

LMC

Lewis M. Carter, Mfg.

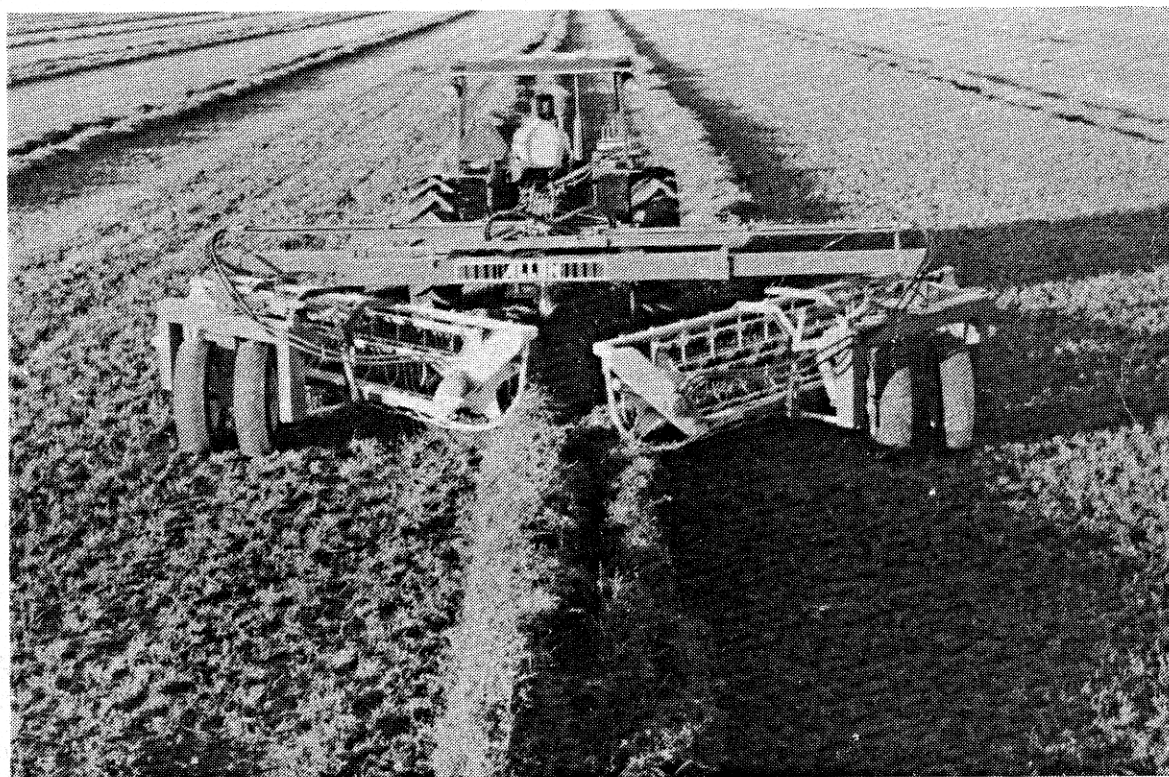
ALLEN 8827 BASKET RAKE

QUALITY

SINCE 1954

SERVICE

"BUILT TO LAST EQUIPMENT"



8827 BASKET RAKE

**OPERATOR'S / PARTS MANUAL
JUNE 1999**

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MODEL 8827
MAIN FRAME

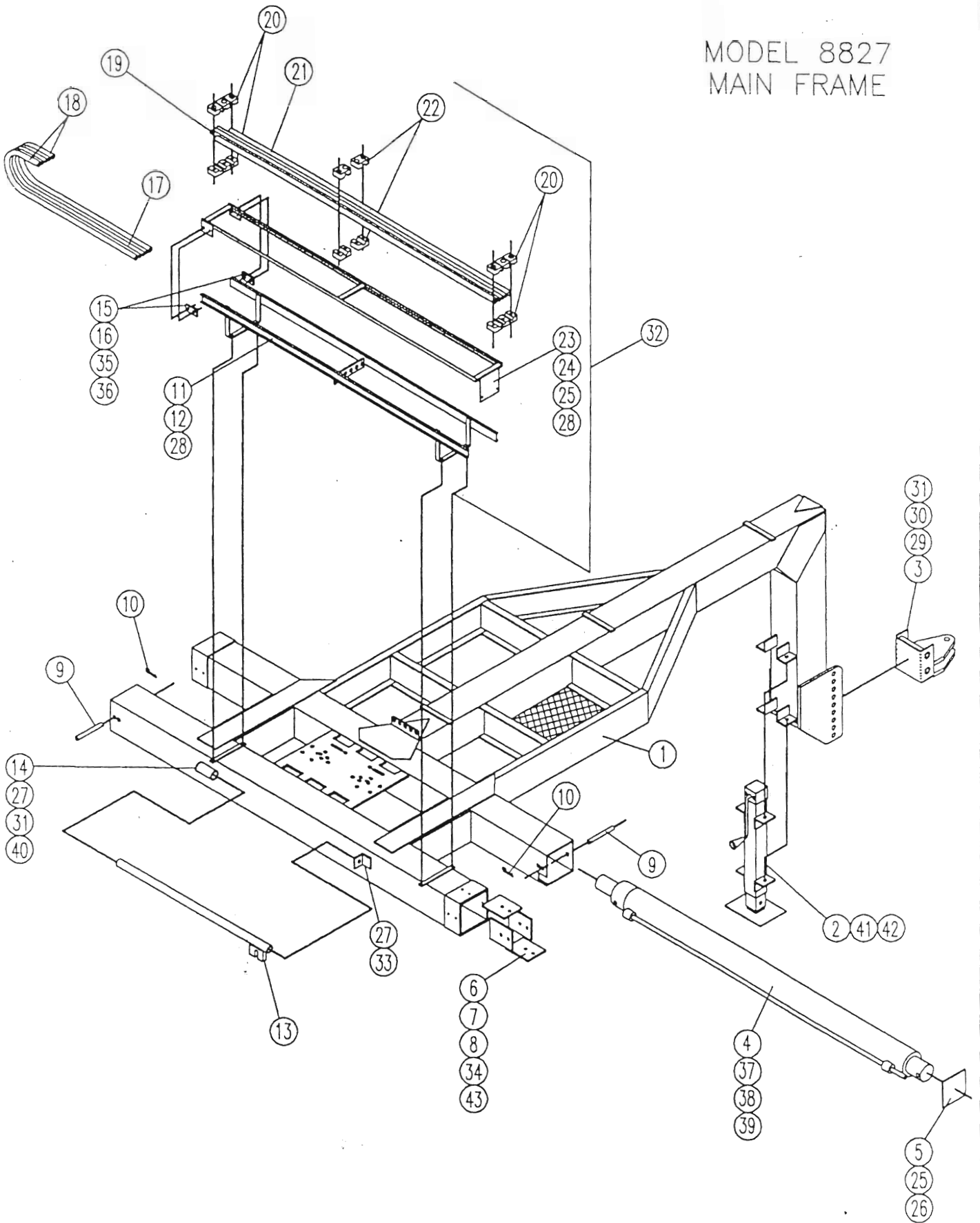
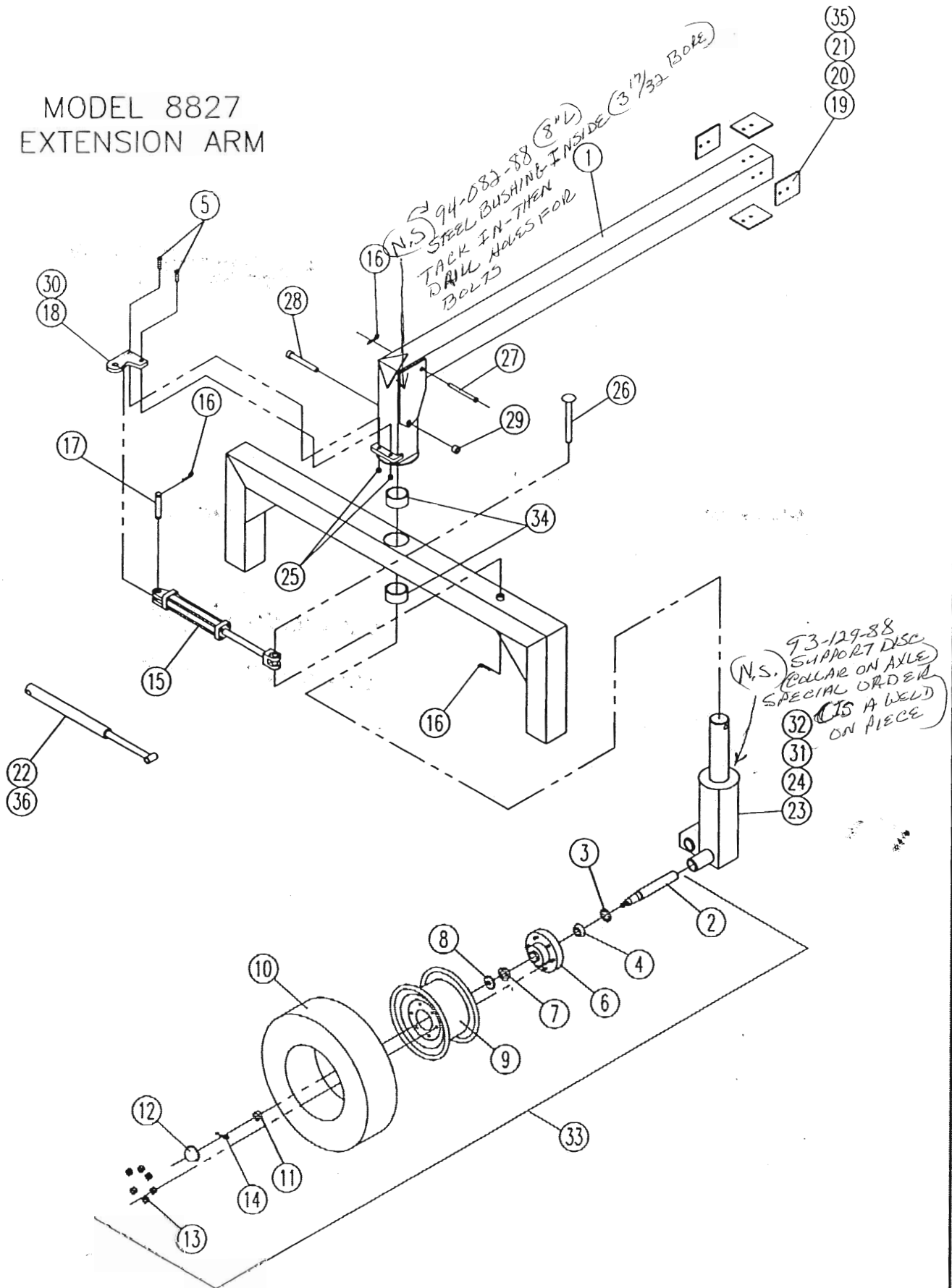


Fig. 1

Main Frame Assembly

Ref. No.	Harrell No.	Description	No. Req'd.	
			3 Function	5 Function
1	85-082-88	Main Frame	1	1
2	85-077-88	Jack Stand	1	1
3	85-074-88	Hitch, 1995	1	1
4	79-113-88	Telescoping Cylinder	2	2
5	93-018-88	End Cap	2	2
6	79-153-88	Poly Slide Bearing ^{1/4" THICK} (OBSOLETE) USE 68-1006-88 (3/16" THICK)	8	8
7	<u>2814-1014</u>	Cap Screws 5/16UNC x 1 1/2" ^(Same as 2816-1014) 1995 THRU 2000	16	16
8	0812-1000	Hex Nut 5/16UNC	32	32
9	79-086-88	Clevis Pin 3/4" x 6 1/2"	2	2
10	79-128-88	Hair Pin Clip	2	2
11	85-009-88	Guide Rail Extension	2	2
12	2814-0810	Cap Screws 1/4UNC x 1"	8	8
13	85-014-85	Hickey Bar	1	1
14	2816-1630	Hex Head Bolt 1/2UNC x 3"	1	1
15	79-001-88	Poly Slide Bearing	4	4
16	3114-0810	Flat Head Screws 1/4UNC x 1 UNC ^{5/8 4216-0810}	8	8
17	79-041-88	Hose Ass'y 51" OAL - AR-17	2	6
18	79-015-88	Hose Ass'y 51" OAL - AR-7	4	4
19	84-021-88	Tubing 3/8" x 75 1/2"	2	6
20	77-071-88	3/8" Tubing Clamp, Half ^(79-016-88 Assy#)	12	36
21	84-022-88	Tubing 1/2" x 75 1/2"	4	4
22	77-072-88	1/2" Tubing Clamp, Half ^(79-012-88 Assy#)	12	12
23	85-028-88	Tubing Rack	2	2
24	2814-0804	Cap Screws 1/4UNC x 1/2"	4	4
25	1702-0800	Flat Washers 1/4"	8	8
26	2814-0806	Cap Screw 1/4UNC x 3/4UNC	4	4
27	1412-1600	Hex Lock Nut 1/2UNC	1	1
28	1412-0800	Hex Lock Nut 1/4UNC	15	15
29	2816-2480	Hex Head Bolt 3/4UNC x 8"	2	2
30	1412-2400	Hex Lock Nut 3/4UNC	2	2
31	1702-1600	Flat Washer 1/2" SAE	2	2
32	84-002-88	Rack Ass'y. (includes 11,12, 15-25,28)	2	2
33	2816-1610	Hex Head Bolt 1/2UNC x 1"	1	1
34 *	93-097-88	Bearing Plate Shim ^{USED ONLY w/79-153-88 (1/4" THICK) POLY SLIDE}	8	8
35 *	0812-0800	Hex Nut 1/4UNC ¹⁴¹²⁻⁰⁸⁰⁰	8	8
36	1602-0800	Lock Washer 1/4" SAE	8	8
37	79-006-88	Teflon Bushing	8	8
38	79-011-88	Stud 1/2"-13UNC	8	8
39	1012-1600	Hex Jam Nut 1/2"-13UNC	8	8
40	79-032-85	Spring	1	1
41	2816-1210	Hex Bolt 3/8"UNC x 1" Gr. 5	4	4
42	1412-1200	Hex Lock Nut 3/8UNC	4	4
43	93-108-88	Half Shim	AS REQUIRED	AS REQUIRED
44	85-078-88	Ball Hitch	1	1
45	85-139-88	Shim Driver Tool	1	1

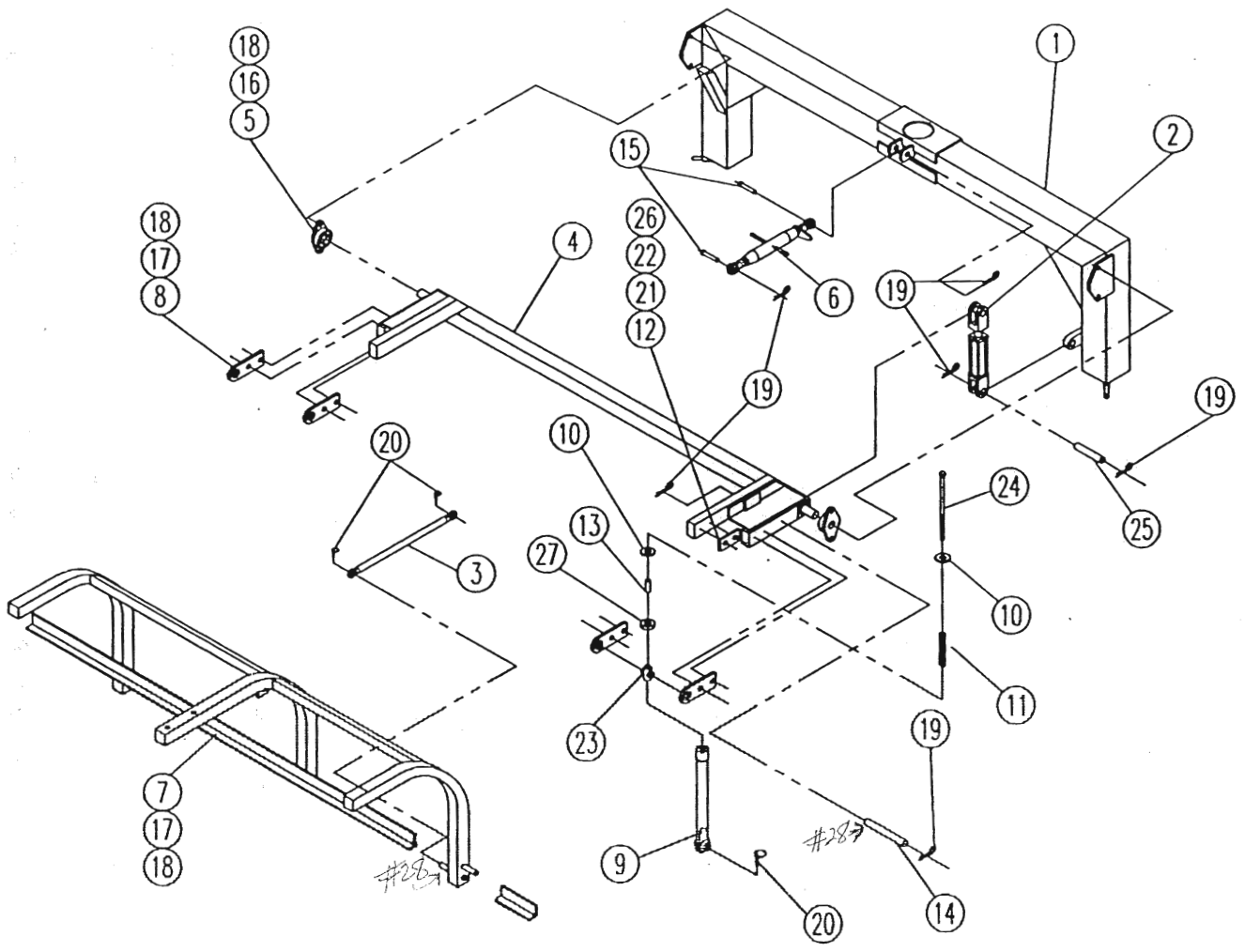
MODEL 8827 EXTENSION ARM



Extension Arm Assembly

Ref. No.	Harrell No.	Description	No. Req'd.	
			3 Function	5 Function
1	85-118-88	Extension Arm	2	2
2	96-034-88	Spindle Shaft	4	4
3	77-006-02	Seal	4	4
4	77-007-02	Inner Bearing	4	4
5	2816-1620	Hex Head Bolt 1/2UNC x 2"	4	4
6	77-001-02	Hub With Cups	4	4
7	77-008-02	Outer Bearing	4	4
8	77-005-02	Spindle Washer	4	4
9	79-017-88	6 Hole Wheel	4	4
10	79-018-88	Tire	4	4
11	77-004-02	Spindle Nut	4	4
12	77-012-02	Hub Cap	4	4
13	77-013-02	Lug Bolts - 1/2-20UNF	24	24
14	77-011-02	Cotter Pin	4	4
15	79-158-88	Swing Cylinder		2
16	79-128-88	Hair Pin Clip	8	8
17	77-003-85	Clevis Pin		2
18	93-107-88	Swing Cylinder Lug	2	2
19	79-153-88	Poly Slide Bearing	8	8
20	* 2814-1006	Cap Screws 5/16UNC x 3/4" (1992 THRU 2000)	16	16
21	0812-1000	Hex Nut 5/16UNC	16	16
22	84-062-88	Telescoping Link	2	
23	85-129-88	Right Hand Lower Axle	1	1
24	85-130-88	Left Hand Lower Axle	1	1
25	1412-1600	Hex Lock Nut 1/2UNC	4	4
26	85-071-88	Swing Arm Pin	2	2
27	79-087-88	Pin, 3/4" x 6"	2	2
28	2816-2864	Hex Head Bolt 7/8UNC x 6 1/2"	2	2
29	1412-2800	Hex Lock Nut 7/8UNC	2	2
30	79-190-88	Hardened Bushing	4	4
31	2816-1234	Hex Head Bolt 3/8UNC x 3 1/2"	4	4
32	1412-1200	Hex Lock Nut 3/8UNC	4	4
33	79-001-02	Hub Ass'y. (includes #2-#14 except 9 & 10) with spindle	4	4
34	94-013-88	Bronze Bushing	4	4
35	93-097-88	Shim	8	8
36	79-010-38	Snap Ring Pin	1	
NS	77-010-02	OUTER RACE (AVAILABLE SEPERATELY FROM HUB)		
NS	77-009-02	INNER RACE (AVAILABLE SEPERATELY FROM HUB)		

MODEL 8827
BASKET ADAPTER,
PIVOT ARM AND
SWING ARM

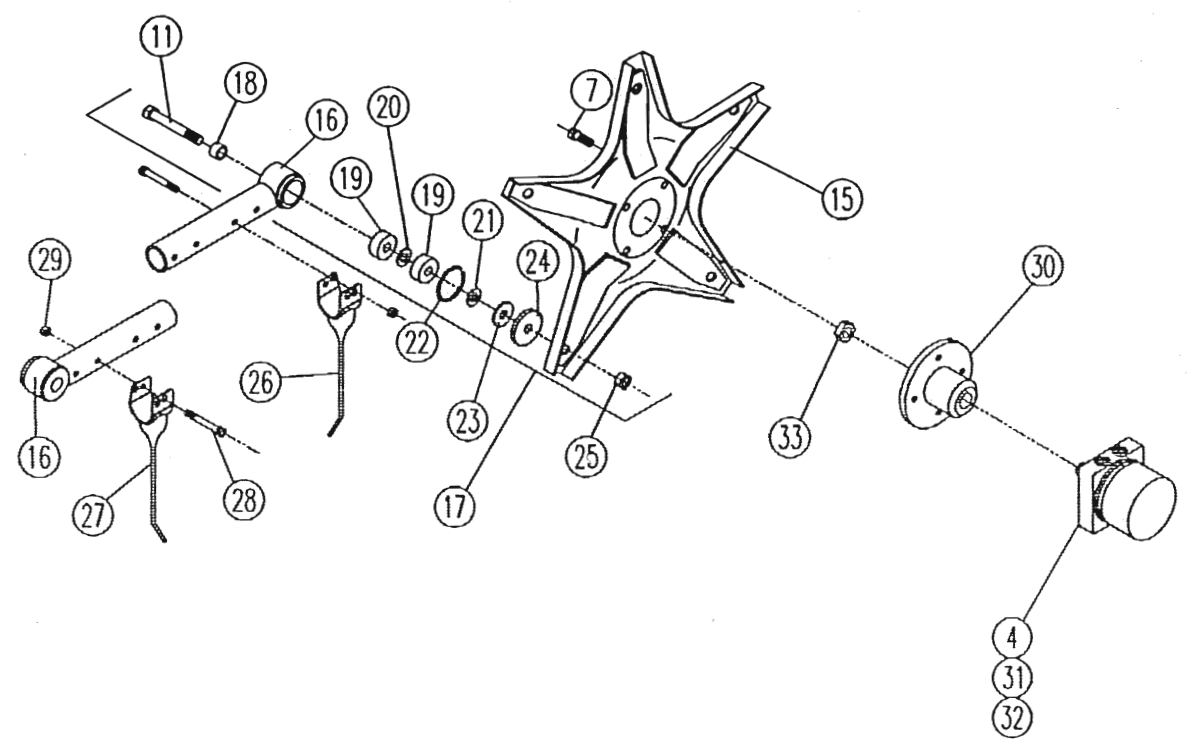
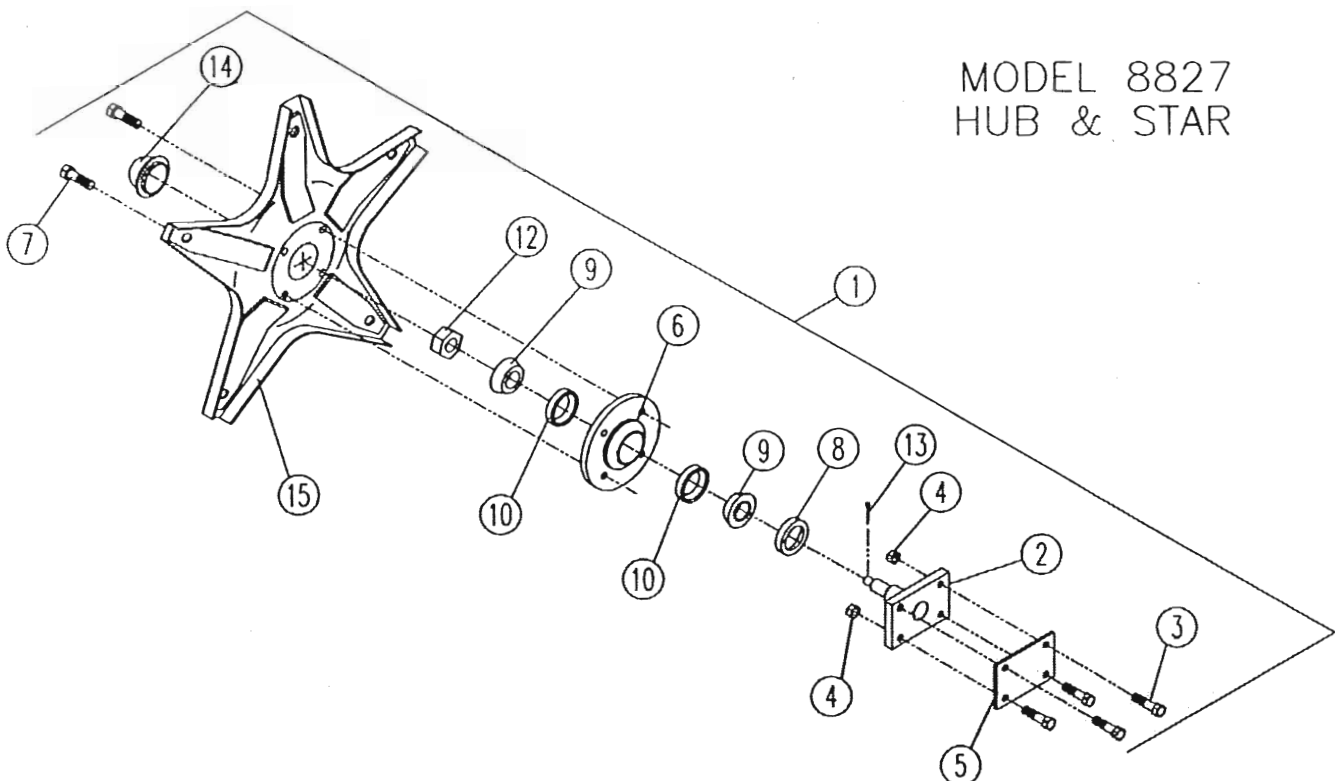


Basket Adapter, Pivot Arm and Lift Arm Assembly

No. Req'd.

Ref. No.	Harrell No.	Description	No. Req'd.	
			3 Function	5 Function
1	85-125-88	Swing Arm	2	2
2	79-170-88	Basket Lift Cylinder	2	2
3	85-128-88	Basket Standoff	4	4
4	85-123-88	Basket Pivot Arm	2	2
5	79-025-88	Two Bolt Flange Bearing	4	4
6	79-022-88	Angle Adjusting Arm	2	2
7	85-096-88	Basket Adaptor	2	2
8	* 98-039-88	Guide Mount <i>93-1099-88 (1997 + LATER)</i>	8	8
9	85-138-88	Ground Pressure Adjusting Arm	4	4
10	79-126-88	Flat Washer, 3/4" Narrow	4	4
11	79-028-88	Flotation Spring, Standard, Prior to 1999 <i>OB SOLETS</i>	4	4
	79-204-88	Flotation Spring, Heavy, 1999 and up	4	4
12	79-002-88	Poly Slide Bearing	4	4
13	77-066-88	UHMW Bushing	4	4
14	96-051-88	Lift Cylinder Pin, 1998 and up	2	2
15	79-081-88	Clevis Pin, 3/4" x 3"	4	4
16	2816-1620	Cap Screw, 1/2UNC x 2"	8	8
17	2816-1630	Cap Screw, 1/2UNC x 3"	16	16
18	1412-1600	Hex Lock Nut, 1/2UNC	24	24
19	77-015-04	Cotter Pin	12	12
20	79-045-06	Lynch Pin	12	12
21	0315-1420	Plow Bolt, 7/16UNC x 2"	8	8
22	0812-1400	Hex Lock Nut, 7/16UNC	8	8
23	95-001-88	Bolt Guide	4	4
24	2816-24170	Hex Head Bolt, 3/4UNC x 17"	4	4
25	79-006-06	Clevis Pin	2	2
26	1602-1400	Lock Washer 7/16"	8	8
27	1012-2400	Hex Jam Nut, 3/4UNC	4	4
28	94-084-88	Spacer Bushing (Used between Items #9 & #7)	4	4

MODEL 8827
HUB & STAR



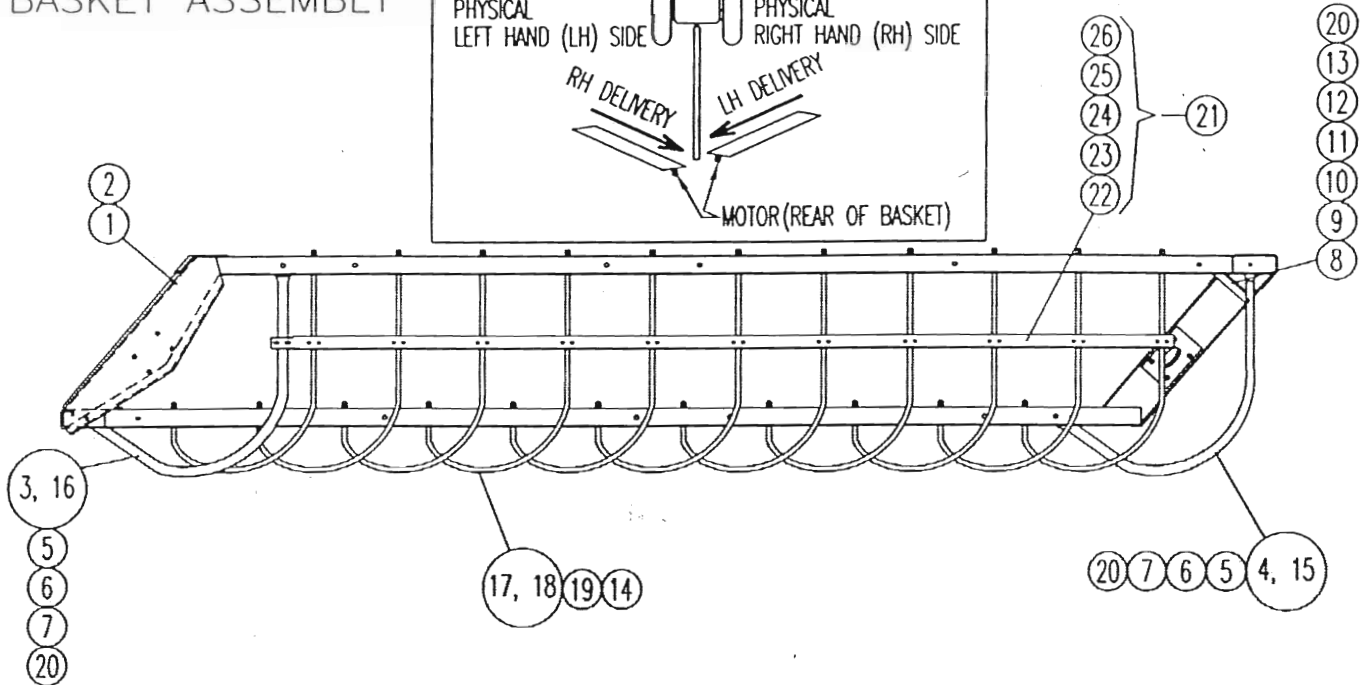
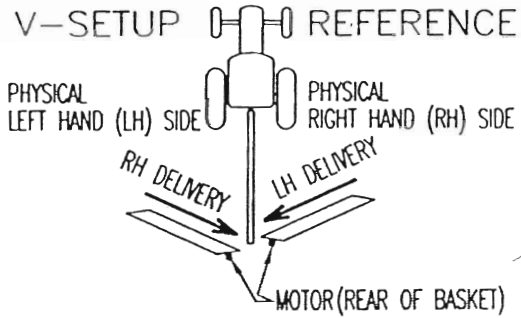
Hub & Star Assembly

79-004-87 HUB ASSY (LESS SPINDLE)

No. Req'd.

Ref. No.	Harrell No.	Description	3 Function	5 Function
1	84-061-88	Hub Ass'y. (inc. items 2, 6 -14)	2	2
2	85-075-88	Hub Spindle	2	2
3	2816-1620	Cap Screws 1/2UNC x 2"	8	8
4	1412-1600	Hex Lock Nut 1/2UNC	16	16
5	98-035-88	Hub Backing Plate	2	2
6	77-012-87	Hub	2	2
7	77-009-36	Hub Bolt	16	16
8	77-006-87	Seal	2	2
9	77-045-88	Bearing	4	4
10	77-005-87	Race (pressed in hub) <i>SAME AS 77-046-88</i>	4	4
11	* 2836-2434	Hex Head Bolt 3/4UNF x 3 1/2" <i>(FOR ROUND HD TINE BAR ONLY)</i>	20	20
12	77-001-87	Spindle Nut	2	2
13	77-049-88	Cotter Pin 1/8" x 2"	2	2
14	77-007-87	Dust Cap	2	2
15	85-031-88	Star	4	4
16	→ 85-032-88	Tine Bar (Without bearings) <i>10 1/2" ROUND HD (OBSOLETE)</i>	10	10
→	84-010-88	Tine Bar (With bearings) <i>10 1/2" ROUND HD (OBSOLETE)</i>	10	10
17	* 84-005-88	Bearing & Bolt Ass'y. (items 11,18-25) <i>(FOR ROUND HD TINE BAR ONLY)</i>	20	20
18	94-021-88	Bushing <i>(FOR ROUND & Sq. HD TINE BAR)</i>	20	20
19	77-052-88	Sealed Roller Bearing <i>(FOR ROUND & Sq. HD TINE BAR)</i>	40	40
20	* 77-054-88	Shim <i>(FOR ROUND HD TINE BAR ONLY)</i>	20	20
21	77-064-88	Spacer <i>(FOR ROUND & Sq. HD TINE BAR)</i>	20	20
22	77-055-88	Snap Ring <i>(FOR ROUND & Sq. HD TINE BAR)</i>	20	20
23	77-067-88	Heavy Washer <i>(FOR ROUND & Sq. HD TINE BAR)</i>	20	20
24	77-056-88	Shield <i>(FOR ROUND & Sq. HD TINE BAR)</i>	20	20
25	1432-2400	3/4UNF Stover Lock Nut <i>(FOR ROUND & Sq. HD TINE BAR)</i>	20	20
26	79-109-88	Tine, R.H. <i>79-1031-88 UNIVERSAL TINE (GOES RH OR LH)</i>	220	220
27	79-110-88	Tine, L.H.	220	220
28	2816-1224	Hex Head Bolt, 3/8UNC x 2 1/2"	220	220
29	1412-1200	Hex Lock Nut, 3/8UNC	220	220
30	85-122-88	Drive Hub, 1-1/4" Tapered <i>(OBSOLETE) USE STRAIGHT 85-143-88</i>	2	2
31	79-200-88	Taper Shaft Motor, STD <i>(OBSOLETE) USE 79-033-88 STRAIGHT</i>	2	2
32	2816-1624	Hex Head Bolt, 1/2UNC x 2 1/2" Gr. 5	8	8
33	77-168-88	Pack Nut <i>OBSOLETE</i>	2	2
	* 94-200-88	BUSHING <i>(FOR Sq. HD TINE BAR ONLY)</i>		
	* 2836-2444	HEX HD BOLT 3/4" X 4 1/2" <i>(FOR Sq. HD TINE BAR ONLY)</i>		
N.S.	79-202-88	<i>OBSOLETE</i> Taper Shaft Motor, Heavy Duty <i>(USE 79-033-88 STRAIGHT)</i>	Optional	Optional
N.S.	72-007-88	White Motor Seal Kit	1	1
N.S.	77-167-88	<i>OBSOLETE</i> Taper Drive Shaft <i>(OBSOLETE) USE 79-034-88 STRAIGHT</i>	1	1
N.S.	79-038-88	White Motor Thrust Bearing	1	1
	2836-2012	HEX HD BOLT (5/8" X 1 1/4") FOR USE W/ 85-143-88 HUB		
	* 84-2005-88	BEARING BOLT ASSY <i>(FOR Sq. HD TINE BAR ONLY)</i>		
	→ 85-1002-88	TINE BAR (10 1/2") W/OUT BDRS <i>(Sq. HD) SUPERCEDES ABOVE # 85-032-88</i>		

MODEL 8827
BASKET ASSEMBLY

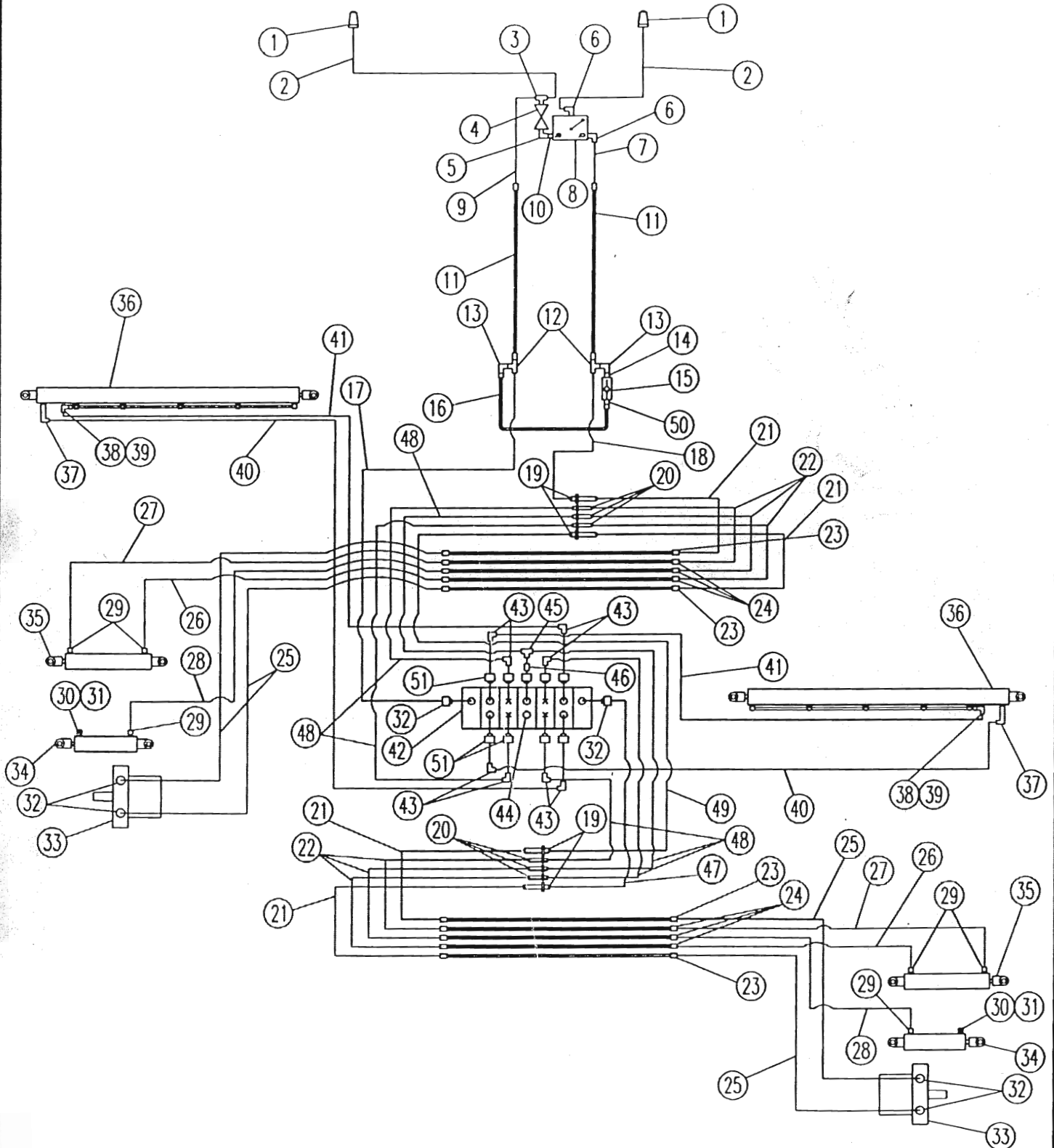


Ref. No.	Harrell No.	Description	Qty. Req'd. per Basket
1	85-035-88	Basket Frame, LH Delivery (RH side on V-Setup)	1
2	85-034-88	Basket Frame, RH Delivery (LH side on V-Setup)	1
3	92-005-88	Front Guard, RH Delivery Basket (LH side on V-Setup)	1
4	92-009-88	Rear Guard, RH Delivery Basket (LH side on V-Setup)	1
5	2816-1620	Hex Bolt 1/2UNC x 2"	4
6	1702-1600	Flat Washer 1/2" SAE	8, (incl. 4 for shims)
7	1412-1600	Hex Lock Nut 1/2UNC	4
8	98-067-88	Guard Brace, RH Delivery (LH side on V-Setup)	1
9	98-066-88	Guard Brace, LH Delivery (RH side on V- Setup)	1
10	0516-1220	Carriage Bolt 3/8UNC x 2"	1
11	2816-1214	Hex Bolt 3/8UNC x 1 1/2"	1
12	1702-1200	Flat Washer 3/8" SAE	5, (incl. 3 for shims)
13	1412-1200	Hex Lock Nut 3/8UNC	2
14	1702-2000	Flatwasher, 5/8"	22
15	92-008-88	Rear Guard, LH Delivery Basket (RH side on V-Setup)	1
16	92-006-88	Front Guard, LH Delivery Basket (RH side on V-Setup)	1
17	96-021-88	Stripper Bar, LH Delivery Basket (RH. side on V-Setup)	11
18	96-023-88	Stripper Bar, RH Delivery Basket (LH side on V-Setup)	11
19	1412-2000	Hex Lock Nut 5/8UNC	22
20	94-021-88	Spacer Bushing	5
21	72-004-88	Stripper Bar Support Group (includes items 22-26)	1
22	93-035-88	Stripper Reinforcing Bar	1
23	79-076-88	"U" Bolt (large)	1
24	79-077-88	"U" Bolt (small)	11
25	1412-1000	Lock Nut 5/16" NC	2
26	1412-0800	Hex Lock Nut 1/4UNC	22

MODEL 8827
5-FUNCTION RAKE
HYDRAULIC SCHEMATIC

TRACTOR RETURN

TRACTOR OUTLET



Hydraulic Schematic

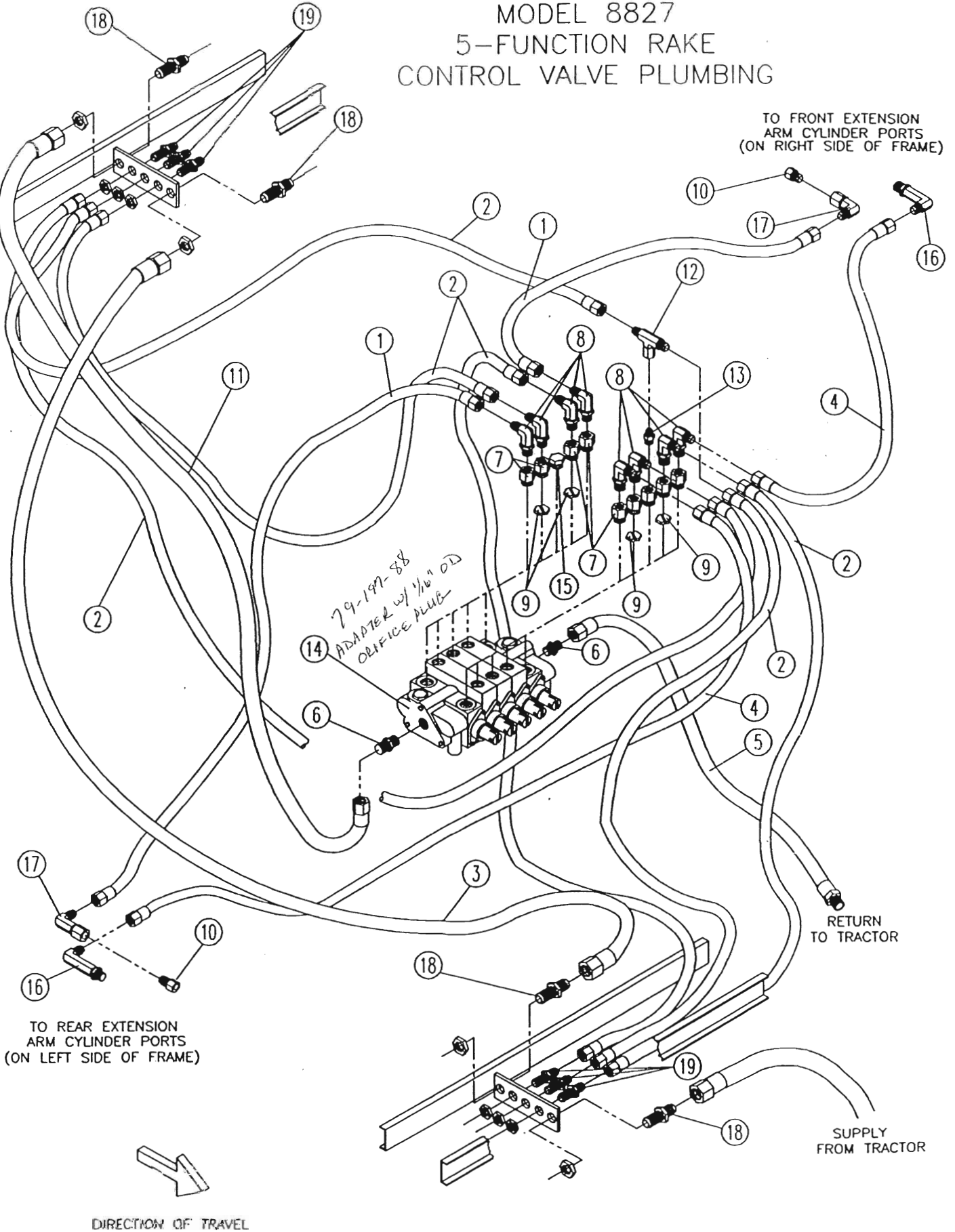
Ref. No.	Horrell No.	Description	No. Req'd.
1	79-212-36	Adapter, Quick Disconnect	2
2	79-068-88	Hose Assembly	2
3	79-112-88	Male Run Tee	1
4	79-072-88	Ball Valve	1
5	79-069-88	Elbow, 90°	1
6	79-070-88	Male Elbow, 90°	2
7	79-066-88	Hose Assembly	1
8	79-042-88	Flow Control Valve	1
9	79-071-88	Hose Assembly	1
10	79-068-38	Nipple	1
11	84-018-88	Hydraulic Tube Assembly	2
12	77-004-38	Female Swivel Run Tee	2
13	77-058-06	Swivel Nut Elbow, 90°	2
14	79-120-88	Swivel Connector	1
15	79-146-88	Check Valve	1
16	84-029-88	Excess Flow Tube	1
17	79-102-88	Hose Assembly	1
18	79-049-88	Hose Assembly	1
19	79-083-88	Bulkhead Fitting	4
20	79-013-88	Bulkhead Fitting	6
21	79-015-88	Hose Assembly	2
22	79-041-88	Hose Assembly	1
23	84-022-88	Hydraulic Tube Assembly	4
24	84-021-88	Hydraulic Tube Assembly	6
25	79-061-88	Hose Assembly	4
26	79-065-88	Hose Assembly	2
27	79-064-88	Hose Assembly	2
28	79-167-88	Hose Assembly	2
29	79-169-88	Straight Thread Connector	4
30	79-171-88	Breather, Lift Cylinder	2
31	79-178-88	Pipe Adaptor	2
32	79-131-88	Male Connector	6
33	79-200-88	Basket Drive Motor	2
34	79-170-88	Lift Cylinder	2
35	79-158-88	Swing Cylinder	2
36	79-113-88	Telescope Cylinder	2
37	79-009-88	Elbow, 90°	2
38	79-125-88	Straight Thread Adapter	2
39	79-097-88	Swivel Nut Elbow	2
40	79-145-88	Hose Assembly	2
41	79-144-88	Hose Assembly	2
42	79-193-88	Brand 5-Function Control Valve	1

Hydraulic Schematic

Ref. No.	Harrell No.	Description	No. Req'd.
43	79-052-88	Straight Thread Elbow	8
44	79-029-85	Straight Thread Plug	1
45	79-099-88	Swivel Branch Tee	1
46	79-121-88	Straight Thread Adapter	1
47	79-055-88	Hose Assembly	1
48	79-101-88	Hose Assembly	6
49	79-046-88	Hose Assembly	1
50	77-047-06	Male Connector	1
51	79-054-88	Straight Thread Adapter	9
N.S.	77-058-88	Restrictor	4
Note: Restrictors are used only on valve ports marked "X"			

MODEL 8827 5-FUNCTION RAKE CONTROL VALVE PLUMBING

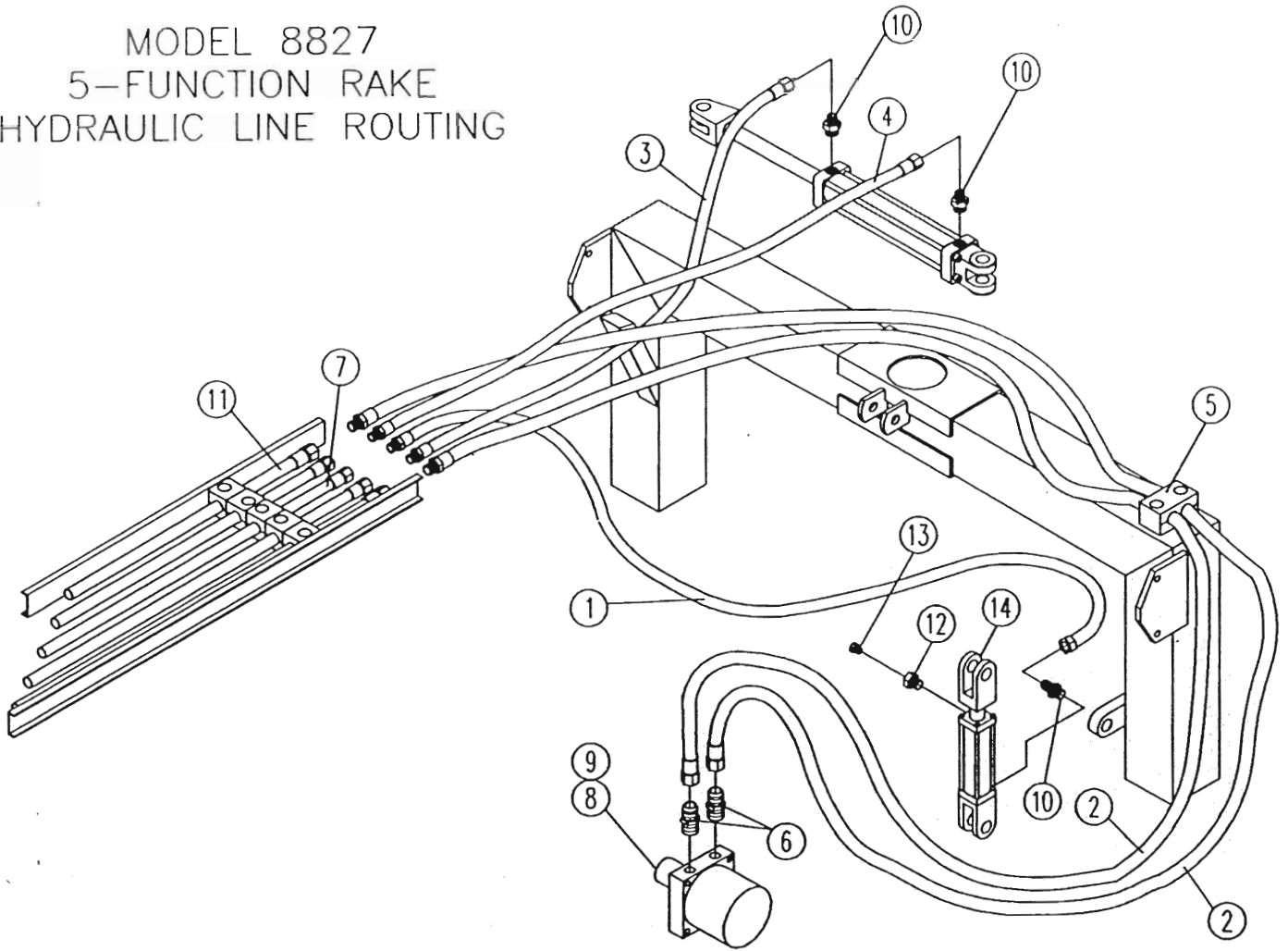
TO FRONT EXTENSION
ARM CYLINDER PORTS
(ON RIGHT SIDE OF FRAME)



5-Function Rake Control Valve Plumbing

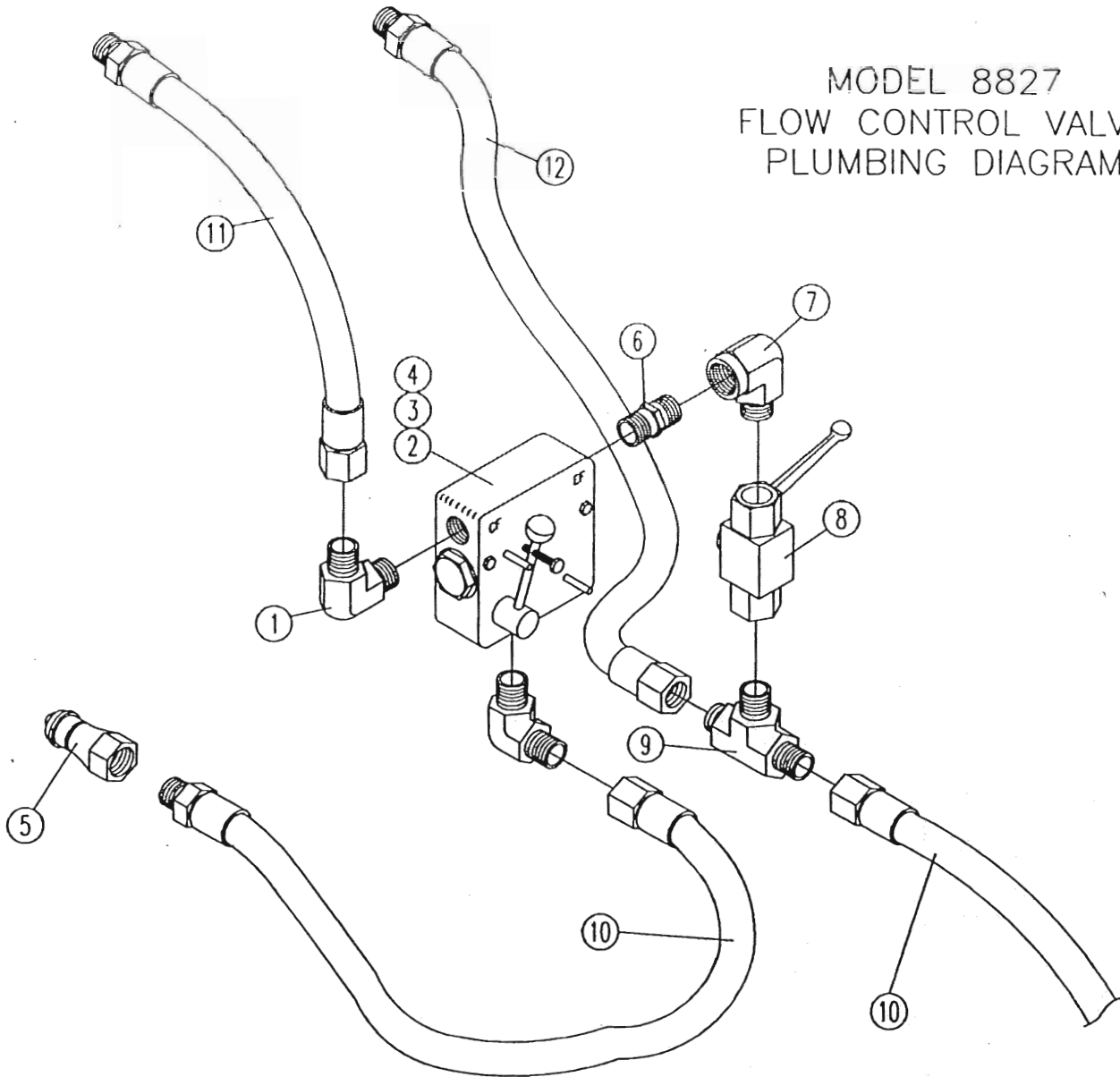
Ref. No.	Harrell No.	Description	No. Req'd.
1	79-144-88	Hose Assembly	2
2	79-101-88	Hose Assembly	6
3	79-046-88	Hose Assembly	1
4	79-145-88	Hose Assembly	2
5	79-102-88	Hose Assembly	1
6	79-131-88	Straight Thread 90° Elbow	2
7	79-054-88	Straight Thread Reducer	9
8	79-052-88	Straight Thread 90° Elbow	8
9	79-197-88	Restrictor (.032)	4
10	79-125-88	Straight Thread Adapter	2
11	79-055-88	Hose Ass'y. 1/2 x 62 - AR-5	1
12	79-099-88	JIC Swivel Branch Tee	1
13	79-121-88	Straight Thread Connector	1
14	79-193-88	Brand 5-Function Valve	1
15	79-029-85	Plug	1
16	79-009-88	Elbow 90° Pipe To JIC (X-Long)	2
17	79-097-88	Elbow 90° Pipe To JIC	2
18	79-083-88	#8 Bulkhead Fitting	4
19	79-013-88	#6 Bulkhead Fitting	6
N.S.	72-043-88	Seal Kit, Brand 5-Function Valve	1

MODEL 8827
5-FUNCTION RAKE
HYDRAULIC LINE ROUTING



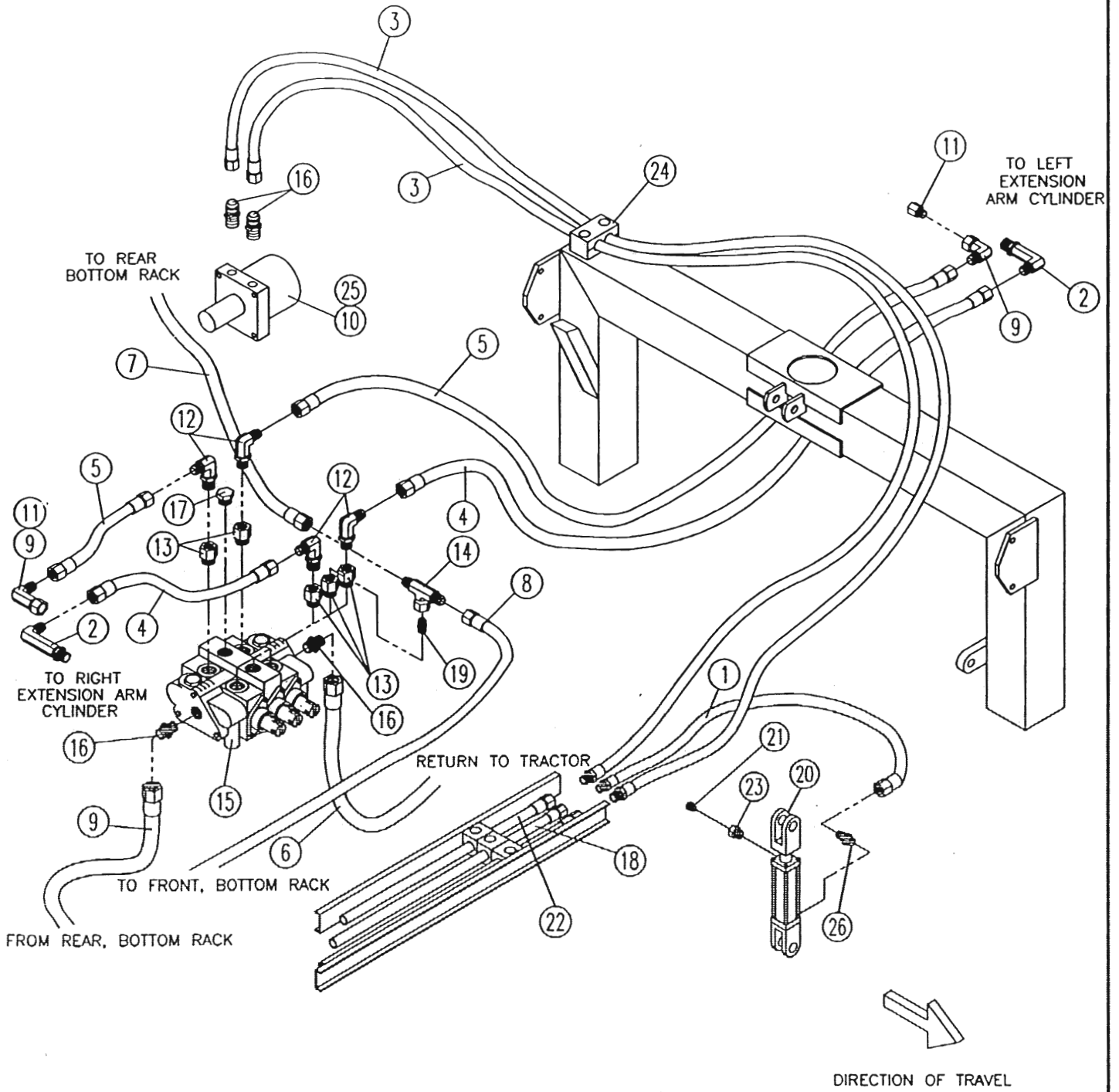
Ref. No.	Harrell No.	Description	No. Req'd.
1	79-167-88	Hose Assembly	2
2	79-061-88	Hose Assembly	4
3	79-065-88	Hose Assembly	2
4	79-064-88	Hose Assembly	2
5	79-108-88	3/4" Twin Hose Clamp	2
6	79-131-88	Male Connector	4
7	84-021-88	Tubing Ass'y. 3/8" x 75 1/2"	6
8	79-200-88	Basket Drive Motor	2
9	79-202-88	Heavy Duty Drive Motor	Optional
10	79-169-88	Straight Thread Connector	6
11	84-022-88	Tubing Ass'y. 1/2" x 75 1/2"	4
12	79-169-88	Straight Thread Connector	2
13	79-171-88	Breather, Lift Cylinder	2
14	79-170-88	Lift Cylinder	2

MODEL 8827
FLOW CONTROL VALVE
PLUMBING DIAGRAM



Ref. No.	Harrell No.	Description	No. Req'd.
1	79-070-88	Male Elbow	2
2 (#16)	79-212-88 #16	Flow Control Valve, for use with Standard Motor (#16 Flow)	1
(E)	79-211-88 E	Flow Control Valve, for use with Optional Hvy. Duty Motor (E Flow)	1
	72-049-88	Flow Control Valve Seal Kit, Brand FC-51	1
	72-050-88	Flow Control Valve Sel Kit, Prince RD1950-16	1
3	1412-0800	Hex Lock Nut 1/4UNC	2
4	2816-0824	Hex Head Cap Screw 1/4UNC x 2 1/2"	2
5	79-212-36	Quick Disconnect Adaptor	2
6	79-068-38	Pipe Nipple	1
7	79-069-88	Street Elbow	1
8	79-072-88	Ball Valve	1
9	79-112-88	Male Run Tee	1
10	79-068-88	Hose Assembly	2
11	79-066-88	Hose Assembly	1
12	79-071-88	Hose Assembly	1

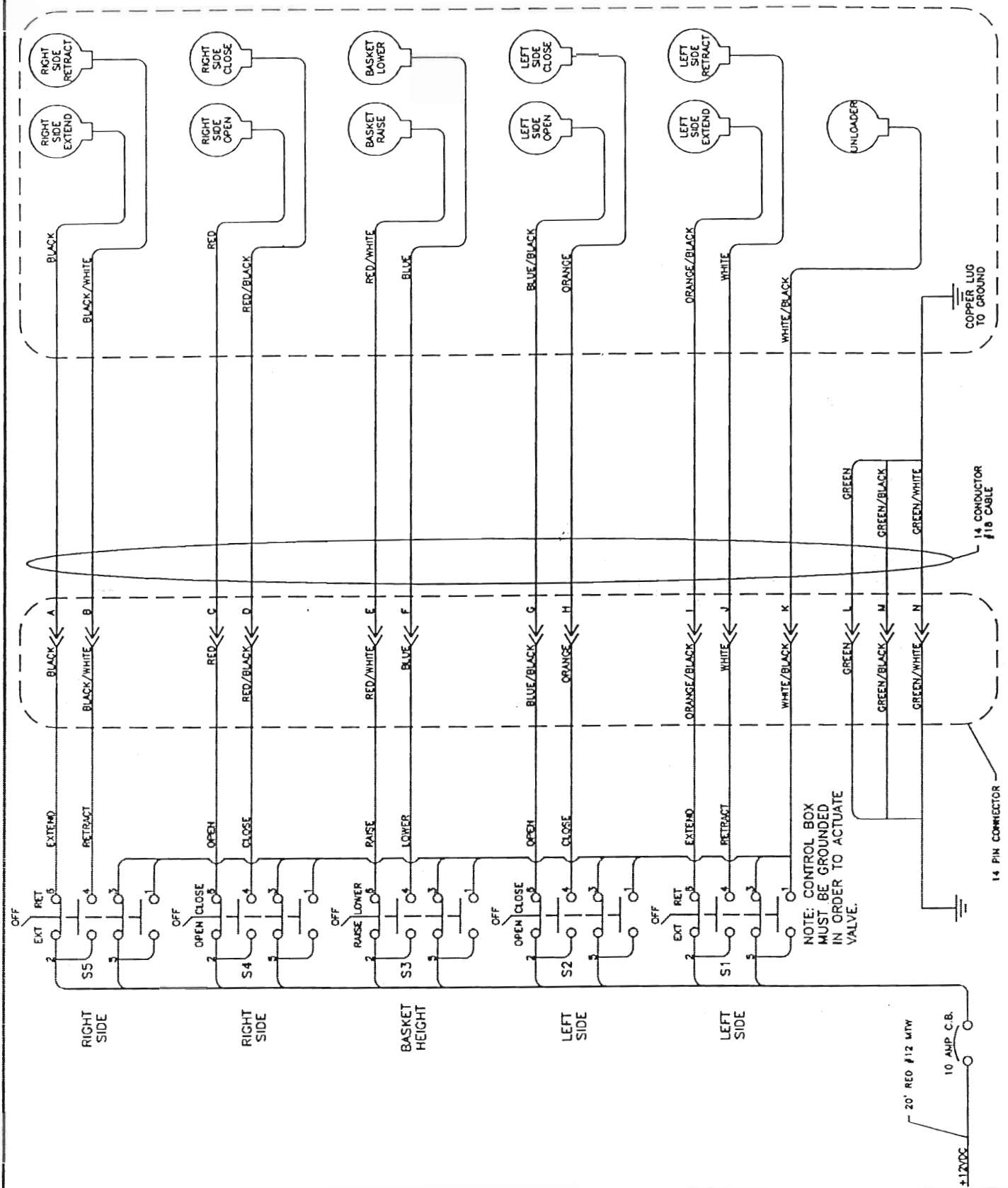
MODEL 8827 3-FUNCTION RAKE HYDRAULIC LINE ROUTING



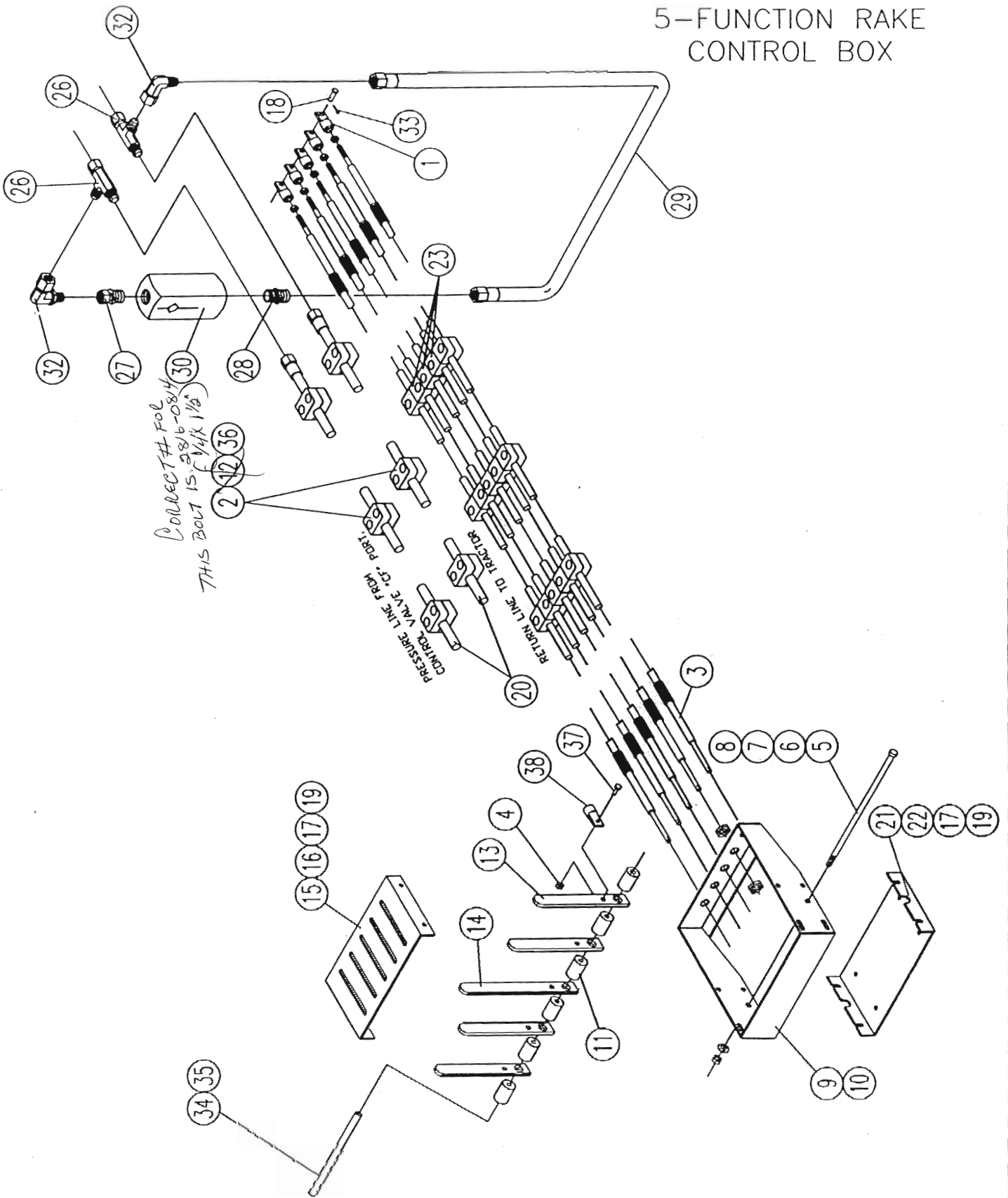
3-Function Rake Hydraulic Line Routing

Ref. No.	Harrell No.	Description	No. Req'd.
1	79-167-88	Hose Assembly	2
2	79-009-88	Elbow 90°	2
3	79-061-88	Hose Assembly	4
4	79-145-88	Hose Assembly	2
5	79-144-88	Hose Assembly	2
6	79-102-88	Hose Assembly	1
7	79-055-88	Hose Assembly	1
8	79-101-88	Hose Assembly	2
9	79-097-88	Swivel Nut Elbow	2
10	79-200-88	Basket Drive Motor	2
11	79-125-88	Straight Thread Adapter	2
12	79-052-88	Straight Thread Elbow	4
13	79-054-88	Straight Thread Adapter	5
14	79-099-88	Swivel Branch Tee	1
15	79-194-88	Brand 3-Function Control Valve	1
16	79-131-88	Male Connector	2
17	79-029-85	Straight Thread Plug	1
18	84-021-88	Tubing Ass'y. 3/8" x 75 1/2"	2
19	79-121-88	Straight Thread Adapter	2
20	79-170-88	Basket Lift Cylinder	2
21	79-171-88	Breather, Lift Cylinder	2
22	84-022-88	Tubing Ass'y. 1/2" x 75 1/2"	4
23	79-171-88	Pipe Adapter	2
24	79-108-88	3/4" Twin Hose Clamp	2
25	79-202-88	Heavy Duty Drive Motor	Optional
26	79-169-88	Straight Thread Connector	2

MODEL 8827 ELECTRIC VALVE WIRING DIAGRAM



MODEL 8827
5-FUNCTION RAKE
CONTROL BOX

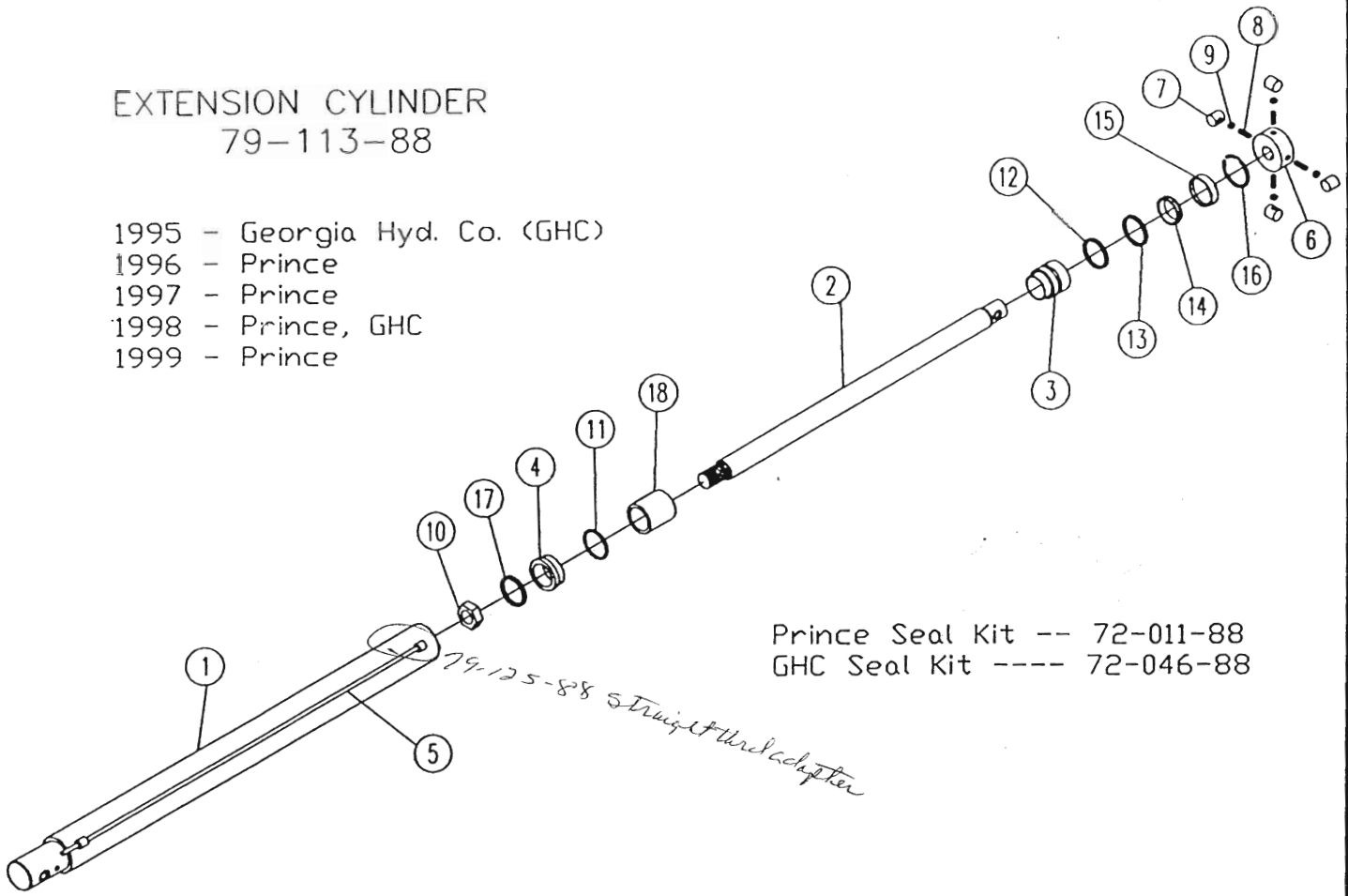


Control Box Assembly

Ref. No.	Harrell No.	Description	No. Req'd.	
			3 Function	5 Function
1	96-048-88	Morse Cable End (TO VALVE) w/ 1/4" hole	3	5
2	79-118-88	Stacking Kit	6	6
3	79-074-88	Morse Cable	3	5
4	1412-1000	Hex Lock Nut 5/16UNF	3	5
5 *	2813-1284	Hex Bolt 3/8"UNC x 8-1/2" (2814-1290) 3/8" x 9" GR2	1	
6 *	2813-1260	Hex Bolt 3/8"UNC x 6" (2814-1260) 3/8" x 6" GR2		1
7	1702-1200	Flat Washers 3/8" SAE	1	1
8	1412-1200	Hex Lock Nut 3/8UNC	1	1
9	85-109-88	Control Box (3 Spool)	1	
10	85-108-88	Control Box (5 Spool)		1
11	96-045-88	Spacer 1/4" 1 1/2"	4	6
12 *	2816-1013	Hex Bolt 5/16"UNC x 1-3/8" Gr. 5 (USE 2816-084) 1/4" x 1/2"	12	12
13	98-046-88	Handle	2	4
14	98-045-88	Handle	1	1
15	93-118-88	Cover	1	
16	93-110-88	Cover		1
17	1702-0800	Flat Washers 1/4" SAE	8	8
18	79-135-88	Clevis Pin	3	5
19	79-147-88	Thumbscrew	8	8
20	84-018-88	Hydraulic Tube Ass'y. 1/2" x 92"	2	2
21	93-119-88	Bottom Plate	1	
22	93-111-88	Bottom Plate		1
23	77-071-88	3/8" Hose Clamp	18	30
24	84-006-88	Complete Control Box Ass'y. (5 Spool) (inc. items 1-22 ex. 5,9,15&21)		1
25	84-007-88	Complete Control Box Ass'y. (3 Spool) (inc. items 1-21 ex. 6,10&16)	1	
26	77-004-38	Female Swivel Run Tee	2	2
27	79-120-88	Swivel Connector	1	1
28	77-047-06	Male Connector	1	1
29	84-029-88	Tube Assembly Excess Flow	1	1
30	79-146-88	Check Valve	1	1
31	0832-0800	Hex Nut 1/4UNF	6	10
32	77-058-06	Swivel 90° Elbow	2	2
33	79-136-88	Cotter Key	3	5
34	94-074-88	Control Box Bushing, 3-Spool	1	
35	94-073-88	Control Box Bushing, 5-Spool		1
36	77-072-88	1/2" Hose Clamp	12	12
37	2816-1010	Hex Bolt 5/16"UNC x 1"	3	5
38	79-073-88	Cable End Clevis (To Control Box) w/ 5/16" hole	3	5

EXTENSION CYLINDER
79-113-88

1995 - Georgia Hyd. Co. (GHC)
1996 - Prince
1997 - Prince
1998 - Prince, GHC
1999 - Prince

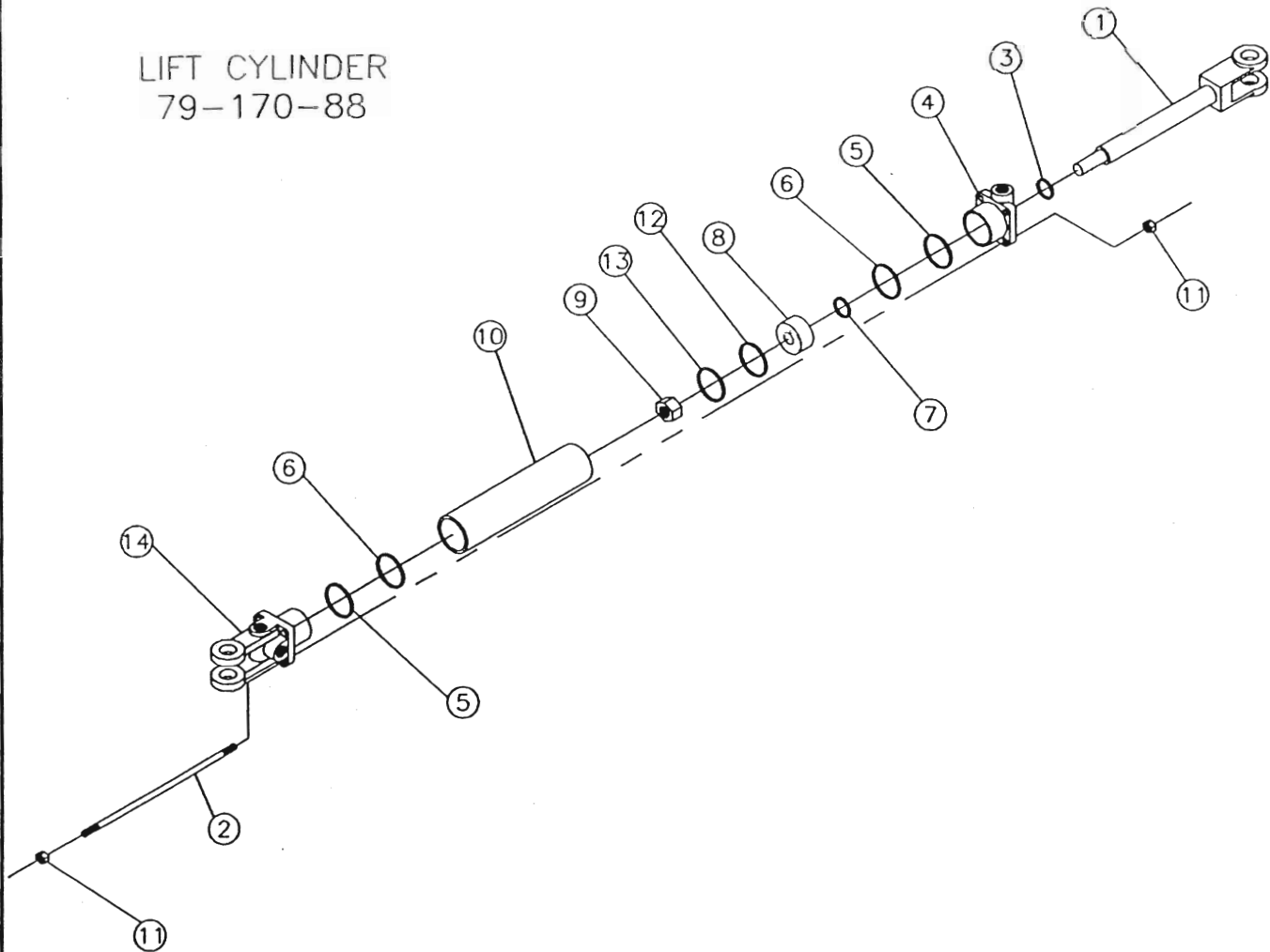


Prince Seal Kit -- 72-011-88
GHC Seal Kit ---- 72-046-88

*Consult Harrell Co. for Individual Repair Parts.

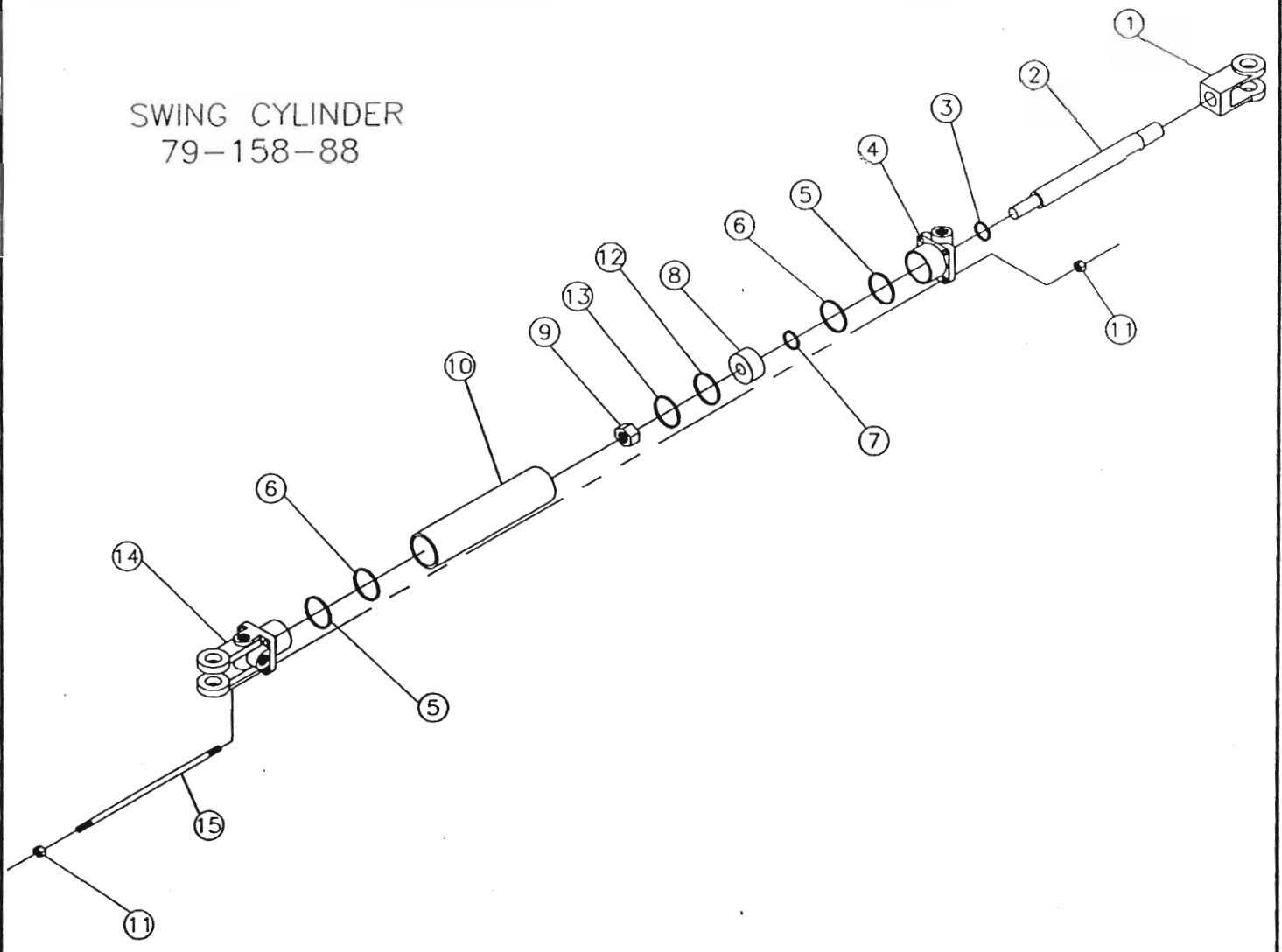
Ref. No.	Harrell No.	Description	No. Req'd.
1	77-102-88	Barrel Assy.	2
2	77-103-88	Piston Rod	2
3	77-104-88	Piston Gland	2
4	77-105-88	Piston	2
5	77-003-88	Manifold Tube	2
6	77-015-88	Cylinder Cap	2
7	79-006-88	Teflon Bushing	8
8	79-011-88	Stud 1/2"-13 UNC	8
9	1012-1600	Jam Nut 1/2"-13 UNC	8
10	77-106-88	Locknut	2
11	77-084-88	O-Ring	2
12	77-031-88	O-Ring	2
13	77-012-88	Backup Washer	2
14	77-009-88	U-Cup	2
15	77-013-88	Wiper	2
16	77-110-88	Snap Ring	1
17	77-083-88	Bearing Ring	2
18	77-081-88	Spacer	2
N.S.	77-007-88	Crown Seal	2
N.S.	72-011-88	Seal Kit (consist of items 13-18)	2

LIFT CYLINDER
79-170-88



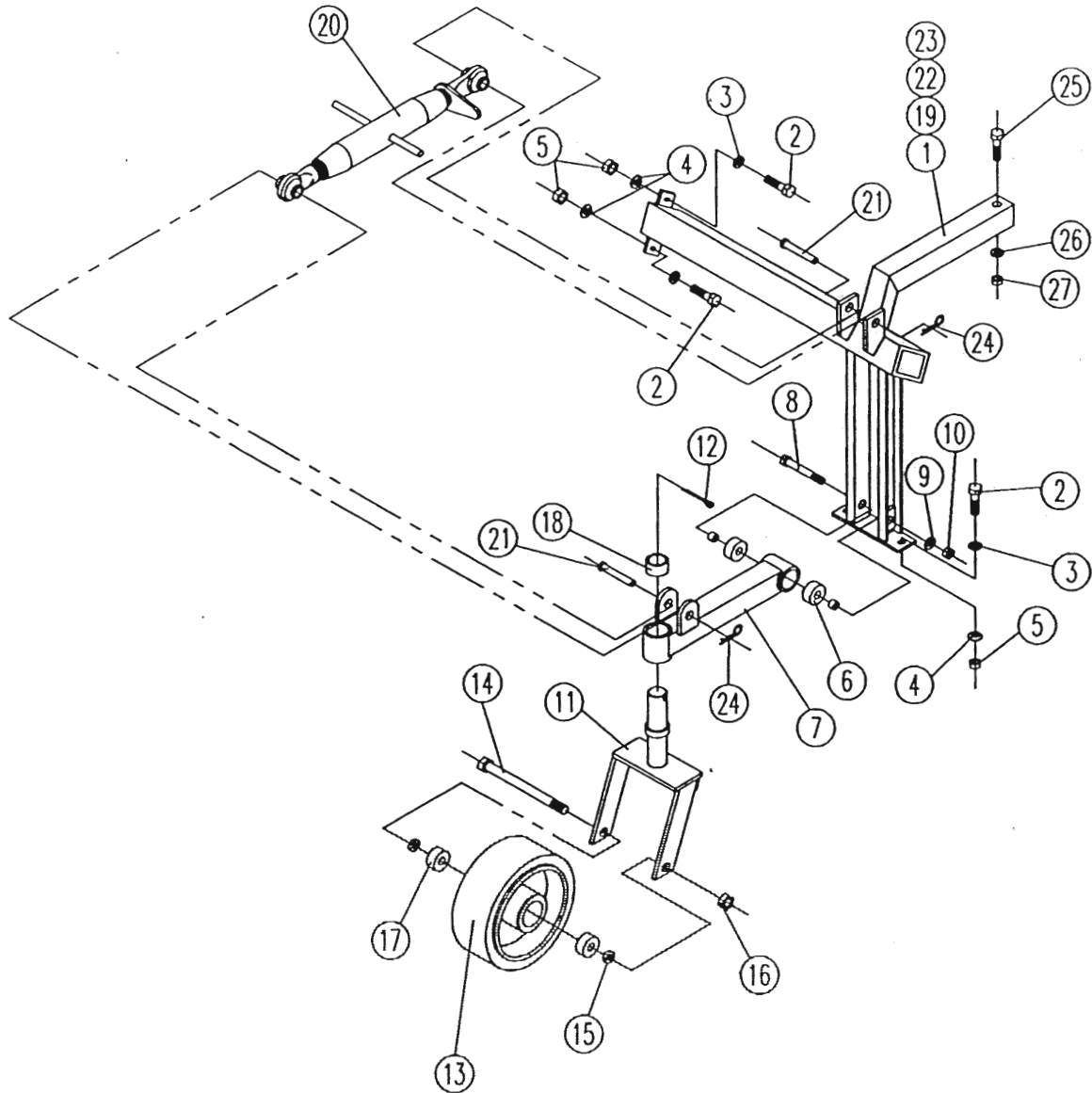
Ref. No.	Harrell No.	Description	No. Req'd.
1	77-155-88	Rod with Clevis	2
2	77-157-88	Tie Rod	8
3	77-135-88	Seal	2
4	77-136-88	Rod Cap	2
5	77-137-88	Back Up Washer	4
6	77-138-88	O-Ring	4
7	77-139-88	Rod Seal	2
8	77-140-88	Piston	2
9	1411-2400	Hex Lock Nut 3/4"-16UNF	2
10	77-156-88	Barrel	2
11	0811-1200	Hex Nut 3/8"-16UNC	16
12	77-142-88	O-Ring	2
13	77-143-88	Piston Ring	2
14	77-144-88	Clevis Cap	2
N.S.	77-152-88	Seal Kit	2

SWING CYLINDER
79-158-88



Ref. No.	Harrell No.	Description	No. Req'd.
1	77-133-88	Rod Clevis	2
2	77-134-88	Cylinder Rod	2
3	77-135-88	Seal	2
4	77-136-88	Rod Cap	2
5	77-137-88	Back Up Washer	4
6	77-138-88	O-Ring	4
7	77-139-88	Rod Seal	2
8	77-140-88	Piston	2
9	1411-2400	Hex Lock Nut 3/4"-16UNF	2
10	77-141-88	Barrel	2
11	0811-1200	Hex Nut 3/8"-16UNC	16
12	77-142-88	O-Ring	2
13	77-143-88	Piston Ring	2
14	77-144-88	Clevis Cap	2
15	77-145-88	Tie Rod	8
N.S.	77-152-88	Seal Kit	2

MODEL 8827
OPTIONAL GAUGE WHEEL



Gauge Wheel Assembly

Ref. No.	Harrell No.	Description	No. Req'd.
1	85-114-88	Gauge Wheel Mount, Front Right	1
2	2816-1612	Hex Head Bolt 1/2UNC x 1 1/4"	5
3	1702-1600	Flat Washers 1/2" SAE	3
4	1602-1600	Lock Washers 1/2" SAE	5
5	1412-1600	Hex Lock Nut 1/2UNC	5
6	77-052-88	Sealed Ball Bearing	2
7	85-047-88	Pivot Tube	1
8	2816-2450	Hex Head Bolt 3/4UNC x 5"	1
9	1702-2400	Flat Washer 3/4" SAE	2
10	1412-2400	Hex Lock Nut 3/4UNC	1
11	85-020-88	Yoke	1
12	79-089-88	Cotter Pin 1/4" x 3"	1
13	79-177-88	Tire & Rim Assembly	1
14	2816-2480	Hex Head Bolt 3/4UNC x 8"	1
15	1702-2400	Flat Washer 3/4" SAE	2
16	1412-2400	Hex Lock Nut 3/4UNC	1
17	94-068-88	Spacer	2
18	94-032-88	Bronze Bushing	2
19	85-115-88	Gage Wheel Mount, Front Left	1
20	79-022-88	Angle Adjusting Arm	1
21	79-082-88	Clevis Pin 3/4" x 3 1/4"	2
22	85-117-88	Gage Wheel Mount, Rear Left	1
23	85-116-88	Gage Wheel Mount, Rear Right	1
24	79-043-06	Hair Pin Clip	2
25	2816-2030	Hex Head Bolt 5/8UNC x 3" Gr. 5	1
26	1702-2000	Flat Washer 5/8" SAE	2
27	1412-2000	Hex Lock Nut 5/8UNC	1

BASKET RAKE TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Tine bar breaking in half.	1. Basket running too fast.	1. Slow basket speed down so that it does not exceed 90 RPM.
Front basket idler spindle breaking.	1. Basket height set too low, tines are digging into the ground. 2. Basket running too fast.	1. Adjust basket height so that tines do not touch the ground. Tines should be within 1/2" of the ground, but not actually in contact with the ground. 2. Slow basket speed down so that it does not exceed 90 RPM.
Star wheels cracking around tine bar bolt head holes.	1. Loose tine bar head bolts. 2. Tine bar head bearing worn out. 3. Bearings too loose in tine bar head. 4. Basket speed too fast	1. Tighten tine bar head bolts. 2. Replace tine bar head bearing. 3. Shim as needed with shim #77-054-88. 4. Slow basket speed down so that it does not exceed 90 RPM.
Baskets fail to operate when hydraulic remote valve is opened.	1. Basket drive hub splines worn out. 2. Check valve #79-146-88 is in the open position.	1. Replace hub, using new bolt, lockwasher, and flat washer. 2. Remove and clean the flow control valve or replace the valve with a new one.
Baskets rise during field operation.	1. System back-pressure is excessive, because return oil flow is restricted.	Read the HYDRAULICS section of OWNER'S MANUAL
Rake function fails to operate.	1. Manual control cable out of adjustment. 2. Wire come off solenoid contact. (Electric control valve only) 3. Solenoid defective. (Electric control valve only) 4. Hydraulic motor or cylinder is bypassing hydraulic oil internally.	1. Adjust cable to take up slack. 2. Replace wire and tighten spade connector. 3. Replace solenoid. 4. Install new seal kit in defective part.

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