

# **Valleytown** Vineyard Duster

## **MODEL VT10 Parts Manual**



**Manufactured by NIKKEL IRON WORKS Shafter, CA**

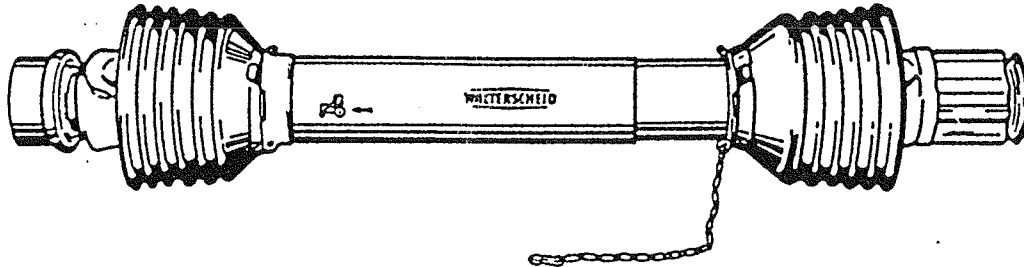
**661-746-4904 800-342-9222**

**[nikkelironworks.com](http://nikkelironworks.com)**

## TABLE OF CONTENTS

|   |            |
|---|------------|
| DRIVELINE INSTRUCTIONS .....              | PAGE 1-5   |
| MAIN FRAME WELDMENT & RELATED PARTS ..... | PAGE 6     |
| FEED AGITATOR & RELATED PARTS .....       | PAGE 7,8   |
| IMPELLER ASSEMBLY & RELATED PARTS .....   | PAGE 9,10  |
| FEED CONTROLS, FRONT CHAIN GUARD .....    | PAGE 11    |
| MAIN DRIVE SHAFT & RELATED PARTS .....    | PAGE 12    |
| AGITATOR AUXILIARY DRIVE .....            | PAGE 13,14 |
| OPERATING INSTRUCTIONS .....              | PAGE 15    |

**NO. 130044 VT10 DRIVELINE**  
(furnished complete only)



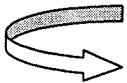
This driveline is for illustration purposes only and is not an illustration of the Driveline as supplied

**CAUTION !!**

**THE DRIVELINE SUPPLIED WITH THIS MACHINE  
MAY BE TOO LONG FOR YOUR TRACTOR.**

**SEE THE OWNERS MANUAL & PARTS LIST  
OR CALL YOUR DEALER FOR SHORTENING INSTRUCTIONS.**

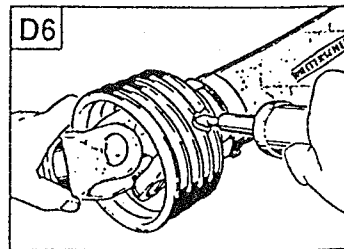
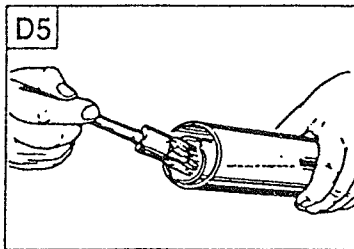
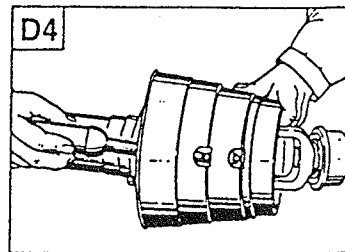
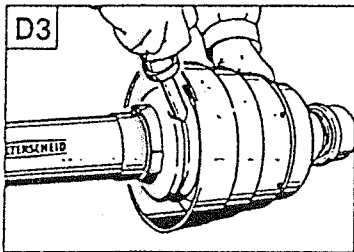
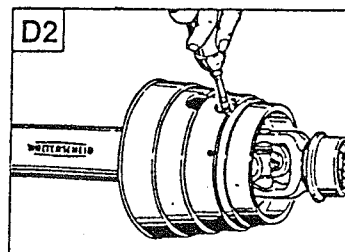
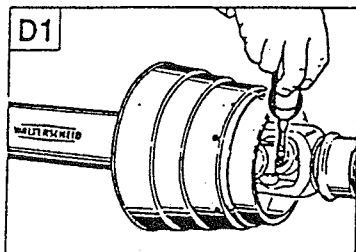
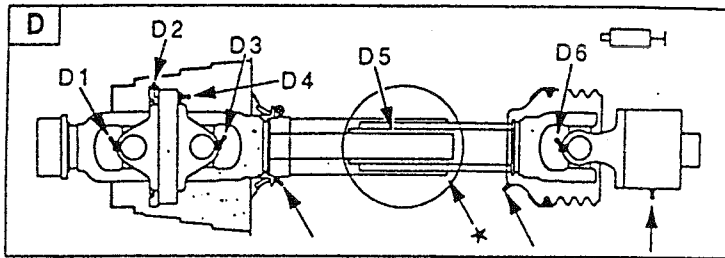
PART NO. DECAL9766



THIS IS YOUR RESPONSIBILITY -----

WARRANTY WILL NOT BE GRANTED ON DRIVELINES IMPROPERLY INSTALLED AND IMPROPERLY LUBRICATED.

## DRIVELINE LUBRICATING INSTRUCTIONS



Lubricate with quality grease before starting work & every 8 operating hours. Clean & grease the implement input drive-line before each prolonged period of non-use.

Molded nipples on the guard near each guard bearing are intended as grease fittings and should be lubricated every 8 hours of operation!

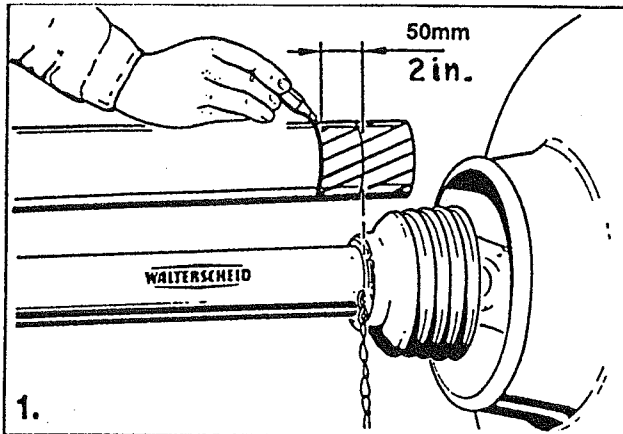
Telescoping members must have lubrication to operate successfully regardless of whether a grease fitting is provided for that purpose. Telescoping members without fittings should be pulled apart & grease should be added manually.

Check & grease the guard tubes in winter to prevent freezing.

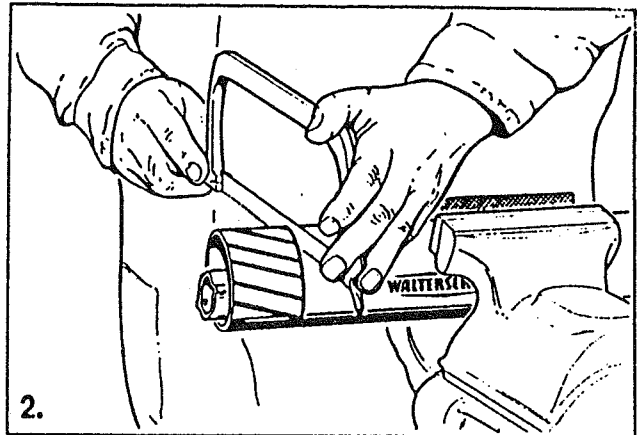
----- CHECK THE LENGTH OF THE TELESCOPING MEMBERS TO INSURE THE DRIVELINE WILL NOT BOTTOM OUT OR SEPARATE WHEN TURNING AND/OR GOING OVER ROUGH TERRAIN.

LENGTH MODIFICATION OF THE IMPLEMENT INPUT DRIVELINE SHOULD ONLY BE DONE AT THE DIRECTION OF THE IMPLEMENT MANUFACTURER.

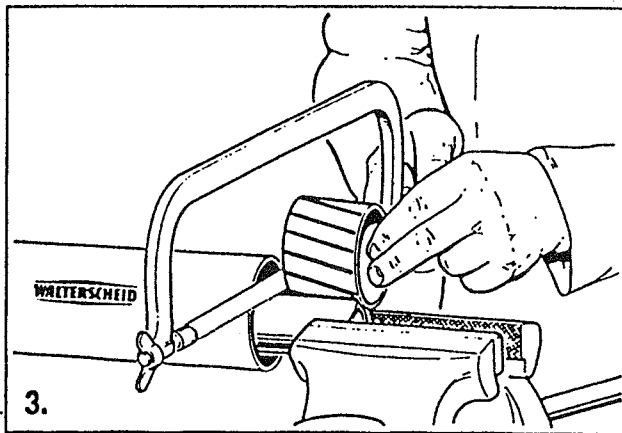
## DRIVELINE LENGTH ADJUSTMENT INSTRUCTIONS



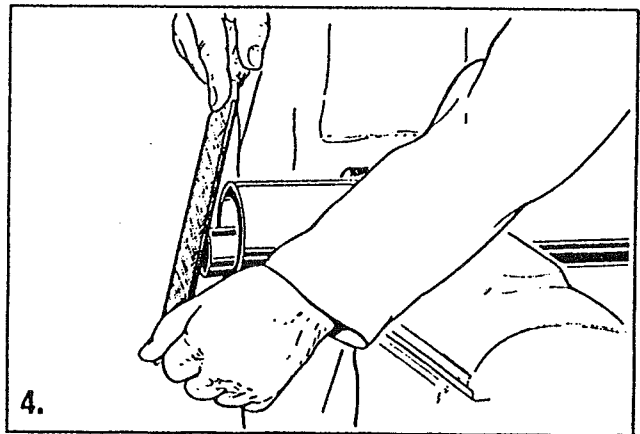
To adjust the length, hold the half-shafts next to each other in the shortest working position and mark them.



Shorten inner and outer guard tubes equally.



Shorten inner and outer sliding profiles by the same length as the guard tubes.



**Round off all sharp edges and remove burrs. Grease sliding profiles.** No other changes may be made to the PTO drive shaft and guard.



## PTO Safety

A PTO shaft revolving at 540 rpm travels more than two metres in less than a second. Little wonder that PTO entanglement nearly always results in devastating injury or death!

Missing or damaged shielding is the main reason for driveline entanglement. Manufacturers have made tremendous strides in developing safer PTO shielding. However, it is impossible to make protection fool proof. All shielding components must be correctly installed and properly maintained to prevent injury in case of accidental contact.

Operator awareness and constant vigilance are also crucial if PTO entanglement is to be avoided. Making repairs while equipment is operating, stepping over or onto revolving shafts, wearing loose or frayed clothing are actions that set the stage for carnage.

Clear safety rules must be established for everyone who works with farm machinery. Even the most experienced operator will benefit by reviewing the PTO safety information summarized in this fact sheet. The guidelines will prove especially valuable for training novice equipment operators — new employees and children who are excited about the prospect of operating farm machinery must be made aware of the importance of sticking to these rules!



### Shielding must be 100%

A tractor's master shield prevents accidental contact with the tractor stub shaft and the front universal joint of the attached machine's driveline. Never operate a tractor with a missing or damaged master shield.

Integral-journal shields completely enclose the power shafts of PTO-operated machines. Manufacturers have made great strides in the design of these tubular shields, most of which are now made of durable plastic. The "cones" that cover the universal joints at each end of a plastic power shaft shield have also been improved - their flexible design makes hook-up easier and provides greater protective cover.

Integral shields rotate on bearings, independently of the power shaft. They revolve with the shaft while it is turning, but the shield will stop spinning if it is contacted. These shields must be kept in place and maintained in good condition to provide protection against the grabbing action of shafts and universal joints.

The power shaft must also be shielded at the point of attachment of the driven machine. Both the universal joint and the machine's stub shaft must be well covered. If this shielding is missing or damaged, or if you feel it doesn't provide adequate protection, talk to your dealer about a replacement.

There are still some older machines in operation that have tunnel shields over their power shafts. This design offered only limited protection. Because tunnel shielding is still open at the bottom, clothing, shoelaces, hair, etc. can be caught by the shaft or universal joints. There is a case to be made for "retiring" such equipment. If it must be used, power shafts and shielding should be replaced with safer, modern components.

### Proper Installation

A PTO shaft may break or separate during operation if improperly used or adjusted. If it does, the tractor-driven end can swing violently, with the potential for severe equipment damage and operator injury.

New equipment is fitted with the driveline recommended for that particular machine. Make very sure that all replacement driveline components conform to the same specifications.

The tractor drawbar should be adjusted to the length specified in the driven machine's manual. This ensures that the telescoping power shaft and shield will stay together when they lengthen in operation. It also prevents driveline "bottoming out" when making a sharp turn, or when the rear tractor wheels enter a depression. This puts considerable strain on shaft and bearing supports, and the entire driveline may be damaged or bent.

### Use your safety sense

To perform its intended function, farm machinery has to operate in a very powerful, aggressive fashion. Operators must adopt good safety habits to prevent injury, even with well-shielded equipment.

Following are key considerations for preventing PTO entanglement.

1. **Always disengage the PTO, shut off the engine and remove the keys before leaving the tractor seat.** You can't be injured by the PTO or other machine parts if the driveline isn't rotating! Taking the keys prevents unexpected start-up by another person while you are cleaning, lubricating, adjusting, or making repairs.
2. **Keep the tractor's master shield in place at all times.**
3. **Check frequently to confirm that integral shields are in good condition.** With the powershaft stopped, you should be able to rotate the shield freely by hand. Look for nicks, dents or bends that could catch clothing. Damaged shields or bearings must be repaired immediately. Don't operate the machine until damaged parts are fixed or replaced.
4. **Never step across a rotating powershaft.** Some equipment must be operated in a stationary location where you are working (e.g. forage wagons and blowers, grinder-mixers, etc.) When such machines are running, always walk around the revolving shaft. Safety devices are usually reliable, but could malfunction.
5. **Dress for safety.** Wear close fitting clothes and keep long hair covered. Raggy old coats and long boot laces can easily be grabbed by rotating parts.

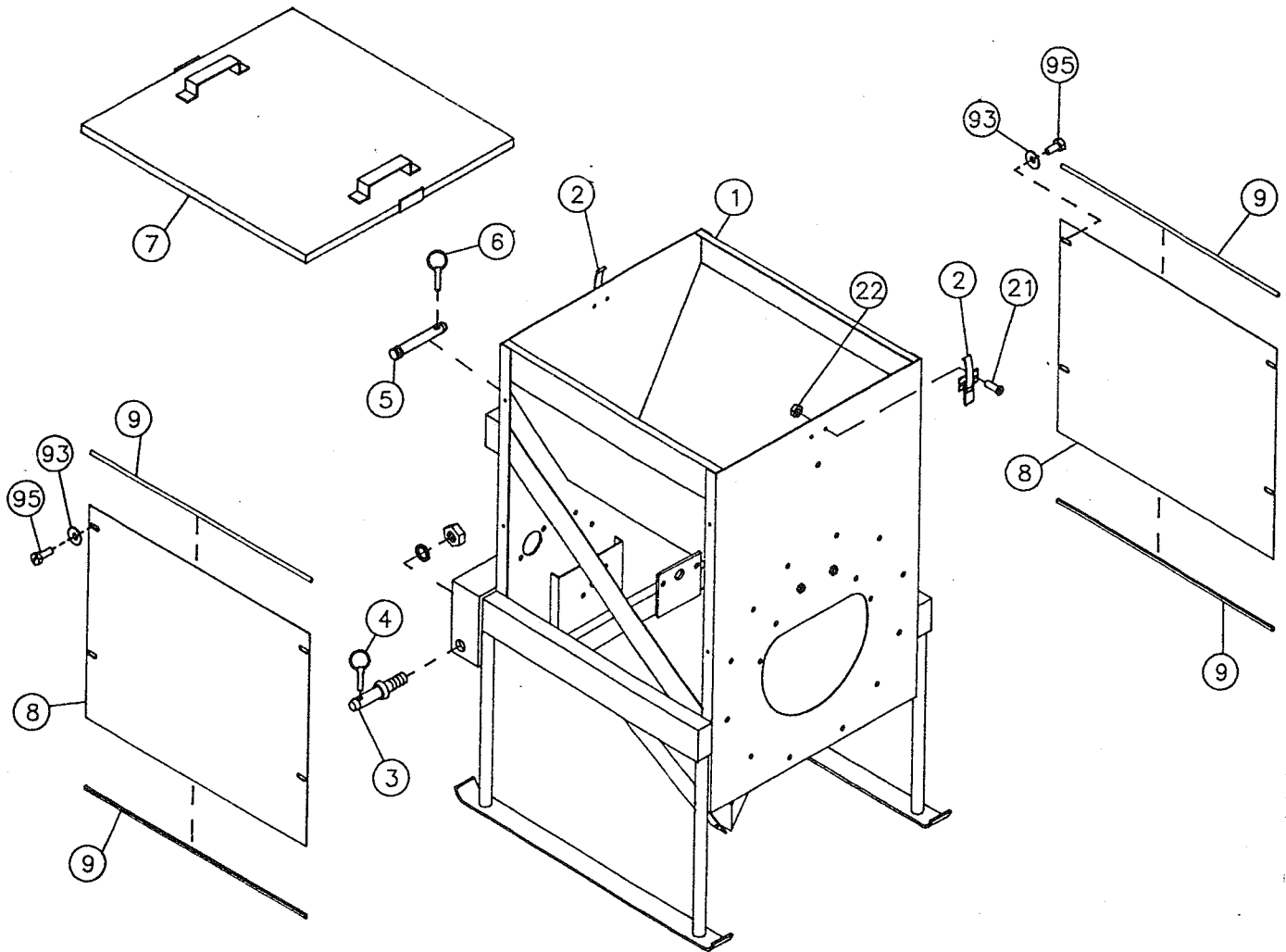
### **Make safety a habit**

Broken bones, severed limbs, crushed skulls — such horrendous injuries are typical of PTO entanglement accidents. The only sure way to prevent such tragedy is to avoid all contact with moving machine parts. Good shielding is vital, but all equipment operators must be aware of hazards and make safety a part of their habitual behaviour.

*The information and recommendations contained in this publication are believed to be reliable and representative of contemporary expert opinion on the subject material. The Farm Safety Association does not guarantee absolute accuracy or sufficiency of subject material, nor can it accept responsibility for health and safety recommendations that may have been omitted due to particular and exceptional conditions and circumstances.*

*Copyright © 1992*

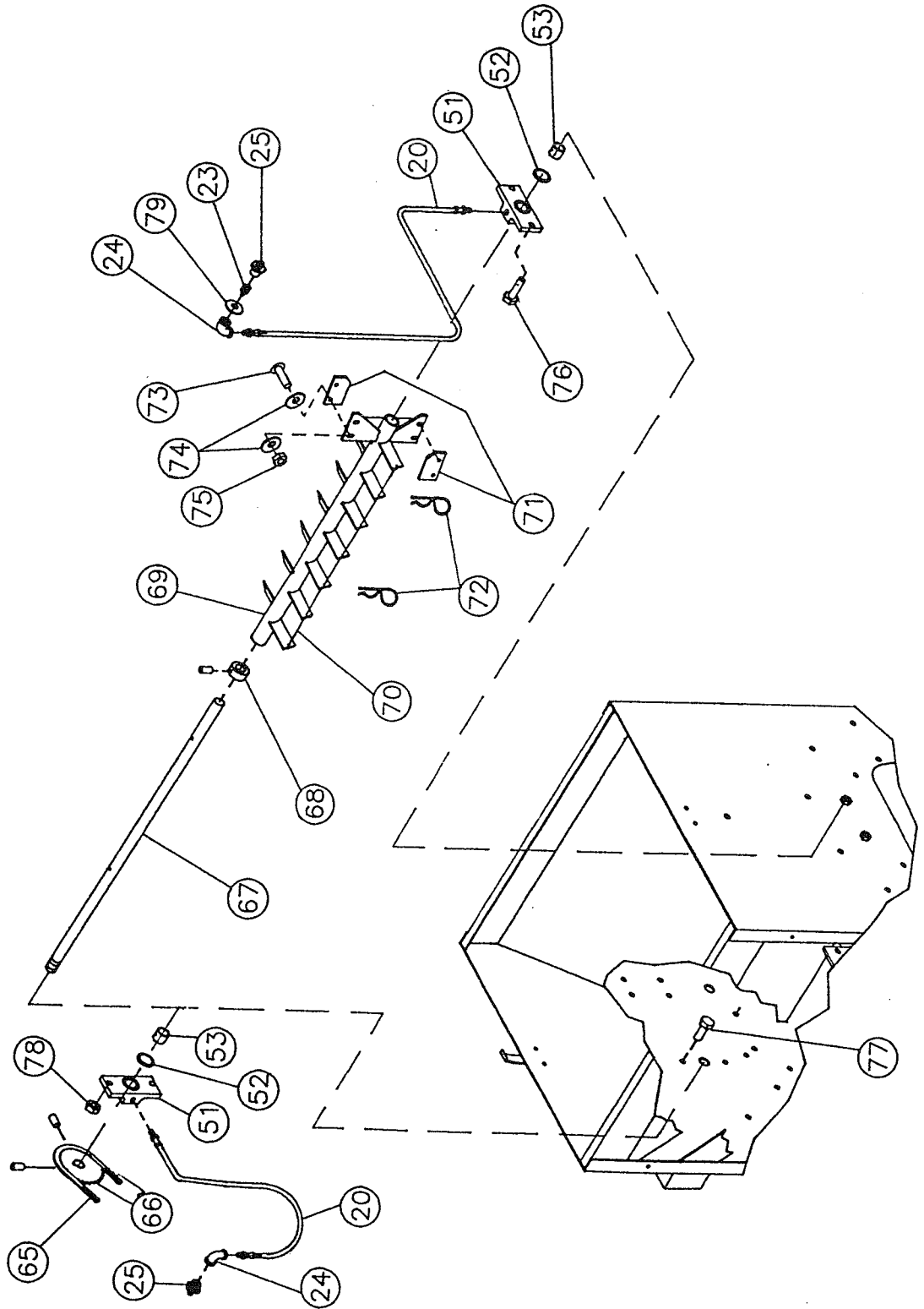
## MAIN FRAME WELDMENT & RELATED PARTS



| REF | PART #       | DESCRIPTION                         | QTY |
|-----|--------------|-------------------------------------|-----|
| 1   | 140066       | MAIN FRAME WELDMENT                 | 1   |
| 2   | 110048       | HOOD LATCH                          | 2   |
| 3   | P728         | CAT.I LOWER LINK PIN W/NUT & LW SHR | 2   |
| 4   | P791         | LYNCH PIN                           | 2   |
| 5   | P772         | CAT.I TOP LINK PIN                  | 1   |
| 6   | P791         | LYNCH PIN                           | 2   |
| 7   | 240066       | HOPPER COVER                        | 1   |
| 8   | 10100        | SIDE PANEL GUARD W/TRIM LOCK        | 2   |
| 9   | 62B3X01      | TRIM LOCK ONLY                      | 4   |
| 21  | PHMS10/24X12 | 10/24 X 3/4" PHILLIPS PANHEAD       | 4   |
| 22  | NUT10/24NYL  | 10/24 NUT                           | 4   |
| 93  | FLTWA04      | 1/4" FLAT WASHER, PLATED            | 8   |
| 95  | SMHH10X12    | #10, 1/4X 3/4" SELF TAPPING SCREW   | 8   |



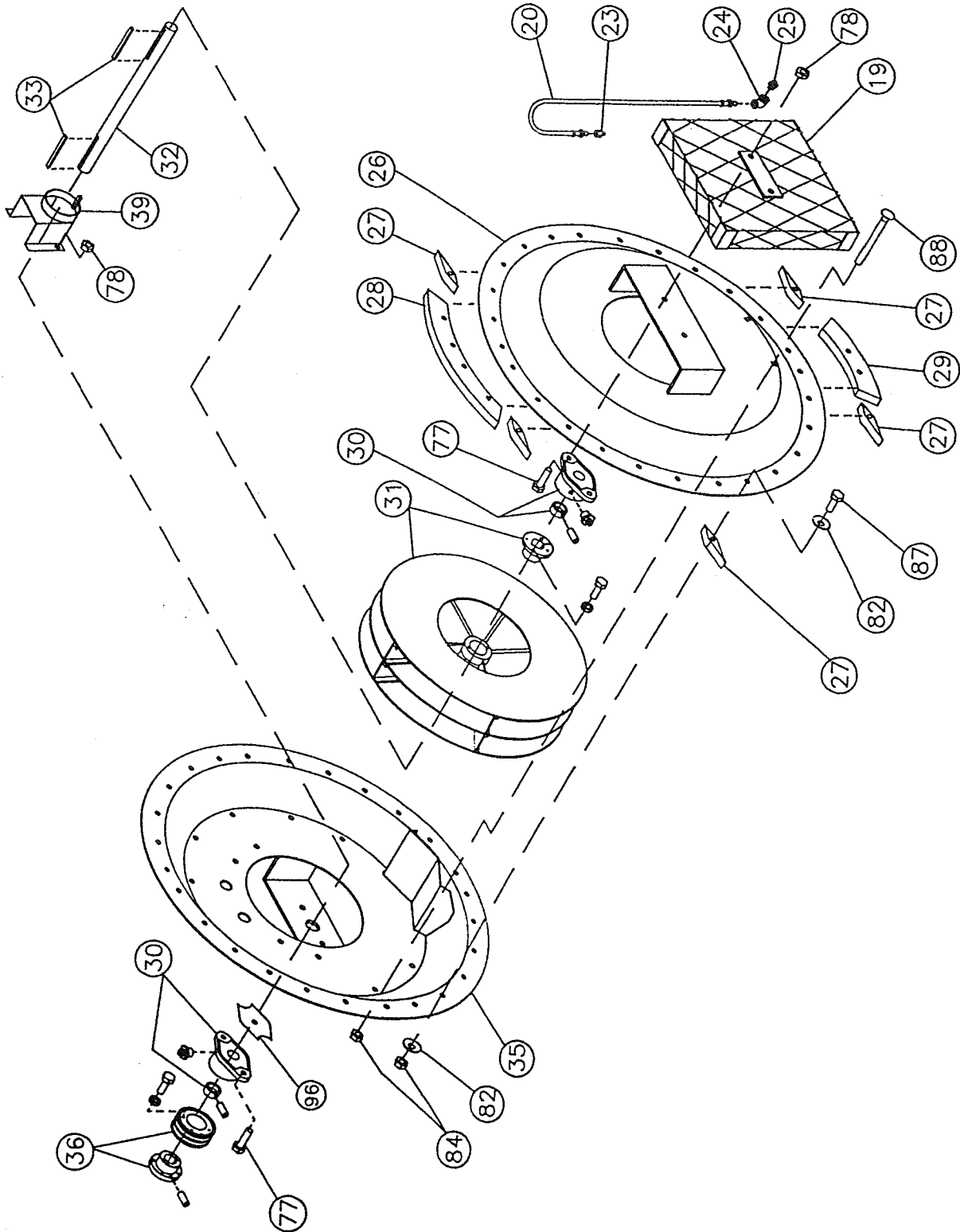
# FEED AGITATOR & RELATED PARTS



## FEED AGITATOR & RELATED PARTS

| REF | PART #       | DESCRIPTION                   | QTY |
|-----|--------------|-------------------------------|-----|
| 20  | 11312        | GREASE HOSE                   | 2   |
| 23  | 320042       | ADAPTER                       | 1   |
| 24  | PF02X90ELL   | 1/8" NPT 90 DEGREE ELBOW      | 2   |
| 25  | B610         | 1/8" NPT STRAIGHT ZERK        | 2   |
| 51  | 120060       | BEARING ASSY                  | 2   |
| 52  | 568214       | 3/4 X 1/8" O'RING             | 2   |
| 53  | 1007-3       | BUSHING ONLY                  | 2   |
| 65  | 1010047      | ROLLER CHAIN                  | 1   |
|     | 1010047A     | (ROLLER CHAIN, 95 & LATER)    |     |
| 66  | 710062       | SPROCKET                      | 1   |
| 67  | 110120       | AGITATOR SHAFT                | 1   |
| 68  | SCOLLAR12    | SET SCREW COLLAR              | 1   |
| 69  | 1R30068      | AGITATOR WITH WIPERS          | 1   |
| 70  | L50X045      | AGITATOR WIRE ONLY            | 1   |
| 71  | 330068       | WIPER ONLY                    | 2   |
| 72  | 12HAIR       | HAIR PIN                      | 2   |
| 73  | PHMS10/24X12 | 10/24 X 3/4" PHILLIPS PANHEAD | 4   |
| 74  | FLTWA10      | 10/24 FLAT WASHER             | 4   |
| 75  | NUT10/24NYL  | 10/24 NUT                     | 4   |
| 76  | CSNC06X20    | 3/8 X 1-1/4" CAP SCREW NC     | 2   |
| 77  | CSNC06X1     | 3/8 x 1" CAP SCREW NC         | 2   |
| 78  | NUT06NCLK    | 3/8" HEX TORQUE NUT           | 2   |
| 79  | FLTWA06`     | 3/8" FLAT WASHER              | 1   |

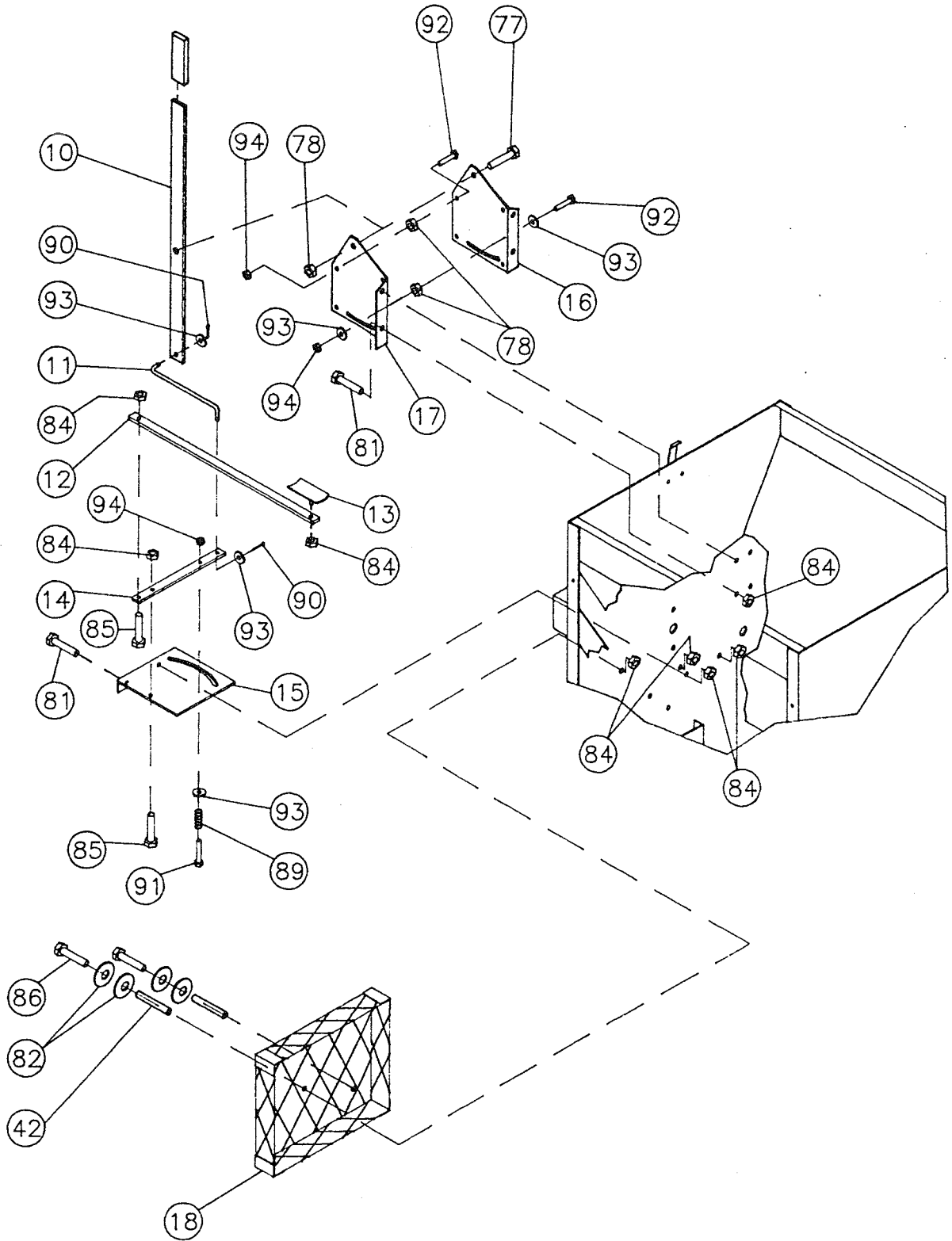
# IMPELLER ASSEMBLY & RELATED PARTS



## IMPELLER ASSEMBLY & RELATED PARTS

| REF | PART #     | DESCRIPTION                                       | QTY |
|-----|------------|---|-----|
| 19  | 440091     | INTAKE GUARD                                      | 1   |
| 20  | 11312      | GREASE HOSE                                       | 1   |
| 23  | 51942      | 1/4 X 28X1/8" FEMALE ADAPTER                      | 1   |
| 24  | PF02X90ELL | 1/8" NPT 90 DEGREE ELBOW                          | 1   |
| 25  | B610       | 1/8" NPT STRAIGHT ZERK                            | 1   |
| 26  | 140091     | OUTER SHROUD                                      | 1   |
| 27  | 110101P    | PLASTIC AIR VANE                                  | 20  |
| 28  | 10300      | UPPER DEFLECTOR                                   | 1   |
| 29  | 10200      | LOWER DEFLECTOR                                   | 1   |
| 30  | 110037     | BEARING 1" BORE                                   | 2   |
| 31  | 130062     | IMPELLER W/TAPER LOCK BUSHING                     | 1   |
| 32  | 110100     | DRIVE SHAFT 1"X15"                                | 1   |
| 33  | CFSQ04     | 1/4" X 2" SQUARE KEY                              | 2   |
| 35  | 140092     | INNER SHROUD                                      | 1   |
| 36  | 610064     | SHEAVE 2 GROOVE, 1"BORE<br>(w/taper lock bushing) | 1   |
| 39  | 130066     | FEEDER  | 1   |
| 77  | CSNC06X24  | 3/8X1-1/2" CAP SCREW NC                           | AR  |
| 78  | NUT06NCLK  | 3/8" NC TORQUE NUT                                | AR  |
| 82  | FLTWA05    | 5/16" FLAT WASHER                                 | AR  |
| 84  | NUT05NCLK  | 5/16" NC TORQUE NUT                               | AR  |
| 87  | CSNC05X24  | 5/16X1-1/2" CAP SCREW NC                          | AR  |
| 88  | CABLT05X96 | 5/16X6" CARRIAGE BOLT NC                          | 2   |
| 96  | 2205A      | SEAL  | 1   |

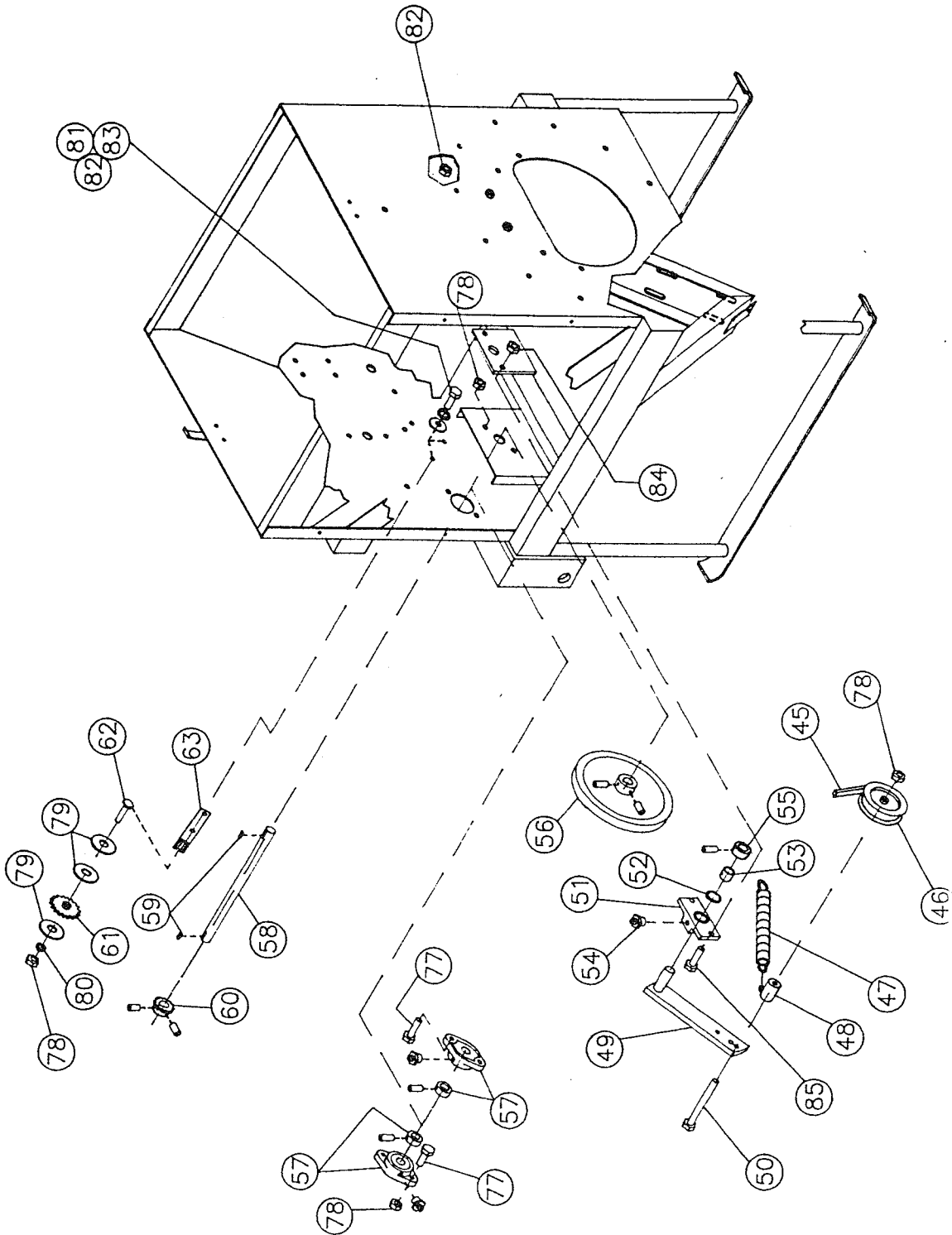
# FEED CONTROLS, FRONT CHAIN GUARD



## FEED CONTROLS, FRONT CHAIN GUARD

| REF | PART #    | DESCRIPTION                    | QTY |
|-----|-----------|--------------------------------|-----|
| 10  | 120066    | FEED CONTROL HANDLE & SLEEVE   | 1   |
| 11  | 120068    | FEED CONTROL ROD               | 1   |
| 12  | 310003    | CONTROL ARM                    | 1   |
| 13  | 110004    | CUT OFF GATE                   | 1   |
| 14  | 330001    | LEVER                          | 1   |
| 15  | 230001    | FEED CONTROL BRACKET           | 1   |
| 16  | 110121    | RIGHT CONTROL HANDLE MTG PLATE | 1   |
| 17  | 110122    | LEFT CONTROL HANDLE MTG PLATE  | 1   |
| 18  | 110129    | CHAIN GUARD, FRONT             | 1   |
| 42  | PIPE04X48 | 1/4" PIPE SPACER               | 1   |
| 77  | CSNC06X16 | 3/8 X 1" NC CAP SCREW          | 1   |
| 78  | NUT06NC   | 3/8" NC NUT, SPACER            | 4   |
| 81  | CSNC06X12 | 5/16" X3/4" NC CAP SCREW       | AR  |
| 82  | FLTWA06   | 3/8" FLAT WASHER               | AR  |
| 84  | NUT06NCLK | 3/8" NC TORQUE NUT             | AR  |
| 85  | CSNC06X16 | 5/16" X1" NC CAP SCREW         | AR  |
| 86  | CSNC06X64 | 3/8" X4" NC CAP SCREW          | AR  |
| 89  | 1100066   | SPRING                         | AR  |
| 90  | COT02X16  | 1/8 X 1" COTTER KEY            | AR  |
| 91  | CSNC04X24 | 1/4X1-1/2" NC CAP SCREW        | AR  |
| 92  | CSNC04X16 | 1 4X1" NC CAP SCREW            | AR  |
| 93  | FLTWA04   | 1/4" FLAT WASHER               | AR  |
| 94  | NUT04NCLK | 1/4" NC TORQUE NUT             | AR  |

# AGITATOR AUXILIARY DRIVE

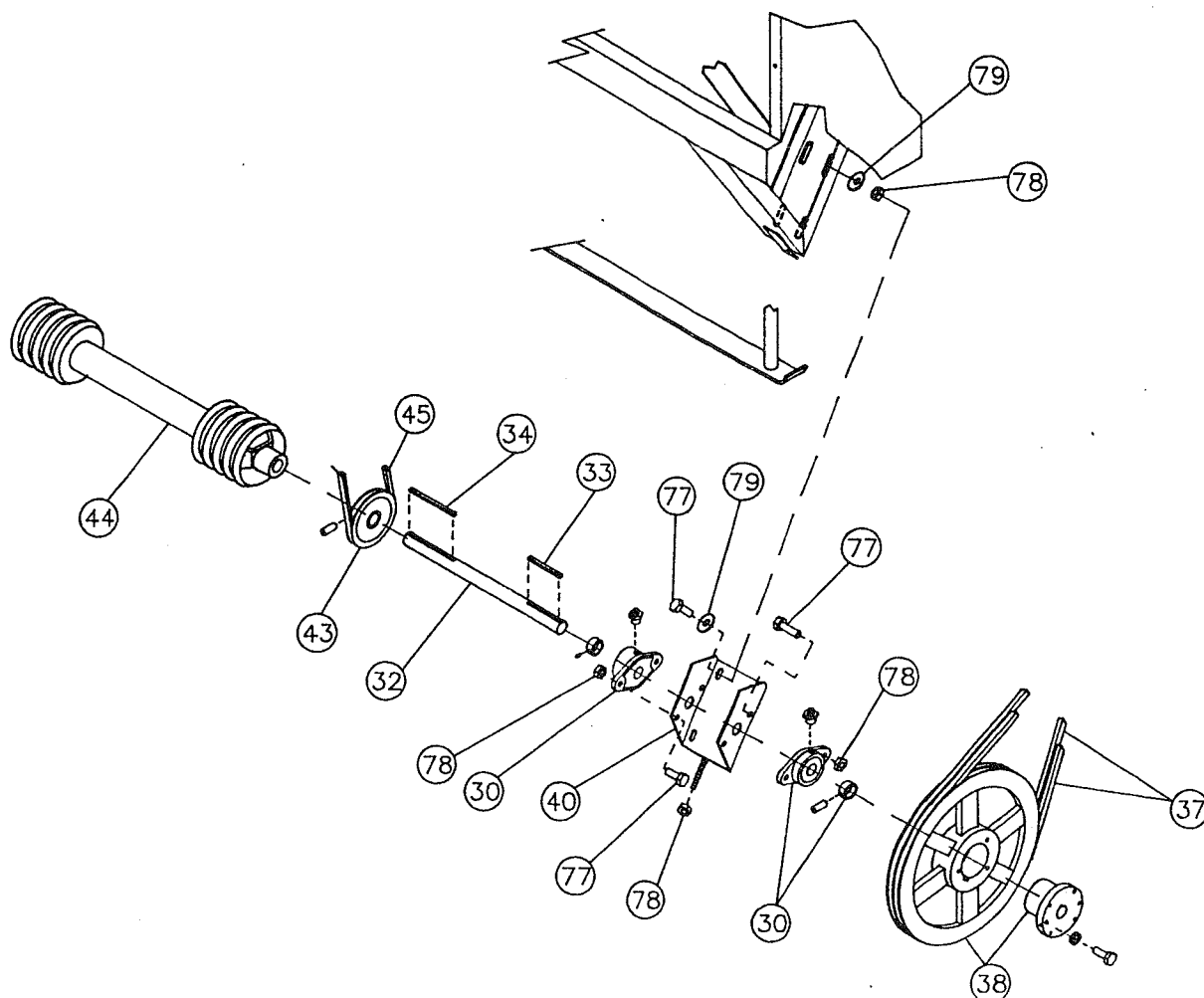


## AGITATOR AUXILIARY DRIVE

| REF | PART #     | DESCRIPTION                   | QTY |
|-----|------------|-------------------------------|-----|
| 45  | 4910041    | SINGLE V BELT                 | 1   |
| 46  | 110125A    | IDLER PULLEY                  | 1   |
| 47  | 110128     | TENSION SPRING                | 1   |
| 48  | 110124     | SPACER                        | 1   |
| 49  | 110123     | IDLER ARM ASSY                | 1   |
| 50  | CSNC06X48  | 3/8X3" NC CAP SCREW           | 1   |
| 51  | 120060     | BEARING ASSY                  | 1   |
| 52  | 568/214    | 3/4X1/8" O'RING               | 1   |
| 53  | 1007-3     | BUSHING ONLY                  | 1   |
| 54  | B610       | 1/8" STRAIGHT ZERK            | 1   |
| 55  | SCOLLAR12  | 3/4" SHAFT COLLAR SET         | 1   |
| 56  | 510039     | SHEAVE                        | 1   |
| 57  | 210037     | 3/4" BEARING                  | 1   |
| 58  | 110098     | SHAFT                         | 1   |
| 59  | WK9        | 3/16X3/4" WOODRUFF KEY        | 2   |
| 60  | 410062     | 15T SPROCKET                  | AR  |
|     | 410062A    | 12T SPROCKET (95 & later)     | AR  |
| 61  | 110127A    | IDLER SPROCKET                | 1   |
| 62  | CABLT06X32 | 3/8X2" CARRIAGE BOLT, SPECIAL | AR  |
| 63  | 110126A    | SPROCKET IDLER BRACKET        | 1   |
| 77  | CSNC06X20  | 3/8X1-1/4" CAP SCREW NC       | AR  |
| 78  | NUT06NCLK  | 3/8" NC TORQUE NUT            | AR  |
| 79  | FLTWA06    | 3/8" FLAT WASHER              | AR  |
| 80  | LW06SP     | 3/8" LOCK WASHER              | AR  |
| 81  | LW05SP     | 5/16" LOCK WASHER             | 2   |
| 82  | FLTWA05    | 5/16" FLAT WASHER             | 2   |
| 83  | CSNC05X12  | 5/16X3/4" NC CAP SCREW        | 2   |
| 84  | NUT05NCLK  | 5/16" NC TORQUE NUT           | 2   |



## MAIN DRIVE SHAFT & RELATED PARTS



| REF | PART #    | DESCRIPTION              | QTY |
|-----|-----------|--------------------------|-----|
| 30  | 110037    | BEARING 1" BORE          | 2   |
| 32  | 110100    | DRIVE SHAFT, 1"X15"      | 1   |
| 33  | CFSQ04    | 1/4X1/4X2" KEY STOCK     | 1   |
| 34  | CFSQ-V04  | 1/4X1/4X3-1/4" KEY STOCK | 1   |
| 37  | 5310102   | MATCHED BELT SET         | 1   |
| 38  | 610064    | SHEAVE 1" BORE, 2-GROOVE | 1   |
| 40  | 120054    | BEARING CARRIER BRACKET  | 1   |
| 43  | 610039    | SHEAVE                   | 1   |
| 44  | 130044    | DRIVE LINE               | 1   |
| 45  | 4910041   | SINGLE V-BELT            | 1   |
| 77  | CSNC06X20 | 3/8X1-1/4" CAP SCREW NC  | AR  |
| 78  | NUT06NCLK | 3/8" NC TORQUE NUT       | AR  |
| 79  | FLTWA06   | 3/8" FLAT WASHER         | AR  |

## VT10 OPERATING INSTRUCTIONS

1. After attaching to your tractor, be sure to check the following:

*Install the Power Take-Off Driveline and slowly raise the unit the full range of lift.*

*Be sure that the driveline does not bottom out. At any point---it may be necessary to cut both halves of the driveline as well as the plastic shields in order to prevent this from occurring.*

*If it is necessary to cut the driveline, refer to "Driveline Length Adjustments" on Page 3.*

2. With the tractor running at idle speed, engage the PTO clutch slowly, making certain that the unit is running smoothly.
3. For trial purposes you may want to put 2 or 3 sacks of sulfur in the hopper, set the control handle at "6". This should result in approximately 12 lbs. per acre. The rate of application can be changed by merely moving the control handle as required. After you have determined the setting you desire, tighten the stop bolt to secure the handle location.
4. When you begin to dust –  
**ALWAYS ENGAGE THE PTO WITH THE ENGINE AT AN IDLE**  
slowly increase RPM until the fan RPM is up to full speed.
5. Lubricate the driveline fittings twice daily. It may be necessary to remove the driveline in order to get to the Zerk fittings. See lubricating Instructions on Page 2.
6. Lubricate all other fittings once daily.