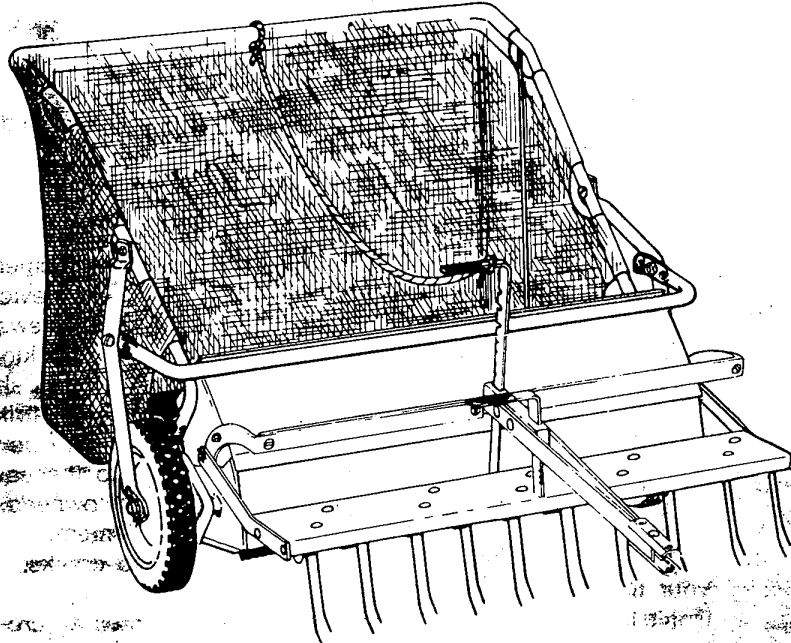


BRINLY



OWNER'S MANUAL



ST-36 BH

SWEeper

MODEL - ST-363 BH

DTS-36 BH

DETHATCHER - SWEeper

MODEL - DTS-363 BH

"IMPORTANT: THIS MANUAL CONTAINS INFORMATION FOR THE SAFETY OF PERSONS AND PROPERTY. READ IT CAREFULLY BEFORE ASSEMBLY AND OPERATION OF THE EQUIPMENT!"

LIMITED WARRANTY

Brinly-Hardy Company warrants only to the original retail purchaser that this product will remain free of defects in workmanship and materials under normal use and service for a period of two (2) years (NOTE: ninety (90) days for commercial or rental use) commencing with the date of purchase.

Any parts found to be defective within the warranty period will be replaced, with proof of date of purchase, at Brinly Hardy Company's expense. Our obligation under this warranty is expressly limited to replacement or repair, at our option of parts which are defective in material or workmanship within thirty (30) days of receipt of the parts. This warranty does not apply to damage caused by unreasonable use, including failure to provide necessary maintenance, nor does it apply to any transportation or labor charges.

WE MAKE NO OTHER EXPRESS WARRANTY NOR IS ANYONE AUTHORIZED TO MAKE ANY ON OUR BEHALF. ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. WE SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND.

BRINLY-HARDY COMPANY (502) 585-3351

MADE IN U.S.A.

CONGRATULATIONS on your purchase of this Brinly Implement. It has been designed, engineered, and manufactured to give you the best possible dependability and performance.

Your Sweeper or Dethatcher-Sweeper is equipped with a durable and powerful 5 to 1 ratio Gear Driven Brush Assembly for high velocity action. It is designed to pick up most types of debris from your lawn, and can be used while you mow!

The combination Dethatcher-Sweeper gently combs through turf, flipping out harmful thatch which is immediately collected by the Sweeper. This, too, can be done while you mow. When the hamper is full, simply pull the dump rope from the driver's seat.

Please read and retain this manual. The instructions will enable you to assemble and maintain your Implement properly. Always observe the "SAFETY RULES".

Should the need ever exist for repair parts, order through most any Lawn and Garden dealer, using part number and description.



RULES FOR SAFE OPERATION

- Know controls and how to stop quickly, READ THE OWNER'S MANUAL.
- Do not allow children to operate the vehicle, do not allow adults to operate without proper instruction and without having read the owner's manual.
- Do not carry passengers. Keep children and pets a safe distance away.
- Always wear substantial footwear. Do not wear loose fitting clothing that can get caught in moving parts.
- Keep your eyes and mind on your tractor/attachment and area being covered. Don't let other interests distract you.
- Stay alert for holes in the terrain and other hidden hazards.
- Keep the vehicle and attachments in good operating condition and keep safety devices in place.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
- See tractor equipment owner's manual for safe operation of the equipment.
- Do not drive close to creeks, ditches and public highways.
- Watch out for traffic when crossing or near roadways.
- When using any attachment, don't allow anyone near the vehicle while in operation.



WARNING !!!

- When backing - carefully back straight to avoid jack-knifing which could result in damage to equipment.
- This product is not designed for use in sand or gravel, or to carry extra weight.
- Lock nuts must be used where specified. They have a slightly oblong hole and are domed on one end.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS - ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

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HARDWARE



No.2 - B-1673P
Hex(Lock)Nut, 1/4"



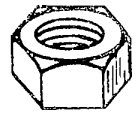
No.3 - B-1675P
Hex(Lock)Nut, 3/8"



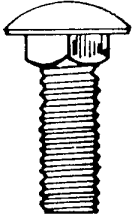
No. 64 - 30M0800P
Hex Nut, 1/4"



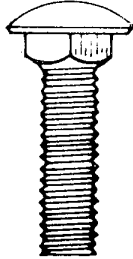
No.65 - 30M1000P
Hex Nut, 5/16"



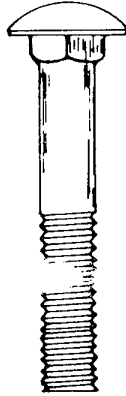
No.66 - 30M1200P
Hex Nut, 3/8"



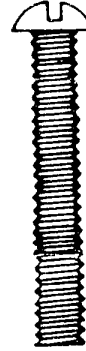
No.56 - 10M1016P
Carriage Bolt
5/16" x 1"



No.57 - 10M1020P
Carriage Bolt
5/16" x 1 1/4"



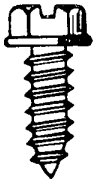
No.58 - 10M1032P
Carriage Bolt
5/16" x 2"



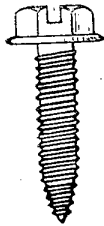
No.59 - 20M0828P
Round Head Screw
1/4" x 1 3/4"



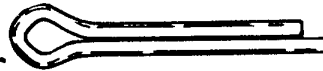
No.60 - 20M0824P
Round Head Screw
1/4" x 1 1/2"



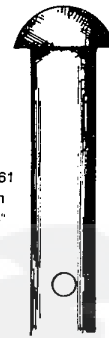
No.6 - B-3327
Hex Washer Head Screw
(Self-Tapping)
#14 x 3/4"



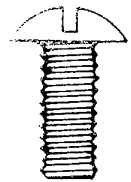
No.41 - R-1073
Hex(Slotted)Flange Head Screw
#14 x 1"



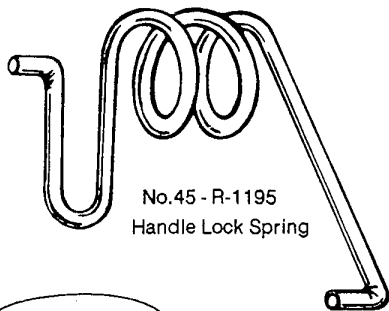
No.72 - 50M0520P
Cotter Pin
5/32" x 1 1/4"



No.75 - B-3861
Drawbar Pin
1/2" x 2-1/4"



No.62 - 20M1012P
Round Head Screw
5/16" X 3/4"



No.45 - R-1195
Handle Lock Spring



No.7 - D-146P
Hairpin Cotter
1/8" x 2 1/2"



No.1 - B-983
Hairpin Cotter
5/64" x 1 3/16"



No.9 - R-618
Special Washer, 5/16"



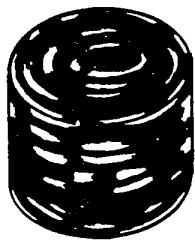
No.31 - R-1022
Spacer
(Transport Lock Bracket)



No.42 - R-1079
Drilled Pin
5/16" x 7/8"



No.68 - 40M0800P
Lockwasher, 1/4"



No. 74 - F-425
Vinyl Cap



No.69 - 40M1000P
Lockwasher, 5/16"



No.70 - 45M1111P
Flat Washer, 5/16"



NO.33 - R-1025
HANDLE GRIP

ASSEMBLY

Fold out carton to use as a pad during assembly and arrange EACH kind of hardware into a group to ease assembly.

Tools Required For Assembly

- 1 - Pair of pliers (slip-joint recommended)
- 1 - Screwdriver (flat)
- 2 - Medium size adjustable wrenches
- Or
- 1 - Adjustable wrench and set of open end wrenches.

- References to the right and left are made while standing at the rear of the machine and facing forward.
- The 1" welded angle is on the bottom (at the rear) of the brush housing (39).
- Do not tighten any fasteners (except where specified) until assembly as described in Fig. 1 has been completed.

FRAME

Refer to Fig. 1

- Assemble both Tow Bars (20) to the Backside (toward Brush Housing) of the Pull Bars (18 and 19) as shown, using four 5/16" x 1" Carriage Bolts (56), 5/16" Lock Washers (69), and 5/16" Hex Nuts (65).
- Raise the Tow Bar Assembly as shown by arrow "A"
- Slip Transport Lock Bracket (30) into position between Tow Bars (20) - align the holes.
- Place a Lock Bracket Spacer (31) in line with one set of holes and insert a 5/16" x 2" Carriage Bolt (58) through the holes and secure with a 5/16" Lock Washer (69) and 5/16" Hex Nut (65).
- Follow the same procedure for the other set of holes as illustrated at "B".
- With the underside of the Towbars (20) facing you, as shown in Fig. 1C, slide the loop portion of the Spring (45) flush against the Lock Bracket Spacer, so that the long leg is closest to you.
- Rotate the long leg of the spring away from you (down) and hook the short leg on the Lock Bracket (30), as shown in Figure 1D.

Note: The two springs used in Dethatcher Sweepers are installed facing opposite directions, as shown in Fig. 1B, with the long "L" shaped leg of Lock Spring resting against one of the two slots in the top of the Lock Bracket.

- Assemble the 5/16" x 1-1/4" Carriage Bolt (57) through side of Tow Bars (20) and secure with a 5/16" Lock Washer (69), and 5/16" Hex Nuts (65).
- Assemble the Clevis Brackets (13) to the top and bottom of the Tow Bars with two 5/16" x 2" Carriage Bolts (58), 5/16" Lock Washers (69), and 5/16" Hex Nuts (65).

Note: If your unit is dethatcher equipped, proceed with Fig. 2. For Lawn Sweeper only, proceed to Fig. 4.

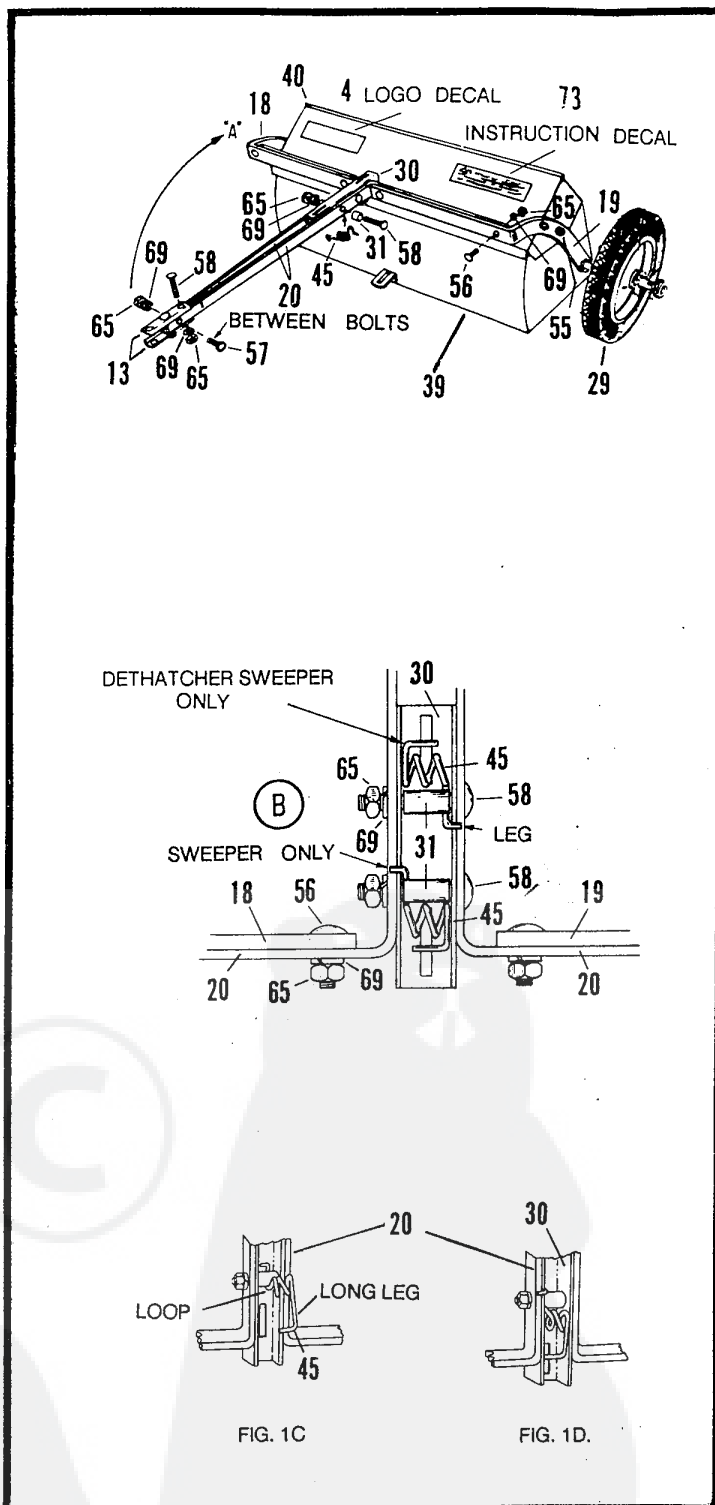


FIG. 1

Refer to Fig 2

- Lay the Tine Tray (35), with "flanges" facing UP and the slotted hole facing forward.
- Attach the Tines (10) (with the bent tips facing forward) to the Tine Tray (35) as shown, using 5/16" x 1" Carriage Bolts (56), special Flat Washers (9), 5/16" Lock Washers (69), and 5/16" Hex Nuts (65).
- Before tightening Tines, be sure loop between each tine's coils nests between two projections (dimples) on the Tine Tray.
- Slide Safety Wires (38) through the tine coils and bend each end over with a pair of pliers (forming a loop on each end). Be sure each end is bent completely over the straight portion of the safety wire as illustrated.

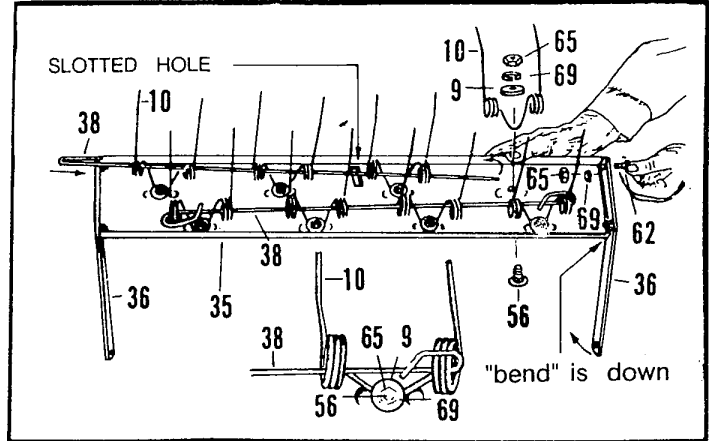



FIG. 2

 Failure to install safety wires can result in personal injury if a tine should disengage from the tine tray.

- Attach each Dethatcher Mounting Bar (36) to the Tine Tray (35) as shown, using two 5/16" x 3/4" Truss Head Screws (62), 5/16" Lock Washers (69), and 5/16" Hex Nuts (65). Be sure the "bend" in each Mounting Bar is down.
- Tighten all fasteners in this assembly.

Refer to Fig. 3.

- Remove the existing bolt (62) and nut (65) from each side of Frame Bar and Deflector Shield (40) as shown.
- Attach the Dethatcher to the Sweeper as shown, using the 5/16" Drilled Pins (42), 5/16" Flat Washers (70), and Large Hairpin Cotter (7) furnished.

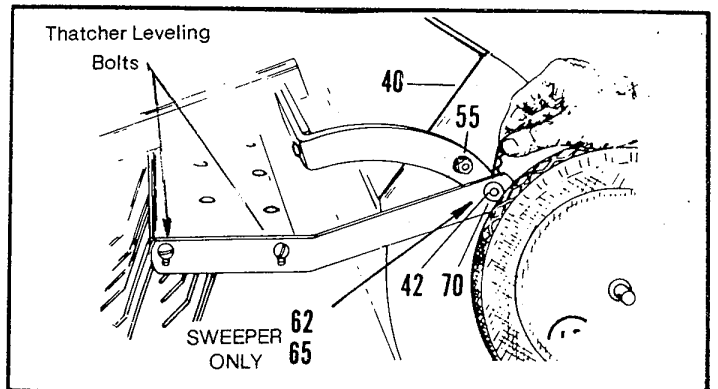


FIG. 3

LOCK BAR SPRINGS Refer to Fig. 4

- While holding spring in place, push the (long) Sweeper Adjusting Handle (32) through the REAR slot in the Transport Lock Bracket (30) with the Notches Toward The Rear - the spring's "L" shaped leg will press against the smooth back edge of the Handle. Note: Make sure LONG leg of Spring stays at TOP of Transport Lock Bracket - AGAINST Lock Bar (See Insert Fig. 4).
- Push the Handle down through the slotted tab ("A") located (in the center) at the bottom of Brush Housing.
- Secure with 1/8" x 2-1/2" Hairpin Cotter (7), using the hole at the bottom of Handle close to the "blunted" point.
- If your Sweeper is Dethatcher Equipped assemble the (short) Dethatcher Adjusting Handle (37), through slot in the front of the Transport Lock Bracket (30) in the same manner described above (Sweeper Adjusting Handle).
- Push the Handle through the slot located (in the center) at the front of the Tine Tray (35).
- Secure with a 5/32" x 1-1/4" Cotter Pin (72) through the bottom hole (bend legs over).
- Insert a 1/8" x 2-1/2" Hairpin Cotter (7) through the hole, above the top of the tray, as shown. This prevents the tray from bouncing up during dethatching.
- Push one Handle Grip (33) on Sweeper Handle (32), and one on the Dethatcher Handle (37), if your Sweeper is Dethatcher equipped.

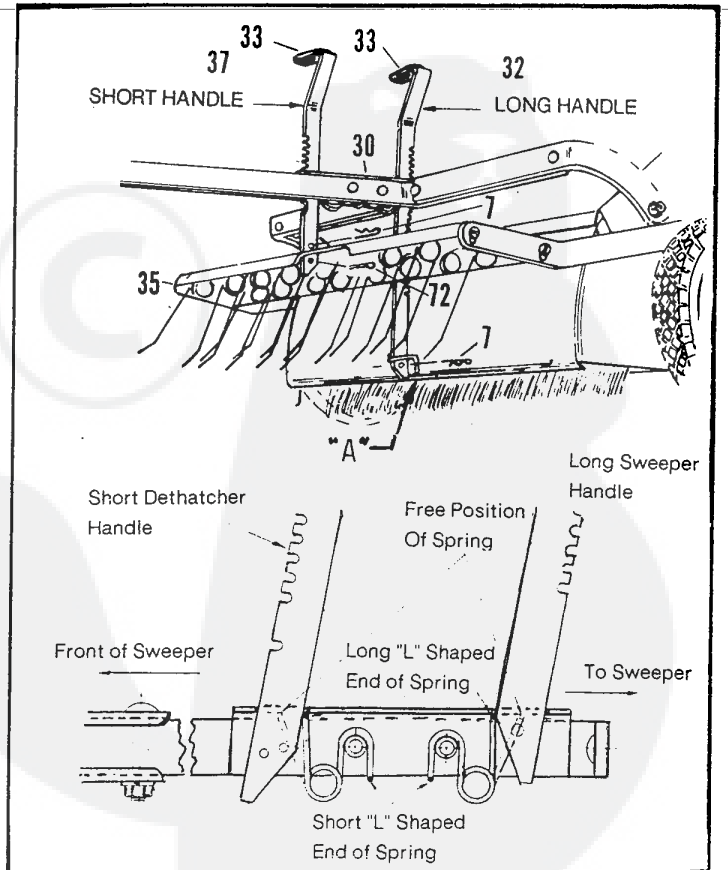


FIG. 4

HAMPER Refer to Fig. 5.

- Attach the Hamper Support Tube (46) to the UNDERSIDE of the Deflector Shield (40) "LIP", with two 3/4" self-tapping Hex Washer Screws (6), DO NOT tighten at this time.
- Insert a Vinyl Cap (74) over ends of Hamper Support Tube.
- Remove Hairpin Cotter (7) and one 1/2" Flat Washer (71) from Axle (27) on each side of Sweeper.
- Install one Hamper Mount Tube (24) on each axle (27).
- Reinstall one 1/2" Flat Washer (71) and Hairpin Cotter (7).
- Attach each Mount Tube (24) to the Hamper Support Tube (46) with one 1/4" x 1-3/4" Round Head Screw (59), one 1/4" Lock Washer (68), and one Hex Nut (64), in the center mounting hole of the Hamper Mounting tube.
- Tighten these hamper fasteners, and the two self tapping screws holding the Hamper Support Tube.
- Slide a Rear Hamper Tube (47) through the UPPER seam in the Hamper (49) and lay the other Rear Hamper Tube (47) on the Hamper Tray.
- Push the 3/8" Diameter Rod (48) through the formed plastic guide on the front edge of Hamper Tray and thread a 3/8" Hex Nut (66) on each end of rod to the end of threads.
- Slip one (upper) Side Tube (23) through each side seam of Hamper and then slide the tube into (upper) Rear Tube (47).
- Slide the (lower) Side Tubes (25) into (lower) Rear Tube (47).
- Align the holes in the flattened ends of the Upper and Lower Side Tubes (23) and (25).
- Insert each end of the Hamper Rod (48) through one pair of these holes. It is necessary to "Rotate" the side tubes outward to complete this procedure.
- Secure each side with one 3/8" Hex Lock Nut (3) - tighten both nuts at the same time.
- Open Hamper (stretching hamper material) and align the small holes in the Rear Hamper Tubes (47) with those in the (telescoping) upper and lower Side Tubes (23 & 25).
- Insert the 3/16" Diameter (spring) Support Rods (26) in the holes located in the BOTTOM assembly and flex (bow out) each Rod while inserting in the matching holes in the underside of Top Tube Assembly.
- Complete this assembly by tightening all the fasteners.

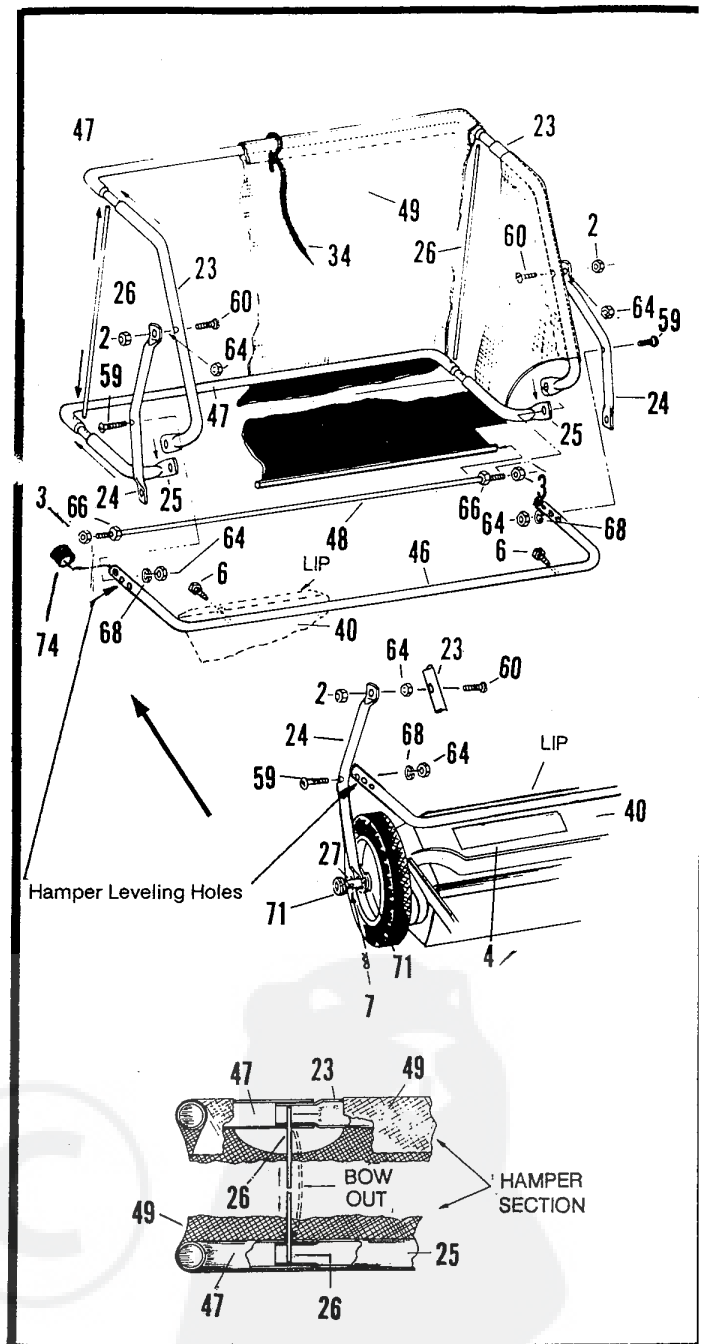


FIG. 5

- Insert a 1/4" x 1-1/2" Round Head Screw (60) (facing outward) through the hole in the middle of each Upper Side Tube (23) and thread a 1/4" Hex Nut (64) onto the screw - against the tube. Do not tighten as the Hamper must be free to "swing" on the screw.
- Hang the Hamper Assembly on the Hamper Mount Tube (24).
- Thread one 1/4" Hex (lock) Nut (2) on each 1/4" x 1-1/2" Round Head Screw (60) and tighten the Lock Nuts (2), against the Hamper Mount Tubes (24).

- Thread the Hamper Dump Rope (34) through grommet - in Hamper Material (49) directly under the Upper Rear Hamper Tube (47).
 - Tie the dump rope around the Hamper Tube (47).
 - Pull on the rope to test the pivoting action of the Hamper - it must pivot freely.
 - Check each fastener on the completed assembly as all bolts and screws should be tightened securely.
- Note: Tie loose end of rope to a convenient location on tractor or rider. Your implement is now ready for use.

ADJUSTMENTS

SWEEPER DEFLECTOR

Refer to Fig. 3

Note: Deflector adjustment may be necessary to control throw-back of material into hamper. Material may go over back of hamper or may not be thrown far enough into the hamper.

- Rotate the Deflector Shield (40) to the correct (throw-back) position by loosening the retaining Carriage Bolt (55) on each side of a Dethatcher-Sweeper, or the Carriage Bolt (55) and the Truss Head Screw (62) on each side of the Deflector Shield of a Sweeper.
- Grasp the formed "LIP" on the Deflector Shield and pull up or push down to regulate the thatch entering the Hamper.
- When the material is deposited toward the REAR of the Hamper and is not thrown over the top, retighten all bolts and screws while holding the Deflector Shield in the proper position.

SWEEPER BRUSH HEIGHT

Refer to Fig. 4

Note: Excessive wheel skidding is caused by having the brushes set too LOW. For maximum performance, operate Sweeper with brushes adjusted as high as possible, barely touching top of grass.

- Using the Brush Height Adjustment Handle, adjust the brushes up or down so they are approximately 2" off the ground.

HAMPER LEVELING

Refer to Fig. 5

Note: For Tractors with exceptionally high or low Drawbars, it may be necessary to level the Sweeper Hamper. This is accomplished by the use of the three adjusting holes in the Hamper Support Tube.

- With your Sweeper attached to the Tractor or Mower, observe the ground clearance at rear of Hamper. The Hamper should have between 2" and 4" of clearance.
- To INCREASE clearance, move the Hamper Support Tube (46) IN one hole.
- To DECREASE clearance, move the Hamper Support Tube (46) OUT one hole.
- Retighten all bolts securely.

DETHATCHER

Refer to Fig. 3

Note: For Dethatcher Equipped Sweepers

- With the Dethatcher-Sweeper attached to the Drawbar on your Lawn/Garden tractor or riding mower position the Dethatcher over a hard level surface.
- Adjust the Tine Tray (height) with the Dethatcher Adjusting Handle (37) until the Tines are suspended about 1/2" above the surface.
- Tine Tray should be level with Ground. Adjust by loosening the two bolts on each side of Tray. Level the tray and retighten the bolts.
- Refer to the Dethatcher Adjustment Decal (5) for further information.

OPERATION

Note: For optimum dethatching action, adjust the Dethatcher as described in adjustment instructions.

- To Sweep only, simply raise the Dethatcher to the transport position.
- Operate your Dethatcher-Sweeper at a speed which allows material to be deposited toward the REAR of the Hamper, this would be somewhat faster than a brisk walk (around 4 miles per hour).
- For best results, only use the Dethatcher-Sweeper or Sweeper when turf conditions are DRY.



WARNING

- When backing - carefully back straight to avoid jack-knifing, which could result in damage to equipment.

MAINTENANCE

Note: The key to years of trouble-free service is to keep the Dethatcher-Sweeper clean and dry.

- Never allow wet material to remain in the Hamper for extended periods.
- Occasionally check all moving parts for free movement and if necessary, lubricate with oil.
- Should rust develop, sandpaper lightly and then coat the bare metal with enamel.
- Periodically check all fasteners for tightness.
- Periodically lubricate brush reels with a drop of oil. Deposit the oil in both Lubrication Holes (LH). One is located in each brush holder half, near the brush retaining washer - located at center of brush assembly. Refer to the LH showing one hole location on the exposed Dethatcher-Sweeper illustration (pg.

ST-363 BH
DTS-363 BH

PARTS LIST

Ref.	Part No.	Description	Qty.	Ref.	Part No.	Description	Qty.
1	B-983	Hairpin Cotter, 3/32" x 1 3/16"	2	40	R-1066-10	Deflector Shield	1
2	B-1673P	Hex Lock Nut, 1/4"	2	41	R-1073	Hex (Slotted) Flange Head Screw, #14 x 1"	6
3	B-1675P	Hex Lock Nut, 3/8"	2	42	R-1079	Drilled Pin, 5/16" x 7/8"	2
4	B-4676	Logo Decal	1	43	R-1084	Hex Jam Nut, 1/2"	2
5	B-4139	Instructions Decal (DTS)	1	45	R-1195	Handle Lock Spring	2
6	B-3327	Hex Washer Head (Self Tapping) Screw	2	46	R-1286	Hamper Support Tube	1
7	D-146P	Hairpin Cotter, 1/8" x 2 1/2"	5	47	R-1287	Rear Tube (Top & Bottom)	2
8	F-383-A	Axle Bearing (Bronze), 1/2" I.D.	2	48	R-1288	Hamper Rod, 3/8" Dia. x 38 3/4	1
9	R-618	Special Washer, 5/16"	10	49	R-1289	Hamper	1
10	R-628	Dethatcher Tine	10	50	R-1308	Anti-Wrap Cup	2
11	R-882-A	Pinion Gear (Iron)	2	51	R-1452	Brush Section (36" Unit)	4
12	R-883	60 Tooth Drive Gear	2	52	R-1502	Hex (Slotted Head) Screw, #10-24 x 7/8"	2
13	R-892-10	Clevis	2	53	R-1509	Brush Holder (Half)	4
14	R-943	Gear Housing (R.H.)	1	54	R-1523	Hex (Slotted Head) Screw, #10-24 x 1/2"	6
15	R-944	Gear Housing (L.H.)	1	55	10M1012P	Carriage Bolt, 5/16" x 3/4"	2
16	R-950	Frame Base Bushing, 1/2" I.D.	2	56	10M1016P	Carriage Bolt, 5/16" x 1"	14
17	R-953	Hex (Lock) Jam Nut, 1/2"	2	57	10M1020P	Carriage Bolt, 5/16" x 1 1/4"	1
18	R-954-10	Pull Bar (R.H.)	1	58	10M1032P	Carriage Bolt, 5/16" x 2"	4
19	R-955-10	Pull Bar (L.H.)	1	59	20M0828P	Round Head Screw, 1/4" x 1 3/4"	2
20	R-956-10	Tow Bar	2	60	20M0824P	Round Head Screw, 1/4" x 1 1/2"	2
21	R-959-01	Brush Axle (Long)	1	62	20M1012P	Round Head Screw, 5/16" x 3/4"	6
22	R-960-01	Brush Axle (Short)	1	63	30M0600P	Hex Nut, #10-24	10
23	R-964	Side Tube (Upper)	2	64	30M0800P	Hex Nut, 1/4"	4
24	R-965	Hamper Mount Tube	2	65	30M1000P	Hex Nut, 5/16"	29
25	R-966	Side Tube (Lower)	2	66	30M1200P	Hex Nut, 3/8"	2
26	R-969	Hamper Support Rod, 3/16"	2	67	40M0600P	Lock Washer, #10	2
27	R-1006A	Axle Stub (Wheel)	2	68	40M0800P	Lock Washer, 1/4"	2
28	R-1014	Drive Pin (Pinion)	2	69	40M1000P	Lock Washer, 5/16"	29
29	R-1016	Wheel	2	70	45M1111P	Flat Washer, 5/16"	2
30	R-1021-10	Transport Lock Bracket	1	71	45M1717P	Flat Washer, 1/2"	11
31	R-1022	Spacer (Transport Lock Bracket)	2	72	50M0520P	Cotter Pin, 5/32" x 1 1/4"	1
32	R-1024-10	Adjusting Handle (Sweeper)	1	73	B-3263	Instructions Decal (ST)	1
33	R-1025	Handle Grip	2	74	F-425	Vinyl Cap	2
34	R-1039	Hamper Dump Rope	1	75	B-3861	Drawbar Pin, 1/2" x 2-1/4"	1
35	R-1049-10	Tine Tray	1				
36	R-1051-10	Dethatcher Mounting Bar	2				
37	R-1052-10	Adjusting Handle (Dethatcher)	1				
38	R-1053	Tine Safety Wire	2				
39	R-1063-10	Brush Housing	1				

TO ORDER PARTS:
Brinly-Hardy Co.
P.O. Box 1116
Louisville, Ky. 40201
(502) 585-3351

