



*PROGRESSIVE  
FARM PRODUCTS, INC.*

**Rigid Shank (1" x 2") Mount  
w/18" Disk Sealer**

# Assembly Instructions

## Rigid (1" x 2") Shank and 20" Coultter Assembly

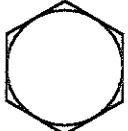

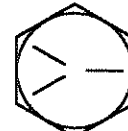

1. Lower the toolbar to a good working height.
2. Use hardware from bag #102027 (7" x 5" frame) or bag# 102033 (7" x 7" frame) for rigid shank for assembly and installation of shank mounts.
3. Refer to the coultter spacing drawings in the back of the book for correct locations/placement of shank mounts. Note there are left and right shank assemblies. When placing an assembly, notice that the shank will line up with either the left or right u-bolt. Mount the row unit to the bar with u-bolts and hardware provided.
4. Attach the coultter arm assembly to the shank mounting bracket using the 1" x 7" pin provided in the mounting bracket. There are also right hand and left hand coultter arms. To determine which is right and left hold the arm up to the 1" pin (the hub assembly should be towards the back of the tool bar). If the hub assembly is facing right – right hand, left – left hand. When assembling the T-Rod/Coultter Spring Assembly, be sure to leave one inch of threads below the lock nut of the spring loaded T-Rod and a distance of 1-1/2" between the bottom of the "T" and the 3/4" nut. **Note: These measurements are approximate. Field conditions may cause the need for further adjustments.**
5. Attach coultter blade to hub with 1/2"-20 x 1-1/4" whiz bolt and 1/2" lock washers.
6. Attach shank to shank mount as shown in diagram.

## Disk Sealer

1. Use hardware from bag #102029 to assemble (as per diagram) and mount the disk sealers to the shank.  
For Rigid Shank Mounts, measurement (when tightened down) should be approximately 15-1/2" from the back edge of the shank mount to the back side (at the bend) of the disk sealer shank mounting bracket (part #801694).  
**Note: Measurements are approximate. Adjustments may need to be made depending upon the depth the knives are running in the ground. For optimum performance, do not run the sealer blades any more than 2-3 inches in the ground.**
2. You can either mounts the sealer blades on now or wait until all hosing (dry, liquid, & anhydrous) has been completed.

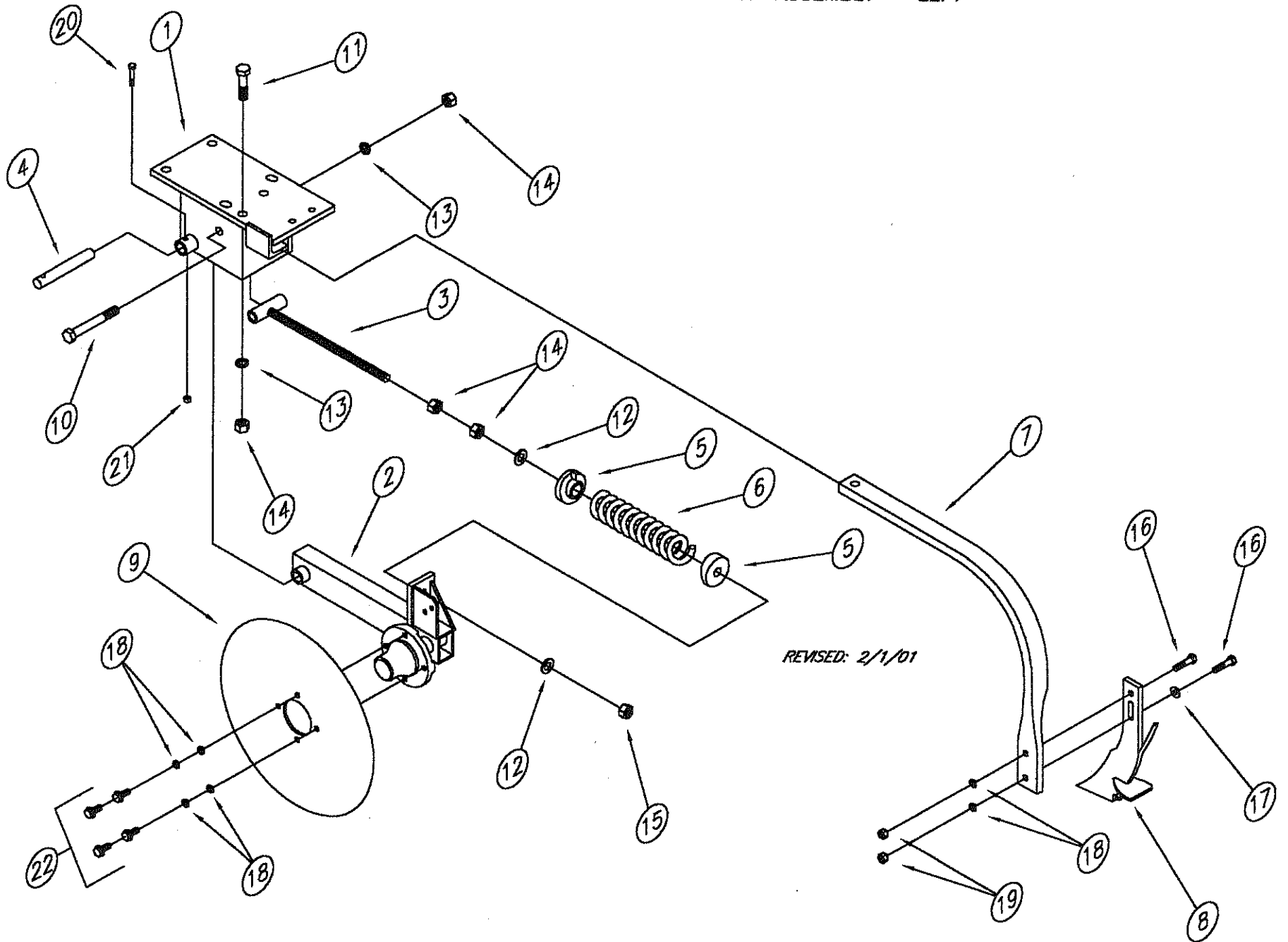
## **BOLT TORQUE**

1. Improperly tightened bolts will result in damage, breakage, expense, and lost time.
2. Always replace bolts with the specified grade and type.
3. Torque all fasteners to the proper value during assembly, then check every two (2) hours of operation until they remain tight.
4. Use the following torque chart as a guide to insure proper tightening of the fasteners.
5. Make a daily inspection of the implement checking for loose bolts as well as leaking hoses.

BOLT Ø - TPI	 GRADE 2	 GRADE 5	 A - 325	 GRADE 8
3/8 - 16	25	35	50	
7/16 - 14	35	55	80	
1/2 - 13	55	85	125	
9/16 - 12	75	125	175	
5/8 - 11	105	170	235	
3/4 - 10	185	305	425	
7/8 - 9	170	445	690	
1 - 8	260	670	1030	
1-1/8 - 7	365	900	1460	
1-1/4 - 7	515	1275	2060	
1-3/8 - 6	675	1675	2700	
1-1/2 - 6	900	2150	3500	

TORQUE VALUES ARE IN FT./LBS. AND ARE BASED ON PLATED OR GREASE COATED HARDWARE. INCREASE VALUES 5 - 10% FOR FINE THREADS. USE 65% OF THE LISTED VALUE FOR JAM NUTS.

SINGLE COLTER AMMONIA APPLICATION ASSEMBLY - LEFT



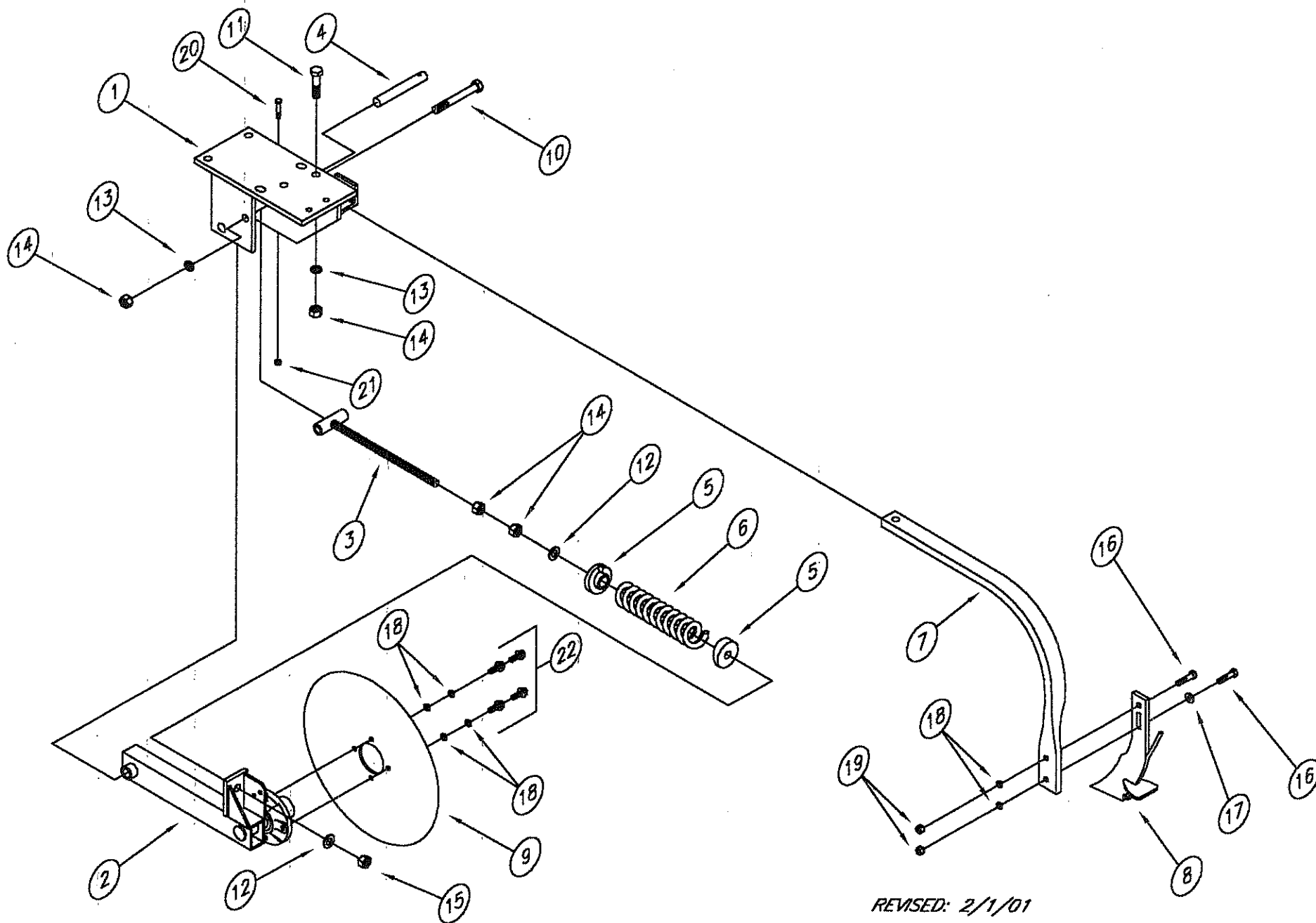
LEFT COLTER ASSEMBLY COMPLETE - 900011L

REF. #	QTY.	PART #	DESCRIPTION	REVISED: 1/30/01
1	1	801325	UNIVERSAL AMMONIA MOUNTING BRACKET - LEFT	
2	1	801204	LEFT SPINDLE TUBE & BUSHING ASSEMBLY	
3	1	801198	SPRING TENSION ROD WELDMENT	
4	1	602212	Ø1.00 X 7-1/4" PIN	
5	2	400096	SPRING RETAINER CASTING	
6	1	400095	COMPRESSION SPRING	
7	1	900037	SIDE MOUNT SHANK	
8	1	900036	AMMONIA KNIFE WITH SEALER	
9	1	400097	20" SMOOTH COLTER	
10	1	101179	3/4-10 X 6" HEX BOLT	
11	1	101422	3/4-10 X 3" HEX BOLT - GR 8 YELLOW ZINC	
12	2	101233	3/4" FLAT WASHER	
13	2	101224	3/4" LOCK WASHER	
14	4	101215	3/4-10 HEX NUT	
15	1	101459	3/4-10 TOPLOCK NUT	
16	2	101149	1/2-13 X 2" HEX BOLT	
17	1	101231	1/2" FLAT WASHER	
18	6	101222	1/2" LOCK WASHER	
19	2	101213	1/2-13 HEX NUT	
20	1	101127	3/8-16 X 2" HEX BOLT	
21	1	101455	3/8-16 TOPLOCK NUT	
22	4	301193	1/2-20 X 1-1/4" WHIZ BOLT	
-	2	**	3/4-10 U-BOLT (NOT SHOWN)	
-	4	101224	3/4" LOCK WASHER (NOT SHOWN)	
-	4	101215	3/4-10 HEX NUT (NOT SHOWN)	

\*\* FOR 7 X 7 TUBE, USE 3/4-10 X 7 X 9" U-BOLT - PART # 101316.

\*\* FOR 7 X 5 TUBE, USE 3/4-10 X 7 X 6-1/2" U-BOLT - PART # 101315.

SINGLE COLTER AMMONIA APPLICATION ASSEMBLY - RIGHT



REVISED: 2/1/01

RIGHT COLTER ASSEMBLY COMPLETE - 900011R

REF. #	QTY.	PART #	DESCRIPTION	REVISED: 7/31/00
1	1	801326	UNIVERSAL AMMONIA MOUNTING BRACKET - RIGHT	
2	1	801203	RIGHT SPINDLE TUBE & BUSHING ASSEMBLY	
3	1	801198	SPRING TENSION ROD WELDMENT	
4	1	602163	Ø1.00 X 7" PIN	
5	2	400096	SPRING RETAINER CASTING	
6	1	400095	COMPRESSION SPRING	
7	1	900037	SIDE MOUNT SHANK	
8	1	900036	AMMONIA KNIFE WITH SEALER	
9	1	400097	20" SMOOTH COLTER	
10	1	101179	3/4-10 X 6" HEX BOLT	
11	1	101422	3/4-10 X 3" HEX BOLT - GR 8 YELLOW ZINC	
12	2	101233	3/4" FLAT WASHER	
13	2	101224	3/4" LOCK WASHER	
14	4	101215	3/4-10 HEX NUT	
15	1	101459	3/4-10 TOPLOCK NUT	
16	2	101149	1/2-13 X 2" HEX BOLT	
17	1	101231	1/2" FLAT WASHER	
18	6	101222	1/2" LOCK WASHER	
19	2	101213	1/2-13 HEX NUT	
20	1	101127	3/8-16 X 2" HEX BOLT	
21	1	101455	3/8-16 TOPLOCK NUT	
22	4	301193	1/2-20 X 1-1/4" WHIZ BOLT	
-	2	**	3/4-10 U-BOLT (NOT SHOWN)	
-	4	101224	3/4" LOCK WASHER (NOT SHOWN)	
-	4	101215	3/4-10 HEX NUT (NOT SHOWN)	

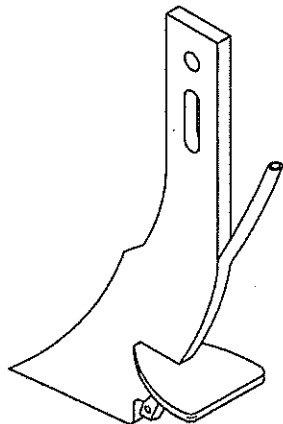
\*\* FOR 7 X 7 TUBE, USE 3/4-10 X 7 X 9" U-BOLT - PART # 101316.

\*\* FOR 7 X 5 TUBE, USE 3/4-10 X 7 X 6-1/2" U-BOLT - PART # 101315.



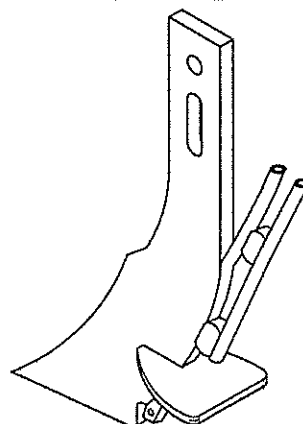
## KNIFE OPTIONS

STANDARD KNIFE WITH  
BEAVER TAIL SEALER



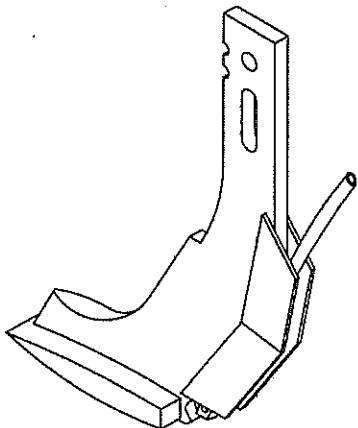
400099 3/8" NH3 TUBE  
400191 1/2" NH3 TUBE

STANDARD KNIFE WITH  
LIQUID TUBE.



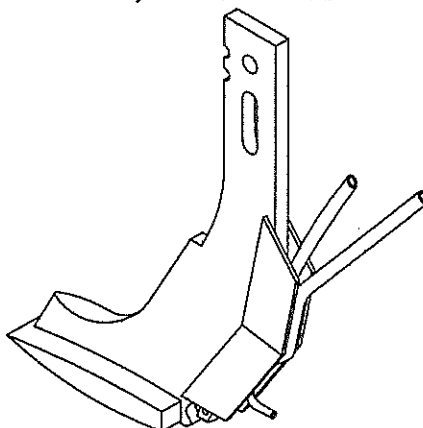
400190 3/8" NH3 TUBE  
400192 1/2" NH3 TUBE

STANDARD MOLE KNIFE  
ANHYDROUS ONLY



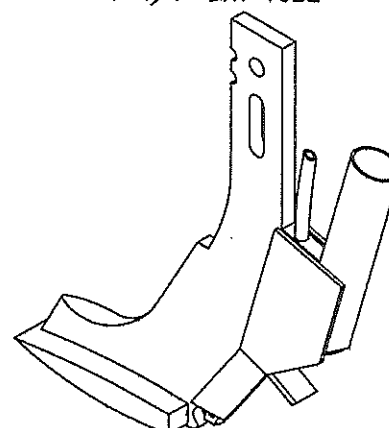
400197 3/8" NH3 TUBE  
400195 1/2" NH3 TUBE

MOLE KNIFE WITH  
3/8" LIQUID TUBE



900102 3/8" NH3 TUBE  
900103 1/2" NH3 TUBE

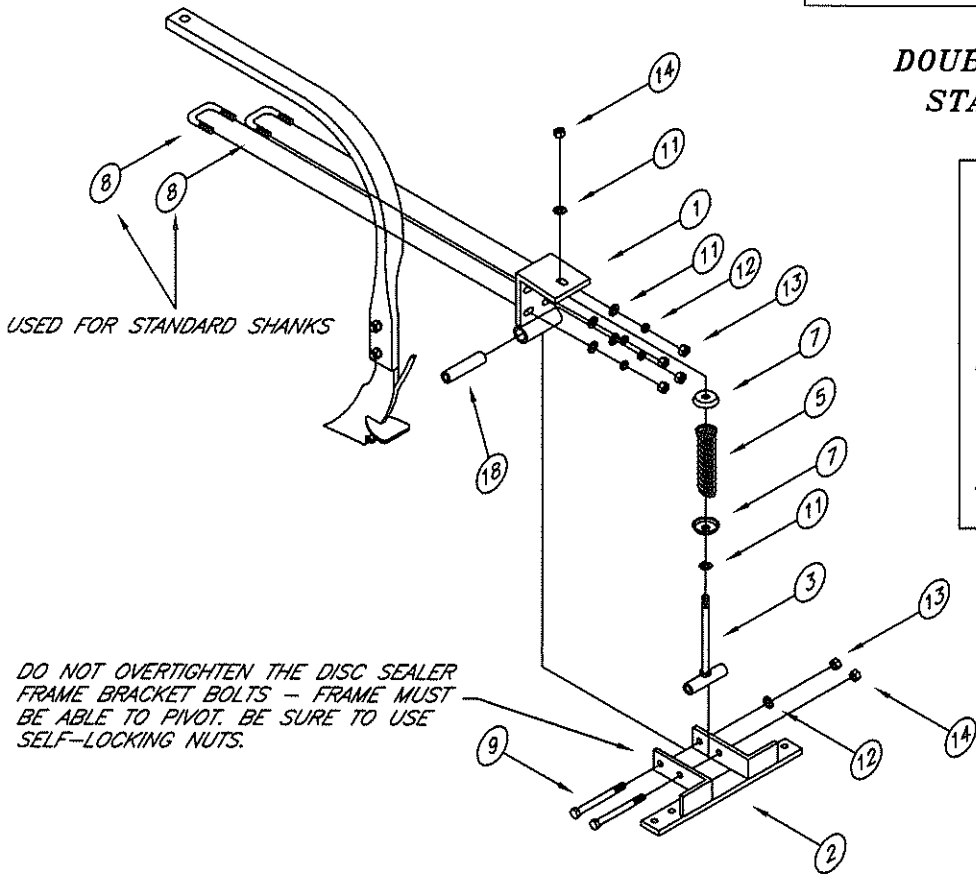
MOLE KNIFE WITH  
1-1/4" DRY TUBE



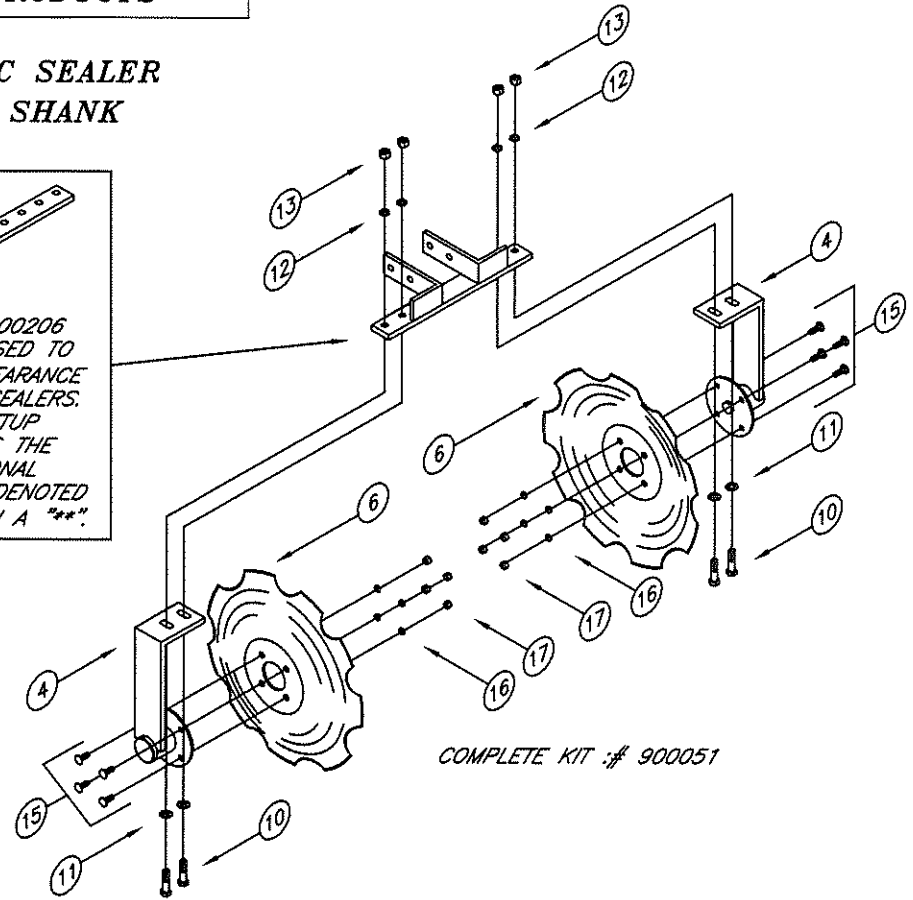
900100 3/8" NH3 TUBE  
900101 1/2" NH3 TUBE



## DOUBLE DISC SEALER STANDARD SHANK



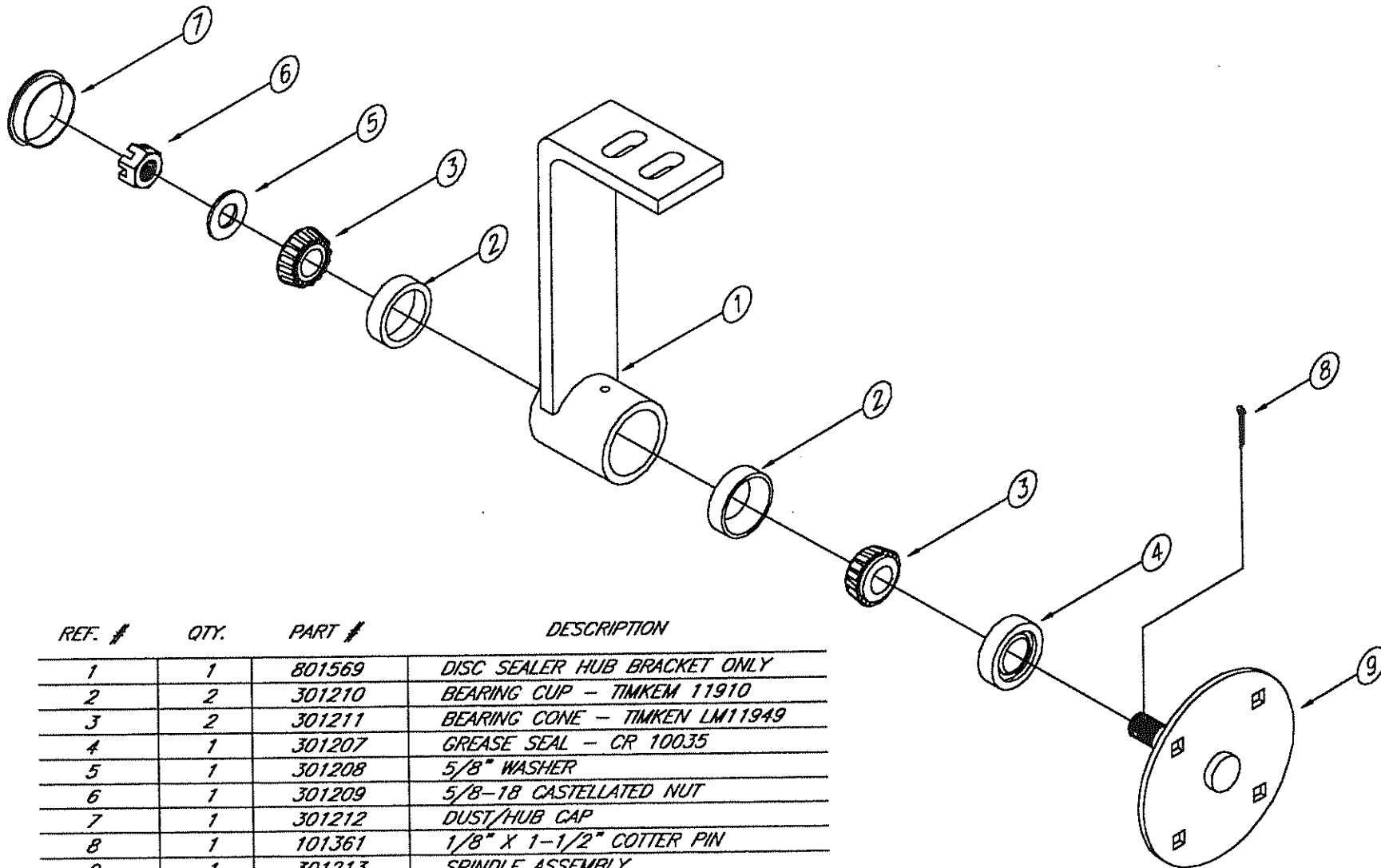
PART # 400206  
MAY BE USED TO  
GAIN 4" CLEARANCE  
BETWEEN SEALERS.  
THIS SETUP  
REQUIRES THE  
ADDITIONAL  
HARDWARE DENOTED  
BELOW WITH A "\*\*".



REF. #	QTY.	PART #	DESCRIPTION
1	1	801694	SHANK MOUNTING BRACKET
2	1	801327	DISC SEALER FRAME BRACKET
3	1	801329	SPRING PIVOT BOLT & BUSHING ASSEMBLY
4	2	801330	SEALER ARM ASSEMBLY
5	1	400123	COMPRESSION SPRING
6	2	400107	18" NOTCHED DISC
7	2	101299	5/8" CUP WASHER
8	2	101355	1/2-13 X 2" X 2-1/2" U-BOLT
9	2	101156	1/2-13 X 5-1/2" HEX BOLT
10	4	101149	1/2-13 X 2" HEX BOLT
11	10	101231	1/2" FLAT WASHER

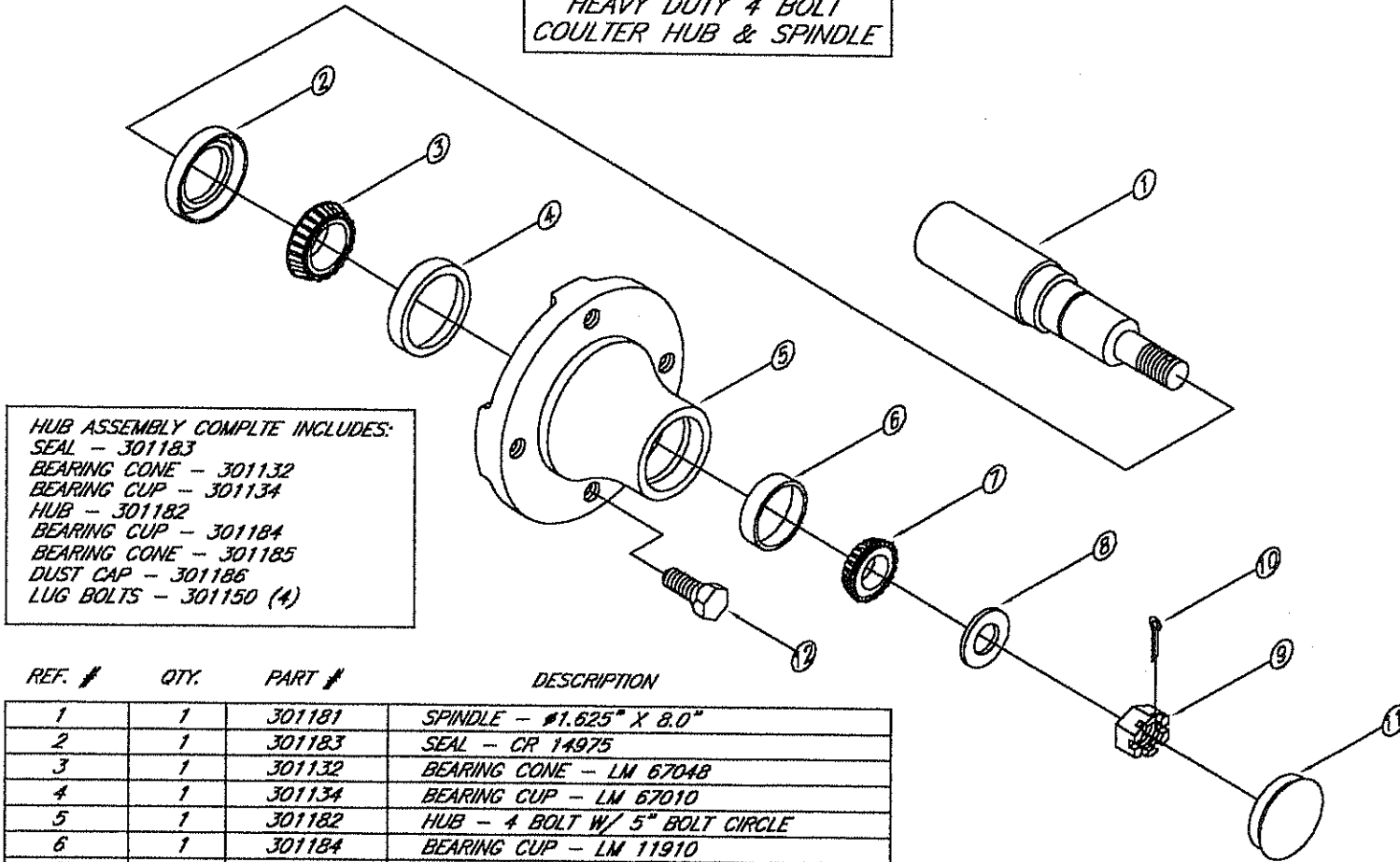
REF. #	QTY.	PART #	DESCRIPTION	REVISED: 1/22/01
12	9	101222	1/2" LOCK WASHER	
13	9	101213	1/2-13 HEX NUT	
14	2	101457	1/2-13 TOPLOCK NUT	
15	8	101357	3/8-16 X 1" CARRIAGE BOLT	
16	8	101220	3/8" LOCK WASHER	
17	8	101211	3/8-16 HEX NUT	
18	1	602214	1,000 O.D. X .524 I.D. X 4-1/8" BUSHING	
**	2	101150	1/2-13 X 2-1/2" HEX BOLT	
**	2	101222	1/2" LOCK WASHER	
**	2	101213	1/2-13 HEX NUT	

## DISC SEALER HUB ASSEMBLY



REF. #	QTY.	PART #	DESCRIPTION
1	1	801569	DISC SEALER HUB BRACKET ONLY
2	2	301210	BEARING CUP - TIMKEM 11910
3	2	301211	BEARING CONE - TIMKEN LM11949
4	1	301207	GREASE SEAL - CR 10035
5	1	301208	5/8" WASHER
6	1	301209	5/8-18 CASTELLATED NUT
7	1	301212	DUST/HUB CAP
8	1	101361	1/8" X 1-1/2" COTTER PIN
9	1	301213	SPINDLE ASSEMBLY

HEAVY DUTY 4 BOLT  
COULTER HUB & SPINDLE



HUB ASSEMBLY COMPLETE INCLUDES:  
 SEAL - 301183  
 BEARING CONE - 301132  
 BEARING CUP - 301134  
 HUB - 301182  
 BEARING CUP - 301184  
 BEARING CONE - 301185  
 DUST CAP - 301186  
 LUG BOLTS - 301150 (4)

SPINDLE ASSEMBLY COMPLETE INCLUDES:  
 SPINDLE - 301181  
 WASHER - 301142  
 CASTELLATED NUT - 301153  
 COTTER PIN - 301152

REF. #	QTY.	PART #	DESCRIPTION
1	1	301181	SPINDLE - #1.625" X 8.0"
2	1	301183	SEAL - CR 14975
3	1	301132	BEARING CONE - LM 67048
4	1	301134	BEARING CUP - LM 67010
5	1	301182	HUB - 4 BOLT W/ 5" BOLT CIRCLE
6	1	301184	BEARING CUP - LM 11910
7	1	301185	BEARING CONE - LM 11949
8	1	301142	THRUST WASHER - 1.5" O.D. X .8125" I.D.
9	1	301153	CASTELLATED NUT - 3/4-16 UNF
10	1	301152	COTTER PIN - 5/32" X 1-3/4"
11	1	301186	DUST CAP
12	4	301150	LUG BOLT - 1/2-20 UNF X 1"
13	1	301188	SPINDLE ASSEMBLY - COMPLETE
14	1	301187	HUB ASSEMBLY - COMPLETE

REVISED 09/08/93