



13006027/13006039 LIFT GATE OPERATOR INSTRUCTION MANUAL

The LiftDog uses your vehicle's 12 Volt battery to power its two-cylinder hydraulic oil system for lifting large loads. The system provides enough power to pull two cylinders, a platform, and the designated load. A check valve is used in conjunction with this system to prevent backflow from the cylinder to the pump and a pressure relief valve prevents the gate from overloading.

WARNING

Liftgate is not to be used as a scale. Liftgate may lift more than its rated capacity. DO NOT EXCEED RATED CAPACITY.

The cylinders and the platform are lowered with gravity control. When the key switch is turned to the down position, the valve is activated to open the flow of oil back to the reservoir. Gravity will pull the platform down to a controlled position set by the operator. The hydraulic pressure in the system keeps the platform at the set position until the operator uses the key switch to change this setting.

Fig. 1

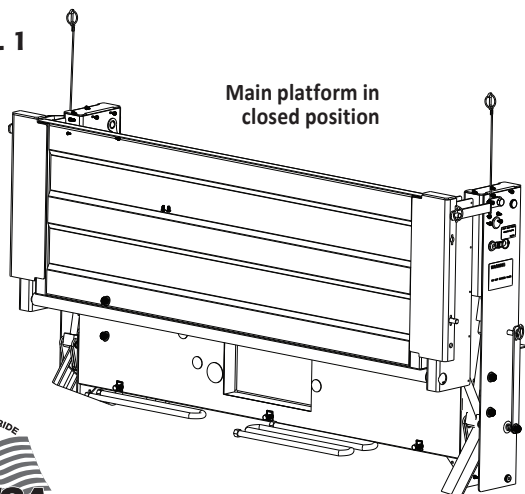


Fig. 2

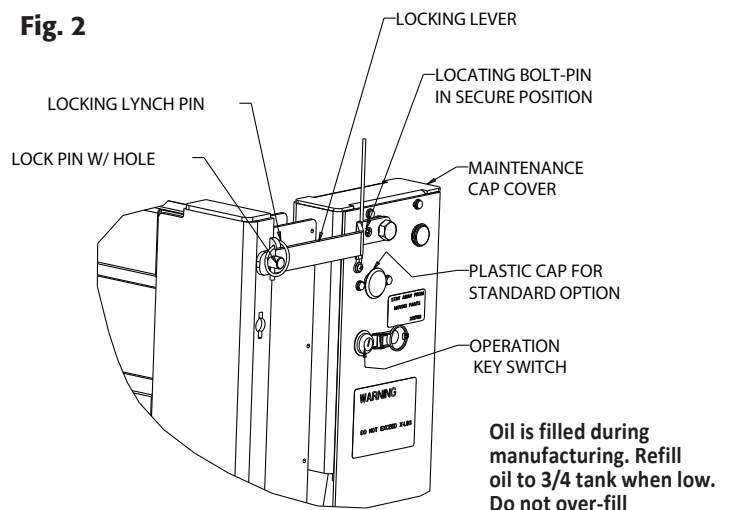
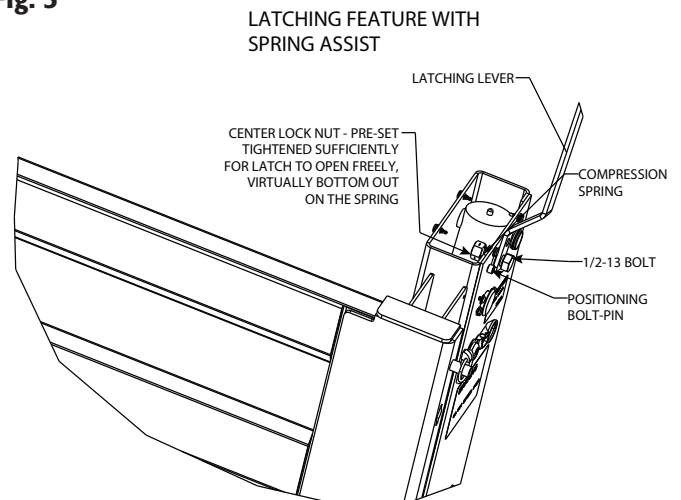


Fig. 3



NOTE: The Liftgate will not operate properly with low voltage. If you experience a slow moving platform or no power when the switch is turned, check for loose or corroded battery connections. If the power is not restored to the system, starting the vehicle engine or replacing battery may be necessary.

Operating the LiftDogg:

1. To open the LiftDogg – Rotate the lock handle bar on the driver side of the vehicle in a clockwise direction, until it is in a vertical position. Rotate the handle bar on the passenger side in the same manner. Pull the main platform open and step away toward the key switch area or a way from moving parts.
2. If your liftgate has an extension ramp, pull the locking latch before to swing open the extension.

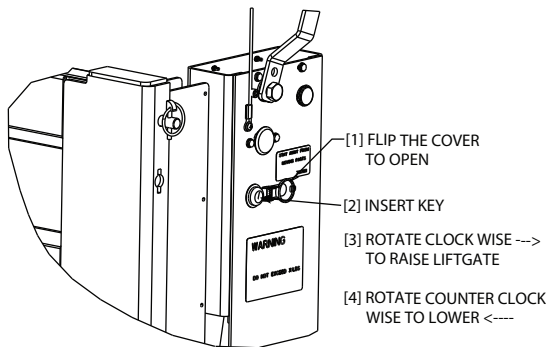


LiftDogg Features and Options

Your Liftgate is quality tested prior to shipping. Installers or End-users will need to mount the LiftDogg for specific application and vehicle fit. The LiftDogg is already filled with low-temperature hydraulic oil for use in sub zero temperatures.

Controlling the LiftDogg

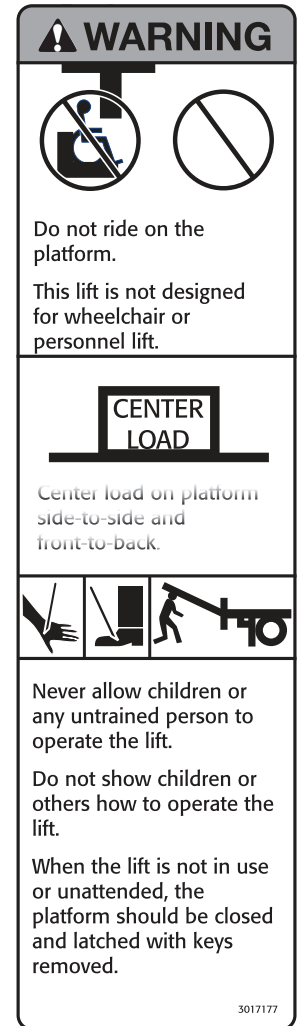
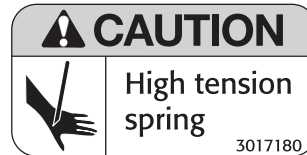
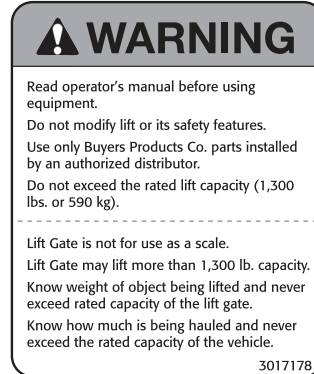
The LiftDogg lift gate is operated by the key provided with the unit. A pendant remote 9ft. cord controller is also available as an optional accessory.



1. To activate the LiftDogg, insert the key into the lock switch.
2. Lower the liftgate by turning the key in a counter-clockwise direction. If you release the key in the middle of the operation, the liftgate will stop moving. It will remain in the stopped position in the air until you resume controlling the system using the key.



Fig. 4. Warning Decals



3. Turn the key in a clockwise direction to raise the liftgate. If you release the key in the middle of the operation, the liftgate will stop moving. It will remain in the stopped position in the air waiting until you resume controlling the system using the key.



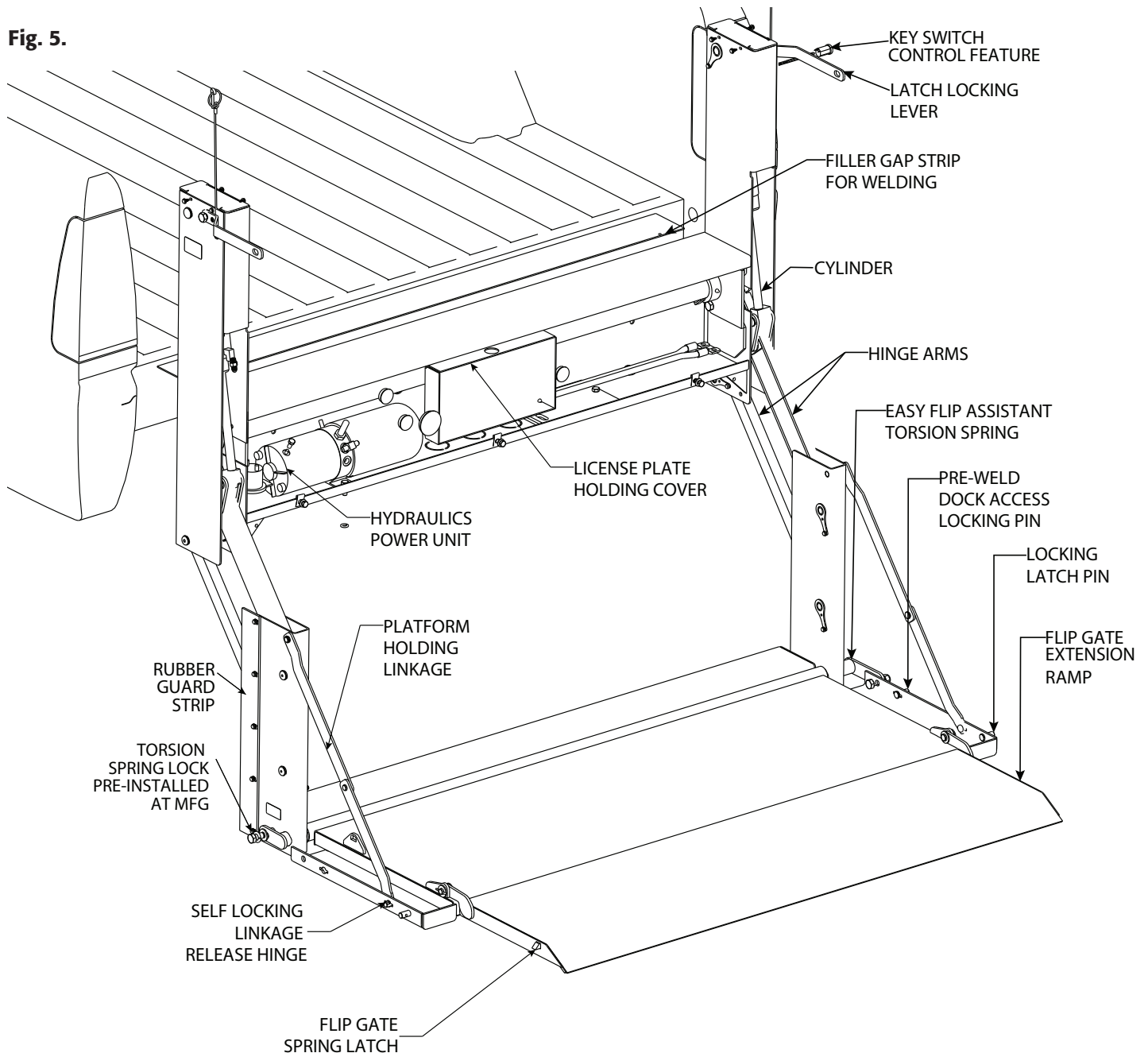
4. After the platform is raised to the truck bed floor, remove your load onto the truck bed.
5. Close the platform and the folding ramp extension. Lock the extension ramp with the spring latch. Pin the lever down with lynch pins for extra security.

6. The LiftDogg liftgate is an industrial product for material handling only. Do not use it as wheel chair lift. Do not ride on the platform and always stand clear of the platform when raising or lowering.

7. Never show children or unauthorized personnel how to operate liftgate.

8. Always remove the key or remote controller when not in use.

9. The platform must reach the floor before loading

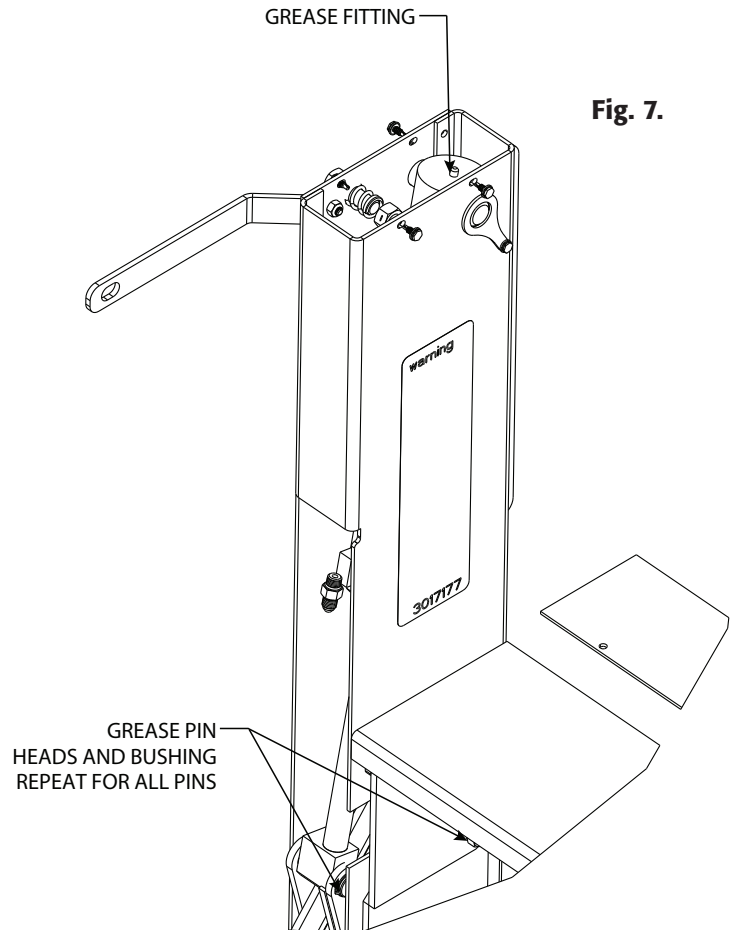
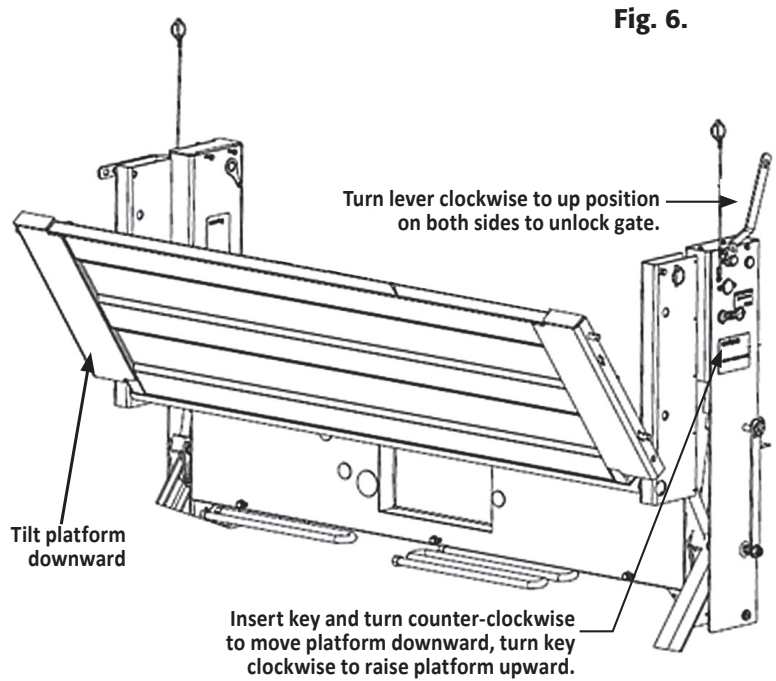


Maintenance and Service Information

All installations, re-installation, and repair should be done by a qualified authorized distributor of Buyers Products. All replacement parts must be of original quality.

Safety Decals must be attached visually. All missing decals should be replaced before usage. No Modification is to be made without the explicit authorization of Buyers Products. Use only AW46 hydraulic oil. LiftDogg Liftgates require preventative maintenance program to be effectively operational. Service is recommended every 120 days or 1500-2000 cycles— whichever comes first.

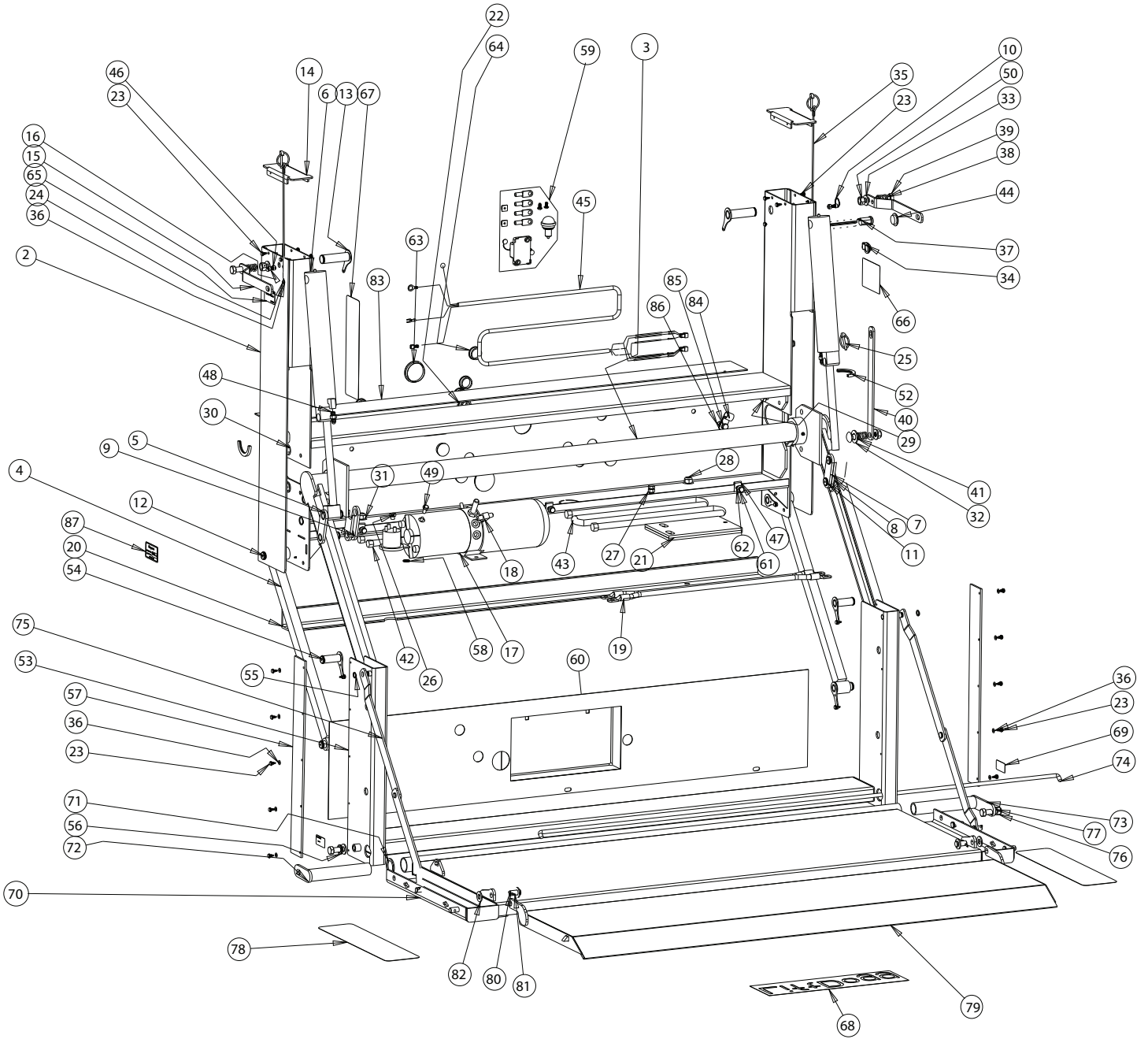
- Check for leaks from cylinders, hoses, and all fittings. Replace or repair as needed to prevent leaking.
- Grease all fittings with grease gun. A taper nose fitting tool may be needed in conjunction with the grease gun.
- Grease all rotating pins. Pins are designed to take the taper nose fitting tool when pressure upon the surface, grease can be pumped into the small opening. Regrease every 120 days.
- Replace any excessive worn parts.
- If needed, adjust platform latches designed to properly lock the gate in the stored position.
- Check for all welds for cracks to see if repair are necessary.
- Check all electrical connections. Clean or repair if corroded.
- Replace fuses, if needed. Check electric cable for worn or damaged insulation.
- Replace or clean safety decals, so that they are legible.
- Check key switch control operation.



Trouble Shooting

Problems	Possible cause	Solution
Liftgate will not operate having no action when key is turned.	Key is broken	Get a replacemnet key
	Poor electrical connection	Reconnect properly
	Fuse is blown	Check for voltage with a meter-replace
	Polarity is reversed	Switch negative and Positive
	Circuit breaker tripped	Reset the breaker
	Bad Key Switch	Replace keyswitch
Liftgate will not raise or raises slowly	Poor electrical connection	check connection thoroughly
	Battery power is very low	recharge battery
	Switch is malfunction	Change switch - Jumper wire to test
	Release valve is stuck-malfunction	Clean first/replace as needed
	Raise solenoid not working	Replace solenoid
	Oil level is low	Refill hydraulic oil to 3/4 tank full
	Vent plug not installed or dirty.	Check vent plug on tank.
	Overloaded liftgate	Reduce the load.
	Release valve is stuck/malfunction	Clean first/replace as needed
Liftgate settles down slowly with load or no load	Hoses may be leaking	Tighen or replace hoses
	Check valve stuck or very dirty	Raise&lower lift several times/replace valve
	check valve malfunction	Replace Valve
	Cylinder Seals worn or dammaged	Replace cylinders
	Down solenoid sticking or partially open	Replace solenoid
Pump or motor is noisy	Worn pump, motor or coupling.	Contact Liftdoggg service distributor
	Oil level is low	Add oil to 3/4 full - Do Not fill 100% full
Liftgate lowers very slowly, especially in cold weather	Hinge arm pins seized to the bushings	Clean and lubricate - replace if damaged
	Lack of lubrication at cylinder pins	Lubricate all joints-jerks
	Cylinder pins seized	Lubricate all joints-jerks-replace as needed
Liftgate will not lower	Poor electrical connection	Check and clean or repair all connections
	Fuse is blown/Circuit breaker trip	Re-place fuse-Reset circuit breaker
	Lift is stuck with obstacle objects	Remove obstacles
	Solenoid is broken	Replace new solenoid
	Hinge arm or cylinder pins seized	Clean, lubricate or replace pins.

Fig. 8.



Parts List

ITEM	PART NO.	QTY.	DESCRIPTION
1	3019421	1	LIFTGATE, FIRST SUB ASSY, 60IN
2	3016802	1	FRAME, UPPER
3	3016804	1	TUBE, MAIN ACTUATING
4	3016803	2	ARM, PIVOT DS & PS
5	3016816	2	CONNECTOR, CYLINDER MECHANICAL
6	3015442	2	CYLINDER, LIFTDOGG, 3/4 ROD
7	3015441	2	SPACER, WASHER
8	3015440	2	PIVOT, ADAPTER ARM EXTENSION inner
9	3018370	2	PIVOT, ADAPTER ARM EXTENSION
10	3016858	2	RING, .875 RETAINING
11	3016859	10	RING, .75" RETAINING
12	3016809	2	PIN, ANTI-ROTATION W/ LONG GREASE PIN
13	3016810	2	PIN, ANTI-ROTATION W/ LONG PIN
14	3016057	2	COVER, TOP UPRIGHT FRAME
15	3016058	2	RETAINER, UPRIGHT FRAME & PLATFORM
16	3016860	2	SCREW, SOCKET, 1/4-20X.5 SST
17	3015595NR	1	POWER UNIT, HYDRAULICS
18	H5715X4X4X6	1	TEE, STRAIGHT THRD BRANCH 1/4 JUMP
19	3016328	1	WIRE ASSEMBLY, LIFTGATE 23ft
20	3016646	1	ANGLE, LONG MOUNTING
21	3016647	2	PLATE, MOUNTING BOTTOM
22	3016863	1	CAB CONNECTORS, MULTICONDUCTOR CONDUIT
23	3018893	28	SCREW, SELF DRILL-SST, 10-16
24	3016867	2	SCREW, SELF TAP, 8-18X.38, SST
25	66003	1	PIN, 3/16 LYNCH
26	FCS038016100SS	3	SCREW, HHC 3/8-16 X 1 304 SST
27	FNE038016044SS	1	NUT, NYLOCK 3/8-16 X 7/16 SST
28	FCS050013100SS	3	SCREW, HHC-1/2-13 X 1 SST
29	3006202	4	SCREW, HEX HD - 1/2-13 X 1-1/2 GR 8 ZC
30	3016864	5	NUT, 1/2-13 FLANGE, NYLOCK, ZN
31	FNE050013053	2	NUT, NYLOCK 1/2-13 ZINC
32	FWF063131095	1	WASHER, 5/8 SAE FLAT ZN
33	3003873	5	WASHER, FLAT 1/2 ID SST
34	CDC01Z	1	DUST COVER, LOCK CYLINDER
35	3016856	2	CABLE, STEEL W/ 3/16 RING LYNCH
36	3016865	12	WASHER, #10, SST
37	3017150	1	SWITCH, KEY AND HARNESS
38	3016861	3	SPRING, COMP, 1/2 ID X 1.00 LONG
39	FCS050013150SS	2	SCREW, HHC-1/2-13 X 1.50 SST
40	3016988	1	LEVER, LOCK
41	3002215	1	BOLT, CARRIAGE 1/2-13 X 1.75 GR5 ZN
42	3016061	1	HOSE, 1/4 X 29 INCH

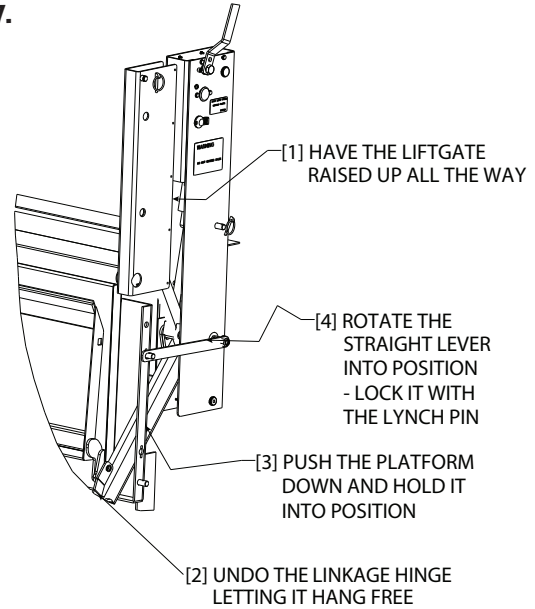
ITEM	PART NO.	QTY.	DESCRIPTION
43	3016062	1	HOSE, 1/4 X 56 INCH
44	3019457	1	CAP PLUG, 15/16 -PIP-IB-17
45	3017149	1	WIRE HARNESS ASSEMBLY
46	FNE025020031	2	NUT, NYLON INSERT 1/4-20 ZINC
47	3017164	3	NUT, CLIP ON, 5/16-18 .025-.150
48	H5315X4	2	ADAPTOR, -4M SAE ORB TO -4M JIC
49	FCS031018063SS	1	SCREW, HHC 5/16-18 X 5/8 SST
50	92401213	2	NUT, HEX REV-1/2-13 GR A ZN
51	3001376	2	SCREW, 3/8 X 1 1/2 HEX LAG
52	3018393	2	CUSHION, RUBBER 2.5 IN LONG ARC
53	3016806	1	FRAME, MID MOBILE
54	3016808	4	PIN, ANTI-ROTATION W/ SHORT PIN
55	3016862	2	RETAINER, RING 1/2
56	FWL050088013SS	1	WASHER, LOCK - 1/2 SPLIT SST
57	3015598	2	COVER, BELTED RUBBER
58	FWL038069009SS	2	WASHER, LOCK RHS-3/8 SST
59	3016817	1	KIT, LIFTDOGG MISC PARTS
60	3016805	1	BOX, LINCENSE PLATE COVER
61	FCS031018063SS	3	SCREW, HHC 5/16-18 X 5/8 SST
62	FWF031075006SS	3	WASHER, 5/16 SAE SST
63	3018390	2	CAP PLUG, 2 INCH
64	3016657	7	CAP PLUG, 1.25 INCH
65	3017181	2	DECAL, STAY AWAY
66	3017178	1	DECAL, WARN- DON'T EXCEED
67	3017177	1	DECAL, WARNING
68	3016843	1	DECAL, LiftDogg LOGO
69	3017180	2	DECAL, CAUTION LABEL
70	3016801	1	PLATFORM, MAIN
71	3015455	1	COLLAR, SLEEVE
72	3016811	1	HANDLE, TORSION SPRING HOLDING DS
73	3016812	1	HANDLE, TORSION SPRING HOLDING PS
74	3015589	1	SPRING, TORSION BAR
75	3016814	2	LINKAGE, WELDMENT DS+PS
76	FNE050013053	1	NUT, NYLOCK 1/2-13 ZINC
77	FCS050013150SS	1	SCREW, HHC-1/2-13 X 1.50 SST
78	3016857	2	ANTISKID TAPE, 4X16, SELF ADHESIVE
79	3016807	1	PLATFORM, RAMP
80	3016056	2	PIN, 1/2" X LENGTH ZINC PLATED
81	FPC013000100	2	COTTER PIN, 1/8 X 1, ZINC
82	3003873	4	WASHER, FLAT 1/2 ID SST
83	3016850	1	COVER, GAP DIAMOND TREAD
84	750	1	CLAMP, HOSE .750, 13/32 HOLE
85	FCS038016075SS	1	SCREW, HHC-3/8-16 X 3/4 SST
86	FNE038016044SS	1	NUT, NYLOCK 3/8-16 X 7/16 SST
87	3019442	1	LABEL, SERIAL NUMBER
88	3018392	1	DECAL, NESTED LOGO & MISC

Special Feature for Dock Accessibility

Your liftgate is accessible to a Dock Access feature for easy backup.

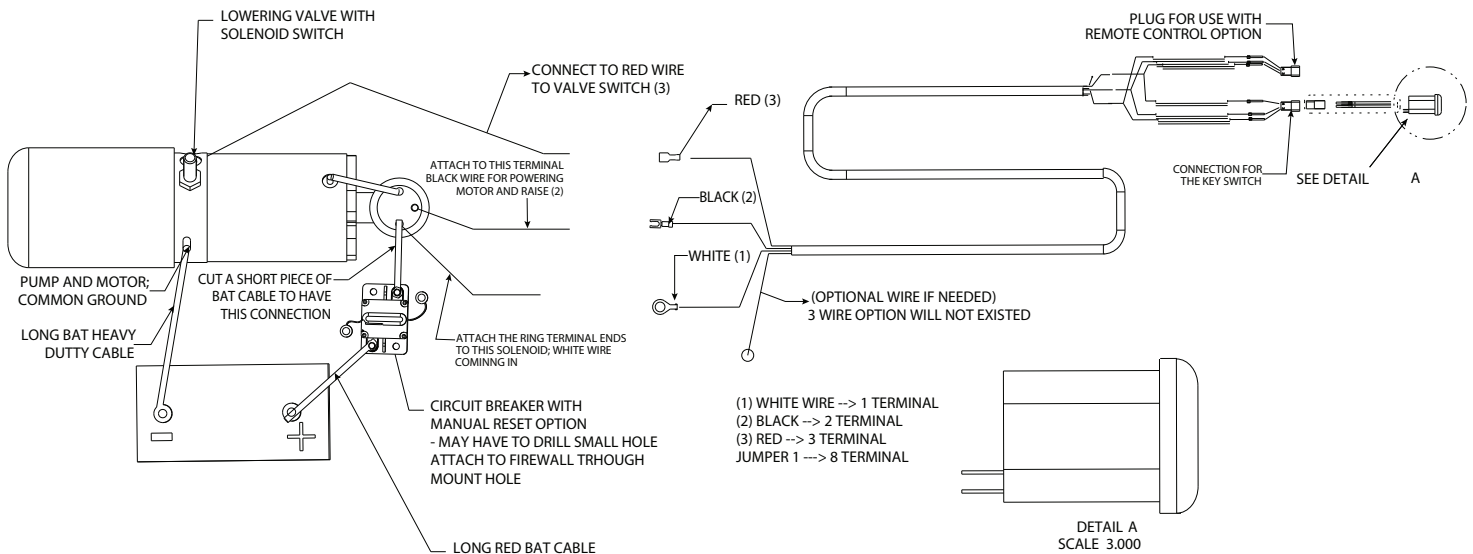
- Raise the Liftgate up all the way.
- Undo the self Locking linkage Hinge
- Rotate the straight lever into position and lock it with the Lynch Pin.
- Push the platform down and hold it into position while latching the lever into position. Be careful of the torsion spring pressure.

Fig. 7.



Electrical Diagram and Wiring Schematics

Fig. 8.



Unless otherwise specified, DO NOT TAMPER with factory setting. Your warranty will be void if not wired accordingly.