



**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: U6911211001 thru U6911211100  
U6921211001 thru U6921211100  
U6951211001 thru U6951211100  
U6961211001 thru U6961211100  
03-11 493520  
05-12, 02-15

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## 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.

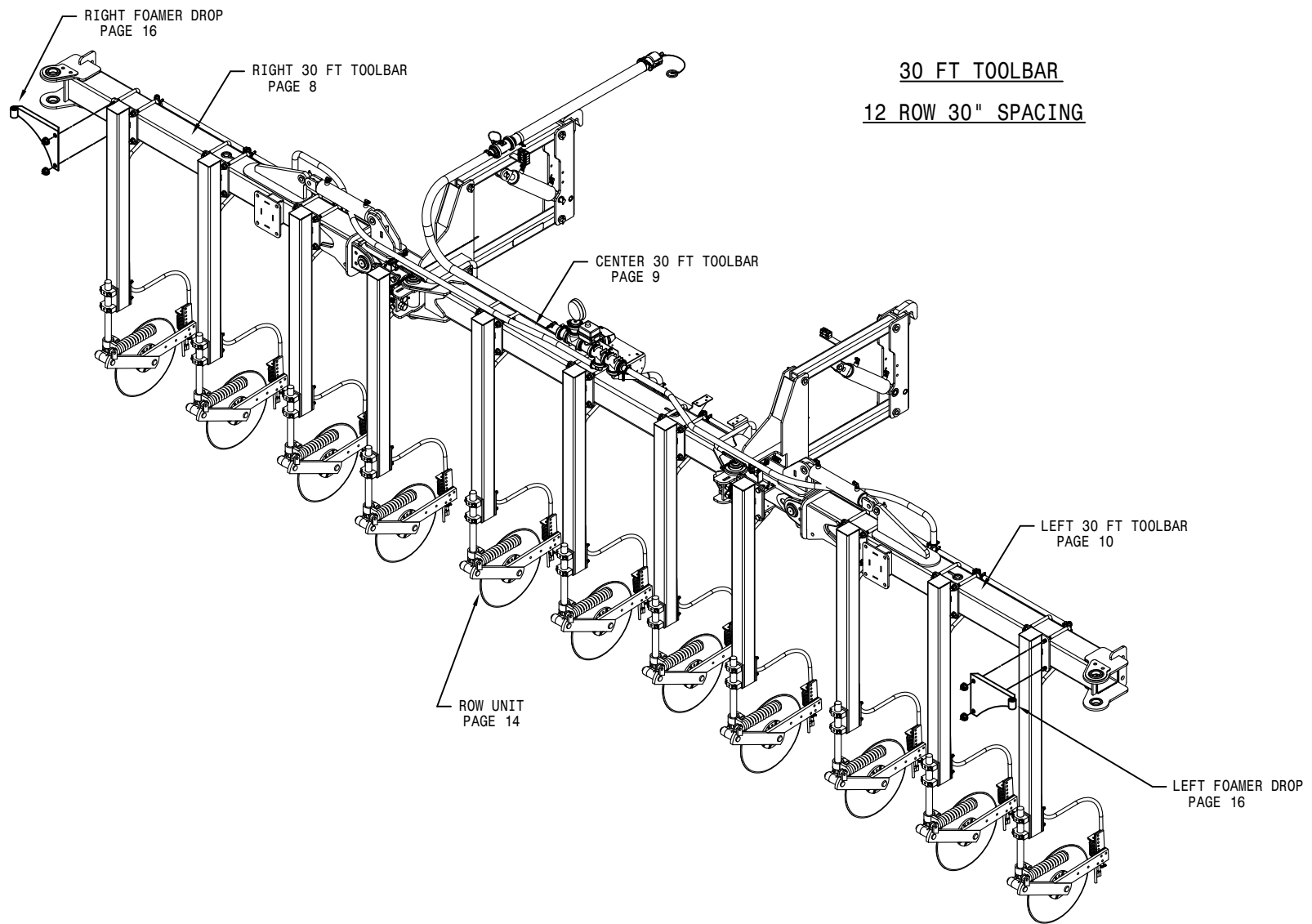
This manual is not intended to be a complete guide for machine maintenance and repairs. If you are not properly trained to perform service on this machine, contact Hagie Customer Support for assistance. Improper maintenance or repair may result in property damage, personal injury, or death.

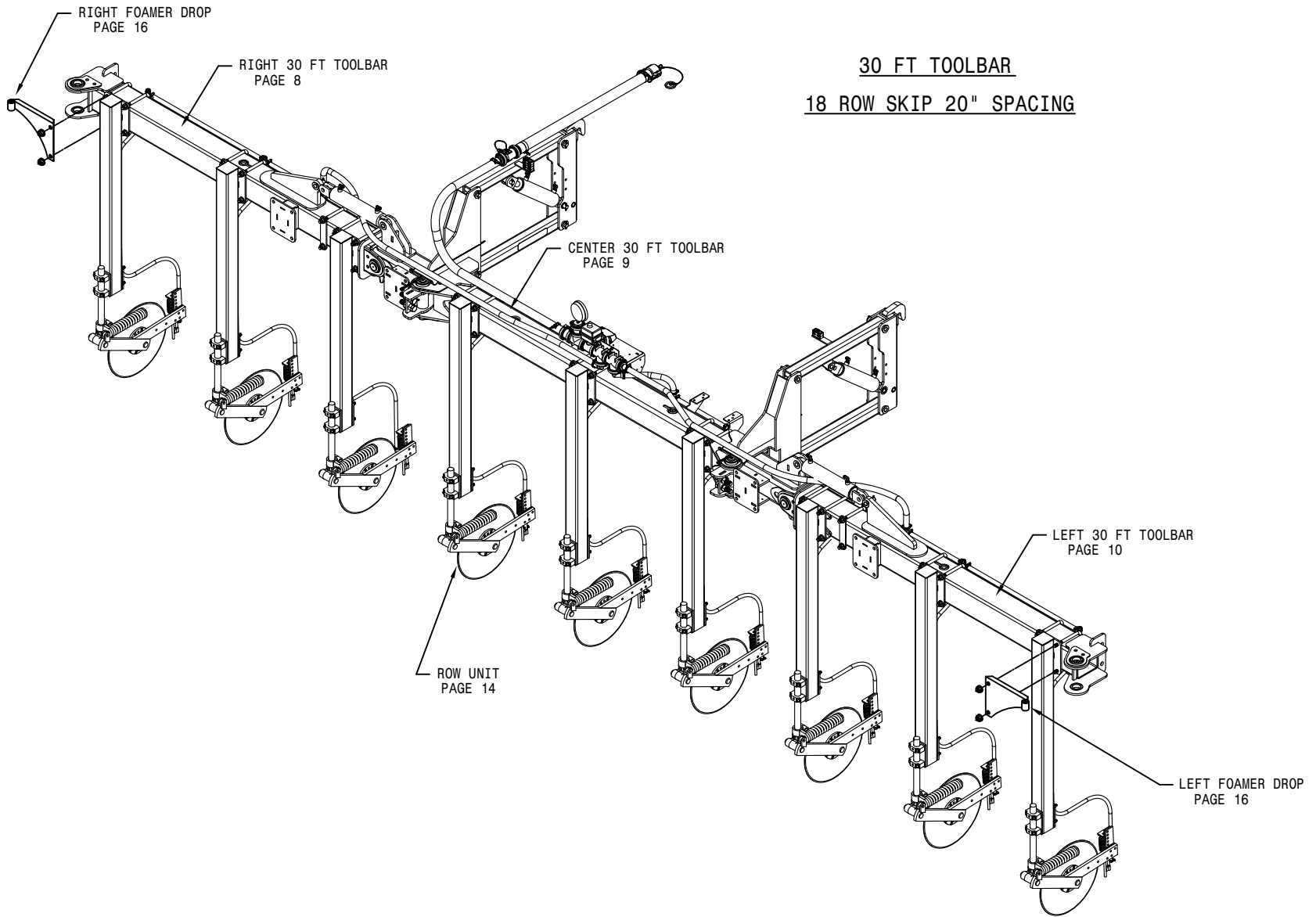
NITROGEN TOOLBAR SERIAL NUMBER

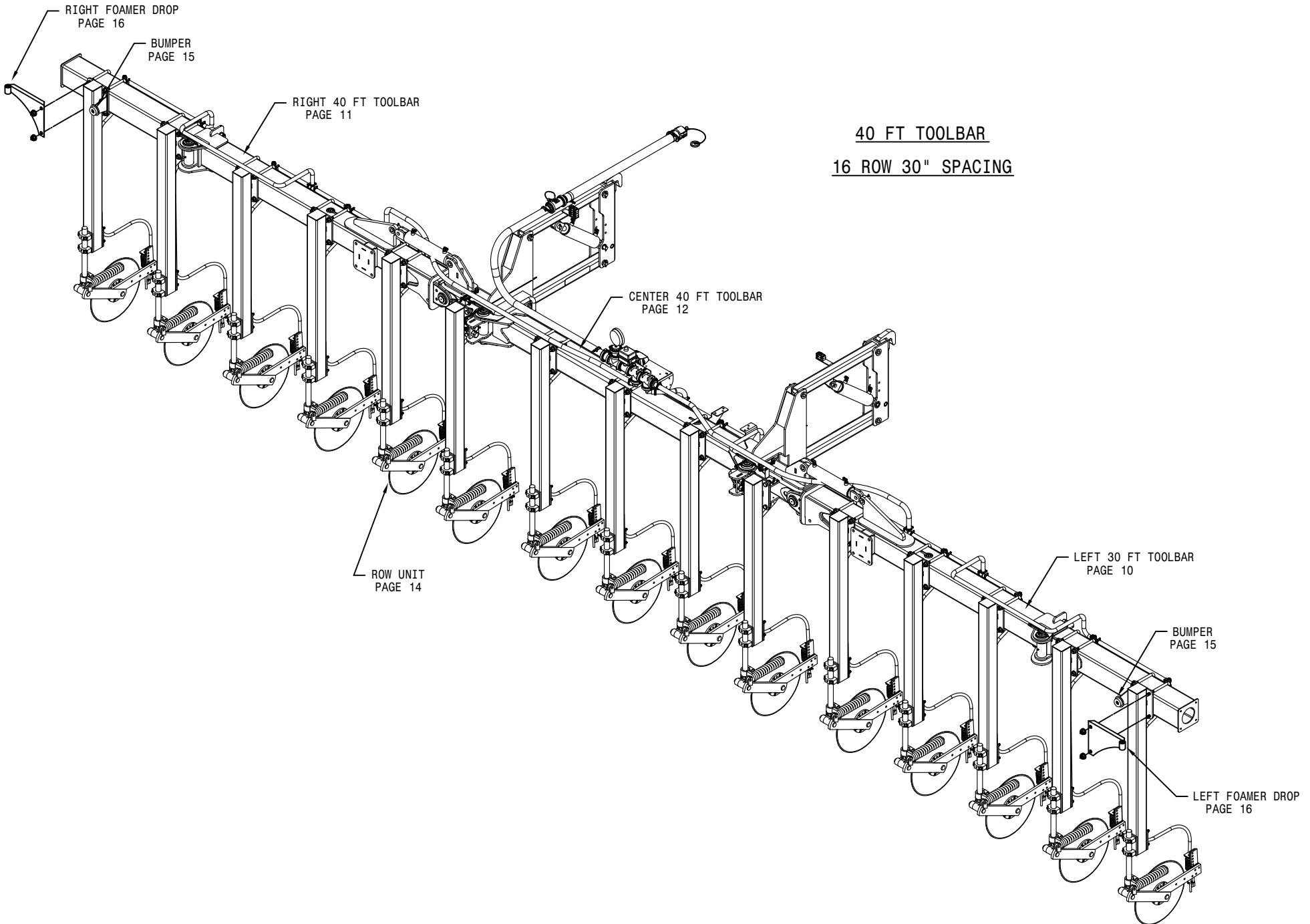
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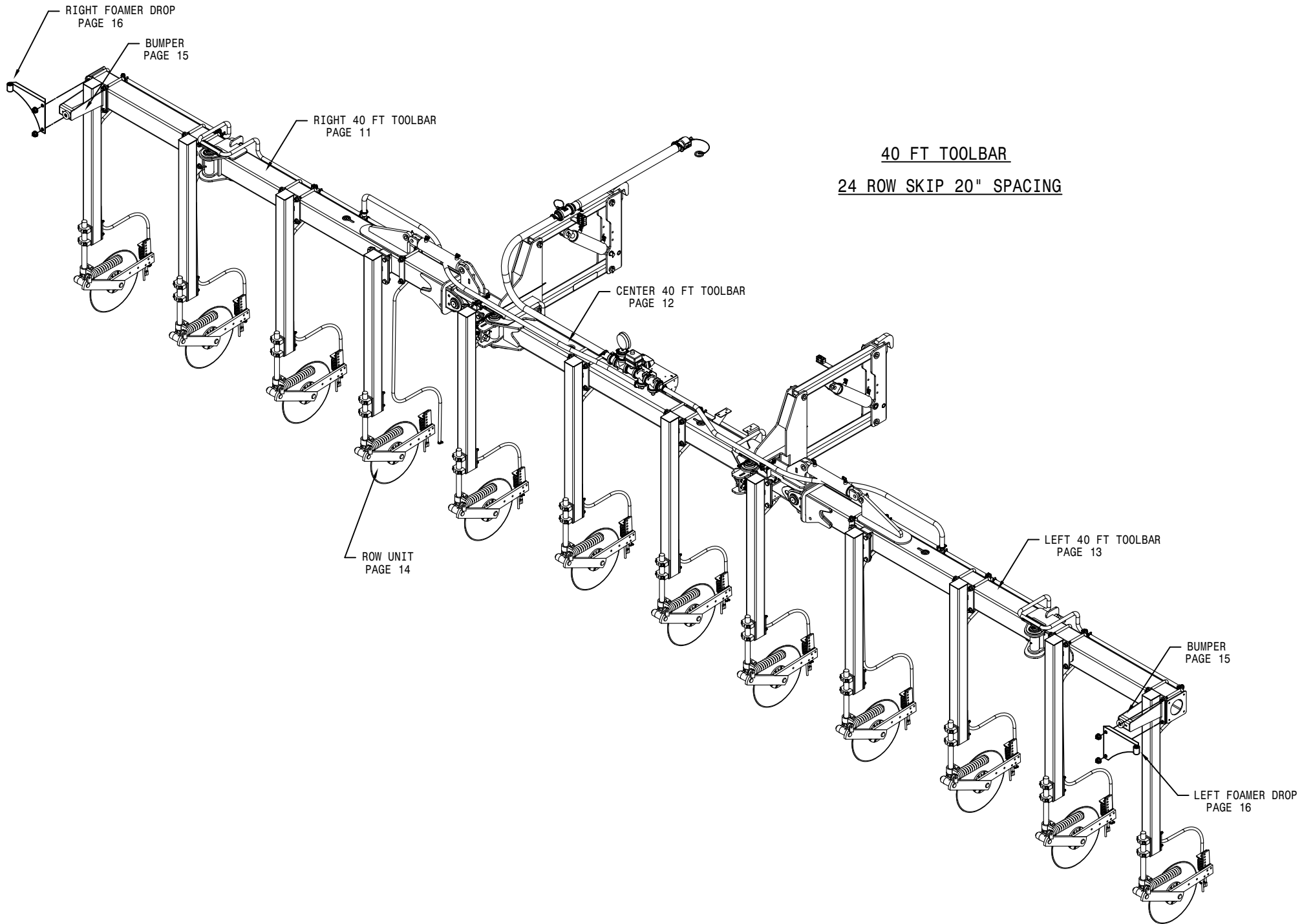
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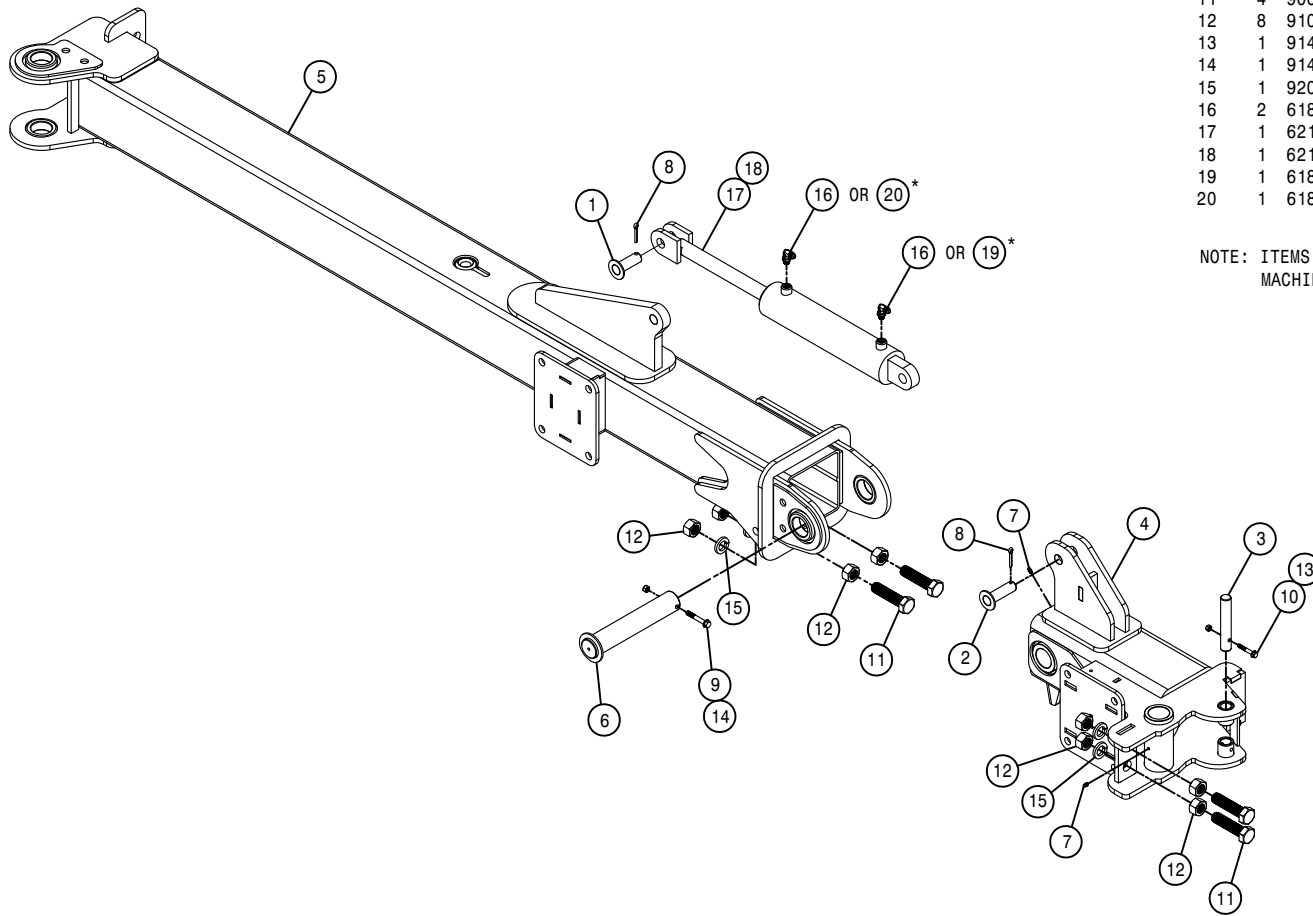


RIGHT 30FT TOOLBAR ASSEMBLY

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	1	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	9/16JIC-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

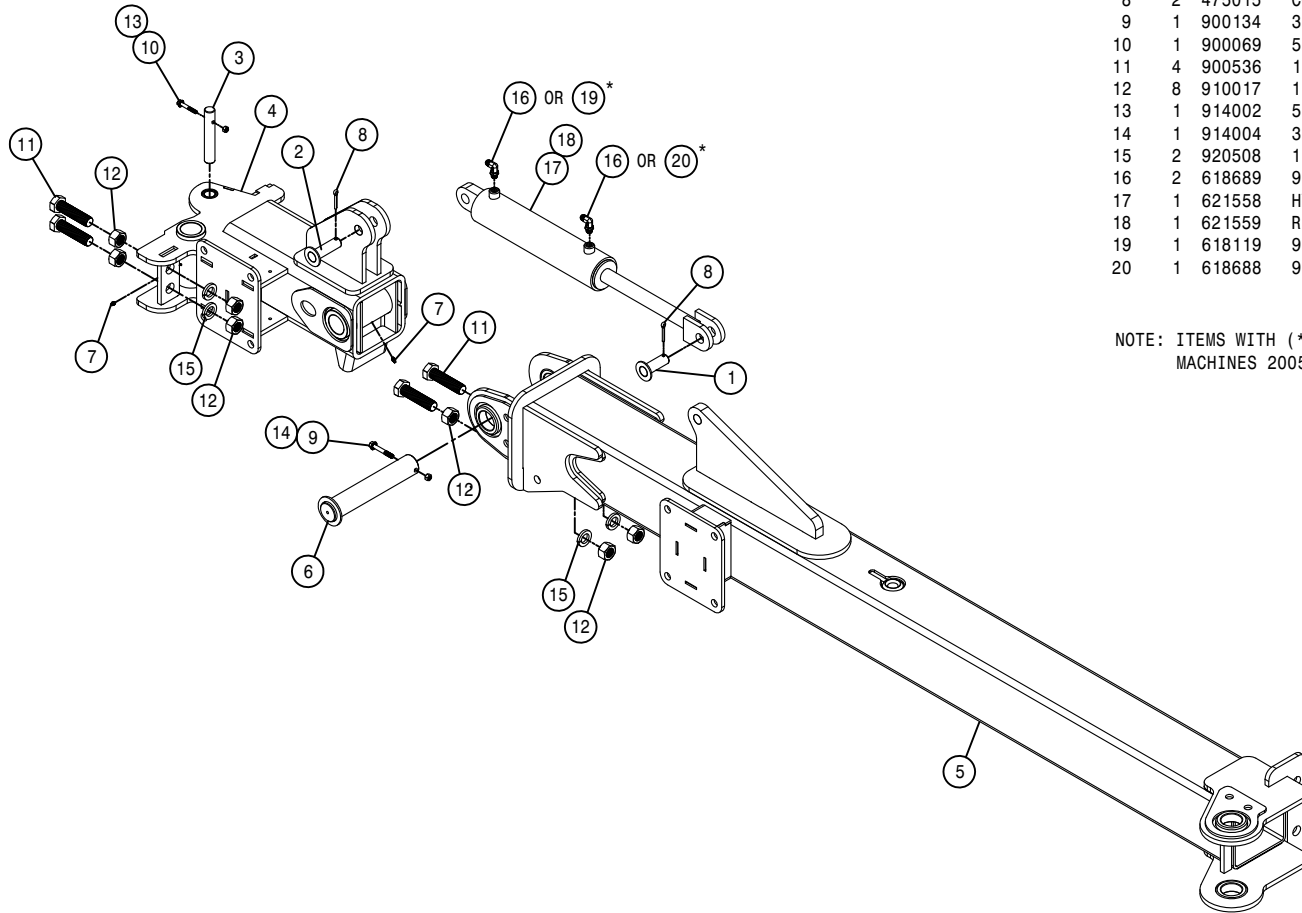
NOTE: ITEMS WITH (\*) ARE USED ON MACHINES 2005 THRU 2007.

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	2	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  
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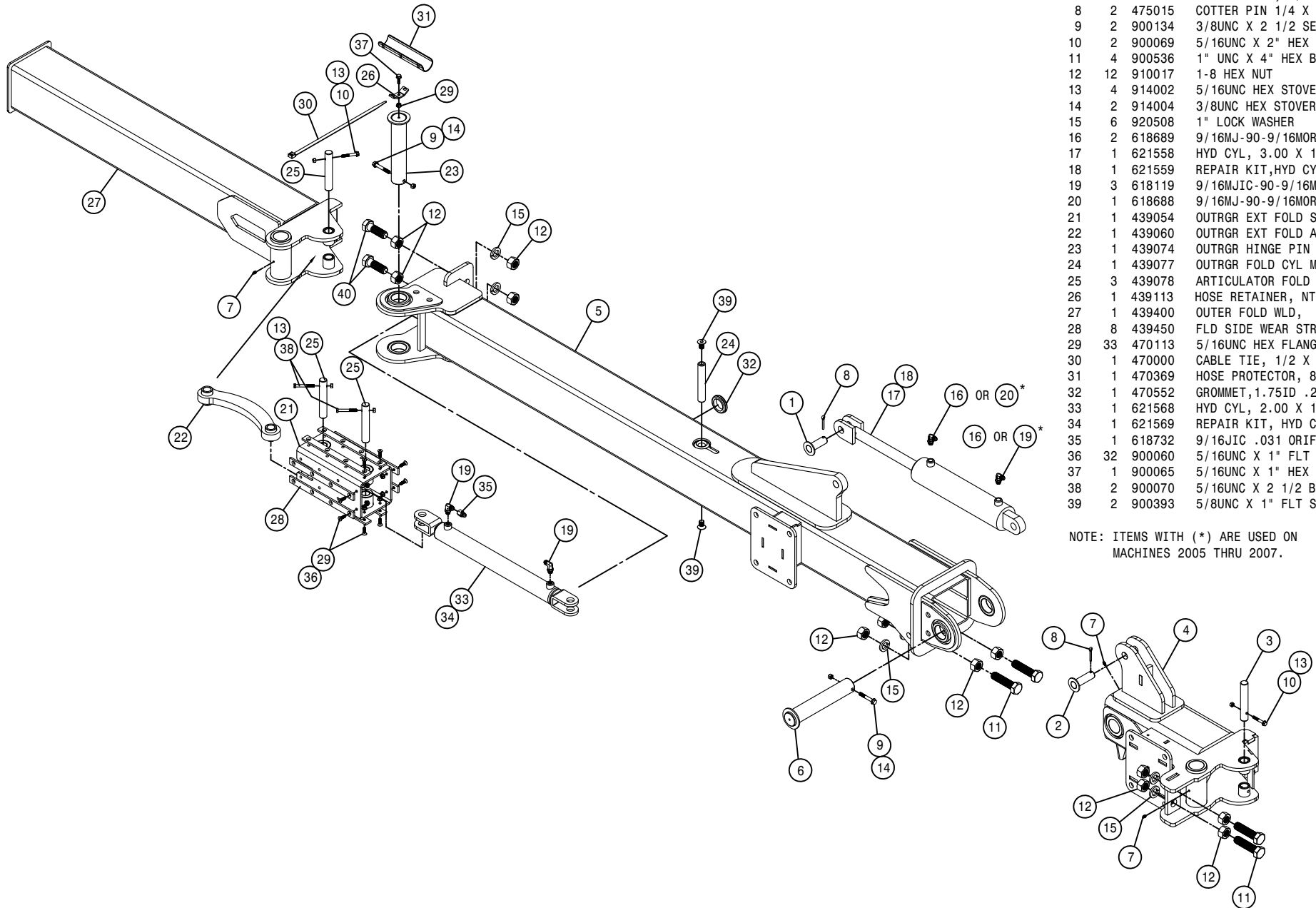


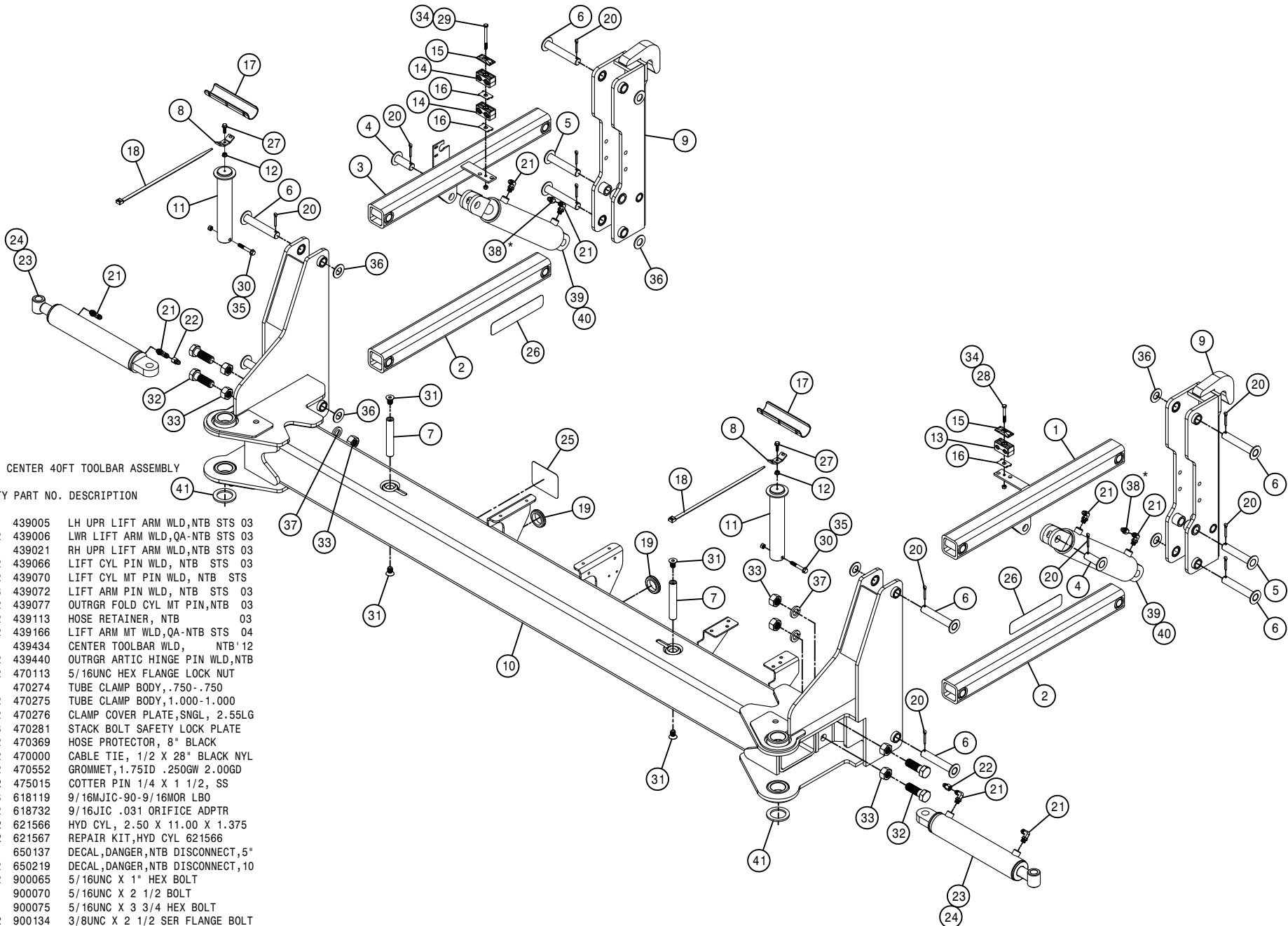
RIGHT 40FT TOOLBAR ASSEMBLY

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
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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

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
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16	3	470281	STACK BOLT SAFETY LOCK PLATE
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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
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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
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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

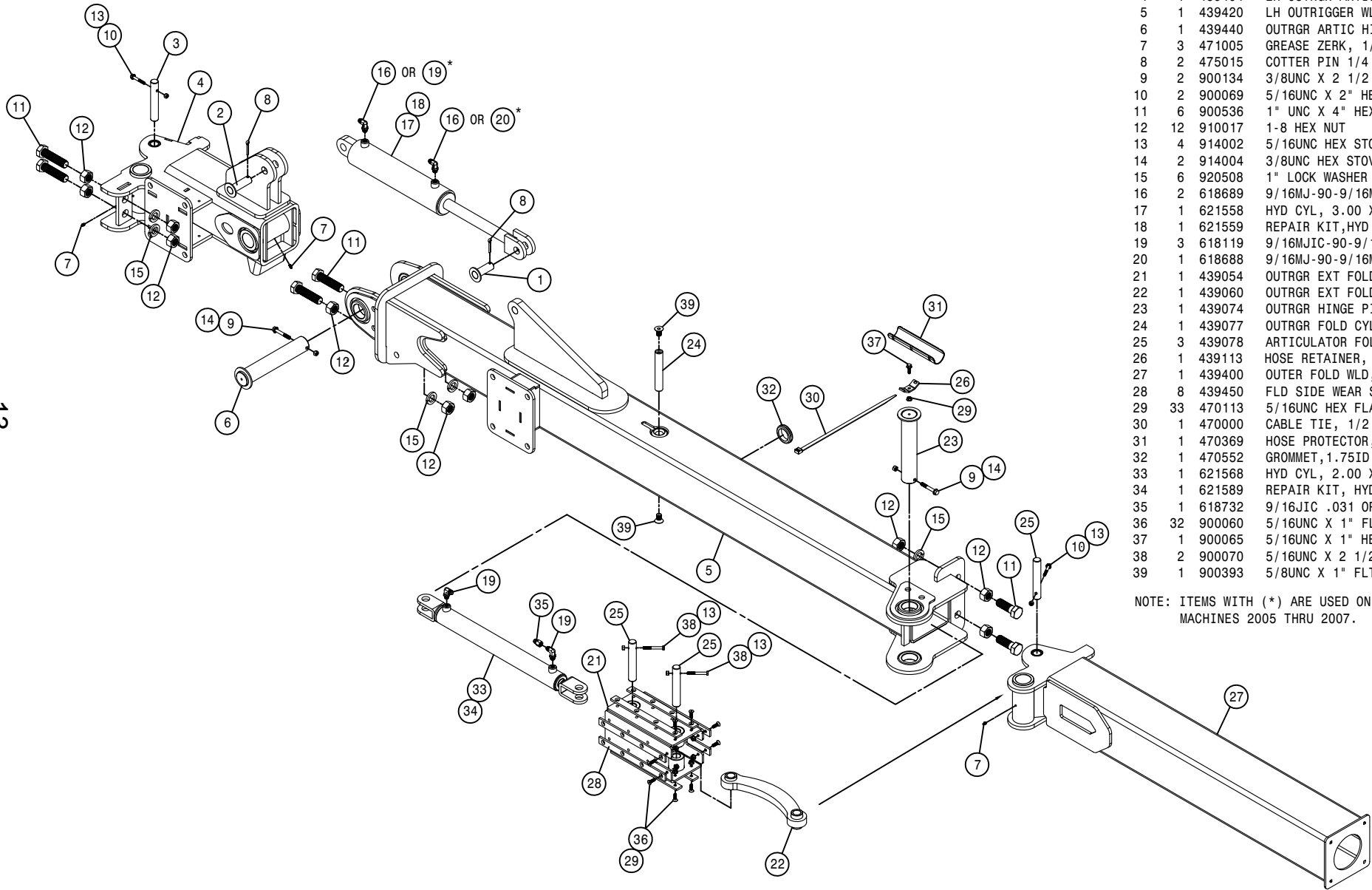
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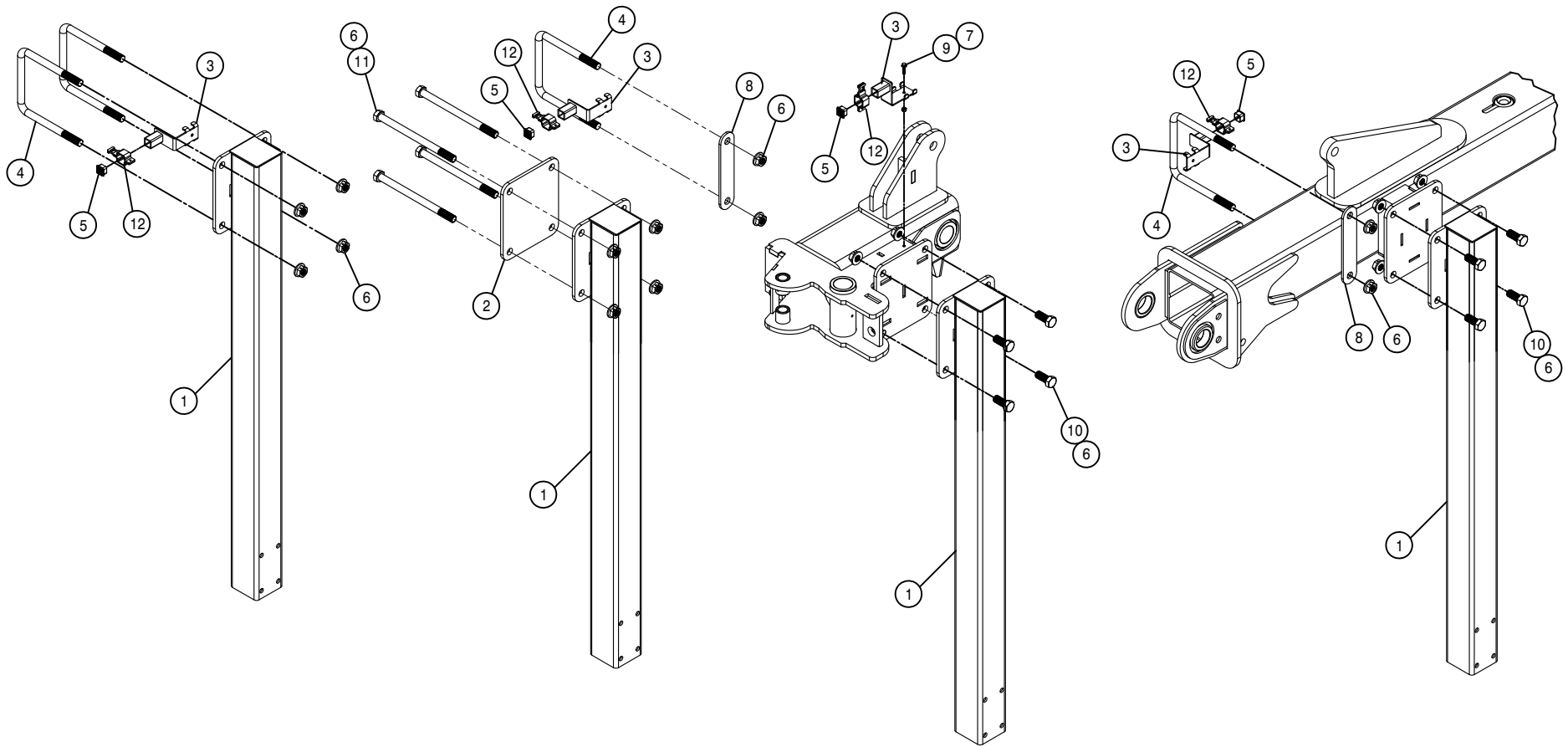
LEFT 40FT TOOLBAR ASSEMBLY

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	439404	LH OUTGRG ARTIC WLD NTB'12
5	1	439420	LH OUTRIGGER WLD, NTB'12
6	1	439440	OUTGRG 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
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22	1	439060	OUTGRG EXT FOLD ARM WLD,NTB 03
23	1	439074	OUTGRG HINGE PIN WLD, NTB 03
24	1	439077	OUTGRG 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

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





ROW UNIT ASSEMBLY

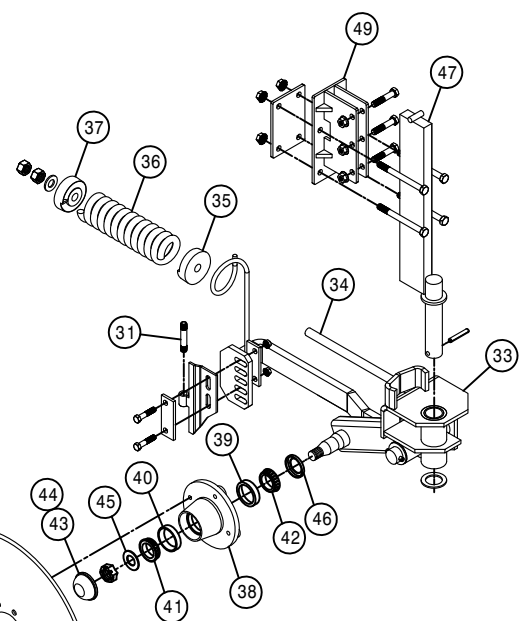
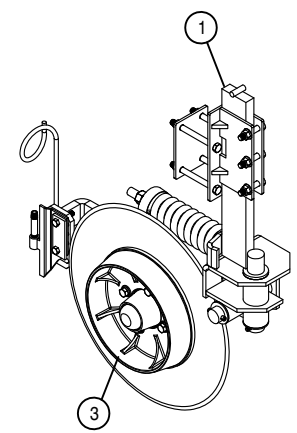
DET. QTY PART NO. DESCRIPTION

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	

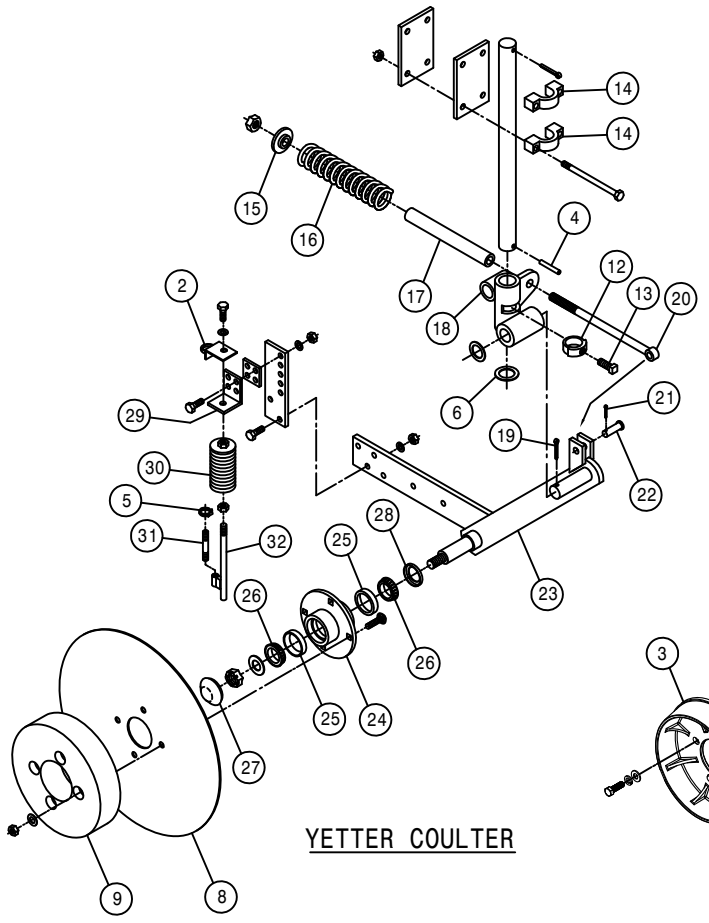
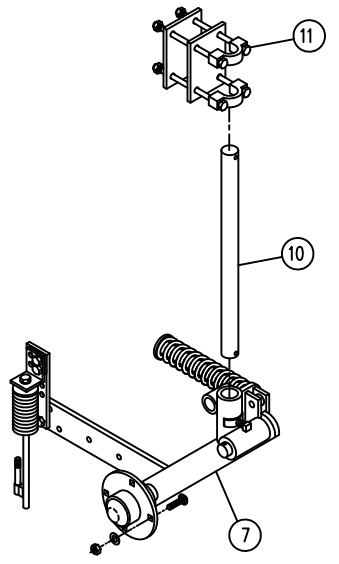
COULTER ASSEMBLY

DET. QTY PART NO. DESCRIPTION

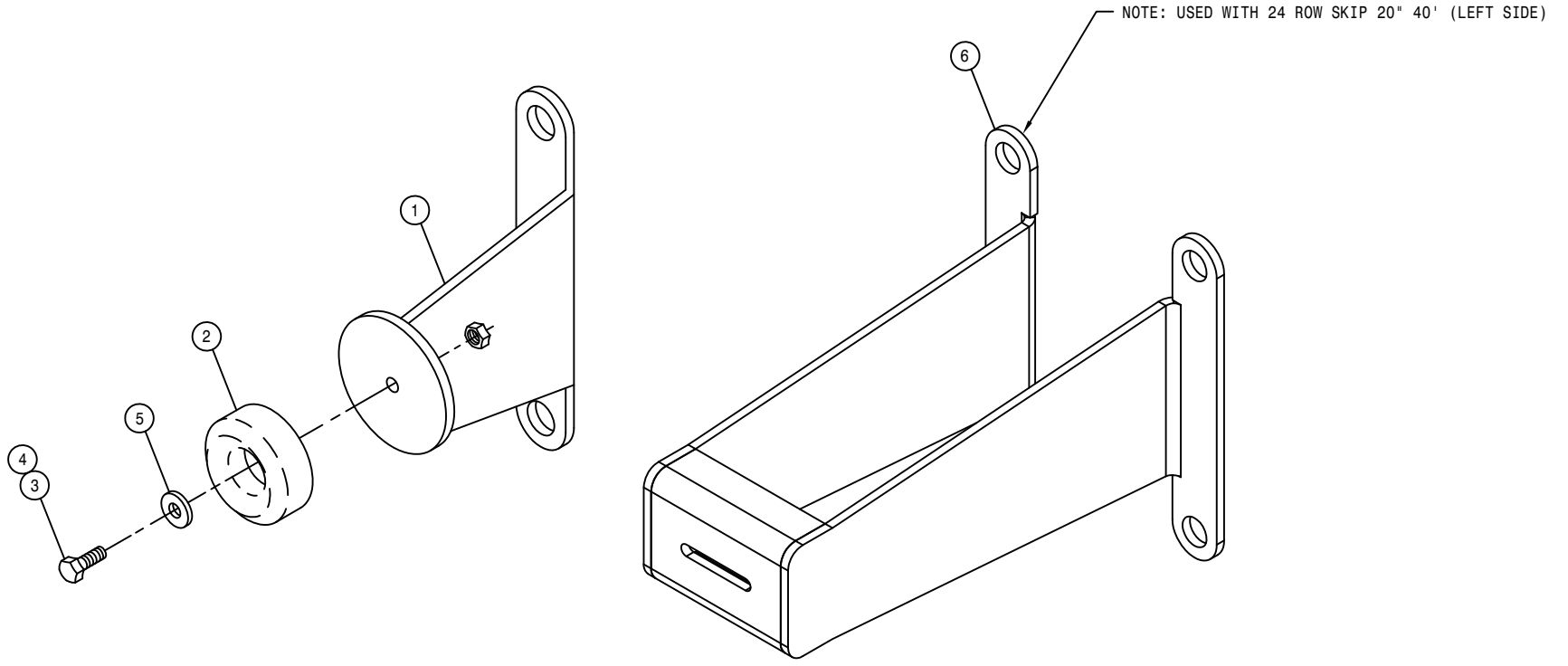
1	1	439218	AG SYSTEMS COULTER,GEN III
2	1	439092	HOSE RETAINER WLD, 1" NTB
3	1	439224	DEPTH WHEEL,CAST,CLYMER
4	1	473937	ROLL PIN, 3/8 X 2 1/2
5	1	520070	HOSE CLAMP NO 8 STAINLESS
6	1	920013	1 1/2 SAE FLAT WASHER
7	1	439105	YETTER COULTER,20" GEN III
8	1	439106	20" SMOOTH BLADE, YETTER
9	1	439107	POLY 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



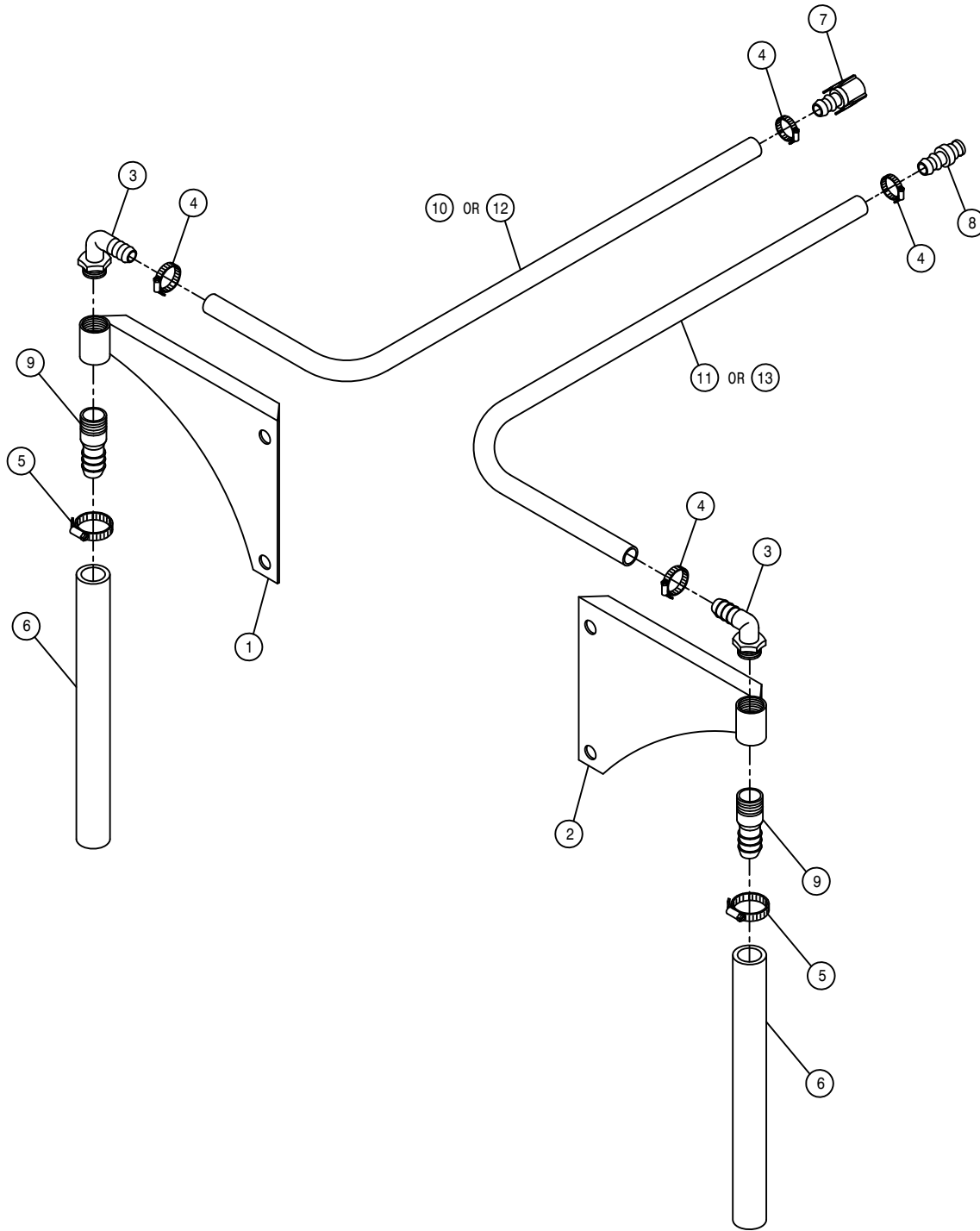
YETTER COULTER



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





FOAMER DROP AND HOSE ASSEMBLY

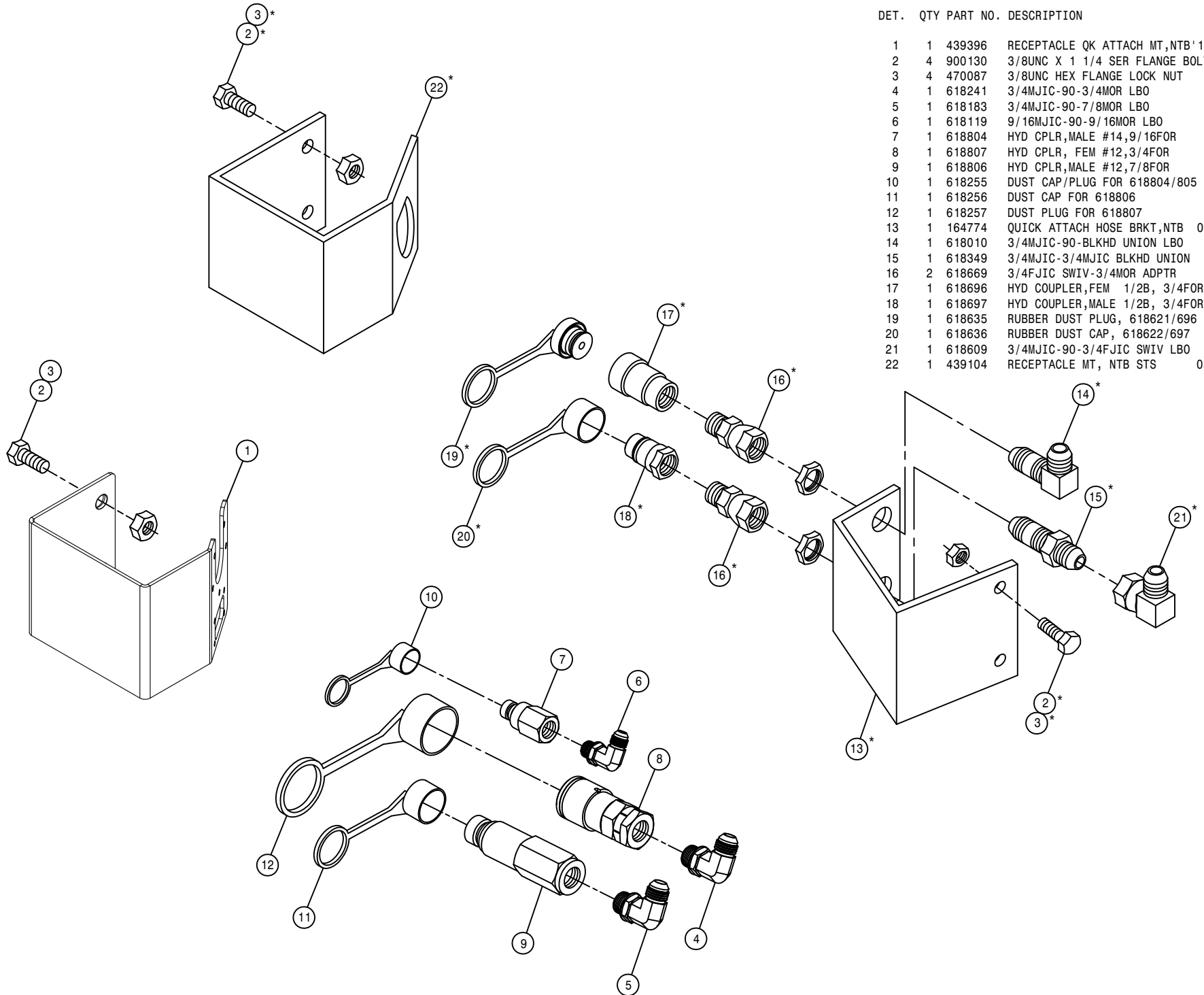
DET.	QTY	PART NO.	DESCRIPTION
1	1	439100	RH FOAMER DROP CPLR WLD, NTB
2	1	439101	LH FOAMER DROP CPLR WLD, NTB
3	2	500067	1 NPT-90-3/4 HOSE BARB, POLY
4	4	520055	HOSE CLAMP NO 12 STAINLESS
5	2	520085	HOSE CLAMP NO 24 STAINLESS
6	2	601586	HOSE, 1 1/4 X 16 2BR BLK EPDM
7	1	696207	.75 HOSE BARB-FEMALE COUPLER
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.

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

QUICK ATTACK ASSEMBLY

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

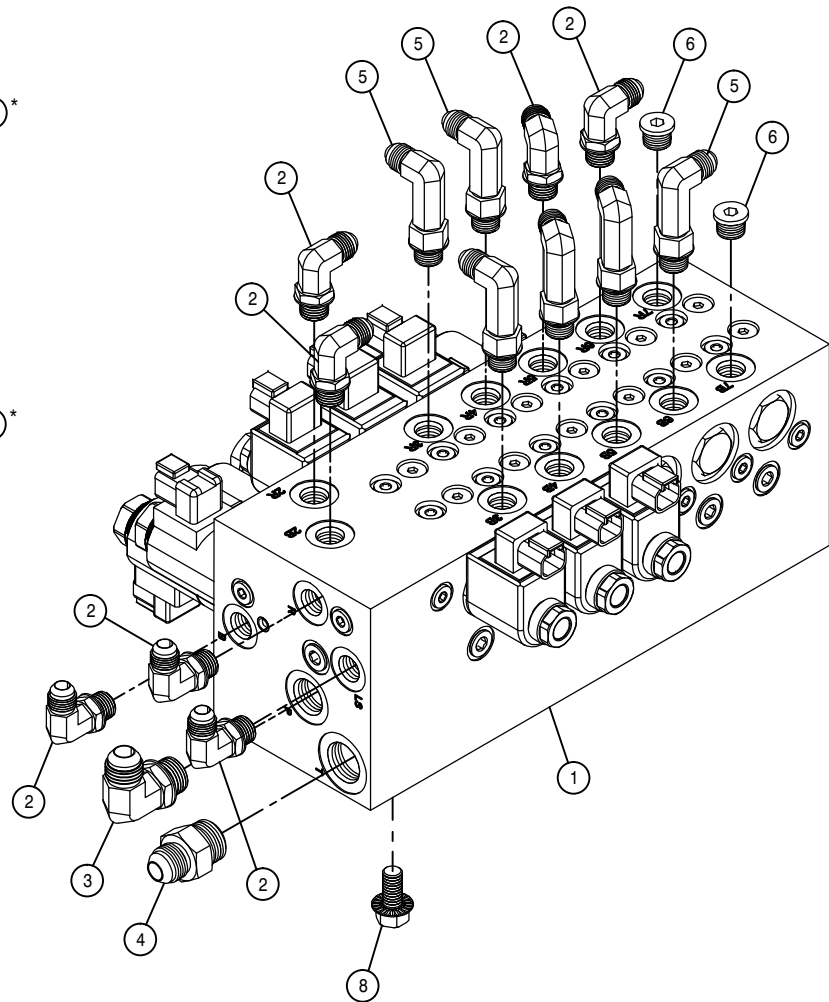
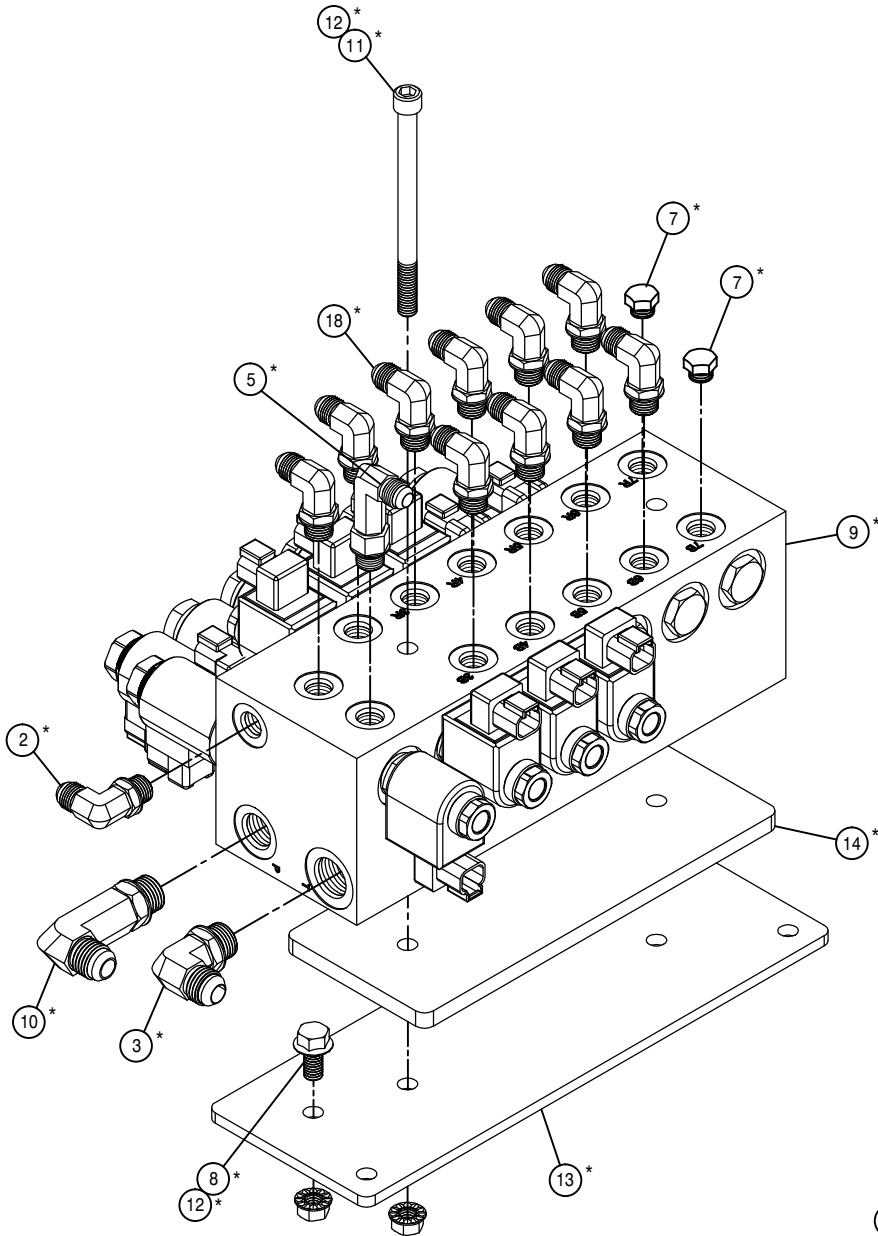


NOTE: ITEMS WITH (\*) ARE USED ON  
MACHINES 2005 THRU 2006.

30FT TOOLBAR CONTROL VALVE ASSEMBLY

DET. QTY PART NO. DESCRIPTION

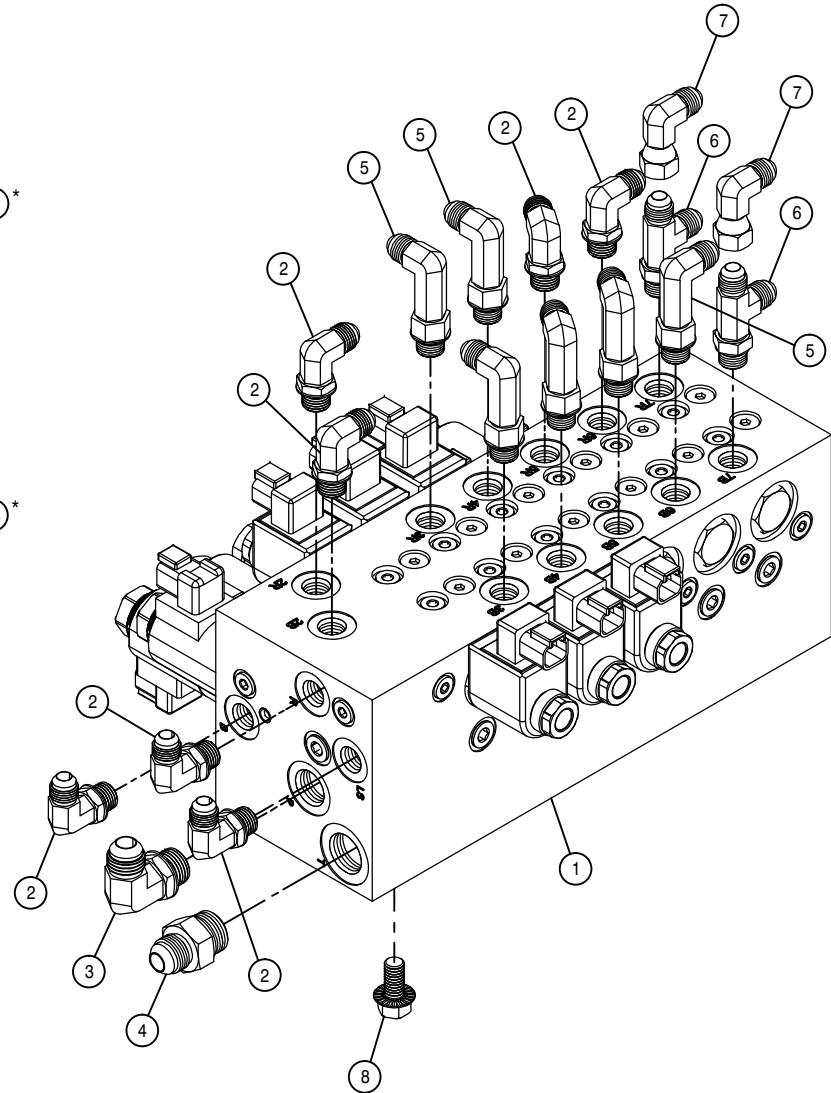
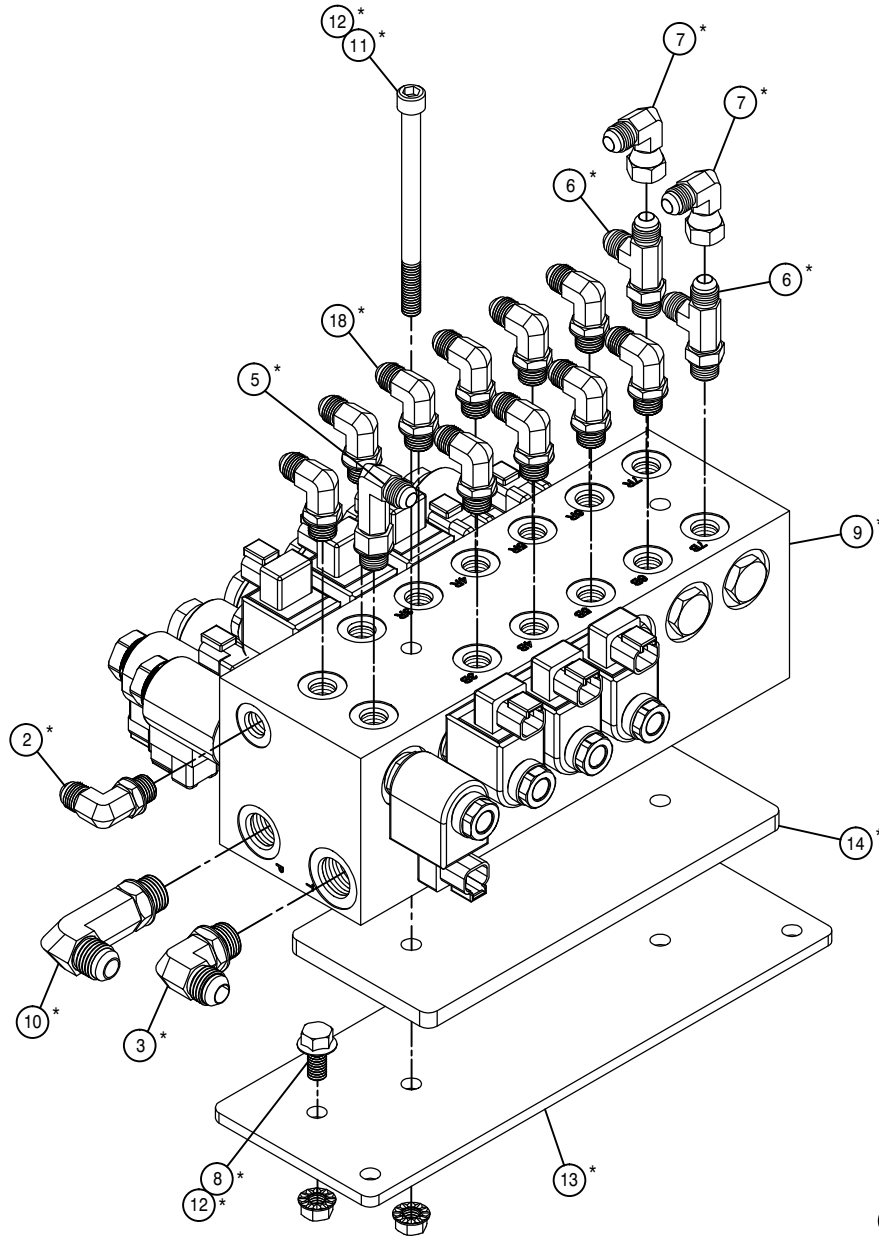
DET.	QTY	PART NO.	DESCRIPTION	
1	1	606280	HYD VALVE, SAUER 6SPL NTB	07
2	18	618119	9/16MJIC-90-9/16MOR LBO	
3	2	618241	3/4MJIC-90-3/4MOR LBO	
4	1	618327	3/4MJIC-7/8MOR ADPTR	
5	7	618440	9/16MJIC-90-9/16MOR EX LG LBO	
6	2	618754	9/16MOR PLUG, HEX SOCKET	
7	2	610185	9/16MOR PLUG, HEX HEAD	
8	8	900128	3/8UNC 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

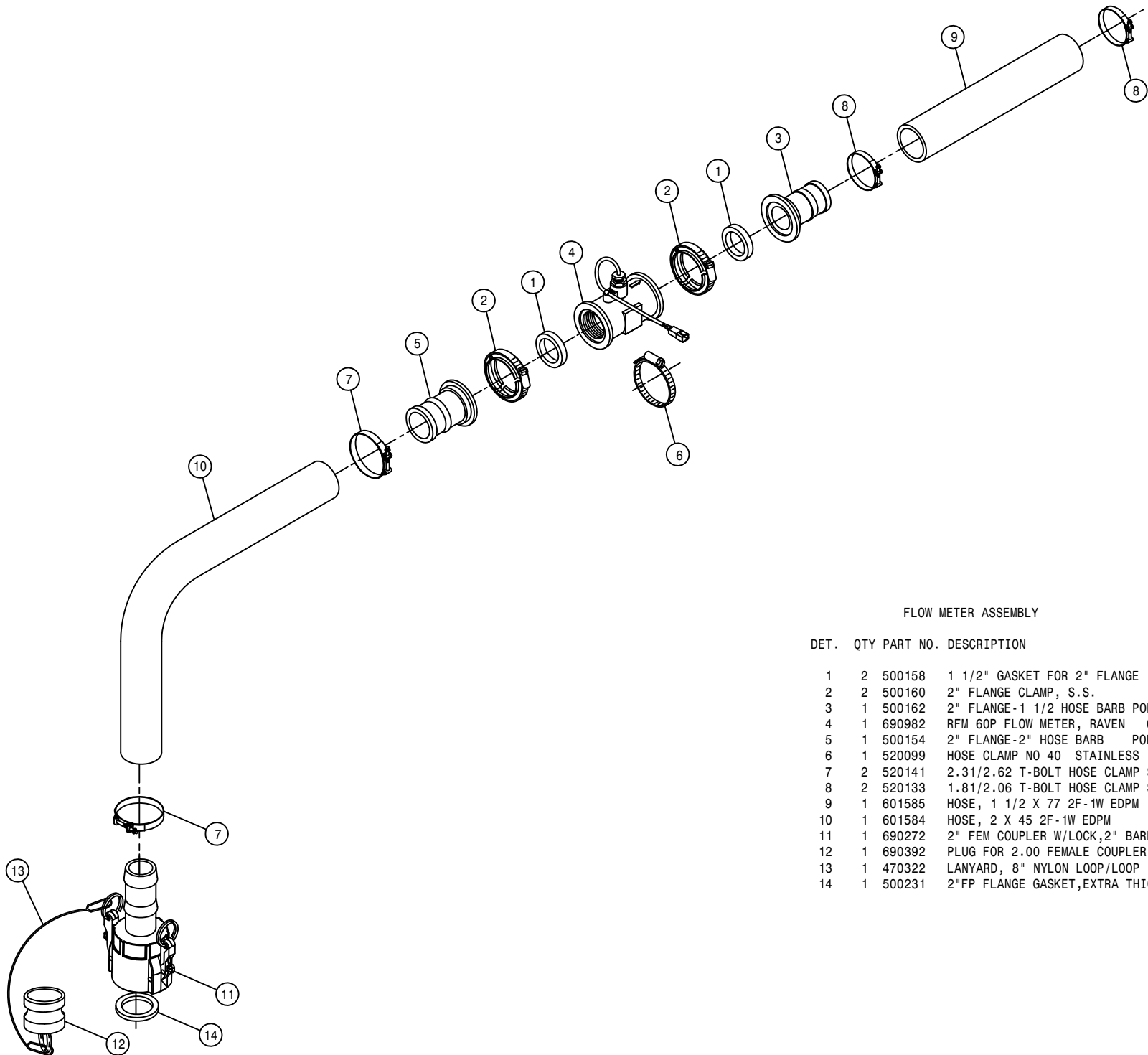


NOTE: ITEMS WITH (\*) ARE USED ON  
MACHINES 2005 THRU 2006.

40FT TOOLBAR CONTROL VALVE ASSEMBLY

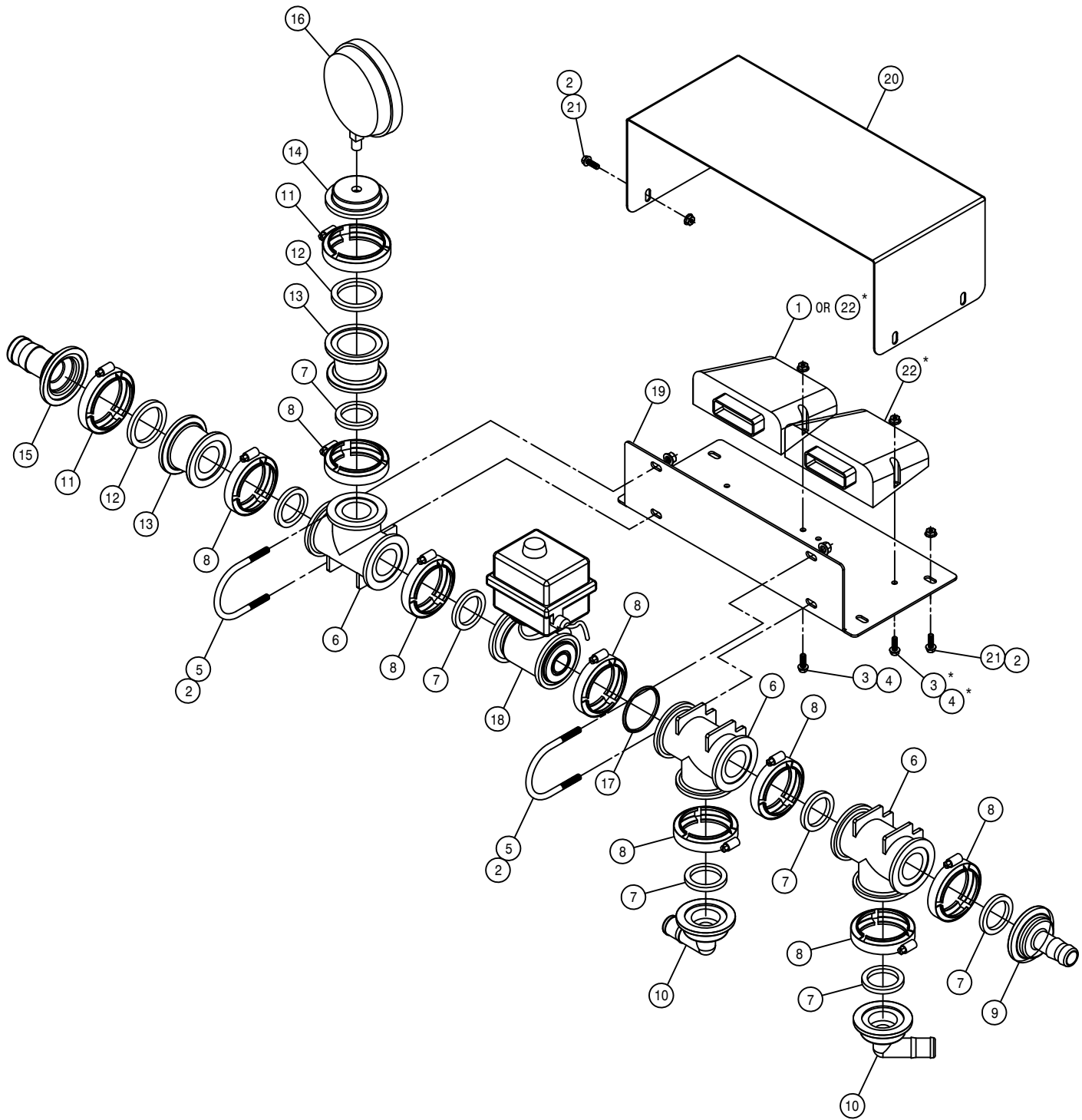
DET.	QTY	PART NO.	DESCRIPTION	
1	1	606280	HYD VALVE, SAUER 6SPL NTB	07
2	18	618119	9/16MJIC-90-9/16MOR LBO	
3	2	618241	3/4MJIC-90-3/4MOR LBO	
4	1	618327	3/4MJIC-7/8MOR ADPTR	
5	7	618440	9/16MJIC-90-9/16MOR EX LG LBO	
6	4	618444	9/16MOR RUN TEE-9/16MJIC	
7	4	618618	9/16MJIC-90-9/16FJIC SWIV LBO	
8	8	900128	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 VALVE ASSEMBLY

DET. QTY PART NO. DESCRIPTION

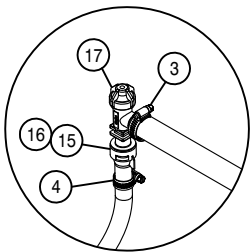
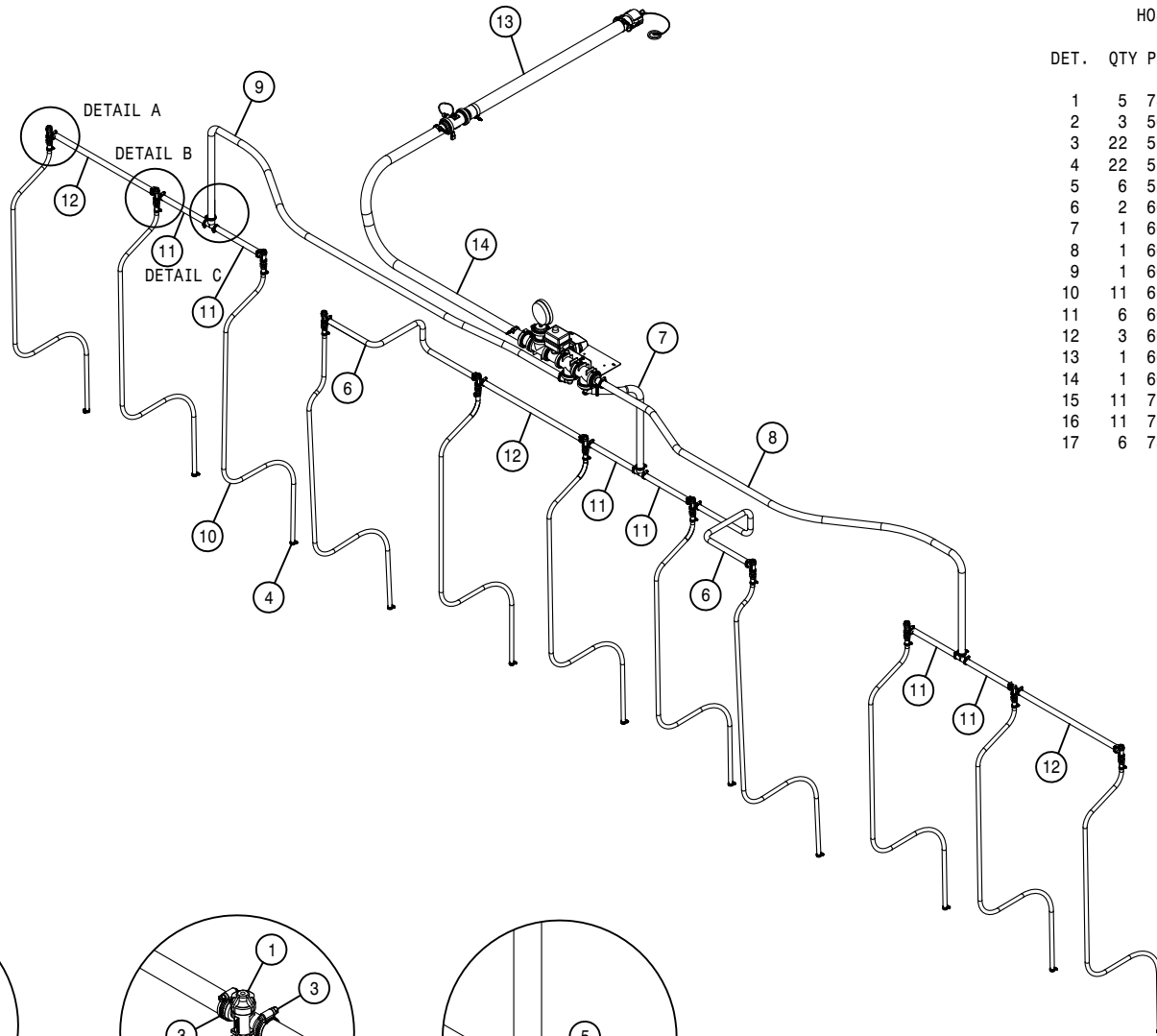
1	1	292016	IQAN-XA2 MODULE
2	12	470113	5/16UNC HEX FLANGE LOCK NUT
3	4	470118	1/4UNC X 3/4 FLANGE HEX BOLT
4	4	470121	1/4UNC HEX FLANGE LOCK NUT
5	2	472195	5/16UNC-2 11/16ID-3 9/16U-BOLT
6	3	500151	2" FLANGE TEE POLY
7	7	500158	1 1/2" GASKET FOR 2" FLANGE
8	8	500160	2" FLANGE CLAMP, S.S.
9	1	500172	2" 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.

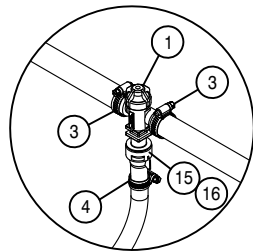
HOSE DIAG, 12R 30" 30FT NTB

DET. QTY PART NO. DESCRIPTION

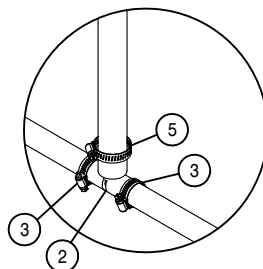
DET.	QTY	PART NO.	DESCRIPTION
1	5	737830	QUICK TJET TEE,1-TIP BODY .75
2	3	500121	3/4 HOSE BARB-1"BRNCH TEE,POLY
3	22	520055	HOSE CLAMP NO 12 STAINLESS
4	22	520070	HOSE CLAMP NO 8 STAINLESS
5	6	520087	HOSE CLAMP NO 20 STAINLESS
6	2	601174	HOSE, 3/4 X 60 1BR BLK EPDM
7	1	601491	HOSE, 1 X 30 1BR BLK EPDM
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



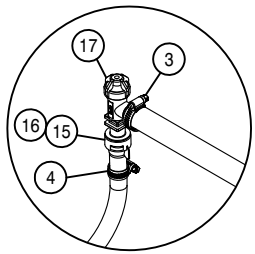
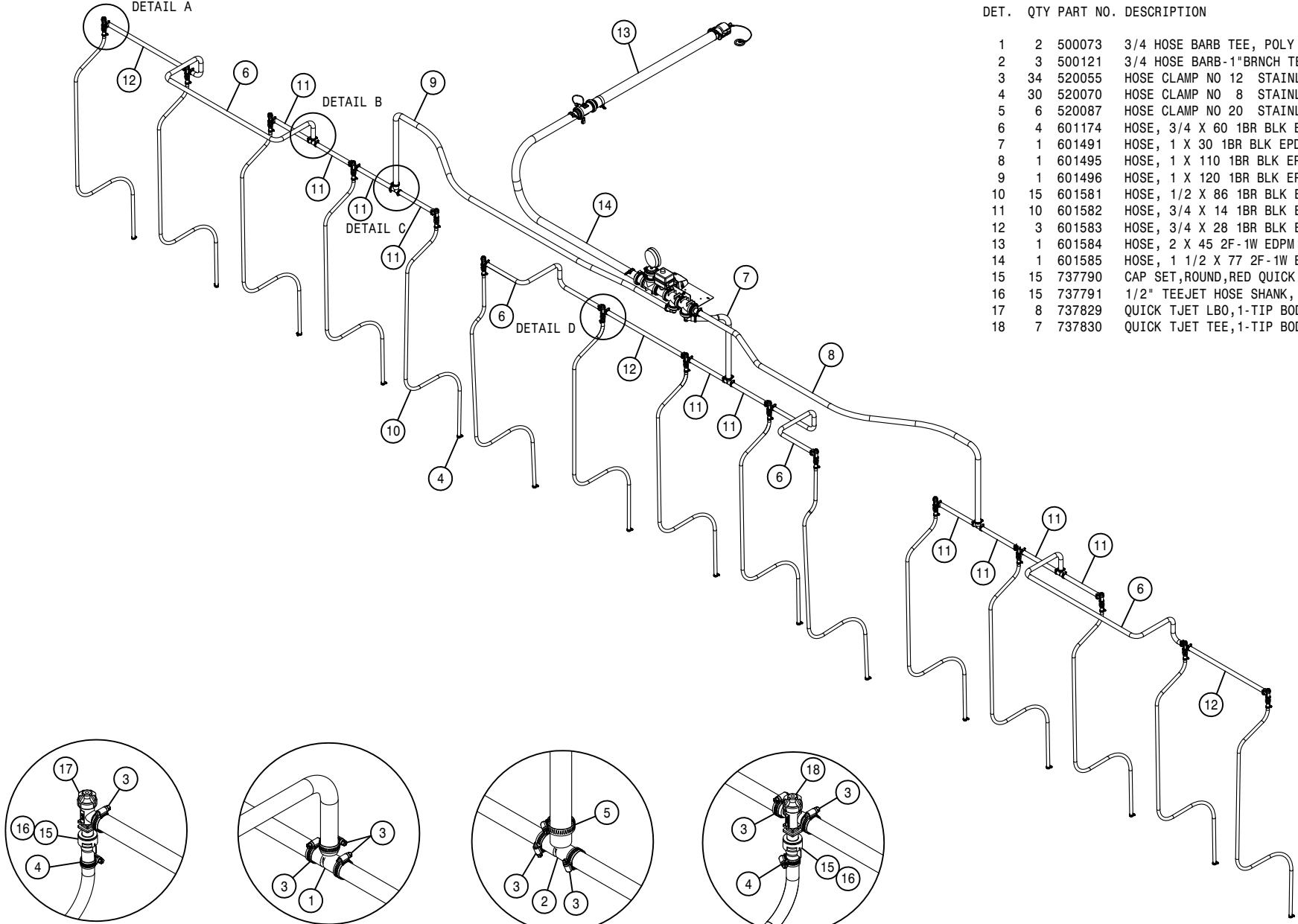
DETAIL B



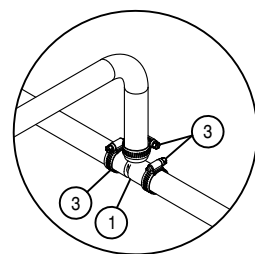
DETAIL C

DET. QTY PART NO. DESCRIPTION

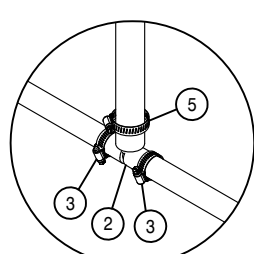
DET.	QTY	PART NO.	DESCRIPTION
1	2	500073	3/4 HOSE BARB TEE, POLY
2	3	500121	3/4 HOSE BARB-1"BRNCH TEE,POLY
3	34	520055	HOSE CLAMP NO 12 STAINLESS
4	30	520070	HOSE CLAMP NO 8 STAINLESS
5	6	520087	HOSE CLAMP NO 20 STAINLESS
6	4	601174	HOSE, 3/4 X 60 1BR BLK EPDM
7	1	601491	HOSE, 1 X 30 1BR BLK EPDM
8	1	601495	HOSE, 1 X 110 1BR BLK EPDM
9	1	601496	HOSE, 1 X 120 1BR BLK EPDM
10	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



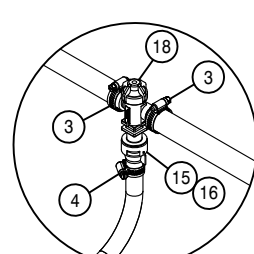
DETAIL A



DETAIL B



DETAIL C

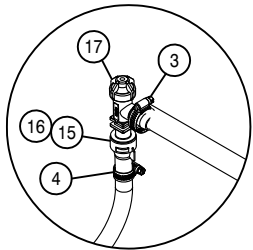
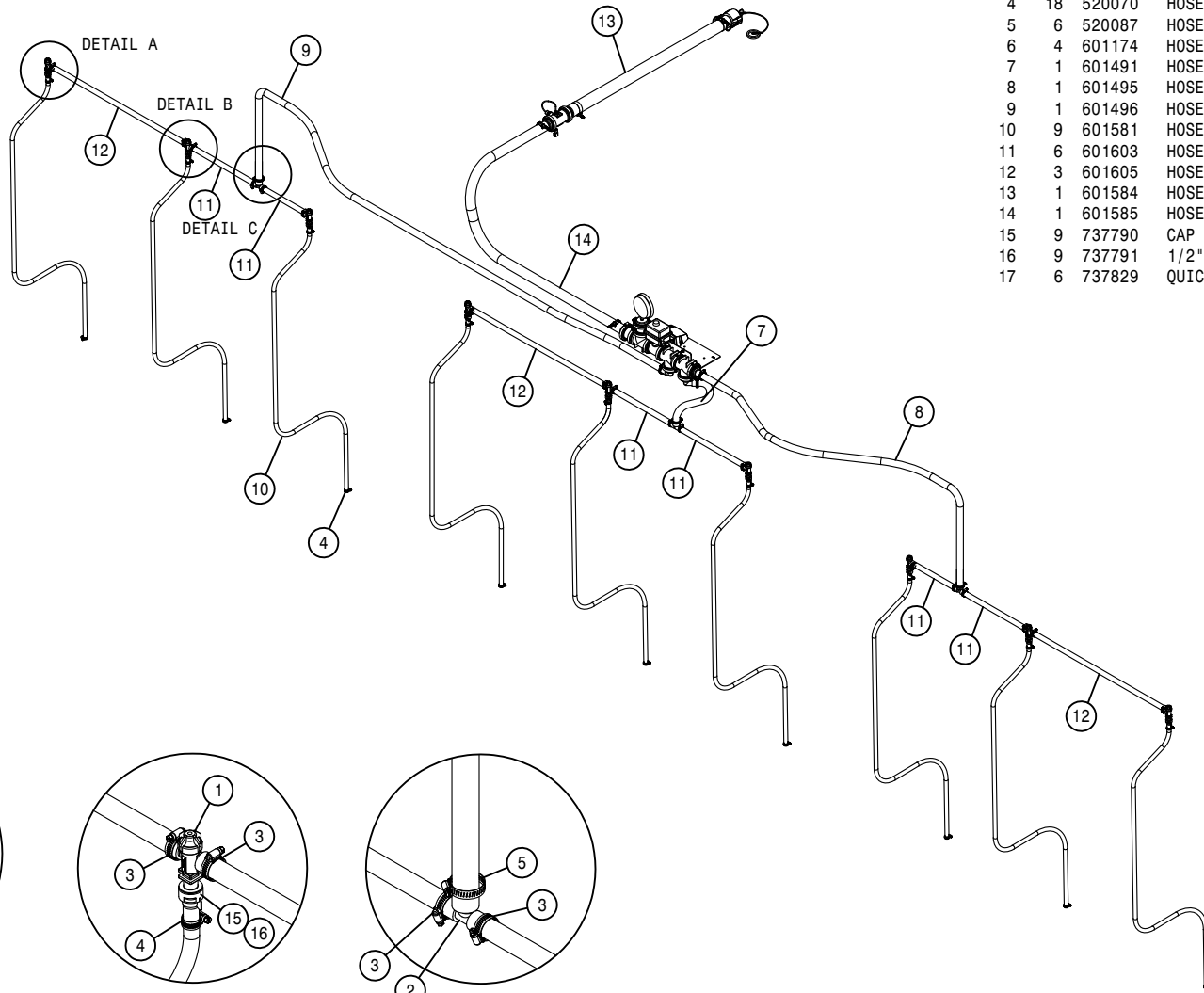


DETAIL D

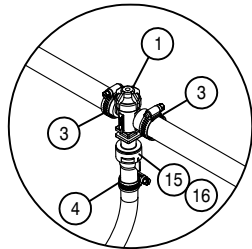


HOSE DIAG, 18R SKIP 20" 30FT NTB

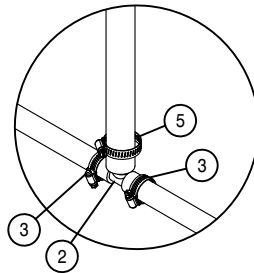
DET.	QTY	PART NO.	DESCRIPTION
1	3	737830	QUICK TJET TEE,1-TIP BODY .75
2	3	500121	3/4 HOSE BARB-1"BRNCH TEE,POLY
3	18	520055	HOSE CLAMP NO 12 STAINLESS
4	18	520070	HOSE CLAMP NO 8 STAINLESS
5	6	520087	HOSE CLAMP NO 20 STAINLESS
6	4	601174	HOSE, 3/4 X 60 1BR BLK EPDM
7	1	601491	HOSE, 1 X 30 1BR BLK EPDM
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

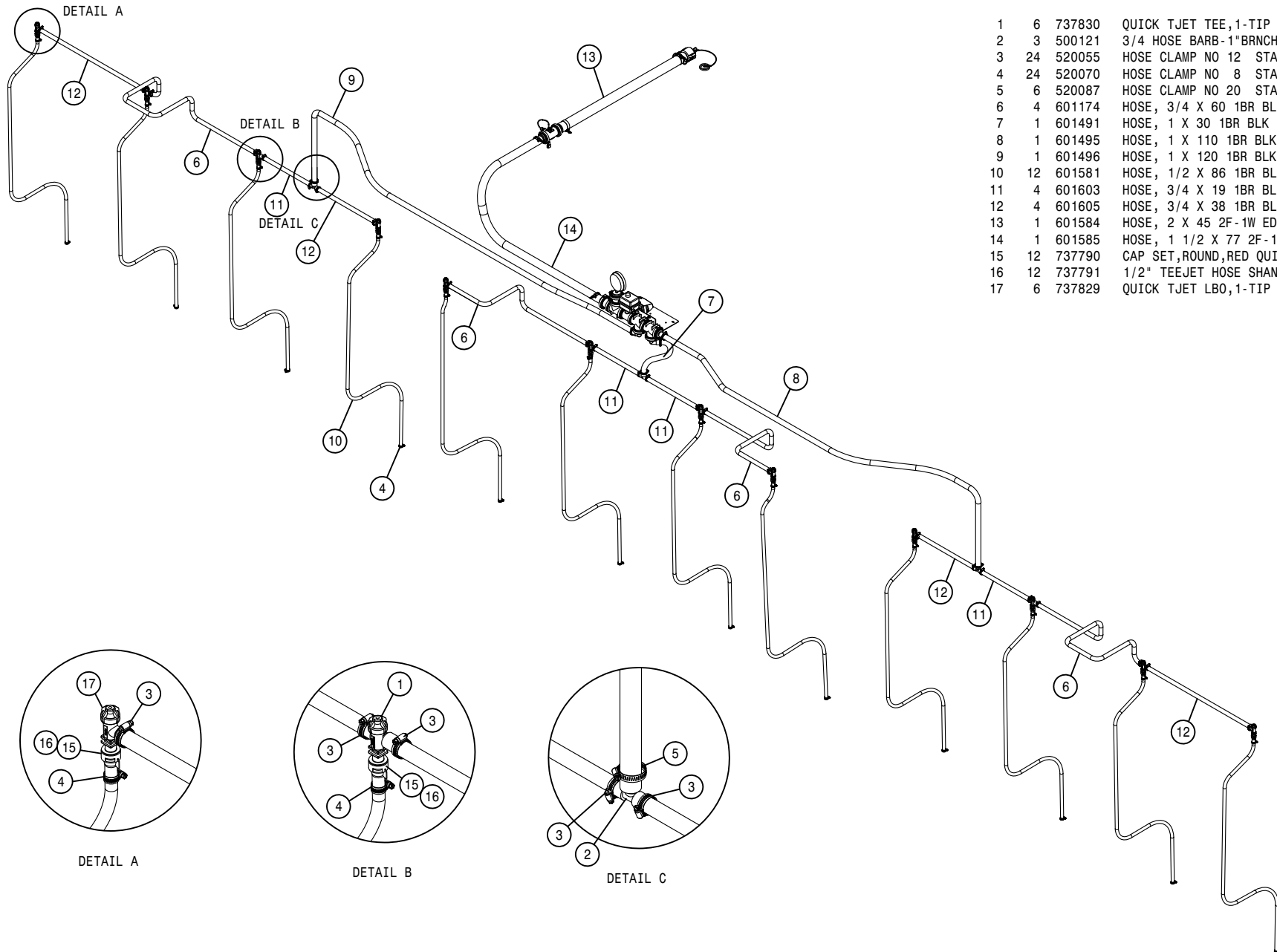


DETAIL C

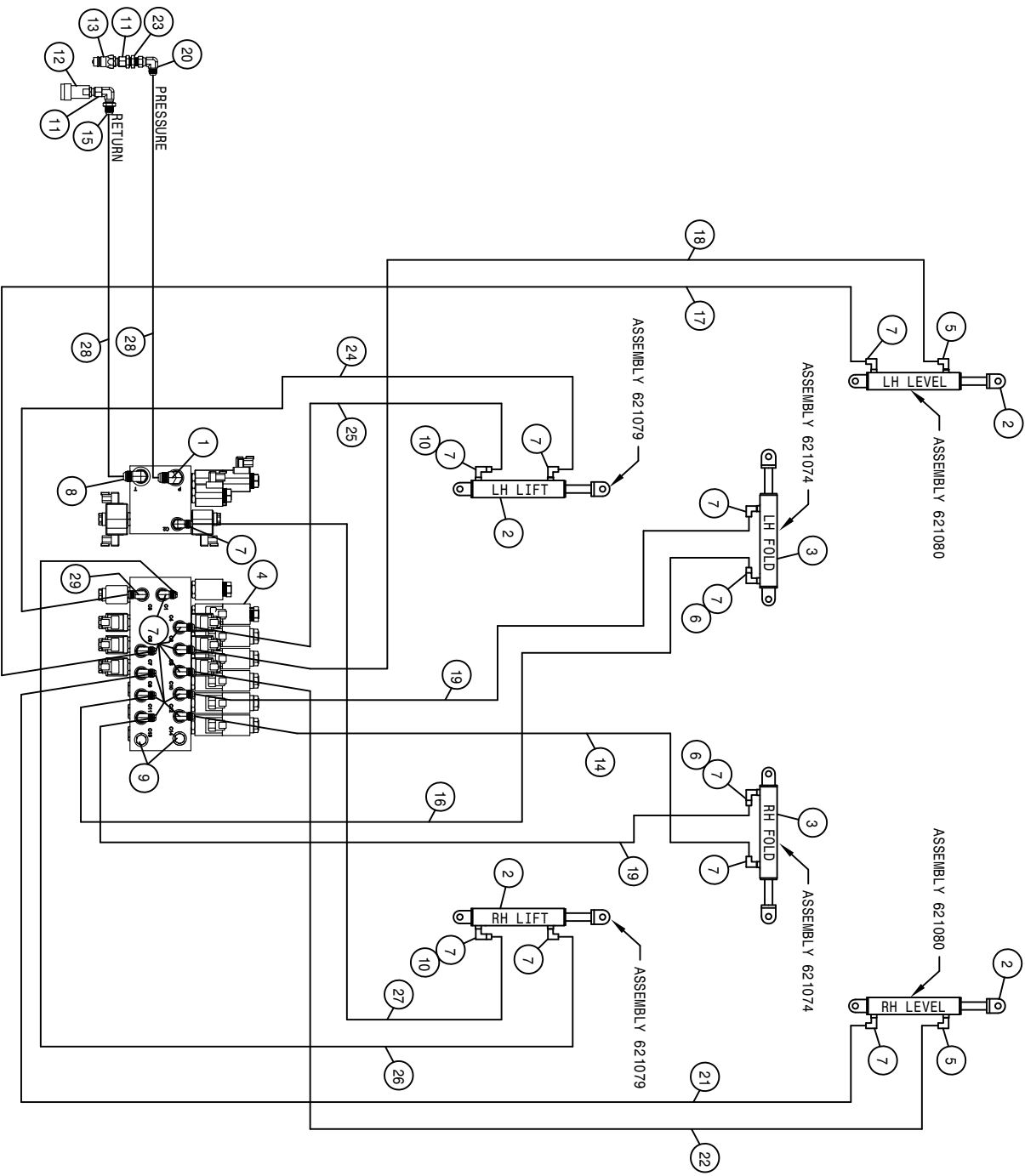
HOSE DIAG, 24R SKIP 20" 40FT NTB

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	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	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

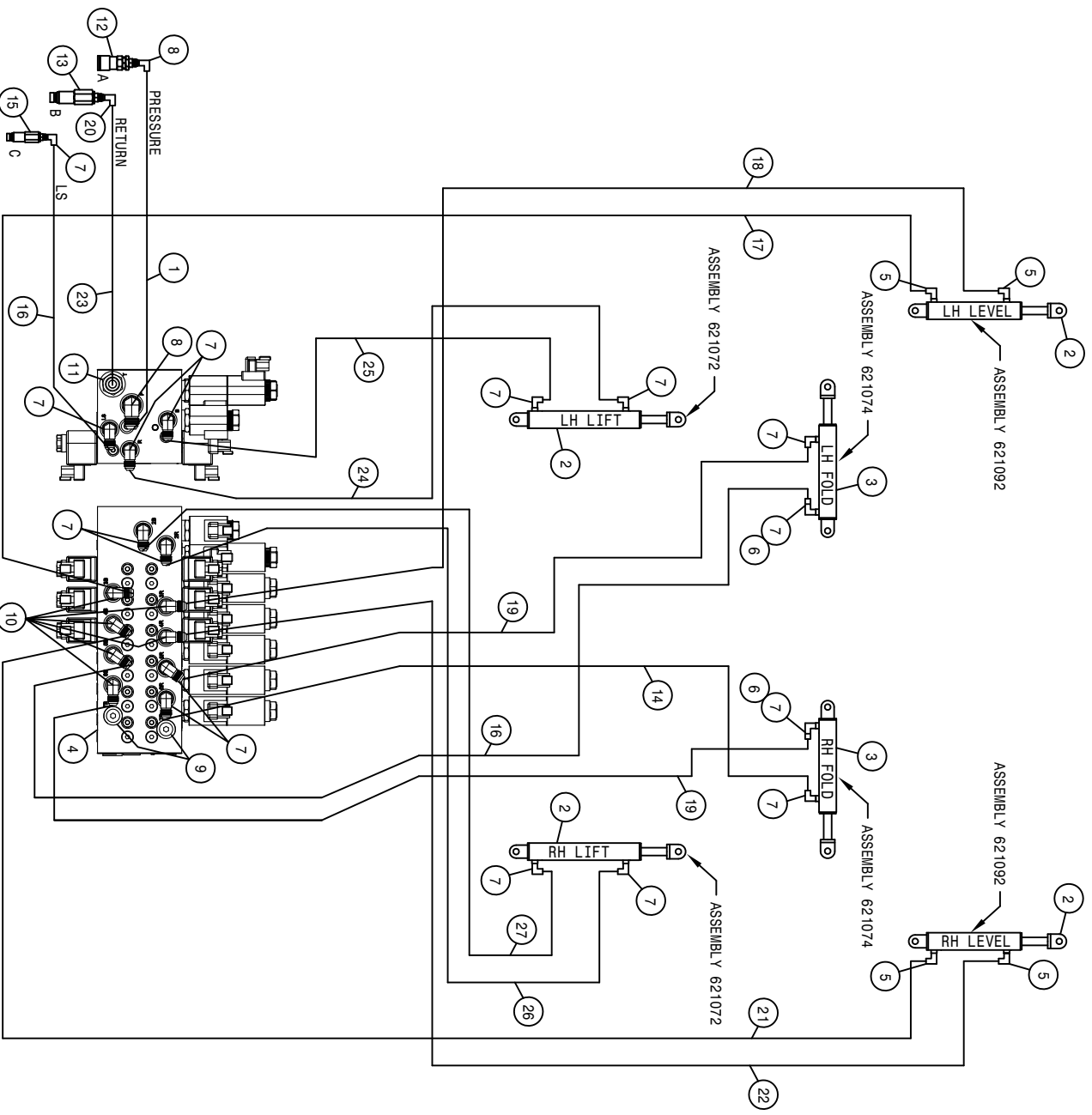


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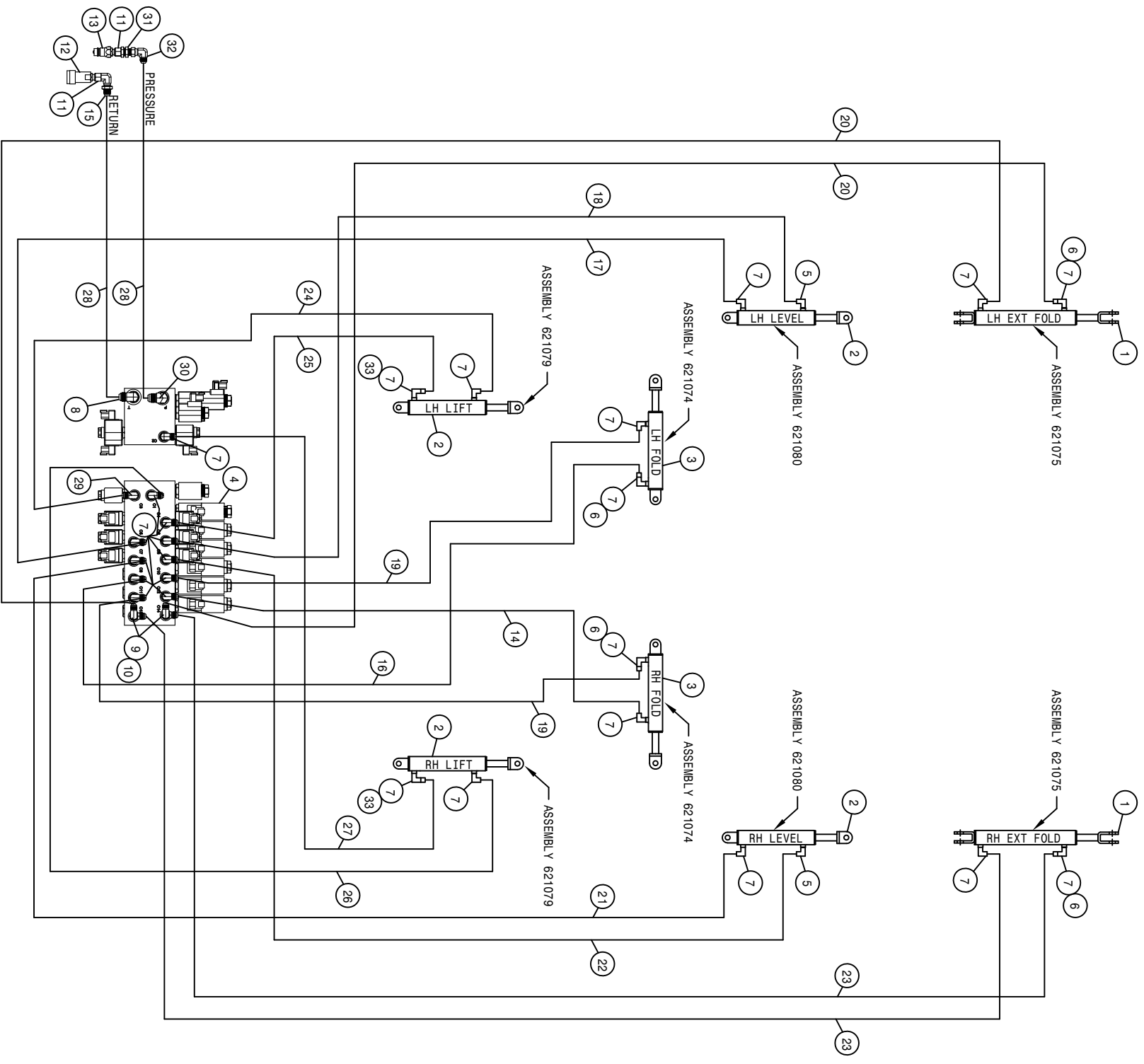
NITROGEN T-BAR 30FT HYD DIAGRAM 2005-2006  
REFERENCE DRAWING NO. 499228

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
2	4	621558	HYD CYL, 3.00 X 11.00 X 1.380	17	1	616084	04-451TC-06FJX-06FJX-46
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	18	1	616176	04-451TC-06FJX-06FJX-58
4	1	606215	NTB CTRL VLV, STS PMSYS 05	19	2	616177	04-451TC-06FJX-06FJX-74
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
7	21	618119	9/16MJIC-90-9/16MOR LBO	22	1	616180	04-451TC-06FJX-06FJX-143
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
10	2	618735	9/16JIC .062 ORIFICE ADPTR	25	1	616183	06-451TC-06FJX-06FJX-52
11	2	618669	3/4FJIC SWIV-3/4MOR ADPTR	26	1	616184	06-451TC-06FJX-06FJX-137
12	1	618696	HYD COUPLER,FEM 1/2B, 3/4FOR	27	1	616185	06-451TC-06FJX-06FJX-147
13	1	618697	HYD COUPLER,MALE 1/2B, 3/4FOR	28	2	616186	08-451TC-08FJX-08FJX-62
14	1	616090	04-451TC-06FJX-06FJX-85	29	1	618440	9/16MJIC-90-9/16MOR EX LG LBO
15	1	618010	3/4MJIC-90-BLKHD UNION LBO				



NITROGEN T-BAR 30FT HYD DIAGRAM 2007-2012  
REFERENCE DRAWING NO. 4992229

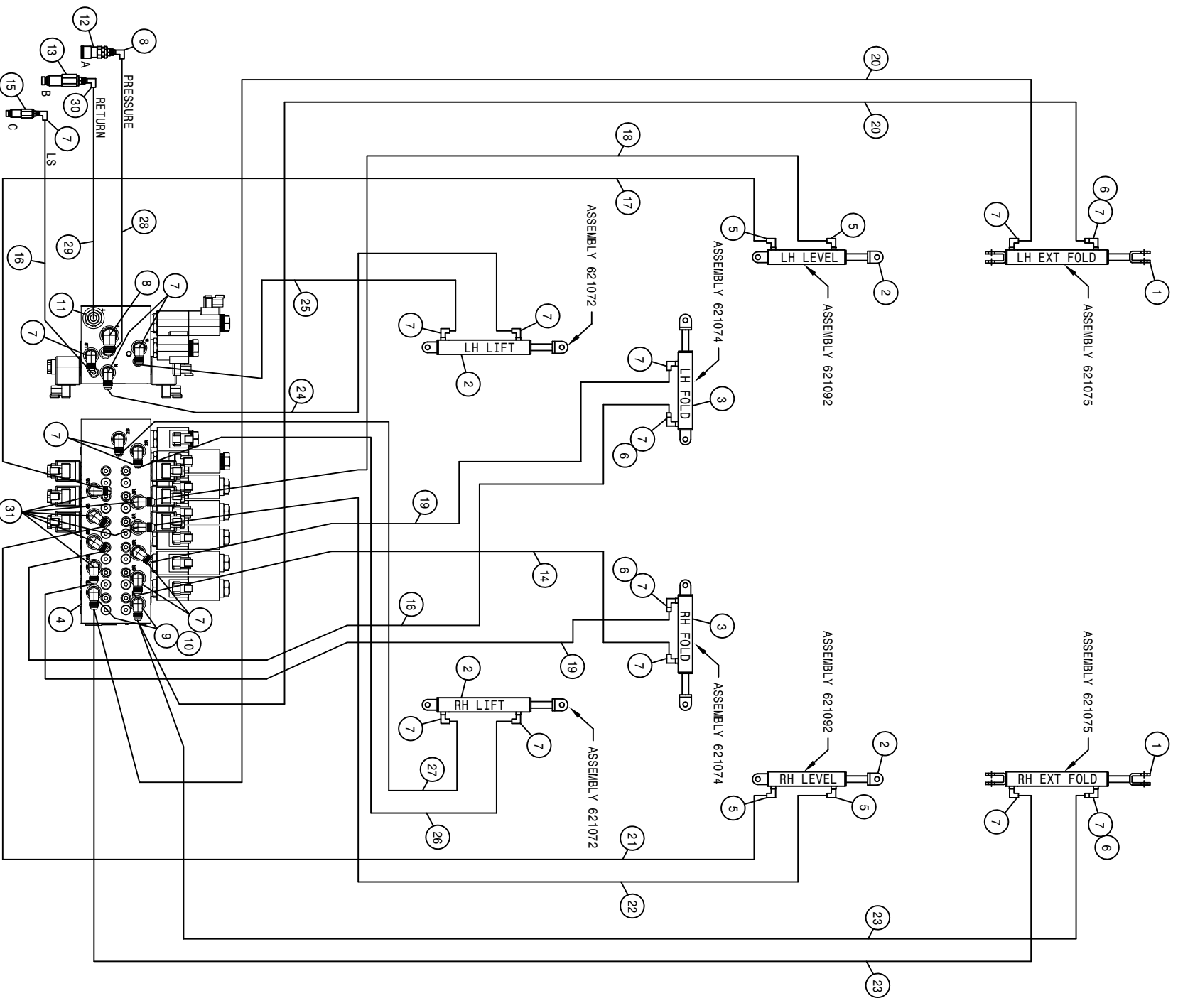
DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION
1	1	616234	08-451TC-08FJX-08FJX-66	15	1	618804	HYD CPLR,MALE #14, 9/16FOR
2	4	621558	HYD CYL, 3.00 X 11.00 X 1.380	16	2	616209	04-451TC-06FJX-06FJX-64
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	17	1	616084	04-451TC-06FJX-06FJX-46
4	1	606280	HYD VALVE,SAUER 6SPL NTB	18	1	616176	04-451TC-06FJX-06FJX-58
5	4	618689	9/16MJ-90-9/16MOR .042 CHK VLV	19	2	616177	04-451TC-06FJX-06FJX-74
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
8	2	618241	3/4MJIC-90-3/4MOR LBO	22	1	616180	04-451TC-06FJX-06FJX-143
9	2	618754	9/16MOR PLUG, HEX SOCKET	23	1	616562	08-451TC-08FJX-08FJX90-66
10	6	618440	9/16MJIC-90-9/16MOR EX LG LBO	24	1	616182	06-451TC-06FJX-06FJX-41
11	1	618327	3/4MJIC-7/8MOR ADPTR	25	1	616183	06-451TC-06FJX-06FJX-52
12	1	618807	HYD CPLR, FEM #12, 3/4FOR	26	1	616563	06-451TC-06FJX-06FJX-141
13	1	618806	HYD CPLR,MALE #12, 7/8FOR	27	1	616564	06-451TC-06FJX-06FJX-151
14	1	616560	04-451TC-06FJX-06FJX-87				H/A





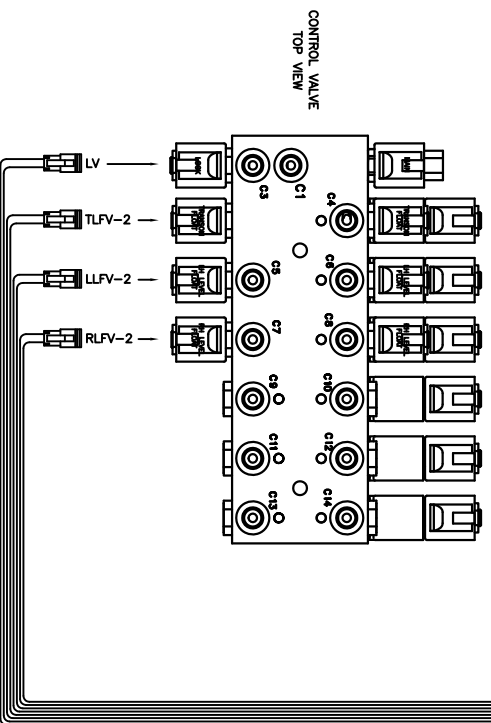
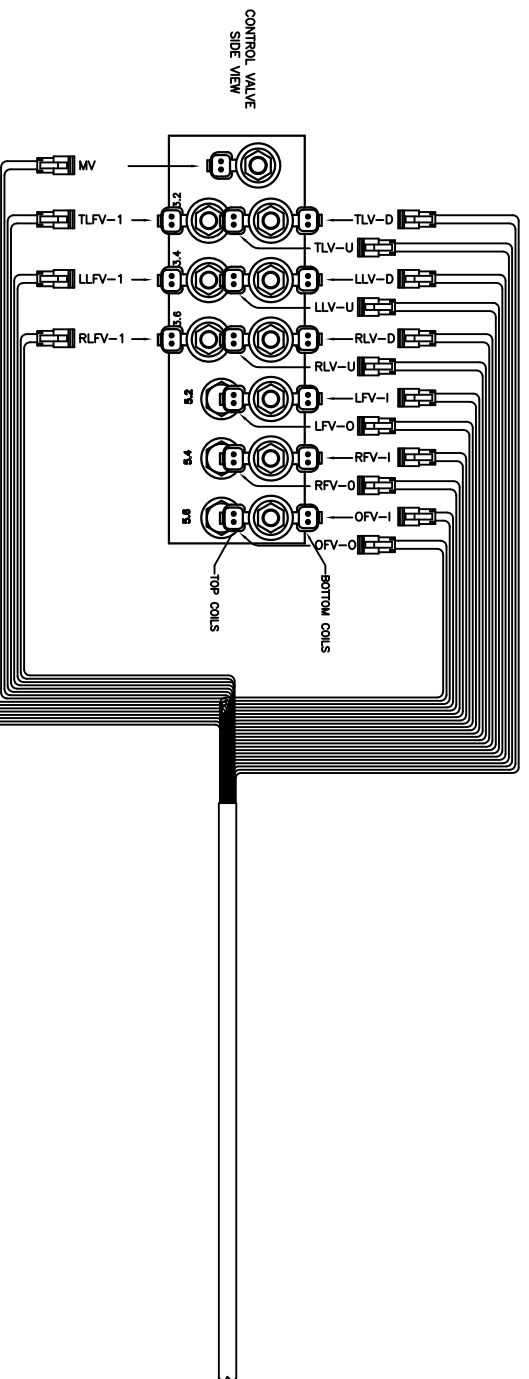
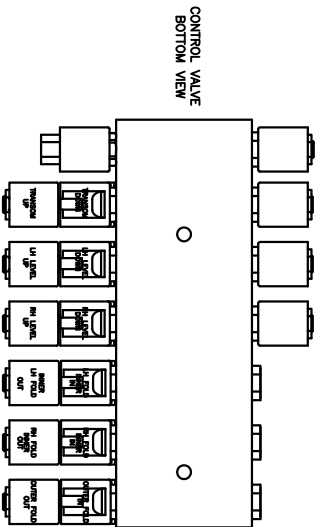
NITROGEN T-BAR 40FT HYD DIAGRAM 2005-2006  
REFERENCE DRAWING NO. 499225

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
2	4	621558	HYD CYL, 3.00 X 11.00 X 1.380	19	2	616177	04-451TC-06FJX-06FJX-74
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	20	1	616414	04-451TC-06FJX-06FJX-126
4	1	606215	NTB CTRL VLV, STS PWRSYS 05	21	1	616179	04-451TC-06FJX-06FJX-129
5	2	618688	9/16MJ-90-9/16MOR .025 CHK VLV	22	1	616180	04-451TC-06FJX-06FJX-143
6	4	618732	9/16JIC .031 ORIFICE ADPTR	23	2	616260	04-451TC-06FJX-06FJX-200
7	25	618119	9/16MJIC-90-9/16MOR LBO	24	1	616182	06-451TC-06FJX-06FJX-41
8	1	618241	3/4MJIC-90-3/4MOR LBO	25	1	616183	06-451TC-06FJX-06FJX-52
9	2	618444	9/16MOR RUN TEE-9/16MJIC	26	1	616184	06-451TC-06FJX-06FJX-137
10	2	618618	9/16MJIC-90-9/16FJIC SWIV LBO	27	1	616185	06-451TC-06FJX-06FJX-147
11	2	618669	3/4FJIC SWIV-3/4MOR ADPTR	28	2	616186	08-451TC-08FJX-08FJX-62
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	04-451TC-06FJX-06FJX-64	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				

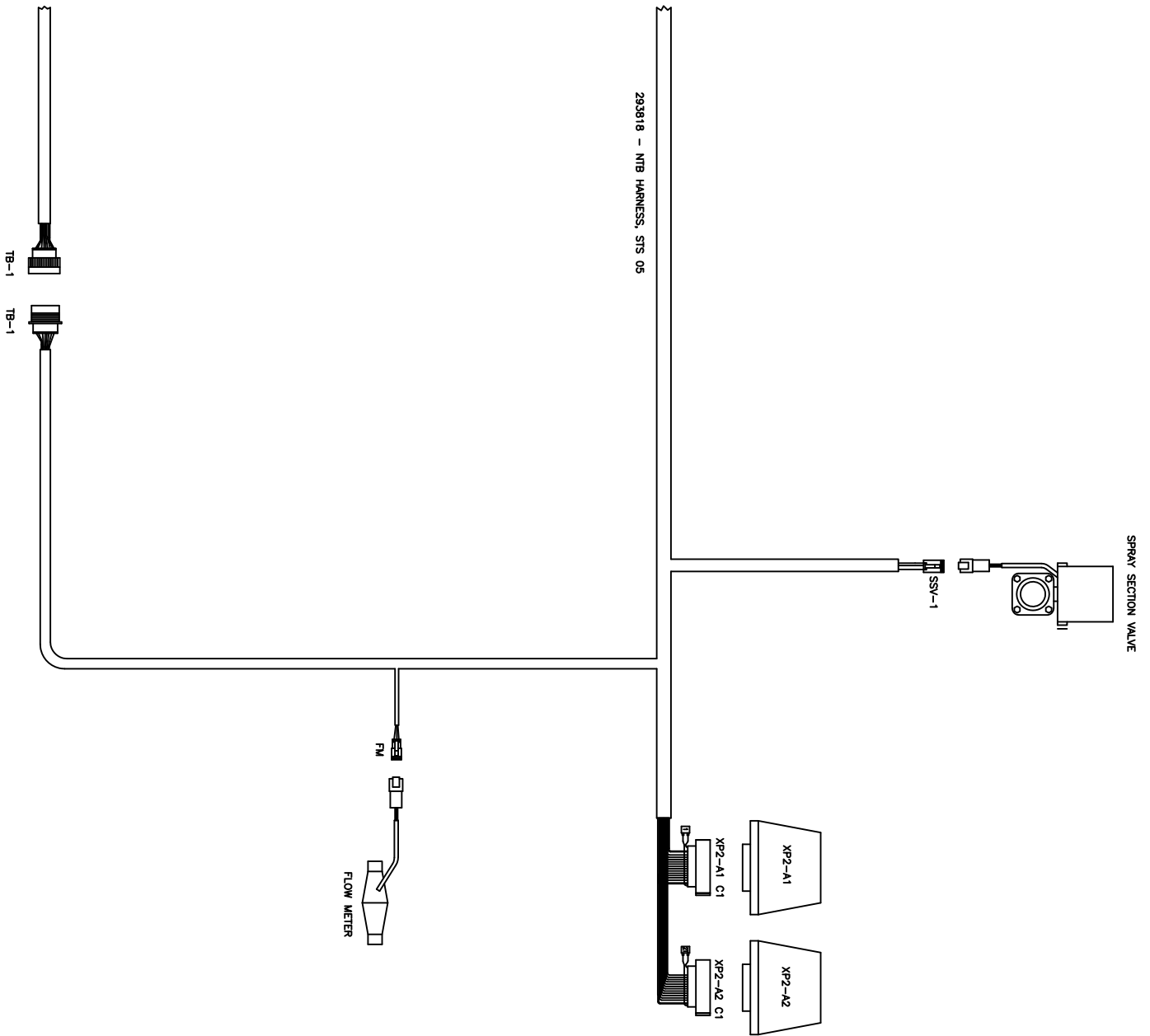


NITROGEN T-BAR 40FT HYD DIAGRAM 2007-2012  
REFERENCE DRAWING NO. 499226

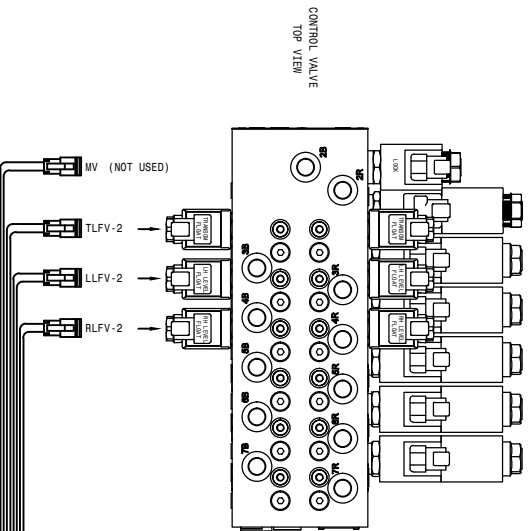
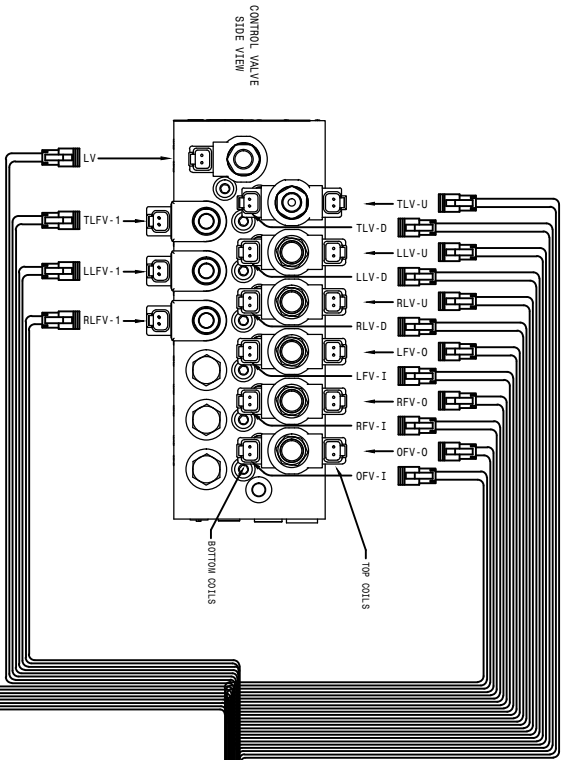
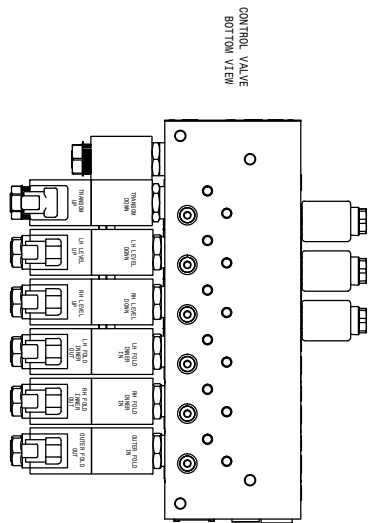
DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION
1	2	621568	HYD CYL, 2.00 X 18.00 X 1.125	17	1	616084	04-451TC-06FJX-06FJX-46
2	4	621558	HYD CYL, 3.00 X 11.00 X 1.380	18	1	616176	04-451TC-06FJX-06FJX-58
3	2	621566	HYD CYL, 2.50 X 11.00 X 1.375	19	2	616177	04-451TC-06FJX-06FJX-74
4	1	606280	HYD VALVE, SAUER 6SPL NTB 07	20	2	616414	04-451TC-06FJX-06FJX-126
5	4	618689	9/16MJ-90-9/16MOR .042 CHK VLV	21	1	616561	04-451TC-06FJX-06FJX-132
6	4	618732	9/16JIC .031 ORIFICE ADPTR	22	1	616180	04-451TC-06FJX-06FJX-143
7	20	618119	9/16MJIC-90-9/16MOR LBO	23	2	616260	04-451TC-06FJX-06FJX-200
8	2	618241	3/4MJIC-90-3/4MOR LBO	24	1	616182	06-451TC-06FJX-06FJX-41
9	2	618444	9/16MJIC-RUN TEE-9/16MJIC	25	1	616183	06-451TC-06FJX-06FJX-52
10	2	618618	9/16MJIC-90-9/16FJIC SWIV LBO	26	1	616563	06-451TC-06FJX-06FJX-141
11	1	618327	3/4MJIC-7/8MOR ADPTR	27	1	616564	06-451TC-06FJX-06FJX-151
12	1	618807	HYD CPLR, FEM #12, 3/4FOR	28	1	616234	08-451TC-08FJX-08FJX-66
13	1	618806	HYD CPLR, MALE #12, 7/8FOR	29	1	616562	08-451TC-08FJX-08FJX90-66
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	2	616209	04-451TC-06FJX-06FJX-64				



293783 - CAB TO BOOM HARNESS, STS 05

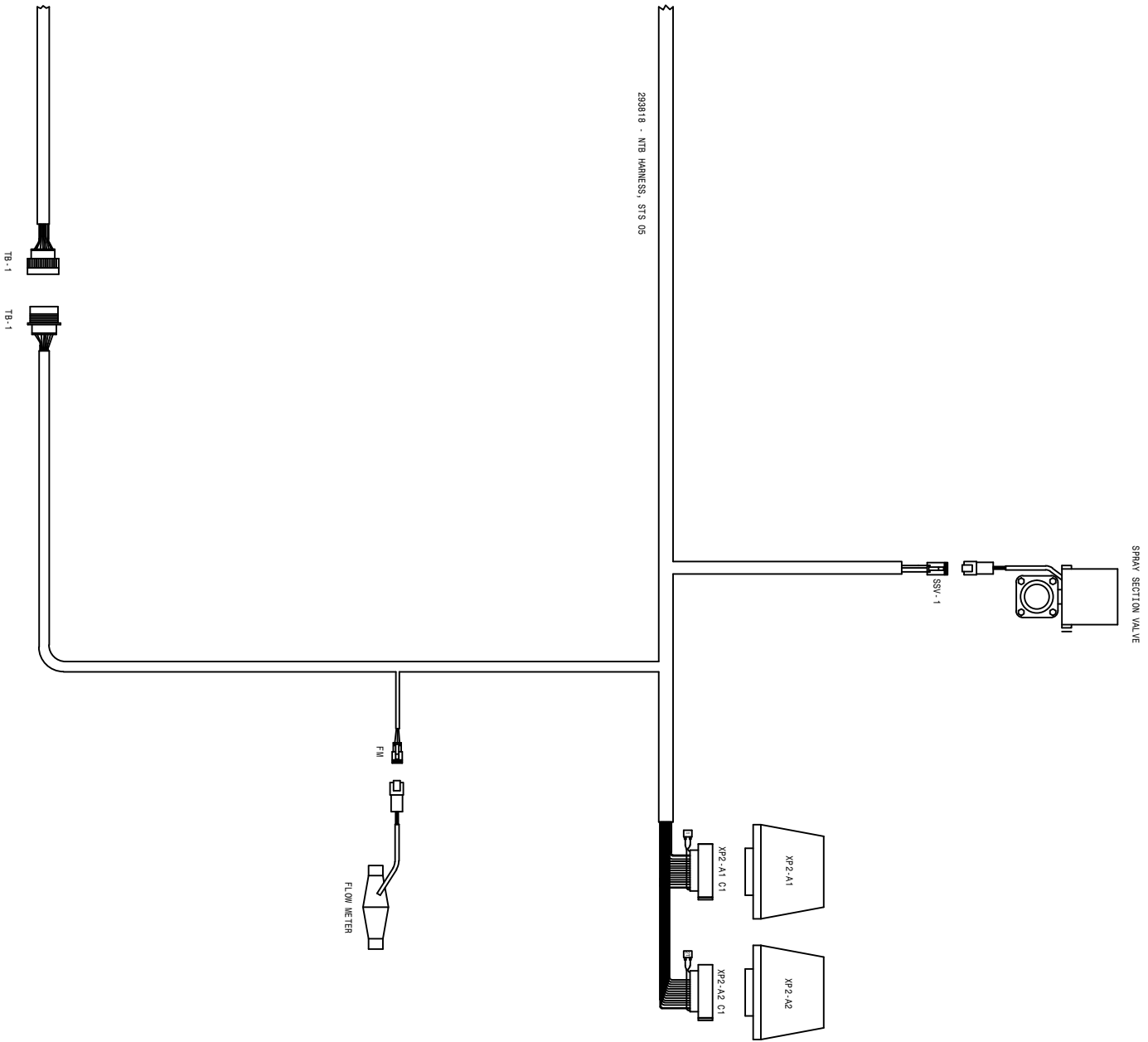


02-18-05 TLM  
 STS NTB WIRING DIAGRAM 05  
 REVISION DATE: 498880

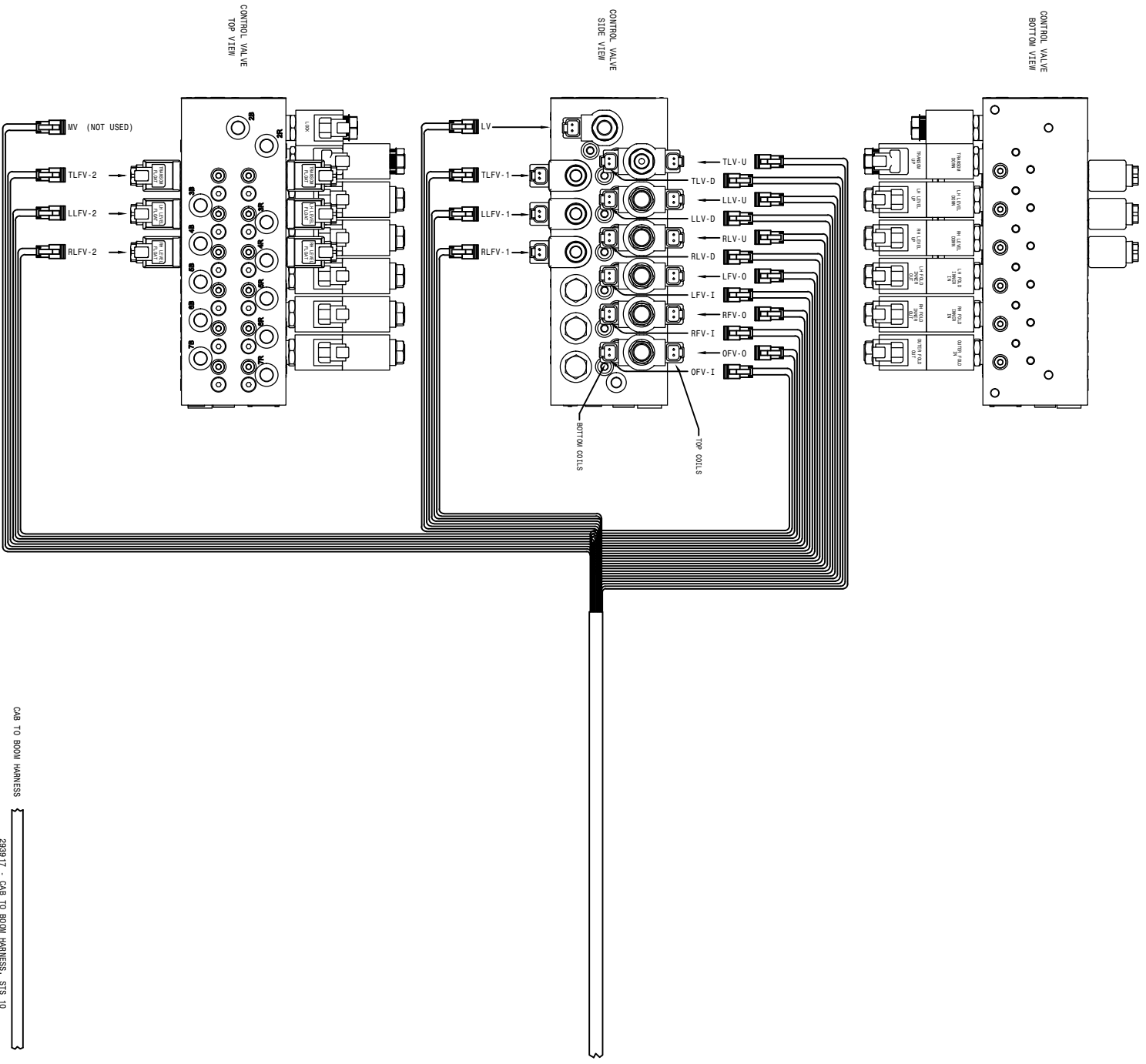


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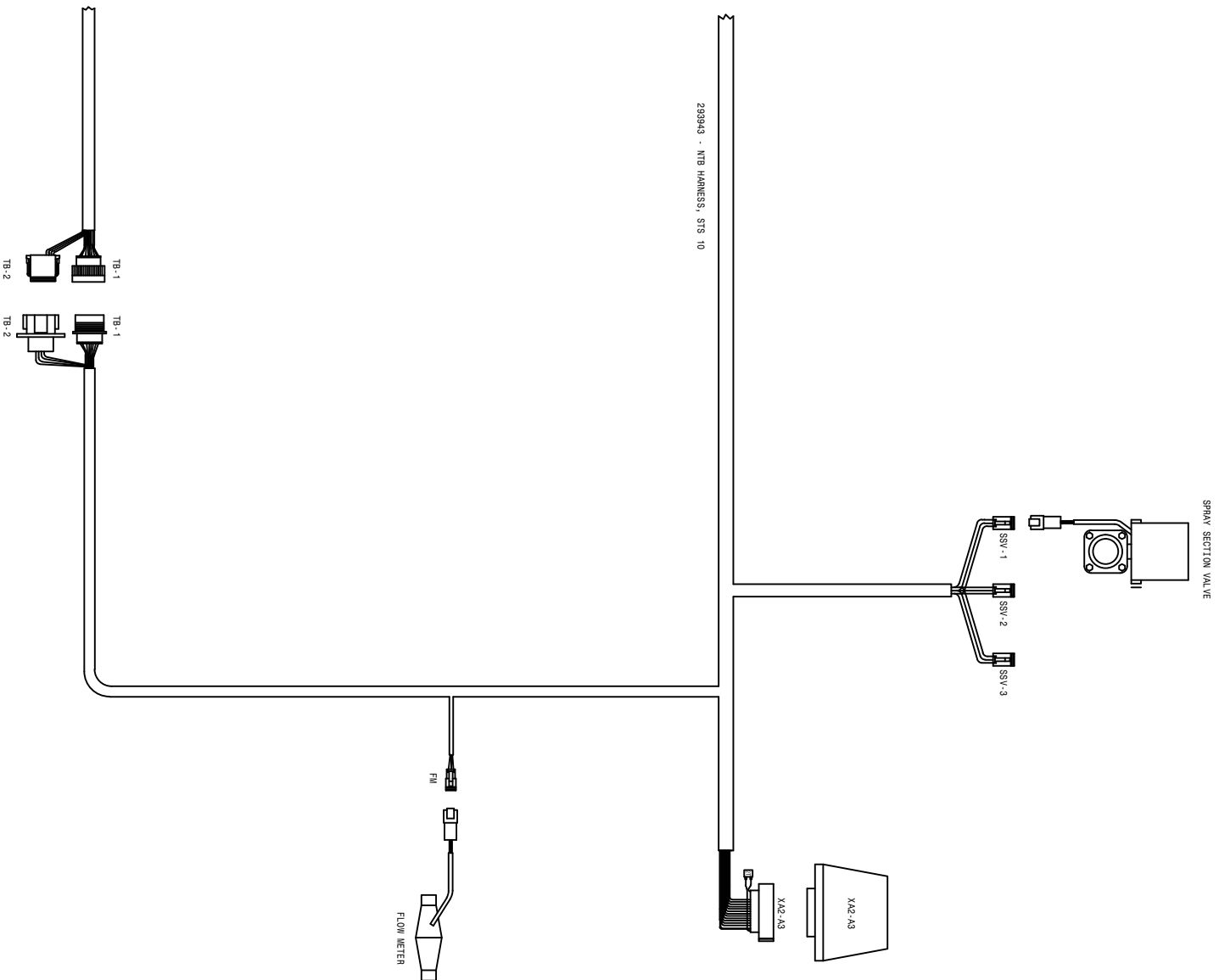




01-28-07 TLM  
 STS NTB WIRING DIAGRAM 07  
 REVISION DATE: 07-17-14  
 498957







06-11-09 TLU  
 STS NTB WIRING DIAGRAM 10  
 REVISION DATE: 07-17-14  
**499045**

# Notes:



