

H&L Tooth Company  
Quality **GET** since 1931

#214.2026 Catalog  
A ISO 9001 CERTIFIED Company



# Tooth Company Ground Engaging Tools

Wear Parts for:

• **H&L® MINING PRODUCTS**



[www.hltooth.com](http://www.hltooth.com)

**H&L® "VP"  
Style  
Teeth**



**H&L®  
Wedge  
Key and  
Clamp  
Assembly**



**Wear  
Shrouds for  
Cat-BE Style 7495**



**Quality  
GET since  
1931**

**H&L® Rope Shovel Whisler 10 and 12  
Series Base Adapters**



**Wear  
Shrouds for P&H-  
Komatsu® 4100**



**Komatsu®  
Style  
Ripper  
Shanks**



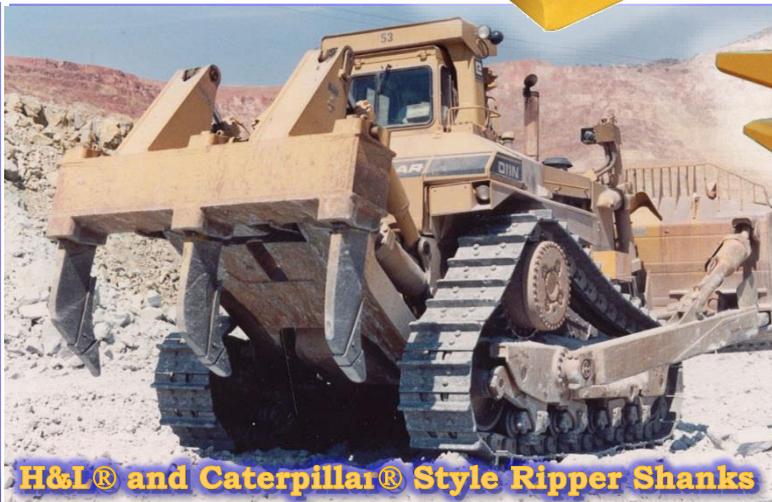
**Custom Made  
Weld-On  
Style  
Adapters**



**OEM style lip  
gauges for  
repairing  
dipper  
shovels**



**H&L® and Caterpillar® Style Ripper Shanks**



# 1-800-HL TOOTH

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# Home of the H&L Tooth Company, Tulsa Oklahoma



200,000 square foot  
manufacturing facility  
for **QUALITY FORGED**  
**WEAR PARTS**

1-800-HL TOOTH (1-800-458-6684) • Visit us at [www.hltooth.com](http://www.hltooth.com)

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**H&L® WELD-ON** adapter systems for all hydraulic Large Shovels.

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Comments and Notes

# H&L® Large “VP” Mining Teeth and Pin Products

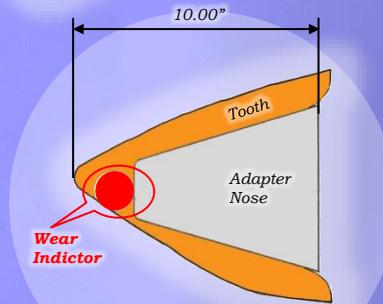
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## Mining Flexhol® Style “VP” Teeth and Attaching Hardware

### 546 “VP” SERIES



### 646 “VP” SERIES



#### Typical Worn Tooth Profile

Only the 546 and 646 Series has a built in wear indicator. It identifies when the tooth wear length is nearing 10.00”.

### 543 “VP” SERIES



### 541 “VP” SERIES



### 546Flexhol® System



### 646PN8 Hammerless Connection



### 543Flexhol® System



### 541Flexhol® System



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# H&L® WH-12 MINING Base Adapter Products

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## “WHISLER 12” Flexhol® or Hammerless Series “VP” Base Adapter Series

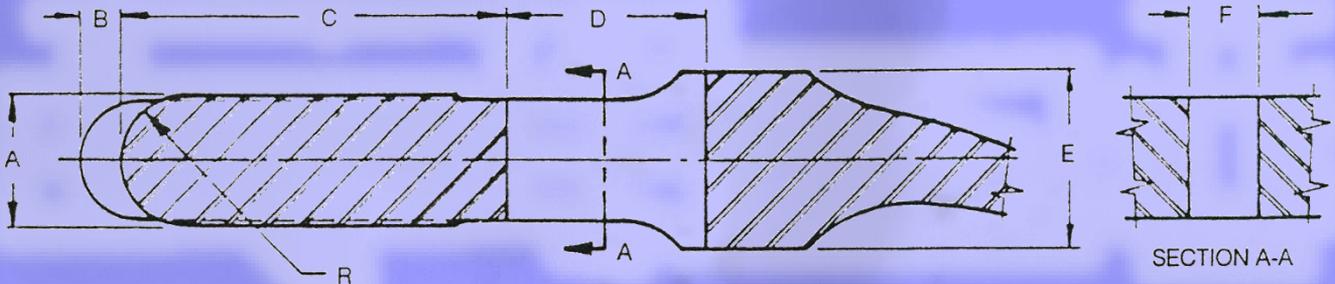


### K-512 Series Wedge Keys and Clamp Assembly



Key Series	“C” Clamp
<b>K-512-3</b>	<b>K-512-9</b>
<b>K-1307</b>	<b>K-1308</b>
<b>K-1322</b>	<b>K-1323</b>
36.0#	70.0#

**512-TWC-546**  
**OEM #3705F-E-TWC-546**  
855.0#



Mfg.	Number	A	B	C	D	E	F	R
Bucyrus-H&L*	X-2781-B	6.25"	1.50"	15.88"	8.50"	6.75"	2.88"	3.12"

\*Bucyrus Engineering and the H&L Tooth Company combined in late 1990 to design and develop a new and larger Whisler style connection for their 495 Shovels. This design became the Industry Standard.

For inspection and fit gauge availability see page 15

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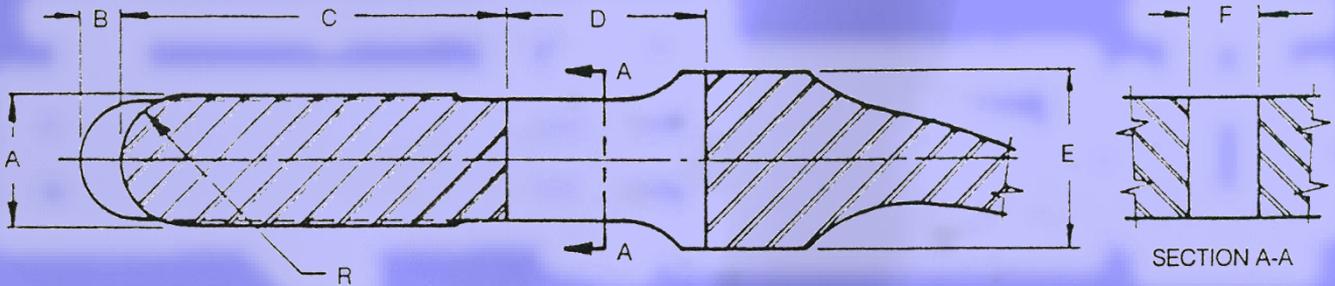
# H&L® WH-10 MINING Base Adapter Products

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## “WHISLER 10” Flexhol® or Hammerless Series “VP” Base Adapter Series



### K-510 Series Wedge Keys and Clamp Assembly



Mfg.	Number	A	B	C	D	E	F	R
Amsco	GA-38867	5.00"	1.50"	15.00"	8.00"	6.75"	2.75"	2.50"
Bucyrus-Erie	889468K1	5.00"	1.50"	15.00"	8.00"	6.75"	2.75"	2.50"
P&H	12-J-704	5.00"	1.50"	15.00"	8.00"	6.75"	2.75"	2.50"

For inspection and fit gauge availability see page 15

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# H&L® WH-8 MINING Base Adapter Products

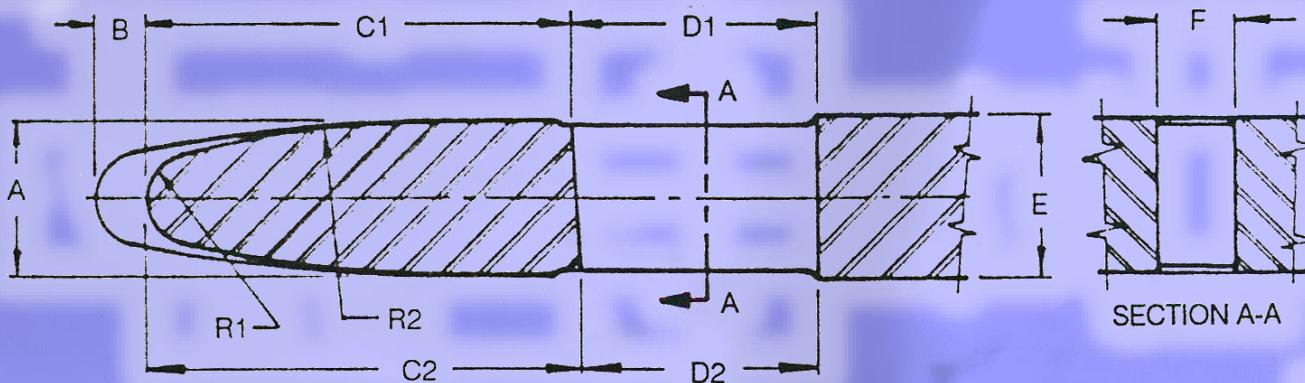
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## “WHISLER 8” Flexhol® or Hammerless Series Base Adapter Series

### K-508 Series Wedge Keys and Clamp Assembly



Key Series "C" Clamp  
**K-508-3** **K-508-9**  
**K-1297** **K-1298**  
 29.0# 55.0#



Mfg.	Number	A	B	C1	C2	D1	D2	E	F	R1	R2
Amsco	GA-28992	5.00"	1.62"	12.80"	13.25"	8.20"	7.75"	5.25"	2.50"	1.38"	36.0"
Bucyrus-Erie	870474K1	5.00"	1.62"	12.80"	13.25"	8.20"	7.75"	5.25"	2.50"	1.38"	36.0"
P&H	12-J-668	5.00"	1.62"	12.80"	13.25"	8.20"	7.75"	5.25"	2.50"	1.38"	36.0"
Esco Corp.	CE-14683	5.00"	2.00"	12.81"	13.28"	8.19"	7.72"	5.25"	2.50"	1.38"	36.0"
Marion	813-C-26	5.00"	1.62"	12.80"	13.25"	8.20"	7.75"	5.25"	2.50"	1.38"	36.0"

For inspection and fit gauge availability see page 15

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# H&L® WH-6 MINING Base Adapter Products

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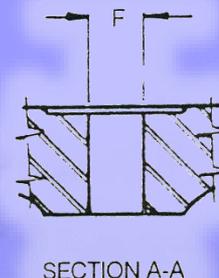
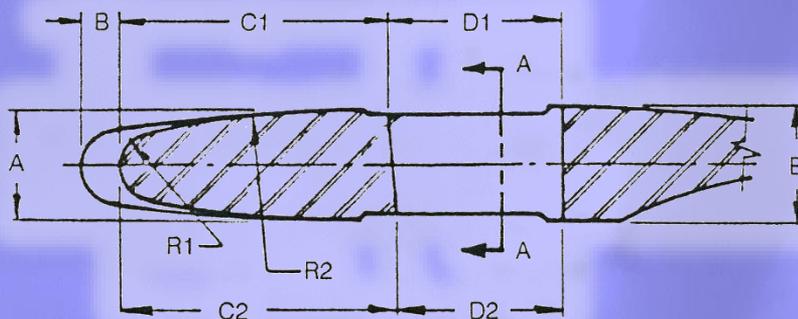
## “WHISLER 6” Flexhol® Series Base Adapter Series



### K-506 Series Wedge Keys and Clamp Assembly



Key Series      “C” Clamp  
**K-506-3**      **K-506-9**  
**K-1299**      **K-1300**  
 20.0#              29.0#



Mfg.	Number	A	B	C1	C2	D1	D2	E	F	R1	R2
Amsco	GA-27506	4.25"	1.50"	10.23"	10.62"	6.89"	6.50"	4.50"	2.25"	1.25"	30.0"
Bucyrus-Erie	863825K1	4.25"	1.50"	10.23"	10.62"	6.89"	6.50"	4.50"	2.25"	1.25"	30.0"
P&H	12-J-468	4.25"	1.50"	10.23"	10.62"	6.89"	6.50"	4.50"	2.25"	1.25"	30.0"

For inspection and fit gauge availability see page 15

# 1-800-HL TOOTH

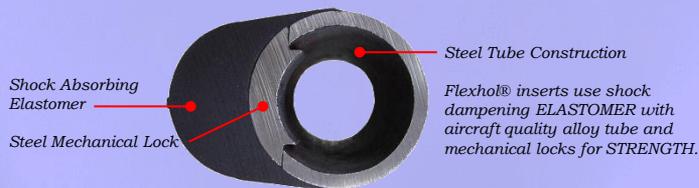
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# H&L® MINING Tooth Attaching Hardware

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## 546-543-541 Flexhol® Attachment Hardware

- **SOLID STEEL** Chrom-Moly Hardened Flexhol® pin!
- Hardened Chrom-Moly Flexhol® **STEEL TUBE** Insert!
- Steel Lock Centering guarantees **POSITIVE LOCK!**
- **SHOCK ABSORBING** 80 Shore elastomer!



### Flexhol® Mechanical Lock Cross Section

#### 546 Flexhol®



#### 546 Severe Duty Flexhol®



#### 543 Flexhol®



#### 541 Flexhol®

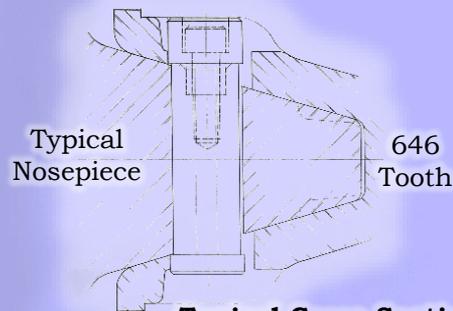


## 646 Tooth PATENTED Hammerless Attachment Hardware!

### 646PN8 Assembly

6.7#

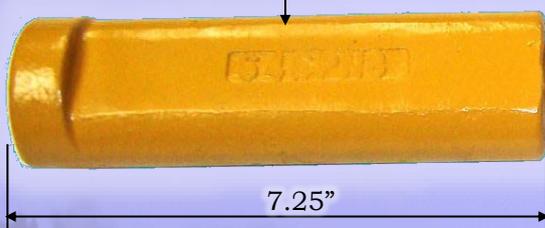
646 series hammerless pin assembly is held secure with a self-locking bolt that is easy to install with a standard 3/4" Allen hex Key.



### Typical Cross Section

#### 646BD8

Body



#### 646OR8

O-Ring



#### 646CP8

Cap



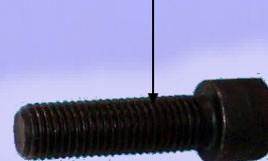
#### 646WS8

Washer



#### 646BT8

Bolt



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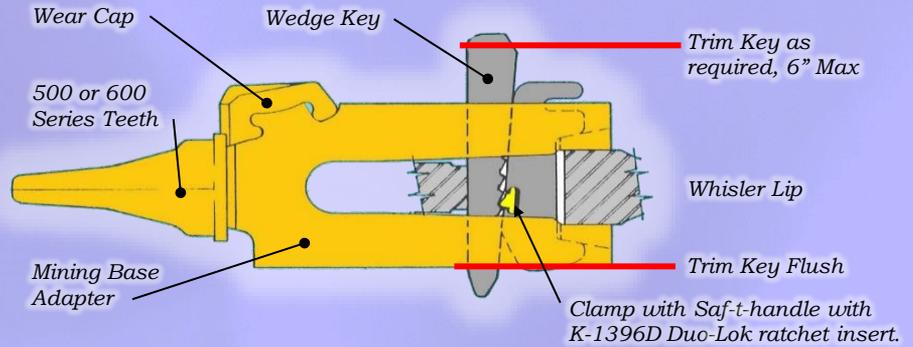
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# H&L® Base Adapter Attaching Hardware

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## Whisler Style Key & Clamp Hardware

All Clamps use K-1396D Duo-Lok Ratchet Insert.



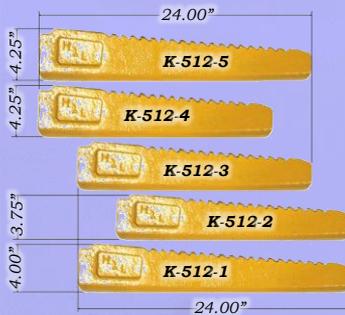
### K-512 Series Wedge Keys and Clamp Assembly

Other OEM numbers K-1307 and K-1308



#### Over and Undersized Keys

Whisler 12 series Wedge Keys are available in oversized keys for worn lips and undersized keys for rebuilt dipper lips.



- "5 Key" = 1/4" Oversized, longer length
- "4 Key" = 1/4" Oversized standard length
- "3 Key" = Standard sized and Length
- "2 Key" = 1/4" Undersized standard length
- "1 Key" = 1/4" Undersized, longer length

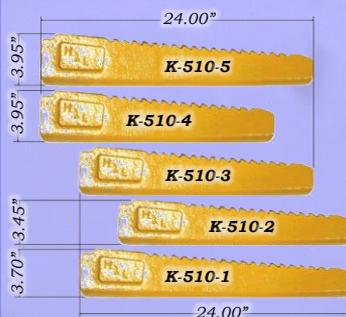
### K-510 Series Wedge Keys and Clamp Assembly

Other OEM numbers K-1294 and K-1295



#### Over and Undersized Keys

Whisler 10 series Wedge Keys are available in oversized keys for worn lips and undersized keys for rebuilt dipper lips.



- "5 Key" = 1/4" Oversized, longer length
- "4 Key" = 1/4" Oversized standard length
- "3 Key" = Standard sized and Length
- "2 Key" = 1/4" Undersized standard length
- "1 Key" = 1/4" Undersized, longer length

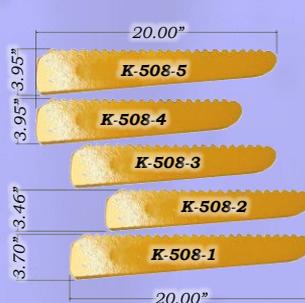
### K-508 Series Wedge Keys and Clamp Assembly

Other OEM numbers K-1297 and K-1298



#### Over and Undersized Keys

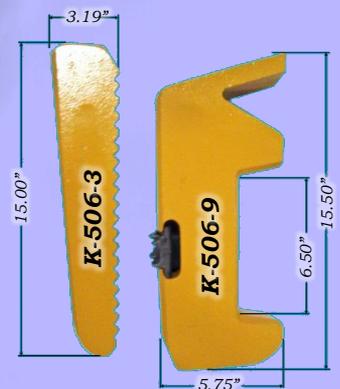
Whisler 8 series Wedge Keys are available in oversized keys for worn lips and undersized keys for rebuilt dipper lips.



- "5 Key" = 1/4" Oversized, longer length
- "4 Key" = 1/4" Oversized standard length
- "3 Key" = Standard sized and Length
- "2 Key" = 1/4" Undersized standard length
- "1 Key" = 1/4" Undersized, longer length

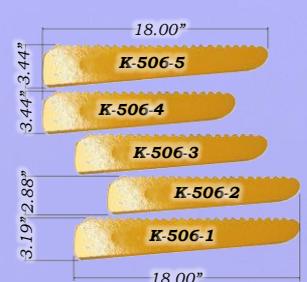
### K-506 Series Wedge Keys and Clamp Assembly

Other OEM numbers K-1299 and K-1300



#### Over and Undersized Keys

Whisler 6 series Wedge Keys are available in oversized keys for worn lips and undersized keys for rebuilt dipper lips.



- "5 Key" = 1/4" Oversized, longer length
- "4 Key" = 1/4" Oversized standard length
- "3 Key" = Standard sized and Length
- "2 Key" = 1/4" Undersized standard length
- "1 Key" = 1/4" Undersized, longer length

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# H&L® Wear Shrouds for P&H 4100 WH-12 Shovels

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**LX-4112-WSR**  
Corner Shroud Right  
480.0#

**LX-4112**  
Center Shroud  
434.0#

**LX-4112-UWS**  
Upper Wing Shroud  
245.0#

**LX-4112-WSL**  
Corner Shroud Left  
480.0#

**512-TWC-546**  
Whisler12 Base Assembly  
1240.0#

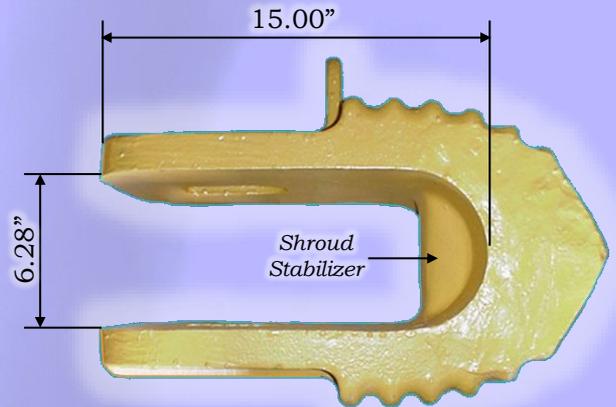


**LX-4112-UWS**  
Upper Wing Shroud  
3 per side

**K-1328 & K-1329**  
Wedge Key & Clamp for  
Uppers and Lower



## LX-4112 Dimensional Checks



**LX-4112-WSR & WSL** Corner Shrouds



**LX-4112** Center Shroud

**K-1326 & K-1327**  
Wedge Key & Clamp for  
Centers



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# H&L® Wear Shrouds for Cat-Bucyrus WH-12 Shovels

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**LX-4950-LCR**  
Lower Corner Right Shroud  
366.0#

**LX-4950-UCR**  
Upper Corner Right Shroud  
348.0#

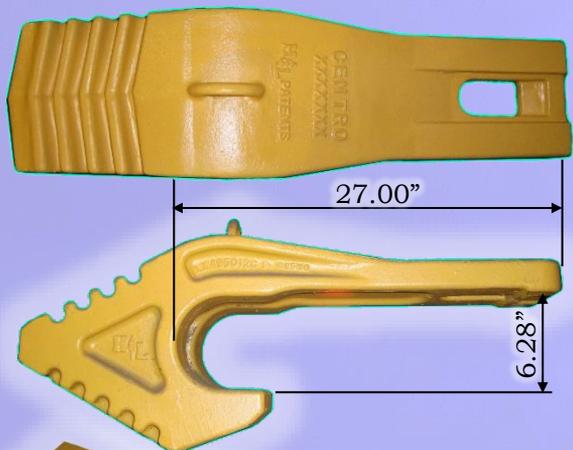
**LX-4950-UCL**  
Upper Corner Left Shroud  
348.0#

**LX-4950-LCL**  
Lower Corner Left Shroud  
366.0#

**512-TWC-546**  
Whisler12 Base Assembly  
1240.0#

**LX-4950-12**  
Center Shroud  
518.0#

## LX-4950-12 Dimensional Checks

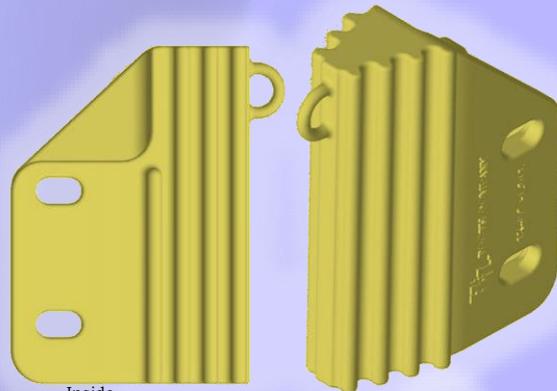


**K-1348 & K-1349**  
Wedge Key & Clamp  
for Centers

**K-1358 & K-1359**  
Hammerless Connection  
for Centers

## LX-4950-UCL LX-4950-UCR

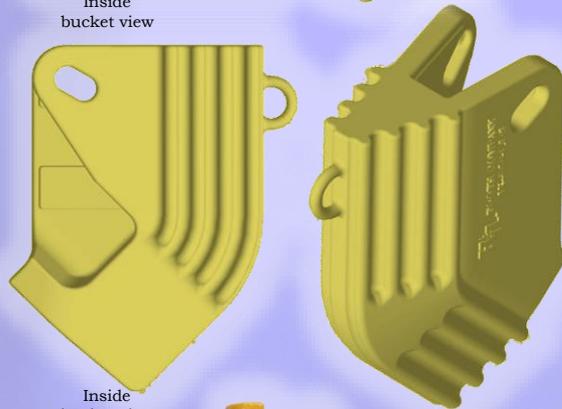
Upper Corner  
Left side shown  
Right side opposite



Inside  
bucket view

## LX-4950-LCL LX-4950-LCR

Lower Corner  
Left side shown  
Right side opposite



Inside  
bucket view

**K-1360 & K-1361**  
Hammerless Connection for  
Upper & Lower Corners

**K-1354-A & B**  
Dovetail Key & Clamp  
for Upper & Lower Corners

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# H&L® Caterpillar Style Ripper Teeth and Shanks

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**“Always use the longest tip that will rip without excessive breakage.”**

*quote Caterpillar's Handbook of Ripping 2/2000*

## R-450 SERIES

### HL-9W-2451

33.0#  
Short  
Centerline



FORGED

### HL-9W-2452ST

40.0#  
Star Rib  
Design



FORGED

### HL-9W-4453

43.0#  
Long  
Centerline



FORGED

## R-500 SERIES

### HL-4T-4502ST

65.0#  
Star Rib  
Design



FORGED

### HL-4T-4503

66.0#  
Long  
Centerline



FORGED

## R-550 SERIES

### CX-6Y-3552

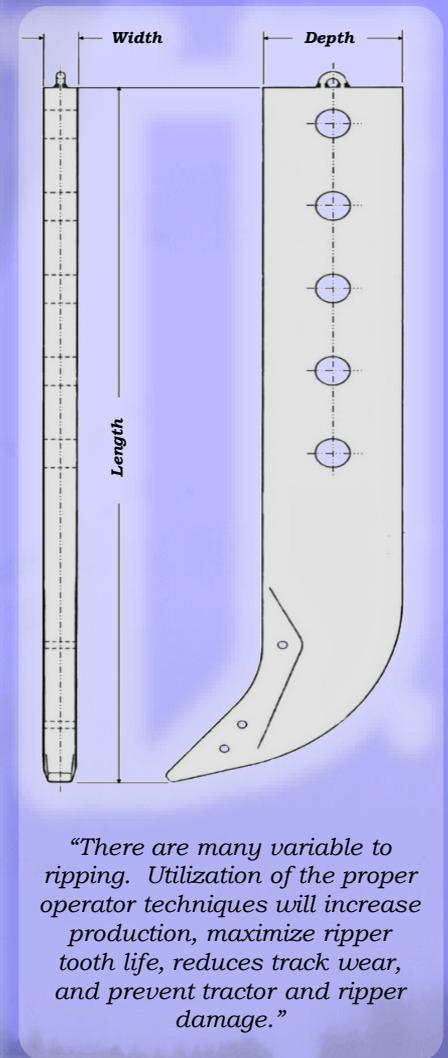
95.5#  
Intermediate  
Penetrator



## D11 and D10 Ripper Shanks ♦One piece ripper shank.

Model	Part Number	Weight*	Width	Depth	Length	Holes	Series
D11	HL-104-9275♦	2630.0#	4.33"	17.75"	129.62"	3	R-550
D11	HL-104-9277♦	2180.0#	4.33"	17.75"	107.50"	4	R-550
D11, D10	HL-3G-6507	1360.0#	3.94"	15.75"	81.31"	2	R-500
D11, D10	HL-6Y-5616♦	1310.0#	3.94"	15.75"	77.85"	2	R-500
D11	HL-8E-0467	2180.0#	4.33"	17.75"	107.50"	4	R-550
D11, D10	HL-8E-8413♦	1310.0#	3.94"	15.75"	77.85"	2	R-500
D10	HL-118-2140	1650.0#	3.94"	15.75"	98.80"	3	R-500
D10	HL-1U-4592	1850.0#	3.94"	15.75"	110.62"	4	R-500
D10, D9	HL-3G-2088	1240.0#	3.50"	14.00"	91.65"	3	R-500
D10, D11	HL-3G-6507	1360.0#	3.94"	15.75"	81.31"	2	R-500
D10	HL-6Y-4679♦	1850.0#	3.94"	15.75"	110.62"	4	R-500
D10, D11	HL-6Y-5616♦	1310.0#	3.94"	15.75"	77.85"	2	R-500
D10, D9	HL-6Y-6138	1240.0#	3.50"	14.00"	91.65"	3	R-500
D10, D9	HL-6Y-6141	960.0#	3.50"	14.00"	71.75"	2	R-500
D10	HL-6Y-6144	1450.0#	3.50"	15.00"	111.20"	3	R-500
D10	HL-6Y-6147	1580.0#	3.50"	15.00"	111.20"	3	R-500
D10	HL-7T-5131♦	1310.0#	3.94"	15.75"	77.85"	2	R-500
D10	HL-8E-8411♦	1400.0#	3.50"	14.00"	98.80"	3	R-500
D10	HL-8E-8413♦	1310.0#	3.94"	15.75"	77.85"	2	R-500
D10, D9	HL-8E-8414	1235.0#	3.50"	14.00"	91.50"	3	R-500
D10, D9	HL-8E-8415♦	960.0#	3.50"	14.00"	71.75"	2	R-500
D10	HL-8E-8417♦	1670.0#	3.50"	15.00"	118.00"	3	R-500
D10	HL-9J-5954	958.0#	3.50"	14.00"	71.00"	2	R-500
D10	HL-9W-4426	1240.0#	3.50"	14.00"	91.65"	3	R-500

\*All weights are an estimation, actual ripper shanks may differ due to steel tolerancing.



# 1-800-HL TOOTH

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# H&L® Caterpillar Style Ripper Shanks, Pins and Retainer

## D 9 and D 8 Ripper Shanks

◆One piece ripper shank.

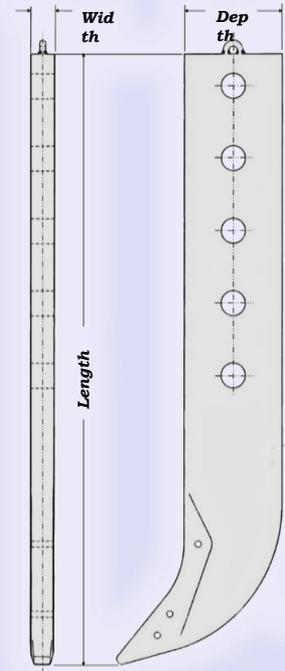
©H&L Tooth Company 2026

Model	Part Number	Weight*	Width	Depth	Length	Holes	Series
D 9	HL-114-4503B	1235.0#	3.50"	14.00"	90.50"	3	R-500
D 9, D10	HL-3G-2088	1240.0#	3.50"	14.00"	91.65"	3	R-500
D 9	HL-3G-8566	1850.0#	3.94"	15.75"	110.65"	4	R-500
D 9, D 8	HL-4T-8988◆	1330.0#	3.00"	13.00"	108.50"	3	R-450
D 9, D 8	HL-4T-8990◆	770.0#	3.00"	13.00"	63.20"	2	R-450
D 9, D10	HL-6Y-6138	1240.0#	3.50"	14.00"	91.65"	3	5-500
D 9, D10	HL-6Y-6141	960.0#	3.50"	14.00"	71.75"	2	R-500
D 9	HL-7J-1793◆	1435.0#	3.50"	14.00"	106.30"	6	R-450
D 9	HL-7J-1794◆	750.0#	3.00"	13.00"	69.20"	2	R-450
D 9	HL-7J-1795◆	750.0#	3.00"	13.00"	62.20"	2	R-450
D 9	HL-8E-5339◆	1120.0#	3.00"	13.00"	91.80"	3	R-450
D 9, D 8	HL-8E-5346◆	770.0#	3.00"	13.00"	63.40"	2	R-450
D 9, D10	HL-8E-8414◆	1235.0#	3.50"	14.00"	91.50"	3	R-500
D 9, D10	HL-8E-8415◆	960.0#	3.50"	14.00"	71.75"	2	R-500
D 9	HL-9W-6167◆	1120.0#	3.00"	13.00"	91.65"	3	R-450
D 8	HL-4T-0134◆	1120.0#	3.00"	13.00"	96.60"	3	R-450
D 8	HL-4T-0135◆	900.0#	3.00"	13.00"	75.00"	3	R-450
D 8	HL-4T-0136◆	700.0#	3.00"	13.00"	59.50"	2	R-450
D 8	HL-8E-5340◆	1170.0#	3.00"	13.00"	96.60"	3	R-450
D 8, D 9	HL-4T-8988◆	1320.0#	3.00"	13.00"	108.50"	3	R-450
D 8	HL-4T-8989◆	950.0#	3.00"	13.00"	79.35"	3	R-450
D 8, D 9	HL-4T-8990◆	770.0#	3.00"	13.00"	63.20"	2	R-450
D 8, D 9	HL-8E-5346◆	770.0#	3.00"	13.00"	63.40"	2	R-450
D 8	HL-8E-5347◆	965.0#	3.00"	13.00"	79.35"	3	R-450

## Full FACTORY WARRANTY

ON ALL H&L PRODUCTS.

Meets or exceeds OEM requirements All dimensions are for reference only.



"There are many variable to ripping. Utilization of the proper operator techniques will increase production, maximize ripper tooth life, reduces track wear, and prevent tractor and ripper damage."

\*All weights are an estimation, actual ripper shanks may differ due to steel tolerancing.

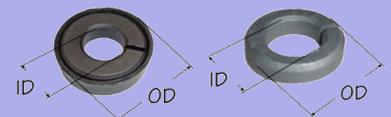
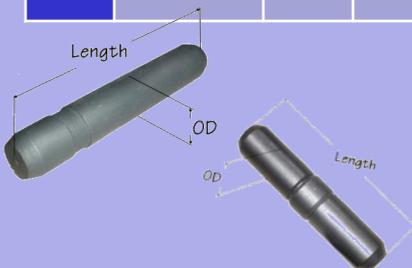
## Cat Ripper Style Pins and Retainers

Series	Part Number	OD	Length	Other Part Numbers
R-200	HL-9W-7112	0.433"	2.36"	8E-6208, 1U-4208
R-250	HL-9J-2258P	0.551"	3.01"	132-4763
R-300	HL-9W-2678	0.750"	3.38"	136-8308, 9J-2358, 9W-2668
R-350	HL-8E-6358	0.748"	4.13"	9W-2678, 114-0358
R-450	HL-6Y-3394	0.995"	5.00"	6Y-3394 (Bucket Type) 138-6450 (HD)
R-500	HL-6Y-1204	1.260"	5.60"	6Y-3907 (Bucket Type) 6Y-1204 (Impact) 138-6508 (HD)
R-550				8E-2229 (Bucket Type) 9N-4245 (Impact) 159-0558 (HD)

Series	Part Number	ID	OD	Other Part Numbers
R-200	HL-4T-0001	0.417"	0.91"	8E-6209
R-250	HL-3G-9609	0.535"	1.18"	133-0609
R-300	HL-1U-2405	0.720"	1.50"	114-0359, 7J-6845
R-350	HL-1U-2405	0.720"	1.50"	114-0359, 7J-6845
R-450	HL-8E-4743	0.970"	1.88"	8E-4743 (Bucket Type) 107-8559 (HD)
R-500	HL-6Y-1202	1.240"	2.50"	4T-4707 (Bucket Type) 6Y-1202 (Impact) 113-4709 (HD)
R-550				8E-2230 (Bucket Type) 6Y-1205 (Impact) 134-1809 (HD)

## Compression Ring Hardware for R-Series Caterpillar Ripper Shanks

Series	Part Number	OD	Length	Other Part Numbers
R-450	HL-4T-2479	1.000"	4.69"	7J-9600
R-500	HL-3G-0500	1.250"	6.00"	102-9062
R-550				6Y-2443



Retainers may or may not have plastic shells.

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# H&L® Komatsu® Style Ripper Teeth, Shanks and Pin Hardware

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## KR1 SERIES

**175-78-31230**

33.0#  
Models D80, D85E  
and D90S



H&L No.  
HL-175-78-31230  
Long Tooth

## KR2 SERIES

**195-78-21331**

44.8#  
Model D355



H&L No.  
HL-195-78-21331  
Short Tooth

## KR2A SERIES

**195-78-71320**

53.8#  
Model D455



H&L No.  
HL198-78-71320ST  
Star Tooth

## KR3 SERIES

**198-79-11230**

50.0#  
Model D455



H&L No.  
HL-198-79-11230  
Short Tooth

**198-79-11551**

56.0#  
Model D455

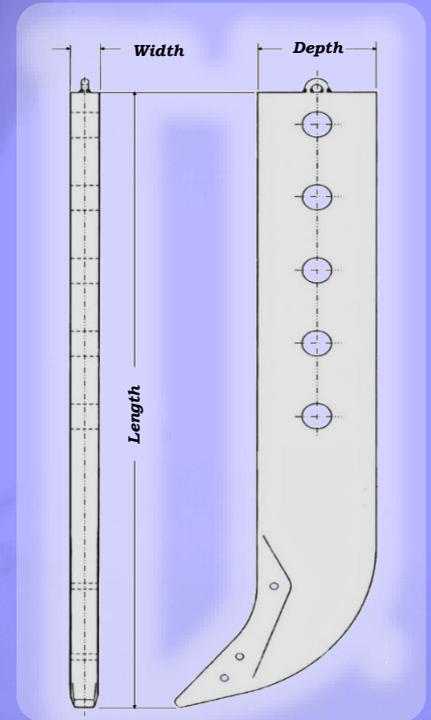


H&L No.  
HL-198-79-11550  
Short Tooth

# H&L® Komatsu® Style Ripper Shanks

Ripper Shanks by length of Shank

Model	Part Number	Weight	Width	Depth	Length	Holes	Series
DRT031	HL-113-78-21130	35.0#	1.56"	4.50"	20.19"	1	
D85-1B, D85-21, D90S	HL-154-78-14344	384.0#	3.00"	9.00"	50.88"	2	KR1
D135, D150, D155	HL-175-78-21613	605.0#	3.00"	12.00"	63.88"	2	KR1
D155	HL-175-78-21614	700.0#	3.00"	12.88"	64.88"	2	KR1
D275, D355	HL-195-78-41191	980.0#	3.50"	14.25"	72.00"	2	KR2
D355A-2, D455A-1	HL-195-78-41190	980.0#	3.50"	14.00"	72.69"	2	KR2
D-375-2, D375A-5	HL-195-78-71310	990.0#	3.50"	14.18"	74.25"	2	KR2A
D375-1, D375A-5	HL-195-78-71120	990.0#	3.50"	14.18"	74.25"	2	KR2
D355A-2	HL-175-79-32130	965.0#	3.50"	14.00"	79.00"	4	KR2
D455A-1	HL-198-78-11240	1340.0#	3.75"	15.75"	84.50"	2	KR3
D275A-2, 355A-3, D455	HL-195-79-31140	1350.0#	3.75"	15.75"	86.38"	4	KR2
D375A-3A	HL-195-79-51151	1350.0#	3.75"	15.75"	87.50"	3	KR2A
D455A-1, D475	HL-198-79-11630	2250.0#	4.38"	18.25"	111.25"	5	KR3



# Ripper Pin Attachment Hardware

**Compression  
Ring Hardware  
for Komatsu  
KR-Series  
Ripper Teeth**



Series	Part Number	OD	Length	Other #
KR1 & KR2	HL-175-78-21740	0.970"	4.25"	175-78-21810
KR2	HL-195-78-71360	1.175"	4.38"	
KR2A	HL-198-79-11320	1.175"	5.38"	
KR3	HL-092-44-03036	1.175"	5.88"	

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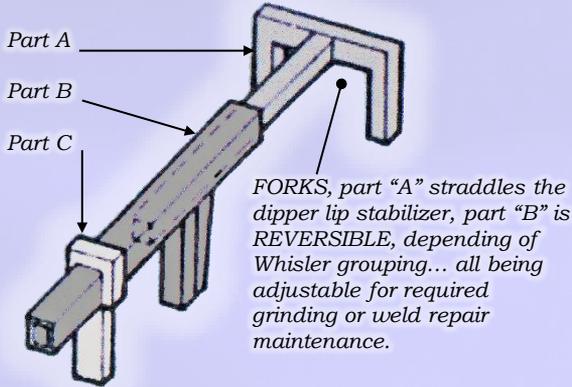
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# H&L® MINING GAUGE INSPECTION

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## UNIVERSAL Whisler Key/Clamp Hole Checks

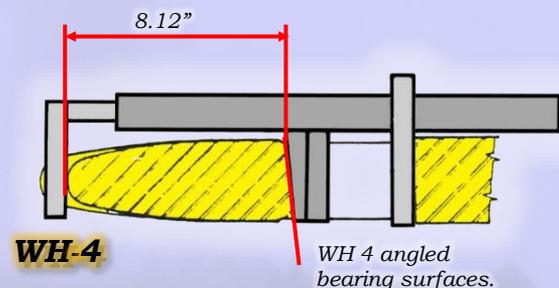
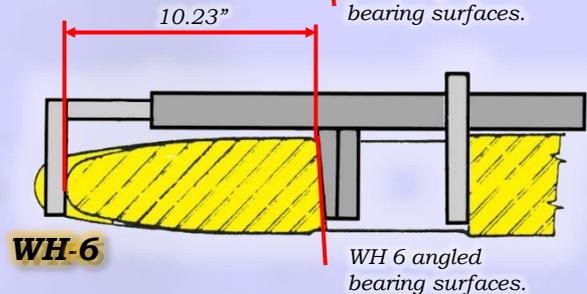
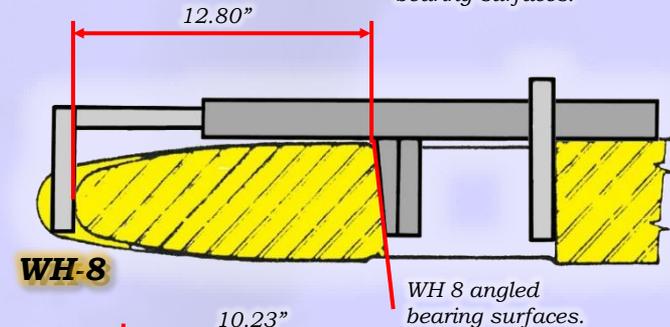
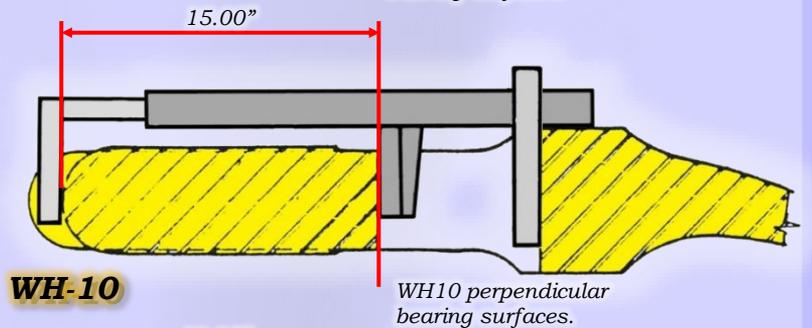
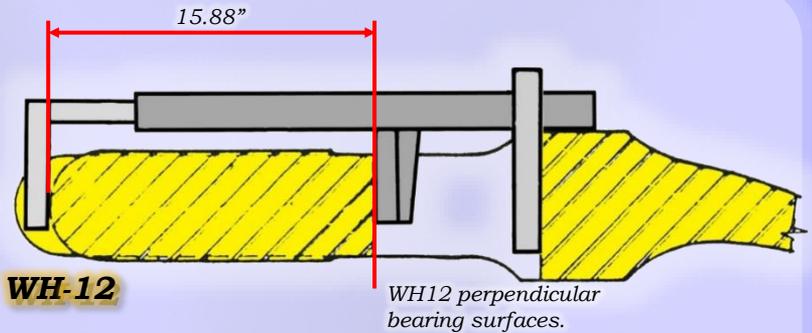
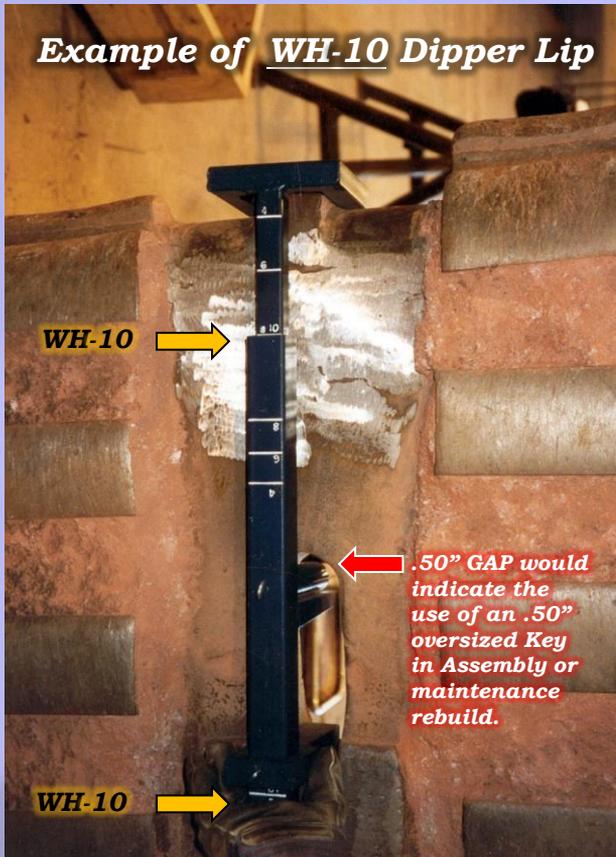
### H&L® X-2562-N Hole Gauge



This gauge will check the slot hole location of WH 4, WH 6, WH 8, WH10 and WH12 Lip fits.

*Gauge is for wear and maintenance dimensional checks.*

### Example of WH-10 Dipper Lip



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# H&L® MINING GAUGE INSPECTION

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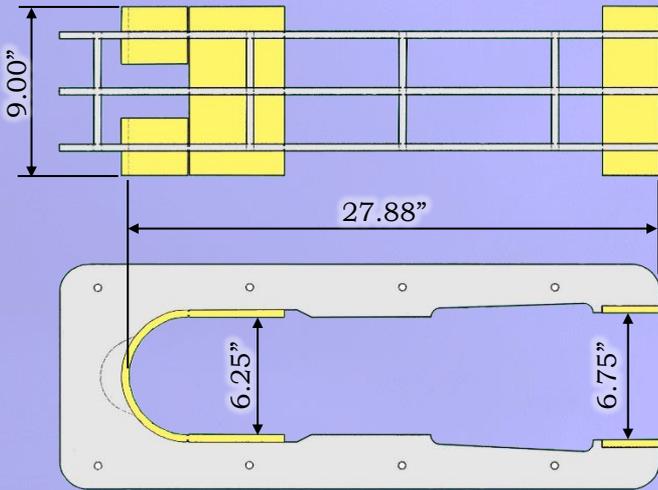
## Lip Maintenance Check and Repair Gauges



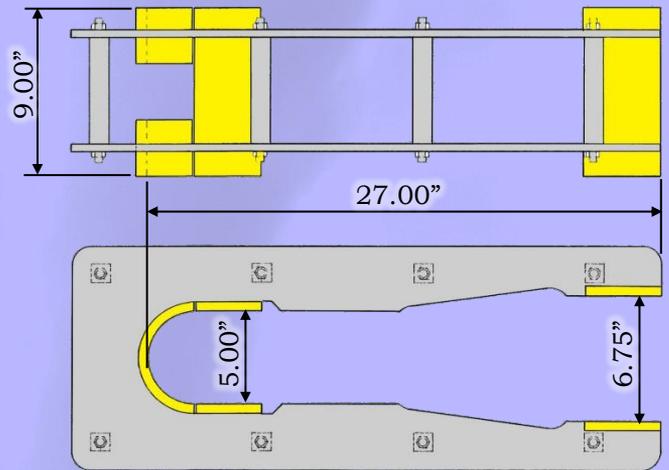
When there are no **OEM** specifications or guidelines supplied by the machine manufacture for Whisler lip repair, H&L® offers a complete line of lip gauges.

*It is H&L's recommendation to the mine maintenance personnel reworking Whisler lips to take nothing for granted.*

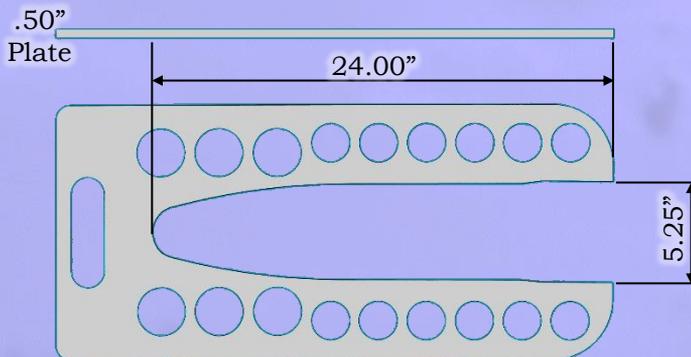
### X-2562-AD WH 12 Lip Check



### X-2562-V WH 10 Lip Check

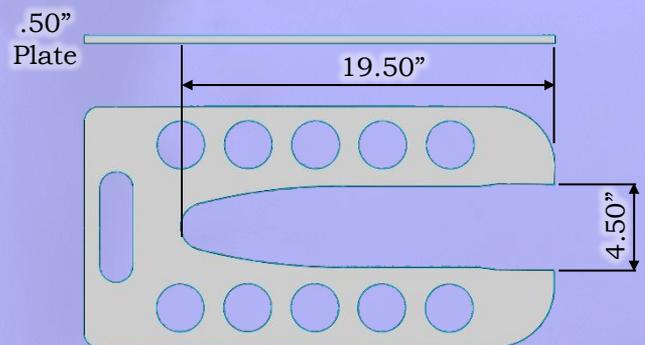


### X-2562-R WH 8 Lip Check



*Whisler 8 lip gauge is constructed as a single plate it is not a box type gauge like the WH10 and WH 12.*

### X-2562-T WH 6 Lip Check



*Whisler 6 lip gauge is constructed as a single plate it is not a box type gauge like the WH10 and WH 12.*

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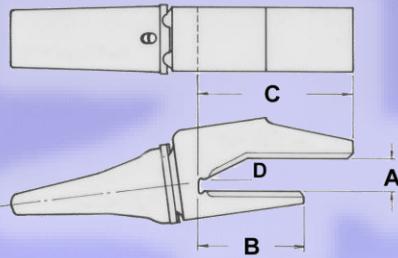
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# H&L® MINING Products... Weld-On Excavator Style Adapters

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## Custom Adapters for any bucket!

*H&L style Mining Style Adapters are not a stocking item, call Customer Service to check availability.*



## “VP” Vertical-Pin Weld-on Adapter Systems



## “1W” Excavator Adapter

Application Model	Part Number	Style	A	B	C	D	Weight
Replaces Esco 3811-V61	3764-W-541	1W	2.36"	6.75"	13.50"	30°	115.0#
Replaces Esco 3858-V61	3765-W-541	1W	2.75"	6.75"	13.50"	30°	115.0#
Replaces Esco 5898-V61	3766-W-541	1W	3.15"	8.00"	15.50"	30°	130.0#
Replaces Esco 5898-V69	3766-W-543	1W	3.15"	8.00"	15.50"	30°	140.0#
P&H 1200, Original OEM	3704-AW-541	1W	5.50"	12.00"	17.25"	25°	240.0#
Replaces Esco 2878-V61	3767-W-541	1W	3.50"	8.94"	16.00"	30°	130.0#
Replaces Esco 2878-V69	3767-W-543	1W	3.50"	8.94"	16.00"	30°	140.0#
Replaces Esco 6803-V69	3773-W-543	1W	3.50"	8.00"	16.00"	30°	175.0#
Replaces Esco 2837-V69	3775-W-543	1W	3.50"	9.70"	20.50"	30°	255.0#
Replaces Esco 2837-V71	3775-W-546	1W	3.50"	9.70"	20.50"	30°	265.0#
Replaces Esco 6805-V61	3768-W-541	1W	3.54"	7.75"	15.50"	30°	120.0#
Replaces Esco 6805-V69	3768-W-543	1W	3.54"	7.75"	15.50"	30°	130.0#
Replaces Esco 6804-V69	3774-W-543	1W	3.94"	8.00"	16.00"	30°	170.0#
Replaces Esco 6804-V71	3774-W-546	1W	3.94"	8.00"	16.00"	30°	180.0#
P&H 1550, Original OEM	3708-AW-541	1AW	4.00"	20.00"	20.00"	45°	245.0#
Replaces Esco 5897-V71	3776-W-543	1W	4.00"	9.70"	20.50"	30°	255.0#
Replaces Esco 5897-V81	3776-W-546	1W	4.00"	9.70"	20.50"	30°	265.0#
Replaces Esco 3869-V81	3779-W-546	1W	4.75"	13.00"	22.00"	30°	350.0#
Replaces Esco 6801-V81	3780-W-546	1W	5.00"	13.00"	22.00"	30°	350.0#
P&H 2550, Original OEM	3709-W-546	1W	5.50"	10.00"	20.00"	45°	370.0#
Hitachi 3500	3720-W-546	1W	5.50"	13.00"	19.00"	30°	425.0#
Replaces Esco 6806-V81	3781-W-546	1W	5.50"	13.00"	22.00"	30°	420.0#



Excavator Bucket Adapter



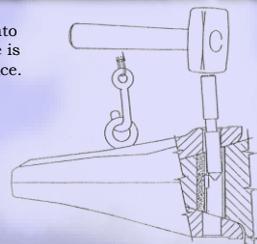
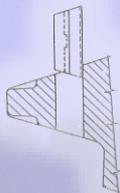
Excavator Bucket with Lip Protectors

*Quality Control Personnel gauge inspects every 500-Series tooth produced, to ensure optimum for between adapter-nose and tooth pocket bearing surfaces. H&L® Flexhol® attachments keep teeth tight to the mating adapter nose, lowering maintenance costs by minimizing equipment downtime!*

## Flexhol® Installation with easy Removal

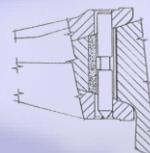


Push the elastomer Insert into the adapter nose until flange is flush with the nose top surface.



Position one of the “VP” style Series Mining tooth on the adapter nose.

Insert SOLID STEEL pin as shown and drive until locked into the elastomer Insert. Pin will be flush with the top of the tooth.



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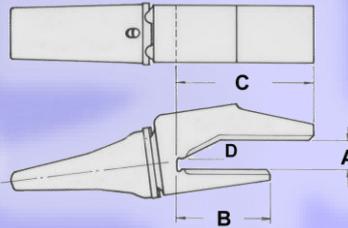
# H&L® MINING Products... Weld-On Loader Style Adapters

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## “VP” Vertical-Pin Weld-on Adapter Systems



**“1W” Loader Adapter**



Quality Control Personnel gauge inspects every 500-Series tooth produced, to ensure optimum fit between adapter-nose and tooth pocket bearing surfaces. H&L® Flexhol® attachments keep teeth tight to the mating adapter nose, lowering maintenance costs by minimizing equipment downtime!

Application Model	Part Number	Style	A	B	C	D	Weight
Replaces Esco 5869-V61	L-3769-W-541	1W	2.50"	8.50"	14.38"	25°	120.0#
Caterpillar 992 - 9W-9704	L-3782-W-541	1W	2.50"	13.50"	17.50"	23°	160.0#
Caterpillar 992 - 9W-9704	L-3782-W-543	1W	2.50"	13.50"	17.50"	23°	160.0#
Komatsu WA-600 Loader	L-6016-W-541	1W	2.75"	6.75"	13.50"	25°	115.0#
Komatsu WA-600 Loader	L-6016-W-543	1W	2.75"	6.75"	13.50"	25°	115.0#
Replaces Esco 1856-V61	L-3770-W-541	1W	3.00"	8.75"	16.50"	25°	135.0#
Caterpillar 992 - 4T-4707	L-3783-W-543	1W	3.00"	13.50"	18.00"	23°	160.0#
Caterpillar 992 - 4T-4707	L-3783-W-543	1W	3.00"	13.50"	18.00"	23°	160.0#
Replaces Hensley 358-944	L-3784-W-543	1W	3.50"	10.50"	20.00"	30°	220.0#
Replaces Hensley 358-944	L-3784-W-546	1W	3.50"	10.50"	20.00"	30°	220.0#
Replaces Esco 5838-V61	L-3771-W-543	1W	3.50"	8.75"	17.00"	30°	130.0#
Replaces Esco 5838-V69	L-3771-W-546	1W	3.50"	8.75"	17.00"	30°	140.0#
Replaces Esco 5839-V61	L-3772-W-543	1W	3.50"	8.19"	16.50"	30°	145.0#
Replaces Esco 5839-V69	L-3772-W-546	1W	3.50"	8.19"	16.50"	30°	155.0#
Replaces Esco 5839-V69	L-3772-W-546	1W	3.50"	8.19"	16.50"	30°	155.0#
Replaces Esco 5894-V81	L-3777-W-546	1W	4.00"	10.50"	21.50"	30°	250.0#
Replaces Esco 5896-V81	L-3778-W-546	1W	4.00"	9.70"	21.00"	30°	260.0#
Caterpillar 994 - 6I-8804	L-3785-W-546	1W	4.00"	13.50"	17.50"	23°	225.0#

**SPADE RIGHT & LEFT HAND** also available on request.

Adapter is cut for 10° degree right and left hand spade lip edge.



**RIGHT & LEFT HAND CORNERS** also available on request.

Adapter is cut to match bucket side plates.



**EXTRA WEAR PROTECTION** also available on request.

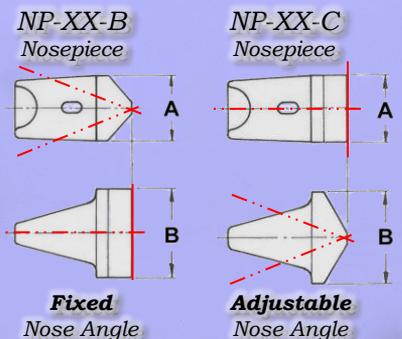
Adapter uses a CX-2772-HD Weap Cap Protector.



## H&L® Weld-On Mining repair or Conversion Nosepieces for Loaders, Face Shovels and Excavator adapters!

Applications	Part Number	Angle	A	B	Tooth	Weight
541 Repair or conversion	NP-541-B	Fixed	5.50"	8.50"	541	85.0#
541 Repair or conversion	NP-541-C	Adjustable	5.50"	8.50"	541	85.0#
543 Repair or conversion	NP-543-B	Fixed	8.50"	11.00"	543	95.0#
543 Repair or conversion	NP-543-C	Adjustable	8.50"	11.00"	543	95.0#
546 Repair or conversion	NP-546-B	Fixed	8.50"	11.00"	546/646	170.0#
546 Repair or conversion	NP-546-C	Adjustable	8.50"	11.00"	546/646	172.0#

### Dimensional Check

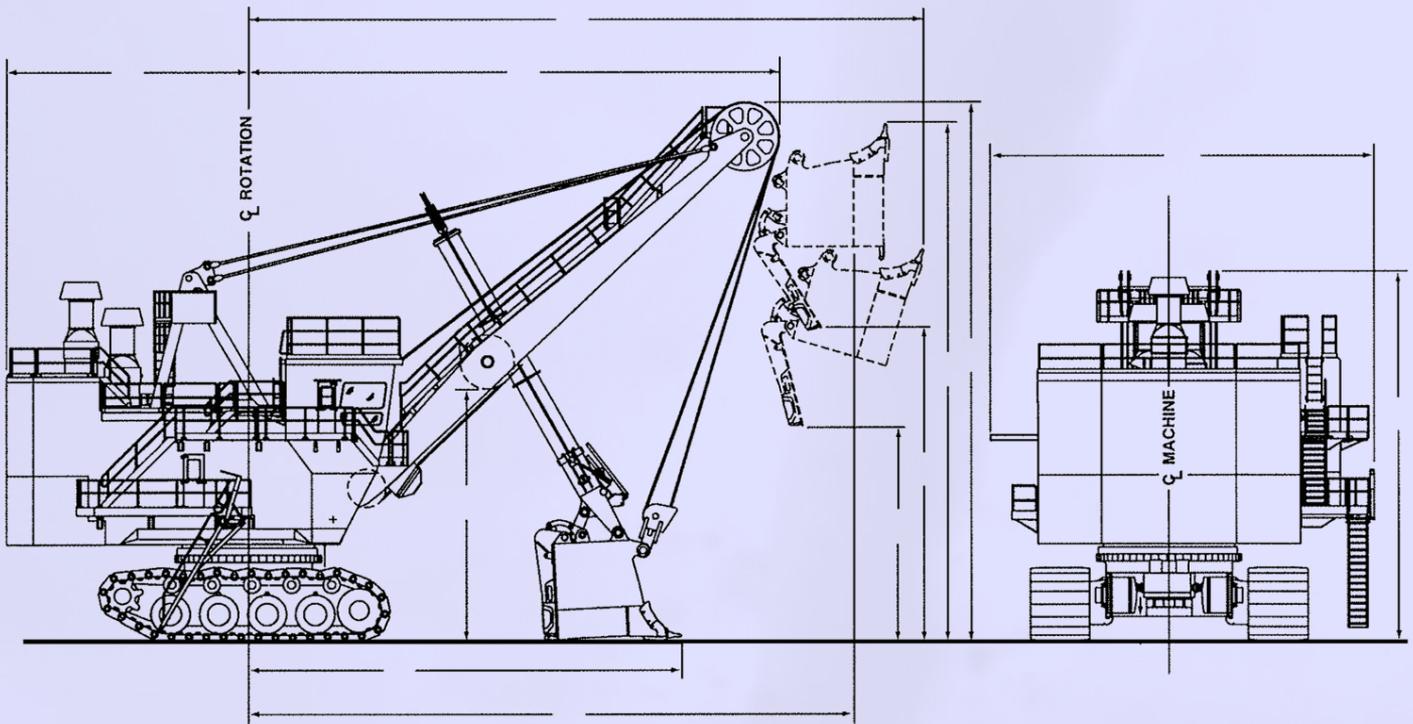


# 1-800-HL TOOTH

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## Comments



## Other Product Catalogs

H&L® Original Style Products: Catalog #209.2026

H&L® Caterpillar® Style Products: Catalog #210.2026

H&L® Cobra Line Style Products: Catalog #211.2026

H&L® Hensley® Style Products: Catalog #212.2026

H&L® Bobcat®, Komatsu® and Other Style Products: Catalog #213.2026

H&L® Original 230-Series Products: Catalog #215.2026

H&L® Raw Steel Billet Ends: Catalog #223.2026

H&L® Original Fabricated Tooth Products: Catalog #242.2026

# H&L® FACTORY WARRANTY!

*The H&L® Tooth Company warrants all H&L® Products against defects in material and workmanship.*

*Tulsa Oklahoma's 200,000 square foot manufacturing home includes forging, fabrication, and heat treating facilities, and serves as our central distribution complex.*



**Tulsa FORGE LINE consists of multiple 4"- 6"- 7 ½"- 9" National Upsetters, 1000, 1300, 2000 Ton National MaxiPres that will produce GET Products from 2 pounds to 2000 pounds.**



**Over two million GET parts in our Shipping Department in Tulsa, Oklahoma.  
H&L Tooth is an ISO 9001 CERTIFIED Company.**

**Patented  
Auto-Welders**

## H&L® Tooth Company Quality Policy

H&L® Tooth commits to meeting or exceeding internal and external customer requirements in its manufacturing and processing of ground engaging tools. This will be achieved by continually improving the effectiveness of our quality system through the establishment and tracking of quality objectives, identifying opportunities for improvements, and teamwork among our employees, customers and vendors.

**1-800-HL TOOTH**