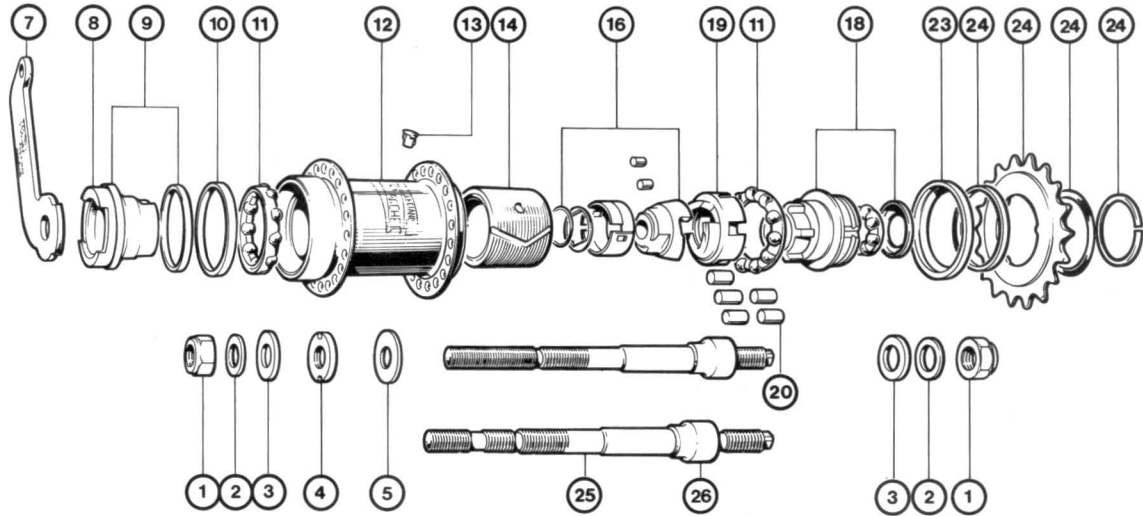


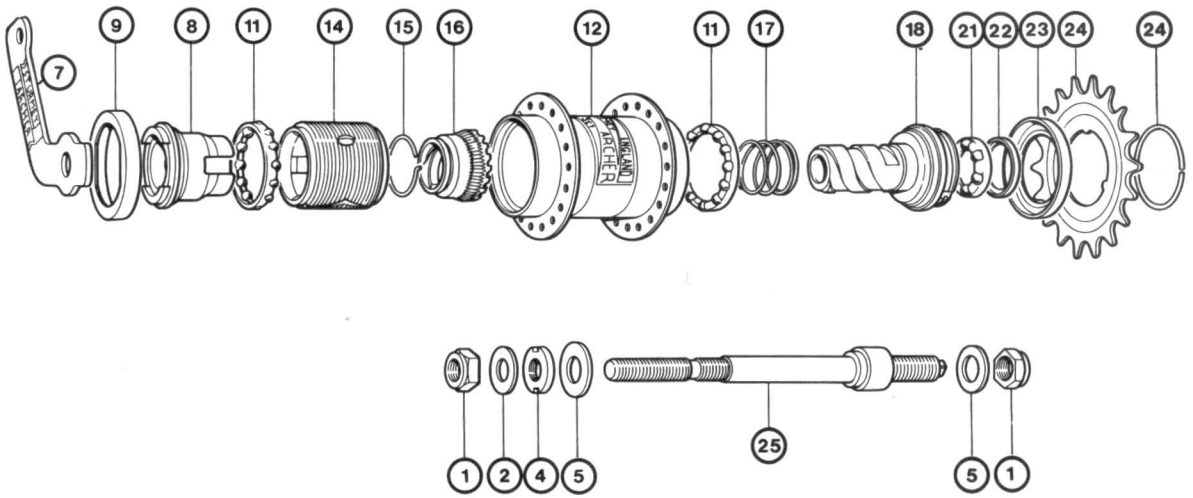
HUBS

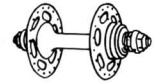
STURMEY ARCHER SC, SC-1, PERRY B-100
TORPEDO COASTER BRAKE

SC



SC1





**STURMEY ARCHER SC, SC-1, PERRY B-100
TORPEDO COASTER BRAKE
PARTS INTERCHANGEABILITY**

Vertical line between numbers indicates parts are not interchangeable.

Parts are interchangeable only if they are on the same line and they do not have a vertical line between them.

	SC-1	SC	Perry B-100	Torpedo*
1. Axle Nut	HMN 118	HMN 118	P 320	0316 061 004
2. Axle Washer 1/16"	HMW 146	HMW 146		
3. Axle Washer 1/8"		HMW 129		
4. LH Brake Arm Nut	HMN 257	HMN 257	P 302	1603 017 100
5. Plain Washer	HMW 366	HMW 366		2318 004 004
6. Notched Washer			P 304	
7. Brake Arm	HSH 424	HSH 424	P 305	0319 101 103
8. Brake Cone Assembly	HSH 457	HSH 438	P 306	0374 109 100 ²
9. Brake Cone Dust Cover	HSH 458	HSH 429		0321 001 000
10. Shell Dust Cover		HSH 439	P 307	0321 002 000
11. Ball Retainers (2)	HSH 453	HSH 427	P 308	0376 100 000
12. Hub Shell 28 holes	HSH 460	HSH 423	P 309	
36 holes	HSH 463	HSH 422		0350 007 111
40 holes	HSH 465	HSH 421		
13. Lubricator		HSA 106		
14. Brake Band	HSH 456	HSH 436	P 310	0373 100 000
15. Actuator Spring	HSH 455			
16. Brake Actuator	HSH 454	HSH 440	P 311	0350 052 100
17. Return Spring	HSH 459			
18. Driver Complete	HSH 451	HSH 425	P 315 threaded	
Driver				0372 100 201
19. Roller Retainer		HSH 430	P 312	0304 001 500
20. Driver Roller (6.5 mm φ)		HSH 428	P 313	0305 001 000
Circlip				0312 003 000
21. Inner Ball Cage for Driver	HSA 284			1676 103 100
22. Dust Cap	HSH 452			1604 013 002
23. Sprocket Dust Cover	HSH 469	HSL 735	P 316	0321 037 105
24. Sprocket Sprocket Spacer Washer and Sprocket Circlip ¹			P 314 threaded P 317 threaded	
25. Axles with fixed cone				
5 3/4" (145 mm) non-grooved				0351 100 000
6" (152 mm) non-grooved	HSH 464			
6 1/8" (155 mm) non-grooved				0351 070 100
6 1/4" (159 mm) non-grooved		HSH 419	P 318	
6 5/16" (159 mm) non-grooved				0351 034 100
6 1/2" (165 mm) non-grooved	HSH 461			
6 7/8" (175 mm) non-grooved	HSH 462			
6 1/2" (159 mm) grooved	HSH 467	HSH 420		
6 7/8" (175 mm) grooved	HSH 468	HSH 418		
26. Fixed Cone		HSH 441		0308 001 100

*Torpedo does sell more individual parts than are listed here.

¹ See Sprocket Interchangeability at beginning of Hub section.

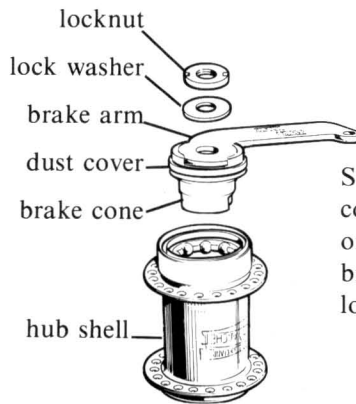
² Includes brake arm.

 HUBS

STURMEY-ARCHER SC
ROLLER DRIVE COASTER BRAKE
DISASSEMBLY AND ASSEMBLY

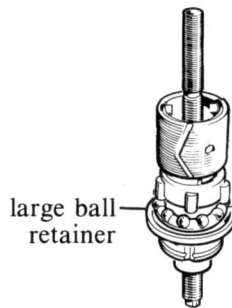
1 DISASSEMBLY

Remove left-hand locknut and lock washer. Unscrew brake cone using brake arm as a wrench. If dust cover and brake arm are press fit on cone, they should not be forced apart. Remove hub shell.



Slip hub shell over assembly. Rotate counter-clockwise until shell race seats on large retainer. Install brake cone, brake arm (brand name facing out) and locknut. Adjust bearing.

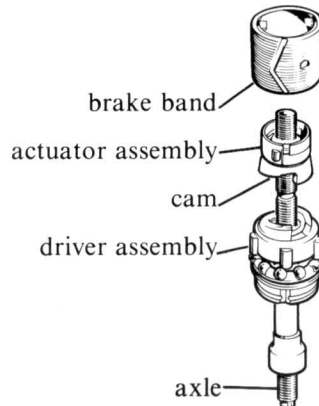
ASSEMBLY 2



Next Step
↓

2 DISASSEMBLY

Remove brake band and actuator assembly. Lift off driver assembly.



Slip driver assembly over axle so that small ball retainer seats on fixed cone. Install actuator *cam end down*. Position brake band with internal tabs up and press over actuator.

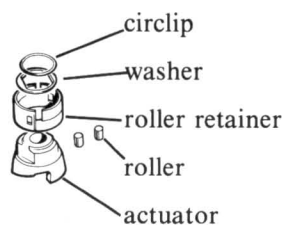
↑
Next Step

ASSEMBLY 1

DISASSEMBLY

Actuator
With a small screwdriver, ease circlip over the end of actuator body. Remove washer and roller retainer; catch rollers.

SUBASSEMBLIES



Actuator
Stick rollers inside roller retainer slots with grease. Slip round end of roller cover over small end of actuator body. Rollers seat against body flats. Install washer and large circlip.

ASSEMBLY

**STURMEY-ARCHER SC
ROLLER DRIVE COASTER BRAKE
DISASSEMBLY AND ASSEMBLY (cont.)
SUBASSEMBLIES**

HUBS 

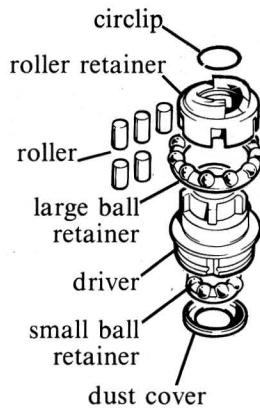
DISASSEMBLY

Driver and Hub Shell

With an awl or small screwdriver ease circlip over end of driver body. Lift off roller retainer and catch rollers.

Remove dust cover with a thin-bladed screwdriver.

Work slowly around cover to avoid deforming it. Lift out ball retainer.



Hub Shell and Driver

Install large ball retainer with *flat side toward driver race*. Stick rollers in roller retainer with grease. Insert small end of driver through large end of roller retainer. Install circlip.

Install remaining ball retainers *flat side out*. Start dust covers straight and tap home with a soft hammer.

ASSEMBLY



CLEANING

Clean all parts, including outside of hub shell, in a suitable solvent. Be very careful not to introduce dirt or grit after cleaning.

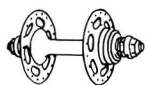
POINTS TO CHECK

Numbers in parenthesis refer to parts chart and exploded drawing.

1. Mating threads of actuator (16) and driver (18) for wear and chipping
2. Surface of driver (18), drive rollers (20) and inside of hub shell for wear and pitting
3. Brake actuator assembly (16) for wear to rollers and roller track
4. Brake band (14) and hub shell mating surfaces for wear or glazing
5. All threaded parts for damaged or stripped threads
6. Dustcaps and bearing retainers for straightness

LUBRICATION

Lubricate ball bearings by filling the spaces between balls with grease. Lubricate hub shell and brake band liberally with a high-temperature grease. Coat other parts with grease.

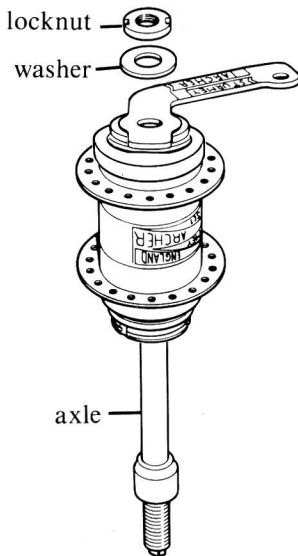


HUBS

STURMEY-ARCHER SC1 COASTER BRAKE DISASSEMBLY AND ASSEMBLY

1 DISASSEMBLY

Remove left-hand locknut and lock washer. Holding driver stationary, unscrew and remove axle.



Turn assembly over.
Install axle from driver side, threading through brake cone. Install lock washer and locknut. Adjust bearing.

ASSEMBLY 3

Next Step

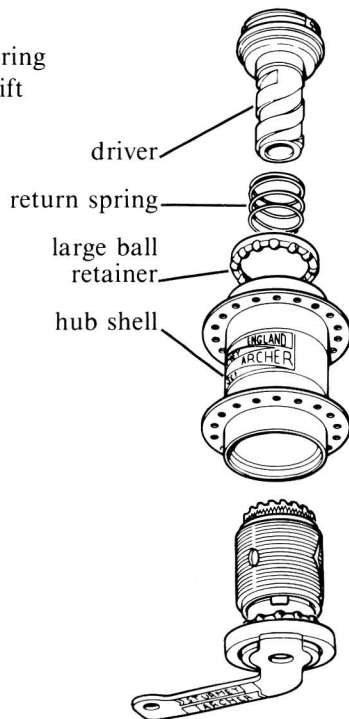


Next Step



2 DISASSEMBLY

Turn assembly over.
Remove driver, return spring and large ball retainer. Lift off hub shell.



Install hub shell *large opening down*.
Insert large ball retainer *flat side up*.
Install return spring and driver.

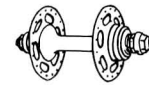
ASSEMBLY 2

Next Step
Next Page



**STURMEY-ARCHER SC1 COASTER BRAKE
DISASSEMBLY AND ASSEMBLY (cont.)**

HUBS

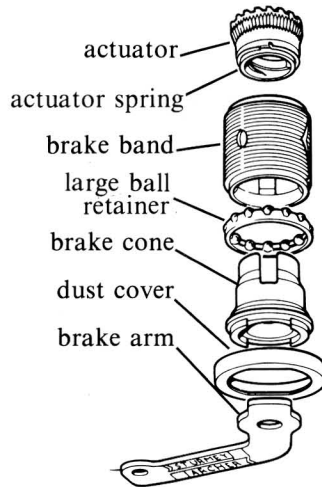


Next Step
Preceding Page

3 DISASSEMBLY

Remove actuator. Remove actuator spring only if it is to be replaced. Ease spring over the end of actuator body with a thin bladed screwdriver.

Remove brake band and large ball retainer. Remove brake cone, dust cover and brake arm separately or as a unit. If these parts are press fit together they should not be forced apart.



If separated, press brake cone, dust cover and brake arm together with brake arm imprint facing out. Install large ball retainer *flat side toward dust cover*. Install brake band with internal tabs engaged in brake cone slots. If actuator spring was removed from actuator, install spring with *hooked end clockwise from spring gap* as viewed from small end of actuator. *Incorrect installation will cause excess drag and wear*. Install actuator *small end down* with actuator spring engaged in one of the brake band slots.

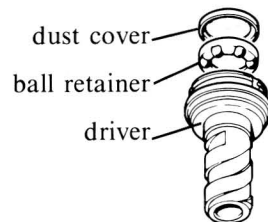
ASSEMBLY 1

SUBASSEMBLY

DISASSEMBLY

Driver

Remove dust cover with a thin-bladed screwdriver. Work slowly around cover to avoid deforming it. Lift out ball retainer.



Driver

Install ball retainer flat side up. Start dust cover straight and tap home with a soft hammer.

ASSEMBLY

CLEANING

Clean all parts, including outside of hub shell, in a suitable solvent. Be very careful not to introduce dirt or grit after cleaning.

POINTS TO CHECK

Numbers in parenthesis refer to parts chart and exploded drawing.

1. Mating threads of actuator (16) and driver (18) for wear and chipping
2. Mating surface of inside of hub shell and outside of actuator (16) for wear and burring
3. Actuator spring (15) for shape and tension
4. Brake band (14) and actuator (16) for wear or burring at mating surfaces

5. Brake band (14) and hub shell mating surfaces for wear or glazing
6. All threaded parts for damaged or stripped threads
7. Dustcaps and bearing retainers for straightness

LUBRICATION

Lubricate ball bearings by filling the spaces between balls with grease. Lubricate hub shell and brake band liberally with a high-temperature grease. Coat other parts with grease.

SUTHERLAND'S HANDBOOK OF COASTER BRAKES AND INTERNALLY-GEARED HUBS