

PARTS MANUAL
FOR
HAGIE STS NITROGEN TOOLBAR

HAGIE MANUFACTURING COMPANY

BOX 273 CLARION, IOWA 50525

(515) 532-2861

COVERS MACHINE SERIAL NUMBERS: U69503330001 thru U69503330100

U69603330001 thru U69603330100

U6950440001 thru U6950440100

U6960440001 thru U6960440100

04-04 493289
02-08

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

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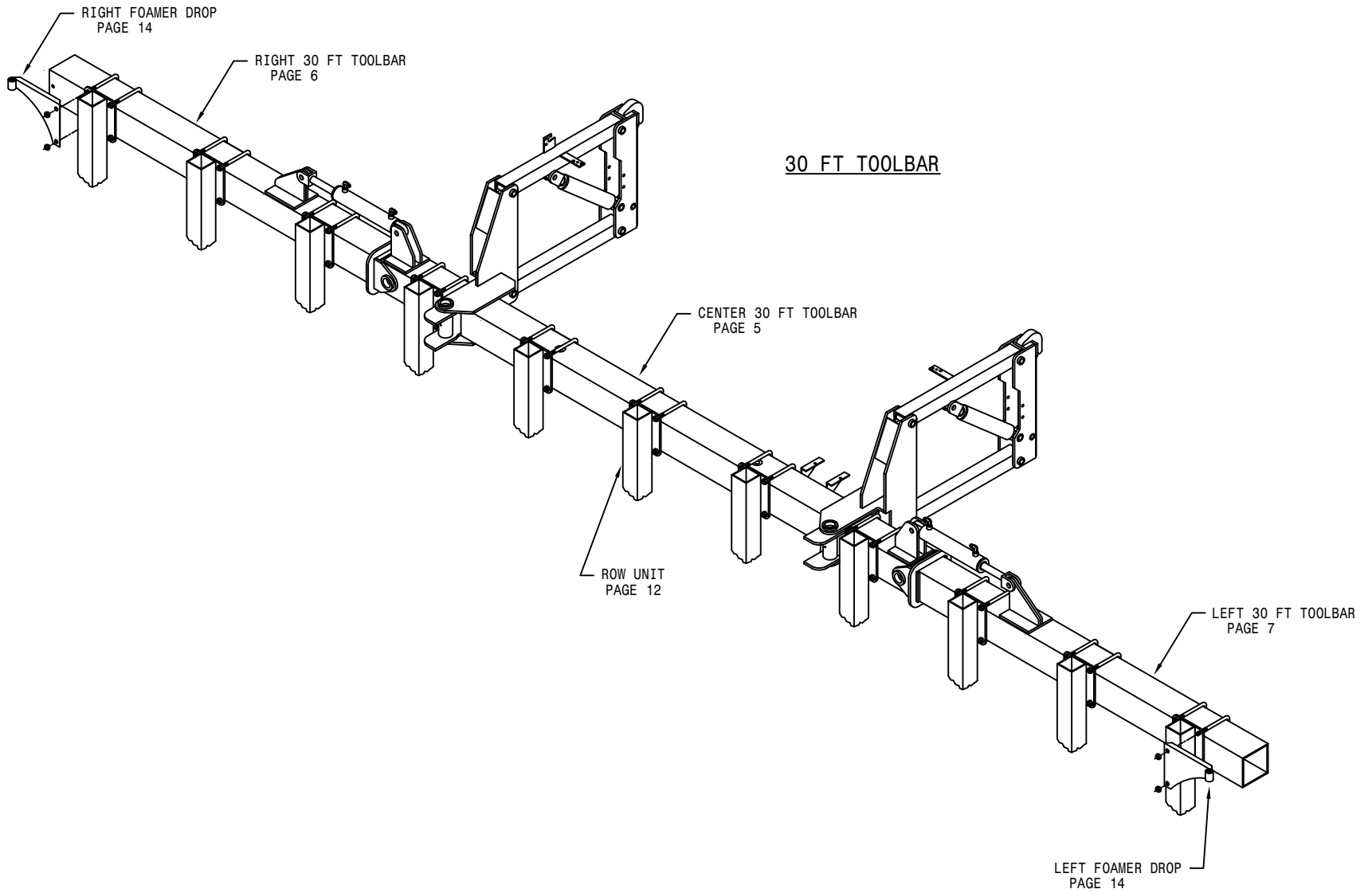
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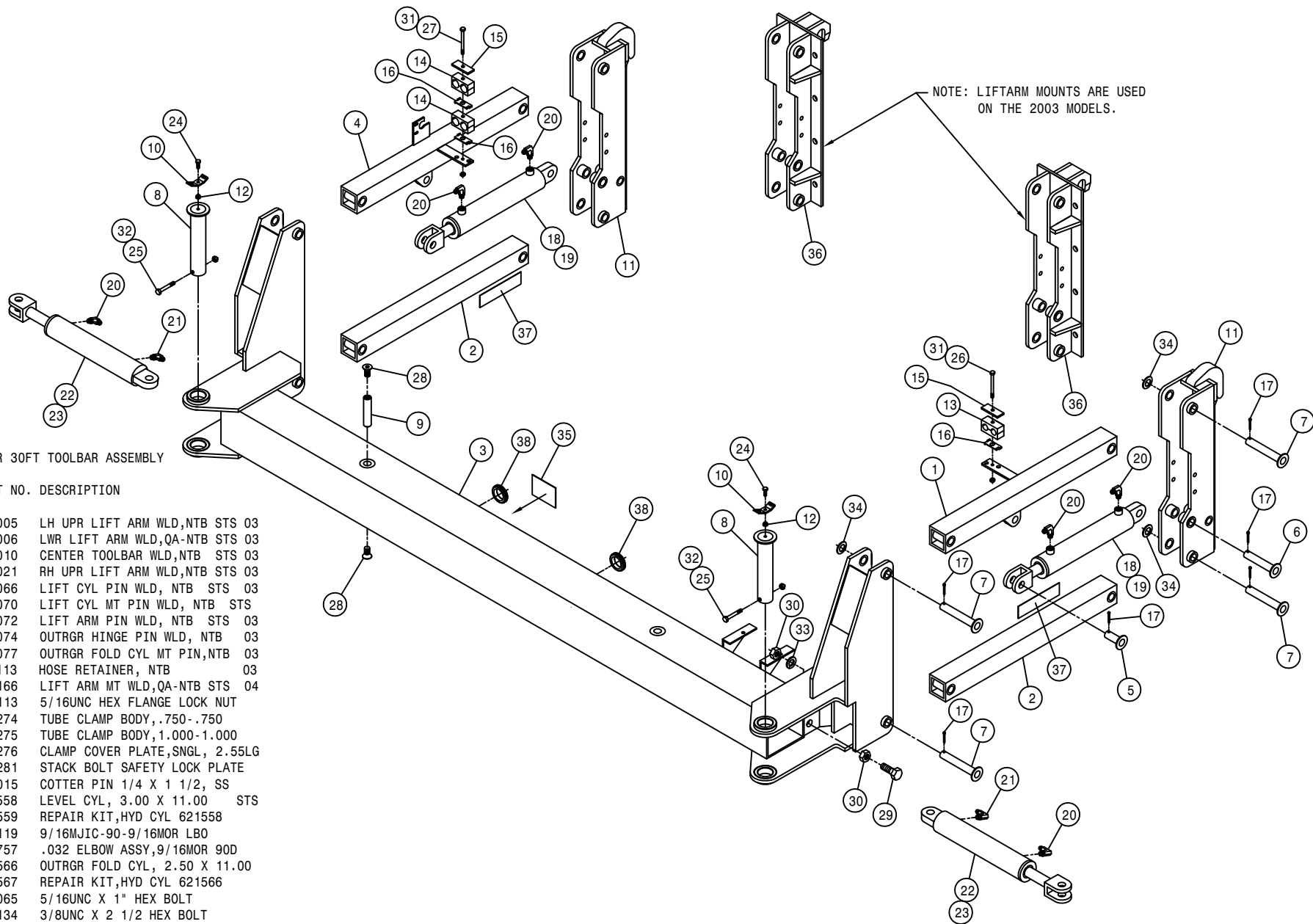
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CENTER 30FT TOOLBAR ASSEMBLY

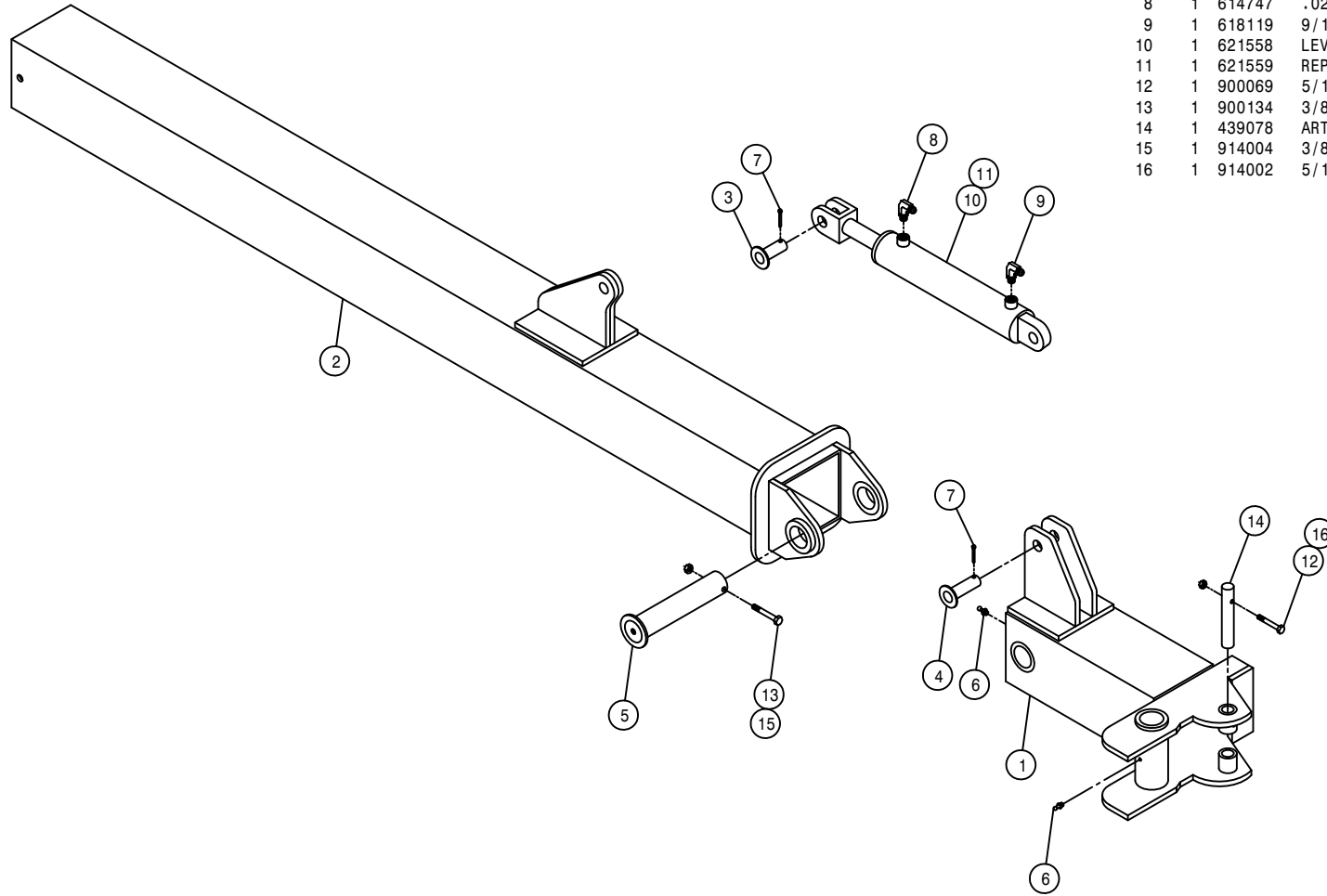
DET. QTY PART NO. DESCRIPTION

1	1	439005	LH UPR LIFT ARM WLD,NTB STS 03
2	2	439006	LWR LIFT ARM WLD,QA-NTB STS 03
3	1	439010	CENTER TOOLBAR WLD,NTB STS 03
4	1	439021	RH UPR LIFT ARM WLD,NTB STS 03
5	2	439066	LIFT CYL PIN WLD, NTB STS 03
6	2	439070	LIFT CYL MT PIN WLD, NTB STS
7	8	439072	LIFT ARM PIN WLD, NTB STS 03
8	2	439074	OUTRGR HINGE PIN WLD, NTB 03
9	2	439077	OUTRGR FOLD CYL MT PIN,NTB 03
10	2	439113	HOSE RETAINER, NTB 03
11	2	439166	LIFT ARM MT WLD,QA-NTB STS 04
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	12	475015	COTTER PIN 1/4 X 1 1/2, SS
18	2	621558	LEVEL CYL, 3.00 X 11.00 STS
19	2	621559	REPAIR KIT,HYD CYL 621558
20	6	618119	9/16MJIC-90-9/16MOR LBO
21	2	614757	.032 ELBOW ASSY,9/16MOR 90D
22	2	621566	OUTRGR FOLD CYL, 2.50 X 11.00
23	2	621567	REPAIR KIT,HYD CYL 621566
24	2	900065	5/16UNC X 1" HEX BOLT
25	2	900134	3/8UNC X 2 1/2 HEX BOLT
26	1	900070	5/16UNC X 2 1/2 BOLT
27	1	900075	5/16UNC X 3 3/4 HEX BOLT
28	4	900393	5/8UNC X 1" FLT SOC CAP SCR
29	4	900534	1" UNC X 3" HEX BOLT
30	8	910017	1" UNC HEX NUT
31	2	914002	5/16UNC HEX STOVER NUT
32	2	914004	3/8UNC HEX STOVER NUT
33	4	920508	1" LOCK WASHER
34	8	920008	1" SAE FLAT WASHER
35	1	650137	DECAL, DANGER, NTB DISCONNECT
36	2	439000	LIFT ARM MT WLD,QA-NTB STS 03
37	2	650219	DECAL,DANGER,NTB DISCONNECT,10
38	2	470552	GROMMET,1.75ID .250GW 2.00GD

RIGHT 30FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

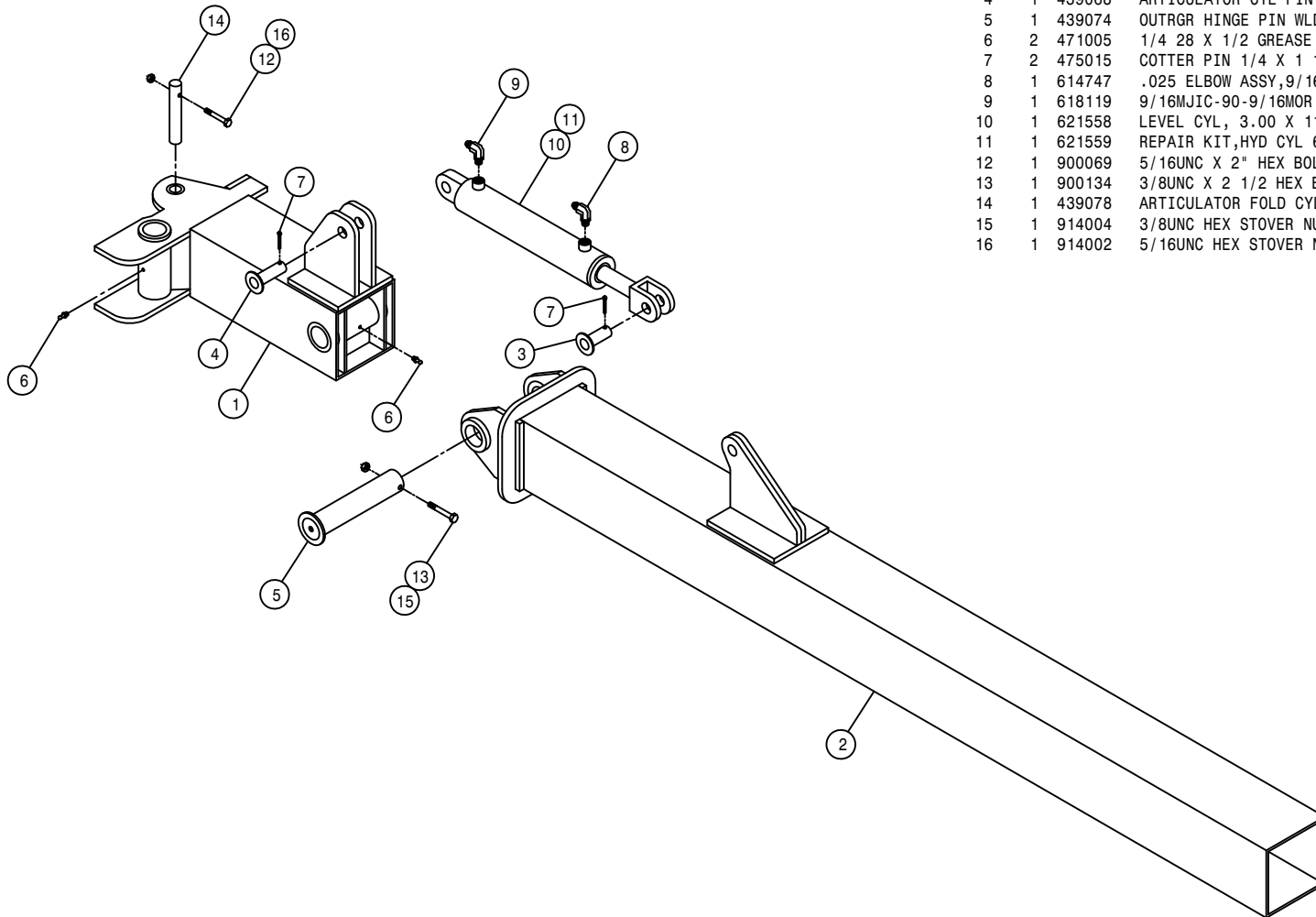
1	1	439025	RH OUTRGR ARTICULATOR WLD NTB
2	1	439040	12R OUTRGR WLD, NTB STS 03
3	1	439066	LIFT CYL PIN WLD, NTB STS 03
4	1	439068	ARTICULATOR CYL PIN WLD, NTB 03
5	1	439074	OUTRGR HINGE PIN WLD, NTB 03
6	2	471005	1/4 28 X 1/2 GREASE ZERK
7	2	475015	COTTER PIN 1/4 X 1 1/2, SS
8	1	614747	.025 ELBOW ASSY, 9/16MOR 90D
9	1	618119	9/16MJIC-90-9/16MOR LBO
10	1	621558	LEVEL CYL, 3.00 X 11.00 STS
11	1	621559	REPAIR KIT, HYD CYL 621558
12	1	900069	5/16UNC X 2" HEX BOLT
13	1	900134	3/8UNC X 2 1/2 HEX BOLT
14	1	439078	ARTICULATOR FOLD CYL PIN, NTB
15	1	914004	3/8UNC HEX STOVER NUT
16	1	914002	5/16UNC HEX STOVER NUT

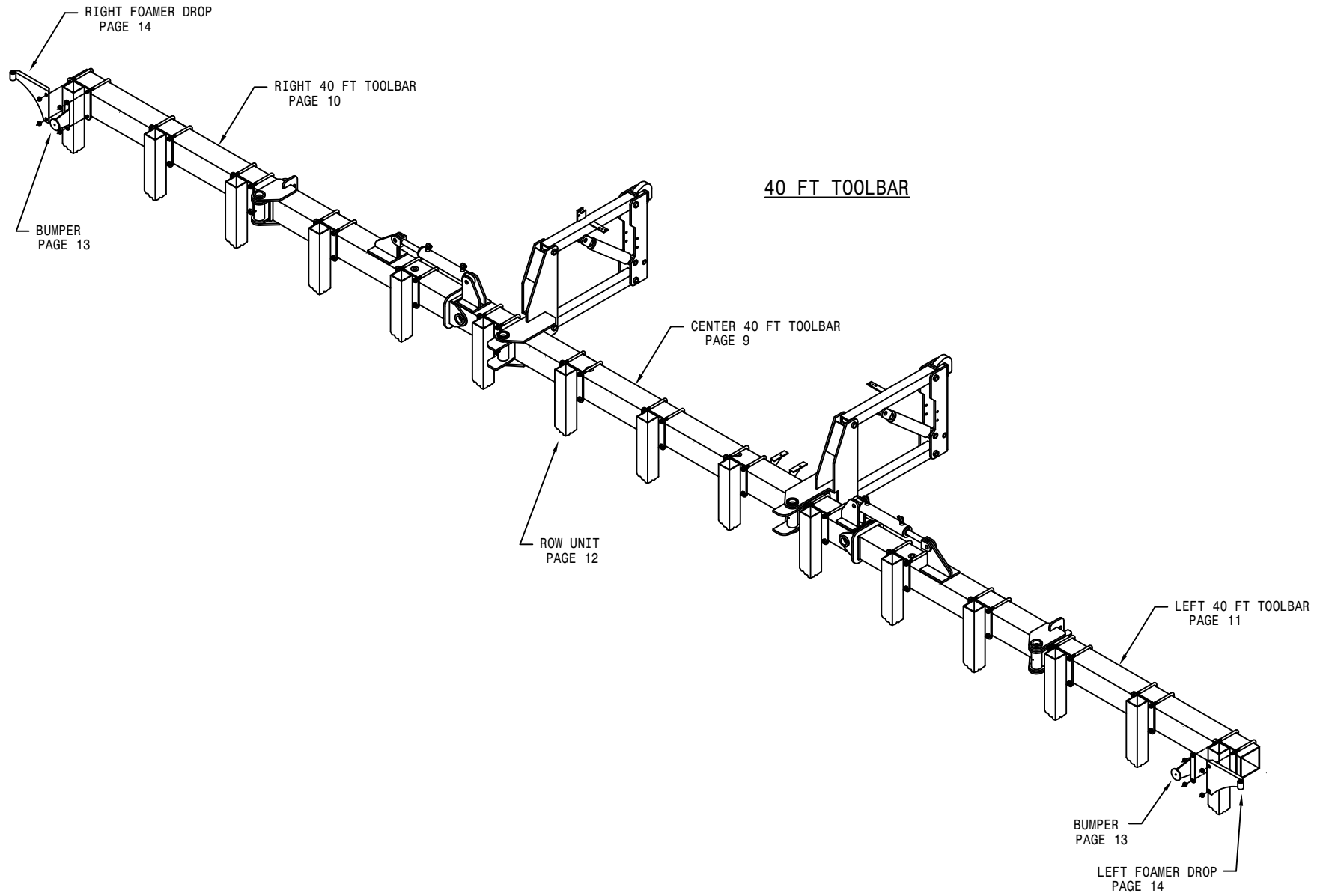


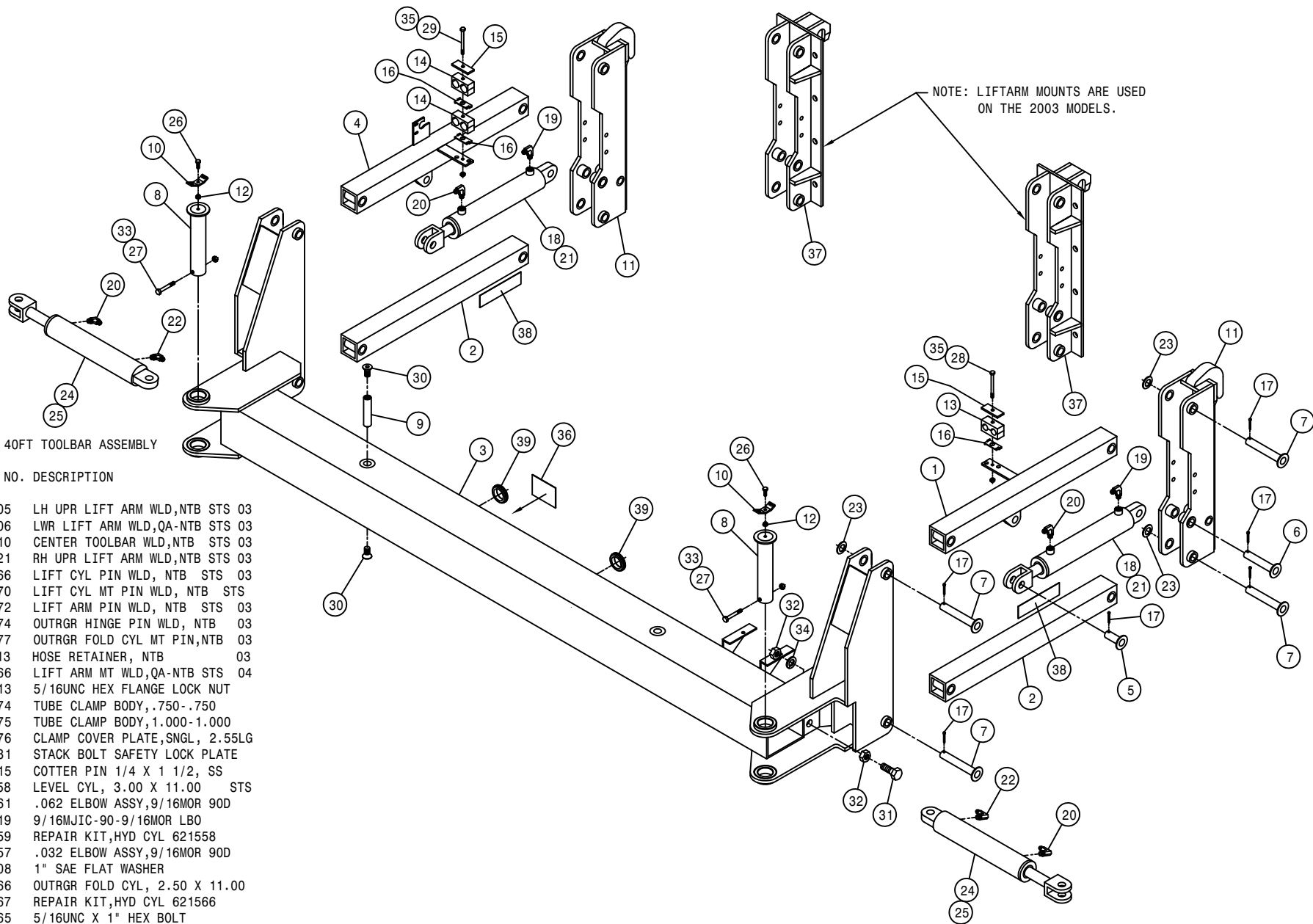
LEFT 30FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

1	1	439026	LH OUTRGR ARTICULATOR WLD NTB
2	1	439040	12R OUTRGR WLD, NTB STS 03
3	1	439066	LIFT CYL PIN WLD, NTB STS 03
4	1	439068	ARTICULATOR CYL PIN WLD, NTB 03
5	1	439074	OUTRGR HINGE PIN WLD, NTB 03
6	2	471005	1/4 28 X 1/2 GREASE ZERK
7	2	475015	COTTER PIN 1/4 X 1 1/2, SS
8	1	614747	.025 ELBOW ASSY, 9/16MOR 90D
9	1	618119	9/16MJIC-90-9/16MOR LBO
10	1	621558	LEVEL CYL, 3.00 X 11.00 STS
11	1	621559	REPAIR KIT, HYD CYL 621558
12	1	900069	5/16UNC X 2" HEX BOLT
13	1	900134	3/8UNC X 2 1/2 HEX BOLT
14	1	439078	ARTICULATOR FOLD CYL PIN, NTB
15	1	914004	3/8UNC HEX STOVER NUT
16	1	914002	5/16UNC HEX STOVER NUT







CENTER 40FT TOOLBAR ASSEMBLY

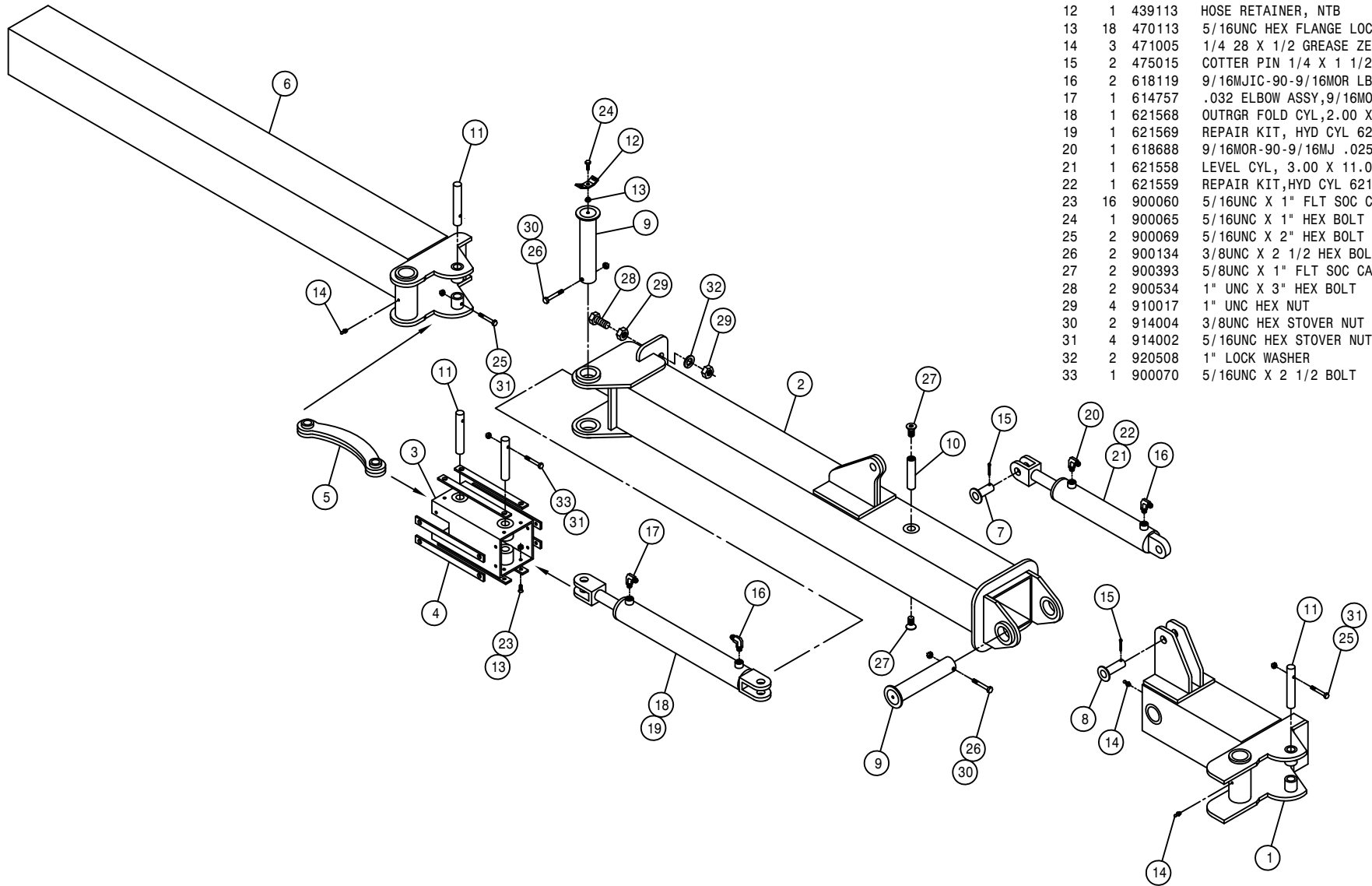
DET. QTY PART NO. DESCRIPTION

1	1	439005	LH UPR LIFT ARM WLD,NTB STS 03
2	2	439006	LWR LIFT ARM WLD,QA-NTB STS 03
3	1	439010	CENTER TOOLBAR WLD,NTB STS 03
4	1	439021	RH UPR LIFT ARM WLD,NTB STS 03
5	2	439066	LIFT CYL PIN WLD, NTB STS 03
6	2	439070	LIFT CYL MT PIN WLD, NTB STS
7	8	439072	LIFT ARM PIN WLD, NTB STS 03
8	2	439074	OUTRGR HINGE PIN WLD, NTB 03
9	2	439077	OUTRGR FOLD CYL MT PIN,NTB 03
10	2	439113	HOSE RETAINER, NTB 03
11	2	439166	LIFT ARM MT WLD,QA-NTB STS 04
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	12	475015	COTTER PIN 1/4 X 1 1/2, SS
18	2	621558	LEVEL CYL, 3.00 X 11.00 STS
19	2	614761	.062 ELBOW ASSY,9/16MOR 90D
20	4	618119	9/16MJIC-90-9/16MOR LBO
21	2	621559	REPAIR KIT,HYD CYL 621558
22	2	614757	.032 ELBOW ASSY,9/16MOR 90D
23	8	920008	1" SAE FLAT WASHER
24	2	621566	OUTRGR FOLD CYL, 2.50 X 11.00
25	2	621567	REPAIR KIT,HYD CYL 621566
26	2	900065	5/16UNC X 1" HEX BOLT
27	2	900134	3/8UNC X 2 1/2 HEX BOLT
28	1	900070	5/16UNC X 2 1/2 BOLT
29	1	900075	5/16UNC X 3 3/4 HEX BOLT
30	4	900393	5/8UNC X 1" FLT SOC CAP SCR
31	4	900534	1" UNC X 3" HEX BOLT
32	8	910017	1" UNC HEX NUT
33	2	914004	3/8UNC HEX STOVER NUT
34	4	920508	1" LOCK WASHER
35	2	914002	5/16UNC HEX STOVER NUT
36	1	650137	DECAL, DANGER, NTB DISCONNECT
37	2	439000	LIFT ARM MT WLD,QA-NTB STS 03
38	2	650219	DECAL,DANGER,NTB DISCONNECT,10
39	2	470552	GROMMET,1.75ID .250GW 2.00GD

RIGHT 40FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

DET.	QTY	PART NO.	DESCRIPTION
1	1	439025	RH OUTRGR ARTICULATOR WLD NTB
2	1	439048	RH 16R OUTRGR WLD, NTB STS 03
3	1	439054	OUTRGR EXT FOLD SLIDE WLD, NTB
4	8	439058	FOLD SLIDE WEAR STRIP, 16R NTB
5	1	439060	OUTRGR EXT FOLD ARM WLD, NTB 03
6	1	439064	OUTRGR EXT ARM WLD, 16R NTB 03
7	1	439066	LIFT CYL PIN WLD, NTB STS 03
8	1	439068	ARTICULATOR CYL PIN WLD, NTB 03
9	2	439074	OUTRGR HINGE PIN WLD, NTB 03
10	1	439077	OUTRGR FOLD CYL MT PIN, NTB 03
11	4	439078	ARTICULATOR FOLD CYL PIN, NTB
12	1	439113	HOSE RETAINER, NTB 03
13	18	470113	5/16UNC HEX FLANGE LOCK NUT
14	3	471005	1/4 28 X 1/2 GREASE ZERK
15	2	475015	COTTER PIN 1/4 X 1 1/2, SS
16	2	618119	9/16MJIC-90-9/16MOR LBO
17	1	614757	.032 ELBOW ASSY, 9/16MOR 90D
18	1	621568	OUTRGR FOLD CYL, 2.00 X 18
19	1	621569	REPAIR KIT, HYD CYL 621568
20	1	618688	9/16MOR-90-9/16MJ .025 CHK VLV
21	1	621558	LEVEL CYL, 3.00 X 11.00 STS
22	1	621559	REPAIR KIT, HYD CYL 621558
23	16	900060	5/16UNC X 1" FLT SOC CAP SCR
24	1	900065	5/16UNC X 1" HEX BOLT
25	2	900069	5/16UNC X 2" HEX BOLT
26	2	900134	3/8UNC X 2 1/2 HEX BOLT
27	2	900393	5/8UNC X 1" FLT SOC CAP SCR
28	2	900534	1" UNC X 3" HEX BOLT
29	4	910017	1" UNC HEX NUT
30	2	914004	3/8UNC HEX STOVER NUT
31	4	914002	5/16UNC HEX STOVER NUT
32	2	920508	1" LOCK WASHER
33	1	900070	5/16UNC X 2 1/2 BOLT



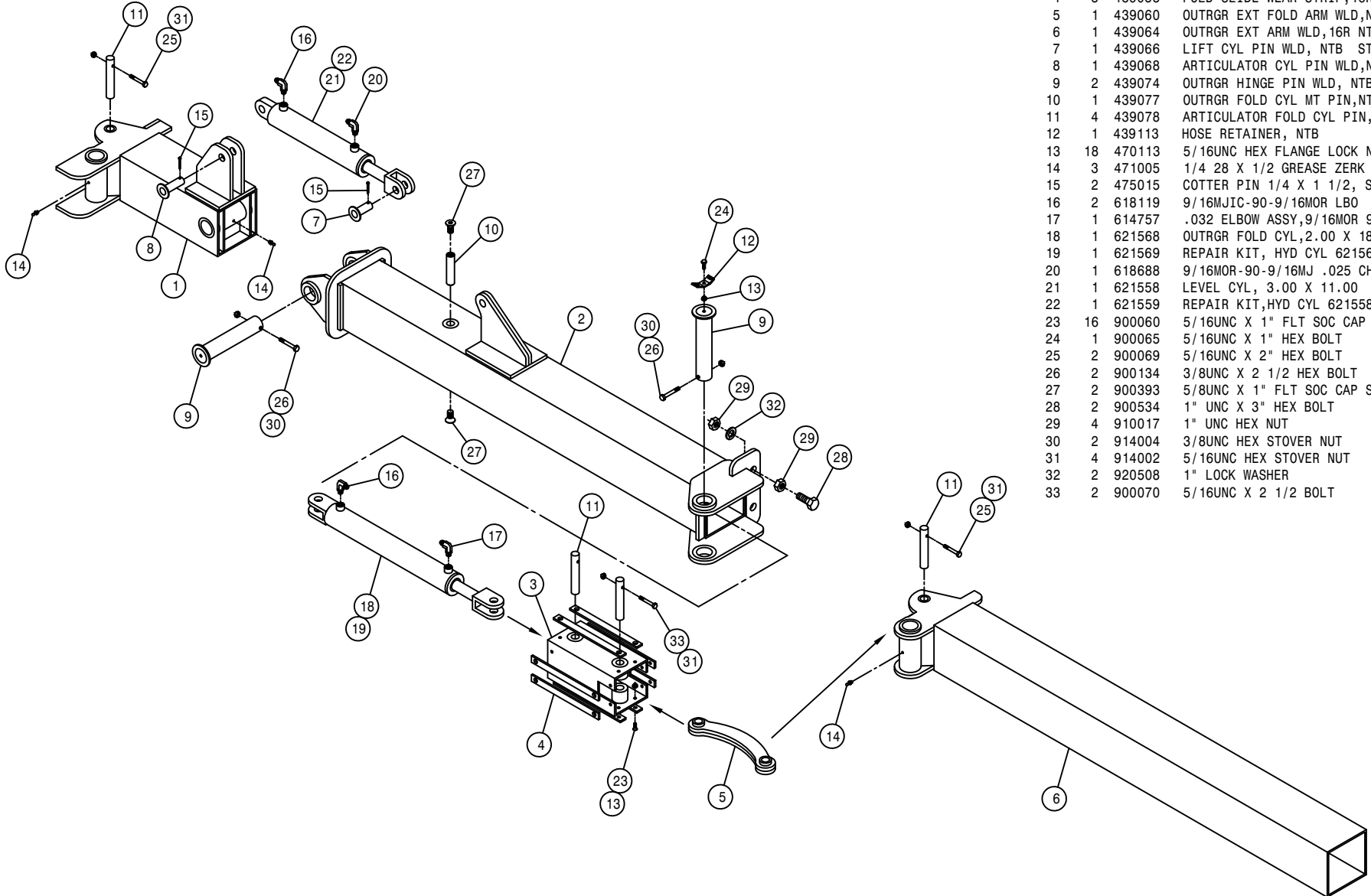
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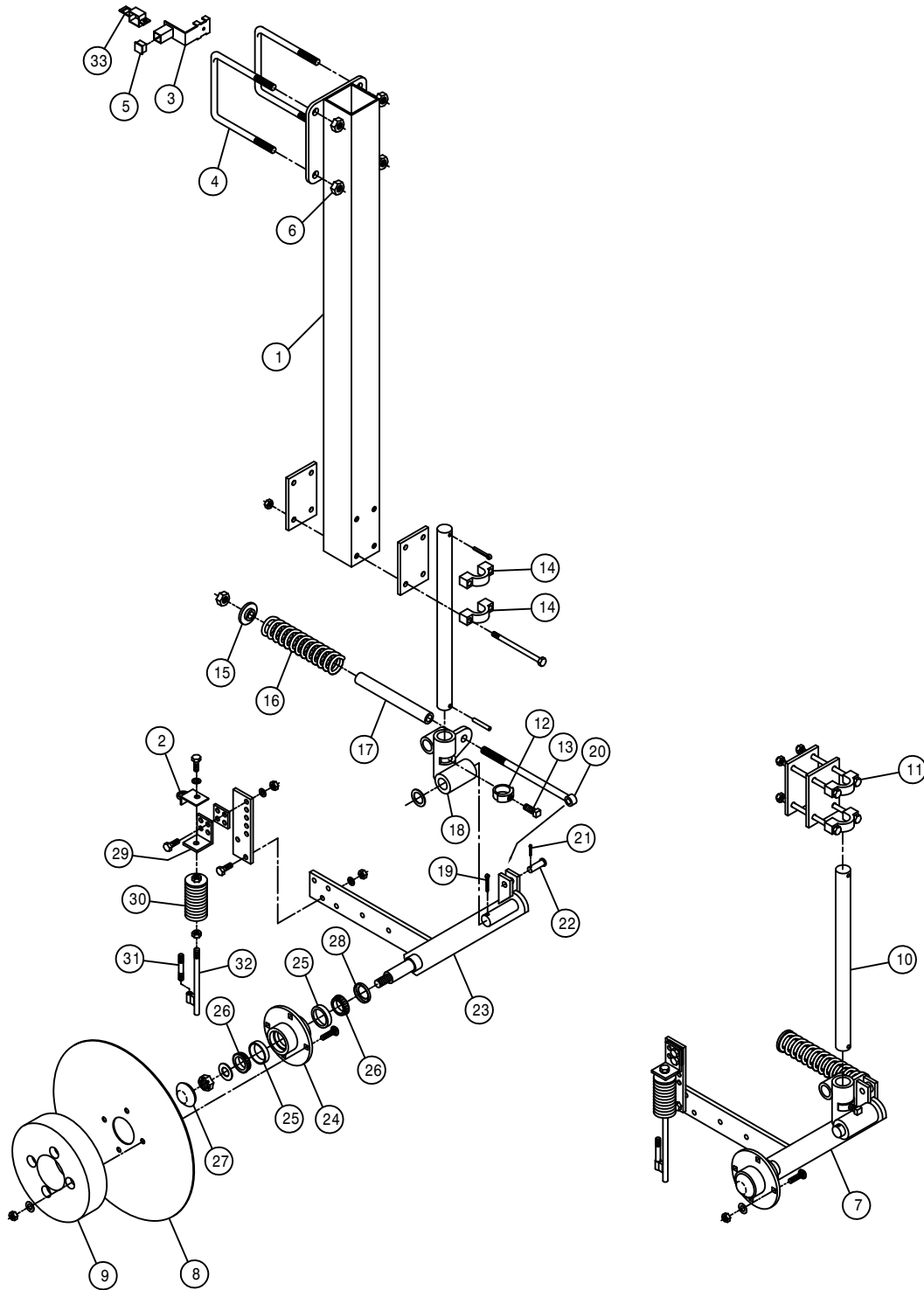
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LEFT 40FT TOOLBAR ASSEMBLY

DET. QTY PART NO. DESCRIPTION

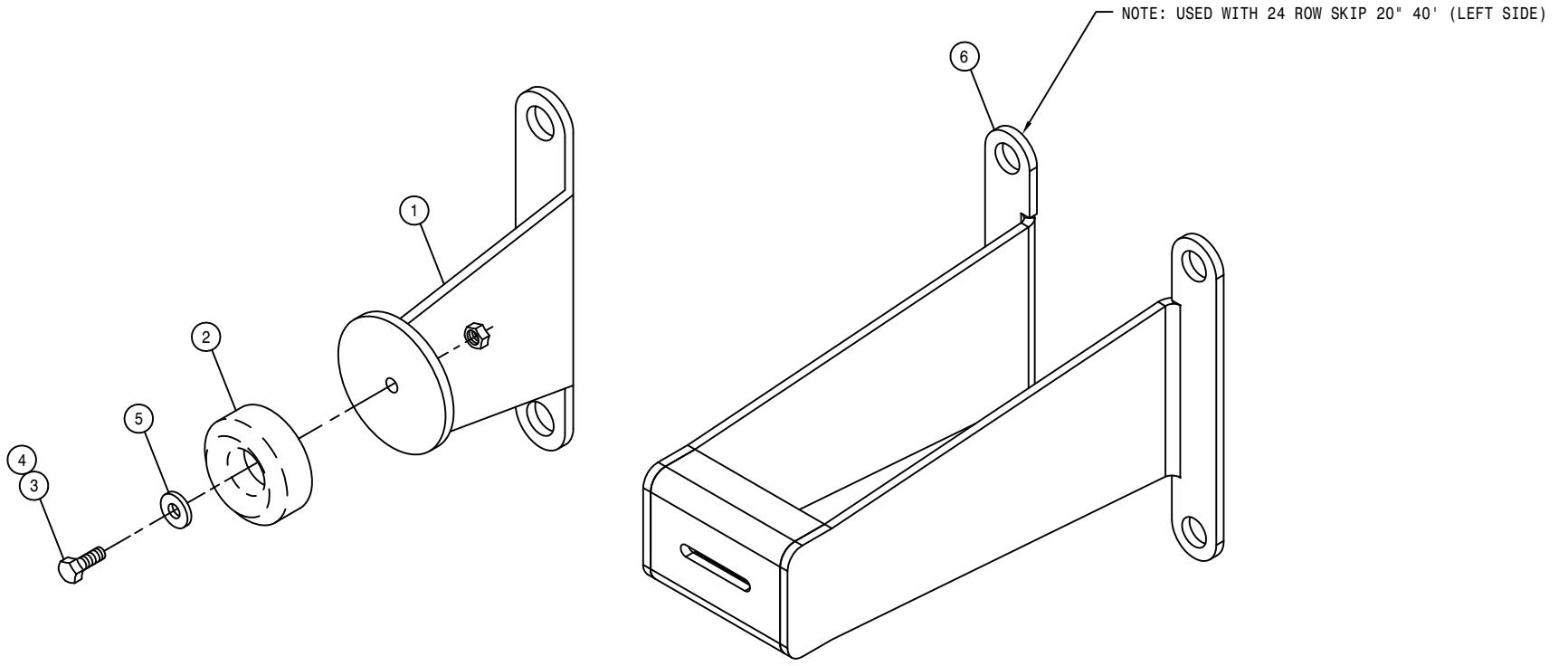
DET.	QTY	PART NO.	DESCRIPTION
1	1	439026	LH OUTRGR ARTICULATOR WLD NTB
2	1	439049	LH 16R OUTRGR WLD, NTB STS 03
3	1	439054	OUTRGR EXT FOLD SLIDE WLD, NTB
4	8	439058	FOLD SLIDE WEAR STRIP, 16R NTB
5	1	439060	OUTRGR EXT FOLD ARM WLD, NTB 03
6	1	439064	OUTRGR EXT ARM WLD, 16R NTB 03
7	1	439066	LIFT CYL PIN WLD, NTB STS 03
8	1	439068	ARTICULATOR CYL PIN WLD, NTB 03
9	2	439074	OUTRGR HINGE PIN WLD, NTB 03
10	1	439077	OUTRGR FOLD CYL MT PIN, NTB 03
11	4	439078	ARTICULATOR FOLD CYL PIN, NTB
12	1	439113	HOSE RETAINER, NTB 03
13	18	470113	5/16UNC HEX FLANGE LOCK NUT
14	3	471005	1/4 28 X 1/2 GREASE ZERK
15	2	475015	COTTER PIN 1/4 X 1 1/2, SS
16	2	618119	9/16MJIC-90-9/16MOR LBO
17	1	614757	.032 ELBOW ASSY, 9/16MOR 90D
18	1	621568	OUTRGR FOLD CYL, 2.00 X 18
19	1	621569	REPAIR KIT, HYD CYL 621568
20	1	618688	9/16MOR-90-9/16MJ .025 CHK VLV
21	1	621558	LEVEL CYL, 3.00 X 11.00 STS
22	1	621559	REPAIR KIT, HYD CYL 621558
23	16	900060	5/16UNC X 1" FLT SOC CAP SCR
24	1	900065	5/16UNC X 1" HEX BOLT
25	2	900069	5/16UNC X 2" HEX BOLT
26	2	900134	3/8UNC X 2 1/2 HEX BOLT
27	2	900393	5/8UNC X 1" FLT SOC CAP SCR
28	2	900534	1" UNC X 3" HEX BOLT
29	4	910017	1" UNC HEX NUT
30	2	914004	3/8UNC HEX STOVER NUT
31	4	914002	5/16UNC HEX STOVER NUT
32	2	920508	1" LOCK WASHER
33	2	900070	5/16UNC X 2 1/2 BOLT





ROW UNIT ASSEMBLY

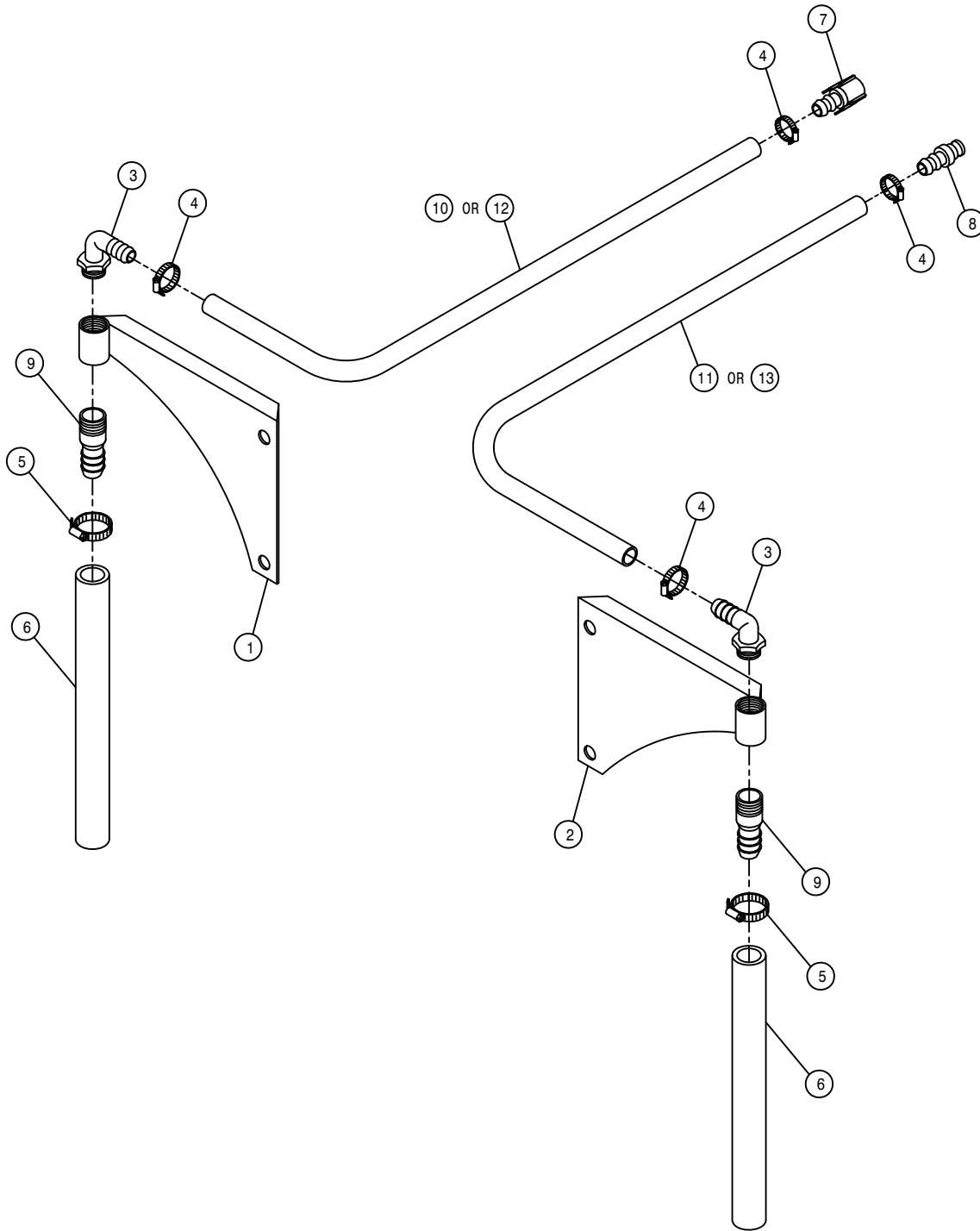
DET.	QTY	PART NO.	DESCRIPTION
1	1	439080	ROW DROP WLD, NTB STS 03
2	1	439092	HOSE RETAINER WLD, 1" NTB
3	1	439096	TIP MT BRKT WLD, NTB STS 03
4	2	473981	.750UNC-7.00ID-8.50 U-BOLT SQ
5	1	629727	FINISH PLUG FOR 1"SQ X 16 GA
6	4	914012	3/4UNC HEX STOVER NUT
7	1	439105	YETTER COULTER,20" GEN III
8	1	439106	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	1	507028	SS PIPE NIPPLE .25NPT-3.00
32	1	439215	INJECTOR ROD, YETTER 2995-212
33	1	737817	NOZL MT CLMP, 1.00 SQ SS, Q-TJET



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



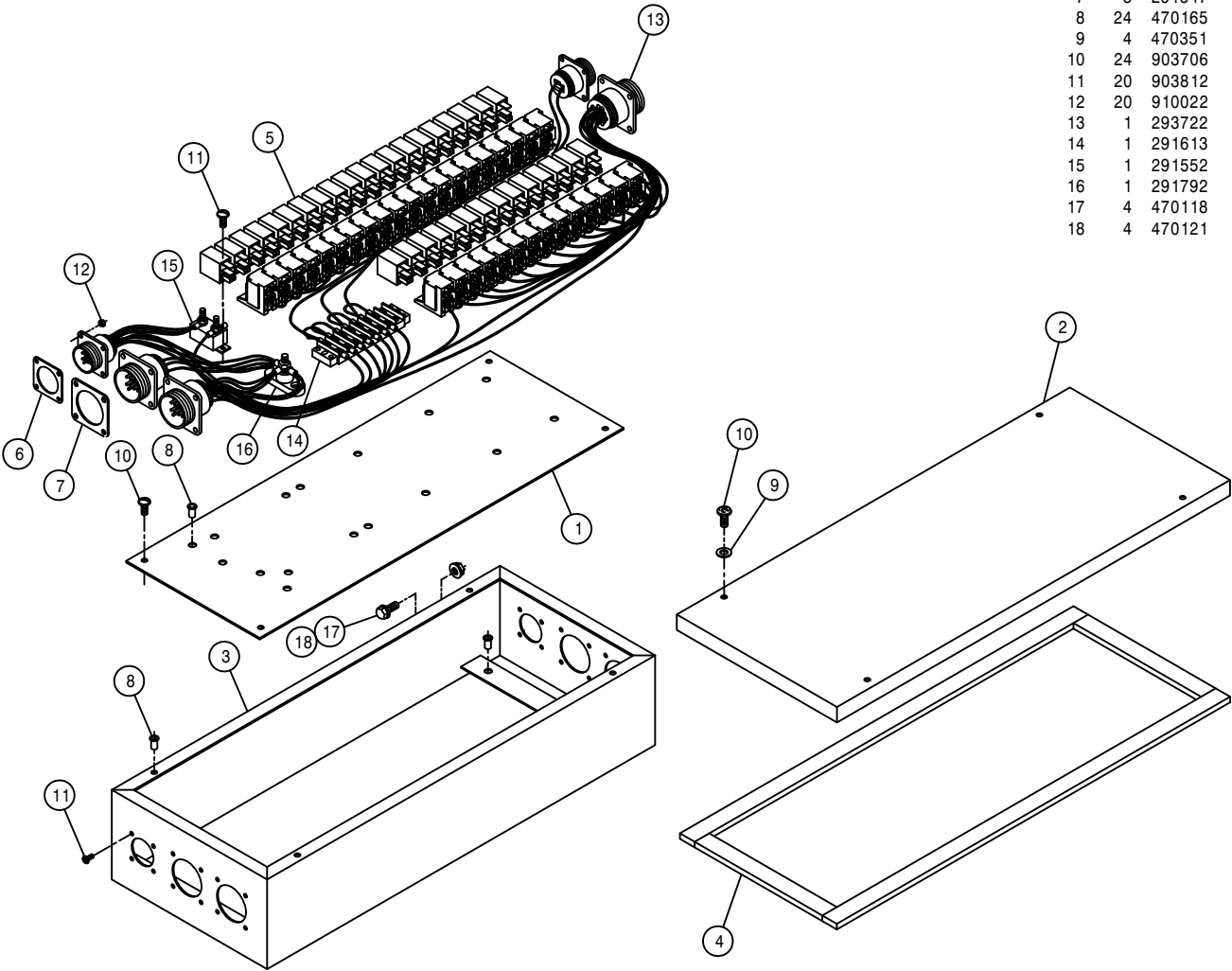
FOAMER DROP AND HOSE ASSEMBLY

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.

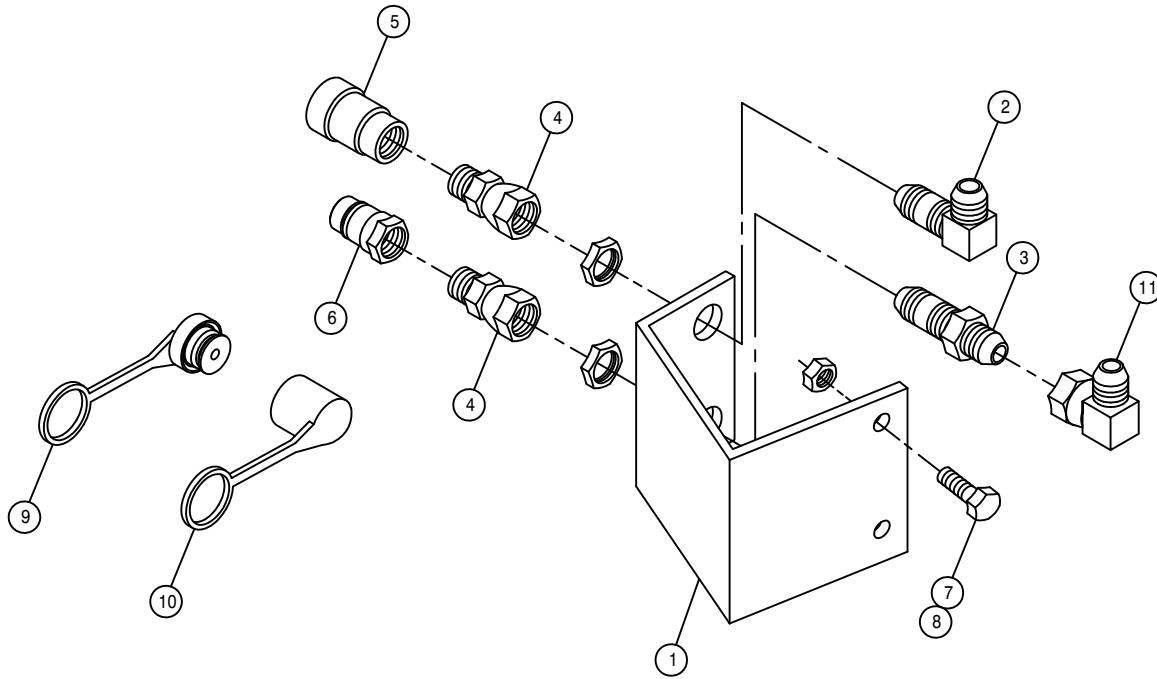
RELAY CONTROL BOX ASSEMBLY

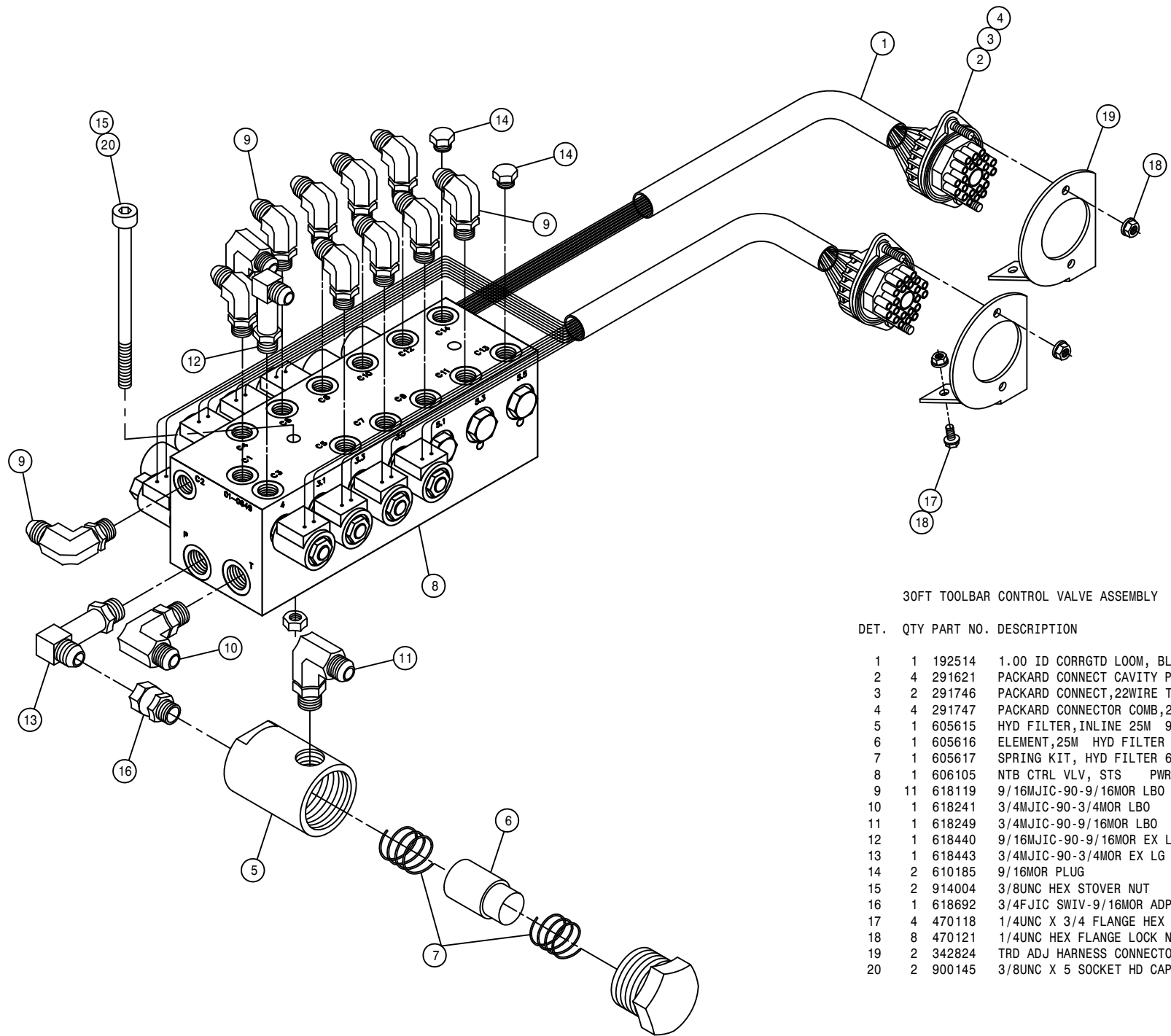
DET.	QTY	PART NO.	DESCRIPTION
	1	003020	NTB RELAY MT PANEL STS 03
	1	003021	NTB RELAY CTRL BOX COVER STS03
	1	003022	NTB RELAY CTRL BOX WLD STS 03
	4	193037	STICKERTITE 1/8 X 3/4
	5	291781	MICRO RELAY, BOSCH 12V SPDT
	2	291846	GASKET, AMP 17-SHELL FLANGED
	3	291847	GASKET, AMP 23-SHELL FLANGED
	8	470165	10-32 NUTSERT .020-.100 MATL
	4	470351	#10 X 1/2 BONDED SEALING WASH
	10	903706	10-32X1/2 PHIL PANHD MACH SCR
	11	903812	6-32 X 1/2 SLT RD HD MACH SCR
	20	910022	6-32 HEX NUT
	13	293722	NTB RELAY BOX HARNESS (293721)
	14	291613	TERMINAL BLOCK 8 POS-2 ROW
	15	291552	CIRCUIT BREAKER,20AMP,INLINEMT
	16	291792	TERM BLOCK,BLACK,3/8-16 SINGLE
	17	470118	1/4UNC X 3/4 FLANGE HEX BOLT
	18	470121	1/4UNC HEX FLANGE LOCK NUT



QUICK ATTACH FITTING ASSEMBLY

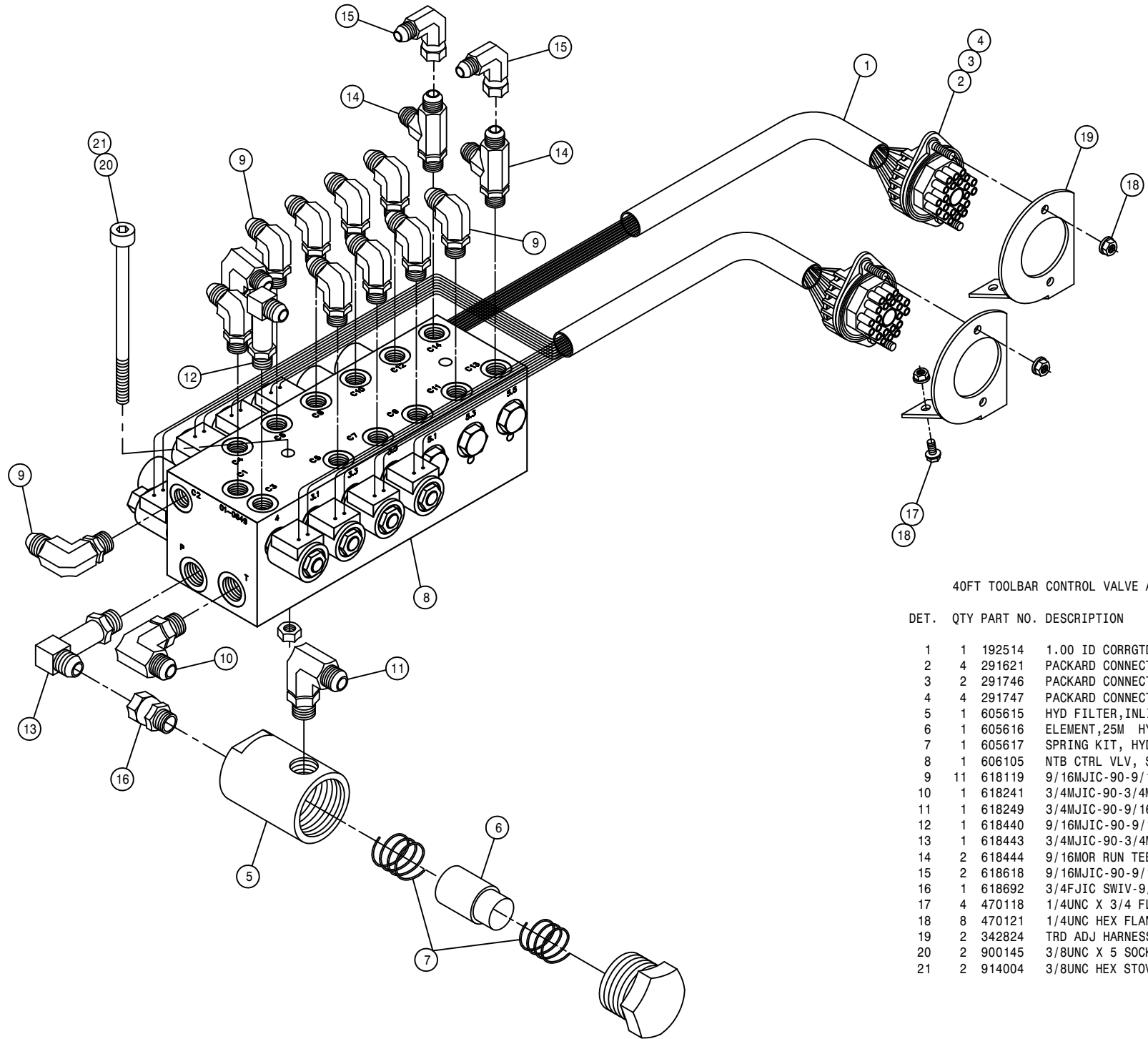
DET.	QTY	PART NO.	DESCRIPTION
1	1	164774	QUICK ATTACH HOSE BRKT,NTB 04
2	1	618010	3/4MJIC-90-BLKHD UNION LBO
3	1	618349	3/4MJIC-3/4MJIC BLKHD UNION
4	2	618669	3/4FJIC SWIV-3/4MOR ADPTR
5	1	618696	HYD COUPLER,FEM 1/2B, 3/4FOR
6	1	618697	HYD COUPLER,MALE 1/2B, 3/4FOR
7	2	900264	1/2UNC X 1 1/4 HEX BOLT
8	2	914008	1/2UNC HEX STOVER NUT
9	1	618635	RUBBER DUST PLUG, 618621/696
10	1	618636	RUBBER DUST CAP, 618622/697
11	1	618609	3/4MJIC-90-3/4FJIC SWIV LBO





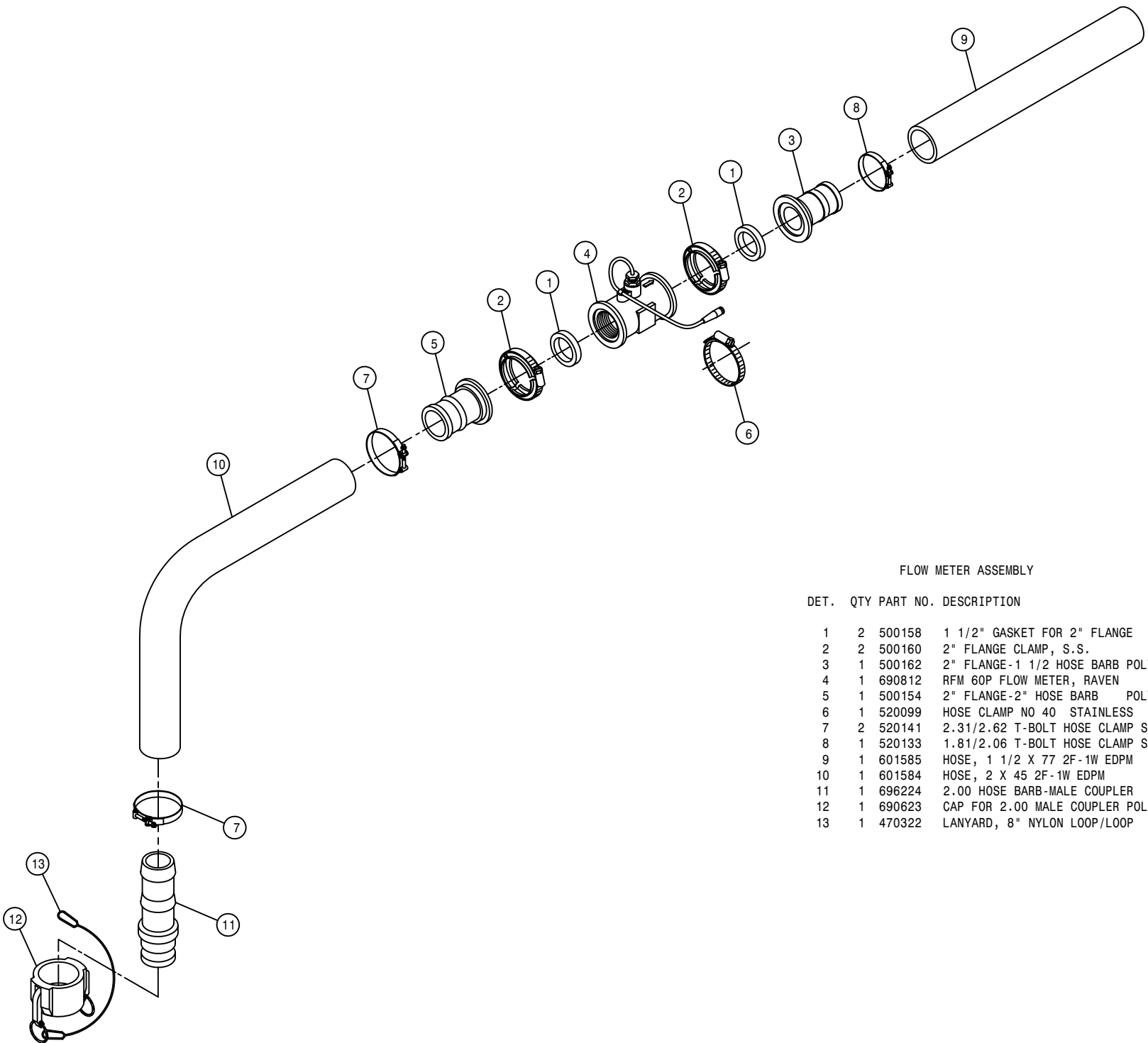
30FT TOOLBAR CONTROL VALVE ASSEMBLY

DET.	QTY	PART NO.	DESCRIPTION
	1	192514	1.00 ID CORRGTD LOOM, BLK POLY
	2	4	291621 PACKARD CONNECT CAVITY PLUG
	3	2	291746 PACKARD CONNECT,22WIRE TOWER
	4	4	291747 PACKARD CONNECTOR COMB,22WIRE
	5	1	605615 HYD FILTER,INLINE 25M 9/16FOR
	6	1	605616 ELEMENT,25M HYD FILTER 605615
	7	1	605617 SPRING KIT, HYD FILTER 605615
	8	1	606105 NTB CTRL VLV, STS PWRSYS 03
	9	11	618119 9/16MJIC-90-9/16MOR LBO
	10	1	618241 3/4MJIC-90-3/4MOR LBO
	11	1	618249 3/4MJIC-90-9/16MOR LBO
	12	1	618440 9/16MJIC-90-9/16MOR EX LG LBO
	13	1	618443 3/4MJIC-90-3/4MOR EX LG LBO
	14	2	610185 9/16MOR PLUG
	15	2	914004 3/8UNC HEX STOVER NUT
	16	1	618692 3/4FJIC SWIV-9/16MOR ADPTR
	17	4	470118 1/4UNC X 3/4 FLANGE HEX BOLT
	18	8	470121 1/4UNC HEX FLANGE LOCK NUT
	19	2	342824 TRD ADJ HARNESS CONNECTOR BRKT
	20	2	900145 3/8UNC X 5 SOCKET HD CAP SCR



40FT TOOLBAR CONTROL VALVE ASSEMBLY

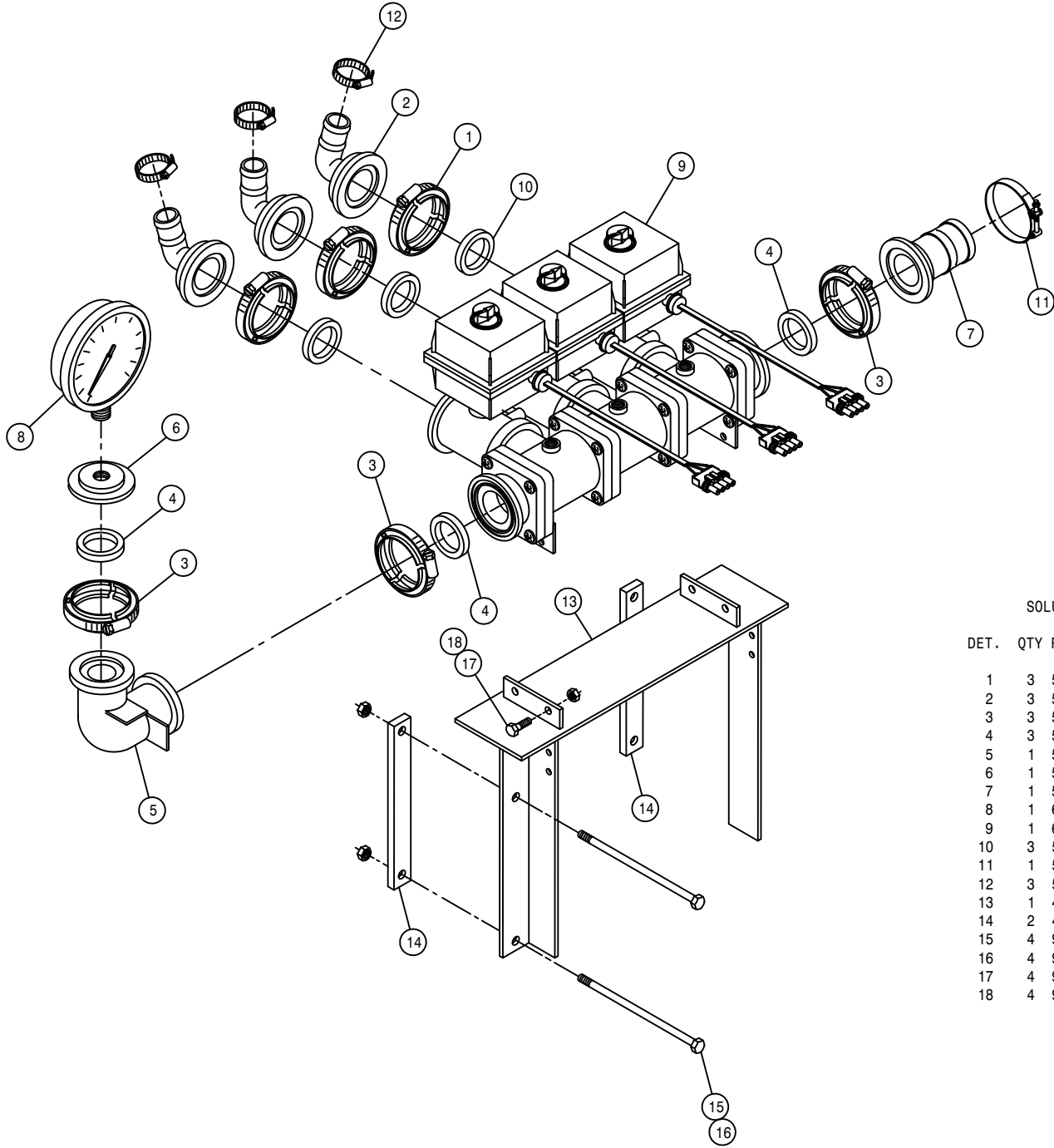
DET.	QTY	PART NO.	DESCRIPTION
	1	192514	1.00 ID CORRGTD LOOM, BLK POLY
	2	291621	PACKARD CONNECT CAVITY PLUG
	3	291746	PACKARD CONNECT, 22WIRE TOWER
	4	291747	PACKARD CONNECTOR COMB, 22WIRE
	5	605615	HYD FILTER, INLINE 25M 9/16FOR
	6	605616	ELEMENT, 25M HYD FILTER 605615
	7	605617	SPRING KIT, HYD FILTER 605615
	8	606105	NTB CTRL VLV, STS PWRSYS 03
	9	618119	9/16MJIC-90-9/16MOR LBO
	10	618241	3/4MJIC-90-3/4MOR LBO
	11	618249	3/4MJIC-90-9/16MOR LBO
	12	618440	9/16MJIC-90-9/16MOR EX LG LBO
	13	618443	3/4MJIC-90-3/4MOR EX LG LBO
	14	618444	9/16MOR RUN TEE-9/16MJIC
	15	618618	9/16MJIC-90-9/16FJIC SWIV LBO
	16	618692	3/4FJIC SWIV-9/16MOR ADPTR
	17	470118	1/4UNC X 3/4 FLANGE HEX BOLT
	18	470121	1/4UNC HEX FLANGE LOCK NUT
	19	342824	TRD ADJ HARNESS CONNECTOR BRKT
	20	900145	3/8UNC X 5 SOCKET HD CAP SCR
	21	914004	3/8UNC HEX STOVER NUT



FLOW METER ASSEMBLY

DET. QTY PART NO. DESCRIPTION

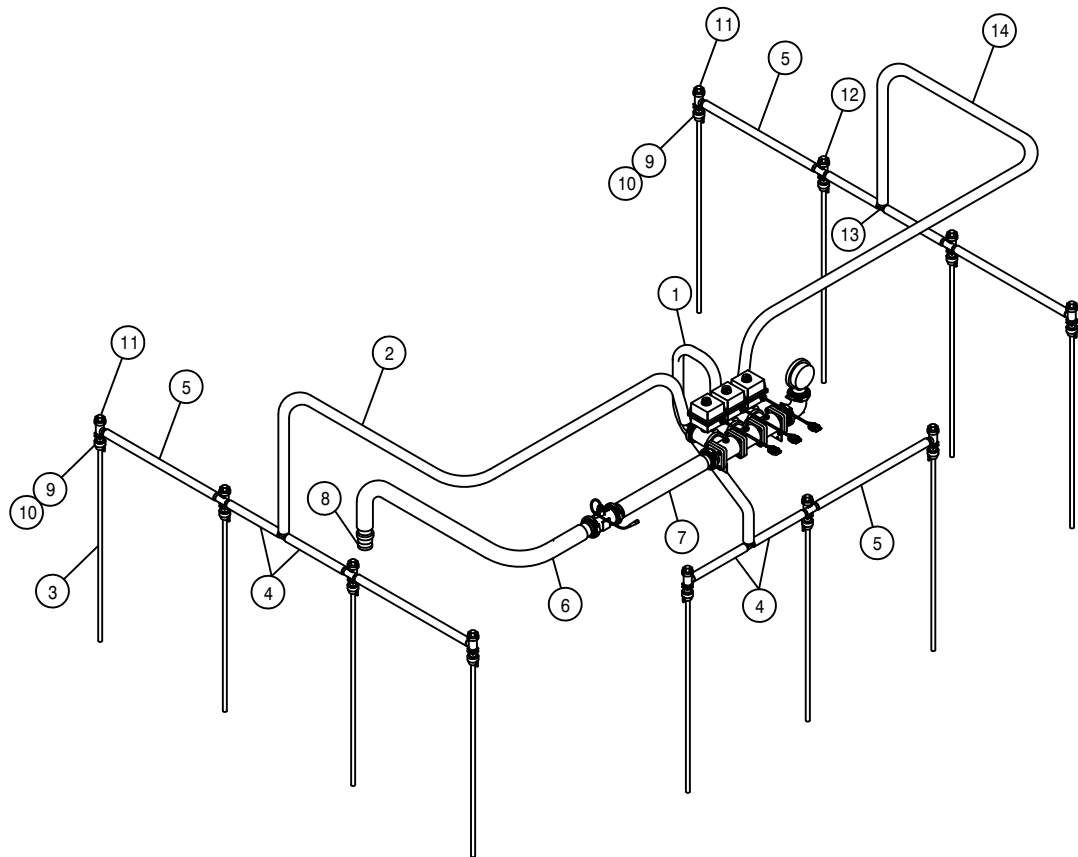
1	2	500158	1 1/2" GASKET FOR 2" FLANGE
2	2	500160	2" FLANGE CLAMP, S.S.
3	1	500162	2" FLANGE-1 1/2 HOSE BARB POLY
4	1	690812	RFM 60P FLOW METER, RAVEN
5	1	500154	2" FLANGE-2" HOSE BARB POLY
6	1	520099	HOSE CLAMP NO 40 STAINLESS
7	2	520141	2.31/2.62 T-BOLT HOSE CLAMP SS
8	1	520133	1.81/2.06 T-BOLT HOSE 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	696224	2.00 HOSE BARB-MALE COUPLER
12	1	690623	CAP FOR 2.00 MALE COUPLER POLY
13	1	470322	LANYARD, 8" NYLON LOOP/LOOP



SOLUTION CONTROL VALVE ASSEMBLY

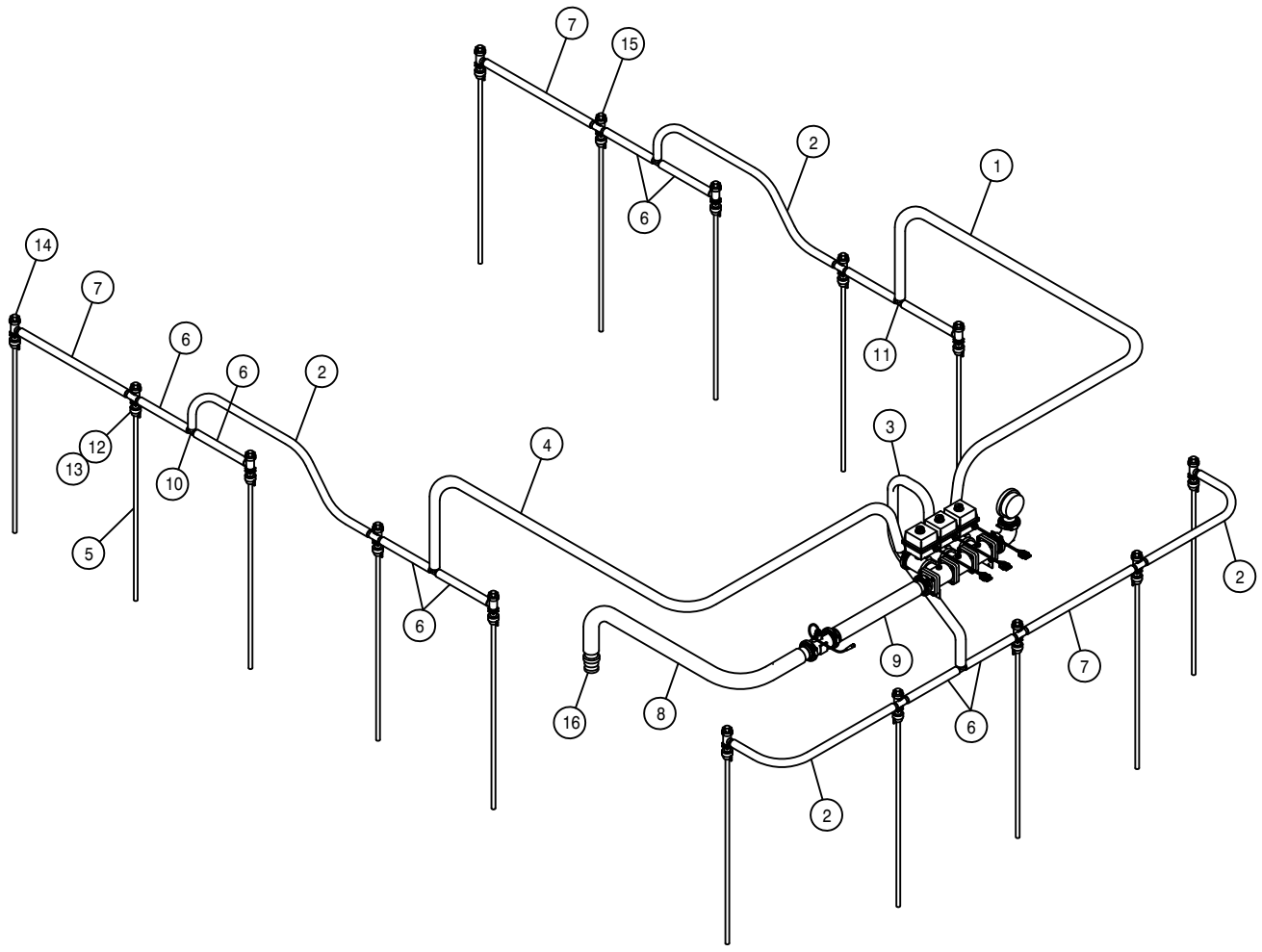
DET.	QTY	PART NO.	DESCRIPTION
	3	500160	2" FLANGE CLAMP, S.S.
	3	500189	2" FLANGE-90-1" HOSE BARB POLY
	3	500194	2"FP FLANGE CLAMP, S.S.
	3	500195	2"FP FLANGE GASKET EPDM
	1	500219	2"FP FLANGE-90-2"FP FLANGE LBO
	1	500229	2"FP FLANGE PLUG, 1/4FNPT POLY
	1	500230	2" FP FLANGE-1 1/2" HOSE BARB
	1	690359	PRESSURE GA GLYCERI 100 PSI
	1	696253	VALVE, 3 SECT KZCO 400-3CBM-DJ
	3	500158	1 1/2" GASKET FOR 2" FLANGE
	1	520133	1.81/2.06 T-BOLT HOSE CLAMP SS
	3	520087	HOSE CLAMP NO 20 STAINLESS
	1	439086	SOLU MANIF MT BRKT WLD,NTB STS
	2	439091	SOLU MANIF MT KEEPER, NTB STS
	4	900148	3/8UNC X 8 HEX BOLT
	4	914004	3/8UNC HEX STOVER NUT
	4	900064	5/16UNC X 3/4 HEX BOLT
	4	914002	5/16UNC HEX STOVER NUT

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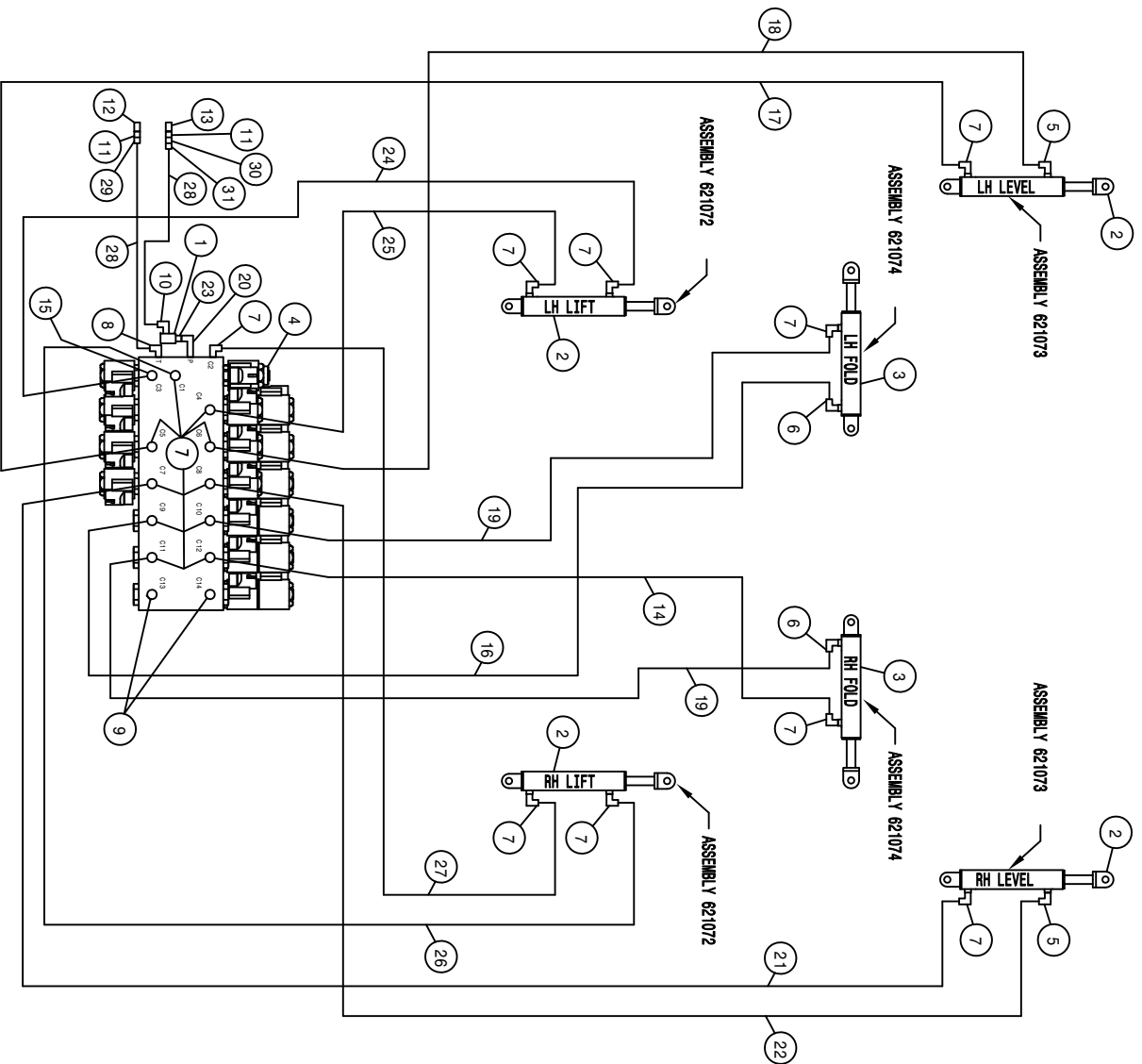
HOSE DIAG 12R 30"-30' TB

DET.	QTY	PART NO.	DESCRIPTION
1	1	601491	HOSE, 1 X 30 1BR BLK EPDM
2	1	601495	HOSE, 1 X 110 1BR BLK EPDM
3	11	601581	HOSE, 1/2 X 86 1BR BLK EPDM
4	6	601582	HOSE, 3/4 X 14 1BR BLK EPDM
5	5	601583	HOSE, 3/4 X 28 1BR BLK EPDM
6	1	601584	HOSE, 2 X 45 2F-1W EDPM
7	1	601585	HOSE, 1 1/2 X 77 2F-1W EDPM
8	1	696224	2.00 HOSE BARB-MALE COUPLER
9	11	737790	CAP SET,ROUND,RED QUICK TEEJET
10	11	737791	1/2" TEEJET HOSE SHANK, NYLON
11	6	737829	QUICK TJET LBO,1-TIP BODY .75
12	5	737830	QUICK TJET TEE,1-TIP BODY .75
13	3	500121	1"BRNCH-3/4 HOSE BARB TEE,POLY
14	1	601496	HOSE, 1 X 120 1BR BLK EPDM



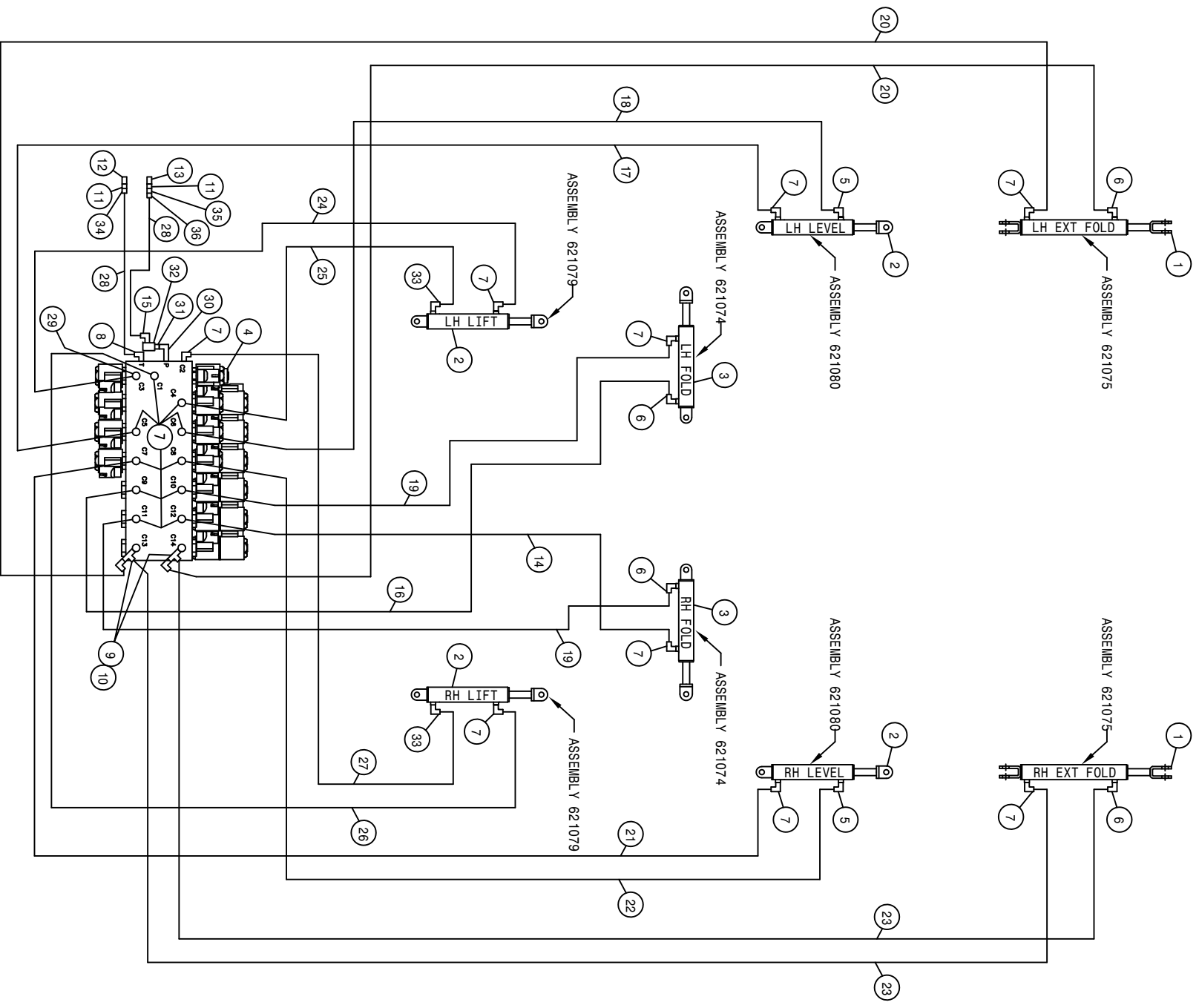
HOSE DIAG 16R 30''-40' TB

DET.	QTY	PART NO.	DESCRIPTION
	1	601496	HOSE, 1 X 120 1BR BLK EPDM
	4	601174	HOSE, 3/4 X 60 1BR BLK EPDM
	1	601491	HOSE, 1 X 30 1BR BLK EPDM
	1	601495	HOSE, 1 X 110 1BR BLK EPDM
	15	601581	HOSE, 1/2 X 86 1BR BLK EPDM
	10	601582	HOSE, 3/4 X 14 1BR BLK EPDM
	3	601583	HOSE, 3/4 X 28 1BR BLK EPDM
	1	601584	HOSE, 2 X 45 2F-1W EDPM
	1	601585	HOSE, 1 1/2 X 77 2F-1W EDPM
	2	500073	3/4 HOSE BARB TEE, POLY
	3	500121	1"BRNCH-3/4 HOSE BARB TEE,POLY
	15	737790	CAP SET,ROUND,RED QUICK TEEJET
	15	737791	1/2" TEEJET HOSE SHANK, NYLON
	8	737829	QUICK TJET LBO,1-TIP BODY .75
	7	737830	QUICK TJET TEE,1-TIP BODY .75
	1	696224	2.00 HOSE BARB-MALE COUPLER



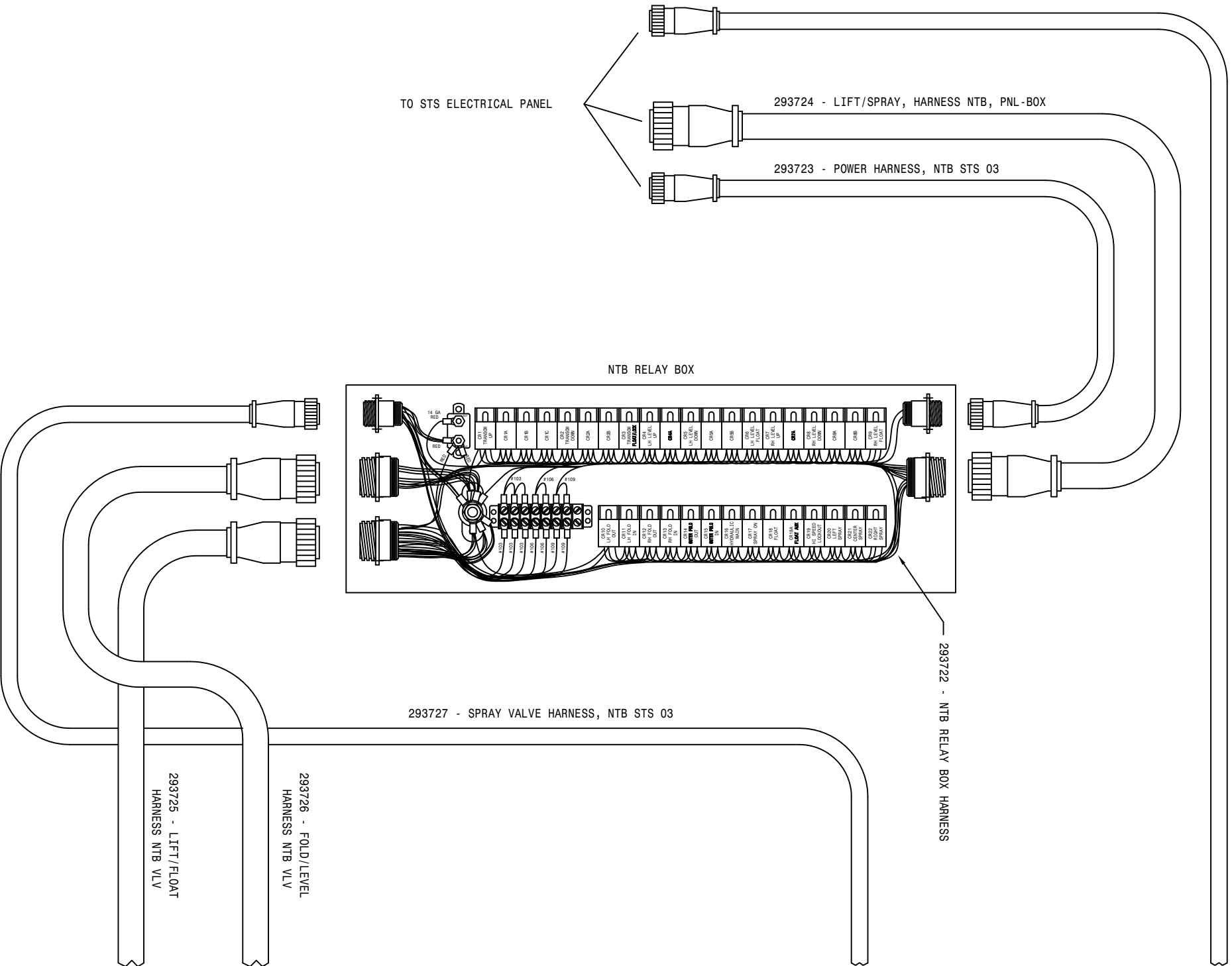
NITROGEN T-BAR 30FT HYD SCHEMATIC 2003
REFERENCE DRAWING NO. 498716

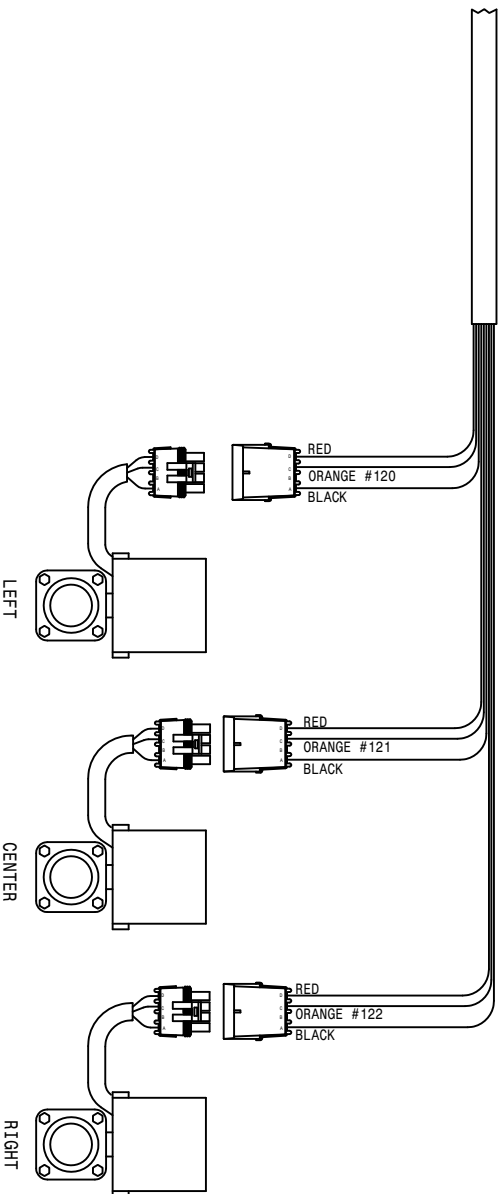
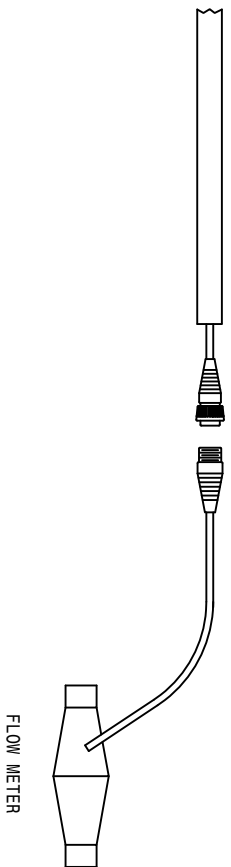
DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION
1	1	605615	HYD FILTER, INLINE 25M 9/16FOR	17	1	616084	04-451TC-06FJX-06FJX-46
2	4	621558	LEVEL CYL, 3.00 X 11.00 STS	18	1	616176	04-451TC-06FJX-06FJX-58
3	2	621566	OUTRGR FOLD CYL, 2.50 X 11.00	19	2	616177	04-451TC-06FJX-06FJX-74
4	1	606105	NTB CTRL VLV, STS PUMRSYS 03	20	1	618443	3/4MJJC-90-3/4MOR EX LG LBO
5	2	614747	.025 ELBOW ASSY, 9/16MOR 90D	21	1	616179	04-451TC-06FJX-06FJX-129
6	2	614757	.032 ELBOW ASSY, 9/16MOR 90D	22	1	616180	04-451TC-06FJX-06FJX-143
7	19	618119	9/16MJJC-90-9/16MOR LBO	23	1	618692	3/4FJIC SWIV-9/16MOR ADPTR
8	1	618241	3/4MJJC-90-3/4MOR LBO	24	1	616182	06-451TC-06FJX-06FJX-41
9	2	610185	9/16MOR PLUG	25	1	616183	06-451TC-06FJX-06FJX-52
10	1	618249	3/4MJJC-90-9/16MOR LBO	26	1	616184	06-451TC-06FJX-06FJX-137
11	2	618669	3/4FJIC SWIV-3/4MOR ADPTR	27	1	616185	06-451TC-06FJX-06FJX-147
12	1	618696	HYD COUPLER, FEM 1/2B, 3/4FOR	28	2	616186	08-451TC-08FJX-08FJX-62
13	1	618697	HYD COUPLER, MALE 1/2B, 3/4FOR	29	1	618010	3/4MJJC-90-BLKHD UNION LBO
14	1	616090	04-451TC-06FJX-06FJX-85	30	1	618349	3/4MJJC-3/4MJJC BLKHD UNION
15	1	618440	9/16MJJC-90-9/16MOR EX LG LBO	31	1	618609	3/4MJJC-90-3/4FJIC SWIV LBO
16	1	616209	04-451TC-06FJX-06FJX-64				



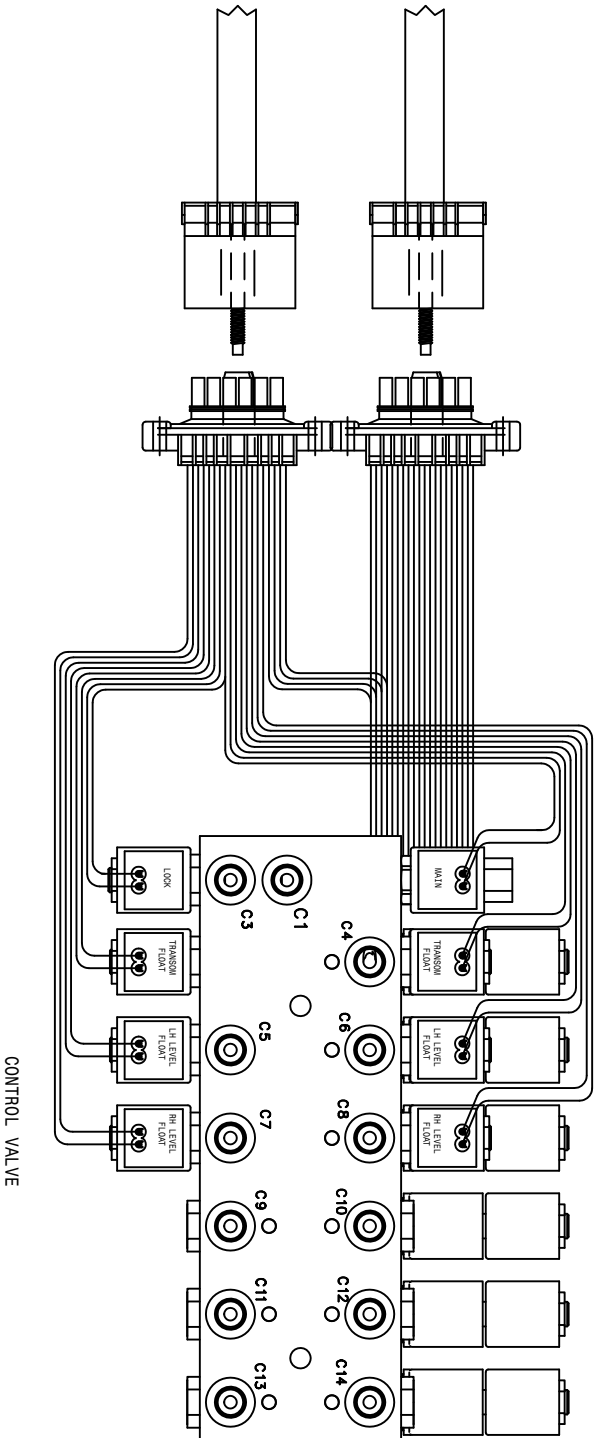
NITROGEN T-BAR 40FT HYD SCHEMATIC 2003
REFERENCE DRAWING NO. 498717

DET.	QTY	PART NO.	DESCRIPTION	DET.	QTY	PART NO.	DESCRIPTION
1	2	621568	OUTRGR FOLD CYL,2.00 X 18	19	2	616177	04-451TC-06FJX-06FJX-74
2	4	621558	LEVEL CYL, 3.00 X 11.00	20	2	616178	04-451TC-06FJX-06FJX-94
3	2	621566	OUTRGR FOLD CYL, 2.50 X 11.00	21	1	616179	04-451TC-06FJX-06FJX-129
4	1	606105	NTB CTRL VLV, STS PWRSYS 03	22	1	616180	04-451TC-06FJX-06FJX-143
5	2	618688	9/16MOR-90-9/16MJ .025 CHK VLV	23	2	616181	04-451TC-06FJX-06FJX-168
6	4	614757	.032 ELBOW ASSY,9/16MOR 90D	24	1	616182	06-451TC-06FJX-06FJX-41
7	4	618119	9/16MJIC-90-9/16MOR LBO	25	1	616183	06-451TC-06FJX-06FJX-52
8	1	618241	3/4MJIC-90-3/4MOR LBO	26	1	616184	06-451TC-06FJX-06FJX-137
9	2	618444	9/16MOR RUN TEE-9/16MJIC	27	1	616185	06-451TC-06FJX-06FJX-147
10	2	618618	9/16MJIC-90-9/16FJIC SWIV LBO	28	2	616186	08-451TC-08FJX-08FJX-62
11	2	618669	3/4FJIC SWIV-3/4MOR ADPTR	29	1	618440	9/16MJIC-90-9/16MOR EX LG LBO
12	1	618696	HYD COUPLER,FEM 1/2B, 3/4FOR	30	1	618443	3/4MJIC-90-3/4MOR EX LG LBO
13	1	618697	HYD COUPLER,MALE 1/2B, 3/4FOR	31	1	618692	3/4FJIC SWIV-9/16MOR ADPTR
14	1	616090	04-451TC-06FJX-06FJX-85	32	1	605615	HYD FILTER,INLINE 25M 9/16FOR
15	1	618249	3/4MJIC-90-9/16MOR LBO	33	2	614761	.062 ELBOW ASSY, 9/16MOR 90D
16	1	616209	04-451TC-06FJX-06FJX-64	34	1	618010	3/4MJIC-90-BLKHD UNION LBO
17	1	616084	04-451TC-06FJX-06FJX-46	35	1	618349	3/4MJIC-3/4MJIC BLKHD UNION
18	1	616176	04-451TC-06FJX-06FJX-58	36	1	618609	3/4MJIC-90-3/4FJIC SWIV LBO





SOLUTION SOLENOID VALVES



Notes:

