

BATTCAR SUPPLEMENT INSTRUCTIONS

Converting CB+ Style Battcars to Fit Old-Style Non-CB Track



WARNING! Strictly follow all instructions to avoid an accident, damage to your vessel, personal injury, or death. See www.harken.com/manuals for additional safety information.

IMPORTANT! See Inspection and Maintenance at end of manual.

Terms

CB – Captive bearings. Wire retaining clips hold bearings captive for easy loading onto track and for maintenance.

CB+ cars – CB cars that can convert to old-style non-CB track.

Corner keepers – Used on CB+ cars to help retain balls when cars are off track. Introduced beginning of 2015.

Retaining clips – Formed wires for holding bearings.

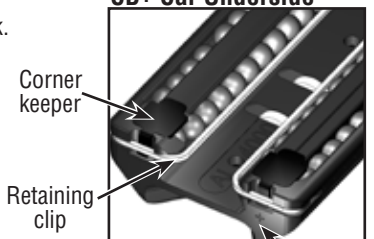
CB style track – Track designed with deeper grooves to accept CB car retaining clips.

Car loader – Short piece of plastic or aluminum track used to hold balls in place when car is not on track.

Note: Newer CB style Battcars can convert to run on old-style non CB track. Order a car loader to make the job easier. See ball and car loader specification chart.

System	Car Loader
A	HSB116
B	HMR2
C	HBB1 or HBB25

CB+ Car Underside



Corner keeper

Retaining clip

+ stamp at one end

Car loader



Clip

Ball loading ports

CB + Cars can Convert to Fit Old-Style, Non-CB Track



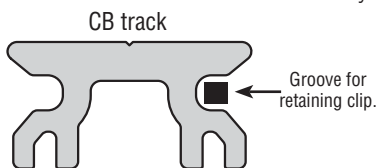
CB+ cars designed for CB track.



CB+ cars can convert to run on old-style, non-CB track.

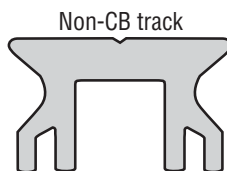


Order car loader.



CB track

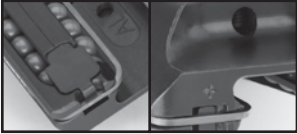



Groove for retaining clip.



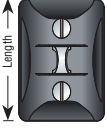




Non-CB track

Track built after 2002. No need to convert car.

Track built before 2003.

Car	Bearing style	Part number	Description	Car width	
				in	mm
		<p>CB+ car</p> 	<p>CB-only car</p> 	<p>Non-CB car</p> 	<p>Car body width</p> 
BATT CAR	CB+	3811	System A CB headboard	2 ³ / ₁₆	56
	CB+	3812	System A CB intermediate car	2 ³ / ₁₆	56
	CB+	3829, 3830, 3831, 3881	System A CB Battcar	2 ³ / ₁₆	56
	CB+	3882, 3883	System A CB high-load	2 ³ / ₁₆	56
	Non-CB	1792, 1807	System A headboard car	2 ³ / ₁₆	56
	Non-CB	1925, 1901, 1944, 1976, 1977	System A batten bar	2 ³ / ₁₆	56
	Non-CB	1894	System A luff car	2 ³ / ₁₆	56
	CB+	3852	System B CB headboard	2 ³ / ₄	70
	CB+	3863	System B CB intermediate car	2 ³ / ₄	70
	CB+	3856, 3857, 3859, 3879	System B CB Battcar	2 ³ / ₄	70
	CB+	3860	System B CB reef car	2 ³ / ₄	70
	Non-CB	1793	System B headboard car	2 ³ / ₄	70
	Non-CB	1979	System B intermediate car	2 ³ / ₄	70
	Non-CB	1794, 1826, 1902, 1946, 1978, 1980	System B batten car	2 ³ / ₄	70
	Non-CB	1895	System B luff car	2 ³ / ₄	70
	CB+	3867	System C CB headboard	3 ⁵ / ₁₆	85
	CB+	3871	System C CB intermediate car	3 ⁵ / ₁₆	85
	CB+	3868, 3869, 3870, 3872	System C CB Battcar	3 ⁵ / ₁₆	85
	CB+	3873	System C CB reef car	3 ⁵ / ₁₆	85
	Non-CB	1782	System C headboard car	3 ⁵ / ₁₆	85
	Non-CB	1784, 1795, 1827, 1828, 1829, 1903	System C batten car	3 ⁵ / ₁₆	85
	Non-CB	1785	System C luff car	3 ⁵ / ₁₆	85
	Non-CB	1785HL	System C high-load luff car	3 ⁵ / ₁₆	85

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Car	Car length		# balls per car	Ball material	Ball kit		Ball diameter		Car loader	Car loader CB+ to non-CB
	in	mm			Part No.	# Balls	in	mm	Included	Order
				Delrin®  Torlon® 						
BATT CAR	4 ¹ / ₈	105	60 x 2	Torlon	177	21	1 ¹ / ₄	6	—	HSB116 x 2
	2 ¹ / ₄	57	32	Torlon	177	21	1 ¹ / ₄	6	—	HSB116
	2 ⁷ / ₈	73	40	Torlon	177	21	1 ¹ / ₄	6	—	HSB116
	4 ¹ / ₈	105	60	Torlon	177	21	1 ¹ / ₄	6	—	HSB116
	3 ⁵ / ₈	92	52 x 2	Torlon	177	21	1 ¹ / ₄	6	HSB116 x 2	—
	3	76	40	Torlon	177	21	1 ¹ / ₄	6	HSB116	—
	2 ¹ / ₈	54	30	Torlon	177	21	1 ¹ / ₄	6	HSB116	—
	5 ³ / ₁₆	132	60 x 2	Torlon	1526	25	5 ⁵ / ₁₆	8	—	HMR2 x 2
	2 ⁹ / ₁₆	68	28	Torlon	1526	25	5 ⁵ / ₁₆	8	—	HMR2
	4 ⁵ / ₁₆	109	48	Torlon	1526	25	5 ⁵ / ₁₆	8	—	HMR2
	5 ³ / ₁₆	132	60	Torlon	1526	25	5 ⁵ / ₁₆	8	—	HMR2
	4 ³ / ₈	111	48 x 2	Torlon	1526	25	5 ⁵ / ₁₆	8	HMR2 x 2	—
	3 ¹³ / ₁₆	97	40	Torlon	1526	25	5 ⁵ / ₁₆	8	HMR2	—
	3 ¹³ / ₁₆	97	40	Torlon	1526	25	5 ⁵ / ₁₆	8	HMR2	—
	2 ³ / ₄	70	30	Torlon	1526	25	5 ⁵ / ₁₆	8	HMR2	—
	9 ¹ / ₈	232	90 x 2	Torlon	547	25	3 ³ / ₈	10	—	HBB25 x 2
	3 ³ / ₄	96	34	Torlon	547	25	3 ³ / ₈	10	—	HBB1
	5 ³ / ₈	136	50	Torlon	547	25	3 ³ / ₈	10	—	HBB1
	9 ¹ / ₈	231	90	Torlon	547	25	3 ³ / ₈	10	—	HBB25
	5 ¹ / ₂	140	52 x 2	Torlon	547	25	3 ³ / ₈	10	HBB1 x 2	—
4 ³ / ₄	121	44	Torlon	547	25	3 ³ / ₈	10	HBB1	—	
4	102	36	Torlon	547	25	3 ³ / ₈	10	HBB1	—	
4	102	36	Torlon	547	25	3 ³ / ₈	10	HBB1	—	

Torlon is a registered trademark of Solvay Advanced Polymers.

Converting CB + Cars to Run on Non-CB Track

Important! Requires CB+ cars. See complete instructions at www.harken.com/manuals.



1. Use flat-bladed screwdriver to push retaining clip toward end.



2. Pry retaining clip off and dump balls in box.



3. Remove retaining clips and corner keepers over box to catch balls.



4. Hold car on edge and load lower side with correct number of balls. **DO NOT OVERLOAD.** Consult chart to confirm quantity.



5. Remove two (2) clips from car loader. Slide car loader in so loading port is on the side of car without balls.



6. Put one (1) clip on "open" end of loader. Load rest of balls through ball loading port into empty bearing race. Consult chart to confirm quantity. Line up car loader with track and gently roll car onto track.

For complete Battcar installation manuals: www.harken.com/manuals. Look for 4248, 4286 and 4637.

Do not use corner keepers.

Inspect

Frequently inspect Battcars for loose locknuts. Replace as necessary. Inspect batten receptacles for loose screws. Replace as necessary.

Maintenance

Battcars: Clean by frequently flushing with fresh water. Periodically clean car by squirting a detergent/water solution into center openings. Roll car back and forth to distribute evenly. Flush bearings with fresh water.

Do not use spray lubricants because ball bearings can skid, not roll. Once car and track are dry, apply one (1) to two (2) drops of McLube® OneDrop™ ball bearing conditioner to ball contact surfaces of track. Roll car back and forth through OneDrop conditioner several times to distribute onto bearings. Wipe remaining OneDrop off track. OneDrop conditioner is preferred, but you can also use one (1) to two (2) drops of a light machine oil. Too much oil attracts dirt.

Track: Clean with detergent and water.

Important! Exposure to some teak cleaners and other caustic solutions can result in discoloration of part and is not covered under the Harken warranty.

McLube is a registered trademark of McGee Industries, Inc.
OneDrop is a trademark of McLube, a division of McGee Industries, Inc.

Warranty

For additional safety, maintenance, and warranty information see www.harken.com/manuals or the Harken catalog.