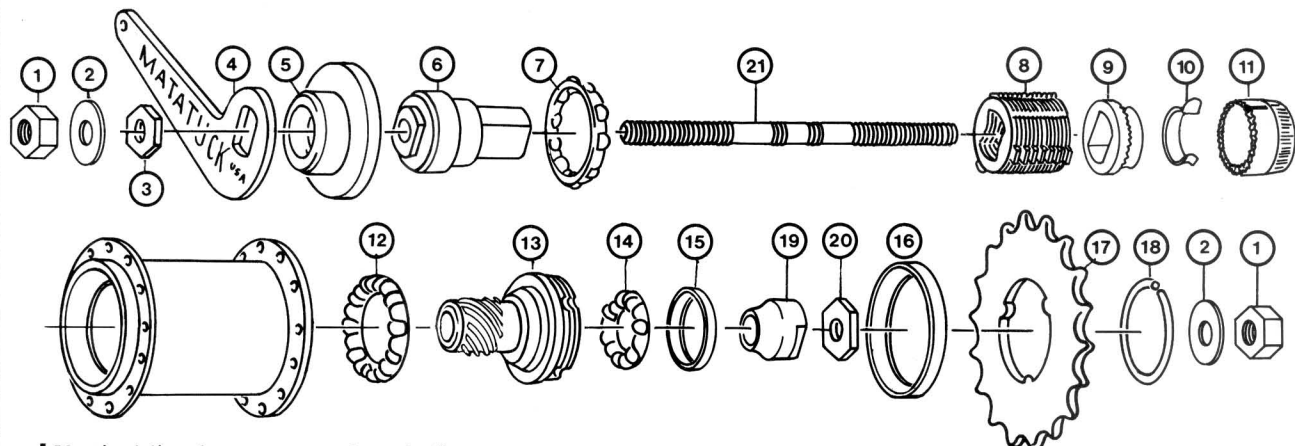


HUBS

NK, MATTATUCK, NEW DEPARTURE COASTER BRAKES PARTS INTERCHANGEABILITY



Vertical line between numbers indicates parts are not interchangeable.

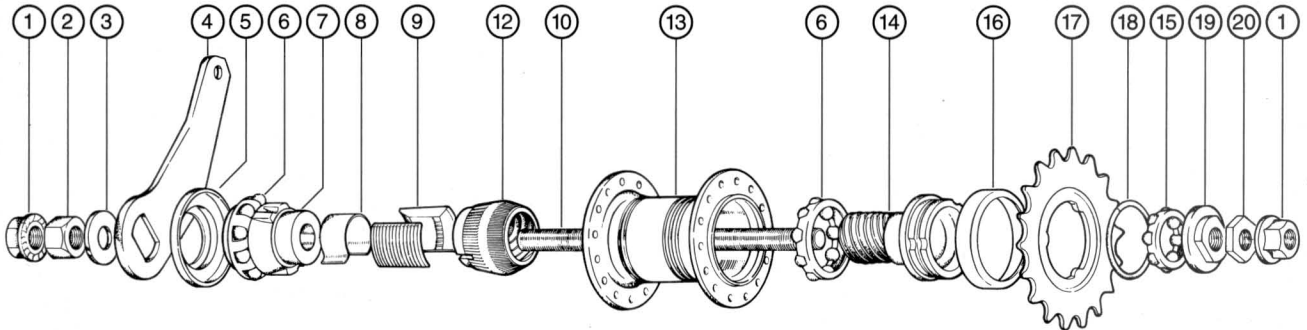
Parts are interchangeable only if they are on the same line and they do not have a vertical line between them.

Item #	NK	New Departure	Mattatuck
1. Axle Nut	NK 88	HD-13	E-13
2. Washer	NK 87	HD-14	E-14
3. Arm Lock Nut	NK 82	HD-15	E-15
4. Brake Arm	NK 75	HD-10	E-10
5. Dust Cap, brake arm side	NK 80	HD-32	E-32
6. Brake Disc Holder	NK 68	HD-22	E-22
7. Ball Retainer	NK 76	HD-16	E-16
8. Brake Discs (17 discs per set) ¹	NK 723	HD-278	E-278
9. Brake Clutch	NK 71	HD-6	E-6
10. Clutch Band (Transfer Spring)	NK 78	HD-12	E-12
11. Screw Cone (Clutch Sleeve)			
9 thread	NK 96		
3 thread	NK 70 (rare)	HD-3	E-3
12. Ball Retainer (10 - 1/4" balls)	NK 76	HD-20	E-16
13. Driver			
9 thread (for 3 lug sprockets)	NK 95		
3 thread (for 3 lug sprockets)	NK 90 (rare)		E-2
3 thread (for screw-on sprockets)		HD-2	
14. Ball Retainer (7 or 8 - 1/4" balls)	NK 77	HD-20	E-20
15. Dust Cap, driver ²	NK 94		E-31-5
16. Dust Cap, sprocket side	NK 93 ³	HD-31	E-31 ³
17. Sprocket (threaded)		HD-17	
Sprocket (3 lug) 20 teeth	NK 921		
19 teeth	NK 922		
18 teeth	NK 923		
16 teeth	NK 925		
14 teeth	NK 927		
18. Sprocket Lock Ring	NK 91		E-5-5
Sprocket Locknut (left threaded)		HD-5	
19. Adjusting Cone	NK 74	HD-7	E-7
20. Cone Locknut	NK 99	HD-15 ²	E-15
21. Axle 6 1/4"	NK 671	HD-4	E-4
6 3/4"	NK 672		

¹ Some New Departure hubs use 21 and 23 discs. Total thickness should be approximately 3/4" (19 mm).

² On New Departure hubs driver dust cap is part of cone locknut.

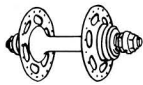
³ These two parts interchange.



1. Flange Nut		S120-1 ¹	13. Hub Shell	32 holes @ 2.5 mm	S120-135
2. Arm Nut		S120-2 ¹	(cont.)	36 holes @ 2.5 mm	S120-136
3. Arm Washer		S120-3 ¹		36 holes @ 3.2 mm	S120-137
4. Brake Arm		S120-4		36 holes @ 3.8 mm	S120-138
5. Left-Hand Dust Cap		S120-5		40 holes @ 2.5 mm	S120-139
6. Ball Retainer C		S120-6 ¹	14. Driver		S120-14 ¹
7. Brake Cone		S120-7	15. Ball Retainer A		S120-15 ¹
8. Clutch Spring		S120-8	16. Right-Hand Dust Cap		S120-16
9. Brake Shoe		S120-9 ¹	17. Sprocket ²	14T	S120-171 ¹
10. Hub Axle	152 mm	S120-101 ¹		16T	S120-172 ¹
	160 mm	S120-102 ¹		18T	S120-173 ¹
	163 mm	S120-103 ¹		19T	S120-174 ¹
	170 mm	S120-104 ¹		20T	S120-175 ¹
11. Arm Clip Set (flat)		S120-11		22T	S120-176 ¹
12. Clutch Cone		S120-12	18. Snap Ring		S120-18 ¹
13. Hub Shell	16 holes @ 2.5 mm	S120-130	19. Cone with Dust Cap		S120-19 ¹
	20 holes @ 2.5 mm	S120-131	20. Locknut		S120-20 ¹
	24 holes @ 2.5 mm	S120-132	21. Clip Screw		S120-21
	28 holes @ 2.5 mm	S120-133	22. Brake Arm Clip		S120-22
	28 holes @ 3.2 mm	S120-134	23. Clip Nut		S120-23

¹Part is interchangeable with Shimano Model D.

²See Sprocket Interchangeability at beginning of Hub section.

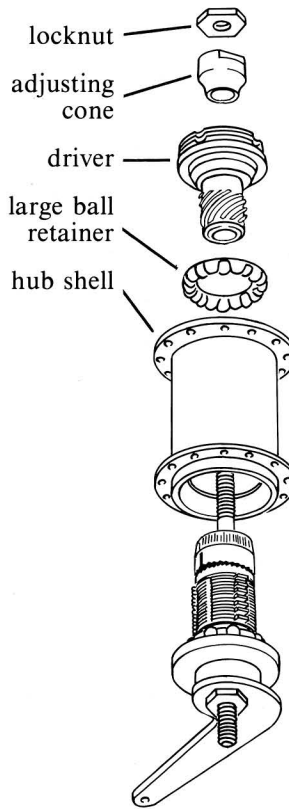


HUBS

NK MULTIPLE DISC COASTER BRAKE DISASSEMBLY AND ASSEMBLY

1 DISASSEMBLY

Remove right-hand locknut and adjusting cone. Rotate driver counter-clockwise and remove. Remove large ball retainer and lift off hub shell.



Install large ball retainer *flat side up*. Install driver, adjusting cone and locknut. Adjust bearing.



Make sure brake disc tabs are still aligned. Align slots in hub shell with tabs and slip hub over assembly. When hub is correctly seated, brake-arm-side ball retainer is not visible behind dust cap. If hub does not seat properly, lift off and repeat this step.

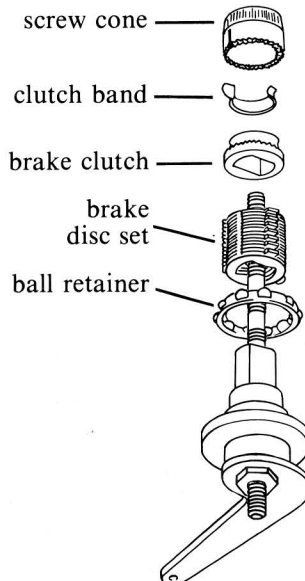
ASSEMBLY 3

Next Step



2 DISASSEMBLY

Remove screw cone and brake clutch. Remove clutch band from brake clutch only if necessary. Remove brake discs and ball retainer.



Next Step



Position axle *brake arm side down*. Install ball retainer *flat side down*. Install one non-turn brake disc over brake holder flats. Install remaining brake discs, alternating tabbed and non-turn discs. Align tabs. Reinstall clutch band on brake clutch if required. Viewed from above, hooked end of clutch band must be *clockwise* from clutch band gap or excessive drag and wear will result. Install brake clutch *clutch band up*. Install screw cone with slot engaging hooked end of clutch band.

ASSEMBLY 2

Next Step
Next Page

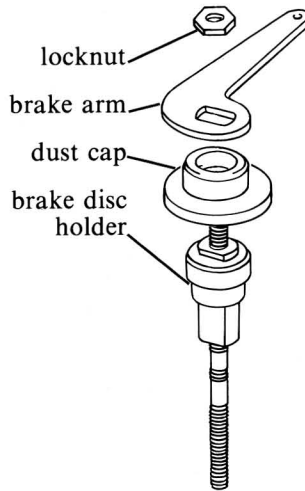


**NK MULTIPLE DISC COASTER BRAKE
DISASSEMBLY AND ASSEMBLY (cont.)**

HUBS 

3 DISASSEMBLY

Remove brake-end locknut, brake arm, dust cap and brake disc holder.



Next Step
↑
Preceding Page

Thread brake holder onto one end of axle far enough to cover half of ridged central section. Install dust cap and brake arm, *imprinted side out*. Install locknut, tighten while holding brake arm stationary.

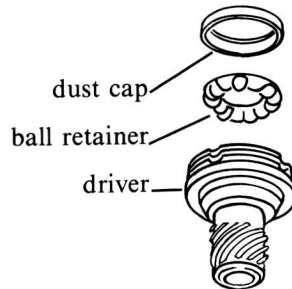
ASSEMBLY 1

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 screw cone (11) and driver (13) for wear and chipping
2. Conical surface of inside of hub shell and outside of screw cone (11) for wear and burring
3. Clutch band (10) for shape and tension
4. Retarder assembly (9-11) for wear or burring of toothed mating surfaces

5. Brake disks (8) for burring, wear, or excessive polishing
6. Brake disc (8) tabs and flatted holes for wear
7. All threaded parts for damaged or stripped threads
8. Dustcaps and bearing retainers for straightness

LUBRICATION

Lubricate ball retainers by filling the spaces between balls with grease. Lubricate hub shell and brake disc set liberally with a high-temperature grease. Grease other internal parts.