

...makes cycling easier

GET INTO GEAR...

Sturmey-Archer has been at the forefront of cycle component design for almost 100 years. The latest range of controls illustrated in this catalogue, demonstrate the flair and ingenuity our young designers bring to Sturmey-Archer products.

Using the best design techniques our engineers have developed innovative, reliable and exciting products for the trade and consumer alike. Index shifting was pioneered by Sturmey-Archer; who were one of the first to introduce twistgrips into its range of controls.



This leaflet has been produced to ensure that dealers and cyclists can get the best from their hub gear systems and shows, with easy to use diagrams, how to change cables and adjust the position of the control. Simple things, but often overlooked by others whose controls are not as versatile to allow individual positioning for different hand and finger sizes as well as handlebar shapes or to allow for simple cable replacement.

Sturmey-Archer components are made for quality cycles worldwide; and designed to provide stylish, comfortable, enjoyable and safe cycling.

Circa. 1907

Twistgrips now adorn almost 50% of all cycles sold - a technique of shifting introduced by Sturmey-Archer over a quarter of a century ago and recently brought right up to date with 3, 5 and 7 speed Twistgrips.

We have now introduced the push-button control mechanism. The new push button Orion Control is beautifully styled and offers a variety of fitment positions to suit all handlebar types. It is also fun to use and looks good.





Get into gear with a Sturmey-Archer Control.







Orion - HSJ 865

Modern, handsome control providing easy gear operation with lever action down the gears and a slick, smooth push-button return action.



A modern easy to operate thumbshifter control for use on bicycles fitted with all 3 speed hubs.



Specifically designed to control the Sturmey-Archer range of brake hubs. Smart thumbshifter action gives positive gear selection in all gears, in all weathers.



Classic Trigger - HSJ 762 (22.2mm clip) - HSJ 765 (23.8mm clip)

The most widely used 3 speed hub gear control in the world - of long proven reliability. A quick 'flick' action, handlebar fitting control - neat, simple and trouble-free. Universally acceptable for all makes of bicycles.

Twistgrip - HSJ 880

With this control a simple twist of the wrist ensures quick, smooth indexed gear changes. Ensuring you are always in control.

Stanza, Nimbus and Orion controls are fitted with a base unit which allows them to be used in front or behind the handlebar. Precise 'teeth' allow the control's position to be set for different hand sizes.





Modern controls with all the advantages of the 3 speed range.



Standard Trigger - HSJ 839

This thumbshifter control allows precise, exact gear selection. Choose the gear and select it first time everytime. Clear, concise numbering takes the 'guesswork' out of gear selection.



Orion - HSJ 866

Like the 3 speed Orion, this stylish, attractive control enhances any handlebar. Its novel push-button control makes gear selection easy. Very popular with female riders.



Twistgrip - HSJ 875

Sturmey-Archer were one of the first manufacturers to use twistgrips some 30 years ago. This model offers a rugged grip to ensure gear selection is positive even in the wet. No slipping, no fuss.





A control for every handlebar type.



Standard Trigger - HSJ 845

7 speed thumbshifter with Sturmey-Archer patent handlebar detent device. This control will grace any cycle.



Twistgrip - HSJ 874

Specially selected rubber compound gives a warm feel to this grip. Easy to operate even when wet.



Wishbone Trigger - HSJ 855

Specifically designed for curved roadster handlebars. This control can be operated with either lever. The flick return is so fast, you will never miss a gear!



controls and cable fitment



3 speed Stanza

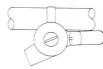


3 speed Nimbus

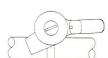


5 speed Trigger

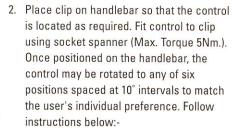
Control Fitment and Orientation



The above controls may be located either in front of or behind the handlebar. Proceed as follows:-

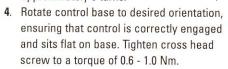


Use a socket spanner to remove control clip.





 Insert coin in screw cover slot. Twist and lift off screw cover to reveal cross head screw. Unscrew, turning screw-driver approximately 6 turns.





Squeeze screw cover legs between finger and thumb. If necessary twist with coin to ensure correct location.



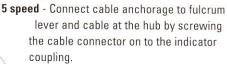


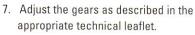


- 1. Select 1st gear on the control.
- Expose cable inner wire and place nipple at base of control lever.
- Rotate and pull cable to engage nipple in control and select high gear.
- 4. Push outer casing into control recess.
- 5. Attach cable to frame.

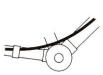


 3 speed - Screw indicator into the hub and attach cable inner wire to indicator via cable anchorage.









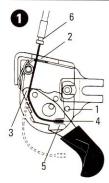


3 speed Trigger

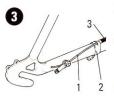
Control Fitment

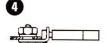
Open clip and place control approximately 50mm from end of handlebar grip and secure fixing screw.

Cable Fitment



- Pull lever back beyond bottom gear
 position to stop (1) and insert wire through
 hole (2) and between pawl and ratchet
 plate at (3). Wire nipple (4) is then fitted
 into notch (5) and cable ferrule (6) slotted
 into hole (2). Keeping tension on wire, push
 lever forward into top gear position. Control
 is then ready for re-connection.
- Check that the fulcrum clip is secured tightly to the frame tube, approximately 125mm from the axle.
- Pass inner wire (1) through fulcrum clip (2) and push outer cable (3) into fulcrum clip stop.
- Loosely connect cable anchorage to inner wire, ensuring the inner wire is correctly inserted.
- With control in 3rd gear connect the adjuster to the indicator coupling.
- 6. Take up any slackness in the inner cable and tighten cable anchorage nut.
- Adjust gear as described in the appropriate technical leaflet.







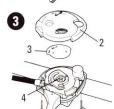
3 speed Orion



5 speed Orion

Control Fitment and Orientation



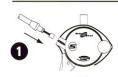




The above controls may be located either in front of or behind the handlebar. Proceed as follows:-

- 1. Use a socket spanner to remove control clip.
- Place clip on handlebar so that the control is located as required. Fit control to clip using socket spanner (Max. Torque 5Nm.).
 Once positioned on the handlebar, the control may be rotated to any of six positions spaced at 10° intervals to match the user's individual preference. Follow instructions below:-
- 3. Unscrew the two cover screws (1) and remove control cover (2). Remove dial plate (3) to reveal the control orientation screw (4). Loosen the screw but do not remove. Rotate the control to the desired position ensuring that control is correctly engaged and sits flat on base. Tighten the screw (4) 0.9Nm, replace dial plate (3) and control cover (2) and tighten screws (1).

Cable Fitment



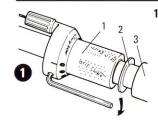
- 1. Feed inner cable and nipple into control.
- 2. Swing cable nipple into pocket on ratchet wheel.
- 3. Pull cable back to lock nipple into pocket on ratchet wheel.
- 'Click' locate the outer cable into control. If the outer cable does not 'click' into place check that the cover screws are tightened sufficiently.
- 5. Attach cable to frame.
- 3 speed Screw indicator into the hub and attach cable inner wire to indicator via cable anchorage.

5 speed - Connect cable anchorage to fulcrum lever and cable to the hub by screwing the cable connector onto the indicator coupling.

Adjust the gears as described in the appropriate technical leaflet.

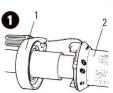
3 speed Twistgrip

Control Fitment

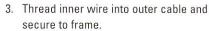


 Slide control (1) onto handlebar followed by the washer (2) and the handlebar grip (3). Before securing control to handlebar ensure that the grip is pushed fully onto the handlebar. Now push control unit against the grip, rotate to the required position and tighten the grub screw to 2Nm max.

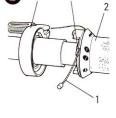
Cable Fitment



- To replace the cable loosen grub screw in control and separate the twistgrip (1) from the body (2) by pulling apart firmly.
 Food inner wire (1) into twisteric (2) and
- 2. Feed inner wire (1) into twistgrip (2) and locate nipple into recess (3). Feed inner wire into body (4) and push twistgrip into body, aligning gear 3 position with mark on body to do so.



- Fit cable anchorage and with control in gear
 connect to indicator coupling.
- i. Re-adjust gears.

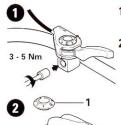


7 speed Standard Trigger



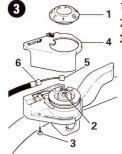
7 speed Wishbone Trigger

Control Fitment and Orientation



- 1. Fit control set in 1st gear onto RH side of handlebar and tighten bolt to 3 5 Nm.
- 2. The control orientation can be altered to suit individual needs by removing the plastic screw cover (1) at the control centre, and loosening the cross head screw. Rotate the control to the desired position before tightening the screw and replacing the cover. The control can be positioned either in front or behind the handlebar.

Cable Fitment



- 1. Select 1st Gear.
- 2. Expose inner cable.
- 3. Remove control orientation screw cover (1), do not loosen the control orientation screw (2). Undo the small cross head screw (3) on underside of control and lift off plastic panel (4) from the top of the control. Engage inner cable nipple (5) into the nipple recess in the control pulley then engage the outer cable (6) in the cable recess. Replace the top panel (4) and secure with screw (3) then replace control orientation screw cover (1).



Run cable along frame and secure with clips/ties. Do not fasten too tight - the outer cable should be retained but not clamped. Smallest possible cable bend 100mm radius. Fit fulcrum lever to cable by screwing in the adjuster.



5 speed Twistgrip



7 speed Twistgrip

Control Fitment



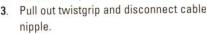
Cable Fitment

1. Slide control onto handlebar followed by the two washers and the handlebar grip. Before securing control to handlebar ensure that the grip is pushed fully onto the handlebar. Now push control unit against the grip, rotate to the required position and

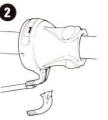
2 Nm max. tighten the grub screw to 2Nm max.

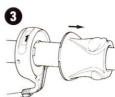
Remove endcap (1) and small screw (2).

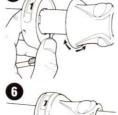


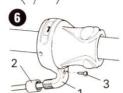


Thread endcap over cable.









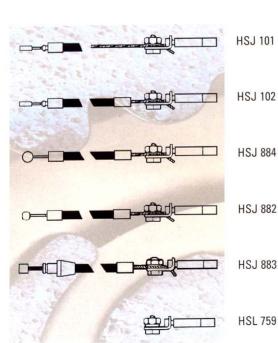
- 5. Insert cable nipple into nipple recess of inner dial ensuring inner wire exits control body correctly. Hold in position with thumb. Fit twistgrip onto body and rotate until it locates over cable nipple. Click twistgrip into body.
- 6. Insert endplate (1) ensuring the outer cable ferrule end is retained. Screw on endcap (2) and insert screw (3) and tighten.
- Re-adjust hub.

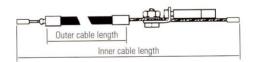


cables and indicators

Control Cables

3 Speed Cables





Trigger cable complete with cable anchorage 530mm x 1520mm

Trigger cable complete with cable anchorage 1420mm x 1570mm

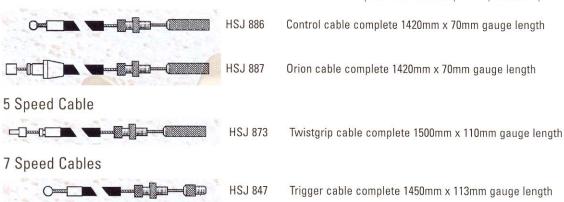
NIMBUS cable complete with cable anchorage 1420mm x 1570mm

Twistgrip cable complete with cable anchorage 1420mm x 1570mm

Orion cable complete with cable anchorage 1420mm x 1570mm

HSL 759 Cable Anchorage



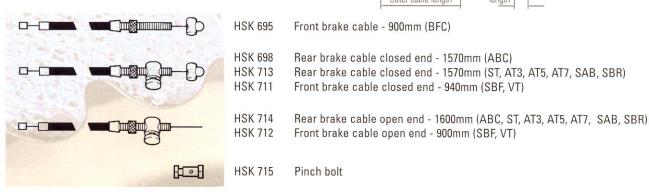


HSJ 872

Brake Cables (for use with Sturmey-Archer Delrin brake levers)



Twistgrip cable complete 1500mm x 140mm gauge length



Brake Lever



PKL 205 Delrin brake lever - 22.2mm Ø

Indicators ACTUAL SIZE



Sales No.	Description
HSA 125	AW (146mm Axle)
HSA 126	AW (163mm Axle), AWC (152mm Axle), (SAB, ABC, AT3 (before 6.89)
HSA 315	SAB, ABC, AT3 (after 6.89)
HSA 316	AWC (163mm Axle)
HSA 490	Sprinter



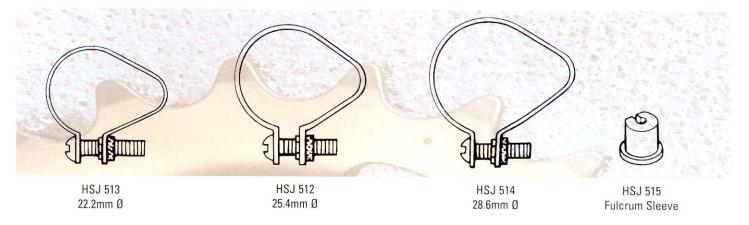
HSL 711 Indicator Guard



fulcrum clips and pulleys

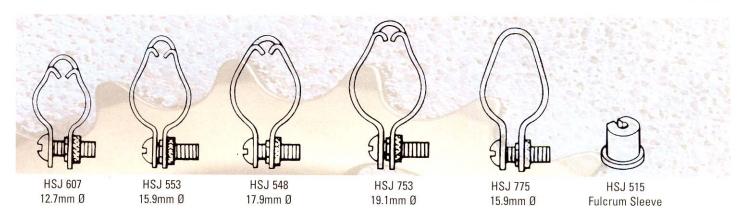
Fulcrum Clips - Top tube and down tube

ACTUAL SIZE



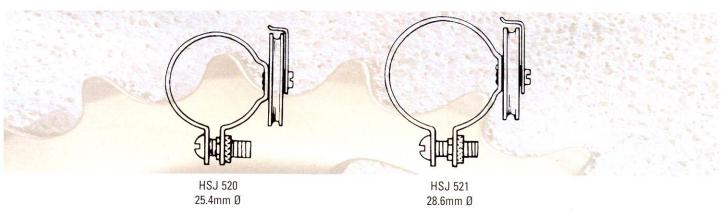
Fulcrum Clips - Chainstay and backstay

ACTUAL SIZE



Pulleys - Top tube and down tube

ACTUAL SIZE

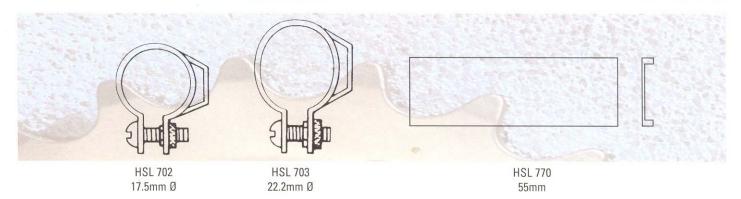




brake arm clips

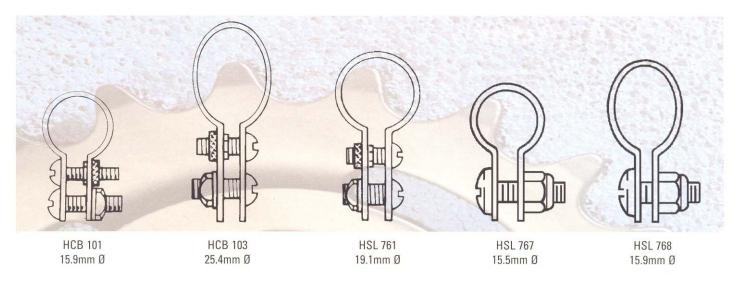
Front brake arm clips

ACTUAL SIZE



Rear brake arm clips

ACTUAL SIZE





sprockets

		14 - 16	17 - 21	22
HSL 714 HSL 715	Description 14Teeth 15Teeth		sers.	Serve
HSL 716 HSL 717 HSL 718 HSL 719	16Teeth 17Teeth (dished) 18Teeth (dished) 19Teeth (dished)		3(0)/3	→ § (()) §
HSL 720 HSL 747 HSL 722	20Teeth (dished) 21Teeth (dished) 22Teeth (dished)			2 most



fulcrum levers and selector guides

Fulcrum Levers



HSJ 844 - Fulcrum lever for 7 speed hubs



HSJ 842 - Fulcrum lever for 3 and 5 speed hubs

Selector Guides



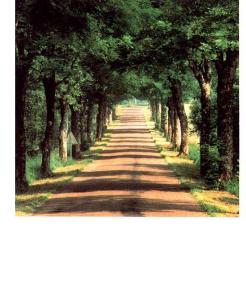
HSA 488 - Gear selector guide for 5 speed hubs



HSJ 848 - Cable Drum HSJ 850 - Adjuster Cover









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