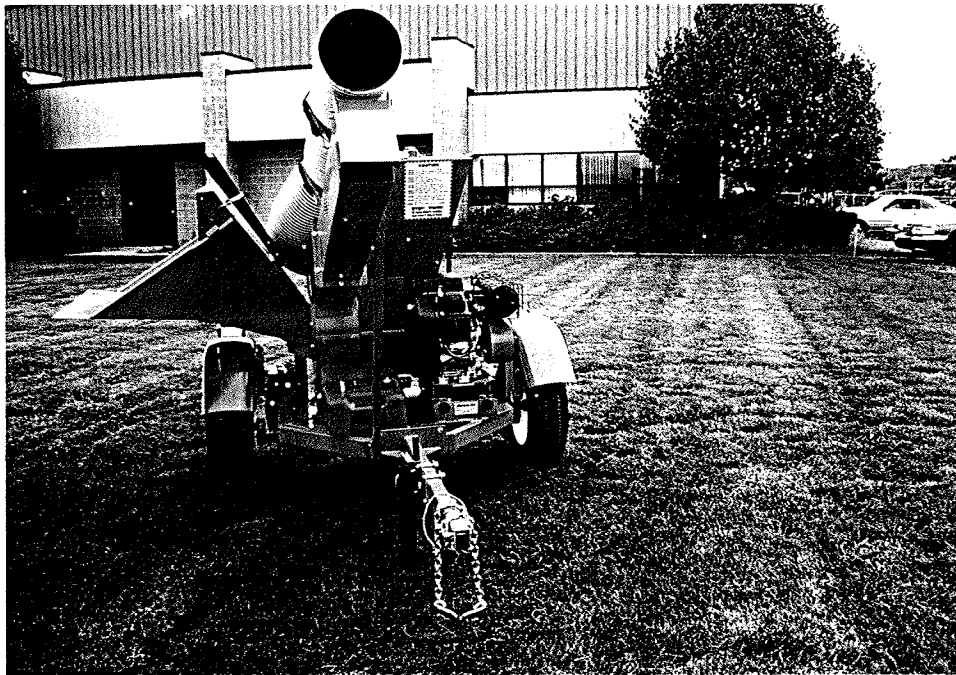


SALSCO, INC.

LEADER BY DESIGN

OWNER'S MANUAL
PARTS MANUAL
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 DURABLE CHIPPER/SHREDDER/VAC ON THE MARKET TODAY. THIS UNIT HAS THE ABILITY TO MEET EXACT STANDARDS AND PERFORM FOR YEARS WITH MINIMUM DOWNTIME. 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, 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 CAUTIONS.

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

READ AND UNDERSTAND MANUAL BEFORE OPERATING

DESCRIPTION

ONE MACHINE.....4 JOBS

Salsco's 20 HP Kohler Chipper Shredder Vac chips - shreds - vac's and mulches hay. This unit comes standard on an over the road trailer and will accept odd shapes and sizes of logs and limbs up to 5" in diameter. Also standard is a light kit and jack. The truck loader chute discharge direction is adjustable and the 10" x 10' diameter heavy duty commercial vacuum hose is mounted to the unit for ease of transport and storage when not in use.

A Straw Blower Kit is available as an option. This unit will blow straw through 100' of 6" diameter P.V.C. without a problem and blow 30' beyond the hose. We also offer a square to round option, so that a hose can be attached to the discharge chute for blowing debris directly into shrub beds. The towing tongue is reversible and this machine can be towed in either direction. The 1" thick impellar assembly weighs in at 300 lbs. and turns at 3000 R.P.M.

The 20 HP C.S.V. offers convenience and versatility not offered by other Chippers on the market today.

READ AND UNDERSTAND MANUAL BEFORE
OPERATING

MANUFACTURED BY: SALSCO, INC.
105 SCHOOL HOUSE ROAD
CHESHIRE, CT 06410
(203) 271-1682
FAX: (203) 271-2596

THIS MANUAL COVERS MODELS: 10027 20 hp KOHLER, C.S.V.

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 the 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 part numbers. All part numbers are listed in this manual.

SERIAL NUMBER

MODEL NUMBER & NAME

NOTE: Be sure to complete your warranty card. This will insure immediate processing of any warranty claims.

READ AND UNDERSTAND THIS MANUAL BEFORE STARTING MACHINE

CAUTIONS

SALSCO CHIPPER/SHREDDER/VAC

- 1) ALWAYS use protective eyewear when machine is in operation
- 2) ALWAYS use gloves and wear ear protection when machine is in operation
- 3) NEVER put hands into or near Chipper/Shredder/Vac intake or discharge openings
- 4) NEVER run with guards removed.
- 5) ALWAYS allow machine to cool off, remove key and put engine in neutral before attempting any maintenance, or repair.
- 6) DO NOT operate with loose clothing or long unrestrained hair. Be sure vines and branches are not wrapped around your body parts.
- 7) DO NOT operate on ice or any other slippery surface. Be sure area around machine is clear and clean. You don't want to trip into the machine.
- 8) NEVER leave machine running unattended, especially around youngsters or persons not instructed in the safe operation of this machine.
- 9) NEVER do any work on this machine without disconnecting the spark plug.
- 10) READ federal guidelines provided with this manual on pages 9-12 of this manual.

NEVER PUT HANDS, OR ANY PART OF YOUR BODY IN INTAKE OR DISCHARGE OPENINGS WHILE MACHINE IS RUNNING

OPERATING INSTRUCTIONS

SALSCO CHIPPER/SHREDDER/VAC

- 1) Be sure all guards are in place.
- 2) Check both chambers to be sure they are free and clear of debris.
- 3) Check engine oil and fuel levels, as per engine manufacturers specifications.
- 4) Set engine throttle just above idle, and set choke. Make sure belt engage lever is in neutral position.
- 5) Start engine and let idle for a few minutes to warm up.

***CAUTION: NEVER LOOK INTO EITHER CHUTE. NEVER REACH, FOR ANY REASON, INTO ANY PART OF THIS MACHINE.**

- 6) Engage belt slowly. After belt engages, gradually bring engine up to full R.P.M. in small increments. Unit is ready to use when engine is running at full R.P.M.

***CAUTION: NEW BELTS WILL "CHATTER". THIS IS NORMAL AND CHATTER WILL DECREASE AS BELT WEARS IN. (SEE HINT #6 ON THIS PAGE).**

- 7) In chipper side, machine will take a maximum of 5" diameter limbs and branches.
- 8) In shredder side, machine will take a maximum of 1" diameter branches, leaves, paper etc.

CAUTION: WHEN USING SHREDDER SIDE, BE SURE BRANCHES, VINES, ETC. ARE NOT WRAPPED AROUND YOUR BODY PARTS.

- 9) Lay vac hose on ground and rake leaves, small branches and leftover debris into hose.

HINTS

- 1) When putting brush in shredder side, throw material in and let it go, do not put it in. IF IT GETS STUCK, LEAVE IT. The next branch will pull it in. DO NOT REACH INTO HOPPER.
- 2) When using the chipper side and you have a SHORT PIECE OF WOOD BOUNCING AROUND IN THE HOPPER, LEAVE IT. The next branch will push it in. DO NOT REACH IN HOPPER FOR ANY REASON.
- 3) When at low idle, you may hear a loud clanking noise. This is most likely the flail blades. Noise should go away with a higher R.P.M.

NEVER REACH INTO, OR LOOK INTO CHUTES OR HOPPER FOR ANY REASON WHILE RUNNING MACHINE

OPERATING INSTRUCTIONS

(continued)

SALSCO CHIPPER/SHREDDER/VAC

- 4) When feeding leaves into the shredder side or vac hose, feed them slowly. A large volume of wet leaves at once, can clog the machine.
- 5) Before turning machine off, let it run at full RPM a few minutes to make sure all material has been discharged.
- 6) When machine is new or when putting on a new belt: Take a finger full of grease and grease underside of belt. Be sure engine is off. NEVER REACH INTO BELT AREA OR BEHIND BELT GUARD WHILE ENGINE IS RUNNING.

WHILE PERFORMING MAINTENANCE OR REPAIR, ALWAYS REMOVE KEY FROM
ENGINE. ENGINE IS IN NEUTRAL.

SERVICE SCHEDULE

SALSCO CHIPPER/SHREDDER/VAC

- 1) ENGINE - Follow service and maintenance schedule set forth by manufacturer in engine manual.
- 2) Grease main bearings once a day or as needed. **DO NOT OVER GREASE.** Wipe extra grease off bearings. Grease engine slides weekly.
- 3) Be sure to clean entire machine, especially around engine box, after using.
- 4) **TO SHARPEN CHIPPER BLADES:** Remove key from engine. Remove spark plug wire. Engine is in neutral. Either remove chipper chute or chipper blade access door. On earlier models remove chute, on later models remove chipper blade access door. Apply heat with Oxy-Acetylene torch at about 180. This will loosen the Locktite and allow the screws to be removed. When you reassemble, be sure to use Locktite. Sharpen blades as you would sharpen a lawn mower, under angle edge only. Sharpen blades as evenly as possible.

HINT: It is strongly recommended to have a set of blades and screws on the shelf to prevent downtime.

HINT: Blades need sharpening when unit stops or slows down feeding itself. If you have to push material in then the chipper blades need to be sharpened.

- 5) **REPLACE FLAIL BLADES:** Remove key from engine. Engine is in neutral. Remove exhaust chute brace. Unbolt hex head bolts on three sides of shredder barrel housing. Two people are needed to flip barrel assembly over. Shredder hopper doors will open and act as legs to support barrel housing.

CAUTION: DO NOT UNDER ANY CIRCUMSTANCES START ENGINE WHEN UNIT IS OPEN OR AT ANY TIME WHEN PERFORMING SERVICE OR MAINTENANCE.

HINT: This would be a good time to do a visual inspection. When checking parts for damage, remember "when in doubt, throw it out". Be safe not sorry.

Loosen split collars, remove flail blades from shaft.

HINT: Pay attention to spacer positions.

Replace damaged flail blades and reassemble. Be sure when replacing flail blades to put biting edge on leading side into rotation.

**ATTENTION TO SERVICE AND MAINTENANCE
PREVENTS DOWNTIME**

SERVICE SCHEDULE
(Continued)

SALSCO CHIPPER/SHREDDER/VAC

- 6) Check band belt periodically. Tighten as necessary as follows: Remove key from engine, engine is in neutral. Remove belt guard. Activate engine engage lever to observe linkage. NOTICE: by loosening two bolts of clutch linkage to frame, you can then slide linkage as necessary to adjust belt tension.

HINT: When machine is new or when putting on a new belt: Take a finger full of grease and grease underside of belt.

NEVER PERFORM ANY SERVICE, MAINTENANCE OR REPAIR WHILE MACHINE IS
RUNNING

SHREDDER/GRINDERS

ANSI/OPEI B71.6-1990

American National Standard of Powered Shredders/Grinders Safety Specifications

12 Operator Safety Instructions

12.1 General

The manufacturer shall supply with the equipment pertinent instructions for safe operation. Examples of appropriate content and language are shown in 12.2 through 12.7.

12.2 Training

- 12.2.1 Become familiar with the owner's manual before attempting to operate this equipment.
- 12.2.2 Children shall not be allowed to operate this equipment.
- 12.2.3 This equipment shall not be operated in the vicinity of bystanders.
- 12.2.4 Carbon Monoxide can be extremely dangerous in enclosed areas; operators shall not run the machine in an enclosed area since the exhaust from the engine contains carbon monoxide, which is colorless, odorless, and tasteless.
- 12.2.5 Operators shall not allow hands or any other part of the body or clothing inside the feeding chamber, discharge chute, or near any moving part.
- 12.2.6 Before inspecting or servicing any part of the machine, the operator shall shut off the power source, disconnect the spark plug wire from the spark plug, and make sure that all moving parts have come to a complete stop.

12.3 Preparation

- 12.3.1 Operators shall obtain and wear safety glasses at all times while operating the machine.
- 12.3.2 Operators shall avoid wearing loose fitting clothing.
- 12.3.3 Operators shall operate the machine only on a level surface.

SHREDDER/GRINDERS

ANSI/OPEI B71.6-1990

American National Standard of Powered Shredders/Grinders Safety Specifications (Continued)

- 12.3.4 Operators shall not operate the machine on side of hill.
- 12.3.5 Before starting the machine, operators shall check that all screws, nuts, bolts, and other fasteners are properly secured. Damaged or unreadable warning and operating decals shall be replaced.
- 12.3.6 Operators shall use extra care in handling gasoline and other fuels. These fuels are flammable, and their vapors are explosive.
- Only an approved container shall be used;
 - Gas cap shall never be removed or fuel added with the engine running. Engine shall be allowed to cool before refueling. Operators shall not smoke;
 - The machine shall not be refueled indoors;
 - The machine or fuel container shall not be stored inside where there is an open flame, such as a water heater.

12.4 Operation

- 12.4.1 Before starting the machine, operators shall make certain that the cutting chamber is empty.
- 12.4.2 When feeding shreddable material into the equipment, operators shall be extremely careful that pieces of metal, rocks, bottles, can, or other foreign objects are not included.
- 12.4.3 If the cutting mechanism strikes any foreign objects or if the machine should start making any unusual noise or vibration, operators shall shut off the engine immediately and allow the machine to stop. Operators shall disconnect the spark plug wire from the spark plug and take the following steps:
- A) Inspect for damage;
 - B) Replace or repair any damaged parts;
 - C) Check for and tighten any loose parts.

SHREDDER/GRINDERS

ANSI/OPEI B71.6-1990

American National Standard of Powered
Shredders/Grinders
Safety Specifications
(Continued)

- 12.4.4 The engine shall be kept clean of debris and other accumulations.
- 12.4.5 Processed material shall not be allowed to build up in the discharge area; this can prevent proper discharge and result in kickback of material through the feed opening.
- 12.4.6 Do not allow hands or any other part of the body or clothing inside the feeding chamber or discharge chute, or near any moving part. (This repetition of 12.2.5 is deliberate.)
- 12.4.7 All guards and deflectors shall be kept in place and in good working condition.
- 12.4.8 Operators shall stand clear of the discharge area when operating this machine.
- 12.4.9 Operators shall keep their faces and bodies back from the feeding opening.
- 12.4.10 Operators shall not overreach. They shall keep proper balance and footing at all times.
- 12.4.11 Operators shall not tamper with the engine-governor settings on the machine; the governor controls the maximum safe operating speed and protects the engine and all moving parts from damage caused by overspeed. Authorized service shall be sought if a problem exists.
- 12.4.12 This machine shall not be transported while the engine is running.
- 12.4.13 If the machine becomes clogged, operators shall shut off the engine (or motor) and disconnect the spark plug wire (electric unit unplug) before clearing debris.

SHREDDER/GRINDERS

ANSI/OPEI B71.6-1990

American National Standard of Powered
Shredders/Grinders
Safety Specifications
(Continued)

12.5 Maintenance and Storage

- 12.5.1 When this equipment is stopped for service, inspection, or storage, or to change an accessory, operators shall make sure the spark plug wire is disconnected from the spark plug. Operators shall allow the machine to cool before making any inspections, adjustments, etc. The machine shall be maintained with care and kept clean.
- 12.5.2 Store the machine out of the reach of children and where gasoline vapors will not reach an open flame or spark. For extended storage periods, run the unit dry of gas. Always all the machine to cool before storing.

CAUTION

**ROTARY MOVING PARTS
KEEP ALL BODY PARTS CLEAR
WEAR PROPER EYE PROTECTION**

SAFETY RULES

1. DO NOT OPERATE WITH COVERS OFF.
2. KEEP HANDS & FEET AWAY!
3. DO NOT REFILL FUEL WHILE ENGINE IS HOT OR IS RUNNING!
4. READ MANUAL BEFORE OPERATING.
5. DO NOT OPERATE AROUND ANIMALS OR PEOPLE.
6. CAUTION - MACHINE CAN TURN DEBRIS INTO FLYING OBJECTS!



DANGER

**Keep
Away**

CAUTION

**DO NOT OPERATE
THIS MACHINE WITHOUT
COVERS IN PLACE**

! DANGER !

**KEEP HANDS AND
FEET AWAY**

CHIPPER/SHREDDER/VAC

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 warranty new equipment, for the original purchaser, as follows for the purchaser categories as listed below:

Commercial Models:

Commercial. 1 Year
Rental. 90 Days

Warranty: Repair or replace (at Salsco's option) 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 Salsco directly at: SALSCO, INC., Service Department, 105 Schoolhouse Road, Cheshire, CT 06410, 203/271-1682.

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, blades, rubber products, etc.

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

SALSCO'S WARRANTY PROCEDURE

In order for Salsco to process your warranty claims in a timely manner you must follow the simple procedures listed below:

1) MACHINE OR PART FAILURE

- a) Call our service department before you try to fix the problem, for instruction on how to correct or repair the problem. Preventive maintenance will also be suggested.
- b) Fill in all information requested on warranty claim form (date of purchase, company name, address, etc.)
- c) List all parts used. Make sure part numbers are correct. You can obtain these from your manual. Any parts that you believe to be defective or any parts that break should be retained for possible inspection until after the warranty has been paid or part has been replaced.

For most engine problems it will be easier for you to contact your local engine dealer. Should you have any problem, please call Salsco.

If you have any questions, please do not hesitate to call us. Our toll free number is 1-800-BSALSCO.

READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING

8/93

WARRANTY CLAIM

SALSCO, INC. - 105 SCHOOL HOUSE ROAD, CHESHIRE, CT 06410

PHONE: (203) 271-1682

FAX: (203) 271-2596

NO-OWNER: _____ PHONE# () _____

ADDRESS: _____

PURCHASED FROM: _____ PHONE# () _____

ADDRESS: _____

DATE FAILED: _____ DATE PURCHASED: _____ INVOICE # _____

SERIAL # _____ MODEL# _____ HOURS USED: _____

PROBABLE CAUSE OF FAILURE OR PROBLEM:(word defective not sufficient)

WORK PERFORMED/COMMENTS ON REPAIR:

PART #	DESCRIPTION	QTY	PRICE EACH	LABOR

PREVENTIVE MAINTENANCE SUGGESTED AND BY WHOM:

OFFICE USE ONLY

DT APPRVD: _____ DT RJCTD: _____ ENTRD A/R: _____ ENTRD DB: _____

DEALER D/R: _____ WARRANTY CARD: _____

PART(S) TOTAL: _____ LABOR TOTAL: _____ TOTAL: _____

APPROVED/REJECTED BY: _____ NAME _____ TITLE _____

REASON FOR REJECTION:

SALSCO INC.
LEADER BY DESIGN

105 SCHOOL HOUSE ROAD
CHESHIRE, CONNECTICUT 06410
PHONE 203-271-1682
FAX 203-271-2596
1-800-8-SALSCO