

CL-1 FOR HYDRAULIC MINING SHOVELS – 6040Fs TO 6090

MAXIMUM PRODUCTIVITY THE MOMENT YOU HIT THE GROUND

CL-1 introduces our first proprietary cast lip system. Providing both the cast lip and G.E.T. allows customers to choose Cat G.E.T. for their Cat machine without having to modify the competitive lip system. CL-1 is supported by your Cat dealer, who cares for all of your equipment needs.

- » High performance & low maintenance.
- » Poured in a single casting - No weld joints to crack.
- » Maximum lip protection - due to the tapered shroud design.
- » Minimized lip repair thanks to our nose geometry and shroud stabilization



CL-1 SYSTEM OVERVIEW

CL-1 is a complete system that matches the GET arrangement with a cast lip that is specifically designed for the machine. CL-1 is available through parts as a cast lip assembly, or incorporated into a bucket or clam assembly from WorkTools. Choose CL-1 for your new hydraulic mining shovel direct from the factory.



CL-1 INTERMEDIATE COUPLER

Intermediate couplers secure to the CL-1 nose base with a hammerless retainer that pulls the coupler tight. Coupler pocket has dual load bearing surfaces to minimize nose stress and wear. These 3-piece systems minimize wear on the more expensive components, helping to provide the lowest cost per ton.

MINIMIZE NOSE WEAR

Coupler pocket evenly distributes load on nose base to reduce stress.

DURABLE TIP LIFE

Concave fit tooth & coupler transfers load into larger components.



COUPLER RETENTION SYSTEM:

- » Safety Focus – Hammerless Retention
- » Minimize lip wear – Primary retention reduces movement and secondary retention keeps shroud tight, reducing periodic maintenance
- » No Special Tooling – Square Hex Drive

Retainer locking cap reduces primary torque screw movement during operation. Dust plug reduces clean out time during service.



CL-1 couple retention is serviced as one assembly.

Retainer pulls coupler onto nose base and inward reducing side movement.

CL-1 TIP OPTIONS

The split tip design improves penetration, resulting in more efficient bucket fill. The retainer lock is built into each tip, simplifying installation. Our hammerless pull ring retention (PRR) secures the tip with the retainer lock. One turn with a common square drive will unlock the tip. Tip stabilizer legs contact coupler before pin to deflect operating load.

CL-P



» This centerline profile tip provides excellent penetration for moderate impact and abrasion applications.

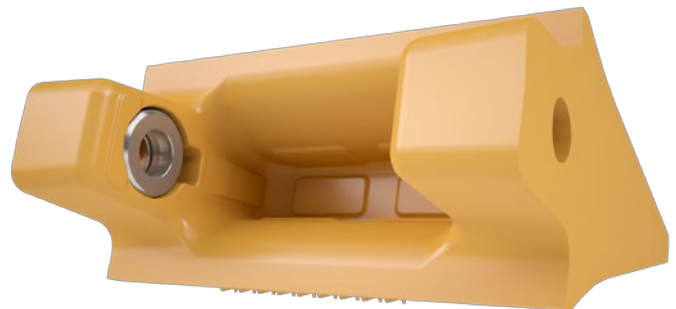
CL-A



» Typically used in high abrasion applications where aggressive penetration is needed. This tip has 8% more wear material than the CL-P tip



The Pull Ring draws the tapered pin into the retainer until it locks into pin channel. Spiral pin head pulls pin out of pin indentation. Dust plug shortens clean out time.



Integrated retainer lock

INSTALLATION & REMOVAL

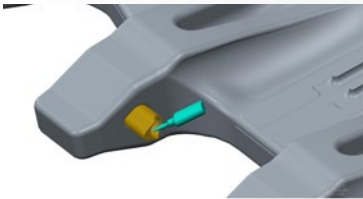
COUPLER INSTALLATION

Follow these six simple steps for fast, safe and easy installation and removal:

Scan the QR Code to the right to watch the installation video.



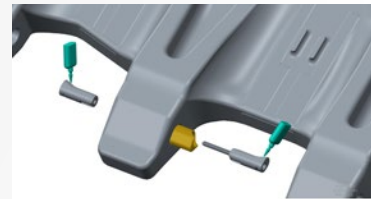
- 1** Insert retainer body into nose base hole, lubricate



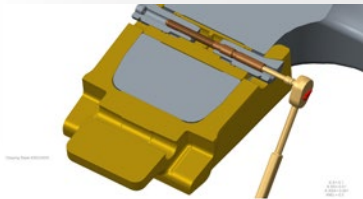
- 2** Slide coupler onto nose base



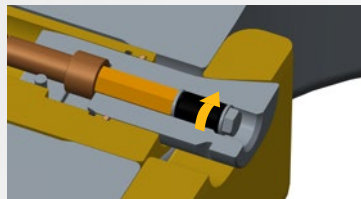
- 3** Insert retainer ends into body, lubricate



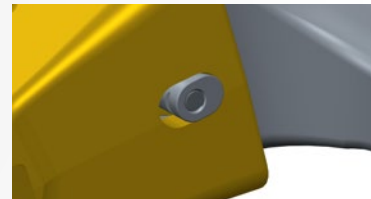
- 4** Tighten the captured bolt to specified torque



- 5** Insert locking plug, hand tighten, plus quarter turn



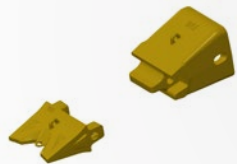
- 6** Insert dust plug



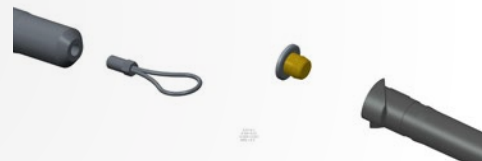
TIP INSTALLATION

Follow these four simple steps for fast, safe and easy installation and removal:

- 1** Ensure tip pocket and coupler nose are clean of fines and slide the tip on to the coupler nose



- 2** If not previously installed, install a dust plug into square drive of tip retaining pin and screw the rope pull into tail end of pin and tighten.



- 3** Insert tip retaining pin into the tip and coupler assembly, rotating the pin clockwise until pin shoulders butt up to cast shoulders.



- 4** Insert a suitable pry bar through loop of rope pull and lever across to lock tip retaining pin into place.



CL-1 CAST LIP PROTECTION

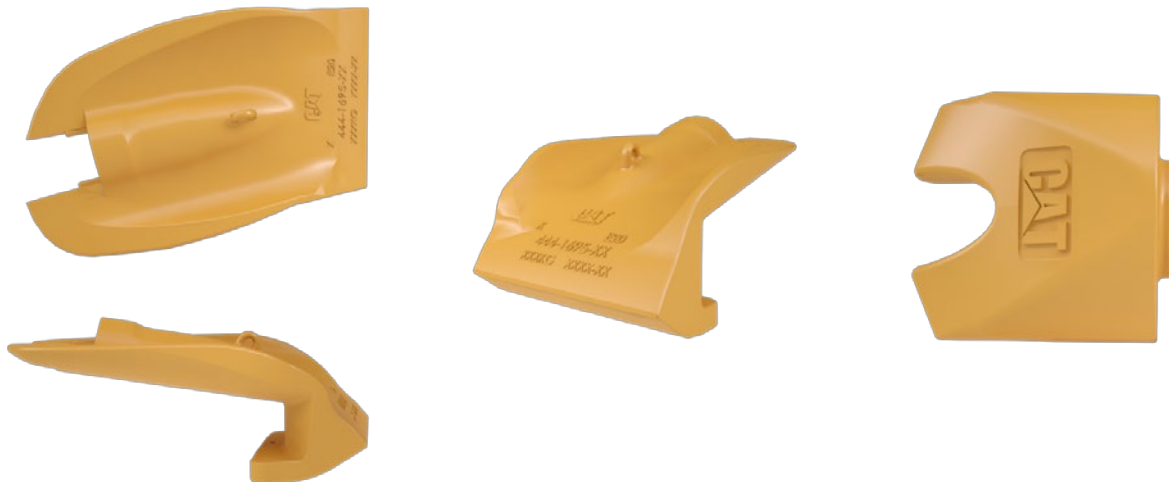
The tapered shroud design provides maximum lip protection, reducing lip wear. Shroud retention inserts into shroud body and is secured to the lip with a dual locking system, ensuring your lip protection stays tight during service.

MAXIMIZED PERFORMANCE

Low profile delivers penetration and optimized material placement reduces un-needed steel cost and weight

EASY REMOVAL

Deflector reduces clean out time



COUPLER RETENTION SYSTEM:

- » Safety Focus – Hammerless Retention
- » Minimize lip wear – Primary retention reduces movement and deflector retention keeps shroud tight, reducing periodic maintenance
- » No Special Tooling – Square Hex Drive



CL-1 WING PROTECTION

Wing shrouds secure to the wings with a hammerless bolt retainer that inserts into the shroud body and pulls the shroud tight to the wing.

MAXIMUM PROTECTION

Low profile delivers penetration and optimized material placement reduces un-needed steel cost and weight.

SAFETY FOCUS

Hammerless Retention

NO SPECIAL TOOLING

Only requires a Square Hex Drive



INSTALLATION & REMOVAL

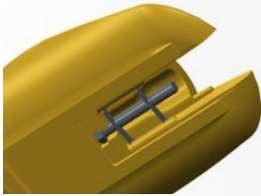
CL-1 CAST LIP & WING PROTECTION INSTALLATION

Follow these four simple steps for fast, safe and easy installation and removal:

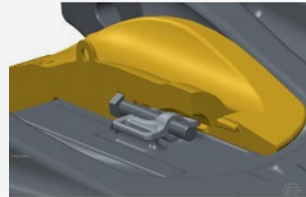
Scan the QR Code to the right to watch the installation video.



- 1** Insert retaining bolt into shroud and secure into position with retainer clip.



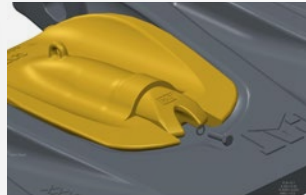
- 2** Align shroud with mounting boss weldment. Ensure retaining bolt aligns with the boss groove.



- 3** Install the belleville washer, thick washer, belleville washer, then cone nut onto the retaining bolt as shown.



- 4** If installing end cap, align end cap and insert end cap bolt with schnorr washer and tension.



WING SHROUD INSTALLATION

Follow these four simple steps for fast, safe and easy installation and removal:

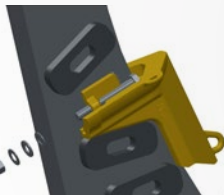
- 1** Insert retainer bolt into shroud and secure into position with retainer clip.



- 2** Align lower wing shroud with mounting boss. Ensure retaining bolt aligns with mounting boss groove. Repeat for upper wing shroud.



- 3** Install the belleville washer, thick washer, belleville washer, then cone nut onto the retaining bolt.



- 4** Tighten.

