

1-800-HL TOOTH

H&L Tooth Company

10055 East 56th Street North, Tulsa, Oklahoma 74117



**DESIGNED FOR
H&L 546 and 646 SERIES
UNIFORGED® TEETH**

produced from High Silicon HL-400 Steels

646 & 546 SERIES MINING WHISLER SYSTEMS

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QUALITY
since 1931

FLYER 96.2006a



Vertical Pin Tooth UPGRADES

HAMMERLESS

FLEXHOL®

- Uniforged® 646 Series Mining Teeth for greater durability!

- Solid Steel Hammerless attachment pin holds tight to the Adapter nose!

- Solid Steel Pin Insert assures alignment!



646BT8
Self Locking Bolt

646CP8 Cap

646BD8 Pin Body

Complete Assembly
646PN8



Solid Steel PIN



Flexible INSERT

- Uniforged® 546 Series Mining Teeth for greater durability!

- Solid Steel Flexhol® assembles with a 6 pound hammer.

- Flexible hole Insert assures Pin locking!

H&L® UNIFORGE® mining teeth are 100% checked for fit and 100% hardness inspected!

MANUFACTURED UNDER ONE OR MORE PATENTS

500 SERIES FORGED WHISLER STYLE MINING BASES

Whisler 8 SIZE

BASE NUMBER	TOOTH SERIES	PIN	INSERT	KEY AND CLAMP	WEAR CAP	WEIGHT	Kilograms
508-46	546 SERIES	546PN	546HL	K-508 SERIES	N/C	500.0#	235.0kgs
508-TWC-46	546 SERIES	546PN	546HL	K-508 SERIES	500-8	475.0#	224.0kgs
508-46	646 SERIES	646PN8F		K-508 SERIES	N/C	500.0#	235.0kgs
508-TWC-46	646 SERIES	646PN8F		K-508 SERIES	500-8	475.0#	224.0kgs

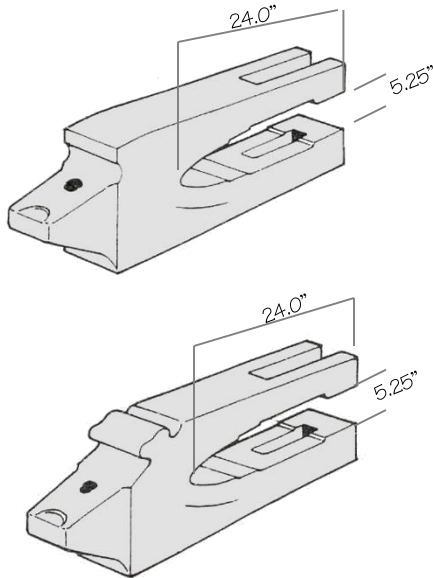
Whisler 10 SIZE

BASE NUMBER	TOOTH SERIES	PIN	INSERT	KEY AND CLAMP	WEAR CAP	WEIGHT	Kilograms
510-46	543 SERIES	543PN	543HL	K-510 SERIES	N/C	855.0#	392.0kgs
510-TWC-46	543 SERIES	543PN	543HL	K-510 SERIES	500-10/12	840.0#	381.0kgs
510-46	646 SERIES	646PN8F		K-510 SERIES	N/C	855.0#	392.0kgs
510-TWC-46	646 SERIES	646PN8F		K-510 SERIES	500-10/12	840.0#	381.0kgs

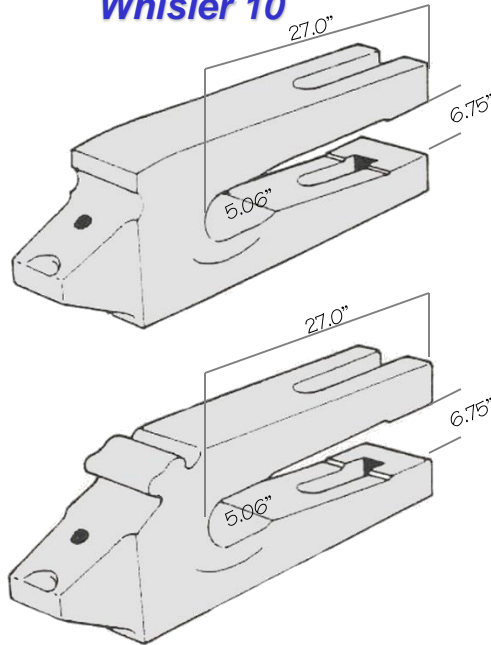
Whisler 12 SIZE

BASE NUMBER	TOOTH SERIES	PIN	INSERT	KEY AND CLAMP	WEAR CAP	WEIGHT	Kilograms
512-E-46	546 SERIES	546PN	546HL	K-512 SERIES	N/C	855.0#	397.0kgs
512-TWC-46	546 SERIES	546PN	546HL	K-512 SERIES	500-10/12	840.0#	390.0kgs
512-E-46	646 SERIES	646PN8F		K-512 SERIES	N/C	855.0#	397.0kgs
512-TWC-46	646 SERIES	646PN8F		K-512 SERIES	500-10/12	840.0#	390.0kgs

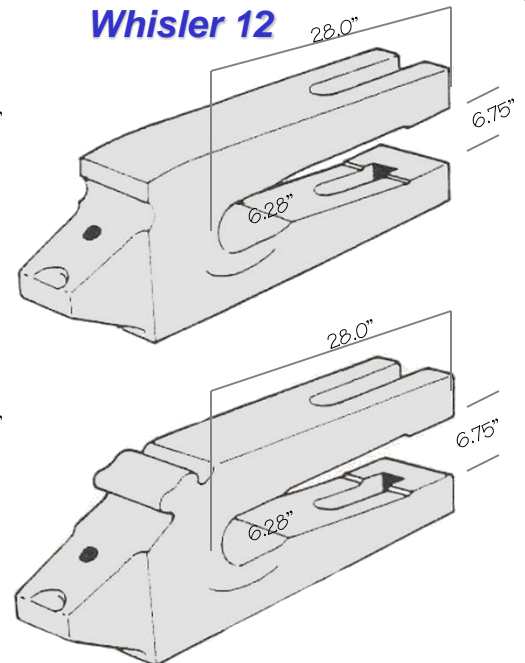
Whisler 8



Whisler 10



Whisler 12



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546 SERIES FLEHOL® PIN AND INSERT

FLANGE DESIGN guarantees proper Insert location through installation!

Solid, round pinning system, constructed from Chrom-Moly HARDENED steels!

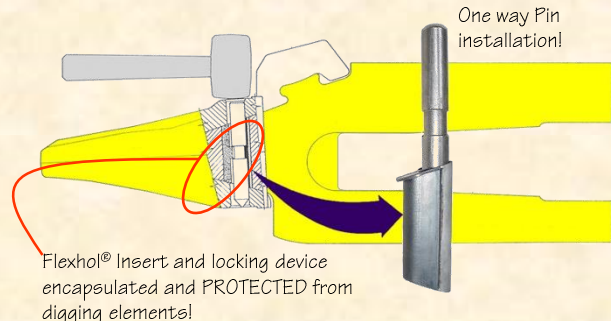
Locking groove guarantees POSITIVE LOCKING POWER!

Shock absorbing elastomer, EPDM 80 Shore hardness!



Flexhol® Inserts use shock dampening ELASTOMER with aircraft quality alloy steel tube and mechanical locks for STRENGTH!

FLEXHOL® MECHANICAL LOCK SECTION



SERIES	FLEXHOL	HEAVY DUTY	SEVERE DUTY
546	PIN	546PN	546PNOB
546	INSERT	546HL	546HLOB

500 SERIES WEDGE KEYS AND CLAMPS

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WHISLER 8 SIZE

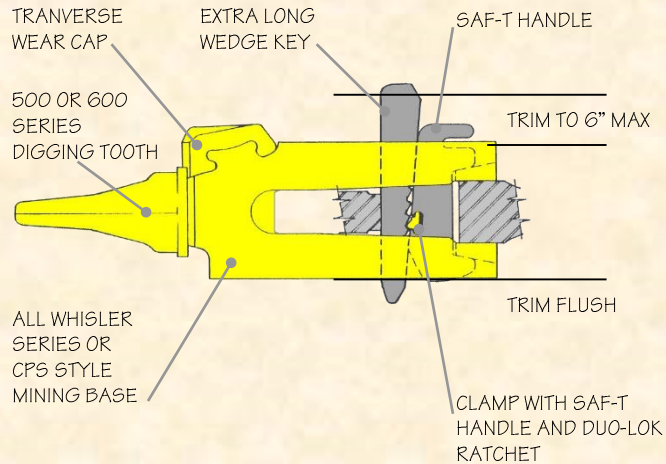
PART #	DESCRIPTION	WEIGHT #	WEIGHT KGS	CLAMPS	WEIGHT #	WEIGHT KGS
K-508-5	EXTRA LONG OVER SIZED	35.0#	16.0KGS	K-508-9	47.0#	21.0KGS
K-508-4	.25" OVER SIZED	35.0#	16.0KGS	K-508-9	47.0#	21.0KGS
K-508-3	STANDARD WEDGE KEY	31.0#	14.0KGS	K-508-9	47.0#	21.0KGS
K-508-2	.25" UNDER SIZED	27.0#	12.0KGS	K-508-9	47.0#	21.0KGS
K-508-1	EXTRA LONG UNDER SIZED	32.0#	14.0KGS	K-508-9	53.0#	21.0KGS

WHISLER 10 SIZE

PART #	DESCRIPTION	WEIGHT #	WEIGHT KGS	CLAMPS	WEIGHT #	WEIGHT KGS
K-510-5	EXTRA LONG OVER SIZED	47.0#	21.0KGS	K-510-9	53.0#	24.0KGS
K-510-4	.25" OVER SIZED	36.0#	16.0KGS	K-510-9	53.0#	24.0KGS
K-510-3	STANDARD WEDGE KEY	33.0#	15.0KGS	K-510-9	53.0#	24.0KGS
K-510-2	.25" UNDER SIZED	30.0#	14.0KGS	K-510-9	53.0#	24.0KGS
K-510-1	EXTRA LONG UNDER SIZED	45.0#	20.0KGS	K-510-9	53.0#	24.0KGS

WHISLER 12 SIZE

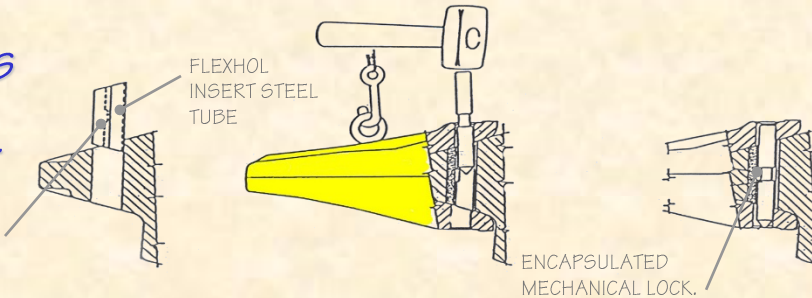
PART #	DESCRIPTION	WEIGHT #	WEIGHT KGS	CLAMPS	WEIGHT #	WEIGHT KGS
K-512-5	EXTRA LONG OVER SIZED	46.0#	21.0KGS	K-512-9	62.0#	28.0KGS
K-512-4	.25" OVER SIZED	40.0#	18.0KGS	K-512-9	62.0#	28.0KGS
K-512-3	STANDARD WEDGE KEY	38.0#	17.0KGS	K-512-9	62.0#	28.0KGS
K-512-2	.25" UNDER SIZED	36.0#	16.0KGS	K-512-9	62.0#	28.0KGS
K-512-1	EXTRA LONG UNDER SIZED	46.0#	21.0KGS	K-512-9	62.0#	28.0KGS



546 SERIES INSTALLATION AND REMOVAL

TYPICAL 546 SERIES BASE NOSEPIECE

ELASTOMER SIDE OF THE FLEXHOL INSERT

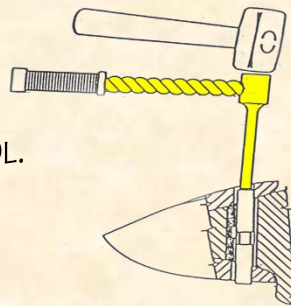


INSERT FLEXHOL SOLID STEEL PIN AS SHOWN AND DRIVE PIN WITH HAMMER (4.0# MINIMUM). Continue to drive pin into insert sleeve until lock has engaged groove locks in the steel pin. PIN WILL BE FLUSH WITH THE TOP OF THE TOOTH BOSS!

PUSH FLEXHOL INSERT INTO NOSEPIECE UNTIL INSERT IS FLUSH WITH TOP OF THE NP SURFACE.

POSITION ONE OF THE H&L FORGED 500 SERIES MINING TEETH OVER THE NOSEPIECE.

TO REMOVE FLEXHOL PIN USE X-2846 REMOVER TOOL. AFTER LOCK HAS DISENGAGED GROOVE SLOT OF THE STEEL PIN, CONTINUE TO DRIVE PIN UNTIL IT CLEARS NOSEPIECE AND TOOTH.



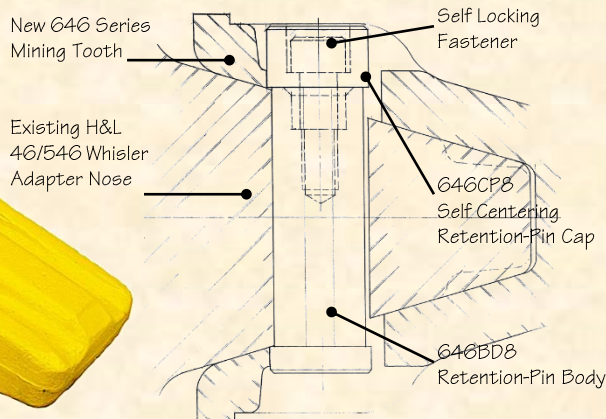
ALL PERSONS PERFORMING MAINTENANCE WORK SHOULD WEAR OSHA APPROVED HARD HAT, SAFETY GLASSES, SAFETY SHOES AND WORK GLOVES!

646 SERIES HAMMERLESS PIN INSTALLATION



646RXH-R

Rock Star Abrasion
210.0# - 95.0kgs



Typical Nose/Tooth Section

646 series pin assembly is held secure with a self locking bolt that is easy to install with a standard 3/4" Hex L-Key



H&L® TOOTH COMPANY *Vertical-Pin* TOOTH SYSTEMS

H&L Teeth are **UNIFORGED®** in the USA from high silicon Chromium-Moly-Nickel alloy steels, enhancing *durability and long life!*



SP style... Flexhol 546SP and Hammerless 646SP

Sharp Penetrating Tooth
Centerline general purpose tooth for general duty mining applications. Paneled design for penetration.



RXH style... Flexhol 546RXH and Hammerless 646RXH

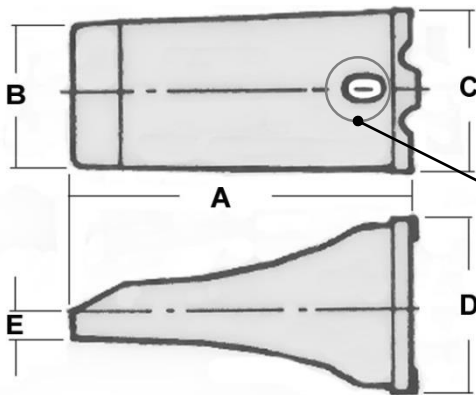
Rock Extra Heavy Tooth
Heavier tooth design for severe duty front end loaders and shovels. Provides greater wear material for enhanced life.



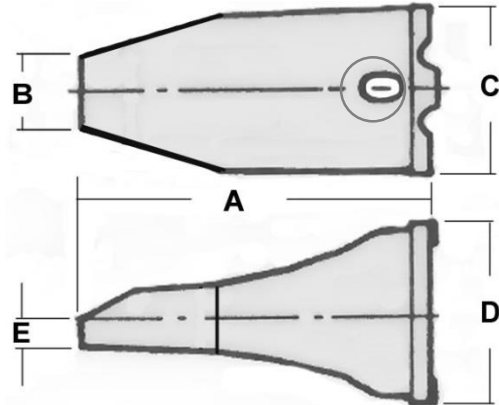
RPS style... Flexhol 546RPS and Hammerless 646RPS

Rock Penetrating Star Tooth
Provides high wear material and is paneled for self-sharpening. Narrow tooth width provides greater penetration.

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SP & RXH Style Tooth



RPS Style Tooth

PART #	LENGTH "A"	WIDTH "B"	TOOTH "C"	HEIGHT "D"	END "E"	WEIGHT
546SP-R	20.00"/508mm	8.00"/203mm	9.00"/229mm	10.00"/254mm	1.50"/38mm	185#/84kgs
546RPS-R	20.00"/508mm	3.50"/89mm	9.00"/229mm	10.00"/254mm	1.50"/38mm	185#/84kgs
546RXH-R	20.00"/508mm	8.00"/203mm	9.00"/229mm	10.00"/254mm	1.50"/38mm	215#/98kgs
646SP-R	20.00"/508mm	8.00"/203mm	9.00"/229mm	10.00"/254mm	1.50"/38mm	185#/84kgs
646RPS-R	20.00"/508mm	3.50"/89mm	9.00"/229mm	10.00"/254mm	1.50"/38mm	185#/84kgs
646RXH-R	20.00"/508mm	8.00"/203mm	9.00"/229mm	10.00"/254mm	1.50"/38mm	215#/98kgs