



**PARTS MANUAL  
FOR  
HAGIE STS NITROGEN TOOLBAR**

**HAGIE MANUFACTURING COMPANY**

721 CENTRAL AVENUE WEST  
BOX 273  
CLARION, IOWA 50525-0273

(515) 532-2861

COVERS MACHINE SERIAL NUMBERS: U6911331001 thru U6911331100  
U6921331001 thru U6921331100  
U6951331001 thru U6951331100  
U6961331001 thru U6961331100  
U6971331001 thru U6971331100  
U6991331001 thru U6991331100

10-12 493562  
REV. 05-13

To obtain the most current parts manual for your machine, please visit [www.hagiehelp.com](http://www.hagiehelp.com).

© 2013 Hagie Manufacturing Company. Clarion, Iowa USA

## NITROGEN TOOLBAR IDENTIFICATION

Each Hagie toolbar is identified by means of a frame serial number. This serial number denotes the model, the year in which it was built, and the number of the toolbar. To insure prompt, efficient service when ordering parts or requesting service repairs from Hagie Manufacturing Company, record the serial number in the space provided below.

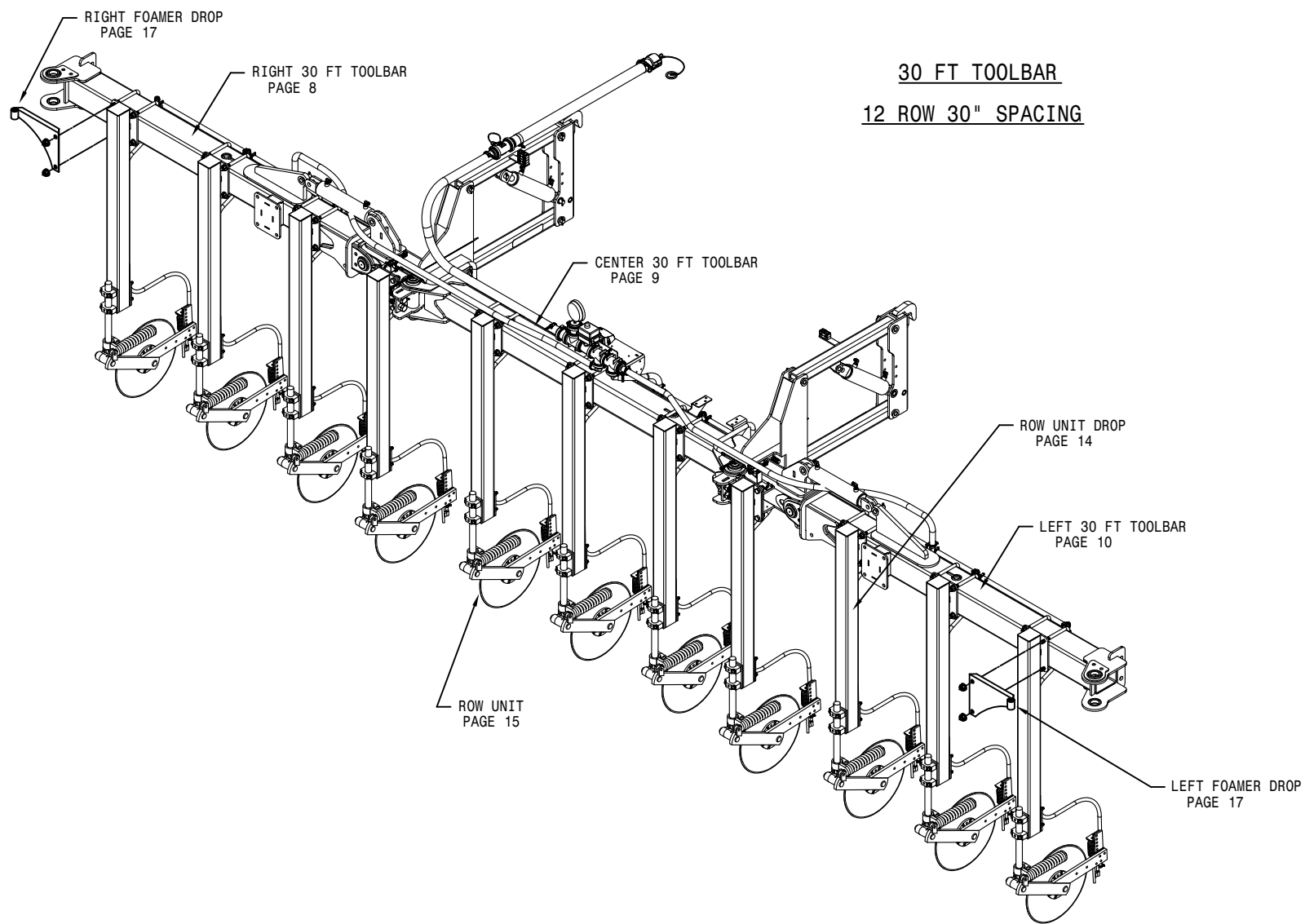
NOTE: Reference to left hand and right hand used throughout this manual refers to the position when seated in the operator's seat facing forward.

NITROGEN TOOLBAR SERIAL NUMBER

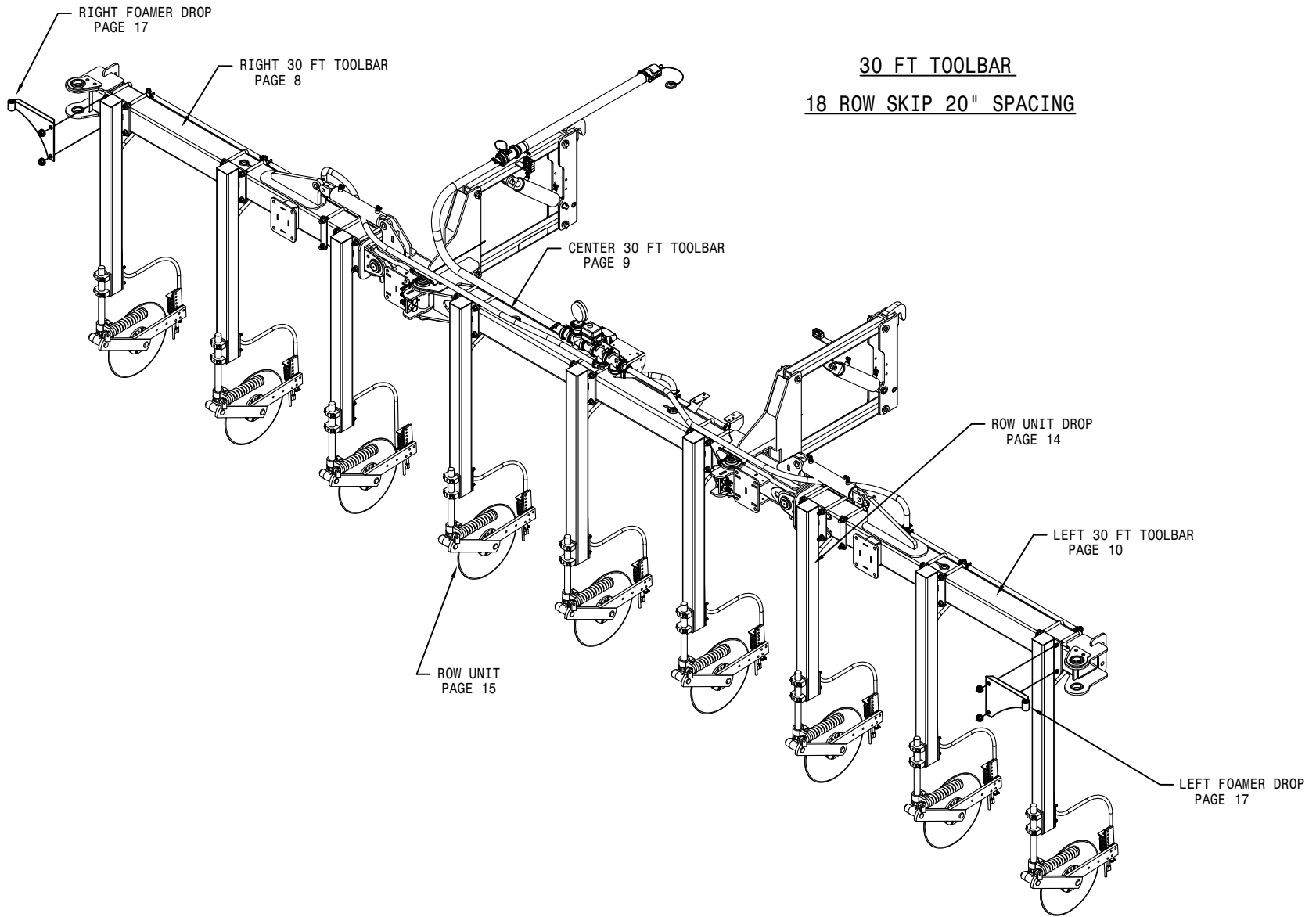
---

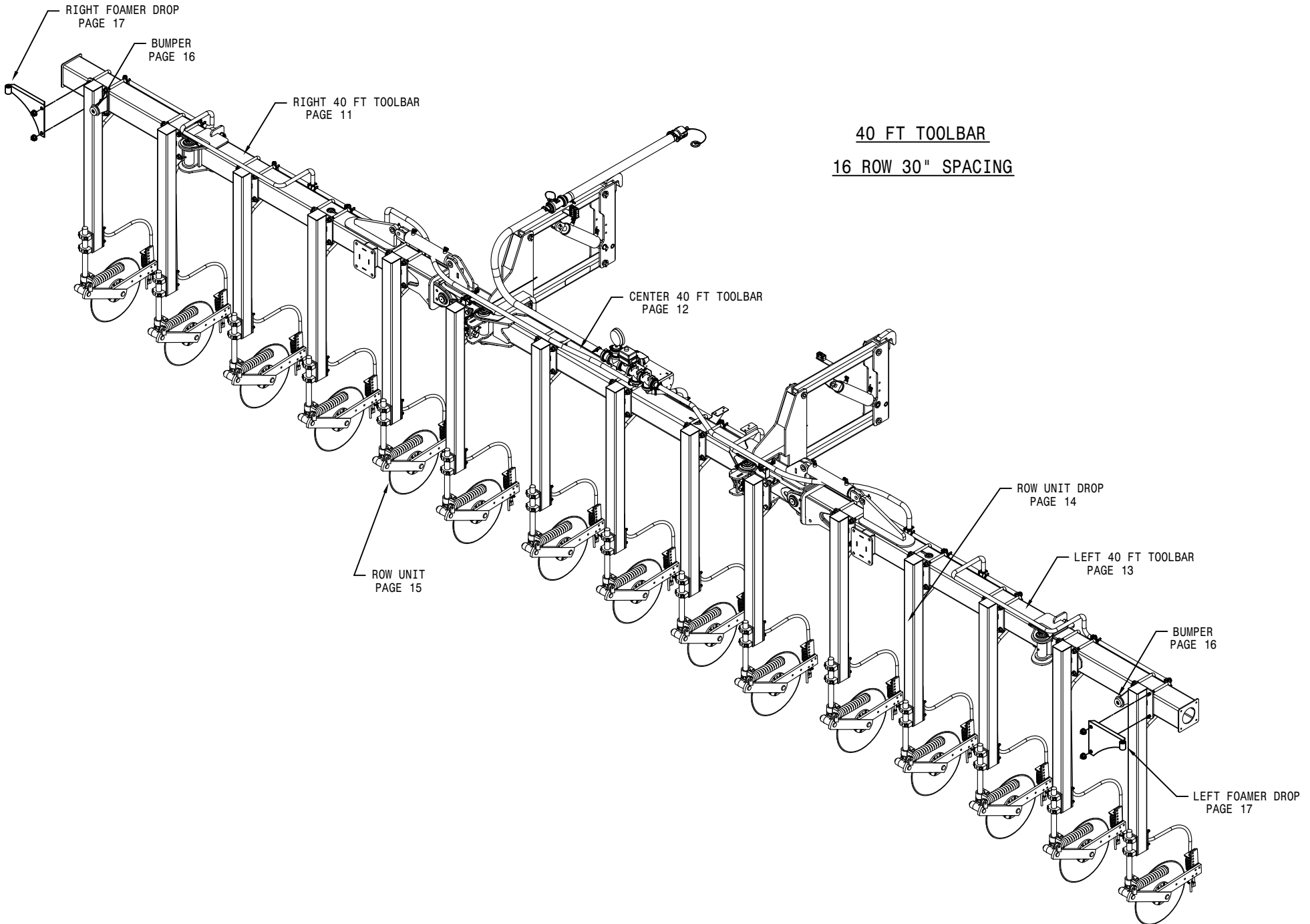
TABLE OF CONTENTS

TOOLBAR ASSEMBLY 30-40FT. . . . .	4-13
ROW UNIT DROP ASSEMBLY 30-40FT. . . . .	14
ROW UNIT ASSEMBLY 30-40-60FT. . . . .	15
BUMPER ASSEMBLY 30-40FT . . . . .	16
FOAMER DROP AND HOSE ASSEMBLY 30-40FT . . . . .	17-18
QUICK ATTACH BRACKETS 30-40FT . . . . .	19
30FT TOOLBAR CONTROL VALVE ASSEMBLY . . . . .	20
40FT TOOLBAR CONTROL VALVE ASSEMBLY . . . . .	21
FLOW METER ASSEMBLY 30-40FT . . . . .	22
SOLUTION CONTROL VALVE ASSEMBLY 30-40FT . . . . .	23-24
SOLUTION HOISING 30-40FT . . . . .	25-28
TOOLBAR ASSEMBLY 60FT . . . . .	29-35
ROW UNIT DROP 60FT. . . . .	36
HYDRAULIC MANIFOLD 60FT . . . . .	37-38
ELECT CONTROL BOX 60FT. . . . .	39
FLOW METER 60FT . . . . .	40
SOLUTION MANIFOLD AND VALVE ASSEMBLY 60FT . . . . .	41-46
SOLUTION HOISING 60FT. . . . .	47-48
HYDRAULIC SCHEMATIC . . . . .	50-63
WIRING DIAGRAM. . . . .	64-73

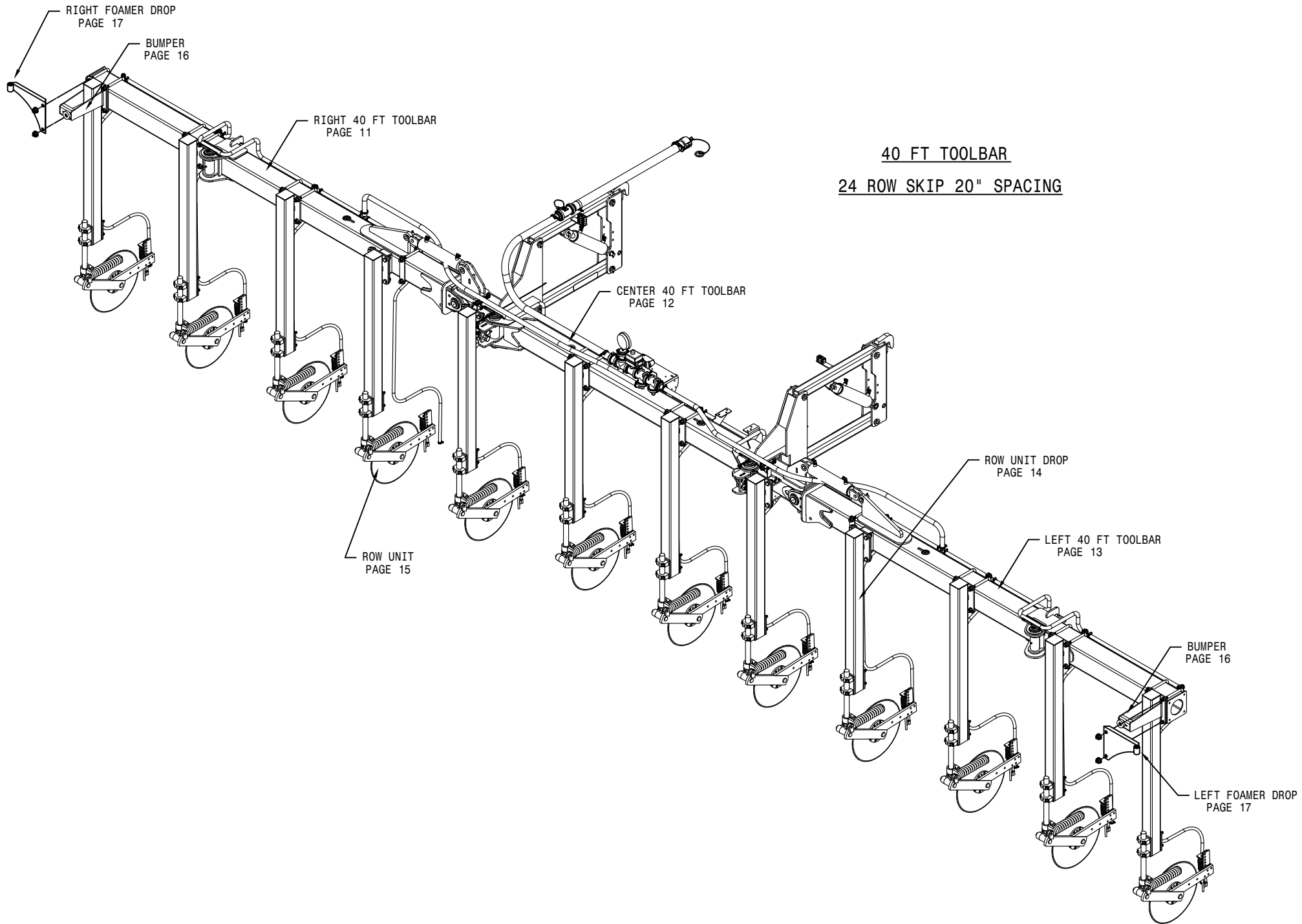








40 FT TOOLBAR  
16 ROW 30" SPACING

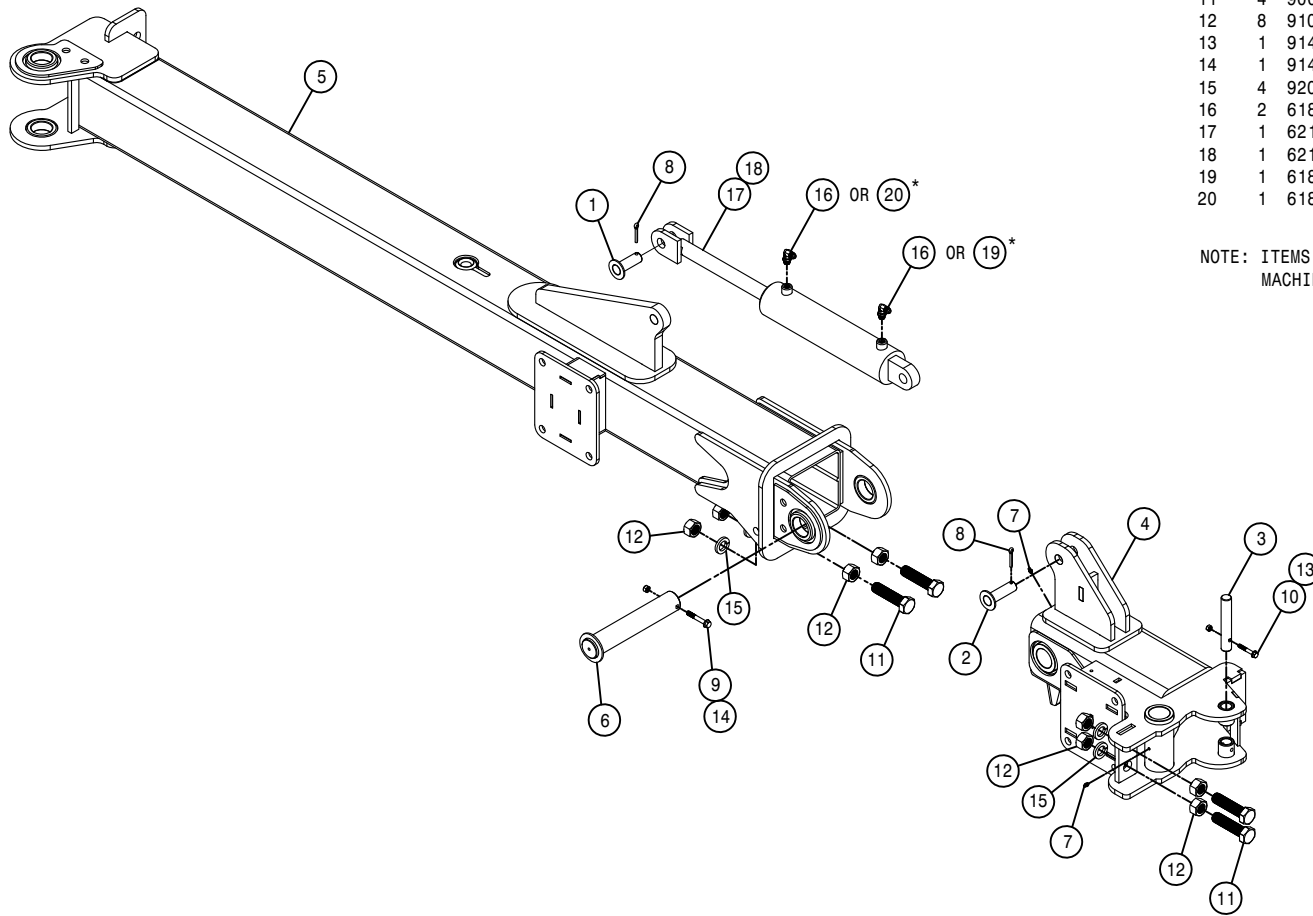


RIGHT 30FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

1	1	439066	LIFT CYL PIN WLD, NTB STS 03
2	1	439068	ARTICULATOR CYL PIN WLD,NTB 03
3	1	439386	ARTICULATOR FLD CYL PIN,NTB' 10
4	1	439419	RH OUTRGR ARTIC WLD NTB' 12
5	1	439433	RH OUTRIGGER WLD NTB' 12
6	1	439440	OUTRGR ARTIC HINGE PIN WLD,NTB
7	2	471005	GREASE ZERK, 1/4 28 X 1/2
8	2	475015	COTTER PIN 1/4 X 1 1/2, SS
9	1	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
10	1	900069	5/16UNC X 2" HEX BOLT
11	4	900536	1" UNC X 4" HEX BOLT,FULL THD
12	8	910017	1-8 HEX NUT
13	1	914002	5/16UNC HEX STOVER NUT
14	1	914004	3/8UNC HEX STOVER NUT
15	4	920508	1" LOCK WASHER
16	2	618689	9/16MJ-90-9/16MOR .042 CHK VLV
17	1	621558	HYD CYL, 3.00 X 11.00 X 1.380
18	1	621559	REPAIR KIT, HYD CYL 621558
19	1	618119	9/16MJIC-90-9/16MOR LBO
20	1	618688	9/16MJ-90-9/16MOR .025 CHK VLV

NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2007.

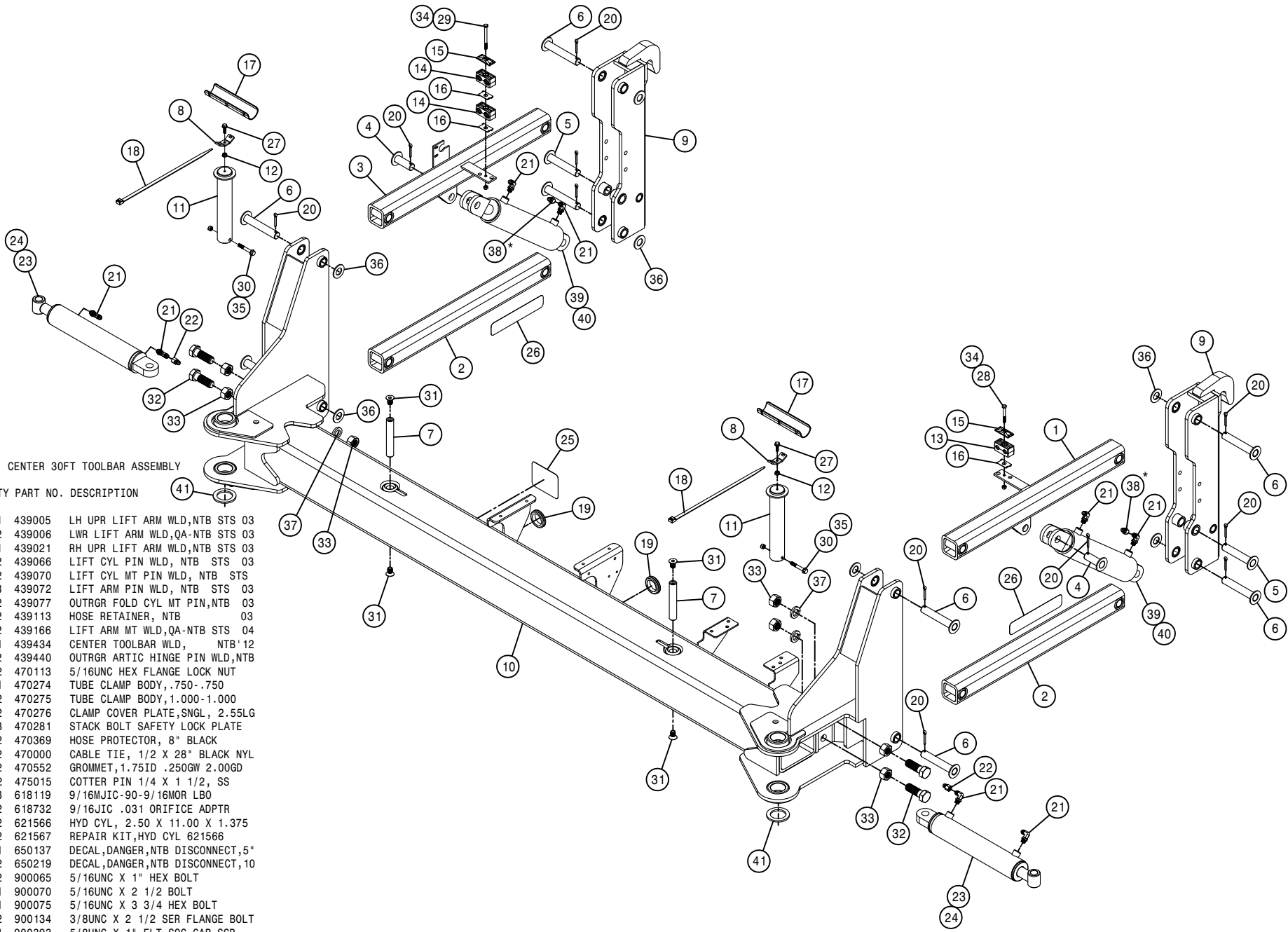


CENTER 30FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

1	1	439005	LH UPR LIFT ARM WLD,NTB STS 03
2	2	439006	LWR LIFT ARM WLD,QA-NTB STS 03
3	1	439021	RH UPR LIFT ARM WLD,NTB STS 03
4	2	439066	LIFT CYL PIN WLD, NTB STS 03
5	2	439070	LIFT CYL MT PIN WLD, NTB STS
6	8	439072	LIFT ARM PIN WLD, NTB STS 03
7	2	439077	OUTRGR FOLD CYL MT PIN,NTB 03
8	2	439113	HOSE RETAINER, NTB 03
9	2	439166	LIFT ARM MT WLD,QA-NTB STS 04
10	1	439434	CENTER TOOLBAR WLD, NTB'12
11	2	439440	OUTRGR ARTIC HINGE PIN WLD,NTB
12	2	470113	5/16UNC HEX FLANGE LOCK NUT
13	1	470274	TUBE CLAMP BODY, .750-.750
14	2	470275	TUBE CLAMP BODY,1.000-1.000
15	2	470276	CLAMP COVER PLATE,SNGL, 2.55LG
16	3	470281	STACK BOLT SAFETY LOCK PLATE
17	2	470369	HOSE PROTECTOR, 8" BLACK
18	2	470000	CABLE TIE, 1/2 X 28" BLACK NYL
19	2	470552	GROMMET,1.75ID .250GW 2.00GD
20	12	475015	COTTER PIN 1/4 X 1 1/2, SS
21	8	618119	9/16MJIC-90-9/16MOR LBO
22	2	618732	9/16JIC .031 ORIFICE ADPTR
23	2	621566	HYD CYL, 2.50 X 11.00 X 1.375
24	2	621567	REPAIR KIT,HYD CYL 621566
25	1	650137	DECAL,DANGER,NTB DISCONNECT,5"
26	2	650219	DECAL,DANGER,NTB DISCONNECT,10"
27	2	900065	5/16UNC X 1" HEX BOLT
28	1	900070	5/16UNC X 2 1/2 BOLT
29	1	900075	5/16UNC X 3 3/4 HEX BOLT
30	2	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
31	4	900393	5/8UNC X 1" FLT SOC CAP SCR
32	4	900534	1" UNC X 3" HEX BOLT
33	8	910017	1-8 HEX NUT
34	2	914002	5/16UNC HEX STOVER NUT
35	2	914004	3/8UNC HEX STOVER NUT
36	8	920008	1" SAE FLAT WASHER
37	4	920508	1" LOCK WASHER
38	2	618735	9/16JIC .062 ORIFICE ADPTR
39	2	621558	HYD CYL, 3.00 X 11.00 X 1.380
40	2	621559	REPAIR KIT,HYD CYL 621558
41	2	483081	2.00 FLAT WASH, GR5 PLT

NOTE: ITEMS WITH (\*) ARE USED ON  
MACHINES 2005 THRU 2007.

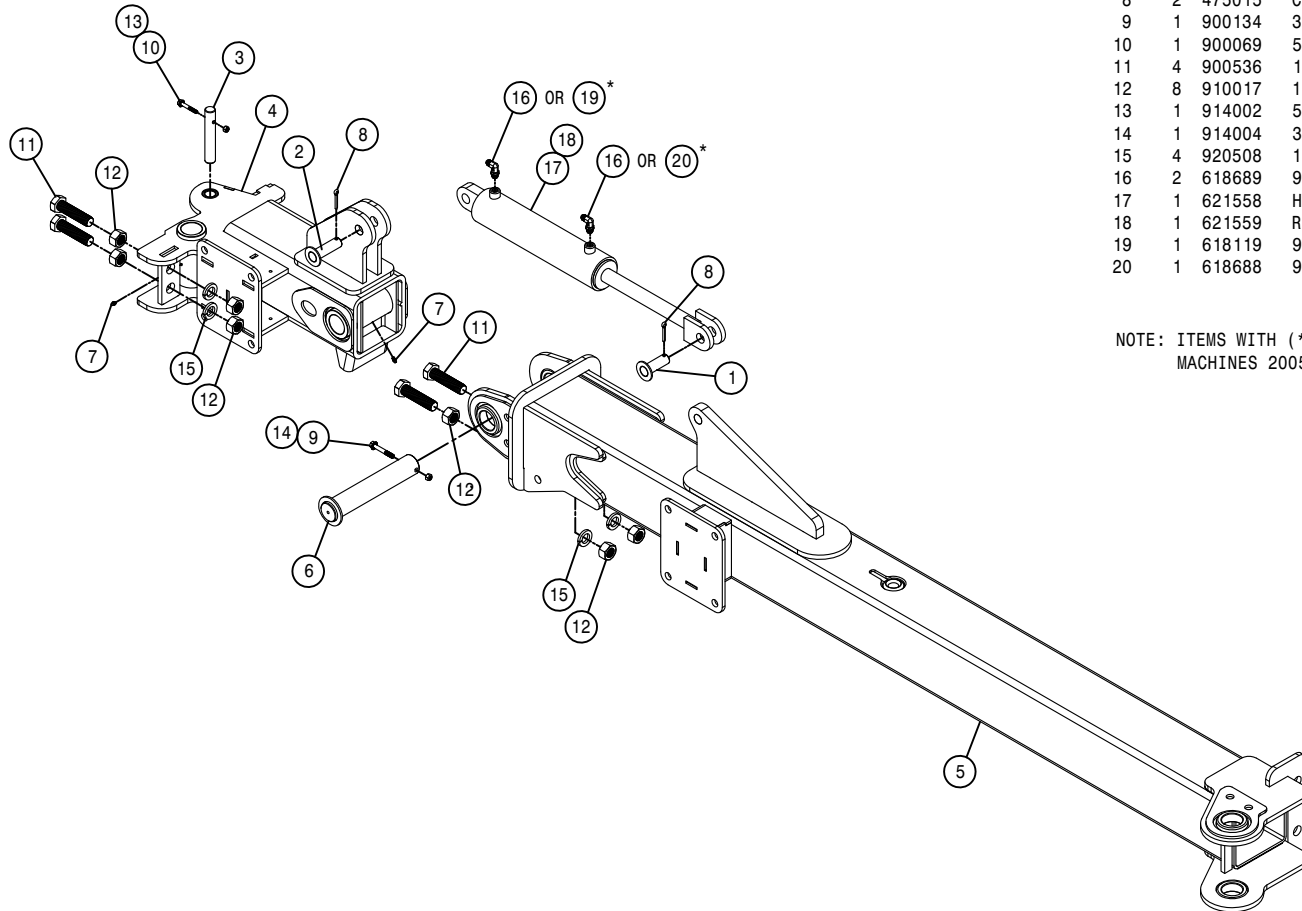


LEFT 30FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

1	1	439066	LIFT CYL PIN WLD, NTB STS 03
2	1	439068	ARTICULATOR CYL PIN WLD,NTB 03
3	1	439386	ARTICULATOR FLD CYL PIN,NTB' 10
4	1	439404	LH OUTRGR ARTIC WLD NTB' 12
5	1	439420	LH OUTRIGGER WLD, NTB' 12
6	1	439440	OUTRGR ARTIC HINGE PIN WLD,NTB
7	1	471005	GREASE ZERK, 1/4 28 X 1/2
8	2	475015	COTTER PIN 1/4 X 1 1/2, SS
9	1	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
10	1	900069	5/16UNC X 2" HEX BOLT
11	4	900536	1" UNC X 4" HEX BOLT,FULL THD
12	8	910017	1-8 HEX NUT
13	1	914002	5/16UNC HEX STOVER NUT
14	1	914004	3/8UNC HEX STOVER NUT
15	4	920508	1" LOCK WASHER
16	2	618689	9/16MJ-90-9/16MOR .042 CHK VLV
17	1	621558	HYD CYL, 3.00 X 11.00 X 1.380
18	1	621559	REPAIR KIT,HYD CYL 621558
19	1	618119	9/16MJIC-90-9/16MOR LBO
20	1	618688	9/16MJ-90-9/16MOR .025 CHK VLV

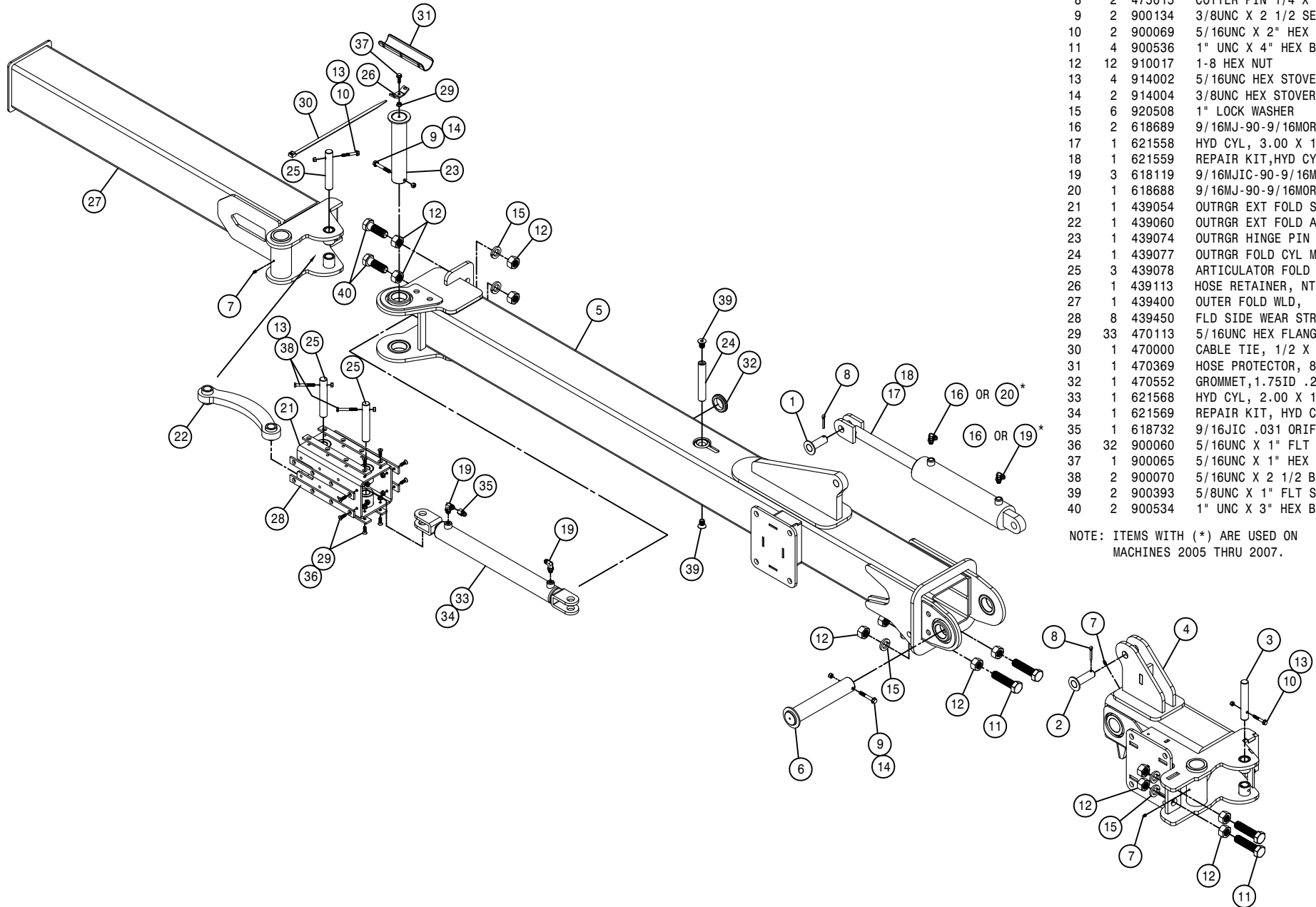
NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2007.

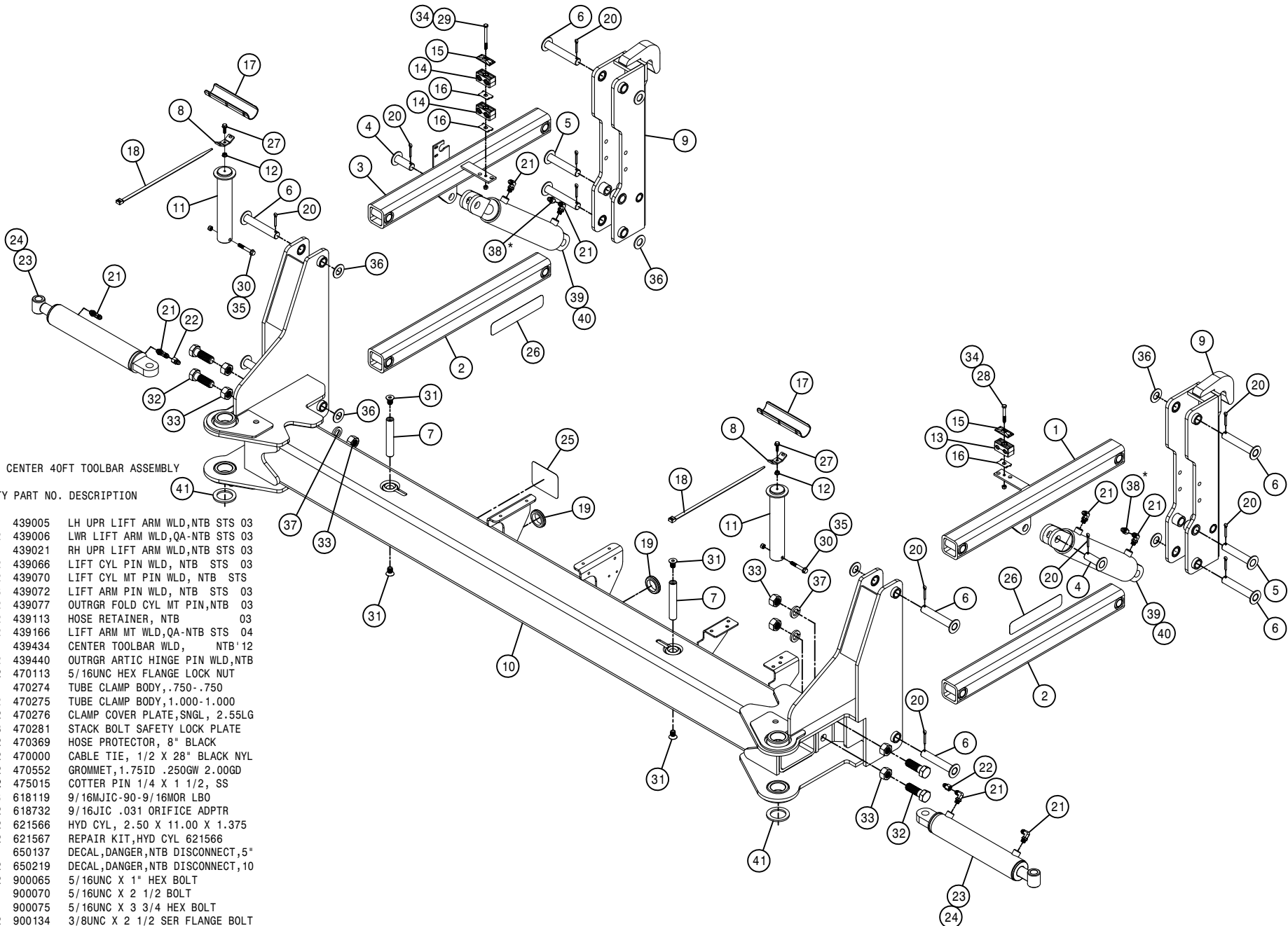


RIGHT 40FT TOOLBAR ASSEMBLY

DET.	QTY	PART NO.	DESCRIPTION
1	1	439066	LIFT CYL PIN WLD, NTB STS 03
2	1	439068	ARTICULATOR CYL PIN WLD, NTB 03
3	1	439386	ARTICULATOR FLD CYL PIN, NTB' 10
4	1	439419	RH OUTRGR ARTIC WLD NTB' 12
5	1	439433	RH OUTRIGGER WLD NTB' 12
6	1	439440	OUTRGR ARTIC HINGE PIN WLD, NTB
7	3	471005	GREASE ZERK, 1/4-28 X 1/2
8	2	475015	COTTER PIN 1/4 X 1 1/2, SS
9	2	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
10	2	900069	5/16UNC X 2" HEX BOLT
11	4	900536	1" UNC X 4" HEX BOLT, FULL THD
12	12	910017	1-8 HEX NUT
13	4	914002	5/16UNC HEX STOVER NUT
14	2	914004	3/8UNC HEX STOVER NUT
15	6	920508	1" LOCK WASHER
16	2	618689	9/16MJ-90-9/16MOR .042 CHK VLV
17	1	621558	HYD CYL, 3.00 X 11.00 X 1.380
18	1	621559	REPAIR KIT, HYD CYL 621558
19	3	618119	9/16MJIC-90-9/16MOR LBO
20	1	618688	9/16MJ-90-9/16MOR .025 CHK VLV
21	1	439054	OUTRGR EXT FOLD SLIDE WLD, NTB
22	1	439060	OUTRGR EXT FOLD ARM WLD, NTB 03
23	1	439074	OUTRGR HINGE PIN WLD, NTB 03
24	1	439077	OUTRGR FOLD CYL MT PIN, NTB 03
25	3	439078	ARTICULATOR FOLD CYL PIN, NTB
26	1	439113	HOSE RETAINER, NTB 03
27	1	439400	OUTER FOLD WLD, NTB' 12
28	8	439450	FLD SIDE WEAR STRIP, 16R NTB' 12
29	33	470113	5/16UNC HEX FLANGE LOCK NUT
30	1	470000	CABLE TIE, 1/2 X 28" BLACK NYL
31	1	470369	HOSE PROTECTOR, 8" BLACK
32	1	470552	GROMMET, 1.75ID .250GW 2.00GD
33	1	621568	HYD CYL, 2.00 X 18.00 X 1.125
34	1	621569	REPAIR KIT, HYD CYL 621568
35	1	618732	9/16JIC .031 ORIFICE ADPTR
36	32	900060	5/16UNC X 1" FLT SOC CAP SCR
37	1	900065	5/16UNC X 1" HEX BOLT
38	2	900070	5/16UNC X 2 1/2 BOLT
39	2	900393	5/8UNC X 1" FLT SOC CAP SCR
40	2	900534	1" UNC X 3" HEX BOLT

NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2007.





CENTER 40FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

1	1	439005	LH UPR LIFT ARM WLD,NTB STS 03
2	2	439006	LWR LIFT ARM WLD,QA-NTB STS 03
3	1	439021	RH UPR LIFT ARM WLD,NTB STS 03
4	2	439066	LIFT CYL PIN WLD, NTB STS 03
5	2	439070	LIFT CYL MT PIN WLD, NTB STS
6	8	439072	LIFT ARM PIN WLD, NTB STS 03
7	2	439077	OUTRGR FOLD CYL MT PIN,NTB 03
8	2	439113	HOSE RETAINER, NTB 03
9	2	439166	LIFT ARM MT WLD,QA-NTB STS 04
10	1	439434	CENTER TOOLBAR WLD, NTB'12
11	2	439440	OUTRGR ARTIC HINGE PIN WLD,NTB
12	2	470113	5/16UNC HEX FLANGE LOCK NUT
13	1	470274	TUBE CLAMP BODY,.750-.750
14	2	470275	TUBE CLAMP BODY,1.000-1.000
15	2	470276	CLAMP COVER PLATE,SNGL, 2.55LG
16	3	470281	STACK BOLT SAFETY LOCK PLATE
17	2	470369	HOSE PROTECTOR, 8" BLACK
18	2	470000	CABLE TIE, 1/2 X 28" BLACK NYL
19	2	470552	GROMMET,1.75ID .250GW 2.00GD
20	12	475015	COTTER PIN 1/4 X 1 1/2, SS
21	8	618119	9/16MJIC-90-9/16MOR LBO
22	2	618732	9/16JIC .031 ORIFICE ADPTR
23	2	621566	HYD CYL, 2.50 X 11.00 X 1.375
24	2	621567	REPAIR KIT,HYD CYL 621566
25	1	650137	DECAL,DANGER,NTB DISCONNECT,5"
26	2	650219	DECAL,DANGER,NTB DISCONNECT,10"
27	2	900065	5/16UNC X 1" HEX BOLT
28	1	900070	5/16UNC X 2 1/2 BOLT
29	1	900075	5/16UNC X 3 3/4 HEX BOLT
30	2	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
31	4	900393	5/8UNC X 1" FLT SOC CAP SCR
32	4	900534	1" UNC X 3" HEX BOLT
33	8	910017	1-8 HEX NUT
34	2	914002	5/16UNC HEX STOVER NUT
35	2	914004	3/8UNC HEX STOVER NUT
36	8	920008	1" SAE FLAT WASHER
37	4	920508	1" LOCK WASHER
38	2	618735	9/16JIC .062 ORIFICE ADPTR
39	2	621558	HYD CYL, 3.00 X 11.00 X 1.380
40	2	621559	REPAIR KIT,HYD CYL 621558
41	2	483081	2.00 FLAT WASH, GR5 PLT

NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2007.

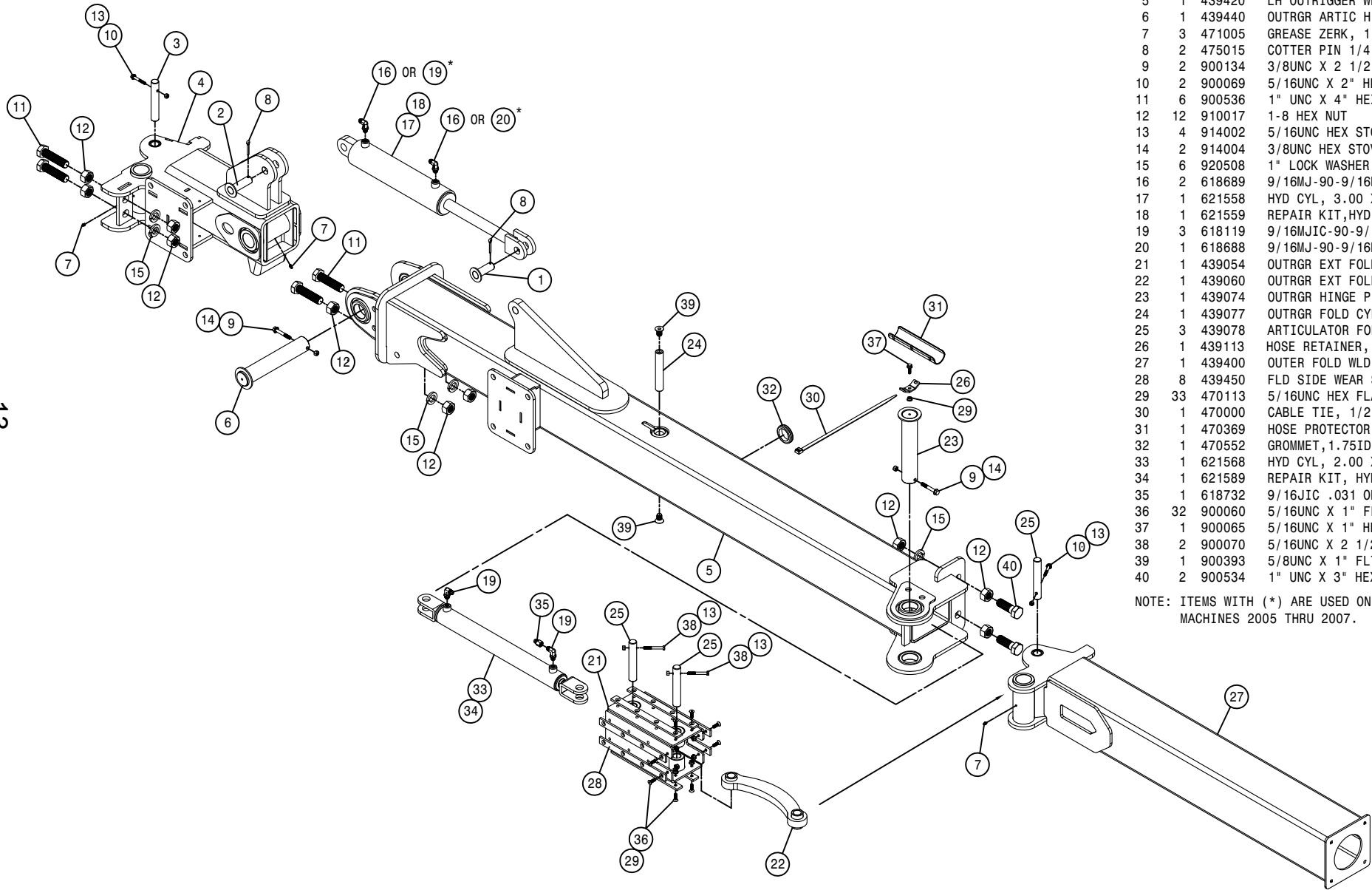


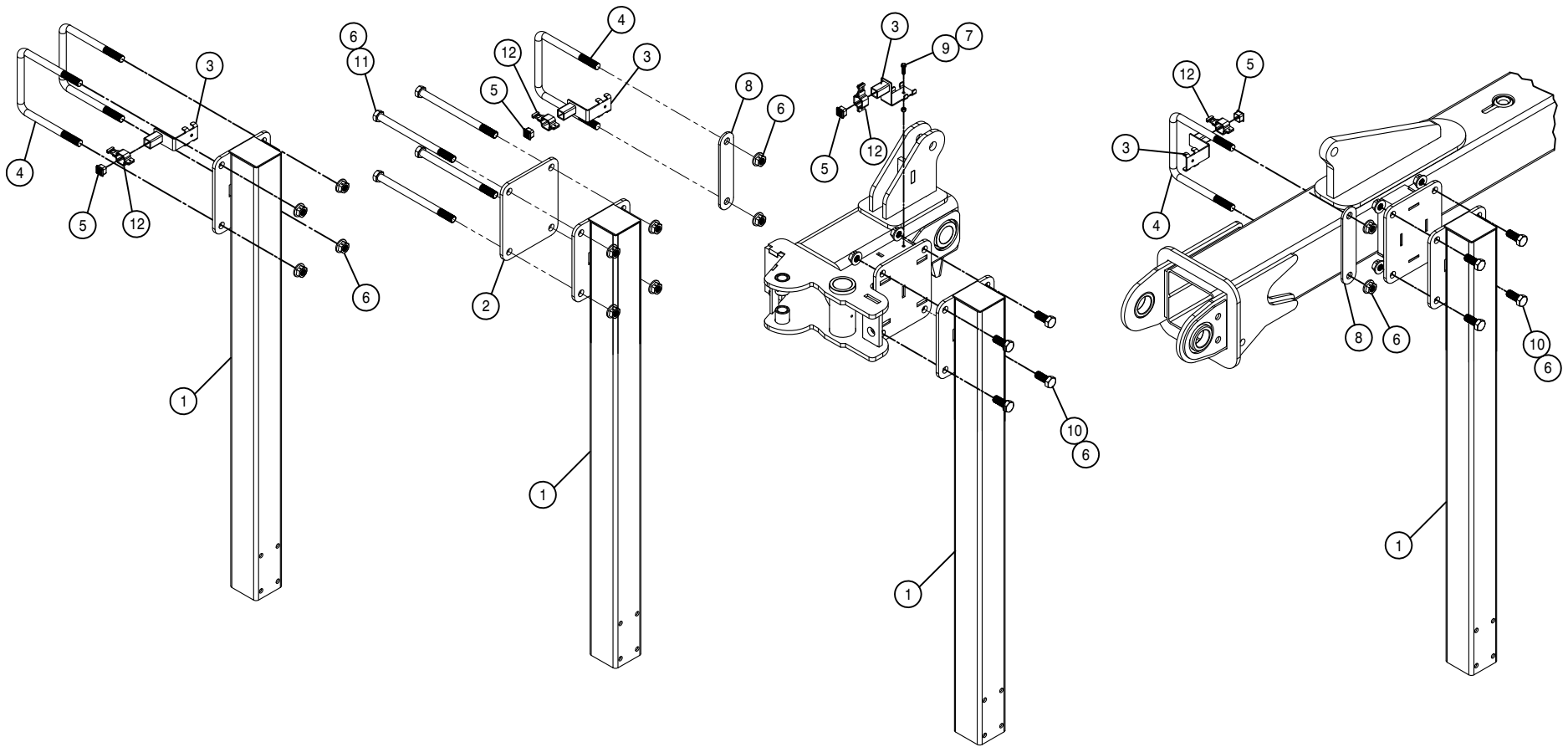
LEFT 40FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

DET.	QTY	PART NO.	DESCRIPTION
1	1	439066	LIFT CYL PIN WLD, NTB STS 03
2	1	439068	ARTICULATOR CYL PIN WLD,NTB 03
3	1	439386	ARTICULATOR FLD CYL PIN,NTB'10
4	1	439404	LH OUTRGR ARTIC WLD NTB'12
5	1	439420	LH OUTRIGGER WLD, NTB'12
6	1	439440	OUTRGR ARTIC HINGE PIN WLD,NTB
7	3	471005	GREASE ZERK, 1/4-28 X 1/2
8	2	475015	COTTER PIN 1/4 X 1 1/2, SS
9	2	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
10	2	900069	5/16UNC X 2" HEX BOLT
11	6	900536	1" UNC X 4" HEX BOLT,FULL THD
12	12	910017	1-8 HEX NUT
13	4	914002	5/16UNC HEX STOVER NUT
14	2	914004	3/8UNC HEX STOVER NUT
15	6	920508	1" LOCK WASHER
16	2	618689	9/16MJ-90-9/16MOR .042 CHK VLV
17	1	621558	HYD CYL, 3.00 X 11.00 X 1.380
18	1	621559	REPAIR KIT,HYD CYL 621558
19	3	618119	9/16MJIC-90-9/16MOR LBO
20	1	618688	9/16MJ-90-9/16MOR .025 CHK VLV
21	1	439054	OUTRGR EXT FOLD SLIDE WLD, NTB
22	1	439060	OUTRGR EXT FOLD ARM WLD,NTB 03
23	1	439074	OUTRGR HINGE PIN WLD, NTB 03
24	1	439077	OUTRGR FOLD CYL MT PIN,NTB 03
25	3	439078	ARTICULATOR FOLD CYL PIN, NTB
26	1	439113	HOSE RETAINER, NTB 03
27	1	439400	OUTER FOLD WLD, NTB'12
28	8	439450	FLD SIDE WEAR STRIP,16R NTB'12
29	33	470113	5/16UNC HEX FLANGE LOCK NUT
30	1	470000	CABLE TIE, 1/2 X 28" BLACK NYL
31	1	470369	HOSE PROTECTOR, 8" BLACK
32	1	470552	GROMMET,1.75ID .250GW 2.00GD
33	1	621568	HYD CYL, 2.00 X 18.00 X 1.125
34	1	621589	REPAIR KIT, HYD CYL 621588
35	1	618732	9/16JIC .031 ORIFICE ADPTR
36	32	900060	5/16UNC X 1" FLT SOC CAP SCR
37	1	900065	5/16UNC X 1" HEX BOLT
38	2	900070	5/16UNC X 2 1/2 BOLT
39	1	900393	5/8UNC X 1" FLT SOC CAP SCR
40	2	900534	1" UNC X 3" HEX BOLT

NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2007.





ROW UNIT ASSEMBLY

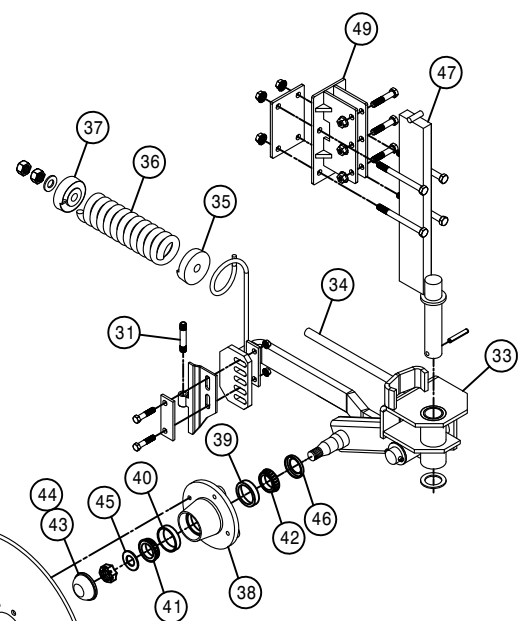
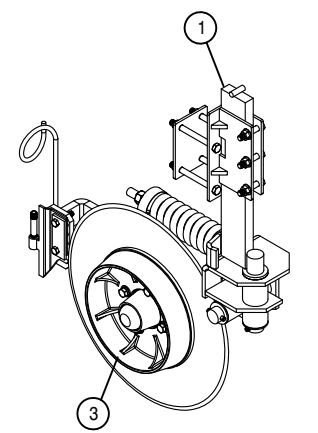
DET. QTY PART NO. DESCRIPTION

1	4	439080	ROW DROP WLD, NTB STS 03
2	1	439082	ROW DROP MT PLT, NTB STS 03
3	4	439096	TIP MT BRKT WLD, NTB STS 03
4	4	473981	.75UNC-7.00ID-8.50 U-BOLT SQ
5	4	629727	FINISH PLUG FOR 1"SQ X 16 GA
6	20	914012	3/4UNC HEX STOVER NUT
7	1	470089	1/4UNC HEX NYLOC NUT, 316 SS
8	2	439444	NTB U-BOLT MOUNT PLATE
9	1	473835	1/4UNC X 1" FLANGE BOLT SS
10	8	900402	3/4UNC X 1 3/4 HEX BOLT
11	4	900422	3/4UNC X 11.00" HEX BOLT
12	4	737817	NOZL MT CLMP, 1.00 SQ SS, Q-TJET

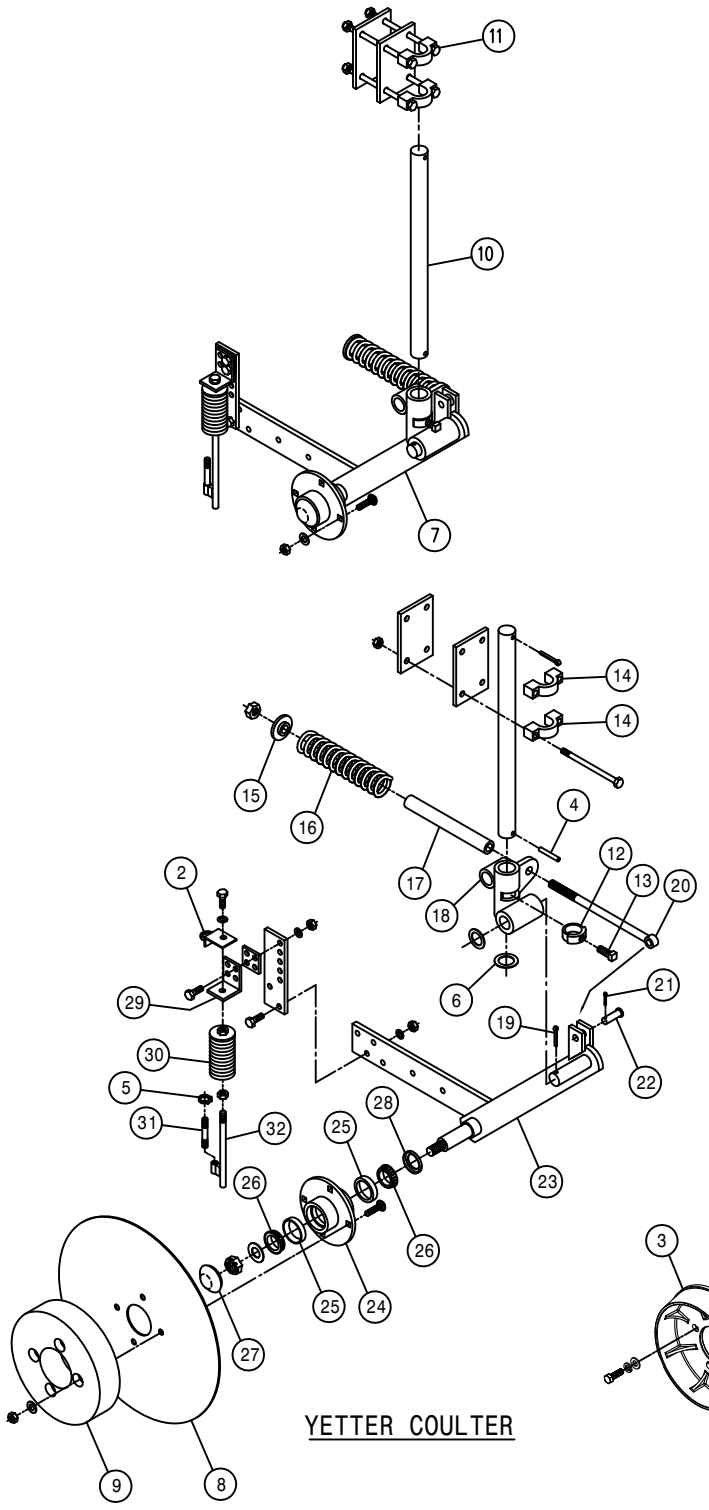
COULTER ASSEMBLY

DET. QTY PART NO. DESCRIPTION

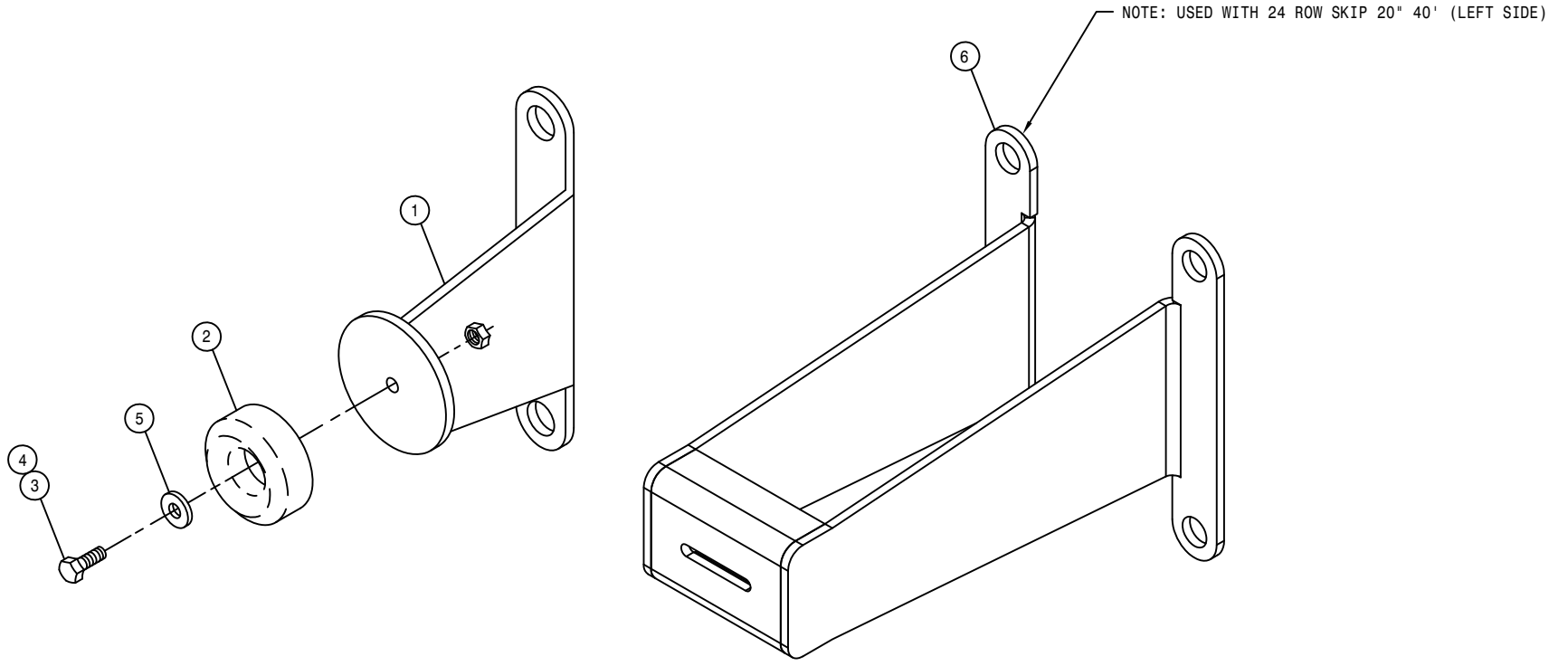
1	1	439218	AG SYSTEMS COULTER,GEN III
2	1	439092	HOSE RETAINER WLD, 1" NTB
3	1	439224	DEPTH WHEEL,CAST,CLYMER
4	1	473937	ROLL PIN, 3/8 X 2 1/2
5	1	520070	HOSE CLAMP NO 8 STAINLESS
6	1	920013	1 1/2 SAE FLAT WASHER
7	1	439105	YETTER COULTER,20" GEN III
8	1	439106	20" SMOOTH BLADE, YETTER
9	1	439107	POLY GAUGE WHEEL, YETTER
10	1	439108	22" SHANK, YETTER
11	1	439109	4" SQ TUBE MT KIT, YETTER
12	1	439201	LOCKING COLLAR,YETTER 2975-303
13	1	439202	5/8-11 X 1" SQ HCPSS GR 5 ZP
14	2	439200	CLAMP CASTING,YETTER 2990-360
15	1	439203	SPRING BUSHING,YETTER 2555-096
16	1	439204	SPRING, 11", YETTER 2550-795
17	1	439205	10"POLY SPRING,YETTER 2550-771
18	1	439206	COULTER PIVOT,RH 2995-307
19	1	470045	COTTER PIN 1/4 X 1 3/4
20	1	439208	SPRING ROD,YETTER 2995-304
21	1	390984	COTTER PIN 1/8 X 1 1/4
22	1	439209	SPRING ROD PIN,YETTER 2995-308
23	1	439210	GENERATION III W/KNIFE ARM
24	1	439211	HUB ASSY, YETTER 2900-105
25	2	125028	BRG CUP LM67010
26	2	125010	BRG CONE LM67048
27	1	439212	HUB CAP, YETTER 2570-375
28	1	129010	SEAL C/R 16069
29	1	439213	INJECTOR MT PLT,YETTER 2995301
30	1	439214	SPRING INJ ASSY,YETTER 2995131
31	2	507028	SS PIPE NIPPLE .25NPT-3.00
32	1	439215	INJECTOR ROD,YETTER 2995-212
33	1	439225	LH HOUSING W/BUSH, STD
34	1	439226	EYE BOLT, SPRING RETAINER
35	1	439227	SPRING CAP, W/COUNTER-BORE
36	1	439229	COMPRESSION SPRING
37	1	439792	SPRING CAP, STAND CASTING
38	1	439264	HUB W/CUPS
39	1	439284	BEARING CUP, INNER
40	1	439285	BEARING CUP, OUTER
41	1	439286	BEARING CONE, OUTER
42	1	439287	BEARING CONE, INNER
43	1	439307	DUST CAP
44	1	439397	O-RING DUST SEAL
45	1	439398	SPINDLE WASHER
46	1	439399	GREASE SEAL
47	1	439789	COULTER SWIVEL BAR, 18" STAND
48	1	439790	COULTER BLADE, 20" RIPPLED
49	1	439791	MOUNTING BRKT, 4" VERT STD



AG SYSTEM COULTER

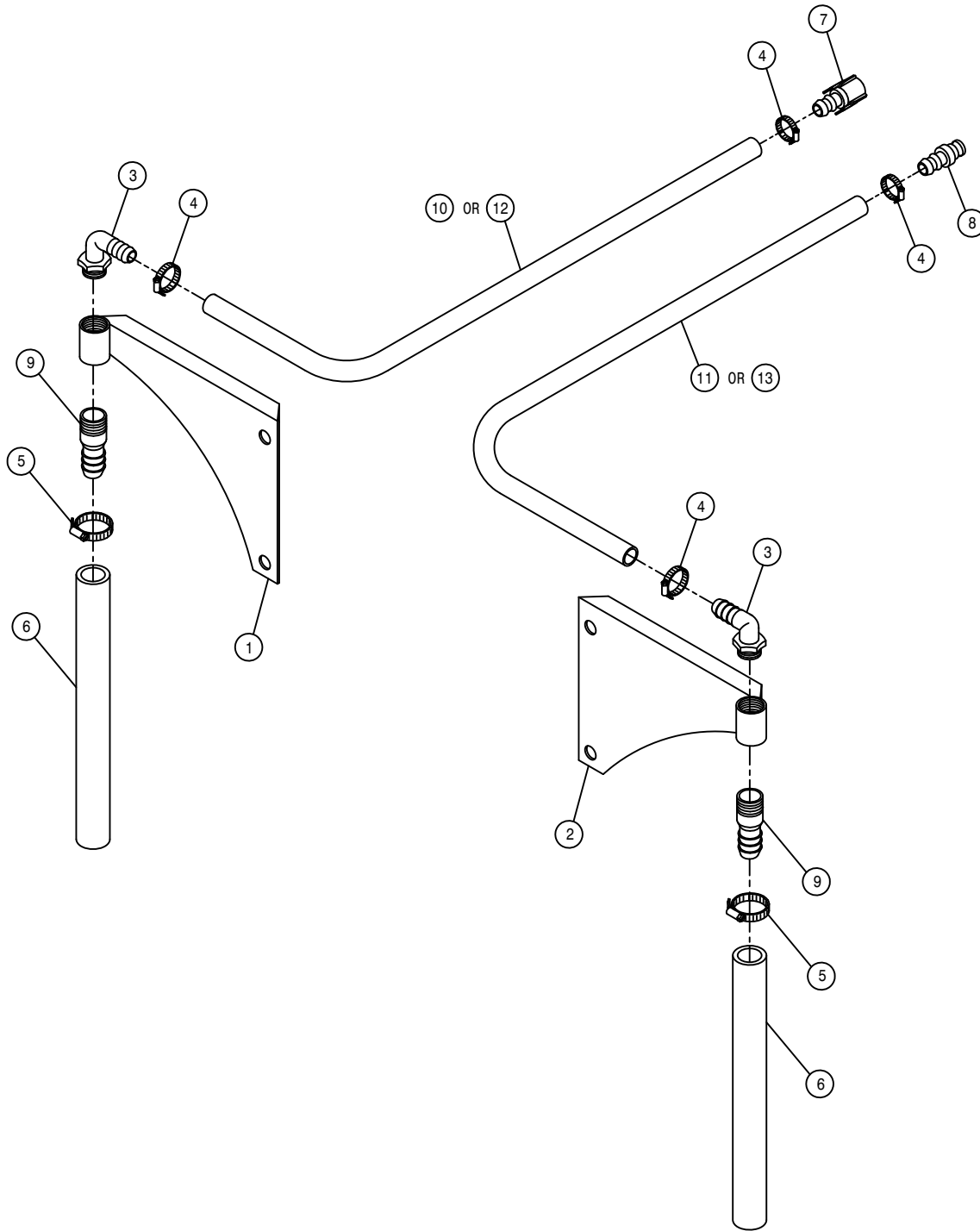


YETTER COULTER



BUMPER ASSEMBLY

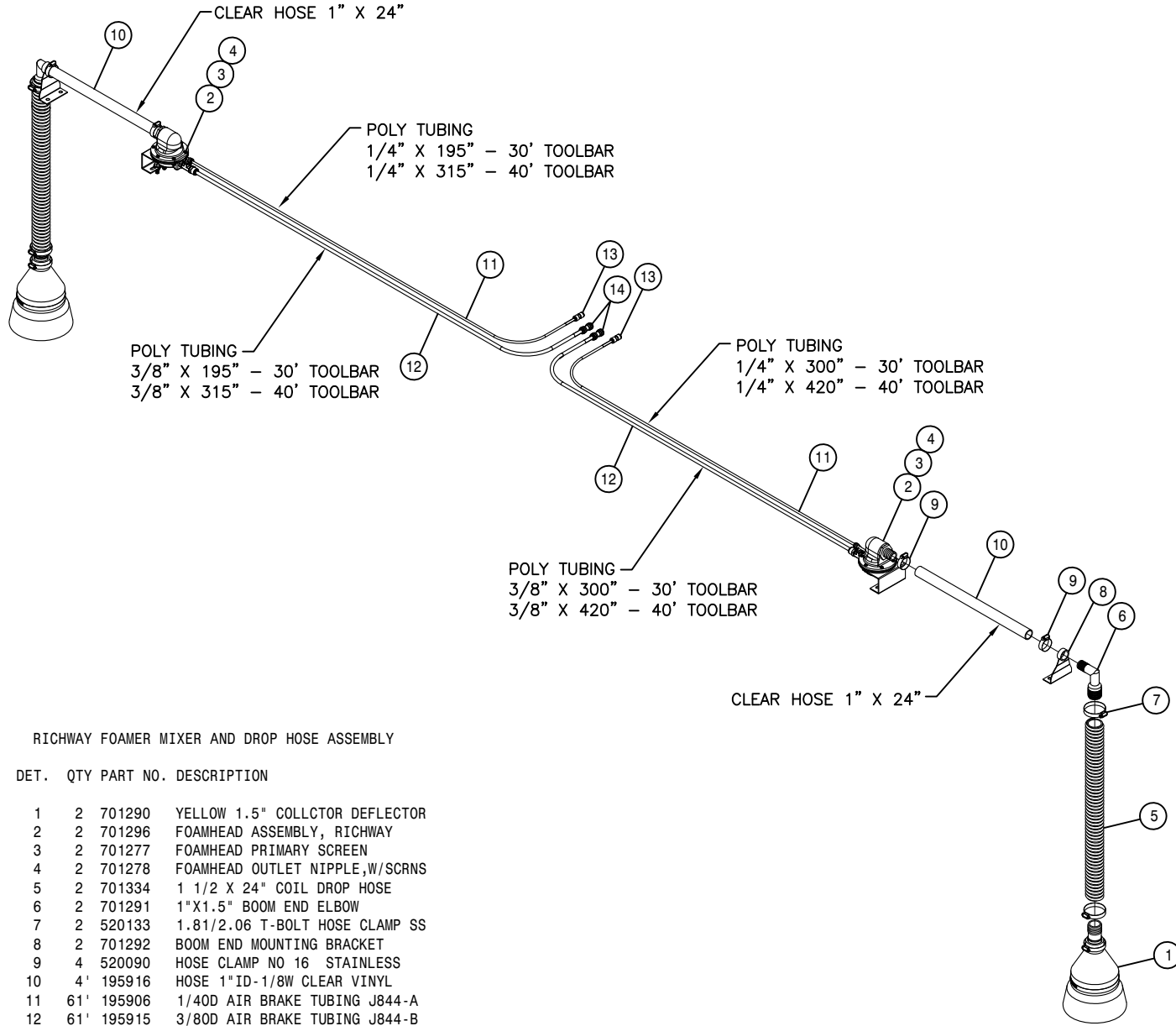
DET.	QTY	PART NO.	DESCRIPTION
1	1	439110	RUBBER BUMPER MT WLD, NTB 03
2	1	470098	RUBBER BUMPER 2.500D X .38ID
3	1	900066	5/16UNC X 1 1/4 HEX BOLT
4	1	914002	5/16UNC HEX STOVER NUT
5	1	920001	5/16 SAE FLAT WASHER
6	1	439117	RUBBER BUMPER MT EXT WLD,NTB



HAGIE FOAMER DROP AND HOSE ASSEMBLY

DET.	QTY	PART NO.	DESCRIPTION
1	1	439100	RH FOAMER DROP CPLR WLD, NTB
2	1	439101	LH FOAMER DROP CPLR WLD, NTB
3	2	500067	1 NPT-90-3/4 HOSE BARB, POLY
4	4	520055	HOSE CLAMP NO 12 STAINLESS
5	2	520085	HOSE CLAMP NO 24 STAINLESS
6	2	601586	HOSE, 1 1/4 X 16 2BR BLK EPDM
7	1	696207	.75 HOSE BARB-FEMALE COUPLER
8	1	696208	.75 HOSE BARB-MALE COUPLER
9	2	714561	1.00NPT-1.25 HOSE BARB
10	1	195908	HOSE, 3/4ID-1/8W CLEAR VINYL X 252.00
11	1	195908	HOSE, 3/4ID-1/8W CLEAR VINYL X 348.00
12	1	195908	HOSE, 3/4ID-1/8W CLEAR VINYL X 192.00
13	1	195908	HOSE, 3/4ID-1/8W CLEAR VINYL X 288.00

NOTE: DETAILS 10 & 11 ARE USED WITH THE 40FT TOOLBAR.  
 DETAILS 12 & 13 ARE USED WITH THE 30FT TOOLBAR.



RICHWAY FOAMER MIXER AND DROP HOSE ASSEMBLY

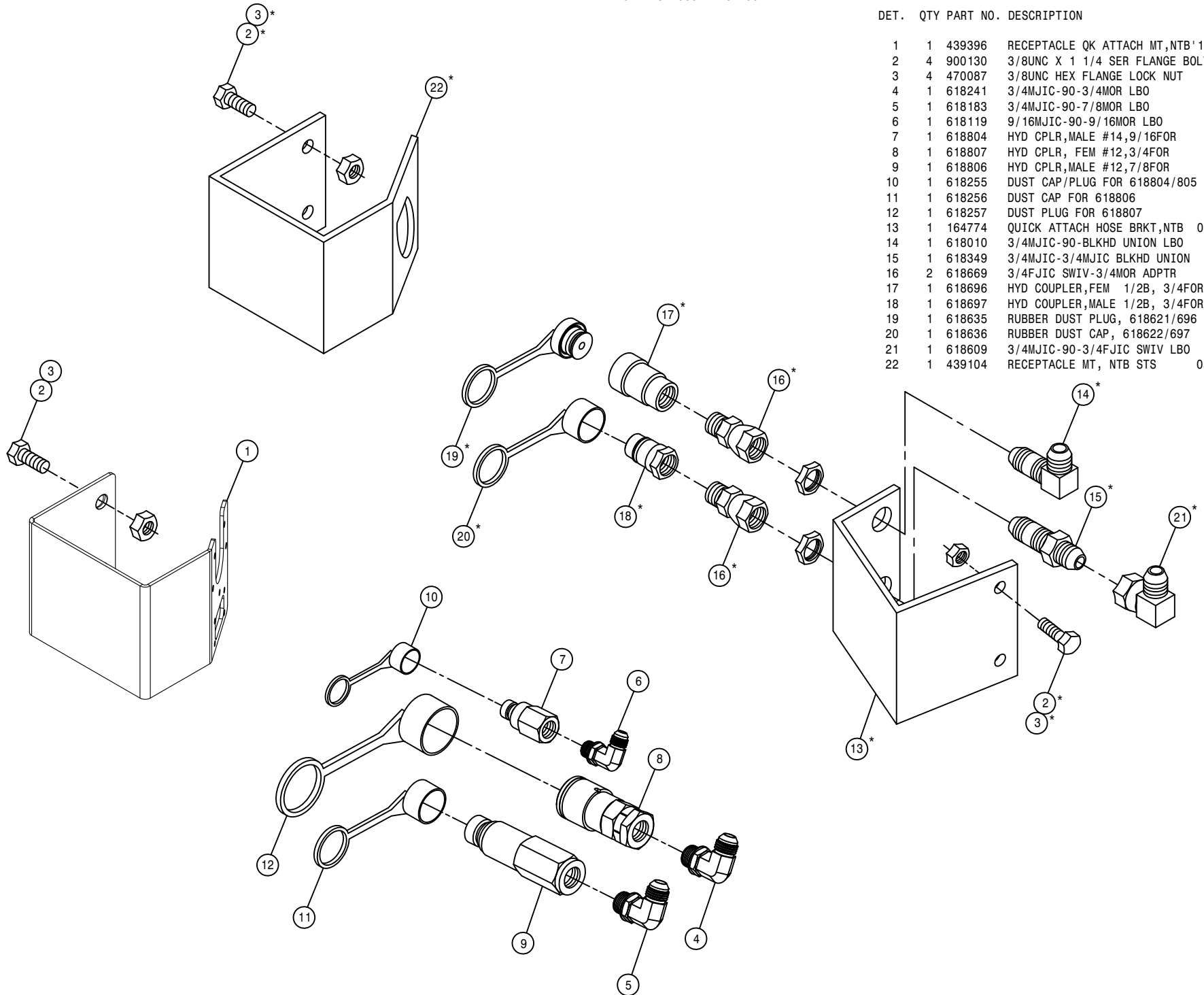
DET.	QTY	PART NO.	DESCRIPTION
	1	2 701290	YELLOW 1.5" COLLECTOR DEFLECTOR
	2	2 701296	FOAMHEAD ASSEMBLY, RICHWAY
	3	2 701277	FOAMHEAD PRIMARY SCREEN
	4	2 701278	FOAMHEAD OUTLET NIPPLE,W/SCRNS
	5	2 701334	1 1/2 X 24" COIL DROP HOSE
	6	2 701291	1"X1.5" BOOM END ELBOW
	7	2 520133	1.81/2.06 T-BOLT HOSE CLAMP SS
	8	2 701292	BOOM END MOUNTING BRACKET
	9	4 520090	HOSE CLAMP NO 16 STAINLESS
	10	4' 195916	HOSE 1" ID-1/8W CLEAR VINYL
	11	61' 195906	1/4OD AIR BRAKE TUBING J844-A
	12	61' 195915	3/8OD AIR BRAKE TUBING J844-B
	13	2 711054	1/4 NYL TUBE UNION, STRAIGHT
	14	2 711055	3/8 NYL TUBE UNION, STRAIGHT

NOTE: ITEMS WITH (\*) ARE USED ON  
MACHINES 2005 THRU 2007.

QUICK ATTACK ASSEMBLY

DET. QTY PART NO. DESCRIPTION

DET.	QTY	PART NO.	DESCRIPTION
1	1	439396	RECEPTACLE QK ATTACH MT,NTB' 11
2	4	900130	3/8UNC X 1 1/4 SER FLANGE BOLT
3	4	470087	3/8UNC HEX FLANGE LOCK NUT
4	1	618241	3/4MJIC-90-3/4MOR LBO
5	1	618183	3/4MJIC-90-7/8MOR LBO
6	1	618119	9/16MJIC-90-9/16MOR LBO
7	1	618804	HYD CPLR,MALE #14,9/16FOR
8	1	618807	HYD CPLR, FEM #12,3/4FOR
9	1	618806	HYD CPLR,MALE #12,7/8FOR
10	1	618255	DUST CAP/PLUG FOR 618804/805
11	1	618256	DUST CAP FOR 618806
12	1	618257	DUST PLUG FOR 618807
13	1	164774	QUICK ATTACH HOSE BRKT,NTB 04
14	1	618010	3/4MJIC-90-BLKHD UNION LBO
15	1	618349	3/4MJIC-3/4MJIC BLKHD UNION
16	2	618669	3/4FJIC SWIV-3/4MOR ADPTR
17	1	618696	HYD COUPLER,FEM 1/2B, 3/4FOR
18	1	618697	HYD COUPLER,MALE 1/2B, 3/4FOR
19	1	618635	RUBBER DUST PLUG, 618621/696
20	1	618636	RUBBER DUST CAP, 618622/697
21	1	618609	3/4MJIC-90-3/4FJIC SWIV LBO
22	1	439104	RECEPTACLE MT, NTB STS 05

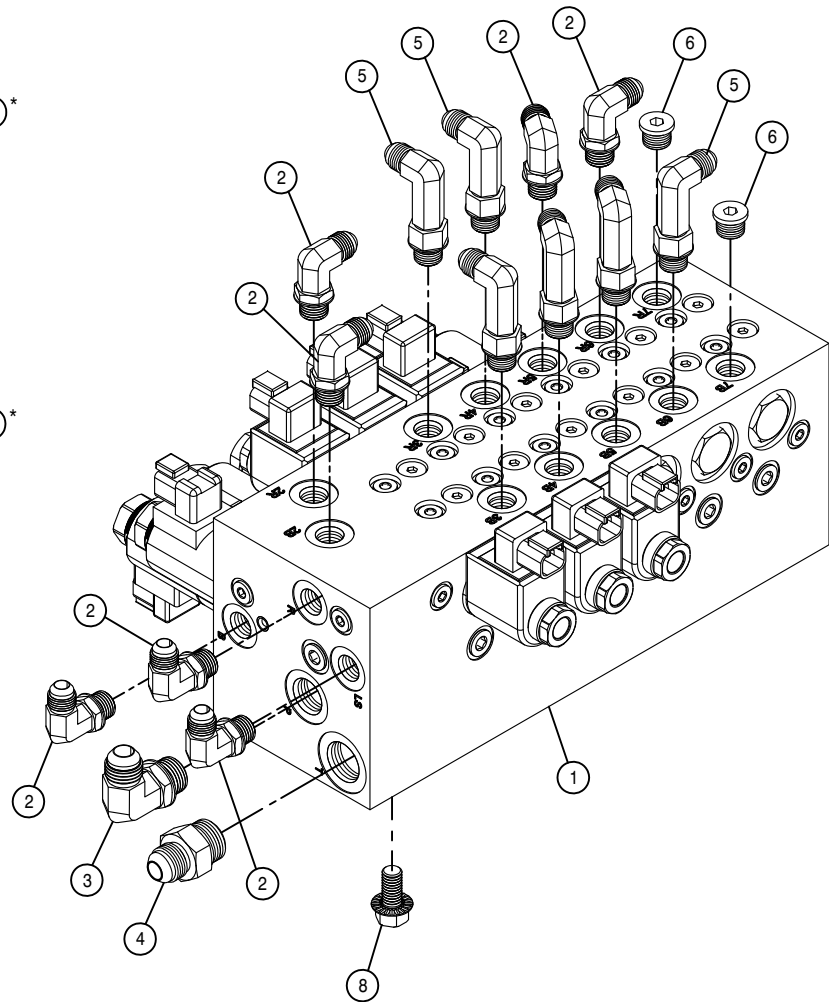
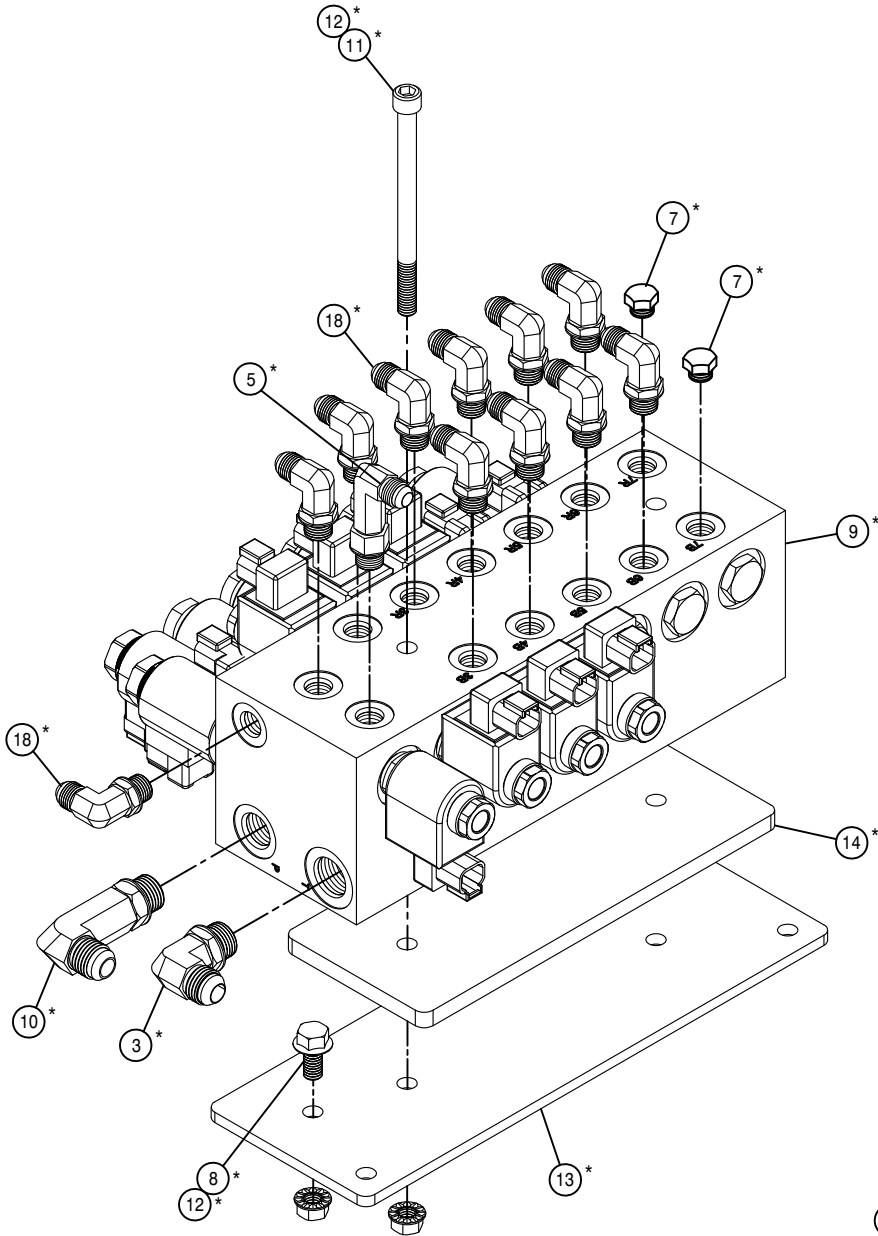


NOTE: ITEMS WITH (\*) ARE USED ON  
MACHINES 2005 THRU 2007.

30FT TOOLBAR CONTROL VALVE ASSEMBLY

DET. QTY PART NO. DESCRIPTION

DET.	QTY	PART NO.	DESCRIPTION	
1	1	606280	HYD VALVE, SAUER 6SPL NTB	07
2	18	618119	9/16MJIC-90-9/16MOR LBO	
3	2	618241	3/4MJIC-90-3/4MOR LBO	
4	1	618327	3/4MJIC-7/8MOR ADPTR	
5	7	618440	9/16MJIC-90-9/16MOR EX LG LBO	
6	2	618754	9/16MOR PLUG, HEX SOCKET	
7	2	610185	9/16MOR PLUG, HEX HEAD	
8	8	900128	3/8UNC X 3/4 HEX BOLT	
9	1	606215	NTB CTRL VLV, STS PWRSYS 05	
10	1	618443	3/4MJIC-90-3/4MOR EX LG LBO	
11	2	900145	3/8UNC X 5 SOCKET HD CAP SCR	
12	6	470087	3/8UNC HEX FLANGE LOCK NUT	
13	1	439443	NTB CTRL ADAPTER SPACER	05
14	1	439442	NTB CTRL VLV ADAPTER PLT	05

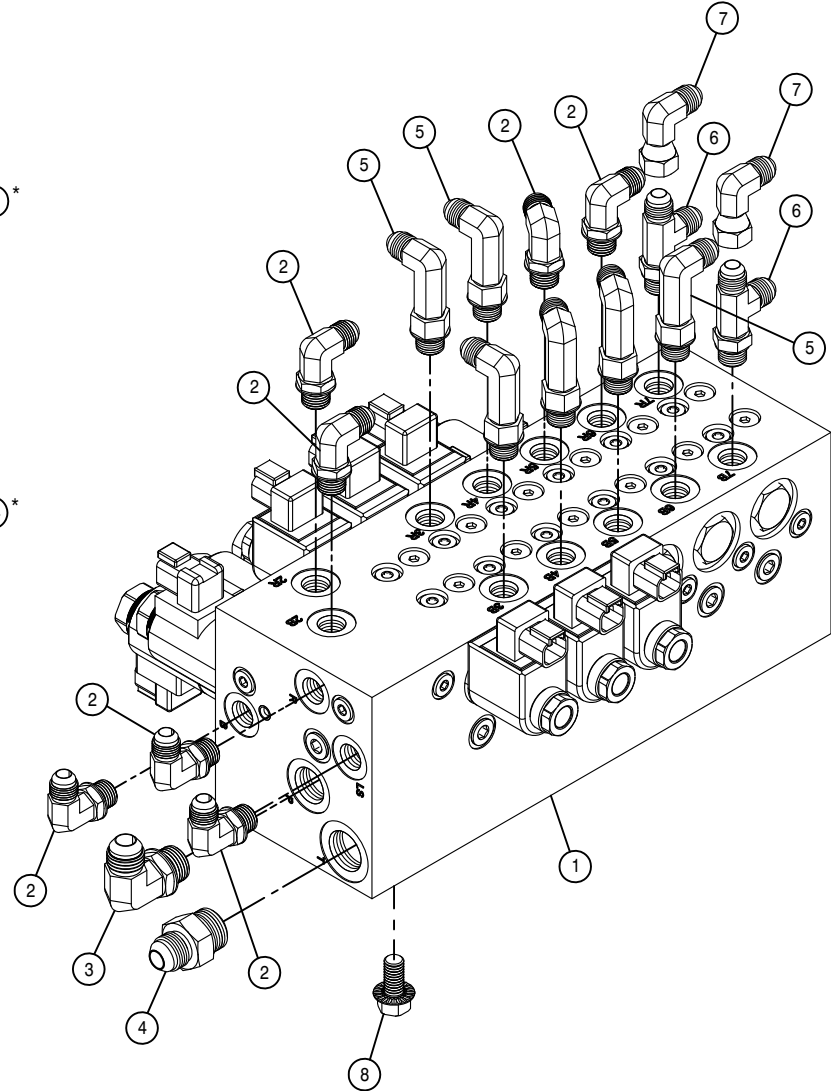
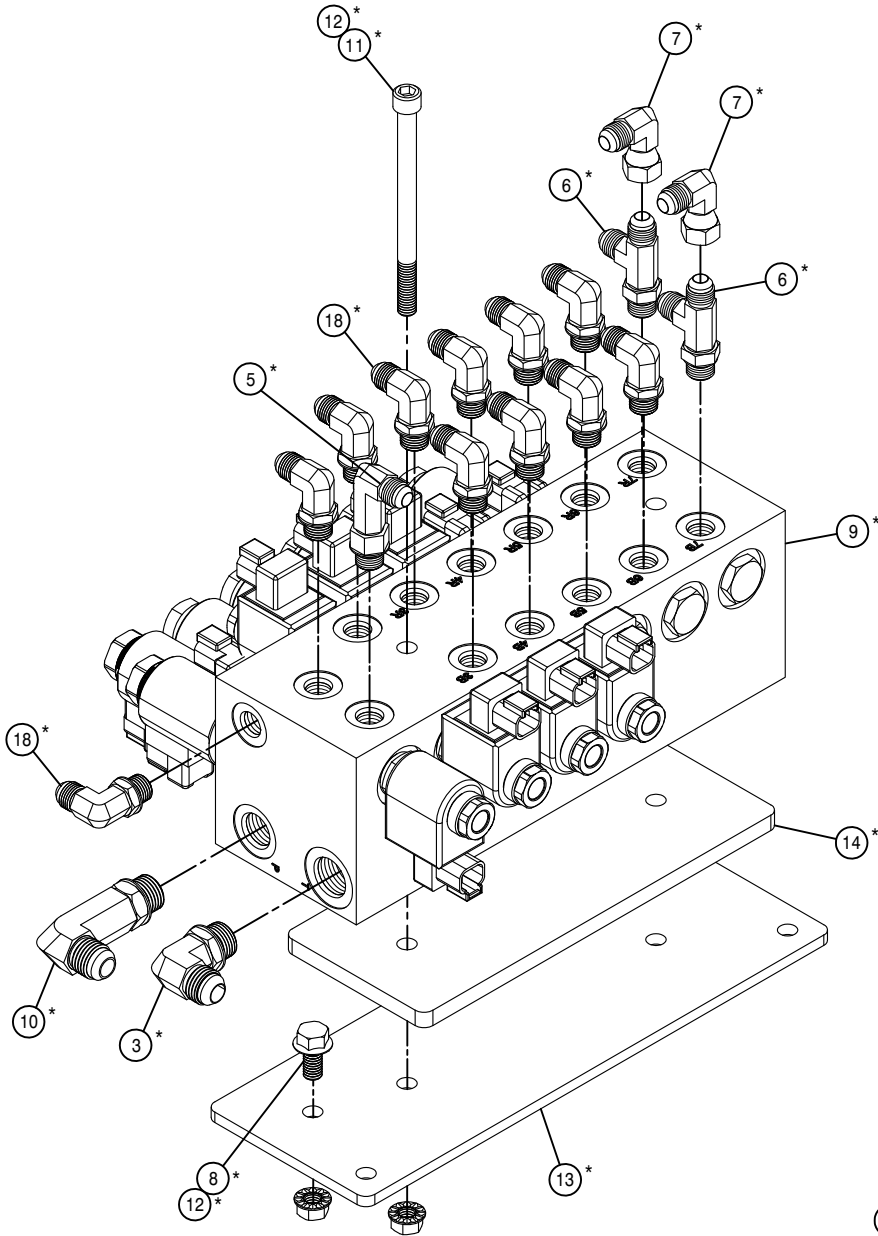


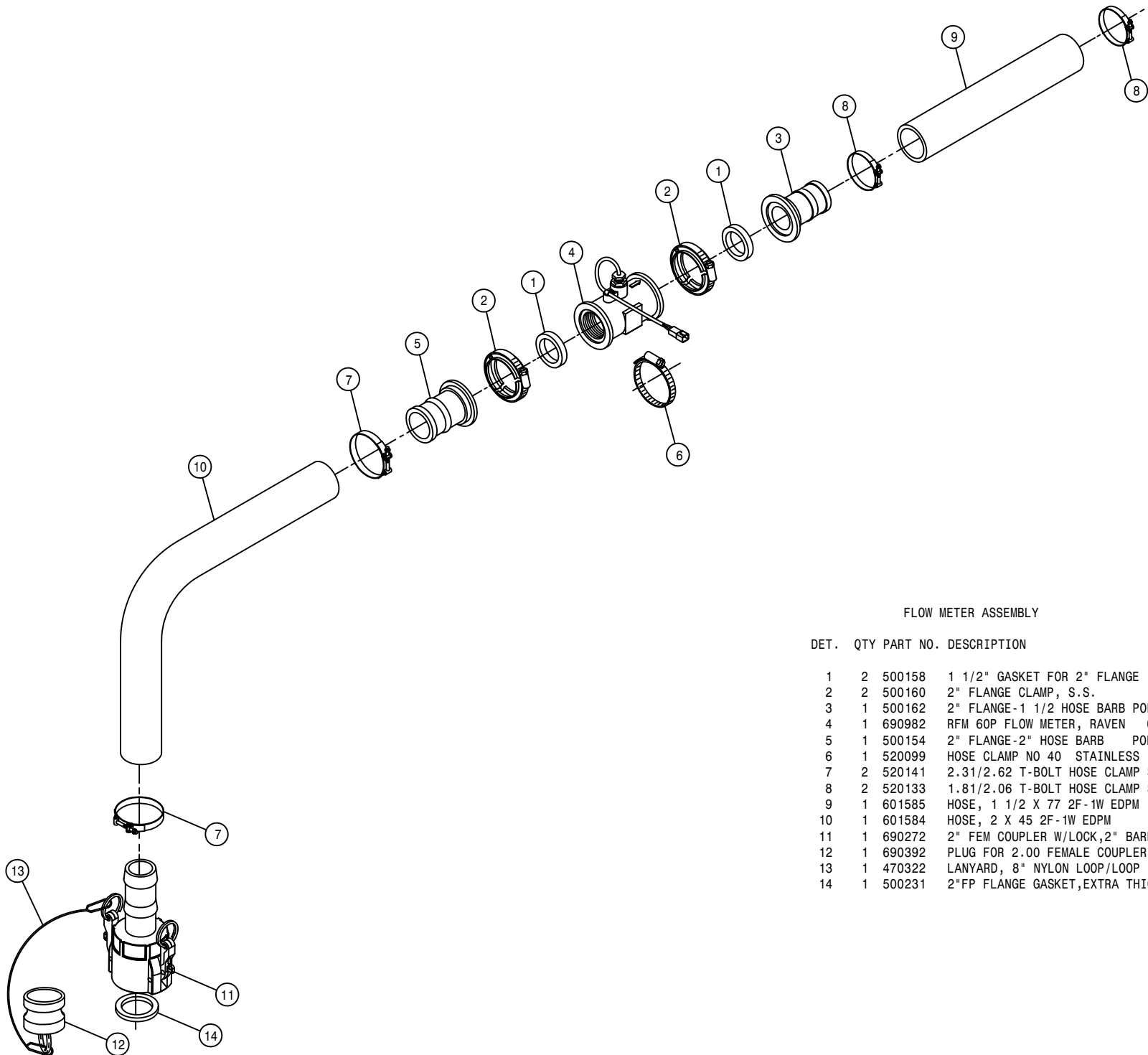


NOTE: ITEMS WITH (\*) ARE USED ON  
MACHINES 2005 THRU 2007.

40FT TOOLBAR CONTROL VALVE ASSEMBLY

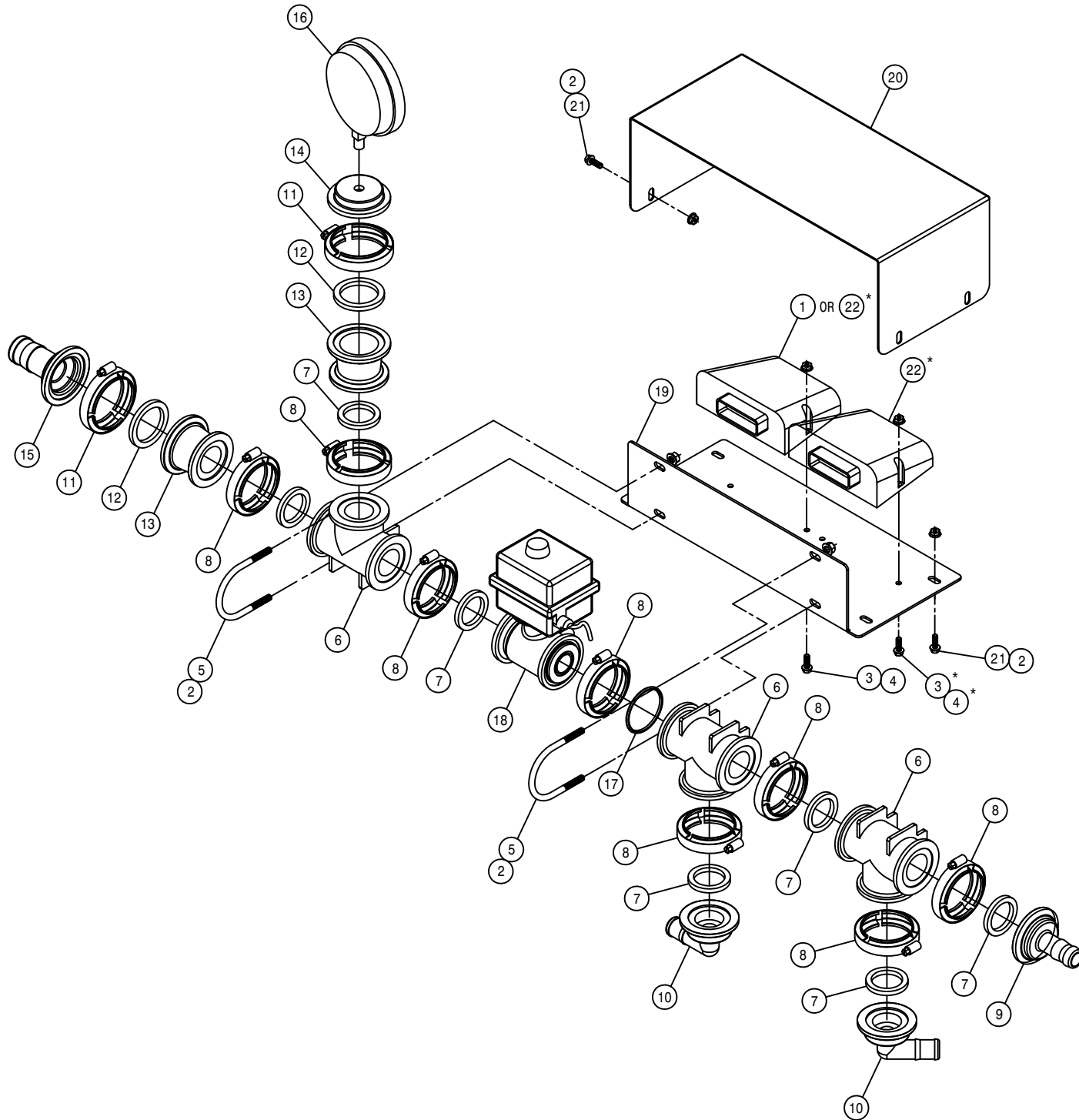
DET.	QTY	PART NO.	DESCRIPTION	
1	1	606280	HYD VALVE, SAUER 6SPL NTB	07
2	18	618119	9/16MJIC-90-9/16MOR LBO	
3	2	618241	3/4MJIC-90-3/4MOR LBO	
4	1	618327	3/4MJIC-7/8MOR ADPTR	
5	7	618440	9/16MJIC-90-9/16MOR EX LG LBO	
6	4	618444	9/16MOR RUN TEE-9/16MJIC	
7	4	618618	9/16MJIC-90-9/16FJIC SWIV LBO	
8	8	900128	3/8UNC X 3/4 HEX BOLT	
9	1	606215	NTB CTRL VLV, STS PWRSYS 05	
10	1	618443	3/4MJIC-90-3/4MOR EX LG LBO	
11	2	900145	3/8UNC X 5 SOCKET HD CAP SCR	
12	6	470087	3/8UNC HEX FLANGE LOCK NUT	
13	1	439443	NTB CTRL ADAPTER SPACER	05
14	1	439442	NTB CTRL VLV ADAPTER PLT	05





FLOW METER ASSEMBLY

DET.	QTY	PART NO.	DESCRIPTION	
	1	2	500158	1 1/2" GASKET FOR 2" FLANGE
	2	2	500160	2" FLANGE CLAMP, S.S.
	3	1	500162	2" FLANGE-1 1/2 HOSE BARB POLY
	4	1	690982	RFM 60P FLOW METER, RAVEN 05
	5	1	500154	2" FLANGE-2" HOSE BARB POLY
	6	1	520099	HOSE CLAMP NO 40 STAINLESS
	7	2	520141	2.31/2.62 T-BOLT HOSE CLAMP SS
	8	2	520133	1.81/2.06 T-BOLT HOSE CLAMP SS
	9	1	601585	HOSE, 1 1/2 X 77 2F-1W EDPM
	10	1	601584	HOSE, 2 X 45 2F-1W EDPM
	11	1	690272	2" FEM COUPLER W/LOCK,2" BARB
	12	1	690392	PLUG FOR 2.00 FEMALE COUPLER
	13	1	470322	LANYARD, 8" NYLON LOOP/LOOP
	14	1	500231	2"FP FLANGE GASKET,EXTRA THICK

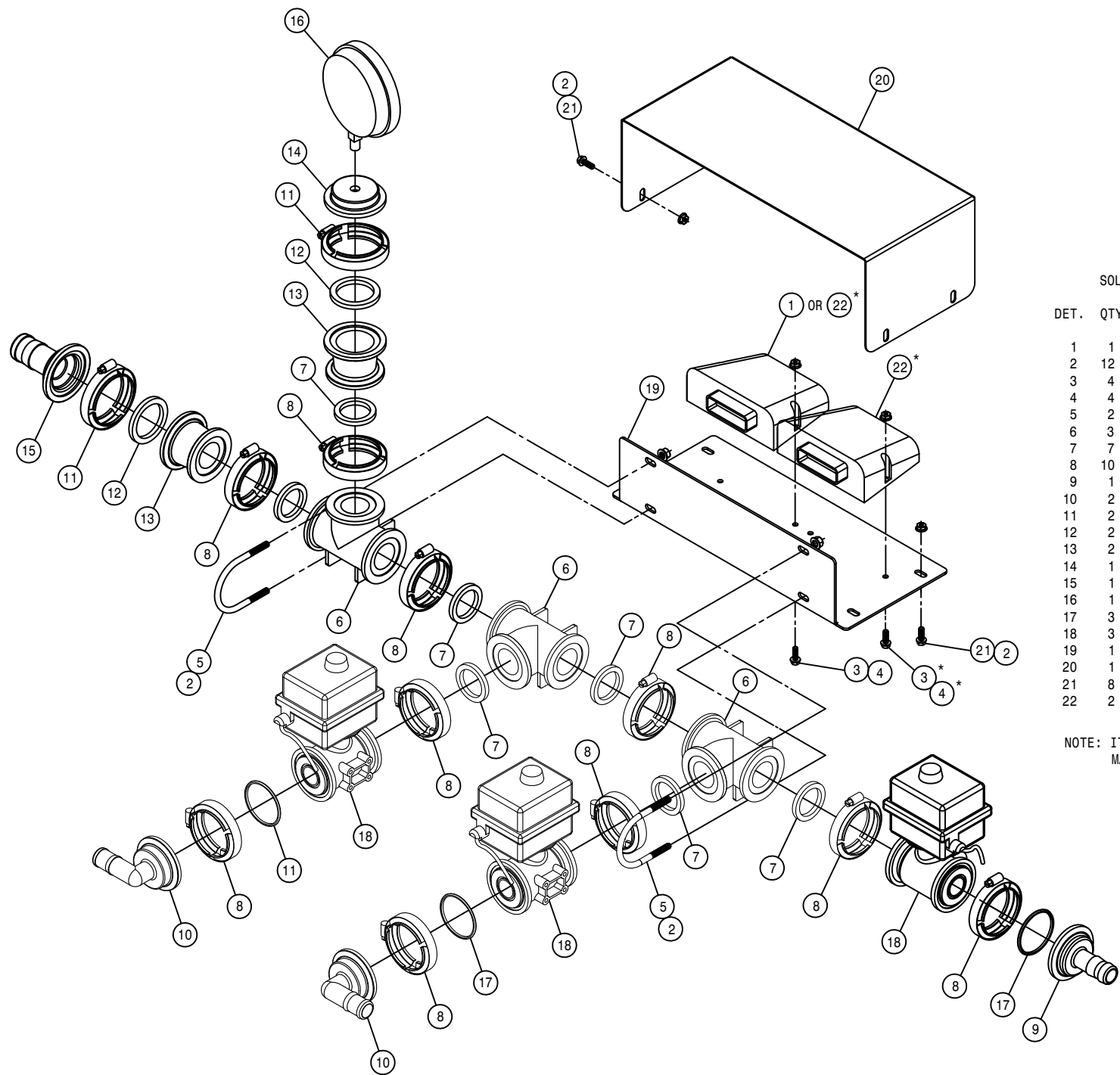


SOLUTION CONTROL 1-VALVE ASSEMBLY

DET. QTY PART NO. DESCRIPTION

1	1	292016	IQAN-XA2 MODULE
2	12	470113	5/16UNC HEX FLANGE LOCK NUT
3	4	470118	1/4UNC X 3/4 FLANGE HEX BOLT
4	4	470121	1/4UNC HEX FLANGE LOCK NUT
5	2	472195	5/16UNC-2 11/16ID-3 9/16U-BOLT
6	3	500151	2" FLANGE TEE POLY
7	7	500158	1 1/2" GASKET FOR 2" FLANGE
8	8	500160	2" FLANGE CLAMP, S.S.
9	1	500172	2" FLANGE-1" HOSE BARB POLY
10	2	500189	2" FLANGE-90-1" HOSE BARB POLY
11	2	500194	2"FP FLANGE CLAMP, S.S.
12	2	500195	2"FP FLANGE GASKET EPDM
13	2	500199	2"FP FLANGE-2"FLANGE REDU POLY
14	1	500229	2"FP FLANGE PLUG, 1/4FNPT POLY
15	1	500230	2" FP FLANGE-1 1/2" HOSE BARB
16	1	690359	PRESSURE GA GLYCERI 100 PSI
17	1	696254	O-RING, KZCO FLANGED VALVES
18	1	696256	VALVE, KZCO C2F-60B-M-S9
19	1	439194	ELECT CTRL MT PANEL, NTB 05
20	1	439195	ELECT CTRL BOX COVER, NTB 05
21	8	470233	5/16UNC X 3/4 FLANGE HEX BOLT
22	2	292012	IQAN-XP2 POWER MODULE

NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2009.



SOLUTION CONTROL 3-VALVE ASSEMBLY

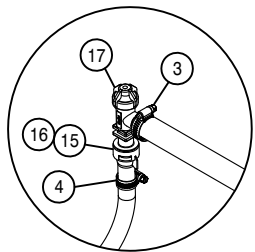
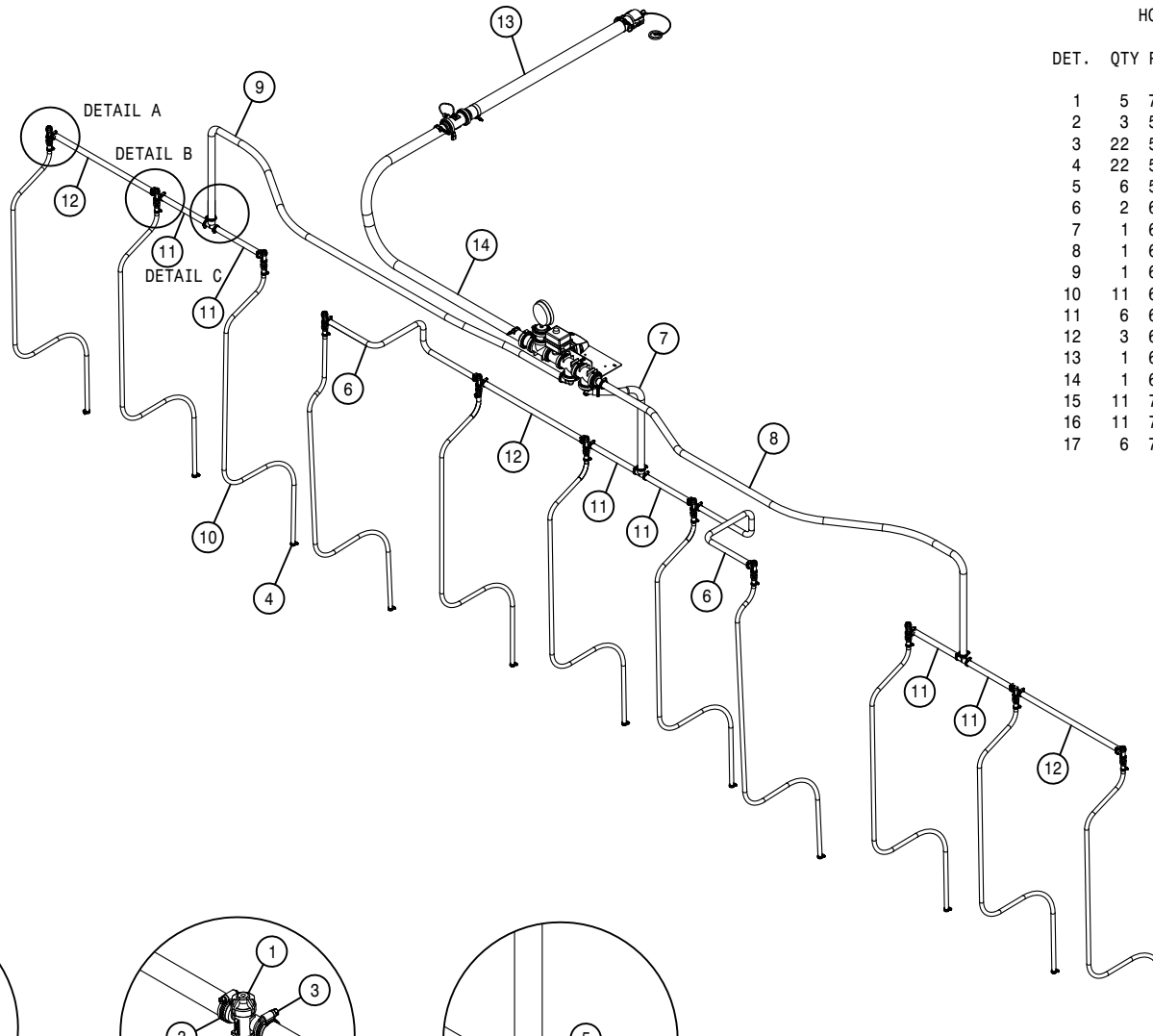
DET.	QTY	PART NO.	DESCRIPTION
	1	292016	IQAN-XA2 MODULE
	12	470113	5/16UNC HEX FLANGE LOCK NUT
	4	470118	1/4UNC X 3/4 FLANGE HEX BOLT
	4	470121	1/4UNC HEX FLANGE LOCK NUT
	2	472195	5/16UNC-2 11/16ID-3 9/16U-BOLT
	3	500151	2" FLANGE TEE POLY
	7	500158	1 1/2" GASKET FOR 2" FLANGE
	10	500160	2" FLANGE CLAMP, S.S.
	9	500172	2" FLANGE-1" HOSE BARB POLY
	10	500189	2" FLANGE-90-1" HOSE BARB POLY
	11	500194	2"FP FLANGE CLAMP, S.S.
	12	500195	2"FP FLANGE GASKET EPDM
	13	500199	2"FP FLANGE-2"FLANGE REDU POLY
	14	500229	2"FP FLANGE PLUG,1/4FNPT POLY
	15	500230	2" FP FLANGE-1 1/2" HOSE BARB
	16	690359	PRESSURE GA GLYCERI 100 PSI
	17	696254	O-RING, KZCO FLANGED VALVES
	18	696256	VALVE, KZCO C2F-60B-M-S9
	19	439194	ELECT CTRL MT PANEL, NTB 05
	20	439195	ELECT CTRL BOX COVER, NTB 05
	21	470233	5/16UNC X 3/4 FLANGE HEX BOLT
	22	292012	IQAN-XP2 POWER MODULE

NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2009.

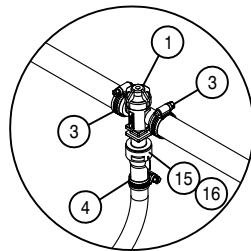
HOSE DIAG, 12R 30" 30FT NTB

DET. QTY PART NO. DESCRIPTION

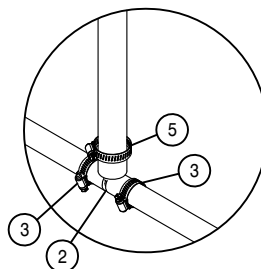
1	5	737830	QUICK TJET TEE,1-TIP BODY .75
2	3	500121	3/4 HOSE BARB-1"BRNCH TEE,POLY
3	22	520055	HOSE CLAMP NO 12 STAINLESS
4	22	520070	HOSE CLAMP NO 8 STAINLESS
5	6	520087	HOSE CLAMP NO 20 STAINLESS
6	2	601174	HOSE, 3/4 X 60 1BR BLK EPDM
7	1	601491	HOSE, 1 X 30 1BR BLK EPDM
8	1	601495	HOSE, 1 X 110 1BR BLK EPDM
9	1	601496	HOSE, 1 X 120 1BR BLK EPDM
10	11	601581	HOSE, 1/2 X 86 1BR BLK EPDM
11	6	601582	HOSE, 3/4 X 14 1BR BLK EPDM
12	3	601583	HOSE, 3/4 X 28 1BR BLK EPDM
13	1	601584	HOSE, 2 X 45 2F-1W EPDM
14	1	601585	HOSE, 1 1/2 X 77 2F-1W EPDM
15	11	737790	CAP SET,ROUND,RED QUICK TEEJET
16	11	737791	1/2" TEEJET HOSE SHANK, NYLON
17	6	737829	QUICK TJET LBO,1-TIP BODY .75



DETAIL A



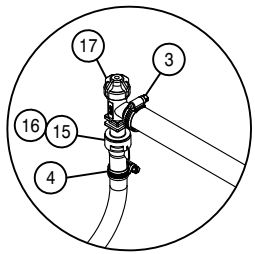
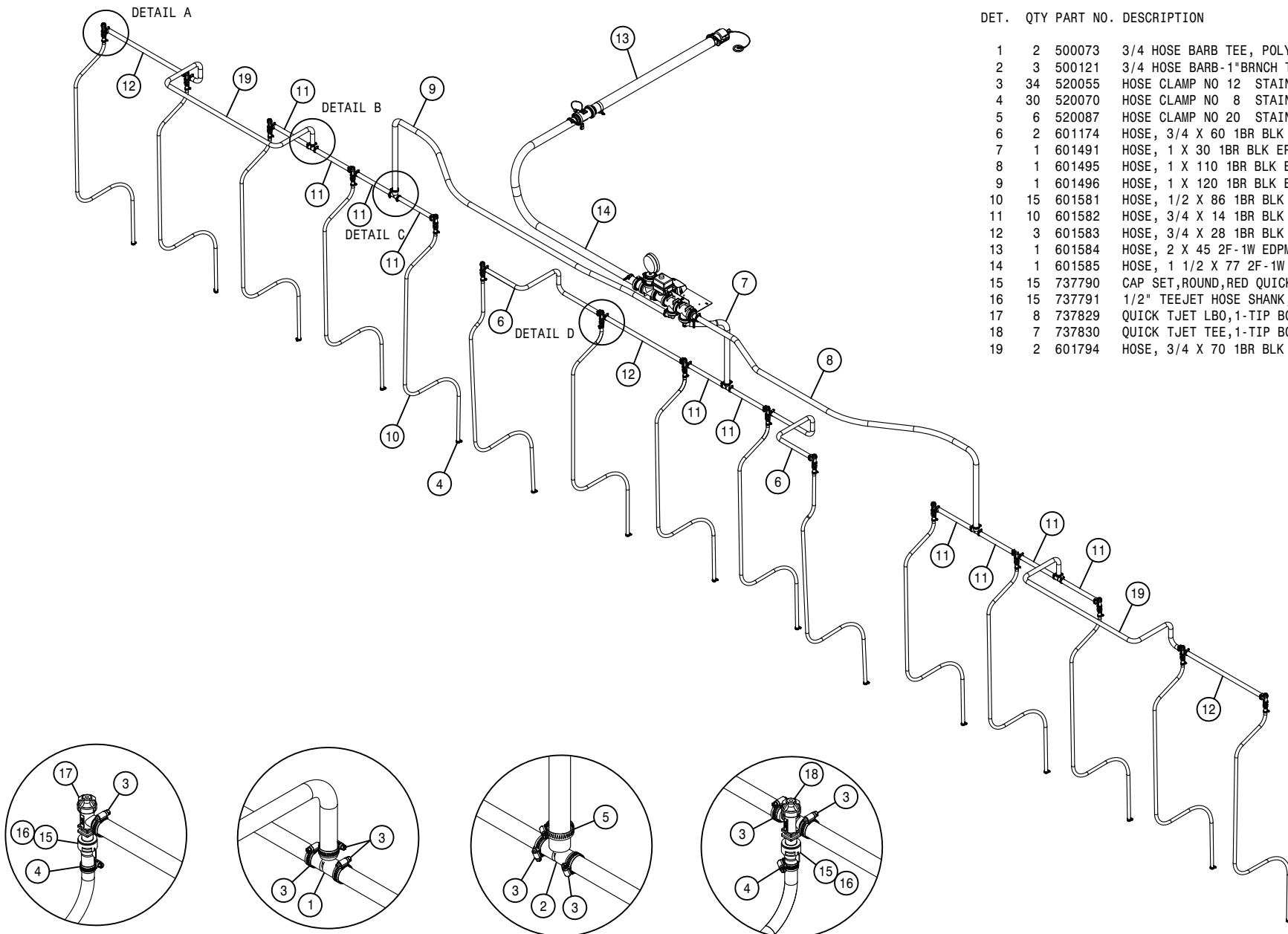
DETAIL B



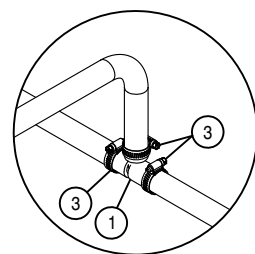
DETAIL C

DET. QTY PART NO. DESCRIPTION

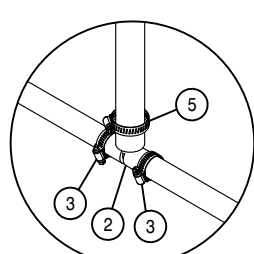
DET.	QTY	PART NO.	DESCRIPTION
1	2	500073	3/4 HOSE BARB TEE, POLY
2	3	500121	3/4 HOSE BARB-1"BRNCH TEE,POLY
3	34	520055	HOSE CLAMP NO 12 STAINLESS
4	30	520070	HOSE CLAMP NO 8 STAINLESS
5	6	520087	HOSE CLAMP NO 20 STAINLESS
6	2	601174	HOSE, 3/4 X 60 1BR BLK EPDM
7	1	601491	HOSE, 1 X 30 1BR BLK EPDM
8	1	601495	HOSE, 1 X 110 1BR BLK EPDM
9	1	601496	HOSE, 1 X 120 1BR BLK EPDM
10	15	601581	HOSE, 1/2 X 86 1BR BLK EPDM
11	10	601582	HOSE, 3/4 X 14 1BR BLK EPDM
12	3	601583	HOSE, 3/4 X 28 1BR BLK EPDM
13	1	601584	HOSE, 2 X 45 2F-1W EDPM
14	1	601585	HOSE, 1 1/2 X 77 2F-1W EDPM
15	15	737790	CAP SET,ROUND,RED QUICK TEEJET
16	15	737791	1/2" TEEJET HOSE SHANK, NYLON
17	8	737829	QUICK TJET LBO,1-TIP BODY .75
18	7	737830	QUICK TJET TEE,1-TIP BODY .75
19	2	601794	HOSE, 3/4 X 70 1BR BLK EPDM



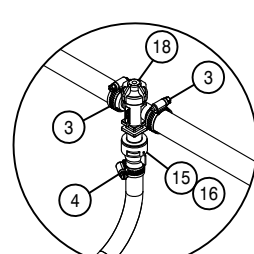
DETAIL A



DETAIL B



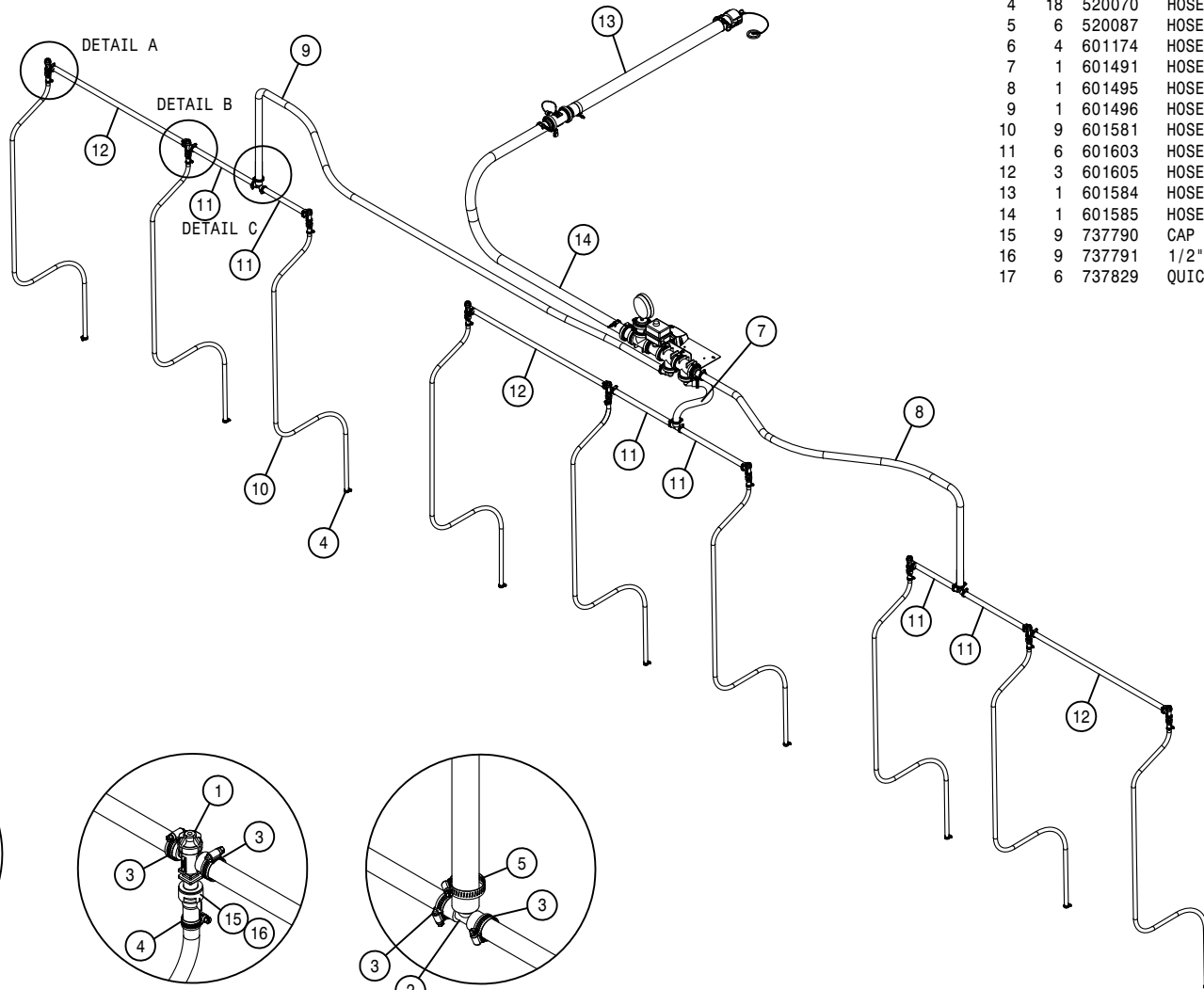
DETAIL C



DETAIL D

HOSE DIAG, 18R SKIP 20" 30FT NTB

DET.	QTY	PART NO.	DESCRIPTION
1	3	737830	QUICK TJET TEE,1-TIP BODY .75
2	3	500121	3/4 HOSE BARB-1"BRNCH TEE,POLY
3	18	520055	HOSE CLAMP NO 12 STAINLESS
4	18	520070	HOSE CLAMP NO 8 STAINLESS
5	6	520087	HOSE CLAMP NO 20 STAINLESS
6	4	601174	HOSE, 3/4 X 60 1BR BLK EPDM
7	1	601491	HOSE, 1 X 30 1BR BLK EPDM
8	1	601495	HOSE, 1 X 110 1BR BLK EPDM
9	1	601496	HOSE, 1 X 120 1BR BLK EPDM
10	9	601581	HOSE, 1/2 X 86 1BR BLK EPDM
11	6	601603	HOSE, 3/4 X 19 1BR BLK EPDM
12	3	601605	HOSE, 3/4 X 38 1BR BLK EPDM
13	1	601584	HOSE, 2 X 45 2F-1W EDPM
14	1	601585	HOSE, 1 1/2 X 77 2F-1W EDPM
15	9	737790	CAP SET,ROUND,RED QUICK TEEJET
16	9	737791	1/2" TEEJET HOSE SHANK, NYLON
17	6	737829	QUICK TJET LBO,1-TIP BODY .75



DETAIL A

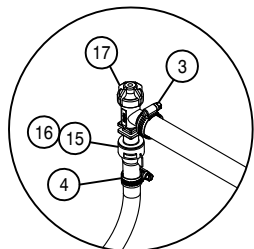
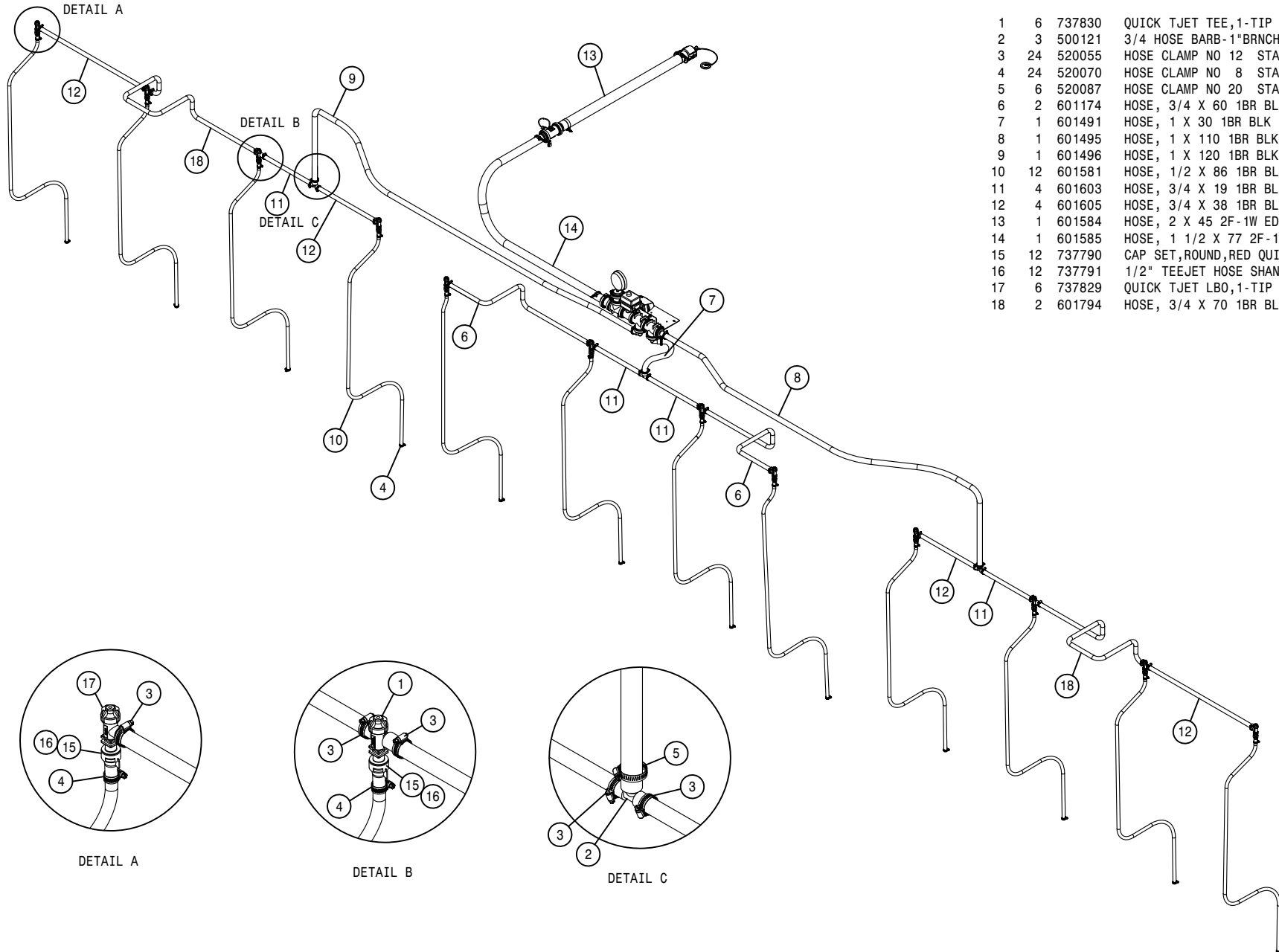
DETAIL B

DETAIL C

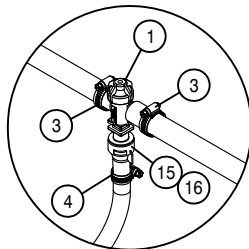
HOSE DIAG, 24R SKIP 20" 40FT NTB

DET. QTY PART NO. DESCRIPTION

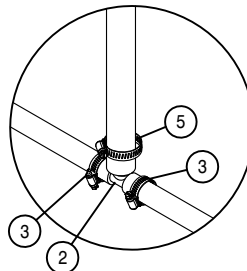
DET.	QTY	PART NO.	DESCRIPTION
1	6	737830	QUICK TJET TEE,1-TIP BODY .75
2	3	500121	3/4 HOSE BARB-1"BRNCH TEE,POLY
3	24	520055	HOSE CLAMP NO 12 STAINLESS
4	24	520070	HOSE CLAMP NO 8 STAINLESS
5	6	520087	HOSE CLAMP NO 20 STAINLESS
6	2	601174	HOSE, 3/4 X 60 1BR BLK EPDM
7	1	601491	HOSE, 1 X 30 1BR BLK EPDM
8	1	601495	HOSE, 1 X 110 1BR BLK EPDM
9	1	601496	HOSE, 1 X 120 1BR BLK EPDM
10	12	601581	HOSE, 1/2 X 86 1BR BLK EPDM
11	4	601603	HOSE, 3/4 X 19 1BR BLK EPDM
12	4	601605	HOSE, 3/4 X 38 1BR BLK EPDM
13	1	601584	HOSE, 2 X 45 2F-1W EDPM
14	1	601585	HOSE, 1 1/2 X 77 2F-1W EDPM
15	12	737790	CAP SET,ROUND,RED QUICK TEEJET
16	12	737791	1/2" TEEJET HOSE SHANK, NYLON
17	6	737829	QUICK TJET LBO,1-TIP BODY .75
18	2	601794	HOSE, 3/4 X 70 1BR BLK EPDM



DETAIL A

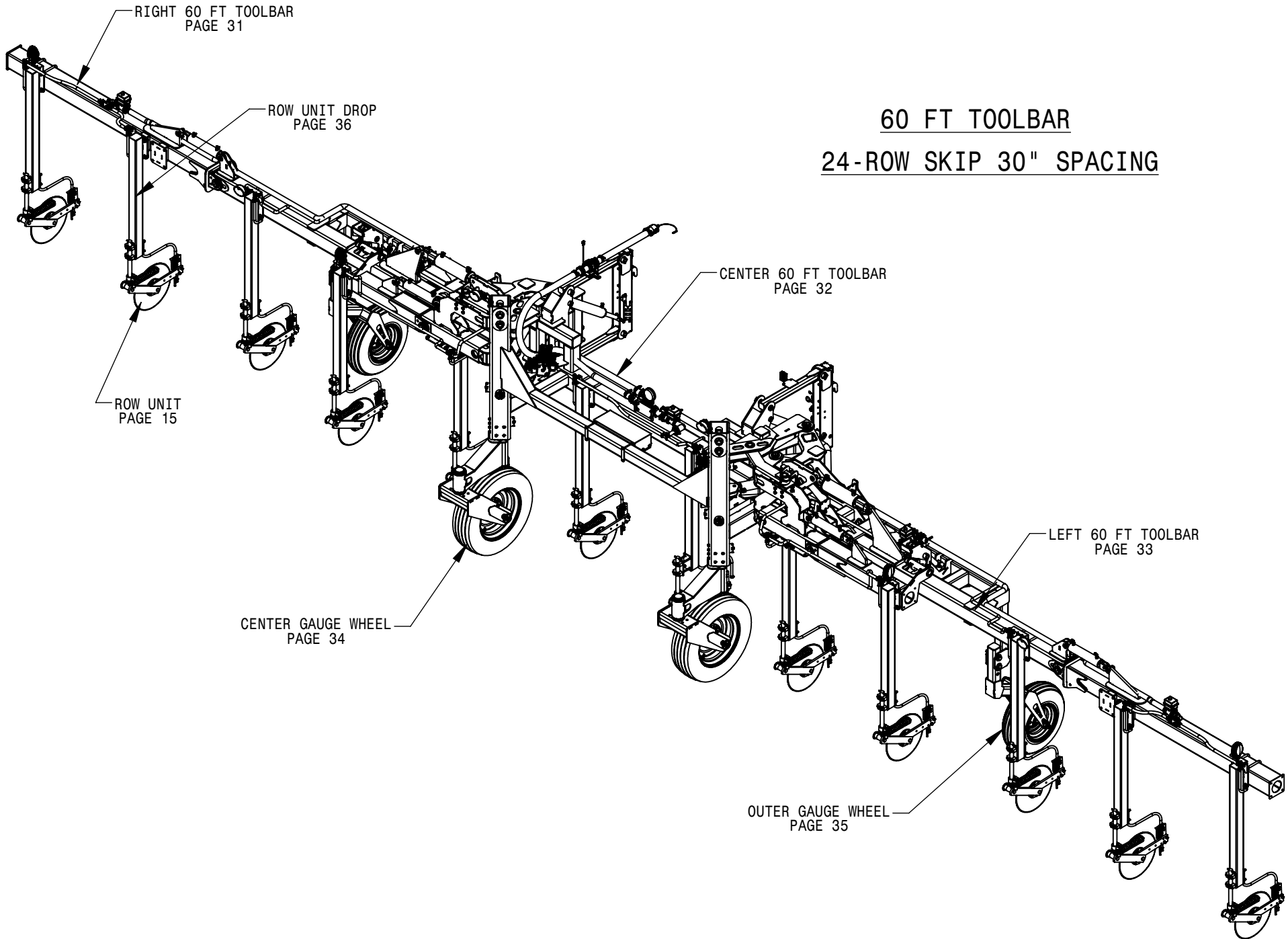


DETAIL B

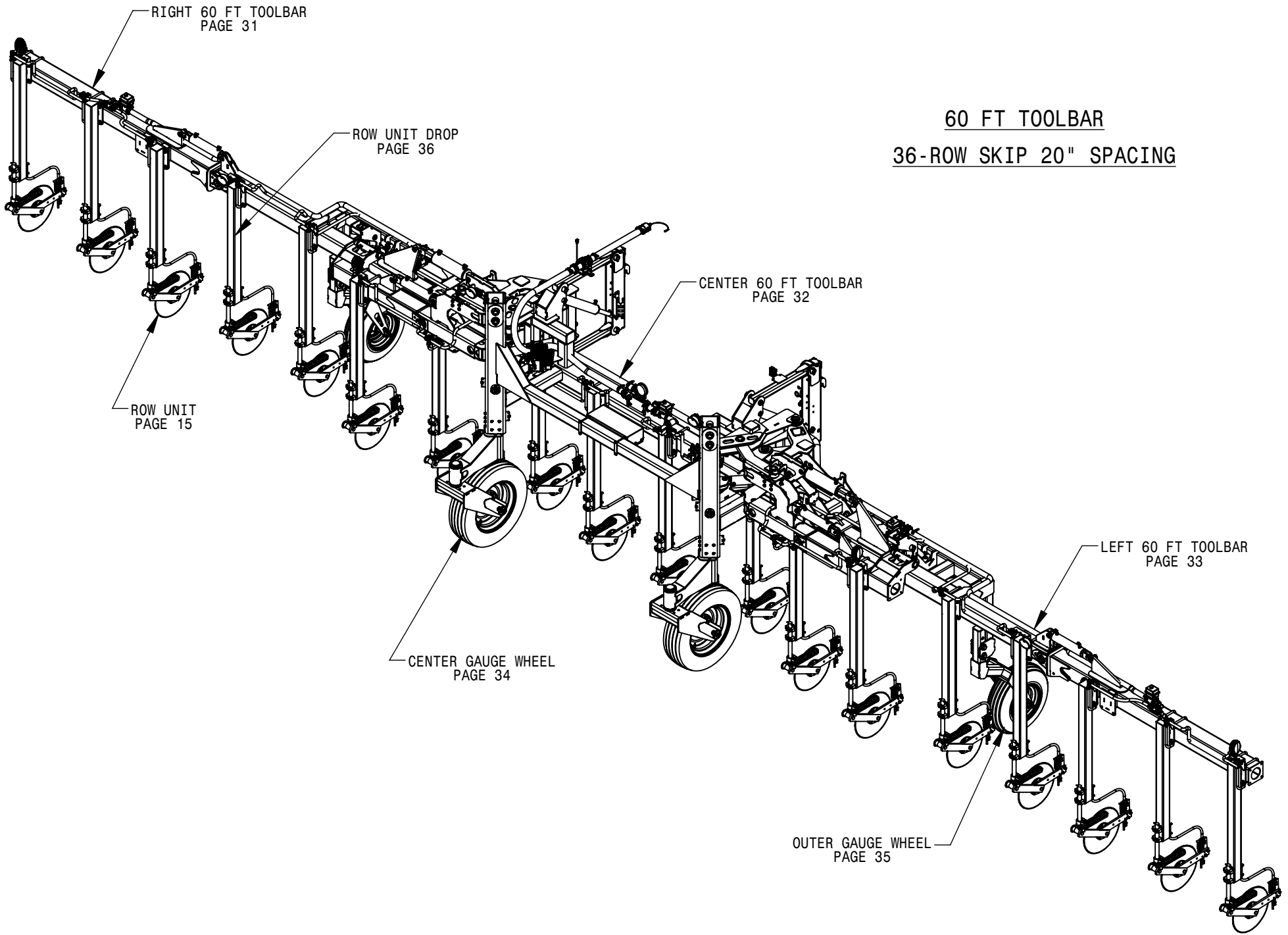


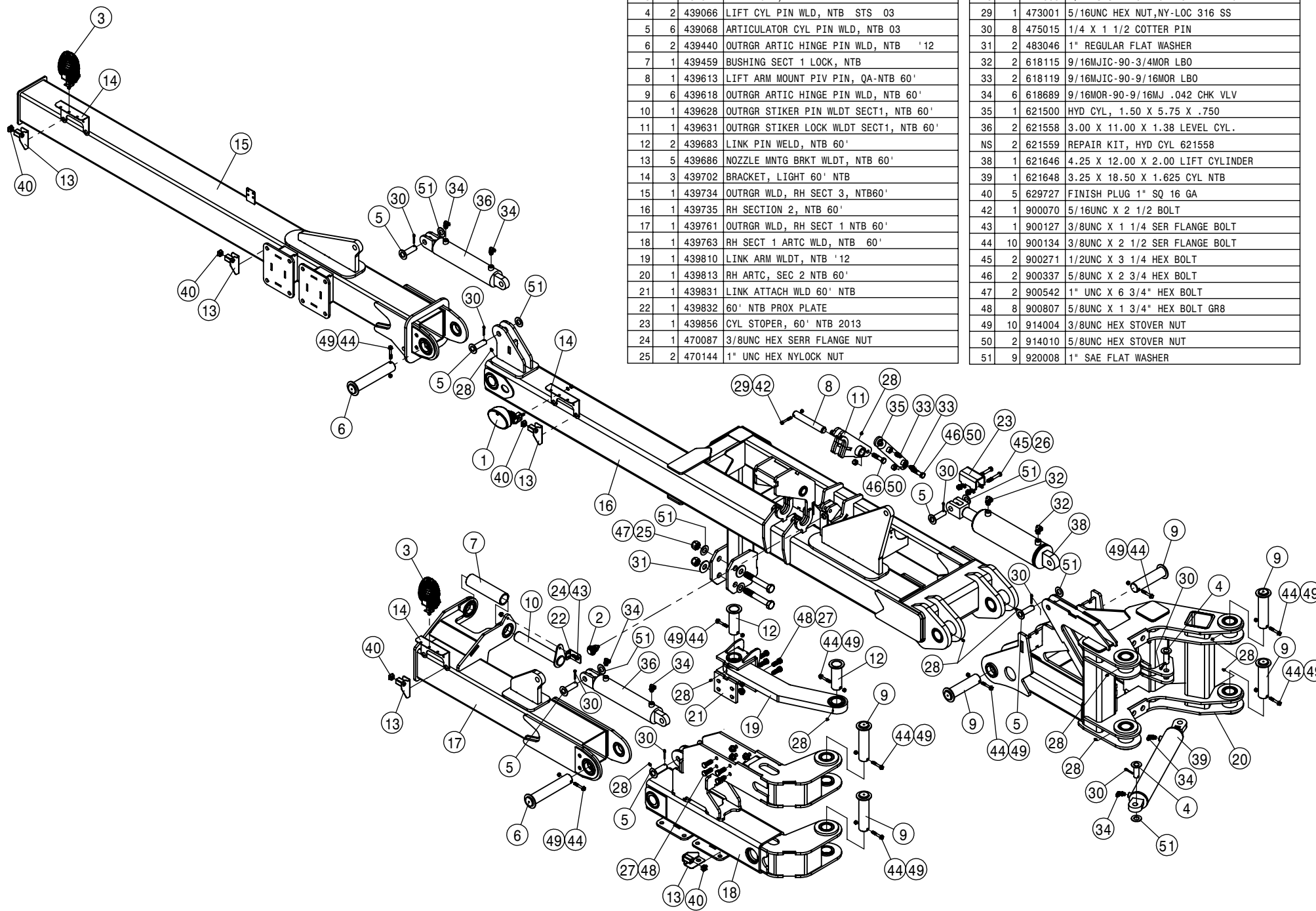
DETAIL C





60 FT TOOLBAR  
24-ROW SKIP 30" SPACING

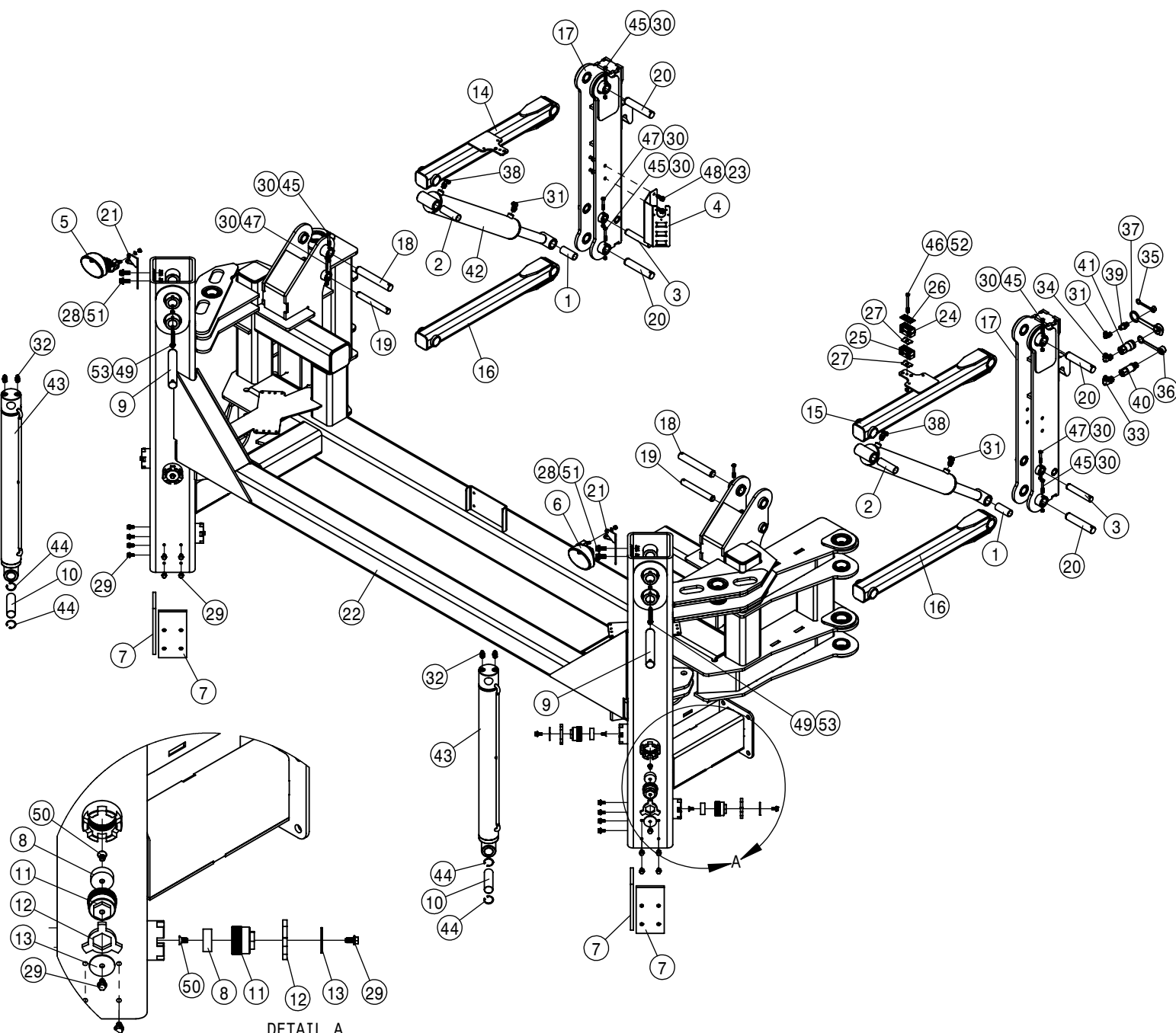




RIGHT 60FT SECTION TOOLBAR ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	1	291902	RH WORKLIGHT, TRAPEZOID GLASS
2	1	291945	PROXIMITY SENSOR,M30 X 1.5
3	2	292917	LED LIGHT, AMBER
4	2	439066	LIFT CYL PIN WLD, NTB STS 03
5	6	439068	ARTICULATOR CYL PIN WLD, NTB 03
6	2	439440	OUTRGR ARTIC HINGE PIN WLD, NTB '12
7	1	439459	BUSHING SECT 1 LOCK, NTB
8	1	439613	LIFT ARM MOUNT PIV PIN, QA-NTB 60'
9	6	439618	OUTRGR ARTIC HINGE PIN WLD, NTB 60'
10	1	439628	OUTRGR STIKER PIN WLDT SECT1, NTB 60'
11	1	439631	OUTRGR STIKER LOCK WLDT SECT1, NTB 60'
12	2	439683	LINK PIN WELD, NTB 60'
13	5	439686	NOZZLE MNTG BRKT WLDT, NTB 60'
14	3	439702	BRACKET, LIGHT 60' NTB
15	1	439734	OUTRGR WLD, RH SECT 3, NTB60'
16	1	439735	RH SECTION 2, NTB 60'
17	1	439761	OUTRGR WLD, RH SECT 1 NTB 60'
18	1	439763	RH SECT 1 ARTC WLD, NTB 60'
19	1	439810	LINK ARM WLDT, NTB '12
20	1	439813	RH ARTC, SEC 2 NTB 60'
21	1	439831	LINK ATTACH WLD 60' NTB
22	1	439832	60' NTB PROX PLATE
23	1	439856	CYL STOPER, 60' NTB 2013
24	1	470087	3/8UNC HEX SERR FLANGE NUT
25	2	470144	1" UNC HEX NYLOCK NUT

RIGHT 60FT SECTION TOOLBAR ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
26	2	470360	1/2UNC HEX SERR FLANGE NUT
27	8	470675	5/8-11 FLANGE NUT, GR8
28	11	471005	1/4-28 STRAIGHT GREASE FITTING
29	1	473001	5/16UNC HEX NUT,NY-LOC 316 SS
30	8	475015	1/4 X 1 1/2 COTTER PIN
31	2	483046	1" REGULAR FLAT WASHER
32	2	618115	9/16MJIC-90-3/4MOR LBO
33	2	618119	9/16MJIC-90-9/16MOR LBO
34	6	618689	9/16MOR-90-9/16MJ .042 CHK VLV
35	1	621500	HYD CYL, 1.50 X 5.75 X .750
36	2	621558	3.00 X 11.00 X 1.38 LEVEL CYL.
NS	2	621559	REPAIR KIT, HYD CYL 621558
38	1	621646	4.25 X 12.00 X 2.00 LIFT CYLINDER
39	1	621648	3.25 X 18.50 X 1.625 CYL NTB
40	5	629727	FINISH PLUG 1" SQ 16 GA
42	1	900070	5/16UNC X 2 1/2 BOLT
43	1	900127	3/8UNC X 1 1/4 SER FLANGE BOLT
44	10	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
45	2	900271	1/2UNC X 3 1/4 HEX BOLT
46	2	900337	5/8UNC X 2 3/4 HEX BOLT
47	2	900542	1" UNC X 6 3/4" HEX BOLT
48	8	900807	5/8UNC X 1 3/4" HEX BOLT GR8
49	10	914004	3/8UNC HEX STOVER NUT
50	2	914010	5/8UNC HEX STOVER NUT
51	9	920008	1" SAE FLAT WASHER

32

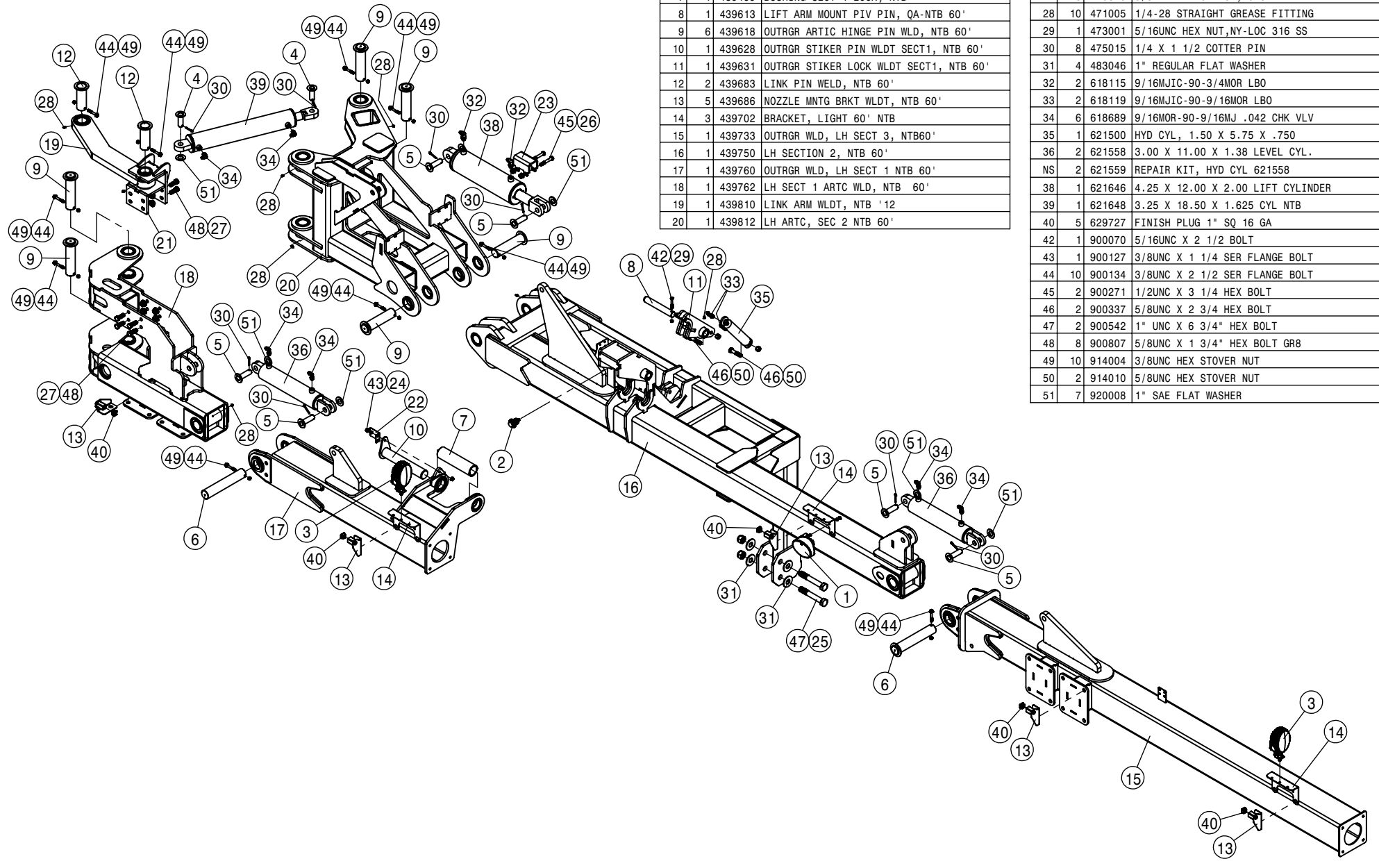


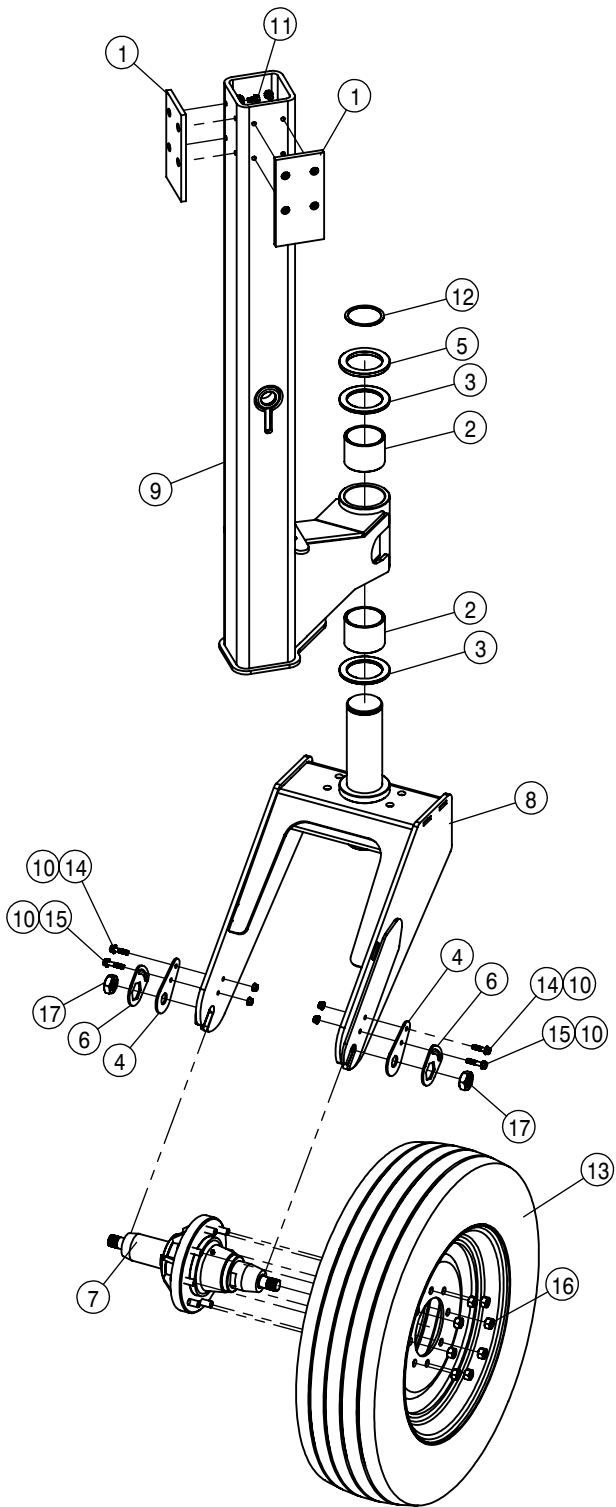
DETAIL A  
SCALE 1 : 13

CENTER 60FT SECTION TOOLBAR ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	2	121109	LIFT CYL BRG, 3.13 POLYGON
2	2	121115	LIFT CYL BRG, 4.00 POLYGON
3	2	164452	LIFT ARM MT PIVOT PIN
4	1	165742	RECEPTACLE MT,STS BOOMS '12
5	1	291902	RH WORKLIGHT, TRAPEZOID GLASS
6	1	291903	LH WORKLIGHT, TRAPEZOID GLASS
7	4	439454	WEAR PAD GAUGE WHEEL, NTB
8	8	439455	WEAR PUCK GAUGE WHEEL NTB
9	2	439535	GAUGE WHEEL LIFT CYL PIN UPPER
10	2	439536	GAUGE WHEEL LIFT CYL PIN LOWER
11	8	439539	GAUGE WHEEL WEAR PUCK HOLDER
12	8	439540	GAUGE WHEEL PUCK HLDR RTNR
13	8	439541	GAUGE WHEEL PUCK HLDR RTNR WASH
14	1	439580	RH UPR LIFT ARM WLD, NTB STS 03
15	1	439581	UPR LIFT ARM LH WLDT, NTB 60'
16	2	439582	LWR LIFT ARM WLDT, NTB 60'
17	2	439588	LIFT ARM MOUNT WLDT, QA-NTB 60'
18	4	439613	LIFT ARM MOUNT PIV PIN, QA-NTB 60'
19	2	439614	LIFT ARM CTR SEC CYL PIN, NTB 60'
20	4	439620	LIFT ARM CTR SEC PIV PIN, NTB 60'
21	2	439722	BRACKET, LIGHT, NTB 60'
22	1	439764	CENTER SECT WLDT, NTB '12
23	2	470087	3/8UNC HEX SERR FLANGE NUT
24	1	470274	TUBE CLAMP BODY, .750-.750
25	1	470275	TUBE CLAMP BODY, 1.00-1.000
26	1	470276	CLAMP COVER PLATE,SNGL, 2.55LG
27	2	470281	STACK BOLT SAFETY LOCK PLATE
28	4	470360	1/2UNC HEX SERR FLANGE NUT
29	24	470409	3/8UNC X 3/4" SERR FLANGE BOLT
30	12	473001	5/16UNC HEX NUT,NY-LOC 316 SS
31	3	618119	9/16MJIC-90-9/16MOR LBO
32	4	618126	9/16MJIC-9/16MOR ADPTR
33	1	618183	3/4MJIC-90-7/8MOR LBO
34	1	618241	3/4MJIC-90-3/4MOR LBO
35	1	618255	DUST CAP/PLUG FOR 618804/805
36	1	618256	DUST CAP FOR 618806
37	1	618257	DUST PLUG FOR 618807
38	2	618739	9/16MJIC-90-9/16MOR .065 CHK
39	1	618804	HYD QUICK CPLR, MALE 1/4B, 9/16FOR
40	1	618806	HYD QUICK CPLR, MALE 1/2B, 7/8FOR
41	1	618807	HYD QUICK CPLR, FEM 1/2B, 3/4FOR
42	2	621578	MAIN LIFT CYL, STS 120' BOOM 07
43	2	621634	HYD CYL,3.00 X 28.00 X 2.00
44	4	629544	SNAP RING, 1.66 INTERNAL
45	8	900070	5/16UNC X 2 1/2 BOLT
46	1	900075	5/16UNC X 3 3/4 HEX BOLT
47	4	900086	5/16UNC X 2 1/4 HEX BOLT
48	2	900130	3/8UNC X 1 1/4 SER FLANGE BOLT
49	2	900136	3/8UNC X 3" SERR FLANGE BOLT
50	8	900171	3/8UNC X 3/4 FLTHD SOC CAP SCR
51	4	900264	1/2UNC X 1 1/4 SER FLANGE BOLT
52	1	914002	5/16UNC HEX STOVER NUT
53	2	914004	3/8UNC HEX STOVER NUT

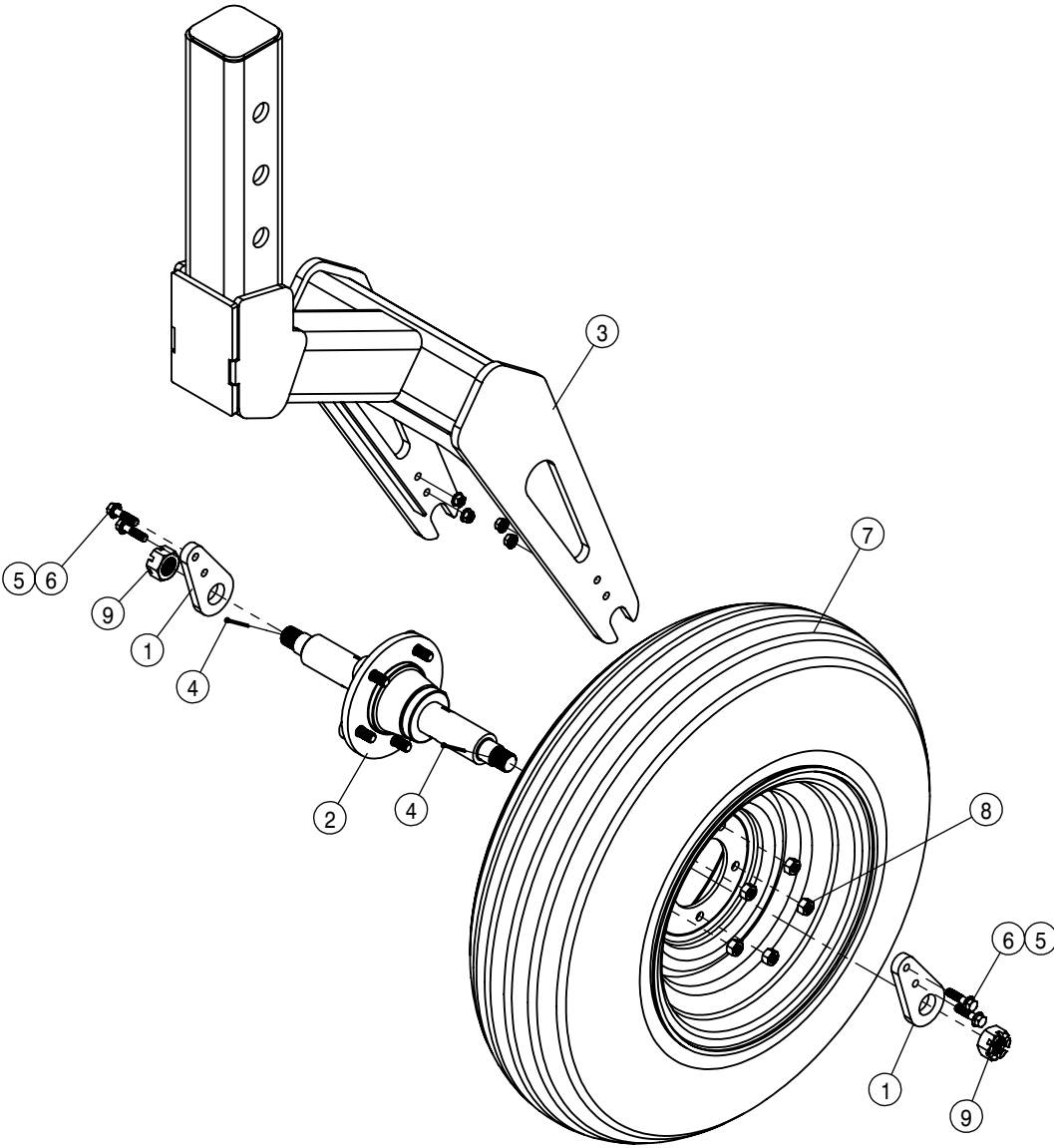
LEFT 60FT SECTION TOOLBAR ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	1	291903	LH WORKLIGHT, TRAPEZOID GLASS
2	1	291945	PROXIMITY SENSOR,M30 X 1.5
3	2	292917	LED LIGHT, AMBER
4	2	439066	LIFT CYL PIN WLD, NTB STS 03
5	6	439068	ARTICULATOR CYL PIN WLD, NTB 03
6	2	439440	OUTRGR ARTIC HINGE PIN WLD, NTB '12
7	1	439459	BUSHING SECT 1 LOCK, NTB
8	1	439613	LIFT ARM MOUNT PIV PIN, QA-NTB 60'
9	6	439618	OUTRGR ARTIC HINGE PIN WLD, NTB 60'
10	1	439628	OUTRGR STIKER PIN WLDT SECT1, NTB 60'
11	1	439631	OUTRGR STIKER LOCK WLDT SECT1, NTB 60'
12	2	439683	LINK PIN WELD, NTB 60'
13	5	439686	NOZZLE MNTG BRKT WLDT, NTB 60'
14	3	439702	BRACKET, LIGHT 60' NTB
15	1	439733	OUTRGR WLD, LH SECT 3, NTB60'
16	1	439750	LH SECTION 2, NTB 60'
17	1	439760	OUTRGR WLD, LH SECT 1 NTB 60'
18	1	439762	LH SECT 1 ARTC WLD, NTB 60'
19	1	439810	LINK ARM WLDT, NTB '12
20	1	439812	LH ARTC, SEC 2 NTB 60'

LEFT 60FT SECTION TOOLBAR ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
21	1	439831	LINK ATTACH WLD 60' NTB
22	1	439832	60' NTB PROX PLATE
23	1	439856	CYL STOPER, 60' NTB 2013
24	1	470087	3/8UNC HEX SERR FLANGE NUT
25	2	470144	1" UNC HEX NYLOCK NUT
26	2	470360	1/2UNC HEX SERR FLANGE NUT
27	8	470675	5/8-11 FLANGE NUT, GR8
28	10	471005	1/4-28 STRAIGHT GREASE FITTING
29	1	473001	5/16UNC HEX NUT,NY-LOC 316 SS
30	8	475015	1/4 X 1 1/2 COTTER PIN
31	4	483046	1" REGULAR FLAT WASHER
32	2	618115	9/16MJIC-90-3/4MOR LBO
33	2	618119	9/16MJIC-90-9/16MOR LBO
34	6	618689	9/16MOR-90-9/16MJ .042 CHK VLV
35	1	621500	HYD CYL, 1.50 X 5.75 X .750
36	2	621558	3.00 X 11.00 X 1.38 LEVEL CYL.
NS	2	621559	REPAIR KIT, HYD CYL 621558
38	1	621646	4.25 X 12.00 X 2.00 LIFT CYLINDER
39	1	621648	3.25 X 18.50 X 1.625 CYL NTB
40	5	629727	FINISH PLUG 1" SQ 16 GA
42	1	900070	5/16UNC X 2 1/2 BOLT
43	1	900127	3/8UNC X 1 1/4 SER FLANGE BOLT
44	10	900134	3/8UNC X 2 1/2 SER FLANGE BOLT
45	2	900271	1/2UNC X 3 1/4 HEX BOLT
46	2	900337	5/8UNC X 2 3/4 HEX BOLT
47	2	900542	1" UNC X 6 3/4" HEX BOLT
48	8	900807	5/8UNC X 1 3/4" HEX BOLT GR8
49	10	914004	3/8UNC HEX STOVER NUT
50	2	914010	5/8UNC HEX STOVER NUT
51	7	920008	1" SAE FLAT WASHER

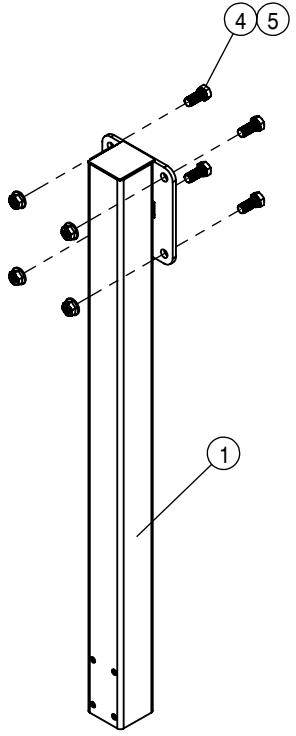
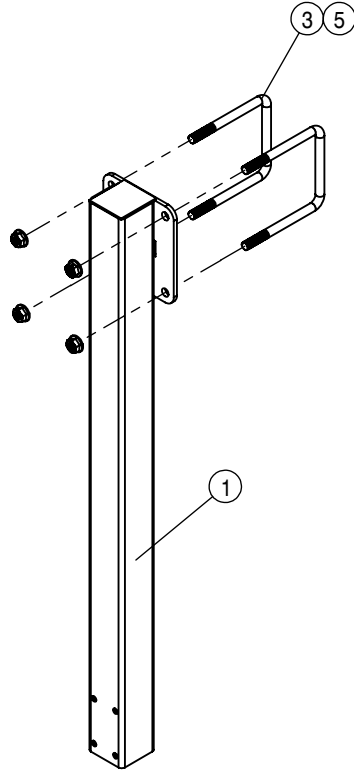
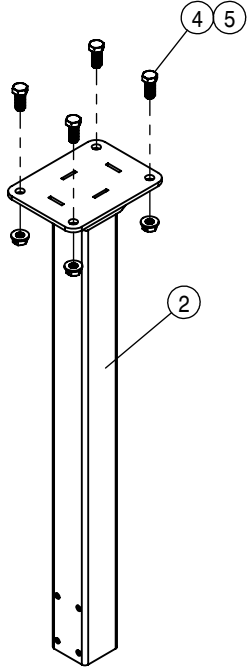




60FT CENTER GAUGE WHEEL ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	2	439454	WEAR PAD GAUGE WHEEL, NTB
2	2	439456	BUSHING CASTER SWIVEL NTB
3	2	439457	THRUST WASHER CASTER SWIVEL, NTB
4	2	439528	GAUGE WHEEL CASTER SPINDLE RTNR
5	1	439534	GAUGE WHEEL CASTER SWIVEL SPCR
6	2	439542	GAUGE WHEEL CASTER NUT RTNR
7	1	439606	CENTER GAUGE WHEEL SPINDLE NTB 60'
8	1	439839	GAUGE WHEEL CASTER MNT WLDT
9	1	439840	GAUGE WHEEL INR TUBE WLDT
10	4	470087	3/8UNC HEX SERR FLANGE NUT
11	8	470409	3/8UNC X 3/4" SERR FLANGE BOLT
12	1	629543	SPIRAL RETAINING RING, 1.84 EXTERNAL
13	1	820147	NTB 60' WHEEL AND TIRE
14	2	900131	3/8UNC X 1 1/2 SER FLANGE BOLT
15	2	900132	3/8UNC X 1 3/4 SER FLANGE BOLT
16	8	910011	5/8UNF HEX NUT
17	2	910103	1 1/8UNF HEX JAM NUT

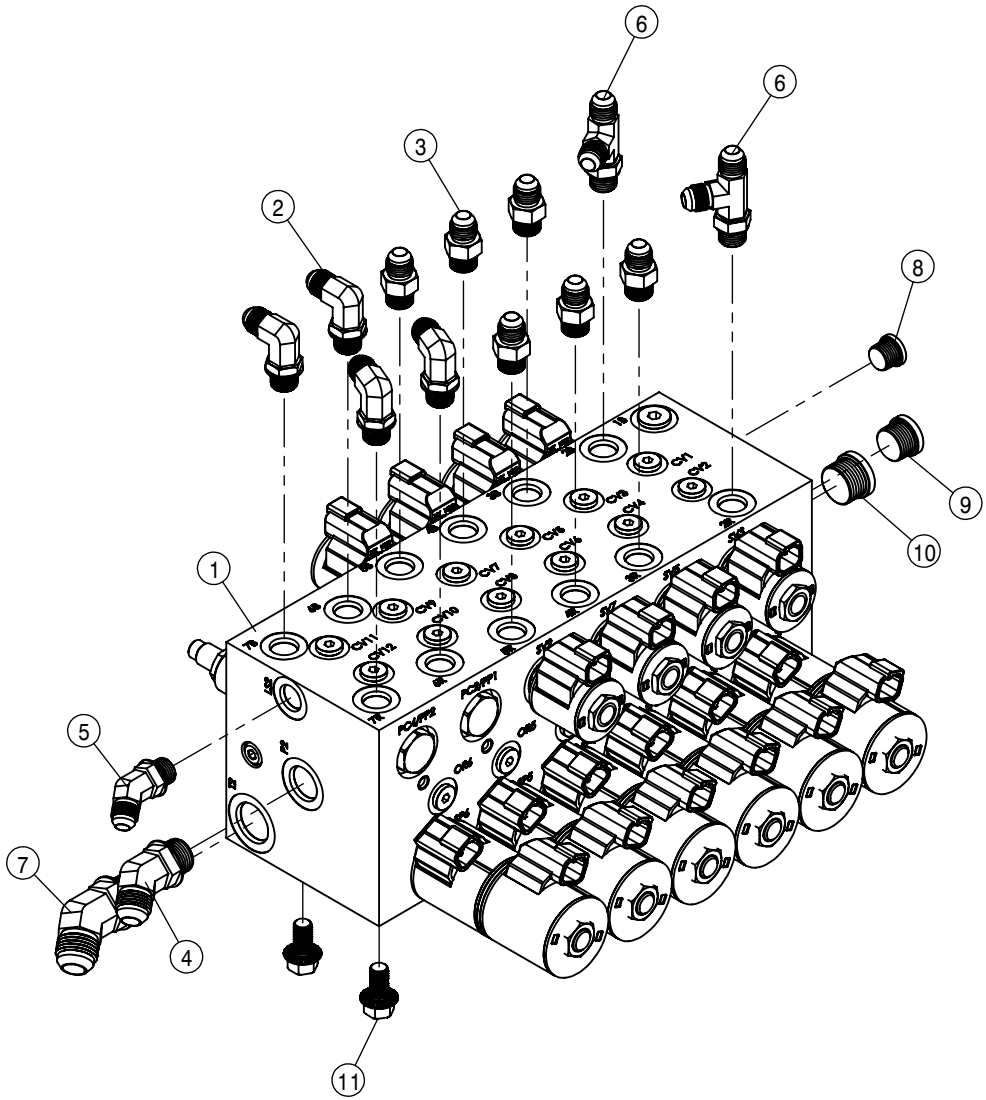


60FT OUTER GAUGE WHEEL ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	2	439848	OTR GAUGE WHL KEEPER NTB '12
2	1	439851	OTR GAGE WHEEL SPINDLE
3	1	439876	OTR GAUGE WHL WLD, NTB '12
4	2	470038	COTTER PIN 1/8 X 1 3/4 LG
5	4	472029	3/8UNC HEX FLANGE NUT SERR SS
6	4	473869	3/8UNC X 1 1/2 SER FLANGE BOLT SS
7	1	820145	OTR GAGE WHEEL ASSY
8	5	910009	1/2UNF HEX NUT
9	2	914018	1"-14 SLOTTED HEX NUT SS

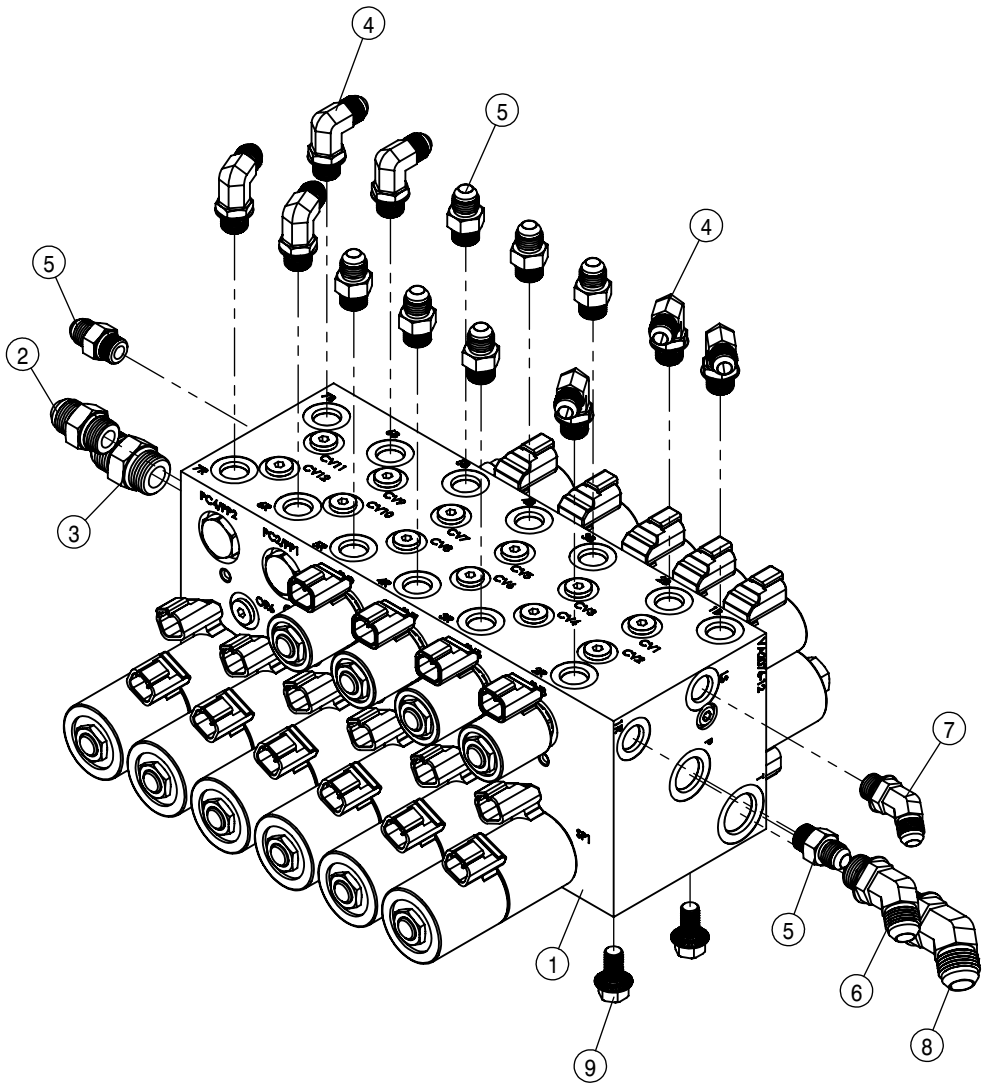


60FT ROW UNIT DROP ASSEMBLY				
DET	QTY	P/N	DESCRIPTION	
1	2	439080	ROW DROP WLD, NTB STS 03	
2	1	439796	ROW DROP WLD, NTB STS 03	
3	2	473981	.750UNC-7.00ID-8.50 U-BOLT SQ	
4	8	900402	3/4UNC X 1 3/4 HEX BOLT	
5	12	914012	3/4UNC CNTLCK SM FLG HEX NUT	

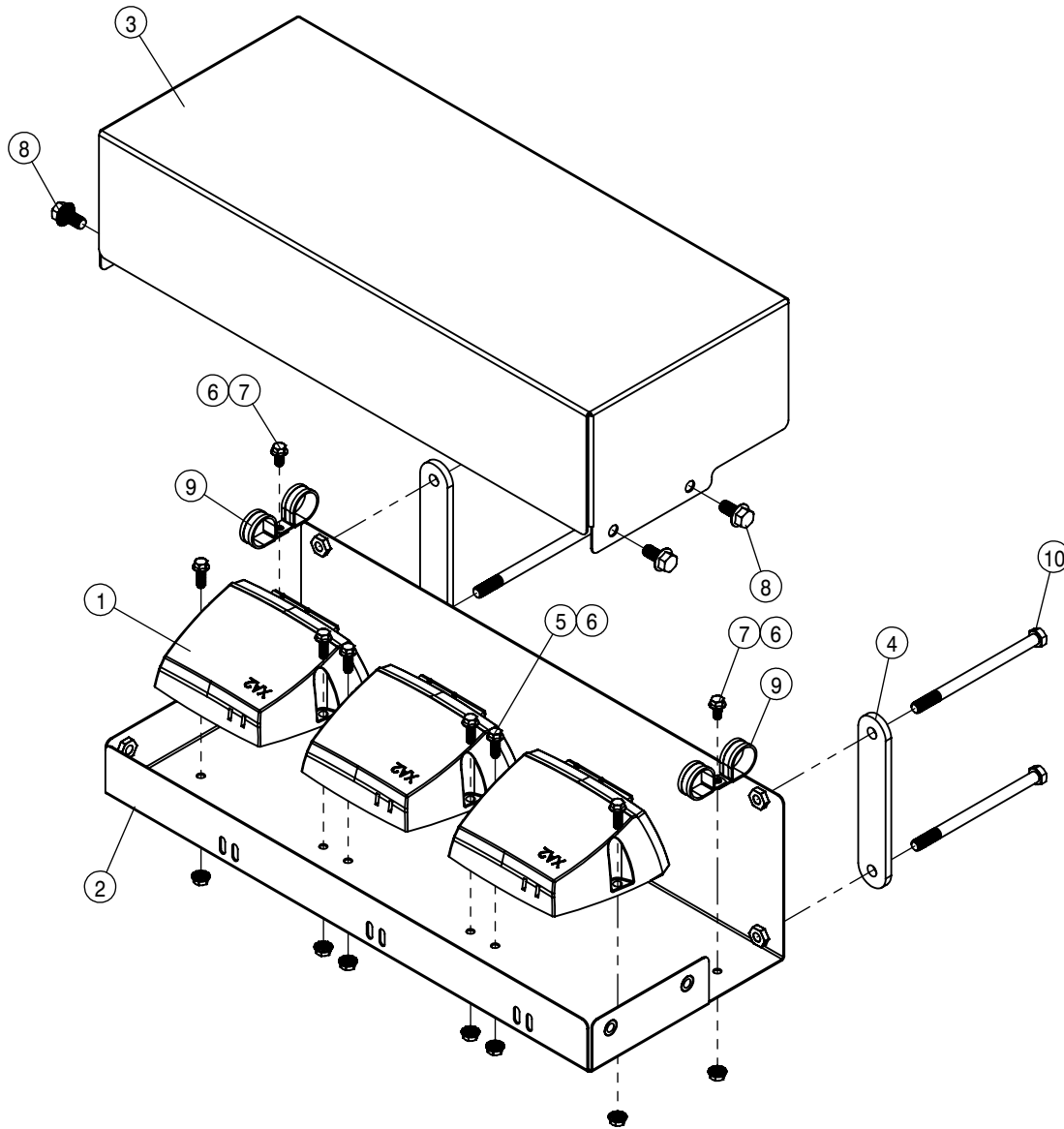




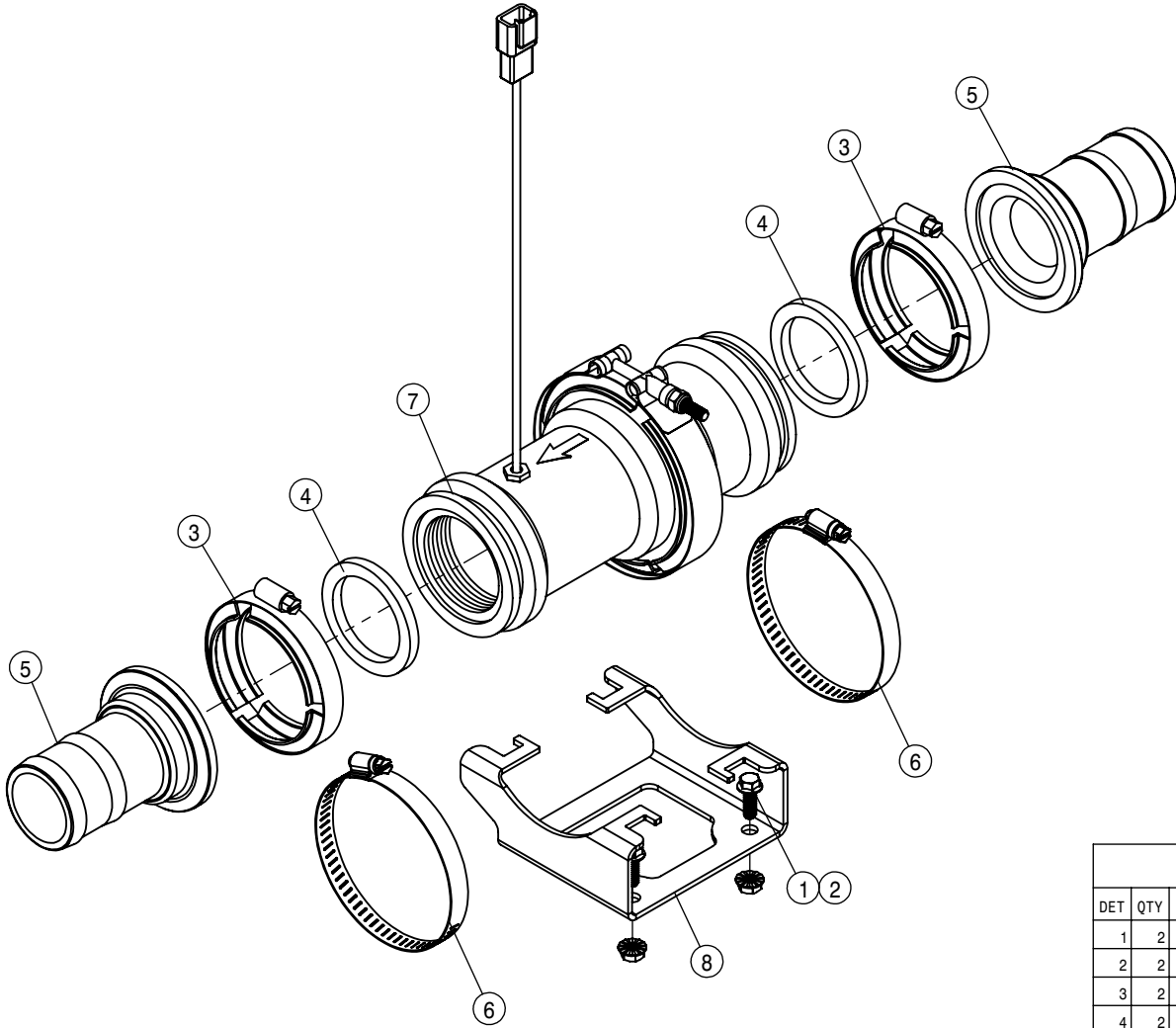
RH 60FT HYDRAULIC MANIFOLD ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	1	606521	ASSY, NTB MANIFOLD, 4-WAY
2	4	618119	9/16MJIC-90-9/16MOR LBO
3	6	618126	9/16MJIC-9/16MOR ADPTR
4	1	618315	3/4MJIC-45-3/4MOR LBO
5	1	618425	9/16MJIC-45-9/16MOR LBO
6	2	618444	9/16MOR RUN TEE-9/16MJIC
7	1	618644	7/8MJIC-45-7/8MOR LBO
8	1	618754	9/16 MOR PLUG, HEX SOCKET
9	1	618755	3/4MOR PLUG, HEX SOCKET
10	1	618756	7/8 MOR PLUG, HEX SOCKET
11	4	900128	3/8UNC X 3/4 SER FLANGE BOLT



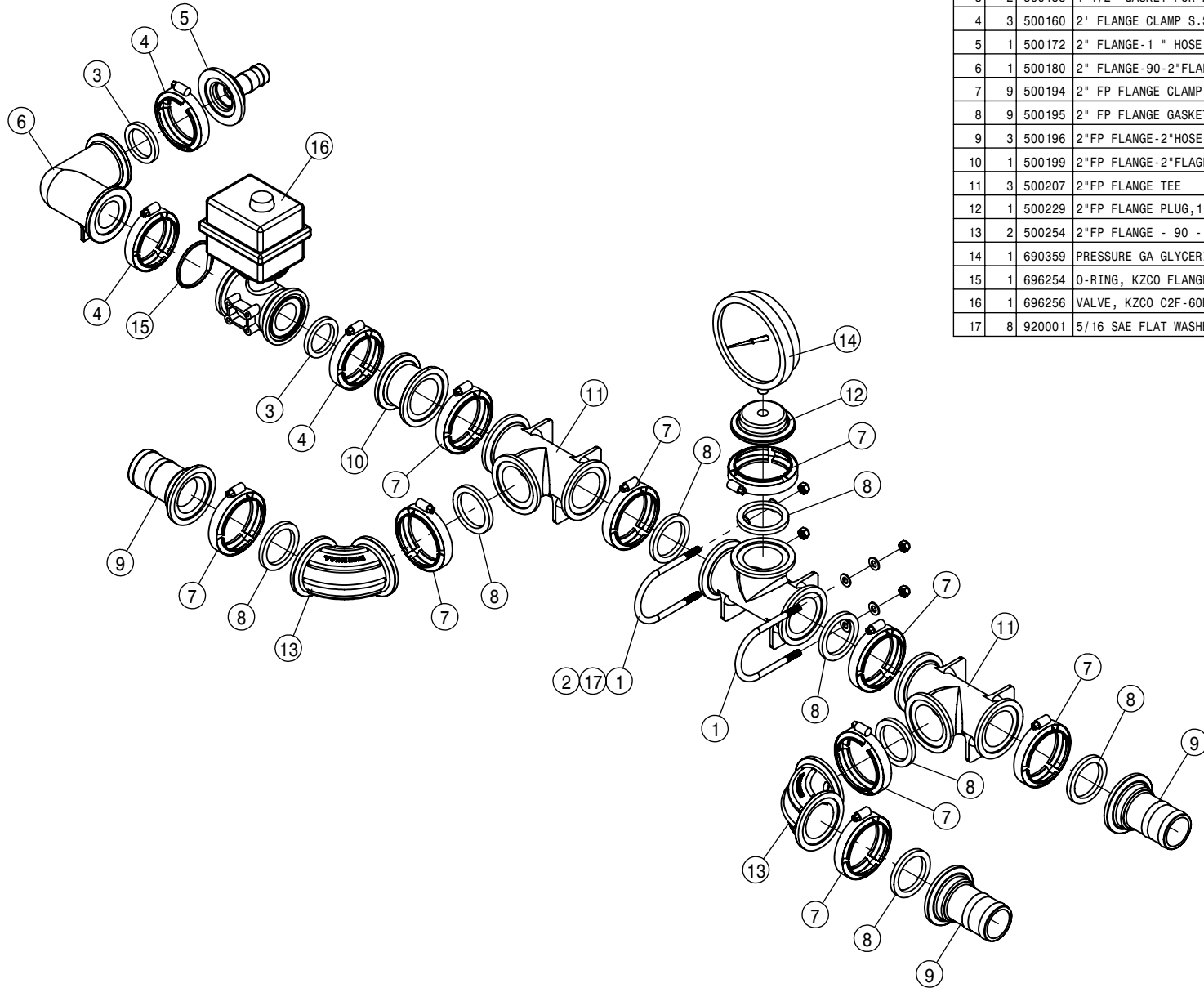
LH 60FT HYDRAULIC MANIFOLD ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	1	606520	ASSY, NTB MANIFOLD, 4-WAY
2	1	611125	3/4MJIC-3/4MOR ADPTR
3	1	611126	7/8MJIC-7/8MOR ADPTR
4	7	618119	9/16MJIC-90-9/16MOR LBO
5	8	618126	9/16MJIC-9/16MOR ADPTR
6	1	618315	3/4MJIC-45-3/4MOR LBO
7	1	618425	9/16MJIC-45-9/16MOR LBO
8	1	618644	7/8MJIC-45-7/8MOR LBO
9	4	900128	3/8UNC X 3/4 SER FLANGE BOLT



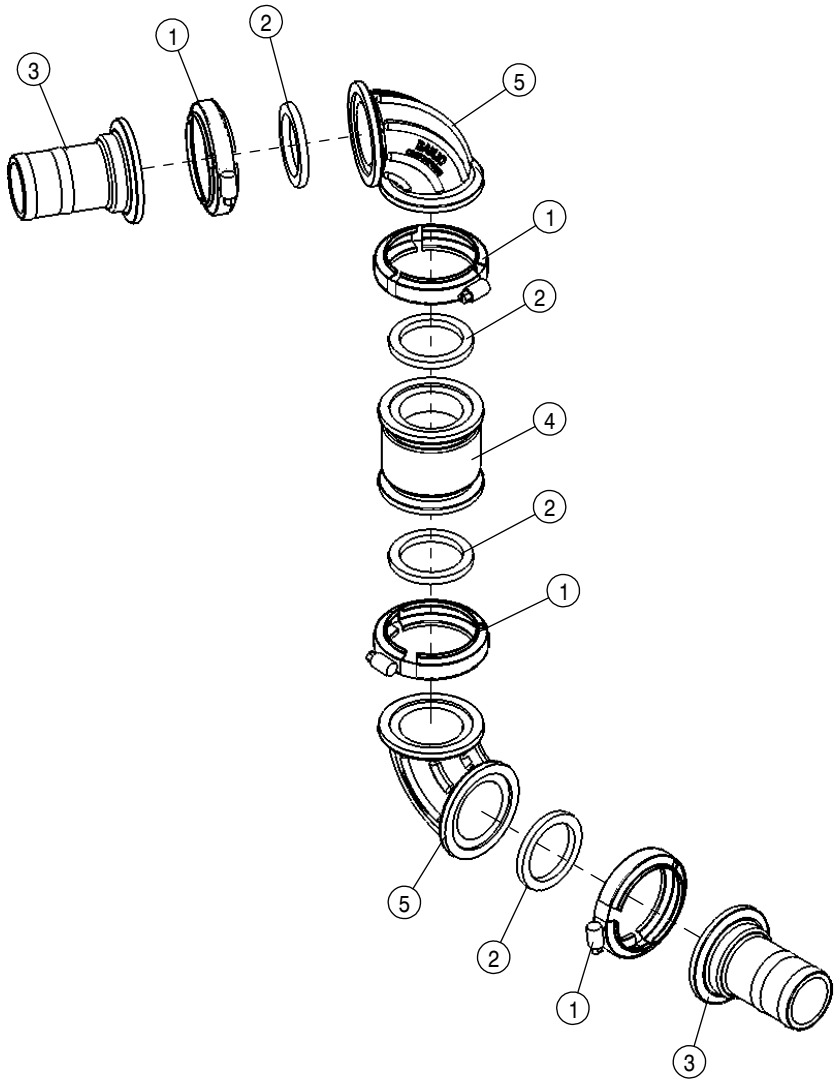
60FT ELECT CONTROL BOX ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	3	292016	IQAN-XA2 MODULE
2	1	439697	ELEC CONTRL BOX WLDT, 60' NTB
3	1	439699	ELECT CTRL BOX COVER, NTB 60'
4	2	439700	ELECT CTRL BOX STRAP, NTB 60'
5	6	470118	1/4 UNC X 3/4 SER FLANGE BOLT
6	8	470121	1/4 UNC HEX FLANGE LOCK NUT
7	2	470122	1/4 UNC X 1/2 FLANGE HEX BOLT
8	4	470409	3/8UNC X 3/4" SERR FLANGE BOLT
9	4	520101	CUSH HOSE CLAMP,#16, 1"D X 1/2"W
10	4	900143	3/8UNC X 5 1/2 HEX BOLT



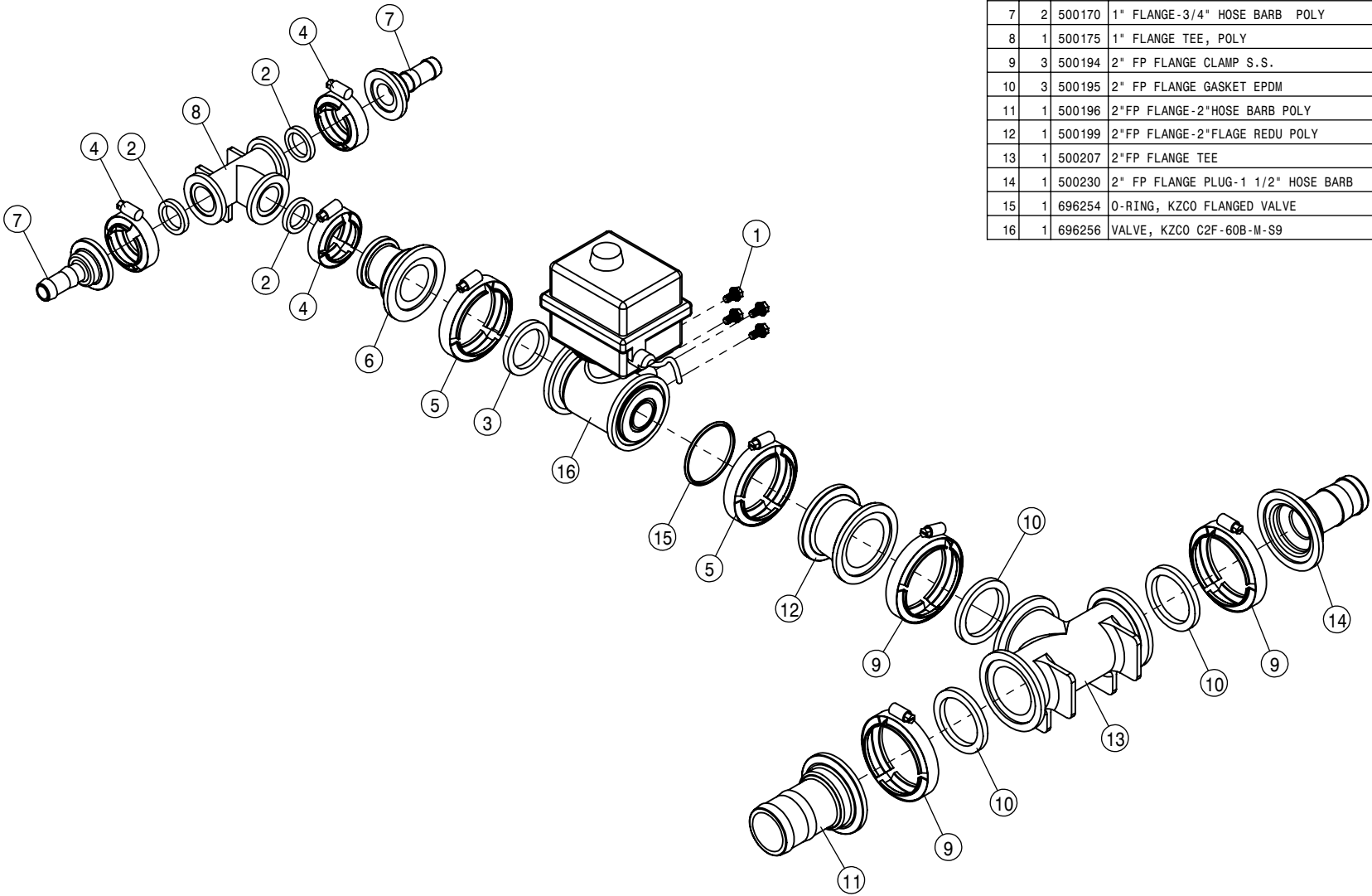
60FT FLOW METER ASSEMBLY				
DET	QTY	P/N	DESCRIPTION	
	1	2	470118	1/4 UNC X 3/4 SER FLANGE BOLT
	2	2	470121	1/4 UNC HEX FLANGE LOCK NUT
	3	2	500194	2" FP FLANGE CLAMP S.S.
	4	2	500195	2" FP FLANGE GASKET EPDM
	5	2	500196	2"FP FLANGE-2"HOSE BARB POLY
	6	2	520056	HOSE CLAMP NO 56 STAINLESS
	7	1	690961	RFM 100 FLOW METER, RAVEN 05
	8	1	A53663	FLOW METER MOUNT



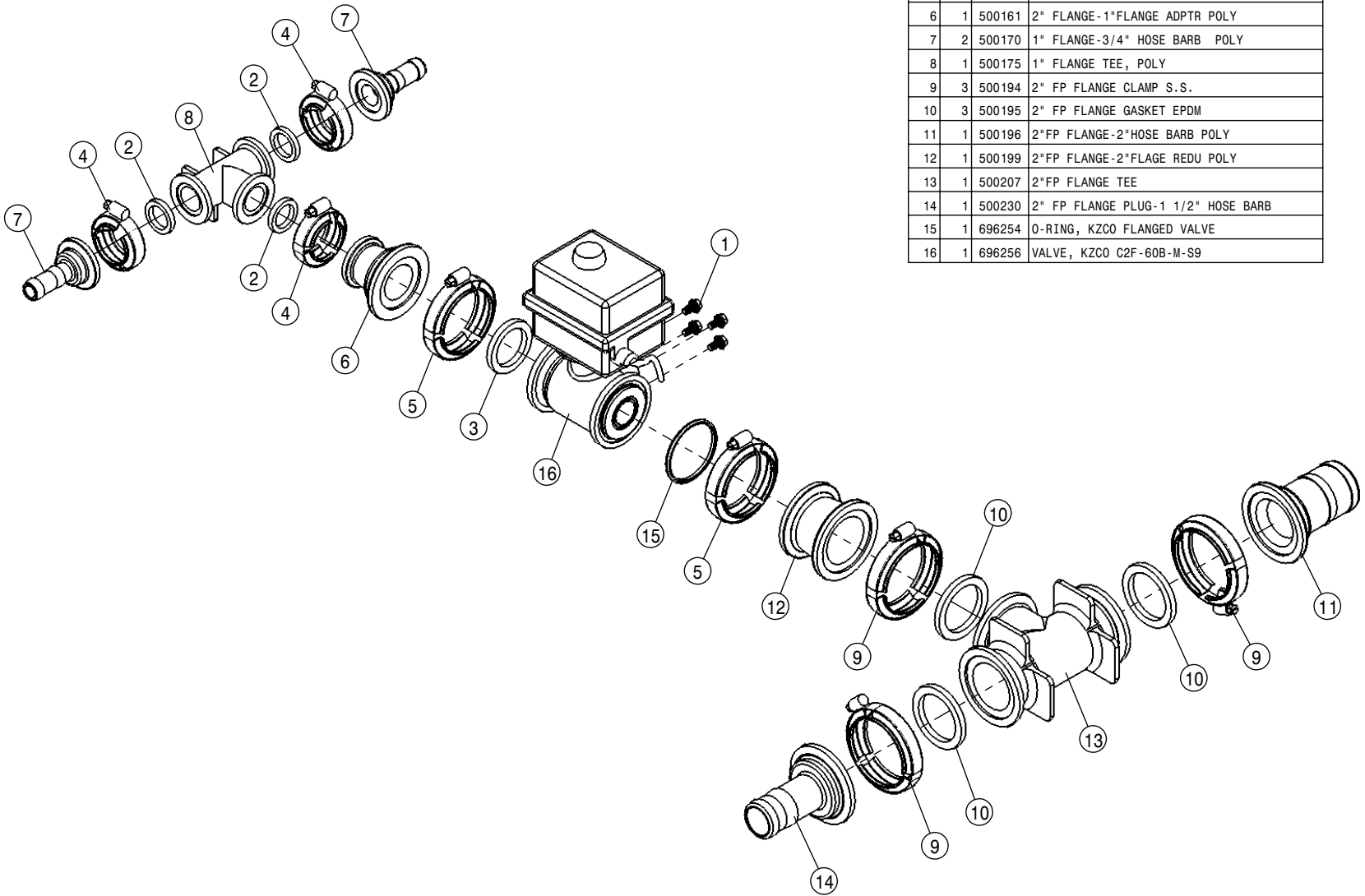
60FT SOLUTION MANIFOLD VALVE ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	2	472034	5/16UNC-2 1/2ID-4.25 U-BOLT
2	4	473001	5/16UNC HEX NUT,NYLOC
3	2	500158	1 1/2" GASKET FOR 2" FLANGE
4	3	500160	2" FLANGE CLAMP S.S.
5	1	500172	2" FLANGE-1 " HOSE BARB
6	1	500180	2" FLANGE-90-2"FLANGE LBO POLY
7	9	500194	2" FP FLANGE CLAMP S.S.
8	9	500195	2" FP FLANGE GASKET EPDM
9	3	500196	2"FP FLANGE-2"HOSE BARB POLY
10	1	500199	2"FP FLANGE-2"FLAGE REDU POLY
11	3	500207	2"FP FLANGE TEE
12	1	500229	2"FP FLANGE PLUG,1/4FNPT POLY
13	2	500254	2"FP FLANGE - 90 - 2" FP FLANGE, SWEEP
14	1	690359	PRESSURE GA GLYCERI 100 PSI
15	1	696254	O-RING, KZCO FLANGED VALVE
16	1	696256	VALVE, KZCO C2F-60B-M-S9
17	8	920001	5/16 SAE FLAT WASHER



60FT SOLUTION ELBOW ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	4	500194	2" FP FLANGE CLAMP S.S.
2	4	500195	2" FP FLANGE GASKET EPDM
3	2	500196	2"FP FLANGE - 2"HOSE BARB POLY
4	1	500251	2"FP MANIFOLD SWIVEL, POLY
5	2	500254	2"FP FLANGE - 90 - 2" FP FLANGE, SWEEP

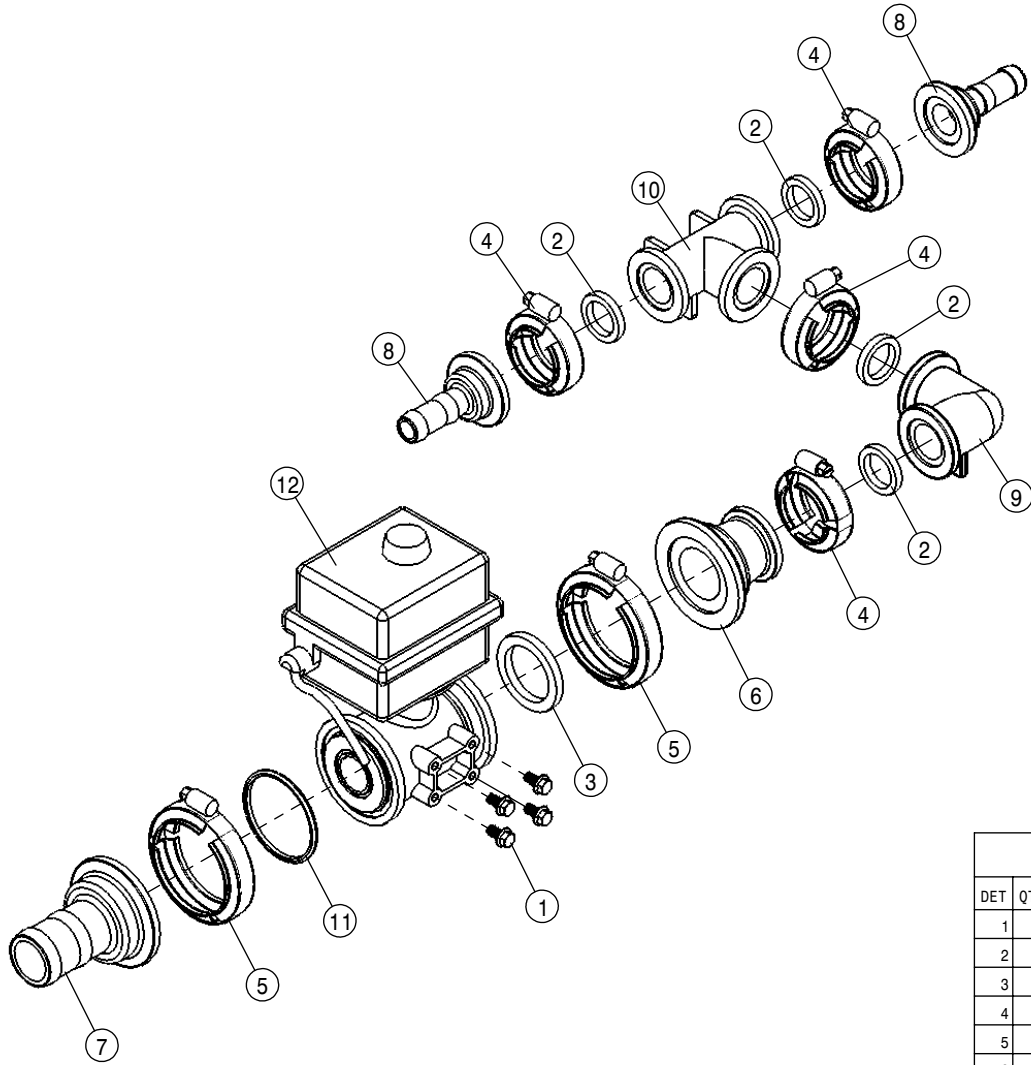


RH 60FT SECT-2 SOLUTION VALVE ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	4	470122	1/4 UNC X 1/2 FLANGE HEX BOLT
2	3	500157	1" FLANGE GASKET EPDM
3	1	500158	1 1/2" GASKET FOR 2" FLANGE
4	3	500159	1" FLANGE CLAMP S.S.
5	2	500160	2" FLANGE CLAMP S.S.
6	1	500161	2" FLANGE-1" FLANGE ADPTR POLY
7	2	500170	1" FLANGE-3/4" HOSE BARB POLY
8	1	500175	1" FLANGE TEE, POLY
9	3	500194	2" FP FLANGE CLAMP S.S.
10	3	500195	2" FP FLANGE GASKET EPDM
11	1	500196	2" FP FLANGE-2" HOSE BARB POLY
12	1	500199	2" FP FLANGE-2" FLANGE REDU POLY
13	1	500207	2" FP FLANGE TEE
14	1	500230	2" FP FLANGE PLUG-1 1/2" HOSE BARB
15	1	696254	O-RING, KZCO FLANGED VALVE
16	1	696256	VALVE, KZCO C2F-60B-M-S9

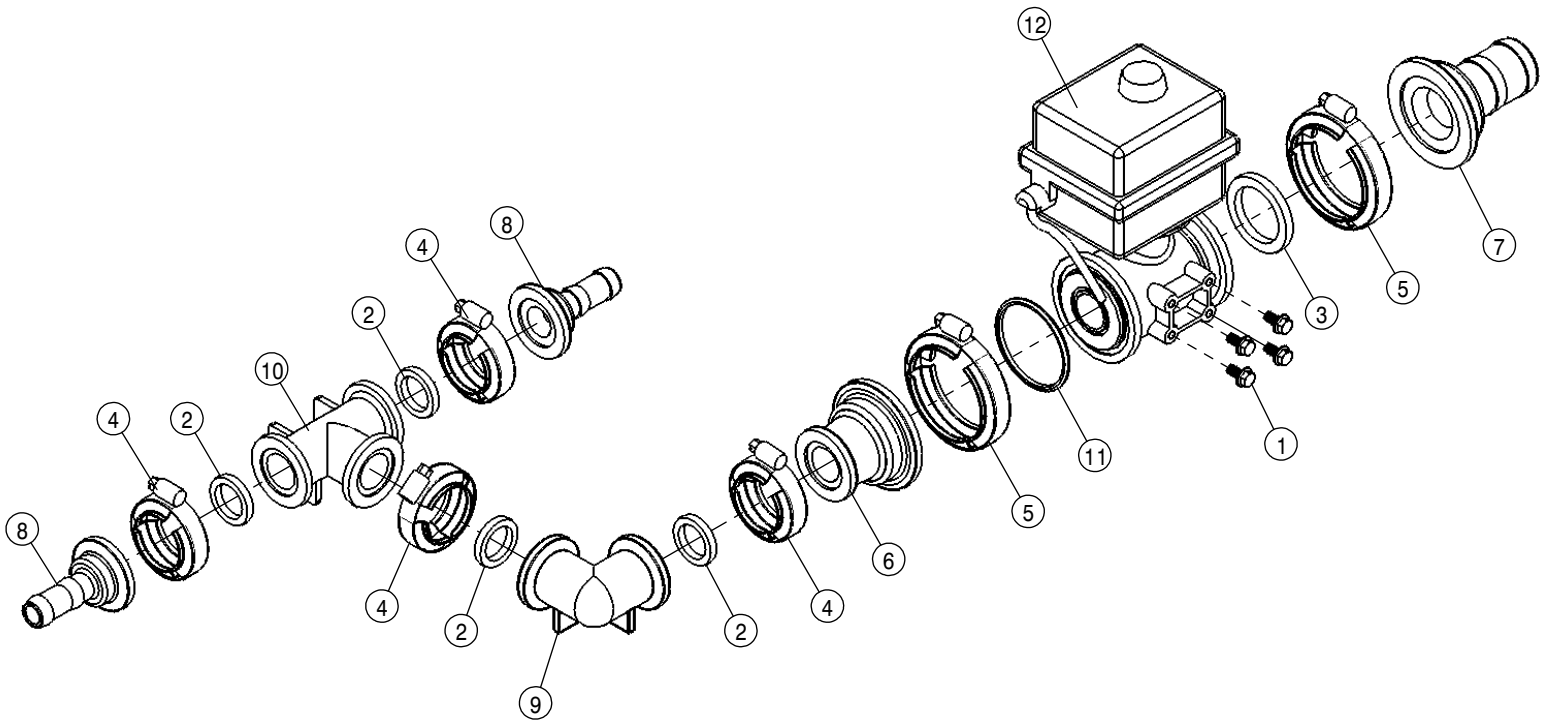


LH 60FT SECT-2 SOLUTION VALVE ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	4	470122	1/4 UNC X 1/2 FLANGE HEX BOLT
2	3	500157	1" FLANGE GASKET EPDM
3	1	500158	1 1/2" GASKET FOR 2" FLANGE
4	3	500159	1" FLANGE CLAMP S.S.
5	2	500160	2" FLANGE CLAMP S.S.
6	1	500161	2" FLANGE-1"FLANGE ADPTR POLY
7	2	500170	1" FLANGE-3/4" HOSE BARB POLY
8	1	500175	1" FLANGE TEE, POLY
9	3	500194	2" FP FLANGE CLAMP S.S.
10	3	500195	2" FP FLANGE GASKET EPDM
11	1	500196	2"FP FLANGE-2"HOSE BARB POLY
12	1	500199	2"FP FLANGE-2"FLAGE REDU POLY
13	1	500207	2"FP FLANGE TEE
14	1	500230	2" FP FLANGE PLUG-1 1/2" HOSE BARB
15	1	696254	O-RING, KZCO FLANGED VALVE
16	1	696256	VALVE, KZCO C2F-60B-M-S9





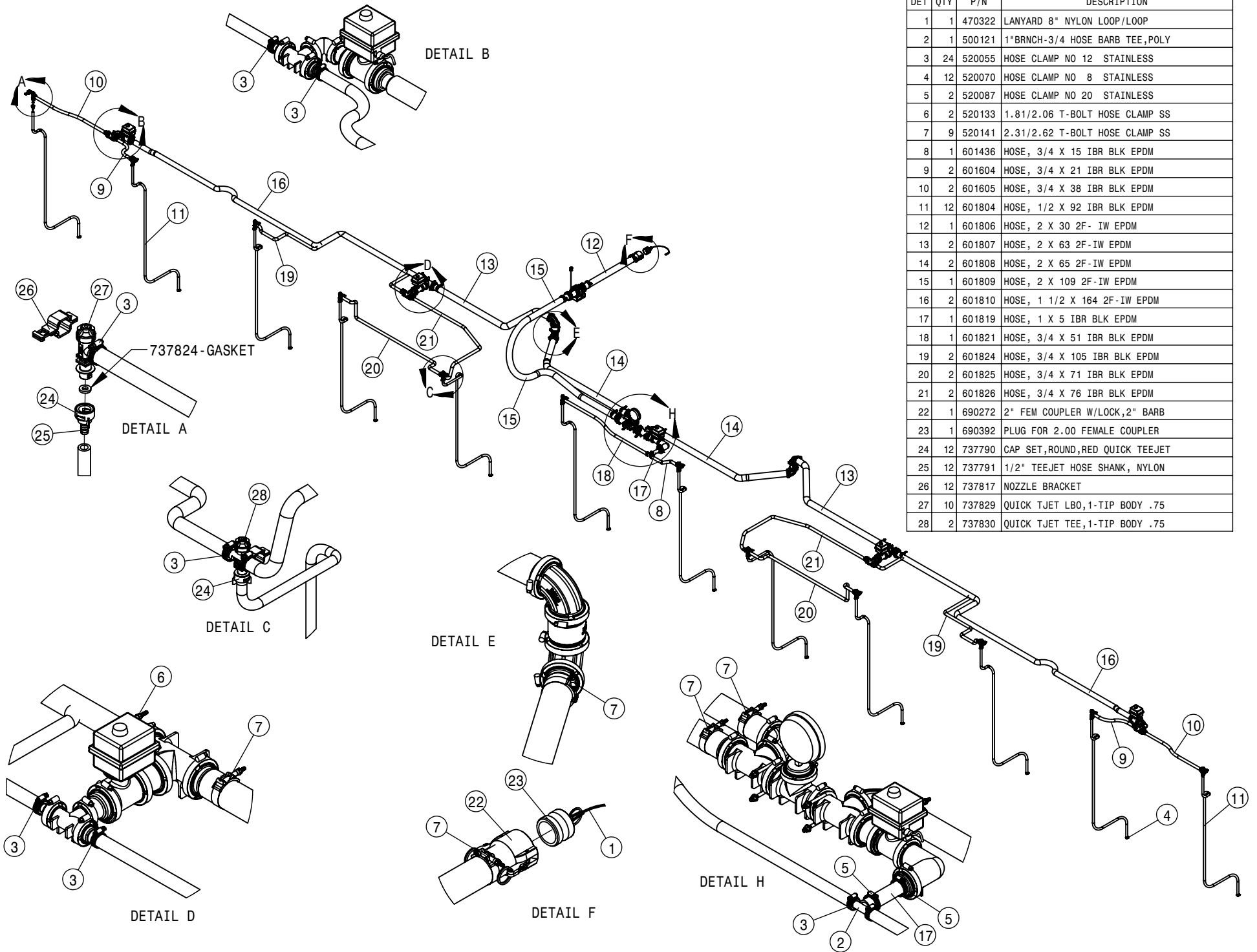
RH 60FT SECT-3 SOLUTION VALVE ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	4	470122	1/4 UNC X 1/2 FLANGE HEX BOLT
2	4	500157	1" FLANGE GASKET EPDM
3	1	500158	1 1/2" GASKET FOR 2" FLANGE
4	4	500159	1" FLANGE CLAMP S.S.
5	2	500160	2" FLANGE CLAMP S.S.
6	1	500161	2" FLANGE-1"FLANGE ADPTR POLY
7	1	500162	2" FLANGE-1 1/2 HOSE BARB POLY
8	2	500170	1" FLANGE-3/4" HOSE BARB POLY
9	1	500174	1" FLANGE-90-1" FLANGE LBOPOLY
10	1	500175	1" FLANGE TEE, POLY
11	1	696254	O-RING, KZCO FLANGED VALVE
12	1	696256	VALVE, KZCO C2F-60B-M-S9

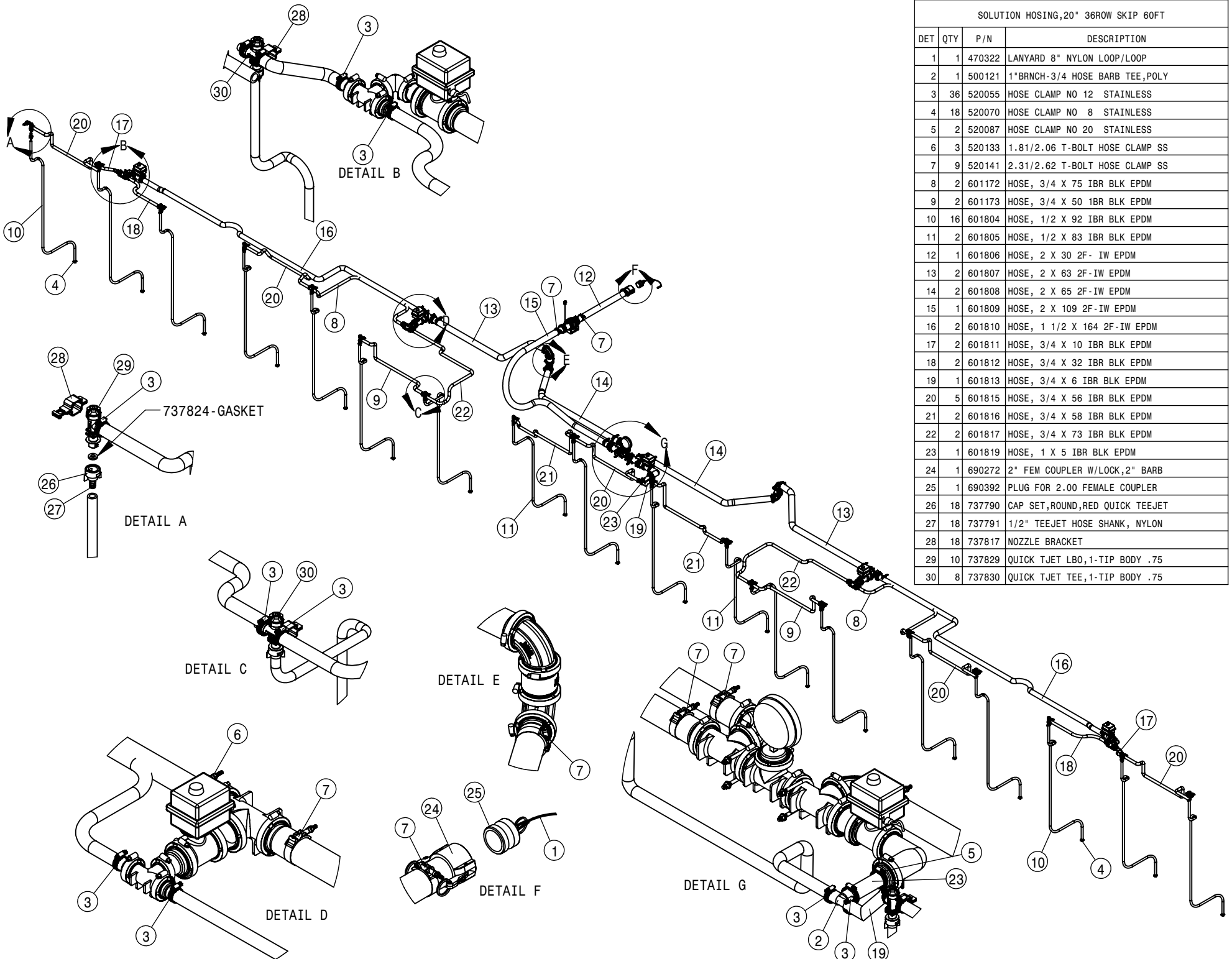


LH 60FT SECT-3 SOLUTION VALVE ASSEMBLY			
DET	QTY	P/N	DESCRIPTION
1	4	470122	1/4 UNC X 1/2 FLANGE HEX BOLT
2	4	500157	1" FLANGE GASKET EPDM
3	1	500158	1 1/2" GASKET FOR 2" FLANGE
4	4	500159	1" FLANGE CLAMP S.S.
5	2	500160	2" FLANGE CLAMP S.S.
6	1	500161	2" FLANGE-1"FLANGE ADPTR POLY
7	1	500162	2" FLANGE-1 1/2 HOSE BARB POLY
8	2	500170	1" FLANGE-3/4" HOSE BARB POLY
9	1	500174	1" FLANGE-90-1" FLANGE LBOPOLY
10	1	500175	1" FLANGE TEE, POLY
11	1	696254	O-RING, KZCO FLANGED VALVE
12	1	696256	VALVE, KZCO C2F-60B-M-S9

SOLUTION HOISING, 30" 24ROW SKIP 60FT

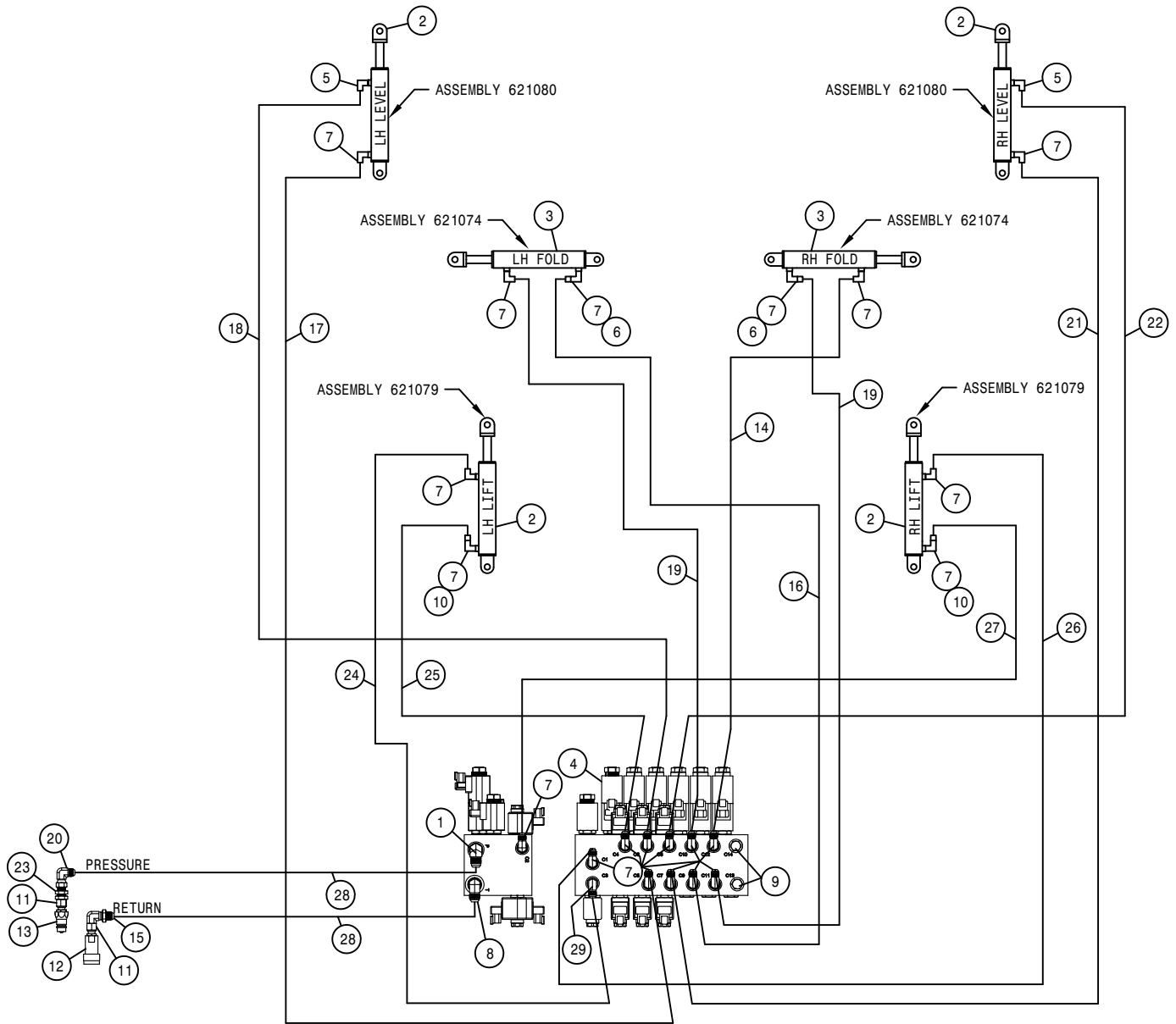
DET	QTY	P/N	DESCRIPTION
1	1	470322	LANYARD 8" NYLON LOOP/LOOP
2	1	500121	1"BRNCH-3/4 HOSE BARB TEE,POLY
3	24	520055	HOSE CLAMP NO 12 STAINLESS
4	12	520070	HOSE CLAMP NO 8 STAINLESS
5	2	520087	HOSE CLAMP NO 20 STAINLESS
6	2	520133	1.81/2.06 T-BOLT HOSE CLAMP SS
7	9	520141	2.31/2.62 T-BOLT HOSE CLAMP SS
8	1	601436	HOSE, 3/4 X 15 IBR BLK EPDM
9	2	601604	HOSE, 3/4 X 21 IBR BLK EPDM
10	2	601605	HOSE, 3/4 X 38 IBR BLK EPDM
11	12	601804	HOSE, 1/2 X 92 IBR BLK EPDM
12	1	601806	HOSE, 2 X 30 2F- IW EPDM
13	2	601807	HOSE, 2 X 63 2F- IW EPDM
14	2	601808	HOSE, 2 X 65 2F- IW EPDM
15	1	601809	HOSE, 2 X 109 2F- IW EPDM
16	2	601810	HOSE, 1 1/2 X 164 2F- IW EPDM
17	1	601819	HOSE, 1 X 5 IBR BLK EPDM
18	1	601821	HOSE, 3/4 X 51 IBR BLK EPDM
19	2	601824	HOSE, 3/4 X 105 IBR BLK EPDM
20	2	601825	HOSE, 3/4 X 71 IBR BLK EPDM
21	2	601826	HOSE, 3/4 X 76 IBR BLK EPDM
22	1	690272	2" FEM COUPLER W/LOCK,2" BARB
23	1	690392	PLUG FOR 2.00 FEMALE COUPLER
24	12	737790	CAP SET,ROUND,RED QUICK TEEJET
25	12	737791	1/2" TEEJET HOSE SHANK, NYLON
26	12	737817	NOZZLE BRACKET
27	10	737829	QUICK TJET LBO,1-TIP BODY .75
28	2	737830	QUICK TJET TEE,1-TIP BODY .75





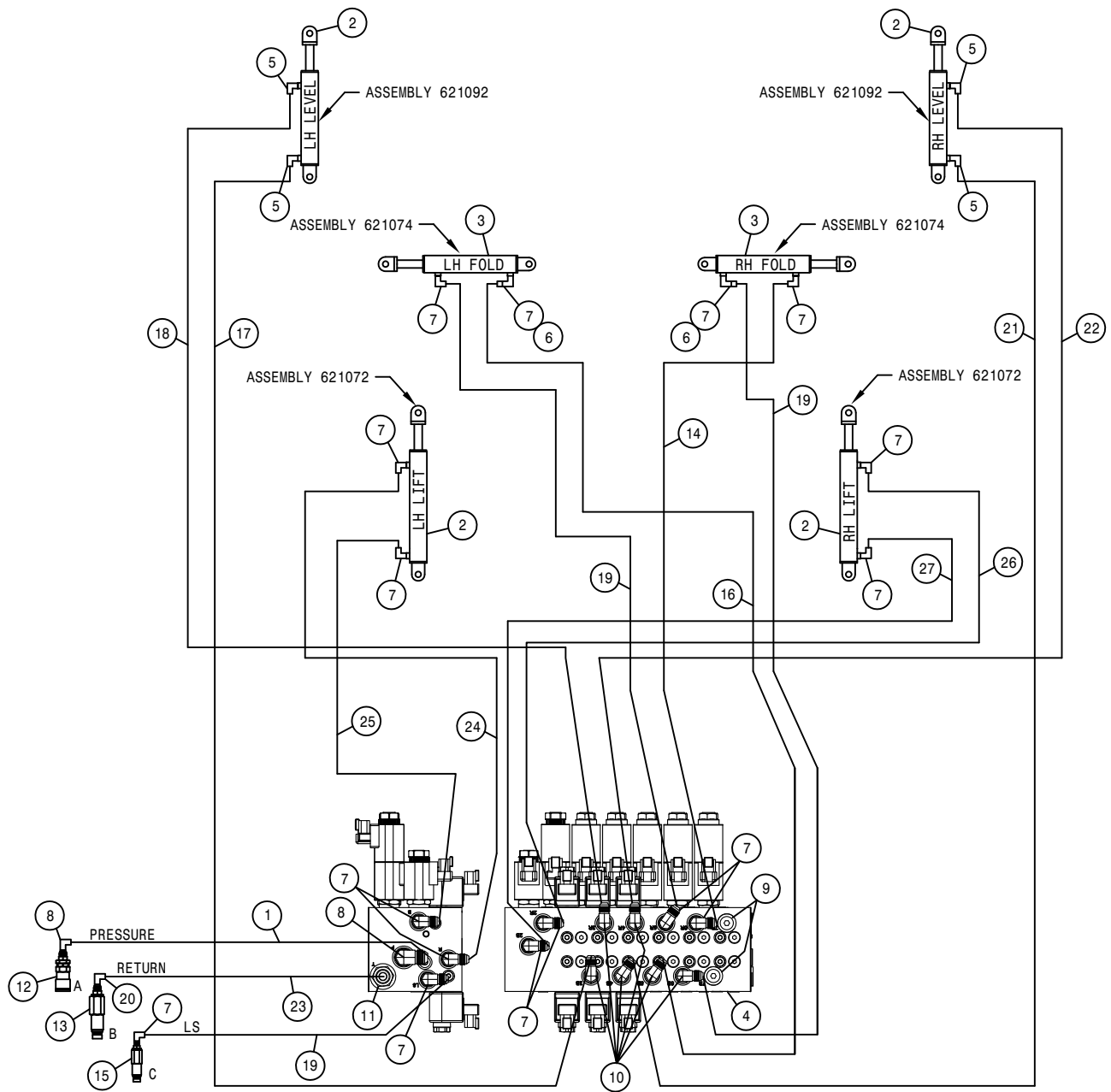
SOLUTION HOSEING,20" 36ROW SKIP 60FT			
DET	QTY	P/N	DESCRIPTION
1	1	470322	LANYARD 8" NYLON LOOP/LOOP
2	1	500121	1"BRNCH-3/4 HOSE BARB TEE,POLY
3	36	520055	HOSE CLAMP NO 12 STAINLESS
4	18	520070	HOSE CLAMP NO 8 STAINLESS
5	2	520087	HOSE CLAMP NO 20 STAINLESS
6	3	520133	1.81/2.06 T-BOLT HOSE CLAMP SS
7	9	520141	2.31/2.62 T-BOLT HOSE CLAMP SS
8	2	601172	HOSE, 3/4 X 75 IBR BLK EPDM
9	2	601173	HOSE, 3/4 X 50 IBR BLK EPDM
10	16	601804	HOSE, 1/2 X 92 IBR BLK EPDM
11	2	601805	HOSE, 1/2 X 83 IBR BLK EPDM
12	1	601806	HOSE, 2 X 30 2F- IW EPDM
13	2	601807	HOSE, 2 X 63 2F-IW EPDM
14	2	601808	HOSE, 2 X 65 2F-IW EPDM
15	1	601809	HOSE, 2 X 109 2F-IW EPDM
16	2	601810	HOSE, 1 1/2 X 164 2F-IW EPDM
17	2	601811	HOSE, 3/4 X 10 IBR BLK EPDM
18	2	601812	HOSE, 3/4 X 32 IBR BLK EPDM
19	1	601813	HOSE, 3/4 X 6 IBR BLK EPDM
20	5	601815	HOSE, 3/4 X 56 IBR BLK EPDM
21	2	601816	HOSE, 3/4 X 58 IBR BLK EPDM
22	2	601817	HOSE, 3/4 X 73 IBR BLK EPDM
23	1	601819	HOSE, 1 X 5 IBR BLK EPDM
24	1	690272	2" FEM COUPLER W/LOCK,2" BARB
25	1	690392	PLUG FOR 2.00 FEMALE COUPLER
26	18	737790	CAP SET,ROUND,RED QUICK TEEJET
27	18	737791	1/2" TEEJET HOSE SHANK, NYLON
28	18	737817	NOZZLE BRACKET
29	10	737829	QUICK TJET LBO,1-TIP BODY .75
30	8	737830	QUICK TJET TEE,1-TIP BODY .75

This Page Intentionally Blank



NITROGEN T-BAR 30FT HYD DIAGRAM 2005-2006  
REFERENCE DRAWING NO. 499228

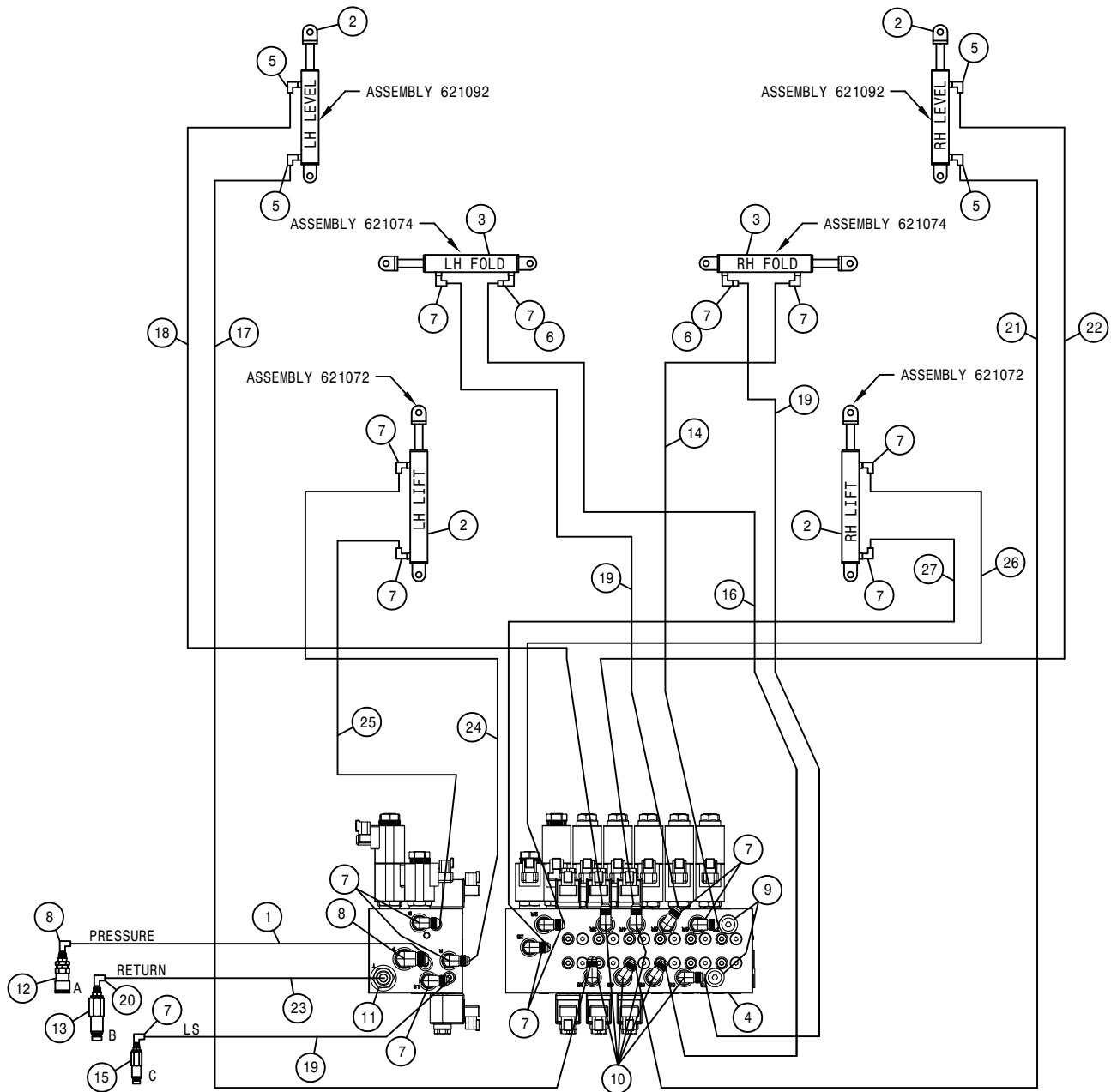
DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION	
1	1	618443	3/4MJIC-90-3/4MOR EX LG LBO	16	1	616209	04-451TC-06FJX-06FJX-64	H/A
2	4	621558	HYD CYL, 3.00 X 11.00 X 1.380	17	1	616084	04-451TC-06FJX-06FJX-46	H/A
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	18	1	616176	04-451TC-06FJX-06FJX-58	H/A
4	1	606215	NTB CTRL VLV, STS PWRSYS 05	19	2	616177	04-451TC-06FJX-06FJX-74	H/A
5	2	618688	9/16MJ-90-9/16MOR .025 CHK VLV	20	1	618609	3/4MJIC-90-3/4FJIC SWIV LBO	
6	2	618732	9/16JIC .031 ORIFICE ADPTR	21	1	616179	04-451TC-06FJX-06FJX-129	H/A
7	21	618119	9/16MJIC-90-9/16MOR LBO	22	1	616180	04-451TC-06FJX-06FJX-143	H/A
8	1	618241	3/4MJIC-90-3/4MOR LBO	23	1	618349	3/4MJIC-3/4MJIC BLKHD UNION	
9	2	610185	9/16MOR PLUG, HEX HEAD	24	1	616182	06-451TC-06FJX-06FJX-41	H/A
10	2	618735	9/16JIC .062 ORIFICE ADPTR	25	1	616183	06-451TC-06FJX-06FJX-52	H/A
11	2	618669	3/4FJIC SWIV-3/4MOR ADPTR	26	1	616184	06-451TC-06FJX-06FJX-137	H/A
12	1	618696	HYD COUPLER,FEM 1/2B, 3/4FOR	27	1	616185	06-451TC-06FJX-06FJX-147	H/A
13	1	618697	HYD COUPLER,MALE 1/2B, 3/4FOR	28	2	616186	08-451TC-08FJX-08FJX-62	H/A
14	1	616090	04-451TC-06FJX-06FJX-85	29	1	618440	9/16MJIC-90-9/16MOR EX LG LBO	H/A
15	1	618010	3/4MJIC-90-BLKHD UNION LBO					





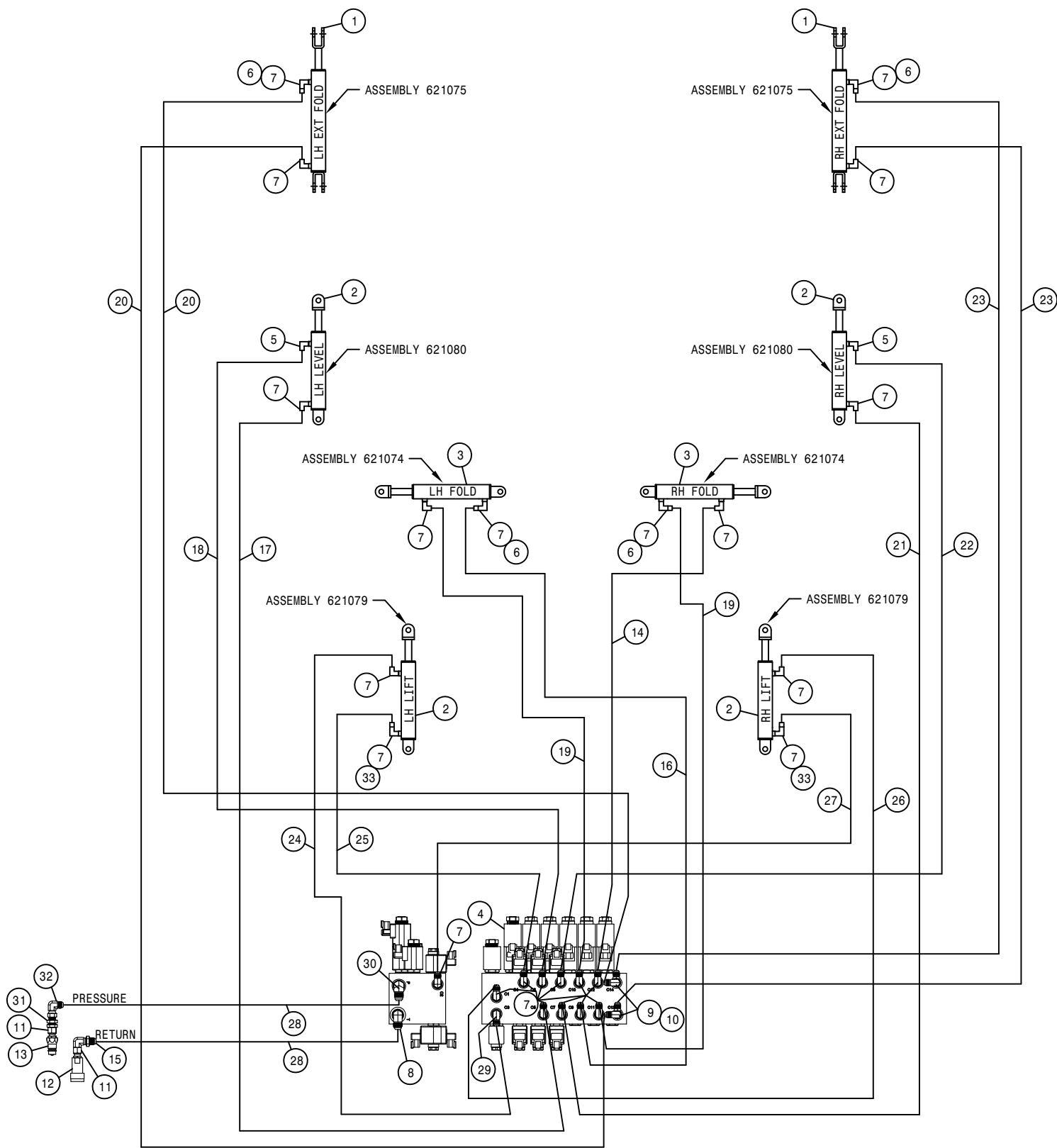
NITROGEN T-BAR 30FT HYD DIAGRAM 2007-2012  
REFERENCE DRAWING NO. 499229

DET.	QTY	PART NO.	DESCRIPTION		DET.	QTY	PART NO.	DESCRIPTION
1	1	616994	08-451TC-08FJX-08FJX-76	H/A	15	1	618804	HYD CPLR, MALE #14, 9/16FOR
2	4	621153	3.00 X 11.00 X 1.38 LEVEL CYL		16	1	616209	04-451TC-06FJX-06FJX-64 H/A
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375		17	1	616084	04-451TC-06FJX-06FJX-46 H/A
4	1	606280	HYD VALVE, SAUER 6SPL NTB	07	18	1	616176	04-451TC-06FJX-06FJX-58 H/A
5	4	618689	9/16MJ-90-9/16MOR .042 CHK VLV		19	3	616177	04-451TC-06FJX-06FJX-74 H/A
6	2	618732	9/16JIC .031 ORIFICE ADPTR		20	1	618183	3/4MJIC-90-7/8MOR LBO
7	16	618119	9/16MJIC-90-9/16MOR LBO		21	1	616561	04-451TC-06FJX-06FJX-132 H/A
8	2	618241	3/4MJIC-90-3/4MOR LBO		22	1	616180	04-451TC-06FJX-06FJX-143 H/A
9	2	618754	9/16MOR PLUG, HEX SOCKET		23	1	616443	08-451TC-08FJX-08FJX90-76 H/A
10	6	618440	9/16MJIC-90-9/16MOR EX LG LBO		24	1	616182	06-451TC-06FJX-06FJX-41 H/A
11	1	618327	3/4MJIC-7/8MOR ADPTR		25	1	616183	06-451TC-06FJX-06FJX-52 H/A
12	1	618807	HYD CPLR, FEM #12, 3/4FOR		26	1	616563	06-451TC-06FJX-06FJX-141 H/A
13	1	618806	HYD CPLR, MALE #12, 7/8FOR		27	1	616564	06-451TC-06FJX-06FJX-151 H/A
14	1	616560	04-451TC-06FJX-06FJX-87	H/A				



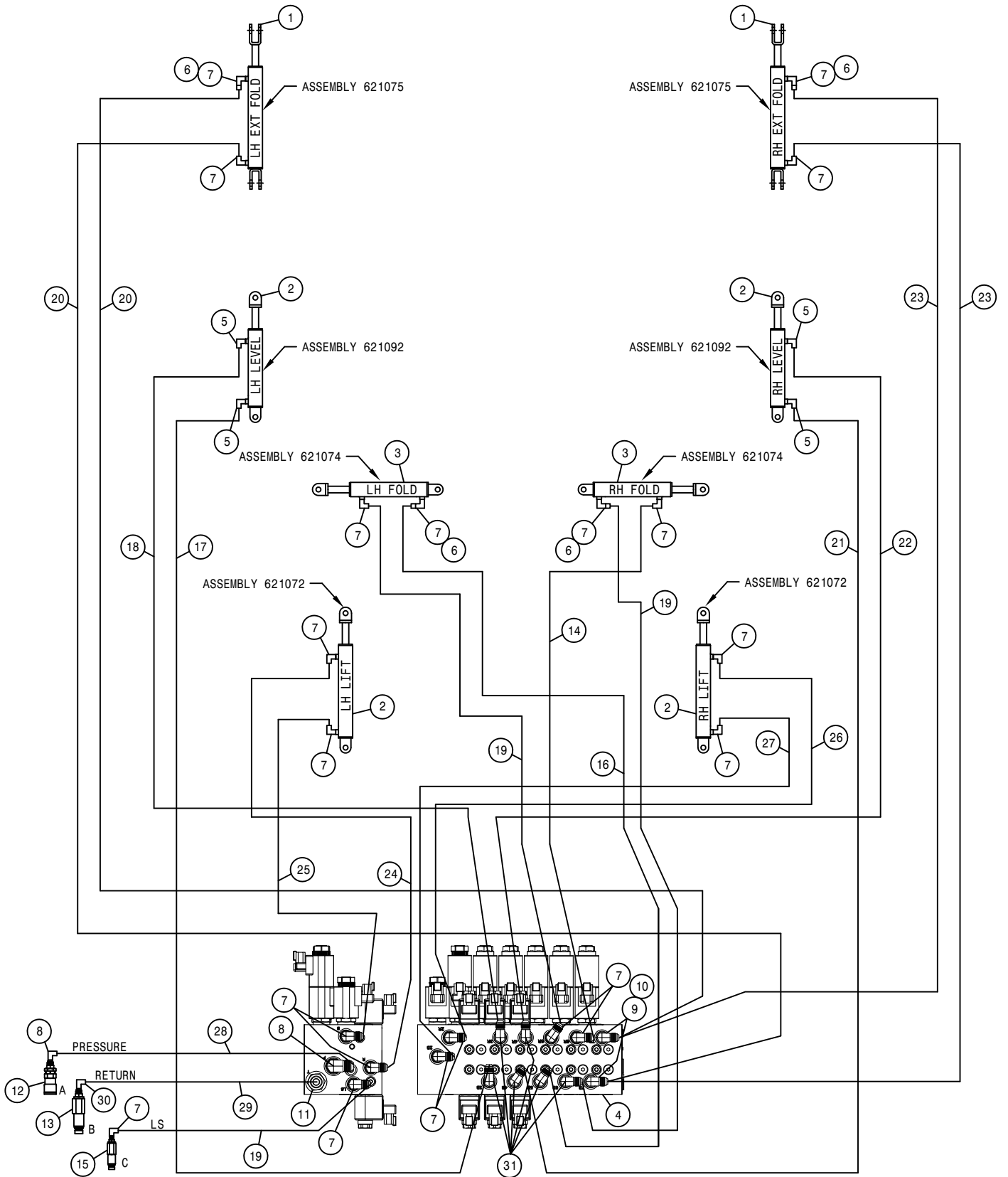
NITROGEN T-BAR 30FT HYD DIAGRAM 2013  
REFERENCE DRAWING NO. 499285

DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION
1	1	616994	08-451TC-08FJX-08FJX-76 H/A	15	1	618804	HYD CPLR, MALE #14, 9/16FOR
2	4	621153	3.00 X 11.00 X 1.38 LEVEL CYL	16	1	616209	04-451TC-06FJX-06FJX-64 H/A
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	17	1	616084	04-451TC-06FJX-06FJX-46 H/A
4	1	606280	HYD VALVE, SAUER 6SPL NTB 07	18	1	616176	04-451TC-06FJX-06FJX-58 H/A
5	4	618689	9/16MJ-90-9/16MOR .042 CHK VLV	19	3	616177	04-451TC-06FJX-06FJX-74 H/A
6	2	618732	9/16JIC .031 ORIFICE ADPTR	20	1	618183	3/4MJIC-90-7/8MOR LBO
7	16	618119	9/16MJIC-90-9/16MOR LBO	21	1	616561	04-451TC-06FJX-06FJX-132 H/A
8	2	618241	3/4MJIC-90-3/4MOR LBO	22	1	616180	04-451TC-06FJX-06FJX-143 H/A
9	2	618754	9/16MOR PLUG, HEX SOCKET	23	1	616443	08-451TC-08FJX-08FJX90-76 H/A
10	6	618440	9/16MJIC-90-9/16MOR EX LG LBO	24	1	616182	06-451TC-06FJX-06FJX-41 H/A
11	1	618327	3/4MJIC-7/8MOR ADPTR	25	1	616183	06-451TC-06FJX-06FJX-52 H/A
12	1	618807	HYD CPLR, FEM #12, 3/4FOR	26	1	616563	06-451TC-06FJX-06FJX-141 H/A
13	1	618806	HYD CPLR, MALE #12, 7/8FOR	27	1	616564	06-451TC-06FJX-06FJX-151 H/A
14	1	616560	04-451TC-06FJX-06FJX-87 H/A				



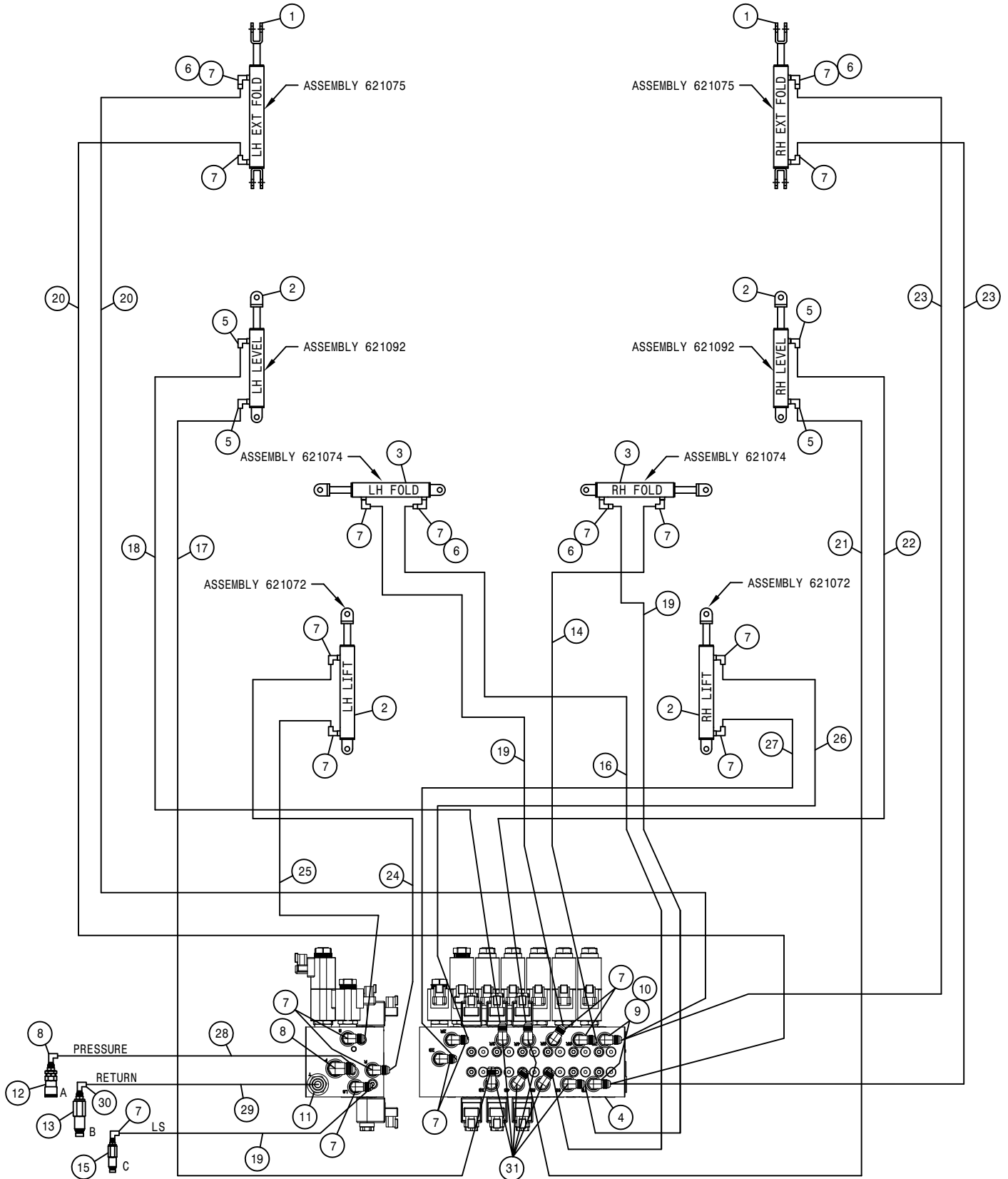
NITROGEN T-BAR 40FT HYD DIAGRAM 2005-2006  
REFERENCE DRAWING NO. 499225

DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION	
1	2	621568	HYD CYL, 2.00 X 18.00 X 1.125	18	1	616176	04-451TC-06FJX-06FJX-58	H/A
2	4	621558	HYD CYL, 3.00 X 11.00 X 1.380	19	2	616177	04-451TC-06FJX-06FJX-74	H/A
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	20	1	616414	04-451TC-06FJX-06FJX-126	H/A
4	1	606215	NTB CTRL VLV, STS PWRSYS 05	21	1	616179	04-451TC-06FJX-06FJX-129	H/A
5	2	618688	9/16MJ-90-9/16MOR .025 CHK VLV	22	1	616180	04-451TC-06FJX-06FJX-143	H/A
6	4	618732	9/16JIC .031 ORIFICE ADPTR	23	2	616260	04-451TC-06FJX-06FJX-200	H/A
7	25	618119	9/16MJIC-90-9/16MOR LBO	24	1	616182	06-451TC-06FJX-06FJX-41	H/A
8	1	618241	3/4MJIC-90-3/4MOR LBO	25	1	616183	06-451TC-06FJX-06FJX-52	H/A
9	2	618444	9/16MOR RUN TEE-9/16MJIC	26	1	616184	06-451TC-06FJX-06FJX-137	H/A
10	2	618618	9/16MJIC-90-9/16FJIC SWIV LBO	27	1	616185	06-451TC-06FJX-06FJX-147	H/A
11	2	618669	3/4FJIC SWIV-3/4MOR ADPTR	28	2	616186	08-451TC-08FJX-08FJX-62	H/A
12	1	618696	HYD COUPLER,FEM 1/2B, 3/4FOR	29	1	618440	9/16MJIC-90-9/16MOR EX LG LBO	
13	1	618697	HYD COUPLER,MALE 1/2B, 3/4FOR	30	1	618443	3/4MJIC-90-3/4MOR EX LG LBO	
14	1	616090	04-451TC-06FJX-06FJX-85	31	1	618349	3/4MJIC-3/4MJIC BLKHD UNION	
15	1	618010	3/4MJIC-90-BLKHD UNION LBO	32	1	618609	3/4MJIC-90-3/4FJIC SWIV LBO	
16	1	616209	04-451TC-06FJX-06FJX-64	33	2	618735	9/16JIC .062 ORIFICE ADPTR	
17	1	616084	04-451TC-06FJX-06FJX-46					



NITROGEN T-BAR 40FT HYD DIAGRAM 2007-2012  
REFERENCE DRAWING NO. 499226

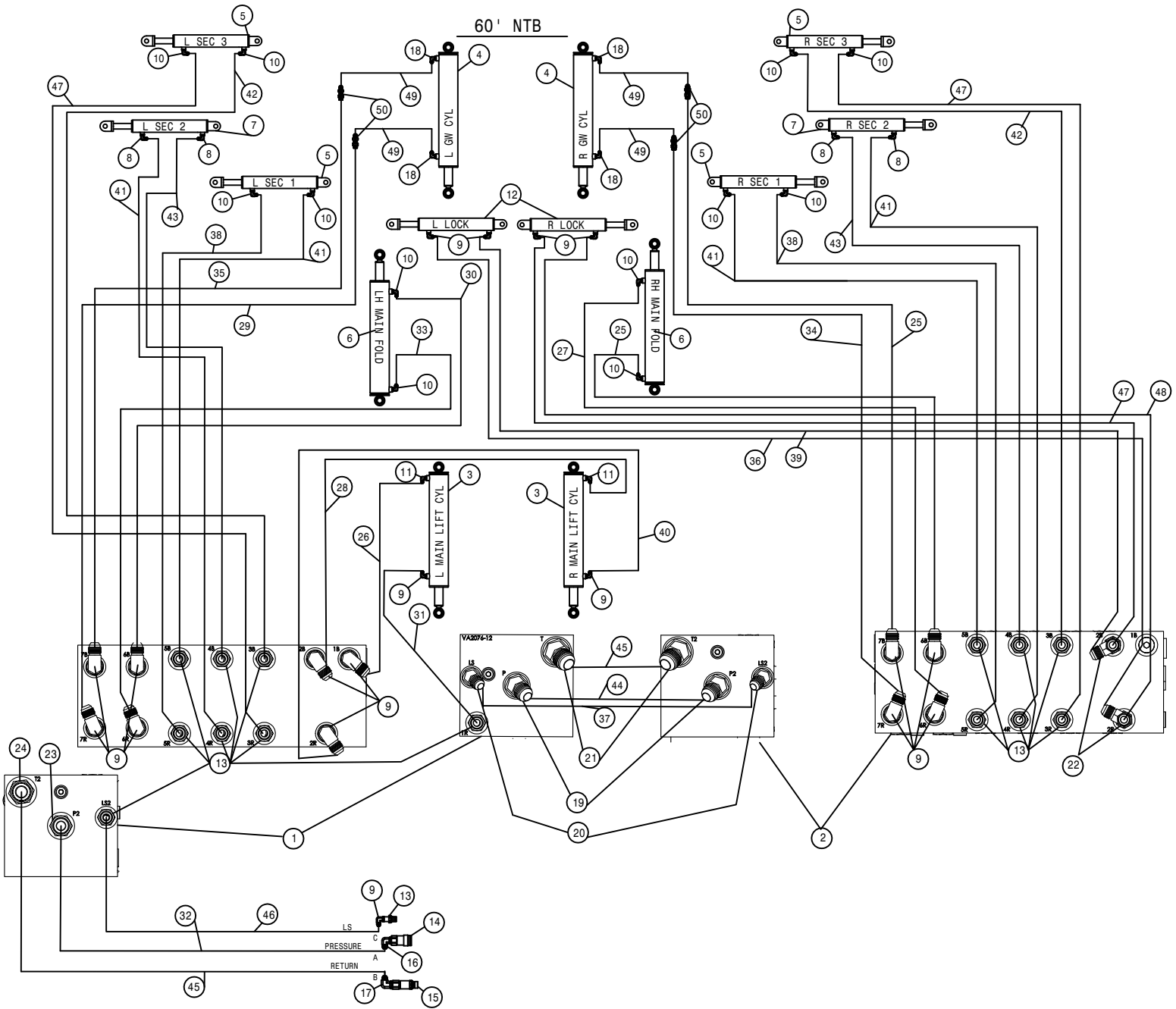
DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION	
1	2	621568	HYD CYL, 2.00 X 18.00 X 1.125	17	1	616084	04-451TC-06FJX-06FJX-46	H/A
2	4	621153	3.00 X 11.00 X 1.38 LEVEL CYL	18	1	616176	04-451TC-06FJX-06FJX-58	H/A
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	19	3	616177	04-451TC-06FJX-06FJX-74	H/A
4	1	606280	HYD VALVE, SAUER 6SPL NTB 07	20	2	616414	04-451TC-06FJX-06FJX-126	H/A
5	4	618689	9/16MJ-90-9/16MOR .042 CHK VLV	21	1	616561	04-451TC-06FJX-06FJX-132	H/A
6	4	618732	9/16JIC .031 ORIFICE ADPTR	22	1	616180	04-451TC-06FJX-06FJX-143	H/A
7	20	618119	9/16MJIC-90-9/16MOR LBO	23	2	616260	04-451TC-06FJX-06FJX-200	H/A
8	2	618241	3/4MJIC-90-3/4MOR LBO	24	1	616182	06-451TC-06FJX-06FJX-41	H/A
9	2	618444	9/16MOR RUN TEE-9/16MJIC	25	1	616183	06-451TC-06FJX-06FJX-52	H/A
10	2	618618	9/16MJIC-90-9/16FJIC SWIV LBO	26	1	616563	06-451TC-06FJX-06FJX-141	H/A
11	1	618327	3/4MJIC-7/8MOR ADPTR	27	1	616564	06-451TC-06FJX-06FJX-151	H/A
12	1	618807	HYD CPLR, FEM #12, 3/4FOR	28	1	616994	08-451TC-08FJX-08FJX-76	H/A
13	1	618806	HYD CPLR, MALE #12, 7/8FOR	29	1	616443	08-451TC-08FJX-08FJX90-76	H/A
14	1	616560	04-451TC-06FJX-06FJX-87	30	1	618183	3/4MJIC-90-7/8MOR LBO	
15	1	618804	HYD CPLR, MALE #14, 9/16FOR	31	6	618440	9/16MJIC-90-9/16MOR EX LG LBO	
16	1	616209	04-451TC-06FJX-06FJX-64					H/A





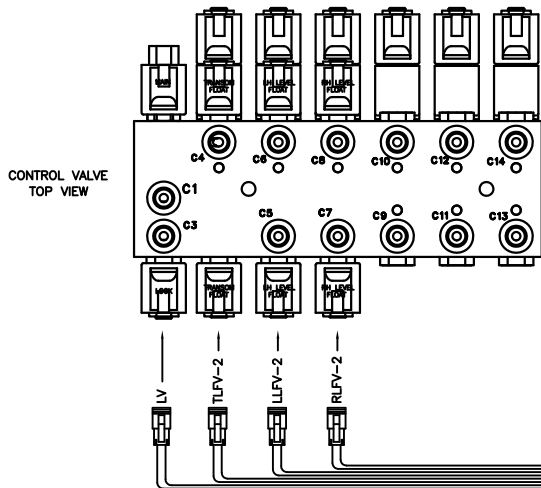
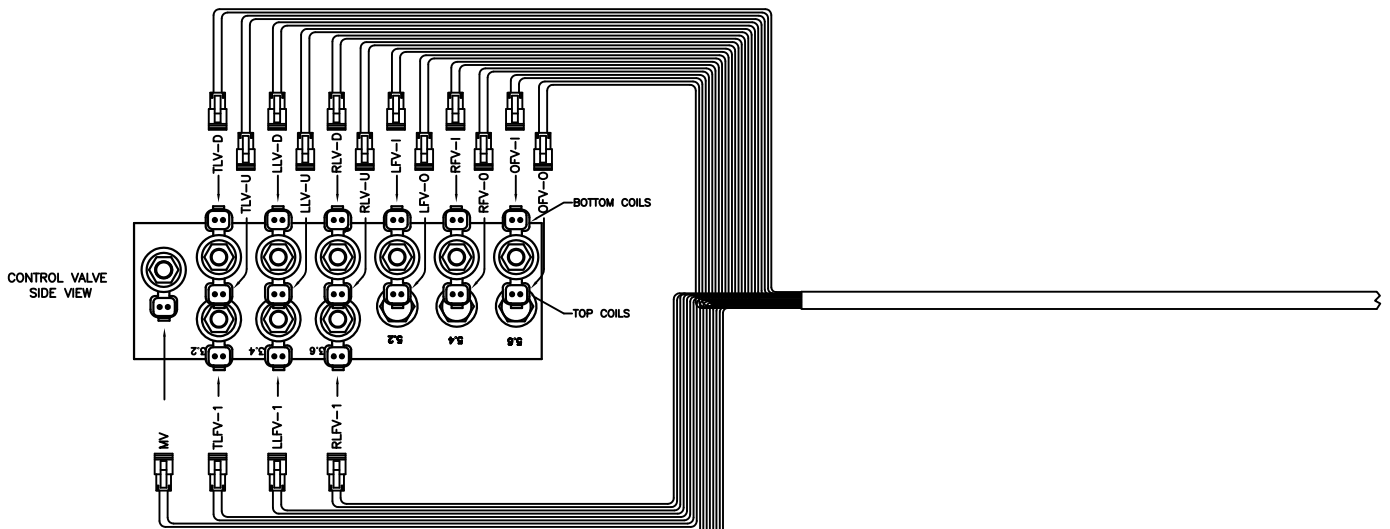
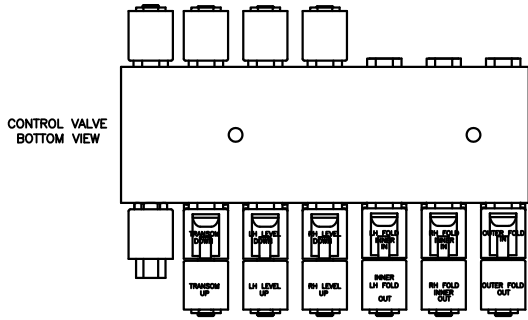
NITROGEN T-BAR 40FT HYD DIAGRAM 2013  
REFERENCE DRAWING NO. 499286

DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION	
1	2	621568	HYD CYL, 2.00 X 18.00 X 1.125	17	1	616084	04-451TC-06FJX-06FJX-46	H/A
2	4	621153	3.00 X 11.00 X 1.38 LEVEL CYL	18	1	616176	04-451TC-06FJX-06FJX-58	H/A
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	19	3	616177	04-451TC-06FJX-06FJX-74	H/A
4	1	606280	HYD VALVE, SAUER 6SPL NTB 07	20	2	616414	04-451TC-06FJX-06FJX-126	H/A
5	4	618689	9/16MJ-90-9/16MOR .042 CHK VLV	21	1	616561	04-451TC-06FJX-06FJX-132	H/A
6	4	618732	9/16JIC .031 ORIFICE ADPTR	22	1	616180	04-451TC-06FJX-06FJX-143	H/A
7	20	618119	9/16MJIC-90-9/16MOR LBO	23	2	616260	04-451TC-06FJX-06FJX-200	H/A
8	2	618241	3/4MJIC-90-3/4MOR LBO	24	1	616182	06-451TC-06FJX-06FJX-41	H/A
9	2	618444	9/16MOR RUN TEE-9/16MJIC	25	1	616183	06-451TC-06FJX-06FJX-52	H/A
10	2	618618	9/16MJIC-90-9/16FJIC SWIV LBO	26	1	616563	06-451TC-06FJX-06FJX-141	H/A
11	1	618327	3/4MJIC-7/8MOR ADPTR	27	1	616564	06-451TC-06FJX-06FJX-151	H/A
12	1	618807	HYD CPLR, FEM #12, 3/4FOR	28	1	616994	08-451TC-08FJX-08FJX-76	H/A
13	1	618806	HYD CPLR, MALE #12, 7/8FOR	29	1	616443	08-451TC-08FJX-08FJX90-76	H/A
14	1	616560	04-451TC-06FJX-06FJX-87	30	1	618183	3/4MJIC-90-7/8MOR LBO	
15	1	618804	HYD CPLR, MALE #14, 9/16FOR	31	6	618440	9/16MJIC-90-9/16MOR EX LG LBO	
16	1	616209	04-451TC-06FJX-06FJX-64					H/A

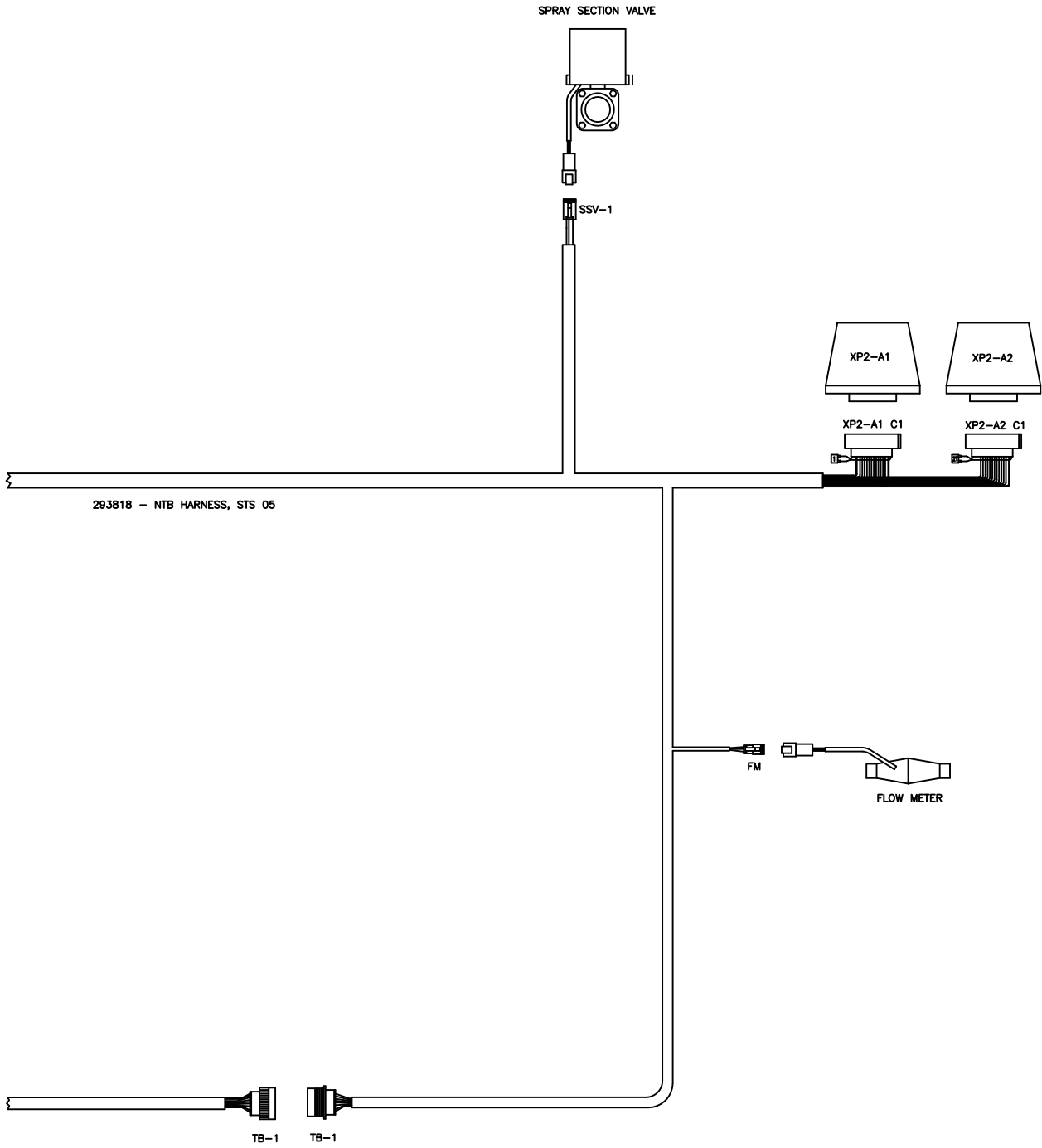


60FT NTB HYDRAULIC DIAGRAM 2013  
REFERENCE DRAWING NO. 499288

DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION	
1	1	606520	HYD MANIF, VA2076-12 PWR SYS	26	1	616128	06-451TC-06FJX-06FJX-48	H/A
2	1	606521	HYD MANIF, VA2076-12-1 PWR SYS	27	1	616182	06-451TC-06FJX-06FJX-41	H/A
3	2	621578	HYD CYL, 3.25 X 20.25 X 1.630	28	1	616184	06-451TC-06FJX-06FJX-137	H/A
4	2	621634	HYD CYL, 3.00 X 28.00 X 2.00	29	1	616304	06-451TC-06FJX-06FJX-36	H/A
5	4	621558	HYD CYL, 3.00 X 11.00 X 1.380	30	1	616349	06-451TC-06FJX-06FJX-47	H/A
6	2	621648	HYD CYL, 3.25 X 18.50 X 1.625	31	1	616352	06-451TC-06FJX-06FJX-62	H/A
7	2	621646	HYD CYL, 4.25 X 12.00 X 2.00	32	1	616504	08-451TC-08FJX-08FJX-98	H/A
8	4	618115	9/16MJIC-90-3/4MOR LBO	33	1	616572	06-451TC-06FJX-06FJX-22	H/A
9	18	618119	9/16MJIC-90-9/16MOR LBO	34	1	616573	06-451TC-06FJX-06FJX-29	H/A
10	12	618689	9/16MJ-90-9/16MOR .042 CHK VLV	35	1	616575	06-451TC-06FJX-06FJX-34	H/A
11	2	618739	9/16MJ-90-9/16MOR .065 CHK VLV	36	1	616596	06-451TC-06FJX-06FJX-148	H/A
12	2	621500	HYD CYL, 1.50 X 5.75 X .750	37	1	617155	06-451TC-06FJX-06FJX-89	H/A
13	1	618804	HYD CPLR, MALE #14, 9/16FOR	38	2	616613	06-451TC-06FJX-06FJX-125	H/A
14	1	618807	HYD CPLR, FEM #12, 3/4FOR	39	1	616614	06-451TC-06FJX-06FJX-145	H/A
15	1	618806	HYD CPLR, MALE #12, 7/8FOR	40	1	616615	06-451TC-06FJX-06FJX-153	H/A
16	1	618241	3/4MJIC-90-3/4MOR LBO	41	4	616701	06-451TC-06FJX-06FJX-119	H/A
17	1	611128	7/8MJIC-90-7/8MOR LBO	42	2	616722	06-451TC-06FJX-06FJX-243	H/A
18	18	618126	9/16MJIC-9/16MOR ADPTR	43	2	616741	06-451TC-06FJX-06FJX-107	H/A
19	2	618315	3/4MJIC-45-3/4MOR LBO	44	1	616093	08-451TC-08FJX-08FJX-86	H/A
20	2	618425	9/16MJIC-45-9/16MOR LBO	45	2	617058	10-451TC-10FJX-10FJX-95	H/A
21	2	618644	7/8MJIC-45-7/8MOR LBO	46	1	616837	06-451TC-06FJX-06FJX-92	H/A
22	2	618444	9/16MOR RUN TEE-9/16MJIC	47	3	617056	06-451TC-06FJX-06FJX-255	H/A
23	1	611125	3/4MJIC-3/4MOR ADPTR	48	1	617057	06-451TC-06FJX-06FJX-259	H/A
24	1	611126	7/8MJIC-7/8MOR ADPTR	49	4	617096	06-451TC-06FJX-06FJX90-22	H/A
25	2	616092	06-451TC-06FJX-06FJX-27 H/A	50	4	618510	9/16MJIC-9/16MJIC BLKHD UNION	

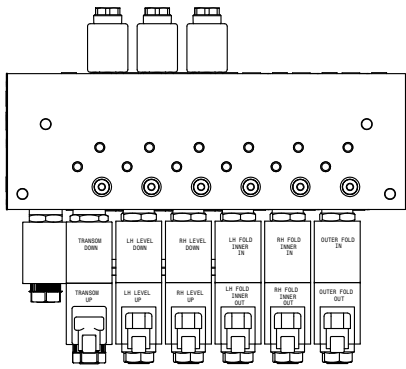


293783 - CAB TO BOOM HARNESS, STS 05

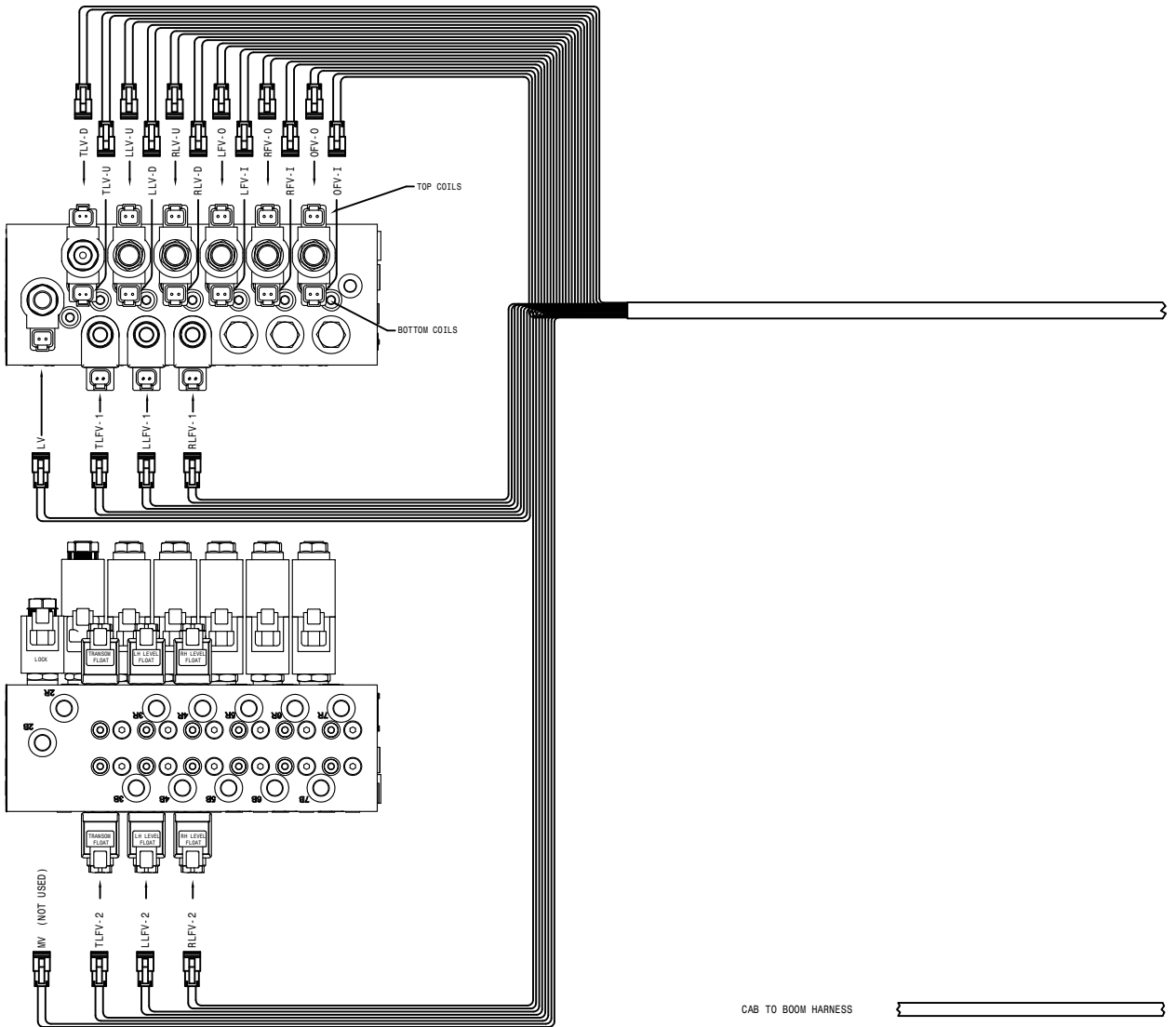


02-16-05 TLM
STS NTB WIRING DIAGRAM 05
REVISION DATE: 498880

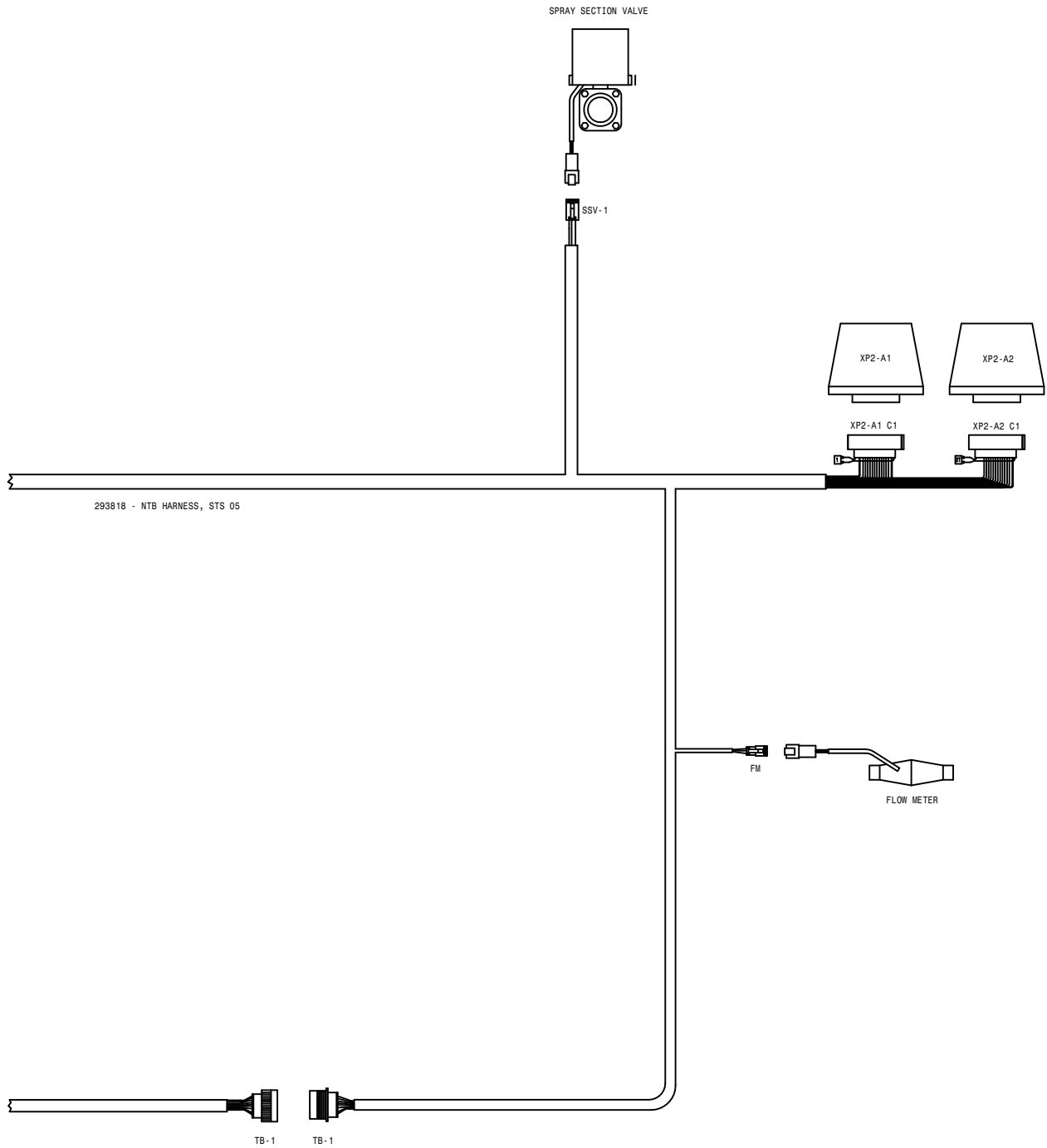
CONTROL VALVE  
BOTTOM VIEW



CONTROL VALVE  
SIDE VIEW

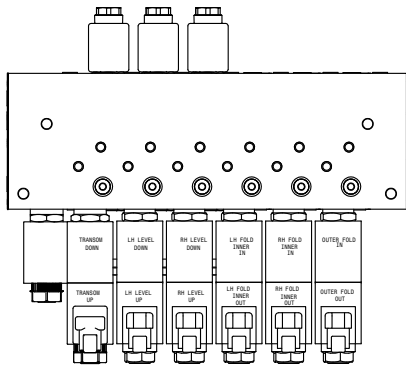


CAB TO BOOM HARNESS

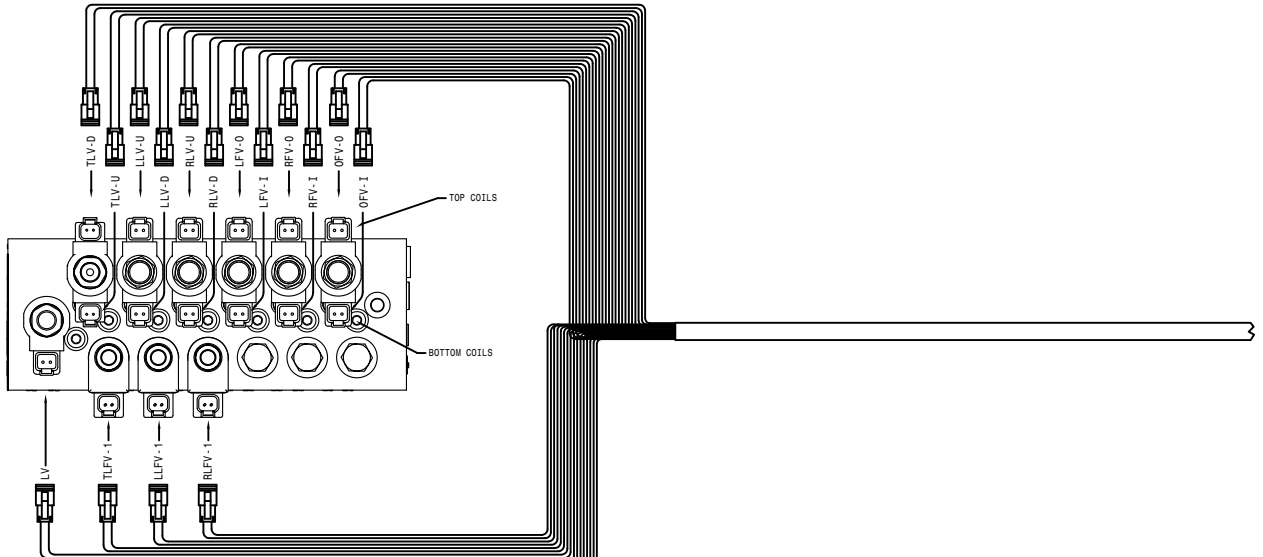


01-29-07 TLM  
 STS NTB WIRING DIAGRAM 07  
 REVISION DATE: 01-28-09 498957

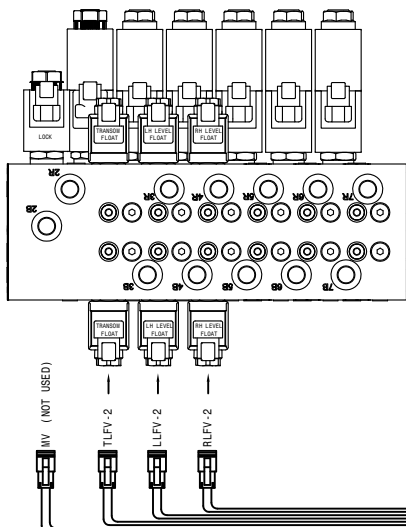
CONTROL VALVE  
BOTTOM VIEW



CONTROL VALVE  
SIDE VIEW

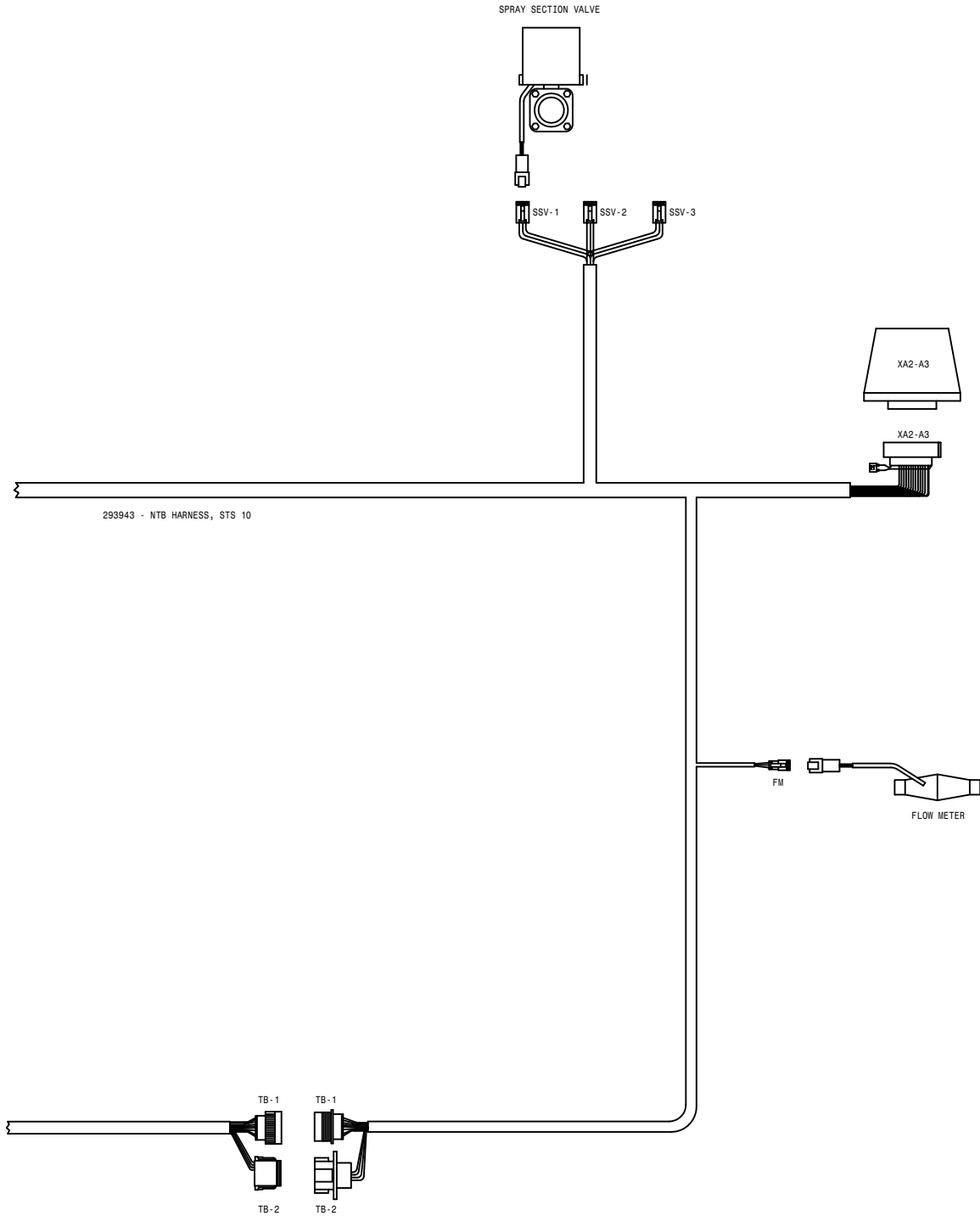


CONTROL VALVE  
TOP VIEW

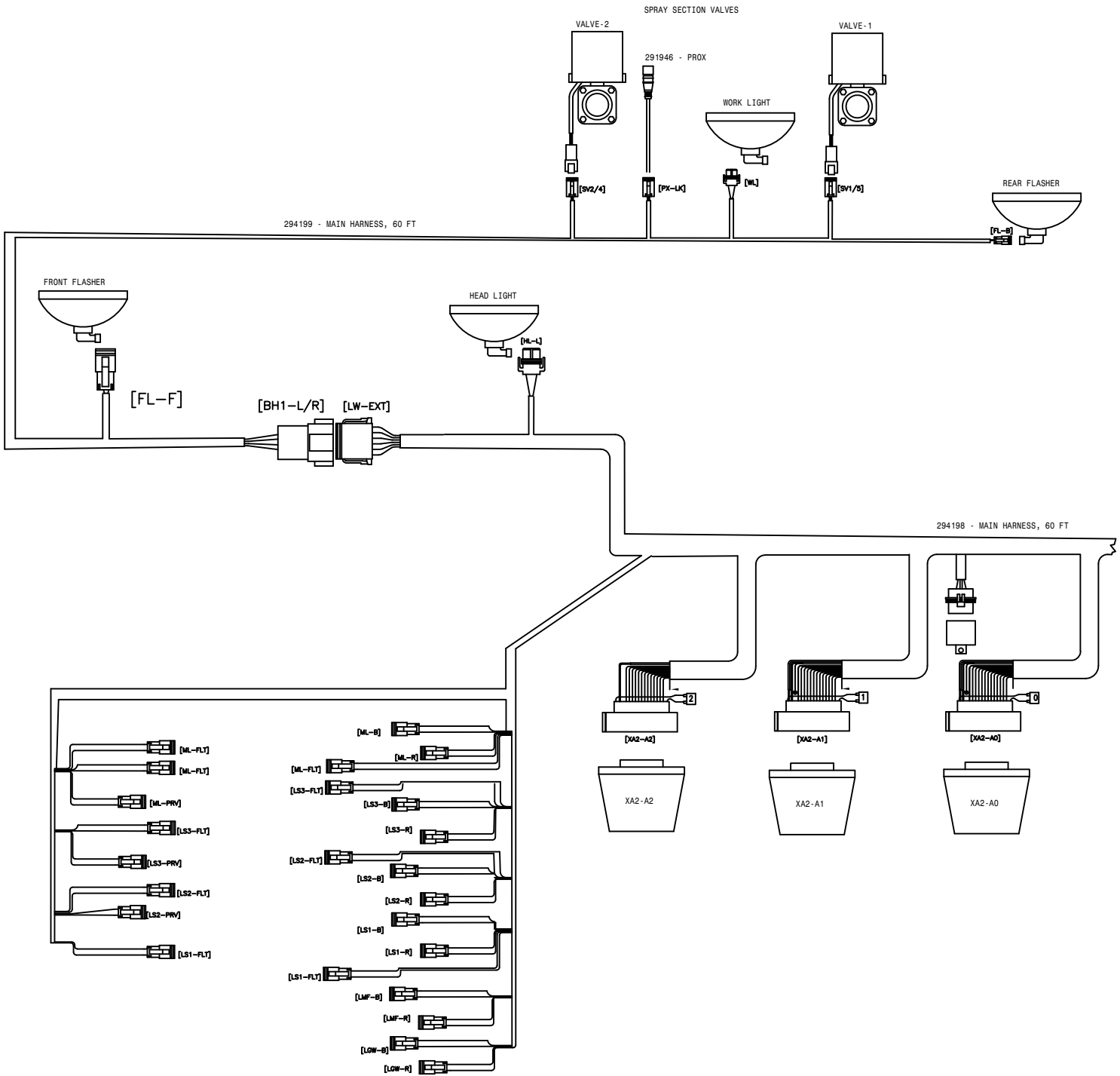


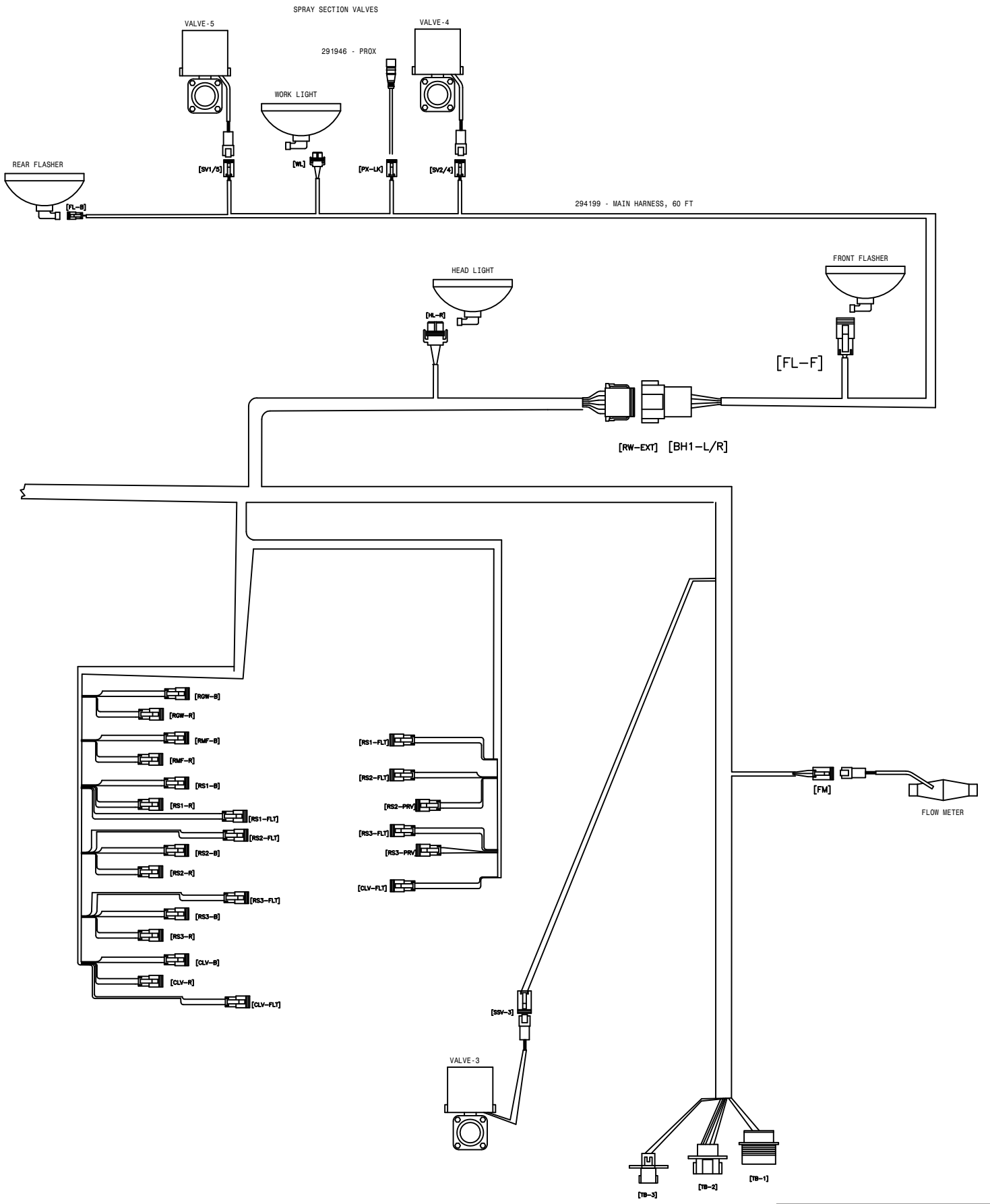
CAB TO BOOM HARNESS 293917 - CAB TO BOOM HARNESS, STS 10





STS NTB WIRING DIAGRAM 10 REVISION DATE: 09-21-09	06-11-09 TLM <b>499045</b>
--	-------------------------------

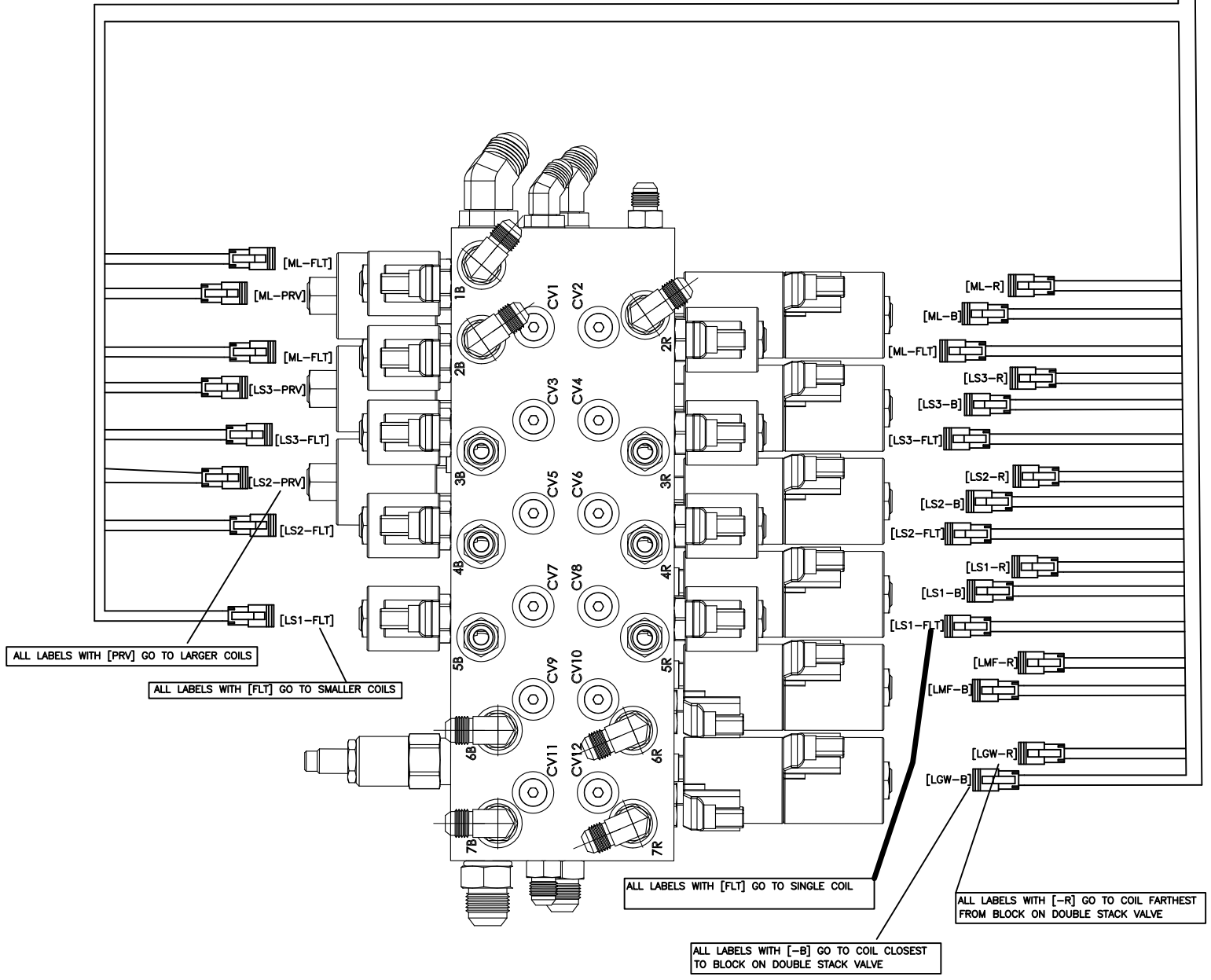




294199 - MAIN HARNESS, 60 FT

60' NTB WIRING DIAGRAM 2013		03/27/13	BNH
SHEET 1 OF 2		499287	
REVISION DATE: 03/27/13			

TO MAIN HARNESS TRUNK



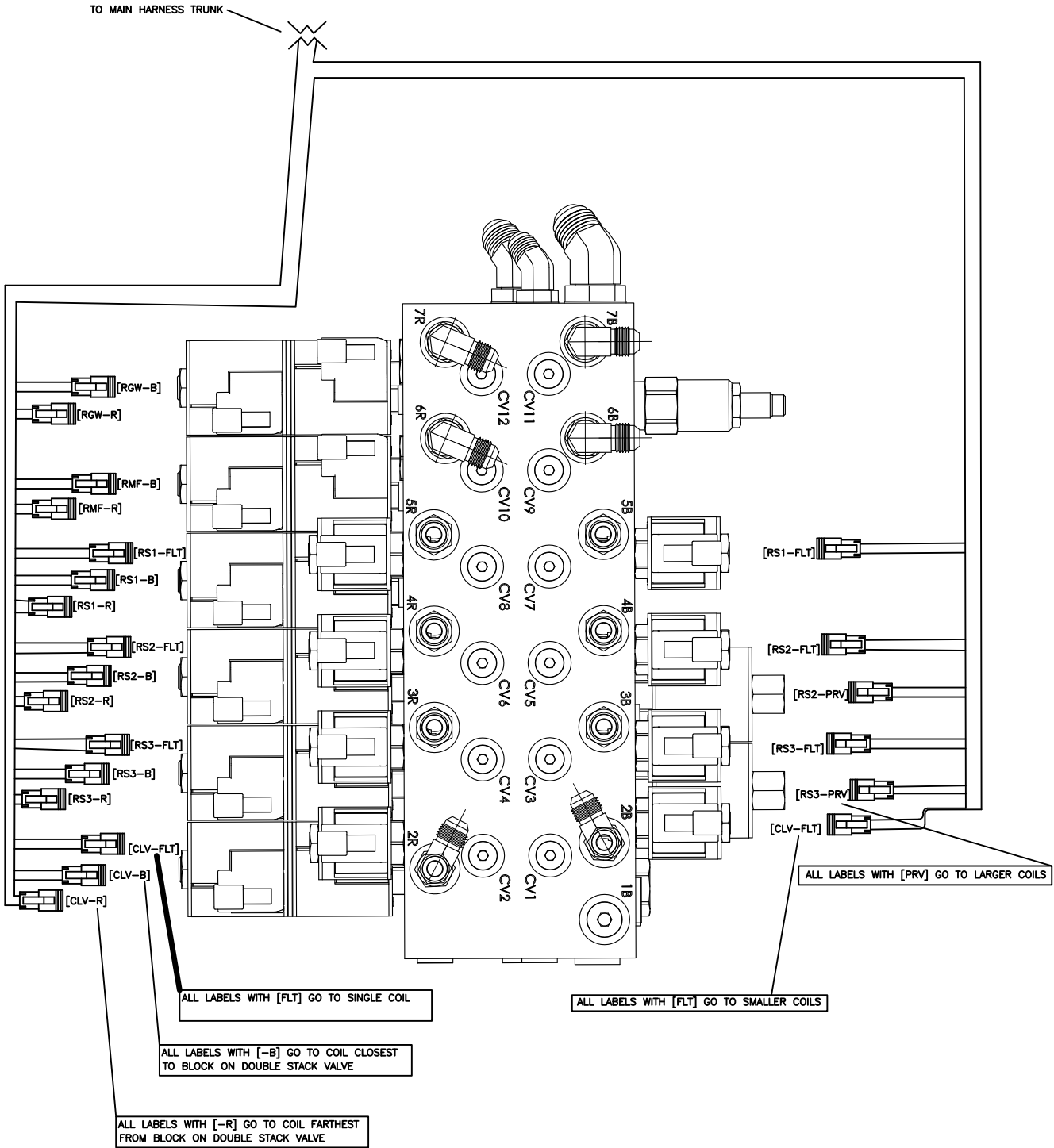
ALL LABELS WITH [PRV] GO TO LARGER COILS

ALL LABELS WITH [FLT] GO TO SMALLER COILS

ALL LABELS WITH [FLT] GO TO SINGLE COIL

ALL LABELS WITH [-B] GO TO COIL CLOSEST TO BLOCK ON DOUBLE STACK VALVE

ALL LABELS WITH [-R] GO TO COIL FARTHEST FROM BLOCK ON DOUBLE STACK VALVE



09/21/12 BNH  
**60' NTB WIRING DIAGRAM 2013**  
 SHEET 2 OF 2  
 REVISION DATE: 09/21/12 499287