive with the rapidly improving internal combustion vehicles. On loan from the Adelaide City Council.

S12 Vertical boiler

Made by Hawke & Co, Kapunda, SA and used by the railways at Farina on the old Ghan line.

S13 Aveling & Porter Standard Steam Roller

Number 9264. Manufactured by Aveling & Porter of Rochester, Kent, UK in circa 1920. Weight 10 tons.

S15 Parsons & Roberts Feed Pump

Originally thought to have fed water to the boiler at the Eureka Foundry in Booleroo Centre, SA. It is now used to feed the Hawke vertical boiler.

S16 Stretcher Bar Hoist

Number 1258 manufactured by Holman Bros of Camborne, Cornwall, UK. A small but powerful winch for use in mining operations, capable of lifting up to 1485 lbs. It operated on compressed air and is mounted on a 'stretcher bar' column in the same way as a rock drill. Hundreds were exported to Australia and South Africa.

S18 Horwood & Ellis

Messrs Thomas Horwood & Robert Ellis operated a foundry in Hindley Street, Adelaide, SA from 1864-1867. Prior to that it was operated by Joel Horwood Senior who commenced business there in 1850. After driving forge blowers in W H May & Sons Wallaroo Foundry for nearly 80 years the piston had worn right through the cylinder.

S19 Marshall Vertical Steam Engine

No 14364 4 hp and ordered on 2 December 1886 by Leau Bros & Co Adelaide, SA along with a vertical boiler to supply the steam. Little else is known about this engine other than it was used near Mannum, SA for pumping water from the River Murray.

S24 Fowler Single-cylinder Ploughing Engine

Number 2662. One of a pair delivered new to Mutooroo SA in 1876 along with associated ploughs and scoop. Their main work was dam sinking for the station. An odd feature is backhand steering which required the steering wheel to be turned in the opposite direction to normal. For its last trip from Mulyungarie outstation to Mutooroo, a distance of 72 miles (115 kms) it was towed by camels. Restoration included a complete new boiler and many, many hours of labour. It was restored as a Jubilee 150 Project.

S27 Reader High Speed Steam Engine

Number 29026. Date of manufacture 1959. Manufactured by Reader & Sons of Nottingham, England, UK. Used at the Pt Pirie Gas Works SA for driving a gas boost pump (compressor) from a direct coupling.

S37 Worthington Pump on Transport

This unit came from Hardy's Winery.

S42 Tuxford Portable

In 1888 steam was the main means of mechanical power, replacing windmills, water wheels, and animals. Originally this engine had a short firebox for using coal, but it was later re-boilered by Roberts United Ironworks, Bendigo with an elliptical boiler. When found this machine was in a derelict condition – its wheels were rotted out, the flywheel was broken and many parts were missing. The rusted out boiler was replaced with a designed and fitted one which has been welded.

S43 Aveling & Porter Tandem Steam Roller

Number 8300 manufactured by Aveling & Porter Rochester, England, UK circa 1914-1919. Weight 9 tons. This type was Aveling & Porter's first attempt at a specialist roller for working with asphalt but they tended to pause briefly at the end of a strip and would sink slightly in the soft asphalt leaving a small ripple or corrugation. This led to the development of the *Rapid Reversing P Type*. This roller is believed to have been used by Marine & Harbours Department for rolling asphalt on jetties. On loan from National Motor Museum, Birdwood, SA.

S44 Ryder Hot Air Engine

Safer than steam engines these required less attention and were popular for pumping water from streams or shallow wells. They relied on expansion and contraction of air due to alternately heating that air by fire and cooling by water to move a piston from one end of the cylinder to the other.

TRACTOR EXHIBITS

T1 International Mogul Type 'C' – 1910

Single cylinder 20 hp. Famous engine with 8¾" bore 15" stroke 240 rpm. It has low tension make and break ignition using dry cell batteries for starting and flywheel driven Auto sparker when running. It has 1 forward gear and friction reverse. It is capable of pulling two 5-furrow ploughs. Mogul tractors were sold by McCormick dealers whilst almost identical Titans were sold by Deering dealers, all under the same International Harvester banner. The original owners were the late Cecil and Hurtle Growden who used it on their farms 2 miles west of Caltowie and at Gladstone, SA. When acquired from Gladstone in 1966 it was in a rusted condition having been used as a base for a crane.

T2 International Titan 10-20 – 1920

Although the same hp as the Mogul type C (T1 above) 2 smaller cylinders and a higher speed of 575 rpm enabled this smaller tractor to do the same work more efficiently. Two forward speeds were 2¼ mph and 2⅞ mph. It proved very popular and at the peak of production a new Titan 10-20 left the factory every 4½ minutes.

T3 McCormick Deering 10-20 – 1924

Engine No KC-14001. A more compact tractor of the same hp as the Mogul and Titan (T1 and T2). It has 4 cylinders, a bore 4½" x 5" - 1000 rpm. One of the first tractors fitted with power take off. Built up using the best parts of two tractors. Weight 4010 lbs.

T4 Jelbart – 1916

Made in Ballarat, Victoria by Faulkner Bros. Used on a Returned Soldiers' Training Farm at Melrose, SA at the close of World War I. It was notorious for starting fires as it did not have any spark arrestor system. It once started a fire which spread from the training farm to Spring Creek. It has a 3-speed gearbox 1-10 mph and reverse. Features a single cylinder two-stroke engine, having two diameter pistons with a larger diameter at the sump end to give better crankcase compression.

T5 Moline – 1920

Engine No 50789. Model D with front wheel drive. This model was first introduced in 1917 and was designed for row crop work. Rear wheels could be removed by taking out two pins and replacing with an implement such as ploughs, cultivators, disks, reapers and binders, etc designed for this tractor. High revving for its time, it had one forward and one reverse gear giving a speed of 2.8 mph at 1400 rpm up to 3.3 mph at 1650 rpm (maximum). Fitted with turning brakes and differential lock. Two of the previous owners were Toop Motors and Yednalue Station.

T6 Hart Parr '30' – 1920

Engine No 17590. A very early model with open drive pinion and crown-wheel on rear drive wheels. It was in a sorry condition before being restored as a straw shed had collapsed on top of it. It has two forward and one reverse gear. Hart Parr claimed to be the founders of the tractor industry.

T7 Cletrac

Engine No MW48699. Cletrac Crawler 1922-24 Model W made in Cleveland, Ohio, USA. It has a 4" bore 5½" stroke. Fitted with a Weidley Engine with one forward and one reverse gear. It originated from west of

Ceduna, SA where it was a general work horse. This type of Cletrac was used in Wirrabara Forest Saw Mills, SA using a belt pulley fitted directly to crankshaft as late as the 1960's.

T8 Peterbro – 1922

Engine No 337. Type 30.4 bhp 30. Engine using Ricardo system featuring two diameter barrels to each piston designed for use in tanks in World War I. It was used for general farm work and was last used for grubbing out boxthorns. Rated at 30 hp at 900 rpm. Working bore 4¾" secondary 3½". Manufactured by Peter Brother Hood Ltd Peterborough, England, UK.

T9 Fordson Crawler – 1923-24

The tracks were an after market conversion kit for use in hilly and difficult traction conditions.

T10 English Fordson

Engine No 981041. Known as the *green model*. It was the last model with a worm drive differential. Last made in the early 1940's when it was replaced by the Fordson Major. Made in Dagenham, England, UK.

T11 Fiat 703 – 1924

Engine No 72330029. One of the very few Italian tractors of this era. It was purchased new by Mr Reichstein, an Appila, SA farmer. It featured three forward speeds, one reverse. Transmission used pure castor oil. Featured planetary type final drive. Bore 105 mm, stroke 180 mm, rpm 900. Forward speeds 1½, 2¼, 3⅞, reverse 1⅙. Weight 2 tons 19 cwt.

T12 Hart Parr 12.24 – 1927

Engine No 37315. Two cylinder horizontal, motor pressure drip lubricator – used for farming and scrub clearing. Unit was collected from the western side of Flinders Ranges, SA. A stick had penetrated the radiator and it was losing water. The tractor was towed to civilisation and restored. Bore 5¾" stroke 6½" 850 rpm. Pressure drip lubricator.

T13 Cross Engine Case 18-32 – 1926

Engine No 62203. A rugged, reliable, broad acre tractor. This unit in its *hey day* sowed up to 2000 acres a year. This was a farm unit operated by the Groves Bros in the Wallaway area, SA. Bore 4½", stroke 6", 1000 rpm 2.46, 3.48 mph. Weight 6680 lbs.

T14 Benz Sendling Motor Tractor Type S8

Engine No 32763. The world's first commercially produced full fuel injection compression ignition (diesel) tractor. Made in Berlin, Germany in 1925, approximately 30-34 hp at 800 rpm. Paper ignition start. Price ex store in 1926 was £725 (\$1450) – a lot of money. To make starting easier on cold mornings a kerosine tank was fitted by E Schrapel and Son Ltd Tanunda, SA who were the importers. The original owners of the tractor were Reichelts of Laura/Caltowie, SA. During the Depression the heads were removed to prevent the tractor being used as the owner could not make payments for it. Many years later it was sold at a clearing sale and was obtained by a scrap dealer who broke up and sold the engine. For restoration an engine was obtained in Adelaide, SA and another in NSW from which a complete unit was assembled. The air cleaner and exhaust came from Brinkworth, SA. One difficulty years ago was the starting of a diesel on cold mornings, there are quite a few reports of farmers who left the tractor idling all night claiming that the little bit of fuel used more than compensated for not having to try and restart it on a frosty morning.

T15 Allis Chalmers 20-30 – 1925

Engine No 4411. A large hp tractor of this era. Two of these units were purchased from Mr Morgan of Yongola, SA. The best parts of both were used to make one complete unit. A broad acre tractor. It used 108 gallons of kerosene to fallow 120 acres. Bore 3¾", stroke 6½", 930 rpm, 2½ to 3½ mph. Weight 7095 lbs. *A Testimonial:* 'If I were asked to compare the Allis Chalmers with a team of 10-20 horses I would say she stands in about the same relation as a motor car to a buggy and pair.'

T16 Lauson S6 12-25" - 1926

Engine No W1124. An American unit which was one of a few units imported to South Australia. It was the last one displayed in the showroom of Mr Lines of Crystal Brook, SA in the late 1920's. It remained unsold and was put into service on the Lines property. It was fitted with a power driven mower for controlling artichoke weeds. It was last used to drive an electric welder. It was acquired in 1969. It is powered by a Wisconsin Motor Type W and drives through a simple 2 speed 2 crown wheel transmission. It features a constant drive belt pulley (the pulley being in constant motion when the tractor is in operation) and an early example of foot operated independent rear wheel brakes. Bore 4¼", Stroke 5¼", 1200 rpm, 2, 3 mph. Weight 4588 lbs.

T17 Glasgow 1924

Engine No 27389. It has an unusual design and was built in Glasgow, Scotland for use in the peat country. It was used in the Two Wells area, SA. May Bros of Gawler tested this tractor against a cross engine Case but the test proved unsatisfactory. No more were imported. Features 3 wheel drive. 2½, 4¼, reverse 2¾ mph.

T18 Lanz Bulldog HR2 – 1926

Engine No 48402. First Lanz model exported to Australia by Heinrich Lanz. It is hopper cooled. Several came to South Australia but due to our climate were unsuccessful. This unit came from Western Australia where a total of 72 were sold. It has 4 forward gears and 4 reverse. Forward and reverse gears were obtained by running the engine forwards or backwards.

T19 John Deere Model D – 1927

Engine No 57098. Introduced in 1923 the model continued until 1952. One of the few to have had such a long acceptance. *The Waterloo Boy* was the forerunner of the John Deere and was the first tractor to be tested at the Nebraska University Test Services – Nebraska Test No 102, April 1924. Bore 6½", Stroke 7", rpm 800. Speeds 3.45, 3.27. Weight 4260 lbs. Bought at an auction in pieces from a deceased estate at Saddleworth, SA.

T20 Hart Parr 28-50 – 1927

(Australian Special) Engine No 70657. Probably the largest of the Hart Parr tractors. Two 12.24 Hart Parr blocks were mounted side by side with a common crankcase. This tractor was obtained from Robertstown, SA. Total American production of this model is said to be 1200 units. Hart Parr parts were available from A C Pritchard, Wakefield Street, Adelaide, SA in 1951.

T21 McCormick Deering 15-30 – 1927

Engine No TC92018. 4 cylinder 4½" bore, 6" stroke, 1000 rpm. One of the most popular tractors of the steel wheel farming era. Fitted with a gas producer. Could be fitted with pto. Many were converted to rubber tyres. It proved a rugged and reliable unit. Forward speeds 2.3, 2.93, 4.46. Weight 6000 lbs.

T23 HSCS Crawler – 1937

Engine No S771. Model L25 Steel horse. Bore 7½" stroke 9-7/16", two stroke rpm 800. 2 cycle, hot bulb ignition, crude oil fuel, 25 hp, Hoffherr Schrantz, Clayton, Shuttleworth. The HSCS organisation goes back to 1842. Captain Clayton, a ship's captain, in company with Joseph Shuttleworth began the production of steam engines for ships in 1842. Three years later this idea was abandoned in favour of engines for agricultural purposes. By 1920 HSCS had produced the single-cylinder engine with outstanding success for power, reliability and economy. Over 50,000 steel horse tractors were in use by 1950 throughout various countries of the world. This unit came from west of Ceduna, SA and was used for agriculture. 3 forward speeds – 1.75, 2.2, 2.75 reverse 1.75 mph. Weight 7427 lbs.

T24 Lanz Bulldog HR6 – 1933

Engine No 82591. Type 22-38, hp 44 maximum. Two-stage governor 540 and 630 rpm. Used originally at Kybunga, SA when it suffered a rollover in the Clare hills. Later worked near Peterborough, SA.

T25 Lanz Bulldog HR5

T34 McCormick Deering W6

Engine No WBKM20416. Built in the early 1940's. Bore 3⅞", Stroke 5¼" rpm. American built. Delivered on steel wheels due to wartime shortage of rubber. It proved a very reliable unit. A high percentage converted to rubber tyres when they became available. Speeds 2⅜, 3⅜, 4⅞, 14½ forward, reverse 2⅞. Weight 7610 lbs.

T36 McCormick Deering W30 – 1935

Engine No SC 15002 Serial No WB14830. This tractor came into Booleroo Whim, SA in the mid-1930's where it spent most of its working life doing farm work. It was a very rugged, reliable unit on rubber tyres. Bore 4½" x 5" 1160 rpm. Max belt hp 33.26. Max draw bar 24.29 hp.

T37 Hart Parr – 1928

Engine No 33364. Model 18.36 – an Australian special 3-speed. Made in USA. 2-cylinder horizontal dry sump pressure lubricator system. This unit had been fitted with a pto system but parts for mounting were not available. Last used in the Gawler area, SA as an attraction to clients to dine in *The Wheat Sheaf* tea rooms. Bore 6¾" Stroke 7" 800 rpm. These were the first tractors with independent pto.

T38 Lanz Bulldog Model N – 1936

Engine No 130778. Purchased in 1936 on steel wheels. Farmed in the Willochra area, near Quorn, SA pulling a 24-hoe Shearer Combine and later in the Bangor Hills at the back of Murray Town, SA. It was sold in 1970 to drive an air compressor in a quarry near Napperby, SA. 2 cycle 1 cylinder 8.86" bore 10½", stroke 540 rpm. Hot bulb ignition, crude oil fuel, maximum belt hp 40, draw bar 30 hp.

T39 Fordson – 1927

Engine No 65420. Made in Detroit, Michigan, USA. Fitted with special rear wheels made by Tractor Grip Wheel Co, Toledo, Ohio, USA. It was used on Yednalue station, Craddock, SA for cleaning out dams. Its previous history is unknown. Bore 4", stroke 5", 1000 rpm.

T40 Holt M29 – 1924

Engine No 540120. Made in Stockton, California, USA. Information on this odd unit is vague but it is a fairly rare one. Built prior to the formation of the Caterpillar Tractor Co. It came from the Koolunga area, SA before being collected from a garage in Gladstone, SA. 4-cylinder, 4¾" x 6", 3 forward speeds, 1 reverse.

T44 John Deere – 1951 Model D

Engine No 188888. Made by John Deere Tractor Co, Moline, Illinois, USA. Bore 6¾, stroke 7", rpm 900. Forward speeds 2¾, 3¾, 4-3/5 reverse 1¾. Nebraska test no 350 on 22 July 1940. Max belt hp 44.83. Max draw bar hp 40.61. Came from Hamley Bridge area, SA.

T47 Bates Steel Mule – 1924

Engine No 10-15-5. Model F15-22. Made by Leroi Engine Co, Milwaukee, USA. It was used mainly for pulling a scoop to build banks along the River Murray to prevent flooding and also as a belt pulley driving a pump for irrigation of orchards at Mypolonga, SA.

- T48 Lanz Bulldog Model P – 1938
Engine No 136022. Manufactured by Heinrich Lanz of Mannheim, Germany. Rated at 45 hp. Heavy duty unit last used in the Kimba area, SA for ploughing new ground in 1974. Estimated to have worked for 42 years. Single-cylinder 8.86" bore. Stroke 10¼" 630 rpm. Crude oil fuel.
- T49 Cletrac Model F
An unusual tractor because of the *high drive*. This feature was used on Caterpillar earthmoving machinery at a much later date.
- T51 Lanz Bulldog Model L
Engine No 117817. Manufactured by Heinrich Lanz of Mannheim, Germany. Involved in the agricultural area around Rudall, SA. Last used on a tip dray picking stumps. Bore 6-11/16". Stroke 8¾" 850 rpm. Crude oil.
- T52 Fordson Major Half Track – 1949
Engine No 1154280. Used in Waitpinga, Normanville area, SA until the early 1970's but it was badly rusted. Used for grubbing yakkas but track system was unsatisfactory. Estimated tractor had only done a few hundred hours work. Bore 4½", strokes 5", 32.5 max belt hp at 1200 revs.
- T54 Lanz Bulldog Model J – 1938
Engine No 178607. Manufactured by Heinrich Lanz, Mannheim, Germany. Smallest of the Lanz tractors in the collection. It was used in the Lipson area on the west coast of SA for general farm work. It had a swarm of bees in the clutch housing when it was collected. Bore 6-11/16" Stroke 8¼" rpm 510 20 hp 3 forward gears 1 reverse rpm 540.
- T55 McDonald Super Diesel – 1938
Engine No TWB761. Made by A H McDonald & Co who were first registered on 13 August 1903. It was purchased new on 23 November 1938. This unit was obtained from Horsham, Victoria where it was used for farming and contract work. It is fitted with Moore clay wheels to handle heavy, sticky clay. Estimated to have done many thousands of hours work. Hot bulb ignition. Crude oil fuel. Bore 9¼" Stroke 10" hp 36. 535-550 rpm 3 forward speeds 2½, 3¾, 4½ mph.
- T56 John Deere Model D - 1937
Engine No 135554. Spent its life on farm work at Farrell Flat, SA. Model D was produced for 31 years. 2 cylinder 6¾" bore 7" stroke 900 rpm 3 forward gears 2½, 3½, 5. Reverse 2. Weight 5690 lbs.

T57 Caterpillar Twenty

Engine No PL21888. Manufactured by the Caterpillar Tractor Co, Peoria, USA. Last used as a bulldozer at Sherlock in the south east of SA. 3 forward speeds 1.79, 3.07, 4.67 reverse 2.35. Weight 7822 lbs. Bore 4" stroke 5½" Max draw bar hp 25 rpm 1100.

T59 Oliver Hart Parr – 1937

Engine No 803809. Model 18-28. Produced in 1930-1937. First of the 4-cylinder vertical engines built by this company. It is also the last model to retain the name Hart Parr. It was used for farming operations in Warnertown, SA where it was purchased at a clearing sale. Bore 4.125" Stroke 5¼" Weight 3800 lbs.

T60 Deutz Model F2M417 – 1952

Engine No 1379521-22. Manufactured by Kockner, Humbolt, Deutz of Koln, Germany. There were very few of these machines imported into Australia. This unit was used in the Koongawa area on the west coast of SA for farming operations. When it was procured the fuel tank was full of water and the fuel pump rusted up. Two-cylinder engine. Glow plug for starting. Bore 4.7", Stroke 6.7" rpm 1350 5-speed transmission 2.3, 3.6, 4.3, 7.5, 12.4, reverse 1.8 mph. Weight 6600 lbs on 12.75 x 28 tyres.

T61 Lanz Bulldog Crawler – 1936

Made by Heinrich Lanz, Mannheim, Germany. This is a very rare unit, two wrecks were collected from the eastern states and one complete unit was made out of the two. Features a plate clutch and a two range 6-speed transmission. Bore 8.86" Stroke 10¼" rpm 630, hp 45, crude oil fuel.

T62 HSCS G35 – 1952

Engine No VL11360 607. Manufactured by Hoffherr, Schranz, Clayton and Shuttleworth, Budapest, Hungary. Bought new after a field day in the Ceduna area, SA. It was originally used in farming operations and then for scrub clearing. It was collected from a scrub area where a rear tyre fractured and it was abandoned. These tractors were known as the *steel horse*. Single cylinder 2 stroke bore 7½", stroke 9-7/16" Crude oil fuel, hot bulb ignition. 4 forward speeds 2.25, 3, 4, 5¼, 2 reverse 1-2/4, 2¼. 760 rpm. Rated 40 hp belt max.

T63 Lanz Bulldog Model S Deluxe – 1953

Engine No 7656127. Last used in the Clare area, SA for general farming operations. Having a bore of 8.8", stroke 10¼" at 750 rpm made this unit the most powerful of the surface ignition Lanz models. 2-cycle crude oil fuel.

T64 K L Bulldog – 1953

Engine No 3683. Made in Australia to the Lanz Model N pattern by Kelly Lewis and Co. It was soon superseded by the full diesel Lanz range. Australian Tractor test No 12, March 1950. Max belt hp 44, max draw bar 41 hp, 2 cycle 8.86" bore stroke 10.24" 600 rpm. Hot bulb ignition. Crude oil fuel. Forward speeds 2.72, 3.62, 4.84, 7.80, 10.38, 13.80 mph reverse 3.38, 9.8 mph. On 14 x 30 tyres. Weight 8064 pounds

T65 Caterpillar 30 – circa 1930

Engine No PS8896. Built in Peoria, USA. Nebraska test no 104. Used mainly for ploughing in southern Adelaide hills, SA and was later fitted with a home-made bulldozer blade which proved unsatisfactory as the tractor was too highly geared for this work. It was last used in the early 1970's. Bore 3¾" Stroke 6½", rpm 850. Weight 9910 lbs. Caterpillar & Best merged in 1925.

T66 Allis Chalmers Model M – Crawler

Engine No UMA8286K. Manufactured in Milwaukee, Wisconsin, USA in approximately 1933. Last used south of Whyalla SA around 1978 for cleaning out dams and repairing banks. Medium duty tractor during mid-30's to late 40's. Bore 4⅞" Stroke 5" rpm 1200. Max draw bar hp 31.8 4-speed transmission 2.23, 3.20, 4.15, 5.80. Reverse 2.55 at 1200 rpm. Weight 6620 lbs.

T67 Sunshine Massey Harris 44k – 1949

Engine No H260A604. Manufactured by Massey Harris Co Racine, Wisconsin, USA. Tractor bought new and spent its life in Appila area, SA doing general farm work. Bore 3.875" Stroke 5½" 1350 rpm Max draw bar hp 33. 5 forward speeds 2¼, 3½, 4½, 5¾, 12½ mph. Reverse 2¾.

T69 MM Twin City Model UTS

Engine No 544248. Manufactured by Moline Co, Minneapolis, Minnesota, USA. Nebraska test No 311 on 21 November 1938. Used for general farm work in the Tarcowie area, SA. Bore 4¼" Stroke 5" 1275 rpm. Draw bar hp 33.5. Forward gears 2.7, 3.5, 4.7, 6.2, 20.2 mph. Reverse 1.3.

T70 Case C – 1936

Engine No C3109331. Manufactured by J I Case, Racine, Wisconsin, USA. This engine came from Kangaroo Island, SA where it was used as a farm unit. Bore $3\frac{3}{8}$ " Stroke $5\frac{1}{2}$ " Max Draw bar hp 21.41. 1100 rpm 3 forward gears 2.3, 3.28, 4.50. 1 reverse 2.6.

T72 Lloyd Model 25-33 – 1949

Engine No 4V1-320-9491. Made by Vivian Lloyd & Co Ltd, Camberly, Surrey, England. V4-95. Mark 1. Turner Diesel engine. 33 hp at 155 rpm. Built using many Bren Gun Carrier parts. Bore $3\frac{3}{4}$ " Stroke $4\frac{1}{2}$ " Diesel fuel. Ford differential and brakes used which caused very poor steering as track pins are too light and kept breaking. 4 forward speeds . 95, 1.9, 3.5, 6. Reverse .75 mph.

T73 Chamberlain 40K

Engine No 292. Manufactured in 1950 by Chamberlain Industries, Welshpool, WA. 40 hp. Petrol kero. Bore $6\frac{1}{8}$ ", stroke $6\frac{1}{4}$ ", rpm 1200. Side valve. 9 forward gears, 3 reverse. After World War II Government approved Harry Chamberlain of Australia Ball Bearing Co to produce a heavy-duty tractor for Australian conditions. The 40K was the result. A Munitions factory at Welshpool, WA was acquired from the Government after the war where the Chamberlain tractors were made. This is one of the early units made at this factory.

T74 McDonald & Co Ltd Tractor Roller

Engine No FH409. Built in 1936 and powered by an RD type engine – diesel with brons type injector. Distillate fuel. Used in Port Pirie area, SA for laying bitumen, footpaths and tennis courts and other light rolling work. Bore $5\frac{1}{2}$ " Stroke 7".

T75 Fowler Internal Combustion Ploughing Traction Engine

50 bhp built in 1912. From a batch of only 6 produced 2 were shipped to Australia. In April 1927 contract 656 was let to Edgar S Horwood to build the reservoir at Wilgena. In December that year a creditors' meeting was held and on 20 January goods unsold were offered to the railways. These good may have included the Fowler engine now in our possession awaiting restoration.

T77 Caterpillar '45' Tractor

Tractor No 21138-20566-30130 Made by the Holt Manufacturing Co of Stockton, California, USA. Type 'H' HP 45 at 600 rpm. Bore 6", stroke 7". Shipped to Australia in the sailing ship *Renown*. The tractor was originally purchased in 1922 by Carl Borgas Snr of Appila, SA. It was used on the family farm pulling 3 ploughs doing 100 acres in 34 hours and using 3-4 gallons per hour at the cost of 4/4 (43c) per acre. Mr Borgas also made a hitch which pulled 2 harvesters at one time. From here it went to Miller's Creek Station and was last used in 1938 when its fuel consumption was 20 gallons to travel 20 miles pulling a boring plant, a Fordson tractor, a model T Ford truck and a caravan. The restoration was the project for our 1994 Rally

T78 Massey Harris 744D – 1951

Engine No 16587. Made with Perkins P6 in a factory in Kilmarnock, Scotland. 3½" bore, 5" stroke, 1350 rpm, pto 534 pm, rated drawbar hp 28.0. Speeds 2¼, 3¼, 4½, 5¾, 12 mph. Turning radius 10' 7".

T79 Chamberlain 6G No DM649

Manufactured by Chamberlain Industries, Welshpool, WA. Perkins L4 motor. Bore 4¼", stroke 4¾" Compression 16-1 269.5 cub ins. Max Eng HP 62 @ 2000 rpm. pto 55 hp @ 2000 rpm. Weight 9365 lbs on 7.50 x 18 front, 18.4 x 28 rear with 6 forward and 2 reverse gears.

T82 Fordson Major

Engine No 1154360 This is powered by petrol/kero. It has power take off. A side pulley starter motor, generator, lights with 3 forward and 1 reverse gear. 1200 rpm.

T85 Ransome Crawler

Small and versatile, designed for use in market gardens.

T89 Mullins Sunshine Auto Header Conversion

Engine No 29794. These headers were released in 1924 using Fordson Engines. During the 1930's the Wisconsin Engines were introduced. Wisconsin 4-cylinder petrol kero motor. Bore 4½", stroke 5", 3-speed gearbox with reverse in each gear. Rack and pinion steering. Sunshine *Buy Australian Goods* – these uncomfortable seats were used by thousands of farmers during the 1920-40 period. The drive wheels are Mullins steel to pneumatic conversion. Front wheels are axle from McCormick W30 tractor. The Sunshine Auto Header was discontinued during the early 1940's after 1356 units had been made.

- T90 David Brown Cropmaster
- T92 Allis Chalmers Model U
Number U22270
- T93 Caterpillar TEN
Smallest crawler made by Caterpillar. 1929 Model.
- T96 Caterpillar 2 TON
- T97 Caterpillar Twenty-two
- T98 Field Marshall
Used for farming on the Willowie plain, SA and later for rabbit warren ripping at Johnburgh, SA.
- T104 Massey Harris 44K
Features an early linkage system.
- T105 Allis Chalmers Model B 1939
One of the many thousands of this popular tractor produced over a 20 year period in the USA. Later models were modernised with foot brakes and electric lights and starting.
- T106 Caterpillar D24U
Quite a popular tractor in the area in the 40's and 50's. Smallest diesel tractor produced by Caterpillar. This one was used in the Tarcowie district, SA. It is in original condition.
- T107 Ferguson TED
An example of the famous 'Grey Fergie'. This has a petrol/kerosene engine.
- T109 Newman WD2
An English tractor made post-war for use on small farms. It was never very successful as it was underpowered and expensive compared to opposition models.

VEHICLE EXHIBITS

V1 Ford 'T' Truck – 1918

Engine No C180234. One of the first Ford trucks to come to Australia it was soon followed by thousands more. It features solid rubber tyres which were standard for commercial vehicles. This vehicle was originally purchased by Wiesner and Co of Eudunda, SA. This firm sold furniture, hardware, household goods and general merchandise. It was obtained in almost original condition.

V2 International Truck – Model F

Engine No 17678. Made in 1920 an unusual feature is the radiator which is mounted behind the engine. In common with many trucks of the era it has solid rubber tyres and no cab.

V3 Chevrolet 1 ton Truck

Engine No 346709. Built in 1926. Apparently the original owner was a gentleman from Glenelg, SA. Whilst in Quorn, SA the vehicle broke down and was taken to the local garage where he left it with instructions 'to fix it up'. Upon collection the price of repairs was deemed to exceed the value of the vehicle and so it was left abandoned at the garage for many years. The truck was eventually purchased by a farmer who lived between Quorn and Wilmington where it was used as a general run around *hack* vehicle. To restore the unit to its original condition body parts found in the Georgetown rubbish dump were used.

V5 V Dub

Powered by a Victorian Railways Service Trolley Engine. It was used for servicing the Victorian Railway system. Complete with all accessories, including electric start – known in SA Railways as *Casey Jones*.

V14 Butcher's Cart

Built by Dignans of Wilmington, SA in 1919 and was used from then until 1924 delivering bread and meat twice weekly to Melrose, Booleroo Centre and Murray Town by the late Fred Blieschke. The bread was baked by Muldoons of Melrose and Edwards of Wilmington. The heaviest bullock slaughtered dressed at 1100 pounds. The gallows in Melrose was still standing in 1980.

- V19 Caldwell Vale Tractor/Truck
Built in 1910. Has a 5½" bore 6½" stroke. The petrol motor has dual spark plugs, dual oiling systems. There is mechanical power steering with 4 equal-sized wheels which are pulled along the load. It was reported in *The Advertiser* on 29 April 1911, 'The Caldwell pulled 30 tons of sand along Henley Beach Road and up the steep hill at Mile End up to West Terrace.'
- V21 Bedford Truck
An example of the size of the truck found on farms in the 1950's.
- V22 Lister Auto Truck
This unit was used in the fruit and vegetable wholesale markets in Adelaide to pull trailers. It is very manoeuvrable in small spaces.
- V24 McDonald Tandem Road Roller
McDonald 'Imperial' type JW#678J of 1927. Thought to have been used by the Department of Marine & Harbours for rolling asphalt on piers. On loan from the National Motor Museum, Birdwood, SA.

STATIONARY ENGINES

- E2 Meters
8-9 hp @ 275 rpm, 6¾" bore, 6⅞" stroke. Vertical tank cooled. Made in Adelaide, SA 1910-1912. Engine came from the Gibbs family of Carrieton, SA where it had spent most of its life on a boring plant.
- E3 Hired Hand
Engine No 155798. 2¼ hp, 4" bore, 5" stroke. Horizontal air cooled. Made in Waterloo, Iowa USA by Associated Manufacturing. Engine was used to power workshop plant.
- E4 International
Engine No 31539. 3 hp @ 600 rpm. Model B Type M. Horizontal hopper cooled. Year of manufacture 1919. Used on Sid Arthur's farm at Morchard, SA driving a milking machine.

- E5 International
Engine No 19707. 6 hp Model C Type M. Year of manufacture was 1920.
Used to drive a chaff cutter at Murray Twigden's farm, Tarcowie, SA.
- E6 International
Engine No 1828 10 hp 425 rpm Model D Type M Made in USA in 1920.
Used on a chaff cutter.
- E7 Petter Junior
Engine No 71712 5 hp A notable feature is that this engine is a 2-stroke.
It was first used in 1927 on a chaff cutter, then on a milking machine at the
Koch farm, Morchard, SA.
- E8 Anglo
Engine No 22755. 5-7 hp @ 400 rpm 6½" bore 9" stroke. Horizontal tank
cooled. Manufactured circa 1912 by Petter, England. A blow lamp is used
for starting, fuel used was either kerosene or crude oil. This engine spent
most of its working life driving a saw bench at Wirrabara forest, SA for the
Jenner brothers. When they first purchased the engine the advice
received from locals was that it would not be any good for the job they
wanted it for. After heeding this advice for many years they finally installed
it on their saw bench where it worked very effectively and efficiently so
they regretted not having installed it earlier.
- E10 Hornsby Akroyd
Engine No 9506 3½" hp 7" bore 14" stroke Horizontal tank cooled.
Manufactured in England prior to 1900. Fuel injected into the hot bulb
during the intake stroke. A blow lamp is used for starting. This engine
was installed in a Chinese garden at Wirrabara forest, SA in 1900 and was
used to pump water out of the Ippanichi creek.
- E11 Lauson
- E12 Challenge
Engine No 20360 3 hp Horizontal hopper cooled. Manufactured in
Batavia, Illinois, USA. This unit was acquired from Mr Schumacher,
Mypolonga, SA in a sad state – it was missing oilers, magneto, fuel tank
and also other parts. It has been converted to high tension magneto from
a chain drive. It is mounted on a home made transport.

E14 Buzzacott

This is now used for driving a lathe in the blacksmith shop.

E15 International

Engine No B2667E 8 hp @ 310 rpm 6" bore 10" stroke Horizontal tank cooled. Ignition produced by a low tension battery start then switched to a friction driven dynamo on the flywheel. Fitted with Auto Sparker Dynamo made by Mostinger Device Manufacturing Co. Originally had a hit and miss governor and this has been converted to throttle governing as well as to kerosene operation. Factory parts used to carry out this conversion were from original parts on hand.

E16 International

Engine No 42765 3 hp 600 rpm Horizontal hopper cooled. Model B.

E17 Bagshaw

Engine No 1528 Model OFG Manufactured in Adelaide, SA. Horizontal hopper cooled. Bought new, together with a chaff cutter by the late Ted McMartin in 1923. When purchased for restoration the magneto was found to be unserviceable and a substitute has been fitted.

E18 Westinghouse

8 hp 5½" bore 14" stroke. Horizontal tank cooled. Used to power a chaff cutter and wood saw on original transport.

E19 International

Engine No S860E. 4 hp @ 400 rpm 5" bore 7½" stroke. Horizontal tank cooled. The Whitehead family of Quorn, SA bought this new unit and another identical to this, one serial number apart to use on a shearing plant. Ignition produced by a Webster tri-polar low-tension magneto. On its original transport.

E20 New Way

Engine No 11586 3½ hp @ 450 rpm. Vertical air cooled. Model A, type C. Made in 1917 in Lansing, Michigan, USA. Purchased by the late A E H Knauerhase from Horwoods on 30 April 1917 for £33 (\$66).

E21 Fuller & Johnson

Engine No 44560 Farm pump engine. Vertical air cooled. Manufactured circa 1917 in Madison, Wisconsin, USA. This engine spent most of its life pumping water south of Melrose, SA on the late Frank Fuller's farm.

E22 Bagshaw

Engine No 300 Model OA. Horizontal tank cooled. Manufactured in Adelaide, SA. Engine was used to power a saw bench. Before the engine arrived the saw was driven by jacking the back axle on the 'Rugby' and running the belt around the wheel that was off the ground.

E23 Hornsby

Engine No 43507 6 hp @ 500 rpm 5½" bore 7½" stroke. Manufactured in England by R Hornsby & Sons Ltd, Grantham & Stockport. Cooling system tank and pump with screen. Used to drive Walter Slee's shearing machines at Wilmington, SA until about 1967.

E25 Foos

Engine No 29835 6 hp @ 370 rpm. Manufactured circa 1918 in Springfield, USA. Horizontal tank cooled, engine and tank mounted on common cast iron base. Used to power a chaff cutter.

E27 Chore Bore

Engine No 34611 2¾ hp Model *Chore Boy*. Horizontal air cooled. Manufactured by Associated Manufacturers Co, Waterloo, Iowa, USA. First used to power a mincing machine for a butcher in Peterborough, SA. Later used as a power plant on a farm for cleaning wheat, etc.

E28 Lauson

Engine No 19151 6 hp @ 350 rpm 5½" bore 8¾" stroke. Type 1 size BC. Manufactured by John Lauson Manufacturing Co established 1879 in New Holstein, Wisconsin, USA. Horizontal tank cooled. Features low tension. Sumter magneto, shipping weight 1800 lbs.

E30 International

Engine No JA3263E 6 hp @ 350 rpm 5½" bore 8¾" stroke Model *Famous* manufactured in Chicago, USA. Horizontal tank cooled with water pump and sieve to aid cooling. Believed to have been bought second hand in 1912. Used as a contract chaff cutter and corn crusher.

E31 Lewis

Engine No 1159 Vertical tank cooled. Features include enclosed alloy crankcase. Ignition obtained by battery start on one spark plug. Once going it was switched to dynamo magneto on the other plug. It has been converted to high tension magneto with chain drive. Bought by Charlie Borgas in 1908 and sold to Winneke brothers in 1912. Vic Winneke sold the farm to Brian Arthur in the late 1960's and the engine remained on the farm.

E32 Hercules

Engine No 275720 7 hp @ 375 rpm Manufactured in Evansville, Indiana, USA. Horizontal hopper cooled. Original low-tension magneto has been converted to high-tension chain-driven magneto.

E34 Sundial

Engine No 7368 2 hp @ 600 rpm Type B Horizontal hopper cooled. Manufactured by Sunshine, Victoria.

E36 Lister

Engine No 9204 2 hp @ 1000 rpm Type DH3 Vertical tank cooled. Features a Lucas magneto. Used on a lighting plant at Mambray Creek, SA.

E38 Allan

Manufactured by Allan Bros of Aberdeen, Scotland. Features hot tube ignition, horizontal tank cooled.

E39 Novo

8 hp 6½" bore 7½" stroke. Vertical hopper cooled. Manufactured in Lansing, Michigan, USA. Fitted with a Fellows rotary high-tension magneto. Has a jacket around the fuel bowl, probably for use in arctic climates. Uses a throttle-type governor and still has evidence of the hit and miss type governor used on earlier models. Originated from the Mannum area, SA. It is missing its brass ID plate.

E41 Hornsby

Engine No 26681 7½ hp Horizontal tank cooled. Manufactured in England.

- E42 Fuller & Johnston
Engine No 7494 5 hp @ 375 rpm Manufactured in Madison, Wisconsin, USA. Horizontal hopper cooled. Came off Tarcowie Creek, SA where it was used to pump water. Originally owned by the Kaehne family it required many hours of restoration. It still has the original old-style low tension magneto.
- E46 Bagshaw
Engine No 1218 2½ hp Model OA Horizontal tank cooled. Manufactured in Adelaide, SA.
- E47 International
Engine No S941E 4 hp @ 400 rpm. Horizontal tank cooled. Acquired from the late C Stacy, Quorn, SA.
- E49 Galloway
Engine No 41504 4 hp Horizontal hopper cooled. Manufactured by W M Galloway Co in Waterloo, Iowa, USA.
- E52 Hornsby
Engine No 27138 7½ hp Horizontal tank cooled. On transport.
- E54 Fuller & Johnson
Engine No 70469 3 hp @ 475 rpm Features a low tension rotary magneto. Purchased for restoration from the Turner property near Pt Neill, SA. It was badly rusted as it had been sitting in the corner of a super shed for many years.
- E55 Olds
Engine No B10214 6 hp Model No 4 Type A Horizontal tank cooled. Probably installed to drive a chaff cutter on a local farm in the early 1900's.
- E56 Olds
Engine No D6089 8 hp Model No 5 type A Horizontal tank cooled. Previous owner, Andy Brown, used it to drive a chaff cutter. Originally fitted with a trembler coil ignition and power was taken from a Nife alcohol battery.

E59 Blackstone

Engine No 58014 14 hp Horizontal tank cooled. Manufactured in Stamford, England. Features lamp start. Previous owners, the late Dominic and John McConville purchased this unit second hand in 1910 along with a large industrial chaff cutter from a large chaff mill in Port Pirie, SA. It was on the McConville property which was sold in 1955.

E63 Clutterbuck

Engine No 975 8 hp Horizontal tank cooled. Manufactured in Adelaide, SA. Engine originated from the Blieschke family of Melrose, SA where it was used to power a chaff cutter. It was found in working condition and required very little restoration work.

E64 New Way

Engine No 3215 4½ hp @ 450 rpm Model E, Type C. Vertical air cooled. Manufactured in Lansing, Michigan, USA.

E65 Lister

Engine No 11669A3 3½ hp @ 650 rpm Model A Manufactured in England. This engine was used to power a 32-volt plant in Bill Menz's garage in Wirrabara, SA before the advent of 240 volt power to the township.

E66 Fuller & Johnston

Engine No 53522 6 hp @ 375 rpm Horizontal hopper cooled. Manufactured by Madison, Wisconsin, USA.

E67 Fuller & Johnston

Engine No 19707 2½ hp 450 rpm Horizontal hopper cooled.

E68 Sundial

Engine No 1101 4 hp @ 600 rpm Type A Horizontal hopper cooled. Engine used for pumping water on Taplin's property, Melrose, SA.

E71 Blackstone

Engine No 56200 6½ hp Horizontal tank cooled. The factory order book records it was tested on 15 November 1906. The engine is on the original transport and was used to pump water from a reservoir near Quorn, SA. It was replaced by an electric pump and sold to D Paynter of Arden Vale who used it to saw wood until about 1973.

E74 United

2½ hp Horizontal hopper cooled. Manufactured in Waterloo, Iowa, USA. The engine came from a derelict farm in the Adelaide Hills, SA and had been sitting in the open for many years. It was brought home on the back of a truck and restored to running condition while still on the truck. The engine jumps around a lot and it is thought to have the timing slightly out, however it starts easily.

E76 Sendling

Engine No 89717 Type DM. Horizontal hopper cooled. The engine was purchased from a station near White Cliffs, NSW where it had been used to power a 4-stand shearing shed. The engine had trouble with its cooling system and as it constantly over-heated the station owners decided to discard it. It was collected as a complete unit and brought to South Australia on the back of an XB Falcon ute in the mid-70's. Restoration included a new set of rings, repairing the little end bearing on the conrod, fixing the injector and giving it a coat of paint.

E82 Ruston Hornsby

Engine No 150600 38 hp Model 7H Manufactured in Lincoln, England circa 1928. Horizontal tank cooled. Despatched from the factory to Melbourne, Vic on 11 July 1928.

E83 Olds

Engine No B5356 6 hp Model No 4 Type A Horizontal tank cooled.

- E85 Clutterbuck
Engine No 829 6½ hp Horizontal tank cooled. Manufactured in Gawler, SA under licence to Blackstone. This unit was purchased new in 1926 for £184 (\$368) by the late Ern Mattner of Canowie Belt. The engine was used to power a chaff cutter. It was last used in 1958 and restored to its current condition in 1975 using all original parts.
- E86 Perry
Made by Perry Engineering in SA.
- E91 Sundex 1922-26
Engine No 481 4 hp Type B Horizontal hopper cooled. Manufactured circa 1924 by Sunshine, Victoria.
- E92 Lister
Engine No 46736 7 hp @ 400 rpm Type P spec 81P. Manufactured in 1930 at Dursley, England. Features a high tension trip magneto.
- E93 Lister
Engine No 245685 3 hp @ 600 rpm Model A. Used on a shearing plant.
- E96 Ronaldson Tippett
Engine No 33606 3½ hp @ 900 rpm Model CH Diesel engine made in Ballarat, Vic displayed driving a southern cross pump.
- E100 Lister
Engine No C577505 6 hp @ 650 rpm Model 5/1/35 Vertical tank cooled. Last used to drive a milking plant and a 32-volt generator on the Becker farm near Caltowie, SA.
- E106 Illman
Engine purchased new in the early 1900's from Illman Bros blacksmiths at Balaklava, SA. Used to power a chaff cutter and corn crusher. It had no crank handle facility and was started by pulling the flat belt to machine.

E113 Foos

Engine No 29832 8 hp @ 370 rpm Manufactured in Springfield, Ohio, USA. Horizontal tank cooled. Purchased new by the late Clarrie Phillis, Morchard, SA. This engine and E25 are only two serial numbers apart.

E114 Foos

Engine No 29566 15 hp @ 270 rpm Manufactured in Springfield, Ohio, USA. Horizontal tank cooled. This engine was used to power one of the two flour mills in Quorn, SA (the other flour mill was powered by steam and you can see the con rod and governor fly balls on the stand at the eastern entrance). It was sold on the closing of the mill and dismantled. It was then donated in a dismantled state having not been used in the interim. During restoration a very hard white shale-like substance was found to be blocking the water jacket – it was flour. An unusual feature is that the counterweights are not cast into the flywheels as they are commonly but are rather on two large discs set on the crank.

E118 Columbus

Engine No 6326 6 hp @ 275 rpm Manufactured by Columbus Machine Co, Ohio, USA. Patented 10 February 1902. Last used to power the shearing plant at Corunna station, Iron Knob, SA.

E119 Pump Jack Engine

Engine No 10023 Made by Fuller and Johnson Pump Jacks, USA.

E126 Jelbart Engine

This is Australian made.

E141 Pump Engine

Used for pumping water. The flywheels were cast in Australia to save shipping costs. They often had the name of the local distributor in the casting.

E142 Moffatt Virtue

3 hp

E143 Cooper

3 hp A grinding machine used for breaking up feed for animals.

E177 Blackstone

6½ hp This was used in the Eureka Foundry, Booleroo Centre, SA.

E178 Lister

5 hp Believed to have been used in the Horwood Bagshaw factory to test run machinery.

THE BIG ENGINES

BE1 Blackstone

Engine No 123545 Type RCG 115 hp @ 195 rpm Bore 18" Stroke 24"
Features include air blast injection and hot bulb ignition. It was tested by the factory on 4 January 1917 before being exported to Clutterbuck Brothers of Adelaide, SA. It was used to pump water at Mypolonga Pumping Station, SA. The last time it was used was during the 1956 floods where it was driving two centrifugal pumps of approximately 18" diameter.

BE2 Mirrlees

Engine No 35392 375 bhp 356 kva @ 600 rpm Mark 2TL8. Manufactured by Mirrlees Bickerton & Day Ltd of Stockport, England. It was originally used for power generation on the Snowy Mountains scheme, NSW. In the late 1950's it was taken to Oraparinna Mine in the Flinders Ranges, SA to power underground machinery.

BE3 Benz

Estimated 125 hp @ 300 rpm featuring a very high torque output. Manufactured in Germany. Reputed to be an ex WWI 'U' boat engine. Imported by Schrapels of Tanunda, SA. Between the late 1920's to the late 1940's it was used to power the Laura Flour Mill, SA. Dismantled and rebuilt by Society members between 1977-87.

MACHINERY

- M1 Corn Grinder
Made by R Hunt & Co, England. Used to grind wheat into flour.
- M3 Patent Safety Horse Gear
Horse-operated power unit featuring enclosed epicyclic transmission. Made by Barrett Exall & Andrews, Reading, UK. It was found in the Wallaway district, SA.
- M4 Illman Powered Winnower
Unit was purchased new in 1928 by the late Bert Chandler of Ceduna, SA. He used it for many years and did a lot of contract cleaning. In its day it was one of the most advanced in the Murat Bay district.
- M5 Shearer Stripper
Manufactured by J & D Shearer in 1901. It was used in the Quorn district, SA for many years. It has a comb width of 4' 6".
- M6 Rabbeo Rabbit Destroyer
Used for fumigating rabbit burrows. Made and patented by M Redden, Pekina, SA. Bought at auction in the Snowtown area, SA.
- M7 Paternosters Little Gem
Windmill with variable pitch fan. Made in Salisbury, SA.
- M8 Seed Sower
Made by an unknown manufacturer, it features a wooden hopper on a cast iron base. It was used on the Nottle farm at Booleroo Centre, SA in the early days.
- M9 May Harvester
This was used on a farm at Eurelia, SA for many years.
- M10 McCormick Harvester
Recovered from Quorn district, SA. This machine has a comb width of 5'.
- M11 H.V McKay Harvester

M12 E W Ross Clover Cutter

A unique chaff cutter design fitted with bar type cutting blades.

M13 Adriance Platt Side Delivery Mower

Manufactured in the late 1800's this mower was collected from a property east of Orroroo, SA. It had been used in the period of the wheat boom before the turn of the century. When it was collected it was parked in the corner of the paddock where it had been used last. It was in a sorry state with all the wood having completely rotted away leaving the metal parts sitting as they would have been on a complete unit.

M14 Table Top Trolley

Made by Wiltshire & Co, Blyth, SA.

M15 International Combine

This machine spreads seed from 10 outlets in front of cultivating tynes. It was an early approach to our present day combine.

M16 Hawke Seed Sower

Made in Kapunda, SA. It was driven by chain from the wheel of a dray.

M17 Drake Screen

Used to remove drake seed from wheat samples in the early days.

M18 Baker Cultivator

This has 21 tynes with a cutting width of 9'. An outstanding feature of this machine is that is equipped with 'knock on' shares which is a more recent innovation to modern farming.

M19 Whim: Horse wheel

The maker's name and year of manufacture are unknown. It was shown on a survey map from 18 February 1879 as being worth £20 (\$40). This machine was buried at Whim Park, Bruce, SA for about 50 years with only the cross bar showing above the ground. It was buried prior to the 1921 flood.

M20 Daddy Dry Wheat Pickler

Made by Alf Hannaford, Woodville, SA.

M21 Gilchrist Dry Pickler

Known as the 'Tumbling Tommy'. Made by H Thompson & Son, Adelaide, SA.

- M22 Robinson Windmill
Made in Booleroo Centre, SA at the local foundry.
- M23 Horwood Bagshaw Stripper
Purchased in approximately 1935 by the late E C Roocke who used it with a horse team until it was replaced by a header. It is in original condition except for a coat of paint.
- M24 Mower – E Samuelson & Co
Used on the Heaslip property, Glenroy, SA about 1880 when farming was booming in the Carrieton district. It was later used to mow spear grass to cut paths through to water for the sheep during good seasons.
- M25 Sacktruck
Manufactured by H V McKay, Sunshine, Victoria.
- M26 Bishop's Wheat Pickler – Wet
Manufactured by Perrin Co Pty Ltd, Melbourne, Victoria.
- M27 Bentalls CSB
Hand-operated chaff cutter. Bentall's improved Haybridge, Maldon, England.
- M28 Bone Crusher
Turns old bones into fertiliser or calcium for the chickens.
- M29 Sand Tyres
Used by the late Bill Jacobs on his sack truck.
- M30 Wooden Piping
Many, many miles of this was used on Mutooroo station, SA. Pre-cut and easily transported it was assembled on site. The timber was formed into a pipe and tightly bound by wire before applying a layer of tar and hessian. Devastating bushfires later destroyed miles of it and it was never replaced.
- M31 Windmill
Manufactured by C E Blesing, Jamestown, SA.
- M32 Wilson Dry Wheat Pickler
Made in Western Australia.

M34 International Single-furrow Walking Plough

M35 Koerstz Woolpress

Manually operated *man killer* woolpress. Replaced by powered hydraulic press.

M36 Berg Rim Tool

Used for changing tyres.

M37 Melotte Separator

Used on the Michael farm, Quorn, SA to separate the cream from the milk. The cream was stored on the farm before being transported to the Orroroo butter factory by train twice a week.

M38 Acetylene Producer

Used for lighting the Yandiah Hall, SA.

M40 Copper

Manufactured by Robinson Eureka Foundry, Booleroo Centre, SA. Used for heating water in the early days.

M41 Britstand Roto Scoop

Also known as the *Tumbling Tommy*. Scoops of this type were used in the 1950's to level the town oval in Booleroo Centre, SA

M42 2-Furrow Plough

Three horses were needed to pull this plough.

M43 Bishop Dry Wheat Pickler

One of several types of machine used to *pickle* wheat in the early days. Pickling is the seed treatment carried out prior to sowing to prevent various fungal diseases of growing wheat.

M44 May Bros Seed Broadcaster

Mounted on a dray and driven with a chain from the wheel. Note the driving mechanism beside the exhibit.

M45 Wind Devil

This is an arrangement used to pump water near Milang, SA in the early days. These mills worked with wind from one direction.

M46 Bentall's Corn and Seed Crusher

Made in Haybridge, Maldon, England.

M47 Bagshaw Hand Winnower

Used to separate wheat from chaff after it was reaped by stripper.

M48 Hand operated Cutter

Used to cut chaff or green feed by hand.

M49 Wheatley Hand Winnower

Built at Kapunda, SA.

M50 Stott Two-Furrow Plough

Manufactured at Booleroo Centre, SA in the late 1880's.

M51 Bag Filler and Tester

Screw type bag filler fitted inside the bag to compact the wheat so the maximum amount of grain could fit into each bag. The small funnel was used to pierce the side of the bag to let a small sample of grain out to ascertain quality.

M52 Bagshaw's Duplex Threshing Header

Made by J S Bagshaw for threshing sheaves of wheat.

M53 Crop Lifters

Used when reaping, it was very handy when wind, etc had pushed the crop too low.

M54 Stone Rake

For those with stones this was a real saver.

M55 Grease Pump

For use with a Caterpillar tractor.

M56 Ship's Bilge Pump

Used to pump water for washing wool on a soldier settler property near Spring Creek, SA.

M57 Horse Drawn Grader

M58 Hand operated Pumps

M59 Hand operated Pumps

M60 Hand operated Pumps
Manufactured by Giant.

M61 Hornsby Mower – single wheel

M62 Hornsby Mower – dual wheel

M63 Sunshine Mower

M64 Draught Horse Harness and Collars

M65 Grindstone
Used for grain crushing.

M66 Bag Fillers
Used to maximise the amount of grain fitted into each bag.

M67 Chain Mud Grips

M68 Fortescues 1 x 2 Windmill
Made by Arncliffe, Sydney, NSW.

M69 Charles Burrel & Co Corn Crusher

M70 Jansen Bros Stripper
Manufactured and used in Eudunda area, SA.

M71 International Hay Baler – hand tie
Similar to the model used on the McCallum farm in the 1950's.

M72 Cross Cut Saw

M73 Wooden Belt Pulleys

M74 Horsehair Teaser
Manufactured by Rueben Sutcliff. Used in Orroroo Blacksmith Shop, SA.

M75 Drag Saw

Used in the Adelaide hills area, SA.

M76 Alston Aqua Windmill

Made by Premier Machinery Co.

M77 Linke Noak Scoop

M78 Windmill – Iron Turbine

M79 Fowler Scoop

This was built to Eyth patents for Australian conditions and was used on Nonning Station, SA where it built dams and other earthworks. It operates between two steam Ploughing Engines which haul it back and forth by means of cable winches. It was restored for the 1993 Rally.

M80 Corn Crusher

Manufactured by US Wind & Pump Co, Batavia, Illionis, USA. Mounted with Challenge engine.

M81 Fowler Water Tender

Used to carry water, wood and other necessities for ploughing engines operating in remote areas.

M82 Fowler Scarifier

One of the implements used with the steam ploughing engines operating in remote areas.

M83 Alston Windmill

Made by H C Richards, Adelaide, SA.

M84 Mellor Direct Action Windmill

Purchased in 1885 by the Mills family, Kanmantoo, SA.

M85 Swing Saw

Briggs and Stratton. The original engine was a BSA.

M86 Reciprocating Cream Pump

Used in a butter factory.

M87 Sunshine Binder

6' width. Donated in original condition after being stored in the shed for many years.

M88 Buzzacot Centrifugal Pump

M89 Southern Cross Pump

Displayed with Ronaldson and Tippett engine.

M90 Wooden Winch Wheel

Used in a warehouse in Port Adelaide, SA in the 19th Century.

M91 Scale Model of Whim

Set up over a well. The cables wrapped around the drum raised and lowered the water buckets. It was horse powered.

M92 Well Bucket

Original well bucket from Booleroo Whim, SA.

M93 Well Bucket

M94 Fence Wire Strainer – Horseshoe style

M95 Bagged Barley Stamp

Each barley district was allocated a code that had to be stamped on each bag of barley. Apparently the initials BC were used somewhere in the southeast and so Booleroo district was BD followed by numbers which identified the grower.

M96 Garden Cultivator

M97 Sacktruck

M98 Lawnmower

M99 World's Best Grinding Mill

Used for grinding grain for animal feed.

M100 Chaff Tools

Used for handling chaff.

M101 Sacktrack

M102 Choke Cutter

Used for removing chokes in stripper and header combs caused by sticks and weeds.

M103 Perkins Bag Loader

M104 Bagshaw Roller Mill

Used to roll grain to aid animal digestability.

M105 Bag Loader Collection

Various ideas to make lifting bags of grain easier.

M106 Home made Lathe

Having more time than money a farmer/engineer in the district made his own.

M130 Harrow Collection

In the early day blacksmiths in each town had his own pattern of harrow resulting in many different types.

M131 Sunshine Auto Header

In its time this Australian designed and built header was one of the most advanced units in the world – reaping and threshing the crop as well as being self-propelled.

M132 Rabbit Fumigator

GENERAL SECTION

G1 Share Display

Collection of implement shares, various foundries listed on the share wherever possible.

G2 Jack Display

Collection of mechanical jacks.

G3 Tractor Wheel Grips

Display of tractor wheel grips which have known information written on the individual grips.

- G4 Seed Drill Ends
Collection of ends from early drills which show the variety in manufacturing. Also contained in the collection are some windmill counter weights and a footplate from an early stripper.
- G5 Implement Seat Display
- G6 Manufacturers' Name Plates
- G7 Old Spanners *Knuckle Skinners*
Collection of spanners well known for skinning knuckles!
- G8 Cranking handles
- G9 Enamel signs
- G10 Tank Lids
Collection of lids that fit the riveted tanks brought by early immigrants to store their goods en route. Upon arrival in Australia the tanks were commonly used for water storage. A riveted tank is also on display.
- G11 Buggy Steps Display
Collection showing the skill of early blacksmithing.
- G12 Bottle Collection
- G15 Magnetos
Individual magnetos include information of what they were used on.
- G19 Fireplace Backing
Manufactured by Robinson and Foot of Booleroo Centre, SA.
- G21 Penny Farthing
This is in memory of the years when BSTPS hosted the State Penny Farthing Championships.

G22 Petrol Cases and Oil Tins

This varied collection shows some petroleum companies who are no longer in existence.

BLACKSMITH AND MACHINERY WORKSHOP

The family of Walter Gum donated a home made lathe put together from a combination of a header, combine, seed drill, etc. It is displayed in its original working order. There is also a home-made belt-driven drill made from Horwood Bagshaw super spreader parts as well as a blacksmith's forge, associated equipment and an assortment of blacksmith's tools. The blacksmith shop was opened at the 2002 Rally.

BSTPS OFFICIALS 2011/2012

President			Ian McCallum
Vice President			Colin Becker
Secretary/Treasurer			Betty Sparre
Assistant Secretary			Malcolm Sparre
Registrar of Units			David Macloy
Committee members	Lynne Brandon	Lyndon Reed	Lester Reichstein
Publicity Officer			Geoffrey Nicholls
Seal holders	Lynne Brandon	Geoffrey Nicholls	Lester Reichstein
Acquisitions Committee	Geoffrey Nicholls	Ian McCallum	David Piggott
Reps on Oval Trust		Ian McCallum	Geoffrey Nicholls
Archives Liaison			Lester Reichstein
Safety Officers		Malcolm Sparre Ian McCallum	Michael Hanisch All members
Public Officer			Betty Sparre
OH&S Officer			Ian McCallum

SPONSORS

Our thanks are extended to the following businesses who have sponsored the 2012 Rally:

Booloroo Business Equipment and Post Office
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IGA Booloroo
Kelly Engineering
Northern Ag
Nuthin' but Natives
Perry's
Remarkable View Wines
Rural Computer Services

RALLY ADVERTISING SIGN AT EASTERN GATE

This is made from the following 'junk' components:

Steel outer wheel rim from McCormick 10-20 Tractor 50" diameter

Cog off blacksmith tiring machine

2 large governor balls from steam flour mill at Quorn. This mill was built in 1879 and is now a motel

Large spanner - 3¼" opening

Pump handle and scroll and wheelbarrow wheel showing Blacksmith's skills

Casting off Ballarat built H V'McKay Harvester (moved to Sunshine early 1900's)
The massive connecting rod is fully machined from Quorn Engine.