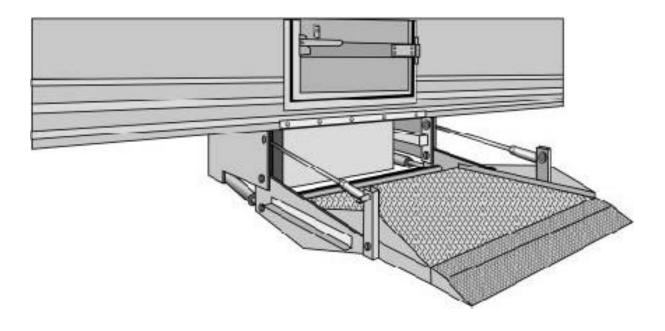
EYMAN E LIFT GATES

Instruction & Repair Parts Manual TLS3500RL Hide-A-Way™ Trailer Side Gate



LEYMAN MANUFACTURING CORPORATION

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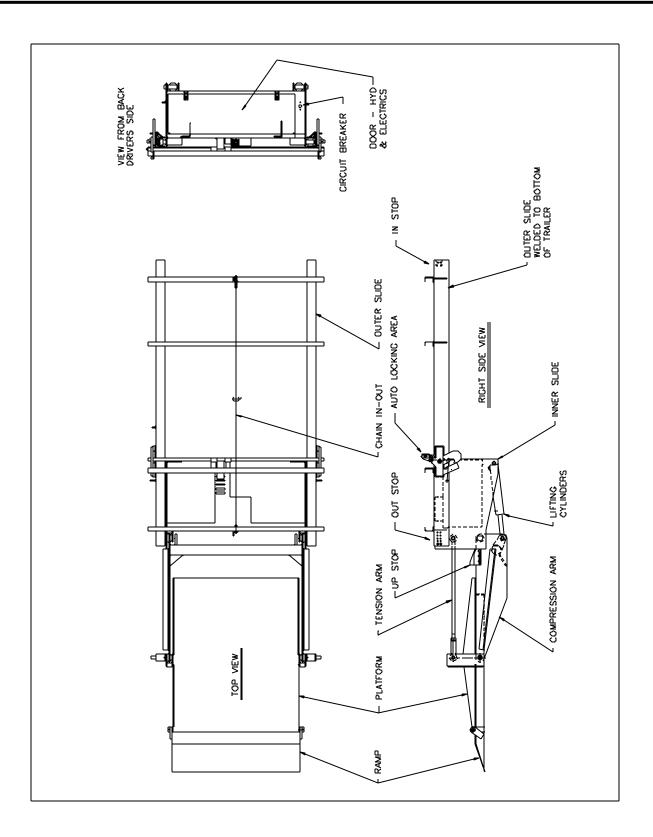
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GENERAL TERMINOLOGY





OPERATING INSTRUCTIONS

Before operating the lift gate, read and understand this manual and all urgent warning decals.

Do not stand in front of the lift gate while unfolding or using the platform.

With the gate in the over-the-road (stored) position, proceed with the following steps:

- 1. To relieve the tension on the auto lock, push the up switch (the gate will go up), pull the handle to release the auto lock.
- 2. Use the down switch to lower the lift until arms are parallel to the ground.
- 3. Stand to the side of the lift gate. Push the power in/out switch down. Gate will run out. Run the gate out until it stops and locks into its fully extended position.
- 4. Unfold the ramp.

To lower the platform, use the down switch only.

To raise the platform, use the up switch only.

To store the gate in the over-the-road (stored) position:

- 1. Raise the platform off the ground until the arms are parallel to the ground.
- 2. Fold ramp over.
- 3. Raise locking bar handle and push the in/out switch upward. Run the gate all the way under the trailer until the lift stops.
- 4. Run gate up (use the up switch). The auto lock will latch.
- 5. Lower the gate until resting on the auto lock. Use the down switch only.



EMERGENCY HAND PUMP OPERATION

If an emergency hand pump was supplied with this lift gate its intended use is to restore the gate to the transit position.

CAUTION: Do not try to operate the power unit when using the hand pump.

Steps to secure the gate, so the trailer can be moved:

- 1. Remove the pump handle from the holder and insert into the hand pump socket.
- 2. Raise the platform off the ground about 6", pump up/down.
- 3. Retract the gate, disconnect the in/out chain and manually push the gate under the trailer all the way until it stops.
- 4. Pump the gate until fully up.
- 5. With the handle unscrew the valve on the bottom of the hand pump. This will let the gate down into its over the road position.

PREVENTATIVE MAINTENANCE

1. <u>Lubrication</u>

This gate has been designed with greaseless bearings. All pivot or turning points have these special bearings. No lubrication is required. If rollers are supplied with great fittings, grease every 90 days using a lithium base grease.

2. <u>Hydraulic</u> With the platform on the ground, check the oil level. Fill to about 1" from the top of the tank.

3. <u>Electrical</u> Check for corrosion and/or loose connections.



PREVENTATIVE MAINTENANCE

TLS3500-RLwith Maintenance MinderÔ Solenoid Maintenance by Cycles

CUSTO	MER:						
LOCAT	ION:						
VEHICL	.E#:		LIFT	GATE MODEL#:	LIFT GATE SERIAL#:		
	$\sqrt{1} = C$	Ж	A = ADJUSTED	N = NOT APPLICABL	E X = WRITE UP REPAIR		
2,000	4,000	8,000		MOTOR - PU	MP COMPONENTS		
			Check that batter	y hold downs are anchored se	curely		
			Check battery(ies	s) for proper charge level. F	ROPER CHARGE LEVEL:		
			Check all wiring o	connections for corrosion and t	ghtness (batteries, switches, etc.)		
			Check solenoids	for loose fittings and operation			
			Check reservoir f	or correct amount of fluid (plat	orm should be down when checking)		
			Inspect and chec	k all circuit breakers. Replace	if necessary		
			Check the charge	e line/power line for proper ope	ration and connections at both ends		
			Remove and clea	an all pump solenoid cartridges			
					manual for recommended fluids)		
			Check and adjust	t the relief valve settings. (See	owners manual for recommended setting)		
			Check brushes a	nd armature in motor. Replace	e if necessary		
			Check amperage draw of motor (see owners manual for recommended amp draw)				
2,000	4,000	8,000			RICATION		
				platform and ramp hinges			
				-	nt. Not with corrosive lubricants, such as WD40, etc		
			Lubricate rollers,	if grease fitting provided			
2,000	4,000	8,000					
				n-out. Observe for correct ope			
				ift gate. Observe for correct o			
				d Fittings for chaffing, rubbing,			
					for proper operation (see owners manual)		
			-	t in-out chain (should only have	½" play)		
				Lock for proper operation			
				amage. Repair if necessary			
			-	wn cylinders for leaks. Repacl	cor replace cylinders		
			- ·	n and/or missing roll pins			
			-	Replace if necessary			
					ension arms. Replace if necessary		
			_	e. Repair any structural welds			
			Repaint where needed.	eded and replace any worn or	missing safety decals		

SERVICED BY:

DATE: ____



MAINTENANCE MINDER 2 OVERVIEW

Power unit is equipped with the Maintenance Minder 2 Controller. It will:

- Automatically keep track of maintenance intervals, and warn the user when maintenance is due, based on the number of lifts
- Record low voltage occurrences
- Record high temperature faults
- Record maximum run time faults, when a single operation exceeded the maximum continuous run time limit
- Give helpful trouble-shooting information on MENU 4, "Last Lift Info"

FAULT CODES

A decal in the power unit enclosure lists the following signal codes for these faults:

- 1 BEEP Service Fault (reached the number of lifts when maintenance is due)
- 2 BEEPS Low Voltage Fault (check battery condition and power line connections)
- 3 BEEPS Max. Time Fault (exceeded the maximum continuous run time allowed)
- 4 BEEPS High Temperature Fault (unit will not run until motor cools)

All fault signals will be repeated THREE times. Controller will prevent power unit from operating during the time period when a fault signal is sounding (about 5 to 10 sec.). The controller is also equipped with an anti-doorbelling feature, which prevents rapid ON / OFF operation of the power unit.

RESETTING after MAINTENANCE IS PERFORMED

To RESET the Maintenance Minder 2 after maintenance has been performed:

- 1) Go to MENU 2, hit "Enter", and toggle down to the "Reset All Info" screen
- 2) Press and hold the hidden RESET button under the Maintenance Minder 2 logo at top of faceplate
- 3) Follow the instructions on the screen regarding a second button, which must be pressed while holding the RESET button to complete the reset operation.



MAINTENANCE MINDER 2 CONTROLLER MENUS

(Press MENU)

MENU 1 – LIFT GATE INFO

(Press ENTER, then ARROW DOWN for each item)

Model Number, Serial Number, Manufacture Date, Vehicle ID, Hardware Version, Firmware Version, Software Version

(Press MENU and ARROW DOWN once)

MENU 2 – PERIOD INFO (data for the current maintenance period)

(Press ENTER, then ARROW DOWN for each item)

Number of Lifts (gives the number during this maintenance interval / and the set number when maintenance is due)

Motor ON (Total motor run time in minutes for this maintenance period)

Service Faults (number of times gate was operated while PAST the maintenance limit) High Pressure Faults (not being used, no sensor available)

Max. Time Faults (times motor exceeded its maximum allowable continuous run time) High Temperature Faults (times thermal switch in motor tripped, if switch provided) Low Voltage Faults (times low voltage occurred)

Reset all Info (Reset data after performing maintenance, once maintenance limit is reached – instructions will flash on screen after limit reached)

(Press MENU and ARROW DOWN twice)

MENU 3 – LIFE TIME INFO (data for the total life time of the gate)

(Press ENTER, then ARROW DOWN for each item)

Same items will appear as under PERIOD INFO, except this is LIFE TIME data

Reset History (reviews history for each maintenance interval)

Press ENTER, then ARROW DOWN to show history. Most recent period is highest #. Screen shows Period #, # of Lifts, and Total Run Time in minutes.

Press MENU and ARROW DOWN three times)

MENU 4 – LAST LIFT INFO (Trouble Shooting Screen – it records data that occurred during the last lift made)

(Press ENTER, then ARROW DOWN for each item)

Supply Voltage (first voltage is the minimum voltage that occurred during the last lift – if below 6 volts gate will stop / second voltage is the supply voltage just before gate operation, must be at least 10 volts)

Motor ON Time (motor run time in seconds during last lift, gate will stop at 180 seconds) Window Time (time in milliseconds during the last lift that the voltage dropped in

between 6 and 8 volts – must not be any longer than 3 seconds or gate will stop)

Note: Controller has an anti-doorbelling feature. Motor will not operate if UP switch is toggled rapidly. This prevents start solenoid contact welding.



GENERAL SPECIFICATIONS

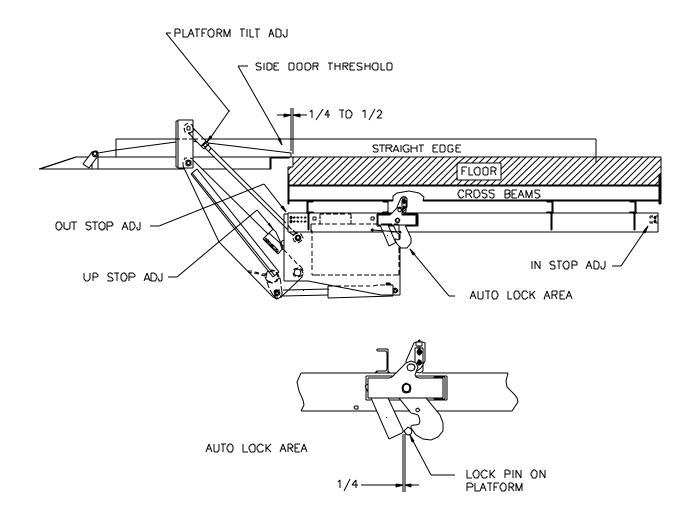
CUSTOMER:	
MODEL:	TLS
CAPACITY:	lbs.
TYPE:	Trailer Side Door Lift Gate
HYDRAULIC PRESSURE:	2000PSI – Up Function 800PSI – In/Out Function
OPERATION:	Power up/Gravity down Power in/out
SERIAL #:	

WARNING:

The use of a battery charger as the sole power source to operate the lift gate is unauthorized and will prevent the lift gate from working properly. The lift gate must always be operated in conjunction with at least one (1) 12 volt heavy duty lift gate battery. A minimum of 9.5 volts must be maintained in order for the valves to operate.



INSTALLATION ADJUSTMENTS



Step 1: The platform was preset at the factory to be level to the floor of the trailer within ¼". With a straight edge, check this. If it is okay, proceed to step 2. If not, let the platform down to the ground. Remove the two (2) roll pins and the top tension arm pivot pins (one on each side).

NOTE: One full turn moves the tip of the platform ¹/₄" (turn the end in, this moves the tip off of the platform up, unscrewing moves the tip of the platform down.

Make necessary adjustments. Replace pins, raise the platform up and check. Repeat if necessary. Replace roll pins.

NOTE: Each side must be adjusted the same amount.

CAUTION: If this adjustment has been made, the in stop must be adjusted to provide the ¹/₄" clearance with the auto locking pin (see sketch 2).

- Step 2: Adjust the up stops. Platform should be even with the floor of the trailer.
- Step 3: Adjust the out stops. The tip of the platform should be $\frac{1}{4}$ " to $\frac{1}{2}$ " from the edge of the threshold.
- Step 4: Adjust the in stops. See sketch 2 and adjust for the ¼" dimension.



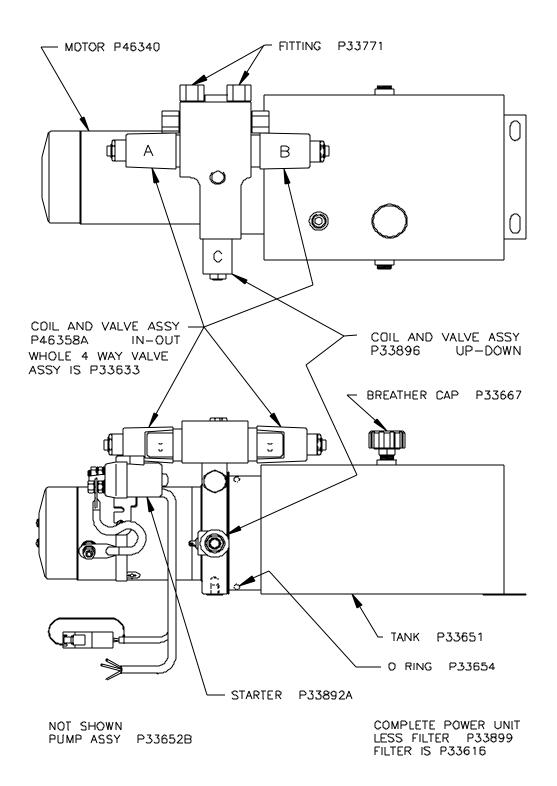
RECOMMENDED HYDRAULIC OILS/LUBRICATION

HYDRAULIC OILS	Manufacturer	Туре		Temp. Range			
Level 1 Normal Conditions	Mobile	DTE 11		-15° F to + 150° F			
	Shell	TELLUS-T15		-15° F to + 150° F			
	Exxon	UNIVIS-N		-15° F to + 150° F			
Level 2 Cold Conditions	Mobile	AERO-H		-50° F to + 80° F			
	Shell	AERO FLU		-50° F to + 80° F			
	Exxon	UNIVIS-H	-	-50° F to + 80° F			
	Mil	H-5606	6	-50° F to + 80° F			
	HYDRAULIC TANK						
	2 ½ gallo	ns					
LUBRICATION Grease	Rollers, if grease fitt	ing provided		Lithium Base Grease			
	BATTERI	ES					
Т	wo (2) 12 V D.C. Group	o 31 Deep Cycle	s				
ELE	CTRICAL COMPONEN		ONS				
	attery terminal protectio						
	AMPERAGE DRAW	OF MOTOR					
	latform (empty) approx			volts.			
At by	pass approximately 19	5 AMP5 @ 13.5	VOItS				
	LIFTING PRESSUR						
With plat	tform at floor level and	pump in bypass	2000PSI				
	IN-OUT PRESSUR						
When sliding gate in-c	out and pump in bypass		; 1000PS	I (slide pads)			
MIN	IIMUM VEHICLE FLOO	OR HEIGHT I AI)FN				
	any size of platform – v						
	any size of platform – v						
	· ·	.		TTEDIES			
	Time up: 14 – 18		17 31 BA	TIERIES			
Time up: 14 – 18 seconds Time down(gravity down): 12 –16 seconds							



POWER UNIT REPLACEMENT PARTS

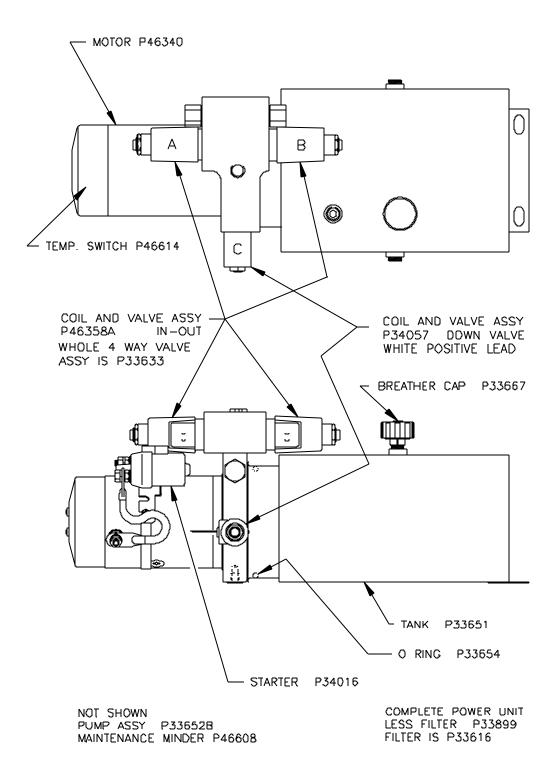
FENNER (GOLD MOTOR) AND SMART START SOLENOID





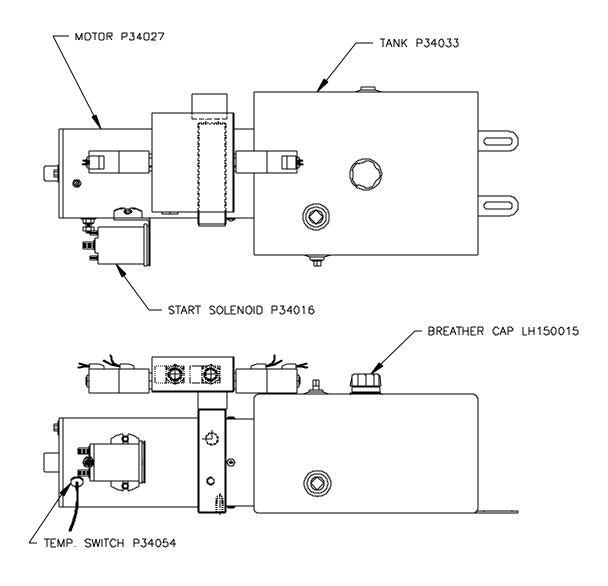
POWER UNIT REPLACEMENT PARTS

FENNER (GOLD MOTOR) AND MAINTENANCE MINDER 2



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POWER UNIT REPLACEMENT PARTS MONARCH (BLACK MOTOR) AND MAINTENANCE MINDER 2

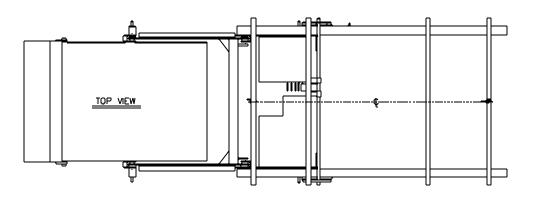


NOT SHOWN PUMP ASSY P34056 MAINTENANCE MINDER P46608 COMPLETE POWER UNIT LESS FILTER P34013 FILTER IS P33616

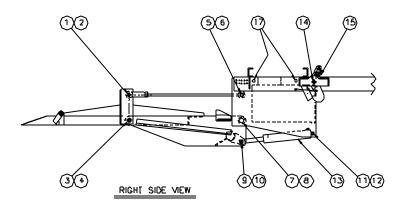


REPLACEMENT BEARINGS AND SHAFTS

VIEW FROM BACK DRIVERS SIDE



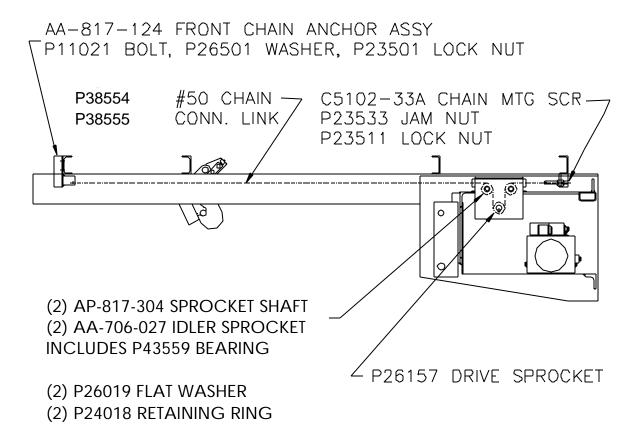




Replacement Bearings and Shafts								
Index #	Req'd	Part #	Part Name	Matl.	Matl. Size			
1	2	P43567	Bearing		1 id. x 1-1/2 lg.			
2	2	BA-817-085	Pin & Boss	CHR RD	1 dia. x 7-5/8 lg.			
3	2	P43567	Bearing		1 id. x 1-1/2 lg.			
4	2	AT-999-129-001	Pin & Boss	CHR RD	1 dia. x 3-1/4 lg.			
5	2	P43567	Bearing		1 id. x 1-1/2 lg.			
6	2	AT-999-129-001	Pin & Boss	CHR RD	1 dia. x 3-1/4 lg.			
7	2	P43566	Bearing		1-1/4 id. x 1-1/2 lg.			
8	2	AA-817-108	Pin & Boss	CHR RD	1-1/4 dia. x 3-1/4 lg.			
9	2	P43574	Bearing		³₄ id. x 1-1/4 lg.			
10	2	AT-817-088-001	Pin	CHR RD	¾ dia. x 3-3/8 lg.			
11	2	P43573	Bearing		¾ id. x ¾ lg.			
12	2	AT-817-088-002	Pin	CHR RD	¾ dia. x 5-7/16 lg.			
13	1	P33944	Hyd. Cylinder		2-1/2 Bore x 12 Stroke			
14	2	P43570	Bearing		1 id. x ½ lg.			
15	2	AP-817-233	Skid Pad		To unlock platform			
16	4	P37544	Roller		One Each Corner			
17	4	AP-817-044	Side Skid Pad		1 od. x 1-13/16 lg.			

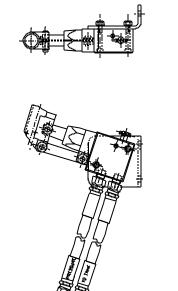


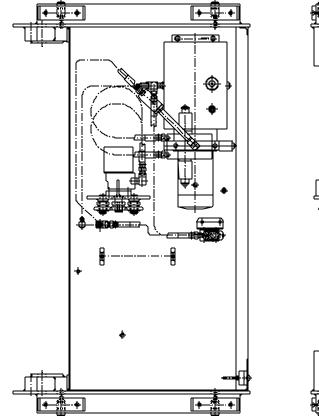
CHAIN AREA REPLACEMENT PARTS

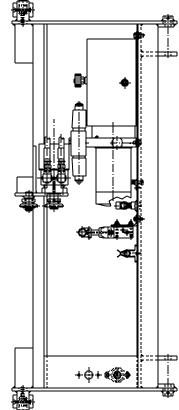




EMERGENCY HAND PUMP OPTION #107TLS







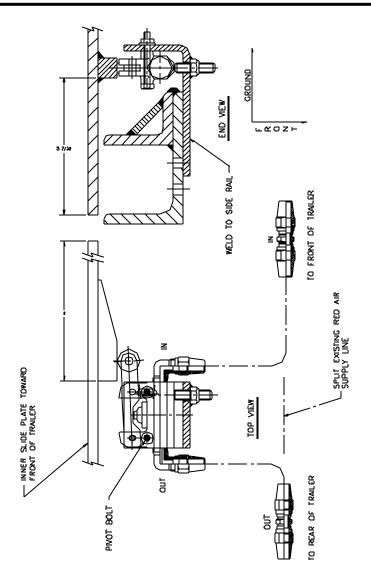
REMOVE TWO PIF ONE FROM HYD ONE FROM TEE

EMERGENCY HAND PUMP OPTION #107TLS

	Hand Pump Opt#107TLS – DA-817-137								
Index #	ndex # Req'd Part #		Part Name	Matl.	Matl. Size				
1	1	P33902	Hand pump						
2	1	AP-817-110	Mounting bracket						
3	2	P15541	Soc HD cap screw		1⁄4 - 20 x 2 in. lg.				
4	2	P26001	Flat washer						
5	2	P23502	Lock nut		1⁄4 - 20NC				
6	2	AT-501-292-020	Hyd line assy						
7	2	P10040	Hex HD screw		5/16 - 18 NC x 1 in. lg.				
8	2	P23510	Lock nut		5/16 - 18NC				
9	2	P46192	Handle holder						
10	2	P17516	Self tapping screw		10 - 32NF x ½ in. lg.				



BRAKE LOCK-UP – OPTION #156TLS

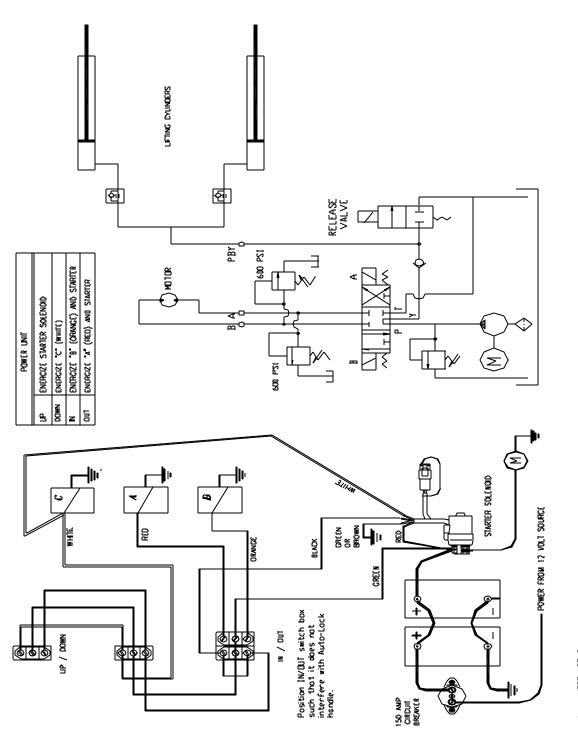


	Brake Lock Up Opt#156TLS								
Index #	Req'd	Part #	Part Name Matl.		Matl. Size				
		D 000.40							
1	1	P33948	3 way valve		With roller				
2	2	P33946	90 deg elbow		3/8 00 10-¼ NPT				
3	2	P33945	Female union		3/8 00 tube to 3/8 00 tube				
4	1	P33947	3/8 CO red brake tubing		1pc makes two lines-12 ft. lg.				
5	1	BA-817-188	Mounting bracket assy						
6	1	BA-817-187	Cam						
7	2	P10557	Hex HD bolt		¼-20 x 2 in. lg.				
8	2	P23007	Plain washer						
9	2	P23502	Lock nut		1⁄4 - 20				
10	1	P14516	Soc HD set screw		3/8-16NC x 1-1/2 lg.				



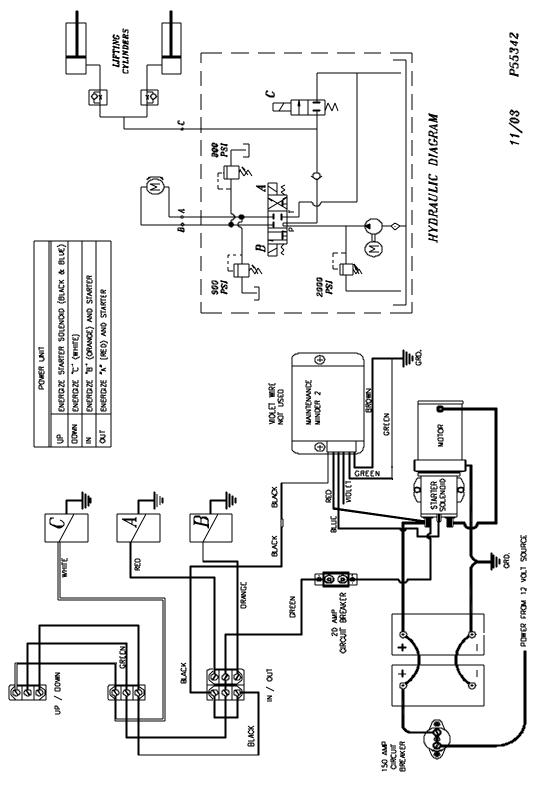
WIRING DIAGRAM (FENNER WITH SMART START SOLENOID)

GOLD MOTOR AND NO TEMPERATURE SWITCH



Apply NDCD NCP-2 corrosion pratection sealer, or aquivalent, at all connections nade during installation.

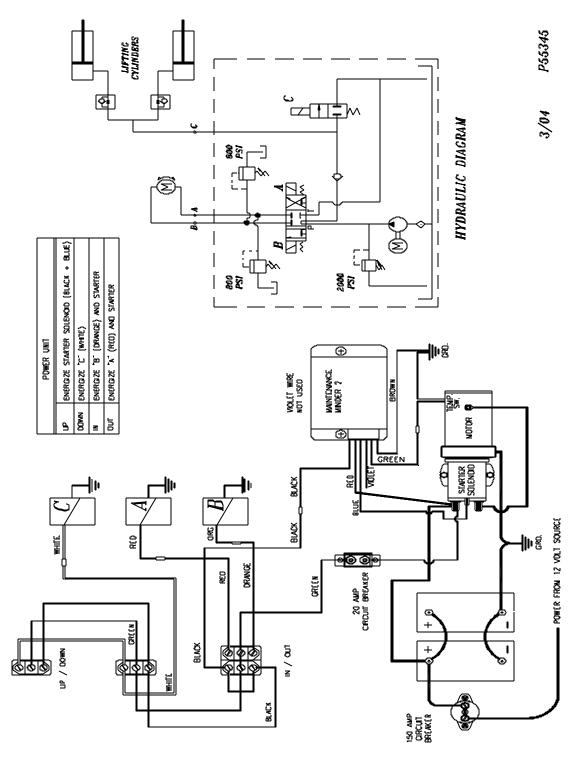
WIRING DIAGRAM (FENNER WITH MAINTENANCE MINDER 2) GOLD MOTOR AND NO TEMPERATURE SWITCH



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WIRING DIAGRAM (MM2 + TEMP.SW.)

MONARCH (BLACK MOTOR) OR FENNER (GOLD MOTOR)

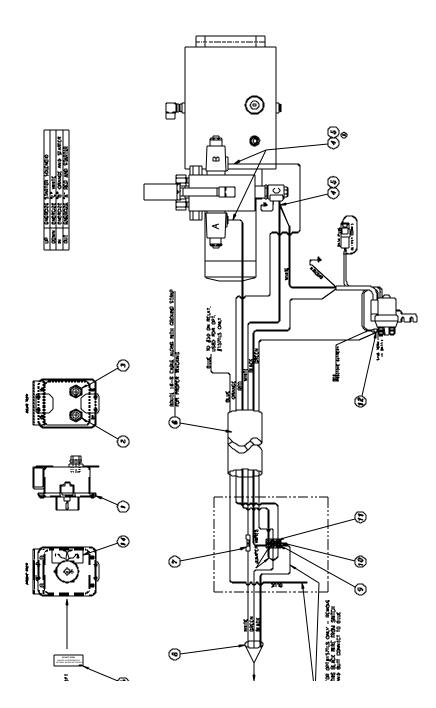


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After 6-01 FENNER (GOLD MOTOR) AND SMART START SOLENOID

WARNING! REVERSING THE LEADS ON THE "C" DOWN VALVE WILL CAUSE PERMANENT DAMAGE TO THE COIL. LARGE SPADE IS GROUND.

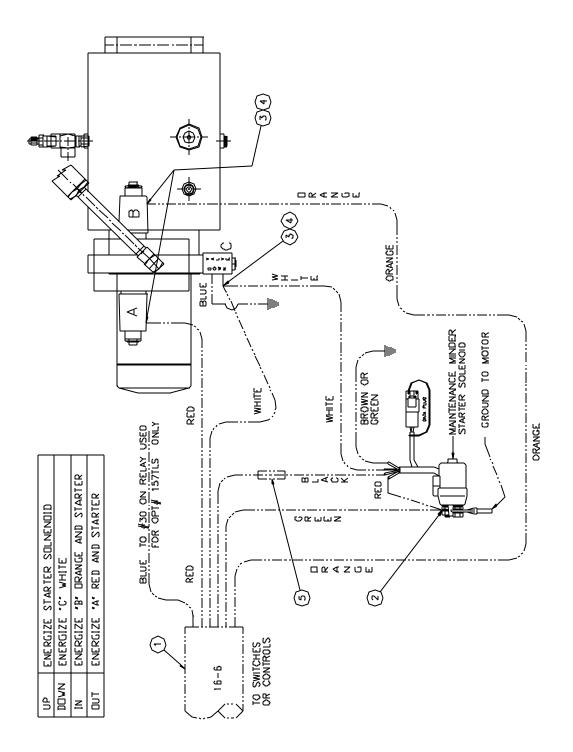


After 6-01

	Basic Electrics – CT-551-324								
Index #	Req'd	Part #	Part Name	Matl.	Material Size	Remarks			
1	1	BA-551-317	Switch box weldment						
2	1	P46445	Cord grip		For 16-8 cable				
3	1	P46139	Cord grip		For 16-3 cable				
4	6	P46300	Heat shrink tubing		3 pcs. each 2" long				
5	3	P46491	Female connector		3/16				
6	1	P46475	Cable 16-6		See chart for length				
7	1	P46156	Butt connector						
8	1	P46186	Cable 16-3		60" long				
9	4	P46444	Large fork terminal						
10	1	P46442	Toggle switch						
11	2	P46476	Small fork terminal						
12	1	P46235	Large ring terminal						
13	1	P46291	Rubber boot			Not shown			
14	1	P55222	In/out decal						
15	1	P55317	Do not open decal						
16	6	P46250	Loom clamp			Not shown			
17	6	P17518	Self tapping screw			Not shown			
18	1	P55267	Electrics/Hyd. Diagram		Smart start	Not shown			
18	1	P55342	Electrics/Hyd. Diagram		MM2, No temp. sw.	Not shown			
18	1	P55345	Electrics/Hyd. Diagram		MM2 + temp. sw.	Not shown			



Before 6-01 FENNER (GOLD MOTOR) AND SMART START SOLENOID



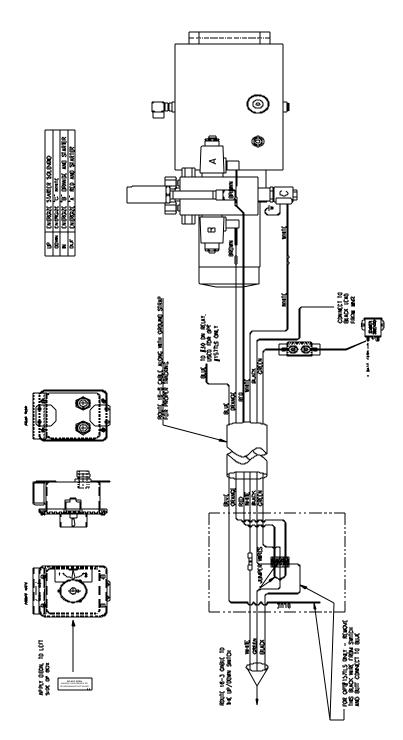


Before 6-01

	Basic Electrics – CT-551-324									
Index #	Req'd	Part #	Part Name	Matl.	. Material Size Rer					
1	1	P46475	Jacketed wire							
2	1	P46235	Large ring term							
3	3	P46491	3/16 female term		Connect 2 wires together at "C"					
4	6	P46300	Heat shrink tubing		3 pcs. each 2" long					
5	1	P46156	Butt connector							



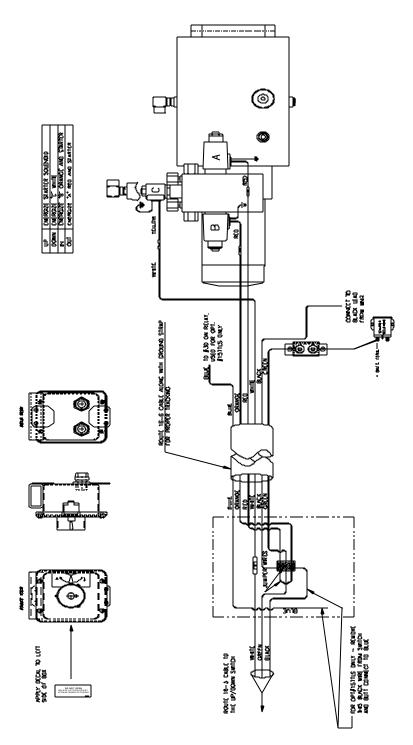
FENNER (GOLD MOTOR) AND MAINTENANCE MINDER 2



LEYMAN E GATES

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MONARCH (BLACK MOTOR) AND MAINTENANCE MINDER 2

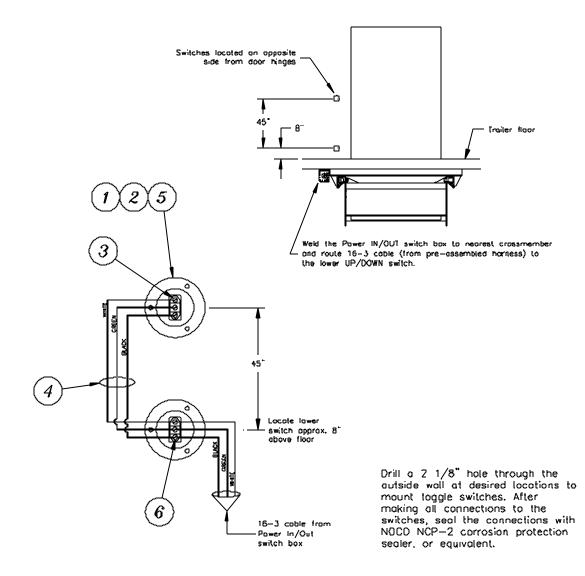




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TOGGLE SWITCH ELECTRICS-WIRING DIAGRAM

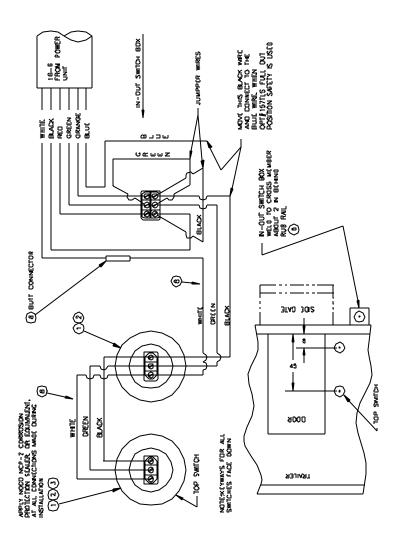
After 6-01



Toggle Switch Electrics – BA-551-323									
Index #	Req'd	Part #	Part Name	Matl.	Mat'l Size	Remarks			
1	2	P46292	Dish pan			side mtg switch			
2	2	P46441	Toggle switch						
3	3	P46476	Fork terminal						
4	1	P46186	Cable 16-3 sow		96 in. (8ft.)				
5	6	P17536	Sheet metal screw		10-16 x ¾ Type AB				
6	3	P46444	Large fork terminal						
7	4	P46250	Loom clamp			Not shown			
8	4	P17518	Self tapping screw			Not shown			

TOGGLE SWITCH ELECTRICS-WIRING DIAGRAM

Before 6-01

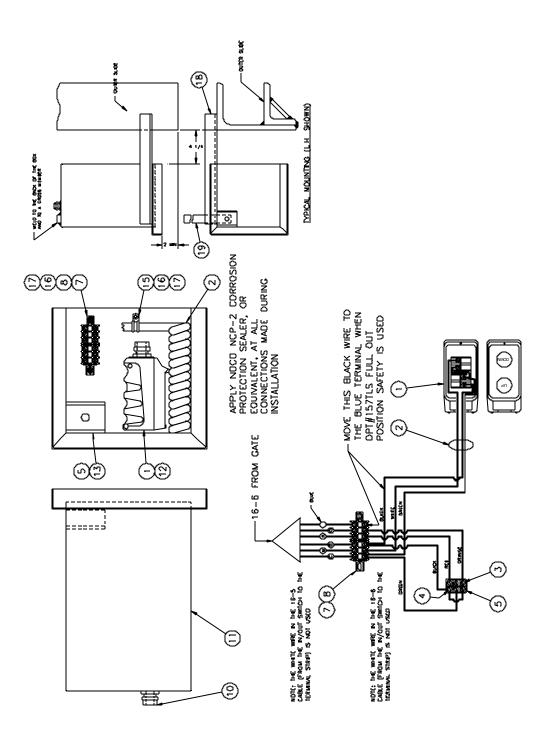


	Toggle Switch Electrics – BA-551-323								
Index #	Req'd	Part #	Part Name	Matl.	Mat'l Size	Remarks			
1	2	P48292	Dish pan						
2	2	AA-551-326	Toggle switch		Single pole				
3	5	P45476	Fork terminal						
4	1	P46186	Cable 16-3		8 ft. lg. (96 in. lg.)				
5	7	P48444	Large fork terminal						
6	1	BA-551-101	Switch box						
7	1	AA-551-327	Toggle switch		2 pole				
8	1	P46156	Butt connector		2 in. lg.				
9	4	P17518	Self tapping screw		10-32 x ½ lg.				
10	4	P46250	Loom clamp						
11	6	P17536	Sheet metal screw		10-16 x ¾ lg.				



WALK AROUND ELECTRICS -

OPTION #103TLS





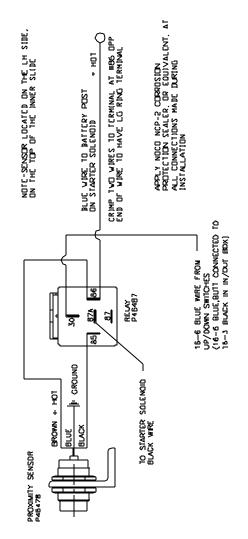
WALK AROUND ELECTRICS -

OPTION #103TLS

	Walk Around Electrics – Opt#103TLS								
Index#	Req'd	Part #	Part #Part NameMatl.Matl. Size		Matl. Size	Remarks			
1	1	P46239	Walk around push button			Square D			
2	1	AP-551-212	Coil cord (1/2)						
3	4	P46475	Locking fork terminal	Small					
4	2	P46444	Locking fork terminal	Large					
5	1	P46442	Toggle switch						
6	1	P46443	Cable (16-5)		20"				
7	2	P48382	Terminal block	KT3					
8	1	P46395	Terminal block end						
9	1	P56554	Steel plug		In open hole i	n back of box			
10	1	P46445	Cord grip						
11	1	P46138	Push button box						
12	1	AA-999-056	Push button hook assy						
13	1	AP-551-016	Toggle switch bracket						
14	5	P17518	Self tapping screw			Ship loose			
15	6	P46250	Loom clamp			Ship 5 loose			
16	3	P19501	Round head screw		#10-24 x ½				
17	3	P23504	Lock nut		#10-24				
18	1	S580-014.000	Support angle	ST angle	1-1/2x1-1/2x1/4x14				
19	1	S050-006.000	Brace	HR flat	1/4x1/2x6				



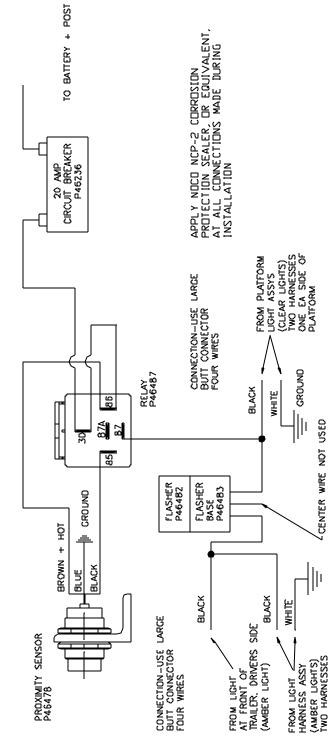
ELECTRICAL CONNECTIONS FULL OUT POSITION SAFETY – OPTION #157TLS



Full Out Position Safety Option#157TLS – CA-551-281								
Index #	Req'd	Part #	Part Name	Matl.	Matl. Size	Wgt.		
1	1	P46478	Proximity sensor					
2	1	P46487	Relay					
3	1	AP-817-138	Sensor mount		Weld to inner slide cover			
4	1	S566-024.000	Sensor out target	St angle	2 x 1-1/2 x 1/8 x 24			
5	1	S566-003.000	Sensor in target	St angle	2 x 1-1/2 x 1/8 x 3			
6	4	P46318	Female connector		For relay connections			
7	1	P46156	Butt connector		Blk wire on sol to blk wire			
8	1	P17518	Self tapping screw		To mount relay			
9	1	P46235	Large ring terminal					
10	1	P46471	Blue wire – 24" lg.	16 ga.	To provide power to relay			



ELECTRICAL CONNECTIONS LIGHTS AND SENSORS – OPTION #155TLS



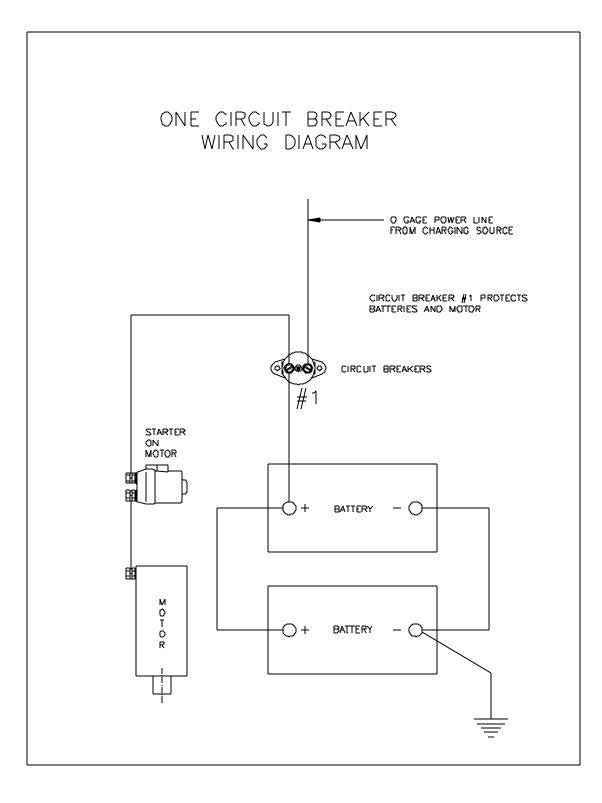
NDTE-SENSOR LOCATED ON THE RH SIDE, DN THE TOP OF THE INNER SLIDE

ELECTRICAL CONNECTIONS LIGHTS AND SENSORS – OPTION #155TLS

Lights and Sensor Electrics Opt#155TLS							
Index #	Req'd	Part #	Part Name	Matl.	Matl. Size		
1	1	P46478	Proximity sensor				
2	1	AP-817-138	Sensor mount		Weld to inner slide cover		
3	1	S586-003.000	Sensor target	st angle	2 x 1-1/2 x 1/6 x 3		
4	1	P46487	Relay				
5	1	P46482	Flasher		Blk wire on sol to blk wire		
6	1	P46483	Flasher base		Blk wire on sol to blk wire		
7	1	P46236	Circuit breaker		20 amp, auto reset		
8	4	P17518	Self tapping screw		CirB-2, relay-1, flasher base-1		
9	2	P46235	Large ring terminal		To starter lg hot post		
10	4	P46318	Female terminal push dn	16 GA	For relay connections		
11	5	P46047	Small ring terminal		To circuit breaker & 3 grounds		
12	2	P48531	Lg butt connector				
13	1	BA-551-193	Light harness assy		Includes all lights		
14	1	P46017	Black wire 16-GA	50 ft lg	To front of trailer		
15	1	P46017	Black wire 16-GA	8 in lg	From clear lights to relay		
16	1	P46301	Green wire 16-GA	3 in Ig	From relay 30 to relay 86		
17	1	P46301	Green wire 16-GA	8 in lg	From relay to circuit breaker		
18	1	P46301	Green wire 16-GA	48 in Ig	From circuit breaker to battery		
19	2	P46017	Black wire 16-GA	15 ft lg	From relay to clear lights		



ONE CIRCUIT BREAKER-WIRING DIAGRAM





TROUBLESHOOTING CHART

PROBLEM	PROBABLE CAUSE	REMEDY
The motor is running, but the platform will not go up or reach the floor of the vehicle.	 Low battery. Green light on starter solenoid must be on to run or check MM2 for voltage faults. Insufficient oil in power unit tank. 	 Recharge or replace battery. Fill tank (55-010-040).
The platform will not go up or reach floor level and the motor does not run.	 Low battery. Green light on starter solenoid must be on to run or check MM2 for voltage faults. Tripped circuit breaker. Power line is loose. Bad motor, starter or switch 	 Recharge or replace battery. Reset the circuit breaker. Check the connections. If loose, tighten. Check for corrosion and clean if necessary. To test-push the up switch, if motor does not run, jump the two terminals on the starter solenoid. The motor should run, if not, the motor is bad. If it does run, the solenoid is bad or is not getting a signal from the switch. Use a test light to check (black wire).
Platform will not lower.	 Low battery. Green light on starter solenoid must be on to run or check MM2 for voltage faults. Bad ground or poor electrical connections. Solenoid valve not opening. Check for obstructions in rails. 	 Recharge or replace battery. Check connections, if loose-tighten. Check for corrosion and clean if necessary. Lower "C" valve (white wire). Must activate when the switch is pushed. Use test light to check. Visually check.
Platform creeps down.	 Hydraulic leak. Defective cylinder or piston seal. "C" valve (white wire) not closing. Drain valve on hand pump may be open. 	 Visually check for leaks. Replace seals or cylinder. Clean and inspect (55-003-003). Check to see if valve on hand pump is closed tightly. Should be tightly closed.
Platform goes down slowly.	 Check for obstructions or damage to arms. Restricted or pinched hydraulic lines. "C" valve (white wire) not opening. Incorrect hydraulic oil for cold weather operation 	 Visually check. Check for bent or pinched lines (55-003-004). Clean and inspect (55-003-003). Use Mobile DTE 11 or Aero-HFA for extreme conditions.
Gate will not go out and/or in.	 Check for obstructions in rails. Low battery. Green light on starter solenoid must be on to run or check MM2 for voltage faults. Tripped circuit breaker. Power line is loose. Bad motor, starter or switch. Insufficient oil in power unit tank. 	 Visually check. Recharge or replace battery. Reset the circuit breaker. Check the connections. If loose, tighten. Check for corrosion and clean if necessary. To test: push out switch and motor does not run, jump the two terminals on the starter solenoid. The motor should run, if it does not run, you have a bad motor. If it does run, the solenoid is bad or it is not getting a signal from the switch. Use test light to check (out is "A" valve "red wire", in is "B" valve "orange wire").

NOTES

