

**J.E. LOVE COMPANY**

**LOVE**®

*TREE SEEDLING HARVESTER*



**SERIAL NUMBERS 103- 114**

**FORESTRY PRODUCTS GROUP**

**P.O. BOX 188**

**GARFIELD, WA 99130-0188**

**PHONE: (509) 635-1321**

**FAX: (509) 635-1434**

*Manufacturers of Special Harvesting Equipment*

# CONTENTS

	<u>PAGE NO.</u>
<b>TAB 1. INTRODUCTION AND SAFETY PRECAUTIONS</b>	<b>1</b>
WARRANTY	2
WARRANTY REGISTRATION	
WARRANTY REGISTRATION - RETURNED ON _____	
<b>TAB 2. INDEX</b>	<b>3</b>
<b>TAB 3. BASIC CHASSIS COMMON PARTS LISTING</b>	<b>3- 3</b>
MAIN FRAME, WHEELS, KNIFE AND TONGUE	3- 5
POWER PACKAGE	3- 9
POWER-TAKE-OFF ASSEMBLY, 540 RPM	3-13
GEAR BOX	3-15
HYDRAULIC PUMP, B5110	3-17
HYDRAULIC PUMP, B5208	3-19
DUAL FLOW REGULATOR, B5357, W/REMOTE ON/OFF AND INTERNAL RELIEF	3-21
HYDRAULIC CYLINDERS, F3514 AND F3515	3-23
HYDRAULIC CYLINDERS, B2496	3-25
HYDRAULIC CYLINDERS, B2604 AND B2605	3-27
BELT CARRIER FRAME, BELT DRIVES & BELT CARRIERS	3-29
BELT CARRIER ASSEMBLIES	3-33
DRIVE END ASSEMBLY	3-35
UNIVERSAL JOINT ASSEMBLY, B2417	3-35
IDLER SHEAVE ASSEMBLY, B1351	3-37
HYDRAULIC SCHEMATIC, MOTOR CIRCUITS	3-39
SOLENOID VALVE MODULE, B5190 AND B5191	3-43
HYDRAULIC SCHEMATIC, TRAILER HANDLING SYSTEM	3-44
HYDRAULIC SCHEMATIC, UNLOADING CONVEYOR SYSTEM	3-45
CONTROL CONSOLE WIRING DIAGRAMS, B5520 AND B5522	3-46
CONDUCTOR CABLE FUNCTION LIST	3-47
BEARING BLOCK, B1968	3-48
<b>TAB 4, ROOT CLEANING ASSEMBLIES</b>	<b>4- 1</b>
OSCILLATING ROOT CLEANING FRAME & DRIVES	4- 3
ROOT SHAKER DRIVE ASSEMBLY, B1180	4- 7
PRE 1998 OSCILLATING BEATERS	4- 9
1998 TIMKEN BEARING OSCILLATING BEATERS	4-11
1999 BALL BEARING OSCILLATING BEATERS	4-13
1999 TIMKEN BEARING OSCILLATING BEATERS	4-15

## CONTENTS, CONTINUED:

	<u>PAGE NO.</u>
<b>TAB 4. ROOT CLEANING SYSTEMS, CONTINUED:</b>	
ROTARY ROOT CLEANING SYSTEM	4-17
<b>TAB 5. HANDLING SYSTEMS</b>	<b>5- 1</b>
MANUAL TRANSFER UNLOAD CONVEYOR SYSTEM - FABRIC, B722000 AND B722011	5-69
SLING HANDLING TRAILER SYSTEM, B722001	5-73
TUB HANDLING TRAILER SYSTEM, B722002	5-77
HYDRAULIC SCHEMATIC, SLING HANDLING SYSTEM	5-81
HYDRAULIC SCHEMATIC, TUB HANDLING SYSTEM	5-83
TRAILER CANOPY - SHORT TRAILER, B724003	5-85
BAG BANDING TRAILER SYSTEM, B722007	5-87
BAG SEWING TRAILER SYSTEM, B722009	5-91
HYDRAULIC SCHEMATIC BAG BANDING TRAILER SYSTEM	5-95
HYDRAULIC SCHEMATIC, BAG SEWING HANDLING SYSTEM	5-97
CANOPY PACKAGE, LONG TRAILER, FULL GABLE, B724004	5-99
MANUAL TRANSFER UNLOAD CONVEYOR SYSTEM - FABRIC, B722008 AND B722010	5-101

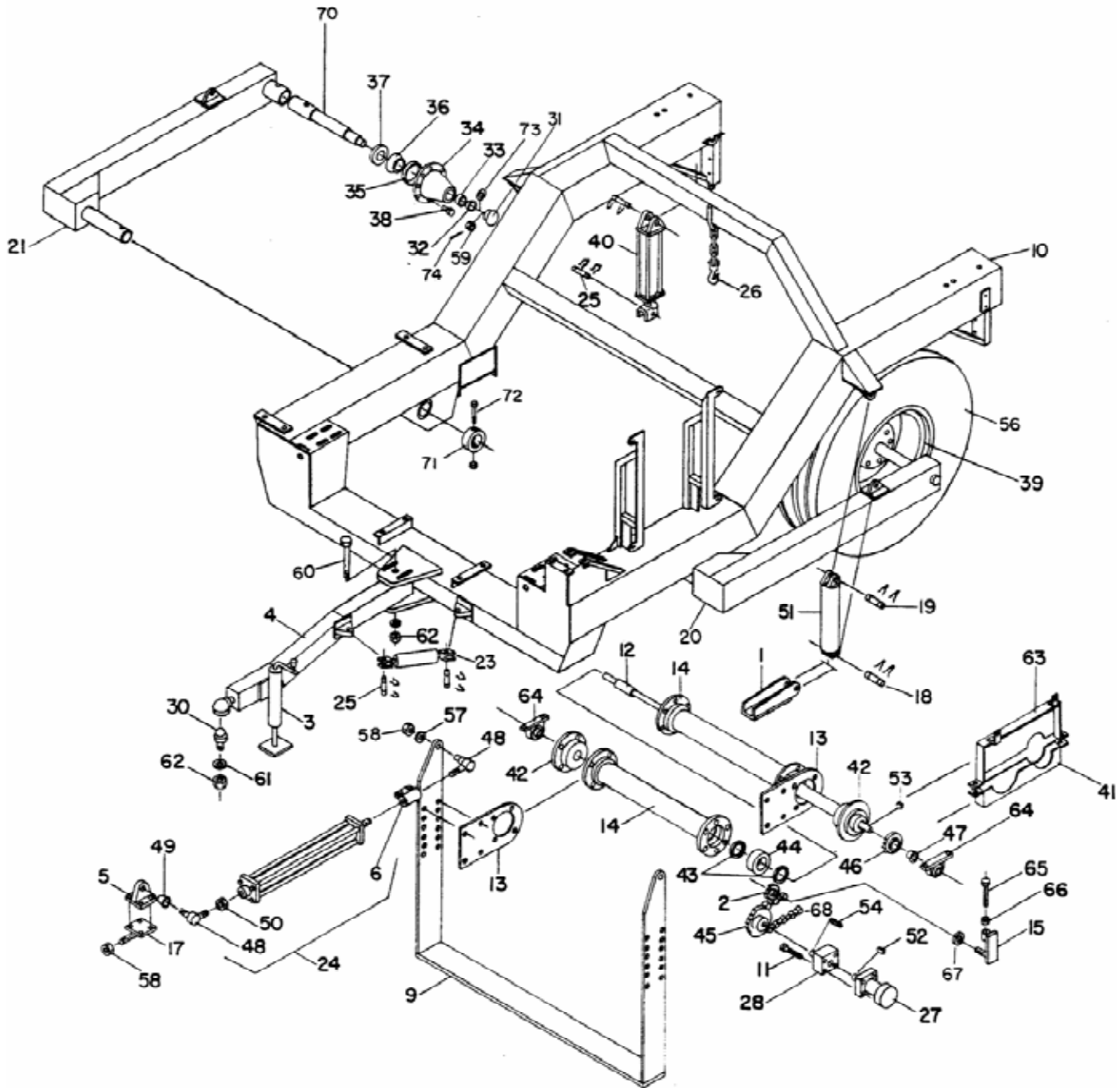
# **BASIC CHASSIS COMMON PARTS**

**SERIAL NUMBER 103 - 114**

**1999 - 2001**



# MAIN FRAME, WHEELS, KNIFE AND TONGUE



# CONTENTS

	<u>PAGE NO.</u>
<b>TAB 1. INTRODUCTION AND SAFETY PRECAUTIONS</b>	<b>1</b>
WARRANTY	2
WARRANTY REGISTRATION	
WARRANTY REGISTRATION - RETURNED ON _____	
<b>TAB 2. INDEX</b>	<b>3</b>
<b>TAB 3. BASIC CHASSIS COMMON PARTS LISTING</b>	<b>3- 3</b>
MAIN FRAME, WHEELS, KNIFE AND TONGUE	3- 5
POWER PACKAGE	3- 9
POWER-TAKE-OFF ASSEMBLY, 540 RPM	3-13
GEAR BOX	3-15
HYDRAULIC PUMP, B5110	3-17
HYDRAULIC PUMP, B5208	3-19
DUAL FLOW REGULATOR, B5357, W/REMOTE ON/OFF AND INTERNAL RELIEF	3-21
HYDRAULIC CYLINDERS, F3514 AND F3515	3-23
HYDRAULIC CYLINDERS, B2496	3-25
HYDRAULIC CYLINDERS, B2604 AND B2605	3-27
BELT CARRIER FRAME, BELT DRIVES & BELT CARRIERS	3-29
BELT CARRIER ASSEMBLIES	3-33
DRIVE END ASSEMBLY	3-35
UNIVERSAL JOINT ASSEMBLY, B2417	3-35
IDLER SHEAVE ASSEMBLY, B1351	3-37
HYDRAULIC SCHEMATIC, MOTOR CIRCUITS	3-39
SOLENOID VALVE MODULE, B5190 AND B5191	3-43
HYDRAULIC SCHEMATIC, TRAILER HANDLING SYSTEM	3-44
HYDRAULIC SCHEMATIC, UNLOADING CONVEYOR SYSTEM	3-45
CONTROL CONSOLE WIRING DIAGRAMS, B5520 AND B5522	3-46
CONDUCTOR CABLE FUNCTION LIST	3-47
BEARING BLOCK, B1968	3-48
<b>TAB 4, ROOT CLEANING ASSEMBLIES</b>	<b>4- 1</b>
OSCILLATING ROOT CLEANING FRAME & DRIVES	4- 3
ROOT SHAKER DRIVE ASSEMBLY, B1180	4- 7
PRE 1998 OSCILLATING BEATERS	4- 9
1998 TIMKEN BEARING OSCILLATING BEATERS	4-11
1999 BALL BEARING OSCILLATING BEATERS	4-13
1999 TIMKEN BEARING OSCILLATING BEATERS	4-15

## CONTENTS, CONTINUED:

	<u>PAGE NO.</u>
<b>TAB 4. ROOT CLEANING SYSTEMS, CONTINUED:</b>	
ROTARY ROOT CLEANING SYSTEM	4-17
<b>TAB 5. HANDLING SYSTEMS</b>	<b>5- 1</b>
MANUAL TRANSFER UNLOAD CONVEYOR SYSTEM - FABRIC, B722000 AND B722011	5-69
SLING HANDLING TRAILER SYSTEM, B722001	5-73
TUB HANDLING TRAILER SYSTEM, B722002	5-77
HYDRAULIC SCHEMATIC, SLING HANDLING SYSTEM	5-81
HYDRAULIC SCHEMATIC, TUB HANDLING SYSTEM	5-83
TRAILER CANOPY - SHORT TRAILER, B724003	5-85
BAG BANDING TRAILER SYSTEM, B722007	5-87
BAG SEWING TRAILER SYSTEM, B722009	5-91
HYDRAULIC SCHEMATIC BAG BANDING TRAILER SYSTEM	5-95
HYDRAULIC SCHEMATIC, BAG SEWING HANDLING SYSTEM	5-97
CANOPY PACKAGE, LONG TRAILER, FULL GABLE, B724004	5-99
MANUAL TRANSFER UNLOAD CONVEYOR SYSTEM - FABRIC, B722008 AND B722010	5-101

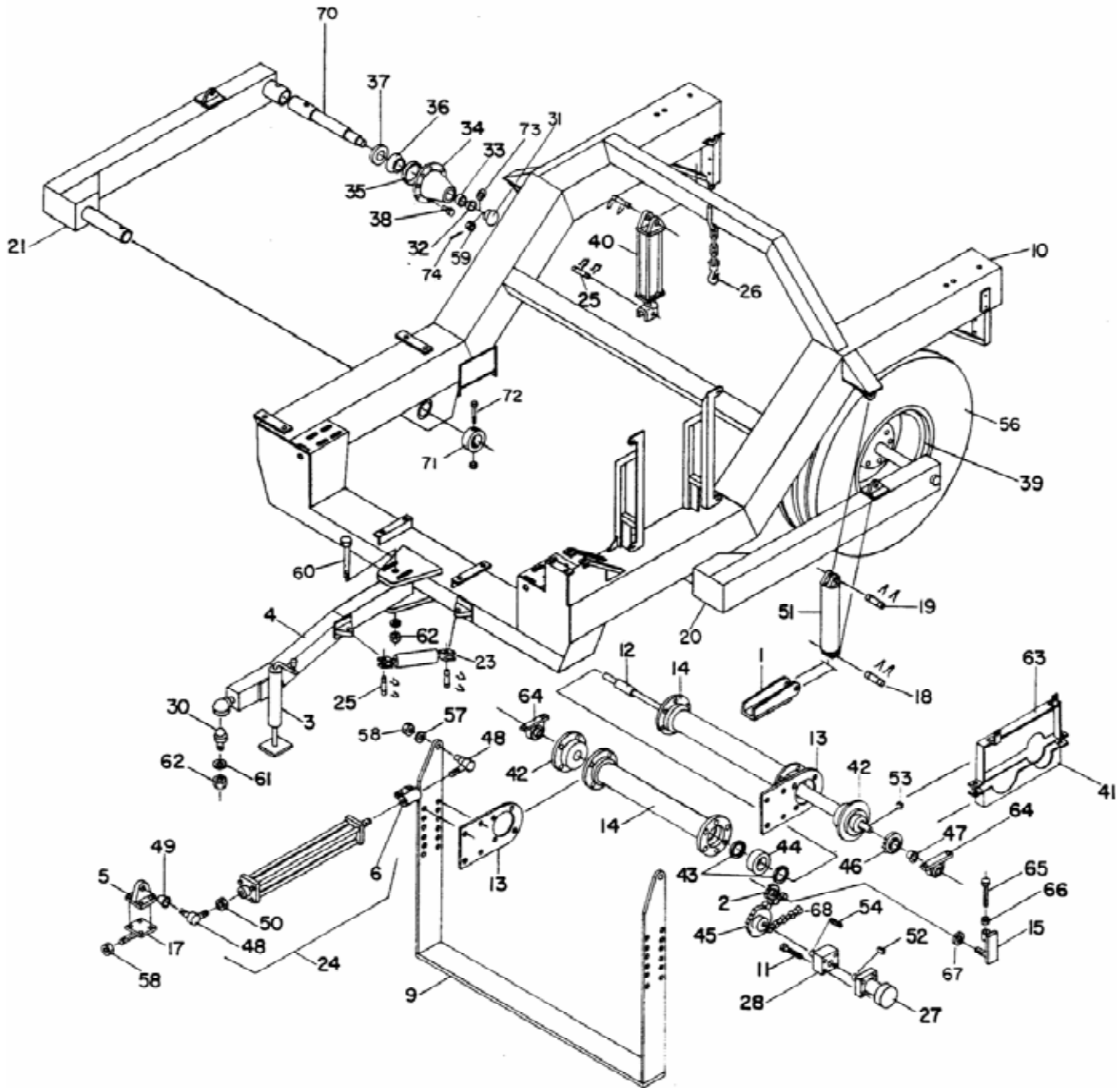


# **BASIC CHASSIS COMMON PARTS**




**SERIAL NUMBER 103 - 114**

**1999 - 2001**

# MAIN FRAME, WHEELS, KNIFE AND TONGUE



## MAIN FRAME, WHEELS, KNIFE AND TONGUE

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B2454	SAFETY STOP
		<b>WARNING - BLOCK SECURELY - DO NOT PLACE YOURSELF UNDER ANY EQUIPMENT SUSPENDED HYDRAULICALLY WITH MECHANICAL STOPS WITHOUT BLOCKING SECURELY.</b>
	D12	DECAL, CAUTION
	D19	DECAL, CAUTION - USE SAFETY STOP
2	A1506	IDLER SPROCKET
3	A1675	TONGUE JACK
		<b>WARNING - BLOCK SECURELY - DO NOT PLACE YOURSELF UNDER ANY EQUIPMENT SUSPENDED WITH MECHANICAL JACKS WITHOUT BLOCKING SECURELY.</b>
	D12	DECAL, CAUTION
4	B1000	TONGUE
	B1444	HITCH ADAPTER
5	B2874	BLADE CYLINDER LUG, SERIAL NO. 062 & LATER
6	B1071	ROD END ADAPTER, 1-1/8 -12 THREAD
9	B1304	58" CUTTING BLADE
10	B2439	72" UNIVERSAL MAIN FRAME
	B2800	76"/72" UNIVERSAL MAIN FRAME
11	X2A0370400	CAP SCREW, 3/8-16 UNC X 4
12	B1365	KNIFE ECCENTRIC SHAFT
13	B1172	ECCENTRIC BEARING MOUNT
14	B1366	CENTER ECCENTRIC BEARING CARRIER
15	B1182	IDLER SPROCKET ADJUSTMENT
		<b>CAUTION - STOP MACHINERY TO CLEAN, ADJUST, OIL OR REPAIR.</b>
	D18	DECAL, CAUTION
17	B1341	KNIFE CYLINDER ADJUSTMENT
18	B2453	CYLINDER PIN, MEDIUM
19	B1508	CYLINDER PIN
20	B2436	LEFT WHEEL ARM
	B2801	LEFT WHEEL ARM, 76"/72"
21	B2437	RIGHT WHEEL ARM
	B2802	RIGHT WHEEL ARM, 76"/72"
23	F3514	HYDRAULIC CYLINDER, 2-1/2 X 6, SAE
24	B2496	KNIFE CYLINDER ASSY, SAE PORTS
		<b>(REFER TO PAGE 3-25)</b>
	B1507	KNIFE CYLINDER ASSEMBLY, PIPE PORTS
25	B1508	CYLINDER PIN
26	B1528	CHAIN GRAB HOOK, 5/16 CHAIN
27	B5393	HYDRAULIC MOTOR, COUNTER CLOCKWISE - O-RING PORTS
	B5374	HYDRAULIC MOTOR, 4-BOLT ORB PORTS - PRIOR TO 1999
	B1658	HYDRAULIC MOTOR, 4-BOLT PIPE PORTS - PRIOR TO 1998
28	B1968	BEARING BLOCK <b>(REFER TO PAGE 3-48)</b>
30	B1667	HEAVY DUTY HITCH BALL
31	B1609	HUB CAP
32	B1610	OUTER CONE
33	B1611	OUTER CUP

## MAIN FRAME, CONTINUED

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
34	B1612	HUB WITH CUPS
35	B1613	INNER CUP
36	B1614	INNER CONE
37	B1615	SEAL
38	B1616	WHEEL BOLT
39	B1617	WHEEL
40	B2521	BELT LIFT CYLINDER ASSEMBLY <b>(REFER TO PAGE 3-23)</b>
	F1704	SAE #8 ORB BREATHER PLUG
	F1705	SAE #8 ORB RESTRICTOR FITTING
41	B1184	KNIFE CHAIN LOWER GUARD



### **WARNING - SHIELDS ARE FOR YOUR PROTECTION - KEEP THEM IN PLACE**

	D24	DECAL, BE CAREFUL
42	B1635	KNIFE ECCENTRIC DRIVE BEARING
43	B1636	ECCENTRIC SHAFT SEAL
44	B1637	KNIFE ECCENTRIC CENTER BEARING
45	B2572	KNIFE DRIVE SPROCKET ASSEMBLY, 28 TOOTH
	B5131	QD BUSHING, 1"
	B5152	QD SPROCKET, 28 TOOTH, SERIAL #045 -
	B1638	KNIFE DRIVE SPROCKET ASSY. 36 TOOTH
46	B1639	KNIFE DRIVEN SPROCKET, 50TLB23
47	B1640	TAPER LOCK BUSHING, 1-3/4"
48	CD535	BALL JOINT, 1"-16 NS RIGHT HAND
49	CD535R	RUBBER SEAL
	CD535RB	DUST COVER, CD535 & R10266 - 1998 & LATER
50	CD537	JAM NUT, 1"
51	B2604	LEFT WHEEL CYLINDER ASSEMBLY <b>(REFER TO PAGE 3-27)</b>
	B2605	RIGHT WHEEL CYLINDER ASSEMBLY <b>(REFER TO PAGE 3-27)</b>
52	X3H808	WOODRUFF KEY, #808 - 1/4 X 1 (WAS B1821)
53	X3H1210	WOODRUFF KEY, #1210 - 3/8 X 1-1/4 (WAS B1820)
54	R14287	STRAIGHT KEY, 1/4 X 1-1/2
56	(*) B1813	RIB IMPLEMENT TIRE
	(*) B1814	TUBE
57	X3B075	LOCKWASHER, 3/4
58	X2C075	HEX NUT, 3/4-10 UNC
59	X2L087-SLT	HEX SLOTTED NUT, 7/8-14 UNF
60	B1181	TONGUE BOLT
61	X3C100	FLAT WASHER, 1"
62	X2L100-SLT	HEX CASTLE NUT, 1-14
63	B2661	KNIFE CHAIN UPPER GUARD



### **WARNING - SHIELDS ARE FOR YOUR PROTECTION - KEEP THEM IN PLACE!**

D24                      DECAL, BE CAREFUL

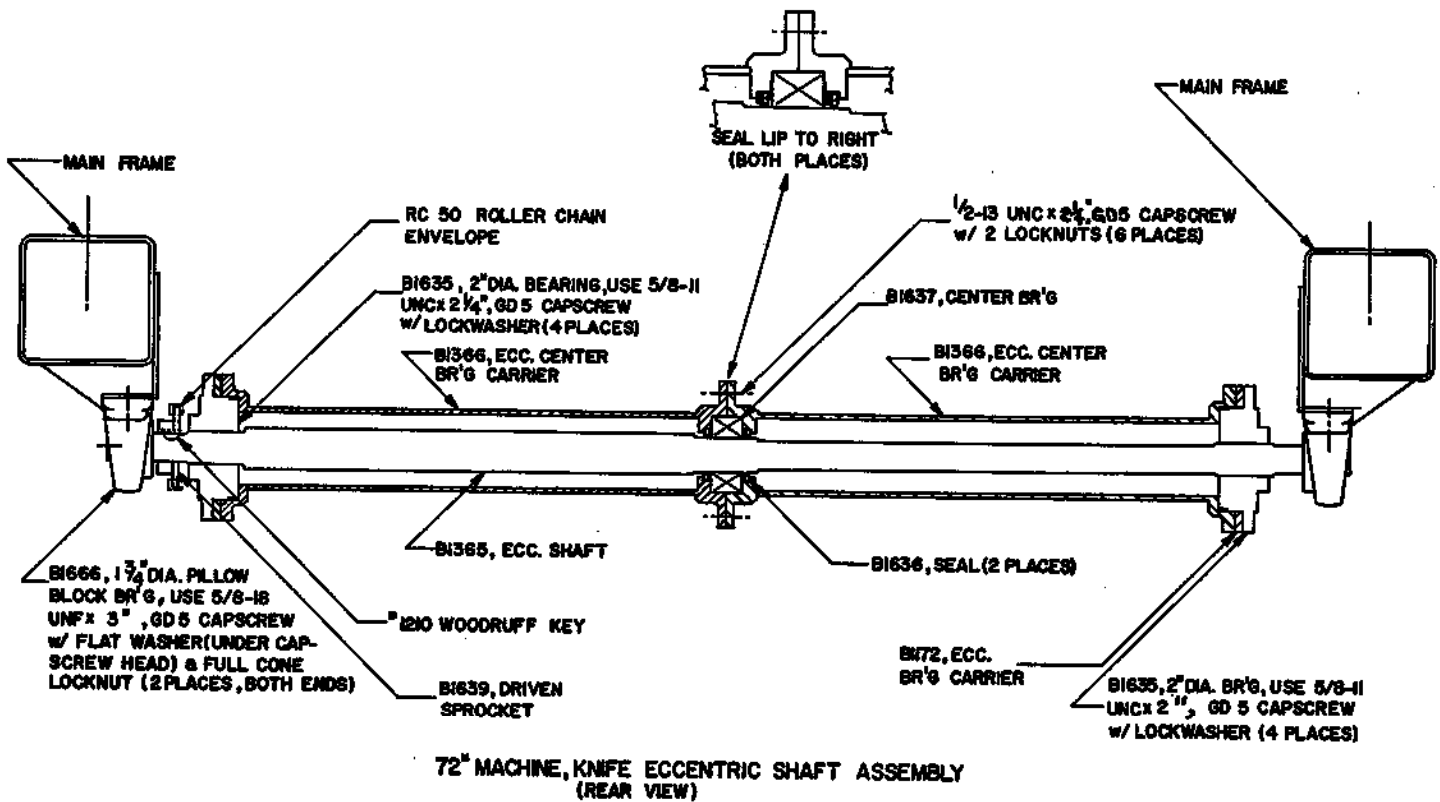
(\*) REFERENCE ONLY, NOT FOR RESALE

MAIN FRAME, CONTINUED

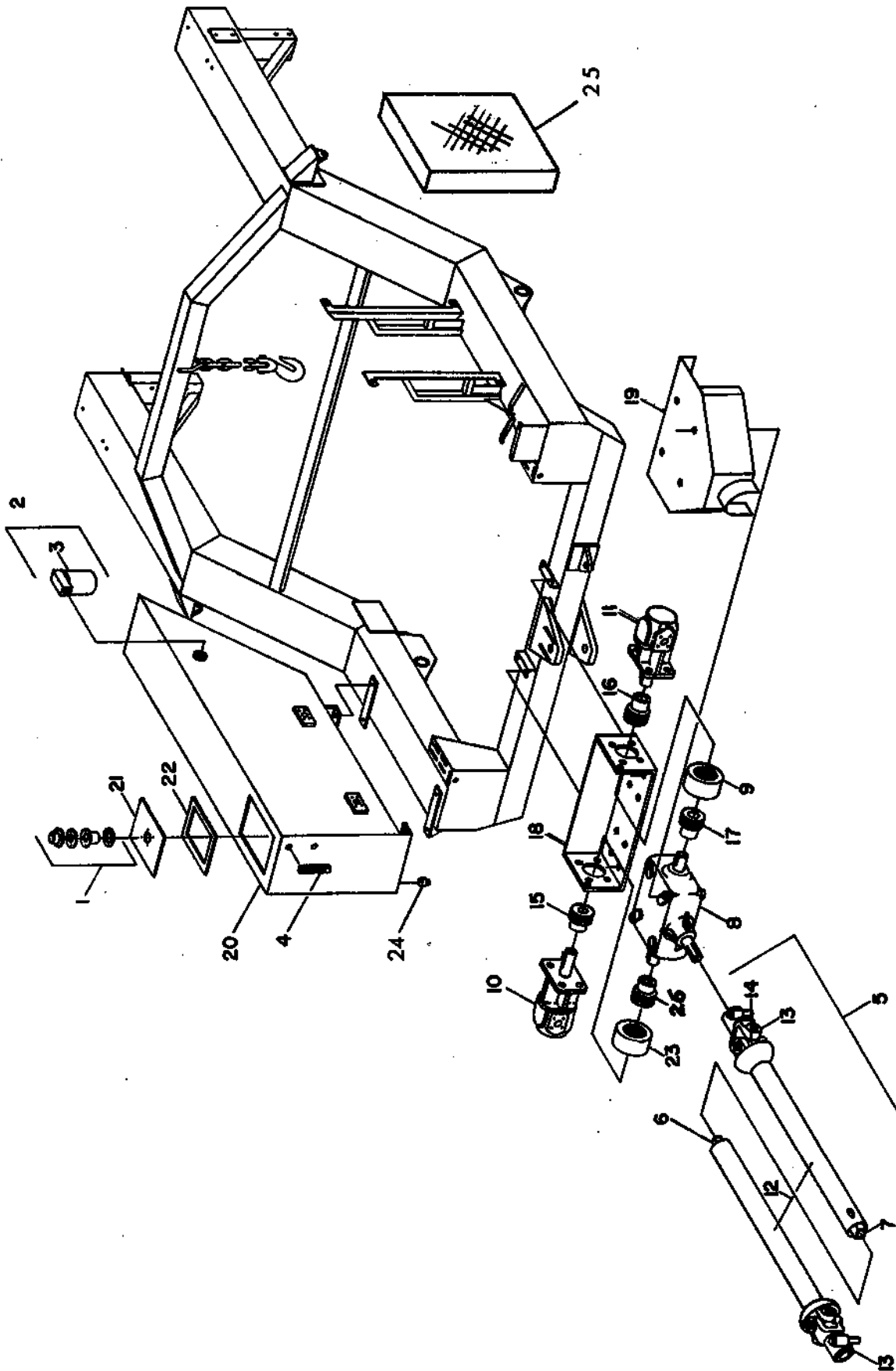
KEY	PART NO.	DESCRIPTION
64	B1666	KNIFE ECCENTRIC PILLOW BLOCK BEARING
65	X2A0500401	B1663, 1/2-13 UNC X 4, FULL THREAD
66	X2D050	HEX JAM NUT, 1/2-13 UNC
67	B1193	SPACER
68	A1671	RC50 ROLLER CHAIN, BOX OF 10 FT
	B1815	OFFSET LINK
	B1816	CONNECTOR LINK
70	B2438	AXLE SPINDLE (2)
	B2811	AXLE SPINDLE, 76/72 CHASSIS
71	B1364	WHEEL ARM COLLAR
72	X2A0370450	CAP SCREW, 3/8-16 UNC X 4-1/2"
73	X3C088	SAE WASHER, 7/8"
74	X3A15-175	COTTER PIN, 5/32' X 1-3/4"

NOT SHOWN:

F5007 PAINT, LOVE YELLOW - GALLON



# HARVESTER MOUNTED POWER PACKAGE



## HARVESTER MOUNTED POWER PACKAGE

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1806	WEATHERPROOF CAP
2	B1913	RETURN FILTER
3	B1914	REPLACEMENT CARTRIDGE
4	B1915	FLUID SIGHT GAUGE
5	B5192	PTO SHAFT ASSEMBLY, 540 RPM, SERIAL #051 & NEWER (FOR 1000 RPM, USE T10644 ADAPTER)



**DANGER - PTO SHAFT. ROTATING DRIVELINE CAN CAUSE DEATH! KEEP AWAY!**

**REFER TO TAB 8, SERVICE SUPPLEMENT. READ AGRICULTURAL DRIVE LINE MANUFACTURER'S ASSOCIATION SAFETY MANUAL FOR OWNERS AND OPERATORS!**

	D107	DANGER DECAL - PTO OUTER SHIELD
	B5157	PTO SHAFT ASSEMBLY, 1000 RPM, SERIAL #045 TO #082 ( <b>REFER TO PAGE 3-13</b> )
6	B5186	INNER PROFILE ASSY, SERIAL NUMBER 045 -



**DANGER - PTO SHAFT. ROTATING DRIVELINE CAN CAUSE DEATH! KEEP AWAY!**

	D107	DANGER DECAL - PTO OUTER SHIELD
7	B5184	OUTER PROFILE ASSY, SERIAL NUMBER 045 -
8	B1937	GEAR BOX ( <b>REFER TO PAGE 3-15</b> )
9	B5419	FLEX COUPLING COVER, NYLON - LARGE SN 113
	B5418	FLEX COUPLING ELEMENT W/FASTENERS SN 113
	B1939	COUPLING SLEEVE, SERIAL NO.037 TO 112
10	B5110	GEAR PUMP, 7 GPM ( <b>REFER TO PAGE 3-17</b> )
11	B5208	GEAR PUMP, 30 GPM, SERIAL NUMBER 047- ( <b>REFER TO PAGE 3-19</b> )
12	B5185	SHIELD ASSEMBLY, SERIAL NUMBER 045-
	INCLUDES:	
2	B5277	CV CONE & BEARING ASSY
	2 B5176	BEARING RING
	2 B5278	SHIELD CONE - 3 RIB
	1 B5175	INNER SHIELD TUBE - ROUND
	1 B5345	OUTER SHIELD TUBE - OVAL
	1 B5178	SAFETY CHAIN

NOTE: DECALS, SCREWS, AND GREASE ZERKS ARE INCLUDED IN THE VARIOUS PARTS ABOVE.



**DANGER - PTO SHAFT. ROTATING DRIVELINE CAN CAUSE DEATH! KEEP AWAY!**

	D107	DANGER DECAL - PTO OUTER SHIELD
14	B5173	CROSS & BEARING KIT, SERIAL NUMBER 045 -
	B1945	CROSS KIT, SERIAL NUMBER 034 - 043
15	B3026	HUB, SMALL - 3/4 BORE, 3/16 KWY, SN 113
	B2625	PUMP COUPLING HUB, 3/4, SN 037 TO 112 (SMALL)

**HARVESTER MOUNTED POWER PACKAGE, CONTINUED**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
	B2444	PUMP COUPLING HUB, 3/4, SERIAL #034, 035, 036
16	B3109	HUB, LARGE - 1-1/4 BORE, 5/16 KWY, SERIAL 113
	B2445	LARGE PUMP COUPLING HUB, 1-1/4, SERIAL 034 TO 112
17	B3110	HUB, LARGE - 1-3/8 BORE 5/16 KWY, SERIAL 113
	B2446	GEAR BOX HUB, 1-3/8, (LARGE) SERIAL #034 TO 112
	B2790	KEY, 5/16 X 1.75 (2) SERIAL #034 TO 112
18	B2456	GEAR BOX/PUMP MOUNT
19	B2792	GEAR BOX COVER, SERIAL NUMBER 047-



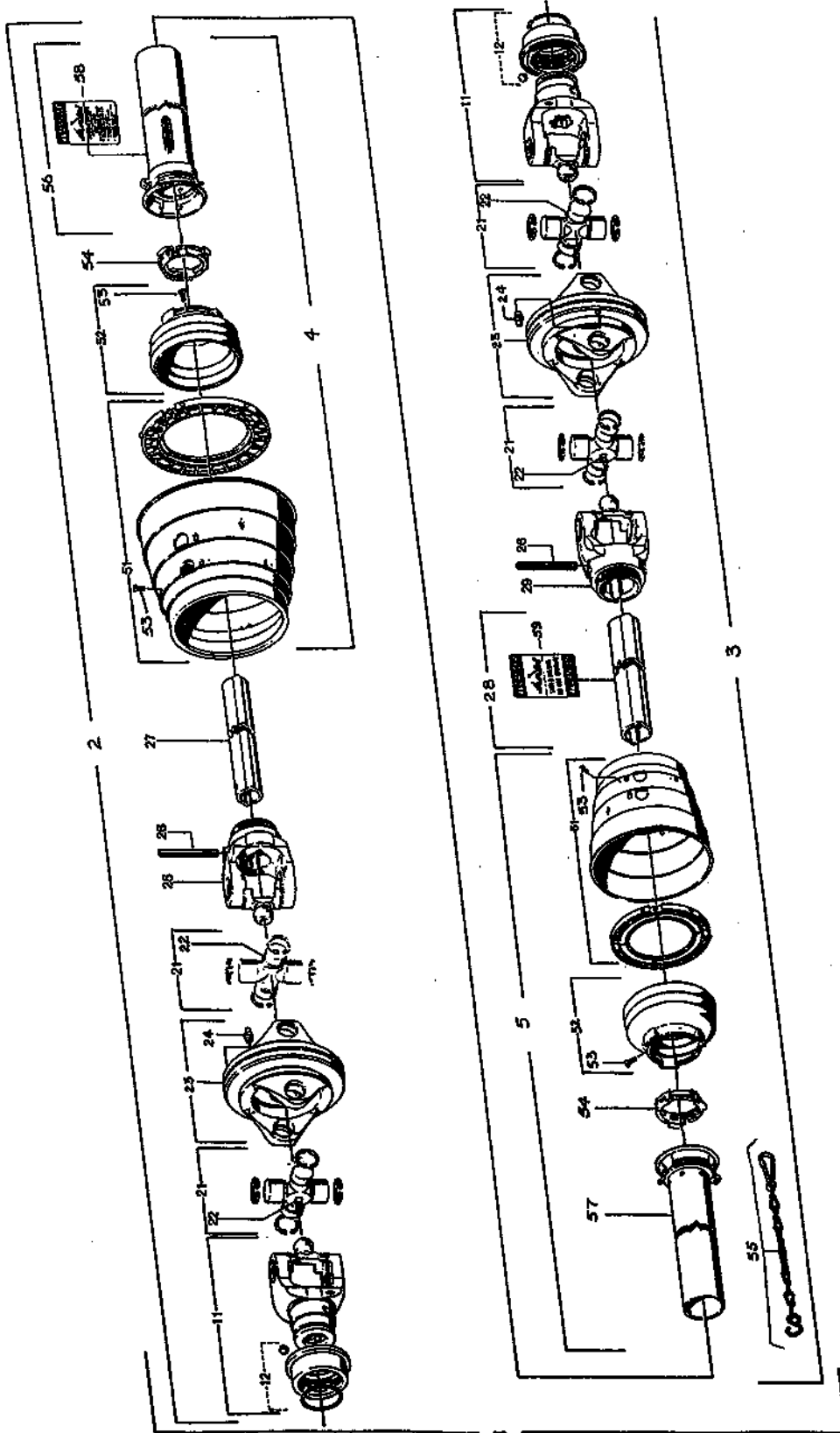
**WARNING - SHIELDS ARE FOR YOUR PROTECTION - KEEP THEM IN PLACE!**

	D24	DECAL, BE CAREFUL
	B2788	GEAR BOX COVER, SERIAL NUMBER 045
20	B2490	HYDRAULIC TANK
21	B2618	TANK INLET COVER
22	B2619	INLET COVER GASKET
23	B5401	FLEX ELEMENT W/FASTENERS - SMALL, SERIAL #113
	B5402	COVER, NYLON - SMALL SERIAL #113
	B5042	COUPLING SLEEVE, SMALL SERIAL #037 TO #112
24	F1131	HEX HEAD PLUG, 1"
25	B5158	COOLER PACKAGE COMPLETE
	B5156	COOLER FAN PACKAGE
	B5159	BIRD CAGE GUARD
	B5270	COOLER CORE COMPLETE
26	B3027	HUB, SMALL - 1-3/8" BORE & 5/16 KWY, SERIAL #113
	B2626	GEAR BOX CPLG HUB, SN NUMBER 037 TO 112 (SMALL)
	B2446	GEAR BOX HUB, 1-3/8, SN #034,035, 036(LARGE)
	B2790	KEY, 5/16 X 1.75





POWER - TAKE-OFF ASSEMBLY  
 SERIAL NUMBER 045 & NEWER, 540 RPM INPUT



**POWER - TAKE-OFF ASSEMBLY**  
**SERIAL NUMBER 045 & NEWER, 540 RPM INPUT**

**KEY**

**PART NO.                      DESCRIPTION**



**DANGER - PTO SHAFT. ROTATING DRIVELINE CAN CAUSE DEATH! KEEP AWAY!**  
**DO NOT OPERATE WITHOUT - \* ALL DRIVELINE, TRACTOR AND EQUIPMENT**  
**SHIELDS IN PLACE. \* DRIVELINES SECURELY ATTACHED AT BOTH ENDS.**  
**\* DRIVE LINE SHIELDS THAT TURN FREELY ON DRIVELINE.**  
**REFER TO TAB 8, SERVICE SUPPLEMENT. READ AGRICULTURAL DRIVE LINE**  
**MANUFACTURER'S ASSOCIATION SAFETY MANUAL FOR OWNERS AND OPERATORS!**

- 1 D107 DANGER DECAL - PTO OUTER SHIELD
- B5192 PTO SHAFT ASSEMBLY, 540 RPM
- B5184 OUTER PROFILE ASSY.
- B5185 SHIELD ASSEMBLY

**INCLUDES:**

- 2 B5277 CV CONE & BEARING ASSY
- 2 B5176 BEARING RING
- 2 B5278 SHIELD CONE - 3 RIB
- 1 B5175 INNER SHIELD TUBE - ROUND
- 1 B5174 OUTER SHIELD TUBE - OVAL
- 1 B5178 SAFETY CHAIN

**NOTE:** DECALS, SCREWS, AND GREASE ZERKS ARE INCLUDED IN THE VARIOUS PARTS ABOVE.

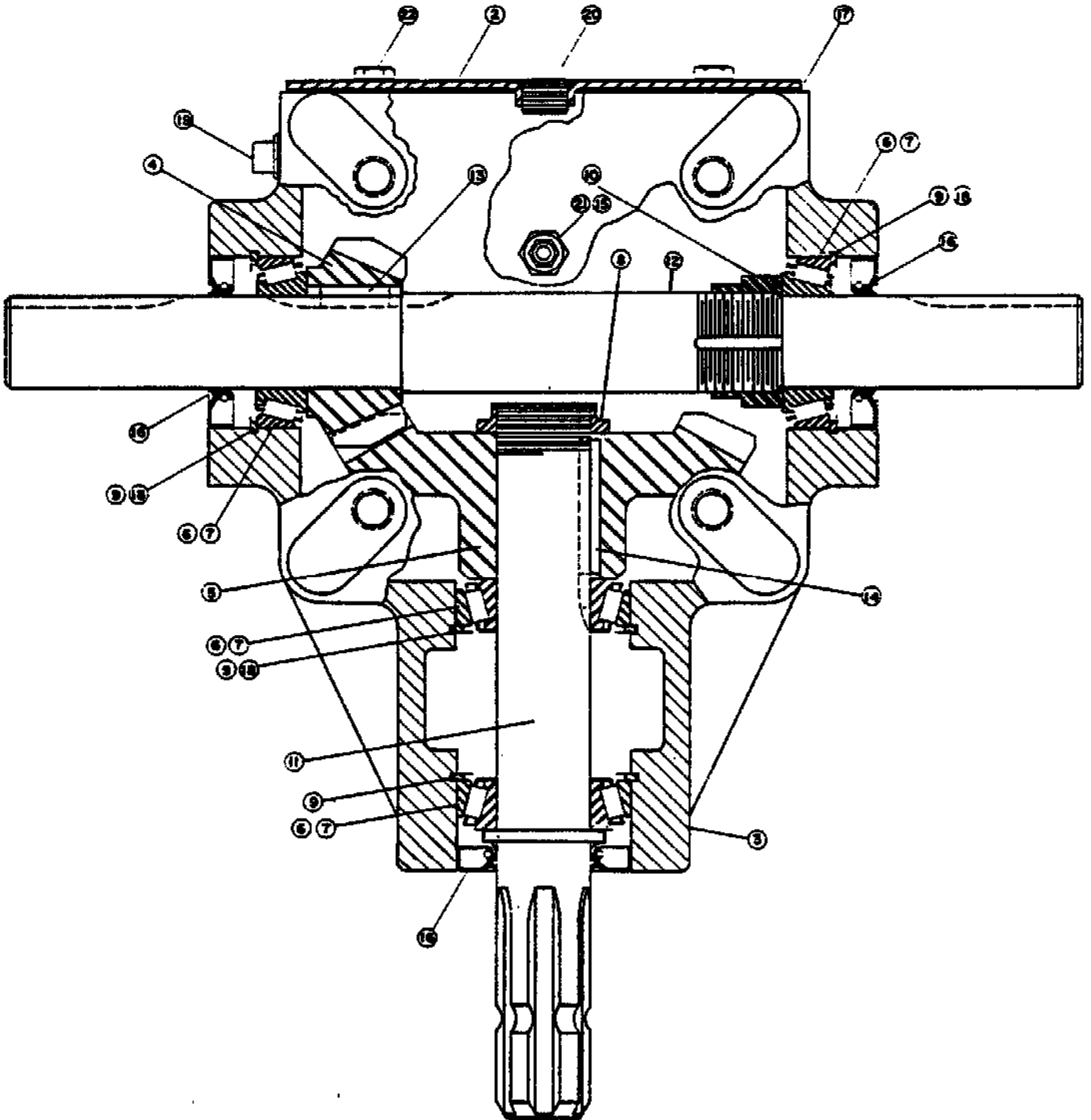


**DANGER - PTO SHAFT. ROTATING DRIVELINE CAN CAUSE DEATH! KEEP AWAY!**

- B5340 ASSEMBLY, SHIELD - SERIAL NO. 045 TO 061
- B5186 INNER PROFILE ASSY, 540 RPM INPUT
- 2 B5193 MALE HALF SHAFT ASSY. WITH SHIELDING (INPUT)
- 3 B5194 FEMALE HALF SHAFT ASSY. WITH SHIELDING (OUTPUT)
- 4 B5347 FEMALE HALF SHIELD ASSY SERIAL 045-061
- 5 B5348 MALE HALF SHIELD ASSY, SERIAL 045-061
- 11 B5166 YOKE, 1-3/8" -6 SPLINE SLIDE
- 12 B5333 QUICK DISCONNECT KIT
- 21 B5173 CROSS & BEARING KIT (2 USED)
- 22 GREASE ZERK, M8 X 1 67.5°
- 23 B5167 DOUBLE YOKE
- 24 GREASE ZERK, M8 X 1 45°
- 25 B5168 INBOARD YOKE, SHAFT END
- 26 B5169 SPRING PIN, 10 X 80
- 27 B5170 INNER PROFILE
- 28 B5171 OUTER PROFILE
- 29 B5172 INBOARD YOKE, TUBE END
- 51 B5277 CV CONE & BEARING ASSY, SERIAL NO. 062 & LATER
- B5177 SHIELD CONE CV, SERIAL NO. 045 TO 061
- 52 B5278 SHIELD CONE 3 RIB, SERIAL NO. 062 & LATER
- B5179 SHIELD COLLAR
- 53 SCREW
- 54 B5176 BEARING RING
- 55 B5178 SAFETY CHAIN
- 56 B5345 OUTER SHIELD TUBE, 1000 MM - SERVICE PART, CUT TO LENGTH
- 57 B5382 INNER SHIELD TUBE, 1000 MM - SERVICE PART, CUT TO LENGTH
- 58 D107 DANGER DECAL - SHIELD
- 59 D111 DANGER DECAL - STEEL TUBE

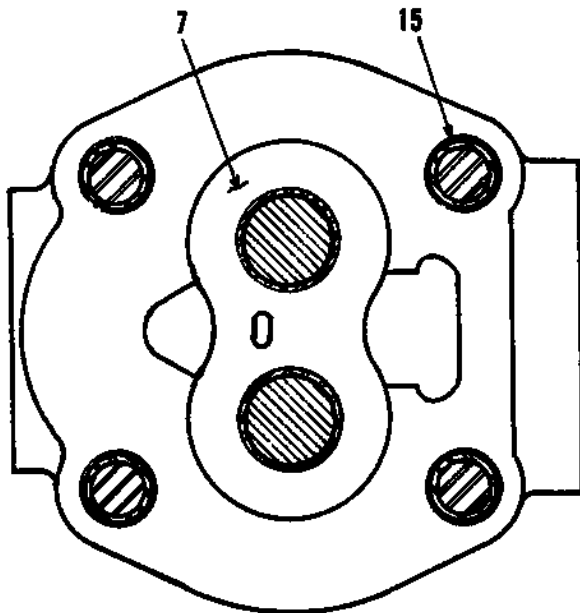
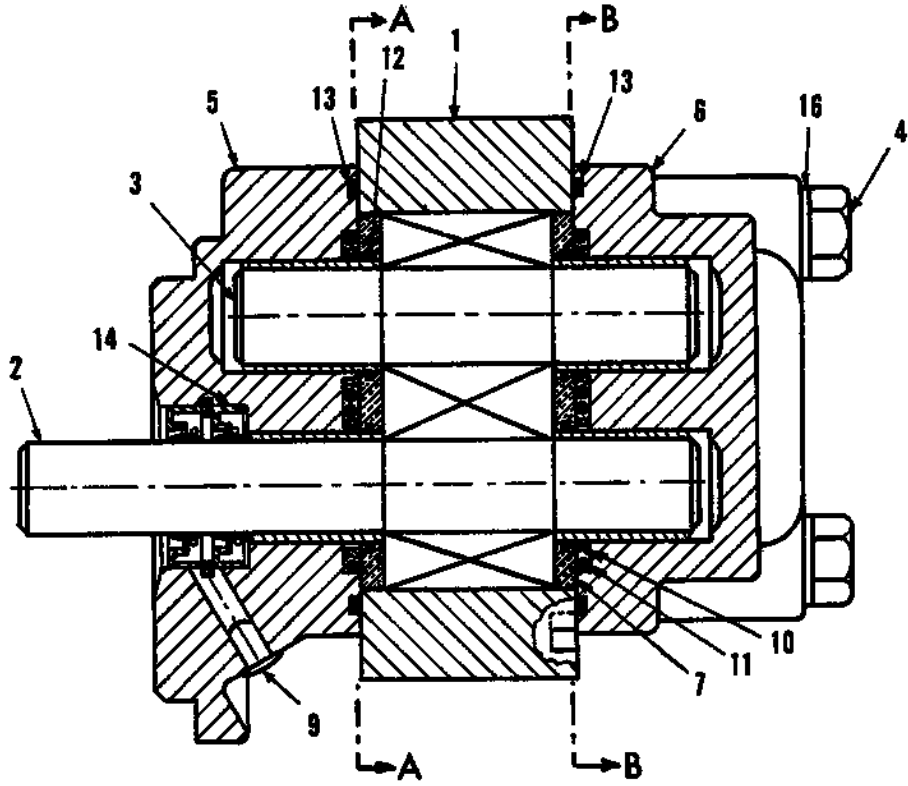
**NOTE:** TO CONVERT TO 1000 RPM, 21-SPLINE INPUT, ADD 1 T10744 ADAPTER.

# B1937, GEAR BOX

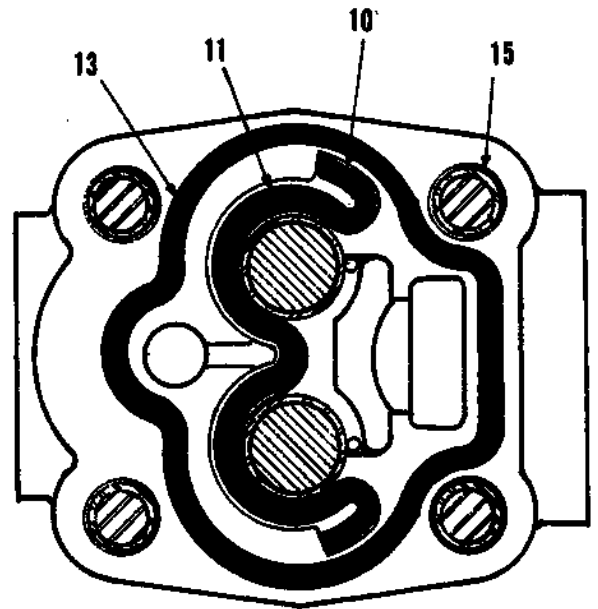


## GEAR BOX, B1937

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1937	GEAR BOX
2	B5018	COVER
3	B5019	HOUSING
4	B5020	PINION, 14 TOOTH
5	B5021	GEAR, 28 TOOTH
6	B5022	BEARING CONE
7	B5023	BEARING CUP
8	B5024	STAKE NUT, 1-3/8-18 THREAD
9	B5025	SNAP RING
10	B5026	STAKE NUT, 1-1/2-18 THREAD
11	B5027	INPUT SHAFT, 1-3/8 - 6B SPLINE
12	B5028	OUTPUT SHAFT
13	B5029	KEY, 5/16 X 1" LONG, HARDENED
14	B5030	KEY, 5/16 X 2" LONG, HARDENED
15	B5031	VENT PLUG, 1/8 PIPE
16	B5032	SEAL
17	B5033	GASKET
18	B5034	SHIM
19	F1196	SQUARE HEAD PIPE PLUG, 3/8
20	F1197	HEX SOCKET PIPE PLUG, 3/8
21	F1198	HEX BUSHING, 3/8 X 1/8 PIPE
22	X2A0310063	CAP SCREW, 5/16-18 UNC X 5/8



SECTION A-A



SECTION B-B

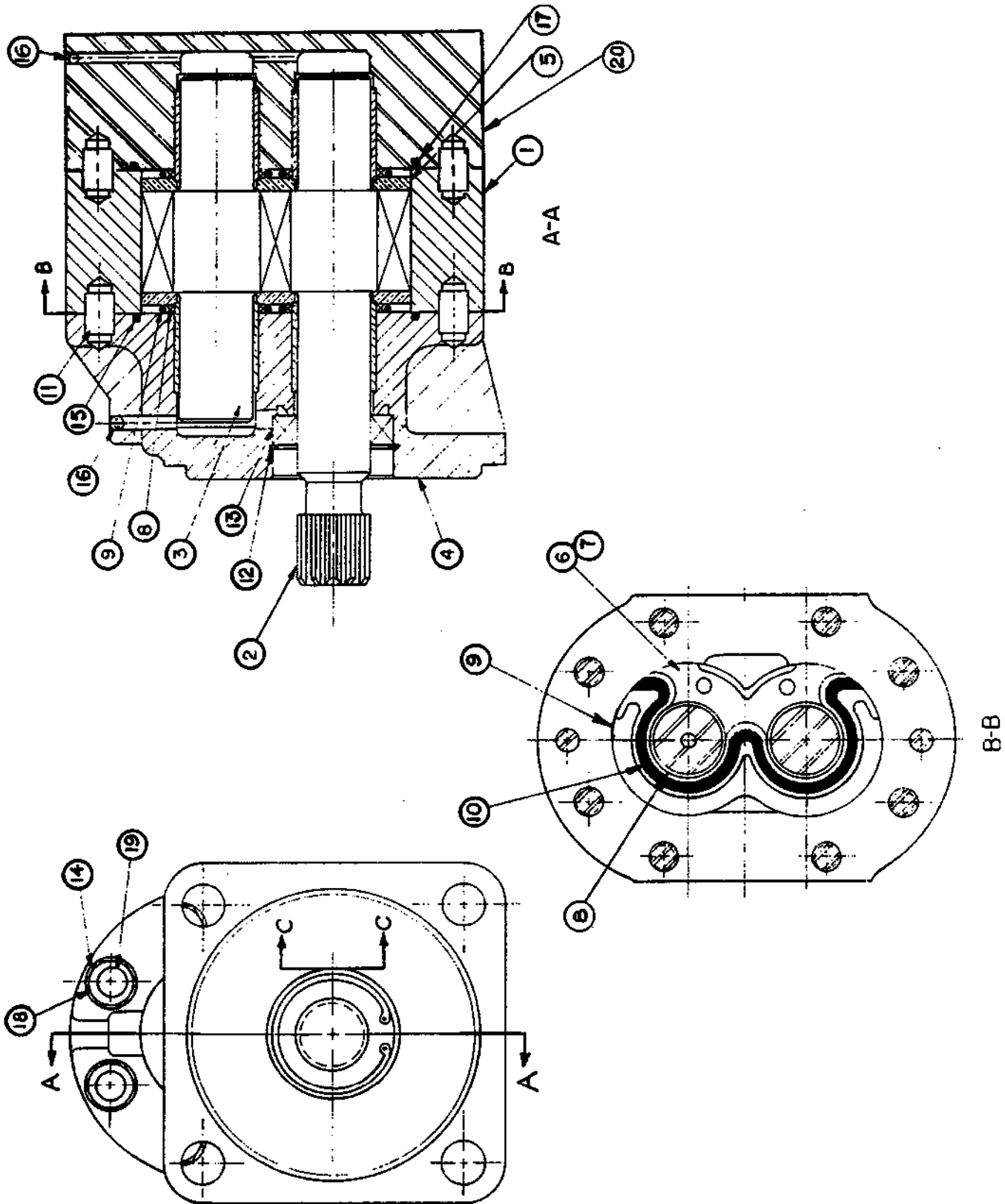
**GEAR PUMP, 7 GPM  
B5110**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B5133	GEAR PLATE
2	B5134	DRIVE GEAR
3	B5135	IDLER GEAR
4	B5136	CAP SCREW
5	B5137	FLANGE
6	B5138	COVER PLATE
7	B5059	SNAP RING
8	B5140	PRESSURE PLATE
9	B5141	PLUG
10	B5142	BACKUP RING
11	B5143	O-RING
12	B5144	O-RING
13	B5145	O-RING
14	B5146	SEAL
15	B5147	DOWEL
16	B5148	WASHER

NOT SHOWN:

B5071	KEY
B5139	SOFT GOODS SERVICE KIT
B5149	SHAFT SEAL KIT

HYDRAULIC GEAR PUMP, SERIAL NUMBER 047 AND LATER  
B5208





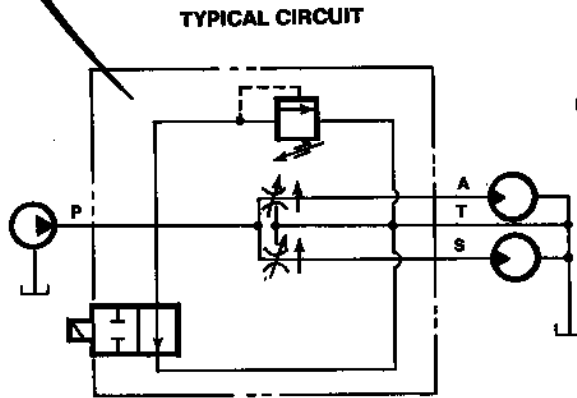
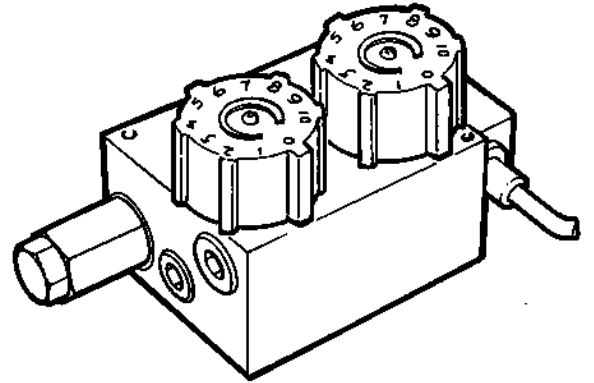
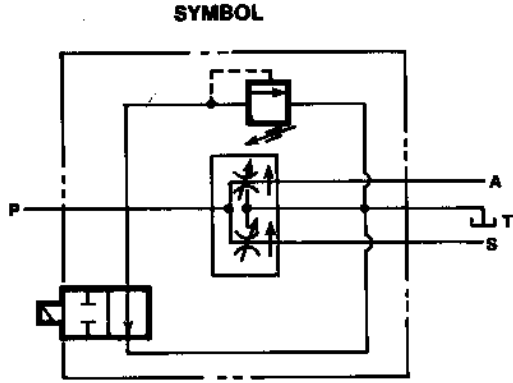
**HYDRAULIC GEAR PUMP, SERIAL NUMBER 047 AND LATER  
B5208**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B5231	FRONT SECTION BODY
2	B5036	FRONT DRIVE GEAR, B5208 PUMP
3	B1788	IDLER
4	B1789	FLANGE
5	B1790	PRESSURE PLATE
6	B1791	TOP ISOLATION PLATE
7	B1792	BOTTOM ISOLATION PLATE
8	B1794	BACKUP RING
9	B1793	RING RETAINER
10	B1795	O-RING
11	B1796	DOWEL
12	B1797	SNAP RING
13	B1798	SEAL
14	B1799	FLAT WASHER
15	B1801	O-RING, FRONT
16	B1804	BALL
17	B5232	O-RING, REAR
18		NUT, HEAT TREATED ½-20 UNF
19	B5233	STUD (*), ½-20 UNF
20	B5234	COVER PLATE, ORB FLANGE SIDE PORTS

NOT SHOWN:

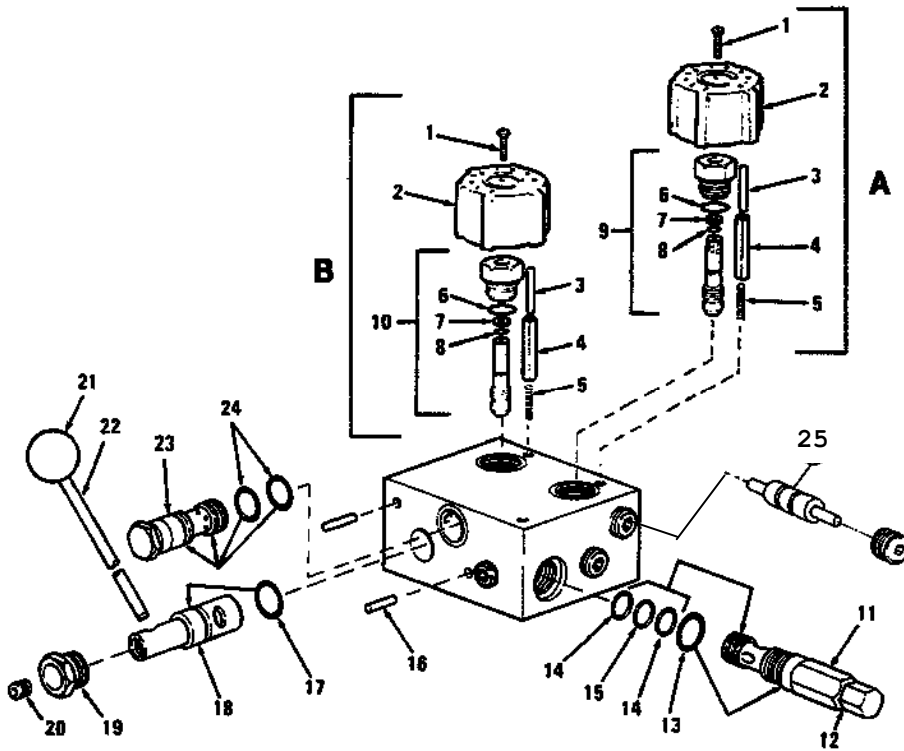
B5235	SOFT GOODS SERVICE KIT
B5236	SHAFT SEAL KIT
B5237	KEY

**DUAL FLOW REGULATOR, B5357  
WITH REMOTE ON/OFF AND INTERNAL RELIEF VALVE**



**DUAL FLOW REGULATOR WITH BUILT-IN  
ON-OFF CONTROL & SYSTEM RELIEF**

**DUAL FLOW REGULATOR, B1679**



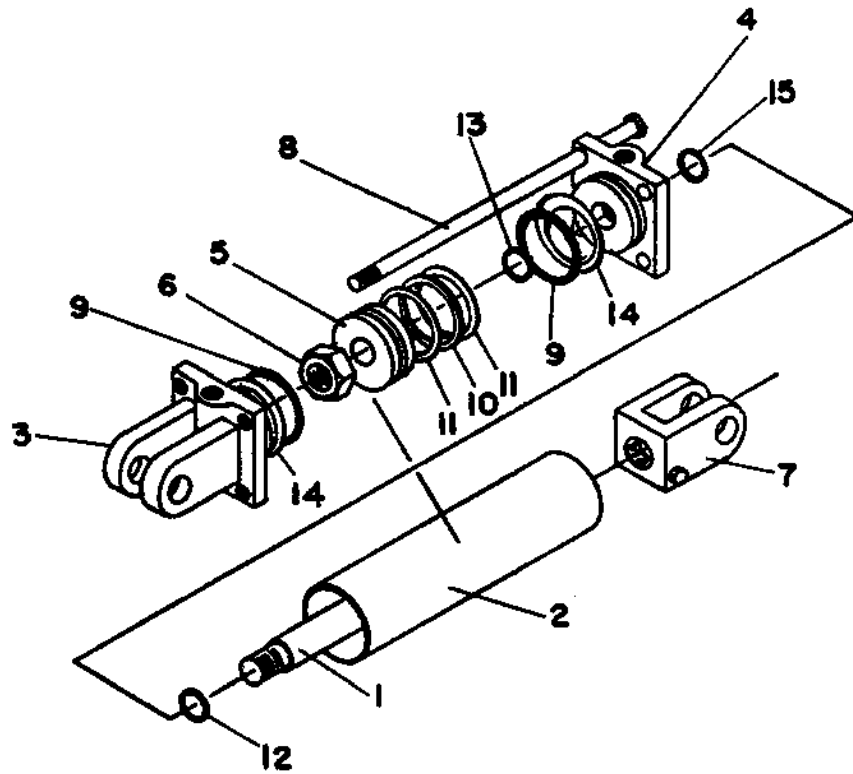
**DUAL FLOW REGULATOR, B5357  
WITH REMOTE ON/OFF AND INTERNAL RELIEF VALVE  
B1679, PRIOR TO 1999  
WITH MANUAL ON/OFF AND INTERNAL RELIEF VALVE**

**NOTE:** NOT ALL PARTS SHOWN ARE SERVICEABLE AT THE USER'S DISCRETION.  
THE PART NUMBERS SHOWN ARE THE ITEMS WE HAVE BEEN ABLE TO  
OBTAIN FROM THE MANUFACTURER.

**LOVE PART NO.**

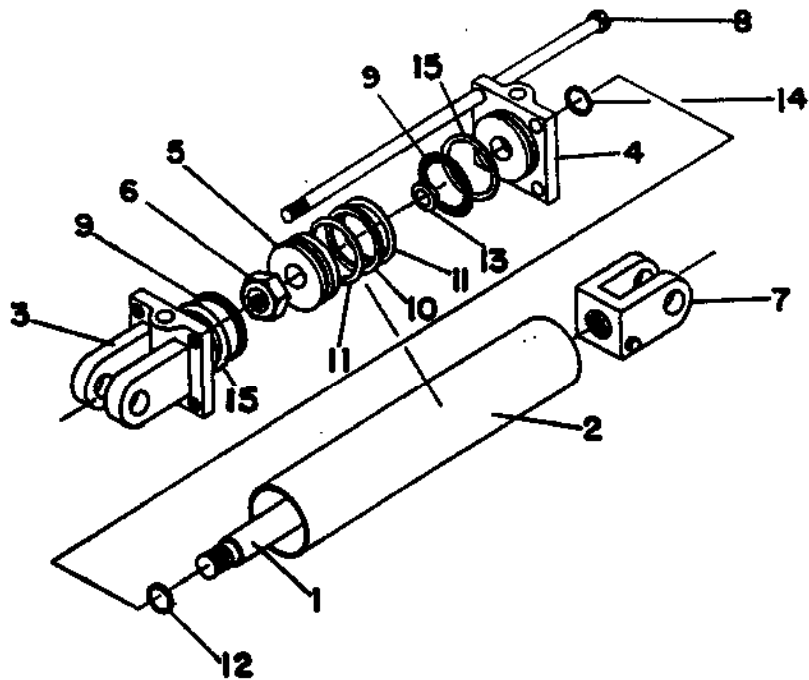
<u>KEY</u>	<u>DESCRIPTION</u>	<u>B5357</u>	<u>B1679</u>
1	SCREW	B5412	B5412
2	HAND KNOB	B5363	B5363
3	DOWEL PIN		
4	ROLL PIN		
5	SPRING		
6	O-RING, VITON}		
7	BACK-UP RING, TEFLON} FOR ADJUST ASSY		
8	O-RING, VITON}		
9	AUGER ADJUST ASSEMBLY, 30 GPM	B5410	
10	SPINNER ADJUST ASSEMBLY, 10 GPM	B5411	
11	RELIEF CARTRIDGE	B5424	B5423
12	GASKET}		
13	O-RING, VITON} FOR RELIEF VALVE		
14	BACK-UP RING, TEFLON}		
15	O-RING, VITON}		
16	ROLL PIN		
17	O-RING, DUMP STEM		USE 1
18	STEM		USE 1
19	PLUG		USE 1
20	SET SCREW		USE 1
21	HAND KNOB		USE 1
22	LEVER		USE 1
23	BY-PASS ASSEMBLY		USE 1
24	O-RING, VITON		USE 2
25	SPOOL ASSEMBLY	USE 1	USE 1
<b>NOT SHOWN:</b>			
	ON/OFF CARTRIDGE ARMATURE ONLY	B5414	NONE
	COIL	B5415	NONE
	ON/OFF SOLENOID CARTRIDGE ASSY COMPL.	B5416	NONE

## F3514 PARTS BREAKDOWN



---

## F3515 PARTS BREAKDOWN



**F3514 PARTS BREAKDOWN  
STEERING CYLINDER, 2-1/2" X 6" SAE**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1729	PISTON ROD
2	B1730	TUBE
3	B5225	BUTT
4	B5226	GLAND
5	B1733	PISTON
6	B1734	LOCKNUT
7	B1735	CLEVIS
8	B1736	TIE ROD
9		O-RING (*)
10		O-RING, PISTON (*)
11		BACKUP RING, PISTON (*)
12		SMALL O-RING (*)
13	B5321	U-CUP (*) 1-1/8 BORE (ROD)
14		BACKUP RING (*)
15		WIPER (*)
	B1744	PACKING KIT, 2-1/2 BORE X 1-1/8 ROD

PARTS MARKED (\*) ARE IN PACKING KIT, B1744. ALL PARTS ON PIPE PORT AND SAE PORT CYLINDERS ARE THE SAME EXCEPT THE BUTT AND GLAND. PACKING KITS ARE INTERCHANGEABLE.

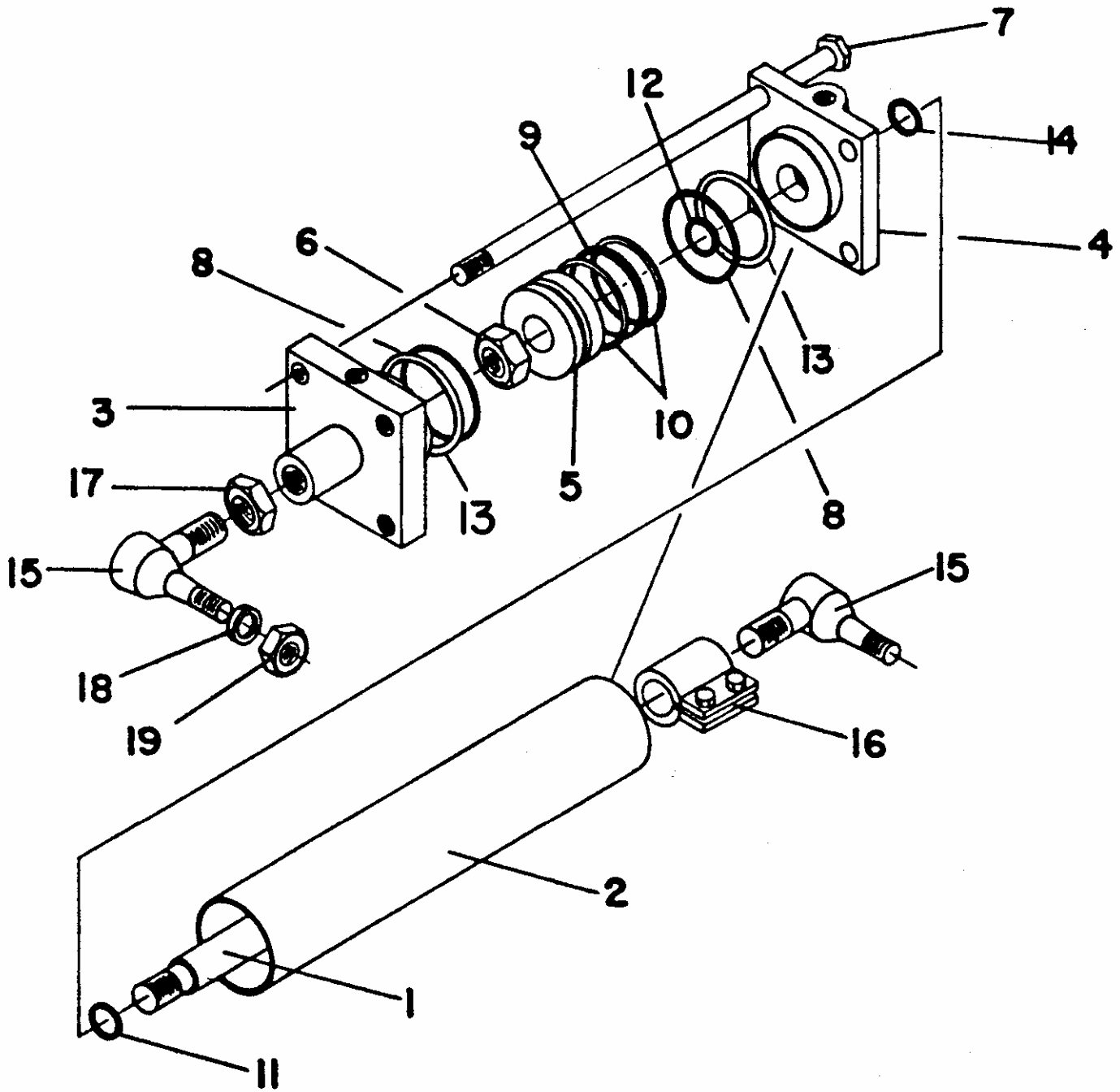
---

**B2521 PARTS BREAKDOWN ASSY.  
BELT LIFT CYLINDER, 2" X 12" SAE**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1757	PISTON ROD
2	B1758	TUBE
3	B5227	BUTT
4	B5228	GLAND
5	B1761	PISTON
6	B1734	LOCKNUT
7	B1735	CLEVIS
8	B1762	TIE ROD
9		O-RING (*)
10		O-RING, PISTON (*), SERIAL NUMBERS TO 076
11		BACKUP RING, PISTON (*), SERIAL NUMBERS TO 076
	B5308	PACKING, U-CUP (*), USE IN PLACE OF KEY 10 & 11, SERIAL NUMBER 076 & LARGER
12		SMALL O-RING (*)
13	B5321	U-CUP (*) 1-1/8 BORE (ROD)
14		WIPER (*)
15		BACKUP RING (*)
	B5072	PACKING KIT, 2 BORE X 1-1/8 ROD
	F3515	CYLINDER ONLY, 2" X 12" SAE

PARTS MARKED (\*) ARE IN PACKING KIT, B5072. ALL PARTS ON PIPE PORT AND SAE PORT CYLINDERS ARE THE SAME EXCEPT THE BUTT AND GLAND. PACKING KITS ARE INTERCHANGEABLE.

B2496 PARTS BREAKDOWN



**B2496 SAE PORT CYLINDERS**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1745	PISTON ROD
2	B1746	TUBE
3	B2495	CYLINDER BUTT END, SAE O-RING
4	B5037	GLAND
5	B1748	PISTON
6	B1734	LOCKNUT
7	B1749	TIE ROD
8		O-RING (*)
9		O-RING, PISTON (*)
10		BACK UP RING (*)
11		SMALL O-RING (*)
12	B5039	U-CUP (*) 1-3/8 BORE (ROD)
13		BACKUP RING (*)
14		WIPER (*)
15	CD535	BALL JOINT, 1" RIGHT HAND
16	B1071	ROD END ADAPTER, 1-1/8 -12 THREAD
17	CD537	JAM NUT, 1"
18	X3B075	LOCK WASHER, 3/4
19	X2L062-SLT	SLOTTED NUT, 5/8-18 UNF
	B1756	PACKING KIT, 3-1/2 BORE X 1-3/8 ROD

PARTS MARKED (\*) ARE IN PACKING KIT B1756. ALL PARTS ON PIPE PORT AND SAE PORT CYLINDERS ARE THE SAME EXCEPT THE BUTT AND GLAND. PACKING KITS ARE INTERCHANGEABLE.





**B2604 LEFT WHEEL CYLINDER ASSEMBLY  
ASSEMBLE AS SHOWN**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1757	PISTON ROD
2	B1758	TUBE
3	B5225	BUTT, SAE, SERIAL #049 UP
	B1759	BUTT, NPT, SERIAL #034 TO #047
4	B5229	GLAND, SAE, SERIAL #049 UP
	B1760	GLAND, NPT, SERIAL #034 TO #047
5	B1761	PISTON
6	B1734	LOCKNUT
7	B1735	CLEVIS
8	B1762	TIE ROD
9		O-RING (*)
10		O-RING, PISTON (*), SERIAL NUMBERS TO 076
11		BACKUP RING, PISTON (*), SERIAL NUMBERS TO 076
	B5311	PACKING, U-CUP (*), USE IN PLACE OF KEY 10 & 11, SERIAL NUMBER 076 & LATER, 2-1/2 OD CYLINDER
12		SMALL O-RING (*)
13		ROD O-RING (*), SERIAL NUMBERS TO 076
14		BACKUP RING (*), SERIAL NUMBERS TO 076
15		WIPER (*)
16	A1587	HYDR CYLINDER BREATHER PLUG, NPT
	F1704	HYDR CYLINDER BREATHER PLUG, ORB
17	R14149	LINE THROTTLE VALVE, NPT
	F1705	SAE #8 ORB RESTRICTOR FITTING
		F10086, O-RING
	B5224	PACKING KIT, 2-1/2 BORE X 1-1/4 ROD
	F3516	HYDRAULIC CYLINDER ONLY, 2-1/2" X 12" SAE, SERIAL #049 UP
	F3513	HYDRAULIC CYLINDER ONLY, 2-1/2" X 12" NPT, SERIAL #034 TO #047

PARTS MARKED (\*) ARE IN PACKING KIT, B5224. ALL PARTS ON PIPE PORT AND SAE PORT CYLINDERS ARE THE SAME EXCEPT THE BUTT AND GLAND. PACKING KITS ARE INTERCHANGEABLE.

**B2605 LEFT WHEEL CYLINDER ASSEMBLY  
ASSEMBLE AS SHOWN**

**B5547 CONVEYOR LIFT CYLINDER ASSEMBLY**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
	B5215	VELOCITY FUSE, ORB
	F1704	BREATHER PLUG, ORB
	F3515	HYDRAULIC CYLINDER ONLY, 2" X 12" SAE
	B5072	PACKING KIT, 2 BORE X 1-1/8 ROD
	F3515	CYLINDER ONLY, 2" X 12" SAE

PARTS MARKED (\*) ARE IN PACKING KIT, B5072. ALL PARTS ON PIPE PORT AND SAE PORT CYLINDERS ARE THE SAME EXCEPT THE BUTT AND GLAND. PACKING KITS ARE INTERCHANGEABLE.



# BELT CARRIER FRAME, DRIVES, BELT CARRIER ASSEMBLIES



**WARNING - STOP MACHINERY TO CLEAN, ADJUST, OIL, OR REPAIR**  
**WARNING - KEEP HANDS, FEET, AND CLOTHING AWAY FROM POWER DRIVEN PARTS!**  
**WARNING - SHIELDS ARE FOR YOUR PROTECTION - KEEP THEM IN PLACE!**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1020	BELT ASSEMBLY PIVOT LATCH
2	B1032	BELT DRIVE PLATE
3	B1035	BEARING, BELT DRIVE
4	B2961	REAR BELT GUARD, OSHA SHIELDING (AFTER 1989)
	B1067	REAR BELT GUARD, PRIOR TO 1989
5	B1132	TRIP ROD HANGER
6	B1133	TRIP ROD
7	B1134	DRIVE END BAR
8	B1136	BAR CLAMP
9	B1140	LEFT GEAR COVER
10	B1141	CENTER GEAR COVER
11	B1142	RIGHT GEAR COVER
12	B1143	INPUT SHIELD HALF (4)



**WARNING - SHIELDS ARE FOR YOUR PROTECTION - KEEP THEM IN PLACE!**

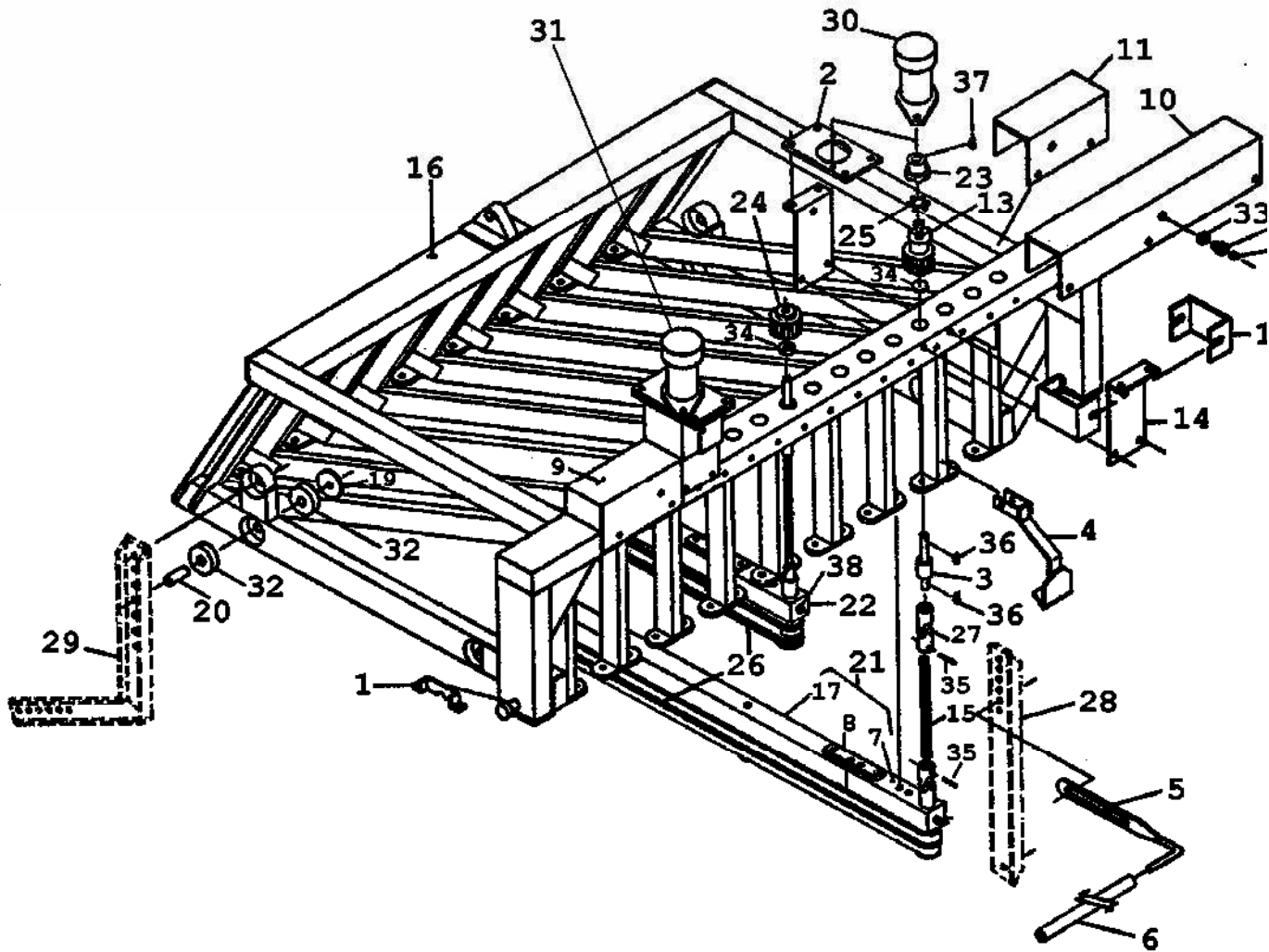
	D24	DECAL, BE CAREFUL
13	B1166H	INPUT GEAR, HARDENED GEAR
14	B1167	MOTOR MOUNT
15	B1199	BELT DRIVE SHAFT
16	B1303	BELT DRIVE FRAME, 8 ON 6" , 72" MAIN FRAME
17	B1317	BELT CARRIER BAR
18	B1320	GREASE TUBE
19	B1368	SHAKER MOUNT WASHER
20	B1369	SHAKER MOUNT SLEEVE
21	B1394	LH CENTER BELT CARRIER BAR (6) <b>(REFER TO PAGE 3-33)</b>
22	B1395	RH CENTER BELT CARRIER BAR (6) <b>(REFER TO PAGE 3-33)</b>
	B1390	LH OUTER BELT CARRIER BAR ASSEMBLY, (1)
	B1391	RH OUTER BELT CARRIER BAR ASSEMBLY, (1)
23	B1590	COUPLING HALF, 1"
24	B1592H	IDLER GEAR, HARDENED TEETH
25	B1619	COUPLING INSERT
26	B1800	PICKUP BELT



**WARNING - KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER DRIVEN PARTS!**

	D18	DECAL, CAUTION
27	B2417	UNIVERSAL JOINT ASSEMBLY <b>(REFER TO PAGE 3-35)</b>
28	B2671	REAR SHAKER HANGER
29	B2672	LEFT FRONT SHAKER HANGER
	B2673	RIGHT FRONT SHAKER HANGER

BELT CARRIER FRAME, DRIVES, BELT CARRIER, CONTINUED:



**BELT CARRIER FRAME, DRIVES, BELT CARRIER ASSEMBLIES,  
CONTINUED**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
30	B5395	<b>RIGHT HAND</b> HYDRAULIC MOTOR, COUNTER CLOCKWISE - 1999 & LATER 12.5 CIR, 2 BOLT, 1" SHAFT, 7/8-14 ORB PORTS
31	B5396	<b>LEFT HAND</b> HYDRAULIC MOTOR, CLOCKWISE - 1999 & LATER 12.5 CIR, 2 BOLT, 1" SHAFT, 7/8-14 ORB PORTS
	B5378	HYDRAULIC MOTOR, 2-BOLT 7-8-14 ORB PORTS (PRIOR TO 1999)
32	CD215	RUBBER BUSHING
33	X2D050	HEX JAM NUT, 1/2-13 UNC
34	X3C075	3/4 FLAT WASHER (16)
35	X3G250-175	A20318, 1/4 X 1-3/4 SPRING PIN
36	X3H606	WOODRUFF KEY, #606 - 3/16 X 3/4 (WAS B1819)
37	X3H809	WOODRUFF KEY, #809 - 1/4 X 1-8 (WAS B1822)
38	X6A5010	STRAIGHT ZERK, 1/4-28 THD

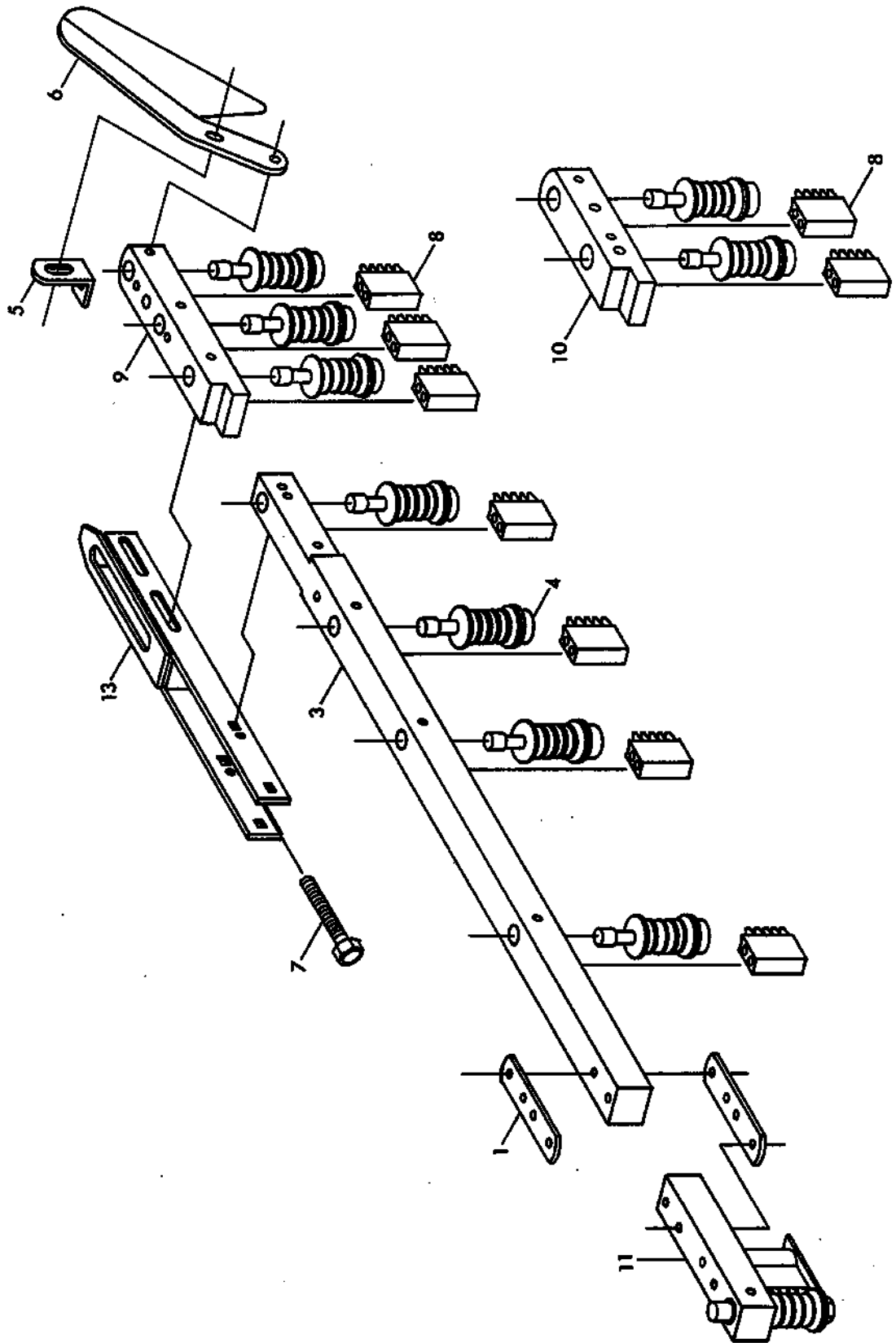
**NOT SHOWN:**

31	B2958	MOUNT, BELT DRIVE SHIELDS
32	B2959	SHIELD, LEFT HAND
33	B2960	SHIELD, RIGHT HAND

**HEAVY DUTY PICKUP OPTION PARTS**

B2909	TUBE, DIAGONAL BRACE (2)
B2910	ADJUSTABLE LINK, DIAGONAL BRACE (2)
B2951	BELT SQUEEZE SOCKET (7)
B2952	BELT SQUEEZE STUD (7)
X2D050	1/2-13 UNC HEX JAM NUT (22)
X2A0500125	1/2-13 UNC X 1-1/4 CAP SCREW (14)
	ADD 12 IDLER SHEAVE ASSEMBLIES, B1351
	ADD 12 THREE IDLER NOSES, B2448
	ADD 12 IDLER SHEAVE SCRAPER, B2447

# BELT CARRIER ASSEMBLIES



## BELT CARRIER ASSEMBLIES

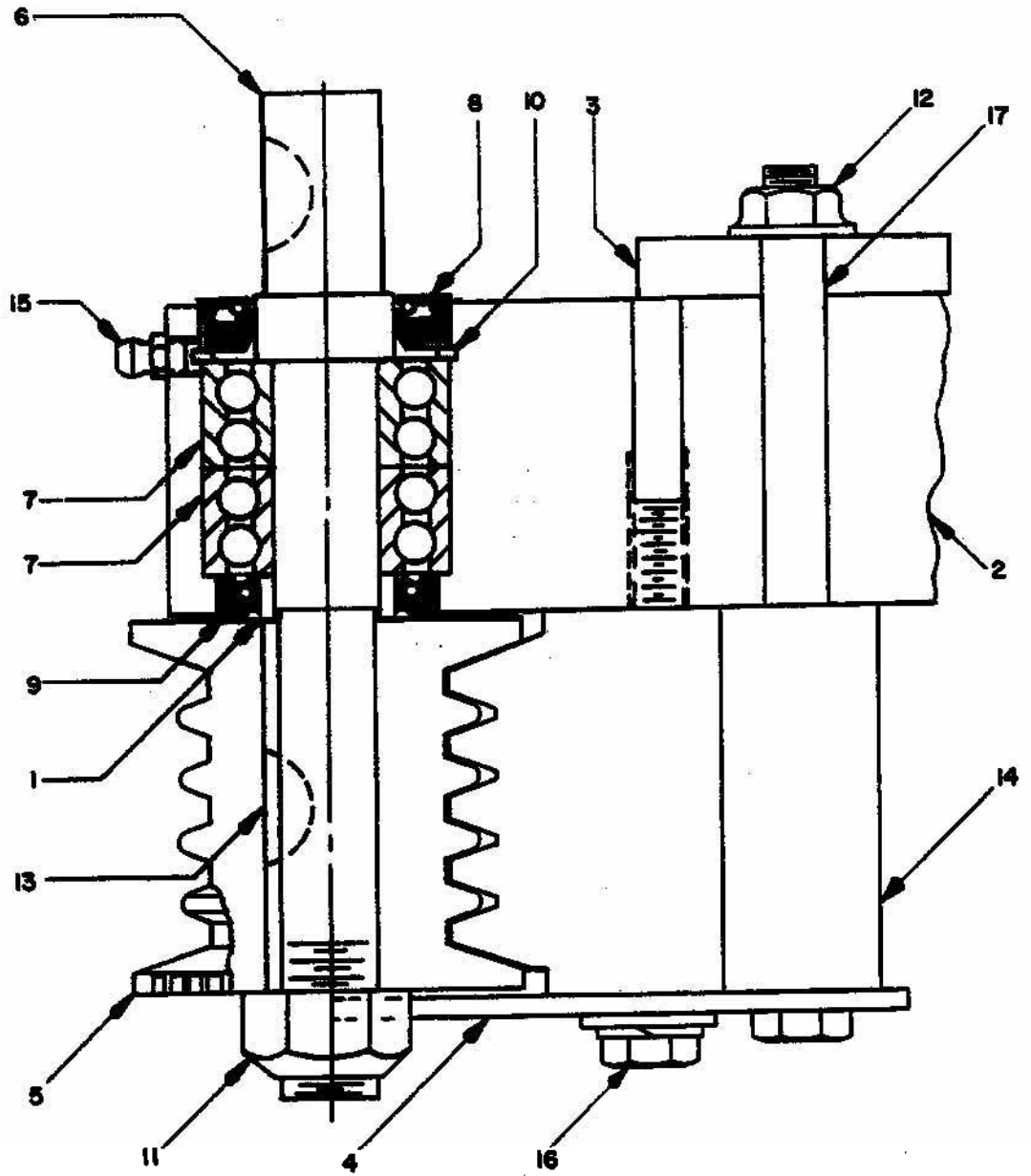
<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1136	CLAMP
3	B1317	BELT CARRIER BAR
4	B1351	IDLER SHEAVE ASSEMBLY
5	B1383	OUTER DIVIDER MOUNT
6	B1384	OUTER DIVIDER
7	X2A0500401	B1663, ½-13 UNC X 4, FULL THREAD
8	B2447	IDLER SHEAVE SCRAPER
9	B2448	THREE IDLER NOSE (4, STANDARD; 16 HEAVY DUTY)
10	B2449	TWO IDLER NOSE, STANDARD ONLY
11	B2450	DRIVE END ASSEMBLY
13	B2452	BELT TIGHTENER
	B1390	LEFT OUTER BELT CARRIER BAR
	B1391	RIGHT OUTER BELT CARRIER BAR
	B1392	RH 3 IDLER BELT CARRIER BAR (STD & HEAVY DUTY)
	B1393	LH 3 IDLER BELT CARRIER BAR (STD & HEAVY DUTY)
	B1394	LEFT CENTER BELT CARRIER (STANDARD ONLY)
	B1395	RIGHT CENTER BELT CARRIER BAR (STANDARD ONLY)

NOT SHOWN:

B1800 BELT, SYMMETRICAL PICKUP

B1800X BELT, SYMMETRICAL PICKUP - NOTCHED STYLE

DRIVE END ASSEMBLY, B2450





## DRIVE END ASSEMBLY, B2450

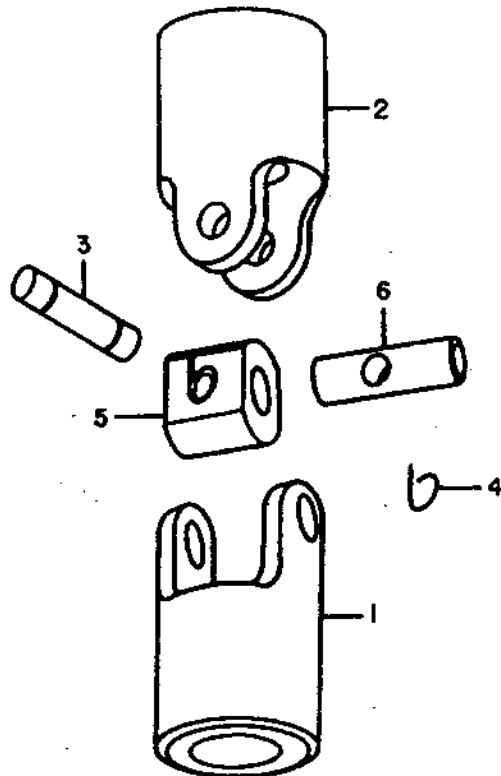
<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1116	DRIVE COLLAR
2	B1134	DRIVE END BAR
3	B1303	BELT DRIVE FRAME, 8 ON 6", 72"
4	B1175	BELT SHIELD
5	B1312	DRIVE SHEAVE
6	B1313	DRIVE SHAFT
7	B1572	DRIVE SHAFT BEARING
8	B1573	UPPER SEAL
9	B1574	IDLER & LOWER DRIVE SEAL
10	B1575	SNAP RING
11	X2L062-CON	B1808, 5/8-18 UNF CONE LOCKNUT
12	X2E037-SF2	B1818, 3/8-16 UNC SM FLANGE SIDE
13	X3H606	WOODRUFF KEY, #606 - 3/16 X 3/4 (WAS B1819)
14	B2451	DRIVE SHEAVE SCRAPER
15	X6A5010	STRAIGHT ZERK, 1/4-28
16	X2A0370300	CAP SCREW, 3/8-16 UNC X 3
	X3B037	LOCK WASHER, 3/8
	X3C037	FLAT WASHER, 3/8
17	X2A0370550	CAP SCREW, 3/8-16 UNC X 5-1/2



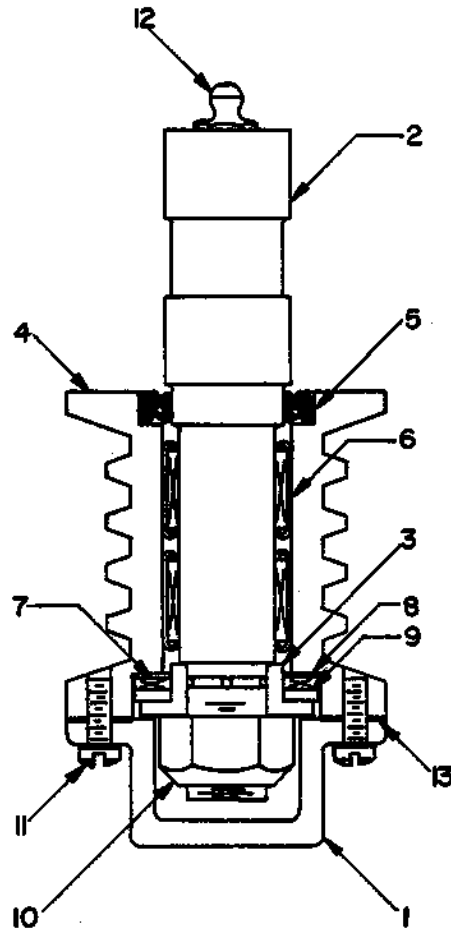
**WARNING - KEEP SHIELDS IN PLACE!**

## UNIVERSAL JOINT ASSEMBLY, B2417

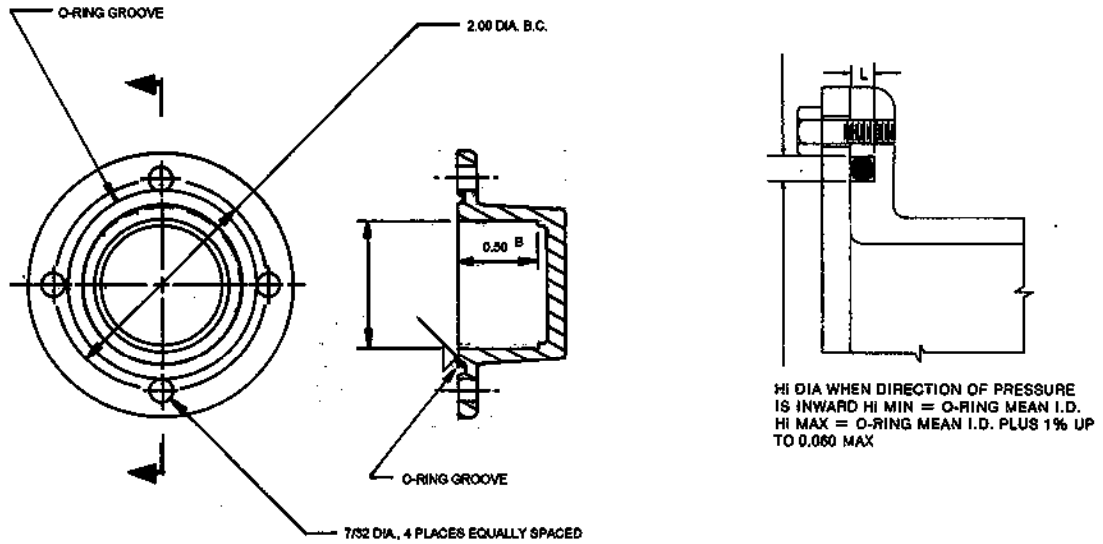
<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B2418	U-JOINT HUB, PIN HALF
2	B2419	U-JOINT HUB, KEY HALF
3	B2427	SMALL JOURNAL
4	B2428	KEEPER
5	B2429	BLOCK
6	B2430	LARGE JOURNAL



IDLER SHEAVE ASSEMBLY, B1351



SERIAL NO. 0113 AND LATER:



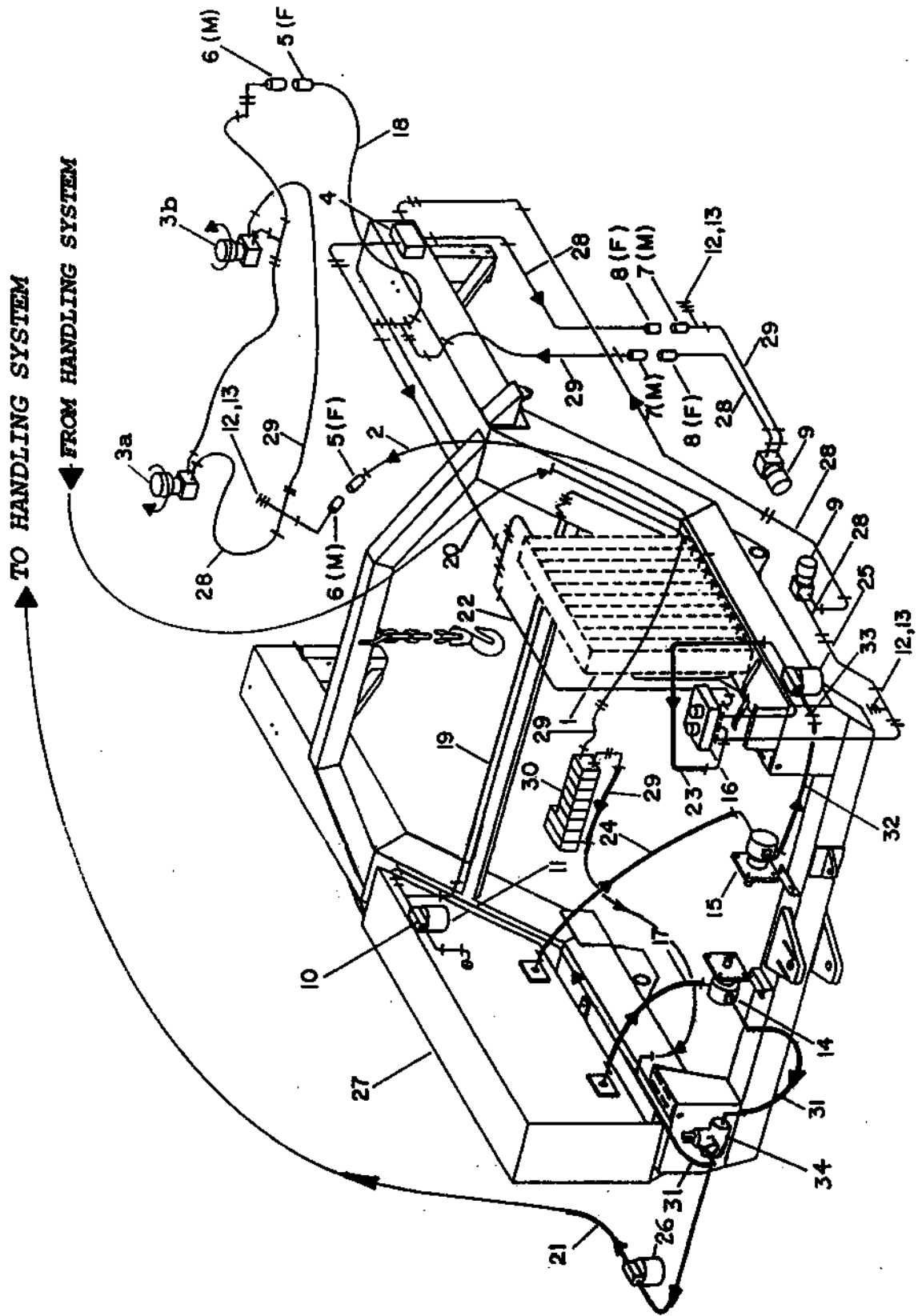
## IDLER SHEAVE ASSEMBLY, B1351

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B1113	IDLER COVER
2	B1314	IDLER SHAFT
3	B1315	IDLER COLLAR
4	B1316	IDLER SHEAVE
5	B1574	IDLER & LOWER DRIVE SEAL
6	3-6	NEEDLE BEARING
7	B1605	NEEDLE THRUST BEARING
8	B1606	THIN RACE
9	B1607	THICK RACE
	B1608	THRUST BEARING COMPLETE
10	X2L062-CON	B1808, 5/8-18 UNF CONE LOCKNUT
11	X2L0100050	B1823, #10-32 X ½ FILLISTER HEAD SCREW
	X3B010	B1824, #10 MED SPLIT LOCK WASHER
12	X6A5000	STRAIGHT ZERK, 1/8-NPT

**2001 REVISION, SERIAL NO. 113 & LATER:**

13		PERMATEX GASKET SEALER, HAS BEEN REPLACED WITH AN O-RING <u>INSIDE</u> THE SCREW HOLES IN THE CAP.
1	B3113	IDLER COVER, O-RING DESIGN
13	B5404	O-RING, 2-029 - IDLER SHEAVE SEAL

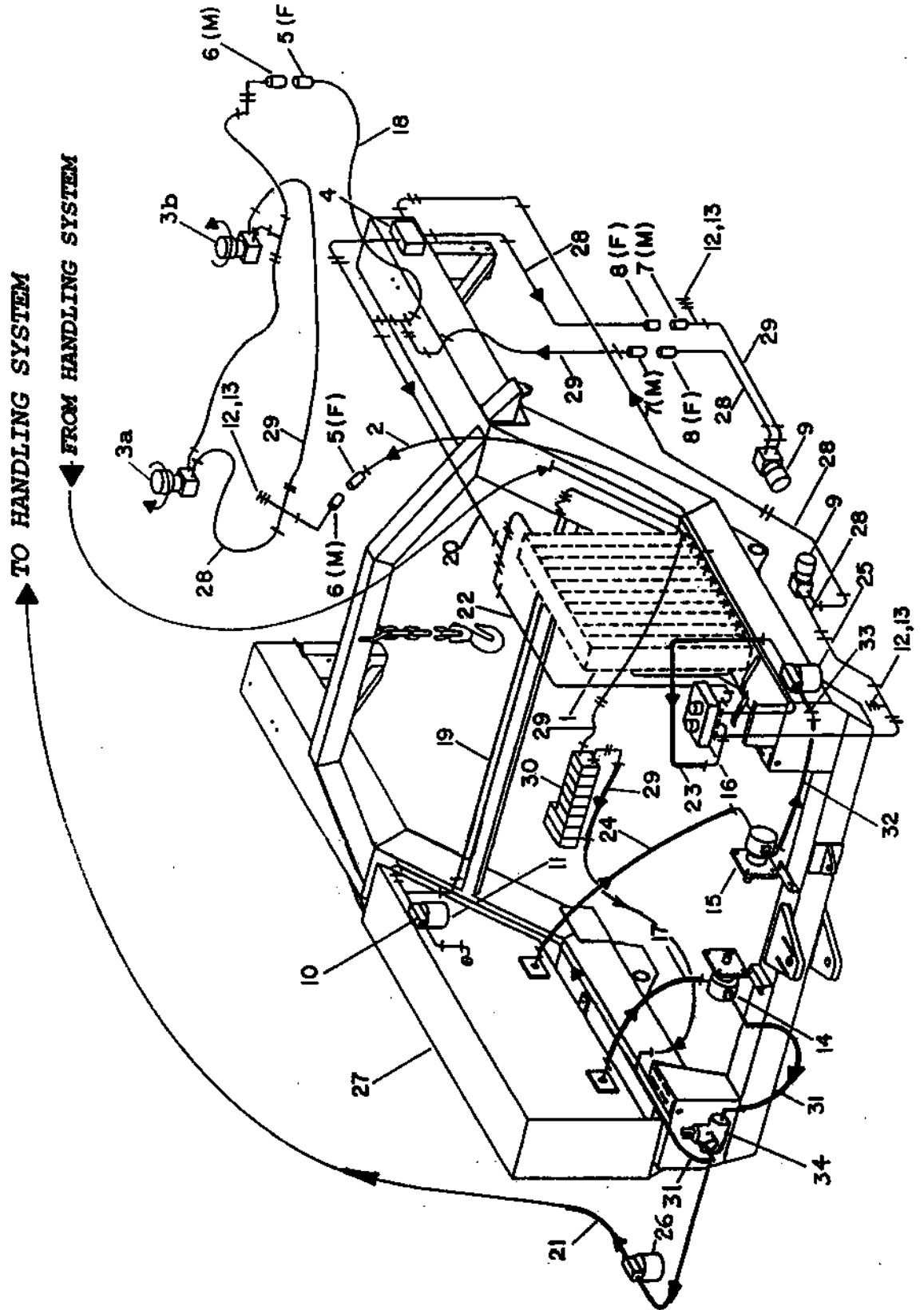
# MOTOR CIRCUITS, ELECTRICAL CONTROLS



**HYDRAULIC SCHEMATIC**  
**MOTOR CIRCUITS, ELECTRICAL CONTROLS**

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B5158	COOLER PACKAGE COMPLETE, SERIAL NUMBER 045 AND LATER
	B5156	COOLER FAN PACKAGE
	B5159	BIRD CAGE GUARD
	B5270	COOLER CORE ONLY, SAE PORTS
2	B1558	HOSE ASSEMBLY, ¾" X 84"
3a	B5395	<b>RIGHT HAND</b> HYDRAULIC MOTOR, COUNTER CLOCKWISE - 1999 & LATER 12.5 CIR, 2 BOLT, 1" SHAFT, 7/8-14 ORB PORTS
3b	B5396	<b>LEFT HAND</b> HYDRAULIC MOTOR, CLOCKWISE - 1999 & LATER 12.5 CIR, 2 BOLT, 1" SHAFT, 7/8-14 ORB PORTS
	B5378	HYDRAULIC MOTOR, 2-BOLT 7-8-14 ORB PORTS (PRIOR TO 1999)
	B1620	HYDRAULIC MOTOR, 2-BOLT, 1/2" NPT PORTS
4	B5398	FLOW CONTROL VALVE, #12 SAE W/O RELIEF
5	B1653	QUICK DISCONNECT COUPLER, 3/4" (2)
6	B1654	QUICK DISCONNECT NIPPLE, 3/4" (2)
7	B1655	QUICK DISCONNECT NIPPLE, 1/2" - 1/2" NPTM
7a	B5182	QUICK DISCONNECT NIPPLE, 1/2" - 1/2" NPTF
8	B1656	QUICK DISCONNECT COUPLER, 1/2" - 1/2" NPTM
9	B5393	HYDRAULIC MOTOR, COUNTER CLOCKWISE - O-RING PORTS
	B5374	HYDRAULIC MOTOR, 4-BOLT ORB PORTS - PRIOR TO 1999
	B1658	HYDRAULIC MOTOR, 4-BOLT PIPE PORTS - PRIOR TO 1998
10	B1913	RETURN FILTER
11	B1914	REPLACEMENT CARTRIDGE
12	B1932	TEST PORT NIPPLE
13	B1936	DUST CAP
14	B5110	GEAR PUMP, 7 GPM ( <b>REFER TO PAGE 3-17</b> )
15	B5208	GEAR PUMP, 30 GPM, SERIAL #047 - ( <b>REFER TO PAGE 3-19</b> )
16	B5357	DUAL FLOW REGULATOR WITH RELIEF AND REMOTE ON/OFF CONTROL
17	B5109	HOSE ASSEMBLY, ¾" X 37"
18	B1961	HOSE ASSEMBLY, ¾" X 32"
19	B5181	HOSE ASSEMBLY, 1" X 77"
20	B5181	HOSE ASSEMBLY, 1" X 77"
21	B5048	HOSE ASSEMBLY, ½" X 30"
22	B1586	HOSE ASSEMBLY, ¾" X 28"
23	B1966	HOSE ASSEMBLY, 1" X 22"
24	B1967	SUCTION HOSE, 1-1/2 X 60"
25	B5164	REPLACEMENT ELEMENT, 10 MICRON, SERIAL #045-
	B5187	VISUAL INDICATOR
26	B5163	REPLACEMENT ELEMENT, 10 MICRON, SERIAL #045 -
	B5187	VISUAL INDICATOR
27	B2490	HYDRAULIC TANK
28	B5377	HOSE ASSEMBLY, 1/2" X 20"
29		<b><u>TO SOLENOID VALVE BANK,</u></b> REFER TO SPECIFIC HANDLING SYSTEM LAYOUT REQUIREMENTS

MOTOR CIRCUITS, ELECTRICAL CONTROLS, CONTINUED:



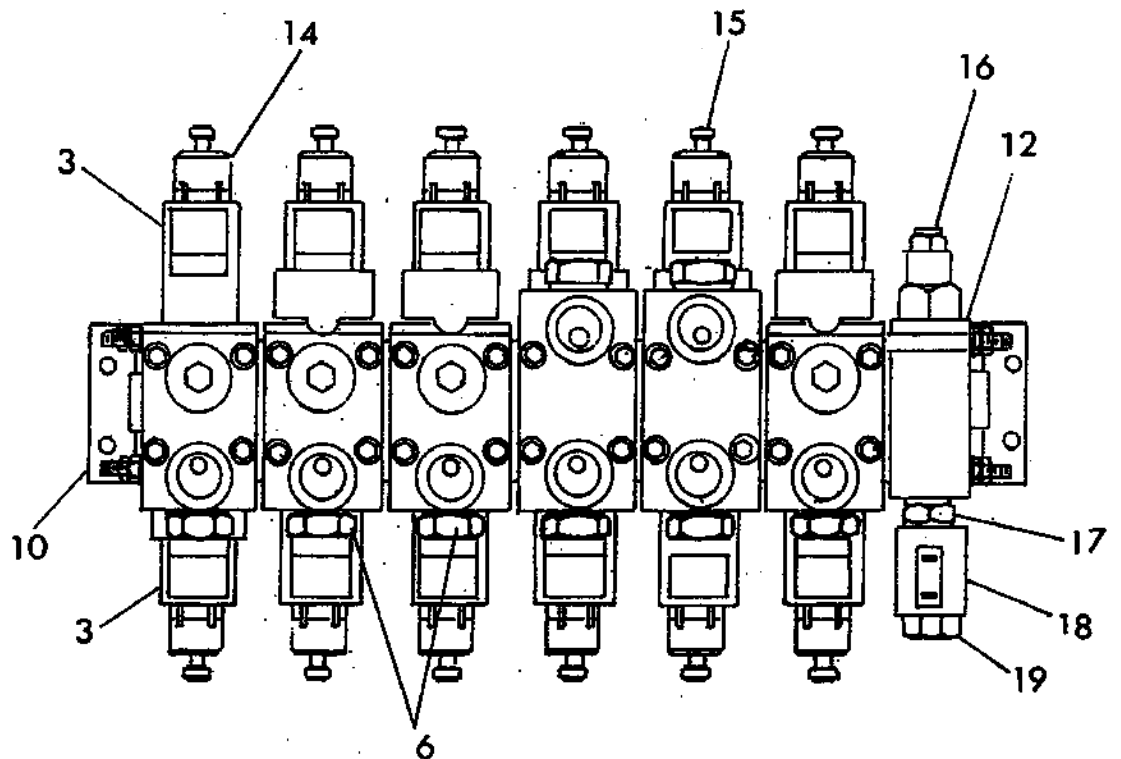
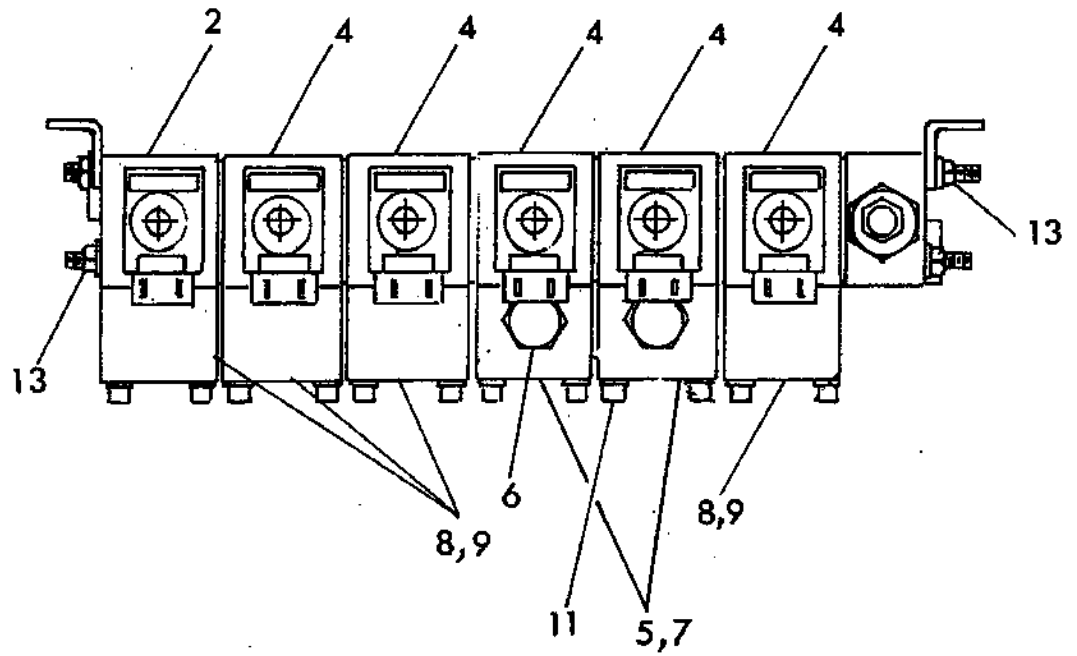
## HYDRAULIC SCHEMATIC

### MOTOR CIRCUITS, ELECTRICAL CONTROLS, CONTINUED

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
30	B5190	SOLENOID VALVE CIRCUIT PACKAGE, 6 MODULE ASSEMBLY <i>(REFER TO PAGE 3-44)</i>
	B5191	SOLENOID VALVE CIRCUIT PACKAGE, 5 MODULE ASSEMBLY <i>(REFER TO PAGE 3-45)</i>
31	B5316	HOSE ASSEMBLY, 1/2" X 22"
32	B5049	HOSE ASSEMBLY, 1" X 26"
33	B5050	HOSE ASSEMBLY, 1" X 13"
34	B5312	SAE RELIEF VALVE
NS	B2539	PRESSURE GAUGE W/COUPLER

# SOLENOID VALVE MODULE

## B5190 AND B5191

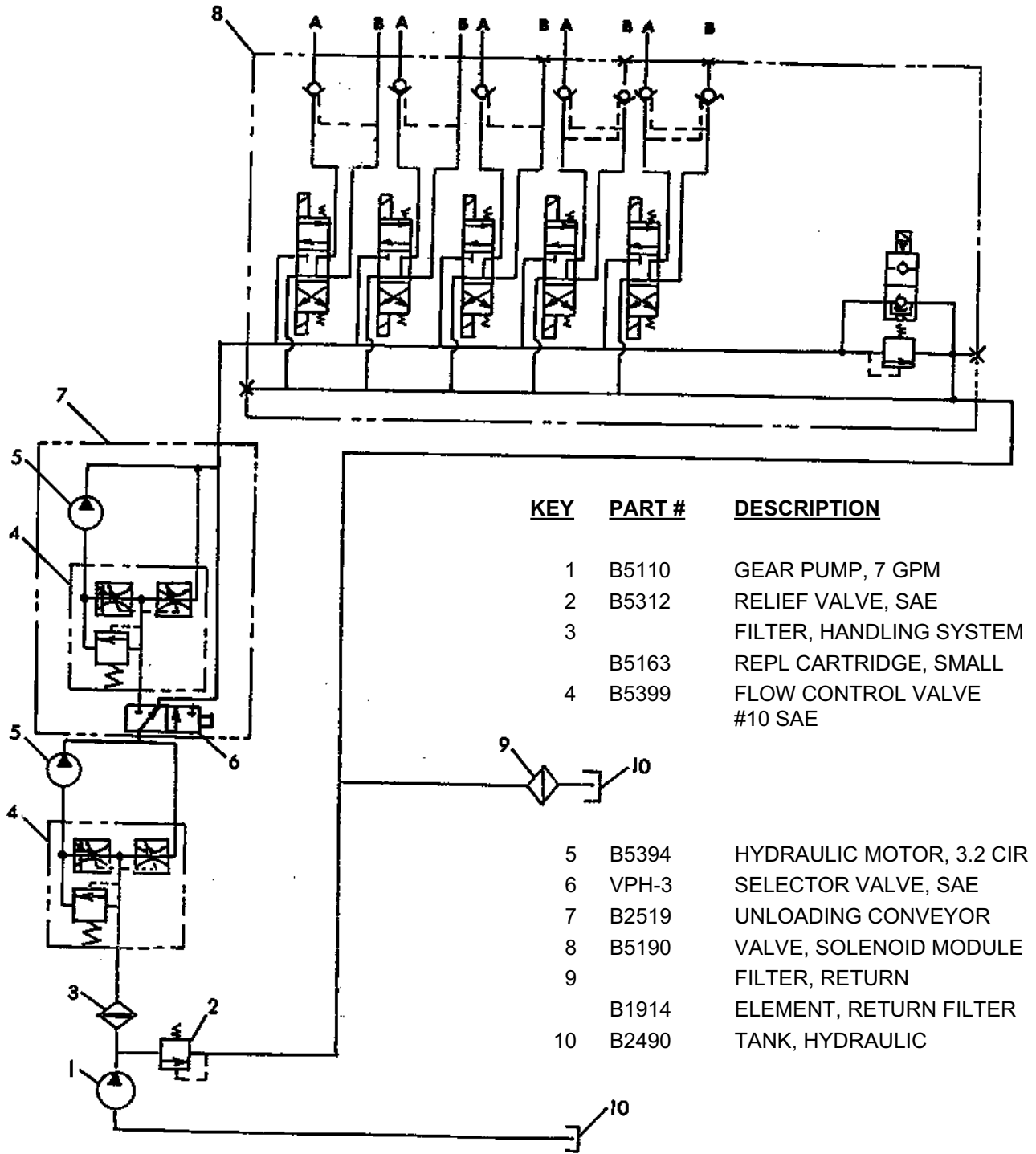




## B5190 AND B5191

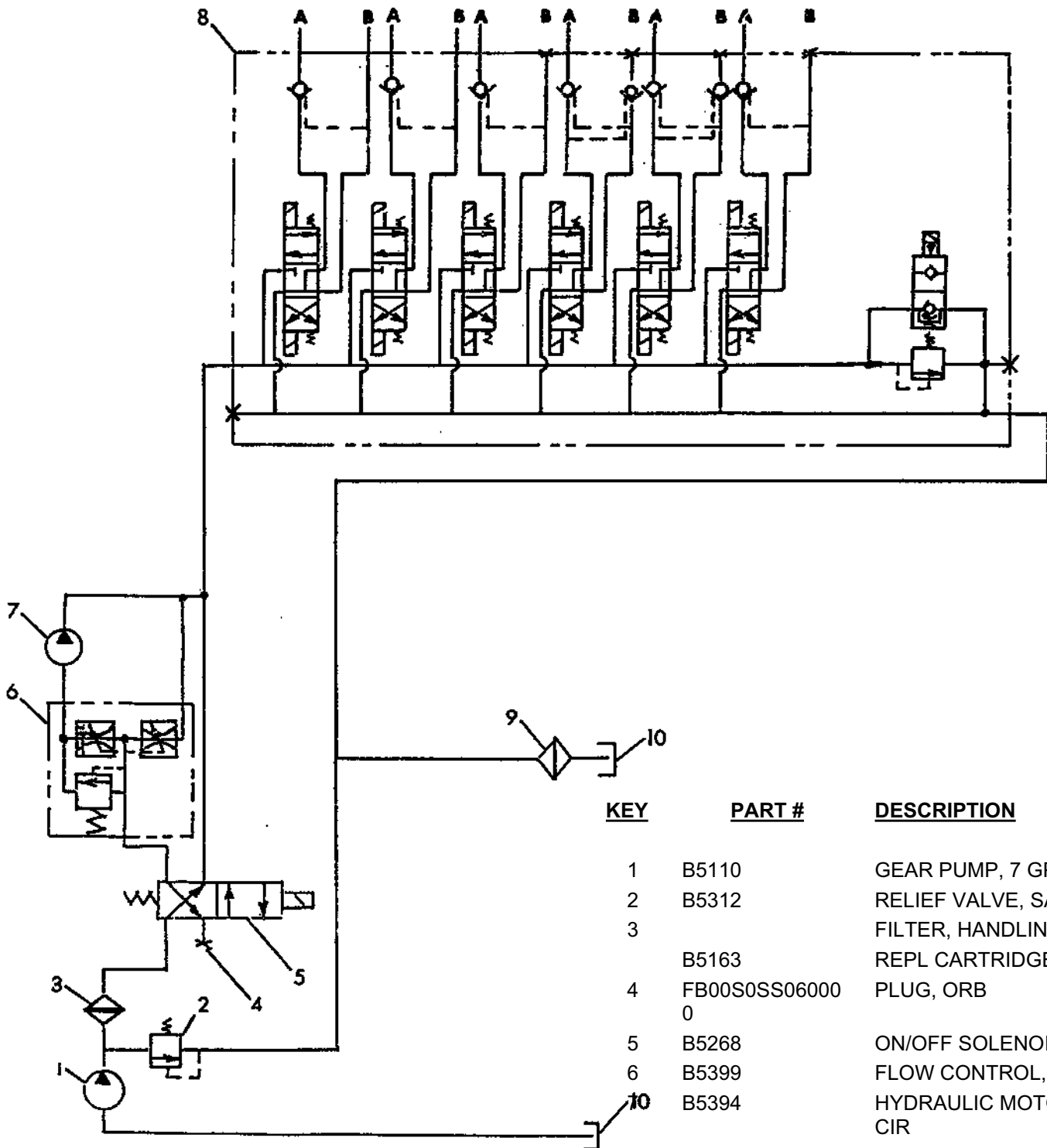
<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	B5190	SOLENOID VALVE CIRCUIT PACKAGE, 6 MODULE ASSEMBLY WITH RELIEF AND UNLOADER COMBINATION
	B5191	SOLENOID VALVE CIRCUIT PACKAGE, 7 MODULE ASSEMBLY WITH RELIEF AND UNLOADER COMBINATION
2	B5238	VALVE ASSEMBLY, END
3	B5239	COIL, 12 VOLT DC
4	B5240	VALVE ASSEMBLY, MIDDLE
5	B5241	BLOCK, DUAL PILOT CHECK
6	B5242	CHECK VALVE, 30 PSI
7	B5243	PISTON, DUAL PILOT CHECK
8	B5244	BLOCK, LOAD CHECK
9	B5245	PISTON, LOAD CHECK
10	B5246	MOUNTING KIT, 7 MODULE ASSY
	B5247	MOUNTING KIT, 6 MODULE ASSY
11	B5248	STACKING KIT
12	B5249	RELIEF AND UNLOADING COMBINATION MODULE
	B5252	RELIEF ONLY MODULE (DEMAND PUMP SYSTEM)
13		1/4-20 UNC HEX JAM NUT
14	B5287	NUT
15	B5288	TUBE ASSEMBLY, ARMATURE
16	B5298	RELIEF VALVE CARTRIDGE
17	B5089	SOLENOID VALVE CARTRIDGE, NORMALLY OPEN
18	B1995	COIL, UNLOADER SOLENOID (BLACK)
19	B5296	CAP NUT
	B5250	SEAL KIT, 5 BANK (FOR B5190 ASSEMBLY)
	B5251	SEAL KIT, 6 BANK (FOR B5191 & B5213 ASSEMBLIES)
	B5282	ASSY, SINGLE PILOT CHECK (1) B5242, CHECK VALVE - 30 PSI (1) B5244, BLOCK - LOAD CHECK (1) B5245, PISTON - LOAD CHECK
	B5283	ASSY, DUAL PILOT CHECK (1) B5241, BLOCK - DUAL CHECK (2) B5242, CHECK VALVE - 30 PSI (1) B5243, PISTON - DUAL CHECK
	B5313	SOLENOID CARTRIDGE COMPLETE (1) B5089, SOLENOID VALVE CARTRIDGE - NORMALLY OPEN (1) B1995, COIL - 12 WATT (BLACK) (1) B5296, CAP NUT

**B5190 SOLENOID VALVE CIRCUIT PACKAGE  
HYDRAULIC SCHEMATIC TRAILER HANDLING SYSTEMS**



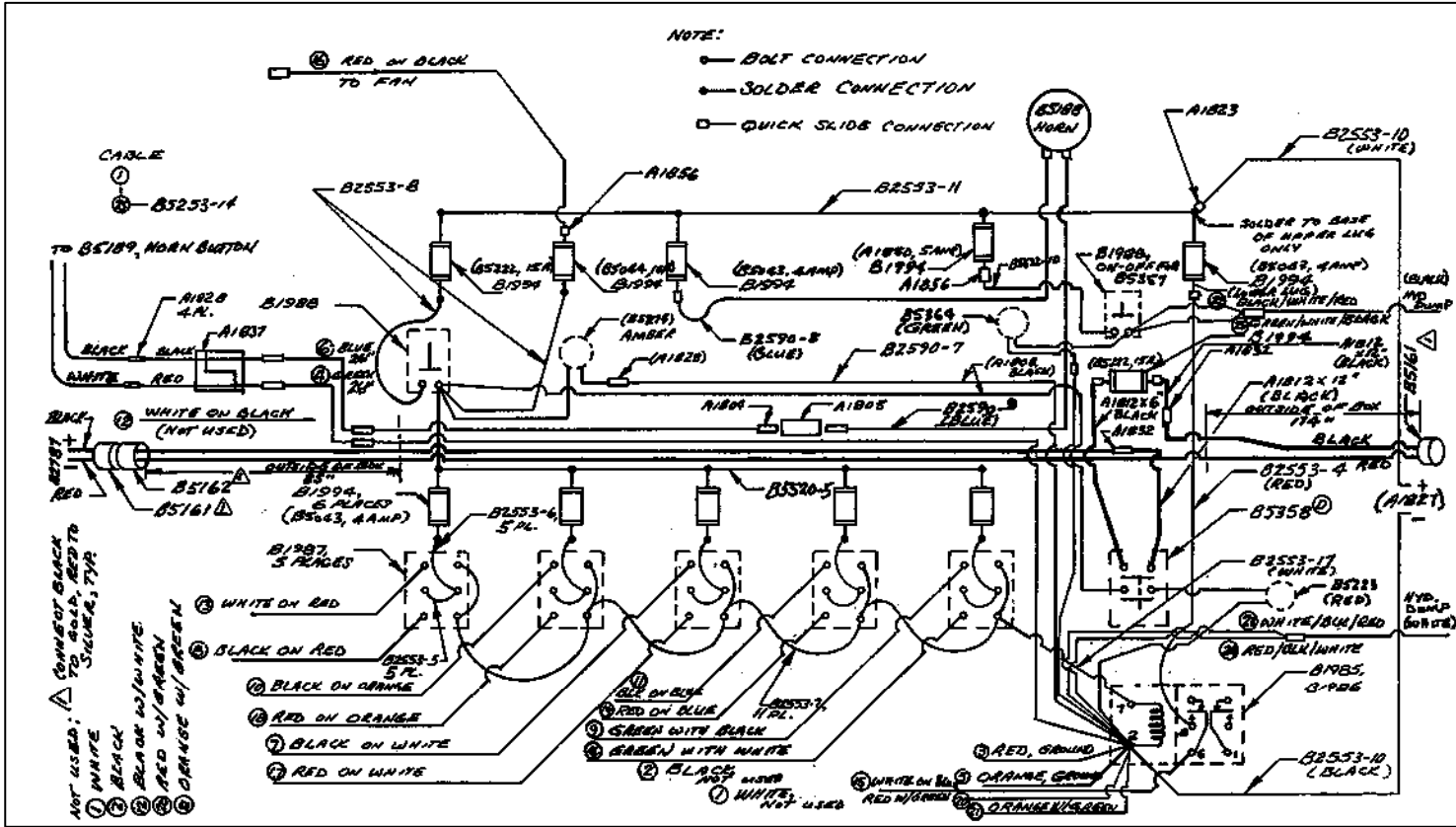
<u>KEY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	B5110	GEAR PUMP, 7 GPM
2	B5312	RELIEF VALVE, SAE
3	B5163	FILTER, HANDLING SYSTEM
4	B5399	REPL CARTRIDGE, SMALL FLOW CONTROL VALVE #10 SAE
5	B5394	HYDRAULIC MOTOR, 3.2 CIR
6	VPH-3	SELECTOR VALVE, SAE
7	B2519	UNLOADING CONVEYOR
8	B5190	VALVE, SOLENOID MODULE
9	B1914	FILTER, RETURN
10	B2490	ELEMENT, RETURN FILTER TANK, HYDRAULIC

**B5191 SOLENOID VALVE CIRCUIT PACKAGE  
HYDRAULIC SCHEMATIC WITH CONVEYOR ON/OFF VALVE**

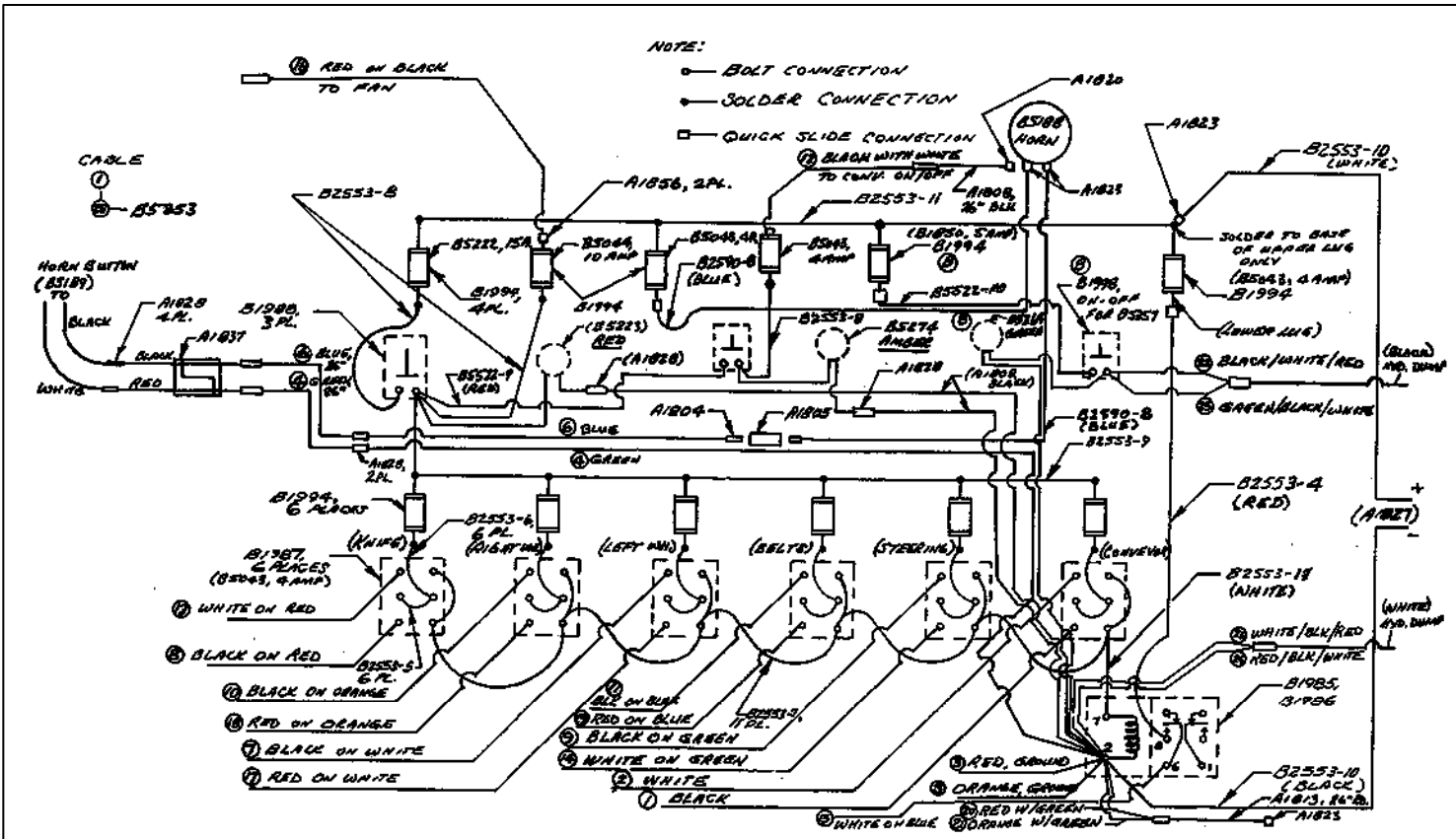


<u>KEY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	B5110	GEAR PUMP, 7 GPM
2	B5312	RELIEF VALVE, SAE
3	B5163	FILTER, HANDLING SYSTEM
4	FB00S0SS06000 0	REPL CARTRIDGE, SMALL PLUG, ORB
5	B5268	ON/OFF SOLENOID
6	B5399	FLOW CONTROL, #10 SAE
	B5394	HYDRAULIC MOTOR, 3.2 CIR
8	B5191	VALVE, SOLENOID MODULE
9	B1914	RETURN FILTER ELEMENT, RETURN FILTER
10	B2490	TANK, HYDRAULIC

# CONTROL CONSOLE WIRING DIAGRAM, B5520, TRAILER SYSTEMS



# CONTROL CONSOLE WIRING DIAGRAM, B5522, CONVEYOR SYSTEMS



**25 CONDUCTOR CABLE FUNCTION LIST  
SERIAL NUMBER 076 AND LATER**

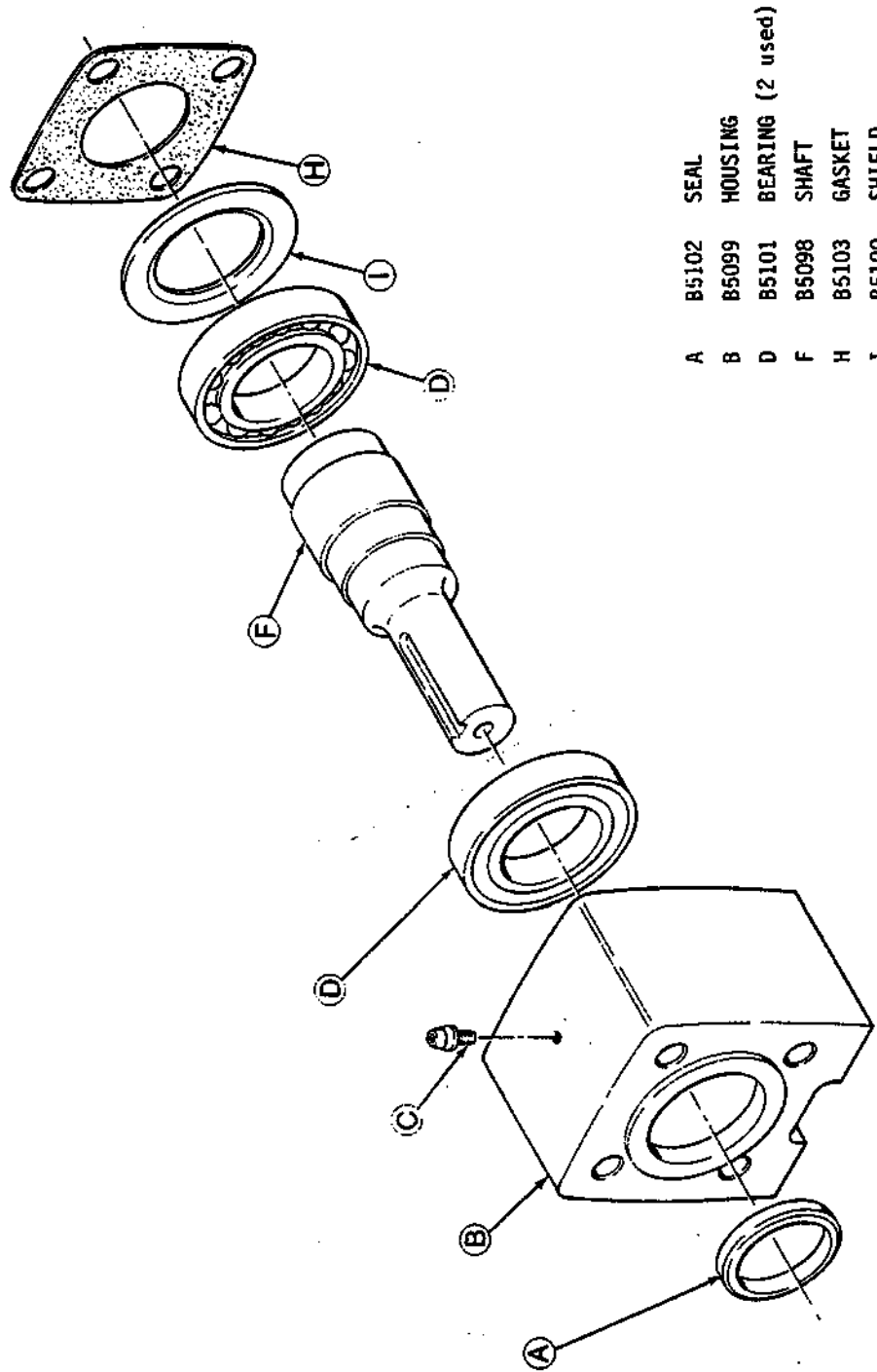
BY CONDUCTOR NUMBER:

<u>NUMBER</u>	<u>CONDUCTOR</u>	<u>FUNCTION</u>	<u>SOLENOID SPADE L TO R</u>
1	BLACK	UNLOADING CONVEYOR LOWER	TOP #11
2	WHITE	UNLOADING CONVEYOR RAISE	BOTTOM #11
3	RED	GROUND CONNECTION	BOTTOM #2
4	GREEN	HORN CONNECTION (TO WHITE)	
5	ORANGE	GROUND CONNECTION	TOP #2
6	BLUE	HORN CONNECTION ( TO BLACK)	
7	WHITE WITH BLACK	LEFT WHEEL DOWN	BOTTOM #1
8	RED WITH BLACK	KNIFE RAISE	BOTTOM #9
9	GREEN WITH BLACK	STEERING RIGHT	TOP #7
10	ORANGE WITH BLACK	RIGHT WHEEL DOWN	BOTTOM #3
11	BLUE WITH BLACK	PICKUP BELT UNIT DOWN	BOTTOM #5
12	BLACK WITH WHITE	CONVEYOR ON/OFF SOLENOID	LEFT LUG
13	RED WITH WHITE	KNIFE LOWER	TOP #9
14	GREEN WITH WHITE	STEERING LEFT	BOTTOM #7
15	BLUE WITH WHITE	UNLOADER SOLENOID	TOP SPADE
16	BLACK WITH RED	FAN CONNECTION	
17	WHITE WITH RED	LEFT WHEEL UP	TOP #1
18	ORANGE WITH RED	RIGHT WHEEL UP	TOP #3
19	BLUE WITH RED	PICKUP BELT UNIT UP	TOP #5
20	RED WITH GREEN	CONVEYOR ON/OFF (GROUND)	RIGHT LUG
21	ORANGE WITH GREEN	CONVEYOR SHUTOFF (GROUND)	RIGHT LUG
22	BLACK WITH WHITE & RED		
23	WHITE WITH BLACK & RED		
24	RED WITH BLACK & WHITE		
25	GREEN W/ BLACK & WHITE		

**NOTE:** RIGHT HAND IS YOUR RIGHT SIDE WHEN FACING THE DIRECTION OF HARVESTER TRAVEL, i.e.: LOOKING FROM THE HARVESTER TOWARDS THE TRACTOR. ALL RIGHT HAND SPADES ARE GROUND CONNECTIONS. CONNECT GROUND JUMPER WIRES IN SERIES, #2 TO #4 TO #6, ETC. TOP AND BOTTOM. LAST JUMPER CONNECTION ON THE BOTTOM CONNECTS TO THE BOTTOM SPADE ON THE UNLOADER SOLENOID, FAR RIGHT

WHEN THE HANDLING SYSTEM DOES NOT USE THE BULK-UNLOADING CONVEYOR, CERTAIN CONDUCTORS ARE NOT USED. IN THE CONTROL BOX THEY ARE LEFT UN-ASSEMBLED AND AT THE SOLENOID VALVE MODULE THEY ARE PROTECTED FROM STRAY CONTACT AND LEFT UN-CONNECTED. THEY ARE AVAILABLE; HOWEVER, FOR FUTURE USE BY THE CUSTOMER FOR THEIR OWN PURPOSES OR FOR FUTURE CONVERSIONS TO OTHER HANDLING SYSTEMS.

# BEARING BLOCK, B1968



	SEAL	HOUSING	BEARING (2 used)	SHAFT	GASKET	SHIELD
A	B5102					
B	B5099					
D	B5101					
F	B5098					
H	B5103					
I	B5100					