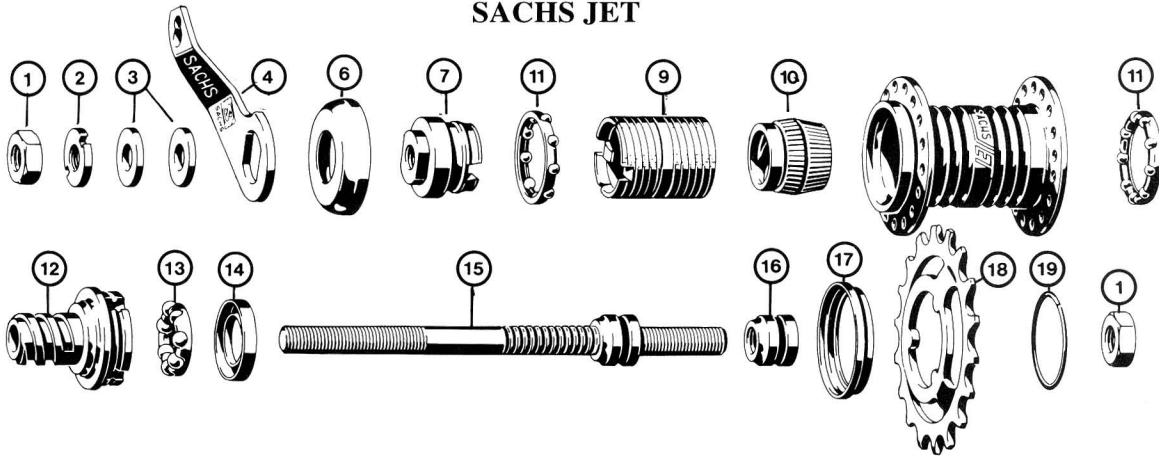


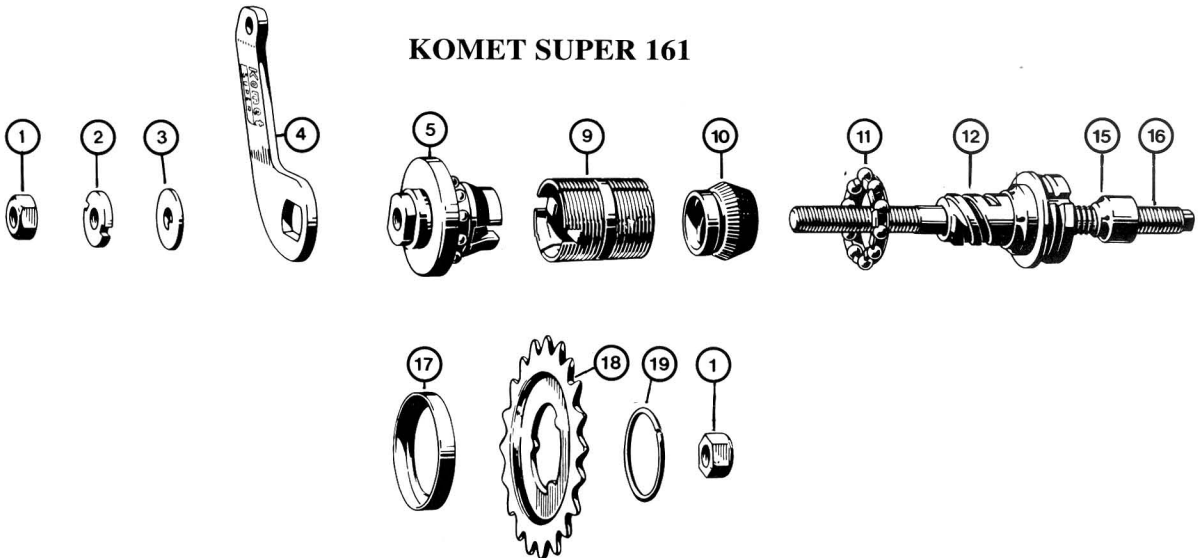
HUBS

SACHS (F & S) COASTER BRAKES

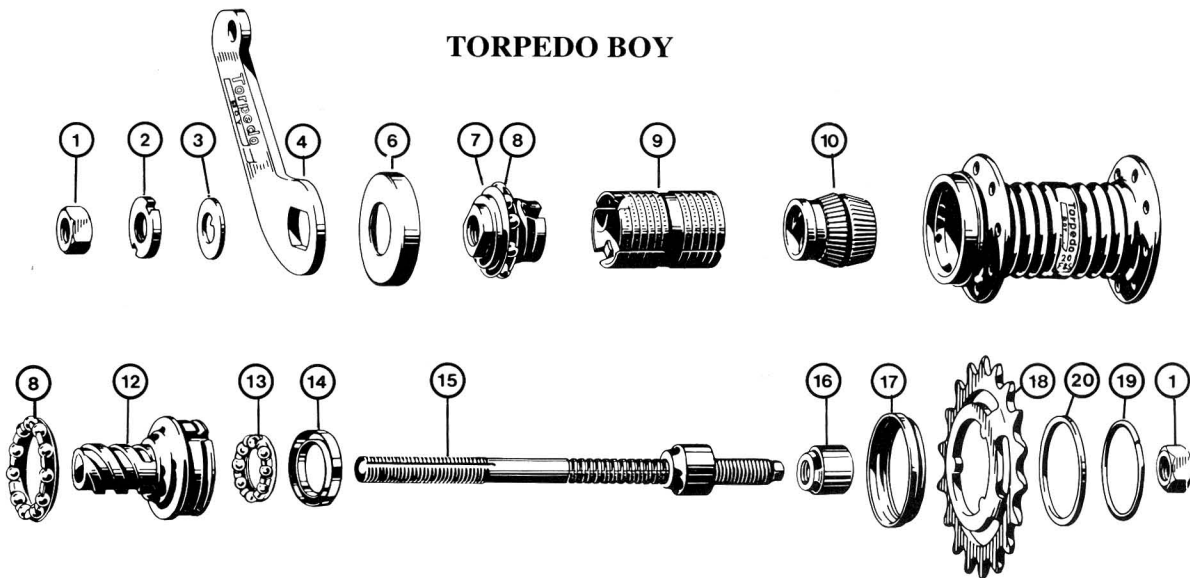
SACHS JET



KOMET SUPER 161



TORPEDO BOY



**SACHS (F&S) COASTER BRAKES
PARTS INTERCHANGEABILITY**



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

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.

	Sachs Jet	Komet Super 161 ¹	Komet Super	Torpedo Boy (Pixie F & S Boy)	Torpedo Boy (New Part Numbers)
1. Axle Nuts (2)					
3/8 x 26 TPI ²	0316 061 004	T 93	T 93	T 93	0316 061 004
3/8 x 24 TPI ²	1603 026 000	T 93A	T 93A	T 93A	1603 026 000A
2. Lock Nuts					
3/8 x 26 TPI ²	1603 017 100	K 102	K 102	K 102	1603 017 000
3/8 x 24 TPI ²	1603 019 000	K 102A	K 102A	K 102A	1603 019 000A
3. Washer	2318 003 000	T 77	T 77	T 77	
4. Brake Arm	2319 004 100	K 108	K 108	J 108	2319 001 100
5. Brake Cone / Dust Cap / Ball Retainer Assembly					
3/8 x 26 TPI ²					2307 001 100
3/8 x 24 TPI ²		K 161/2A			2374 004 001A
6. Dust Cap	2321 006 000	K 161/1	K 104	J 104	2321 001 000
7. Brake Cone					
3/8 x 26 TPI ²	2374 006 100 ⁴		K 101	J 101	
3/8 x 24 TPI ²	2307 003 101		K 101A		
8. Ball Retainer		Star S 2051	K 106 (Star K 91)	J 106 (Star 130)	2376 001 200
9. Brake Cylinder	2373 002 000 ⁵	K 113	K 113	J 113	2373 001 000
Spring for Brake Cylinder		K 113A	K 113A		
10. Driving Cone	2306 002 100 ⁵	K 107	K 107	J 107	2306 001 000
11. Ball Retainer	2376 002 001 ⁵	K 161/4	K 105	J 106	
Star 0103-247		S 2050	Star K 042	Star 130	
12. Driver Assembly (Inner Hub Barrel)	2372 004 100 ⁵	K 161/5	K 114	J 114	2372 001 401
13. Ball Retainer	2376 003 000	K 161/5A	10-1/4" loose balls	10-1/4" loose balls or S-1025	1676 103 100
Star 0103-519		Star S 1025			
14. Dust Cap	1604 013 002	K 112A			1604 013 002
15. Axle with Fixed Cone					
3/8 x 26 TPI ²		K 110/4	K 110/4	J 110/4	2371 008 000
3/8 x 24 TPI ²	1671 103 000 ⁵	K 110/4A	K 110/4A	J 110/4A	1671 103 001A
16. Fixed Cone					
3/8 x 26 TPI ²		K 110	K 110	J 110	
3/8 x 24 TPI ²	2308 003 101	K 110A	K 110A	J 110A	1608 101 000A
Oiler	none			T 82K	
17. Dust Cap, sprocket side	2321 002 101	K 161/6	K 103	J 103	2321 002 101
18. Sprockets, 17-22 ³					
19. Sprocket Lockrings ³	0512 011 000	DR-616E	DR-616E	DR-616E	0512 011 000
20. Sprocket Spacer Washer ³	none required	none required	none required	J 116	0518 018 000
				2 required except with 12T sprocket	

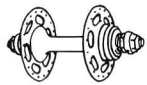
¹ 161 is stamped on hub shell.

² 3/8 x 26 TPI is sometimes referred to as German thread. 3/8 x 24 TPI is sometimes referred to as American thread. American threaded parts have A stamped in them.

³ See Sprocket Interchangeability at beginning of Hub section.

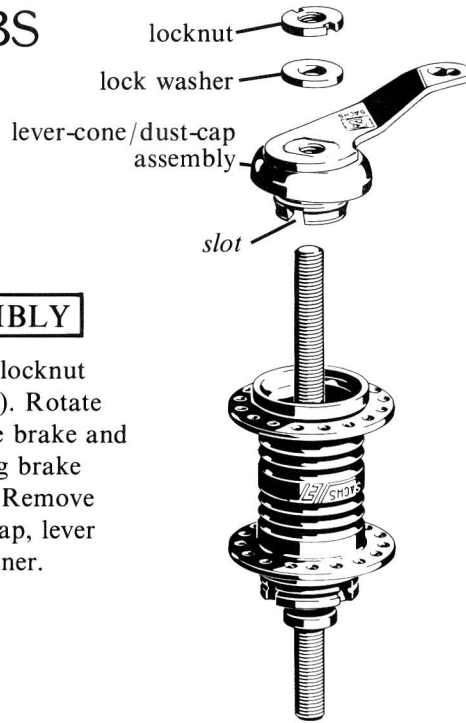
⁴ Includes brake arm and cone.

⁵ There are several similar part numbers for these items.



HUBS

SACHS (F & S) COASTER BRAKES
DISASSEMBLY AND ASSEMBLY¹



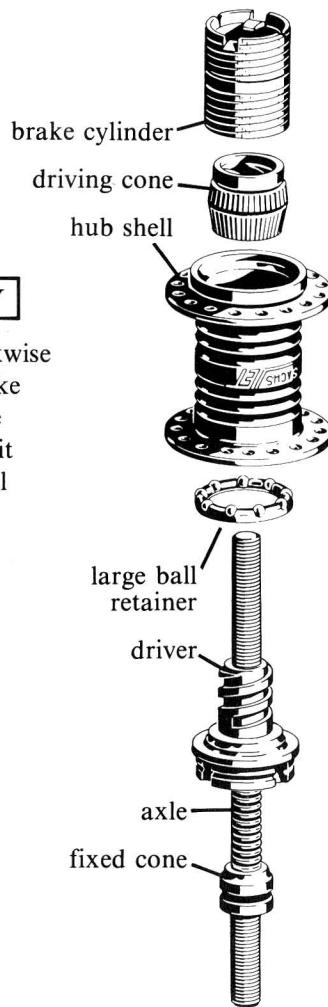
1 DISASSEMBLY

Remove left-hand locknut and washer (if any). Rotate driver to disengage brake and unscrew cone using brake lever as a wrench. Remove brake lever, dust cap, lever cone and ball retainer.

Thread lever-cone/dust-cap assembly onto axle. Cone slots must engage brake cylinder tabs and ball retainer must seat in hub race. Replace lock washer (if any) and lock nut. Adjust bearing.

ASSEMBLY 2

Next Step
↓



↑
Next Step

2 DISASSEMBLY

Rotate hub counter-clockwise and lift off axle. Lift brake cylinder and driving cone out of hub either as a unit or separately. Lift off ball retainer and driver.

Install driver. Small ball retainer in driver seats onto fixed axle cone. Slip large ball retainer over driver *flat side down*. Slip hub shell over axle *smaller opening down*. Push small end of driving cone into straight-sided end of brake cylinder. Install driving cone and brake cylinder as a unit.² Rotate clockwise to engage driver splines.

ASSEMBLY 1

¹ These hubs may also be disassembled by threading out the axle first and replacing it last. This procedure is especially recommended for Karat and Centrix hubs.

² For Karat and Centrix assemble brake shoes, lever cone and driving cone and install as a unit.

**SACHS (F & S) COASTER BRAKES
DISASSEMBLY AND ASSEMBLY (cont.)
SUBASSEMBLIES**



DISASSEMBLY

Driver

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



Driver

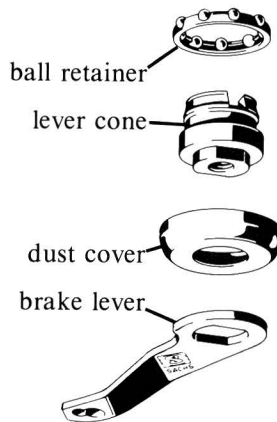
Install ball retainer flat side up. Start dust cover straight and tap home with a soft hammer.

ASSEMBLY

DISASSEMBLY

Lever-Cone/Dust-Cap

If brake lever, lever cone and dust cover are press fit together, they should not be forced apart. Ball retainer may be popped off cone.



Lever-Cone/Dust-Cap

Reassemble lever cone, dust cover and brake lever if they have been separated. Pop ball retainer over cone, *flat side toward dust cover.*

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 driving cone (10) and driver (12) for wear and chipping
2. Conical surface of inside of hub shell and outside of driving cone (10) for wear and burring
3. Brake shoes and driving cone (10) for wear and burring
4. Brake cylinder (9) 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 retainer by filling the spaces between balls with grease. Lubricate hub shell and brake shoes liberally with a high-temperature grease. Grease other internal parts.