CAT G.E.T. SOLUTIONS FOR UNDERGROUND LOAD HAUL DUMP LOADERS

R1300-R3000



MODULAR SEGMENT SYSTEM for R1300 to R3000 LHD

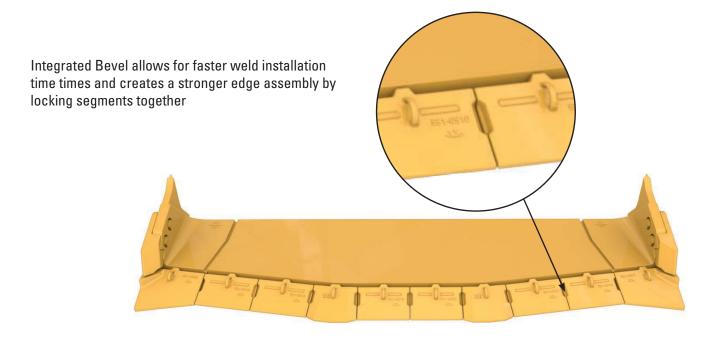
Modular Shrouds deliver welded part reliability with the replacement simplicity of a mechanical system. Wear indicators are visible from the topside to help establish maintenance intervals.

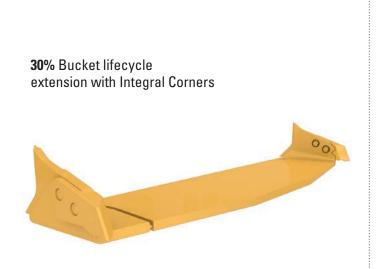


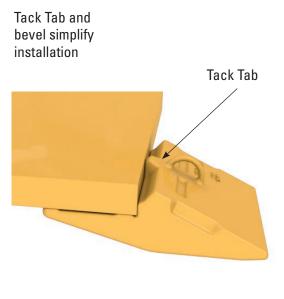
MODULAR SEGMENT SYSTEM

R1700 TO R3000 LHD

Individual segments are configured to form Lip Assemblies that range from covering all LHD size classes. 1920 to 3754mm configurations are built today, with custom widths available on request.



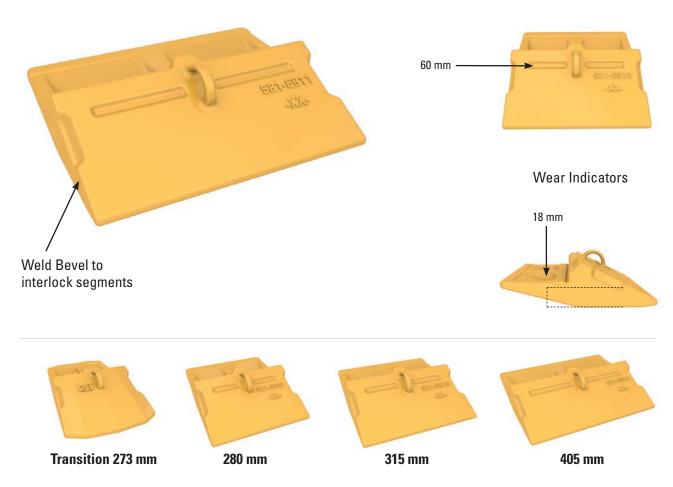




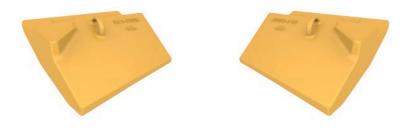
MODULAR SEGMENT SYSTEM

R1300 TO R3000 LHD

Segments are designed for easy serviceability and intuitive maintenance planning. Corners are wear balanced with the centers segments to help extend the service life of the modular segment system.



Segments have – 80% allowable wear material



Corners have ~ 40% more material for balanced system wear

MODULAR SEGMENT SYSTEM

R1300 TO R3000 LHD

Modular segments are designed for easy fitment and fast installation. Three simple steps will create a modular system that delivers superior reliability and performance.



CAT DURILOCK™ SHROUD SYSTEMWith Cat INFINITITE™ Retention for R1700 and R3000 LHD

Cat Durilock[™] Shrouds adapt to your ever-changing mining environment in minutes without having to change the base edge or retention system. Infinitite[™] secures the 3 shroud systems for maintenance free retention.

HAMMERLESS

50% Faster Installation & removal vs competitive shrouds systems.

MAINTENANCE FREE

No Re-torque. INFINITITE[™] spring delivers continuous retaining force.

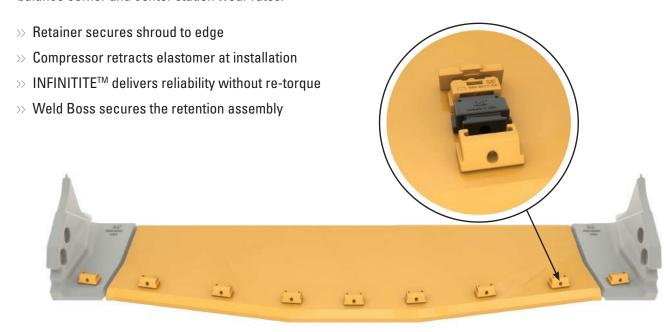
DYNAMIC

3 performance levels from the same base edge system



WITH CAT INFINITITE™ RETENTION FOR R1700 TO R3000 LHD

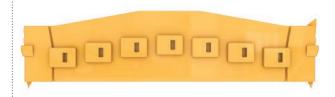
The Lip assembly provides the mounting surfaces for the shrouds and corner protectors, which balance corner and center station wear rates.



STEPPED CORNER BASE EDGE

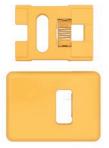
Reduces corner shroud torsional loads by 26% to prevent breakage





WEAR BAR - MAWPS PLATE

- Wear bars can extend base edge life 30%
- MAWPS* retention replaced in minutes
 - * Mechanically Attached Wear Plate System



WITH CAT INFINITITE™ RETENTION FOR R1700 TO R3000 LHD





D50P

Penetration of a tip, protection of a lip shroud.

Serrated edge design increases material penetration and bucket fill factors.



D50S

Balanced wear design for most applications

Baseline design provides equal distribution of Wear Material for applications that do not involve heavy floor cleaning



D50A

Long Life while maintaining a sharp penetrating profile

12% more usable wear material through the contoured design which repositions material on shroud base

WITH CAT INFINITITE™ RETENTION FOR R1700 TO R3000 LHD

Hammerless Sidebar protection installs in minutes and extends the life of the sidebar to lower rebuild costs. The protectors compliment Corner Guards and are compatible with any Cat Durilock lip shroud system.



Hammerless Sidebar protection through Cat MAWP retention technology.



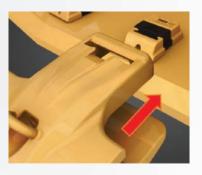
WITH CAT INFINITITE™ RETENTION FOR R1700 TO R3000 LHD

The INFINITITE™ retainer is easy to handle compared to small complex retention and has no hardware to fail or break. The positive retention system keeps shrouds tight, reducing edge damage often experienced with loose-fitting shrouds.

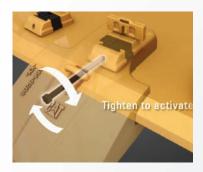
Assemble Spring/Compressor onto the weld boss. Place nut in compressor body



2 Slide shroud onto base edge assembly



Bolt should engage nut (in the compressor)
Tighten bolt until retainer slides into
shroud body



Remove bolt from shroud after installing retainer



REMOVAL

Use a flathead screwdriver to remove the Retainer from the Shroud



BUCKET CONFIGURATIONS BY MODEL AND BUCKET

| MODEL | BUCKET WIDTH | DESCRIPTION |
|-------------|--------------|--|
| R1300G | 1920 | Bucket 2.4M³ (3.1 YD³) |
| R1300G | 1980 | Bucket 2.8M³ (3.7YD³) |
| R1300G | 2170 | Bucket 3.1M³ (4.1 YD³), Ejector Bucket 2.4M³ (3.7 YD³), Ejector Bucket 2.8M³ (3.7 YD³), Ejector Bucket 2.4M³ (3.7 YD³), Ejector Bucket 2.8M³ (3.7 YD³), Bucket 3.4M³ (4.5 YD³) |
| R1300G | 2370 | Bucket 3.4M³ (4.5YD³) |
| R1600G | 2410 | Bucket 3.9M³ (5.1YD³) |
| R1600G | 2570 | Bucket 4.2M³ (5.5 YD³), Bucket 4.8M³ (6.2 YD³), Bucket 5.6M³ (7.3 YD³), Bucket High Pen 4.8M³ (6.2 YD³), Ejector Bucket 4.8M³ (6.3 YD³), Ejector Bucket 4.8M³ (6.3 YD³) |
| R1600G | 2830 | Bucket 5.9M³ |
| R1600G | 2870 | Bucket 5.9M³ (7.7 YD³), Bucket High Pen 5.9M³ (7.7 YD³) |
| R1700 | 2672 | Bucket 5.0M³ (6.5 YD³), Bucket High Pen 5.0M³ (6.5 YD³), Bucket 4.6M³ (6.0 YD³) |
| R1700 | 2772 | Bucket High Pen 5.7M³ (7.5 YD³), Ejector Bucket 5.6M³ (7.3 YD³), Bucket 5.7M³ (7.5 YD³), Ejector Bucket 5.6M³ (7.3 YD³) |
| R1700 | 2932 | Bucket 6.7M³ (8.8 YD³), Bucket High Pen 6.7M³ (8.8 YD³) |
| R1700 | 2982 | Bucket 7.4M³ (9.7 YD³), Bucket High Pen 7.4M³ (9.7 YD³) |
| R1700 | 3492 | Bucket Light Mat 8.8M³ (11.5 YD³) |
| R1700 | 2830 | Bucket 5.7M³ |
| R1700 | 3244 | Bucket 7.5M³ |
| R2900/R3000 | 3054 | Bucket 7.2M³ (9.4 YD³), Bucket High Pen 7.2M³ (9.4 YD³), Bucket 6.4M³ (8.4 YD³) |
| R2900/R3000 | 3154 | Bucket 8.2M³ (10.7 YD³), Bucket High Pen 8.2M³ (10.7 YD³), Bucket 8.3m³ (10.9 yd³) |
| R2900/R3000 | 3354 | Bucket 8.9M³ (11.6 YD³), Bucket High Pen 8.9M³ (11.6 YD³), Bucket 8.9M³ (11.6 YD³) |
| R2900/R3000 | 3454 | Ejector Bucket 7.1M3 (9.3 YD³), Bucket 9.5 M³, Bucket 3500 mm Light Mat 10.5M³ (13.7 YD³), Bucket 10.5m³ (13.7 yd³) |
| R2900/R3000 | 3754 | Bucket 3800 mm Light Mat 11.5M³ (15.0 YD³), Bucket 11.6 m³ (15.2 yd³) |

CAT BOLT-ON HALF ARROWS

MAXIMUM LIP PROTECTION THROUGH INTEGRATED DESIGN

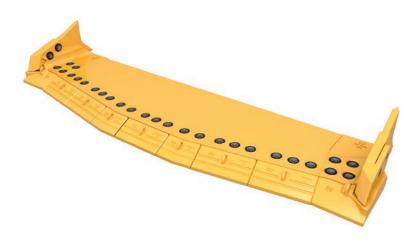
The bolt-on half arrow (BOHA) system delivers best-in-class lip protection with fewer parts than competitive systems. Reducing maintenance cost through better protection, and fewer parts to manage. BOHA segments have superior hardness vs. welded components.

| HIGH PERFORMANCE | 14% harder than weld-on. |
|--------------------------|---|
| SIMPLIFY INSTALLATION | Up to 75% faster replacement vs. weld-on when using Cat dirt blocker rings. |
| SAFETY | No welding-related concerns. |



BOHA BASE EDGE DESIGN

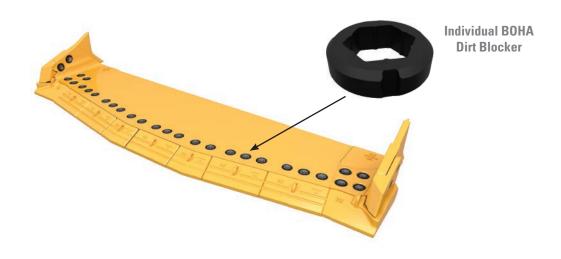
The BOHA system includes a base edge specific to your bucket, which includes cast corners (R1700-3000) and butter bead, reducing installation times by 75%.



50% more contact area reduces stress and impact, which will extend the service life of your base edge system.

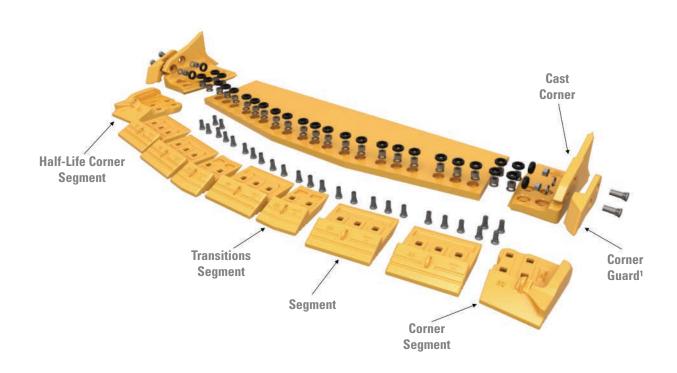


Reduce clean-out times from minutes to seconds. Dirt blocker rings compresses for easy installation and removal with a common pick or flat screw driver.



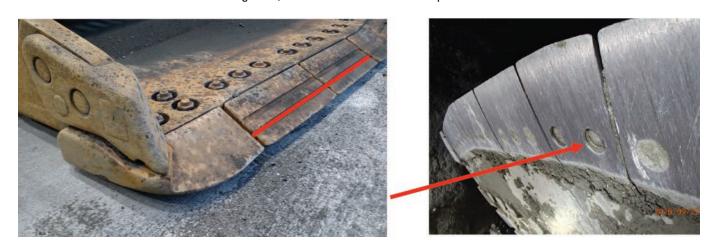
BOHA PERFORMANCE DESIGN

The BOHA system includes a base edge specific to your bucket, which includes cast corners (R1700-3000) and butter bead, reducing installation times by 75%.



Maintenance-friendly with integrated wear indicators

- » Replace full corners with Half Life Corners² at center segment half-life.
- » End-of-life indicators are on the segment, as well as the bolt hole depth.



- ¹ Corner Guards are only available for R1700-R3000 Machine Sizes.
- ² Half Life Corners are only available for R1300-R1700 Machine Sizes.

BOHA REMOVAL AND INSTALLATION³

The BOHA system includes a base edge specific to your bucket, which includes cast corners (R1700-3000) and butter bead, reducing installation times by 75%.

Install the center half arrow to base edge using nuts, washers, and bolts. Tighten the nuts loosely by hand.



Install all half arrows from the center segment out to the corner segments. Tighten loosely by hand.



Install a bucket corner guard to both corners of base edge using nuts, half washers, and bolts. Tighten the nuts loosely by hand.



Ensure all half arrows and bucket corner guards are hard against base edge. Use an impact wrench to tighten nuts fully.

Insert the dirt blocker rings into the counterbores of base edge over all full nuts.



When half arrows are at half-life, replace the corner segment edges with new half-life corner segment edges.



³ These instructions are only meant as an overview. For the complete instructions please view M0081516 in SIS.

TOTAL WEAR PROTECTION

INCREASED PRODUCTIVITY. FOR EVERY ENVIRONMENT. FOR EVERY APPLICATION.

Get the best available protection for every product on your site, from wheel loaders to cable shovels, with our Total Wear Protection line.

LAMINATED WEAR PRODUCT (LWP)



Chocky Bars, available in four shapes, feature a V-groove design that can be bent around a radius. They can be separated or modified in length. The inset of the Cat logo allows for the trapping of fine material in each section, extending the life of the wear material itself. Chocky bars come in four sizes.



Wear Buttons, designed for applications that optimize the round profile, trap material to provide material-on-material wear. Wear buttons are available in four sizes.



Tear Drop Wear Button fits in with the existing line of circular Wear Buttons. The tear drop shape can extend into corners or follow natural tapers on the protected surface.



Roll Bars protect the leading edge of dozers, loaders, mining shovels and other equipment, providing maximum wear protection while minimizing drag. Roll bars are available in three sizes.



Wear Lugs are for the use on earth moving equipment in the sidebar and leading edge of the bucket. The profile shape of the top of the Wear Lug allows this product to be utilized in TTT applications for further traction on track shoes.



Bolt Protectors help prevent hardware wear on cutting edges, top plates, sidebar protectors and more by allowing material to pack. They also allow for easier removal when replacing G.E.T.

LAMINATED WEAR PRODUCT (LWP)

Wear Blocks are used in areas where a single piece needs to cover a large or specific surface area. There are several new Wear Blocks in the portfolio that give more flexibility and options for coverage.



6x8" Wear Blocks are versatile and long lasting. They feature a zigzag inset design that allows for material-on-material wear. They prevent channel wear common in parallel grooves, delivering extended life in extreme operations.



3x4"Wear Patch Blocks can be plug welded in tight areas. They can also be grouped together where no gaps are desired between parts.



11" Trapezoidal Wear Blocks can fill a tapered area or be staggered in a pattern to avoid straight-line channels. They feature a zigzag inset design that allows for material-on-material wear. They prevent channel wear common in parallel grooves, delivering extended life in extreme operations.



4x8.5" Skid Wear Blocks are rectangular shaped and perimeter welded in place.

MANGANESE WEAR PRODUCTS

MANGANESE WEAR PRODUCTS



Cat Manganese Wear Bar is the first to market product and is designed for the most impact prone applications, including mining shovel heels and lips, and in fixed plant applications including primary and secondary crushers.



Cat Manganese Wear Block are designed for the most impact prone applications.

BI-METALLIC WEAR PRODUCTS



Cat Bi-Metallic Wear Blocks use a unique mechanical bonding process for the highest impact applications. The mild steel jacket and fingers create a strong bond to the chrome white iron.



Cat Tungsten Sidebars are designed to be installed on the bucket wings of any HMS, ERS, or LHEX bucket. These are an alternative method of protection over OEM cast wing shroud systems. The tungsten carbide sidebars strengthen the bucket sidewall and provide a shadowing effect that can protect the sidewall from wear.

WEAR PRODUCTS STANDS

The specially designed stands are engineered to support over 2,500 pounds of wear products. They can be placed at the point of use parts store, warehouse, weld shop, fabrication shop for easy storage or consignment plans.

See PEBJ0031 for more information.



Full Stand











Cocky bars in application

ABRASION RESISTANT MATERIAL (A.R.M.)

Cat Abrasion Resistant Material is a coating made of extremely hard tungsten carbide particles that forms a protective shield over key wear surfaces. Cat G.E.T. with A.R.M. is ideal for high-abrasion, low-to-moderate impact applications—such as working in sand, gravel and other abrasive materials that can severely diminish G.E.T. wear life.

EXTEND YOUR WEAR LIFE

LOWER YOUR COST PER HOUR

Tungsten carbide offers three to five times the life of through-hardened G.E.T.

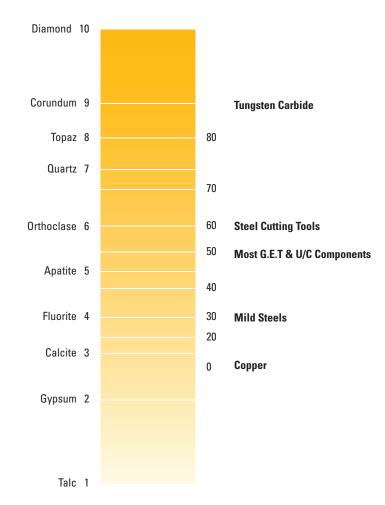
Self-sharpening wear pattern means fewer change-outs in the right applications.

HARDNESS COMPARISON

MOHS HARDNESS

ROCKWELL "C" HARDNESS





EXAMPLE PARTS WITH A.R.M. APPLIED





A.R.M. OPTION AVAILABLE

NOTE: Products available with the A.R.M. option feature this symbol.

ENGINEERED TO ORDER (ETO) CUSTOM PRODUCTS

Bucket and blade products are continually refined as they work and wear, so the G.E.T. solution often needs to be "tailored" to your unique wear environment. Your Cat dealer can provide that custom product for your application.

OVERLAY PRODUCTS

Abrasion Resistant Material (A.R.M.) and Plasma Resistant Material (P.R.M.) can be applied to G.E.T. components to extend their life.



Custom base edges and cutting edges are available for your bucket.



CASTINGS - LIP SHROUDS, COUPLER, TIPS



Contact: GET_ETO_Request@cat.com

- To request ETO forms
- To submit ETO request



PEDJ0779

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