

HARKEN®

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INSTRUCTIONS

CB Genoa Lead Cars

22 mm, 27 mm, 32 mm



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.

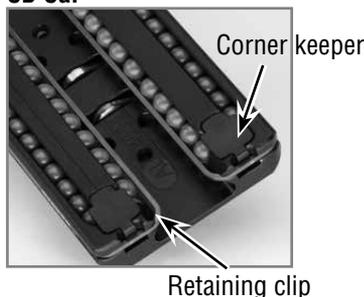
CB+ cars – Cars that can convert to old style non-CB track.

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.

CB Car

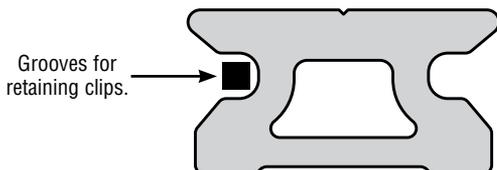


Specifications

Part No.	Fits CB track	End control	Purchase	Maximum working load	Breaking load		
22 mm Small Boat							
G222B/G2227B	2720/373	E2230/2740	2:1	1250	567	2500	1134
G224B/G2247B	2720/373	E2250/2742	4:1	1250	567	2500	1134
27 mm Midrange							
G272B/G2727B	R27/1602	E2730/1632	2:1	2300	1043	5000	2268
G273B/ G2737B	R27/1602	E2750	3:1	2300	1043	5000	2268
G273B.HL/G2737B.HL	R27/1602	E2750	3:1	3600	1632	7200	3266
G274B/G2747B	R27/1602	E2750/1632	4:1	2300	1043	5000	2268
G274B.HL/G2747B.HL	R27/1602	E2750	4:1	3600	1632	7200	3266
32 mm Big Boat							
G323B/G3237B	R32/3159	E3250/3173	3:1	5000	2268	10000	4536
G324B/G3247B	R32/3159	E3250.HL/3174	4:1	5000	2268	10000	4536

Track Compatibility

CB cars are shipped for use on CB track with grooves at waist to accept retaining clips first supplied by Harken in 2003. See end of manual if you have older track.



Attaching Splice to Deadend on Car or Controls

1. Loosen one (1) deadend eyestrapp screw on end control. Remove other screw and rotate bail to capture splice loop. Install screws using a threadlocker such as blue Loctite® adhesive on screws.
2. When using smaller control line, pass eye through deadend eyestrapp and run tail through to make a hitch without undoing screws.

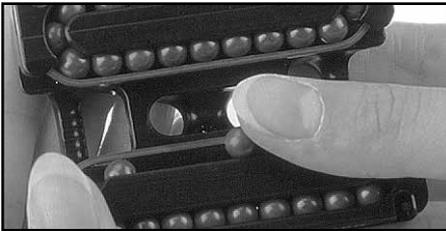


Installing Traveler Car on Track

Install forward end control. Position car at end of track with control block assembly facing toward the bow. Gently roll car onto track. Car should roll on easily. If not, check to make sure you are using CB track. **Do not remove ball retaining wires.** Cars will not roll unless they have retaining clips. **Exception: CB+ cars can convert to non-CB. See reverse side.** If any balls are lost, refer to following instructions for quantities and how to load. Attach shockcord to aft leg of sheave carrier.



Loading Ball Bearings into CB Cars

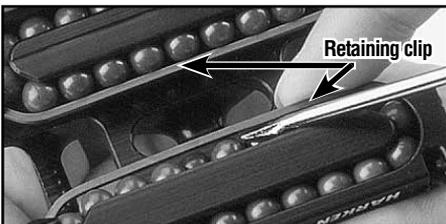


Position car on edge with retaining clip in place. Gently push one (1) ball at a time into car from center of clip. Allow balls to roll into return race and insert remaining balls. **Do not overfill car!**

Ball Replacement Chart

Car	Car length		Balls per car	Balls	Order	Balls per set	Ball Ø	
	in	mm					in	mm
G222B, G2224B G2227B, G22247B	4 ¹ / ₈	105	60	Torlon®	177	21	1/4	6
G272B, G273B, G274B G2727B, G2737B, G2747B	5 ³ / ₁₆	132	60	Torlon	1526	25	5/16	8
G273B.HL, G274B.HL G2737B.HL, G2747B.HL	9	229	96	Torlon	1526	25	5/16	8
G323, G324B G3237, G3247B	9 ¹ / ₈	231	90	Torlon	547	25	3/8	10

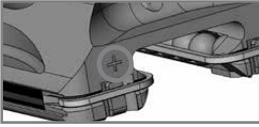
Removing Ball Bearings from CB Cars



Position car on edge and gently push one (1) ball at a time from center of retaining clip. **Do not remove retaining clip from car!**

Loctite is a registered trademark of Henkel AG & Company KGaA.
Torlon is a registered trademark of Solvay Advanced Polymers.

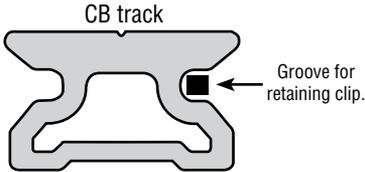
Converting CB + Cars to Fit Old-Style Non-CB Track



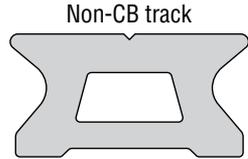
CB+ cars designed for CB track.



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



Track built after 2003. No need to convert car.



Track built before 2003.

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.

Inspect

Frequently inspect retaining screw and control block fittings for signs of loosening. Replace as necessary. Make sure every installation includes Harken track endstops. Arrange control tackle so cars do not hit endstops under load.

Maintenance

Traveler cars: 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. 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.



Warranty

For additional safety, maintenance, and warranty information see www.harken.com/manuals or the Harken catalog. See www.harken.com/manuals for more instructions such as setting up systems and installing pivot stops.