

Herd

SURE-FEED BROADCASTER

Herd

**MODEL 3-PT. M96
(3-BU. CAPACITY)**

**Instructions for
ASSEMBLY, MOUNTING,
SEEDING, OPERATING and
MAINTENANCE**

**REPAIR
PARTS LIST**



HERD SEEDER COMPANY, INC.

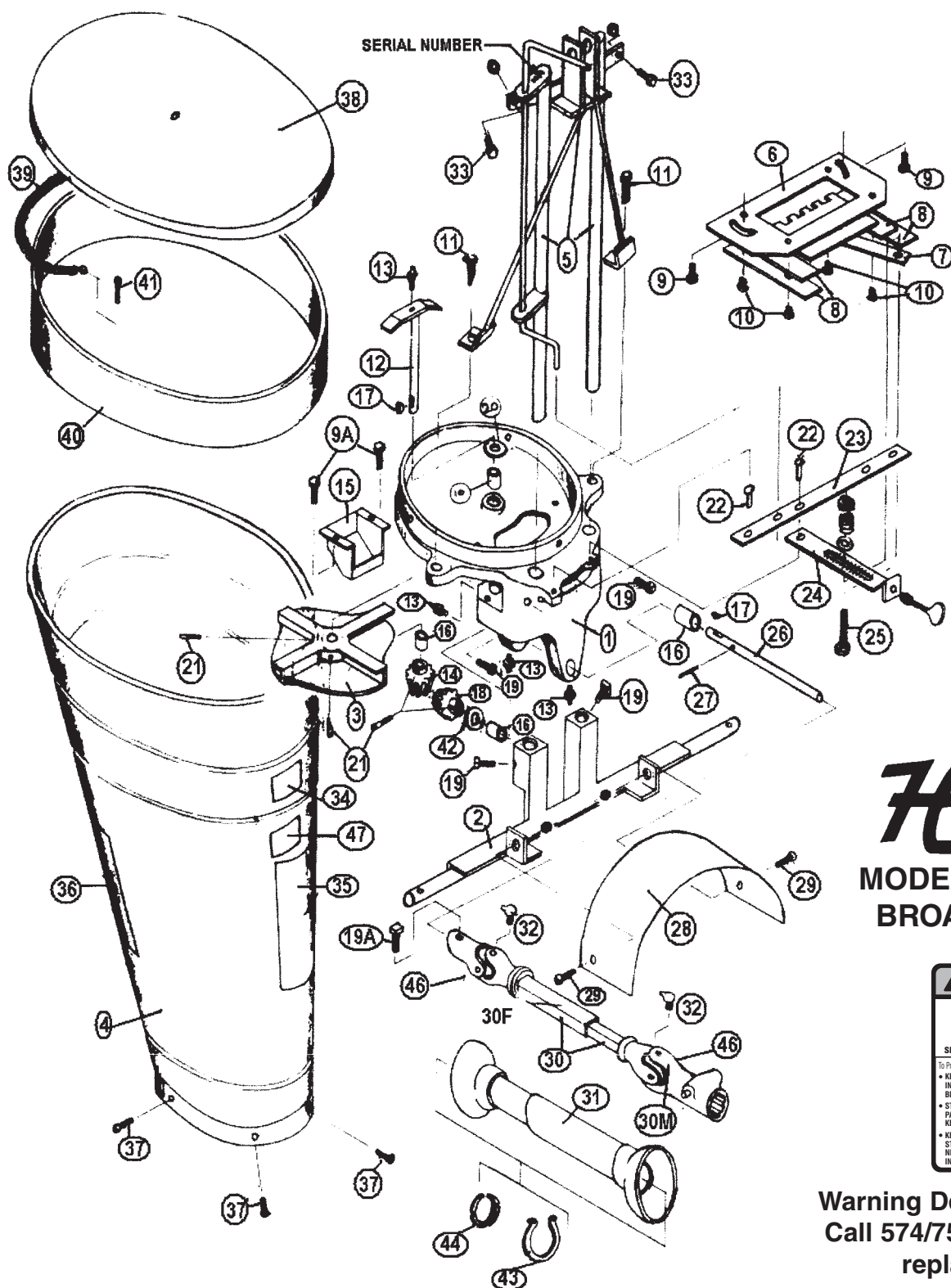
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SERIAL NUMBER LOCATED ON UPPER CONTROL HANDLE PLATE.



Herd

MODEL 3-PT. M-96 BROADCASTER



Warning Decal - If missing
Call 574/753-6311 for free
replacement.

PARTS AND ACCESSORIES FOR MODEL 3-PT M-96 SHOWN IN DRAWING

When ordering parts, order by both part name and number. Also, be sure to give model number of your Broadcaster (3-PT. M-96), and serial number. The serial number will be found on upper control handle plate.



"CAUTION" KEEP all guards and shields in place at all times. Disengage power take-off and shut off tractor engine before making any adjustments or repairs to seeder. KEEP hands, fingers and loose clothing well away from any and all moving parts at all times.

PHOTO #	PART #	NAME AND DESCRIPTION	# NEEDED
1.	984	Grey-Iron Base, w/Bearings, 12" Diameter.....	1
2.	894	Bottom part of 3 Pt. Frame - Crossbar	1
3.	174	Fan - 5/8" Bore, 4 Bladed, Lap-over	1
4.	981A	Hopper - 12" Diameter Base complete w/screws and decals	1
5.	873	Back Brace Assembly.....	1
6.	985	Adjustable Seed Opening Plate, on which Seed Gate operates.....	1
7.	881	Seed Gate w/connecting Linkage.....	1
8.	925	Seed Gate Guides - 2 used per side.....	2 pr.
9.	403	Hex Head Capscrew w/Flat Washer 1/4" x 1/2"	2
9A.	403B	1/4" x 1/2" Hex Head Capscrew w/Lockwasher.....	2
10.	404	Round Head Machine Screw - 3/16" x 3/16"	4
11.	871	Hex Head Capscrew - 5/16" x 1-1/4" w/Lock Washer and Nut.....	2
12.	901	Fan Shaft (with Keyway) w/Agitator.....	1
13.	915	Grease Fittings - 1/4" straight	4
14.	902-14	Gear with 14-Teeth, 5/8" Bore	1
15.	879	Gear Guard.....	1
16.	954	Bushing for Casting - 5/8" x 1", before S/N #200500 - Grey color	4
16A.	954A	Powdered Metal Bushing, after S/N #200500 - Bronze color.....	4
17.	903	Half-Moon Key - 5/8" x 3/16", used in gears	2
18.	902-18	Gear with 18 Teeth, 5/8" Bore.....	1
19.	401	Square Head Setscrew - 3/8" x 3/4"	4
19A.	401G	3/8" x 3/8" Socket Setscrew for P.T.O.	1
20.	406	Leather Washer used on Fan Shaft Agitator	1
21.	886	Socket Setscrew - 1/4" x 1/4" used in Gears.....	2
	387	Square Head Setscrew 1/4" - 20 x 3/4" used in fan	2
22.	402	Rivet for Handle - 3/16" x 7/8"	1
	367	Rivet for Seed Gauge - 3/16" x 3/4"	1
23.	955	Lower Control Handle.....	1
24.	882	Seed Gauge - complete	1
	882B	1/4" x 2-1/2" Thumb Screw with Nut (only)	1
25.	930	Tension Spring w/Bolt, used on Control Arm	1
26.	897	Driven Shaft - 5/8" x 6-1/2" (w/Keyway).....	1
27.	998	Spring Pin - 1/8" x 1"	1
28.	898	Gal. Shield for Tumbling Shaft	1
29.	403A	Hex Head Capscrew - 1/4" x 1/2", w/Nut.....	2
30.	414P	Complete Power Take-Off Shaft w/Q.T. Yoke, 1-3/8" Spline, 22-1/2" overall length...	1
30M.	414MP	Tractor End only of Power Take-Off Shaft.....	1
30F.	414FP	Broadcaster End only of Power Take-Off Shaft	1
31.	415P	Complete Shield only, for Power Take-Off Shaft.....	1
	415FP	Shield only for Tractor End of Power Take-Off Shaft	1
	415MP	Shield only for Seeder End of Power Take-Off Shaft.....	1
32/33/34.		5/16" x 1" Machine Bolt w/Nut and Lockwasher	1
35.	989A	Seeding Chart Decal	1
36.	831	Herd Surefeed Decal	1
37.	408	Truss Head Machine Screw - 3/16" x 3/4" w/Nut.....	3
38.	796	Lid (*Optional equipment).....	1
39.	797	Lid Spring (*Optional equipment) w/Bolt and Nut	1
40.	982	Hopper Extension - 18" high, 2 Bu. Capacity (*Optional).....	1
41.	408A	#10 x 3/4" Phillips Truss Head Machine Screw w/Nut (*Optional).....	1
42.	994	Space Washers for 5/8" Shaft, used behind Gears and Spring Pin.....	VAR.
43.	38P	Bearing Retainer for Weasler P.T.O. Shield Only.....	1
	47	Bearing Retainer for G & G P.T.O. Shield Only	2
44.	46	Nylon Bearing for G & G P.T.O. Shield Only.....	1
	37P	Nylon Bearing for Weasler P.T.O. Shield Only	2
46.	843	Cross and Bearing Repair Kit (G & G P.T.O. Shaft Only)	2
47.	1091	Warning Spinning Blades Decal.....	1

(*OPTIONAL EQUIPMENT, NOT STANDARD WITH BROADCASTER.)

INSTRUCTIONS FOR REMOVAL AND REPLACEMENT OF 954 AND 954A BUSHINGS

1. Remove gears, driven shaft, fan and agitator. NOTE! See instruction for removing gears or driven shaft on page #4.
2. Remove grease fittings.
3. Press out old bushing.
4. The new bushing should be pressed into place by exerting even pressure to the whole bearing edge and pressing it into place.
5. After they are in place, they must be reamed out to a 5/8 I.D. or the shaft will not fit. A reamer is best, but a 3 or 4 flute drill bit will work if you are very cautious. Do not use a 2 flute drill, as it will chatter and tear up the new bearing.
6. Check to see if shaft will fit bushing.
7. Using a small 1/8" drill, drill bushing through grease fitting hole so grease will get between shaft and bearing. Replace grease fitting.
8. Replace shafts and grease. Every 1 hour of use, regrease the bushing for long life.

DESIGNS SUBJECT TO CHANGE WITHOUT NOTICE.

TO ASSEMBLE MODEL 3-PT. M-96:

1. Place Broadcaster wrong side up for ease in assembly.
2. To connect handle, remove small tension bolt (1/4"), washer and spring assembly that runs through opening linkage and gauge. Lubricate opening plate with oil so it works freely. Run thumb-screw out three-fourths of the way and move gauge away from handle against Broadcaster base. Rotate flat handle around so that front edge of handle is under corner of the gauge... and at the same time, make sure the seed opening linkage is above the handle. Move gauge under so that 1/4" bolt can now be replaced through linkage-handle and through slot on gauge. Place washer, spring, and then nut on bolt. Tighten until tension is on spring, so that control handle will not move when in use.
3. Recheck seed opening handle to see that opening works freely. If not, check for paint in operating grooves and oil.
4. Slide 5/8" end of power take-off shaft over 5/8" shaft extending through base of Broadcaster. Make sure power take-off shaft is tight against base with no end-play! Tighten setscrew securely. It is end-play that ruins gears!
5. Place 3-PT. cross-bar on Broadcaster with welded clips (to which the shield bolts) placed away from Broadcaster. Tighten securely with two 3/8" setscrews.
6. Fasten safety shield to welded clips on cross-bar, using two 1/4" x 1/2" hex-head capscrews and nuts furnished.

TO MOUNT MODEL 3-PT. M-96:

1. To mount on 3-point hitch of tractor: Fasten one side of the seeder to the lower 3-point hitch arm, then fasten the other side. Place the tractor end of the power take-off shaft into the seeder end of the power take-off shaft. "CAUTION!" - Now check to see that the power take-off shaft (part No. 414P) is not too long before raising the seeder up with the 3-point hitch. If it is too long you will need to cut equal amounts off of both ends of the power take-off shaft before attaching the upper center link arm to the seeder and raising the seeder up with the 3-point hitch. Herd Seeder Company will not be responsible for damage to the seeder due to the power take-off shaft bottoming out so make sure this does not happen.

OPERATING INSTRUCTIONS:

1. Broadcaster should be operated level, or tilted slightly forward toward tractor. Broadcaster may be run a few inches above or below tractor P.T.O., but not enough to bind universal joints.
2. Sway-bars or blocks should be used to keep unit from swaying from side to side.
3. To prevent the hopper from rusting when fertilizer is used, fill the space where hopper and base meet, with grease, remove any excess.
4. Be sure to run tractor full throttle – the P.T.O. never below 540 R.P.M.! Operate P.T.O. only when using Broadcaster.
5. Broadcaster should be greased hourly and more often if fertilizer or nitrates are being spread. (DO NOT GREASE PARTS!)
6. Keep in mind the rate your tractor travels in M.P.H. In using the Broadcasting chart, the seed opening must be opened wide for fast speeds and set narrower for slow speeds. (Settings given are for a speed of 4 M.P.H.)
7. Do not attempt to adjust, while machine is in use.
8. To center spread of material: The seed plate is fastened to bottom of casting by two bolts. This was designed because different seeds and fertilizers, or materials, all leave the fan differently, according to weight, size and quality, and the spread would not be evenly divided behind tractor. Normal setting of the adjustable plate used for center spread, is when the mark on casting is in line with rivet in seed opening plate.
 - (A) Right-hand and left-hand reference is determined by standing at the rear of the Broadcaster and facing the direction of tractor travel.
 - (B) If the seed or material spread should be strong to the right side, loosen pivot plate and move towards the right side.
 - (C) If material spread is too much to the left side, loosen pivot plate and move towards the left side.
 - (D) Do not move pivot plate more than 1/4" before checking, a small movement changes the pattern very much.
 - (E) Be sure and tighten bolts on seed plate.
9. You may lower the Broadcaster to fill hopper, then raise it to proper level to operate.
10. After operating Broadcaster a few minutes, check and tighten all set-screws.
11. This Model 3-PT. M-96 Broadcaster is not recommended for spreading granular insecticides and herbicides. Our electric models I-92 and I-44 were specially designed for this purpose.
12. Do not attempt to spread granular herbicides with this Model 3-PT. M-96 for the spread cannot be properly centered, due to the lightness of the material. Also, the agitator will grind up the material causing uneven feeding and dusting of material.

MAINTENANCE:

1. When this 3-PT. M-96 is being used for nitrates, fertilizer or any type of highly corrosive material, be sure to clean thoroughly when through by flushing out with water. Lubricate seed opening guides and plate, and also, all parts that may corrode, before storing. In doing this, your Broadcaster will give much better service when you are ready to use it next time, and also, it will prolong the life of the machine.
2. This Broadcaster was thoroughly tested and will do the job efficiently and properly if the instructions are followed. A little extra time spent in setting up this machine the first time, and in reading and following operating instructions thoroughly, will pay dividends over the years, for these Broadcasters were built for years of service.

INSTRUCTIONS FOR REMOVING GEARS OR DRIVEN SHAFT:

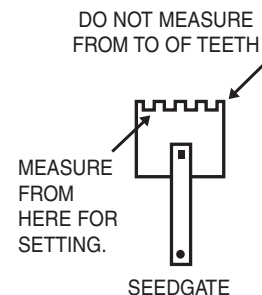
1. Loosen setscrew holding power take-off shaft to Broadcaster and remove power take-off shaft.
2. Remove 1/8" pin in shaft behind gear and bushing.
3. Loosen setscrew in gear. Drive shaft forward through face of gear.
4. Remove half-moon key and drive shaft back through gear. Do not lose space washers.
5. Loosen setscrew holding gear to fanshaft and remove gear... then remove half-moon key.
6. To reassemble, reverse above procedure.

BROADCASTING INSTRUCTIONS

FOR MODEL 3-PT. M-96

Figured at 4 M.P.H. (See information below chart for instructions for other speeds)

SEED OR MATERIAL	SIZE OPENING	PER ACRE	SPREAD WIDTH
ALFALFA.....	3/16"	8 Lbs.	18 Ft.
AMMONIUM NITRATE	3/8"	80 Lbs.	18 Ft.
AUSTRALIAN PEA	3/8"	1 Bu.	28 Ft.
BLUE GRASS.....	1/2"	1 Bu.	12 Ft.
BROME GRASS.....	1/2"	1 Bu.	12 Ft.
CLOVER	3/16"	8 Lbs.	18 Ft.
FERTILIZER, PELLET OR GRANULAR	5/8"	83 Lbs.	18 Ft.
FESCUE	1/2"	17 Lbs.	14 Ft.
FLAX AND MILLET	1/4"	10 Pts.	20 Ft.
LADINO CLOVER.....	1/32"	1 Lb.	18 Ft.
LESPEDeza	3/16"	8 Lbs.	18 Ft.
OATS	1"	2 Bu.	24 Ft.
ORCHARD GRASS.....	3/8"	1 Bu.	12 Ft.
RED TOP	3/16"	7 Pts.	12 Ft.
RYE	1/2"	1 Bu.	26 Ft.
RYE GRASS.....	1/2"	17 Lbs.	14 Ft.
SOYBEANS	3/4"	2 Bu.	36 Ft.
SUDAN GRASS.....	3/8"	18 Lbs.	18 Ft.
SWEET SUDAN GRASS.....	1/2"	20 Lbs.	18 Ft.
TIMOTHY.....	3/16"	6 Lbs.	16 Ft.
TURNIP SEED	1/4"	10 Lbs.	24 Ft.
VETCH	3/8"	1 Bu.	26 Ft.
WHEAT	1/2"	1 Bu.	26 Ft.



(1 Bushel of Blue Grass, Brome Grass or Orchard Grass weighs approximately 14 lbs.)

1 Lb. = 0.45 KG.

1 Mile = 1.6 KM

1 Foot = 30 CM

8 Lbs. = 3.6 KG.

4 Miles = 6.4 KM

12 Feet = 3.6 M

14 Lbs. = 6.3 KG.

6 Miles = 9.6 KM

18 Feet = 5.4 M

At 6 M.P.H. the opening should be opened half-again as much, or 50% more. At 8 M.P.H. the opening should be opened twice as much, or doubled. Or, as examples: to spread 8 lbs. of Alfalfa a width of 18 ft. the opening will be 3/16" at 4 M.P.H., or 9/32" at 6 M.P.H. or 3/8" at 8 M.P.H. To spread 1 bu. of Blue Grass 12 ft. wide, an opening of 1/2" is for 4 M.P.H., a 1" opening is for 8 M.P.H. and a 3/4" is for 6 M.P.H. Seed openings must be opened wider for fast speeds and set narrower for slow speeds. When opening is opened past 5/16" (or length of teeth), the amount feeding through the opening will increase 40%.

Width of spread varies according to quality and weight of seed or material, speed of tractor and wind conditions. After making one run through the field, check spread. Make sure that all setscrews on broadcaster are tight.

LIMITED WARRANTY

This Herd Broadcaster was thoroughly tested before it left the factory. We warrant each Broadcaster sold by us to be free from defects in material and workmanship when used according to our directions. **OUR OBLIGATION UNDER THIS WARRANTY IS LIMITED TO MAKING GOOD AT THE FACTORY ANY DEFECTIVE PART OR PARTS THEREOF WHICH SHALL WITHIN THREE MONTHS AFTER DELIVERY OF SUCH HERD BROADCASTER TO THE ORIGINAL PURCHASER, TO BE RETURNED TO US.** No person or company is authorized to make further warranty.

This warranty shall not apply to any Herd Broadcaster which shall have been repaired or altered outside of our factory in any way so as to affect its stability or reliability, nor which has been subject to misuse, negligence or accidents, or was caused by damage while in possession of the consumer or resulted from failure to the consumer to provide reasonable and necessary maintenance.

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