



balzer

MOUNTAIN LAKE, MN 56159

(507) 427-3133

SERVICE PARTS MANUAL

CONVENTIONAL SHREDDERS

PULL TYPE, FULL & SEMI-MOUNTED

MODEL

1200-1500-1800-2000-2200 & 2400



5-93

F



SAFETY



SAFETY SIGNS

WHY SAFETY SIGNS ARE IMPORTANT

Safety signs or decals provide very important information and instructions designed to alert you to dangers and hazards that can be present during operation of this equipment. However, safety sign instruction does no good if it is not read, understood and followed.

WHEN SAFETY SIGNS MUST BE REPLACED

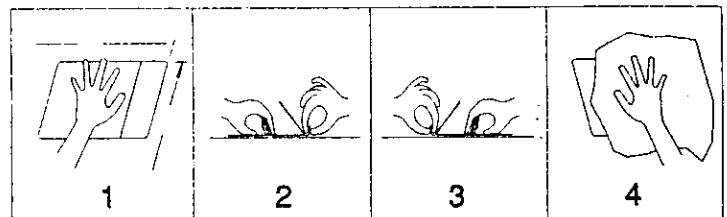
Safety signs or decals must be kept clean and readable. If they become unreadable for any reason they must be replaced with an identical replacement decal. Safety decals must also be replaced if parts are repaired or replaced with new parts that do not already include the necessary safety decals.

WHY SAFETY SIGNS ARE IMPORTANT

Surface preparation is very important for safety decals to properly adhere. Grease, oil and dirt must be removed and the surface must be smooth and dry.

Most decals have a split backing which is meant to be removed from the split outward.

1. Position the decal in the proper location and hold firmly over the largest portion of backing.
2. With one hand holding the decal in position, the free hand can carefully roll the loose end over and peel the backing outward. When the backing is removed as described and shown (fig.1), with even and gradual pull, the decal will roll onto the surface smooth and wrinkle free.
3. With the smallest portion of the decal attached, the same procedure can be applied to the other half.
4. After the decal is attached in place, use a cloth or soft paper towel to burnish the decal onto surface. Work gently from the middle outwards to avoid creating any wrinkles.



WHERE TO OBTAIN REPLACEMENTS

Order replacement decals by part number through your nearest dealer. Part numbers are printed on most decals, later in this section and in the parts section of this manual.

SAFETY



⚠ BE CAREFUL

1. KEEP ALL SHIELDS IN PLACE.
2. STOP ENGINE BEFORE LEAVING OPERATOR'S POSITION TO ADJUST, OIL, CLEAN OR UNLOAD MACHINES UNLESS OTHERWISE SPECIFICALLY RECOMMENDED IN THE "OPERATORS MANUAL".
3. WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING THE MACHINE.
4. KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER DRIVEN PARTS.
5. KEEP OFF EQUIPMENT UNLESS SEAT OR PLATFORM FOR OPERATION AND OBSERVATION IS PROVIDED.
6. KEEP ALL OTHERS OFF.
7. USE FLASHING WARNING LIGHTS WHEN OPERATING ON HIGHWAYS EXCEPT WHEN PROHIBITED BY LAW.
8. MAKE CERTAIN EVERYONE IS CLEAR OF MACHINE BEFORE STARTING ENGINE OR OPERATION.

10744

10744 "BE CAREFUL"

DECALS ARE LOCATED IDENTICALLY AT BOTH ENDS OF SHREDDER

⚠ DANGER

SHIELD MISSING
DO NOT OPERATE

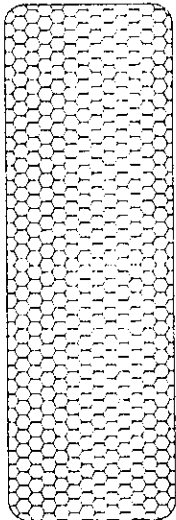
15285

⚠ DANGER

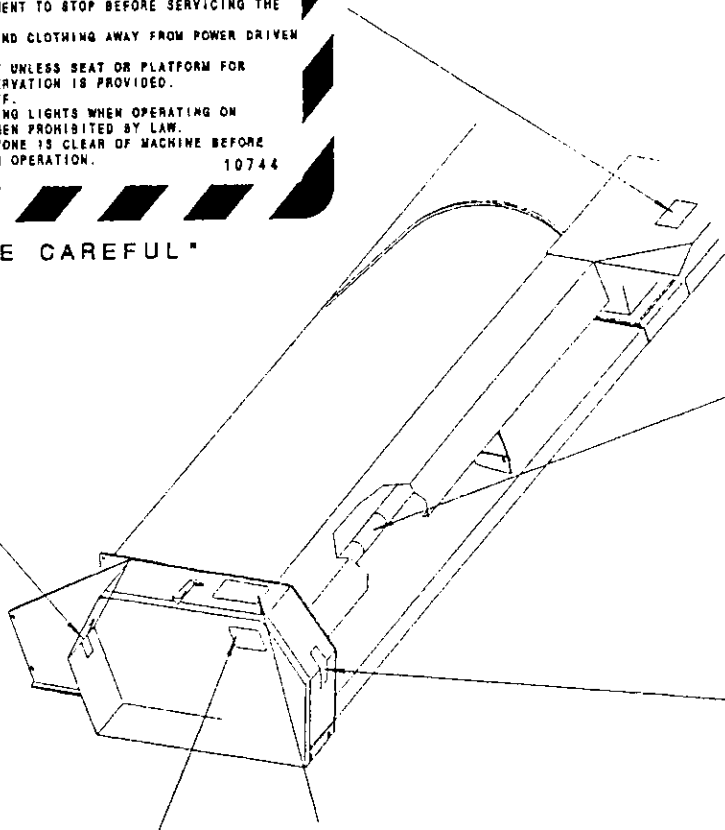
SHIELD MISSING
DO NOT OPERATE

15285

⚠ DANGER



12795
"AMBER REFLECTOR"



⚠ CAUTION ⚠

SHUT OFF MACHINE BEFORE REMOVING SHIELDS AND / OR ADJUSTING MACHINE. REPLACE SHIELD BEFORE OPERATING

8154

8154 "CAUTION"

⚠ DANGER

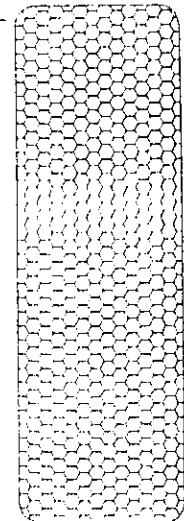
STOP: WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING OR OPENING OF SHIELDS.

LOOK: THE IGNITION KEY IS REMOVED.

LISTEN: FOR ALL MOVEMENT TO STOP, ROTATING PARTS CONTINUE TO ROTATE AFTER POWER IS SHUT OFF.

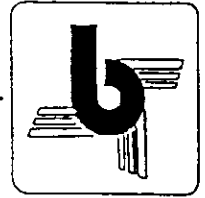
14175

14175 "DANGER"



12794
RED REFLECTOR

Shredder Safety



1. This machine must be operated and serviced by qualified persons who have thoroughly read and understand this operator's manual and the safety signs on the machine.

2. Read and follow the instructions on all decals.

3. Never operate shredder with any guards or shields not in place. Replace any missing or damaged shields.

4. Be sure the front flipper shields are in place and swing freely prior to operation.

5. Keep hands and feet away from all moving parts.

6. Never wear any loose clothing when working around moving parts.

7. Keep children away from machinery.

8. Never leave shredder operating unattended.

9. Never allow anyone to ride any place other than tractor's seat.

10. Do not stand in front, behind, or along side of machine when the cylinders are turning.

11. Wait for all movement of cylinders to stop before servicing or opening of the shields on the shredder.

12. Block wheels securely when machine is parked on an incline.

13. Periodically check for loose or missing hardware and tighten or replace as needed.

14. Do not work under the shredder for servicing of cutting knives or other reasons unless the machine has been safely blocked up, and the P.T.O. disconnected.

15. Replace any parts which show signs of excess wear, cracking or likely failure with original equipment service parts.

16. Make certain that everyone and everything is cleared before starting the engine or operation of the shredder.

17. Always start up unit slowly and gradually bring up to speed in order to check for abnormal operation.

18. If your shredder develops abnormal noises or excessive vibration, stop the unit at once and safely determine and correct the cause.

19. When parking always lower the shredder and block wheels.

20. Insure tire pressure is 20 p.s.i. maximum.

21. Hydraulic fluid pressure can be very dangerous and can cause serious personal injury. Be sure to relieve all pressure before disconnecting hydraulic lines.

22. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, not your hand to search for leaks.

23. If injured by escaping hydraulic fluid seek prompt medical attention, serious infection or reaction may develop.

24. Always use a safety chain between towing vehicle and shredder when transporting.

25. Never assume that everyone is as safety conscious as you are.



DANGER

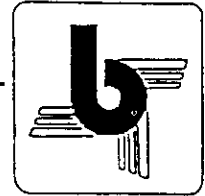
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LOOK: THE IGNITION KEY IS REMOVED.


LISTEN: FOR ALL MOVEMENT TO STOP, ROTATING PARTS CONTINUE TO ROTATE AFTER POWER IS SHUT OFF.

L4175

Set-Up & Assembly



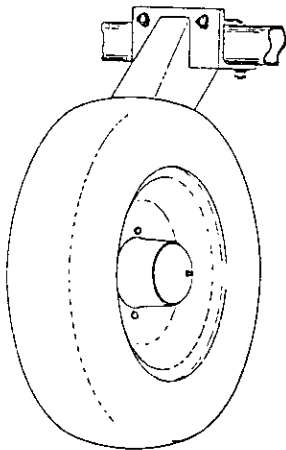
IMPORTANT INFORMATION

 If shredder must be raised off the ground to install any equipment, be sure to safely block it up. Be certain that the entire area is safe before doing anything.

WHEEL ARM ASSEMBLY

Remove hardware bag from box of parts. It contains hardware for 2 arms. If additional arms have been ordered, there will be an additional hardware bag with them.

Position the wheel arms on rock-shaft as shown for the desired row spacing. Be sure to position the wheel arms so that the tire will be in the center of the rows for best operation. The customer supplied tires should be inflated to 15-20 p.s.i.



HYDRAULIC CYLINDER OR RATCHET JACK

Install a standard agricultural 3x8 hydraulic cylinder or compatible ratchet jack between the cylinder arm on the rockshaft and the mounting bracket on top of the main housing.

HOSE STAND

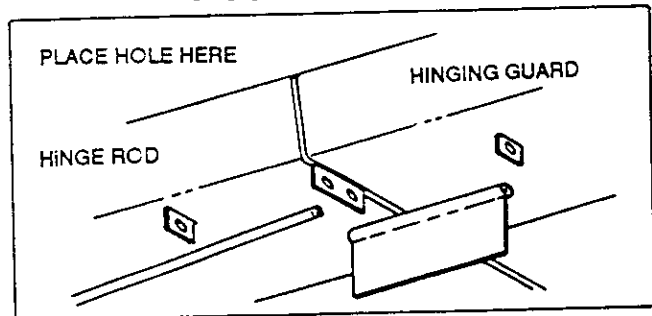
Remove the right front bolt on the top of the gear box shield and stall the hose stand. Run hydraulic hoses from hydraulic cylinder through stand to the tractor. The stand is in the box of parts.

IMPLEMENT JACK

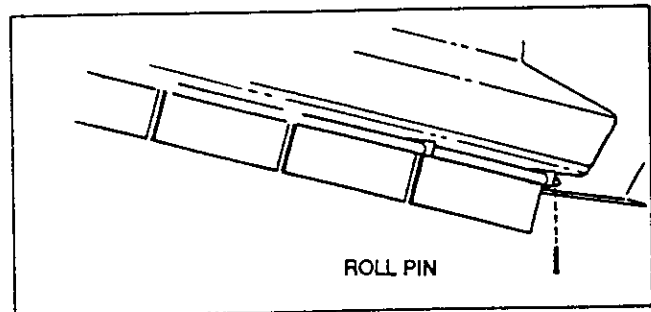
Remove jack from the box of parts. Install it onto mount that is located on the outside of the left hitch arm at the front of the shredder.

HINGING GUARDS

Remove hinging guards and 2 roll pins from box of parts, and locate the 2 hinge rods. Each are either 6 or 7 foot long, depending on model. Slide one hinge rod halfway through the center hinge tab while positioning hinging guard between center hinge tab and the next one. Slide the hinge rod through the hinge pipe, repeat until are in place on one side. Insert roll pin in rod hole that appears between the outside hinge tab and the end panel. Refer to illustrations below. Hinging guard installation.



ROLL PIN PLACEMENT



TORQUE CHART

RECOMMENDED TORQUE IN FOOT-POUNDS COARSE AND FINE THREAD	
BOLT MARKING	GRADE 5
BOLT DIA.	TORQUE
1.4	10
5/16	18
3/8	39
7/16	58
1/2	87
9/16	111
5/8	173
3/4	290
7/8	500
1	620

QUICK HITCH

IMPORTANT:

A quick hitch is required with mounted and semi-mounted units in order to have room for the PTO.

MOUNTED (Three-Point)

1. Assemble the hitch of a mounted unit as shown in Figure B-2.
 - a) The parts labeled are taped together along with a bag containing the attaching hardware.

SEMI-MOUNTED (Two-Point)

18' and 20'

1. Figure B-3 shows a semi-mounted unit (18' or 20') with required quick hitch.



CAUTION

When using the semi-mounted model, the top link on the hitch **MUST NOT BE USED** or the warranty will be voided.

PULL-TYPE

1. Figure B-4 shows the bolt-on tongue hitch of the pull-type models.
2. The mounting hardware is placed in appropriate holes in the tongue.

IMPLEMENT JACK

PULL-TYPE

1. A screw jack comes with pull-type models.
2. Use the screw jack for supporting the front of the shredder when it is not hitched to a tractor.
 - a) Install the screw jack onto the mount that is located on the outside of the left tongue hitch arm at the front of the shredder. See Figure B-4.
3. When the shredder is hitched to the tractor, the screw jack can be stored by attaching to the mount located on the top, left main housing.

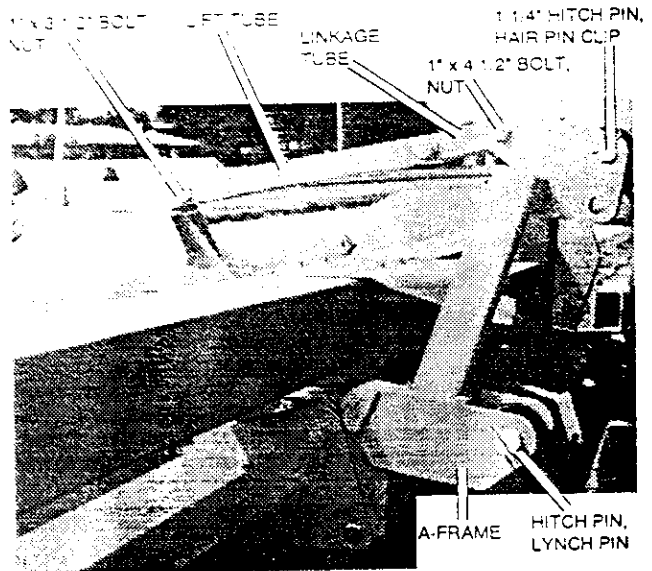


Figure B-2: Hitch Assembly of Mounted (three-point) Unit.

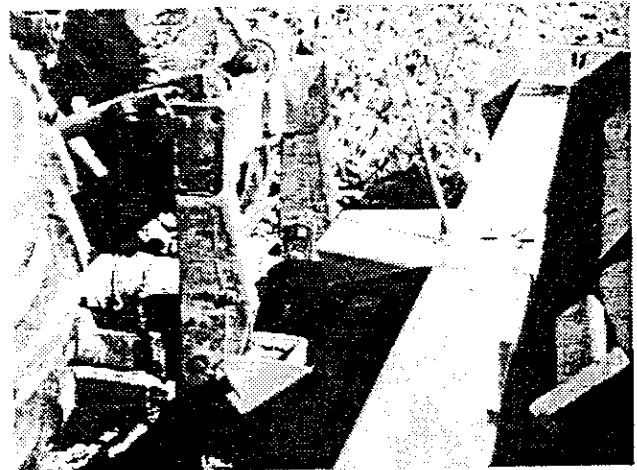


Figure B-3: A Semi-Mounted (two-point) Unit (18' or 20') with the required quick hitch.

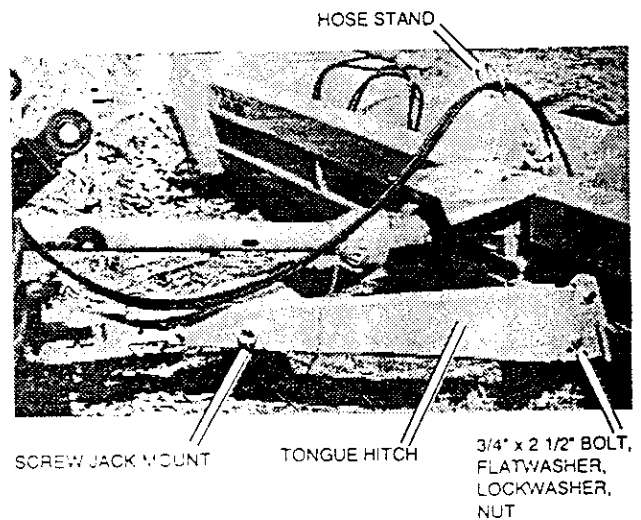


Figure B-4: Hitch Assembly of Pull-Type Unit showing the Bolt-On Tongue.

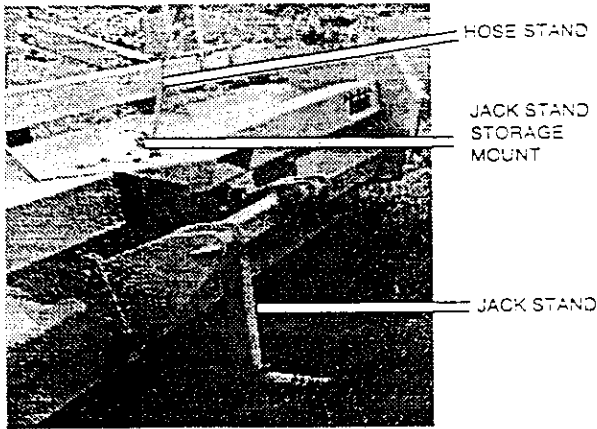


Figure B-5: Jack Stand on Semi-Mounted Models.

MOUNTED AND SEMI-MOUNTED

1. A jack stand comes with mounted and semi-mounted models.
2. Use the jack stand for supporting the front of the shredder when it is not hitched to a tractor.
 - a) Attach the jack stand to the mount located on the main housing behind the hitch. See Figure B-5.
3. When the shredder is hitched to the tractor, the jack stand can be stored by attaching to the mount located on the top, left main housing.

PTO DRIVES

1. Mounted, pull-type, and semi-mounted units require different PTOs.
 - a) Be sure you have the correct PTO before running the shredder.
2. Measure the PTO and compare the dimensions to the chart in Figure B-6.
 - a) If it does not match, contact your dealer for the correct PTO.



CAUTION

Improper PTO length can result in serious injury and equipment damage.

3. The protective shield around the PTO comes equipped with a chain to keep the shield from rotating while the PTO is operating.
 - a) Anchor the chain by attaching it to the hitch or any stationary part of the equipment.



DANGER



Never operate the PTO without its protective cover or with a damaged protective cover. This could result in serious injury and / or equipment damage.

MACHINE TYPE	PTO RPM	TRACTOR SPLINE	COMPRESSED OVERALL LENGTH	MACHINE SIZE			
				12'	15'	18'	20'
Pull-Type	540	1 3/8-6	53"	√	√		
Pull-Type	1000	1 3/8-21	53"	√	√	√	√
Pull-Type	1000	1 3/4-20	53"	√	√	√	√
Pull-Type	CV1000	1 3/8-21	52 1/4"	√	√	√	√
Pull-Type	CV1000	1 3/4-20	52 1/4"	√	√	√	√
Mounted	540	1 3/8-6	31 1/8"	√	√		
Mounted	1000	1 3/8-21	31 1/8"	√	√	√	√
Mounted	1000	1 3/4-20	31 1/8"	√	√	√	√

Figure B-6: PTO Lengths.

NOTE: Semi-mounted models use the same PTOs as mounted models.

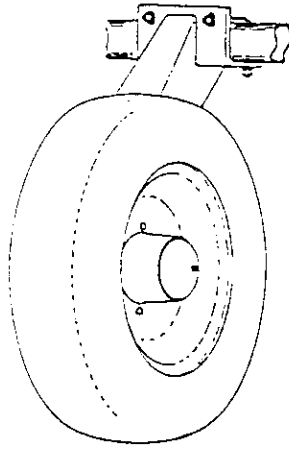


Figure B-9: Wheel Arm Assembly.

WHEEL ARM ASSEMBLY (Pull-Type and Mounted)

1. Remove the hardware bag from the box of parts.
 - a) The hardware bag contains the hardware for two wheel arms.
 - b) If additional arms have been ordered, there will be an additional hardware bag with them.
2. Position the wheel arms on the rockshaft at the desired row spacing. See Figure B-9.
 - a) For best operation, be sure to position the wheel arms so that the tire will be in the center between the rows.
3. The customer-supplied tires should be inflated to 15 to 20 p.s.i.

CASTER WHEEL ASSEMBLY (Semi-Mounted)

1. The caster wheels are shipped in four separate pieces. One of each is required to complete one caster wheel.
 - a) Caster assembly.
 - b) Top link with hardware.
 - c) Bottom link with hardware.
 - d) Mounting bracket set with hardware.

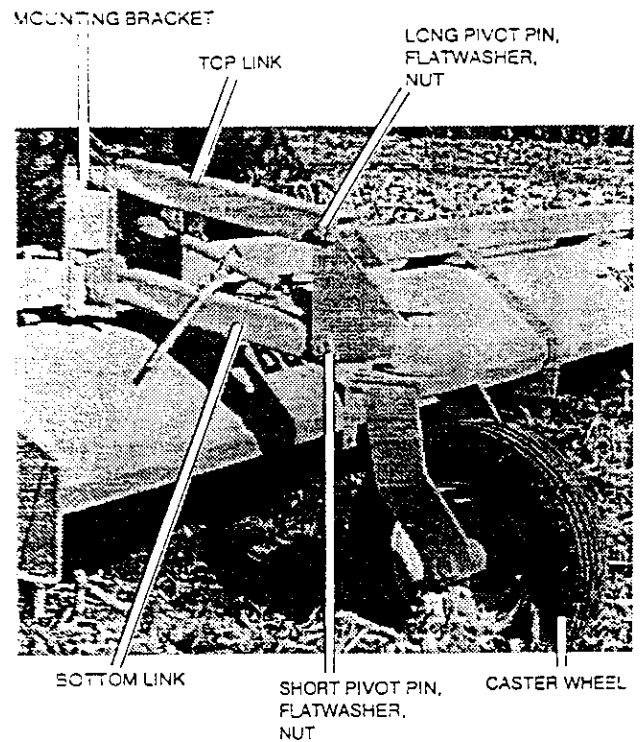
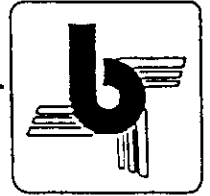



Figure B-10: Caster Wheel.


2. Assemble the mounting bracket set to the square tube that runs the length of the shredder. See Figure B-10.
 - a) Position the mounting bracket with the angles out and spaced slightly more than 12" apart.
 - b) Do not tighten at this time.
3. Attach the top and bottom links to the mounting bracket set.
 - a) Use the long pivot pins, washers, and nuts.
4. Attach the caster assembly to the top and bottom links.
 - a) Use the short pivot pins, washers, and nuts.
5. Position the caster wheel to the desired spacing.
6. Tighten all hardware.

Operation



 **CAUTION: DISENGAGE TRACTOR P.T.O. DRIVE IMMEDIATELY SHOULD EXCESSIVE VIBRATION OCCUR WHILE SHREDDER IS IN OPERATION. SHUT OFF TRACTOR AND REMOVE IGNITION KEYS BEFORE DETERMINING THE CAUSE OF THE VIBRATION.**

The tractor should be operated at recommended P.T.O. speed for maximum effectiveness of the shredder.

 **CAUTION: ALWAYS START UP UNIT SLOWLY AND GRADUALLY BRING UP TO OPERATING SPEED.**

The shredder knives must be run a minimum of 2 inches above the ground to prevent excessive wear and knife damage. Position wheels to run in valley between rows.

Do not make sharp turns while tractor P.T.O. is engaged. This practice will damage shredder and tractor drive lines. Constant velocity P.T.O.'s are available which permit sharper turns. Consult with your local dealer for more information.

Never operate shredder with any broken or missing knives, this will cause structural and bearing damage to the unit.


Keep all hinging guard shields in place and free swinging. Replace any broken or bent guards.

FULLY MOUNTED UNITS

IMPORTANT: Reduce travel speed when on a rough or bumpy surface with shredder raised.

ADDITIONAL WEIGHT MAY NEED TO BE ADDED TO THE FRONT OF TRACTOR, TO COUNTERACT THE SHREDDER WEIGHT.

WINDROW

 **ALWAYS KEEP DEFLECTORS IN PLACE. IF WINGS MUST BE ADJUSTED, ALSO REPOSITION DEFLECTORS TO AVOID UNSAFE OPERATION.**

Adjust wings to change the desired windrow width. Loosen the bolts holding the wing clamps and spread wings open. Reposition deflectors to the required width, close wings until they make contact with the deflectors and tighten the wing clamp bolts.

If used as a conventional shredder with the wings wide open, the deflectors must also be adjusted outward. To cover the maximum area.

ALL MODELS



CAUTION

Disengage the tractor PTO drive immediately should excessive vibration occur while the shredder is in operation. Shut off the tractor and remove the ignition keys before determining the cause of the vibration.



CAUTION

Always start up the unit slowly and gradually bring it up to operating speed.

1. The tractor should be operated at the recommended PTO speed for maximum effectiveness of the shredder.
2. The shredder knives must be run a minimum of two inches above the ground to prevent excessive wear and knife damage.
3. Position the wheels to run in the valley between the rows.
4. Never operate the shredder with any broken or missing knives.
 - a) This will cause structural and bearing damage to the unit.
5. Keep all hinging guard shields in place and free swinging.
 - a) Replace any broken or bent guards.

PULL-TYPE MODELS



CAUTION

Do not make sharp turns (pull-type only) while the tractor PTO is engaged.

1. This practice will damage the shredder and the tractor drive lines.
2. A constant velocity (CV) PTO is available which permits sharper turns.
3. Consult with your local dealer for more information.

MOUNTED MODELS

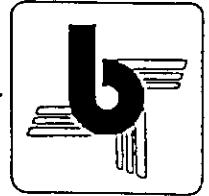
IMPORTANT: Reduce travel speed when on a rough or bumpy surface with shredder raised.



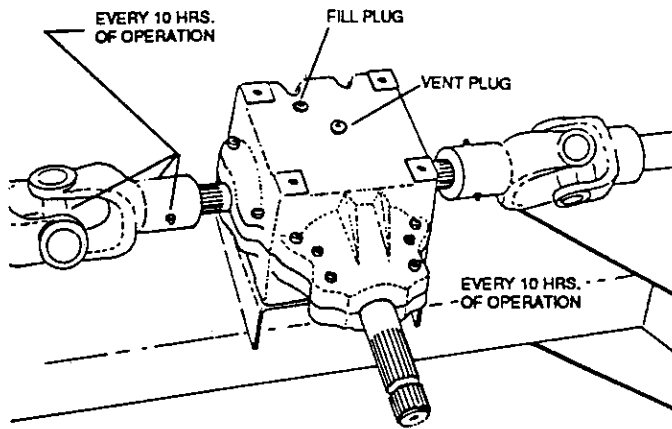
CAUTION

Additional weight may need to be added to the front of the tractor to counteract the shredder weight.

Service & Lubrication

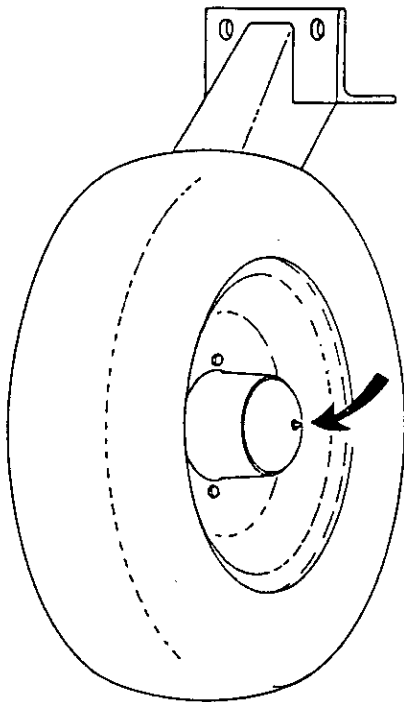


PTO



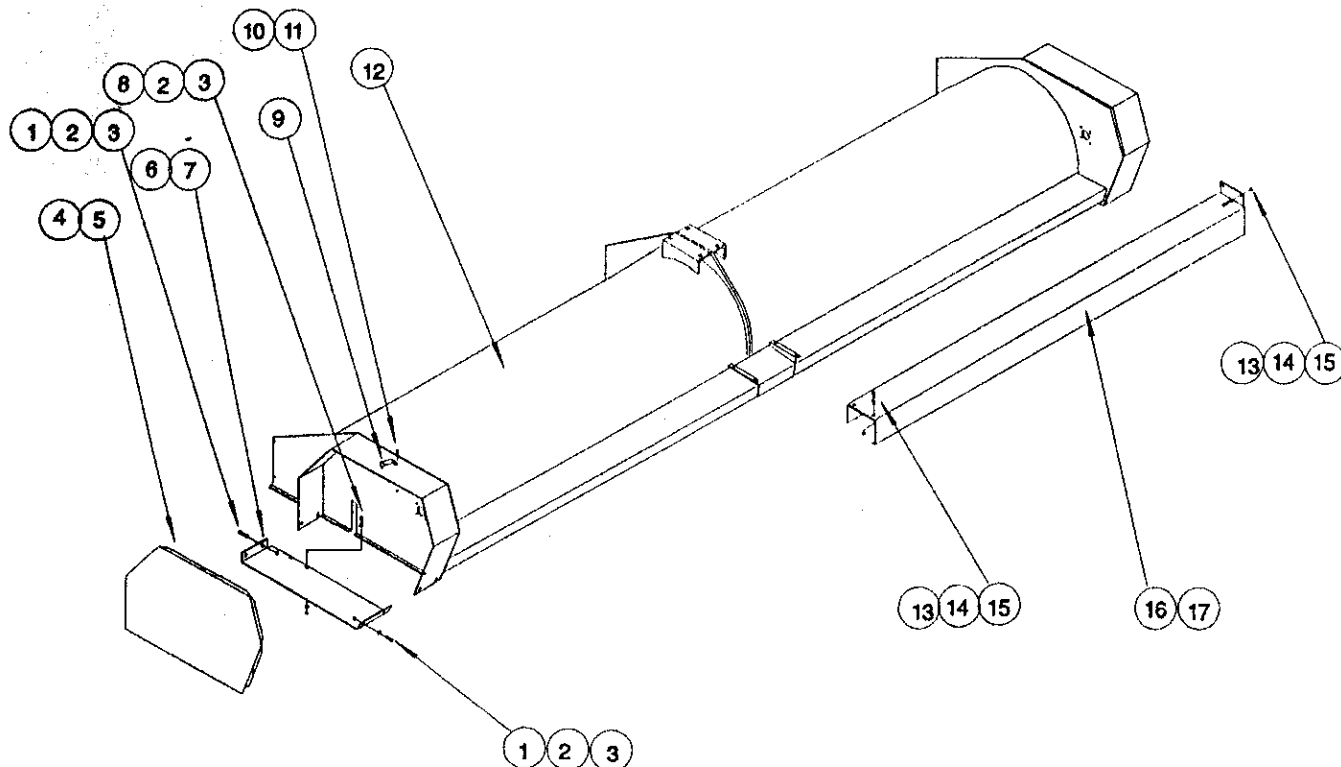
Grease all PTO joints prior to operating and after every eight hours of operation. Some PTO's have a grease fitting for the slide. If your PTO doesn't, the PTO should be pulled apart and the slide cleaned and greased occasionally to insure proper and safe operation.

Check oil level by removing fill plug and reading level on the dipstick. Use a good quality SAE 90 oil with anti-foaming additives.



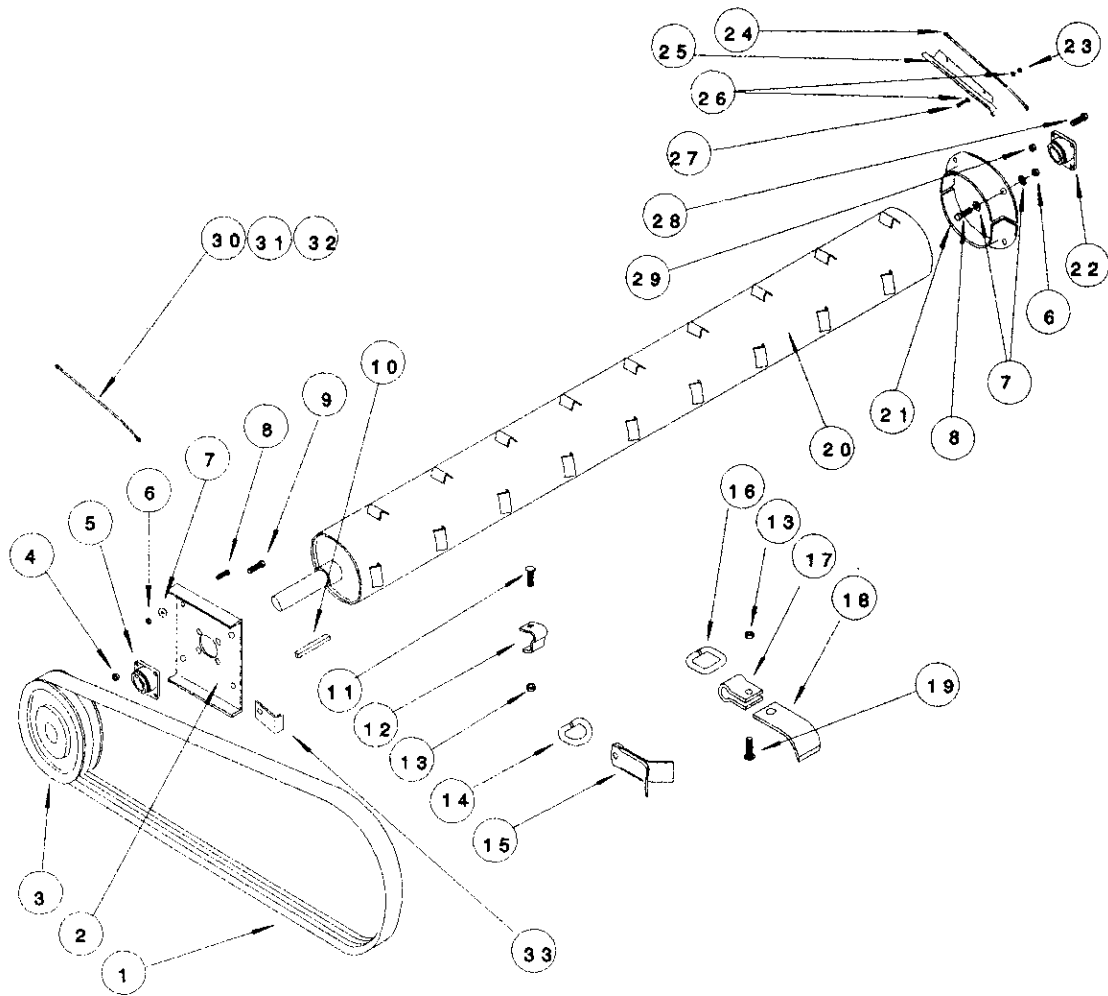
Grease wheel bearings every 50 hours of operation.

MAIN HOUSING 1200-1500



ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	1206	BOLT HEX HD, 3/8X1	11	2584	NUT HEX HD 1/4 TOPLOCK
2	2496	NUT HEX HD TOP LOCK	12	24195	MAIN HOUSING WELDMENT (1200)
3	1598	FLAT WASHER 3/8		24168	MAIN HOUSING WELDMENT (1500)
4	1440	END SHIELD RH	13	1185	BOLT HEX HD 5/16X1
5	1440	END SHIELD LH	14	1597	FLAT WASHER 5/16
6	12404	END PANEL, BOTTOM RH	15	2475	NUT HEX HD 5/16 TOPLOCK
7	12403	END PANEL, BOTTOM LH	16	12422	SHIELD, LINE SHAFT RH (1200)
8	1207	BOLT HEX HD 3/8X1 1/4		12423	SHIELD, LINE SHAFT LH (1200)
9	14403	HOOD LATCH	17	24172	SHIELD, LINE SHAFT RH (1500)
10	1161	BOLT HEX HD 1/4X5/8		24173	SHIELD, LINE SHAFT LH (1500)

CYLINDER ASBY 1200-1500

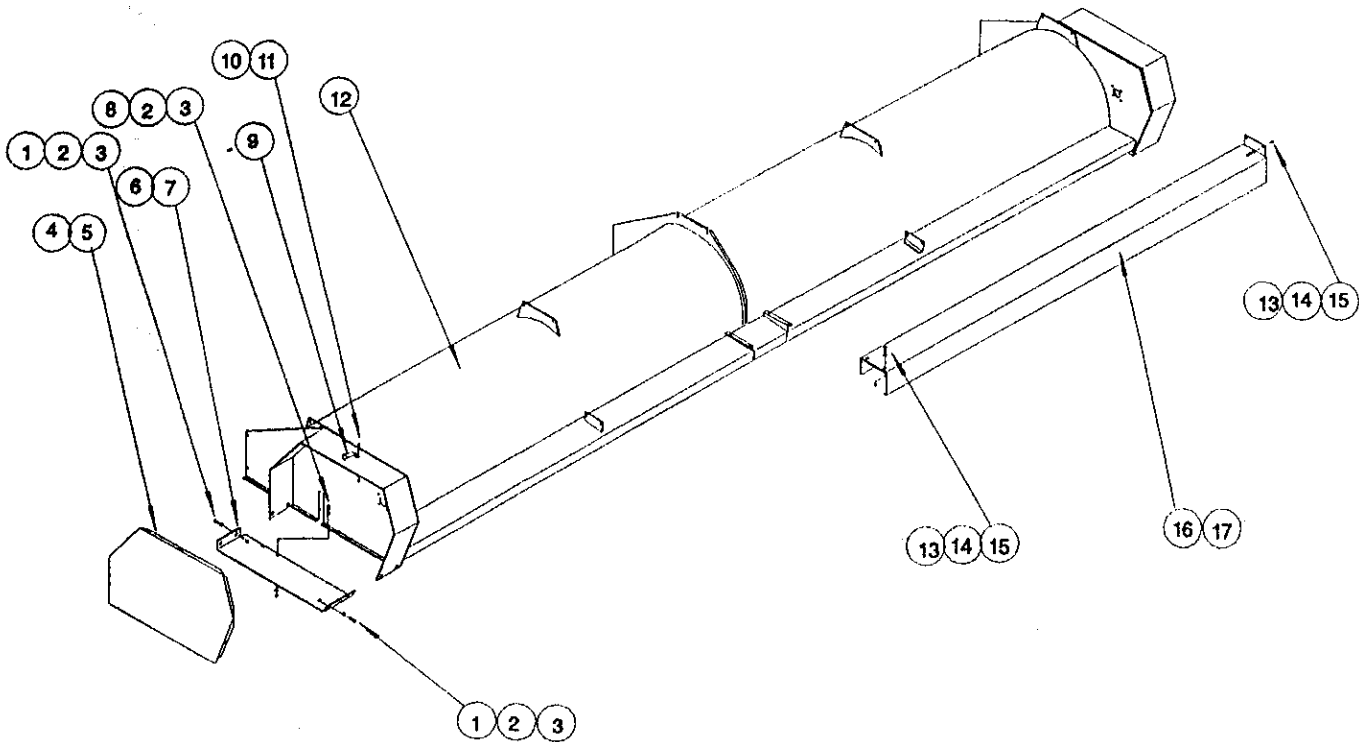


ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	12393	BELT 2 BAND (1000RPM)	17	12296	HANGER, KNIFE
	17192	BELT 2 BAND (540RPM)	18	12297	CUP KNIFE
2	12358	BEARING STIFFENER	19	1095	BOLT, CARRIAGE 1/2 x 1 1/2
3	12388	PULLEY 2C-11" (1000RPM)	20	12345	ROTOR 1200
	17191	PULLEY 2C-8" (540RPM)		24191	ROTOR 1500
	12390	BUSHING ASBY 1 1/2	21	12366	GRASS RING
4	2539	NUT, HEX HD 1/2 (LOCKING)	22	16894	BEARING 1 1/2 4-BOLT
5	12359	BEARING 1 1/2-4 BOLT	23	2496	NUT, HEX HD 3/8 (LOCKING)
6	2475	NUT, HEX HD 5/16 (LOCKING)	24	24177	GREASE LINE 21 1/2"
7	1597	FLATWASHER 5/16	25	24188	KNIFE DEFLECTER, R.H.
8	1186	BOLT, HEX HD 5/16 x 1 1/4		24031	KNIFE DEFLECTER, L.H.
9	1251	BOLT, HEX HD 1/2 x 1 3/4	26	1598	FLATWASHER 3/8
10	2408	KEY 3/8 x 2 1/2	27	1207	BOLT, HEX HD 3/8 x 1 1/4
11	2530	BOLT, CARRIAGE 1/2 x 3 1/4	28	1253	BOLT, HEX HD 1/2 x 2 1/4
12	12355	KNIFE BRACKET	29	2539	NUT, HEX HD 1/2 (LOCKING)
13	2539	NUT, HEX HD 1/2 (LOCKING)	30	24178	GREASE LINE 10"
14	12356	D-RING	31	12333	COUPLER 1/8NPT
15	12357	SIDE KNIFE	32	2291	ZERK 1/8NPT
	24153	SIDE KNIFE (HEAVY)	33	24322	CLAMP, GREASE HOSE
16	12295	SQUARE RING			

MAIN HOUSING



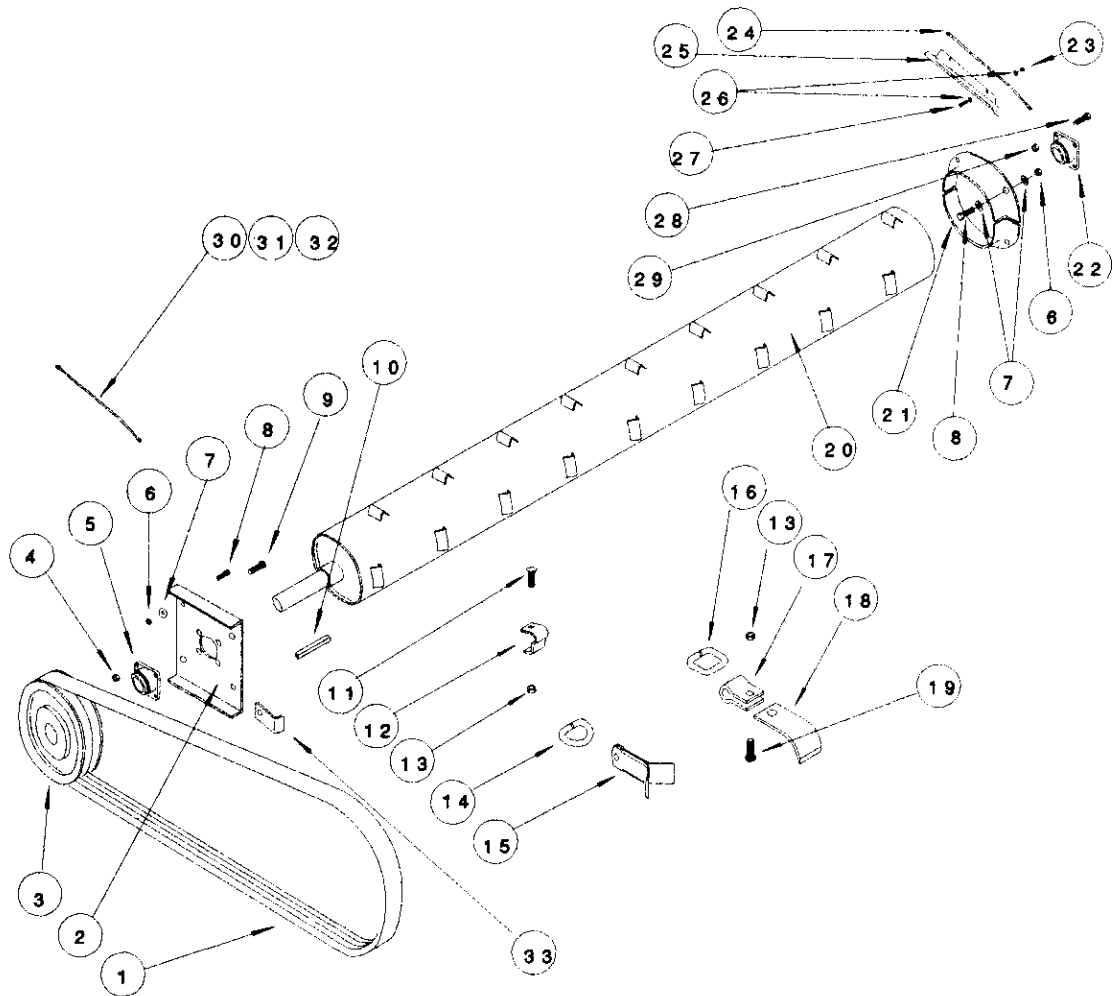
1800-2000-2200-2400



ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	1206	BOLT, HEX HD 3/8 x 1	13	1185	BOLT, HEX HD 5/16 x 1
2	2496	NUT, HEX HD 3/8 (LOCKING)	14	1597	FLATWASHER 5/16
3	1598	FLATWASHER 3/8	15	2475	NUT, HEX HD 5/16 (LOCKING)
4	14400	END SHIELD, R.H.	16	24064	SHIELD, R.H. 1800
5	14401	END SHIELD, L.H.	16	24010 24108	SHIELD, R.H. 2000
6	24114	END PANEL, BOTTOM R.H.	16	24516	SHIELD, R.H. INSIDE 2200
7	24113	END PANEL, BOTTOM L.H.	16	24512	SHIELD, R.H. OUTSIDE 2200-2400
8	1207	BOLT, HEX HD 3/8 x 1 1/4	16	24508	SHIELD, R.H. INSIDE 2400
9	14403	HOOD LATCH	17	24065	SHIELD, L.H. 1800
10	1161	BOLT, HEX HD 1/4 x 5/8	17	24010 24109	SHIELD, L.H. 2000
11	2564	NUT, HEX HD 1/4 (LOCKING)	17	24515	SHIELD, L.H. INSIDE 2200
12	24197	MAIN HOUSING 1800	17	24511	SHIELD, L.H. OUTSIDE 2200-2400
	24199	MAIN HOUSING 2000	17	24507	SHIELD, L.H. INSIDE 2400
	24468	MAIN HOUSING 2200			
	24489	MAIN HOUSING 2400			

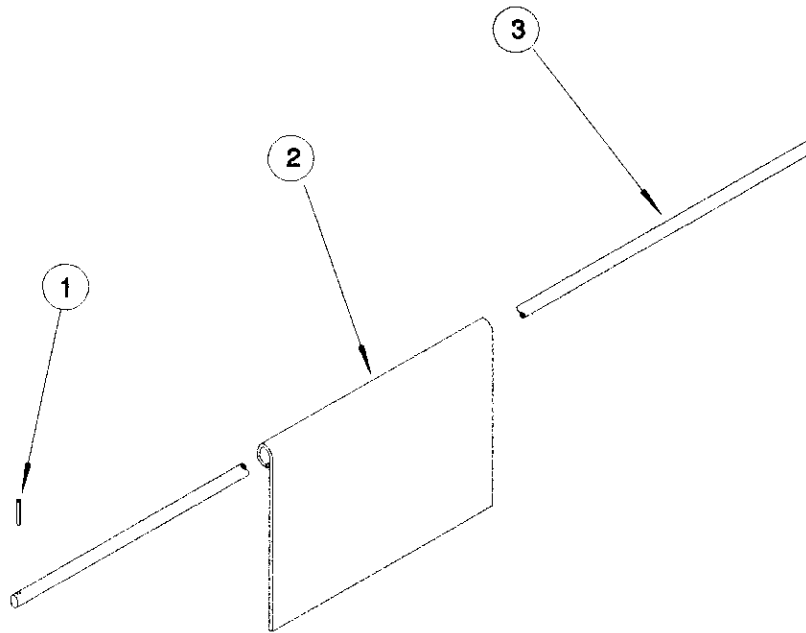
CYLINDER ASBY

1800-2000
2200-2400



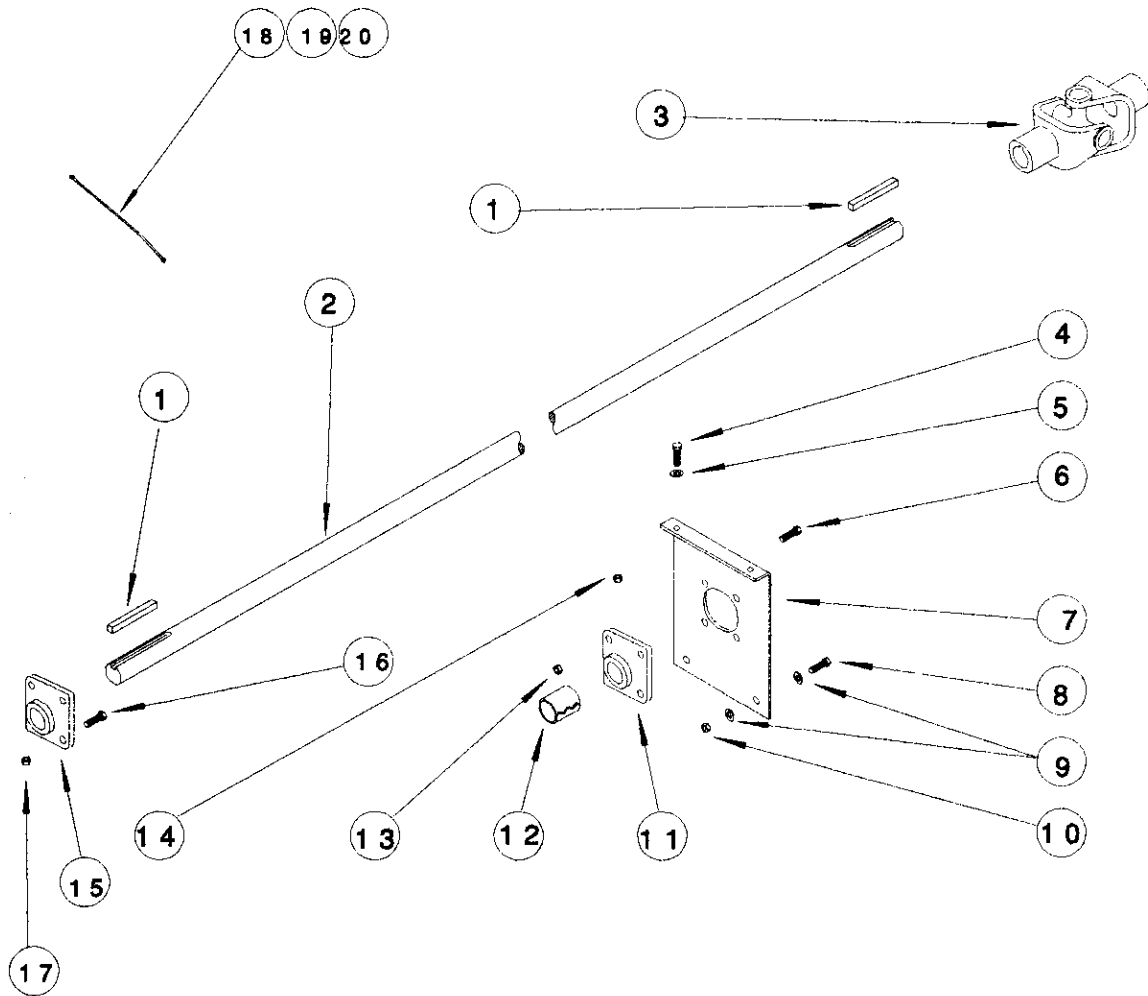
ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	24076	BELT 3 BAND(1000RPM)	17	12296	HANGER, KNIFE
	17477	BELT 3 BAND(1000RPM) SPEED-UP	18	12297	CUP KNIFE
2	24101	BEARING STIFFENER	19	1095	BOLT, CARRIAGE 1/2 x 1 1/2
3	24073	PULLEY 3C-11"(1000RPM)	20	24048	ROTOR 1800
	17476	PULLEY 3C-8"(1000RPM)SPEED-UP		24039	ROTOR 2000
	24075	BUSHING ASBY 2"		24435	ROTOR 2200
4	2546	NUT, HEX HD 5/8(LOCKING)		24436	ROTOR 2400
5	12359	BEARING 2"-4 BOLT	21	12366	GRASS RING
6	2475	NUT, HEX HD 5/16(LOCKING)	22	24145	BEARING 1 3/4 4-BOLT
7	1597	FLATWASHER 5/16	23	2496	NUT, HEX HD 3/8(LOCKING)
8	1186	BOLT, HEX HD 5/16 x 1 1/4	24	24177	GREASE LINE 2 1/2"
9	1291	BOLT, HEX HD 5/8 x 2	25	24138	KNIFE DEFLECTER, R.H.
10	2439	KEY 1/2 x 2 1/2		24031	KNIFE DEFLECTER, L.H.
11	2530	BOLT, CARRIAGE 1/2 x 3 1/4	26	1598	FLATWASHER 3/8
12	12355	KNIFE BRACKET	27	1207	BOLT, HEX HD 3/8 x 1 1/4
	18277	KNIFE BRACKET(2200-2400)	28	1293	BOLT, HEX HD 5/8 x 2 1/4
13	2539	NUT, HEX HD 1/2(LOCKING)	29	2546	NUT, HEX HD 5/8(LOCKING)
14	12356	D-RING	30	24178	GREASE LINE 10"
15	12357	SIDE KNIFE	31	12333	COUPLER 1/8NPT
	24153	SIDE KNIFE (HEAVY)	32	2291	ZERK 1/8NPT
16	12295	SQUARE RING	33	24322	CLAMP, GREASE LINE

HINGING GUARD & ROD



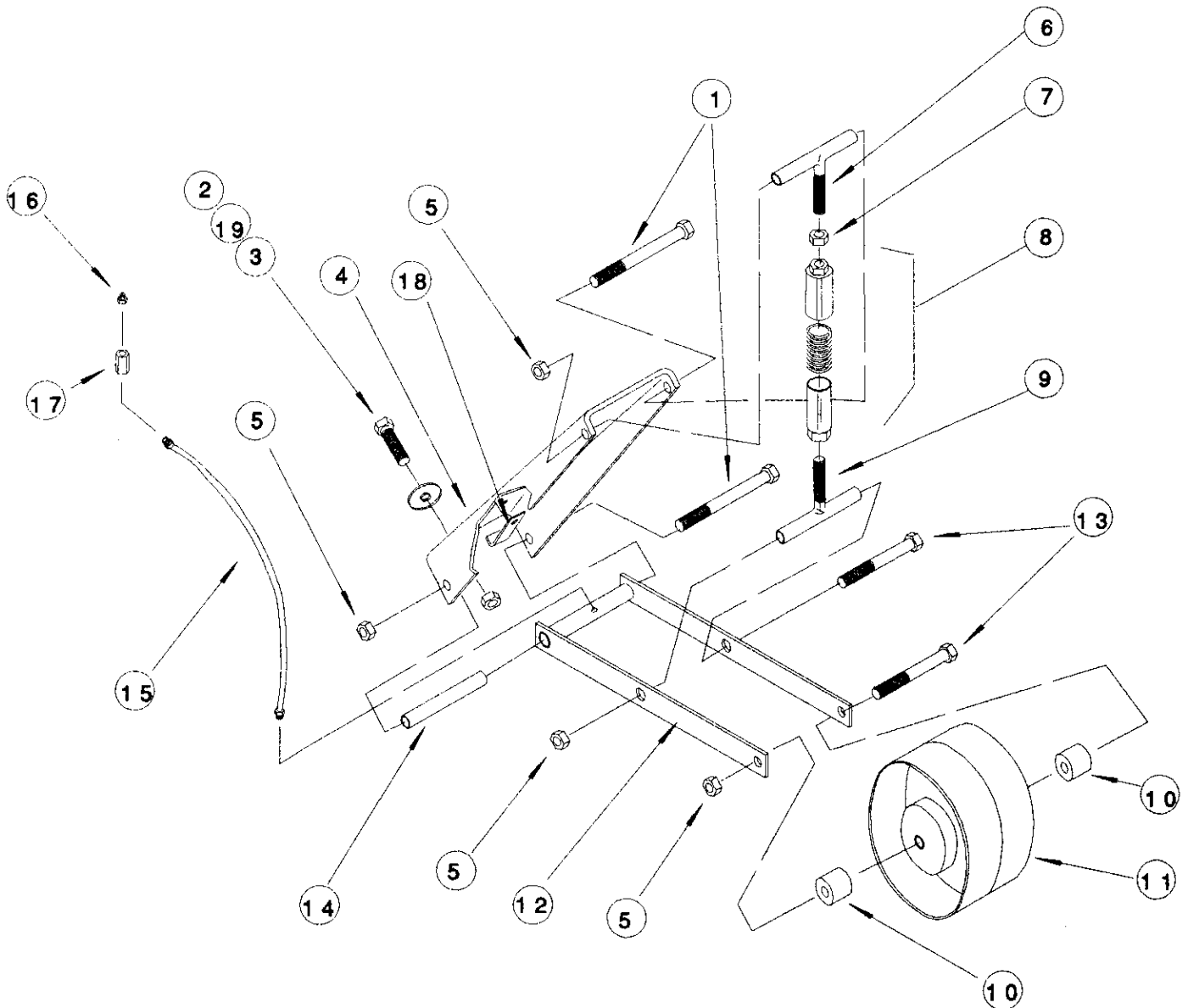
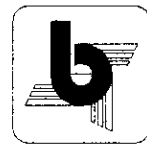
ITEM	P/N	DESCRIPTION
1	1850	ROLL PIN
2	12362	HINGING GUARD
3	12365	HINGE ROD 12 FT.
	24188	HINGE ROD 15 FT.
	24103	HINGE ROD 18 FT.
	24104	HINGE ROD 20 FT.
	24498	HINGE ROD 22 FT.
	24499	HINGE ROD 24 FT.

DRIVE LINE ASBY



ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	2486	KEY 3/8 x 2 1/2	9	1600	FLATWASHER 1/2
2	24233	SHAFT 1 1/2 x 63 5/16 (1200)	10	2539	NUT, HEX HD 1/2 (LOCKING)
	24234	SHAFT 1 1/2 x 81 5/16 (1500)	11	24202	BEARING 2" 4-BOLT
	24235	SHAFT 1 3/4 x 100 11/16 (1800)	12	24203	SLEEVE 1 3/4 I.D.
	24236	SHAFT 1 3/4 x 112 11/16 (2000)	13	2546	NUT, HEX HD 5/8 (LOCKING)
	24482	SHAFT 1 3/4 x 125" (2200)	14	2475	NUT, HEX HD 5/16 (LOCKING)
	24483	SHAFT 1 3/4 x 137" (2400)	15	16894	BEARING, 1 1/2 4-BOLT (1200-1500)
3	24238	U-JOINT 1 1/2 (1200-1500)		20092	BEARING, 1 3/4 4-BOLT (1800-2400)
	24239	U-JOINT 1 3/4 (1800-2400)	16	1251	BOLT, HEX HD 1/2 x 1 1/2 (1200-1500)
	12911	CROSS & BEARING KIT		1290	BOLT, HEX HD 5/8 x 1 3/4 (1800-2400)
4	1185	BOLT, HEX HD 5/16 x 1	17	2539	NUT, HEX HD 1/2 (LOCKING) 1200-1500)
5	1597	FLATWASHER 5/16		2546	NUT, HEX HD 5/8 (LOCKING) 1800-2400)
6	1290	BOLT, HEX HD 5/8 x 1 3/4	18	24179	GREASE LINE 30"
7	24223	MOUNTING PLATE	19	12333	COUPLER 1/8NPT
8	1249	BOLT, HEX HD 1/2 x 1 1/4	20	2291	ZERK 1/8NPT

BELT TIGHTENER

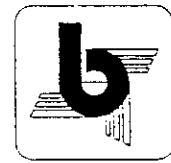


ITEM	P/N	DESCRIPTION
1	1263	BOLT, HEX HD 1/2 x 5 1/2
2	1206	BOLT, HEX HD 3/8 x 1
3	1207	NUT, HEX HD 3/8(TOPLock)
4	18824	MOUNTING CHANNEL
5	2539	NUT, HEX HD 1/2(TOPLock)
6	18825	ADJUSTER, UPPER
7	1696	NUT, HEX HD 5/8-11UNC R.H.
8	24595	TIGHTENER KIT
9	18826	ADJUSTER, LOWER
10	24589	BUSHING 5/8 I.D. x 1 3/16

ITEM	P/N	DESCRIPTION
11	20126	IDLER PULLEY
12	24582	TIGHTENER
13	1262	BOLT, HEX HD 1/2 x 5
14	12400	PIPE BUSHING
15	24181	GREASE LINE HOSE 18"
16	2291	ZERK 1/8NPT
17	12333	COUPLER 1/8NPT
18	24322	CLAMP, GREASE HOSE
19	1598	FLATWASHER 3/8

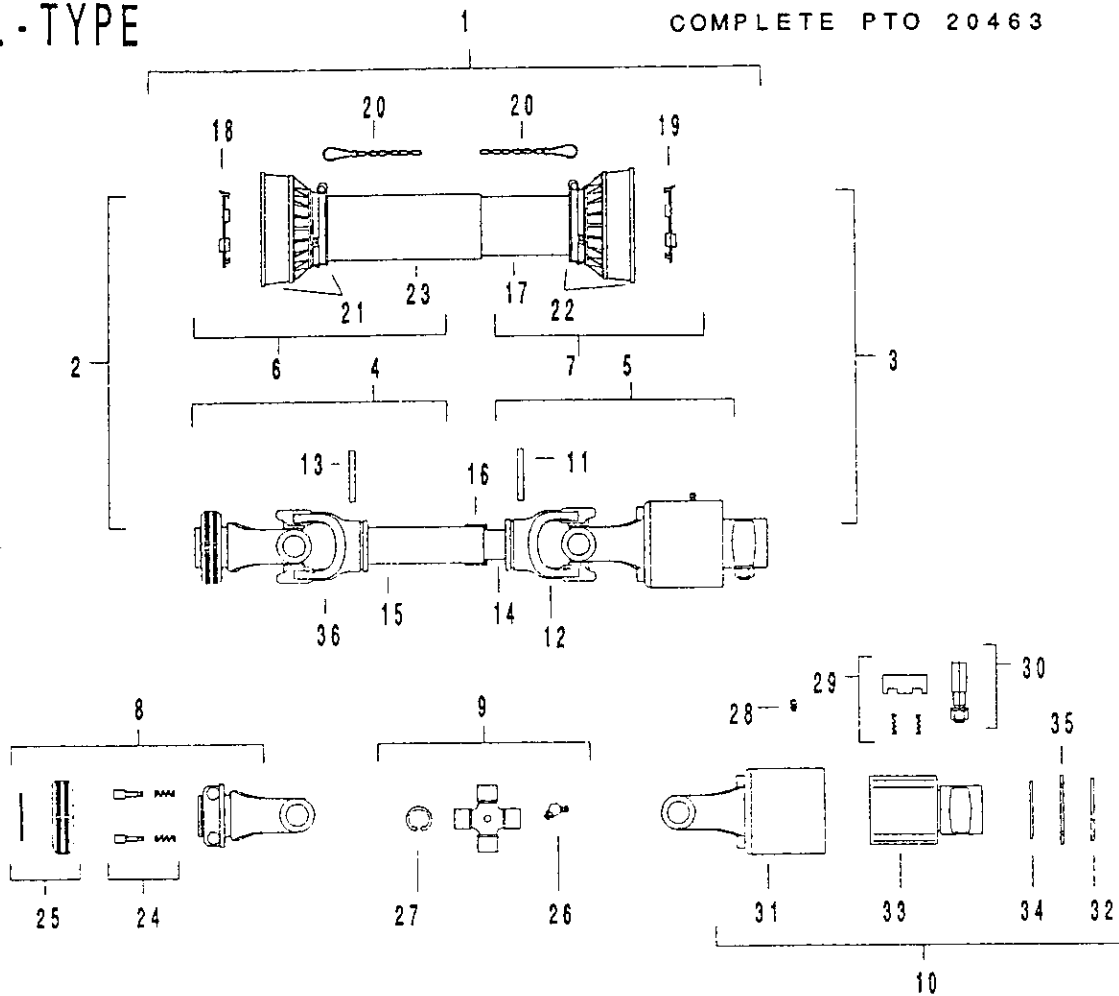
24580 BELT TIGHTENER R.H. COMPLETE
 24581 BELT TIGHTENER L.H. COMPLETE

PTO 1 3/8-6 540 w/OVER-RUNNING CLUTCH



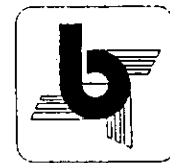
PULL-TYPE

COMPLETE PTO 20463



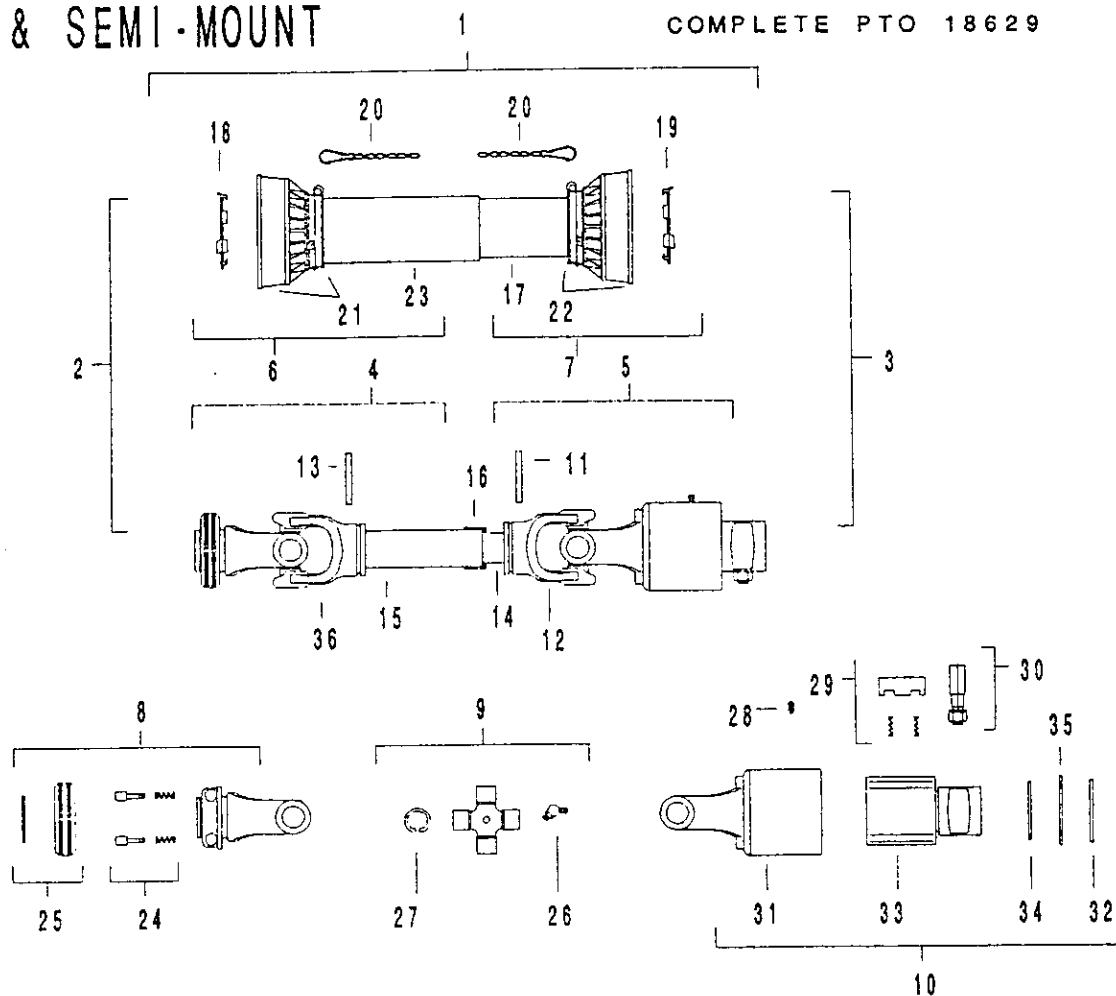
ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	23045	SAFETY GUARD COMP.	19	18708	I. BEARING 8-9-10
2	23119	HALF SHAFT T.H.	20	18704	CHAIN COMPLETE
3	23057	HALF SHAFT I.H.	21	18730	O. CONE SETS N8-9
4	20467	TRACTOR HALF NO SHLD	22	18729	I. CONE SETS N8-9
5	23054	IMPLEM. HALF NO SHLD	23	23071	CM. SAFETY TUBE
6	23048	HALF GUARD T.H.	24	18722	PUSH BUTTON COMP.
7	23044	HALF GUARD I.H.	25	20463	HUB (ROTARY LATCH)
8	18670	YOKE RS 1 3/8-6	26	18716	GREASE NIPPLE (ZERK)
9	23060	CROSS JOURNAL ASBY	27	23061	CIRCLIP (SNAP RING)
10	23083	FREE WHEEL RA CLUTCH	28	23004	GREASE NIPPLE (ZERK)
11	18715	FLEXIBLE PIN	29	23082	RATCHET W. SPRING
12	18683	YOKE, INNER TUBE	30	23080	PIVOT (PIN ASBY)
13	18714	FLEXIBLE PIN	31	23081	CLUTCH OUTER BODY
14	23066	CM. CARDAN TUBE	32	23079	CIRCLIP (SNAP RING)
15	23064	CARDAN TUBE	33	23068	HUB (CLUTCH INNER)
16	18700	RING NUT	34	23076	SCREEN RING
17	23073	SAFETY TUBE	35	23077	CLOSING PLATE HALF
18	23078	O. BEARING 8-9-10	36	18682	YOKE, OUTER TUBE

PTO 1 3/8-6 540 w/OVER-RUNNING CLUTCH



FULL & SEMI-MOUNT

COMPLETE PTO 18629



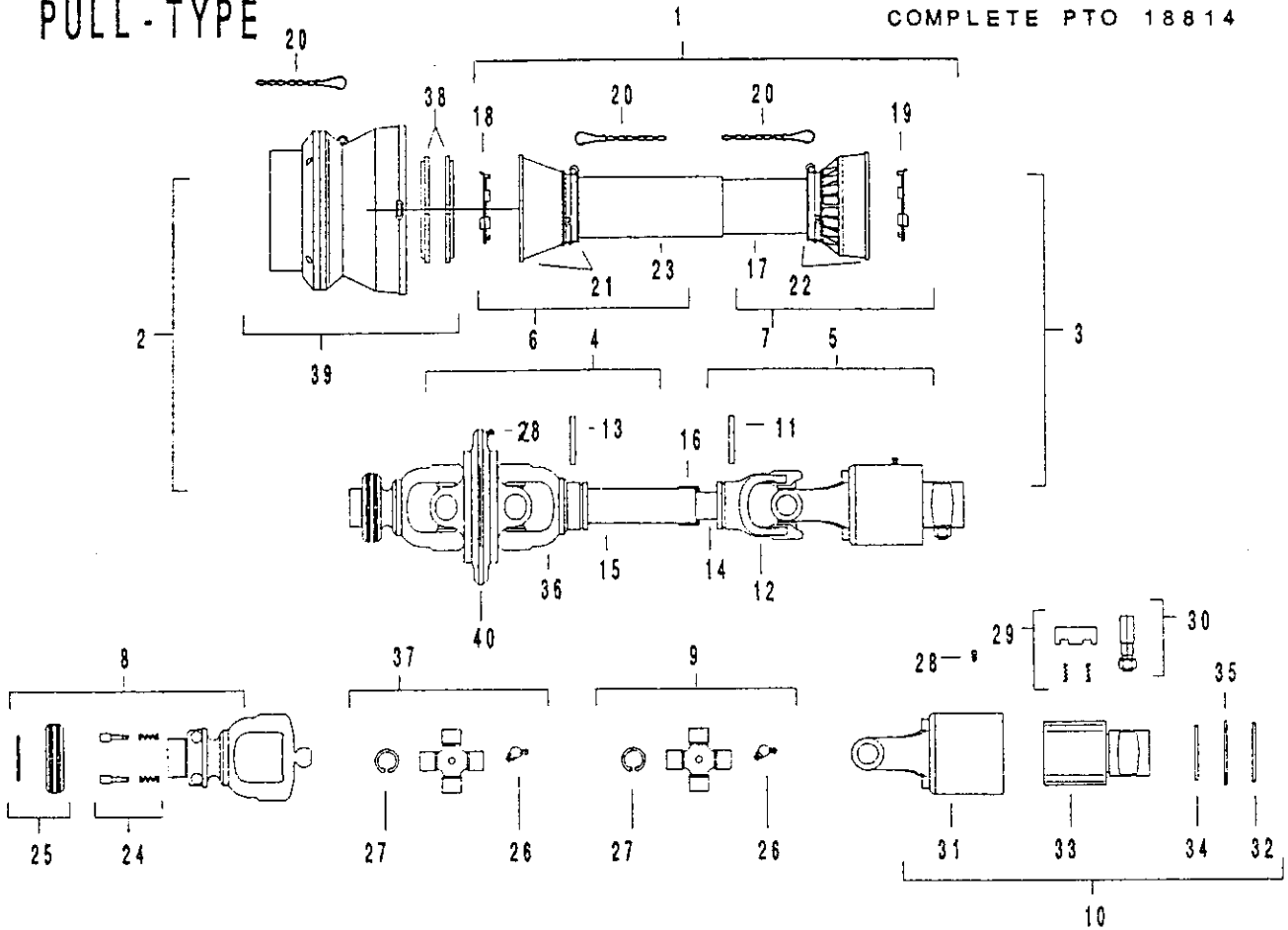
ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	23040	SAFETY GUARD COMP.	19	18708	I. BEARING 8-9-10
2	20466	HALF SHAFT T.H.	20	18704	CHAIN COMPLETE
3	23056	HALF SHAFT I.H.	21	18730	O. CONE SETS N8-9
4	20465	TRACTOR HALF NO SHLD	22	18729	I. CONE SETS N8-9
5	23055	IMPLEM. HALF NO SHLD	23	23069	CM. SAFETY TUBE
6	23046	HALF GUARD T.H.	24	18722	PUSH BUTTON COMP.
7	23042	HALF GUARD I.H.	25	20463	HUB (ROTARY LATCH)
8	18670	YOKE RS 1 3/8-6	26	18716	GREASE NIPPLE (ZERK)
9	23060	CROSS JOURNAL ASBY	27	23061	CIRCLIP (SNAP RING)
10	23083	FREE WHEEL RA CLUTCH	28	23004	GREASE NIPPLE (ZERK)
11	18715	FLEXABLE PIN	29	23082	RATCHET W. SPRING
12	18683	YOKE, INNER TUBE	30	23080	PIVOT (PIN ASBY)
13	18714	FLEXABLE PIN	31	23081	CLUTCH OUTER BODY
14	23065	CM. CARDAN TUBE	32	23079	CIRCLIP (SNAP RING)
15	23063	CARDAN TUBE	33	23068	HUB (CLUTCH INNER)
16	18700	RING NUT	34	23076	SCREEN RING
17	23072	SAFETY TUBE	35	23077	CLOSING PLATE HALF
18	23078	O. BEARING 8-9-10	36	18682	YOKE, OUTER TUBE

CV PTO 1 3/8-6 540 W/OVER-RUNNING CLUTCH



PULL-TYPE

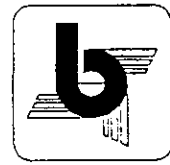
COMPLETE PTO 18814



ITEM	P/N	DESCRIPTION
1	23041	SAFETY GUARD ASBY
2	23089	HALF SHAFT T.H.
3	23087	HALF SHAFT I.H.
4	20472	TRACTOR HALF NO SHLD
5	23059	IMPLEM. HALF NO SHLD
6	23047	HALF GUARD T.H.
7	23043	HALF GUARD I.H.
8	18739	YOKE RS 1 3/8-6
9	23060	CROSS JOURNAL ASBY
10	23083	FREE WHEEL RA CLUTCH
11	18715	FLEXABLE PIN
12	18683	YOKE, INNER TUBE
13	18714	FLEXABLE PIN
14	23075	CM.CARDAN TUBE
15	23062	CARDAN TUBE
16	18700	RING NUT
17	23074	SAFETY TUBE
18	18707	O.BEARING 8-9-10
19	18708	I.BEARING 8-9-10
20	18704	CHAIN COMPLETE
21	18766	O.CONE SETS N8-9

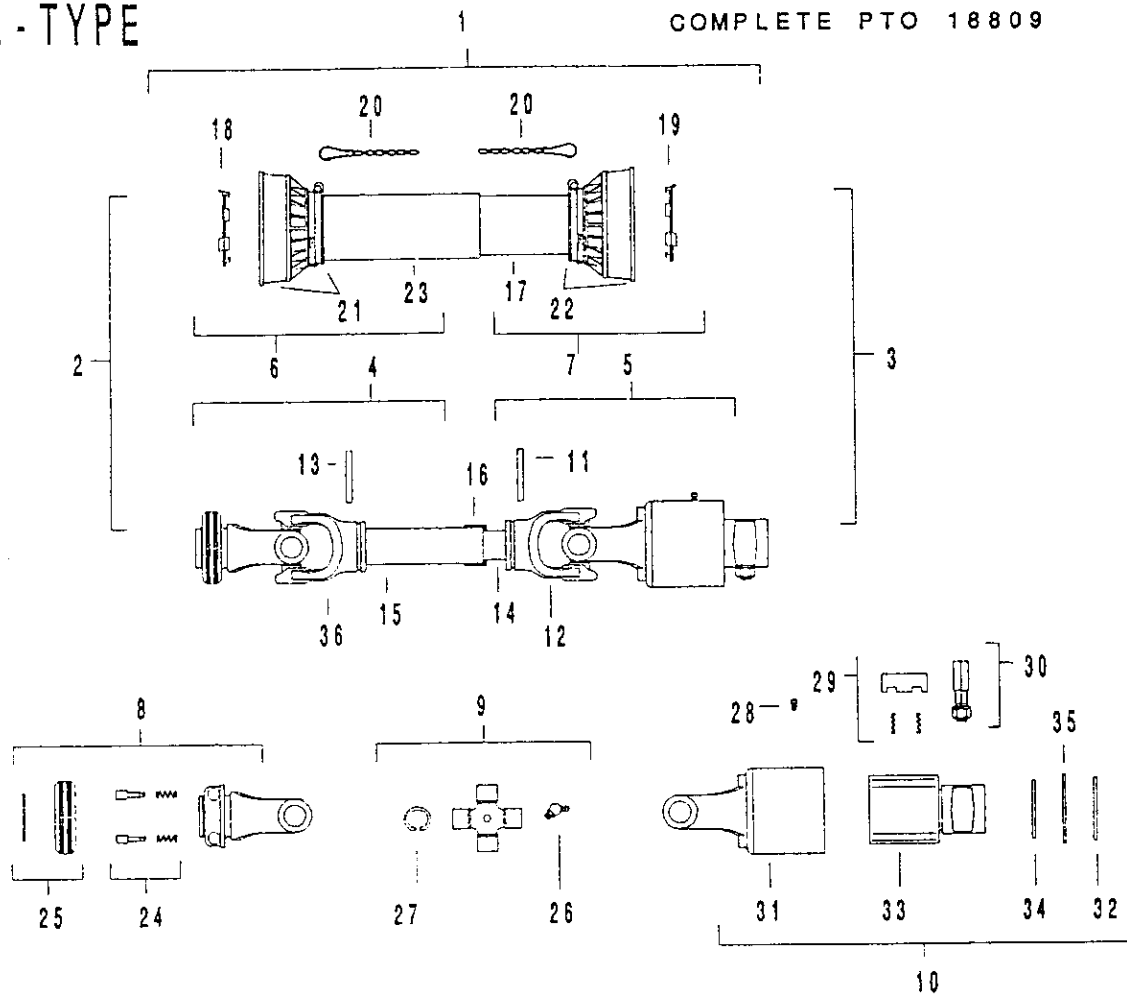
ITEM	P/N	DESCRIPTION
22	18729	I.CONE SETS N8-9
23	23070	CM.SAFETY TUBE
24	18722	PUSH BUTTON COMP.
25	20463	HUB (ROTARY LATCH)
26	18716	GREASE NIPPLE(ZERK)
27	18711	CIRCLIP(SNAP RING)
28	23004	GREASE NIPPLE(ZERK)
29	23082	RATCHET W.SPRING
30	23080	PIVOT(PIN ASBY)
31	23081	CLUTCH OUTER BODY
32	23079	CIRCLIP(SNAP RING)
33	23068	HUB(CLUTCH INNER)
34	23076	SCREEN RING
35	23077	CLOSING PLATE HALF
36	18749	YOKE, OUTER TUBE
37	23008	CROSS JOURNAL ASBY
38	18771	RING NUT DOWELS
39	18743	COMPLETE SHELL
40	23011	CENTRAL BODY

PTO 1 3/8-21 1000 w/OVER-RUNNING CLUTCH



PULL-TYPE

COMPLETE PTO 18809



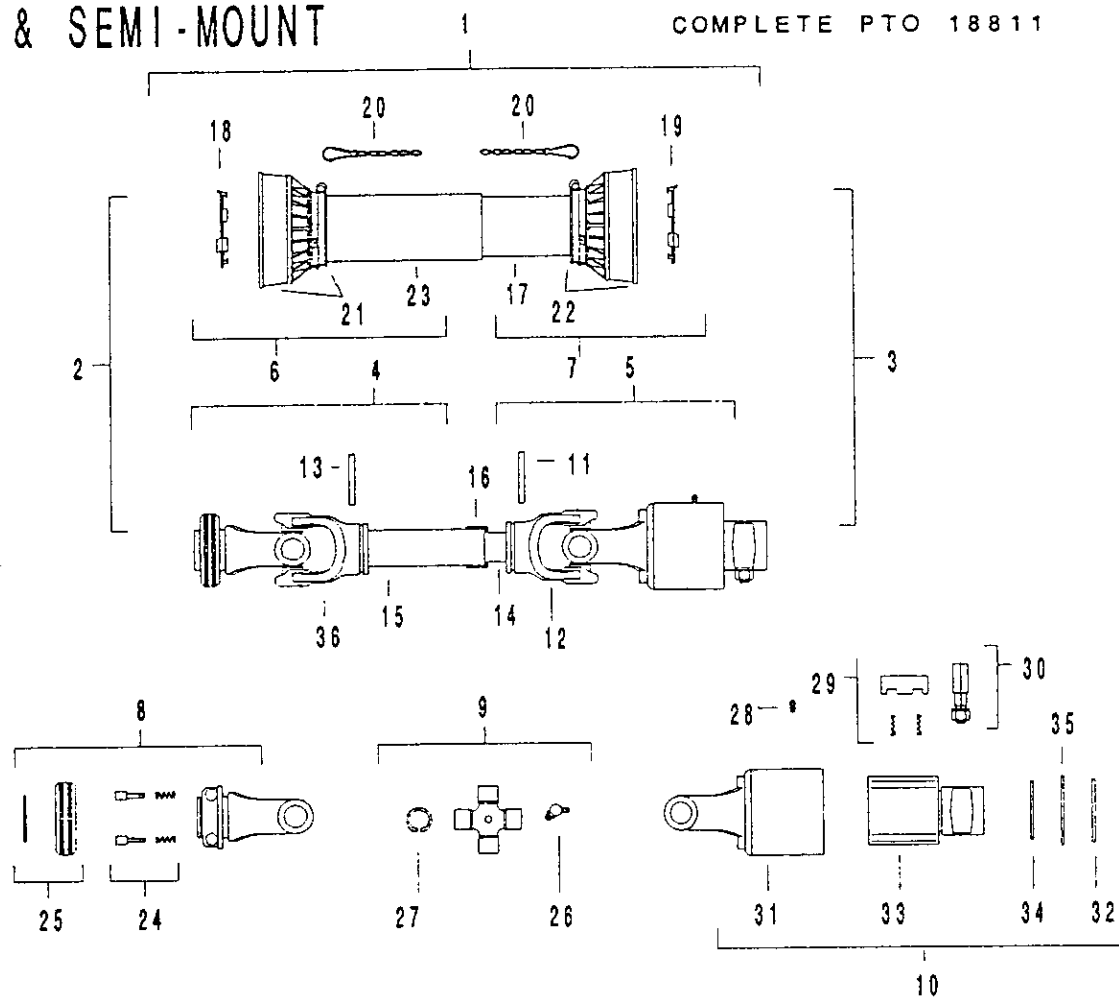
ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	23045	SAFETY GUARD COMP.	19	18708	I. BEARING 8-9-10
2	23052	HALF SHAFT T.H.	20	18704	CHAIN COMPLETE
3	23057	HALF SHAFT I.H.	21	18730	O. CONE SETS N8-9
4	23051	TRACTOR HALF NO SHLD	22	18729	I. CONE SETS N8-9
5	23054	IMPLEM. HALF NO SHLD	23	23071	CM. SAFETY TUBE
6	23048	HALF GUARD T.H.	24	18722	PUSH BUTTON COMP.
7	23044	HALF GUARD I.H.	25	20463	HUB (ROTARY LATCH)
8	18732	YOKE RS 1 3/8-21	26	18716	GREASE NIPPLE (ZERK)
9	23060	CROSS JOURNAL ASBY	27	23061	CIRCLIP (SNAP RING)
10	23083	FREE WHEEL RA CLUTCH	28	23004	GREASE NIPPLE (ZERK)
11	18715	FLEXABLE PIN	29	23082	RATCHET W. SPRING
12	18683	YOKE, INNER TUBE	30	23080	PIVOT (PIN ASBY)
13	18714	FLEXABLE PIN	31	23081	CLUTCH OUTER BODY
14	23066	CM. CARDAN TUBE	32	23079	CIRCLIP (SNAP RING)
15	23064	CARDAN TUBE	33	23068	HUB (CLUTCH INNER)
16	18700	RING NUT	34	23076	SCREEN RING
17	23073	SAFETY TUBE	35	23077	CLOSING PLATE HALF
18	23078	O. BEARING 8-9-10	36	18682	YOKE, OUTER TUBE

PTO 1 3/8-21 1000 W/OVER-RUNNING CLUTCH



FULL & SEMI-MOUNT

COMPLETE PTO 18811



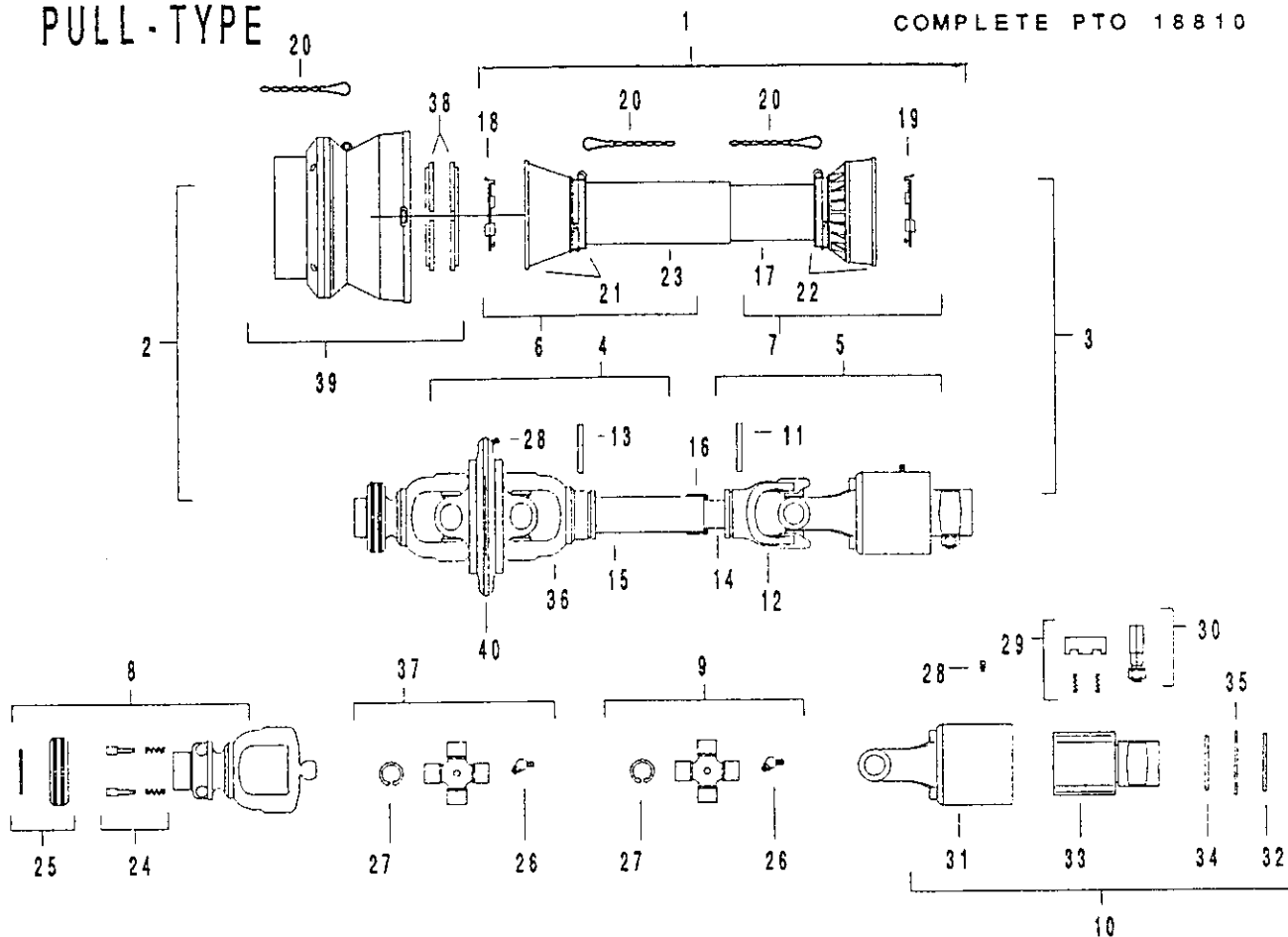
ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	23040	SAFETY GUARD COMP.	19	18708	I. BEARING 8-9-10
2	23050	HALF SHAFT T.H.	20	18704	CHAIN COMPLETE
3	23056	HALF SHAFT I.H.	21	18730	O. CONE SETS N8-9
4	23049	TRACTOR HALF NO SHLD	22	18729	I. CONE SETS N8-9
5	23055	IMPLEM. HALF NO SHLD	23	23069	CM. SAFETY TUBE
6	23046	HALF GUARD T.H.	24	18722	PUSH BUTTON COMP.
7	23042	HALF GUARD I.H.	25	20463	HUB (ROTARY LATCH)
8	18732	YOKE RS 1 3/8-21	26	18716	GREASE NIPPLE (ZERK)
9	23060	CROSS JOURNAL ASBY	27	23061	CIRCLIP (SNAP RING)
10	23083	FREE WHEEL RA CLUTCH	28	23004	GREASE NIPPLE (ZERK)
11	18715	FLEXABLE PIN	29	23082	RATCHET W. SPRING
12	18683	YOKE, INNER TUBE	30	23080	PIVOT (PIN ASBY)
13	18714	FLEXABLE PIN	31	23081	CLUTCH OUTER BODY
14	23065	CM. CARDAN TUBE	32	23079	CIRCLIP (SNAP RING)
15	23063	CARDAN TUBE	33	23068	HUB (CLUTCH INNER)
16	18700	RING NUT	34	23076	SCREEN RING
17	23072	SAFETY TUBE	35	23077	CLOSING PLATE HALF
18	23078	O. BEARING 8-9-10	36	18682	YOKE, OUTER TUBE

CV PTO 1 3/8-21 1000 W/OVER-RUNNING CLUTCH



PULL-TYPE

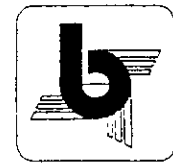
COMPLETE PTO 18810



ITEM	P/N	DESCRIPTION
1	23041	SAFETY GUARD ASBY
2	20470	HALF SHAFT T.H.
3	23058	HALF SHAFT I.H.
4	23053	TRACTOR HALF NO SHLD
5	23059	IMPLEM. HALF NO SHLD
6	23047	HALF GUARD T.H.
7	23043	HALF GUARD I.H.
8	18738	YOKE RS 1 3/8-21
9	23060	CROSS JOURNAL ASBY
10	23083	FREE WHEEL RA CLUTCH
11	18715	FLEXABLE PIN
12	18683	YOKE, INNER TUBE
13	18714	FLEXABLE PIN
14	23075	CM.CARDAN TUBE
15	23062	CARDAN TUBE
16	18700	RING NUT
17	23074	SAFETY TUBE
18	18707	O.BEARING 8-9-10
19	18708	I.BEARING 8-9-10
20	18704	CHAIN COMPLETE
21	18766	O.CONE SETS N8-9

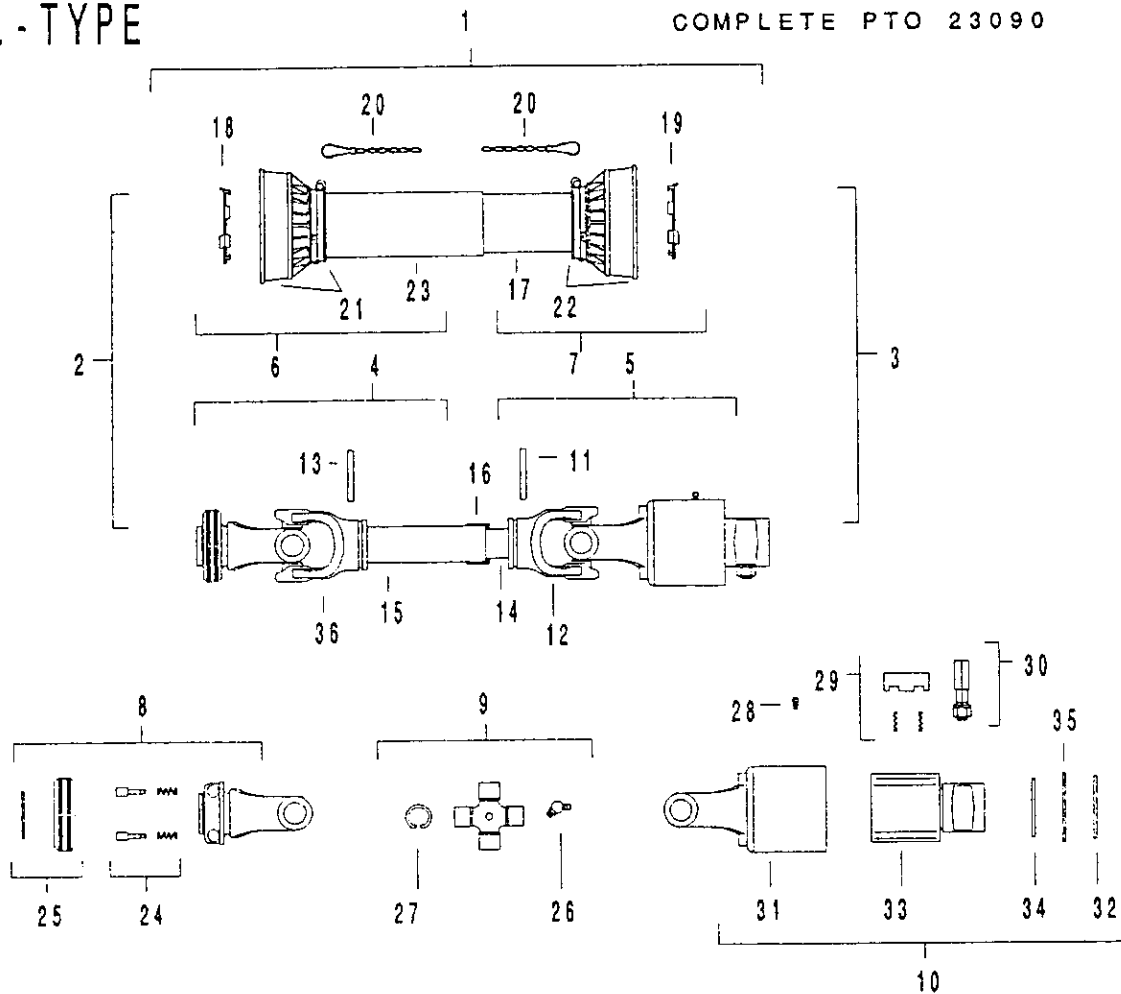
ITEM	P/N	DESCRIPTION
22	18729	I.CONE SETS N8-9
23	23070	CM.SAFETY TUBE
24	18722	PUSH BUTTON COMP.
25	20463	HUB (ROTARY LATCH)
26	18716	GREASE NIPPLE(ZERK)
27	18711	CIRCLIP(SNAP RING)
28	23004	GREASE NIPPLE(ZERK)
29	23082	RATCHET W.SPRING
30	23080	PIVOT(PIN ASBY)
31	23081	CLUTCH OUTER BODY
32	23079	CIRCLIP(SNAP RING)
33	23068	HUB(CLUTCH INNER)
34	23076	SCREEN RING
35	23077	CLOSING PLATE HALF
36	18749	YOKE, OUTER TUBE
37	23008	CROSS JOURNAL ASBY
38	18771	RING NUT DOWELS
39	18743	COMPLETE SHELL
40	23011	CENTRAL BODY

PTO 1 3/4-20 1000 w/OVER-RUNNING CLUTCH



PULL-TYPE

COMPLETE PTO 23090



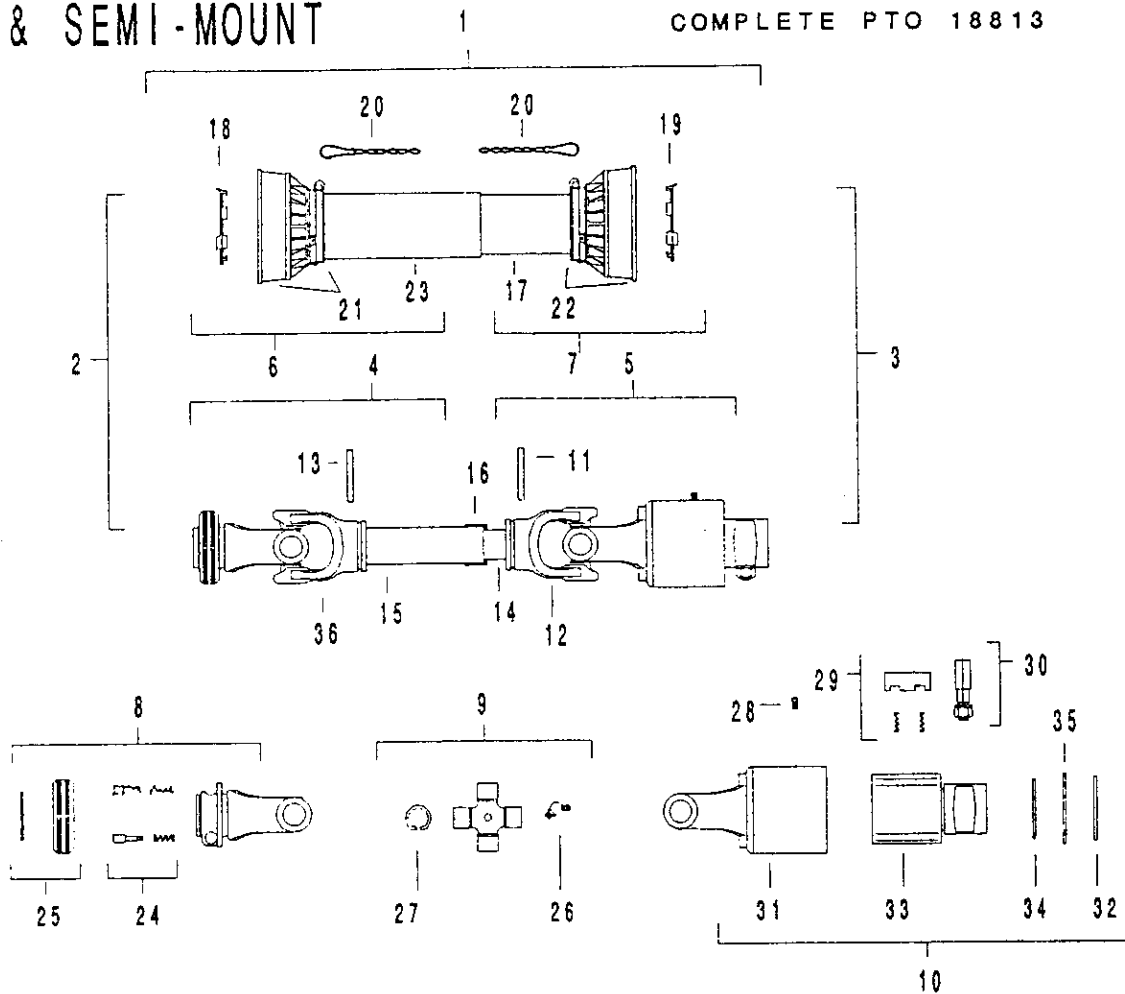
ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	23045	SAFETY GUARD COMP.	19	18708	I. BEARING 8-9-10
2	23091	HALF SHAFT T.H.	20	18704	CHAIN COMPLETE
3	23057	HALF SHAFT I.H.	21	18730	O. CONE SETS N8-9
4	20464	TRACTOR HALF NO SHLD	22	18729	I. CONE SETS N8-9
5	23054	IMPLEM. HALF NO SHLD	23	23071	CM. SAFETY TUBE
6	23048	HALF GUARD T.H.	24	18722	PUSH BUTTON COMP.
7	23044	HALF GUARD I.H.	25	18764	HUB (ROTARY LATCH)
8	23086	YOKE RS 1 3/4-20	26	18716	GREASE NIPPLE (ZERK)
9	23060	CROSS JOURNAL ASBY.	27	23061	CIRCLIP (SNAP RING)
10	23083	FREE WHEEL RA CLUTCH	28	23004	GREASE NIPPLE (ZERK)
11	18715	FLEXABLE PIN	29	23082	RATCHET W. SPRING
12	18683	YOKE, INNER TUBE	30	23080	PIVOT (PIN ASBY)
13	18714	FLEXABLE PIN	31	23081	CLUTCH OUTER BODY
14	23066	CM. CARDAN TUBE	32	23079	CIRCLIP (SNAP RING)
15	23064	CARDAN TUBE	33	23068	HUB (CLUTCH INNER)
16	18700	RING NUT	34	23076	SCREEN RING
17	23073	SAFETY TUBE	35	23077	CLOSING PLATE HALF
18	23078	O. BEARING 8-9-10	36	18682	YOKE, OUTER TUBE

PTO 1 3/4-20 1000 w/OVER-RUNNING CLUTCH



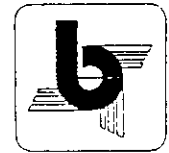
FULL & SEMI-MOUNT

COMPLETE PTO 18813



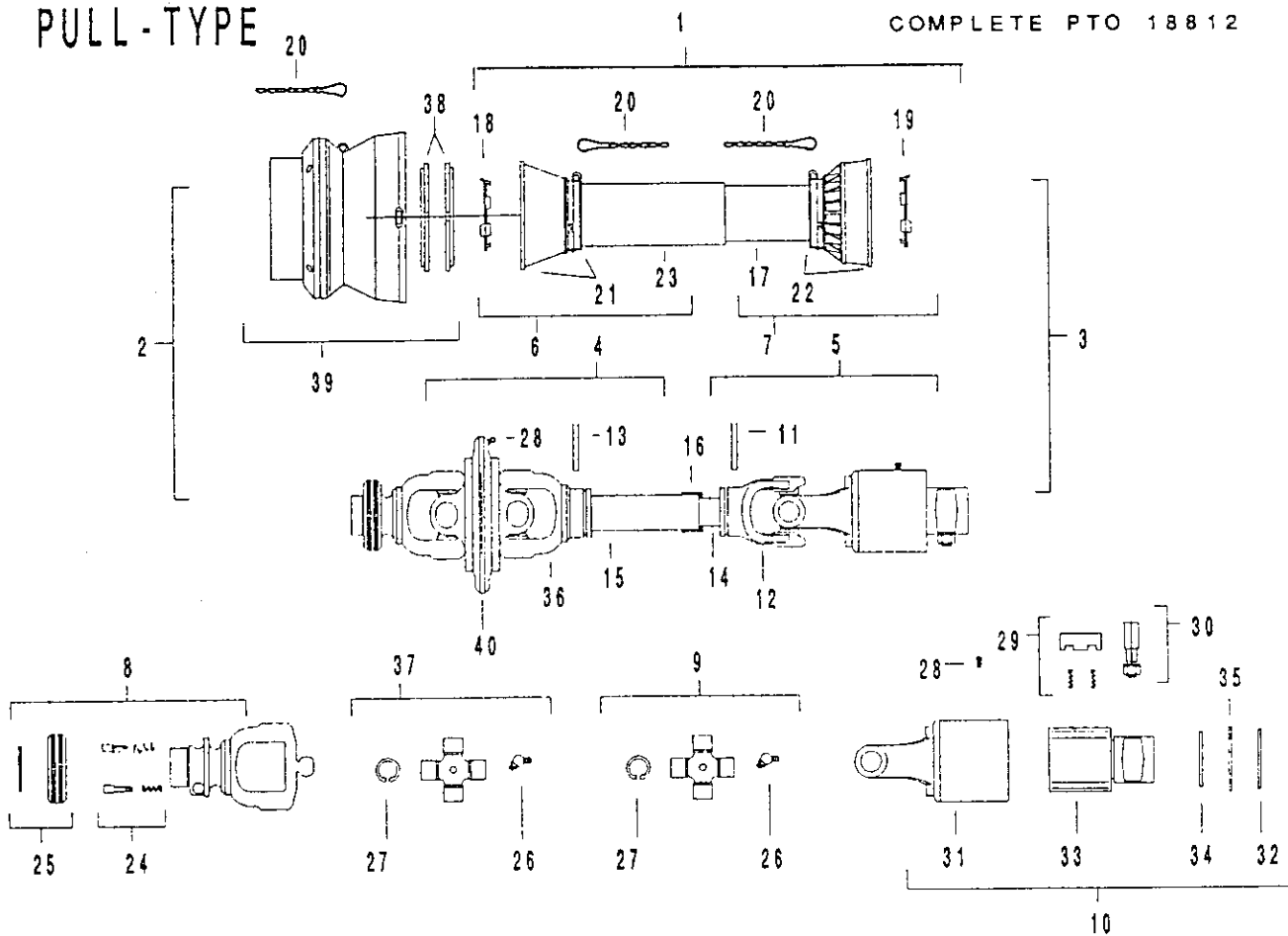
ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	23040	SAFETY GUARD COMP.	19	18708	I. BEARING 8-9-10
2	20469	HALF SHAFT T.H.	20	18704	CHAIN COMPLETE
3	23056	HALF SHAFT I.H.	21	18730	O. CONE SETS N8-9
4	20468	TRACTOR HALF NO SHLD	22	18729	I. CONE SETS N8-9
5	23055	IMPLEM. HALF NO SHLD	23	23069	CM. SAFETY TUBE
6	23046	HALF GUARD T.H.	24	18722	PUSH BUTTON COMP.
7	23042	HALF GUARD I.H.	25	18764	HUB (ROTARY LATCH)
8	23086	YOKE RS 1 3/4-20	26	18716	GREASE NIPPLE (ZERK)
9	23060	CROSS JOURNAL ASBY	27	23061	CIRCLIP (SNAP RING)
10	23083	FREE WHEEL RA CLUTCH	28	23004	GREASE NIPPLE (ZERK)
11	18715	FLEXABLE PIN	29	23082	RATCHET W. SPRING
12	18683	YOKE, INNER TUBE	30	23080	PIVOT (PIN ASBY)
13	18714	FLEXABLE PIN	31	23081	CLUTCH OUTER BODY
14	23065	CM. CARDAN TUBE	32	23079	CIRCLIP (SNAP RING)
15	23063	CARDAN TUBE	33	23068	HUB (CLUTCH INNER)
16	18700	RING NUT	34	23076	SCREEN RING
17	23072	SAFETY TUBE	35	23077	CLOSING PLATE HALF
18	23078	O. BEARING 8-9-10	36	18682	YOKE, OUTER TUBE

CV PTO 1 3/4-20 1000 w/OVER-RUNNING CLUTCH



PULL-TYPE

COMPLETE PTO 18812

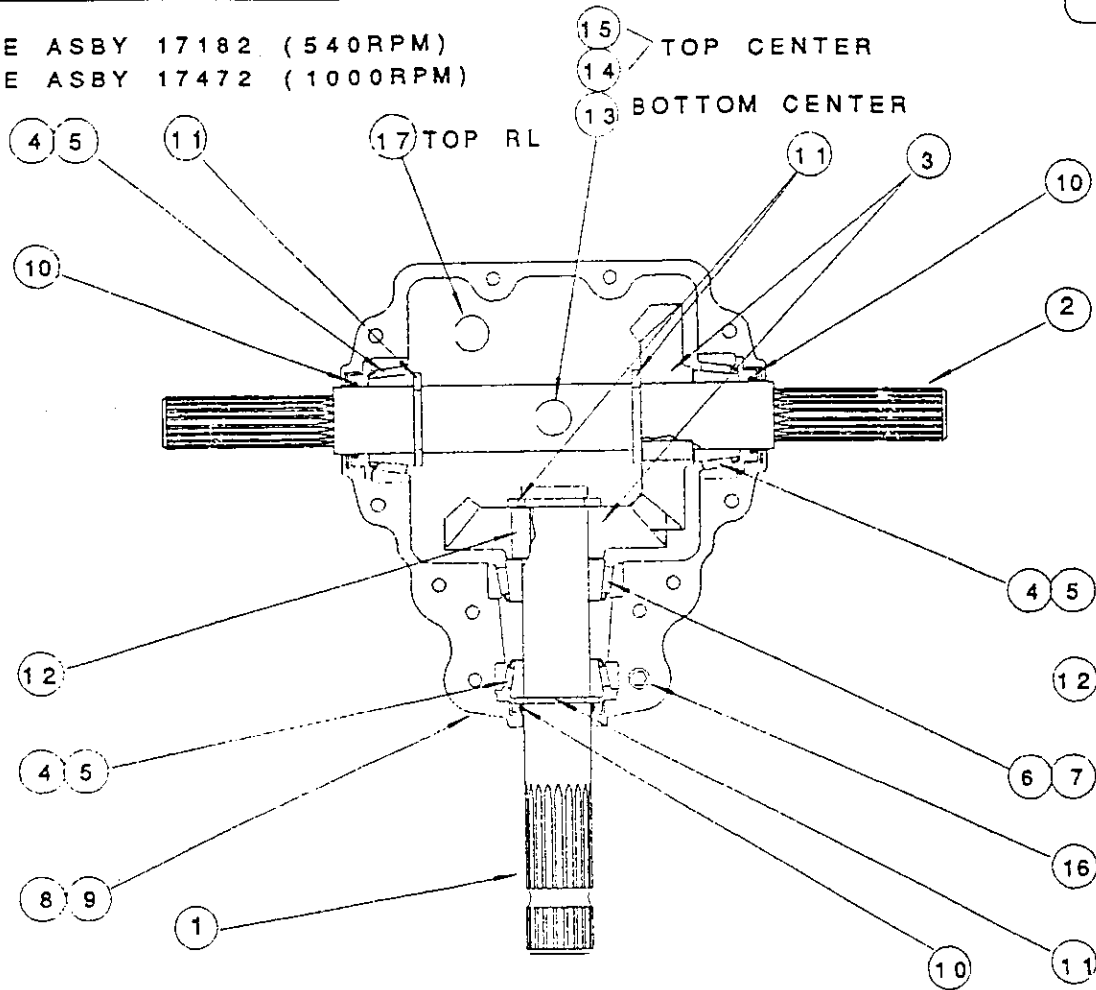


ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	23041	SAFETY GUARD ASBY	22	18729	I.CONE SETS N8-9
2	23053	HALF SHAFT T.H.	23	23070	CM.SAFETY TUBE
3	23087	HALF SHAFT I.H.	24	18722	PUSH BUTTON COMP.
4	20471	TRACTOR HALF NO SHLD	25	18764	HUB (ROTARY LATCH)
5	23059	IMPLEM. HALF NO SHLD	26	18716	GREASE NIPPLE(ZERK)
6	23047	HALF GUARD T.H.	27	18711	CIRCLIP(SNAP RING)
7	23043	HALF GUARD I.H.	28	23004	GREASE NIPPLE(ZERK)
8	23085	YOKE RS 1 3/4-20	29	23082	RATCHET W.SPRING
9	23060	CROSS JOURNAL ASBY	30	23080	PIVOT(PIN ASBY)
10	23083	FREE WHEEL RA CLUTCH	31	23081	CLUTCH OUTER BODY
11	18715	FLEXABLE PIN	32	23079	CIRCLIP(SNAP RING)
12	18683	YOKE, INNER TUBE	33	23068	HUB(CLUTCH INNER)
13	18714	FLEXABLE PIN	34	23076	SCREEN RING
14	23075	CM.CARDAN TUBE	35	23077	CLOSING PLATE HALF
15	23062	CARDAN TUBE	36	18749	YOKE, OUTER TUBE
16	18700	RING NUT	37	23008	CROSS JOURNAL ASBY
17	23074	SAFETY TUBE	38	18771	RING NUT DOWELS
18	18707	O.BEARING 8-9-10	39	18743	COMPLETE SHELL
19	18708	I.BEARING 8-9-10	40	23011	CENTRAL BODY
20	18704	CHAIN COMPLETE			
21	18766	O.CONE SETS N8-9			

GEARBOX-540 & 1000



COMPLETE ASBY 17182 (540RPM)
 COMPLETE ASBY 17472 (1000RPM)

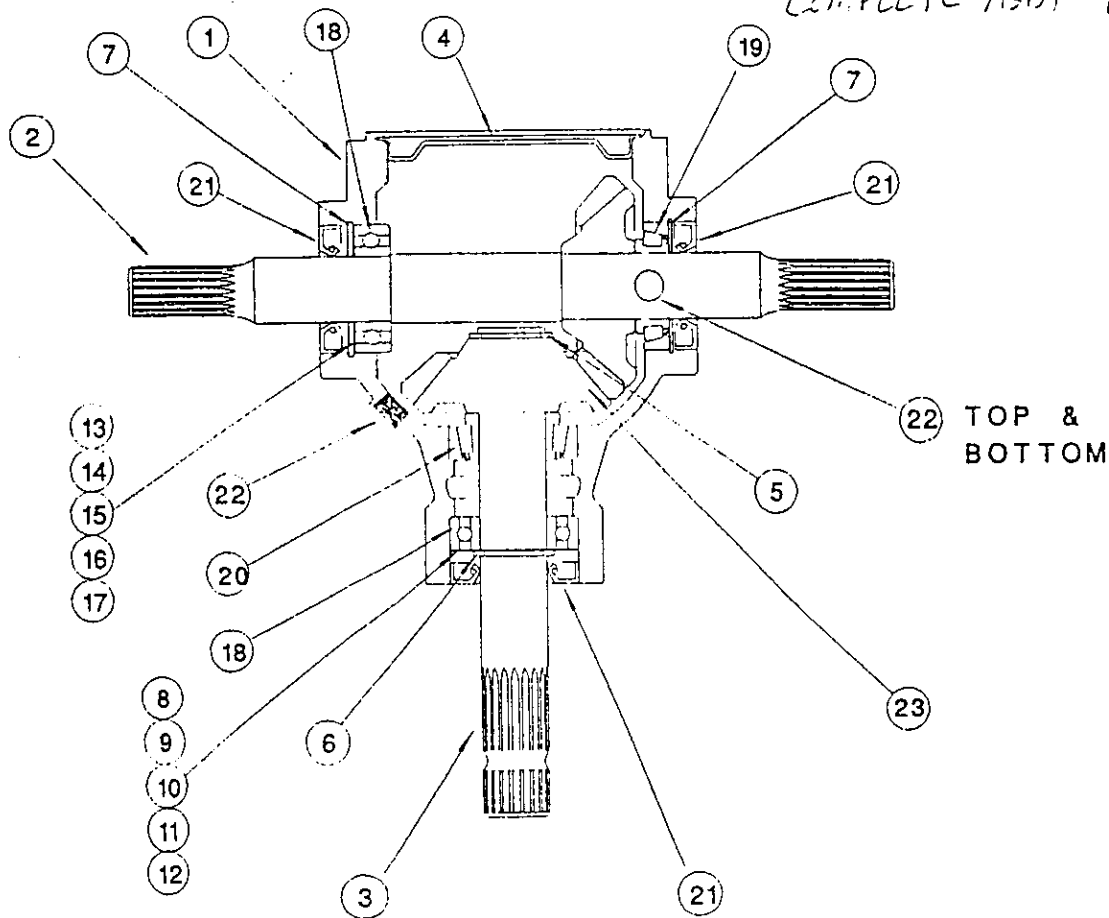


ITEM	P/N	DESCRIPTION
1	17186	PINION SHAFT
2	17189	CROSS SHAFT
3	17183	GEAR 27 TOOTH (540)
	17187	GEAR 20 TOOTH (540)
	17473	GEAR 22 TOOTH (1000) (2)
4	11477	BEARING CONE, SMALL (3)
5	12872	BEARING CUP, SMALL (3)
6	17205	BEARING CONE, LARGE
7	11499	BEARING CUP, LARGE
8	17184	CASTING, TOP
9	17188	CASTING, BOTTOM (TAPPED)
10	17203	SEAL 1 3/4 (3)
11	17204	RETAINING RING 1 3/4
12	17185	KEY 3/8 x 1 7/16 (2)
13	13181	DRAIN PLUG 1/2NPT
14	13038	BUSHING 1/8 TO 1/2NPT
15	13097	PRESSURE RELIEF 1/8NPT
16	2267	CAPSCREW, SOC. HD 3/8x2 1/4(12)
17	17190	FILL PLUG w/DIPSTICK 1/2NPT

GEARBOX 1000 RPM

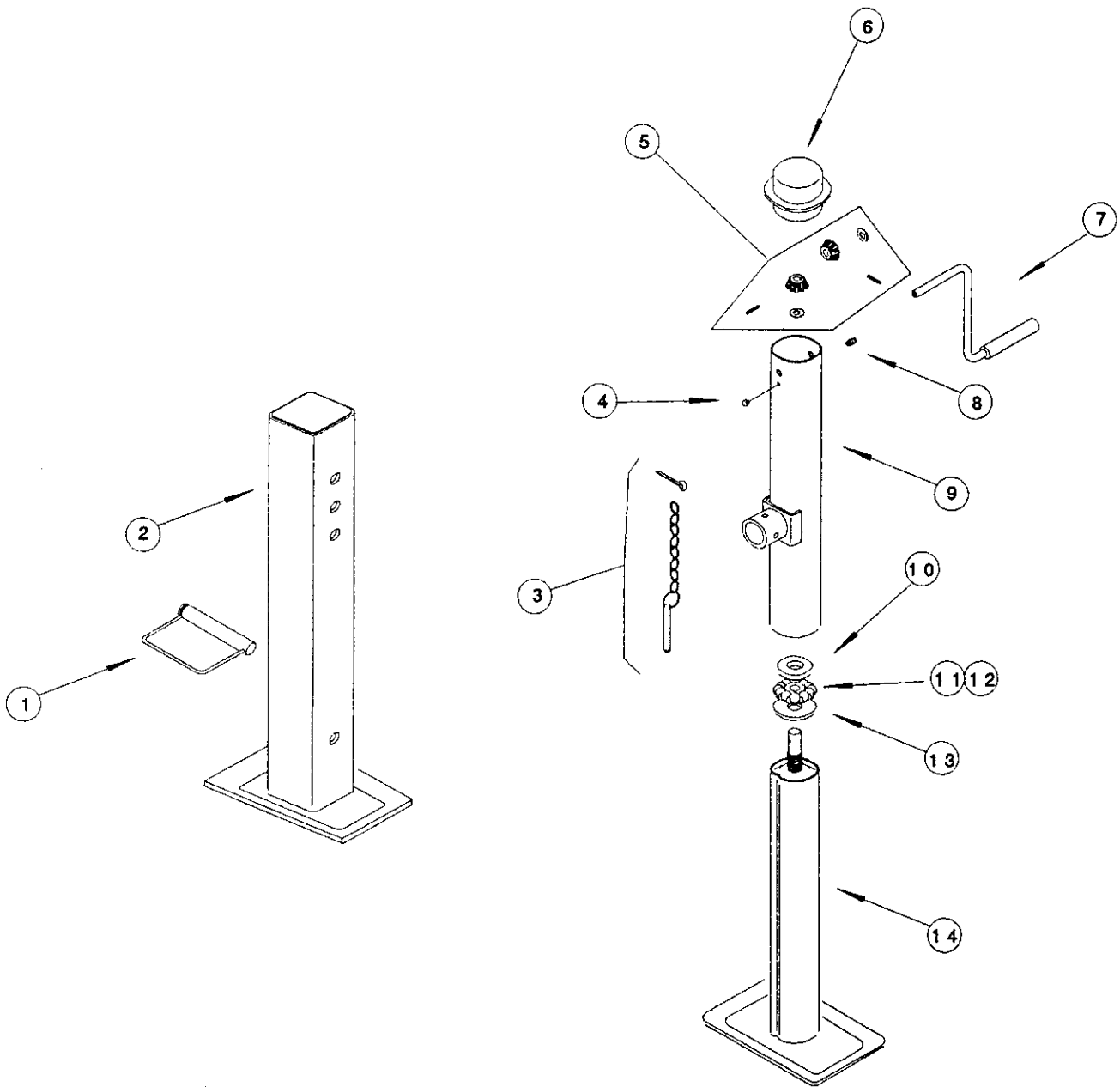
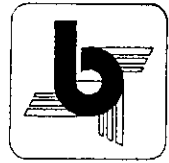


COMPLETE ASBY 18776



ITEM	P/N	DESCRIPTION
1	18783	GEARBOX CASE
2	18777	CROSS SHAFT
3	18778	SHAFT
4	18779	COVER
5	18780	CIRC CLIP
6	18782	SNAP RING
7	18781	SNAP RING (2)
8	18784	RING (SHIM)
9	18785	RING (SHIM)
10	18786	RING (SHIM)
11	18787	RING (SHIM)
12	18788	RING (SHIM)
13	18789	RING (SHIM)
14	18790	RING (SHIM)
15	18791	RING (SHIM)
16	18792	RING (SHIM)
17	18793	RING (SHIM)
18	18795	BALL BEARING (2)
19	18796	TAPERED ROLLER BEARING
20	18797	TAPERED ROLLER BEARING
21	18798	OIL SEAL (3)
22	18799	OIL PLUG (3)
23	18800	BEVEL GEAR (SET OF 2)

JACK PARTS

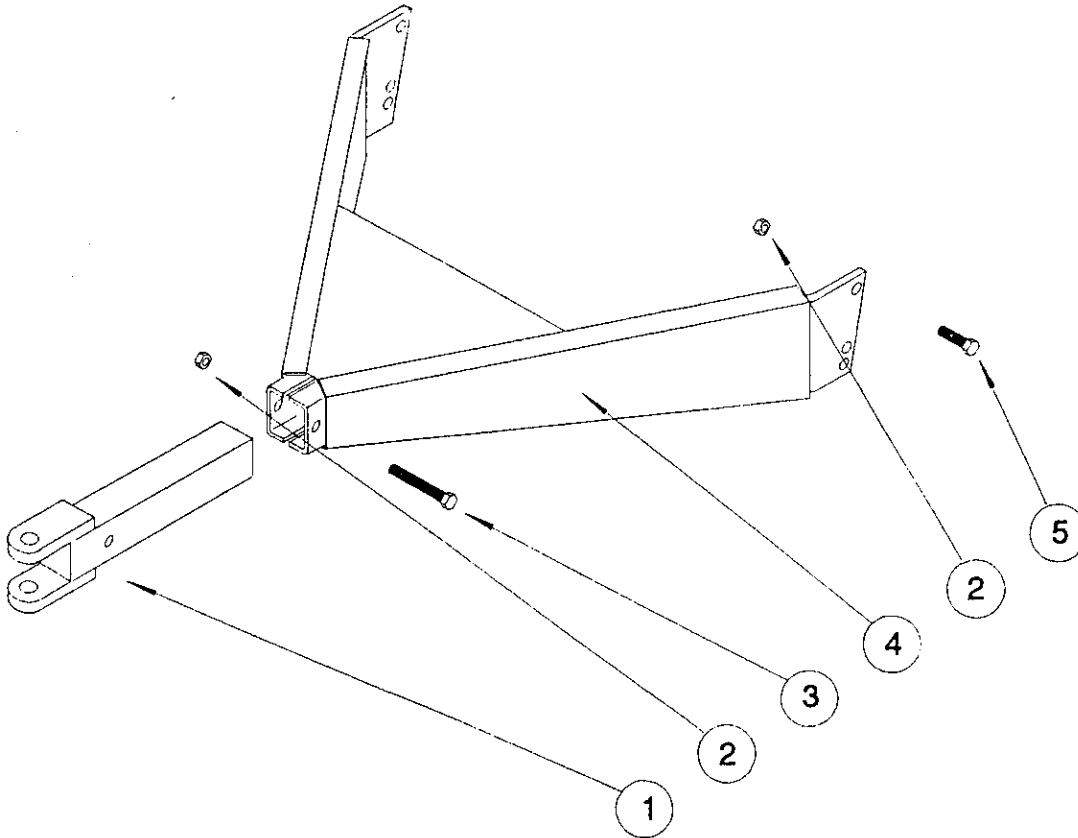


ITEM	P/N	DESCRIPTION	ITEM	P/N	DESCRIPTION
1	24384	HITCH PIN	8	2288	ZERK 3/16 DRIVE-IN
2	20855	JACK STAND	9	13055	OUTER TUBE ASBY
3	13049	PULL PIN & CHAIN	10	13054	THRUST WASHER
4	13048	RUBBER GROMMET	11	13052	FELT SPACER
5	13046	BEVEL GEAR KIT	12	13053	BALL & CAGE BEARING
6	13047	SW TUBE CAP	13	13051	SUPPORT WASHER
7	13045	CRANK ASBY	14	13050	INNER TUBE ASBY

PULL TYPE HITCH



COMPLETE ASBY 24283

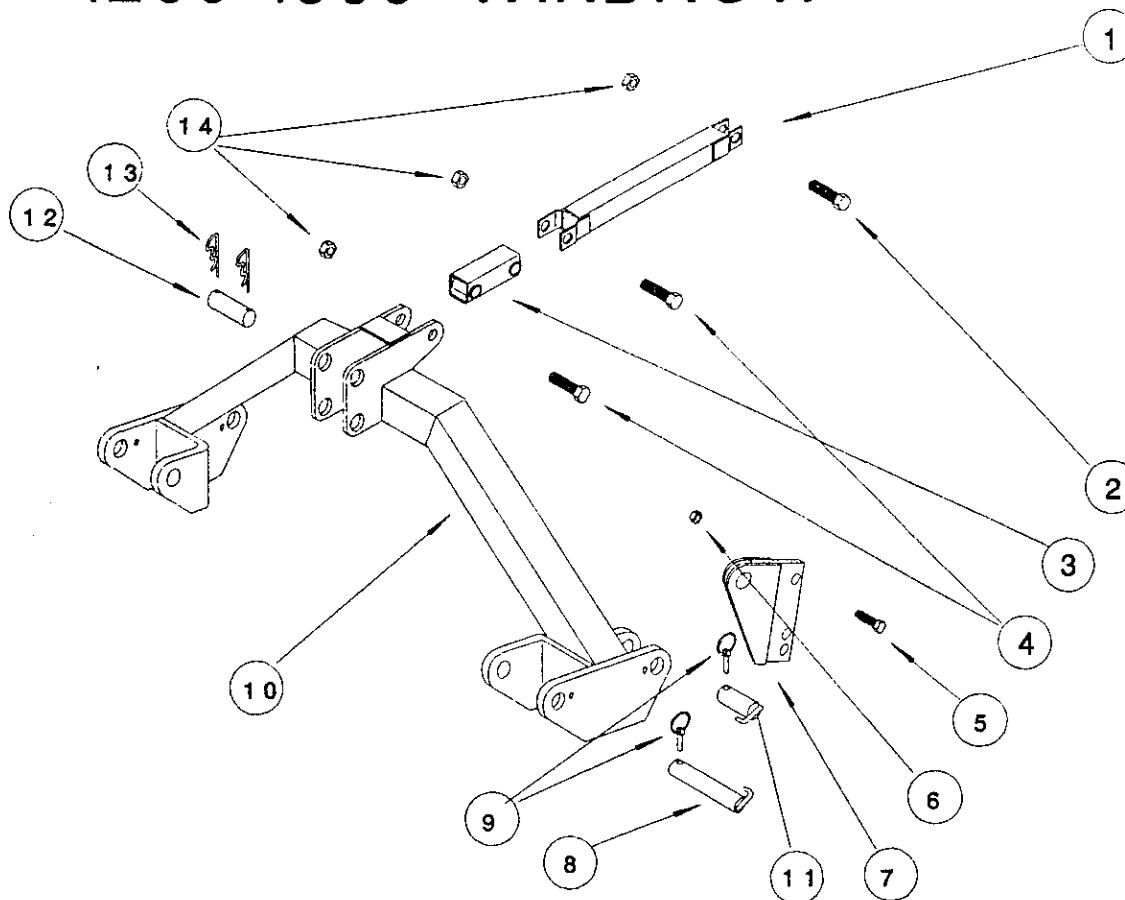


ITEM	P/N	DESCRIPTION
1	24295	TONGUE, ADJUSTING
2	1777	NUT, HEX HD 3/4(LOCKING)
3	1320	BOLT, HEX HD 3/4 x 5
4	24284	TONGUE HITCH
5	1313	BOLT, HEX HD 3/4 x 2 1/2

FULL MOUNT PARTS

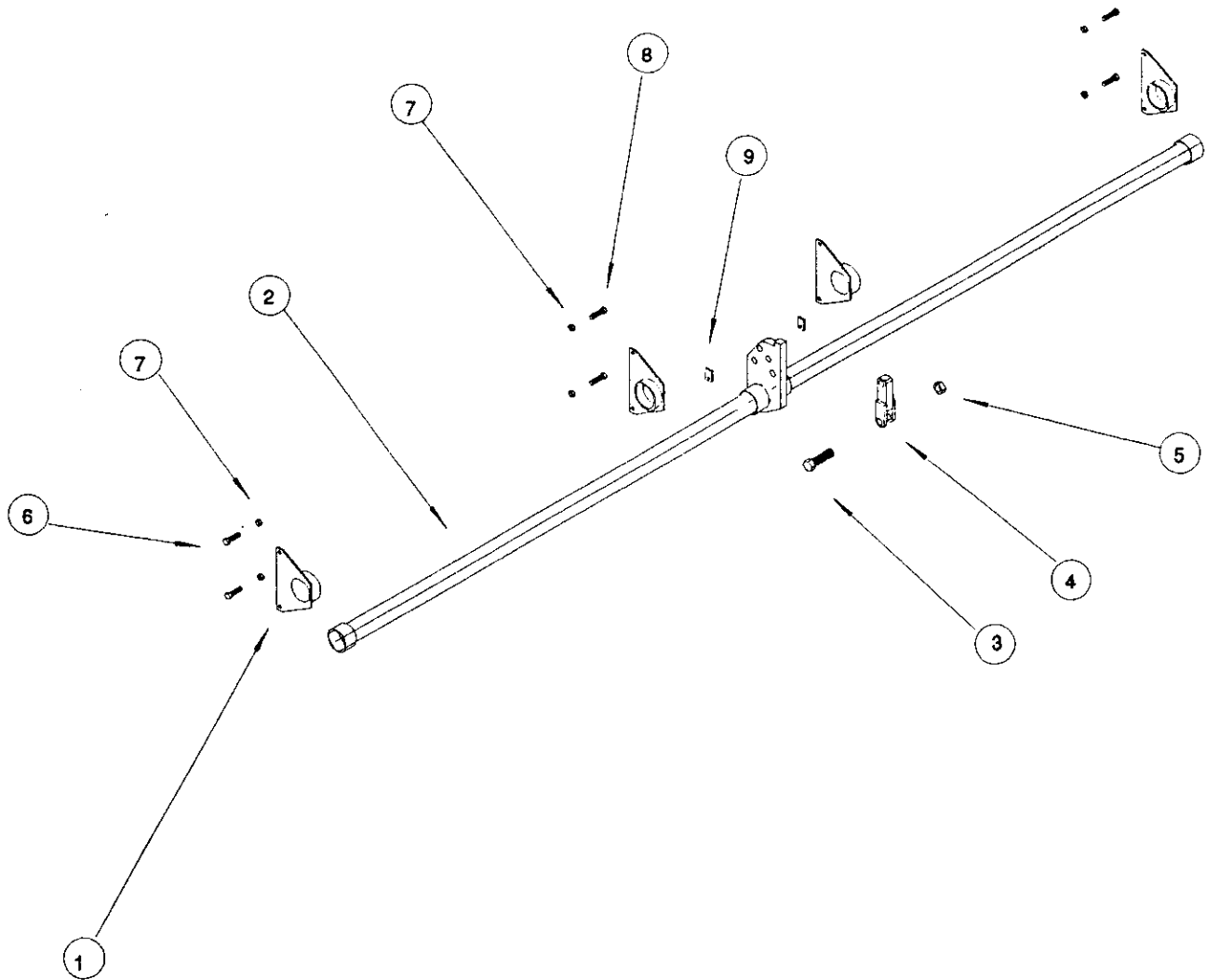


1200-1500 WINDROW



ITEM	P/N	DESCRIPTION
1	24362	LIFT TUBE
2	1344	BOLT, HEX HD 1 x 3
3	24359	LINKAGE TUBE
4	1346	BOLT, HEX HD 1 x 4 1/2
5	1313	BOLT, HEX HD 3/4 x 2 1/2
6	1777	NUT, HEX HD 3/4 (LOCKING)
7	24355	PIVOT MOUNT
8	17299	PIN 9"
9	2584	LYNCH PIN 3/8
10	24347	"A"-FRAME
11	24370	PIN 3 1/2"
12	17303	PIN 4 1/8"
13	11059	HAIR PIN 5/32
14	1779	NUT, HEX HD 1" (LOCKING)

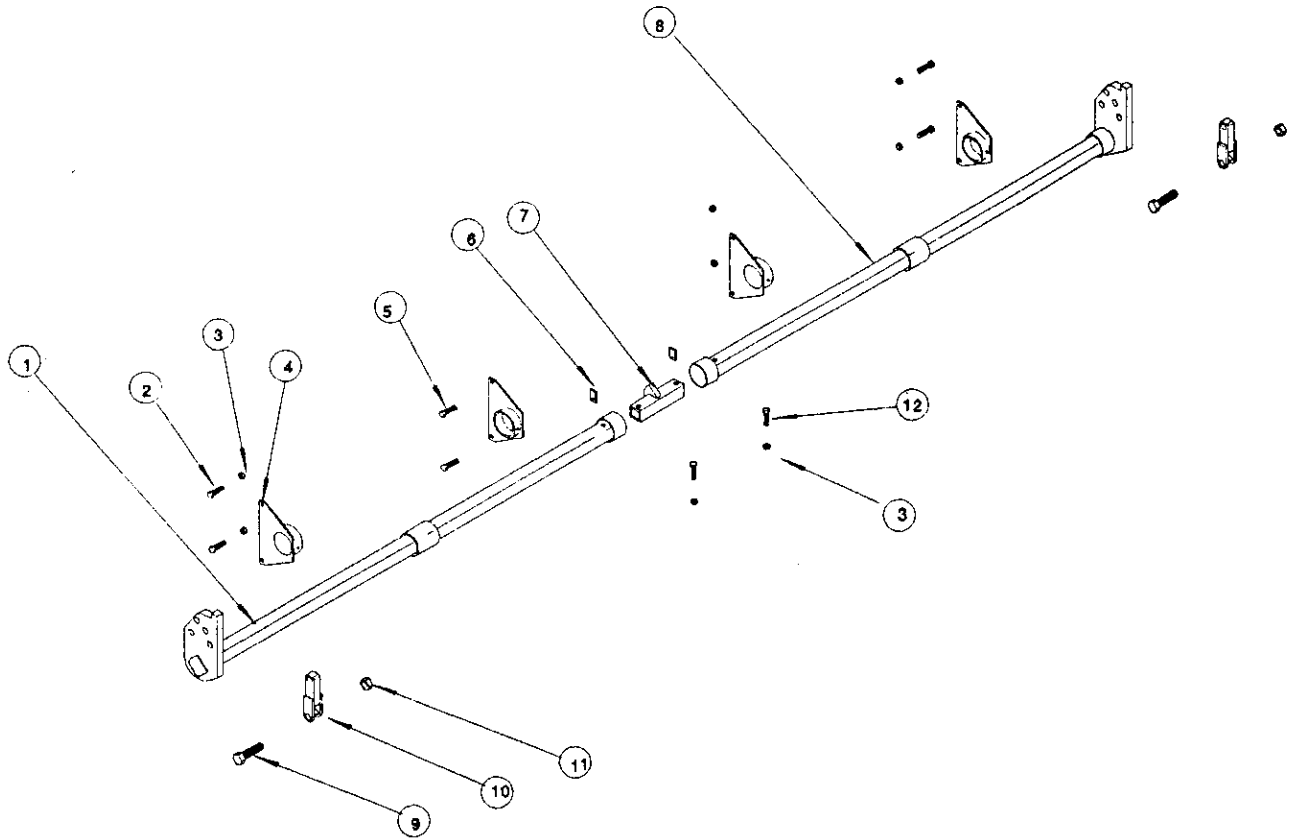
ROCKSHAFT 1200-1500



ITEM	P/N	DESCRIPTION
1	24271	BEARING, ROCKSHAFT
2	24260	ROCKSHAFT 12 FT
	24265	ROCKSHAFT 15 FT
3	1344	BOLT, HEX HD 1 x 3 1/2
4	24276	CLEVIS ARM
5	1779	NUT, HEX HD 1"
6	1290	BOLT, HEX HD 5/8 x 1 3/4
7	2546	NUT, HEX HD 5/8 (LOCKING)
8	1294	BOLT, HEX HD 5/8 x 2 3/4
9	24282	SPACER, LOWER

ROCKSHAFT

1800-2000 WINDROW

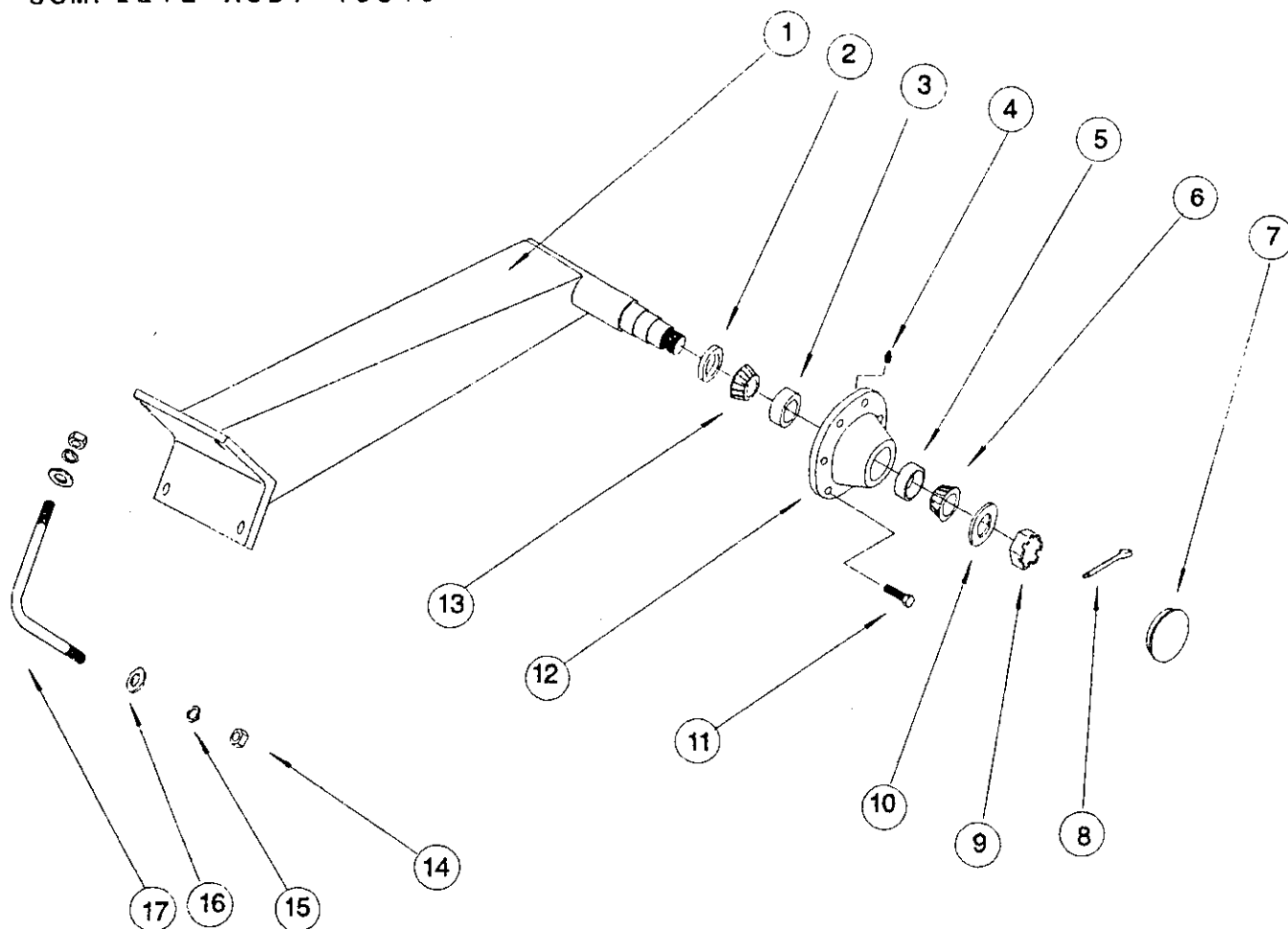


ITEM	P/N	DESCRIPTION
1		ROCKSHAFT R.H. 1800
	24542	ROCKSHAFT R.H. 2000
2	1290	BOLT, HEX HD 5/8 x 1 3/4
3	2546	NUT, HEX HD 5/8 (LOCKING)
4	24271	BEARING, ROCKSHAFT
5	1295	BOLT, HEX HD 5/8 x 3
6	24282	SPACER, LOWER
7	24301	SPLICE BAR, ROCKSHAFT
8		ROCKSHAFT L.H. 1800
	24543	ROCKSHAFT L.H. 2000
9	1343	BOLT, HEX HD 1 x 3
0	24276	CLEVIS ARM
11	1779	NUT, HEX HD 1" (LOCKING)
12	1298	BOLT, HEX HD 5/8 x 3 3/4

WHEEL ARM ASBY

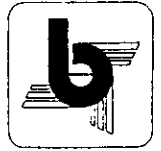


COMPLETE ASBY 15349



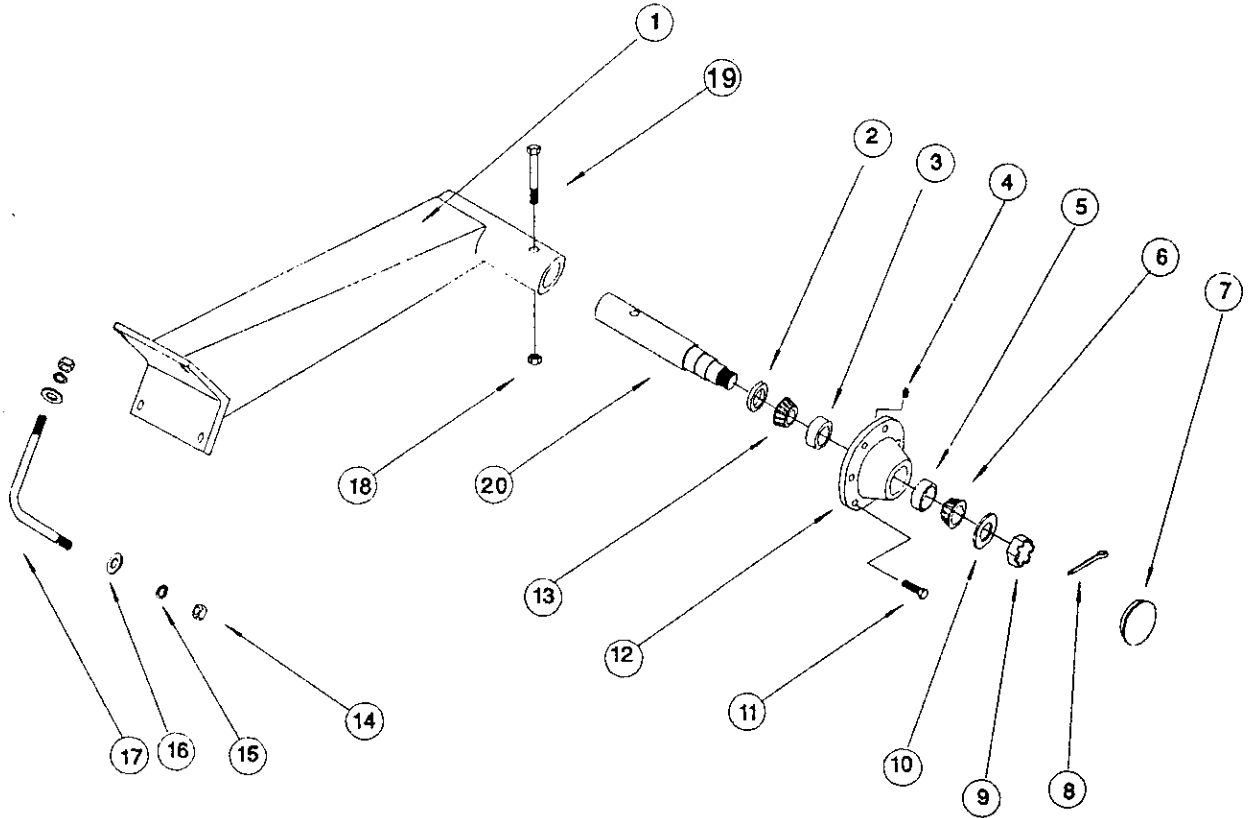
ITEM	P/N	DESCRIPTION
1	15351	WHEEL ARM
2	6572	SEAL, GREASE
3	6574	CUP, INNER
4	2286	ZERK 1/4 - 28
5	6663	CUP, OUTER
6	6665	CONE, OUTER
7	6666	HUB CAP
8	2045	COTTER PIN 5/32 x 1 1/2
9	1754	NUT, HEX CASTLE 1"
10	1605	FLATWASHER 1"
11	9089	BOLT, WHEEL
12	12441	HUB 6-BOLT
13	6573	CONE, INNER
14	1696	NUT, HEX HD 5/8
15	1640	LOCKWASHER 5/8
16	1602	FLATWASHER 5/8
17	15354	BOLT, WHEEL ARM

WHEEL ARM ASBY



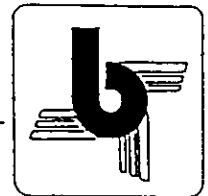
1200 WINDROW

COMPLETE ASBY 18430



ITEM	P/N	DESCRIPTION
1	18431	WHEEL ARM
2	6572	SEAL, GREASE
3	6574	CUP, INNER
4	2286	ZERK 1/4 - 28
5	6663	CUP, OUTER
6	6665	CONE, OUTER
7	6666	HUB CAP
8	2045	COTTER PIN 5/32 x 1 1/2
9	1754	NUT, HEX CASTLE 1"
10	1605	FLATWASHER 1"
11	9089	BOLT, WHEEL
12	12441	HUB 6-BOLT
13	6573	CONE, INNER
14	1696	NUT, HEX HD 5/8
15	1640	LOCKWASHER 5/8
16	1602	FLATWASHER 5/8
17	15354	BOLT, WHEEL ARM
18	2539	NUT, HEX HD 1/2 (LOCKING)
19	1258	BOLT, HEX HD 1/2 x 3 1/2
20	18241	SPINDLE 1 3/4

Parts



It is the policy of Balzer Mfg. Corp. to constantly improve its products whenever it is practical to do so.

The Balzer Mfg. Corp. must therefore reserve the right to redesign or change its equipment or component parts thereof without incurring the obligation to install or furnish such changes on equipment previously delivered.

INSTRUCTIONS FOR ORDERING PARTS

1. Order all parts by their part number and name. NOTE: All reference to left and right, front and rear apply to the machine as viewed from the rear and facing in direction it normally travels when operating.
2. Parts should never be ordered from item numbers only.
3. Always mention the model and serial numbers found on name plate of unit on which part is to be used. Much delay and confusion can be avoided when correct model and serial numbers are specified on parts order and correspondence.
4. Owners, order all parts thru your local dealer.
5. Dealers must indicate how to ship: whether by truck, rail, freight, express or parcel post.
6. Collect phone calls will not be accepted.
7. Address all orders for parts as follows:

balzer mfg
corp
highway 60 east
mountain lake, mn. 56159
phone (507) 427-3133

INSTRUCTIONS FOR RETURNING PARTS FOR ADJUSTMENT

1. To assure prompt handling of claims, your dealer or distributor should follow standard claim procedure and forward claim within thirty (30) days of any part failure or malfunction believed to be a warranty claim to the Balzer Mfg. Corp. service department for processing.
2. No returned parts will be accepted unless they are transportation prepaid and accompanied by the packing list copy.
3. Parts returned should have a tag attached with senders name and address clearly printed.