

News

This Issue

Usually our masthead montage features three of the machines we've written about; this time, as we're revisiting the Ambassador Moped, we've dug a single photo out of the archives, which shows 'The largest number of Ambassador Mopeds seen in the same place in this century'. This was at the Banbury Run in 2002.

Next Issue

We publish at the beginning of January, April, July, and October. That means our next issue will be out at the start of April.

Although we've often written all the articles in recent editions, we welcome contributions to the magazine. We try to be as flexible as we can over deadlines and formats, but the sooner you send in any articles, adverts or news, the more likely they are to be included. Our address is 144 The Street, Rushmere St Andrew, IPSWICH, IP5 1DH, and our e-mail is icenicam@pattle.globalnet.co.uk

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Information Library

We'd like to give our particular thanks to Saverio Orgiana who has sent us several manuals for the on-line library: 21 for Garelli, 5 for Malaguti, and 8 for Minarelli. Thanks also go to Masatoshi Windle for information on Sturmey-Archer hub brakes.

We've also added items on the ABJ Auto Minor, Bond Mark D, Norman Lido & Nippy, Raleigh RSW16 & other cycles, Rumi Formichino. and the UK version of the VéloSoleX 3800.

Much of the library is available free of charge on our website.

Calendar

It used to be the VMCC Cyclomotor section that opened the year with a New Year's Day ride near Portsmouth, but the honour of the first ride of 2025 goes to the EACC's Mince Pie run on the first Sunday of the year.

Please let us know if you hear of any events that are suitable for cyclomotors, autocycles and mopeds.

- | | |
|--------------|--|
| Every Tues | EACC and FMCC evening meeting at either the <i>Falcon</i> or the <i>Half Moon</i> in Walton, Felixstowe. |
| 5 January | EACC 42nd Mince Pie Run from Orwell Yacht Club, Ipswich. 07944-058644 |
| 18 January | FBHVC Club Expo at the British Motor Museum, Gaydon, Warwickshire. |
| 30 March | Bromfietsbeurs at Sportpodium Waarland, The Netherlands 09:00 to 15:00 hrs. Admission €5.00 |
| 13 April | EACC 20th Radar Run and Mopedjumble starts at Bromeswell Village Hall. 07702-192008 |
| 27 April | Ride it Day, which is a week later than usual to avoid Easter. In support of the NSPCC's Childline. |
| 21 & 22 June | EACC display at the Dene Rally at Monkwood, near Alresford. Jim Beacon: jim.beacon@gmail.com |
| 22-24 August | 24hour Moped Endurance Race in Serbia. E-mail Igor Gašparević: igorgasperevic@gmail.com |

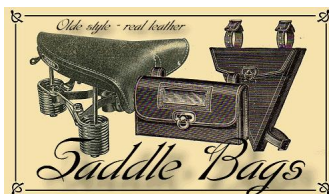
Free Trade

Adverts in the *Iceni CAM Magazine* are free! Including ones with a photo or logo. Send your ads to 144 The Street, Rushmere St Andrew, IPSWICH, IP5 1DH or e-mail icenicam@pattle.globalnet.co.uk



Ignition: Villiers 50mm body HT coil for 1F/2F £25. Moby contact sets £8.50, Cady contact sets £8.50p. Bosch pattern contact sets £7-£8.50 according to type. Wipac Bantamag contact sets £20. Wipac series-90 contact sets £20. Miller W7&BS9 mag contact sets LH & RH £20. Wipac & Miller mag-flywheel nuts 5/16"×22tpi (Sold out). **New:** Mobylette/Raleigh M11 LH new chrome mushroom-head mag nuts £15. Lots of assorted new stock contact points for all manner of old and obsolete machines—see website. External mounting capacitor with bracket, lead, & connector £13. Miller FW17 capacitor £7. Excelsior Wipac 15/72 & Miller W7/BS9 capacitor £8. Suzuki FZ50/TS50/GP100etc D77 contact set £8.50, capacitor £6. Champion 'copper-core' short-reach moped spark plugs L86C £3. Plug cap non-resistive £2. HT lead copper core, 5mm £1.50p/ft, 7mm £2.50p/ft. **Switchgear:** Chrome horn button £7. 5-way switch beam/off/dip/horn/cutout £15. 3-way switch beam/dip or off/on + horn £9. 2-way switch beam/dip £7. Brake-light switch £8. Wipac pattern Tricon switch c/w wired lead beam/dip/horn/cutout £15. Miniature pull on/push off lighting switch £3. Lucas pattern U39 switches long&short knob types £15. **Headlamps:** Chromax steel 5"case/4"lens £25. CEV pattern moped black headlamp switched £26. Chrome wire stone guard for Niox/CEV/EB headlamps £7.50p. Headlamp peak chrome 4" to 5" round £8. Headlamp clips pack of 5 for £2. **Tail lamps:** Genuine Old style autocyple/cyclemotor rear lamp units £22 each. Bruchsicker LED rear cycle lamps £2 each or 3 for £5 Lucas 679pattern back lights for NVT Easy Rider £12. Polished cast alloy taillight bracket for Lucas 679 £15. Adaptor plate for Lucas 679 assembly £8. Lucas MT110 & 211pattern rear lamps £15. Lucas 477/1 rear lamps £18. Autocyple/cyclemotor 1" rear lamp £22. Wipac S446 pattern single-contact rear lamp £14. Wipac S446 pattern stop/tail rear lamp £14. Puch pattern oval rear lens £10. ULO232.03 pattern Mobylette rear lens £8. Yamaha FS1E rear lens £5. Yamaha Passola rear lens £4. Puch Luxor type rear lens £4. **6V bulbs:** Extensive selection of many difficult to get types, see website for list. **Horns:** 6V AC horns c/w fitted mounting bracket, plated-finish £10 each. Shrinkwrap sleeving box 127pcs in 7 sizes £9.

E-mail: mark.daniels975@btinternet.com
Tel. 01473-716817 (Ipswich)
Website: www.mopedland.co.uk



Saddles, seats & covers: Lycett pattern single saddles for light motor cycles 12"×12" new, £40. Lycett pattern light motor cycle new chrome plated saddle springs for rigid frame type seat, 7½" long × 2" diameter × 5½ coils × 6mm diameter wire, £8 pair. Trials type upholstered pad seats, 15" long × 10" wide £40. 'Triangular Pad' black vinyl upholstered saddle, 1ft long × 9" wide, with firm 2" high-density foam, solid mounting with 7/8" stem clamp, black sides with red top and white piping £50. 'Extra-comfort' vinyl upholstered 2½" deep foam single-saddle with sprung mounting and 7/8" stem clamp, all black £45. BTG Bategu single-saddles with rubber covers in black £85 (as fitted to old Puch and other continental mopeds). Replacement BTG rubber covers in black, grey and cream £40 each. Eurathane foam moulded single-seats in black with 7/8" stem mounting: 'Std' 10½" long × 8" wide × 2½" deep £12. Selle 'Royal' traditional style cycle saddle with dark brown cover on gel foam padding, chrome springs & wire frame, 10" long × 8½" wide × 3" deep £35. New- Profile Standard black unsprung eurathane foam moulded saddle 10¼" long × 8¼" wide × 2½" deep with 7/8" stem mounting £12. New: Raleigh Comfy Classic black saddle with gel & foam pad & compression springing 10¼" long × 8¾" wide with 7/8" stem mounting £20. New: 'Reptile' Comfort black foam pad saddle with compression springing 9¾" long × 8¼" wide + 7/8" stem mounting £16. New: 'Smoothy' economy black cycle saddle with firm foam pad & compression springing 8½" wide × 9¾" long with 7/8" stem mounting £14. New: Wisp saddle cover (black) £15.

Saddle Stems: New: chrome plated saddle stems 1" diameter main stem with 7/8" diameter stem top for saddle clamp fitting × 12" total length - £6 (can easily be cut down if shorter length required)

Saddlebags: Genuine leather, old-style toolbags suitable for fitting to cyclemotor, autocyple, moped, and cycle saddles. Fixing by ½" wide leather straps, with plated buckles. Typically hold spark plug spanner, spare plugs, pliers, small screwdriver, cycle spanner etc. Dimensions outside (approx).

Autocyple tool Wide/Standard 10"×1½"×4" @ 5" strap ctrs. £45 (with 2 clips).

Triangle Bags

Large Cyclemotor 8½"×7"×2" £40 each.
Large Cycle (narrow) 8½"×7"×1½" £40 each.
Small Cycle (narrow) 7"×5½"×1½" £30 each.
Large sizes accommodate all plug spanner styles, narrow widths clear 3-speed gear cable.

Tools: Brass Bristle 4" miniature spark plug brush £1. Sturmey-Archer 5/8" axle cone spanner £1. 10" black plastic handpump c/w Schrader valve adaptor £3 Typically fit Mobylette etc.

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Earliest model Kerry Capitano 2-speed moped, frame 2478. Original registration 290 MRT in 1962 (non-transferable) c/w V5c. Very original condition, unrestored, original 3.1bhp Minarelli engine still on standard bore fitted with new piston rings. Everything works as it should. 60mph speedo. Lights/horn all work. Starts easily and runs very well, and satnav paced at 38mph. Owned since 2003, and it's been on the road and in use all that time—£650. Featured in IcenicAM article 'Return of the New King' in 2016. Please contact mark.daniels975@btinternet.com or ring Ipswich 01473-716817



Phillips — RAP
New Rex engine parts



Hercules (GB)

Parts for Her-Cu-Motor and Corvette

Rex piston sets: Kolbenschmidt, Mahle, Vertex, range of oversizes for 1-speed, 2-speed, & 3-speed Rex. Rings, clutch parts and plates for all models, front sprockets, cables. Range of parts for most models - Gadabout, 2sp/3sp individual cylinder head gaskets £3 and base gaskets £2. 2-speed & 3-speed full range of front sprockets. Some engine parts: Rex 1-speed, 2-speed & 3-speed. Some cables for all Panda & Gadabout models. New 50mm air filters £9, for 12 & 14mm Bing carburetter Panda/Motorised Cycle. Hercules (GB): a small range of new & used stock. New piston rings Corvette and Her-cu-motor. Main bearings and seals. New Lavalette/Corvette/Paloma 27½" drive belts £9. See website: www.mopedland.co.uk for more details. E-mail: mark.daniels975@btinternet.com
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Moped/autocycle HD drive chain 1/2x3/16eq £10 boxed length. Spare connecting links for 3/16 £1.50 & 1/8 chains 80p. Spare springclips pack 12 £1. Link splitters std £14 / H-duty £16 / light cycle £4. Imperial 3/8" cotter pins £2 pair. Continental 9mm cotter pins £2 pair. ISO 1 3/8 Freewheels 16T £6, 20T £12, 22T £14, 23T £15, 24T £16. Miniature 14T 1" x 20tpi £10. **New:** AV89/RM5 M36x1mm x 20T Special freewheel £23. **New:** Imperial 7/16" x 26tpi cycle thread 'plain' fixed cones £7 / 'adjustable' cones £8. Sachs clutch plates, cork insert or bonded types £8 each. Villiers Junior/JDL/F-series re-corked chainwheel and clutch plate sets service-ex £30 each. Peugeot102/103 clutch discs £8.

Clutch plates for other makes too—see website. Heavy-Duty rubber block pedals & reflector block pedals £9.50 pair. New-LH & RH new chrome pedal crank arm sets 5 1/2" centres/2" offset £20 pair. Autocycle front fork suspension bands £5 each. Excelsior band fork rubber buffers £4 each. **New:** Moby/Raleigh RM5 Leading-link front suspension bands 15x5mm £7 each. **New:** Moby/Raleigh RM5 L-L band&bush and rivet kits £7 each (2-per). Ariel-3 front suspension 2-buffer kit £25. NVT Easy Rider fork seals £10 pair. Moby fork gaiters £12 pair. **New:** Mobylette mudguard stay chrome eyebolt sets 10mm/16mm/22mm £5 each. Autocycle 5" long x 7/8" pair soft rubber 'palm' grips £4 pair. Cycle/Cyclemotor 4 1/2" long x 7/8" pair soft rubber 'palm' grips £4 pair. Wide range of most moped drive belts from £6. 19x1.2 Italcercio Westwood pattern 32-H chrome rims £50 each (for PC50 front). 21x2.50 2F-autocycle Radaelli Westwood 36-H chrome rims £46 each. 16x2.25 Italcercio Westwood 36-H chrome rims £48 each (Tomos, Garelli, Batavus etc). 26x2 1/4 36-H chrome rims for early autocycle and trade bike £25 each. Special 40-H pierce 26x2 1/4 new chrome rims: £40 each (Norman Cyclemate rear, etc). 26x2 1/4 x 36-H special dimpled&pierced chrome rims for Cyclemaster £60 each. 17x2.00/2.25 Takasago Westrick pattern 1.2x36-H Moby M40 chrome rims £24 each. 17x2.25/2.50 Takasago Westrick pattern 1.4x36-H Moby 50V/NVT/Honda C50 chrome rims £28 each. **Tyres:** 26x1.3/8 Vee Roadster pattern 2T&2T £21. 26x2 Continental (Quickly, RM1, etc) £50 tubes £4. 20x2x1 3/8 trade bike small front tyre £6. 2.50x21 Golden-Boy universal pattern block tread to fit 2F autocycles, etc £50. 19x2 Continental blackwall £45. 19x2 Mitas 'Economy' blackwall £25. 19x2.25 Heidenau blackwall £60. 19x2.25 Continental blackwall £40. 18x2.25 inner tubes £6. 17x2 & 17x2.25 Vee £15/tubes £5. 17x2.25 Mitas Sport blackwall £30/whitewall £40. 16x2.25 Vee tyres £18, inner tubes £6. 2.50x15/20x2.50 Golden-Boy (BSA Dandy, Ariel Pixie) universal pattern block tread £40. 14x2.25 inner tubes £6. 8x3.00 Vee (Honda Stream) £18. Fibreglass moulded panels Raleigh RM1/RM2 sidepanels £24 each. RM4 sidepanels LH & RH £22 each, RM4 toolboxes LH & RH £18 each, MobyAV89/Raleigh RM5 sidepanels £22 each. Runabout sidepanels LH&RH £18 each. Old Moby sidepanel 3-set £44, Cady M1/M3 sidepanels LH & RH £18 each. Moby M40 sidepanels LH & RH £20 each. Moby AV42/48 sidepanels LH & RH £18 each. Moby AV76/78 sidepanels LH & RH £22 each. Nippy Mk1/2 engine covers LH £22 & RH £20. Batavus 50mm & Ariel-3 52mm Encarwi air filter housings £16. Raleigh RM9/+1 chainguard £25. Villiers 1F/2F front sprocket cover alloy casting £15. Rubber rim tapes all sizes 14" to 26" £1each, 19" & 21" £1.50p. Cyclemaster engine mounting rubbers 4 x bush kit £12. **New:** Moby/Raleigh all metalastic engine mounting bush kits, top mounts AV89/RM5 £8 each, top mounts AV48/RM9 £15 each, small bottom mount £6. Selection new Moby pedal shafts £15 each. Chrome bezel red reflector with 5mm stud mounting £7. Tank Badge sets for Raleigh RM4/RM5, Norman Nippy Mk5/Lido Mk3, Phillips Panda Mk3/Gadabout Mk4 £18 pair. Mobylette Mobyomatic 'shield' tank badge sets £18pr Villiers 3K mag cover badge, new £4. RM11/RM12 tank badge, new £4. Some cables for Raleigh RM1/2, Norman mopeds, Phillips mopeds, Villiers 3K engine. Cut-cable end trims (alloy crimp

£12 for £1. Further extended range of kit components to make up your own cables (see website). Petrol pipe clear 5mm light 90p/ft, 5mm HD £1/ft, 6mm HD £1/ft, black neoprene pipe 4mm/5mm/5.5mm black neo £1.20p/ft. RH10x1mm 180° fuel tap £14. RH10x1mm LH 90° fuel tap Mobylette M40/50V/51V) £16. **New:** 90° fuel tap 12x1mm pitch LH/RH thread £12. Chrome fuel cap for Raleigh RM4/Runabout/Wisp/RM11/RM12/Norman Nippy £15. 40mm push-in fuel cap light grey £7.50. Petrol cap seals for Honda PC50 £1. Petrol cap seals for Cyclemaster, Power Pak 90p, for Runabout, Wisp, Mini-Motor, etc £1. Cylinder black paint 100ml tin £8. 21mm Ø Continental handlebar stem 6 1/2" long £12 / 7/8" Ø Imperial handlebar stem 7" L £8. Handlebars 'North Road' & 'All-Rounder' patterns £10. Chrome blade-end decomp lever £15. Chrome ball-end decomp lever £13. Magura decomp lever £10. Clutchlock/decomp/choke triggers in red plastic £3. Removable cable ties, pack 25 for 50p. CBA LaFranconi pattern moped chrome silencers in 30mm £75. 28mm round-60mm moped silencer £40. Moby M40 chrome exhaust pipes for oval silencer £20. Mobylette/Raleigh chrome exhaust pipe all fixed-engine models £30. Chrome exhaust pipe AV89/SP50/Raleigh RM5/RM11/RM12 £37. **New:** Moby/Raleigh exhaust nut £4. Exhaust ring gaskets 33/35 o/d £1 each. Honda PC50 brake shoes £12 pair. PC50 front susp bush kits £16 set-8. PC50 air filter element £4. Honda PC50 carburettor O-ring seal kits for main jet & float bowl £3.50p set. Honda PC50 rubber elbow from air-filter to carb £12. **New:** PC50: Front brake cable £16. Rear brake cable £18, Throttle cable £10. **New:** PC50 sidepanel/toolbox cover screw £5. PC50K1 ohv front sprockets 15T & 13T £30. PC50 ohc front sprockets 15T, £30. PC50, Express & Camino speedo cables £10. Tomos speedo cables £10. Huret speedo cables 55cm £15, 65cm £16, 85cm £18, 85cm with removable end for leading-link fork early AV89/RM5 £20. VDO speedo cables, range of lengths. **New** front sprockets DKW, Mobylette, Raleigh, Sachs, Parilla, Victoria, HMW + many other odd continentals. **New** stock of speedo drives VDO, Huret, CEV, Lucia, all £10. NOS speedos, Veglia £20 each. VDO £40 each. Moby SKF main bearings £35 pair, and crank seals £4.50 each. Incredible selection of parts not available anywhere else—because we manufacture lots of them ourselves! Far too much to list it all in this advert. You really need to visit the Website www.mopedland.co.uk Tel. 01473-716817 (Ipswich), E-mail: mark.daniels975@btinternet.com



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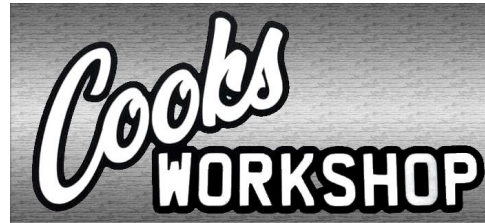


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Itom extractor for original composite roller M24x1.5—£15.
 Itom Tourist all steel drive roller—£65.
 Lohmann hard rubber drive rollers—£25.
 Bosch 100mm mag flywheel puller NVT etc.M22x1.5—£18.
 Bosch 115mm mag flywheel puller for both alloy & steel types M26x1.5—£15.
 CEV/Dansi/Kerry mag flywheel puller for 2 & 3 window flywheels M19x1—£15.
 Ducati Cucciolo mag flywheel puller M22x 1—£18.
 Honda P50/PC50 single-end mag flywheel puller M24x1- £12.
 Honda P50/PC50/C50,70,90 dual-end mag flywheel puller M24x1RH / M27x1LH—£14.
 Lavalette/Paloma/Hercules Corvette mag flywheel puller M22x1- £18.
 Manhurin Hobby mag flywheel puller M24x1.5—£15.
 Miller Type FW17 mag flywheel puller Phillips/Her-cu-motor etc.13/16 x 26tpi—£16.
 Mobylette/Raleigh clutch drum extractor M24x1—£12.
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 Peugeot all models mag flywheel puller M20x1—£15.
 Raleigh RM1/RM2 Lucas mag flywheel puller M22x1.5—£18.
 Sachs clutch centre extractor M27x1.25—£15.
 Simson SR2 Optima & S51 mag puller M27x1.25—£15.
 Villiers 3K mag flywheel puller 7/8x14-tpi UNF—£15.
 Scott Cyc-auto Wipac S1233 mag flywheel puller—£20.
 Wipac Bantamag & Series 90 (un-ported 2BA/3BA) 3-hole mag flywheel puller—£20.
 Wipac Series 90 & Miller BS9 (ported 2BA) 4-hole mag flywheel puller—£20
 Wipac Series 90 (ported 2BA) 4-hole mag puller—£20
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Due to illness, I am forced to sell my **1956 New Hudson** **autocycle**. It has a Villiers 98cc 2F engine. Owned by me for 12 years, having completed many Club runs. £1,500.
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Mopedland Jumble Parts section, featuring mainly used and NEW/old stock odd parts for various Cyclomotors, Autocycles & Mopeds. This is much like an on-line Autojumble pitch for small bike parts, but also listing complete bikes for sale. New parts are regularly adding as sold items drop off, so there's a constant turnover of new listings.

Visit website www.mopedland.co.uk for up-to-date viewing.

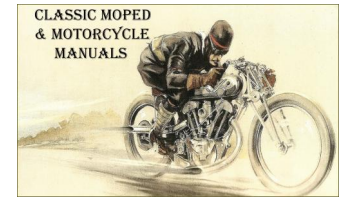
Fred Spaven Engineering

Until recently I have been restoring a wide variety of historic vehicles from 1960's Cooper-Climax racing cars to a 'bitsa 1950's trials AJS but, now back to being a full-time student, I can't take on such long and involved projects. Instead I'm looking for smaller 'evening and weekend' tasks to keep the workshop ticking over. I've got extensive experience of engine and gearbox building, frame & suspension repair/modification/fabrication, welding & machining facilities and close links to local vapour blasters, machinists, painters and so forth. As I don't have the time to take on whole vehicles (even tiny ones!) I would be willing to offer services up to and including engine rebuilds to ensure sensible turnaround times. Some of my old work is on my website:

www.Spaven-Engineering.co.uk
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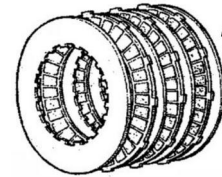
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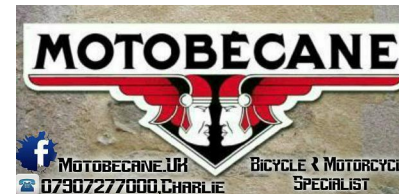
1959 Norman Nippy Mk2/type2 2-speed moped. Registration OSK 966 (non-transferable) c/w V5c. Original, newly restored with Villiers 3K engine 2bhp rebored with new +0.040" piston (needs running in). New clutch plates. Geared-up with 13T sprocket (std 12T) for 35mph. Starts easily, runs well, and everything works. New rims with stainless spokes, brakes relined, new tyres, new chain, new seat, new pedals, all new cables, all new machined front leading-link and plunger rear suspension units. Repainted, coach-lined, new transfers, and many parts chromed, totally rebuilt. Superb—£1,650 ono. Please contact mark.daniels975@btinternet.com or ring Ipswich 01473-716817



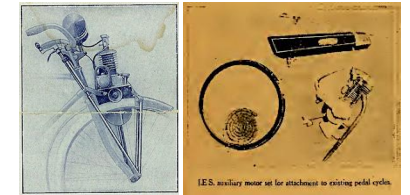
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Will take complete engine if you have one. Also: Information, dimensions, photographs, of sundry parts for 1914 JES Cyclemotor so I can re-make specific components that are missing from my motor. Please help. Derek 0115-923-1191.



1952 Excelsior Spryt autocycle with 98cc Spryt Mk2 motor—£1,250.

Original reg LMJ 283 c/w V5c (non-transferable). Complete, original, and good working order. All correct parts including the big Wipac headlamp and original Wipac rear lamp. Back-pedal rear brake hub. Has had wheels rebuilt with new Sanremo chrome rims. C/w both side-panels, Lycett tension sprung saddle, and leather tool bag. Lot of work recently completed. New main bearing and seal, new piston rings and engine has good compression, new clutch fitted, magneto set overhauled with good spark and new mag seal, carb overhauled, fuel tank cleaned out. Please contact mark.daniels975@btinternet.com or ring Ipswich 01473-716817. Thanks.

A Minor Cyclemotor

by Mark Daniels

Sponsored by Andrew Williams, Malvern, Worcs.

The earliest references to the Raynal Manufacturing Co Ltd at 41–43 Fleet Street, Birmingham, appear around 1914 as a bicycle maker building two-stroke lightweight motor cycles using both Precision and Villiers engines, though it is clear the business must have developed from cycle origins much earlier than this date. A preserved copy of Raynal's 1922 season trade catalogue, indicated as 'List No.48', probably gives the best insight to its activity around this time. The edition illustrates a 2½hp Villiers-powered motor cycle, and

offers an extensive range of cycle models, accessories, components and fittings for home trade & export. This year proved the last listing for its motor cycle products, and Raynal continued thereafter as a traditional cycle manufacturer.

On 10 September 1937 Raynal announced the first Villiers Junior engined autocycle in *The Motor Cycle* magazine, however the Raynal Company enjoyed only the briefest exclusivity of

a matter of months before Excelsior announced another Villiers 'Autobyk' autocycle at Earls Court Motor Cycle Show in November 1937. Other manufacturers followed and Raynal's brief monopoly was gone.

When Raynal's stocks of Junior 'deflector' engines ran out in 1939, it switched to the new Villiers 6-port Junior De Luxe motor for 1940, before production ended during the year for the rest of the duration of World War II. Over the wartime period there appears no positive confirmation about quite how the Raynal plant was deployed, though in common with other cycle manufacturers, munitions work would seem likely.

Raynal production resumed in 1946 with a revised Junior De Luxe autocycle but, in 1947 the company was bought by British Plasterboard, though it seems to have continued as before. Long time Managing Director Alfred B Jackson left Raynal at some point after this, to set up his own company: ABJ Cycles, based at 300 Icknield Port Road, Birmingham B16.

While all the other autocycle builders had readily started preparing revised frame designs for the new 2F engine when Villiers announced it in late 1948, Raynal just continued with the old Junior De Luxe machine, and never did produce a next generation autocycle.

The Raynal business was sold on to Tube Investments in 1950, who seemed to have primarily bought it for access to the Dunelt brand. It's hard to draw a line exactly when Raynal ceased making autocycles, as their obsolete machine just seemed to gradually fade away. They were clearly listing the autocycle up to the end of the sales season in late 1950, though some references suggest that old stock was still being sold up to 1953, while the Raynal brand itself melted into anonymity within the sprawling British Cycle Corporation.

But the Raynal autocycle is not the focus of this feature...

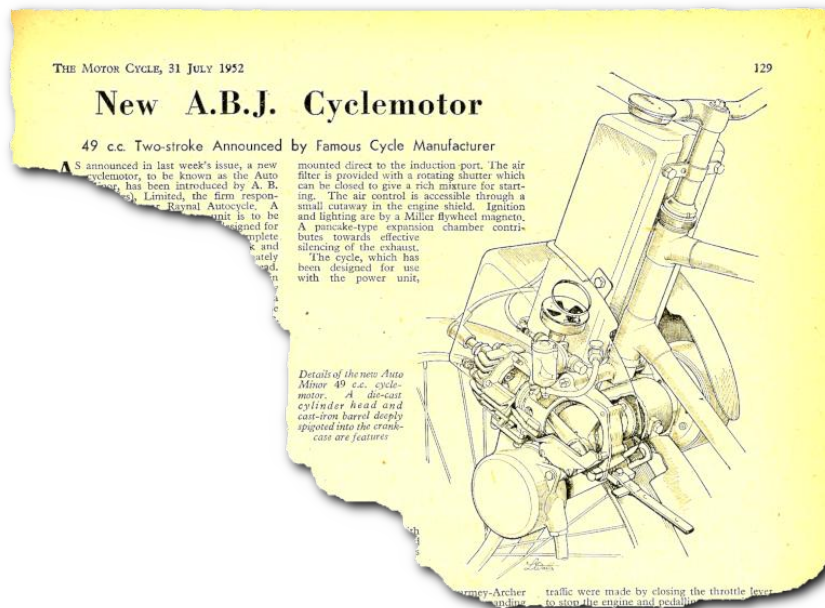
In July 1949, ABJ announced two similar looking models with Villiers 99cc two-speed 1F motor cycle and single-speed 2F autocycle engines, both with a motor cycle style 'top-tanks'. The ABJ autocycle was unlike any of its other 2F autocycle contemporaries, where the saddle tank, telescopic front forks and simple, rigid loop frame all contributed to its unique appearance.

The ABJ 1F motor cycle had DC electrics with a rectifier and battery, and though the 2F autocycle only had flywheel magneto AC electrics, it was equipped with an electric horn—an unusual feature for an autocycle of time.

Both autocycle and motor cycle continued in production until 1952, though surviving examples of both models are extremely rare and were probably only produced in very limited numbers.

But neither the ABJ autocycle nor motor cycle are the focus of this feature....

On 24 July 1952 *The Motor Cycle* magazine released the first announcement of a new ABJ motorised bicycle named the Auto Minor, with a brief note that 'It can be supplied mounted on a fork suitable for attaching to most cycles, or complete with special bicycle designed for cyclemotor use. Single speed cycle £39 (+ purchase tax) £41-18s-4d, 3-speed hub model £40-5s (+ pt) £43-9s-2d.'



The following week's edition of *The Motor Cycle* on 31 July presented more details with a drawn illustration. The unusually short-stroke engine was specified 42mm bore × 36mm stroke for 49.9cc with a cast iron cylinder and alloy head at 6:1 compression, and fitted with a decompression valve. The overhung crank journal was neatly laid across the forks behind the steering headstock, with the carborundum drive

roller centrally disposed, and a Miller mag flywheel set arranged to the right. The engine unit assembly weighs about 20lbs and pivots across the fork crown to engage & disengage by a cam-locking lever, though needing to be fixed into each setting position by a nut and bolt, so seemingly ineffective as a practical clutching operation. There wasn't much to see in period pictures of the Auto-Minor since it just appeared as a tin box on end (the fuel tank), on top of another tin box (the engine cover). It was also now reported that the cycles could be supplied in 'closed' (gents) and 'open' (ladies) style frames.

A manufacturer's speed was given as 25mph with 200+mpg consumption.

Although it was announced in *The Motor Cycle* edition of 23 October that the ABJ autocycle and motor cycle would be produced alongside the cyclemotor for 1953, the range became suddenly cut back to just the Auto Minor alone, even before the end of 1952!

The ABJ Auto Minor cyclemotor is the focus of our feature, though our test machine only came about from no more than a new, unused bare engine with drive roller, but no mag-set, carb, exhaust, or mounting fork set. The essential front fork had to be fabricated to enable mounting of the engine.



We have the opportunity to assess some of the components that were not explained. The drive roller is a simple carborundum cylinder, just bolted together on a steel core, and not a composite assembly. The original Amal carb was

arranged in a downdraft orientation with the air slide set in the horizontal plane, but our subject was rebuilt with a fabricated inlet manifold angled to take a 3/8" Amal 308 in a conventional arrangement.

The Auto-Minor was originally presented with a Miller mag-set to power the ignition and a lighting set, but this one has been rebuilt with a Wipac Bantamag set modified to run on a rechargeable battery and coil ignition, so instead this cycle lighting set is powered by a friction driven cycle dynamo from the right hand side of the rear tyre.

Our Auto-Minor is mounted in a Triumph Tri-master cycle frame, and its motor engaged by undoing the bar-nut and setting to the optimum required pressure according to the conditions.

A lever with ball knob has been added to 'tilt' the engine as something to get hold of when the engine might be hot. A rod with knob works to control the shutter choke through the steel cowl, pull to close and push to clear. This motor came with no fuel tank or engine cover, so uses a Teagle Industrial hedgecutter tank, and the engine cover is fabricated.

Pull in the decompressor to navigate the bike around with the drive engaged.

Inside, the engine is a conventional Schnuerle-loop lightly domed head piston, but the transfer porting is an interesting arrangement with the transfers placed both sides of the exhaust port, which means the fresh charge is directed to the back of the cylinder. This is pretty unusual for 1952, which we've only previously seen and experienced on one other period, though slightly earlier, motor: the Tailwind. Could the ABJ Auto-Minor design be connected? The 'feel' of these two machines is remarkably similar. The Tailwind showed no four-stroking effects at all, where gas scavenging was certainly working very efficiently at speed, and we could only presume that its cylinder must have a relatively large exhaust port,

which would probably be contributing toward the lack of torque at lower revs. The Auto-Minor also revs cleanly with no four-stroking, though delivers better torque at lower revs, which could be because it has a smaller exhaust port, though that could just as easily be because the ABJ is 21cc (40%) higher capacity than the Tailwind.

Our ABJ holds 22mph on flat and 25 on a light downhill run.

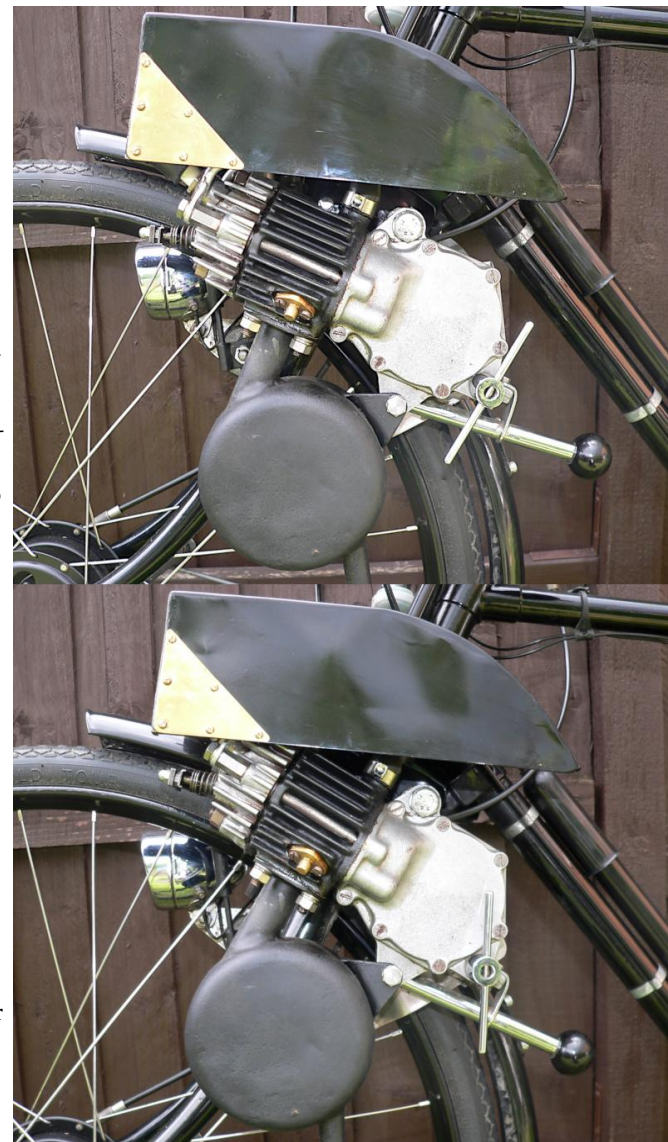
The British Hub Co drum front brake, and single-speed cycle rear with drum brake proved easily capable of arresting a 25mph cycle motor.

Though the motor runs smoothly with negligible four-stroking, the ABJ still vibrates from the cycle components, so that overhung crank is talking to us, whereas the Tailwind with its extra crankshaft support journal had no such issues.

The Miller mag-set originally fitted to the ABJ would have been somewhat heavier and provided more rotating mass than the Wipac Bantamag on our featured example, which could have changed the engine running characteristics somewhat.

The Auto-Minor was listed for sale during 1953 but seemed to have been dropped at the end of the year, when ABJ reportedly reverted to bicycle manufacture.

There are no clues on any parts of the engine as to who might have made any of the components, but it would seem unlikely it was ABJ's own work since this would have





required iron and aluminium casting and machining facilities, that cycle manufacturers don't normally have. We can only conclude it was subcontract made, but no idea who might have done this.

It's a mystery why Alfred Jackson chose to drop the Auto-Minor cyclomotor when all finance and work to produce the engine had already been completed. It's clear that the required investment into the project wouldn't have been recovered in such a short time, and there can't have been many sold because there are simply so few to be found.

Maybe the sales had been so poor that Alfred thought it wasn't worth any more input.

That might have been because cyclomotors in Britain were invariably attachment engines bought on cost, and cyclomotors complete on bicycles involved the extra cost of the bicycle, which wouldn't have been part of the equation unless the buyer also needed a new bicycle. The British market never functioned like the European market, which had embraced the concept of the 'complete' cyclomotor & bicycle, and the Auto-Minor was only really priced and sold as a complete machine.

Yes, it was suggested that the engine 'can be supplied mounted on a fork suitable for attaching to most cycles', but there was never any price even quoted for the motor with its fork kit, and there's no evidence it was ever actually sold as such. It's fair to conclude that it was never really intended to sell Auto-Minor other than in the complete cyclomotor & bicycle form, and all other makes of cyclomotor attachment engine kits would have been cheaper. Was this the reason the ABJ cyclomotor didn't sell?

The Auto-Minor joined the 1F motor cycle and 2F auticycle as failed ABJ projects. There didn't appear to have been many of any of these machines produced, and surviving examples of all three models are extremely rare.



Next: The title of the next main feature is '9+1 does not = 10'. Well the first part might be pretty obvious, but somehow we doubt you'll figure out what the other half is about.

(Still) Absolutely Fabulous

by Mark Daniels

*Sponsored by Neil Plunkett,
Christchurch, New Zealand.*

November 1961, sweeping curves, dashing lines, and a

striking contrast of black & white.

The hand behind the pen could have been Mary Quant, but this stunning up-to-the-minute creation was the work of—Ambassador!

The Ascot company had become well known for the manufacture of motor cycles since beginning production in 1947, but never got round to making an auticycle since these were generally an offshoot product of bicycle manufacturers and they had no such background. All their bikes were fitted with practically every type of Villiers engine, and it was probably

Number 63

AMBASSADORS have long been noted for their modernity in styling. Now, for 1962, their range is augmented by a moped, sleek and trim enough to rank proudly among the best-lookers on the market. Its technical features are as up-to-date as its lines.

Powered by the Villiers 3K two-speed unit, and attractively finished in the Ambassador colours of greystone white and raven black, the moped would appear to be assured a bright future.

The Motor Cycle, 12 October 1962

a natural progression that when they finally got round to producing a pedal assisted machine that it would use the Wolverhampton factory's 3K/1 motor.

Since Ambassador factored Zündapp products in the UK, accredited motor cycling authorities simply dismissed the moped as being no more than one of these German creations fitted with the Villiers engine, but no Zündapp was ever built like this machine! The selection of cycle components was quite extraordinary for a British home built lightweight. From headstock to tail light the frame comprised a pair of massive half-pressings joined along the centre line, with a welded central construction dropping down to the swing-arm link and side stand pivot. Unusually no centre stand was ever fitted, and the Earles pattern forks are unique for a British moped, though the style appeared on several continental machines and this points to where the front and rear suspension units originated with their galvanised shrouds and gold plastic moulded end links. Other obviously imported parts were the chromed 'Pranafa' hubs which were laced into RW aluminised Westwood pattern rims and shod with 2¼×19 whitewall tyres. And that 'Pranafa' rear hub—it's so unusually wide with such a 'leaning' spoke angle that even a professional wheel-builder was struck to make comment on it! Though the petrol tank may appear visually similar to the NSU S2-3 in photographs, this is certainly not the case as the pressings are markedly different. The single

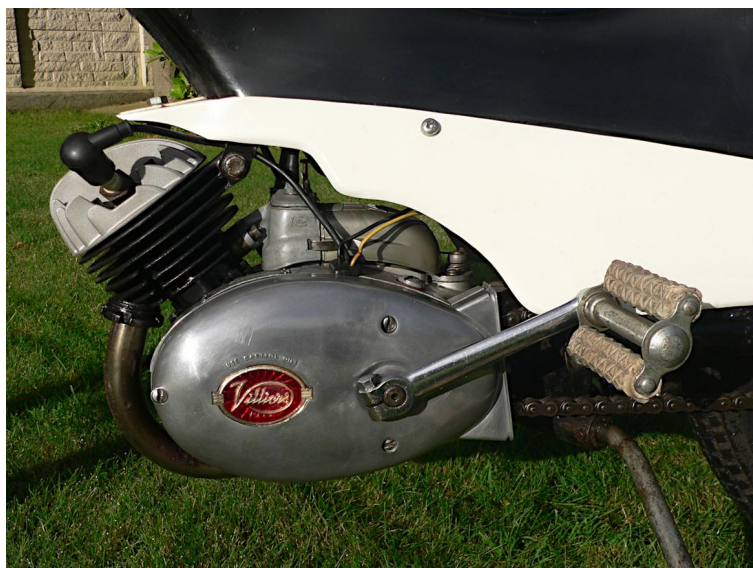


seat lifts from a hidden catch at the back, revealing a tool storage cavity with a pump holder tube disappearing into the bowels of the frame. Behind the seat, the long rear frame/mudguard form is topped by an extra long rack. Miller supplied the rear light and horn hiding away in the

nacelle, which also houses the VDO speedo kit and European origin headlamp set.

The cycle package generates contrasting impressions from differing angles. With the Earles pattern forks, nacelle and sturdy mudguard, the front end appearance is strikingly solid. From side views the machine looks almost scooter like, while from the rear it seems remarkably long and slender. Sitting on the bike, one is immediately struck by how low the fixed seat height feels at only 31 inches, stretch out to the handlebars and you're in a sporty forward lean. It's difficult to work out exactly what the Ambassador was intended to be, it's certainly an enigma!

All sounds pretty fair so far, but the new machine wasn't without its design flaws. The stock Villiers 3K and 3K/1 motors were issued to all customers with a 12-tooth front sprocket, which was suitably geared to the Phillips and Norman combinations of 32-tooth rear sprocket (2.67 ratio) on the same 19-inch wheels. Unfortunately the Pranafa hub came with a 35-tooth rear sprocket (2.92 ratio), leaving it badly under-geared



compared to the competition. To make matters worse, the mismatched Magura twist-grip to allow use of the Villiers throttle cable that came with the motor set, had a physical stop restricting the carb slider to $\frac{3}{4}$ opening. This combination left the moped particularly gutless, and meant it was revving its nuts off at a top whack of 30mph. The Ambassador owner must have been very disappointed with his new purchase when the Phillips Gadabout, Norman Nippy, and Norman Lido riders went burning past on their machines—fitted with the same Villiers 3K engine!

Only two of the seven known surviving machines are believed to have the original side panels remaining, which appear so large as to completely cover and prevent access to the carb controls of choke and flood button. From a small hole in the frame behind the petrol tank, operation seems to have been enabled by some sort of remote control wire link, long gone on every example. Presumably this was so frail that it broke in every case, preventing starting, which required permanent discarding of the side panels to enable direct access to the carb. Our feature machine is a fairly complete and original example of the survivors, though has 'custom styled' reduced panels to permit side access to the carb controls.

The Villiers 3K engine with cast iron cylinder is specified at 40mm bore \times 39.7mm stroke, with 7:1 compression ratio alloy head for a rating of 2bhp @ 5,500rpm, and fed by Villiers own SM10 carburettor with a 12mm venturi.

The crankshaft journal is fitted with an engine speed clutch, which invariably results in accelerated clutch plate wear, and primary transmission is delivered by chain. Since the engine runs 'the wrong way round', the primary chain works under loaded tension on its bottom run, allowing the 'slack' to drop back into the sprockets on its top return run, so tends to give the engine something of a characteristic 'running rattle'.

Though a 13-tooth front sprocket would return the gearing to normal expectation, this example runs a 14-tooth (2.5 ratio) to take it 16.6% up on how it left the works, (or 8.3% up against normal drive). This over-gearing had been compensated for with some power increase by boring out the cylinder to 54cc (+0.060"/1.5mm), taking the capacity up by 8%, then facing back the head and reforming of the combustion chamber to raise the compression ratio from 7:1 to 8.5:1. Though visually identical, a different twist-grip and adapted cable now allow full throttle opening and, since our first report on this very same machine back in February 2002 (Wow, 23 years ago!), the motor has received a further compression ratio increase by removal of the 0.63mm head gasket, and bonding of the head joint with RTV high temp red silicone, taking another 0.8cc out of the combustion chamber capacity, so the compression ratio now works out at 10.8:1.

So let's see how the Ambassador should have gone if it had been engineered a bit better!

It's a cold day, and starting seems easiest by simply pressing the flood button on the carb until a few drips fall beneath the engine, then kick down on either pedal with an ounce of throttle and within a couple of spins the motor is running. Since the flood worked so predictably, we never even bothered trying the choke, which lifts off automatically as the throttle is opened. The engine breathes through Villiers's own type SM10/12mm carburettor,

and it's away with a smooth and quiet exhaust note reminiscent of a muffled vacuum cleaner. First gear always seems to engage with a clunk, but there's no dragging on the clutch once it's in, and this seems an idiosyncrasy of the motor since we've reported this before on other 3K machines. With the raised gearing on our feature machine, it was half expected to need a little more slipping of the clutch to pull away, however the bike is surprisingly readily off the mark. Switching up to second is where the ratio catches up, since first proves to be relatively low and leaves a big jump up to second. This requires buzzing up the revs in first to maintain momentum through the change, and to put this into context, the ratio gap is a massive 39% wider than on a comparative two-gear Rex motor! With a recent ignition overhaul and blueprint timing, the engine feels even better than the last time we rode it; it no longer seems bothered by the ratio jump between gears and delivers sufficient torque to cope unconcernedly with jumping the gear-change gap.

As the revs pick up in second, this Ambassador really begins to pull its top gear quite strongly so there's absolutely no situation of over-gearing, and it completely overcomes Villiers's mis-pitched ratios. Villiers motors may have historically acquired a reputation as reliable, though plodding, carhorses, but this tweaked 3K/1 surprisingly dispels this tradition since it revs as freely and smoothly as any other contemporary moped engine.

The brakes are good, suspension is firm, and the ride quite positive with the whole package impressing as being very taut for a moped, not at all like the 'flexi-feel' of many lightweights. Due in part to the cornering confidence, the side stand scrapes far too easily on the left and really needs something doing about this detracting problem. Over two decades in storage seem to have deadened the 45mph VDO speedo somewhat; it no longer swings wildly like it used to, though the mileometer still doesn't work. The needle now seems to move somewhat sluggishly as the bike feels to be faster than the indication, but this time we have a pacer with a sat-nav.

Typically cruising in town around general traffic our speedo indicates around 25mph, which feels faster, and our pacer clocks off at 30–31mph. At indicated 29–30mph our pacer reads off 35–36mph, and on two fast light-downhill runs paced at 40mph. Forty was what we calculated from the gearing changes back when the original feature



was produced, but we were never actually paced at the time, so it's nice to confirm that the maths actually works out to match an independent sat-nav.

This is easily the fastest Villiers 3K engined machine we've ever ridden, and it just goes to show what can be achieved from this unlikely engine with some modifications. The 6V × 15/15W headlight is utterly useless along dark country lanes since the 'infinite beam diffuser' lamp glass takes what little illumination there is, and scatters it everywhere except the road in front of you, but investigations reveal it's not the original lens, which should be a Hella 2-77290.



First man ever to lap the Brooklands Outer Circuit at over 130 m.p.h. back in 1928, KAYE DON proved his prowess on the road as well as the track by winning the Tourist Trophy Race in 1928 with a Lea-Francis. First-time contender for the World's Land Speed Record with the "Silver Bullet" Kaye Don also raced motor boats and held many records at the wheel of cars of all sorts and sizes.

Kaye Don

The Ambassador Moped was undoubtedly very stylish for its time and, with a few obvious design errors sorted out, could easily have made a great machine—so what happened to it?

The company's founder, Kaye Don, was approaching retirement and sold the business to DMW in October 1962, but the new moped was already doomed before this time. With the TI-Raleigh Group choosing to factor Motobécane products from the 1961 season, and subsequently killing off home produced Phillips Gadabout P45 and Norman Nippy Mk4 models, the 3K engine was left with almost no demand. Villiers was hardly going to have much further interest in producing the motor once its two main customers had jumped overboard, so once the pilot batch of mopeds was built up, Ambassador would have found themselves left high and dry without an engine.

Then there's still the mystery of that frame? Wide use of metric fasteners on the major cycle parts was most untypical of Ambassador's imperial background, and the red top on the seat (the feature bike is recovered in black) didn't really fit with the rest of the colour

scheme. It was unimaginable that the little Ascot company would have created the enormously expensive set of press tooling required to make the frame sections, tank, nacelle and side panels, then only have produced a handful of machines. Sure enough they didn't, but the true source was as unlikely as it was obscure. The stamping of Solinsen 'Pranafa' Grafrath on the brake-plates gives away the incredible origin as, Solifer from Finland!

How the connection between these two distant companies came about is likely to remain a mystery, but there was a fair bit of conversion work involved to produce the Ambassador.

The engine mounting was completely different for the Villiers 3K1 compared to the motors that Solifer was fitting in its Export model.

The original Solifer Export model was launched on 1st March 1960, and initially powered by a two-speed engine from German company Expresswerke AG as the Solifer Export two-speed Express M-107 type.

Other motors fitted in the Solifer Export were two-speed Pluvier (Dutch) 1961–64, Tomos (licensed Puch) 1962–64, two-speed Pluvier/Berini Thermomat 1964–70, & 3-speed Pluvier/Berini Thermomat from 1969.

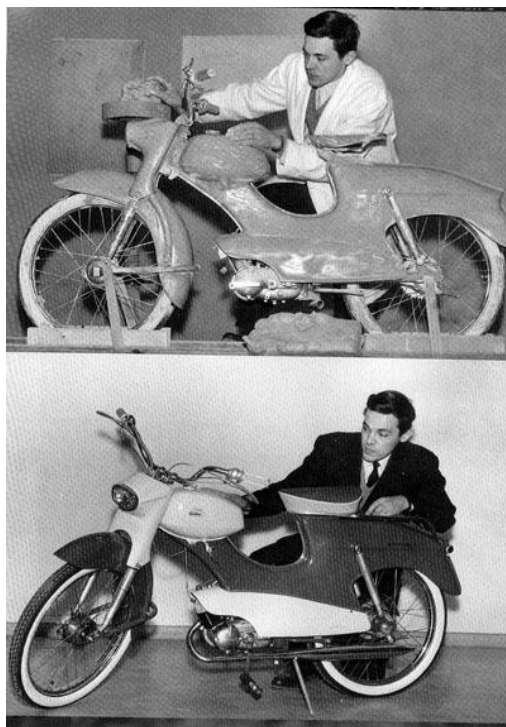
The original Express M-107 featured right handed chain drive and left side exhaust, but it seems more likely the Ambassador was based upon the more compatible Pluvier version with its exhaust on the right and putting the transmission out on the left, same as the Villiers.

The Solifer versions all had the spark plug centrally located, where the Villiers came out the side at 45° and might have necessitated an access port cutting in the left hand side panel. Traces of what was probably the original red Solifer colour can be found in places underneath the black Ambassador overpainting, so there's the match to the seat top!

The model code for the one-year-only Ambassador Moped of 1962, was 'A-A prefix', and serialization was represented irrespective of the model produced, so SPN = Sequential production numbers.

Surviving moped frame numbers recorded on the Ambassador Register list serials 116, 145, 164, 175, A-A 196 (our test machine), 220, 239. Other numbers in between are all part of Ambassador serialised production, so only the prefix indicates the model, and that there would be no other models of 'Popular', 'Sports Super S', 'Electra 75', or 'Three Star Special' that would have the same numbers as the mopeds.

The change for 1962 was that the SPN was again reset with the known number range being built from about 10 to 461 on the Ambassador register for 1962. Serialised production over all



Modelled as a sculpture from clay by the Finland artist Richard Lindh, then translated into metal by Solifer. This extraordinary moped was a unique work of art in 1960.

models would mean that statistical projection couldn't effectively be applied to figure out how many mopeds were made, and the only thing that statistics could suggest from the serialised list is that it could be as low as seven, possibly as high as 106, but unlikely to higher than 113.

Applying percentages of the five Ambassador models built in 1962: Electra 75 (16), Popular (5), Sports Super S (7), Three Star Special (5), Moped (7), means the moped represents 17.5%. Presuming 500 machines built before production ended with sale of the business in October, suggests maybe 86 mopeds could have been built ... we really don't know, but it looks less than 100.

In October 1960 the Swedish manufacturer Fram-King signed a three-year sales agreement with Solifer to contract delivery of at least 9,600 Export moped frames to Sweden beginning in 1961, as parts without engines as the Swedes planned to install three-speed DKW ZU-805 motors in them. This seemingly promising export deal was soon compromised by Fram-King's payment problems, followed by their bankruptcy, and Solifer had to offset the credit losses. The Fram Company subsequently re-financed and, with a new contract, went on to sell Fram-King branded Solifers in Sweden for many years. With the deal concluded with the Swedes, the Solifer Export began to interest other European manufacturers on a wider scale with its elegance and style.

The next major moped export contract was the one signed in 1961 for the English market with Ambassador Motor Cycles Ltd. The order reportedly included 1,000 pieces for the 1961 post-season, and the Solifer factory would supply at least 3,000 moped frames per year from the beginning of 1962, delivered without an engine, to enable the fitment of the British Villiers 50cc 3K/1 motor. Obviously this didn't work out as planned, and the deal reportedly fell through due to payment delays.

Beyond the initial batch of frame kits, the Villiers engine supply situation could also have ground the project to a halt, by which time the shortly-to-be-retiring Kaye Don was well into negotiation to sell his company to Harold Nock at the Dawson Motor Works. Understandably, 'The Don' wasn't going to be bothered to find another engine for his factored moped frame, and Richard Lindh's artwork tragically became a very limited edition in Britain. Solifer continued to manufacture other models of mopeds and light motor cycles until the early 1970s, and still exists today in its original trade as a caravan & campervan manufacturer; it also factors in Chinese made lightweight two-wheelers for sale under Solifer branding.

Forty years on from the dawn of the 'swinging sixties', and rare surviving examples of the Ambassador moped are still just—Absolutely Fabulous!



Next: Another old British moped, built only for one season! It's actually quite special, but you probably wouldn't recognise it as a keystone in this manufacturer's production plan.

Even before the introduction of the RSW16, somebody at Raleigh had also come up with the idea of motorising this forthcoming small-wheel bicycle by fitting the Motobécane engine that was already being licensed in the contract of 5 October 1960.

The project to produce a motorised version of the small-wheel bicycle was coded RM7, and we can get some idea when this started because the engine specification was entered as 1.4bhp, as taken from the early continuous-fin, 6.5:1 compression motor used in the RM6 at the time, and up to November 1965 when the early engine would be wholly succeeded by the new replacement split-fin 7.5:1 compression, 1.7bhp engine.

The RM7 code would have been allocated to the motorised RSW16 project before, or at the same time as, the RM8 Automatic MkII project was issued. The RM7 model however, required somewhat more involved development than the simple RM8 Automatic MkII, which was announced and introduced in December 1963, so the RM7 project must also have been commissioned at latest sometime in 1963. A Raleigh Small Wheel 16 pre-production bicycle model was only shown to Alex Moulton (as a patent check) as early as 1964, to go on sale in 1965 as the RSW16.

It's easy to presume that the RM7 may have simply involved bolting an engine into the RSW16 cycle frame, but the physical mechanics don't quite work like that. While the RM7 looked very similar to the

bicycle, it actually employed a completely different frame with reinforced sections at all its joints.

The earliest 'D'-registered factory prototype RM7s were completed and running around on pre-production road tests from summer 1966 (JAU 70D), and early 'E'-registered examples (after August 1966), at which time the models were already branded by a Wisp graphic.

While we were at Nottingham Inspire in June 2024 researching for our article on 'The Ghost', we incidentally came across a few other lost images from the Raleigh Company Archives that nobody knew anything about...

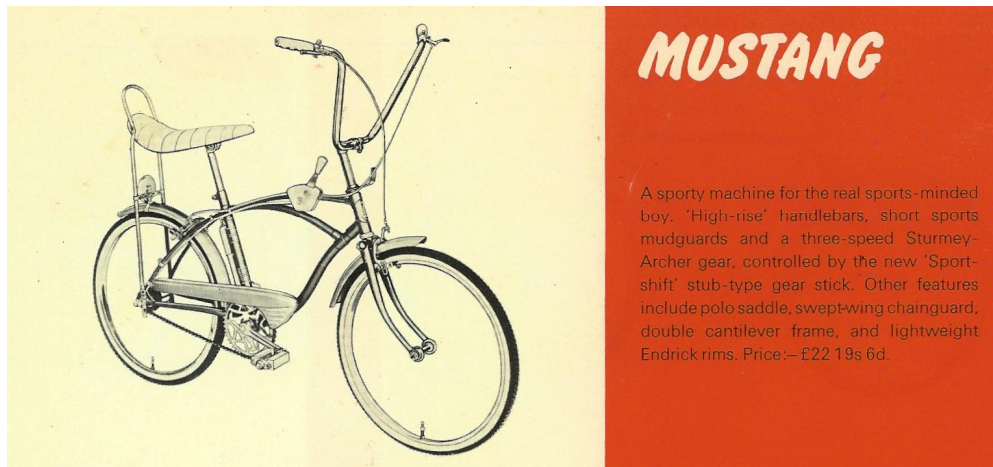


So where might this R16-Poweride fit into the greater picture?

RAL 766D might appear to be a 1966 Nottinghamshire issued registration, except that this number isn't real! AL-serials were issued by Nottinghamshire Authority, but they never used the RAL *mm*D series. Maybe the RAL letters were chosen just because it's a Raleigh? We can only speculate whether 766 might mean the model was made (or the picture was taken) in July 66? Otherwise it seems an odd number to choose.

While the R16-Poweride seems to be largely based on the RSW16 cycle frame, it is also equipped with quite a number of clearly Wisp components, which suggests it was built as a parallel project in the early development phase.

Items that are recognisable as Wisp include the dimpled 36-H rear wheel with 44T rear sprocket, pedal chain-wheel, and headlamp. Since the RSW16 frame has a longer headstock stem, the 'Wisp pattern' handlebars might appear to have been set in the lowest position, but that handlebar clamp doesn't look like the one-piece Wisp set.



MUSTANG

A sporty machine for the real sports-minded boy. 'High-rise' handlebars, short sports mudguards and a three-speed Sturmey-Archer gear, controlled by the new 'Sport-shift' stub-type gear stick. Other features include polo saddle, swept-wing chainguard, double cantilever frame, and lightweight Endrick rims. Price:— £22 19s 6d.

After we trawled an investigation through all the Raleigh cycle handlebars, the closest match would seem to be the bar-set from the obscure Raleigh Mustang. The Mustang seems to be a copy of American bikes like the Schwinn Stingray, and this undated catalogue lists it as a three-speed, so presumably pre-dates the 5-speed version launched at the 1966 Earls Court Show, so c1966. The Mustang seems to be an almost 'forgotten bike', and its presence in the Raleigh range would appear to alter the usual accounts of the history of the Raleigh Chopper.

R16's round stand bracket looks to be one from an RM4 or 5, since it's certainly not the Wisp style channel stand bracket. The RSW16 frame carried a light-weight cycle side-stand that wasn't capable of supporting the bike when fitted with an engine, so Raleigh had to fit a centre stand to make it stable.

The engine is an early 1.4bhp continuous-fin engine, though oddly fitted with a later type low-tension mag-set!

We don't feel the headlamp position on the front mudguard would have been legal for a moped in the UK, because it's mounted too low.

The Giuliani saddle is of Italian origin, and we don't think that this was fitted on any other Raleigh machines.

The R16 has a 'fixed' pedal chain tensioner; Wisp was fitted with a 'sprung' pedal chain tensioner.

The HT coil mounting bracket is pop riveted to the frame, which looks like an improvised 'last minute' R&D job on a marketing model, and doesn't seem like it would have been a production standard finish.



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The 'R16-Poweride' is clearly a prototype model that failed to win approval. It's as though it's intended to present a lower cost alternative to the Wisp, but when you look at the few actual 'cost reduced' parts like the calliper front brake compared to the RSW16 front hub, and the fuel tank (which supports the rear bag without need for the rear carrier), fitment of cheaper 2.125 cycle grade tyres, omitting the chrome engine trims, and RSW16 nylon bush in the top steering head instead of the Wisp top bearing race ... it'd be easy to conclude that there might not be enough cost-saving to make a worthwhile difference in listing both the Wisp and the R16 competing with it.

A MkII version of the RSW16 bicycle was announced on 1 September 1967, and would be presented at the Earls Court Show later that month.

The MkII was a cost reduced version of the original RSW16, as a result of Raleigh acquiring Moulton on 7 August that year, then pitching the Moulton & cost reduced RSW MkII at different markets rather than being competing models.

Introduced 14 April 1967, Wisp production officially ended in September 1969, but at some point within this period Raleigh's marketing department may have been looking to update the design toward a Wisp Mk2 ... Maybe something like this?



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The headlamp on the Wisp Mk2 looks like the same headlamp as on the RSW16 MkII, so we'd presume this would date the Wisp Mk2 model to around late 1967–68 for this headlamp to be available.

The Sachs 1.6–2.0ps motor is an unexpected fitment and, since it seems to be based on a Wisp frame, why didn't they simply leave the Motobécane engine fitted? Sachs did manufacture automatic 'Saxonette' versions of its motor, and maybe Raleigh Marketing was thinking to progress, beyond the belt drive flywheel, to a 'unit' automatic engine?

We presume the 'light grey shape' beneath the saddle was representing what was intended to be the fuel tank, with the white frame panels presumed to be possible body trim pressings or plastic mouldings, and the black box behind the seat an integral rear carrier.

The front mudguard looks as if it's adapted from the Autocrat prototype, but now with cut-outs to enable fitting between the narrower Wisp forks.

The negative was titled as 'Wisp Mk2 mock-up', so maybe little more than an initial marketing impression model with superficial rear body panels, though it could demonstrate the lines along which they were thinking of further developing the Wisp.



Next: Another discovery from the Nottingham Inspire Raleigh Archives: we found a German Farmer!

Can you figure what this is about? Otherwise you'll have to wait till the April edition...



Iceni CAM Magazine is produced by Andrew Pattle and Mark Daniels. Mark rides the bikes and writes the articles; Andrew calls himself the editor, putting the magazine together and printing it.

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