

Hub	Trouble Chart					Exploded Drawing		Parts Interchangeability Chart		Disassembly and Assembly Instructions		Cleaning, Points to Check and Lubrication		Axle Thread Size
	page	page	page	page	page	page	page	page	page	page	page	page		
Bendix	2-3	2-20	2-21	2-22	2-23								3/8" x 24 TPI	
Centrix (see Sachs Jet)													3/8" x 26 TPI	
Hawthorne (see NK)														
Karat (see Centrix)														
Mattatuck (see NK)														
New Departure (see NK)														
NK	2-4	2-30	2-30	2-32	2-33								3/8" x 24 TPI	
NK Super Model 120	2-4	2-31	2-31	2-32	2-33								3/8" x 24 TPI	
Perry	2-4	2-24	2-25	(see Sturmey-Archer SC)									3/8" x 26 TPI	
Sachs (F&S)													note ¹	
Komet Super	2-3	2-6	2-7	2-8	2-9									
Sachs Jet	2-3	2-6	2-7	2-8	2-9									
Torpedo	2-5	2-25	2-25	See Sturmey-Archer SC)										
Torpedo Boy	2-3	2-6	2-7	2-8	2-9									
Schwinn Approved (see Sachs (F&S) Komet Super)													3/8" x 24 TPI	
Schwinn Approved Mark IV (see Sturmey-Archer SC)													3/8" x 26 TPI	
Shimano														
Type A, B or D	2-3	2-11	2-10	2-14	2-16								3/8" x 24 TPI	
Type E	2-3	2-11	2-10	2-14	2-16								3/8" x 24 TPI	
Mighty Mite	2-3	2-13	2-13	(similar to Type B)									3/8" x 24 TPI	
Sturmey-Archer														
SC	2-5	2-24	2-25	2-26	2-27								3/8" x 26 TPI	
SC1	2-3	2-24	2-25	2-28	2-29								3/8" x 26 TPI	
Styre (see Sturmey-Archer SC)														
Sun Tour	2-3	2-17	2-17	2-18	2-19								3/8" x 24 TPI	
Torpedo (see Sachs (F&S) Torpedo)														

BRAKE ARM MOUNTING

Coaster brakes have a brake arm which prevents the left-hand cone and axle from turning when the brake is applied. Attach the brake arm and axle nuts finger-tight before cinching down either. Make sure that the brake arm clamp will not pull the brake out of line as this will cause severe bearing alignment problems. Tighten axle nuts first, then brake arm clamp.

¹ Available with either *German Thread* $\frac{3}{8}$ " x 26 TPI or *American Thread* $\frac{3}{8}$ " x 24 TPI.

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HUBS

COASTER BRAKE TERMINOLOGY (by Manufacturer)
Numbers in parenthesis refer to parts chart and exploded drawing.

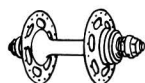
Sachs (F & S)	Shimano	Sun Tour	Bendix	Sturmey-Archer		NK	Function
				SC	SC1		
Driver, Inner Hub Barrel (12)	Driver (14)	Driver (12)	Drive Screw (15)	Driver (18)	Driver (18)	Driving Screw (13)	Transfers rotation from sprocket into hub mechanism.
Driving Cone (10)	Clutch Cone (12)	Clutch Cone (9)	Drive Clutch (12)	Driver Roller Assembly (19-20)	Brake Actuator (16)	Screw Cone (11)	Transfers rotation from driver to hub shell when pedalling forward.
			Drive-End Expander (8)	Actuator Roller Assembly (16)		Brake Clutch (9)	Squeezes braking surfaces together when back pedalling.
Brake Cylinder Assembly (9)	Clutch Spring (8)	Clutch Spring (7)	Retarder Spring (11)			Actuator Spring (15)	Clutch Band (10)
	Brake Shoe Assembly (10)				Brake Band (14)	Brake Band (14)	
		Brake Shoes (8)	Brake Shoes (9)				
						Brake Disc Set (8)	
Brake Cone, Lever Cone (7)	Brake Cone (7)	Brake Cone (6)	Anchor-End Expander (7)	Brake Cone (8)	Brake Cone (8)	Brake Disc Holder (6)	Keeps stationary braking surface from moving.
Brake Lever, Brake Arm (4)	Brake Arm (4)	Arm (3)	Brake Arm (4)	Brake Arm, Torque Arm (7)	Brake Arm, Torque Arm (7)	Brake Arm (4)	Holds brake cone or disc holder stationary.

INTERNAL EXPANDER TYPE COASTER BRAKES² TROUBLE CHART

Symptom	Possible Causes ¹	
	Resulting from wear, improper lubrication or abuse	Resulting from improper assembly or installation
No brake (pedals slip backwards)	Keys or teeth on expanders, brake clutch or brake cylinder worn or damaged	
	Hub flanges loose on hub shell body	Retarder spring reversed or missing
	Stripped threads or splines or threads on sprocket	
Forward drive slips	Retarder spring worn or damaged	
	Drive screw or clutch threads worn or damaged	
Hub whines while coasting	Hub shell tapered surface worn or gouged	
Forward drive will not release	Axle bent	
	Bearing cones too tight	
Grinding, cracking noises	Chain too tight	
Hub binds and drags	Ball retainer damaged or broken	Ball retainer reversed
	Broken parts inside hub	
	Dustcap bent	Retarder spring reversed
Brake grabs	No lubrication	
Brake squeak	Brake arm loose at frame	
	Braking surfaces worn, glazed or burred	
	Improper lubrication—too slippery	
Poor braking	Tapered surfaces of expanders or brake shoes burred	
Too much reverse pedal travel	Brake parts worn	
	Adjusting cone too loose	

¹Bendix, Sachs (F & S), Shimano, Sun Tour, Sturmey-Archer SC1

²See Coaster Brake Terminology chart for parts numbers.

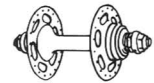


HUBS

NK MATTATUCK and NEW DEPARTURE MULTIPLE DISC COASTER BRAKE TROUBLE CHART

Symptom	Possible Causes ¹	
	Resulting from wear, improper lubrication or abuse	Resulting from improper assembly or installation
No brake (pedals slip backwards)	<ul style="list-style-type: none"> Brake disc (8) tabs worn off Screw cone (11) or brake clutch (9) teeth worn or damaged Hub flanges loose on hub shell body Sprocket splines stripped Clutch band (10) weak or bent 	
Forward drive slips	<ul style="list-style-type: none"> Driver (13) or screw cone (11) threads worn or damaged 	
Hub whines while coasting	<ul style="list-style-type: none"> Hub shell or screw cone (11) tapered surface worn or gouged 	
Forward drive will not release	<ul style="list-style-type: none"> Axle bent 	
Grinding, cracking noises	<ul style="list-style-type: none"> Adjusting cone (19) too tight Chain too tight 	
Binds and drags	<ul style="list-style-type: none"> Ball retainer damaged or broken Broken parts inside hub Dustcap bent 	Ball retainer reversed
Brake grabs	<ul style="list-style-type: none"> No lubrication Brake arm (4) loose at frame 	
Brake squeaks	<ul style="list-style-type: none"> Brake discs (8) worn, glazed, polished or burred 	
Poor braking	<ul style="list-style-type: none"> Improper lubrication—too slippery Brake clutch (9) or screw cone (11) teeth worn 	Brake discs (8) improperly stacked
Too much reverse pedal travel	<ul style="list-style-type: none"> Brake parts worn Clutch band (10) weak Adjusting cone (19) too loose 	Too few disks (8)

¹ Parts numbers in parenthesis refer to parts chart and exploded drawing.



**STURMEY-ARCHER SC
ROLLER DRIVE COASTER BRAKE
TROUBLE CHART**

Symptom	Possible Causes ¹	
	Resulting from wear, improper lubrication or abuse	Resulting from improper assembly or installation
Too much reverse pedal travel	Adjusting cone too loose	
No brakes (pedals slip backwards)	Brake parts worn	
	Actuator (16) roller retainer bent, broken	
	Actuator (16) race or rollers worn or damaged	Actuator (16) rollers improperly installed
	Hub flanges loose on hub shell	
Forward drive slips	Driver rollers (20) or cage dirty or damaged	Driver rollers (20) improperly installed
Forward drive will not release		
Grinding, cracking noises	Axle (25) bent	
	Brake cone (8) too tight	
	Chain too tight	
	Ball retainer damaged or broken	Ball retainer reversed
Hub binds and drags	Broken parts inside hub	
	Dustcap bent	
	Hub shell roller race worn or damaged	
Brake grabs	No lubrication	
	Brake arm (7) loose at frame	
Brake squeaks	Braking surfaces glazed, polished or burred	
Poor braking	Improper lubrication—too slippery	
	Brake parts worn	
	Brake cone (8) too loose	

¹ Parts numbers in parenthesis refer to parts chart and exploded drawing.