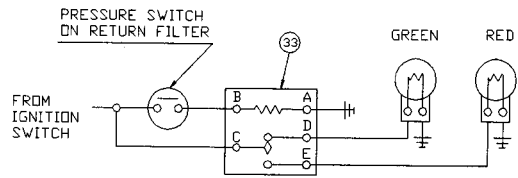
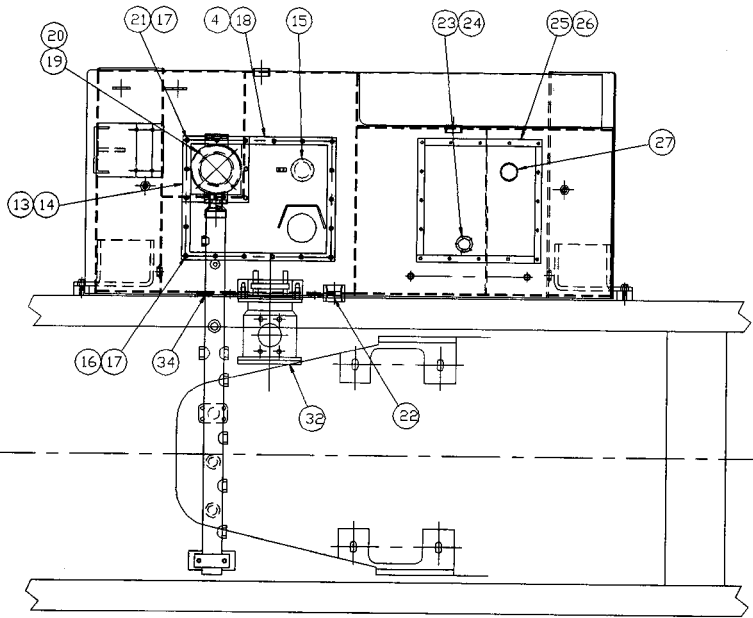
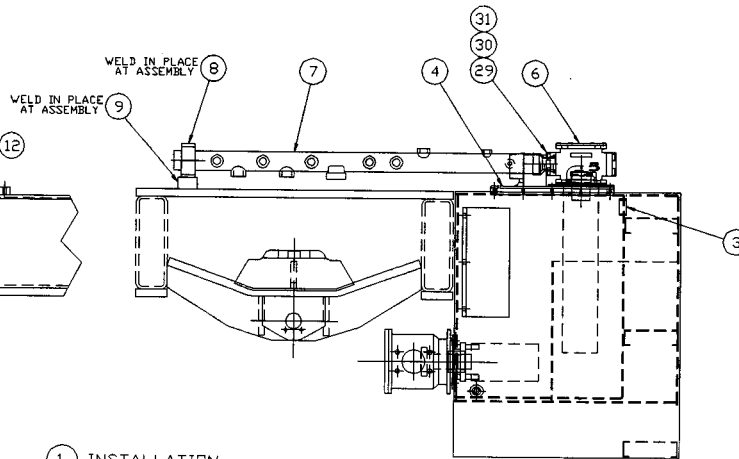
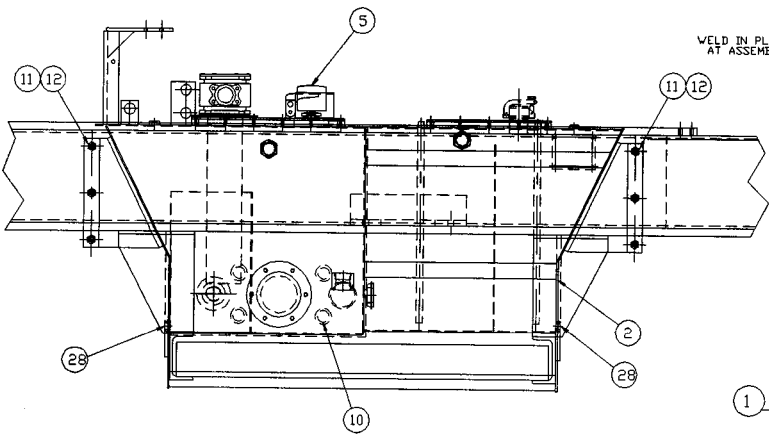


SECTION T

HYDRAULIC
SYSTEM



WIRING DIAGRAM



1 INSTALLATION

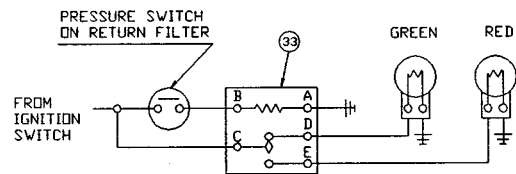
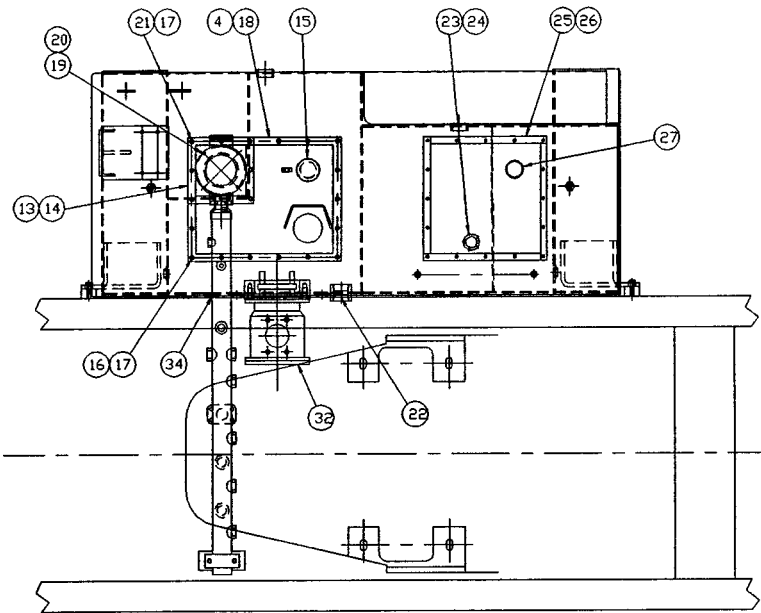
HYDRAULIC TANK CAPACITY = 94 GAL.

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS +/- 3 PLACE DECIMALS +/- 2 PLACE DECIMALS +/- 1 PLACE DECIMALS +/- ANGLES	SWINGMASTER CORPORATION 11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131
	HYD. & FUEL TANK INSTALLATION MODEL SL180-15
SEE SWINGMASTER SPECIFICATION G-1 FOR TOLERANCES NOT SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING SCALE 1=6	DRAWN BY: J.K. DATE 8-26-98
	DRAWING NO. D-801

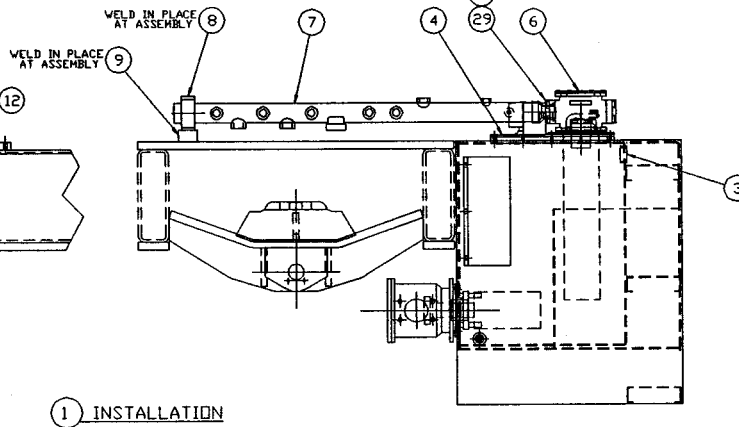
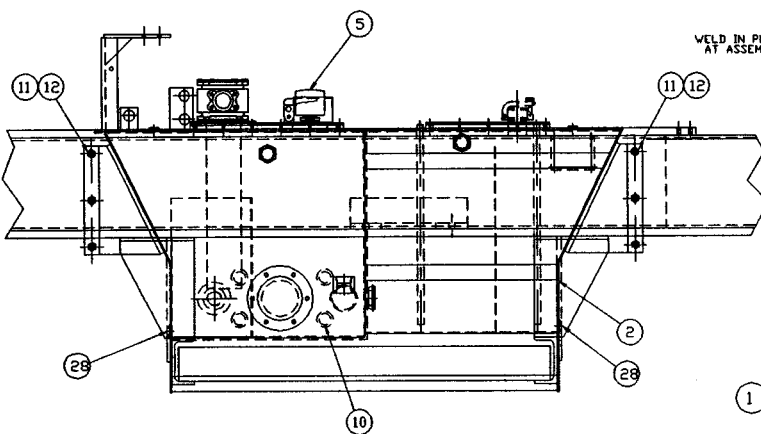
MACHINE	SECTION	20
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	

ASSEMBLY NUMBER	DESCRIPTION
1805866	HYDRAULIC & FUEL TANK INSTALLATION

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1805867	HYDRAULIC & FUEL TANK WELDMENT	1.00
003	1800270	SIGHT GAUGE - 1 1/2" NPT	2.00
004	1805868	HYDRAULIC TANK COVER WELDMENT	1.00
005	1800621	RESERVOIR BREATHER	1.00
006	1804867	HYD. RETURN FILTER (KS7 FILTER ELEMENT)	1.00
007	1805869	HYDRAULIC RETURN LINE MANIFOLD	1.00
008	1803322	HOSE CLAMP - 2 1/2"	1.00
009	1805870	MOUNTING BLOCK	1.00
010	1802675	3/4" PIPE PLUG - SOCKET HEAD	4.00
011	1800471	H.H.C.S. 1/2-13 X 1 1/2" LONG	6.00
012	1800570	1/2" LOCK WASHER	6.00
013	1805871	HYDRAULIC FILTER FLANGE	1.00
014	1802028	HYDRAULIC FILTER FLANGE GASKET	1.00
015	1800263	HYDRAULIC TANK CAP WITH LOCKING TAB	1.00
016	1800442	H.H.C.S. 5/16-18 X 3/4" LONG	29.00
017	1800074	5/16" LOCK WASHER	37.00
018	1805872	HYDRAULIC TANK COVER GASKET	1.00
019	1800454	H.H.C.S. 3/8-16 X 1 1/4" LONG	4.00
020	1800568	3/8" LOCK WASHER	4.00
021	1800443	H.H.C.S. 5/16-18 X 1" LONG	8.00
022	1800660	2" PIPE PLUG-SOCKET HEAD	1.00
023	1800276	FUEL LEVEL SENDER	1.00
024	1800287	GASKET (FOR FUEL SENDER)	1.00
025	1806207	FUEL TANK COVER PLATE WLDM'T	1.00
026	1800895	COVER PLATE GASKET	1.00
027	1800274	FUEL CAP	1.00
028	1800656	1/2" PIPE PLUG-SOCKET HEAD	2.00
029	1800826	1 1/2" SPLIT FLANGE CLAMP HALF	2.00
030	1802587	SOCKET HEAD CAP SCREW 1/2-13 X 1" LONG	4.00
031	1804054	PIPE CAP - 2"	1.00
032	1805611	SUCTION STRAINER	1.00



WIRING DIAGRAM



1 INSTALLATION

HYDRAULIC TANK CAPACITY = 94 GAL.

<p>TOLERANCES</p> <p>UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS +/-</p> <p>3 PLACE DECIMALS +/-</p> <p>2 PLACE DECIMALS +/-</p> <p>1 PLACE DECIMALS +/-</p> <p>ANGLES</p> <p>SEE SWINGMASTER SPECIFICATION</p> <p>G-1 FOR TOLERANCES NOT SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>DO NOT SCALE DRAWING</p> <p>SCALE 1"=6"</p>		<p>SWINGMASTER CORPORATION</p> <p>11415 MELROSE AVENUE</p> <p>FRANKLIN PARK, ILLINOIS 60131</p> <p>HYD. & FUEL TANK INSTALLATION</p> <p>MODEL SL180-15</p>	
<p>DRAWN BY: J.K.</p> <p>DATE: 8-26-98</p>		<p>DRAWING NO.</p> <p>D-801</p>	

SWINGMASTER CORPORATION

PARTS BOOK

MACHINE

SECTION

20

MODEL SL180 SWINGLOADER

HYDRAULIC SYSTEM

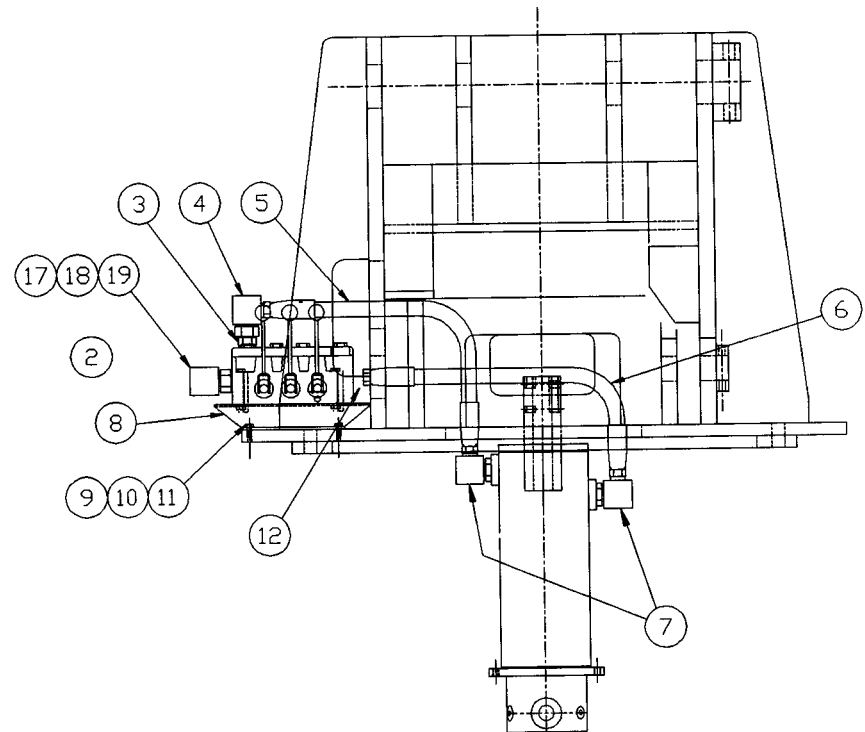
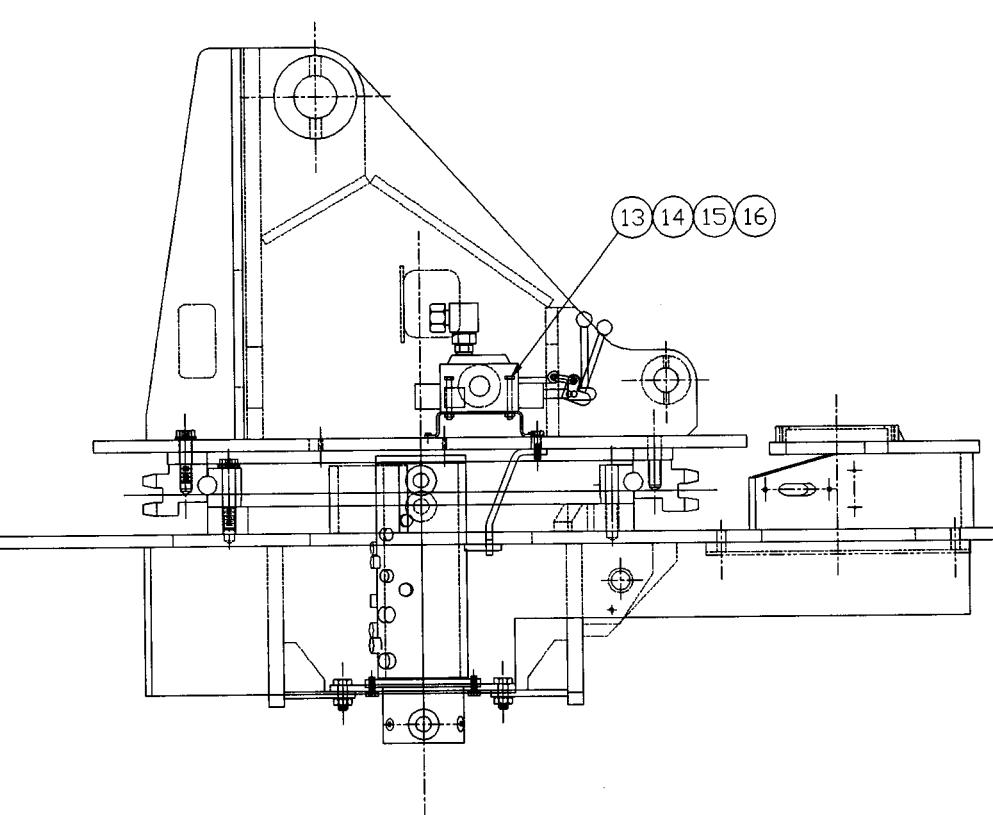
ASSEMBLY
NUMBER

DESCRIPTION

1805866

HYDRAULIC & FUEL TANK INSTALLATION

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
033	1800381	RELAY SWITCH - SPST 12V	1.00
034	1800657	1 1/4" PIPE PLUG-SOCKET HEAD	1.00



<p>TOLERANCES</p> <p>UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS +/-</p> <p>3 PLACE DECIMALS +/-</p> <p>2 PLACE DECIMALS +/-</p> <p>1 PLACE DECIMALS +/-</p> <p>ANGLES</p> <p>SEE SWINGMASTER SPECIFICATION</p> <p>G-1 FOR TOLERANCES NOT SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>DO NOT SCALE DRAWING</p> <p>SCALE: 1/8</p>		<p>SWINGMASTER CORPORATION</p> <p>11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131</p>	
		<p>MAIN VALVE INSTALLATION</p>	
		<p>DRAWN BY: J.K.</p> <p>DATE: 8-17-98</p>	<p>DRAWING NO.</p> <p>C-368</p>

MACHINE	SECTION	20
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	

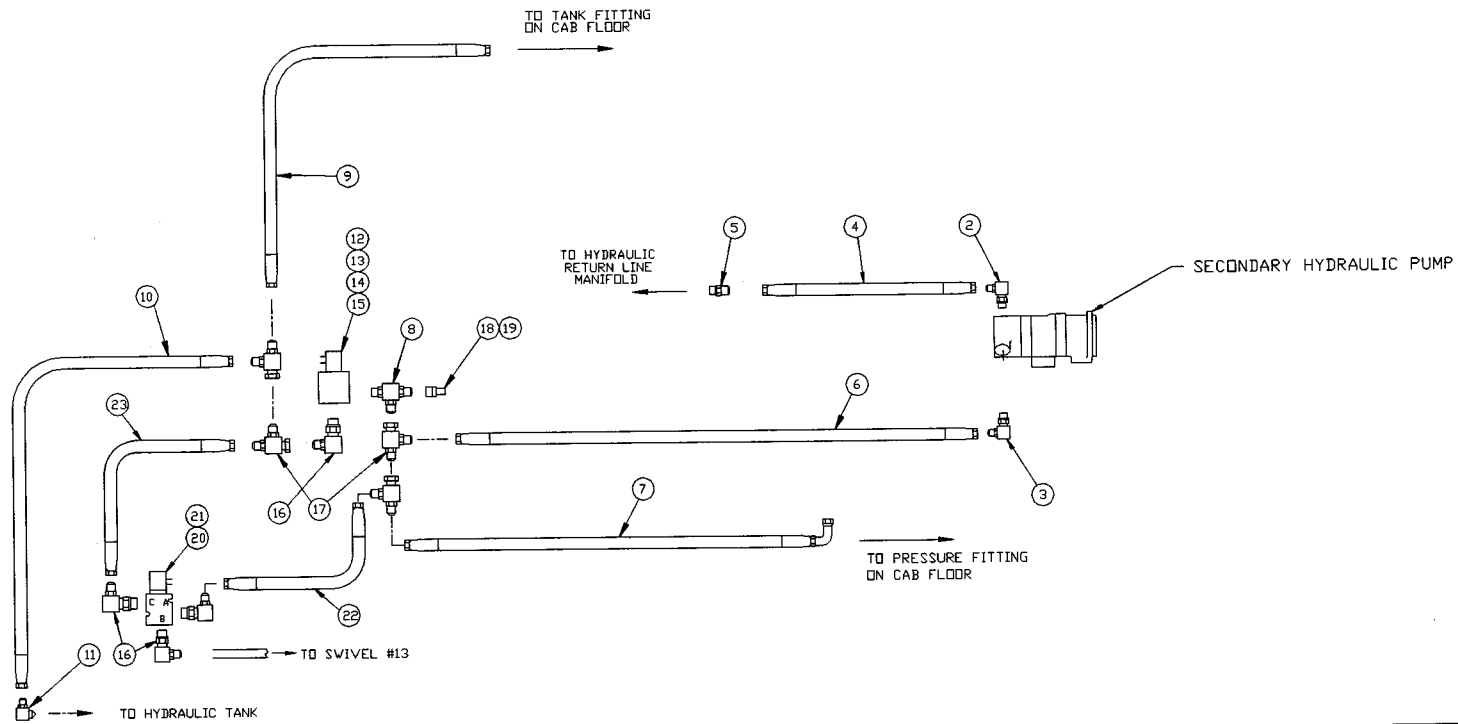
ASSEMBLY
NUMBER

DESCRIPTION

1805881

MAIN VALVE INSTALLATION

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1803512	HYDRAULIC CONTROL VALVE - 3 SECTION	1.00
003	1800772	STRAIGHT MALE 3/4 O-RING TO 1 1/4 TUBE	1.00
004	1803513	1 1/4" 90 DEGREE SWIVEL TUBE ELBOW	1.00
005	1805882	HOSE ASSEMBLY -1503-20	1.00
006	1805883	HOSE ASSEMBLY -1503-20	1.00
007	1802326	90 DEG MALE ELBOW 1 1/2 ORG TO 1 1/4 TBE	2.00
008	1805884	VALVE MOUNTING BRACKET	1.00
009	1800445	H.H.C.S. 5/16-18 X 1 1/2" LONG	4.00
010	1800074	5/16" LOCK WASHER	4.00
011	1800550	5/16" FLAT WASHER	4.00
012	1802525	STRAIGHT MALE 1 1/4 O-RING TO 1 TUBE	1.00
013	1800463	H.H.C.S. 3/8-16 X 3 1/2" LONG	3.00
014	1800552	3/8" FLAT WASHER	3.00
015	1800568	3/8" LOCK WASHER	3.00
016	1800514	HEX NUT 3/8-16	3.00
017	1802385	90 DEG MALE ELBOW 1 O-RING TO 1/2 TUBE	1.00
018	1800264	TEST PORT - 3/4"-16	1.00
019	1800876	DUST CAP	1.00



1 INSTALLATION

<p>TOLERANCES</p> <p>UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS +/-</p> <p>3 PLACE DECIMALS +/-</p> <p>2 PLACE DECIMALS +/-</p> <p>1 PLACE DECIMALS +/-</p> <p>ANGLES</p> <p>SEE SWINGMASTER SPECIFICATION</p> <p>0-1 FOR TOLERANCES NOT SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>DO NOT SCALE DRAWING</p> <p>SCALE:</p>	<p>SWINGMASTER CORPORATION</p> <p>11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131</p>	
	<p>SECONDARY PUMP PRESSURE & RETURN</p>	
	<p>LINES & FITTINGS - H.R.C. LOWER</p>	
	<p>MODEL SL180-15</p>	
<p>DRAWN BY: J.K.</p> <p>DATE: 8-20-98</p>	<p>DRAWING NO.</p> <p>D-800</p>	

MACHINE	SECTION	20
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	

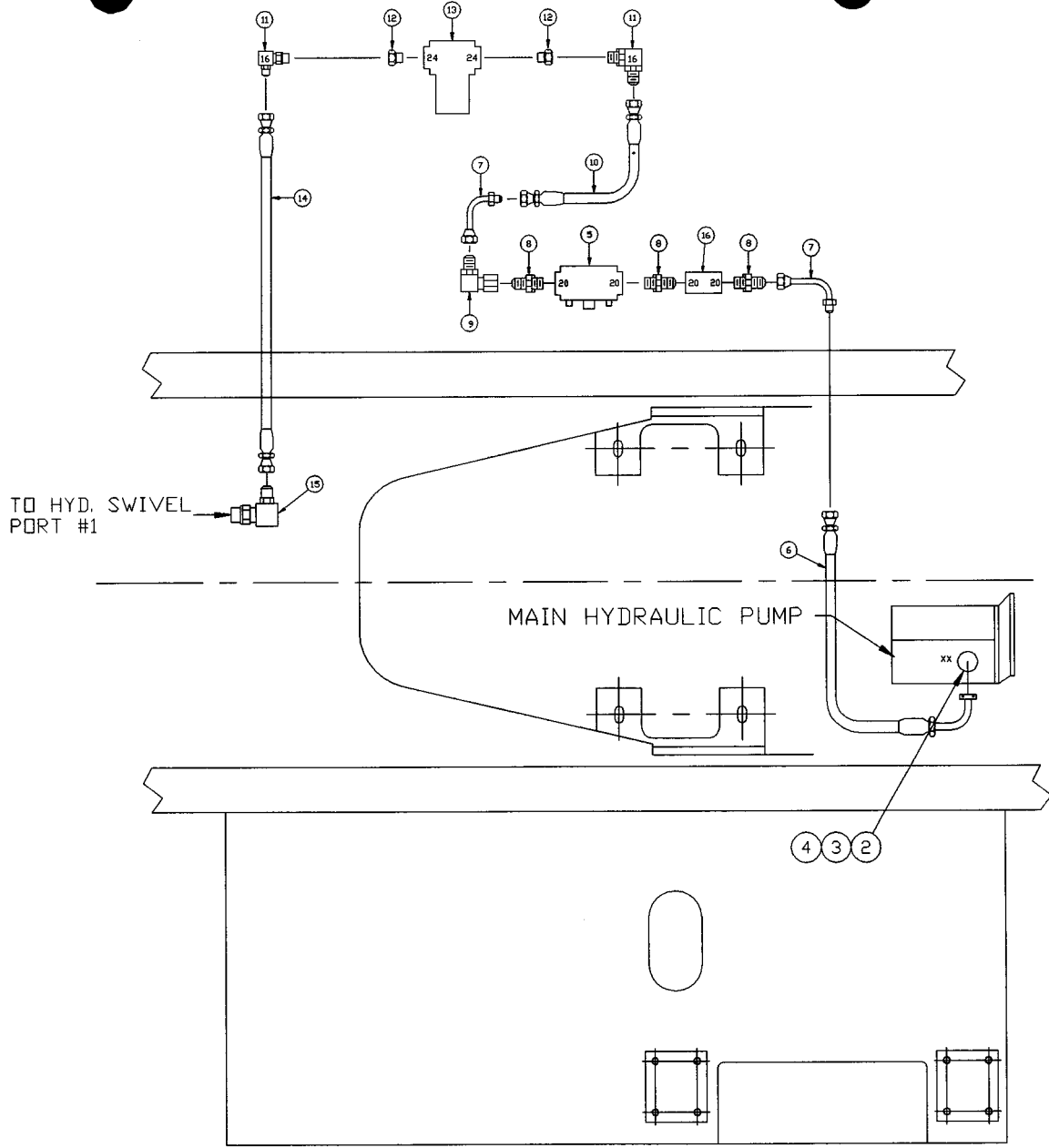
ASSEMBLY
NUMBER

DESCRIPTION

1805873

SECONDARY PUMP LINES & FITTINGS INSTALL

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1800796	90 DEG MALE ELBOW 1/2 O-RING TO 1/2 TUBE	1.00
003	1802437	90 DEG. MALE ELBOW 1/2 O-RING TO 3/8 TBE.	1.00
004	1805874	HOSE ASSEMBLY -1503-8	1.00
005	1803798	STRAIGHT MALE 3/4 O-RING TO 1/2 TUBE	1.00
006	1805875	HOSE ASSEMBLY -1503-6	1.00
007	1805876	HOSE ASSEMBLY -1503-6	1.00
008	1800881	MALE TEE 3/8 TUBE-3/8 TUBE-3/8 O-RING	1.00
009	1805877	HOSE ASSEMBLY -1503-6	1.00
010	1805878	HOSE ASSEMBLY -1503-6	1.00
011	1801896	90 DEG MALE ELBOW 3/4 PIPE TO 3/8 TUBE	1.00
012	1800267	SOLENOID CARTRIDGE VALVE - PILOT PRESS.	1.00
013	1802530	TAPPED STEEL BAR	1.00
014	1800439	H.H.C.S. 1/4-20 X 1 1/2" LONG	2.00
015	1800567	1/4" LOCK WASHER	2.00
016	1800794	90 DEG MALE ELBOW 3/8 O-RING TO 3/8 TUBE	4.00
017	1800858	3/8 TUBE RUN TEE M-F SWIVEL-M	4.00
018	1801668	3/8" MALE QUICK DISCONNECT	1.00
019	1800876	DUST CAP	1.00
020	1803266	SOLENOID CARTRIDGE VALVE	1.00
021	1803267	VALVE BODY	1.00
022	1805879	HOSE ASSEMBLY -1503-6	1.00
023	1805880	HOSE ASSEMBLY -1503-6	1.00



1 INSTALLATION

<p>TOLERANCES</p> <p>UNLESS OTHERWISE SPECIFIED FRACTIONS +/- 3 PLACE DECIMALS +/- 2 PLACE DECIMALS +/- 1 PLACE DECIMALS +/- ANGLES</p> <p>SEE SWINGMASTER SPECIFICATION G-1 FOR TOLERANCES NOT SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING SCALE:</p>	<p>SWINGMASTER CORPORATION</p> <p>11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131</p>	
	<p>MAIN HYDRAULIC CONTROL VALVE LINES & FITTING INSTALLATION (PRESSURE & RETURN)</p>	
	<p>MODEL SL180-15 BNRR SPL</p>	
	<p>DRAWN BY: J.K.</p> <p>DATE: 8-13-98</p>	<p>DRAWING NO.</p> <p style="font-size: 2em;">C-366</p>

MACHINE	SECTION	20
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	

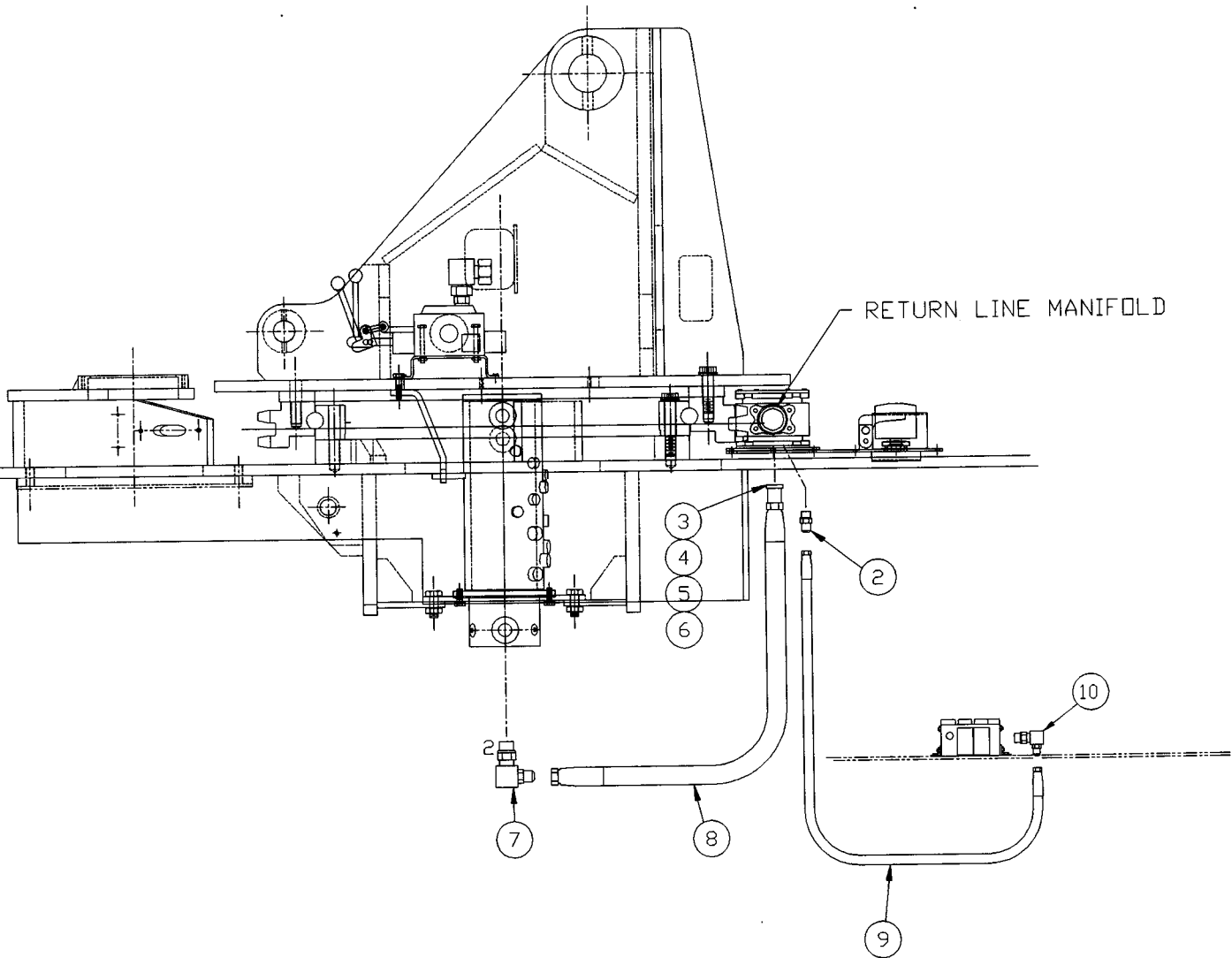
ASSEMBLY
NUMBER

DESCRIPTION

1805887

MAIN HYDRAULIC VALVE LINES & FITT. INSTL

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1800825	1 1/4" SPLIT FLANGE CLAMP HALF	2.00
003	1800869	12 POINT FLANGED SCREW 7/16-14X 1 1/4 LG	4.00
004	1800820	1 1/4" O-RING FOR SPLIT FLANGE HEAD	1.00
005	1805903	UCC FLOW SENSOR SERIES 20	1.00
006	1805888	HOSE ASSEMBLY -20	1.00
007	1805904	TUBE ELBOW - LONG	2.00
008	1804232	STRAIGHT MALE 1 1/4 O-RING TO 1 1/4 TUBE	3.00
009	1803513	1 1/4" 90 DEGREE SWIVEL TUBE ELBOW	1.00
010	1805889	HOSE ASSEMBLY -20	1.00
011	1803723	90 DEG MALE ELBOW 1 1/4 ORG TO 1 1/4 TBE	2.00
012	1805905	'O' RING REDUCER -24-20	2.00
013	1804938	PRESSURE LINE FILTER ASSY	1.00
014	1805890	HOSE ASSEMBLY -20	1.00
015	1803581	90 DEG MALE 1 1/4 O-RING TO 1 1/2 TUBE	1.00
016	1803678	CHECK VALVE -20	1.00



1 INSTALLATION

<p>TOLERANCES</p> <p>UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS +/-</p> <p>3 PLACE DECIMALS +/-</p> <p>2 PLACE DECIMALS +/-</p> <p>1 PLACE DECIMALS +/-</p> <p>ANGLES</p> <p>SEE SWINGMASTER SPECIFICATION</p> <p>G-1 FOR TOLERANCES NOT SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>DO NOT SCALE DRAWING</p> <p>SCALE:</p>	<p>SWINGMASTER CORPORATION</p> <p>11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131</p>	
	<p>MAIN HYDRAULIC PUMP RETURN</p>	
	<p>LINES & FITTINGS INSTALLATION</p>	
	<p>MODEL SL180-15</p>	
<p>DRAWN BY: J.K.</p> <p>DATE: 8-18-98</p>	<p>DRAWING NO.</p> <p>C-370</p>	

MACHINE

SECTION

20

MODEL SL180 SWINGLOADER

HYDRAULIC SYSTEM

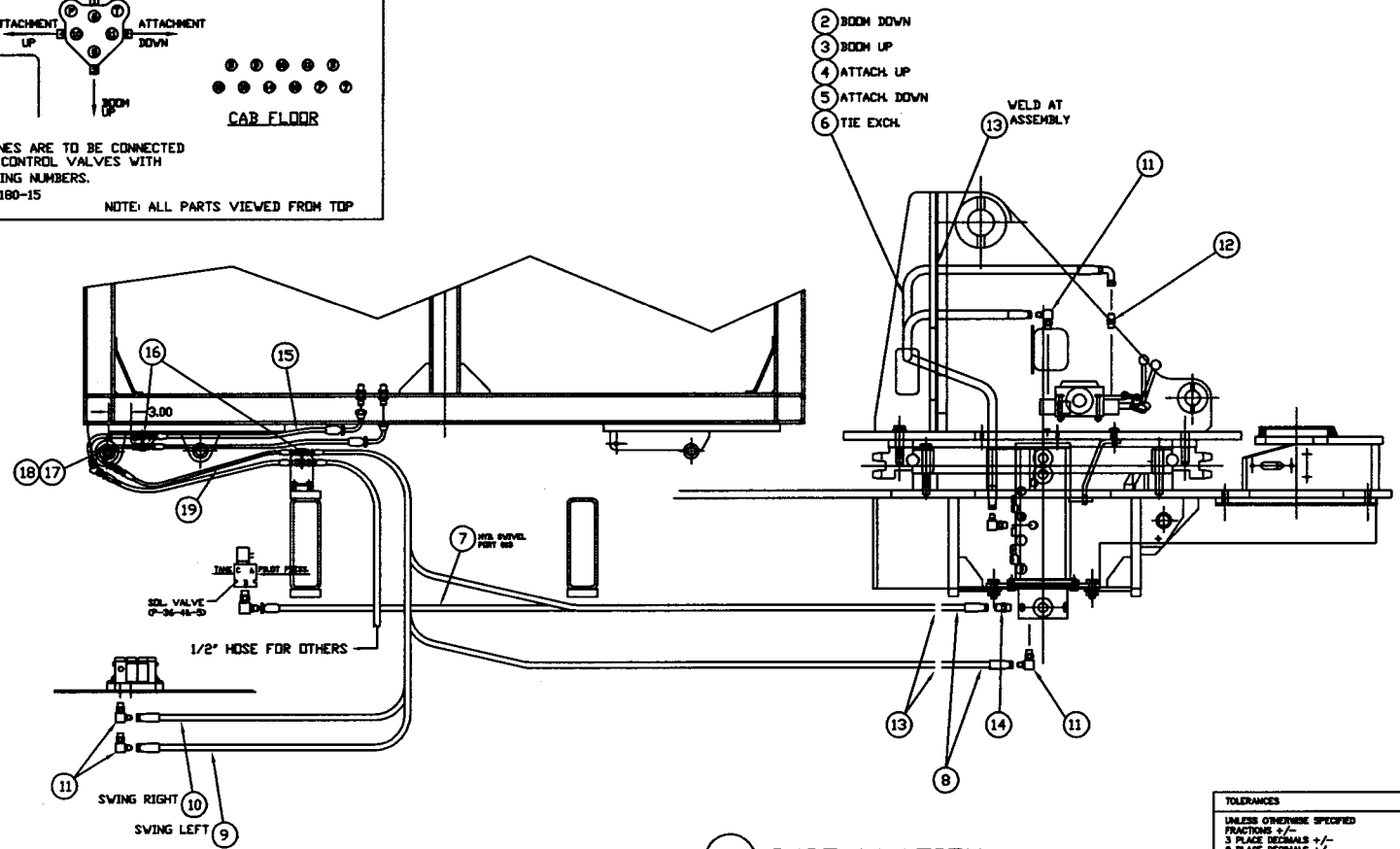
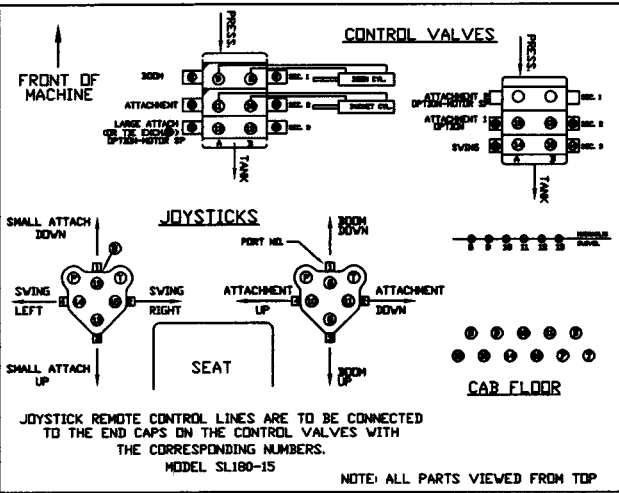
ASSEMBLY
NUMBER

DESCRIPTION

1805850

MAIN HYDRAULIC RETURN LINES & FITTINGS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1802346	STRAIGHT MALE 1 O-RING TO 3/4 TUBE	1.00
003	1800821	1 1/2" O-RING FOR SPLIT FLANGE HEAD	1.00
004	1800826	1 1/2" SPLIT FLANGE CLAMP HALF	2.00
005	1801343	12 POINT FLANGED SCREW 1/2-13 X 1 1/4 LG	4.00
006	1800570	1/2" LOCK WASHER	4.00
007	1802352	90 DEG MALE ELBOW 1 1/2 ORG TO 1 1/2 TBE	1.00
008	1803786	HOSE ASSEMBLY 1503-24	1.00
009	1805849	HOSE ASSEMBLY 1503-12	1.00
010	1802328	90 DEG MALE ELBOW 1 O-RING TO 3/4 TUBE	1.00



1 INSTALLATION

<p>TOLERANCES</p> <p>UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS +/-</p> <p>3 PLACE DECIMALS +/-</p> <p>2 PLACE DECIMALS +/-</p> <p>1 PLACE DECIMALS +/-</p> <p>ANGLES</p> <p>SEE SWINGMASTER SPECIFICATION</p> <p>0-1 FOR TOLERANCES NOT SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>DO NOT SCALE DRAWING</p> <p>SCALE:</p>	<p>SWINGMASTER CORPORATION</p> <p>11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131</p>	
	<p>H.R.C. LINES & FITTINGS - LOWER</p>	
	<p>MODEL SL180-15</p>	
	<p>DRAWN BY: J.K.</p>	<p>DRAWING NO. D-799</p>
	<p>DATE: 8-18-90</p>	

MACHINE

SECTION

20

MODEL SL180 SWINGLOADER

HYDRAULIC SYSTEM

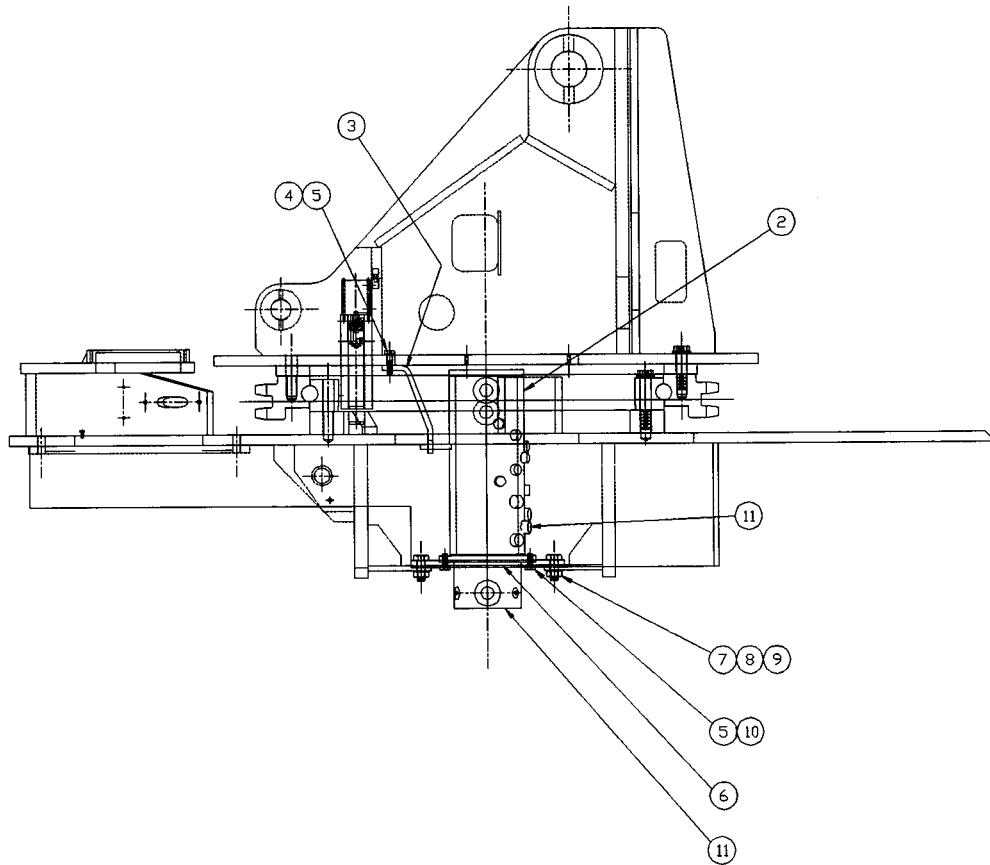
ASSEMBLY
NUMBER

DESCRIPTION

1805858

H.R.C. LINES & FITTINGS - LOWER

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1803790	HOSE ASSEMBLY 1503-6	1.00
003	1802416	HOSE ASSEMBLY 1503-6	1.00
004	1802416	HOSE ASSEMBLY 1503-6	1.00
005	1802547	HOSE ASSEMBLY 1503-6	1.00
006	1801348	HOSE ASSEMBLY 1503-6	1.00
007	1805851	HOSE ASSEMBLY 1503-6	1.00
008	1805852	HOSE ASSEMBLY 1503-6	5.00
009	1805853	HOSE ASSEMBLY 1503-6	2.00
010	1805854	HOSE ASSEMBLY 1503-6	2.00
011	1800794	90 DEG MALE ELBOW 3/8 O-RING TO 3/8 TUBE	15.00
012	1800762	STRAIGHT MALE 3/8 O-RING TO 3/8 TUBE	4.00
013	1801832	HOSE CLAMP - 3/4"	9.00
014	1803556	45 DEG MALE ELBOW 3/8 TUBE TO 3/8 O-RING	2.00
015	1805856	HOSE ASSEMBLY 1503-6	11.00
016	1801033	3/8 TUBE STRAIGHT BULKHEAD UNION	11.00
017	1805857	TUBE ASSEMBLY -6	11.00
018	1804103	TUBE UNION - 3/8	11.00
019	1805855	HOSE ASSEMBLY 1503-6	11.00



NOTE: INSTALL SWIVEL WITH PORT 5 & 6
TOWARD FRONT OF MACHINE.
PORT 2 SHOULD BE ON THE LEFT-HAND
SIDE AND PORT 1 SHOULD BE ON THE RIGHT-HAND
SIDE WHEN LOOKING FORWARD.

1 INSTALLATION

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS +/- 3 PLACE DECIMALS +/- 2 PLACE DECIMALS +/- 1 PLACE DECIMALS +/- ANGLES	SWINGMASTER CORPORATION 11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131	
	HYDRAULIC SWIVEL INSTALLATION	
SEE SWINGMASTER SPECIFICATION Q-1 FOR TOLERANCES NOT SPECIFIED	MODEL SL180-15	DRAWING NO.
DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING SCALE: 1/8"	DRAWN BY: J.K. DATE: 9-4-98	D-803

MACHINE	SECTION	20
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	

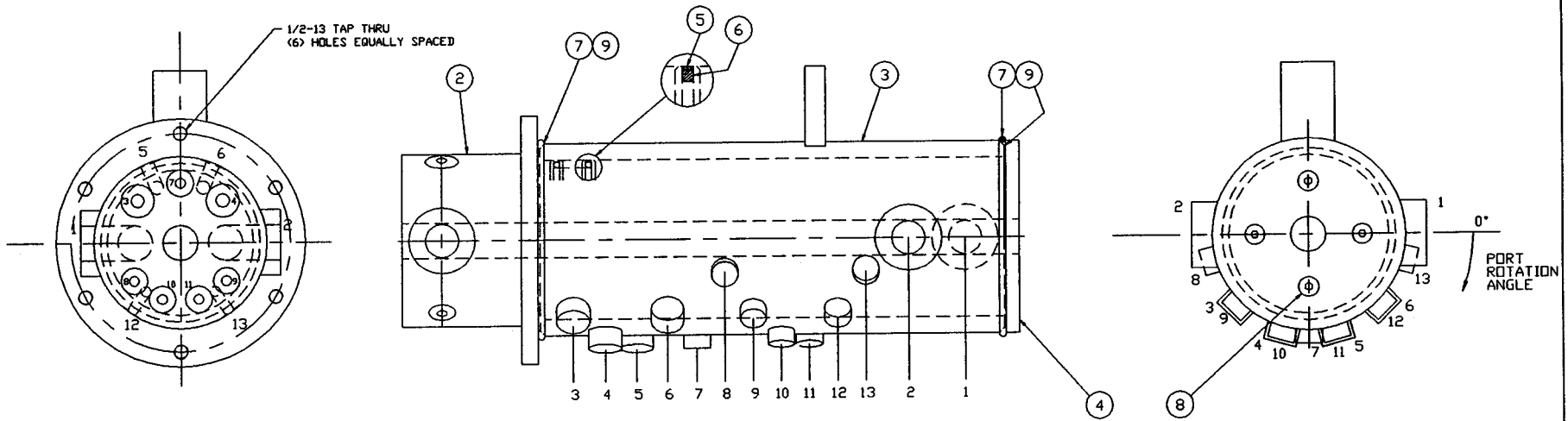
ASSEMBLY
NUMBER

DESCRIPTION

1805906

HYDRAULIC SWIVEL INSTALLATION

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1803315	HYDRAULIC SWIVEL	1.00
003	1805907	SWIVEL DRIVER	1.00
004	1801334	H.H.C.S. 1/2-13 X 2" LONG	3.00
005	1800570	1/2" LOCK WASHER	9.00
006	1803317	SWIVEL MOUNTING PLATE	1.00
007	1800479	H.H.C.S. 3/4-10 X 2" LONG	3.00
008	1800572	3/4" LOCK WASHER	3.00
009	1800521	HEX NUT 3/4-10	3.00
010	1801417	H.H.C.S. 1/2-13 X 1 1/4" LONG	6.00
011	1800971	1/2" O-RING BOSS PLUG-HEX HEAD	8.00



HYDRAULIC SWIVEL PORT SIZES, PORT ROTATION ANGLES, REQUIRED FLOWS & MINIMUM PRESSURE REQUIREMENTS.

NOTE: ALL PORTS TO BE S.A.E. STD. STRAIGHT THD. "O" RING BOSS UNLESS OTHERWISE STATED.

PORT NUMBER	PORT SIZE	PORT ROTATION ANGLE	REQUIRED FLOW	MINIMUM PRESSURE REQUIREMENT
1	1-1/2"	0°	6.2 GPM	3000 PSI
2	1-1/2"	180°	6.2 GPM	3000 PSI
3	1/2"	135°	1.2 GPM	2500 PSI
4	1/2"	105°	1.2 GPM	2500 PSI
5	1/2"	75°	1.2 GPM	2500 PSI
6	1/2"	45°	1.2 GPM	2500 PSI
7	3/8"	90°	7 GPH	DRAIN
8	3/8"	165°	7 GPH	1000 PSI
9	3/8"	135°	7 GPH	1000 PSI
10	3/8"	105°	7 GPH	1000 PSI
11	3/8"	75°	7 GPH	1000 PSI
12	3/8"	45°	7 GPH	1000 PSI
13	3/8"	15°	7 GPH	1000 PSI

UP - WHEN INSTALLED →

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS +/- 3 PLACE DECIMALS +/- 2 PLACE DECIMALS +/- 1 PLACE DECIMALS +/- ANGLES	SWINGMASTER CORPORATION	
	11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131	
SEE SWINGMASTER SPECIFICATION Q-1 FOR TOLERANCES NOT SPECIFIED	13 PORT HYDRAULIC SWIVEL	
DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING SCALE 1/2	DRAWN BY: B.V. DATE: 3-12-90	DRAWING NO. D-350

MACHINE

SECTION

20

MODEL RTC-15 ROUGH TERRAIN CRANE

HYDRAULIC SYSTEM

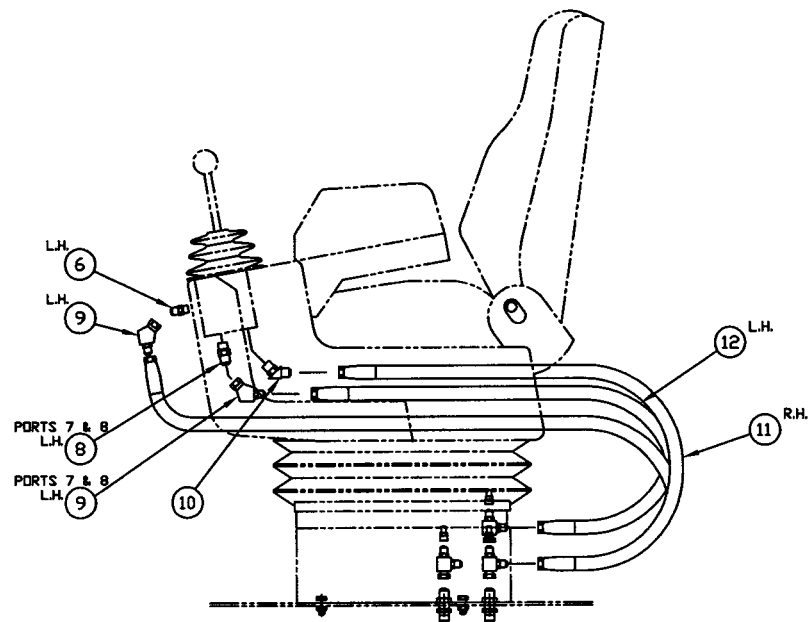
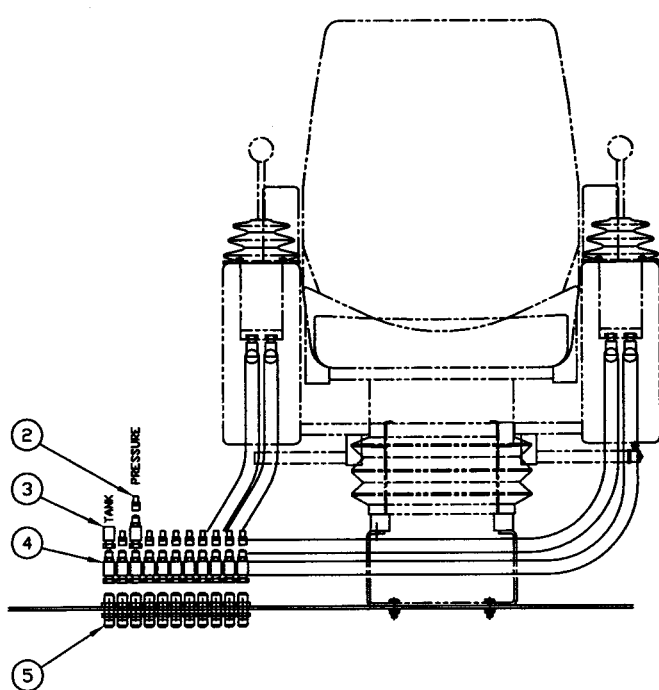
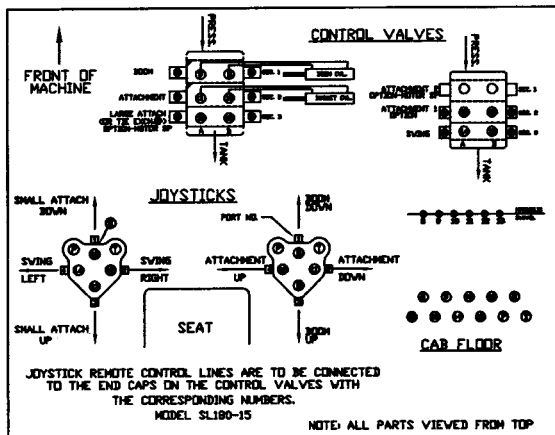
ASSEMBLY
NUMBER

DESCRIPTION

1803315

HYDRAULIC SWIVEL

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
2	8703318	SPOOL	1
3	8703319	SLEEVE	1
4	8703320	RETAINER PLATE	1
5	8703321	SEAL	14
6	8703322	O-RING	14
7	8702694	O-RING	2
8	8703323	BUTTON HEAD SOCKET CAP SCREW	4
9	8703324	NYLON WASHER	3



1 INSTALLATION

<p>TOLERANCES</p> <p>UNLESS OTHERWISE SPECIFIED</p> <p>FRACTIONS +/-</p> <p>3 PLACE DECIMALS +/-</p> <p>2 PLACE DECIMALS +/-</p> <p>1 PLACE DECIMALS +/-</p> <p>ANGLES</p> <p>SEE SWINGMASTER SPECIFICATION G-1 FOR TOLERANCES NOT SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>DO NOT SCALE DRAWING</p> <p>SCALE 1</p>		<p>SWINGMASTER CORPORATION</p> <p>11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131</p>	
		<p>HYDRAULIC REMOTE CONTROLS</p>	
		<p>LINES & FITTINGS INSTALLATION</p>	
		<p>MODEL SL180-15</p>	
<p>DRAWN BY: J.K.</p> <p>DATE: 8-17-98</p>		<p>DRAWING NO.</p> <p>C-369</p>	

MACHINE	SECTION	20
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	

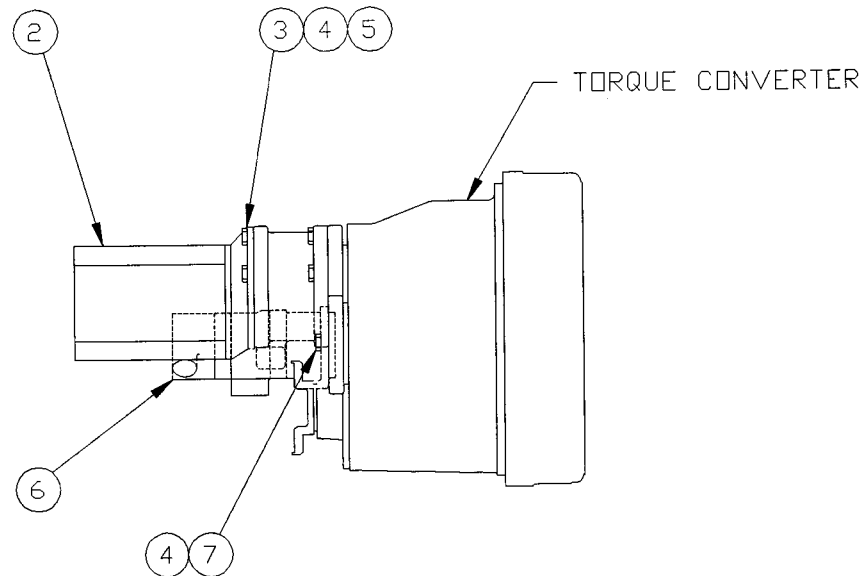
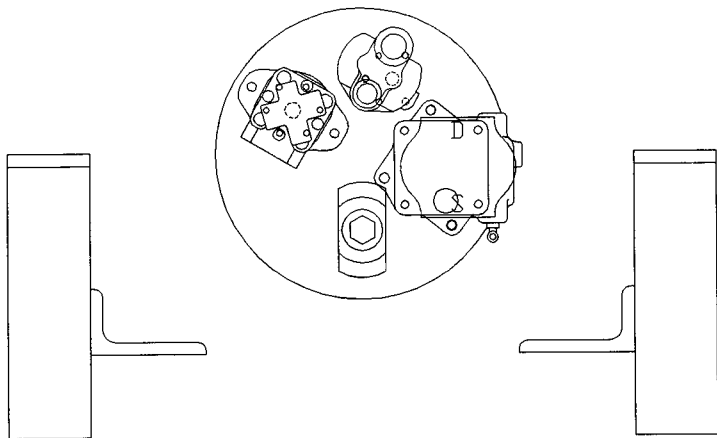
ASSEMBLY
NUMBER

DESCRIPTION

1805865

H.R.C. LINES AND FITTINGS INSTALLATION

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1801668	3/8" MALE QUICK DISCONNECT	10.00
003	1800852	90 DEG TUBE ELBOW 3/8 M TO 3/8 F SWIVEL	1.00
004	1800858	3/8 TUBE RUN TEE M-F SWIVEL-M	12.00
005	1801033	3/8 TUBE STRAIGHT BULKHEAD UNION	11.00
006	1802383	STRAIGHT MALE 3/16 O-RING TO 3/8 TUBE	1.00
007	1803584	NAME PLATE - JOYSTICK PRESSURES	1.00
008	1805864	REWORKED O-RING UNION -6-6	2.00
009	1803615	45 DEG TUBE ELBOW 3/8 M TO 3/8 F SWIVEL	3.00
010	1803556	45 DEG MALE ELBOW 3/8 TUBE TO 3/8 O-RING	10.00
011	1801786	HOSE ASSEMBLY 1503-6	6.00
012	1803772	HOSE ASSEMBLY 1503-6	7.00



1 INSTALLATION

TOLERANCES		SWINGMASTER CORPORATION	
UNLESS OTHERWISE SPECIFIED		11415 MELROSE AVENUE	
FRACTIONS +/-		FRANKLIN PARK, ILLINOIS 60131	
3 PLACE DECIMALS +/-		HYDRAULIC PUMPS INSTALLATION	
2 PLACE DECIMALS +/-			
1 PLACE DECIMALS +/-			
ANGLES			
SEE SWINGMASTER SPECIFICATION		DRAWN BY: B.W.	
G-1 FOR TOLERANCES NOT SPECIFIED		DATE: 9-14-88	
DIMENSIONS ARE IN INCHES		DRAWING NO.	
DO NOT SCALE DRAWING		C-116	
SCALE:			

1	4-5-90
REV.NO.	DATE

MACHINE

SECTION

20

MODEL SL180 SWINGLOADER

HYDRAULIC SYSTEM

ASSEMBLY
NUMBER

DESCRIPTION

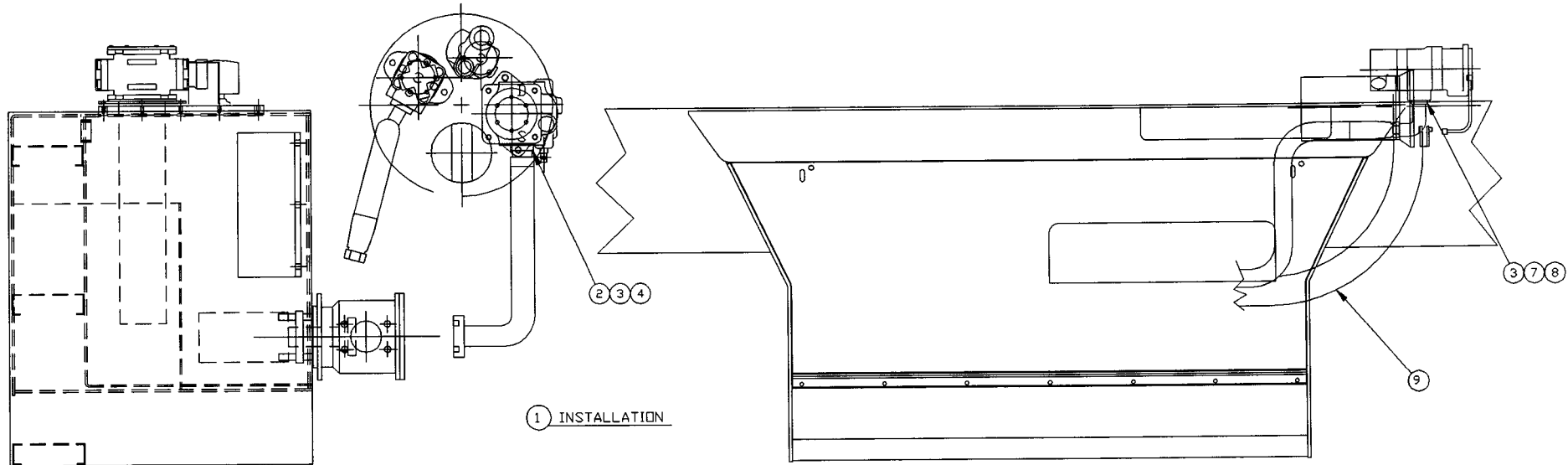
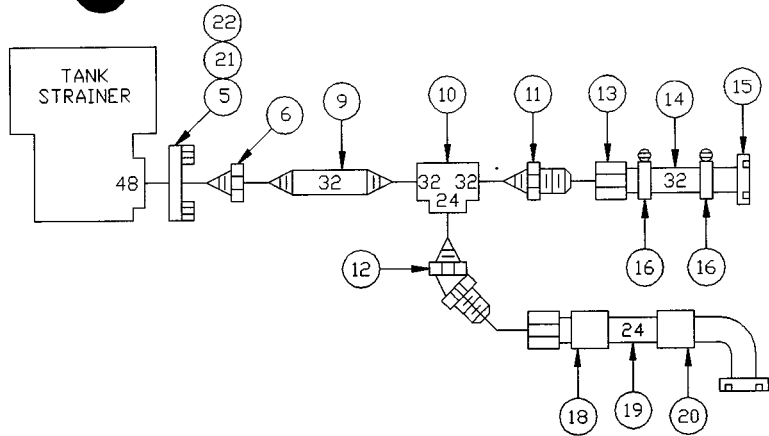
1803380 HYDRAULIC PUMPS INSTALLATION

ITEM
NO.PART
NUMBER

DESCRIPTION

QTY
USED

2	1803381	MAIN HYDRAULIC PUMP	1
3	1800509	R/H THREAD STUD 1/2-13 X 1 3/4" LONG	4
4	1800570	1/2" LOCK WASHER	6
5	1800517	HEX NUT 1/2-13	4
6	1800120	HYDRAULIC PUMP - DOUBLE - STEER + PILOT	1
7	1800471	H.H.C.S. 1/2-13 X 1 1/2" LONG	2



1 INSTALLATION

TOLERANCES

UNLESS OTHERWISE SPECIFIED
 FRACTIONS +/-
 3 PLACE DECIMALS +/-
 2 PLACE DECIMALS +/-
 1 PLACE DECIMALS +/-
 ANGLES

SEE SWINGMASTER SPECIFICATION
 G-1 FOR TOLERANCES NOT SPECIFIED

DIMENSIONS ARE IN INCHES
 DO NOT SCALE DRAWING
 SCALE:

SWINGMASTER CORPORATION

11415 MELROSE AVENUE
 FRANKLIN PARK, ILLINOIS 60131

MAIN SUCTION LINES & FITTINGS INSTALLATION

BNRR MODEL SL180-15

DRAWN BY: J.K.

DRAWING NO.

DATE: 8-11-98

C-365

MACHINE	SECTION	20
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	

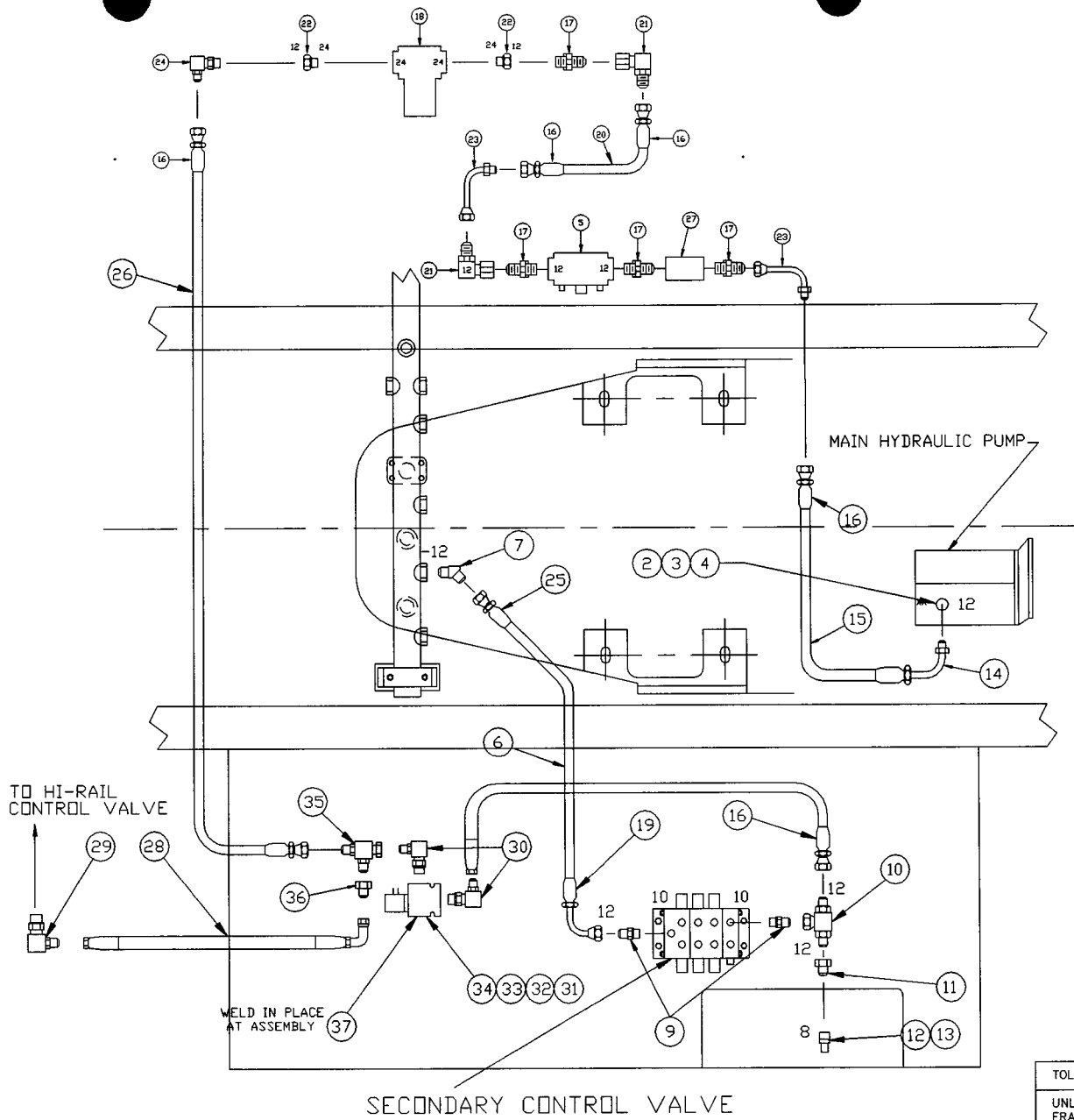
ASSEMBLY
NUMBER

DESCRIPTION

1805886

MAIN SUCTION LINES & FITTINGS INST'L

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
002	1800827	2" SPLIT FLANGE CLAMP HALF	2.00
003	1801343	12 POINT FLANGED SCREW 1/2-13 X 1 1/4 LG	8.00
004	1800822	2" O-RING FOR SPLIT FLANGE HEAD	1.00
005	1805891	4 BOLT FLANGE ADAPTER	1.00
006	1805892	3" TO 2" REDUCING BUSHING	1.00
007	1800826	1 1/2" SPLIT FLANGE CLAMP HALF	2.00
008	1800821	1 1/2" O-RING FOR SPLIT FLANGE HEAD	1.00
009	1804161	PIPE NIPPLE - 2"	1.00
010	1805893	150LB REDUCING TEE 2x2x1-1/2	1.00
011	1805894	PIPE TO FLARE UNION -32-32S	1.00
012	1805895	PIPE TO FLARE 45 DEG. MALE ELBOW -32-32S	1.00
013	1805896	FLARE SWIVEL END -32-32	1.00
014	1800727	2661-32 BULK HOSE/(IN)	1.00
015	1801007	STRAIGHT 1 1/2" SPLIT FLANGE-2661-12	1.00
016	1800693	2 1/2" HOSE CLAMP	2.00
018	1800998	HOSE FITTING -24	1.00
019	1805897	HOSE 1503-24	1.00
020	1800997	HOSE FITTING SPLIT FLANGE ELBOW -24	1.00
021	1805898	12 PT FLANGE HEAD CAP SCREW 5/8-11x1-3/4	4.00
022	1805899	O-RING -48	1.00



SECONDARY CONTROL VALVE

1 INSTALLATION

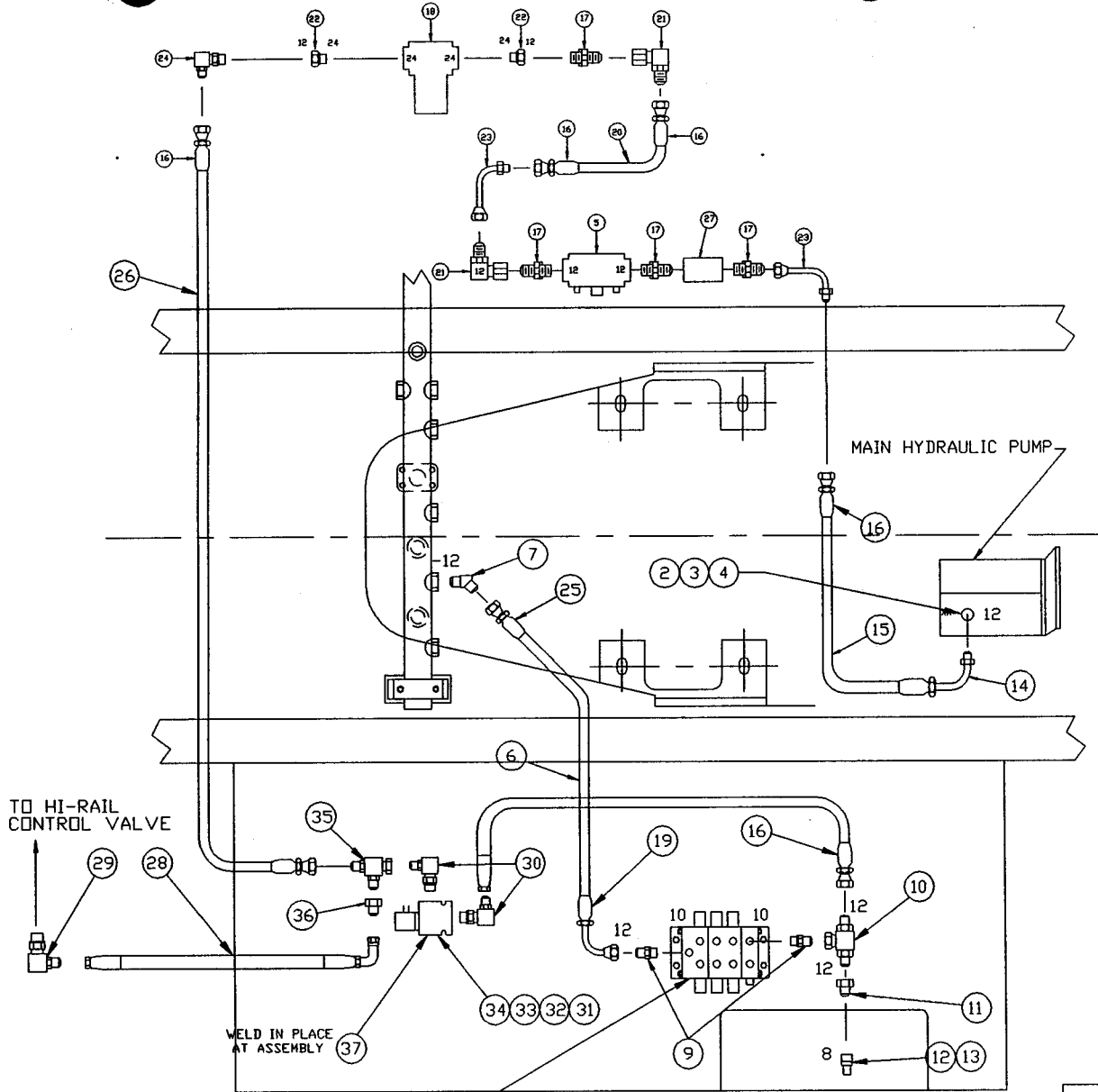
TOLERANCES
 UNLESS OTHERWISE SPECIFIED
 FRACTIONS +/-
 3 PLACE DECIMALS +/-
 2 PLACE DECIMALS +/-
 1 PLACE DECIMALS +/-
 ANGLES
 SEE SWINGMASTER SPECIFICATION
 G-1 FOR TOLERANCES NOT SPECIFIED
 DIMENSIONS ARE IN INCHES
 DO NOT SCALE DRAWING
 SCALE:

SWINGMASTER CORPORATION	
11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131	
SECONDARY HYD. CONTROL VALVE LINES & FITTING INSTALLATION (PRESSURE & RETURN)	
MODEL SL180-15 BNRR SPL	
DRAWN BY: J.K.	DRAWING NO.
DATE: 941206	C-367

MACHINE	SECTION	20
-----	-----	-----
MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	
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ASSEMBLY	DESCRIPTION
NUMBER	-----
1805885	SECONDARY CONT. VALVE LINES & FITT. INST
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
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002	1800824	1" SPLIT FLANGE CLAMP HALF	2.00
003	1800867	12 POINT FLANGED SCREW 3/8-16 X 1 1/4 LG	4.00
004	1800819	1" O-RING FOR SPLIT FLANGE HEAD	1.00
005	1805900	UCC FLOW SENSOR SERIES 20	1.00
006	1800721	1503-12 BULK HOSE/(IN)	1.00
007	1802331	45 DEG MALE ELBOW 3/4 TUBE TO 3/4 O-RING	1.00
009	1800768	STRAIGHT MALE 5/8 O-RING TO 3/4 TUBE	2.00
010	1803580	3/4 TUBE BRANCH TEE M - M - F-SWIVEL	1.00
011	1802380	STRAIGHT TUBE ADAPTER 1/2-M TO 3/4-F	1.00
012	1800264	TEST PORT - 3/4"-16	1.00
013	1800876	DUST CAP	1.00
014	1800837	HOSE FITTING SPLIT FLANGE ELBOW -12	1.00
015	1800720	2781-12 BULK HOSE/(IN)	1.00
016	1800838	STRAIGHT 3/4 TUBE F-2781-12	5.00
017	1800770	STRAIGHT MALE 3/4 O-RING TO 3/4 TUBE	3.00
018	1804938	PRESSURE LINE FILTER ASSY	1.00
019	1800993	90 DEG SHORT ELBOW 3/4 TUBE F-1503-12	1.00
020	1800720	2781-12 BULK HOSE/(IN)	1.00
021	1801912	90 DEG TUBE ELBOW 3/4-M TO 3/4-F SWIVEL	2.00
022	1805901	'O' RING REDUCER	2.00
023	1805902	TUBE ELBOW - LONG	2.00
024	1800801	90 DEG MALE ELBOW 3/4 O-RING TO 3/4 TUBE	1.00
025	1804845	STRAIGHT 3/4 TUBE F-1503-12	1.00
026	1800720	2781-12 BULK HOSE/(IN)	1.00
027	1803679	CHECK VALVE -12	1.00
028	1802537	HOSE ASSEMBLY 2781-8	1.00
029	1800796	90 DEG MALE ELBOW 1/2 O-RING TO 1/2 TUBE	1.00
030	1802328	90 DEG MALE ELBOW 1 O-RING TO 3/4 TUBE	1.00
031	1802347	SOLENOID CARTRIDGE VALVE	1.00
032	1802348	CARTRIDGE VALVE BODY	1.00
033	1802349	H.H.C.S. 5/16-18 X 2 1/4" LONG	2.00



SECONDARY CONTROL VALVE

1 INSTALLATION

TOLERANCES	
UNLESS OTHERWISE SPECIFIED	
FRACTIONS +/-	
3 PLACE DECIMALS +/-	
2 PLACE DECIMALS +/-	
1 PLACE DECIMALS +/-	
ANGLES	
SEE SWINGMASTER SPECIFICATION	
G-1 FOR TOLERANCES NOT SPECIFIED	
DIMENSIONS ARE IN INCHES	
DO NOT SCALE DRAWING	
SCALE:	

SWINGMASTER CORPORATION	
11415 MELROSE AVENUE FRANKLIN PARK, ILLINOIS 60131	
SECONDARY HYD. CONTROL VALVE LINES & FITTING INSTALLATION (PRESSURE & RETURN)	
MODEL SL180-15 BNRR SPL	
DRAWN BY: J.K.	DRAWING NO.
DATE: 941206	C-367

MACHINE	SECTION	20
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MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM	
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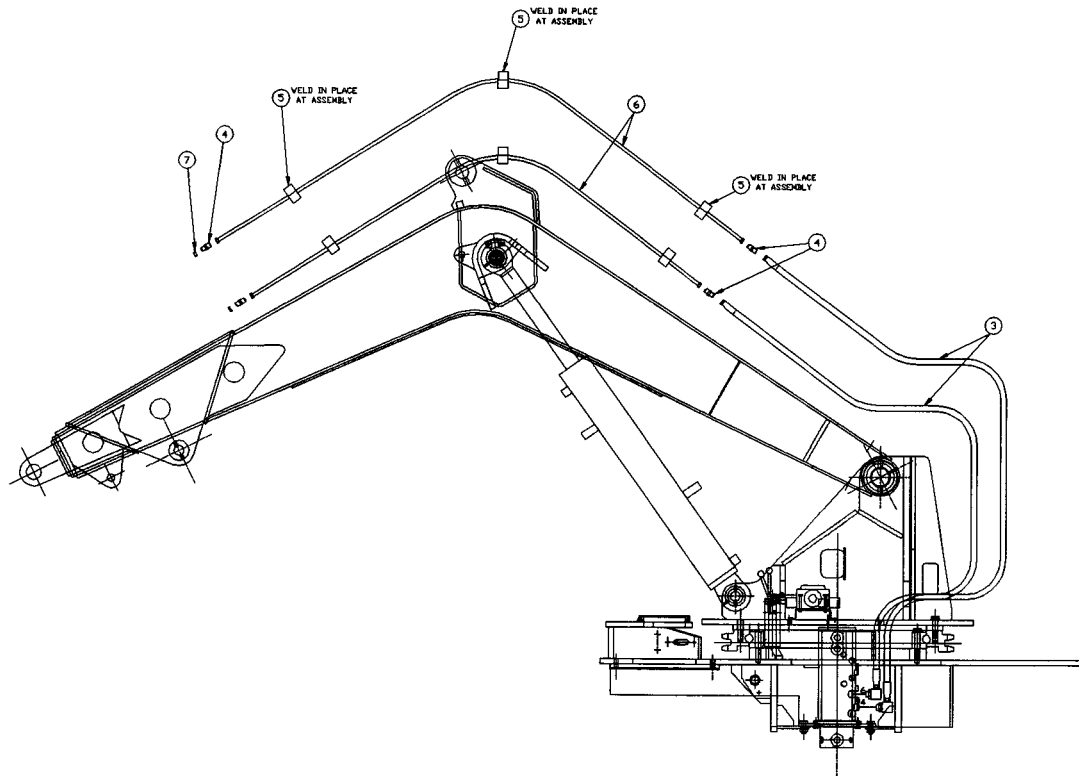
ASSEMBLY
NUMBER

DESCRIPTION

1805885

SECONDARY CONT. VALVE LINES & FITT. INST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
034	1800074	5/16" LOCK WASHER	2.00
035	1800861	3/4 TUBE RUN TEE M-F SWIVEL-M	1.00
036	1802380	STRAIGHT TUBE ADAPTER 1/2-M TO 3/4-F	1.00
037	1802536	MOUNTING BLOCK	1.00



1 INSTALLATION

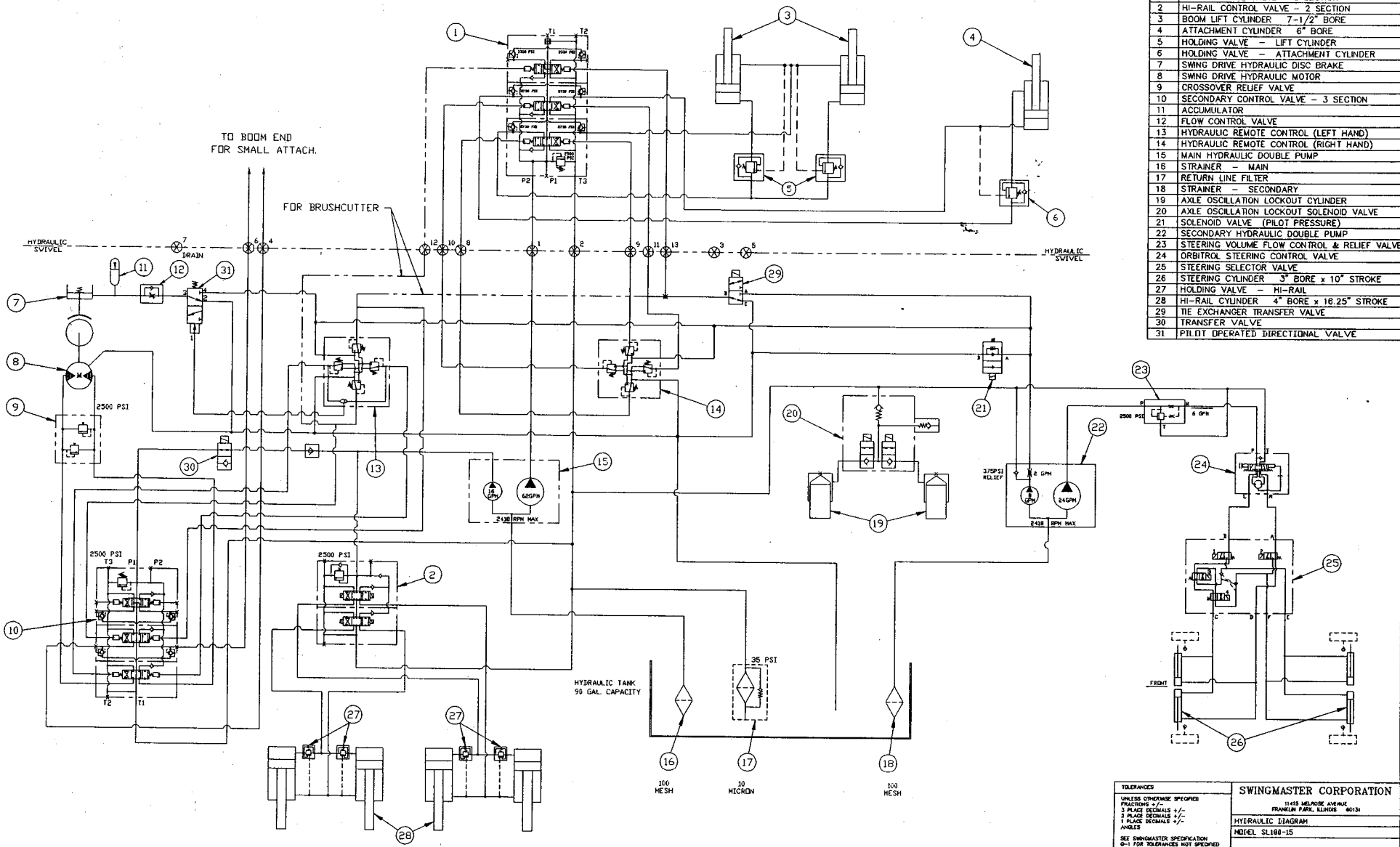
TOLERANCES
 UNLESS OTHERWISE SPECIFIED
 FRACTIONS +/-
 3 PLACE DECIMALS +/-
 2 PLACE DECIMALS +/-
 1 PLACE DECIMALS +/-
 ANGLES
 SEE SWINGMASTER SPECIFICATION
 G-1 FOR TOLERANCES NOT SPECIFIED
 DIMENSIONS ARE IN INCHES
 DO NOT SCALE DRAWING
 SCALE:

SWINGMASTER CORPORATION
 11415 MELROSE AVENUE
 FRANKLIN PARK, ILLINOIS 60131
 ATTACHMENT LINES & FITTINGS INSTALLATION
 MODEL SL180-15
 DRAWN BY: J.K. DRAWING NO.
 DATE: 9-18-98
 D-810

MACHINE	SECTION	53
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MODEL SL180 SWINGLOADER	HYDRAULIC SYSTEM ACCES/OPTIONS	
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ASSEMBLY NUMBER	DESCRIPTION
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1805956	ATTACHMENT LINES & FITTINGS INSTALLATION
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY. USED
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002	1800797	90 DEG MALE ELBOW 1/2 O-RING TO 5/8 TUBE	2.00
003	1802566	HOSE ASSEMBLY 2781-10	2.00
004	1801072	5/8 TUBE STRAIGHT MALE UNION	4.00
005	1800229	HOSE CLAMP - 5/8"	6.00
006	1805957	TUBE ASSEMBLY	2.00
007	1800887	5/8" TUBE CAP NUT	2.00
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ITEM	DESCRIPTION
1	MAIN CONTROL VALVE - 3 SECTION
2	HI-RAIL CONTROL VALVE - 2 SECTION
3	BOOM LIFT CYLINDER 7-1/2" BORE
4	ATTACHMENT CYLINDER 6" BORE
5	HOLDING VALVE - LIFT CYLINDER
6	HOLDING VALVE - ATTACHMENT CYLINDER
7	SWING DRIVE HYDRAULIC DISC BRAKE
8	SWING DRIVE HYDRAULIC MOTOR
9	CROSSOVER RELIEF VALVE
10	SECONDARY CONTROL VALVE - 3 SECTION
11	ACCUMULATOR
12	FLOW CONTROL VALVE
13	HYDRAULIC REMOTE CONTROL (LEFT HAND)
14	HYDRAULIC REMOTE CONTROL (RIGHT HAND)
15	MAIN HYDRAULIC DOUBLE PUMP
16	STRAINER - MAIN
17	RETURN LINE FILTER
18	STRAINER - SECONDARY
19	AXLE OSCILLATION LOCKOUT CYLINDER
20	AXLE OSCILLATION LOCKOUT SOLENOID VALVE
21	SOLENOID VALVE (PILOT PRESSURE)
22	SECONDARY HYDRAULIC DOUBLE PUMP
23	STEERING VOLUME FLOW CONTROL & RELIEF VALVE
24	ORBITROL STEERING CONTROL VALVE
25	STEERING SELECTOR VALVE
26	STEERING CYLINDER 3" BORE x 10" STROKE
27	HOLDING VALVE - HI-RAIL
28	HI-RAIL CYLINDER 4" BORE x 16.25" STROKE
29	TIE EXCHANGER TRANSFER VALVE
30	TRANSFER VALVE
31	PILOT OPERATED DIRECTIONAL VALVE

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS +/- 3 PLACE DECIMALS +/- 2 PLACE DECIMALS +/- 1 PLACE DECIMALS +/- ANGLES SEE SWINGMASTER SPECIFICATION 0-11 FOR TOLERANCES NOT SPECIFIED DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING SCALE		SWINGMASTER CORPORATION 11415 MENDOTA AVE. MAX FRANKLIN PARK, ILLINOIS 60131 <hr/> HYDRAULIC DIAGRAM MODEL SL180-15 <hr/> DRAWN BY: JEC DATE: 8-6-98 DRAWING NO. D-798	
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