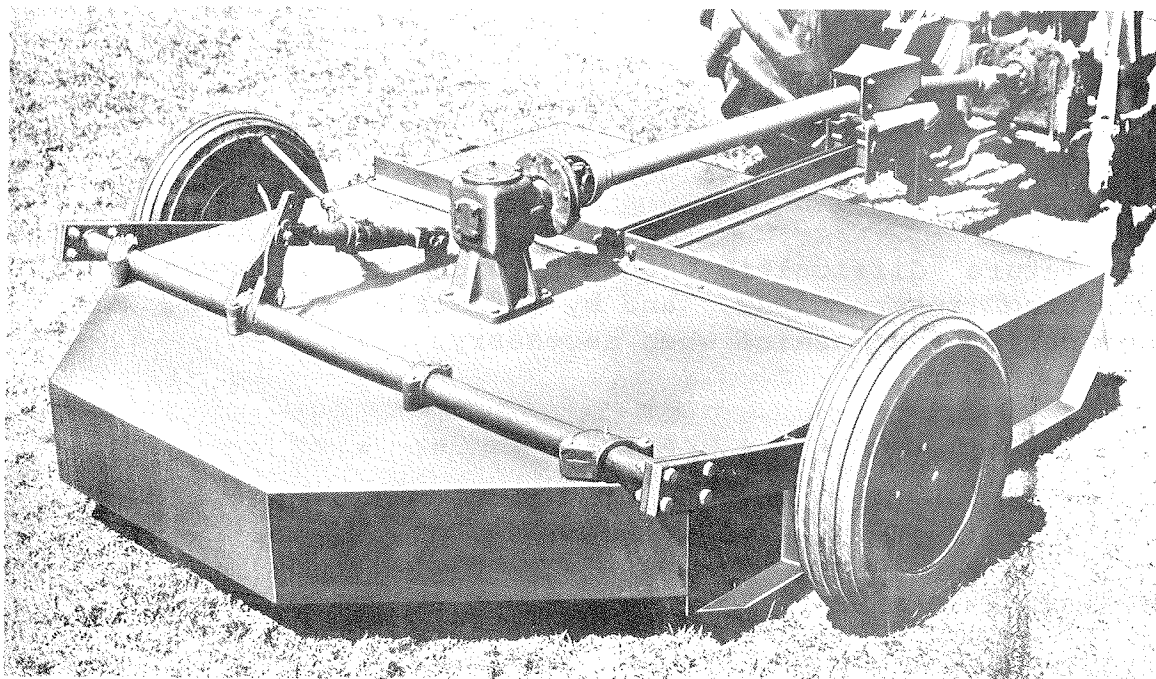


OPERATOR'S MANUAL
REPAIR PARTS CATALOG

.....

Brillion

FARM IMPLEMENTS
WITH A FUTURE



MODEL R-84

Model R-84-02

BRILLION IRON WORKS, INC.

Brillion, Wisconsin, U. S. A.

Brillion

ROTARY SHREDDER

Your Brillion Shredder is built with the best materials and workmanship available. All machines are adjusted at the factory to assure their proper mechanical operation. Minor slip clutch adjustments may have to be made, to prevent premature failure of parts.

* * * * *

Many future difficulties can be avoided by following the operating instructions, and by correctly adjusting and lubricating the machine when necessary.

* * * * *

Location Reference

"Right" and "left", "front" and "rear" refer to the operators right and left, front or rear, when he faces the same direction as the machine is traveling.

SPECIFICATIONS

| | |
|--------------------------------|---|
| Width of Cut - - - - - | 84" |
| Height of Cut- - - - - | 1" - 14" |
| Blades - - - - - | Heat-treated alloy steel |
| Hood - - - - - | Heavy gauge welded steel assembly |
| Gears - - - - - | Heat treated alloy steel cut gears |
| Blade Drive - - - - - | Timken bearing equipped - high alloy gearbox casting |
| Blade Mounting - - - - - | Blades pivot on hardened alloy steel shoulder bolts. |
| P. T. O. Drive Shaft - - - - - | Heavy duty - 3 joint needle bearing assembly, 540 R.P.M. |
| Hitch- - - - - | Adjustable to drawbar height of tractor and for leveling unit. |
| Lift- - - - - | Tractor hydraulic cylinder or "Brillion" ratchet screw jack (order 7C-841 jack assembly). |
| Wheel Sizes - - - - - | Three types available - (1) 14" Pneumatic (2) 15" Pneumatic (3) Laminated rubber |
| Weight - - - - - | 1585# |
| Shear Pin Coupler - - - - - | (optional) Two 3/8" dia. pins with replaceable bushings |
| Slip Clutch - - - - - | (Optional) Multiple disc-adjustable. |

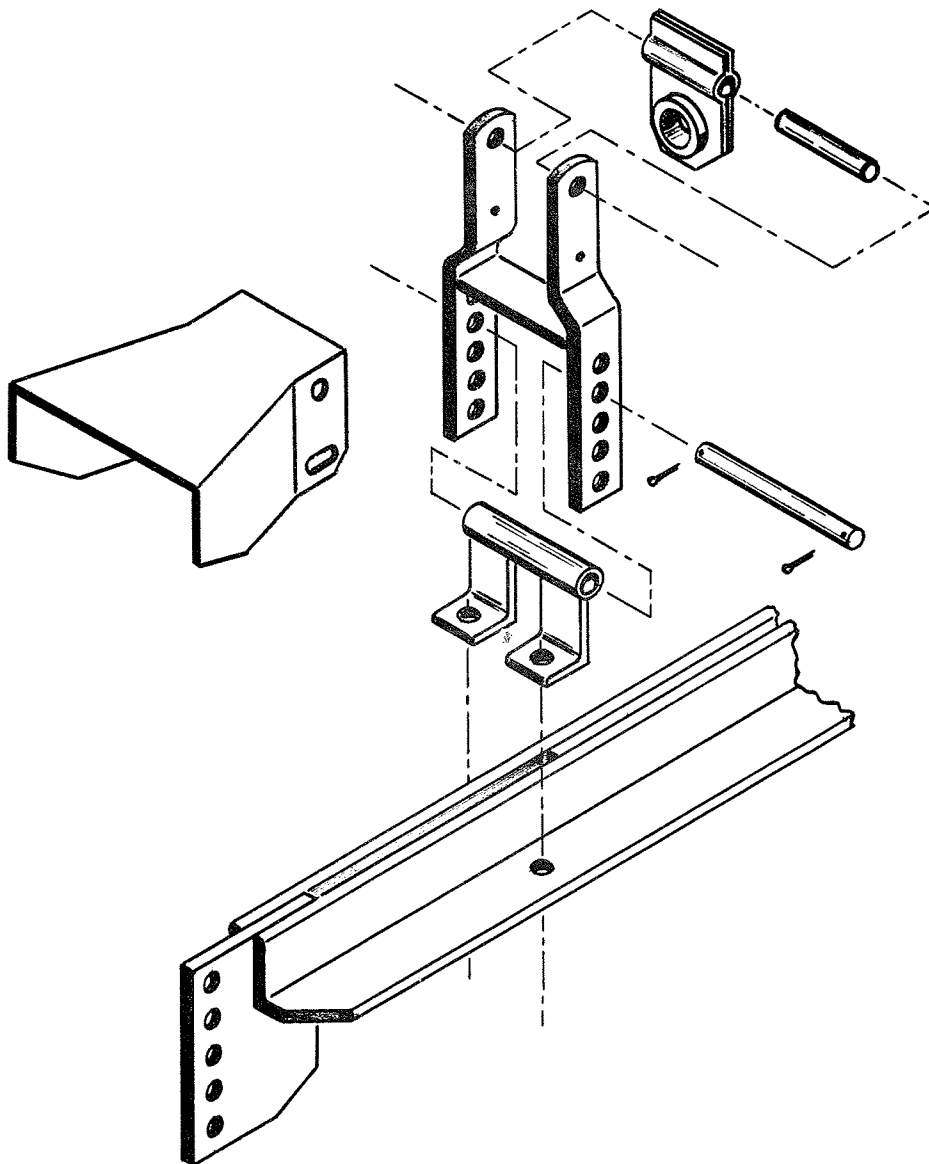
ASSEMBLY INSTRUCTIONS
BRILLION R-84 ROTARY SHREDDER

Your machine is shipped as five basic assemblies. All fasteners are already in the holes in which they are to be used.

Place the drawbar on top of the hood and bolt down tight with the six (6) bolts, nuts, and lockwashers provided.

Separate the axle arm assemblies from each other. The additional bolts required for mounting will be found in the small bag attached to the assembly. Bolt the axle arms to the end plates on the lift shaft so the wheels are mounted toward the front of the unit.

Attach the P. T. O. support components to the drawbar as illustrated below.



3D628

LUBRICATION

The gear housing on this machine is shipped without oil and must be filled to proper level before operation. Use S. A. E. 140 oil during the summer and S. A. E. 90 for winter operation. Check oil level monthly.

Grease fittings are assembled into the P. T. O. shaft and the axle bearings. Grease all P. T. O. fittings after each 10 hours of operation and the axle bearings as often as needed.

OPERATION

These shredders are intended for operation at a P. T. O. speed of 540 R. P. M. Running your tractor at part throttle will result in less satisfactory shredding. Control your ground speed with your gearshift, and maintain shredder at rated speed.

When starting a swinging-blade shredder, the blades are usually not in balance at first, and the machine will shake violently if started too quickly. Engage the P. T. O. slowly at a low throttle setting. The blades will balance quickly and you may increase speed. Try to avoid starting the machine directly in heavy work. Give the blades a chance to balance first.

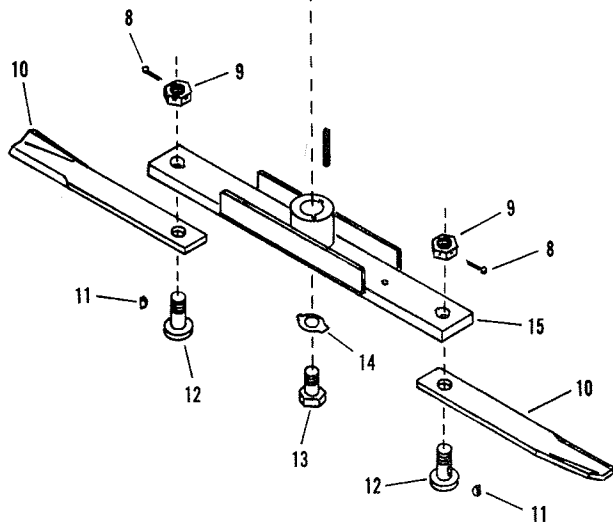
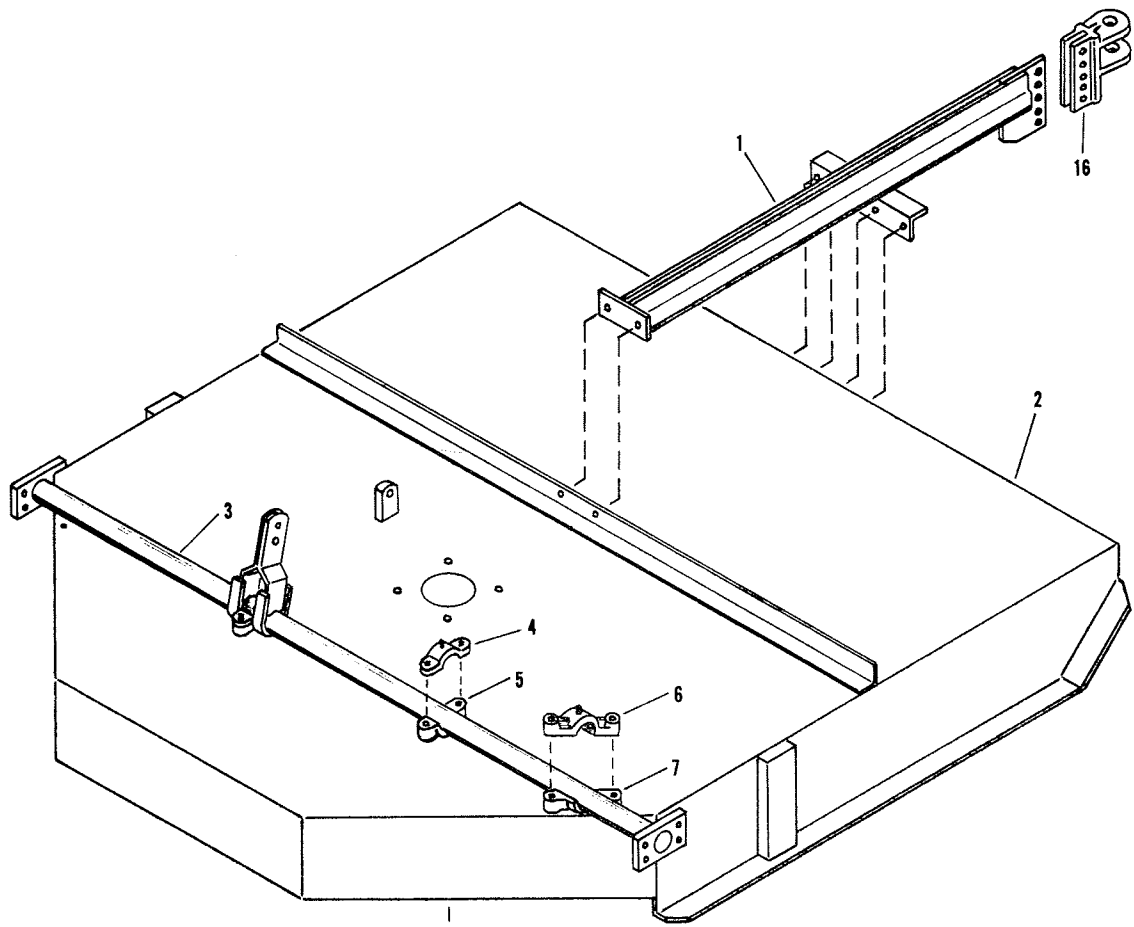
Operate your shredder level or slightly lower in front. The drawbar hitch plate is adjustable to accomplish this.

SHEAR COUPLER

The drive train is protected by two 3/8 shearpins in the P. T. O. shaft. These are common bolts which can be purchased anywhere, but DO NOT USE HEAT TREATED BOLTS OR PINS OF ANY KIND. To do so is inviting severe damage to shredder or tractor. When replacing shearpins, do NOT draw bolts tight - only snug, or finger tight. Use locknuts or double nuts to keep bolts from loosening.

SLIP CLUTCH

The multiple disc clutch is intended to protect the shredder and tractor against shock and overload damage. It also eliminates the downtime created by replacing shear pins. If the clutch runs hot during normal operation of the tractor, draw up 1/6 turn on each of the (12) adjusting screws. Continue to operate and recheck for heating. Do this until excessive slippage and heating are eliminated.

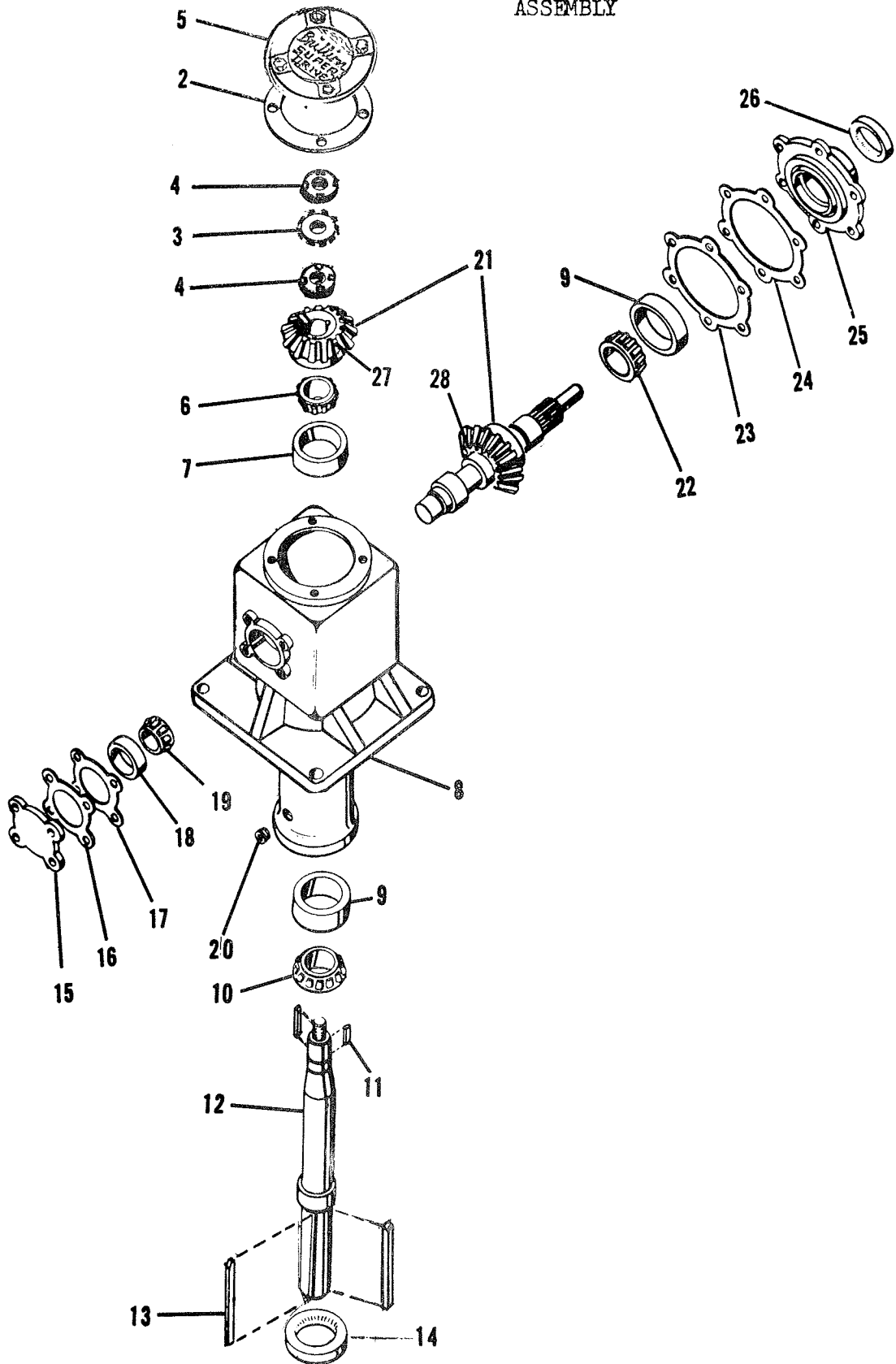


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HOOD AND BLADE ASSEMBLY

| Sym. | Part No. | Description |
|------|----------|--|
| 1 | 3D-424 | Drawbar Assembly |
| 2 | 3D-395 | Hood Assembly |
| 3 | 3D-440 | Lift Shaft Assembly |
| 4 | 4C-758 | Bearing Cap Assembly |
| 5 | 4C-778 | Bottom Axle Bearing |
| 6 | 9C-367 | R. H. Bearing Cap Assembly |
| 7 | 9C-366 | L. H. Bearing Cap Assembly (not illustrated) |
| 7 | 9C-362 | R. H. Bottom Bearing |
| 7 | 9C-363 | L. H. Bottom Bearing (not illustrated) |
| 8 | 6C-468 | Cotter Pin (3/16" x 2" Long) |
| 9 | 8C-609 | Slotted Nut |
| 10 | 3D-449 | Blade |
| 11 | 9C-424 | Woodruff Key |
| 12 | 9C-421 | Pivot Bolt |
| 13 | 4C-996 | Retaining Screw |
| 14 | 4C-918 | Clutch Lockwasher |
| 15 | 3D-442 | Blade Arm Assembly |
| 16 | 1D-293 | Heavy Duty Hitch |

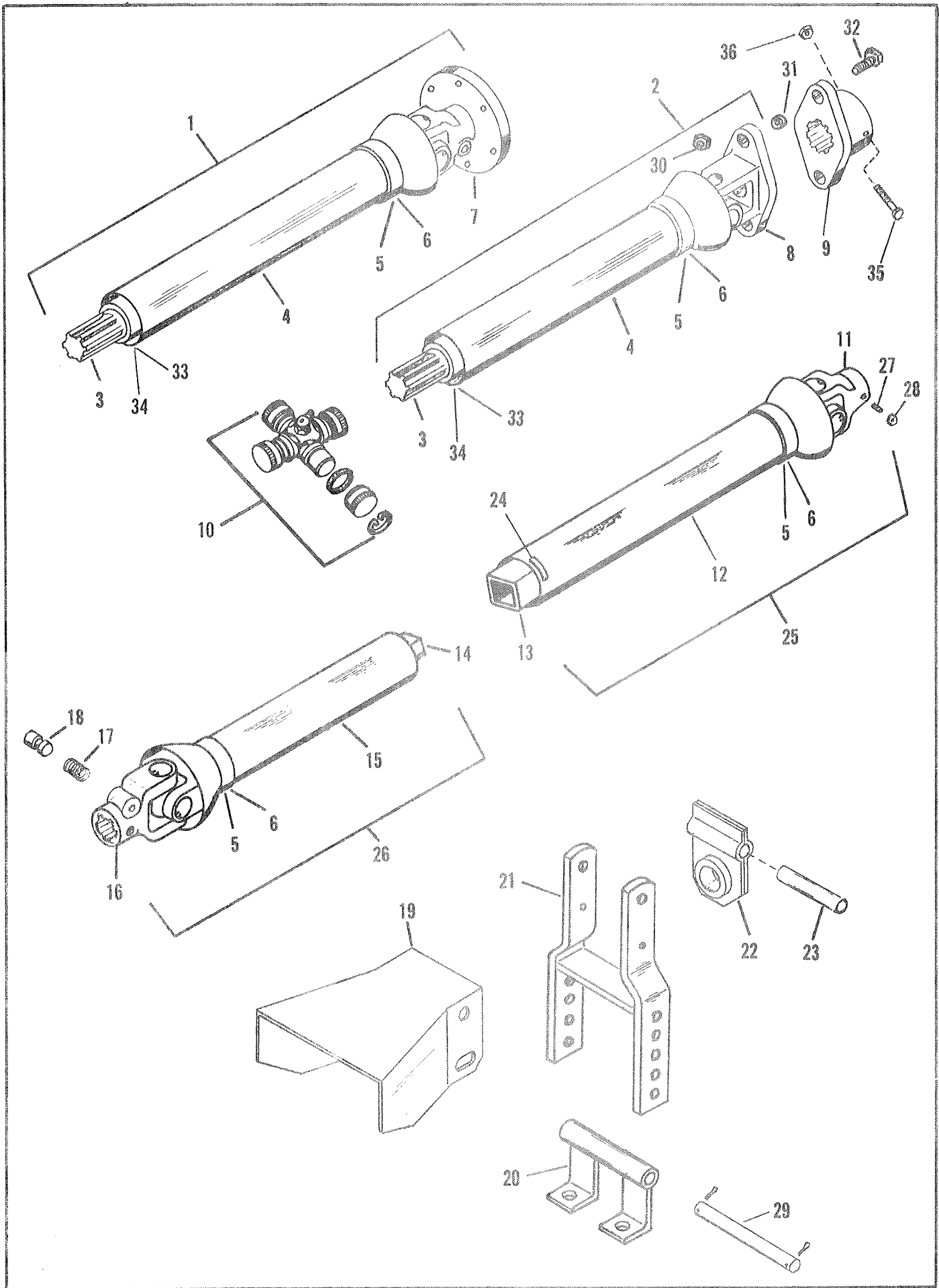
SHREDDER
"SUPER DRIVE"
ASSEMBLY



9C-636

GEARBOX ASSEMBLY

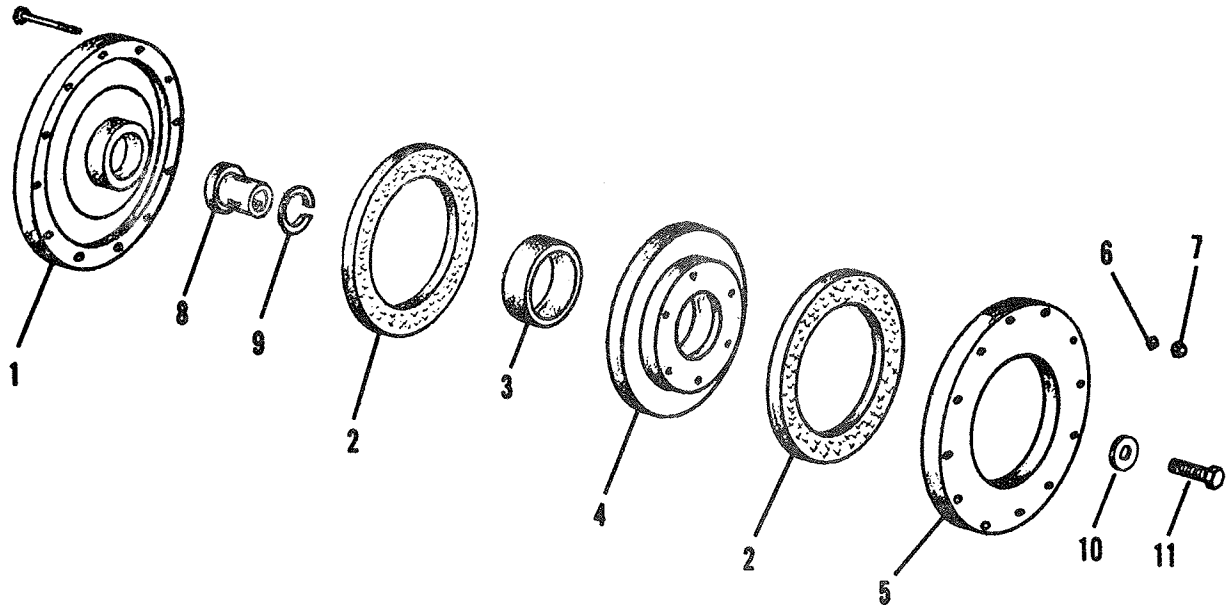
| Sym. | Part No. | Description |
|------|----------|--|
| 1 | 3D-436 | Complete Gearbox Assembly |
| 2 | 4C-825 | Cover Gasket |
| 3 | 1D-764 | Bearing Lockwasher |
| 4 | 1D-763 | Bearing Nut |
| 5 | 1D-768 | Drive Cover |
| 6 | 1D-759 | Bearing Cone (Timken #25580) |
| 7 | 1D-758 | Bearing Cup (Timken #25520) |
| 8 | 1D-760 | Housing |
| 9 | 4C-832 | Bearing Cup (Timken #362A) |
| 10 | 4C-850 | Bearing Cone (Timken #368) |
| 11 | 4C-836 | Key |
| 12 | 3D-434 | Output Shaft |
| 13 | 3D-435 | Key |
| 14 | 4C-831 | Output Seal |
| 15 | 4C-822 | Bearing Cap |
| 16 | 4C-827 | Shim (.007") |
| 17 | 4C-826 | Shim (.005") |
| 18 | 3C-164 | Bearing Cup (Timken #14276) |
| 19 | 4C-848 | Bearing Cone (Timken #14138A) |
| 20 | 4C-841 | Drain Plug |
| 21 | 3D-624 | Matched Set - Gear & Gear Shaft Assembly |
| 22 | 4C-847 | Bearing Cone (Timken #367) |
| 23 | 4C-829 | Shim (.005") |
| 24 | 4C-828 | Shim (.007") |
| 25 | 4C-842 | Bearing Flange |
| 26 | 4C-830 | Input Seal |
| 27 | 3D-437 | Output Pinion |
| 28 | 3D-439 | Input Shaft with Gear |



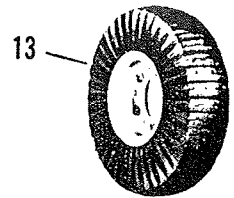
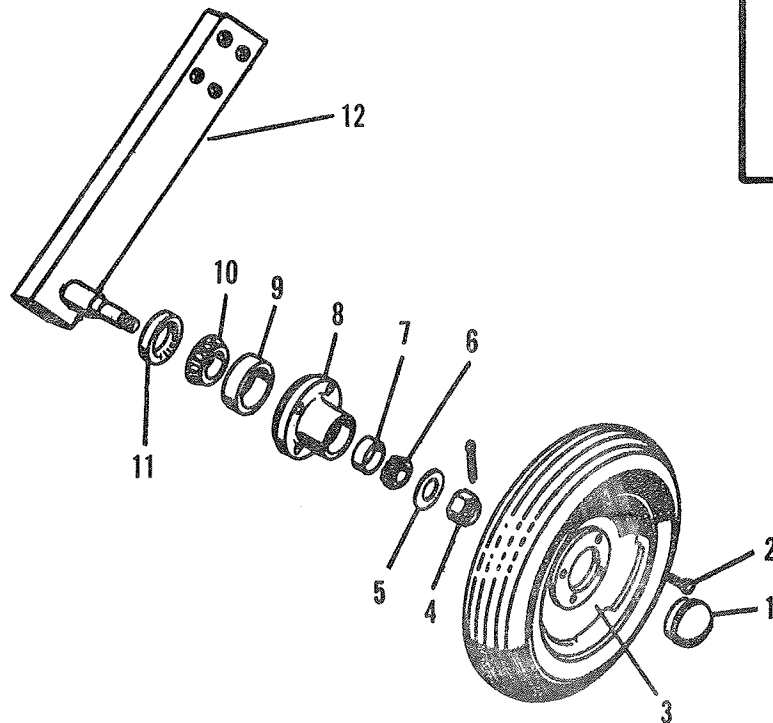
3 JOINT P. T. O. COMPONENTS
R-84 ROTARY SHREDDER

| Index No. | Part No. | Description |
|--------------|----------|---|
| 1 | 3D-414 | Tube & Clutch Flange Yoke Assembly |
| 2 | 3D-413 | Tube & Shear Flange Yoke Assembly |
| 3 | 3D-625 | Drive Shaft & Yoke Assembly |
| 4 | 3D-626 | Shield Complete |
| 5 | 2D-140 | Nylon Bearing |
| 6 | 2D-141 | Retaining Ring |
| 7 | 1D-904 | Flange Yoke |
| 8 | 1D-766 | Shear Yoke (With 3/8" Bushings) |
| 9 | 9C-390 | Shear Flange Assembly (3/8" Bushings) |
| 10 | 5D-515 | Universal Joint Repair Kit |
| 11 | 8C-315 | Yoke |
| 12 | 3D-231 | Rear Shield Complete |
| 13 | 3D-232 | Tube & Yoke Assembly |
| 14 | 3D-233 | Shaft & Yoke Assembly |
| 15 | 3D-234 | Front Shield Complete |
| 16 | 6C-589 | 1-3/8 - 6 Spline Tractor Yoke (540 RPM) |
| 17 | 5C-257 | Lock Pin Spring |
| 18 | 5C-987 | Lock Pin (Obsolete - Order 3D-757) |
| 19 | 3D-105 | Center Shield |
| 20 | 3D-412 | Bearing Anchor Assembly |
| 21 | 3D-135 | Bearing Support Assembly |
| 22 | 7C-323 | Bearing |
| 23 | 7C-322 | Bearing Sleeve |
| 24 | 1D-854 | Nylon Centralizer |
| 25 | 3D-107 | Tube & Joint Assembly |
| 26 | 3D-108 | Shaft & Joint Assembly (540 RPM) |
| 27 | 5C-233 | Setscrew |
| 28 | 5C-234 | Jam Nut |
| 29 | 3D-140 | Anchor Pin |
| 30 | 5C-954 | Stover Nut |
| 31 | 9C-419 | Bushing - 3/8" |
| 32 | 1C-508 | Shear Bolt (3/8 - 16 NC x 2-1/2" Long) |
| 33 | 3D-680 | Nylon Bearing |
| 34 | 3D-681 | Retaining Ring |
| 35 | 1D-239 | Capscrew, 5/16-18 NC x 3 Long, Grade 5 |
| 36 | 6C-748 | Stover Nut, 5/16-18 NC |

SLIP CLUTCH ASSEMBLY



WHEEL & AXLE ARM ASSEMBLY



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SLIP CLUTCH ASSEMBLY

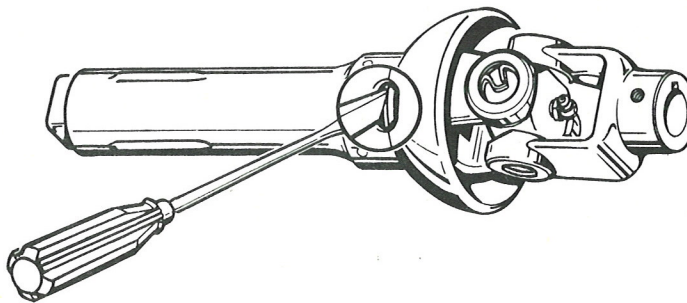
| Sym. | Part No. | Description |
|------|----------|----------------------------|
| | 1D-909 | Clutch Assembly (Complete) |
| 1 | 1D-371 | Hub |
| 2 | 1D-395 | Friction Disc |
| 3 | 1D-544 | Bushing |
| 4 | 1D-374 | Friction Plate |
| 5 | 1D-372 | Pressure Plate |
| 6 | 1D-398 | Belleville Washer |
| 7 | 1C-670 | Nut (Self Locking) |
| 8 | 1D-888 | Adapter Sleeve |
| 9 | 1D-542 | Snap Ring |
| 10 | 1D-889 | Retaining Washer |
| 11 | 5C-516 | Capscrew (L. H. Thread) |

WHEEL & AXLE ARM ASSEMBLY

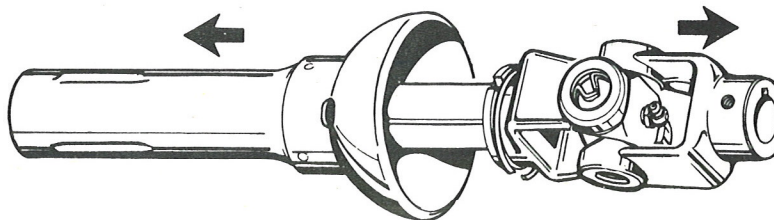
| | | |
|----|--------|---|
| 1 | 5C-908 | Cap |
| 2 | 5C-100 | Wheel Bolt |
| 3 | 5C-916 | Wheel Rim - 15" |
| | 8C-470 | Wheel Rim - 14" |
| 4 | 5C-909 | Nut |
| 5 | 5C-907 | Washer |
| 6 | 5C-911 | Bearing Cone (Timken #LM11949) |
| 7 | 5C-912 | Bearing Cup (Timken #LM11910) |
| 8 | 5C-904 | Wheel Hub |
| 9 | 5C-914 | Bearing Cup (Timken #LM67010) |
| 10 | 5C-913 | Bearing Cone (Timken #LM67048) |
| 11 | 5C-910 | Grease Seal |
| 12 | 9C-720 | Arm & Shaft Assembly |
| 13 | 1D-900 | 6.00 x 9 Laminated Tire & Rim |
| | 1D-933 | 6.00 x 9 Laminated Tire Kit (2 wheels with bolts) |

Instructions for Removing Nylon Quick Detachable Free Wheeling Guard

1. Insert screw driver in slot in bell and push snap ring downward and forward out of groove toward large opening of bell.

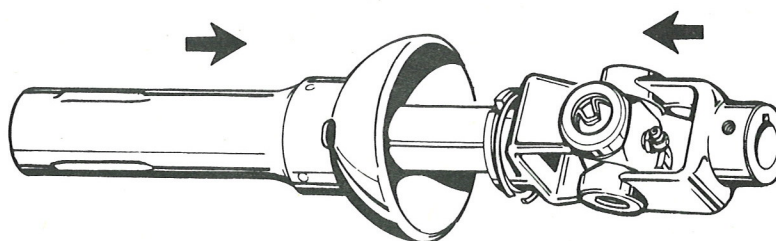


2. Slide guard off of joint.



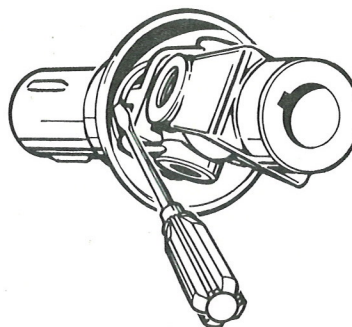
Instructions for Assembling Nylon Quick Detachable Free Wheeling Guard

1. Slide snap ring over joint hub.



2. Insert nylon bearing in groove of joint hub.

3. Slide joint assembly into guard. With screwdriver, push snap ring into groove.



WARNING - DO NOT POUND BELL TO REMOVE JOINT ASSEMBLY.