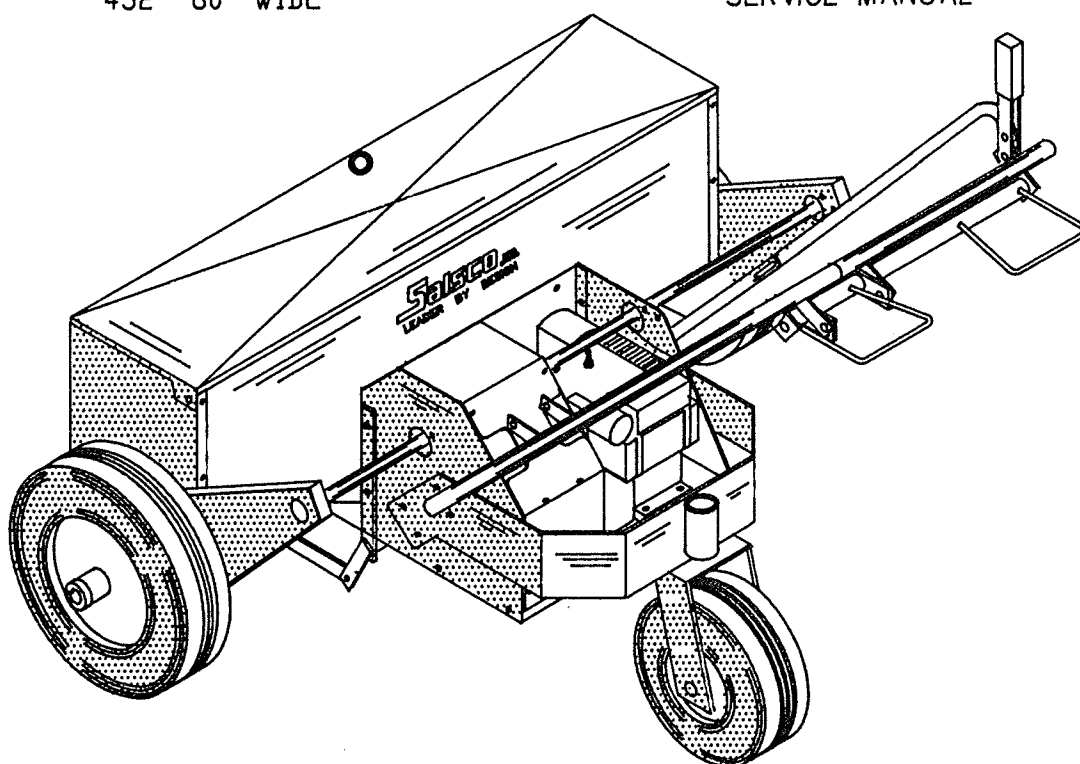


Salsco, INC.

LEADER BY DESIGN

MODEL 450	36" WIDE	DROP SPREADER	OWNER'S MANUAL
451	48" WIDE		PARTS MANUAL
452	60" WIDE		SERVICE MANUAL



SALSCO, INC.
TURF EQUIPMENT DIVISION
105 SCHOOL HOUSE ROAD
CHESHIRE, CONN. 06410 USA

* NOTE: PLEASE READ "CAUTIONS" IN THIS MANUAL

STATEMENT OF FACT

YOU HAVE JUST PURCHASED THE HIGHEST QUALITY, MOST MANEUVERABLE SELF-PROPELLED DROP SPREADER ON THE MARKET TODAY. THIS UNIT HAS THE ABILITY TO MEET EXACT STANDARDS AND PERFORM FOR YEARS WITH MINIMUM DOWN TIME. HOWEVER, IT CANNOT READ NOR WILL IT UNDERSTAND THIS MANUAL NO MATTER HOW LONG YOU LEAVE IT ON TOP OF THE MACHINE. IT IS YOUR RESPONSIBILITY TO READ AND UNDERSTAND IT. IT IS ALSO YOUR RESPONSIBILITY TO BE CERTAIN THIS INFORMATION IS PASSED ALONG TO ANYONE WHO IS EXPECTED TO OPERATE THIS EQUIPMENT. SHOULD YOU CHOOSE NOT TO READ AND UNDERSTAND AND PASS ALONG THE INFORMATION PROVIDED YOU, PLEASE EXPECT EQUIPMENT FAILURE AND POSSIBLE INJURIES TO PERSONS AROUND THIS EQUIPMENT.

FOR THE SAFETY OF THE OPERATOR IT IS IMPERATIVE THAT THIS MANUAL IS CAREFULLY READ AND UNDERSTOOD.

HAVING READ THIS MANUAL, IT IS YOUR RESPONSIBILITY TO BE SURE THAT ALL NEW OPERATORS READ AND UNDERSTAND THIS MANUAL ESPECIALLY THE CAUTIONS ON PAGE FIVE.

AS A MANUFACTURER OF EQUIPMENT WE HAVE A RESPONSIBILITY TO DESIGN A SAFE PIECE OF EQUIPMENT. HOWEVER, ONLY YOU CAN PREVENT ACCIDENTS!!!

THINK SAFETY

DESCRIPTION

At last, a line of Self-Propelled Drop Spreaders that will bring speed, efficiency and profit to your operation. Built tough to meet SALSCO's exacting standards for durability and quality, the 450-Series Spreaders cover the ground at 2 1/2 MPH, and are very maneuverable on slopes and on the flat. Individual steering clutch handles and a zero turning radius allow you to work with ease around trees, hydrants, flower beds...in fact any obstacle. Capable of covering from 30,800 to 57,200 square feet per hour, any of the models will increase the profitability of your spreading operation.

DO NOT RUN MACHINE WITHOUT GUARDS IN PLACE

THINK

SAFETY

MANUFACTURED BY: SALSCO, INC.
TURF EQUIPMENT DIVISION
105 SCHOOL HOUSE ROAD
CHESHIRE, CONNECTICUT 06410
203/271-1682
FAX (203) 271-2596

450 SERIES DROP SPREADER OWNER'S MANUAL

THIS MANUAL COVERS MODELS: 450 SERIES DROP
SPREADERS

This company reserves the right to discontinue, add improvements to, or change the design of any model or product at any time without obligation to improve existing machines, either by changing the design or adding new parts.

It has been and will continue to be the policy of SALSCO to update existing machines at its own discretion. Whenever possible, new designs will be made in such a way, that they can be "Retro Fit" if so desired.

Record in space provided below the model and serial number of this unit. Please retain these numbers for future reference.

No parts orders will be accepted without Model numbers or parts numbers.

Model Number

Serial Number

Model No. Prefix

Part Number

452

A000

* PART NUMBER PREFIX MUST BE USED WHEN ORDERING PARTS (452A000). PREFIX NUMBER IS LISTED ABOVE.

**** CAUTION ****

READ AND UNDERSTAND THIS MANUAL BEFORE STARTING MACHINE!!

SERVICE SCHEDULE

<u>ITEM</u>	<u>FREQUENCY</u>
CLEAN MACHINE If you use water, it's always a good idea to blow dry with an air gun. <u>CAUTION:</u> WEAR SAFETY GLASSES	DAILY
OIL MOVING PARTS-Including but not limited to the clutch rod linkage and hopper door.	DAILY
CHECK TIRE AIR PRESSURE	WEEKLY
CHECK BUSHING ON AGITATOR SHAFT	MONTHLY
CHECK ENGINE (see engine manual)	
CHECK ENGINE OIL	DAILY
CHECK ENGINE GEAR BOX OIL	WEEKLY

THINK

SAFETY

CAUTION

BEFORE YOU START THIS MACHINE:

1. READ AND UNDERSTAND OWNERS MANUAL.
2. DO NOT RUN WITHOUT GUARDS AND OTHER SAFETY COVERS ON MACHINE.
3. NEVER LEAVE MACHINE RUNNING WHILE UNATTENDED.
4. NEVER REACH UNDER OR INTO MACHINE FOR ANY REASON WHILE MACHINE IS RUNNING AS IT CAN CAUSE SERIOUS INJURY.
5. BEFORE REMOVING SEED BOX ALWAYS SHUT MOTOR OFF.
6. ALWAYS REMOVE SPARK PLUG WIRE, MAKE SURE ENGINE SWITCH IS OFF, THROTTLE IS IN STOP POSITION, AND SHUT GAS OFF WHEN WORKING ON OR CHECKING INSIDE OF MACHINE.
7. NEVER DO ANYTHING WITH BELTS, SUCH AS REMOVING OR REPLACING THEM, ETC., WHILE ENGINE IS RUNNING.
8. DO NOT REMOVE CAUTION DECALS.
9. SAFETY DECALS SHOULD BE REPLACED IMMEDIATELY AFTER REPAINTING OR WHEN THEY BECOME ILLEGIBLE. ** SEE NOTE BELOW **
10. WHEN MACHINE IS LEFT UNATTENDED MOTOR SHOULD BE SHUT OFF AND MACHINE SHOULD BE LEFT IN GEAR.

**** NOTE ****

SAFETY IS A PRIME CONCERN AT SALSCO AND THE SAFETY DECALS ON YOUR MACHINE ARE A HIGHLY VISIBLE AND CONSTANT REMINDER TO ALL OPERATORS. REPLACEMENT SAFETY DECALS MAY BE OBTAINED FROM YOUR LOCAL DEALER OR BY CALLING TOLL FREE 1-800-8SALSCO.

DO NOT RUN MACHINE WITHOUT GUARDS IN PLACE

OPERATING INSTRUCTIONS

- 1) READ AND UNDERSTAND OWNERS MANUAL.
- 2) ASSEMBLE HANDLES AND CLUTCH LINKAGE.
- 3) SERVICE BRIGGS & STRATTON (see engine manual).
- 4) PUT DRIVE CLUTCH IN NEUTRAL. SQUEEZE HANDLES TOWARDS HANDLE BARS, THEN PUSH THEM DOWN PAST HANDLE BARS. THEY WILL LOCK IN NEUTRAL.
- 5) START UNIT. (YOU MAY HAVE TO CHOKE UNIT.) SET ENGINE R.P.M. ABOUT 1/2 THROTTLE.
- 6) LIFT CLUTCH HANDLES UP THEN FORWARD. MACHINE WILL BE MOVING. AT THIS TIME YOU WILL BE GOING STRAIGHT. TO STEER, PULL CLUTCH HANDLE IN DIRECTION YOU WANT TO GO.
- 7) AFTER YOU'RE COMFORTABLE WITH DRIVING THE UNIT, SHUT OFF THE MOTOR.
- 8) OPEN HOPPER DOOR AND MOVE METER LEVER TO SEE THE OPENING ON THE BOTTOM OF THE HOPPER.
- 9) PICK SETTING FOR MATERIAL YOU'RE USING. CLOSE SHUT OFF PLATE AND PUT MATERIAL IN HOPPER.
- 10) ADJUST THROTTLE FOR WALKING SPEED YOU DESIRE.
- 11) OPEN SHUT OFF PLATE. GO STRAIGHT FOR A FEW FEET AND CLOSE SHUT OFF PLATE.
- 12) FORMULA FOR CHECKING OUTPUT.

DISTANCE TO TRAVEL (in inches) X EFFECTIVE WIDTH OF UNIT - 144 = SQ. FT. COVERED.

LBS. OF MATERIAL USED - SQ. FT. COVERED X 1000 = COVERAGE.

EXAMPLE OF LIME:

DISTANCE TRAVELED		EFFECTIVE WIDTH	
240"	X	50"	= 12,000 - 144 = 83.33 SQ. FT COVERED

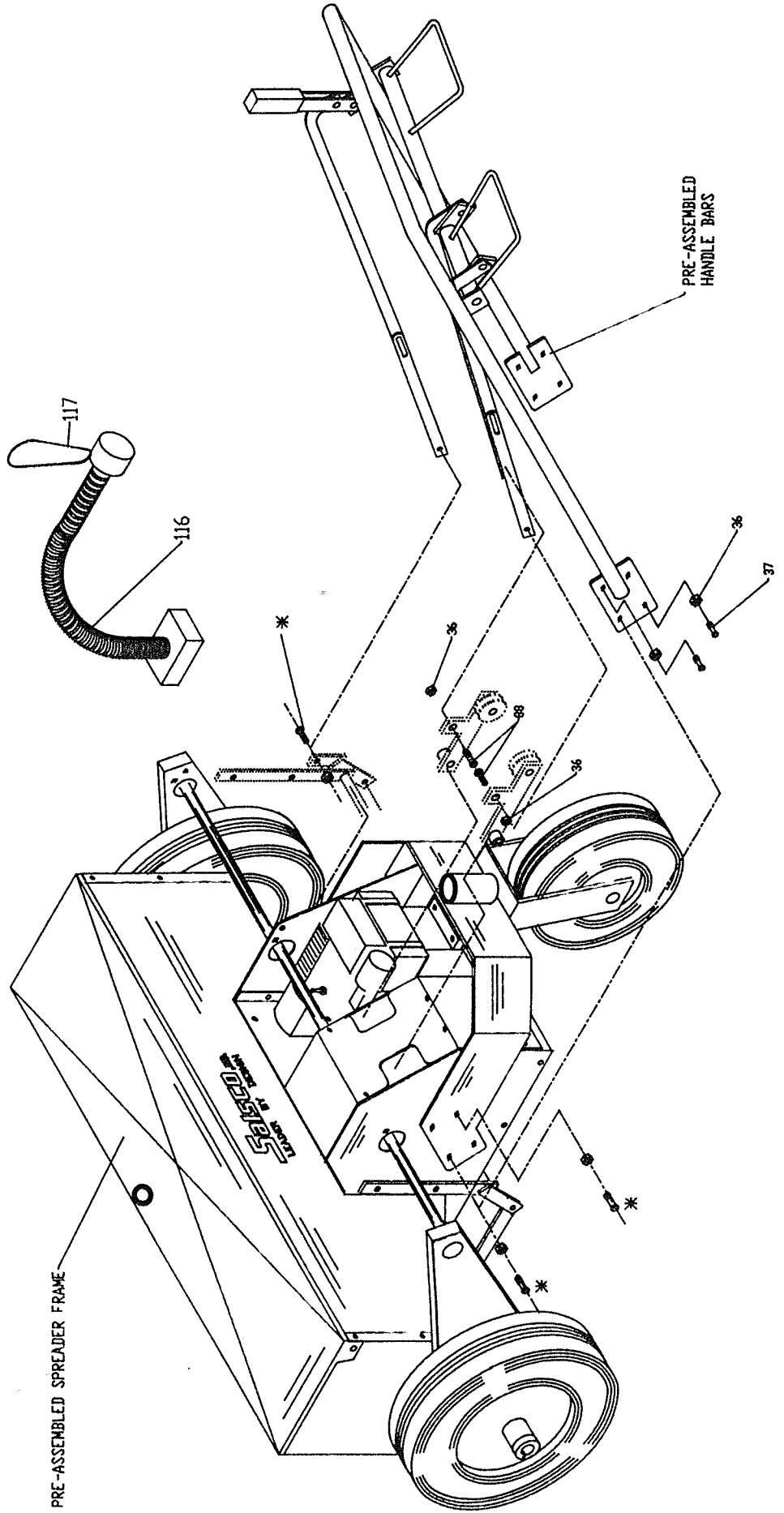
LBS. OF MATERIAL
7 LBS. - 83.33 SQ.FT. = .08 X 1,000 = 80 LBS. PER 1,000 SQ. FT.

DO NOT RUN MACHINE WITHOUT GUARDS IN PLACE

THINK SAFETY

Salsco, Inc.
LEADER BY DESIGN
 105 SCHOOL HOUSE ROAD
 CHESHIRE, CONNECTICUT 06410

*= FASTENERS SUPPLIED BOLTED TO FRAME
 36 A-159 LOCK NUT 6
 37 G-138 CARRIAGE BOLT 4
 88 C-138 HEX SCREW 2
 116 J-175 AIR FILTER KIT 1
 117 U-193 WIRE TIE 1



COMMON PARTS FOR MODELS

450---451-----452

36" SPREADER

PARTS FOR MODEL 450

ITEM	NO.	NAME	QTY
1	L-208	METER LEVER	1
2	T-502	HOPPER END PLATE (R)	1
3	U-502	HOPPER END PLATE (L)	1
4	A-228	CENTER SUPPORT BEARING	1
5	A-120	BUSHING	2
6	Z-215	HOPPER SUPPORT	2
7	F-168	CHAIN GUARD	2
8	V-502	CHAIN M'T'G PLATE (R)	1
9	V-502	CHAIN M'T'G PLATE (L)	2
19	A-046	SPRCKET	2
20	A-109	BEARING	2
21	A-110	FLANGETTE	4
22	A-081	SET COLLAR	8
23	G-084	WHEEL 4.80/4.00-8	2
24	N-054	CHAIN	2
25	B-104	BLACK KNOB	2
38	A-223	SEAL	1
39	N-229	KEY 3 1/2	2
40	A-057	1/2 LINK	2
41	A-058	MASTER LINK	2
45	A-234	METER GUARD	1
46	P-221	SPACER PLATE	2
117	K-166	SPACER PLATE	2

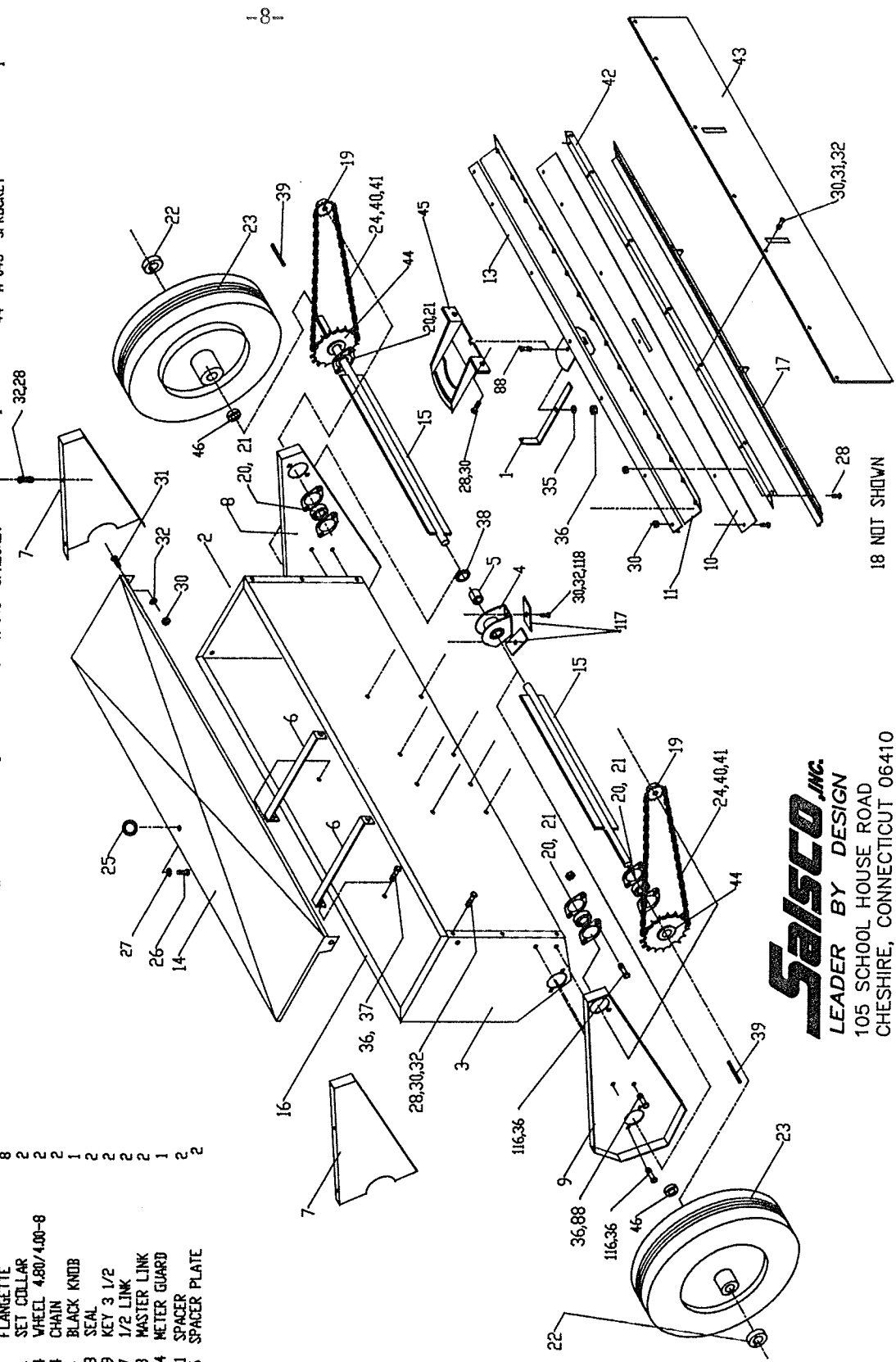
48" SPREADER

PARTS FOR MODEL 451

ITEM	NO.	NAME	QTY
10	S-505	SLIDE RET'G PLATE	1
11	T-505	LINE SLIDE METER	1
13	V-505	SLIDE PIVOT PLATE	1
14	V-505	HOPPER COVER	1
15	F-232	SHAFT ASSY V/2021,44	2
16	X-505	HOPPER PLATE	1
17	D-226	SHUT OFF HINGE	1
18	S-094	FOAM SHUT OFF STRIP	1
42	H-228	SHIELD BRACKET	1
43	X-094	RUBBER SHIELD	1
44	A-045	SPRCKET	1

60" SPREADER

ITEM	NO.	NAME	QTY
10	Q-502	SLIDE RET'G PLATE	1
11	P-502	LINE SLIDE METER	1
13	S-502	SLIDE PIVOT PLATE	1
14	X-502	HOPPER COVER	1
15	X-076	SHAFT ASSY V/2021,44	2
16	Y-502	HOPPER PLATE	1
17	A-226	SHUT OFF HINGE	1
18	Q-094	FOAM SHUT OFF STRIP	1
42	G-228	SHIELD BRACKET	1
43	V-094	RUBBER SHIELD	1
44	A-045	SPRCKET	1



FASTENERS

26	B-140	HEX SCREW	1
27	A-146	LOCK WASHER	1
28	J-133	HEX SCREW	32
29	B-158	HEX NUT	5
30	E-158	LOCK NUT	50
31	A-133	HEX SCREW	10
32	A-135	FLAT WASHER	48
33	A-132	HEX SCREW	12
34	C-136	CARRIAGE BOLT	8
35	A-139	FLAT WASHER	16
36	A-159	LOCK NUT	69
37	G-138	HEX SCREW	6
88	C-138	HEX SCREW	21
91	A-136	CARRIAGE BOLT	14
92	B-144	HEX SCREW	4
94	A-138	HEX SCREW	2
100	B-143	HEX SCREW	2
101	L-138	HEX SCREW	2
102	A-147	FLAT WASHER	5
103	B-146	LOCK WASHER	2
104	A-137	CARRIAGE BOLT	10
109	D-040	AUTO CLIP	2
110	A-147	FLAT WASHER	2
111	C-145	HEX NUT	2
112	A-163	HEX NUT	2
113	B-158	LOCK NUT	2
116	B-136	CARRIAGE BOLT	8
118	A-134	HEX SCREW	2

Salsco, Inc.

LEADER BY DESIGN

105 SCHOOL HOUSE ROAD
CHESHIRE, CONNECTICUT 06410

18 NOT SHOWN

COMMON PARTS FOR MODELS 450-----451-----452

ITEM	MDL	NAME	QTY
50	C-227	SHUT OFF HANDLE	1
51	Y-181	LOWER SHUT OFF LINK	3
52	X-181	UPPER SHUT OFF LINK	1
53	N-208	SHUT OFF CONN. LINK	2
54	F-099	SHAFT MT'G PLATE (L)	1
55	G-099	SHAFT MT'G PLATE (R)	1
56	H-099	RIGHT CLUTCH HANDLE	1
57	A-227	LEFT CLUTCH HANDLE	1
58	B-227	RIGHT CLUTCH LEVER	1
59	J-208	LEFT CLUTCH LEVER	1
60	K-208	BELT GUARD ASSY	1
61	G-168	SHUT OFF PIVOT LINKAGE	1
62	M-208	MOTOR MT'G PLATE	1
63	I-099	HANDLE BAR ASSY	1
64	D-227	BUSHING	2
65	A-122	PIVOT AXLE	1
66	A-088	PULLEY 3"	2
67	M-066	BEARING	3
68	A-109	FLANGE	6
69	A-110	FLANGE	3
70	G-104	HANDLE GRIP	1
71	M-070	V BELT	2
72	A-064	IDLER PULLEY	2
73	A-015	SPRING	2

COMMON PARTS FOR MODELS 450-----451-----452

ITEM	MDL	NAME	QTY
74	H-200	MOTOR	1
75	A-084	WHEEL	1
76	A-115	VASHER	1
77	A-080	SET COLLAR	3
78	B-228	SPRING BRACKET	1
79	K-098	HANDLE PIN	1
80	E-088	WHEEL PIN	1
81	F-228	WHEEL BRACKET	1
82	F-229	KEY 1 1/2	1
83	R-066	PUSH CAP	1
84	C-173	THRUSTLE ASSY	2
85	B-188	SPLIT LOCK COLLAR	1
86	J-175	AIR FILTER KIT	1
87	U-193	WIRE TIE	1

* = NOT SHOWN

PARTS FOR MODEL 450 36" SPREADER

ITEM	MDL	NAME	QTY
67	A-232	LEFT PULLEY SHAFT	1
68	B-232	RIGHT PULLEY SHAFT	1

PARTS FOR MODEL 451 48" SPREADER

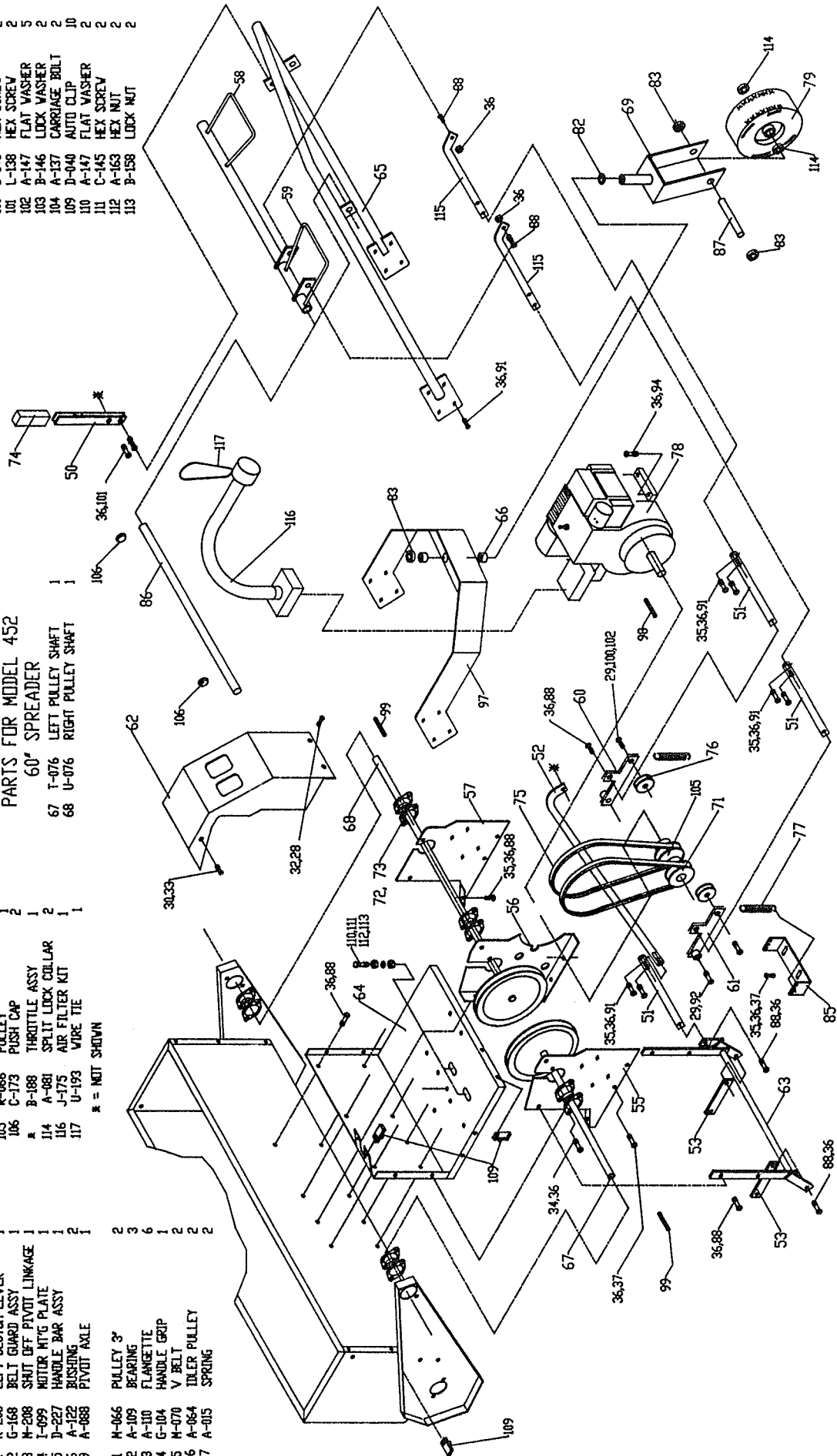
ITEM	MDL	NAME	QTY
67	D-232	LEFT PULLEY SHAFT	1
68	E-232	RIGHT PULLEY SHAFT	1

PARTS FOR MODEL 452 60" SPREADER

ITEM	MDL	NAME	QTY
67	T-076	LEFT PULLEY SHAFT	1
68	U-076	RIGHT PULLEY SHAFT	1

26	A-140	HEX SCREW	1
27	A-146	LOCK WASHER	1
28	J-133	HEX SCREW	32
29	B-158	HEX NUT	5
30	E-158	LOCK NUT	50
31	A-133	HEX SCREW	10
32	A-135	FLAT WASHER	48
33	A-132	HEX SCREW	12
34	C-136	CARRIAGE BOLT	16
35	A-139	FLAT WASHER	16
36	A-159	LOCK NUT	69
37	G-138	HEX SCREW	21
38	A-138	HEX SCREW	21
39	A-136	CARRIAGE BOLT	14
40	B-144	HEX SCREW	2
41	A-138	HEX SCREW	4
42	B-143	HEX SCREW	2
43	L-138	HEX SCREW	2
44	A-147	FLAT WASHER	5
45	B-146	LOCK WASHER	2
46	A-137	CARRIAGE BOLT	2
47	D-040	AUTO CLIP	10
48	A-147	FLAT WASHER	2
49	C-145	HEX SCREW	2
50	A-163	HEX NUT	2
51	B-158	LOCK NUT	2

Salsco, Inc.
LEADER BY DESIGN
 105 SCHOOL HOUSE ROAD
 CHESHIRE, CONNECTICUT 06410



Suggested Tightening Torques For Alloy 1960 Inch Series Socket Head Cap Screws

NOMINAL SIZE	BASIC SCREW DIAMETER INCHES	TORQUE TO TIGHTEN SCREWS TO YIELD (in-lb)		TIGHTENING TORQUE* (in-lb)	
		UNRC	UNRF	UNRC	UNRF
0	0.0600	—	3.5	—	2.6
1	0.0730	6	6.5	4.5	4.8
2	0.0860	10	11	7.5	8
3	0.0990	15	16	11	12
4	0.1120	22	24	16	18
5	0.1250	32	33	24	24
6	0.1380	40	45	30	34
8	0.1640	74	78	55	58
10	0.1900	105	120	79	90
		(ft-lb)		(ft-lb)	
1/4	0.2500	22	25	17	19
5/16	0.3125	46	51	35	38
3/8	0.3750	83	93	62	70
7/16	0.4375	132	146	100	109
1/2	0.5000	203	230	150	172
5/8	0.6250	380	430	283	317
3/4	0.7500	667	750	500	562
7/8	0.8750	917	1020	688	767
1	1.0000	1390	1520	1040	1080
1-1/4	1.2500	2780	3080	2080	2310
1-1/2	1.5000	4850	5450	3625	4080

Nominal Sizes	Tensile Strength P.S.I. Min.	Yield Strength P.S.I. Min.	Elongation* In 2 Inches Per Cent Min.	Reduction of Area* Per Cent Min.	Minimum Hardness Rockwell C
0 to 1/2	180,000	162,000	12	35	39
Over 1/2	170,000	153,000	14	40	38

* Listed tightening torques are 75 percent of the torque to yield based on ASTM574. Specification listing tensile strength of 180,000 PSI for screw size 0.500 and smaller and 170,000 PSI for screw size 0.625 and larger. Values based on plated and non-lubricated fasteners.

Tightening torques are only recommended for proper applications. Refer to your engineering stats.

Suggested Tightening Torques For Other Alloy Socket Screw Products (INCH-POUND)

Nom. size	Basic Screw Diameter	Button Head Flat Head Hex Key Size	Flat Head		Button Head				Shoulder Screw Tightening Torque	Low Head Tightening Torque
			Tightening Torque		Tightening Torque		Nominal Size	Hex Key Size		
0	.060	.035	—	1.5	—	1.5	—	—	—	—
1	.073	.050	2.5	2.5	2.5	2.5	—	—	—	—
2	.086	.050	4.5	4.5	4.5	4.5	—	—	—	—
3	.099	1/16	7	7	7	7	—	—	—	—
4	.112	1/16	8	8	8	9	4	.050	—	5.0
5	.125	5/64	12	13	12	12	5	.062	—	9.5
6	.138	5/64	15	17	16	16	6	.062	—	9.5
8	.164	3/32	30	31	30	30	8	5/64	—	19.4
10	.190	1/8	40	45	40	45	10	3/32	—	33.5
1/4	.250	5/32	100	110	100	110	1/4	1/8	50	77.9
5/16	.312	3/16	200	220	200	220	5/16	5/32	125	156.0
3/8	.375	7/32	350	400	350	400	3/8	3/16	265	273.0
7/16	.437	1/4	560	625	—	—	7/16	7/32	—	428.0
1/2	.500	5/16	850	1,000	850	1,000	1/2	1/4	470	615.0
9/16	.562	5/16	1,200	1,360	—	—	—	—	—	—
5/8	.625	3/8	1,700	1,900	1,700	1,800	5/8	5/16	1,150	1,315.0
3/4	.750	1/2	3,000	3,200	—	—	3/4	3/8	2,000	—
7/8	.875	9/16	5,000	5,400	—	—	—	—	—	—
1	1.000	5/8	8,000	7,600	—	—	1	1/2	4,000	—

* Listed tightening torques are 75 percent of the torque to yield based on ASTM574. Specification listing tensile strength of 180,000 PSI for screw size 0.500 and smaller and 170,000 PSI for screw size 0.625 and larger. Values based on plated and non-lubricated fasteners.

Tightening torques are only recommended for proper applications. Refer to your engineering stats.

WARRANTY

Your Salsco Commercial or Turf Equipment product is a commercial type product and is normally manufactured and sold for commercial or industrial use. Salsco will, for the original purchaser, for one (1) year from the date of purchase (90 days if used for rental purposes; RENTAL IN THIS CASE MEANS MACHINE DOING PROPERTIES NOT OWNED BY ORIGINAL PURCHASER) repair or replace, free of charge, any part or parts found to be defective in material or workmanship or both. Any transportation charges to be borne by the purchaser.

If, during the Warranty Period, the product does not function properly due to defect, simply contact your Salsco Dealer and provide the unit or part for inspection or contact directly:

SALSCO, INC.
Service Department
105 School House Road
Cheshire, CT 06410

203/271-1682
FAX: 203/271-2596

This warranty does not include incidental or consequential damages and is exclusive of any implied warranties.

This warranty does not include normal maintenance parts, including, but not limited to spark plugs, filters, lubricants, springs, tines, tine overlays, nylon bars, and blades.

This warranty does not include parts or components which are covered under the original manufacturers warranty, including, but not limited to engine and differential.

[illegible]