

## Matchless Silver Arrow specification changes

### 1930 Model A

Standard model, price £55 (also available under hire purchase: £15/5/6 deposit and twelve £4/3/0 monthly payments).

Standard model equipped with P. & H. acetylene lighting and bulb horn, price £57/10/6.

De Luxe model, with electric lighting and instrument panel, price £63/2/6 (£17/10/9 deposit and twelve £4/14/8 monthly payments).

Petrol tank: Chrome with white side panels, lined black, and Matchless 'scroll' transfer



(2½ gall.). Central metal strip black. Black and white tank as option.

Bore: 54 mm

Stroke: 86 mm

Carburettor: Amal type 4/014 (bottom petrol feed), jet 70, jet block and barrel size 21, 4/4 throttle valve in position 3.

Maximum power: 16 b.h.p. at 5000 rpm

Lucas Magneto: Type KLV-0

Saddle: Large Lycett Aero with roll back

Wheels: 26" x 3.25" (= 3.25 x 19); 8" x ¾" brakes on both wheels

Gearbox: Sturmey Archer 3-speed type BS

Throttle lever

Rustless black gun finish for all small parts not enamelled or chromium-plated.

### Equipment on de Luxe model

Lucas Magdyno: Type MDB

Rear light: MT110

Electric horn: Lucas B410

Headlamp: Lucas type S51

Three-lobed instrument panel incorporating:

Speedometer : Smiths S71 (trip); S107 (non-trip)

Lucas control switch

Lucas ammeter type BM1

Lucas panel light and ignition switches (round knob inscribed "Off – On", ignition also with "Ign")

Twist-grip throttle

### Sidecars

None recommended

### Options

Sports handlebars

Chrome plated wheel rims

Speedometer for standard model, fitting on bracket in front of steering damper knob, trip or non-trip

Legshields

Clarion high-frequency electric horn in place of Lucas

Detachable luggage carrier

Matchless pillion footrests

Hutchinson 'Fastfit' sports pillion seat

Hutchinson 'De Luxe' pillion seat (when luggage carrier used)

27" x 4" wheels (= 4 x 19)

Matchless handlebar flag (Matchless in black on white background)

Matchless coat badges

### Changes during the year

Very early Arrows had the ignition cut-out on the handlebar, not in the panel

Very early Arrows had cylinder blocks and heads which were more rectangular. Later they were more 'D'-shaped, i.e. narrower on the carb. side

Improved gear change support (from about 2/30)

Metal strip along bottom of oil tank removed (from about 2/30)

Magneto platform was changed slightly during the year. Early platforms only allowed for two bolts to hold the magneto/magdyno (plus a lateral positioning bolt). Later, the bolt holes were lengthened to allow more back and forth movement and three (magdyno) or four (magneto) fixing bolts used, the central hole being key-shaped, presumably to slot in the magdyno with the central screw in place.

Exhaust pipe attachment point moved from lower rear engine/gearbox plate stud to bottom of crankcase (from about 2/30)

“Silver Arrow” tank transfer introduced (when?):



### **1931 Model A/2**

Standard model, price £55 (also available under hire purchase: £15/5/3 deposit and twelve £4/3/0 monthly payments).

De Luxe model, with electric lighting and instrument panel, price £64 (£17/10/9 deposit and twelve £4/14/8 monthly payments).

Petrol tank: Chrome with white side panels and chrome ‘M’ (2½ gall.). Central metal strip black with circular red on black “M” transfer.

Gearbox: Sturmey Archer 4-speed type D.IV. All gear ratios changed: Lower 1<sup>st</sup> and higher top.

Amal carburettor jet changed from 70 to 55 in combination with Amal air filter.

Larger diameter exhaust pipe

Exhaust ports on head spaced further apart (6<sup>5</sup>/<sub>8</sub>" instead of 5<sup>1</sup>/<sub>8</sub>" )

Oil tank capacity increased from 4 to 6 pints (?).

#### **Equipment on de Luxe model**

As for 1930, except four-lobed panel to incorporate oil drip feed indicator

Horn: Lucas B410

Magdyno type: MSV-2

#### **Sidecars**

No. 1, Touring sidecar (Price of combination £73)

No. 2, Sports sidecar (Price of combination £74)

#### **Options**

Acetylene lighting

Speedometer for standard model, fitting on bracket in front of steering damper knob, trip or non-trip

Sports handlebars

Chrome plated wheel rims

27" x 4" wheels (= 4 x 19)

Legshields

Lucas high-frequency electric horn (HF314, Altette)

Lucas H52 headlamp for non-panel machines

Extra large chrome plated headlamp (MC140)

Detachable luggage carrier

Matchless pillion footrests

Pullman pillion seat (illustrated in use on p.14 of 1931 catalogue)

Hutchinson ‘De Luxe’ pillion seat (when luggage carrier used)

### **1932 Model A/2**

Standard model, price £55 (also available under hire purchase: £13/15/0 deposit and twelve £4/4/1 monthly payments).

De Luxe model, with electric lighting and instrument panel, price £64 (£16/00/0 deposit and twelve £4/16/3 monthly payments).

Petrol tank: Chrome with white side panels and chrome ‘M’ (2½ gall.)

‘Clean’ handlebars with integral fittings, black finish; new style twist-grip throttle

Instrument panel with oil indicator (drip feed) and ignition tell-tale

Horn: Lucas HF314  
 Fabric oil filter in oil tank  
 New type magneto coupling rubber  
 New type headlamp bracket  
 New type piston (longer skirt) with three rings (instead of two) (two different types were apparently produced, possibly from two separate manufacturers)  
 New type grooved bush for camshaft  
 New type kickstarter  
 Higher 2<sup>nd</sup> gear.

### ***Sidecars***

No. 1, Touring sidecar (Price of combination £82/10)

No. 2, Sports sidecar (Price of combination £83/10)

### ***Options***

Chrome tank with black gold-lined panel  
 Lucas 8-day clock  
 Instrument panel with oil indicator (button) and ignition tell-tale  
 Chrome plated wheel rims  
 Pullman pillion seat (illustrated in use on p.14 of 1931 catalogue)  
 Hutchinson 'De Luxe' pillion seat  
 27" x 4" wheels (= 4 x 19)  
 Detachable luggage carrier  
 Extra large chrome plated headlamp (MC140)  
 Legshields

### **1933 Model A/2**

Standard model no lights, price £55.

Standard electric lighting model, price £61/5/0.

De Luxe model, with electric lighting and instrument panel, price £64/0/0.

Petrol tank: Chrome with black side panels and gold lines and chrome-plated 'M'

Gearbox type D.IV

Carburettor float chamber changed from swan neck type to straight (?).

Some may have been fitted with the oilbath chaincase, which was available on most other models from 1933

Likewise, some may have been fitted with the deep C-section mudguards with chrome-plated brass edging, which were used on the D-series models from that year.

"Square" section gudgeon pin circlip used from 1.1.1933

### ***Sidecars***

No. 1, Touring sidecar (Price of sidecar £20/10/0)

No. 8, Light Cruiser sidecar (Price of sidecar £20/10/0)

All sidecars were fitted with a special spring frame chassis for use on the Silver Arrow

### ***Options***

As for 1932

**Useful information originally published in table form in each year's catalogue.**

	<b>Silver Arrow 1930</b>	<b>Silver Arrow 1931</b>	<b>Silver Arrow 1932</b>
<b>Measurements</b>			
Length solo	7' 0"	7' 0"	7' 0"
Length comb.		7' 2"	
Width solo	?	2' 5½"	2' 5¾"
Width combination	?	4' 9"	5' 5½"
Wheel base	4' 8"	4' 8"	4' 8"
Ground clearance	6"	6"	6"
Saddle height	2' 3½"	2' 3½"	2' 3½"

<b>Fuel</b>			
Petrol tank capacity (imp.gallons)	2½	2½	2½
Oil tank capacity	4	6	6
Petrol consumption solo (miles per gallon)	90 - 105	90 - 105	90 - 105
Petrol consumption comb.	?	75 – 90	75 – 90
Oil consumption solo (miles per gallon)	1600 - 1800	1600 - 1800	1600 - 1800
Oil consumption comb.	?	1500 - 1700	1500 - 1700
Carburettor jet	70		
<b>Transmission</b>			
Front chain size	<sup>7</sup> / <sub>16</sub> " x 265"	<sup>7</sup> / <sub>16</sub> " x 265"	<sup>7</sup> / <sub>16</sub> " x 265"
Front chain links	78	78	78
Rear chain size	<sup>1</sup> / <sub>2</sub> " x 305"	<sup>1</sup> / <sub>2</sub> " x 305"	<sup>1</sup> / <sub>2</sub> " x 305"
Rear chain links	125	125	125
<b>Gears</b>			
Gear ratio 4 <sup>th</sup>	?	5.9	5.9
Gear ratio 3 <sup>rd</sup>	6.1	7.8	7.8
Gear ratio 2 <sup>nd</sup>	9.4	11.6	10.4
Gear ratio 1 <sup>st</sup>	16.8	17.5	17.5
<b>Tyres</b>			
Size of tyres	26" x 3.25 <sup>1</sup>	26" x 3.25 <sup>1</sup>	26" x 3.25 <sup>1</sup>
Pressure front (lbs/sq.in)	16	16	15 - 16
Pressure rear	22	22	20 - 22
Pressure side	?	18	16 - 18
Pressure rear comb.	?	26	24 - 26
<b>Speed</b>			
Miles per hour solo	60 - 65	60 - 65	60 - 65
Miles per hour comb.	?	50 - 55	50 - 55
<b>Weight (less equipment)</b>			
Solo in lbs	308	308	308
Comb. in lbs	?	450	450
<b>Engine</b>			
Bore in mm	53.9	54	54
Stroke in mm	85.7	86	86
Cubic capacity in cc	400	400	400
No. of cylinders	2	2	2
Angle of cylinders	26°	26°	26°
Compression ratio	5.6	5.6	5.6

Notes

<sup>1</sup> 27" x 4.00 tyres optional extra (pressure 2lbs less each per wheel)