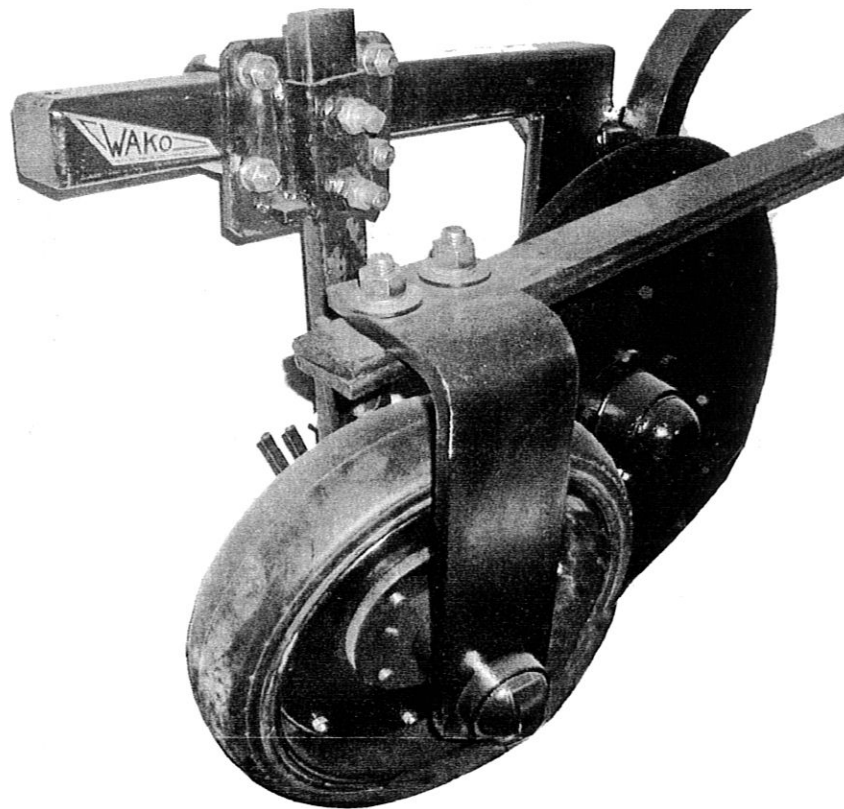
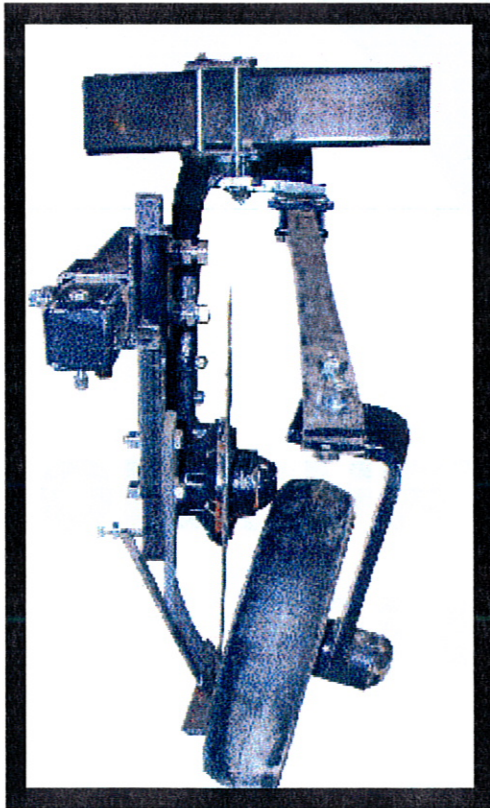
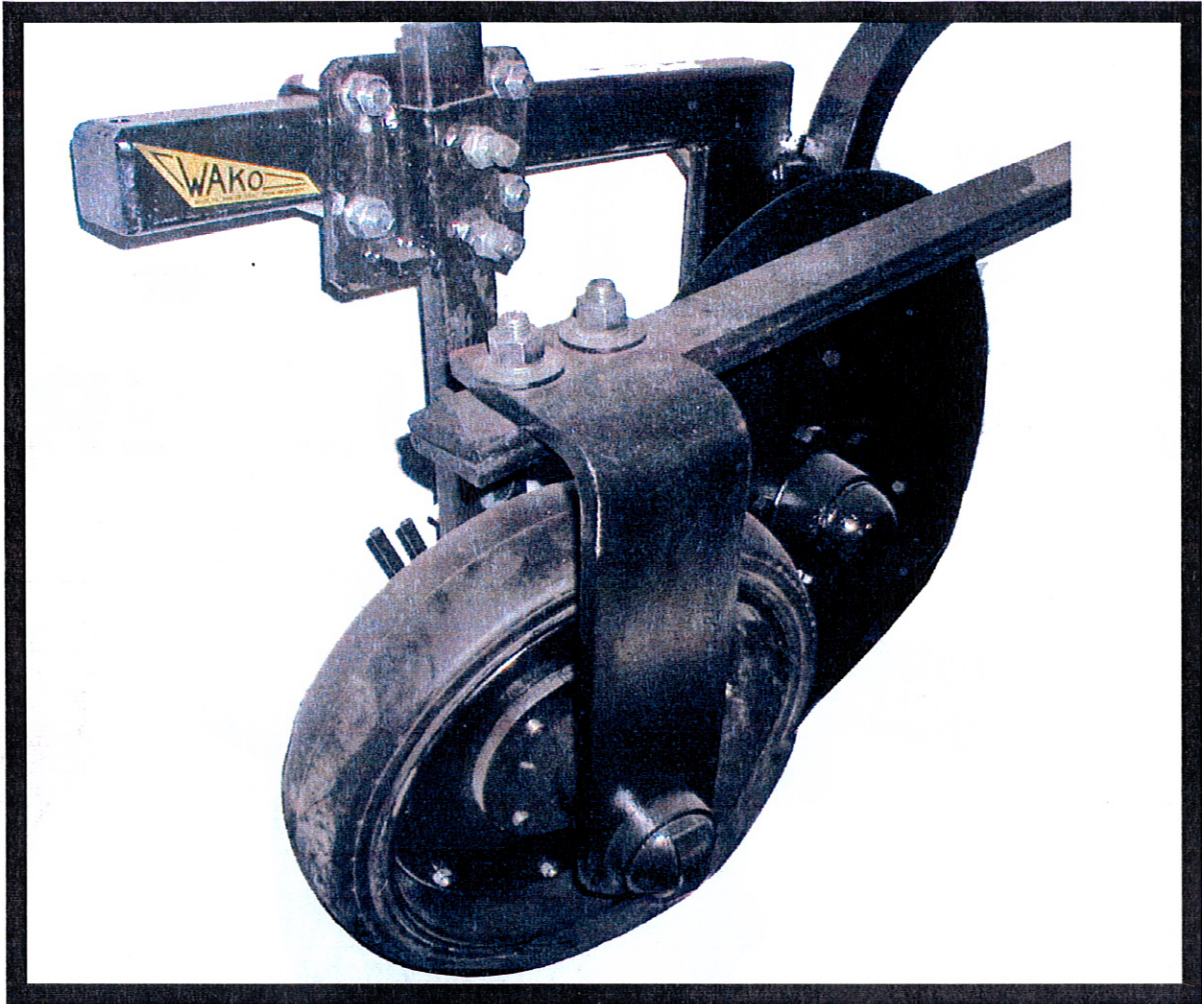


**WAKO's**  
**NO TILL**  
**OFFSET COULTER**



**ASSEMBLY INSTRUCTIONS**  
**& PARTS LIST**



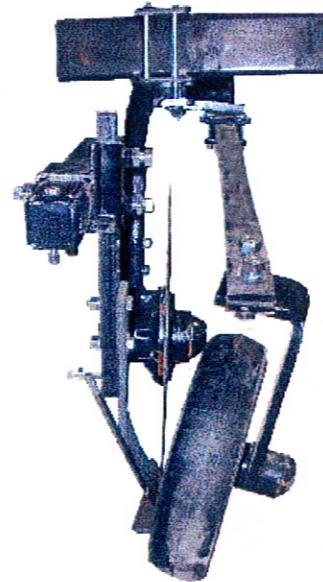
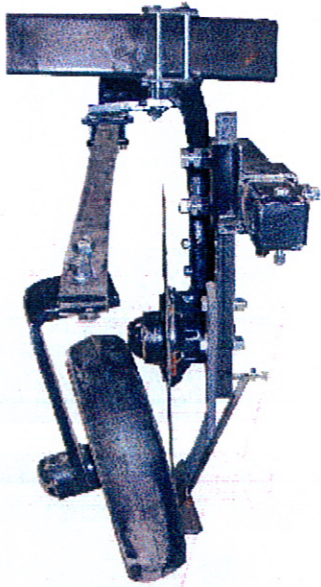
**The  
Assembled  
WAKO  
NTO Coulter  
(no till offset)**

We Just  
Build 'em  
Better!



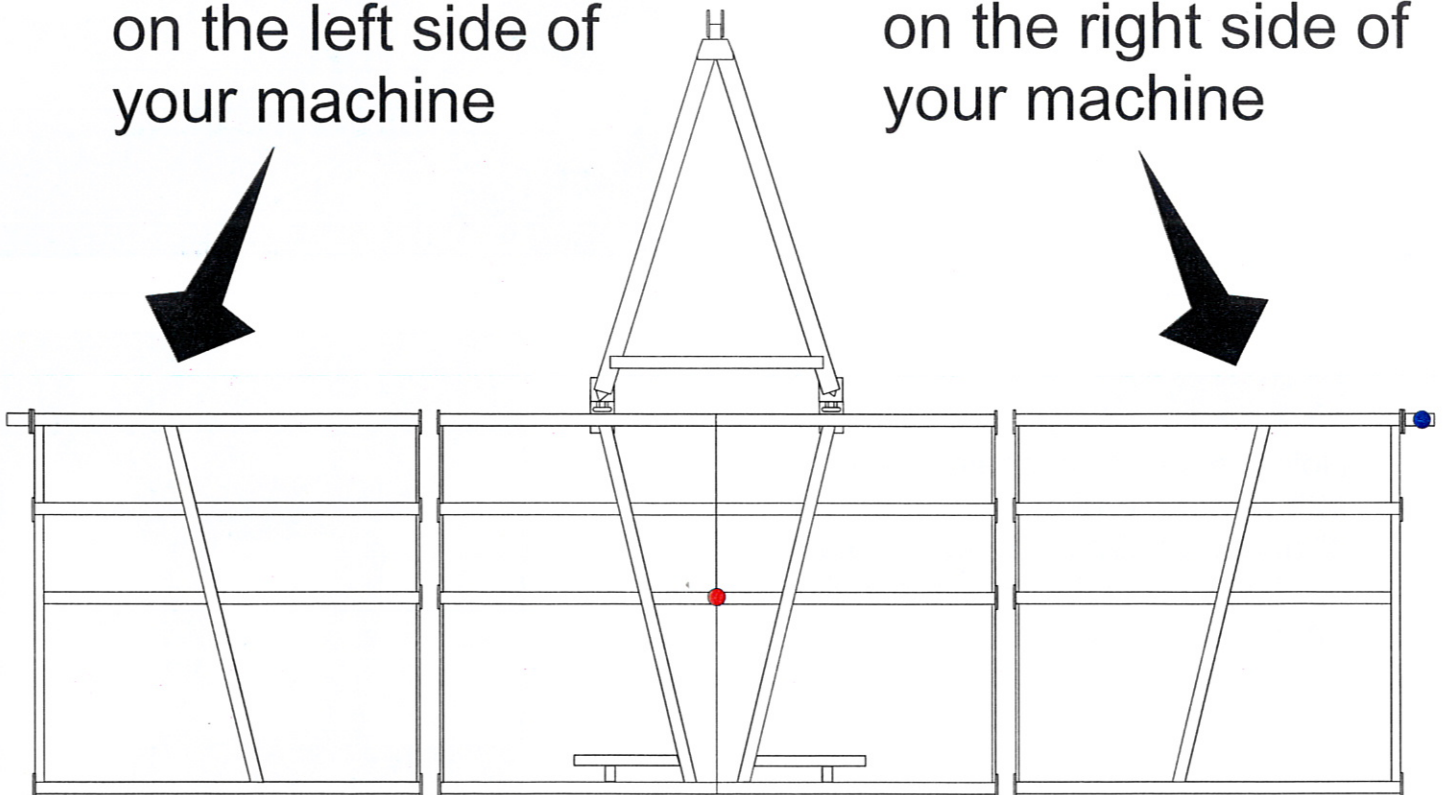
(800) 299-4300  
(580) 234-3434

# Attention!



Mount these units  
on the left side of  
your machine

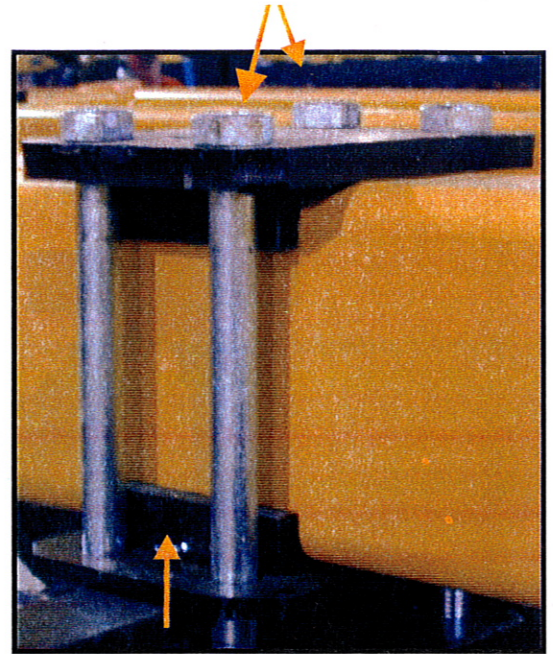
Mount these units  
on the right side of  
your machine



Proper mounting will make these units draft into the ground rather than ride out.

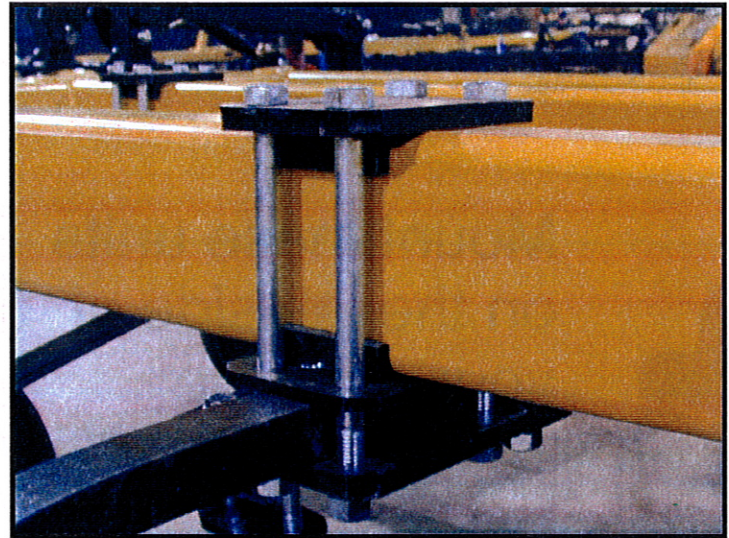
## STEP 1

Start with plate #2a (5/8" thick with stops) on top of the frame. Next install the four 10" bolts (#28a,b,d).



## STEP 2

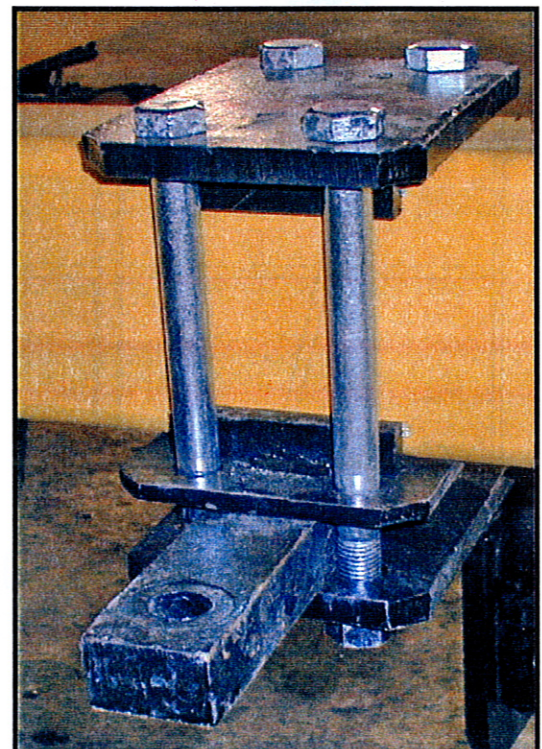
Slide plate #2b (3/8" thick with stops on both sides) onto the bolts.



*back view*

## STEP 3

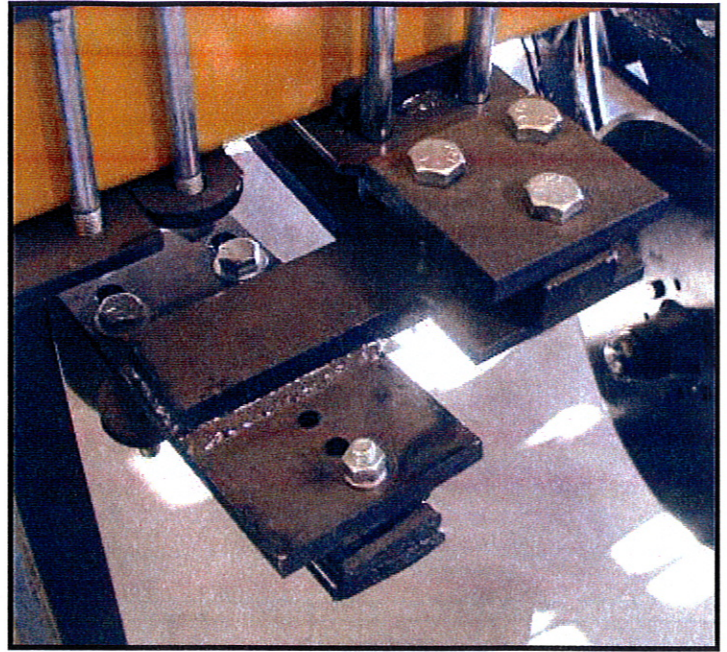
Hold the shank up against plate #2b with the end of the shank 4" ahead of plate #2b. Install plate #3. Now install the nuts and lock washers on the four bolts.



*Front view*

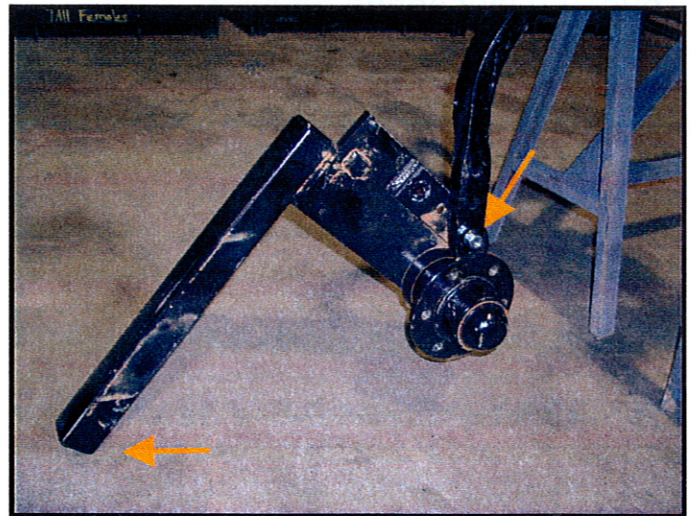
## STEP 4

Slide the shank back until bracket (#4 & #5) are against the shank plates. Tighten plate (#5) as shown in the picture. Now tighten the 4 shank mounting bolts. NOTE: (#4 comes in lefts & rights)



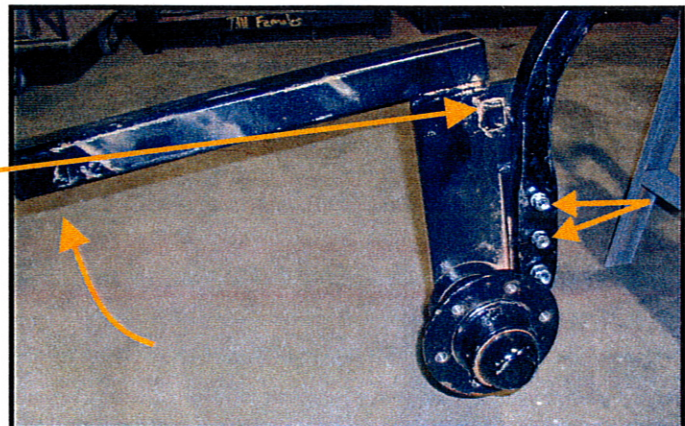
## STEP 5

Mount the coultter frame assy (#6) to shank letting it rest on the ground while you secure the bottom bolt fasteners-(#29 a,b,d) (#6 comes in lefts & rights & fastener #24 comes in two lengths to accommodate lefts & rights) Left unit shown #24 for a (left is 4") and length for a (right is 3")



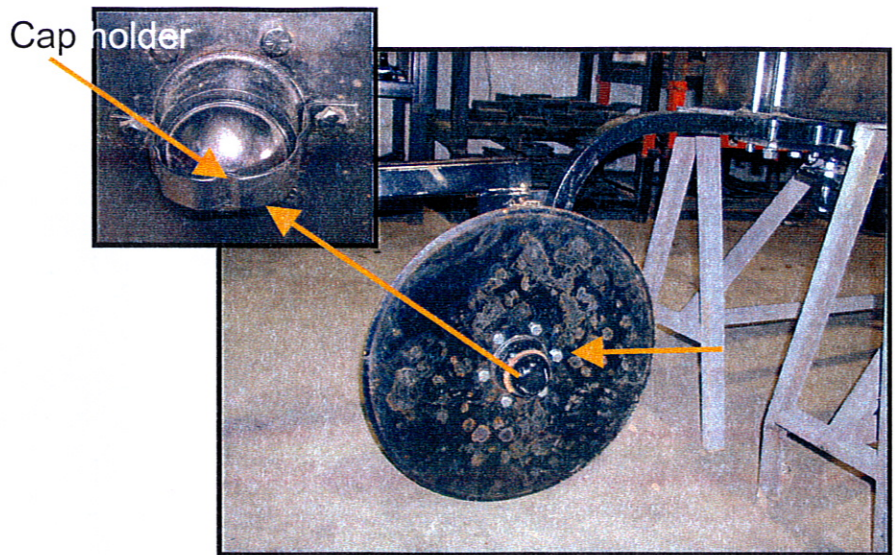
## STEP 6

Swivel the coultter frame assy. up and install the remaining two bolts (#21a,b,d) lift the end of the bar up until the square stop contacts the shank. Tighten one bolt to hold it there then tighten the other two bolts.



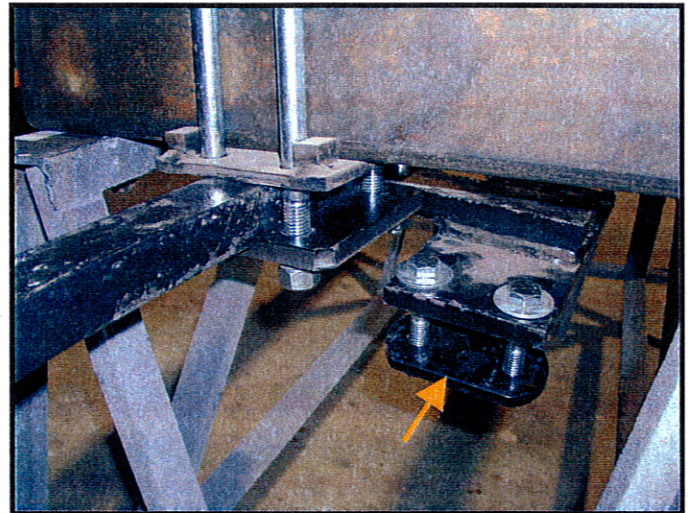
## STEP 7

Now mount the couler disc, cap and cap holder (#7) using fasteners (#22a)



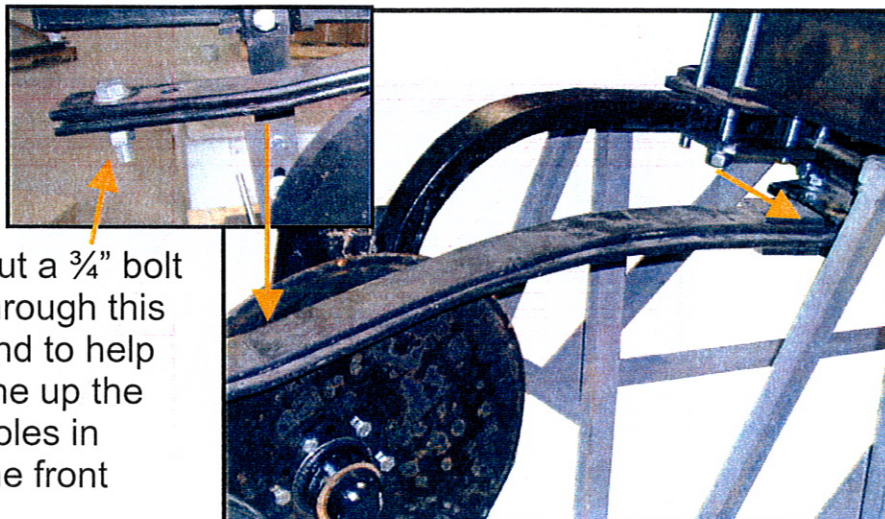
## STEP 8

Mount the leaf spring retainer plate (#8) fasteners (#29a,b,c,d) just start the nuts.

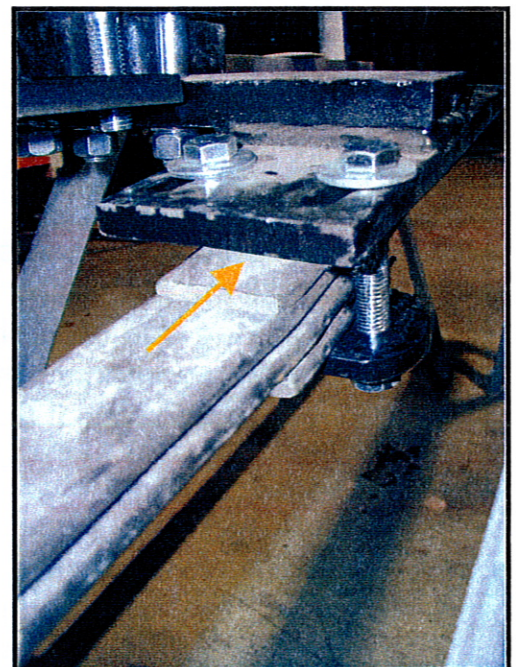


## STEP 9

Insert the two leaf springs & spring savers (#9) into the holder made up of (#4 & #8)

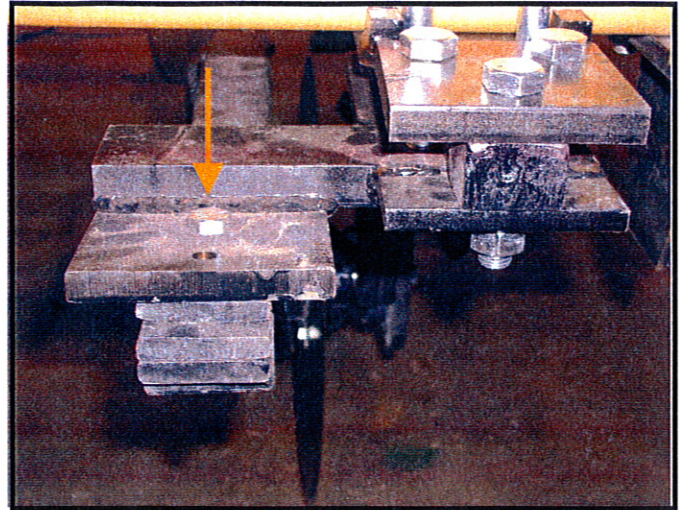


Put a  $\frac{3}{4}$ " bolt through this end to help line up the holes in the front



## STEP 10

Secure the springs in place by inserting and securing bolt (#20a,b,d) through the end of leaf spring and holder. We have had more success with the bolt in the front hole.

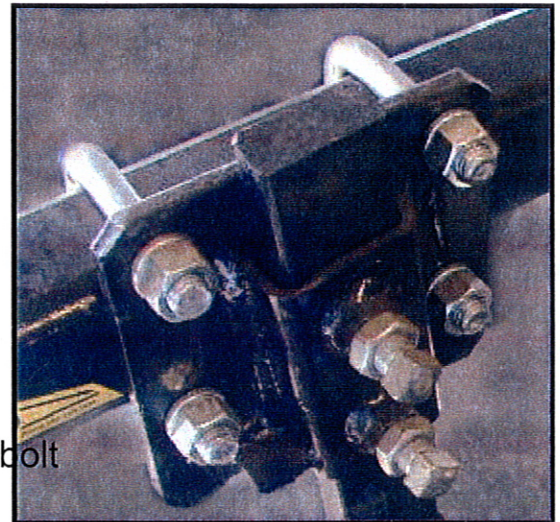


## STEP 11

Slide the knife bar holder (#13) onto the coultter frame assy. and insert the u-bolts (#16a,f) and start the nuts. (#13 comes in lefts & rights)

Start the 2 set screws w/jam nuts (23a & g) in the knife bar holder.

**STEP 11a** Put the knife bar in the knife bar holder about 1" above the holder, snug 1 bolt



## STEP 12

Mount the knife (#15) using bolt (#19a,b,c,d) in the two knife holes and (#18a,g) in the bottom hole of the knife bar (#14).

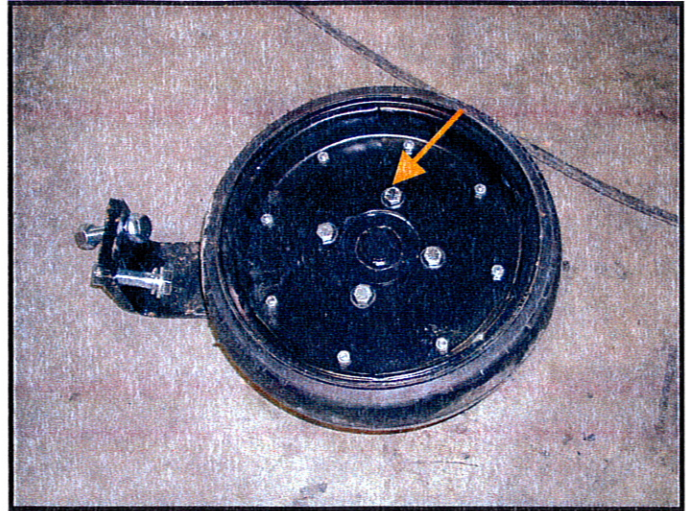
(#15 comes in lefts & rights)

Pull the knife back & at this time tighten the top bolt only.



## STEP 13

Mount the wheel (#12) onto the wheel mounting hub (#10/11), fasteners (#17a)



## STEP 14

Using fasteners (#26a,b,c,d) mount the wheel assembly onto the spring. Here the press wheel is mounted on the bottom of the spring but some applications may call for it to be mounted on the top of the spring.



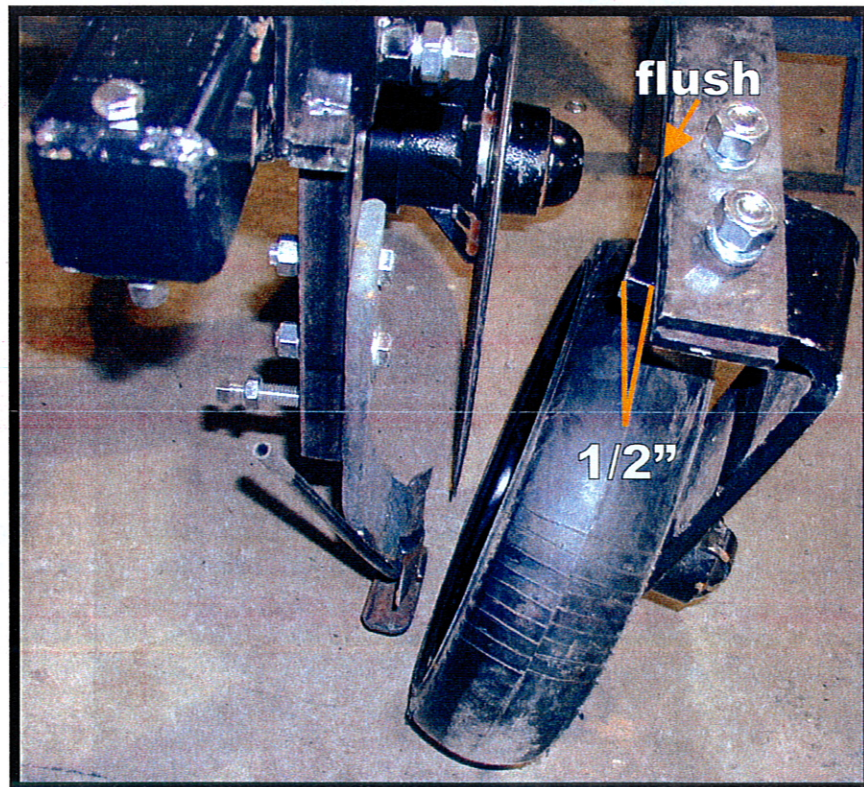


# ADJUSTING THE NTO COULTER

## SETTING THE WHEEL PITCH

### STEP 15

Adjust the wheel pitch so that the closing hub mounting arm corner is flush with the spring in the front and extends toward the coultter disc/knife assembly  $\frac{1}{2}$ " in the back. (at  $7^\circ$  angle)

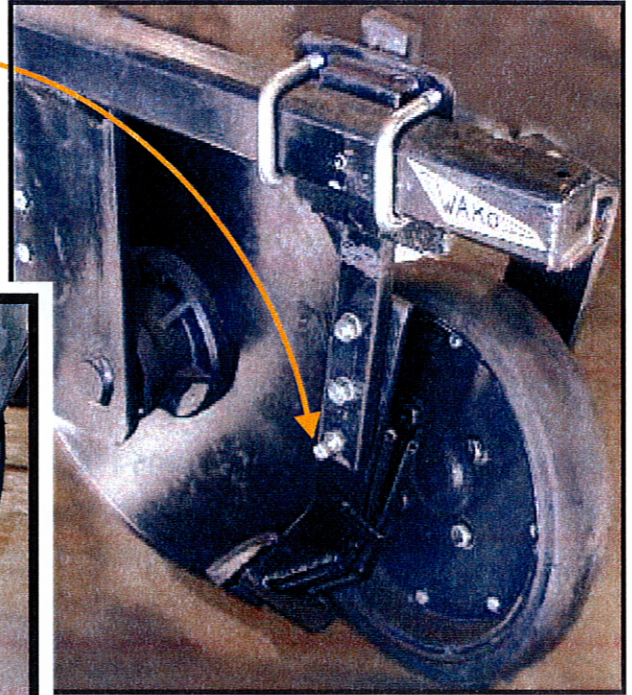


# SETTING THE KNIFE TO THE COULTER DISC

## STEP 16

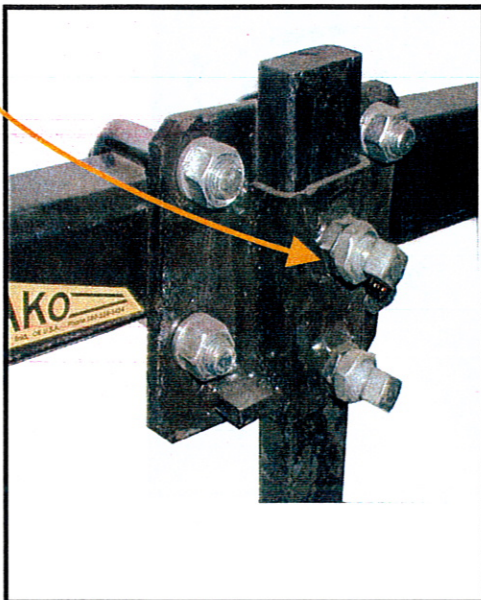
Use bolt (#18a,g) to adjust the knife's left/right pitch to the coultter disc. The knife should be an 1/8" away at the closest point but the coultter must still spin freely.

Jam the nut, tighten the 2nd bolt at this time. Now tighten the knife bar.



**STEP 17** Set the knife's height to the coultter disc by adjusting bolts (23a,g) on the knife bar (#14).

Tip of knife insert should be even with the bevel of the coultter disc.

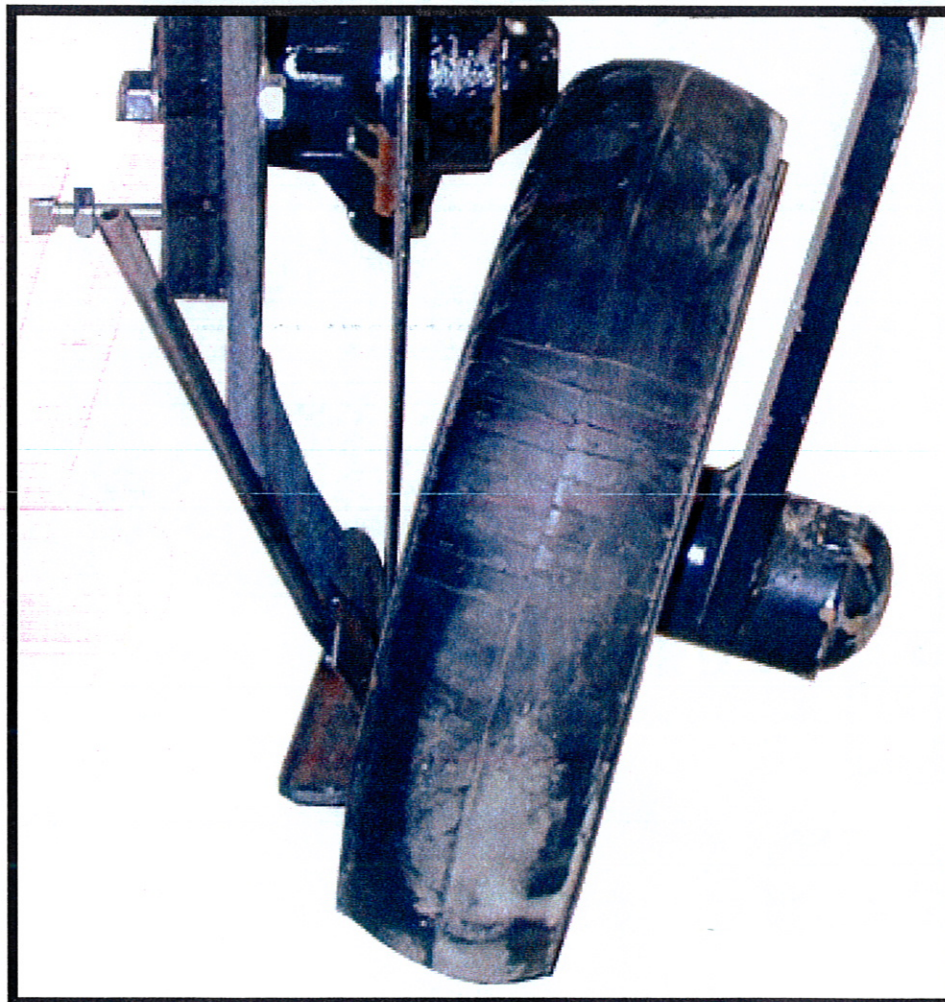
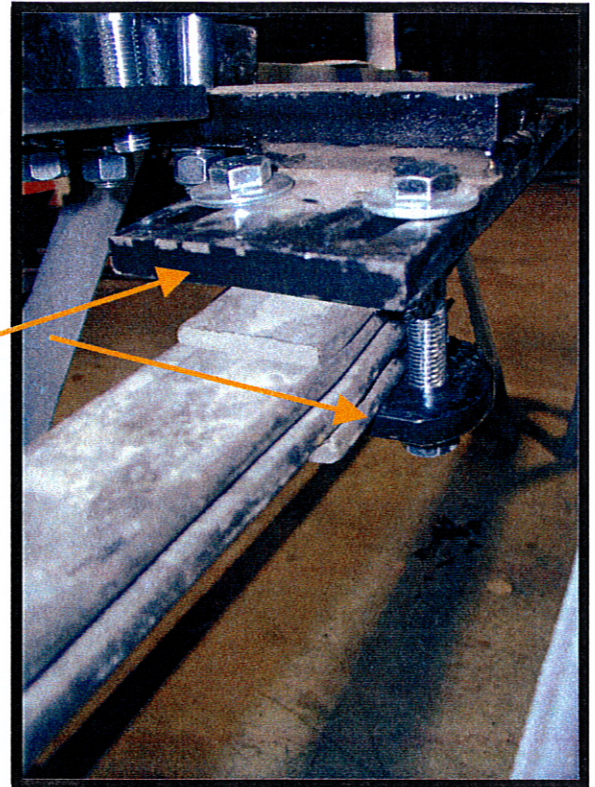


Once the height is set pull the knife & knife bar back and tighten the set screws.

# SETTING THE WHEEL TO THE KNIFE

## STEP 18

Adjust the wheel to knife placement using bracket (#4/#8). Shift springs right or left (might take a 'jiggling' motion) to adjust the wheel to the knife. The wheel should be a 1/4" away from the disk. Wheel must still spin freely. Tap the lower plate & or bolt heads to adjust them in the slots.



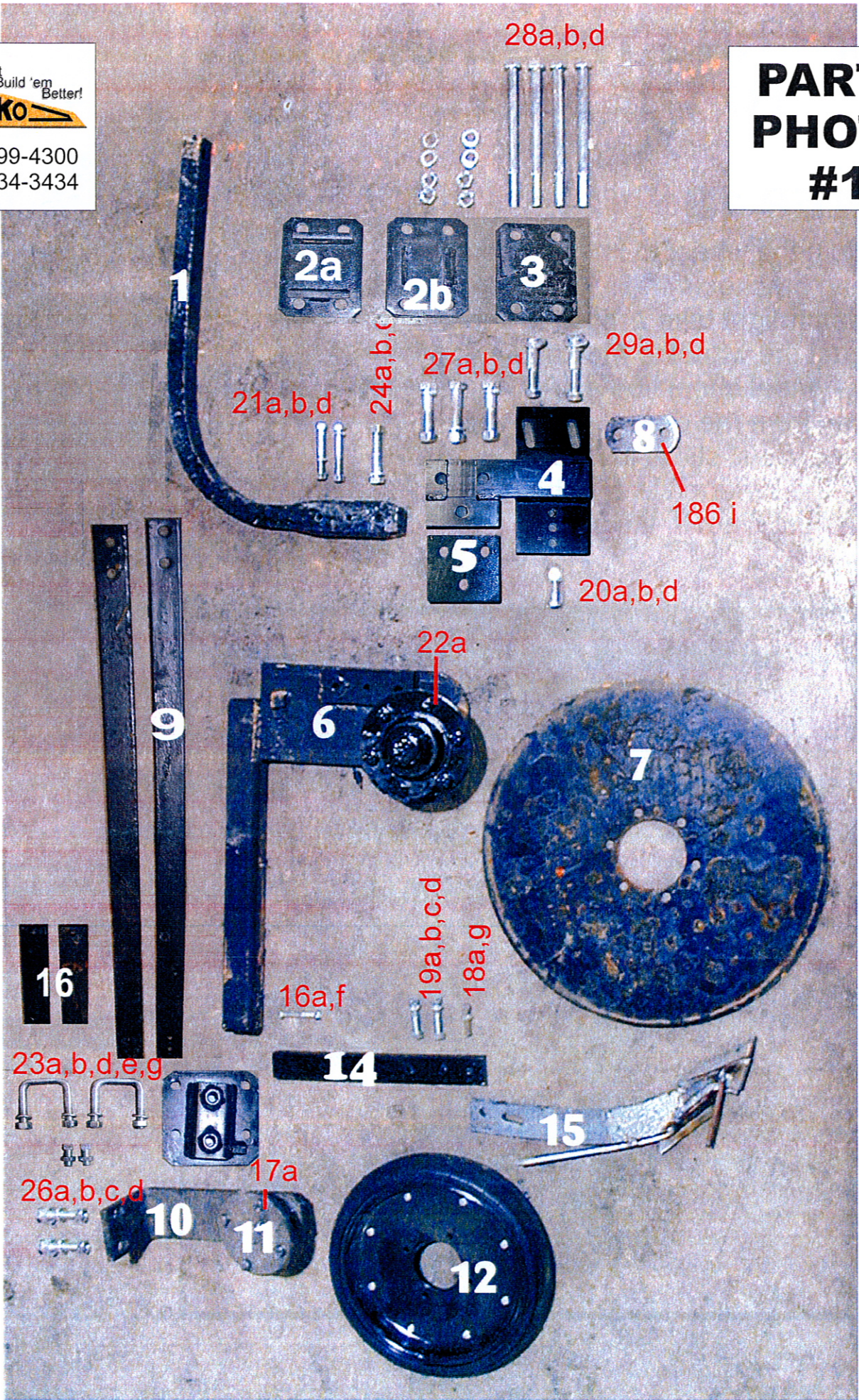
**CORRECTLY  
ADJUSTED  
NTO  
COULTER**



(800) 299-4300  
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series 1104

# PARTS PHOTO #1



1

2a

2b

3

28a,b,d

21a,b,d

24a,b,c

27a,b,d

29a,b,d

8

186 i

5

20a,b,d

9

6

22a

7

16

16a,f

19a,b,c,d

18a,g

23a,b,d,e,g

14

15

26a,b,c,d

17a

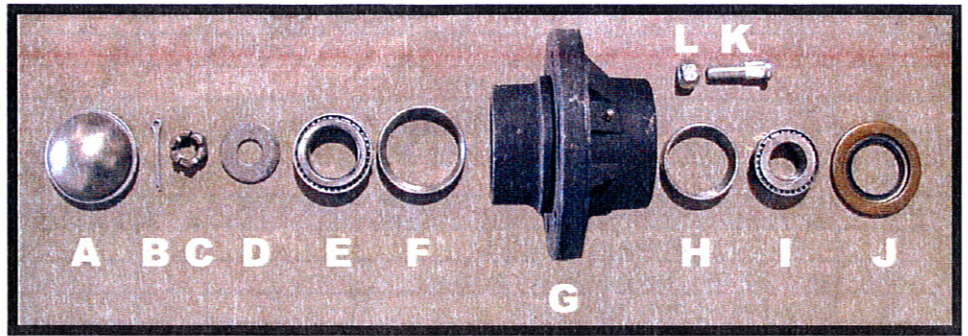
10

11

12

	PARTS LIST	QTY.	PART NUMBER			
1	1-1/2" CHISEL SHANK (LONG)	1	KSHC1200L112			
2a	FRAME MOUNT PLATE - TOP (WITH STOPS ON ONE SIDE)	1	Z0217B		0	
b	FRAME MOUNT PLATE - CENTER (STOPS ON BOTH SIDES)	1	Z0217B			
3	FRAME MOUNT PLATE - BOTTOM (WITH NO STOPS)	1	Z0217-WSB			
4	LEFT ADJ. LEAF SPRING HANGER BRACKET	1	Z0492-WSL			
	RIGHT ADJ. LEAF SPRING HANGER BRACKET	1	Z0492.0-WSR			
5	LEAF SPRING HANGER PLATE	1	Z0492C			
6	LEFT COULTER FRAME ASSEMBLY	1	Z0484-WSAL		see parts photo # 2	
	RIGHT COULTER FRAME ASSEMBLY	1	Z0484-WSAR		for details	
7	24" COULTER , SINGLE BEVEL (6 HOLE)	1	TCOP24243SB			
8	LEAF SPRING RETAINER PLATE	1	Z0186-I			
9	CLOSER LEAF SPRINGS	2	Z0491A			
10	PRESS WHEEL MOUNTING ARM	1	Z0488-WSH			
11	4 HOLE ROUND PLATE AND SPINDLE	1	Z0488-WSI		see parts photo # 3	
12	PRESS WHEEL	1	WHBNT0			
13	LEFT KNIFE BAR HOLDER	1	Z0485-WSAL			
	RIGHT KNIFE BAR HOLDER	1	Z0485-WSAR			
14	KNIFE BAR	1	Z0489A			
15	LEFT KNIFE	1	KKNCNTOL			
	RIGHT KNIFE	1	KKNCNTOR			
16	LEAF SPRING BACKUP	1	Z0491B			
17a	1/2" x 1" fine thread hex cap bolt	4	FCH121F			
18a	1/2" x 1-3/4" set screw (sq. head cone cup)	1	FTS12134			
g	1/2" jam nut	1	FNT12J			
19a	1/2" x 2" hex cap bolt	2	FHC122			
b	1/2" nut	2	FNT12			
c	1/2" flat w asher	2	FFW12			
d	1/2" lock w asher	2	FLW12			
20a	1/2" x 3-1/2" hex cap bolt	1	FHC12312			
b	1/2" nut	1	FNT12			
d	1/2" lock w asher	1	FLW12			
21a	1/2" x 4" hex cap bolt FOR LEFT	2	FHC124			
	1/2" x 3" hex cap bolt FOR RIGHT	2	FHC123			
b	1/2" nut	2	FNT12			
d	1/2" lock w asher	2	FLW12			
22a	9/16" x 1-1/4" fine thread hex cap bolt	6	FCH916114			
23a	5/8" x 1-1/2" set screw	4	FTS58112Z			
b	5/8 nut	4	FNT58			
d	5/8 lock w asher	4	FLW58			
e	5/8 x 3-3/4 U-Bolt	2	FUB58334			
g	5/8" jam nut	4	FNT58J			
24a	5/8" x 4" hex cap bolt FOR LEFT	3	FHC584			
	5/8" x 3" hex cap bolt FOR RIGHT	3	FHC583			
b	5/8" nut	3	FNT58			
c	5/8" flat w asher	2	FFW58			
d	5/8" lock w asher	3	FLW58			
25a	3/4" x 2-1/2" hex cap bolt	1	FHC34212			
b	3/4" nut	1	FNT34			
d	3/4" lock w asher	1	FLW34			
26a	3/4" x 3" hex cap bolt	2	FHC343			
b	3/4" nut	2	FNT34			
c	3/4" flat w asher	2	FFW34			
d	3/4" lock w asher	2	FLW34			
27a	3/4" x 4" hex cap bolt	3	FHC344			
b	3/4" nut	3	FNT34			
d	3/4" lock w asher	3	FLW34			
28a	3/4" x 10" hex cap bolt	4	FHC3410			
b	3/4" nut	4	FNT34			
d	3/4" lock w asher	4	FLW34			
29a	5/8 x 4-1/2 hex cap bolts	2	FHC58412			

# PARTS PHOTO #2

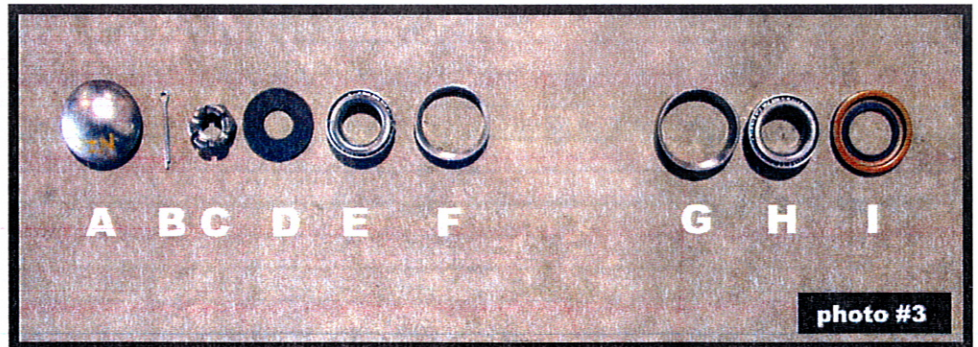


## DETAIL OF PART #6

**803 HUB**  
6 bolt  
4910 lb.  
2-1/8" spindle

PHOTO #3	DESCRIPTION		HOW MANY USED	WAKO PART NUMBER
A	DUST CAP	3-5/8"	1	WHB803L
B	COTTER PIN		1	WHB803K
C	CASTLE NUT	7/8"SAE	1	WHB803H
D	WASHER	7/8"	1	WHB803J
E	INNER BEARING		1	WHB803D
F	INNER RACE		1	WHB803E
G	HUB ONLY w/RACES		1	WHB803A
H	OUTER RACE		1	WHB803G
I	OUTER BEARING		1	WHB803F
J	SEAL		1	WHB803C
K	LUG BOLT		6	WHB611I
L	NUT		6	

# PARTS PHOTO #3



## DETAIL OF PART #11

**WAKO MFG'D HUB**  
using  
**611/709 HUB PARTS**

PHOTO #3	DESCRIPTION		HOW MANY USED	WAKO PART NUMBER
A	DUST CAP	2-7/16"	1	WHB611L
B	COTTER PIN		1	WHB611K
C	CASTLE NUT	7/8"SAE	1	WHB611H
D	WASHER	5/8"	1	WHB611J
E	INNER BEARING		1	WHB611D
F	INNER RACE		1	WHB611E
G	OUTER RACE		1	WHB611G
H	OUTER BEARING		1	WHB611F
I	SEAL		1	WHB611C



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