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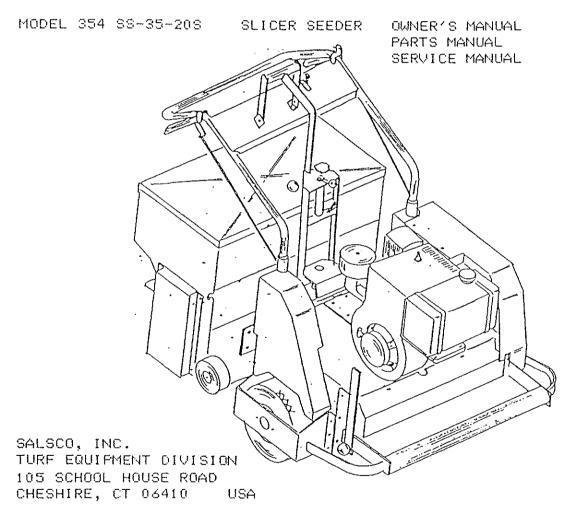


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MANUFACTURED BY:

SALSCO, INC
TURF EQUIPMENT DIVISION
105 SCHOOL HOUSE RD.
CHESHIRE CT 06410 USA
(203) 271-1682
FAX (203) 271-2596

SLICER SEEDER MANUAL

THIS MANUAL COVERS MODEL: SS-35-20S

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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. New designs will be made in such a way, whenever possible, that they can be "Retro Fit" to units already in the field if so desired.

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

No parts orders will be accepted without Model numbers and part numbers.

EXAMPLE ORDER: "I have one of your machines, model SS-35-20S Prefix 354, s/n _______, I need the following parts. 6pc - 354A600."

Model No.	<u>Prefix N</u>	<u>lo.</u> <u>Part No. Code:</u>	
SS-35-20S	= 354	1 <u>Model</u>	Part No.*
•		000	A000
		354	A600

* PART NUMBER PREFIX MUST BE USED WHEN ORDERING PARTS (___A000).

**** CAUTION ****

READ AND UNDERSTAND THIS MANUAL BEFORE STARTING MACHINE!

DESCRIPTION

The Salaco Slicer Seeder Model SS-35-20S is the only ALL TERRAIN Slicer Seeder* on the market today.

It has the ability to seed within a 25" radius and will handle inclines up to 40 degrees*. This unit will plant rows 2" apart creating a 20" seed bed with each pass.

The unit has the ability to slice and seed at the rate of 18,000 sq. feet per hour.

The slicer blades are adjustable to a maximum depth of 2 1/4". Please keep in mind that for the best germination seed should be set just below soil surface, approximately 1/4" depth. The seed passes from the hopper through a diamond shaped metering device and comes out alongside the slicer disc which is riding in the slit created by the Cutter Blade. The seed is then deposited in that slit. Due to our 2" center line of rows, 6-8 seeds per linear inch should be more than sufficient for proper seed bed.

The slicer discs are mounted on a pivoting hopper allowing them to follow the slit created by the slicer blades around a 25" radius.

This is a precision seeding machine and while we do make an attempt at advising on how to adjust the seed meter the best and most accurate way is discribed on page 4 under "OPERATION & START UP INSTRUCTIONS."

* PLEASE REFER TO THE "CAUTIONS" SECTION ON PAGE 3 OF THIS MANUAL!

"CAUTION"

THIS MACHINE CAN CAUSE SERIOUS INJURY. PLEASE READ AND UNDERSTAND ALL CAUTION NOTES. NEVER LEAVE MACHINE RUNNING WHILE UNATTENDED!!

- 1. READ AND UNDERSTAND OWNER'S 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. DO NOT LET ANYONE WALK NEXT TO OR IN FRONT OF MACHINE WHILE IT IS IN OPERATION.
- 6. NEVER RUN OVER ASPHALT OR CONCRETE OR ANY OTHER SURFACE WHICH CANNOT BE SLICED WITH THE SLICER BLADES IN LOWERED POSITION.
- 7. BE SURE SLICER CLUTCH IS DISENGAGED BEFORE STARTING UNIT.
- 8. UNDER NO CIRCUMSTANCES, EVER ALLOW ANY PART OF YOUR BODY OR ANYONE ELSE'S BODY TO COME IN CONTACT WITH THE FRONT OF, UNDERNEATH SIDE OR INSIDE OF ANY PART OF THIS MACHINE AS IT WILL REMOVE ANY PART OF THE BODY THAT IS PLACED THERE!
- 9. 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 THE INSIDE OF THE MACHINE.
- 10. NEVER RUN MACHINE WITHOUT CONNECTING ELECTRIC KILL SWITCH TO BELT OR BELT LOOP. THIS WILL SHUT DOWN THE MACHINE'S ENGINE SHOULD THE OPERATOR BECOME SEPARATED FROM THE MACHINE.
- 11. DO NOT REMOVE CAUTION DECALS.
- 12. SAFETY DECALS SHOULD BE REPLACED IMMEDIATELY AFTER REPAINTING OR WHEN THEY BECOME ILLEGIBLE. **SEE NOTE BELOW**

** 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 1-800-85ALSCO.



OPERATION & START UP INSTRUCTIONS

OF SLICER SEEDER

THIS MACHINE IS ADJUSTED AT THE FACTORY, HOWEVER, READ AND UNDERSTAND THIS SECTION BEFORE OPERATING.

- A) Be sure that Cutter Raising Lever is in full up position (towards operator).
- B) Be sure to lower front Foot Guard. Blades cannot be adjusted with this guard in "UP" position, nor will the blades engage if the Guard is "UP".
- C) Be sure that clutch handles are squeezed into lock position (this will disengage the clutch and apply the brakes).
- D) Place switch on motor to "ON" position. Place choke lever (just under air cleaner) to "CHOKE" position if needed and pull cord to start engine. Place throttle lever to low engine speed and return choke lever to normal position. BE SURE MACHINE IS OVER AREA TO BE SEEDED. (CHECK CAUTIONS SECTION OF THIS MANUAL: PAGE 3).
- E) Be sure to connect electric Kill Switch to your belt on belt loop, this will shut down the machine should you become separated from the unit.
 - It is a good idea to run machine around the yard a little with the cutter handle in raised position to get a feel for the drive clutches. Once this is done you are ready to move on to the next step.
- F) It would be best to run the machine on bare soil the first time and each time you wish to calibrate the seed meter. Adjust the cutter to the most shallow cutting depth (see Cutter Depth Adjustment Pages 6, Section 1a). Place the type of seed you wish to calibrate in hopper and choose the seed setting lowest on the scale (about 1-2 to start). Next, lower the cutters and run the machine in a straight line for about 10 feet, raise cutters and stop the machine. Check seed in slot and make any adjustments needed to the seed meter. lower

number for less seed, higher number for more seed. When you reach the setting you are pleased with, mark—the decal provided. Repeat this procedure with the different types of seed used. You now have a seeding machine that is calibrated to your needs. These procedures will help you and your operators become more familiar with the Slicer Seeder.

G) Place Cutter Raising Lever to desired cutting depth position (see Cutter Depth Adjustment Page 6, Section la. Place Seed Adjustment Lever to desired position. Release forward Clutch Lever and check to see if cutting depth and seed amount meet your requirements. Adjust as needed.

*NOTE: ALWAYS LOWER CUTTER LEVER SLOWLY. IF DEPTH IS SET TOO DEEP, LOWERING OF THIS LEVER CAN CAUSE PREMATURE FAILURE OF BELTS OR EVEN CAUSE MACHINE TO LUNGE FORWARD.

MAINTENANCE

- There is only one (1) grease fitting on this unit. This fitting is located on the Seed Actuator. This should be greased weekly.
- 2. All chains and sprockets should be checked daily for alignment, no lubrication is needed.
- Check engine manual for maintenance on engine oil, gear box oil, and air cleaner.
- 4. Remove guards and check belts, chains, nuts, and bolts weekly.

CAUTION: NEVER RUN MACHINE WITH GUARDS REMOVED

<u>ADJUSTMENTS</u>

CUTTER DEPTH ADJUSTMENT

a. Blade depth can be adjusted from ground level to 2 1/4" deep by turning Ball Lock Handle (page 12, Item 56) about 15 degrees to unlock threads. Star Knob can be turned to the right for less depth or left for more depth. When proper depth is obtained Ball Lock Handle (page 12, Item 56) should be turned to lock Star Knob (page 12, Item 55) in place.

NOTE: THIS MACHINE WILL NOT ALLOW YOU TO PLANT SEED DEEPER THAN 1/2 - 3/4" BELOW THE THATCH LAYER. THIS ADJUSTMENT IS SET AT FACTORY AND SHOULD NOT BE CHANGED.

2. SEED ADJUSTMENT

a. Seed can be adjusted by loosening Lever (page 14, Item 158) on Hopper and turning Pointer (page 14, Item 158) to desired location on the scale of 1-10 --- 1 for less 10 for more.

3. CUTTER BELT ADJUSTMENT

To adjust the Cutter Belt Tension, you must perform the following steps.

..JTE: DO NOT PUT ANY PART OF YOUR BODY UNDER THIS MACHINE AS IT WILL REMOVE IT. DO NOT REACH UNDER IT WITH STICKS OR RODS, IT COULD THROW THEM OUT AT YOU. THIS PIECE OF EQUIPMENT WILL HURT YOU IF YOU DO NOT FOLLOW OUR CAUTIONS. ABOVE ALL, YOU MUST USE COMMON SENSE.

- a. Remove belt guards (Items 59 and 60). The motor should be off at this time. We will tell you when to start it.
- b. Lower and raise the Roll Bar (Item 104) several times. You will notice how the stop (Item 105) prevents the pulley (Item 93) from engaging Belts (Item 43) when the Cutter Height Handle (Item 55) is lowered. To properly observe this, raise Roll Bar (Item 104) and have second person lower the Cutter Height Handle (Item 55) (WATCH YOUR FINGERS). You should look at the Stop (Item 105) while this is happening. Now, lower Roll Bar (Item 104) and repeat the lowering and raising of the Cutter Height Handle (Item 55). Be sure you understand how this works before going to step C.
- c. You-will need a piece of plywood about 1/2" thick x $4' \times 4'$.
- d. Lay plywood down on floor in front of an object that will not move. Example: wall, door, etc.
- e. Push machine on top of plywood in such a way that Roll Bar is up against non-moveable object.
- f. Place Drive Clutch Handles (Item 45) into lock position and depress lever locks (Item 68). This will apply brakes and disengage Drive Belt.
- g. Lower the Cutter Height Handle (Item 55) and be sure Cutters and Wheels (Item 21) are on plywood.
- h. Raise Cutter Handle (Item 55), start engine and set r.p.m. at about 1/3 r.p.m.
- i. Lower Cutter Handle (Item 55) slowly so Cutters will engage plywood. Cutters should not stop turning. If they do and Belt begins to slip, raise Cutter Handle (Item 55), and shut down engine.
- j. Remove spark plug wires, turn ON/OFF switch to OFF. Lower Cutter Height Handle (Item 55).
- K. Reach in from Rubber Mud Guard (Item 2) to adjust Bolt (Item 92). Loosen Jam Nut (Item 91) and screw Adjusting Bolt (Item 92) up toward the top of the machine (approximately 1/8"). Tighten Jam Nut (Item 91). Adjust both sides in this manner.

- 1. Repeat steps (h) & (i). If belt still slips, repeat steps (j) & (K).
- m. If belt does not slip, but cutters will not stop turning when the Cutter Handle (Item 55) is raised, then follow steps (j) & (K) with one exception. Adjusting Bolt (Item 92) must be lowered 1/16". Repeat this procedure until blades stop when raised and belt does not slip when lowered. To set Depth adjustment turn Star Knob (Item 65) until there is 1/2" between Adjuster Lock Knob and Star Knob(Item 64 and Item 65).
- n. Adjusting Bolt (Item 92) only puts down pressure on cutter housing, it should remain at factory setting. However, when the blades wear there may not be enough pressure on the Cutter Housing and on the Lock Nut (Item 89*) can be tightened about 1/2". Be sure, when putting new blades on machine, to back this adjustment out 1/2".

CAUTION: BLADES SHOULD NEVER TURN WHEN THEY ARE IN RAISED POSITION.

4. WHEEL BELT ADJUSTMENT

a. Belt adjustment can be made to either side by loosening Locknut (Item 6) on the Clutch Rod (Item 49) and adjusting Nuts (Items 6 and 206) either in or out to aquire proper adjustment. Belts are adjusted properly when machine will move freely when the handles are squeezed, but not locked and prior to brakes being applied.

SERVICE & DISASSEMBLY PROCEDURE

*NOTE: SALSCO USES SELF-LOCKING NUTS AND LOCTITE ON ALL BOLTS. IT IS VERY IMPORTANT TO FOLLOW THIS PROCEDURE.

1)

- a. Remove spark plug wire.
- b. Make sure engine switch is in off position.
- Make sure throttle is in stop position.
- d. Shut off gas.
- e. Drop Cutter Height Lever so cutters are at ground level.

2) TO REPLACE CUTTER BLADES:

- a. Remove both locknuts (Item 8 & 10) from Cutter Height Handle (Item 55).
- b. Remove Guard (Item 60).
- c. Remove Drive Belts [Item 43 (see page 11-section 5)].
- d. Remove 6 Bolts (Item 84) that mount Cutter Housing Assy. to Main Housing.
- e. (i) Remove Cutter Housing Assy. from Main Housing.
 - (ii) Remove Drive Chain (Item 88)
- f. Loosen Bearing Bolts (Item 80) on Sprocket side of Housing & remove Bearing Bolts (Item 80) on other side.
- g. Slide free end of cutter shaft from Housing with Sprocket end remaining in Housing.
- h. Remove Bolt (Item 70) from shaft. Bearing (Item 73), Spacers (Items 76, 77, & 78), and Cutter Blades (Item 79) can be slid off shaft & replaced.
- TO REASSEMBLE, REVERSE PROCEDURE: TO REASSEMBLE LOOSEN SET SCREWS (ITEM 111), TIGHTEN BUSHINGS (ITEM 77) IN COUPLING (ITEM 78) WHEN REPLACING ON CUTTER SHAFT. AFTER ALL BLADES AND SPACERS ARE ON, TIGHTEN BOLT (ITEM 70) ON END OF CUTTER SHAFT. NOW LOOSEN BUSHING (ITEM 77) IN COUPLING (ITEM 78) JUST ENOUGH TO TAKE UP SIDE PLAY. DO NOT OVER TIGHTEN SIDE PLAY. NOW TIGHTEN SET SCREWS (ITEM 111).

3) TO REPLACE SEED DISCS SHAFT ASSEMBLY

- a. Remove Guard (Item 120).
- b. Remove Master Link from Chain (Item 121).
- Remove Bearing Bolts (ITEM 151).
- d. Remove Shaft Assy. (Item 122).

TO REASSEMBLE, REVERSE PROCEDURE

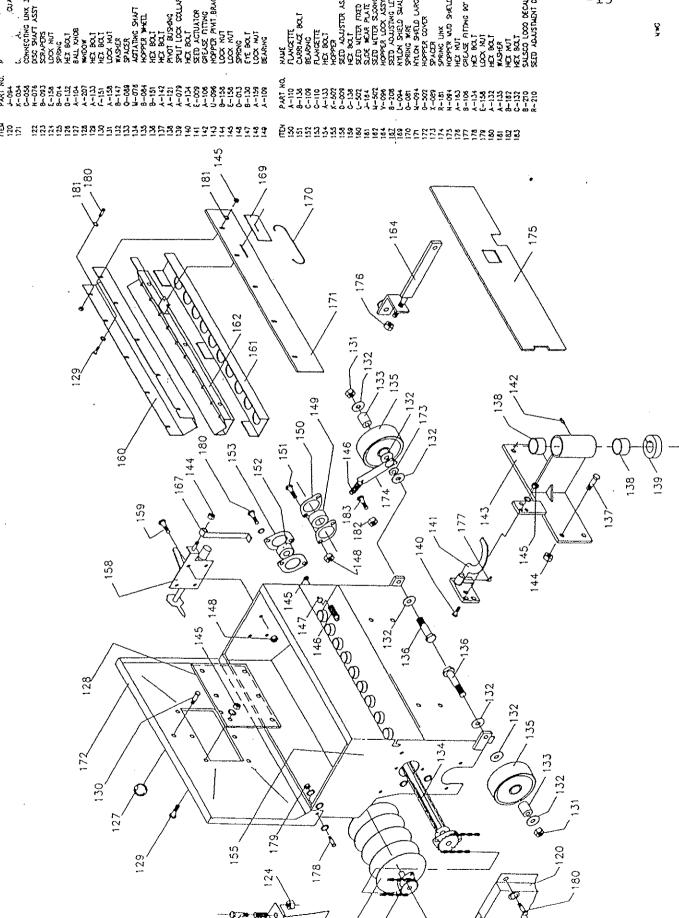
4) TO REPLACE WHEEL DRIVE BELTS

- a. Remove Guards (ITEMS 59 & 60)
- b. Slide Belt over Top Pulley.
- c. Remove 4 Wheel Mounting Nuts (Item 7) and slide Wheel Assy. from Housing.
- d. Belts can now be replaced.
- e. Belts should now be adjusted (see page 8, section 4).

TO REASSEMBLE, REVERSE PROCEDURE

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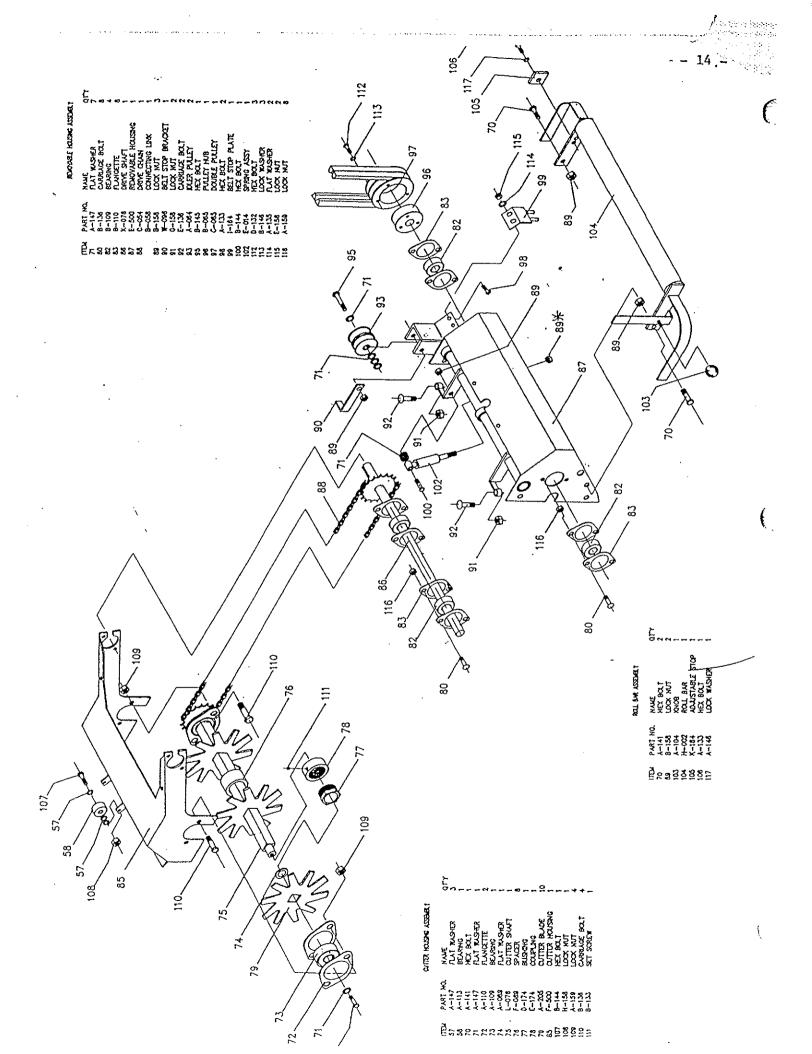
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SERVICE & DISASSEMBLY PROCEDURE (Continued)

- 5) TO REPLACE CUTTER DRIVING BELTS
- a. Be sure that Cutter Height Handle (Item 55) is in "UP" position.
- b. Remove Guard (Item 60).
- c. Belts (Item 43) can be slid off pulleys & replaced. *NOTE: After belts are removed from top pulley, lower Cutter Housing and Foot Guard (Item 104) to release brake and remove belts from lower pulley.
- d. Belt can be adjusted. (See section CUTTER BELT ADJUSTMENT, this manual, page 6 & 7).

"CAUTION": CUTTER BLADES SHOULD NOT TURN WHEN HEIGHT HANDLE IS IN "UP" POSITION.

- TO REPAIR OR REPLACE SEED METERING PLATES
 - a. Remove Chain Guard (Item 120) and Chain (Item 121).
 - b. Remove Bearing Bolts (Item 180) and slide the Agitating Shaft (Item 134) from Hopper.
 - Remove Hopper and Shield.
 - d. Remove 10 Bolts (Item 129) and remove Seed Meter (Item 160) from Hopper.
 - e. Remove Springs (Item 170 & Item 146) from Seed Meter.
 - f. Seed Meter (Item 162) and Wear Plate (Item 161) can be lifted and removed from back side of Hopper.
 - g. Inspect Metering Plates and Wear Plate to be sure they are clear of all debris and seed.

TO ASSEMBLE, REVERSE PROCEDURE. BE SURE TO USE A SILICONE TO SEAL SEAMS AND OPEN AREA INSIDE HOPPER.

WARRANTY

Your Salsco Commercial or Turf Equipment product is a commercial type product and is normally manufatured 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) 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 distributor and provide the unit part for inspection or contact directly:

SALSCO, INC.
Turf Equipment Division
Service Department
105 School House Road
Cheshire, CT 06410
(203) 271-1682
Telex 643708
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 differential.

This warranty does not include parts damaged by misuse or negligence.