

J.E. LOVE COMPANY

LOVE®

LOVE / ØYJORD SEEDER



FORESTRY PRODUCTS GROUP

P.O. BOX 188

GARFIELD, WA 99130-0188

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Manufacturers of Special Harvesting Equipment

J. E. LOVE COMPANY WARRANTY

The J. E. Love Company warrants that it will repair F.O.B. its factory or furnish without charge F.O.B. its factory, a similar part to replace any material in its machinery which within one year after date of retail delivery or lease/rental is proved to the satisfaction of the Company to have been defective at the time it was delivered. Provided that all parts claimed defective shall be returned, properly identified, to the Company's branch having jurisdiction over the territory, charges prepaid.

This warranty to repairs applies only to new and unused machinery, which after shipment from the factory of the Company, has not been altered, changed, repaired or treated in any manner whatsoever, and does not extend to equipment or implements not manufactured by the J. E. Love Company, although sold or operated with the Company's Machinery.

Furthermore, component parts, equipment, accessories and items not fabricated by J. E. Love Company are warranted only to the extent of the original manufacturer's warranty.

THIS WARRANTY TO REPAIR IS THE ONLY WARRANTY EITHER EXPRESS, IMPLIED OR STATUTORY, UPON WHICH SAID MACHINERY IS SOLD. SPECIFICALLY, THE J. E. LOVE COMPANY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR PURPOSE.

The Company's liability in connection with this transaction is expressly limited to the repair or replacement of defective parts; all other damages and warranties, statutory or otherwise, being hereby expressly waived by the purchaser.

No representative of the Company has the authority to change this warranty or this contract in any manner whatsoever, and no attempt to repair or promise to repair or improve the machinery covered by this contract by any representative of the Company shall waive any consideration of the contract or change or extend this warranty in any manner whatsoever.

The J. E. Love Company shall in no event be responsible or liable in damages for losses, delays or nonperformance caused by or due to current energy, fuel or material shortages or due to Labor Contracts beyond the control of the Company.

WARRANTY CLAIMS PROCEDURE

1. A warranty claim must be submitted through the point of purchase.
2. Defective parts for such a warranty claim is made must be returned to the J. E. Love Company, transportation charges prepaid, within 30 days from the claim date.

RETURNED GOODS POLICY

1. No goods may be returned without prior approval.
2. All goods returned must be accompanied with documentation identifying date of purchase.
3. All goods returned must be delivered to J. E. Love Company, transportation charges prepaid.
4. A 15% restocking charge is applied to returned goods credits.

- SAFETY PRECAUTIONS -



*Attention!
Your Safety is Involved*

This symbol is used to call the Operator's attention to safety precautions. When you see this symbol, heed its warning



WARNING - SHIELDS ARE FOR YOUR PROTECTION - KEEP THEM IN PLACE.



CAUTION - BLOCK SECURELY - DO NOT PLACE YOURSELF UNDER ANY EQUIPMENT SUSPENDED HYDRAULICALLY WITH MECHANICAL STOPS, JACKS OR HOISTS WITH OUT BLOCKING SECURELY.



CAUTION - STOP MACHINERY TO CLEAN , OIL OR REPAIR.



CAUTION - RELEASE TO LOWEST POSITION BEFORE LUBRICATING OR SERVICING.



CAUTION - KEEP HANDS, FEET, AND CLOTHING AWAY FROM POWER DRIVEN PARTS.

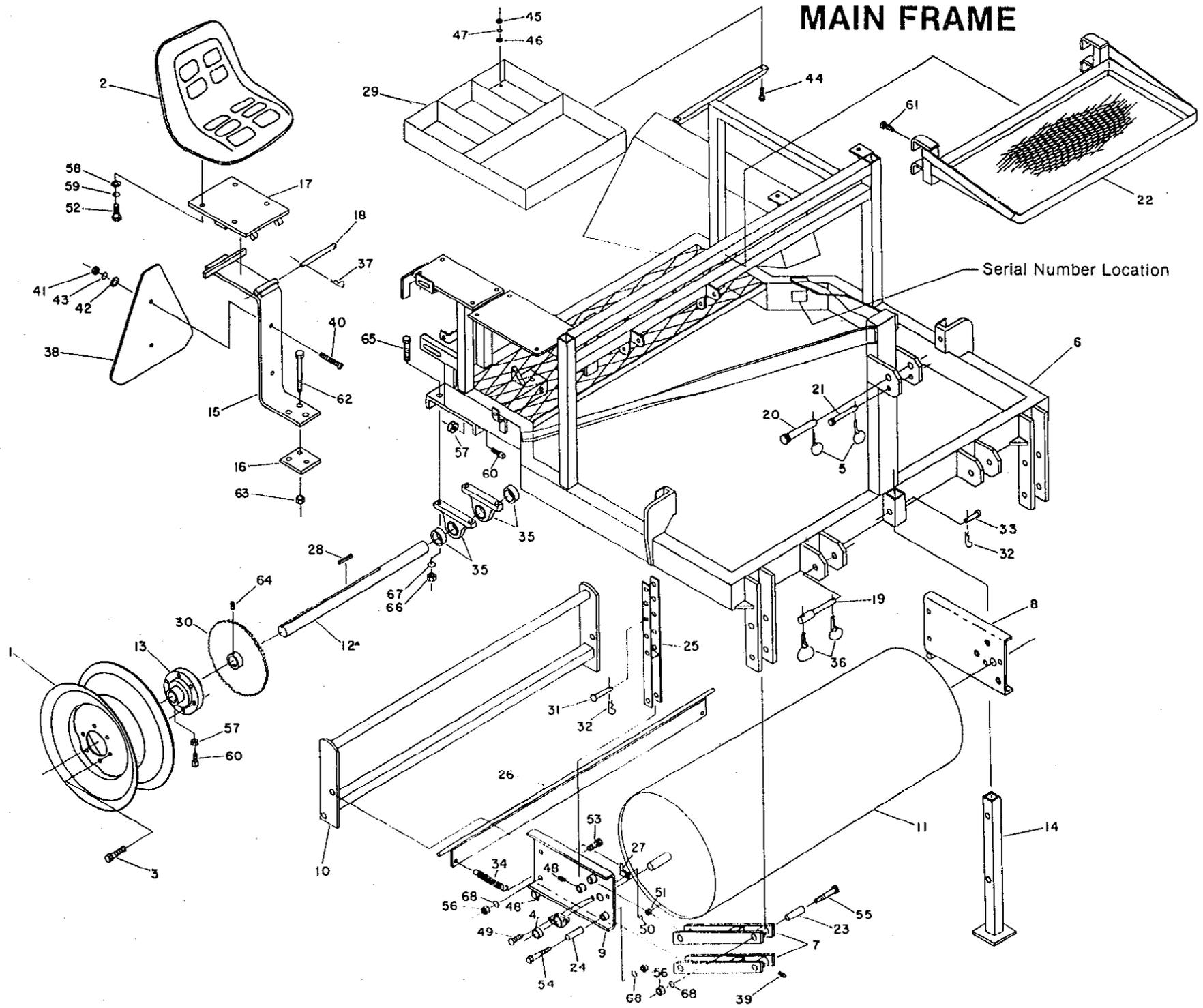


CAUTION - OPERATOR MUST DISMOUNT THE SEEDER BEFORE IT IS LIFTED.



CAUTION - BALLAST TRACTOR TO GAIN STABILITY, WHEN NECESSARY.

MAIN FRAME



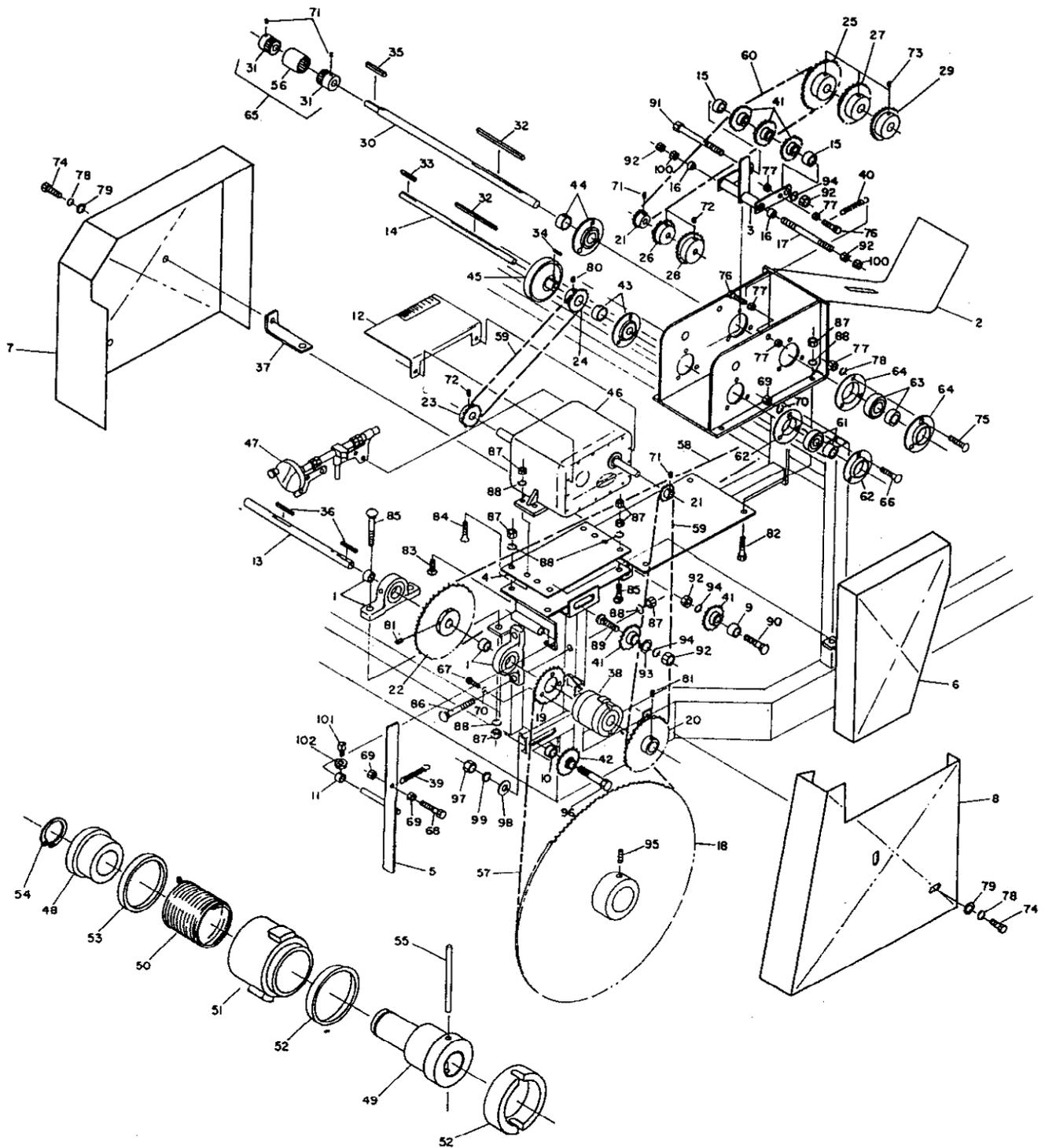
MAIN FRAME

| KEY | PART NO. | QTY. | DESCRIPTION |
|-----|------------|------|--|
| 1 | A1574 | 2 | WHEEL (16 X 5.50, SAE #623) |
| 2 | B1591 | 1 | SEAT |
| 3 | B1616 | 12 | WHEEL BOLT |
| 4 | B1664 | 2 | ROLLER SHAFT BEARING |
| 5 | D10089 | 2 | QUICK LOCK PIN |
| 6 | S10001 | 1 | SEEDER FRAME, STANDARD ROWS |
| 7 | S10003 | 4 | PARALLEL LINK |
| 8 | S10004 | 1 | LEFT ROLLER LUG |
| 9 | S10005 | 1 | RIGHT ROLLER LUG |
| 10 | S1006 | 1 | TOOL BAR |
| 11 | T10579 | 1 | ROLLER, 12" - SERIAL NO. 10092 AND LATER |
| | S10007 | 1 | ROLLER, 18" - SERIAL NO. 10001 TO 10091 |
| 12 | S10013 | 2 | AXLE |
| 13 | S10014 | 2 | HUB |
| 14 | S10015 | 1 | JACK STAND |
| 15 | S10019 | 1 | SEAT STAND |
| 16 | S10020 | 1 | SEAT SUPPORT CLAMP |
| 17 | S10021 | 1 | SEAT BASE |
| 18 | S10023 | 1 | SEAT HINGE PIN |
| 19 | S10029 | 2 | LOWER HITCH PIN |
| 20 | S10030 | 1 | CATEGORY II UPPER PIN |
| 21 | S10031 | 1 | CATEGORY I UPPER PIN |
| 22 | S10035 | 1 | FRONT STORAGE TRAY |
| 23 | S10043 | 4 | FORWARD LINK BEARING |
| 24 | S10044 | 6 | LOWER LINK BEARING |
| 25 | S10045 | 2 | ROLLER LUG LIFT ARM |
| 26 | S10046 | 1 | ROLLER SCRAPER |
| 27 | S10047 | 2 | SCRAPER SPRING RETAINER |
| 28 | S10052 | 2 | DRIVE AXLE KEY |
| 29 | S10072 | 1 | TOOL TRAY |
| | S10054 | 1 | TOOL TRAY, SERIAL #10001 TO 10063 |
| 30 | S10125 | 1 | PRIMARY DRIVE SPROCKET (96T) |
| 31 | S11003 | 2 | ROLLER STOP PIN |
| 32 | S11004 | 3 | HAIR PIN CLIP |
| 33 | S11005 | 1 | JACK STAND PIN |
| 34 | S11006 | 2 | ROLLER SCRAPER PIN |
| 35 | S11024 | 4 | 1-7/8" PILLOW BLOCK BEARING |
| 36 | S11027 | 4 | LYNCH PIN |
| 37 | S11043 | 2 | HAIR PIN CLIP |
| 38 | K2189 | 1 | SLOW MOVING VEHICLE SIGN |
| 39 | X6A5000 | 4 | ZERK, 1/8 NPT STRAIGHT |
| 40 | X2K0100125 | 2 | #10-24 UNC X 1-1/4" MACHINE SCREW |
| 41 | X2C010 | 2 | #10-24 UNC HEX NUT |
| 42 | X3C018 | 2 | 3/16 FLAT WASHER |
| 43 | X3B018 | 2 | 3/16 LOCK WASHER |
| 44 | X2A0250075 | 4 | 1/4-20 UNC X 3/4" CAP SCREW |
| 45 | X2C025 | 4 | 1/4-20 UNC HEX NUT |
| 46 | X3C025 | 4 | 1/4 FLAT WASHER |
| 47 | X3B025 | 4 | 1/4 LOCK WASHER |

MAIN FRAME

| KEY | PART NO. | QTY. | DESCRIPTION |
|-----|------------|------|---|
| 48 | X6A5010 | 8 | ZERK, 1/4-28 UNF STRAIGHT |
| 49 | X2B0310125 | 4 | 5/16-18 UNC X 1-1/4" CARRIAGE BOLT |
| 50 | X3B031 | 4 | 5/16 LOCK WASHER |
| 51 | X2C031 | 4 | 5/16-18 UNC HEX NUT |
| 52 | X2A0370075 | 4 | 3/8-16 UNC X 3/4" CAP SCREW |
| 53 | X2A0500125 | 4 | 1/2-13 UNC X 1-1/4" CAP SCREW |
| 54 | X2A0500250 | 6 | 1/2-13 UNC X 2-1/2" CAP SCREW |
| 55 | X2A0500350 | 4 | 1/2-13 UNC X 3-1/2" CAP SCREW |
| 56 | X2C050 | 14 | 1/2-13 UNC HEX NUT |
| 57 | X2D037 | 6 | 3/8-16 UNC JAM NUT |
| 58 | X3C037 | 4 | 3/8 FLAT WASHER |
| 59 | X3B037 | 4 | 3/8 LOCK WASHER |
| 60 | X2F037125 | 6 | 3/8-16 UNC X 1-1/4" SQUARE HEAD SET SCREW |
| 61 | X2A0370100 | 4 | 3/8-16 UNC X 1" CAP SCREW |
| 62 | X2A0500550 | 3 | 1/2-13 UNC X 5-1/2" CAP SCREW |
| 63 | X2E050-NF2 | 3 | 1/2-13 UNC SELF LOCKING NUT |
| 64 | X2G050050 | 2 | 1/2-13 UNC X 1/2" SET SCREW |
| 65 | X2A0620225 | 8 | 5/8-11 UNC X 2-1/4" CAP SCREW |
| 66 | X2C062 | 8 | 5/8-11 UNC HEX NUT |
| 67 | X3B062 | 8 | 5/8 LOCK WASHER |
| 68 | X3B050 | 14 | 1/2 LOCK WASHER |

FEEDER DRIVE AND TRANSMISSION



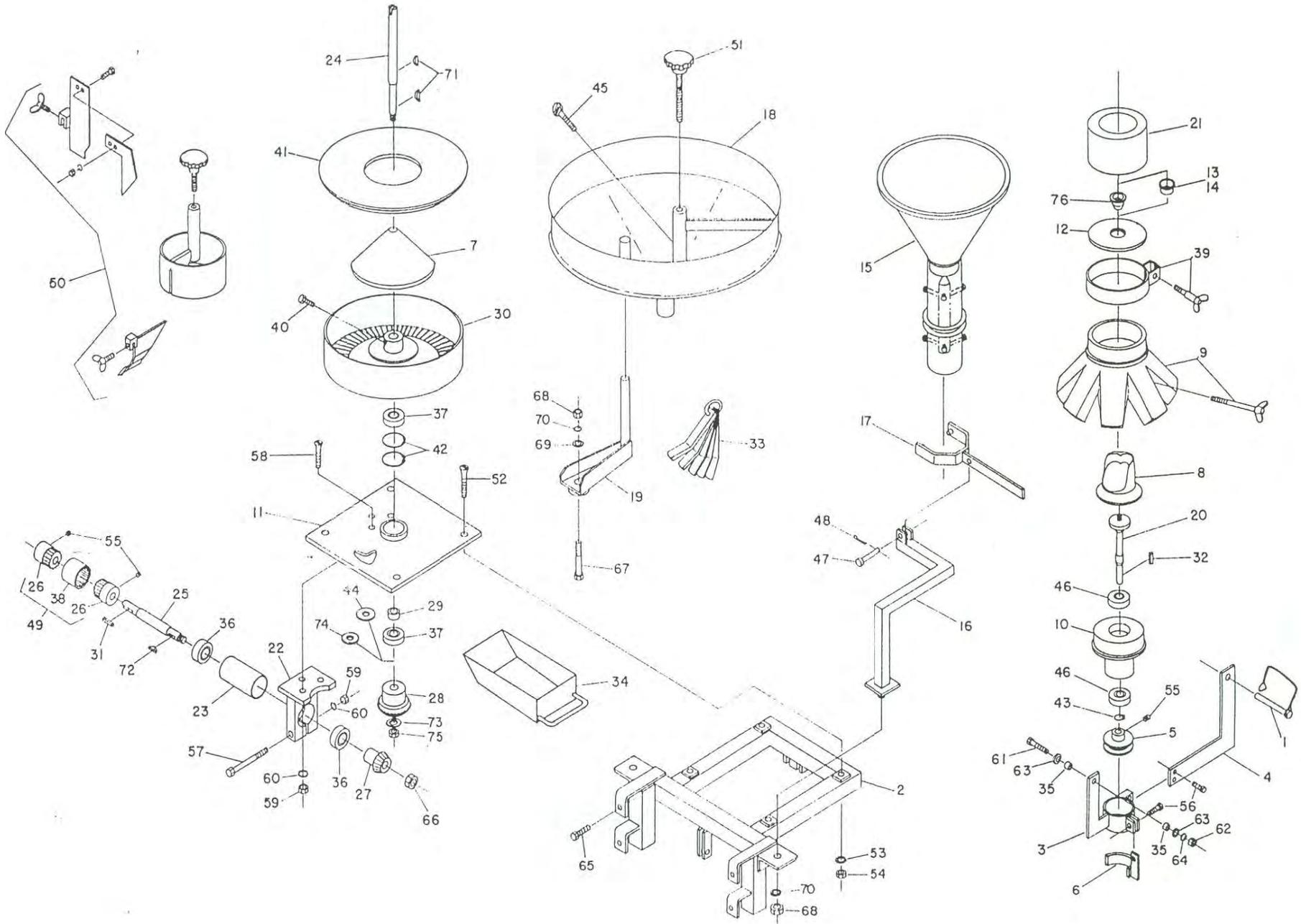
FEEDER DRIVE AND TRANSMISSION

| KEY | PART NO. | QTY. | DESCRIPTION |
|-----|----------|------|--|
| 1 | S11101 | 2 | JACKSHAFT BEARING |
| 2 | S10002 | 1 | TRANSMISSION HOUSING |
| 3 | S10012 | 1 | IDLER BRACKET |
| 4 | S10016 | 1 | VARIABLE SPEED MOUNTING PLATE |
| 5 | S10022 | 1 | CLUTCH DISENGAGING DOG |
| 6 | S10036 | 1 | OUTSIDE UPPER SHIELD |
| 7 | S10037 | 1 | INSIDE MAIN SHIELD |
| 8 | S10038 | 1 | SHIELD, OUTSIDE LOWER |
| 9 | S10049 | 1 | IDLER SPACER |
| 10 | S10050 | 1 | IDLER SPACER |
| 11 | S10051 | 1 | LOCKING COLLAR |
| 12 | S10079 | 1 | CALIBRATION PLATE BRACKET |
| | D-88 | 1 | CALIBRATION DECAL, SHIP LOOSE |
| 13 | S10057 | 1 | JACKSHAFT |
| 14 | S10058 | 1 | PRIMARY TRANSMISSION SHAFT |
| 15 | S10065 | 2 | TRANSMISSION IDLER SPACER |
| 16 | S10066 | 2 | TRANSMISSION BRACKET SPACER |
| 17 | S10067 | 1 | IDLER SPACER |
| 18 | S10125 | 1 | PRIMARY DRIVE SPROCKET (96T) |
| 19 | S10126 | 1 | CLUTCH SPROCKET (24 T) |
| 20 | S10127 | 1 | JACK SHAFT FEEDER SPROCKET (48t) |
| 21 | S10128 | 2 | FEEDER DRIVE SPROCKET (12t) |
| 22 | S10129 | 1 | SPINNER DRIVE SPROCKET (60t) |
| 23 | S10131 | 1 | FEEDER DRIVE SPROCKET (21t) |
| 24 | S10223 | 1 | OVERLOAD CLUTCH SPROCKET (21t) SN 10081 & UP |
| | S10132 | | OVERLOAD CLUTCH SPRKT (21t) SN 10001 TO 10080 |
| 25 | S10133 | 1 | FEEDER DRIVE SPROCKET (36t) |
| 26 | S10134 | 1 | FEEDER DRIVE SPROCKET (20t) |
| 27 | S10135 | 1 | FEEDER DRIVE SPROCKET (30t) |
| 28 | S10136 | 1 | FEEDER DRIVE SPROCKET (25t) |
| 29 | S10137 | 1 | FEEDER DRIVE SPROCKET (25t) |
| 30 | S10151 | 1 | TRANSMISSION OUTPUT SHAFT |
| 31 | S10152 | 2 | FLEXIBLE COUPLER HUB |
| 32 | S10159 | 2 | TRANSMISSION KEY |
| 33 | S10160 | 1 | TRANSMISSION INPUT KEY |
| 34 | S10224 | 1 | OVERLOAD CLUTCH KEY, SERIAL NO. 10081 & LATER |
| | S10161 | | OVERLOAD CLUTCH KEY, SERIAL NO. 10001 TO 10080 |
| 35 | S10162 | 2 | COUPLER KEY |
| 36 | S10164 | 2 | PRIMARY JACKSHAFT KEY |
| 37 | S10167 | 1 | INSIDE SHIELD TOP MOUNT |
| 38 | S11100 | 1 | SEEDER DRIVE CLUTCH, SERIAL 10064 & UP |
| | S11001 | | SEEDER DRIVE CLUTCH, SERIAL 10001 TO 10063 |
| 39 | S11007 | 1 | CLUTCH DISENGAGEMENT SPRING |
| 40 | S11008 | 2 | TRANSMISSION IDLER SPRING |
| 41 | S11022 | 5 | #35 CHAIN IDLER SPROCKET |
| 42 | S11023 | 1 | #40 CHAIN IDLER SPROCKET |
| 43 | S11025 | 2 | 5/8 FLANGETTE BEARING ASSEMBLY |
| 44 | S11026 | 2 | 3/4 FLANGETTE BEARING ASSEMBLY |
| 45 | S11106 | 1 | TORQUE LIMITER, SERIAL 10064 UP |
| | S11028 | | OVERLOAD CLUTCH, SERIAL 10001 TO 10063 |
| 46 | S11029 | 1 | VARIABLE RATIO TRANSMISSION |
| 47 | S11030 | 1 | SCREW CONTROL |
| 48 | S11031 | 1 | INPUT HUB |
| 49 | S11032 | 1 | OUTPUT ASSEMBLY |
| 50 | S11033 | 1 | DRIVE SPRING |
| 51 | S11099 | 1 | CONTROL, COLLAR, 3 STOPS, SN 10064 & UP |
| | S11034 | | CONTROL COLLAR, SERIAL #10001 TO 10063 |

FEEDER DRIVE AND TRANSMISSION

| KEY | PART NO. | QTY. | DESCRIPTION |
|-----|------------|------|--|
| 52 | S11035 | 1 | DUST COVER AND SEAL |
| 53 | S10036 | 1 | FELT SEAL |
| 54 | S11037 | 1 | RETAINING RING |
| 55 | S11038 | 1 | ROLL PIN |
| 56 | S11048 | 1 | COUPLER SLEEVE |
| 57 | S11073 | 1 | PRIMARY DRIVE CHAIN ASSEMBLY |
| 58 | S10232 | 1 | SPINNER DRIVE CHAIN ASSEMBLY |
| 59 | S11075 | 2 | VARIABLE RATIO TRANSMISSION CHAIN ASSEMBLY |
| 60 | S11076 | 1 | TRANSMISSION CHAIN ASSEMBLY |
| 61 | S11081 | 2 | 5/8 FLANGETTE BEARING ONLY |
| 62 | S11082 | 4 | 5/8 FLANGETTE STAMPING |
| 63 | S11083 | 2 | 3/4 FLANGETTE BEARING ONLY |
| 64 | S11084 | 4 | 3/4 FLANGETTE STAMPING |
| 65 | S12002 | 1 | FLEXIBLE COUPLER ASSEMBLY |
| 66 | X2B0250075 | 6 | 1/4-20 UNC X 3/4" CARRIAGE BOLT |
| 67 | X2A0250075 | 3 | 1/4-20 UNC X 3/4" CAP SCREW |
| 68 | X2A0250100 | 1 | 1/4-20 UNC X 1" CAP SCREW |
| 69 | X2C025 | 8 | 1/4-20 UNC HEX NUT |
| 70 | X3B025 | 9 | 1/4 LOCK WASHER |
| 71 | X2G025025 | 8 | 1/4-20 UNC X 1/4" SET SCREW |
| 72 | X2G025037 | 6 | 1/4-20 UNC X 3/8" SET SCREW |
| 73 | X2G025050 | 6 | 1/4-20 UNC X 1/2" SET SCREW |
| 74 | X2A0310075 | 4 | 5/16-18 UNC X 3/4" CAP SCREW |
| 75 | X2B0310075 | 6 | 5/16-18 UNC X 3/4" CARRIAGE BOLT |
| 76 | X2A0310100 | 4 | 5/16-18 UNC X 1" CAP SCREW |
| 77 | X2C031 | 14 | 5/16-18 UNC HEX NUT |
| 78 | X3B031 | 10 | 5/16 LOCK WASHER |
| 79 | X3C031 | 4 | 5/16 FLAT WASHER |
| 80 | X2G031025 | 2 | 5/16-18 UNC X 1/4" SET SCREW |
| 81 | X2G031050 | 4 | 5/16-18 UNC X 1/2" SET SCREW |
| 82 | X2A0310100 | 4 | 3/8-16 UNC X 1" CAP SCREW |
| 83 | X2B0370100 | 2 | 3/8-16 UNC X 1" CARRIAGE BOLT |
| 84 | X2K0370125 | 4 | 3/8-16 UNC X 1-1/4" FLAT HEAD CAP SCREW |
| 85 | X2B0370125 | 4 | 3/8-16 UNC X 1-1/4" CARRIAGE BOLT |
| 86 | X2B0370250 | 2 | 3/8-16 UNC X 2-1/2" CARRIAGE BOLT |
| 87 | X2C037 | 18 | 3/8-16 UNC HEX NUT |
| 88 | X3B037 | 16 | 3/8 LOCK WASHER |
| 89 | X2B0500200 | 1 | 1/2-13 UNC X 2" CARRIAGE BOLT |
| 90 | X2B0500300 | 1 | 1/2-13 UNC X 3" CARRIAGE BOLT |
| 91 | X2A0500475 | 1 | 1/2-13 UNC X 4-3/4" CAP SCREW |
| 92 | X2C050 | 5 | 1/2-18 UNC HEX NUT |
| 93 | X3C050 | 1 | 1/2 FLAT WASHER |
| 94 | X3B050 | 3 | 1/2 LOCK WASHER |
| 95 | X2G050050 | 2 | 1/2-13 UNC X 1/2" SET SCREW |
| 96 | X2A0620250 | 1 | 5/8-11 UNC X 2-1/2" CAP SCREW |
| 97 | X2C062 | 1 | 5/8-11 UNC HEX NUT |
| 98 | X3C063 | 1 | 5/8 SAE FLAT WASHER |
| 99 | X3B062 | 1 | 5/8 LOCK WASHER |
| 100 | X2D050 | 2 | 1/2-13 UNC HEX JAM NUT |
| 101 | X2F025075 | 1 | 1/4-20 UNC X 3/4" SQUARE HEAD SET SCREW |
| 102 | X2D025 | 1 | 1/4-20 UNC HEX JAM NUTS |

FEEDER AND SPINNER MECHANISMS



FEEDER AND SPINNER MECHANISMS

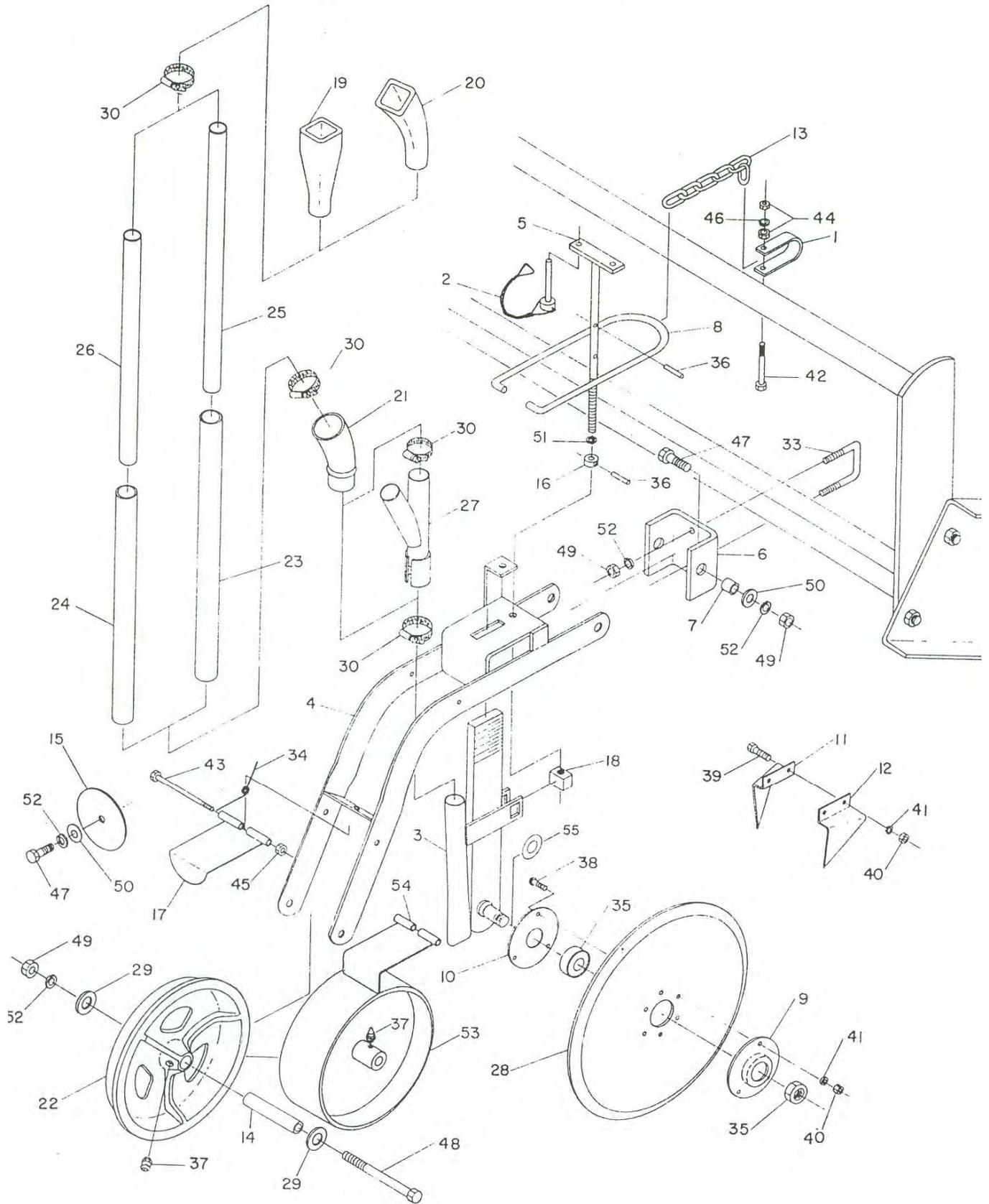
| KEY | PART NO. | QTY. | DESCRIPTION |
|-----|----------|------|---|
| 1 | K3031 | 1 | SNAPPER PIN |
| 2 | S10076 | 1 | FEEDER SUPPORT FRAME |
| 3 | S10077 | 1 | SPINNER SUPPORT |
| 4 | S10078 | 1 | SPINNER SUPPORT BAR |
| 5 | S10041 | 1 | 2.15" PITCH DIAMETER SHEAVE |
| 6 | S10062 | 1 | SPINNER SHIELD |
| 7 | S10101 | 1 | FEEDER CONE |
| 8 | S10102 | 1 | SPINNER |
| 9 | S11116 | 1 | DISTRIBUTOR HEAD, 4 ROWS |
| | S11124 | 1 | DISTRIBUTOR HEAD, 5 ROWS - LARGE PORTS |
| | S11123 | 1 | DISTRIBUTOR HEAD, 6 ROWS - LARGE PORTS |
| | S10217 | | DISTRIBUTOR HEAD, 6 ROWS - REFINED SMALL PORTS |
| | S10103 | | DISTRIBUTOR HEAD, 6 ROWS - SERIAL #10001 TO #10063 |
| | S11131 | | DISTRIBUTOR HEAD, 7 ROWS - LRGE PORTS - SERIAL #10106 |
| | S10218 | | DISTRIBUTOR HEAD, 7 ROWS - REFINED SMALL PORTS |
| | S10104 | | DISTRIBUTOR HEAD, 7 ROWS - SERIAL #10001 TO #10063 |
| | S10219 | | DISTRIBUTOR HEAD, 8 ROWS - REFINED SMALL PORTS |
| | S10105 | | DISTRIBUTOR HEAD, 8 ROWS - SERIAL #10001 TO #10063 |
| | S11120 | 1 | DISTRIBUTOR HEAD, 8 ROWS - LARGE PORTS |
| 9a | S11113 | (1) | WING SCREW, M6-1.0 X 75 - PLATED |
| 10 | S10106 | 1 | SPINNER SUPPORT BLOCK |
| 11 | S10107 | 1 | FEEDER PLATE |
| 12 | S10108 | 1 | NOZZLE PLATE <i>(NOT USED WITH LARGE SEED OPTION)</i> |
| 13 | S10109 | 1 | SMALL NOZZLE, 0.56 DIA BORE (1) |
| 14 | S10110 | 1 | LARGE NOZZLE, 0.88 DIE BORE (1) |
| 15 | S10115 | 1 | SMALL BATCH FUNNEL |
| 16 | S10117 | 1 | SMALL BATCH FUNNEL SUPPORT |
| 17 | S10119 | 1 | SMALL BATCH LIFT ARM |
| 18 | S10120 | 1 | BULK SEED HOPPER |
| 19 | S10144 | 1 | HOPPER SUPPORT |
| 20 | S10145 | 1 | SPINNER SHAFT |
| 21 | S10146 | 1 | SPINNER CONCENTRATOR, SERIAL #10001 TO 10063 |
| | S10215 | 1 | SPINNER CONCENTRATOR |
| 22 | S10147 | 1 | FEEDER DRIVE BLOCK |
| 23 | S10148 | 1 | BEARING TUBE |
| 24 | S10149 | 1 | FEEDER SHAFT |
| 25 | S10150 | 1 | FEEDER DRIVE SHAFT |
| 26 | S10152 | 2 | FLEXIBLE COUPLER HUB |
| 27 | S10153 | 1 | BEVEL GEAR (18t) |
| 28 | S10154 | 1 | BEVEL GEAR (36t) |
| 29 | S10155 | 1 | FEEDER BEARING SPACER |
| 30 | S10157 | 1 | FEEDER WHEEL |
| 31 | S10162 | 2 | COUPLER KEY |
| 32 | S10163 | 1 | SPINNER KEY |
| 33 | S10165 | 1 | HOPPER HEIGHT GAUGE |
| 34 | S10166 | 1 | CATCH PAN |
| 35 | S10028 | 2 | BUSHING |

FEEDER AND SPINNER MECHANISMS

| KEY | PART NO. | QTY. | DESCRIPTION |
|-----|------------|------|--|
| 36 | S11045 | 2 | BEARING |
| 37 | S11046 | 2 | BEARING |
| 38 | S11048 | 1 | COUPLER SLEEVE |
| 39 | S11055 | 1 | NOZZLE PLATE RING W/WING BOLT |
| | S11112 | | WING BOLT (FOR S11055) |
| 40 | S11056 | 1 | FEEDER SET SCREW |
| 41 | S11057 | 1 | FEEDER COVER |
| 42 | S11058 | 2 | RETAINING RING |
| 43 | S11059 | 1 | RETAINING RING |
| 44 | X3D13787-2 | | BEVEL GEAR SPACER (AS REQUIRED) [WAS S11061] |
| 45 | S11071 | 1 | THUMB SCREW |
| 46 | S11077 | 2 | SEALED SPINNER BEARING |
| 47 | S11079 | 1 | SMALL BATCH YOKE PIN |
| 48 | S11080 | 1 | COTTER PIN |
| 49 | S12002 | 1 | FLEXIBLE COUPLER ASSEMBLY |
| 50 | S12003 | 1 | FEEDER DIVIDER |
| 51 | S12004 | 1 | FEED CONTROL SCREW |
| 52 | X2K0250250 | 4 | 1/4-20 UNC X 2-1/2" FLAT HEAD CAP SCREW |
| 53 | X3B025 | 4 | 1/4 LOCK WASHER |
| 54 | X2C025 | 4 | 1/4-20 UNC HEX NUT |
| 55 | X2G0250025 | 6 | 1/4-20 UNC X 1/4" SET SCREW |
| 56 | X2A0310100 | 3 | 5/16-18 UNC X 1" CAP SCREW |
| 57 | X2A0310300 | 1 | 5/16-18 UNC X 3" CAP SCREW |
| 58 | X2K0310150 | 3 | 5/16-18 UNC X 1-1/2" FLAT HEAD CAP SCREW |
| 59 | X2C031 | 3 | 5/16-18 UNC HEX NUT |
| 60 | X3B031 | 3 | 5/16 LOCK WASHER |
| 61 | X2A0310175 | 1 | 3/8-16 UNC X 1-3/4" CAP SCREW |
| 62 | X2C037 | 1 | 3/8-16 UNC HEX NUT |
| 63 | X3C037 | 2 | 3/8 FLAT WASHER |
| 64 | X3B037 | 1 | 3/8 LOCK WASHER |
| 65 | X2A0430100 | 4 | 7/16-14 UNC X 1" CAP SCREW |
| 66 | X2D050 | 1 | 1/2-13 UNC HEX JAM NUT |
| 67 | X2A0620250 | 1 | 5/8-11 UNC X 2-1/2" CAP SCREW |
| 68 | X2C062 | 2 | 5/8-11 UNC HEX NUT |
| 69 | X3C062 | 1 | 5/8 FLAT WASHER |
| 70 | X3B062 | 2 | 5/8 LOCK WASHER |
| 71 | X3H808 | 2 | #808, 1/4 X 1" WOODRUFF KEY (B1821) |
| 72 | X3H606 | 1 | #606, 3/16 X 3/4" WOODRUFF KEY (B1819) |
| 73 | X3C063 | 1 | 5/8 SAE FLAT WASHER |
| 74 | X3D13787-1 | | MACHINE BUSHING (AS REQUIRED) [WAS S11089] |
| 75 | S11039 | 1 | LOCK NUT |
| 76 | S10216 | 1 | NOZZLE, SPECIAL - 0.75 DIA BORE (1) |

(1) **NOTE:** NOZZLES ARE NOT USED WITH LARGE SEED CONVERSION, S12047.

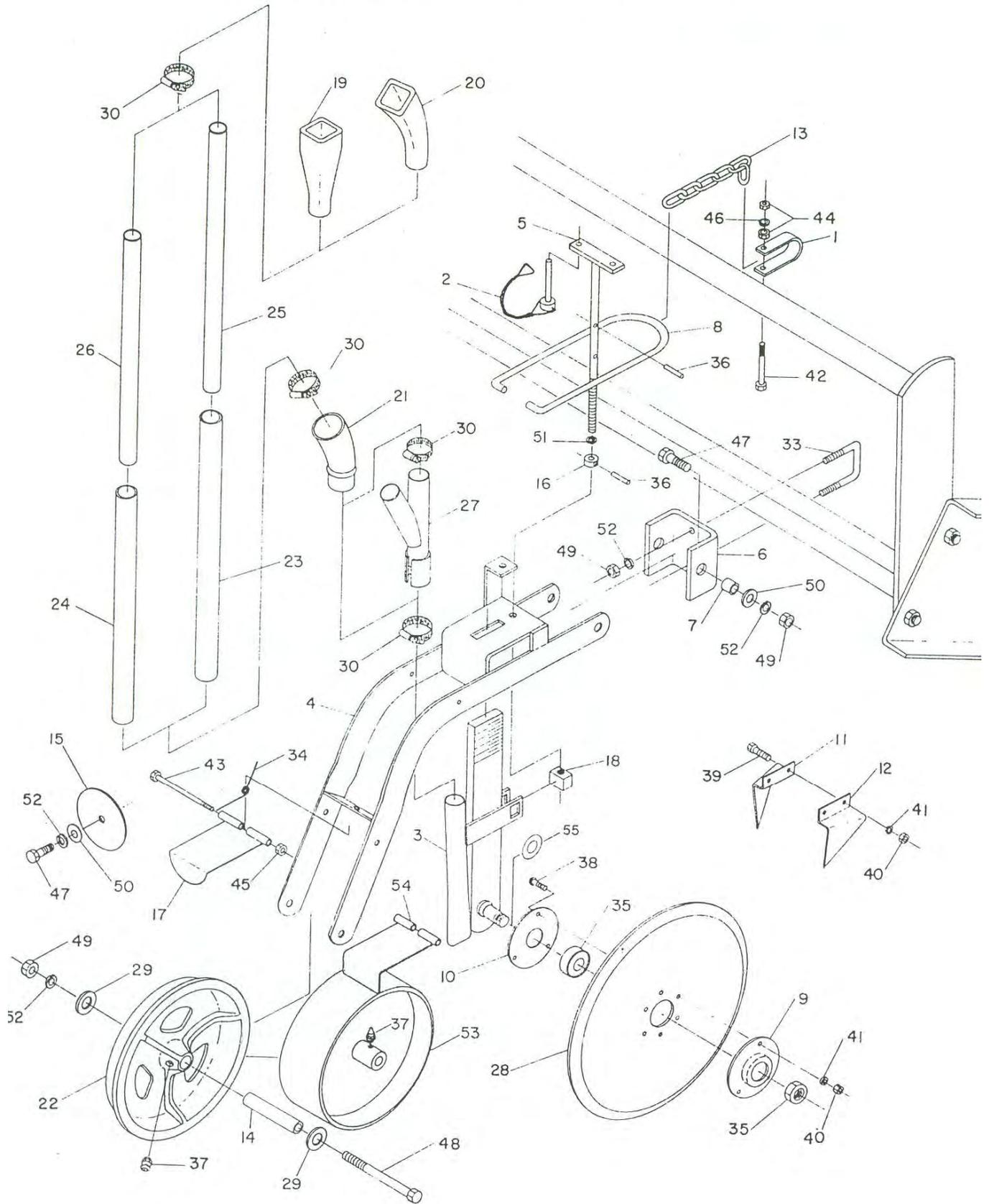
GROUND OPENER ASSEMBLY



**GROUND OPENER ASSEMBLY
S12006, CONCAVE PACKER WHEEL
S12023, FLAT PACKER WHEEL**

| KEY | PART NO. | QTY. | DESCRIPTION |
|--------|------------|------|--|
| 1 | H7003 | 1 | U-CLIP |
| 2 | R14184 | 2 | SNAPPER PIN |
| 3 | S10008 | 1 | DISC LUG, SERIAL NO. 10016 & LATER FOR SERIAL #10001 TO 10015, ORDER 1 EACH S10008 AND S10070, NUT |
| 3a | S10243 | 1 EA | ADAPTER, LARGE DROP TUBE (NOT SHOWN) |
| 4 | S10009 | 1 | GROUND OPENER FRAME |
| 5 | S10011 | 2 | DEPTH ADJUSTING SCREW |
| 6 | S10027 | 1 | OPENER FRAME HINGE |
| 7 | S10028 | 2 | OPENER HINGE BUSHING |
| 8 | S10032 | 1 | OPENER SUPPORT LOOP |
| 9 | S10069 | 2 | BEARING OUTER FLANGE - SERIAL NO. 10036 & LATER |
| | S10033 | | BEARING OUTER FLANGE - SERIAL NO. 10001 TO #10035 |
| 10 | S10034 | 2 | BEARING INNER FLANGE |
| 11 | S10039 | | LEFT OUTSIDE DISC SCRAPER (SERIAL #10001 TO #10015) |
| 12 | S10040 | | RIGHT OUTSIDE DISC SCRAPER (SERIAL #10001 TO #10015) |
| 13 | S10048 | 1 | OPENER SUPPORT CHAIN |
| 14 | S10055 | 1 | PACKER WHEEL BUSHING |
| 15 | S10056 | 1 | PACKER WHEEL SCRAPER (SERIAL #10001 TO S10015) |
| 16 | S10061 | 2 | ADJUSTING BOLT COLLAR |
| 17 | S10056 | 1 | PACKER WHEEL SCRAPER |
| 18 | S10070 | 2 | LUG NUT |
| 19 | S10111 | AR | STRAIGHT TRANSITION CONNECTOR |
| | S11121 | AR | STRAIGHT TRANSITION CONNECTOR - LARGER SIZE |
| 20 | S10112 | AR | BENT TRANSITION CONNECTOR |
| | S11122 | AR | BENT TRANSITION CONNECTOR - LARGER SIZE |
| 21 | S10113 | 2 | BENT REDUCTION CONNECTOR |
| 22 | S10114 | 2 | PACKER WHEEL HALF |
| 23, 25 | | | SEED TUBES, AFTER SERIAL NUMBER 10105 |
| 23 | S11125 | | LOWER SEED TUBE, LARGE SIZE - 40 MM X 16" MINIMUM |
| 25 | S11126 | | UPPER SEED TUBE, LARGE SIZE - 34 MM X 16" MINIMUM |
| 23-26 | | | SEED TUBES, PRIOR TO SERIAL NUMBER 10105 |
| 23 | S10138 | AR | LOWER SEED TUBE, LONG - 1-1/4" O.D. X 15-1/2" |
| 24 | S10139 | AR | LOWER SEED TUBE, SHORT - 1-1/4" O.D. X 13-1/2" |
| 25 | S10140 | AR | UPPER SEED TUBE, LONG - 1" O.D. X 15-3/4" |
| 26 | S10141 | AR | UPPER SEED TUBE, SHORT - 1" O.D. X 13-3/4" |
| | S11125 | AR | SEED DROP TUBE ASSEMBLY (2 PCS) - LARGE PORTS |
| | S10243 | AR | ADAPTER, LARGE DROP TUBE TO GROUND OPENER |
| 27 | S10143 | AR | Y-TUBE |
| 3a | S10243 | 1 EA | ADAPTER, LARGE DROP TUBE (NOT SHOWN) |
| 28 | S11087 | 2 | FLAT DISC COULTER (SERIAL #10036 & LATER) |
| | S11000 | 2 | FLAT DISC COULTER (SERIAL #10001 TO #10035) |
| 29 | S11044 | 2 | PACKER WHEEL THRUST WASHER |
| 30 | S11052 | 3 | STEEL TUBE CLAMP |
| 33 | S10245 | 1 | U-CLAMP ASSEMBLY [WAS S1106, U-BOLT] |
| | S10244 | | BAR, PLATED |
| | X2A0370275 | | 3/8-16 UNC X 2-3/4 CAP SCREW (2) |
| | X2C037 | | 3/8-16 UNC HEX NUT (2) |
| | X3B037 | | 3/8 LOCK WASHER (2) |
| 34 | S11088 | 1 | SPRING |
| 35 | S12000 | | DISC BEARING REPLACEMENT KIT (INCLUDES BEARING AND LOCK NUT) |
| 36 | X3G125-075 | 2 | 1/8 X 3/4" SPRING PIN |
| 37 | X6A5010 | 3 | 1/4 UNF X 3/16 ZERK |
| 38 | X2K0250050 | 6 | 1/4-20 UNC X 1/2" TRUSS HEAD CAP SCREW |
| 39 | X2A0250100 | | 1/4-20 UNC X 1 CAP SCREW (SERIAL #10001 TO #10015) |
| 40 | X2C025 | 6 | 1/4-20 UNC HEX NUT |

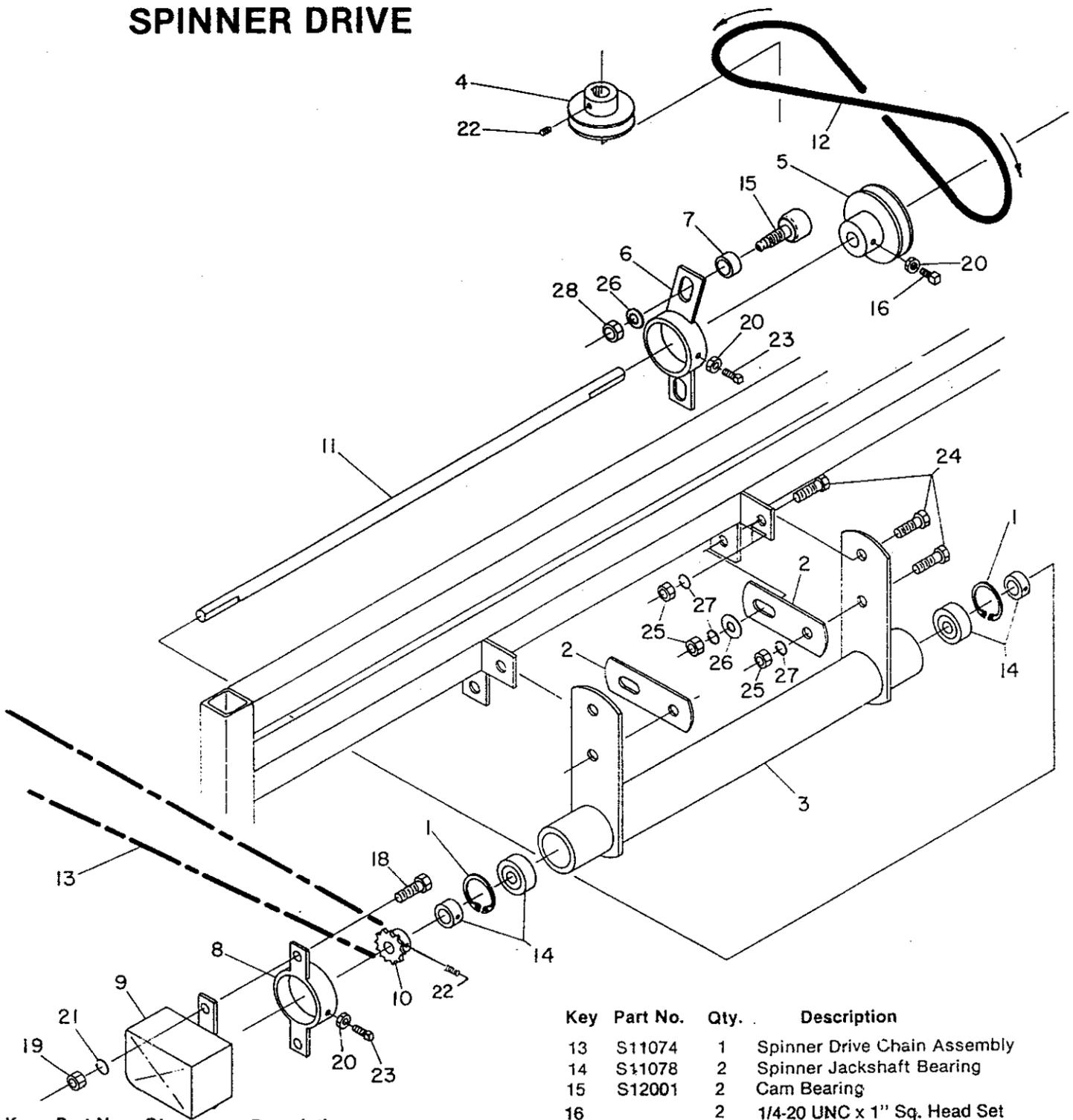
GROUND OPENER ASSEMBLY



**GROUND OPENER ASSEMBLY
S12006, CONCAVE PACKER WHEEL
S12023, FLAT PACKER WHEEL**

| KEY | PART NO. | QTY. | DESCRIPTION |
|------------|-----------------|-------------|---|
| 41 | X3B025 | 6 | 1/4 UNC LOCK WASHER |
| 42 | X2A0310175 | 1 | 5/16-18 UNC X 1-3/4" CAP SCREW |
| 43 | X2A0310550 | 1 | 5/16-18 UNC X 4" CAP SCREW |
| 44 | X2E031-NF2 | 2 | 5/16-18 UNC HEX LOCK NUT |
| 45 | X2E031-NF2 | 1 | 5/16 UNC HEX LOCK NUT |
| 46 | X3B031 | | 5/16 LOCK WASHER - NOT USED WITH LOCKNUTS |
| 47 | X2A0370125 | 2 | 3/8 UNC X 1-1/4" CAP SCREW |
| 48 | S10214 | 1 | PACKER WHEEL BOLT |
| 49 | X2C037 | AR | 3/8 UNC HEX NUT |
| 50 | X3C037 | 2 | 3/8 FLAT WASHER |
| 51 | S11051 | 1 | THRUST WASHER |
| 52 | X3B037 | 7 | 3/8 LOCK WASHER |
| 53 | S10212 | 1 | FLAT PACKER WHEEL |
| 54 | S10213 | 1 | FLAT PACKER SCRAPER |
| 55 | S11091 | AR | COULTER SHIM, 0.015 |
| | S11092 | AR | COULTER SHIM, 0.025 |

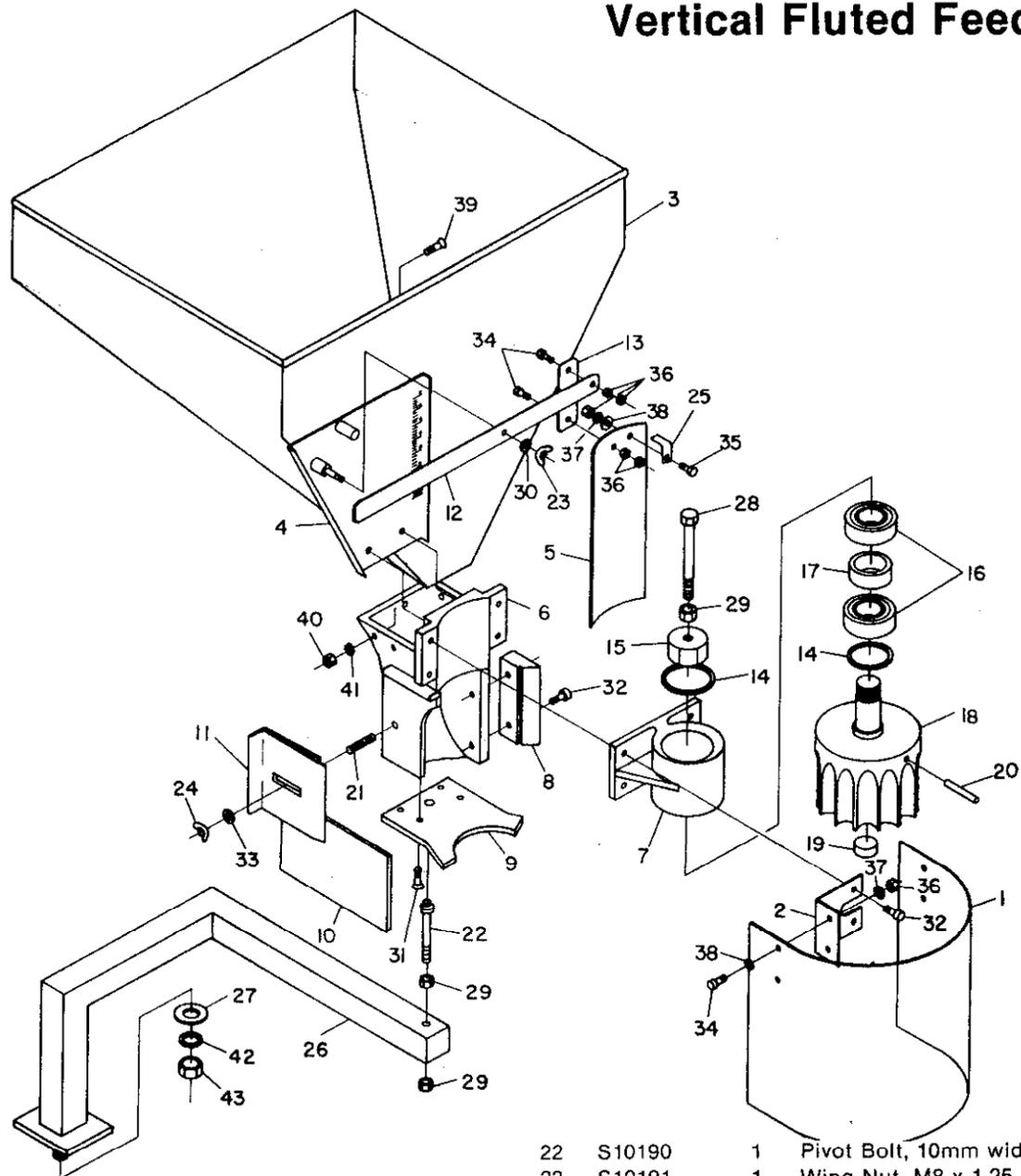
SPINNER DRIVE



| Key | Part No. | Qty. | Description |
|-----|----------|------|--------------------------------|
| 1 | B1575 | 2 | Retaining Ring |
| 2 | S10017 | 2 | Tensioner Arm |
| 3 | S10018 | 1 | Spinner Drive Block |
| 4 | S10041 | 1 | 2.15" Pitch diameter Sheave |
| 5 | S10042 | 1 | 2.75" Pitch diameter Sheave |
| 6 | S10059 | 1 | Spinner Drive Belt Follower |
| 7 | S10060 | 2 | Spacer |
| 8 | S10063 | 1 | Spinner Jackshaft Shield Mount |
| 9 | S10064 | 1 | Spinner Jackshaft Shield |
| 10 | S10130 | 1 | Spinner Drive Sprocket (10t) |
| 11 | S10158 | 1 | Spinner Drive Jackshaft |
| 12 | S11009 | 1 | Spinner Drive Belt |

| Key | Part No. | Qty. | Description |
|-----|----------|------|--|
| 13 | S11074 | 1 | Spinner Drive Chain Assembly |
| 14 | S11078 | 2 | Spinner Jackshaft Bearing |
| 15 | S12001 | 2 | Cam Bearing |
| 16 | | 2 | 1/4-20 UNC x 1" Sq. Head Set Screw |
| 18 | | 2 | 1/4-20 UNC x 3/4 Cap Screw |
| 19 | | 2 | 1/4-20 UNC Hex Nut |
| 20 | | 4 | 1/4-20 UNC Jam Nut |
| 21 | | 2 | 1/4 Lock Washer |
| 22 | | 4 | 1/4-20 UNC x 1/4 Set Screw |
| 23 | | 2 | 1/4-20 UNC x 3/4 Set Screw (Square Head) |
| 24 | | 6 | 3/8-16 UNC x 1" Cap Screw |
| 25 | | 6 | 3/8-16 UNC Hex Nut |
| 26 | | 4 | 3/8 Flat Washer |
| 27 | | 6 | 3/8 Lock Washer |
| 28 | | 2 | 7/16-20 UNF Jam Nut |

Vertical Fluted Feeder



| Key | Part No. | Qty. | Description |
|-----|----------|------|---|
| 1 | S10169 | 1 | Shield |
| 2 | S10170 | 2 | Shield Bracket |
| 3 | S10171 | 1 | Hopper |
| 4 | S10172 | 1 | Gauge Plate |
| 5 | S10173 | 1 | Gate |
| 6 | S10174 | 1 | Feeder Console |
| 7 | S10175 | 1 | Bearing Block |
| 8 | S10176 | 1 | Flute Block |
| 9 | S10177 | 1 | Bottom Plate |
| 10 | S10178 | 1 | Wiper |
| 11 | S10179 | 1 | Wiper Plate |
| 12 | S10180 | 1 | Lever Arm |
| 13 | S10181 | 1 | Lower Lever Arm |
| 14 | S10182 | 2 | Snap Ring |
| 15 | S10183 | 1 | Special Hex Nut |
| 16 | S10184 | 2 | Bearing |
| 17 | S10185 | 1 | Bearing Spacer |
| 18 | S10186 | 1 | Flute |
| 19 | S10187 | 1 | Plug |
| 20 | S10188 | 1 | Roll Pin, 6mm x 70mm |
| 21 | S10189 | 1 | Threaded Stud, M6 x 35mm |
| 22 | S10190 | 1 | Pivot Bolt, 10mm wide |
| 23 | S10191 | 1 | Wing Nut, M8 x 1.25 |
| 24 | S10192 | 1 | Wing Nut, M6 x 1 |
| 25 | S10193 | 1 | Guide Stop |
| 26 | S10194 | 1 | Fluted Feed Mounting Bracket |
| 27 | S10195 | 1 | 16mm Flat Washer |
| 28 | S10196 | 1 | Cap Screw, M10 x 70mm |
| 29 | S10197 | 3 | Hex Nut, M10 x 1.5 |
| 30 | S10198 | 1 | 8mm Flat Washer |
| 31 | S10199 | 4 | Slotted, Flat Head Countersunk Screw, M6 x 16 |
| 32 | S10200 | 6 | Socket Head Screw, M6 x 20 |
| 33 | S10201 | 1 | 6mm Flat Washer |
| 34 | S10202 | 6 | Cap Screw, M5 x 16 |
| 35 | S10203 | 1 | Cap Screw, M5 x 12 |
| 36 | S10204 | 9 | Hex Nut, M5 x 0.8 |
| 37 | S10205 | 5 | 5mm Lock Washer |
| 38 | S10206 | 5 | 5mm Flat Washer |
| 39 | S10207 | 5 | Slotted Flat Head Countersunk Screw, M4 x 16 |
| 40 | S10208 | 5 | Hex Nut, M4 x 0.7 |
| 41 | S10209 | 5 | 4mm Lock Washer |
| 42 | S10210 | 1 | 16mm Lock Washer |
| 43 | S10211 | 1 | Hex Nut, M16 x 2 |