



L-16 Crank-Up Lift

**Instruction &
Operation
Manual
2012**

**722 Blue Crab Road Newport News VA 23606
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WINCH INSTALLATION

- READ THIS FIRST -

- (1) The L-16 lift and winch assembly are packaged separately. The lift is shipped with the steel cable installed. Take care when removing the winch from the carton as the lift leveling feet and other small parts are packaged with the winch.
- (2) Attach winch to platform mounting channel using (3) 3/8" x (3) 1-1/4" bolts provided. See figure 1 below.
- (3) Place bolts through holes and hold in place.
- (4) Place winch over bolts and secure with 3/8" flat washers and 3/8" self-locking nuts.
- (5) Install leveling pads to the bottom of each fold-out leg. (See page 4 for details).
- (6) Continue with operation instructions on page 2.

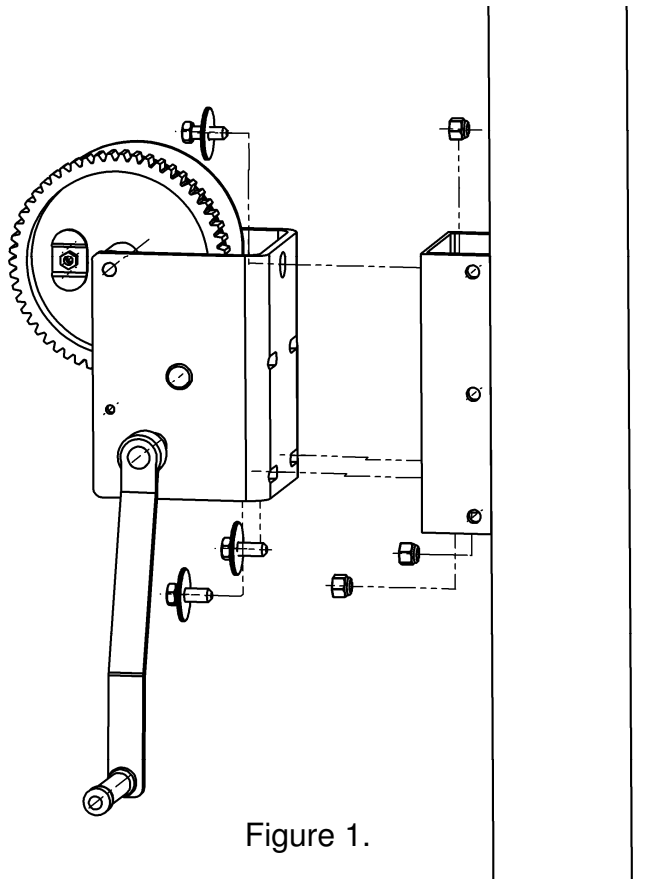
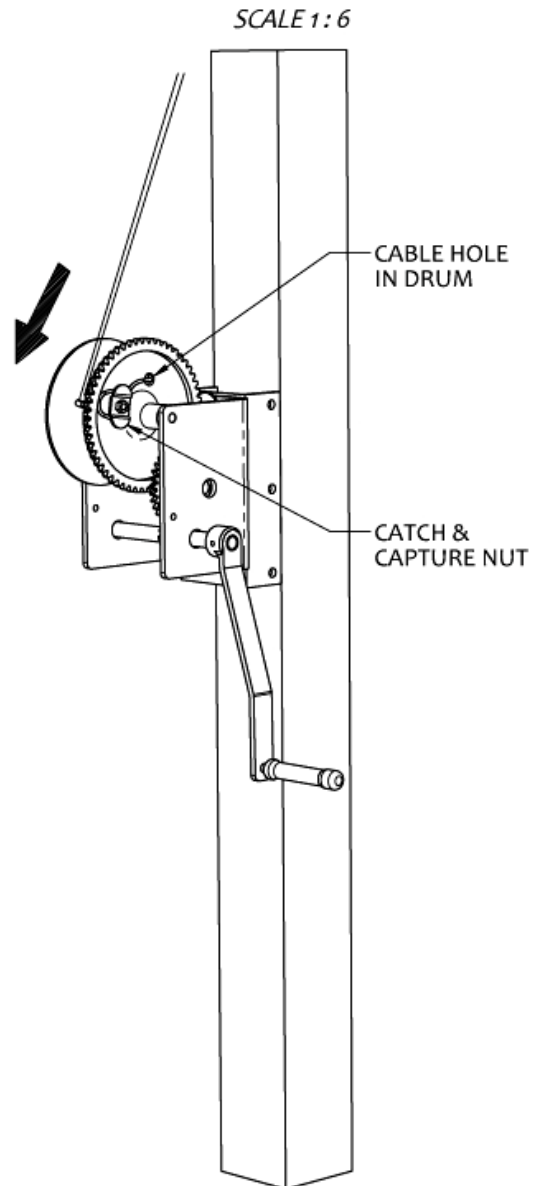


Figure 1.

WINCH CABLE ATTACHMENT

- 1) WRAP AT LEAST 2 TURNS OF CABLE AROUND THE DRUM OF THE WINCH.
- 2) FEED AT LEAST 5IN OF CABLE THRU THE HOLE ON THE RIGHT SIDE OF WINCH DRUM, SAME SIDE AS CRANK HANDLE.
- 3) WITH YOUR THUMB BEND A LOOP IN THE CABLE, AS ILLUSTRATED.
- 4) LOOSEN THE CAPTURE NUT AND CAREFULLY FEED THE LOOP THRU THE CATCH AND TIGHTEN THE CAPTURE NUT WITH A WRENCH.

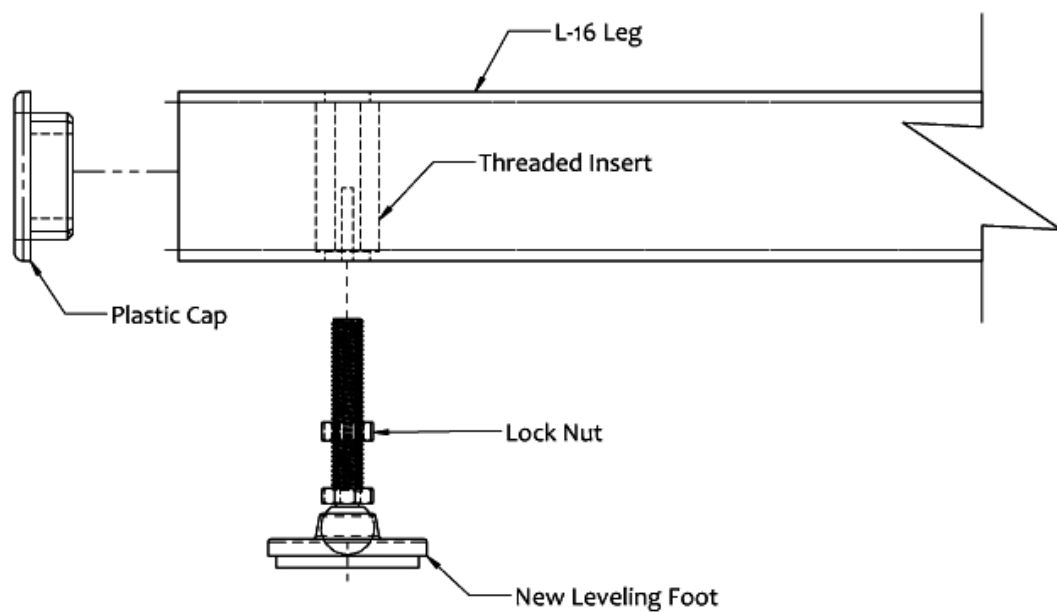


OPERATION

- (1) Remove locking pin holding each leg in the folded position. Fold the legs down and re-insert locking pins through the leg braces.
- (2) The central mast is the main load supporting element.
- (3) Adjust the leveling pads at the end of each leg so that the lift is vertically straight and level. Make sure to eliminate any slack between the legs and braces. Leveling pads should not be adjusted so that the central mast does not rest solidly on the ground.
- (4) Inspect the cable to make sure that none of the wires are frayed or that the cable itself has not been crushed.
- (5) Test the lift to see that no damage has been incurred that would bind the moving pieces of the system.
- (6) Secure the load to your lift in a proper fashion being careful to have a positive fastening.
- (7) If two or more lifts are being used simultaneously, all lifts must be raised evenly.
- (8) Three safety pins are provided for use when raising and lowering the lift. These must be used to insure safety in the event of cable failure. As you raise the lift, insert a safety pin into the first hole in the 2" tube. Then insert a 2nd pin into the next hole down as it becomes visible. When the 3rd hole becomes available, remove the first safety pin and insert it into the 3rd hole. Continue to alternate pins through the holes until the second stage begins to rise. Leave a pin in the last hold of the 2" tube. Using the two remaining pins, repeat the above procedure inserting pins in the 3" tube for lifts above 12 ft. To lower the system, follow the above procedures in reverse order.

NOTE: MAKE SURE THAT THE WINCH IS RATCHETING AS YOU CRANK. IF THIS FAILS TO HAPPEN, LOWER THE LIFT SLIGHTLY AND THEN RAISE IT AGAIN UNTIL YOU HEAR IT CLICK BEFORE RELEASING THE HANDLE. IF THIS OCCURS, THE WINCH MAY NEED TO BE ADJUSTED INTERNALLY.

WARNING: KEEP HANDS FREE OF UPPER TUBES WHILE RAISING AND LOWERING LIFT!

L-16 LEG ASSEMBLY

THREAD LEVELING FOOT INTO THE THREADED INSERT WITHIN THE L-16 LEG.
THREAD THE LOCK-NUT UP INTO POSITION TO SET YOUR LEVELING HEIGHT.
PRESS BLACK PLASTIC CAP INTO THE END OF THE LEG TUBE.

MAINTENANCE

The steel cable deserves and requires the most attention as it is the means by which the load is able to move up and down. The proper cable for this application is supplied, but it is up to you to inspect and maintain it regularly.

- (1) Keep the cable lubricated periodically to avoid oxidation. Any light duty oil or silicone based lubricant will do just fine.
- (2) Lubricate the pulleys frequently to prevent premature wear. The same lubricant used on the cable will be sufficient for this application.
- (3) If the cable shows any sign of fraying, wear, or deformation – order a replacement from your authorized Applied Electronics dealer or distributor.
- (4) Inspect the ball and shank that is swaged to the top end of the cable. See that the cable always remains flush to the outside of the ball.
- (5) Always replace any bent or broken parts immediately. These are available and should be purchased through the Applied Electronics dealer network.
- (6) Individually push the 2" and the 3" tubes to one side in both directions and check the gap between the tube and the bushing material that surrounds the tube at the top of each larger tube. If the gap ever becomes greater than .035", then new material should be ordered to replace the worn material. This gap measurement can be handled quickly and effectively with a standard feeler gauge.
- (7) To replace the cable, follow the cable routing diagram in fig. (A) page 7. Be sure to keep the tubes in the same alignment orientation. Termination of the cable to the winch should be done as shown in fig. (B) page 7.
- (8) In order to insure extended winch performance, occasionally grease gears, reel shaft and handle threads. An occasional drop of oil on drive shaft bearings is also recommended.

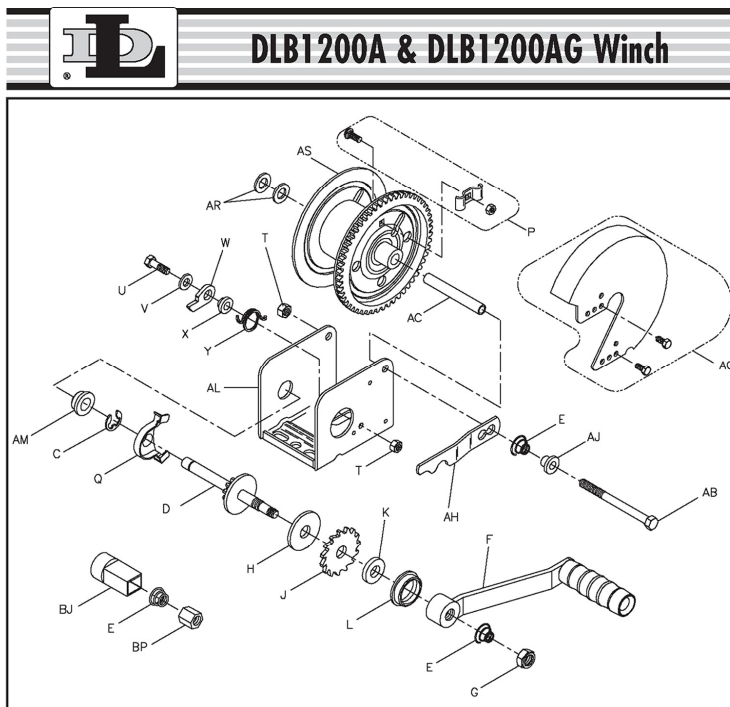
DO NOT OIL OR GREASE WINCH BRAKE MECHANISM.

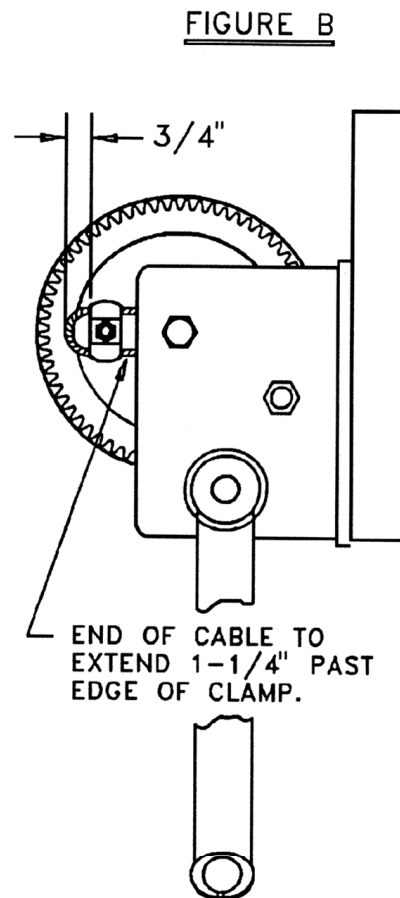
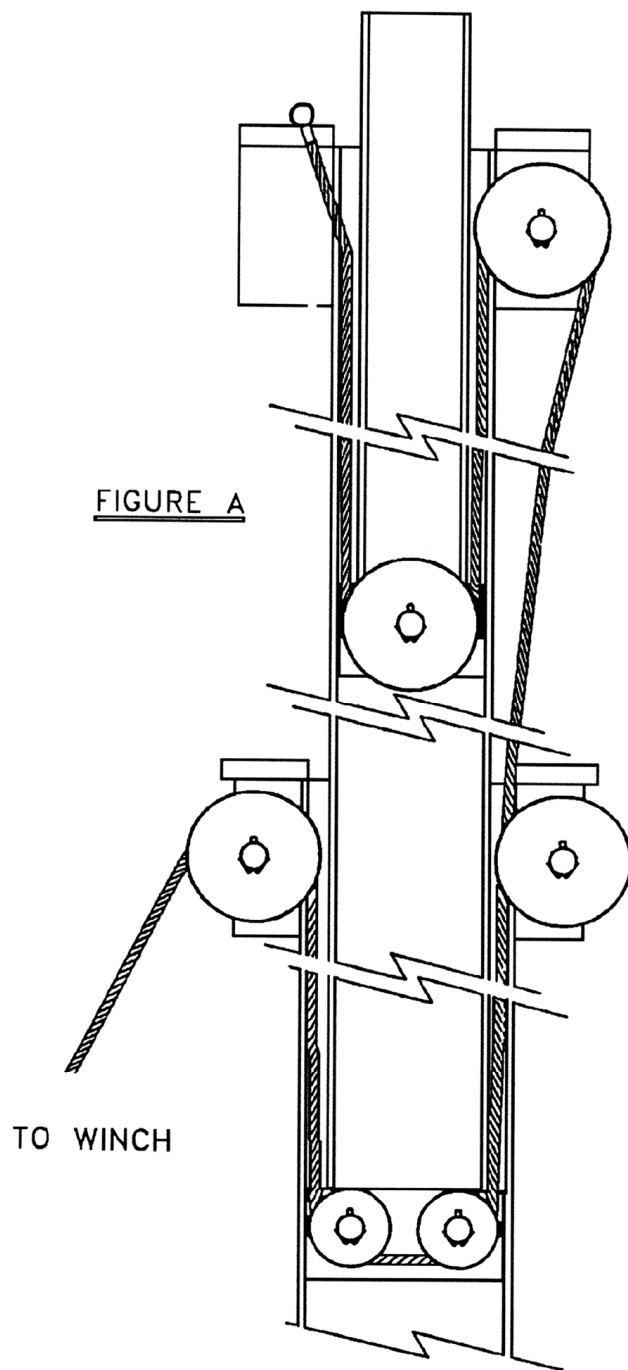
WINCH PARTS BREAKDOWN

PARTS LIST

Ref	Description	Part No.	Ref	Description	Part No.
A	Base	404900*	AH	Lockout Lever (optional)	404579
A	Base – DLB 350AG	404945*	AJ	Spacer (optional)	404166
B	Bushing	204012	AK	Gear Cover (optional)	
C	"E" Ring	205116		Painted Bronze	5240346
D	Drive Shaft	306061		Plated	5240361
E	Spring	204364	AL	Base	404896*
F	Handle – 7"	5703061		Base – DLB 1200AG	404897*
	Handle – 9-3/8"	5703103	AM	Bushing	204009
G	Nut	205033	AN	Gear Cover – "G" Series	406115
H	Pressure Plate	204362	AQ	Gear Cover (optional)	
H	Pressure Plate "G" Series	206620		Painted Bronze	5240122
J	Ratchet Wheel	404164		Plated	5240221
K	Pressure Washer	404163	AR	Spacer Washer	204360
L	Bushing	206328	AS	Reel	304754*
M	Nut	205316	AS	Reel – 1-7/8" (optional)	304768*
N	Bolt	205332	AT	Base	404891*
P	Rope Clamp Kit	5243506		Base – DLB 1500AG	404892*
Q	Gear Cover – "G" Series	406114	AU	Drive Shaft	304760
S	Reel	306075*	AV	Handle – 9-3/8"	5703103
	Reel - DLB350AG	306167		Handle – 12"	5703111
T	Locknut	204803	AW	Bolt	204804
U	Bolt	205167	AX	Reel Spacer	204808
V	Flat Washer	205055	AY	Gear Cover (optional)	
W	Pawl	404409		Painted Bronze	5240387
W	Pawl – "G" Series	404190		Plated	5240403
X	Spacer	404166	AZ	Reel	304755*
	Spacer – "G" Series	404191	BA	Base – DLB2500A	406047*
Y	Spring	204363		Base – DLB 2000AG	404899*
	Spring – "G" Series	204460	BB	Spacer	404434
Z	Reel Spacer	207183	BC	Bolt	205006
AB	Bolt	203161	BD	Flat Washer	205139
AC	Reel Spacer	204807	BE	Intermed. Drive Shaft	306035
AE	Reel	306062*	BF	Nut	205014
AF	Base	404893*	BH	Reel	304756*
	Base – DLB 800AG	404895*	BJ	Drive Hub (Optional)	304562
			BM	Handle w/Lock Pin (Opt)	5703426
			BN	Handle Hub (Optional)	304630
			BP	Special Nut (Optional)	404970
			BQ	"E" Ring	206162
			BR	Bushing	206163
			BS	Bolt	205335

*Specify Color When Ordering





SPECIFICATIONS

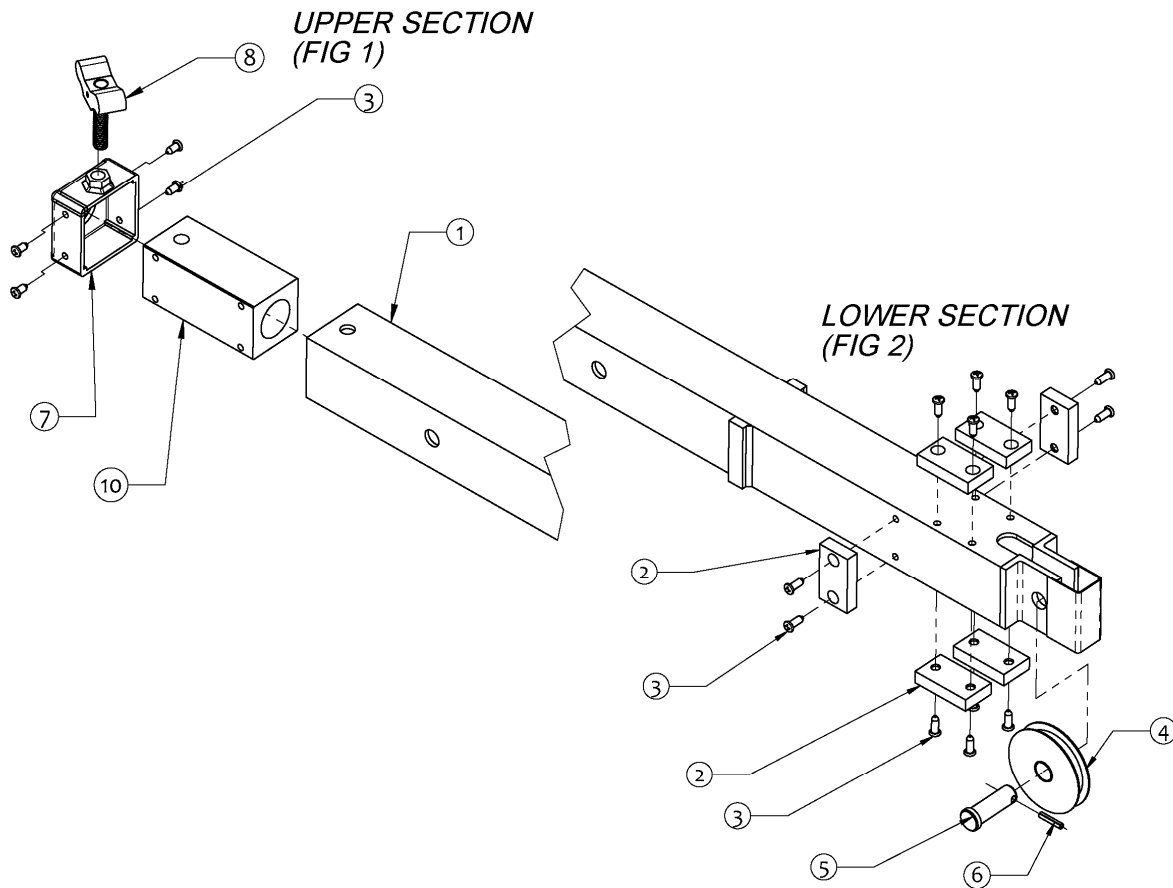
- Three Section 16 ft. Crank-Up Lift
- 500 lb. Load Maximum at 6' Through 16'
- 6-1/2' Loading Height
- 16' Maximum Lift Height
- 84" Base Diameter For Stability
- 6-1/2' Folded Length
- 18" Folded Diameter
- 95 lbs. Total Weight
- 3/16" Steel Cable

FIELD REPLACEMENT PARTS**PART NUMBER****DESCRIPTION**

91-505	Winch, DLB1200A
91-501	Cable, 3/16" 7 x 19 GAC With Ball and Shank
91-039	Top Plastic Insert
96-000	Steel Lock Collar
91-328	Thumbscrew
90-112	2" Mast Tube
90-113	3" Mast Tube
91-114	4" Mast Tube
91-022	Wheel Kit
91-316	Brace End Cap 1-1/2" x 2"
91-317	Leg End Cap 2 x 2
92-500	Leg
92-501	Leg Brace/Outrigger
92-502	Complete Leg/Brace Assembly
92-504	Threaded Leg Insert
91-025a	Leveling Pad/Foot
91-301	Mast Pin, 3/8" x 4-1/2" Quick Release
91-300	Leg Pin, 3/8" x 3-1/2" Quick Release w/T Handle
91-310	Clevis Pin, 1/2" x 1-1/2"
91-304	Slotted Roll Pin
91-023	Pulley, 1-1/2" DIA With Bushing
91-024	Pulley, 2-1/2" DIA With Bushing
91-336	Upper Bushing Material, 1-7/8"
91-337	Upper Bushing Material, 2-7/8"
91-334	Lower Bushing Material, 1-7/8"
91-335	Lower Bushing Material, 2-7/8"
91-327	Bushing Set (20) 1-7/8" (4) 2-7/8"
*92-503	Mast Insert
*91-026a	Retro Fit Leveling Pad, Insert and Pin Kit
*91-025	Leveling Pad/Foot
*91-026	Brass Leveling Pad Insert

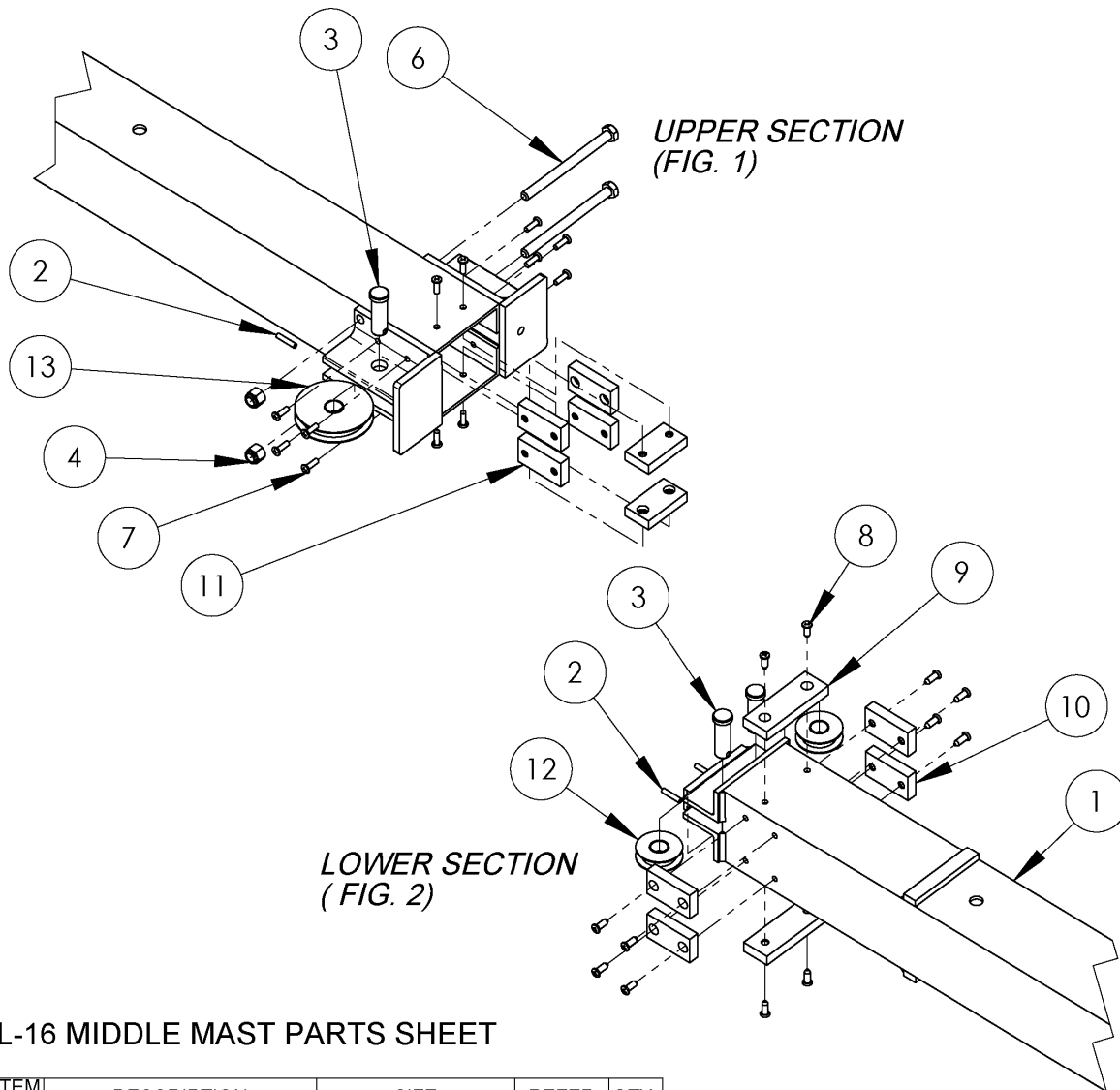
*For lifts manufactured prior to 2011

L-16 TOP MAST PARTS SHEET



ITEM NO.	DESCRIPTION	SIZE	REFER. NO.	QTY.
1	L-16 2in Mast - Stage 3	TOP MAST	90-112	1
2	LOWER BUSHING	.375 WIDTH 1.75"	91-334	6
3	SHEET METAL SCREW	#8 X 1/2" LG. ZINC	91-066	16
4	CABLE PULLEYS	LENGTH 2.5"	91-024	1
5	PIN - CLEVIS	.50in DIA. 1.50in. Lnth	91-310	1
6	PIN - SLOTTED ROLL	0.156in x 0.75in Pin	91-304	2
7	L-16 STEEL LOCK COLLAR	SHEET METAL PART	96-000	1
8	L-16 THUMBSCREW	3/8-16 X 1.25" Lnth	91-328	1
10	TOP PLASTIC INSERT	MACHINED SQU HDPE 4" Lnth	91-039	1

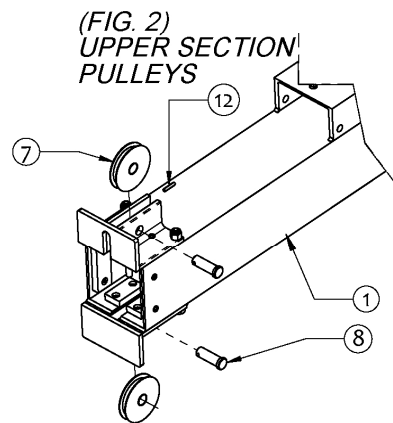
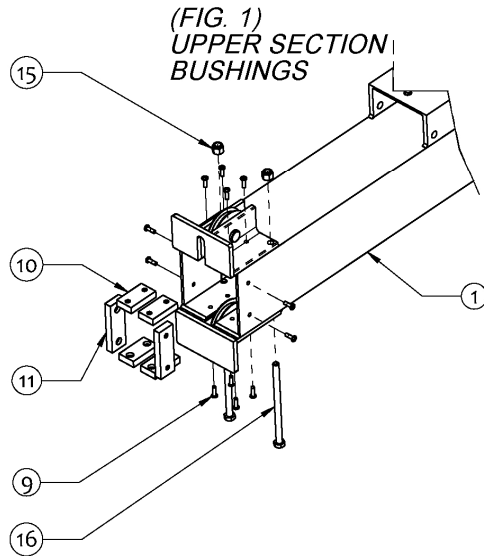
L-16 MIDDLE MAST PARTS SHEET



L-16 MIDDLE MAST PARTS SHEET

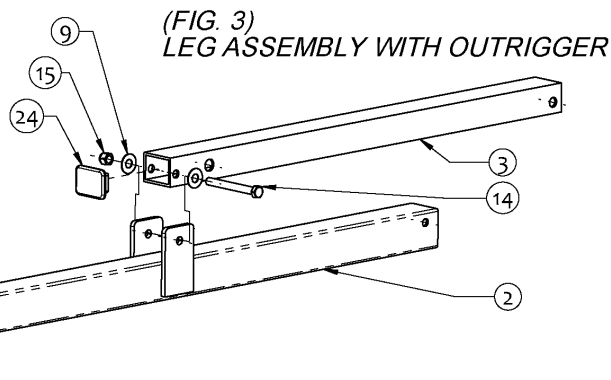
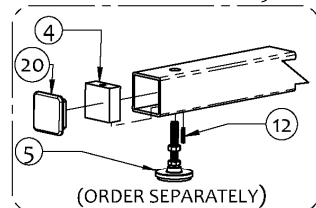
ITEM NO.	DESCRIPTION	SIZE	REFER.	QTY.
1	L-16 3in Mast - Stage 2	MIDDLE MAST	90-113	1
2	PIN - SLOTTED ROLL	0.156 in X 0.75 in Pin	91-304	3
3	PIN - CLEVIS	.50in Dia 1.50in Lnth	91-310	3
4	SAE HEX NUT - NYLOCK	5/16-18 Thread	91-063	2
6	SAE 5/16-18 HEX CAP GRADE 5 BOLT	Length 4.00in	91-081	2
7	MACHINE SCREW	#8-32 x 5/8" Lg. Zinc	91-074	12
8	SHEET METAL SCREW	#8 x 1/2" Lg. Zinc	91-066	12
9	LOWER BUSHING	.375 Width 2-7/8"	91-335	2
10	LOWER BUSHING	.375 Width 1-7/8"	91-334	4
11	UPPER BUSHING WITH NUT	.375 Width 1-7/8"	91-336	6
12	CABLE PULLEYS	Length 1.5in	91-023	2
13	CABLE PULLEYS	Length 2.5in	91-024	1

L-16 BOTTOM MAST PARTS SHEET pg1

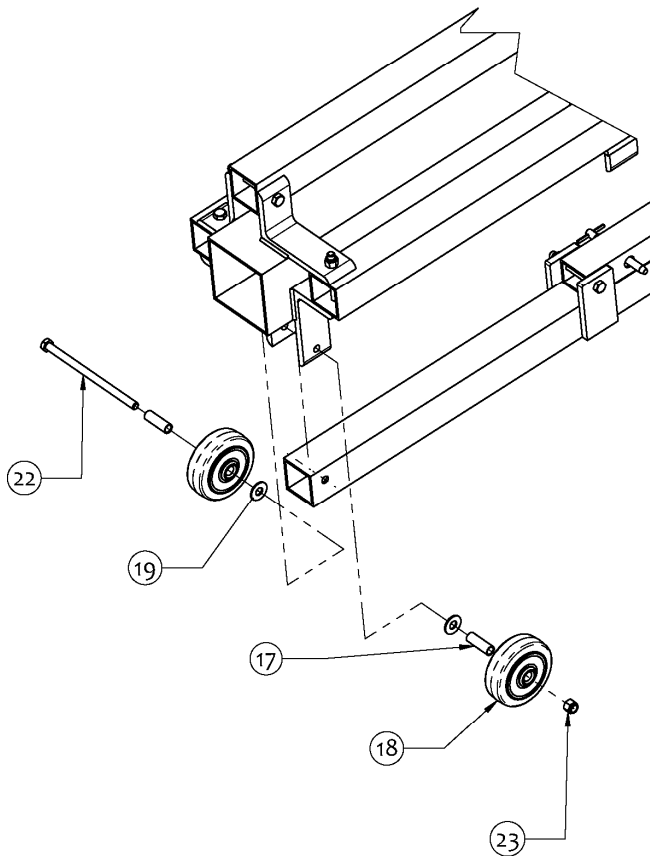
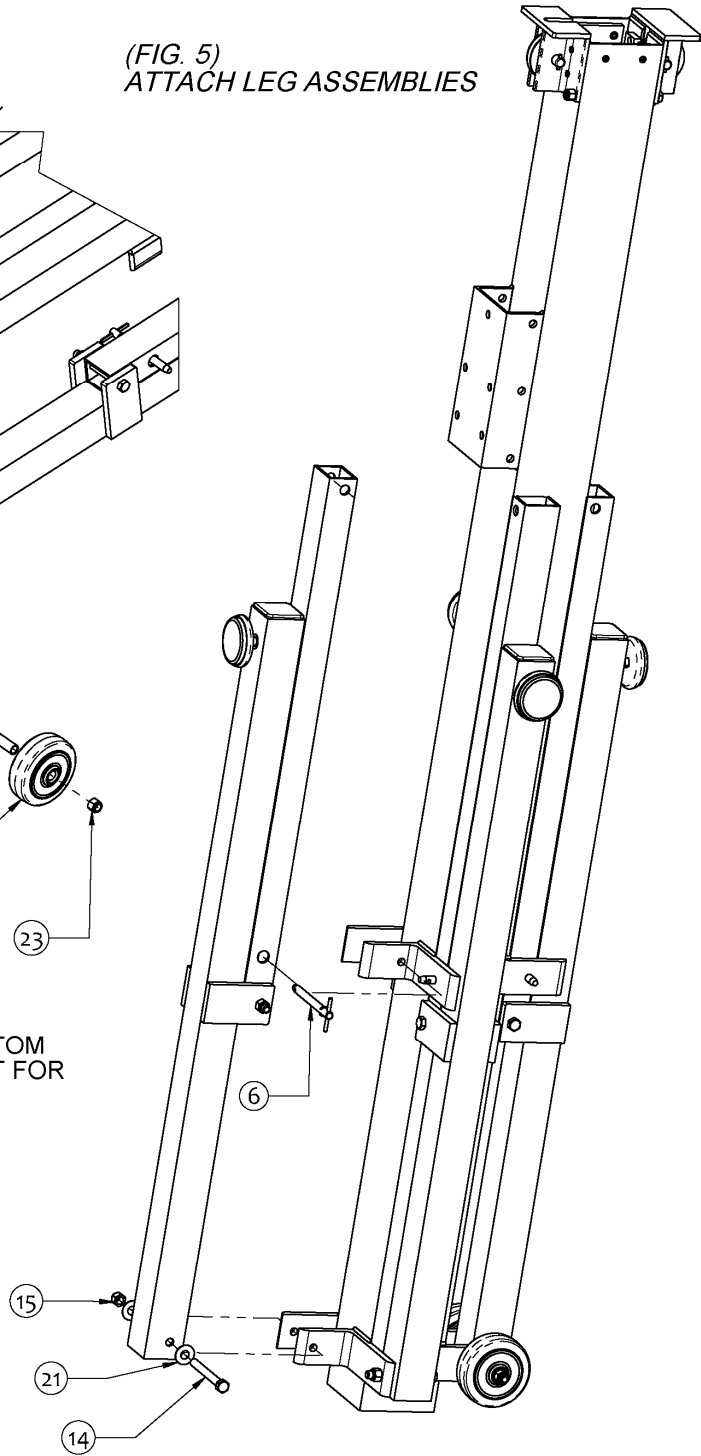


ITEM NO.	DESCRIPTION	SIZE	REFER NO.	QTY
1	L-16 4IN MAST - STAGE 3	BOTTOM MAST	90-114	1
2	L-16 LEG	LEG ASSEMBLY	92-500	4
3	L-16 OUTRIGGER	Leg Brace / Outrigger	92-501	4
4	L-16 LEG INSERT - THREADED	1.75" x 1.75" x .75"	92-504	4
5	L-16 SCREW FOOT	L16 Foot - 3/8in Threaded Leveler	91-025a	4
6	PIN - QUICK RELEASE	3/8 DIA. X 3-1/2" Pin w/ T-Handle	91-300	4
7	CABLE PULLEY	LENGTH 2.5in.	91-023	2
8	PIN - CLEVIS	PIN - CLEVIS	91-310	2
9	MACHINE SCREW	#8-32 x 5/8" Lg. Zinc	91-074	12
10	UPPER BUSHING WITH NUT	.375 WIDTH 2-7/8"	91-337	2
11	UPPER BUSHING WITH NUT	.375 WIDTH 1-7/8"	91-336	4
12	PIN - SLOTTED ROLL	.156in. X 0.75 in. Pin	91-304	2
13	WINCH	L-16 Winch Base Plate	91-505	1
14	SAE HEX CAP BOLT	3/8- 16 Length 3.5" GRD 8 ZINC.	91-078	7
15	SAE HEX NUT - NYLOCK	3/8-16 THREADS	91-063	8
16	SAE HEX CAP BOLT	5/16-18 Length 5.0" GRD5 ZINC	91-082	2
17	CASTER WHEEL BEARING	.50" Dia x 1.5" Length (Part of wheel)	---	2
18	CASTER WHEEL	3.5 in. X 1.25 in. Colson	91-014	2
19	FLAT WASHER	.375" Standard Flat Washer	91-010	2
20	PLASTIC TUBE CAP	2" SQU. Cap - Black	91-317	4
21	FLAT WASHER	.375" Stainless Steel - Thin Washer	91-012	16
22	SAE HEX CAP BOLT	3/8- 16 Length 6.5" GRD 8 ZINC.	91-068	1
23	SAE HEX NUT - NYLOCK	5/8-18 THREADS	91-063	2
24	PLASTIC TUBE CAP	1.5" x 2" Cap - Black	91-316	4

L-16 LEG RETROFIT KIT ONLY 91-026A



L-16 BOTTOM MAST PARTS SHEET pg2

(FIG. 4)
ATTACHING LOWER WHEELS(FIG. 5)
ATTACH LEG ASSEMBLIES

NOTES:
1) EACH LEG ATTACHES TO THE BOTTOM
MAST (FIG 5) THE SAME WAY, EXCEPT FOR
THE LEG WITH WHEELS (FIG 4)
WHICH IS OPPOSITE THE WINCH.