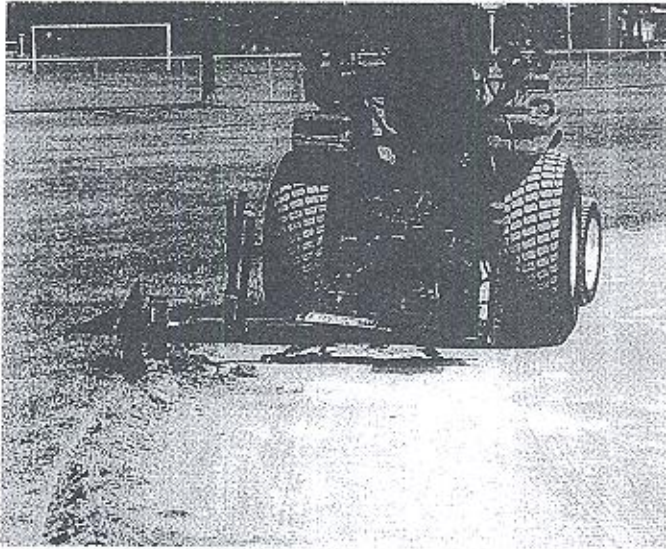


BANNERMAN

Diamond Edger[®]

Edge your diamonds in less than two minutes!



The Bannerman B-DE-20 Diamond Edger[®] can give your ball diamonds the finishing touch just like the professional teams demand - and reduce the time, effort and labour to do the job. Once you get your diamonds into shape, it is simply matter to redress with your Bannerman Diamond Groomer (B-BP-4/6 Ballpark-4/6[®] or B-DM-6 Diamond Master[®]) the surface before and after every game (or even between innings). You will be able to keep your diamonds into top-notch shape throughout the entire season with much less effort when compared to other methods.

General Information

Tractor Requirements: 17-35 horsepower tractor with Category 1 Three Point Hitch

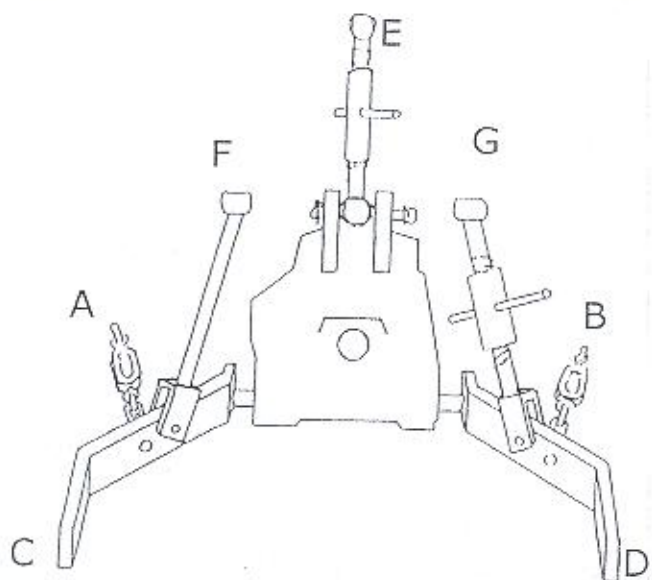
Weight: Approximately 250 lbs.

Speed of Operation: 3 to 4 m.p.h. (6 to 6.5 k.ph.)

Route of Opeation: Forward direction only. Straight lines and turning are permitted.

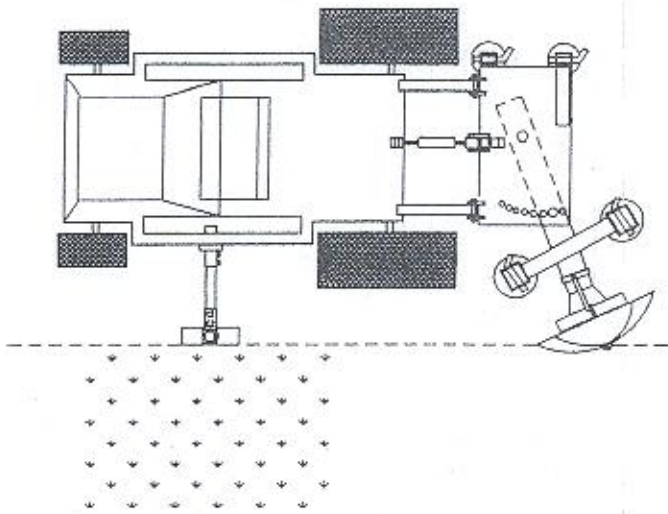
Hooking up the Three Point Hitch

1. Select a tractor 18 horsepower or greater equipped with the standard Category "0" or "1" Three Point Hitch.
2. Free up all linkages, pivot ball joints with adequate caution to ensure proper movement of the linkage. This also ensure hook up is quicker & safer.
3. With both the tractor & groomer on a level, firm surface, first measure the distance from the two rear Three Point Hitch arms "C" & "D" to the ground - with the arms in the lowest position, ground clearance should be no greater than 6" (15 cm). Adjustment to the vertical tractor lift links "F" & "G" may be necessary.
4. Safely reverse tractor to groomer, and "shut-off" the tractor's engine. Connect the left hand tractor hitch arm "C" onto the groomer, pick-up pin locate the lock snap pin into the pin hole.
5. Connect the right hand tractor hitch arm "D" onto the groomer, pick-up pin locate the lock snap pin into the pin hole.
6. Connect tractor adjustable top link "E" to tractor and to top hold in "A" frame of groomer. Be sure snap pins are in cross holes of connecting pins, use hardened pins, **NOT** Bolts.
7. While the groomer is in raised position, level the groomer horizontally to the rear axle of the tractor.
8. Safely and slowly lower the groomer to the ground. When the groomer is resting on the ground, adjust the tractor top link "E", either in or out to ensure the mainframe is 90 degrees to the rear of the tractor. There should be 5/8" (16 mm) clearance from the tips of the ripper blades' teeth, to the level ground.
9. Lift the groomer for transport to approximately 18" (46 cm) of height and proceed to the baseball diamond infield surface to be groomed.



Note: Top Link "E" can be either manual adjustable or hydraulic type. Start tractor engine, raise groomer to height of 2 ft (60 cm) off of the ground. Ensure parking brake is on before leaving the tractor seat. With the unit raised up, adjust "Side Sway" turn buckles "A" & "B" to prevent "Side to Side" movement of the groomer. Be sure when adjusting side sway to centre the groomer to tractor to ensure groomer follows in a straight line of cultivation behind the tractor.

Mounting Instructions

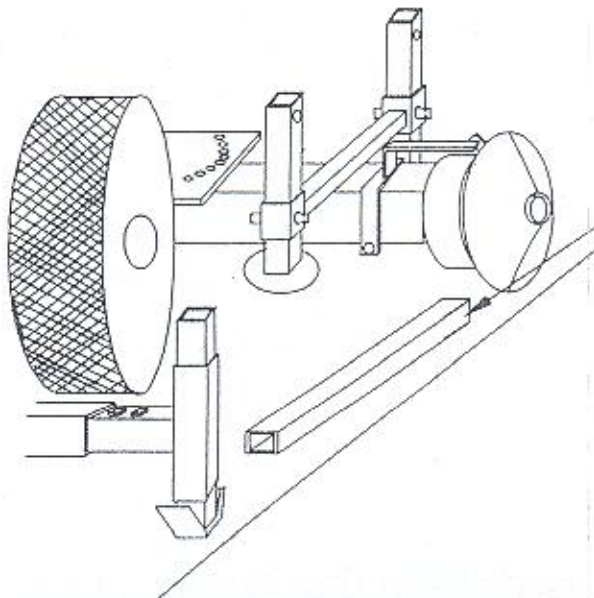
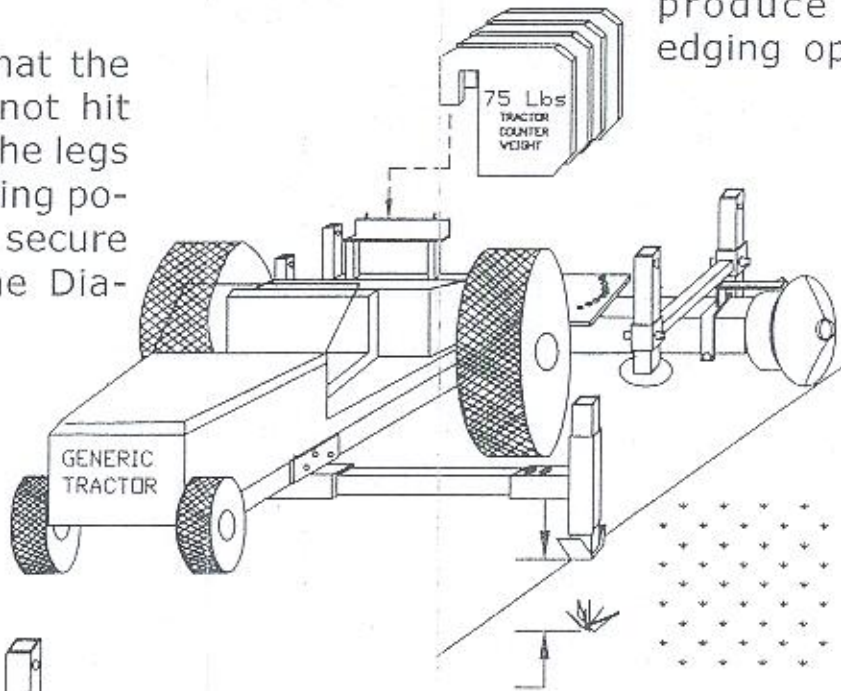


Note: You may have to drill holes into/ or modify the tractor frame to suit the mounting plate. Make sure that the edging guide shoe is free from the tires and at least 2 inches from the ground to allow for uneven surfaces.

Check to make sure that the Diamond Edger does not hit the rear tires and that the legs are raised to the operating position and pull pins are secure before operation of the Diamond Edger.

IMPORTANT

You must have at least 3 Counter weights of 75lbs. to produce superior edging operation.

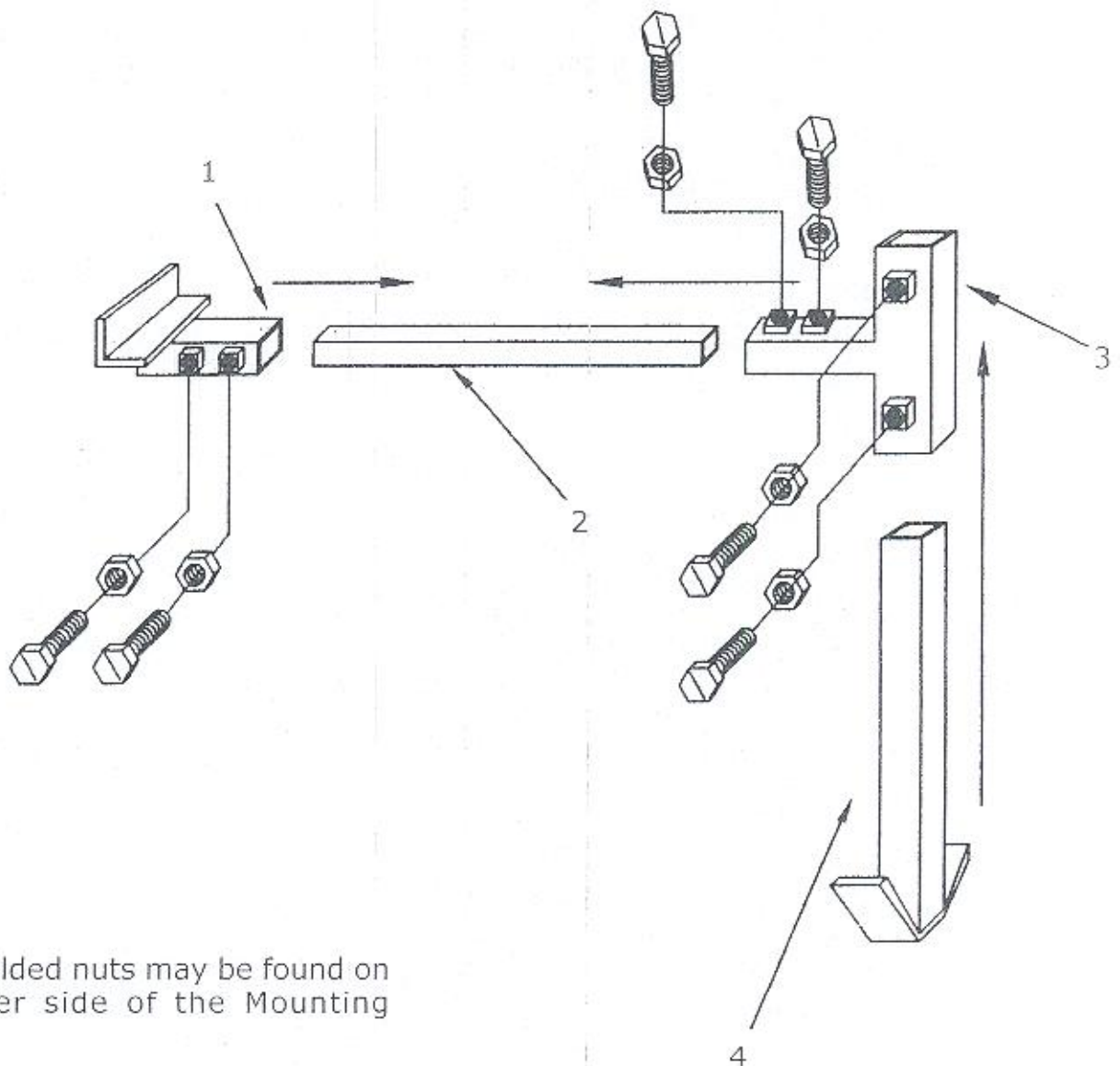


Use a steel tube or wood plank to align the guide shoe with the edging disc. Make sure that the alignment tube/plank is parallel to the tractor tire to insure proper cutting alignment and action.

Guide Installation Instructions

Install #1 (Mounting Bracket) to the frame of the tractor. Drill holes, or modify bracket to suit the desired mounting area. The Mounting Bracket (#1) must be installed to the same side as the edging disc and be placed in the middle of the tractor. It should be clearly visible to the operator and be clear of the tractor wheels turning radius. Insert #2 (Telescopic Arm) into the Mounting Bracket (#1) and lock in desired position using the 1/2"-13 Bolts and 1/2-13 Jam nuts provided. Fit #4 (Guide Shoe) into the #3 (Adjusting Tee Bracket) and secure using 1/2"-13 Bolts and 1/2"-13 Jam nuts provided. Be sure that the Guide Shoe (#4) is parallel with the tractor tire. Insert the Telescopic Arm (#2) into the Adjusting Tee Bracket (#3) and secure using the 1/2"-13 bolts and 1/2-13 Jam nuts provided.

** For securing bolts and nuts you will need 3/4" wrenches/sockets.**



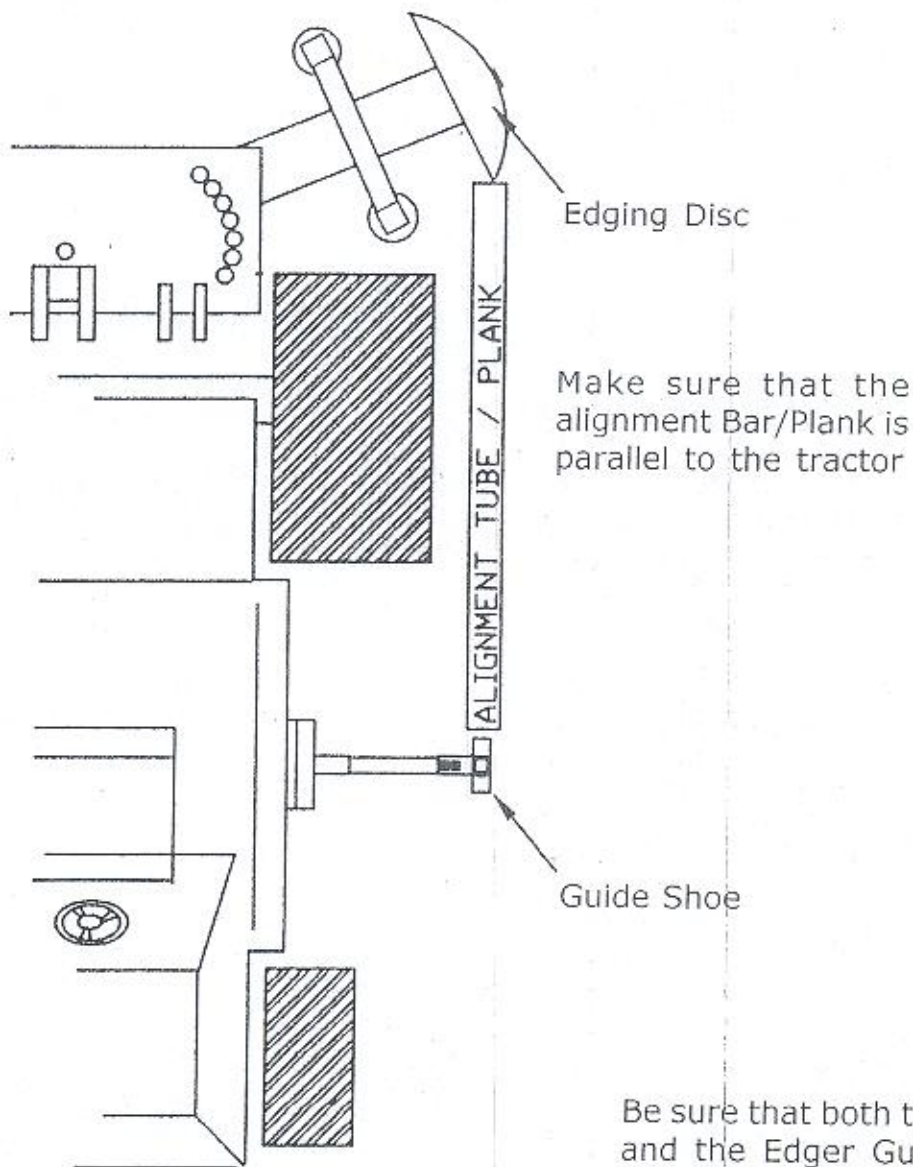
Fixed/Welded nuts may be found on the under side of the Mounting Bracket.

Guide Alignment Instructions

Depicts the use of a steel tube or wood plank in order to obtain alignment. It is important that the guide shoe and cutting disc is parallel and properly aligned be sure that the tube/plank is parallel to the rear tire of the tractor. It is imperative that the edging disc guide be mounted in the middle of the tractor and on the same side as the edging disc. Be sure that the guide is in the operators line of sight, it could result in difficulty following an edge and will produce a poor edging job.

Once in use be sure that there is a 3 to 4 inch clearance between the guide shoe and the surface to be edged to allow for possible ground height fluctuations.

These instructions should be followed carefully to prevent any unnecessary damage to the tractor and /or the diamond edger guide assembly.



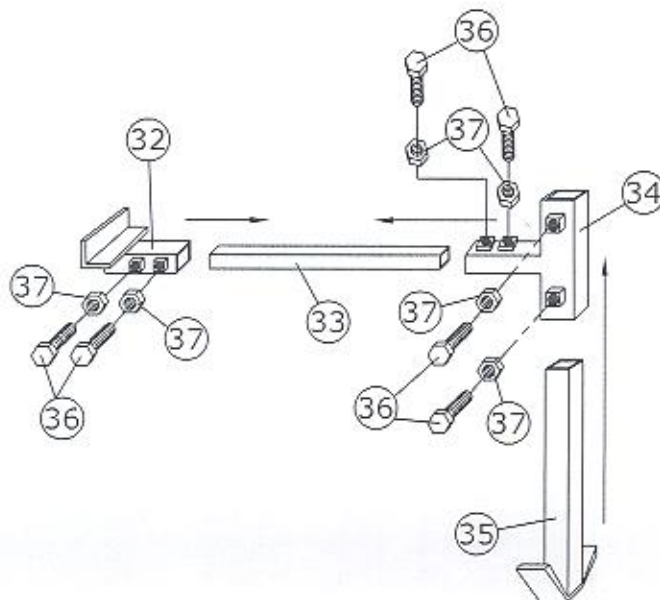
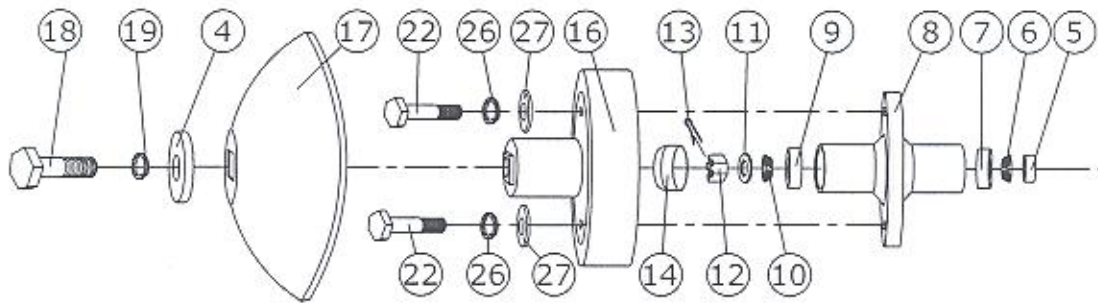
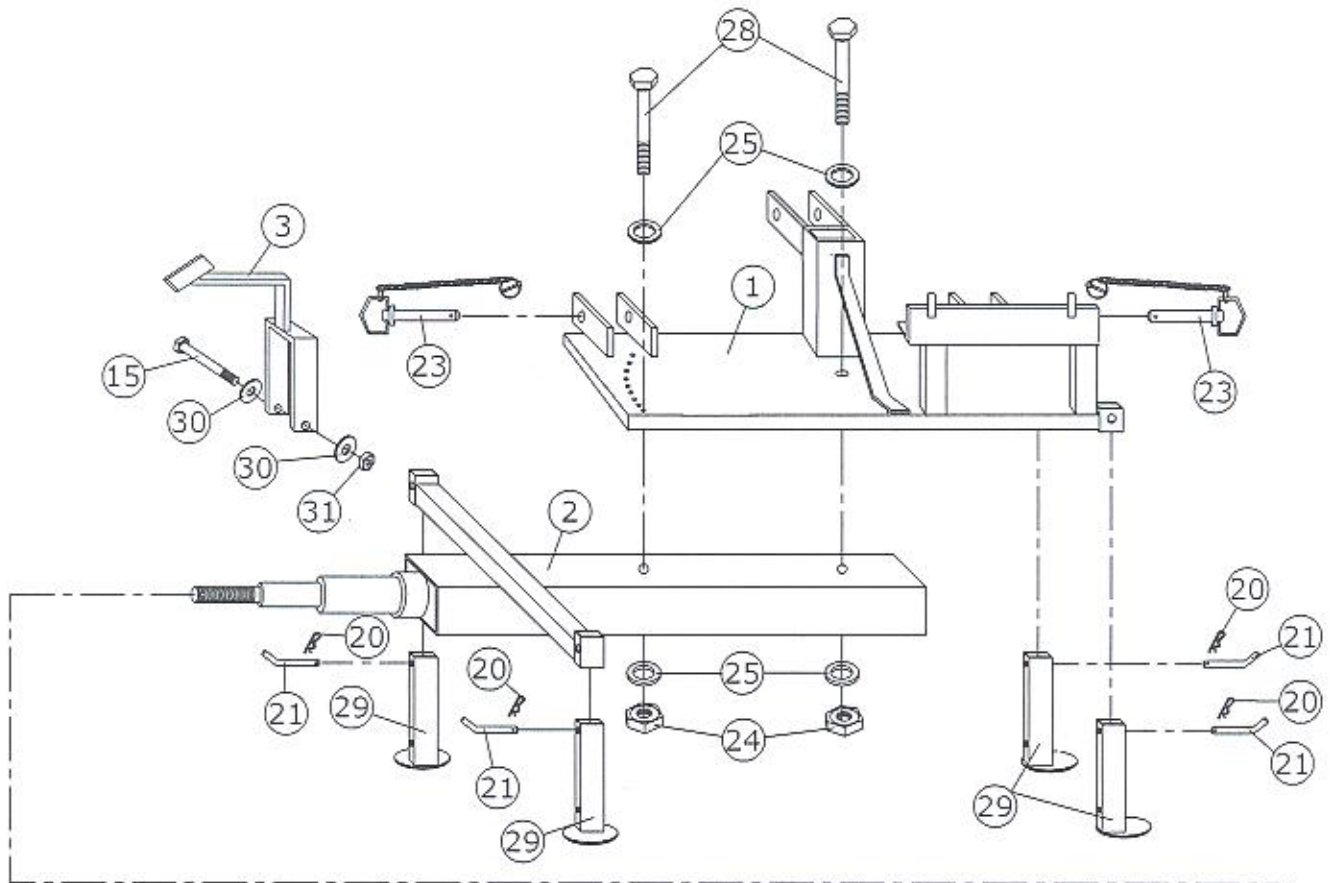
Edging Disc

Make sure that the alignment Bar/Plank is parallel to the tractor

Guide Shoe

Be sure that both the Diamond Edger and the Edger Guide are free from tractor extremities while in motion. (Tires, etc.)

B-DE-20 Diamond Edger

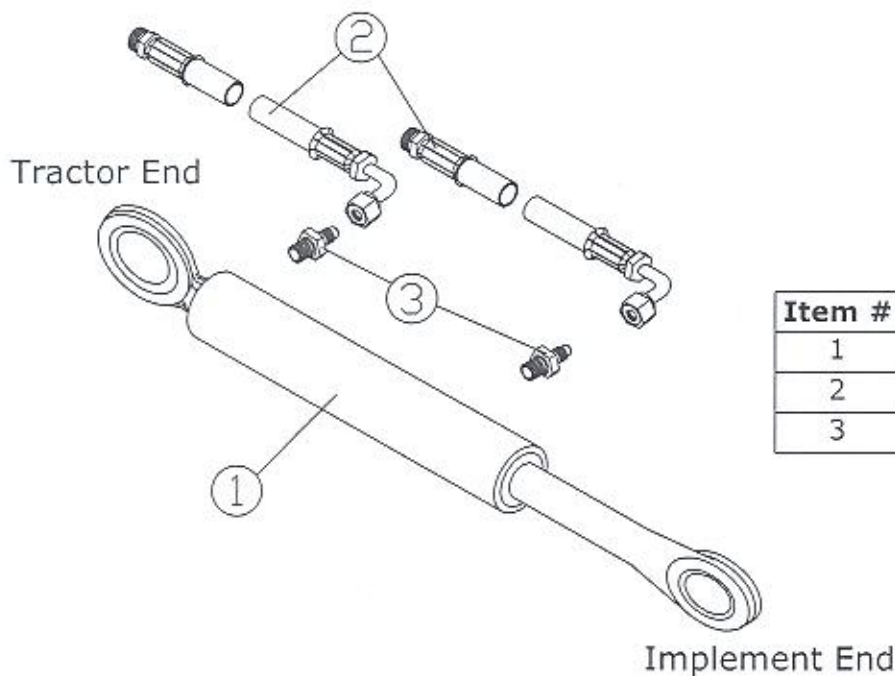


B-DE-20 DIAMOND EDGER

Item No.	Part No.	Part Description	Qty.
1	15400	Frame - Main	1
2	15401	Axle Assembly	1
3	15402	Scraper Assembly	1
4	15405	Washer - Disc Plate	1
5	15406	Seal - Hub	1
6	15407	Bearing - Inner Cone	1
7	15408	Bearing - Inner Cup	1
8	15409	Hub Wheel	1
9	15410	Bearing - Outer Cup	1
10	15411	Bearing Outer Cone	1
11	15412	Washer - Retainer	1
12	15413	Nut - Castle 1"-12	1
13	15414	Pin - Cotter	1
14	15415	Cap - Dust	1
15	01033	Bolt - 3/8"-16 x 6.0" HHC	1
16	15417	Hub - Disc Mounting	1
17	15418	Disc - Cutting	1
18	15041	Bolt - 3/4"-10 x 2" HHC	1
19	15042	Washer - 3/4" Lock	1
20	02060	Pin - Hitch	4
21	15049	Pin - 3/8" Pull	4
22	15302	Bolt - 5/8"-18 x 3.5" HHC	6
23	15116	Pin - Tow	2
24	11250	Nut - 3/4"-16 Nylon Insert	2
25	06037	Washer - 3/4" Flat	4
26	15419	Washer - 5/8" Lock	6
27	04037	Washer - 5/8" Flat	6
28	15420	Bolt - 3/4"-16 x 6.0" HHC	2
29	08109	Stands	4
30	02024	Washer - 3/8" Flat	2
31	03022	Nut - 3/8"-16 Nylon Insert	1
32	15421	Bracket - Guide Mounting	1
33	15422	Tube - Distance	1
34	15423	Tube - Clamping Tee	1
35	15424	Tube - Vertical Guide	1
36	03023	Nut - Jam 1/2"-13	6
37	15113	Bolt - 1/2"-13 x 1.25" HHC	6

B-DE-20 Diamond Edger Accessories & Optional Equipment

B-H.C. Hydraulic Top Link Kit

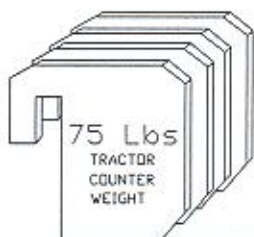


Item #	Part No.	Description	Qty
1	15150	Hydraulic Cylinder	1
2	15151	Hydraulic Hoses (60")	2
3	15152	NPT to JIC Connectors	2

Hose ends are $\frac{3}{8}$ " NPT for No. 3 Quick Connectors

Hoses are rated at 4000 PSI Capacity

Cylinders are rated at 2500 PSI Capacity



B-T.W. Tractor Weight (75 lbs. each) Sold Separately