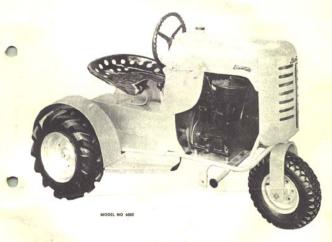
# BANTAM LAWN AND GARDEN RIDING TRACTORS

TRACTORS

## INSTRUCTION MANUAL AND PARTS LIST



MODEL NO. 4000-4 H.P. MODEL NO 6000-6.3 H.P. MODEL NO. 9000-9.6 H.P. Net Price \$1.50

FALLS PRODUCTS, INC.

BANTAM TRACTOR DIVISION

Genoa, Illinois

### OPERATING INSTRUCTIONS FOR ALL MODELS

Your Bantam Tractor and attachments are the proven product of careful engineering and practical application. This manual is intended to help you get the greatest utility and the most enjoyment from your Bantam. Read it, and keep it to refer to whenever you have a question about operation or maintenance.

Transmission and Differential The automotive type transmission and differential are specially designed and manufactured for the Bantam Tractors. Gears are hob cut from case hard-ened steel, and run immersed in oil-tight gear boxes. Lubricating plugs are located on the end of differential case and on the left of transmission box. These plugs are to be used for both filling and draining. Keep gear boxes filled to plug level with automobile differential grease; check regularly. Drain and refill differential once a year.

Gear shift lever is located just forward of the seat with positions for the three gears marked. There are twoforward gears and reverse. Turn down the hand throttle when shifting gears, and double clutch when necessary. (If gears do not immediately mesh, quickly throw clutch in and out, then shift gears again.)



Bestom Transmission and Differential

A gear shift adjustment is provided to insure positive gear shifting and locking. This adjustment mechanism includes an Allen set-screw, spring and bullet plunger which engages in the position notches of the shifting arm. The adjusting screw is located in the forward end of the transmission case, near the top on the left side. When spring becomes set and loosens, the gears may slip out of engagement under a heavy load or as the result of severe vibration. If this occurs, give the set-screw one or two small turns to tighten the spring pressure.

The transmission and differential of your Bantam Tractor are guaranteed for one year, and with proper care, will give you many years of trouble free performance. A Briggs and Stratton Engine instruction manual was delivered with your Bantam Tractor. Read carefully these operating and maintenance instructions so that you will know how to get the greatest efficiency from your Bantam's power plant. Engine warranty will not apply if manufacturer's instructions are not followed.

This is a four-cycle engine which has an independent crankcase for oil the same as an automobile—do not add oil to the gaseline. Fill the crankcase with SAE 20 oil and check regularly. Fill the fuel tank with a good grade of regular yasoline.

When adding or changing oil in the air cleaner, the filter assembly must be dismounted from the engine due to lack of working space under the tractor hood. Unscrew cover wing-nut from the air cleaner stud. Remove the boil which attaches the air cleaner pipe straptothelower part of carburetor body. The air cleaner stud is threaded into this strap, so both must be removed together.

Rear Axle Bearings require no lubrication. On the 3 and 5 h.p. tractors these bearings are made of Oilite self oiling bronze. On the 8h.p. tractor sealed bearings are used.

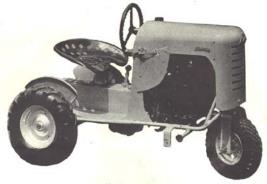
Steering Gears should be oiled occassionally through the oil hole at the top of grill casting where marked.

Wheels and Tires. Keep tires inflated to 28 lb. pressure. Give special attention to front tire when tractor is equipped with a front mount attachment. Grease the front wheel regularly through alemite filling in wheel hub.

Propeller Shaft. Grease regularly the alemite fittings in the universal joints of the propeller shaft assembly. There is one universal joint in this assembly of the 3 and 5 h.p. tráctors, and two in the 8 h.p. tractor.

#### 3 H.P. and 5 H.P. TRACTORS

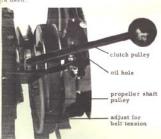
Clutch. The 3 and 5 h.p. tractors are equipped with the "Ball-Lok" V-belt clutch with hand lever control, mounted on the engine crankshaft. It is a heavy duty clutch with no friction parts to adjust or replace--and is safe against false starts. This clutch can be "slipped" when starting heavy loads, but for long belt life do not ride clutch. Pull back on shifting lever to engage clutch; push forward to disengage. When engag-



#### MODEL NO. 4000-4 H.P.

ing clutch apply a steady pressure until you feel the clutch lock into place. Due to the locking feature you have complete control and feel of your starting load at all times.

Before starting the engine, oil the clutch shifting collar, Disengage clutch and turn over the the starter crank pulley by hand until the oil hole is exposed in the collar immediately to the rear of the clutch belt pulley. Squirt some SAE 20 oil in the oil hole and move the clutch handle back and forth to work in the oil. Oil the shifting collar each time before the tractor is used.

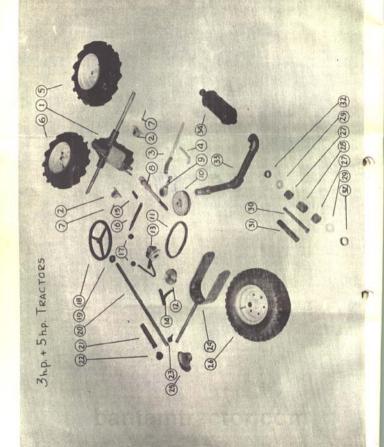


This clutch needs no adjustment, Efficient power transmission is obtained by correct belt tension and position of drive pulley. Beltisadjusted correctly when set for a total play of 1/4 to 3/8 in, when tested with the fingers. Too loose a belt will cause slippage, resulting in power loss and excessive belt wear. A loose belt will also cause the clutch to vibrate out of engagement. Too tight a belt will make shifting difficult, and may keep clutch from engaging properly. Belt tension is adjusted by running the jam nuts up or down on the stud of the propeller shaft bearing hanger when the clutch is engaged. The correct position of the drive pulley is directly below the clutch pulley; that is, the center of both pulleys should be invertical alignment.

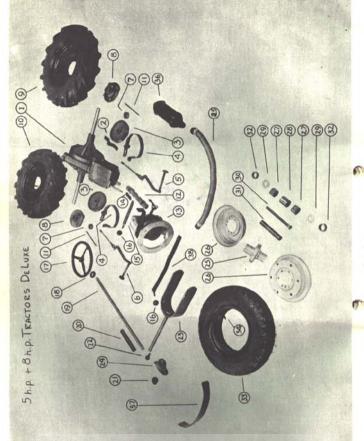
For a power test drive tractor up to a wall, place front wheel against the wall, shift into low and engage clutch. When all adjustments are correct the wheels will turn over, grinding into the earth without the clutch slipping or disengaging. If surface is paved, usehigh gear for this test so as not to grind off too much rubber from the tires.

Brakes. Upon disengaging clutch in either forward or reverse gears, an immediate braking action is developed which makes use of the manual brakes generally unnecessary. The 3 and 5 h.p. tractors are equipped with a friction type emergency brake. The foot lever control is lo-

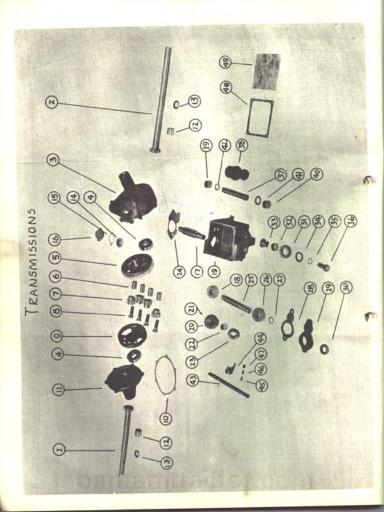
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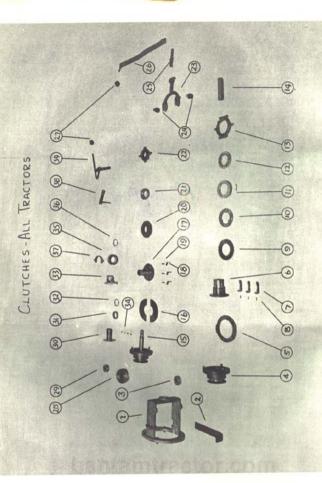
	3 H.P. and 5 H.P. TRACTORS  LIST NO. 1	5 H. P. Std. Tractor Part No.	3 H. P. Std. Tractor Part No.
1.	4 T 4 DV		(Marketon)
1.	Assy Transm. & Diff.	5 300	5 300
-	(See Parts List No. 3)	H 12020	
2.	Rear Axle Bearing (2 reqd.)	5870	5870
	Brake Lever	5110	5110
4.	Mtg. Brkt Brake Lever	5004	5004
5.	AssyRear Wheel & Tire-LH	5030	3030
6.	AssyRear Wheel & Tire-RH	5040	3040
	Rear Wheel (not pictured)	5050	3050
	Rear Tire (not pictured)	5031	3031
4	Rear Tube (not pictured)	5032	3032
7.	Rear Axle Key	5033	5033
8.	Propellor Shaft	5580	5580
9.	Propellor Shaft Brg.	5640	5640
10.	Pulley-Propellor Shaft	5573	5573
11.	V Belt-Engine to Transm.	5051	5051
12.	Pulley-Accessories Drive	5061	3061
13.	Assy-Clutch, Shift & Brkts. (See Parts List No. 4)	5730	3730
14.	Mtg. Brkt Clutch Shift Lever	5710	5710
15.	Transm. Shifting Linkage	5652	5652
16.	Transm. Shift Lever	5650	5650
17.	Shift Knob	5025	5025
18.	Steering Wheel	5035	
19.	Steering Wheel Fiber Washer	5504	5035
20.	Steering Shaft	5503	5504
21.	Steering Shaft Spring	5506	5503
22.	Steering Gear Pinion	5502	5506
23.	Steering Gear Pinion Steering Shaft Frt. Brg.		5502
24.	Wheel Fork	5520	5520
25.	Steering Gear Segment	5510	5510
26.	Assy Front Wheel & Tire	5501	5501
20,		5010	5010
	Front Wheel (not pictured)	5020	5020
	Front Tire (not pictured)	5011	5011
27.	Front Tube (not pictured)	5012	5012
	Front Wheel Bearings (2 reqd.)	5015	5015
28.	Front Wheel Brg. Spacer	5001	5001
29.	Front Wheel Brg. Retainer (2 reqd.)	5016	5016
30.	Front Wheel Axle	5007	5007
31.	Front Wheel Axle Shaft	5002	5002
32.	Front Wheel Fork Spacer (2 reqd.)	5003	5003
33.	Exhaust Tube	5070	3070
34.	Muffler	5810	3810



5 H.P. and 8 H.P. DELUXE TRACTORS	8 H. P. and 5 H. Deluxe Tractor
LIST NO. 2	Part No.
Assy Transm. & Diff.	8300
	0300
Transmission Mtg. Strap (2 regd.)	8658
Brake Drum	8905
Brake Band	8910
Brake Pedal & Adj. Rod - LH	8920
Brake Pedal & Adj. Rod - RH	8930
Rear Axle Spacer	8906
Rear Wheel Hub (w/Mtg. Bolts)	8970
	8030
	8040
	8050
	8031
	8032
	8907
	8060
	8730
	0170
	8657
	8150
	5025
	5035
	5504
	8503
	5506
	5502
	5520
	8510
	5501
	8010
	8010
	8015 5015
	5001
	5016
	8004
	8002
	5003
	8011
	8012
	8070
	8080
Front Bumper	8065
	LIST NO. 2  AssyTransm. & Diff. (See Parts List No. 3) Transmission Mtg. Strap (2 reqd.) Brake Drum Brake Band Brake Pedal & Adj. Rod - LH Brake Pedal & Adj. Rod - RH

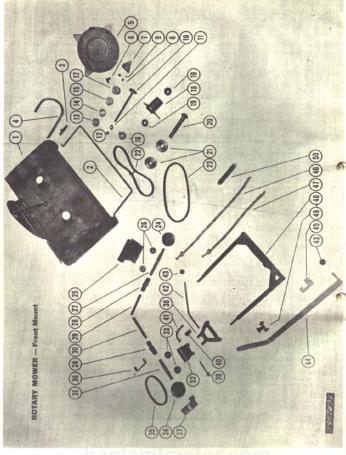


TRANSMISSIONS		8 H. P. & 5 H. P. Deluxe	5 H. P. & 3 H. P. Standard	
1.13	ST NO. 3	Tractors	Tractors	
		Part No.	Part No.	
1.	Rear Axle - RH	8350	5350	
	Rear Axle - LH	8350	5 3 3 0	
3.	Differential Housing	8355	5355	
	Rear Axle Main Bearing	8357	5357	
	Differential Worm Drive Gear	8 3 4 1	5 34 1	
	Spider Gear Bushing (4 to set)	8346	5 34 6	
	Spider Gear (4 to set)	8345	5 3 4 5	
	Spider Gear Bolt (4 to set)	8353	5353	
	Differential Drive Gear Cover	8356	5356	
	Gasket-Differential Hsg.	8372	5 37 2	
	Side Cover-Differential Hsg.	8371	5371	
	Rear Axle Sleeve Bearing	8360	5354	
	Oil Seal-Rear Axle	8361	5361	
4			5366	
	Worm Shaft Bearing-Rear	8366		
	Gasket-Worm Shaft Brg. Cap	8369	5 3 6 9	
	Worm Shaft Bear Cap	8368	5 3 6 8	
	Worm Drive Shaft	8365	5 36 5	
	Worm Shaft Bearing-Front	8232	8232	
	Transmission Housing	8381	5 38 1	
	Main Drive Gear	8305	5 30 5	
	Main Drive Gear Key	8309	5 30 9	
2.	Main Drive Gear Bearing	8306	8 30 6	
3.	Sliding Gear	8315	5315	
4.	Gasket-Transm. to Diff.	8301	5 30 1	
5.	Splined Drive Shaft	8311	5311	
	Spline Shaft Bearing-Front	8232	8232	
7.	Bearing Retainer Ring	8312	8312	
8.	Gasket-Transm. frt. Brg. Cap	8319	5319	
	Transmission Frt. Brg. Cap	8318	5318	
	Oil Seal-Splined Shaft - Frt.	8316	8316	
	Reverse Idler Gear	8387	5 387	
	Reverse Idler Gear Bearing	8388	8 3 8 8	
	Reverse Idler Gear Stud		5 38 6	
	Spacer-Reverse Idler (2 reqd.)	8389	5389	
	Gasket-Reverse Idler	8384	5384	
	Reverse Idler Gear Shaft	8386	5385	
	Cluster Gear Shaft	8391	5191	
	Cluster Gear Shart	8391	5391	
			8382	
	Cluster Gear Bearing-Rear	8382	8382	
	Gluster Gear Bearing-Front	8366		
	Spacer-Cluster Gear-Front	8393	5393	
	Spacer-Cluster Gear - Rear	8394	5394	
	Shifter Shaft	8321	5 32 1	
	Shifter Yoke	8322	5 3 2 2	
	Plunger Pin	8323	8 3 2 3	
	Plunger Pin Spring	8 3 2 4	8 3 2 4	
	Retaining Screw-Plunger Pin	8325	8 3 2 5	
18.	Gasket-Transm. Cover	8328	5 328	
19.	Transm. Hsg. Cover	8327	5327	
Std.	Hardware Used: (not pictured)			
Dra	in Plug	3/4" Pipe Plug	1/4" Pipe Plug	
	, Side Cover Bolts (6 reqd.)	1/4"-20x3/4" HH Bolt		
	rm Brg. Cap Bolts(2 reqd.)	1/4"-20x3/4" HH Bolt		
	Filling Fittings	3/4" Pipe Fittings		
	nsm. to Diff. Bolts(4 regd.)	5/16"-18x1" HH Bolt	5/16"-18x1" HH Bolt	
	nsm. Brg. Cap Bolts(2,reqd)	1/4"-20x3/4" HH Bolt		
	nsm. Cover Bolts Pf recd.		#1/4/F920#364ff/5HF1/Bolt	



	LUTCHES	8 H.P. & 5 H.P. Deluxe	5 H, P, & 3 H, 1 Standard
L	IST NO. 4	Part No.	Tractors Part No.
	Assembly, Clutch (3HP)		3740
	Assembly, Clutch (5HP)		5740
	Assy., Clutch (Items 4 to 14)	8240	
	Assy., Clutch (Items 15 to 22)	8270	
1.	Clutch Housing	8231	
	Mtg. BrktShift Lever	8055	
	Clutch Hsg. Rear Bearing	8232	
	(Items 4 to 14, inc. will service clutches on deluxe tractors bearing		
	serial numbers to 2355259, inclusive)		
4.	Clutch Driven Pulley & Bearing	8140	
	Clutch Driven Pulley Bearing *	5642	
5.	Clutch Driven Ring	8241	
	Clutch Body	8242	
	Clutch Finger (6 regd.)	8243	
	Return Spring () regd.)	8244	
	Glutch Drive Ring	8245	
	Clutch Drive Plate	8246	**
	Clutch Adjusting Ring	8247	
	Clutch Shifter Ring Body	8248	
	Clutch Shifter Ring	8249	
	Clutch Driven Shaft	8052	
	(Items 15 to 22 inc. will service clutches on deluxe tractors bearing		
	serial numbers 2355260 and higher)		
15.	Clutch Driven Pulley & Shaft	8280	1000
16.	Liner Member (2 regd.)	8271	
17.	Clutch Body	8272	
18.	Clutch Finger (3 reqd.)	8273	
19.	Return Spring (3 reqd.)	8274	
20.	Clutch Plate	8275	
21.	Clutch Adjusting Ring	8276	***
	Clutch Shifter Ring	8277	
	Shifting Yoke	8054	**
	Yoke Retainer Sleeve (2 reqd.)	8053	
25.	Yoke Linkage	8058	
	Shift Arm	8720	
27.	Shift Knob	5025	
28.	Pulley-Accessories Drive - 5 H.P.		5061
29.	Pulley-Accessories Drive - 3 H.P. (Items 30 to 39, inc. will service	***	3061
	clutches on 5 H. P. and 3 H. P. standard tractors.		
30.			5741
	Clutch Body & Pulley MemRr. (3HP)*		3741
31.	Clutch Body Bronze Collar		5742
	Retainer-Clutch Body Collar		5743
	Clutch Body & Pulley MemFrt.		5744
	Clutch Locking Ball (4 regd.)		5745
	Clutch Shifting Sleeve		5746
	Retainer-Clutch Shifting Sleeve		5747
37			5748
38.			5710
39.			5720
	V Belt-Clutch to Transm. *		5051
	The second secon		2021

<sup>\*</sup> This Item is not pictured.



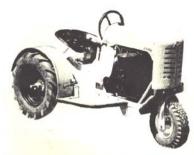
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RO	TARY MOWER - Front Mount	34" Part #20000	40" Part #25000
1.	Assy. Deck	20500	25500
2.		20303	25393
3.		20390	25575
4.		20410	
	Runner - R.H.	20420	
5.		20490	25490
6.	Vertical Cutter (4 reqd.)	20495	25470
7.		20489	
8.		20488	
9.		20487	
10.		20380	
11.		20496	
12.		20498	
13.		20493	
14.		20491	
	Cutter Height Adj. Spacer LH 7/16"	20497	
	Gutter Height Adj. Spacer RH 1/2"	20492	
17	Cutter Height Adj. Spacer 1"	20494	
	Assy. Cutter Shaft & Brg. Hsg. LH	20440	
W.	Assy. Cutter Shaft & Brg. Hsg. RH	20450	
18	Cutter Shaft Brg. Hsg. (2 reqd.)	20451	
	Cutter Shaft Brg. Hsg. (4 reqd.)	20452	
20	Cutter Drive Shaft (2 reqd.)	20430	
21	Cutter Drive Pulley (2 LH & 1 RH regd.)	20453	
22.	V Belt - Cutter Drive Pulleys	20472	
23.		20471	
	Assy. Power Take-Off	20470	25470
24.	PTO Drive Pulley	20473	23470
25.		20480	
	PTO Shaft Bearing	8232	
27.		20474	
28.	Universal Joint	5590	
29.	PTO Drive Shaft Extension - Male	20460	25460
	Assy. Belt Tightener Clutch & Mtg.	20800	25800
30.		20890	25890
	Clutch Drive Shaft	20885	23070
	Belt Tightener Clutch Shft. Brg. Hsg.	20880	
	Clutch Shaft Brg.	8232	
	Clutch Drive Pulley	20870	
35.		20104	25104
	Belt Guide	20101	25101
37.	Clutch Drive Belt Guard	20860	23101
38.		20801	25810
39.		20850	
40.		20803	
41.	Cam Action Bolt	20802	
	Clutch Shifting Rod	20804	
	Shift Knob	5025	
44.	Mower Lifting Handle	20120	
45.	Lifting Handle Catch	20103	
46.		20130	
47.	Support Chain	20140	
48.	Pushbar	20900	25900
		20110	
49.	Lifting Handle Fulcrum	20110	

<sup>\*</sup> This item not pictured

ROT	ARY MOWER — Underneath Mount	#22000
1.	Assy. Deck	22400
2.	Rear Sheild	22310
3.	Slideway - Cutter Hsg. (2 reqd.)	22395
4.	Assv Cutter Hsg. & Slide	22390
5.	Cutter Hsg. Bearing (2 reqd.)	20452
6.	Cutter Shaft	22320
7.	Cutter Shaft Drive Pulley	22315
8.	Assy Belt Tightener Clutch Adj. Bolt	22340
9.	Assy Idler Pulley, Brgs. & Shaft	22380
10.	Idler Pulley	22381
11.	Idler Shaft Bearing	8232
12.	Idler Shaft Sleeve	22382
13.	ldler Shaft	22383
14.	Eccentric - Belt Tightener Clutch	22371
15.	Shaft - Belt Tightener Clutch	22355
16.	Shaft Adj. Collar (2 reqd.)	22356
17.	Clutch Shift Hub	22361
18.	Clutch Shift Rod	22362
19.	Shift Knob	5025
20.	Drive Belt	22306
21.	Cutter Bar	22301
22.	Drawbar	22330
23.	Cutter Height Adj. Spacer (2 reqd.)	20492
24.	Retainer	20496
25.	Drawbar Nut (2 regd.)	20498
26.	Cutter Blade (2 reqd.)	22302
27.	Cutter Bolt (2 regd.)	20488
28.	Cutter Bolt Nut (2 regd.)	20487
29.	Engine Driven Pulley (5 HP)	22305
.0	Engine Driven Pulley (3 HP)	23305
30.	Tractor Rear Mtg. Brkt.	22304

This item not pictured



MODEL NO. 9000-9.6 H.P.

Clutch. The 8 h.p. Bantam Tractor is equipped with the Edgemont disc type clutch which makes a direct hook-up between the engine and the gear transmission. It is hand operated, engaging and disengaging with light pressure and picking up the load without grab. It locks itself in the engaged position—and is safe—it will not engage or disengage as speed is increased. This clutch is built to take punishment, but do not ride it during operation. Pash the shifting lever all the way forward to engage clutch; pull all the way back to disengage.

This clutch has a fine adjustment which is quick and easy to make:

 Engage clutch, turn over engine by hand until set screw in adjusting collar is accessible. Disengage clutch in order to free adjusting collar.

- Z. Loosen the set-screw with a 5/32 in. Allen wrench. Turn collar clockwise to tighten, counter clockwise to loosen. Retighten setscrew. Turn over engine by hand and engage clutch. If clutch will not go all the way forward, adjustment is too tight.
- For a final test apply the "wall" test as described in the section on the 3 and 5 h.p. tractor clutch.

Individual Rear Wheel Brakes are standard equipment on the 8 h, p. tractor. The brake bands are most easily adjusted by blocking up the tractor and removing the rear wheels.

#### WARRANTY

Bantam Tractors and Attachments are warranted by Bantam Tractor for 90 days from the date of the original purchase. This warranty provides for the replacement at our factory or authorized service station of all parts manufactured by us that prove unsatisfactory because of defective materials or vorkmanning.

The engine, clutch, tires and other parts not of our manufacture, are subject to the varranty of their respective manufacturers and are not included here. Bantam Tractor agrees to replace or repair the parts covered by this warranty when shipped to the Bantam factory or service station, freight prepaid.