

Service Manual for:

# ***NL500*** ***Lift Series***



## **Public Use Wheelchair Lifts**

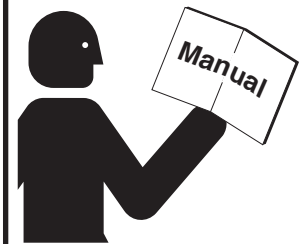
### **Series A1**

#### **DOT — Public Use Lift**

"DOT — Public Use Lift" verifies that this platform lift meets the "public use lift" requirements of FMVSS No. 403. This lift may be installed on all vehicles appropriate for the size and weight of the lift, but must be installed on buses, school buses, and multi-purpose passenger vehicles other than motor homes with a gross vehicle weight rating (GVWR) that exceeds 4,536 kg (10,000 lb).



#### **! WARNING**



**Read manual  
before installing  
or servicing lift.  
Failure to do so  
may result in  
serious bodily  
injury and/or  
property damage.**

Braun NL500 Series™

36090 Rev. A

April  
2012

# Congratulations

We at The Braun Corporation wish to express our fullest appreciation on your new purchase. With you in mind, our skilled craftsmen have designed and assembled the finest lift available.

This manual provides service-related material. Refer to the FMVSS No. 403 Quick Reference Installation Sheet for installation instructions, operating instructions and maintenance procedures.

Braun NL500 Series™ lifts are built for dependability and will provide years of pleasure and independence as long as the lift is installed and serviced as specified by a Braun certified technician, and the lift is operated by an instructed person.

Sincerely,  
THE BRAUN CORPORATION

Paul W. Brown

Ralph W. Braun  
Chief Executive Officer

## Warranty and Registration Instructions

Immediately upon receiving the lift, examine the unit for any damage. Notify the carrier at once with any claims.

Two warranty/registration cards (shown right) are protected in a clear envelope and attached to the lift protective shipping wrap. The sales representative must process one of the cards. The consumer must fill out the other card and mail it to The Braun Corporation. A detailed warranty section is provided in this manual. The warranty cards must be processed to activate the warranty.

**Model No.**

**Serial No.**

**OWNER'S WARRANTY REGISTRATION**

XXXXXX-XXXXXX      XX-XXXXXX

**PURCHASED FROM**

**OWNER**

**NAME** \_\_\_\_\_ **DATE INSTALLED** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_

**CITY** \_\_\_\_\_

**TELEPHONE** \_\_\_\_\_ **STATE** \_\_\_\_\_ **ZIP** \_\_\_\_\_

**TO VALIDATE WARRANTY**  
**REGISTRATION CARDS MUST BE RETURNED TO THE BRAIN CORPORATION.**

## Sample Warranty/Registration Card

Two Braun Serial No./Series No. identification tags (shown below) are posted on the lift. One I.D. tag is posted on the right side vertical channel. A second I.D. tag is located on the lift mounting base. Both I.D. tags provide the product identification information provided on the warranty/registration card. Record the information in the space provided (or document on a copy). This information must be provided when filing a warranty claim or ordering parts.

<b>The Braun Corporation</b> 1-800-THE LIFT™ BRAUNLIFT.COM™	
DOT Public Use Lift MODEL#	
XXXXXXXXXX	Model No. _____
Max. Lifting Capacity - 600Lbs.	
SERIAL NUMBER	
XX-XXXXX	Serial No. _____
MFG DATE	
XX/XX/XXXX	Date of Manufacture _____
CE	

Sample Serial No./Series No. Identification Tag

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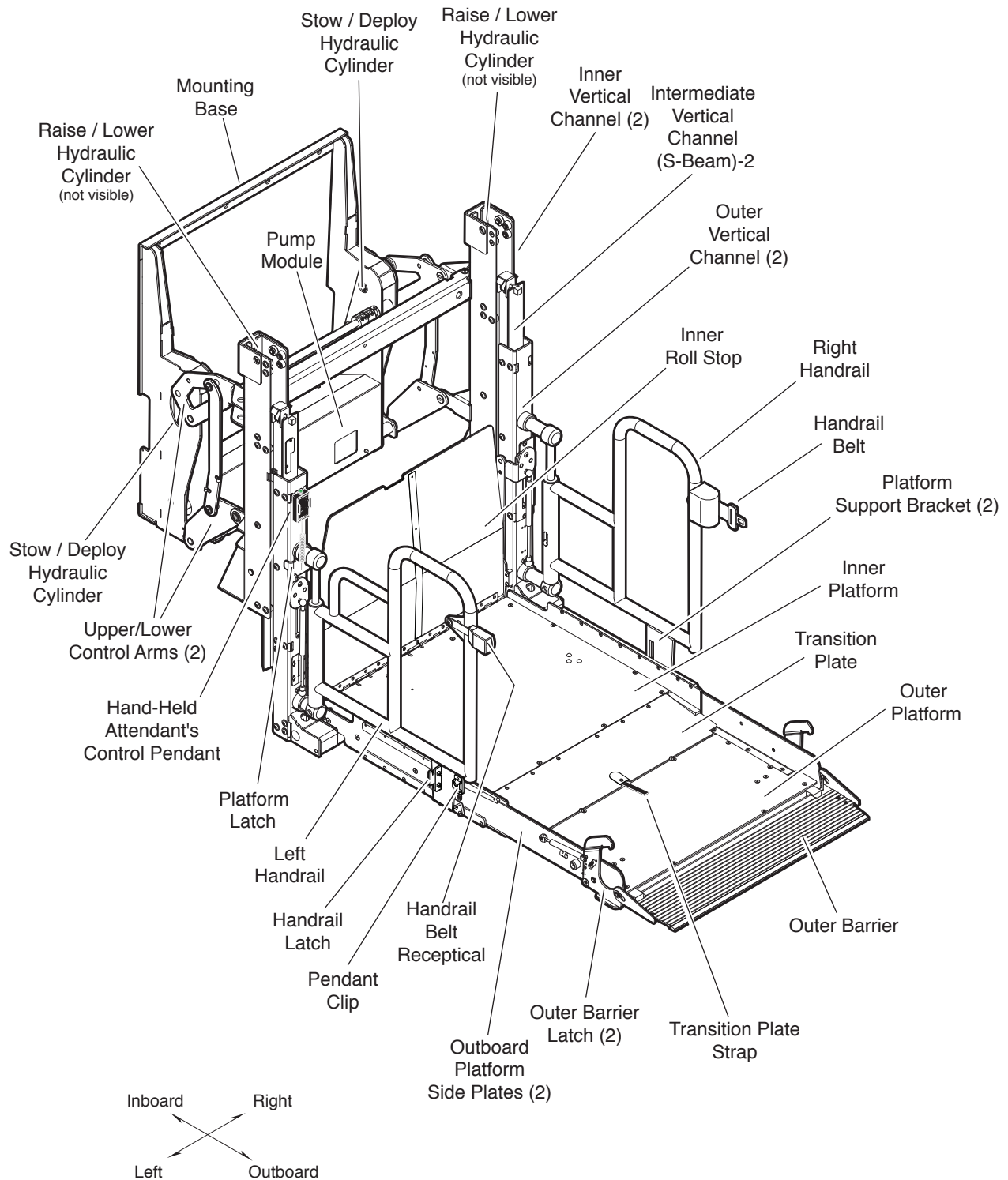
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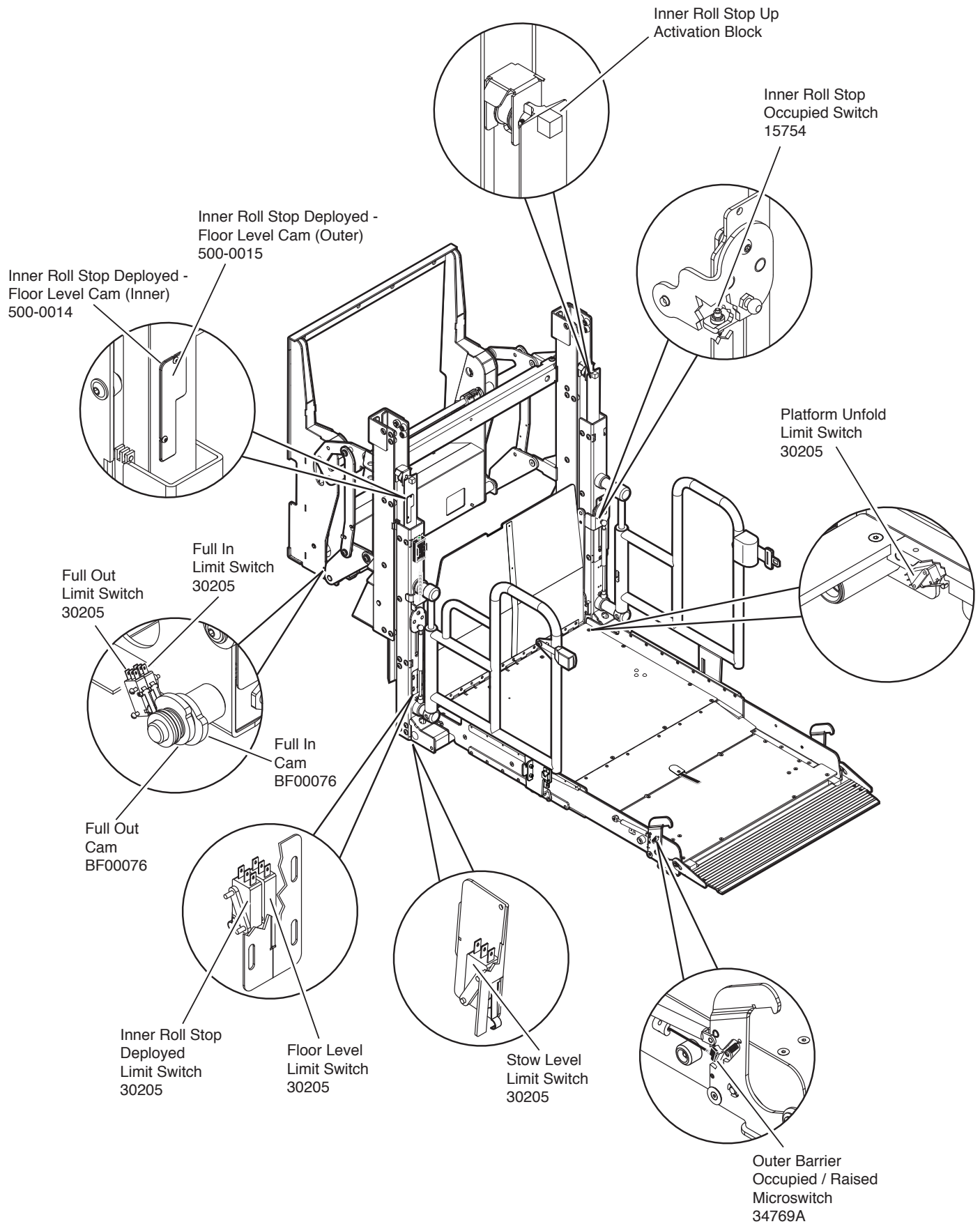
## Warranty

Braun® Limited Warranty .....	34-36
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# Lift Terminology



## Switch and Sensor Locations



## Certification Checklist Diagnostic Procedures

The following operations and conditions must be functionally verified in order for the lift to be FMVSS 403/404 compliant. If an operation does not function as described or a condition is not met, follow the referenced procedures to correct the problem or contact a Braun Corporation Product Support representative.

Public use vehicle manufacturers are responsible for complying with the lift lighting requirements in Federal Motor Vehicle Safety Standard No. 404, Platform Lift Installations in Motor Vehicles (49 CFR 571.404).

- Vehicle movement is prevented unless the lift door is closed, ensuring the lift is stowed.
  - 1. Verify lift door closed signal (vehicle interlock).
  - 2. Refer to the interlock installation instructions.
- Lift operation shall be prevented unless the vehicle is stopped and vehicle movement is prevented.
  - 1. Verify vehicle secure signal (orange 18 gauge) single conductor plug from inside valve block housing has a +24 volt signal.
  - 2. Refer to the interlock installation instructions.
- The platform will not fold/stow when occupied.
  - Refer to Platform Unfold Switch Adjustment procedure.
- The inner roll stop will not raise if occupied.
  - Check Inner Roll Stop Occupied and Inner Roll Stop Deployed Switches for wear or damage, and for proper operation.
- The outer barrier will not raise if occupied.
  - Refer to Outer Barrier Occupied Switch Adjustment procedure.
- Verify platform lighting when lift is deployed and pendant illumination when lift is powered.
  - 1. Replace bulb(s) in the light housing.
  - 2. Check vehicle wiring and fuses going out to lights.
- A visual and audible warning will activate if the threshold area is occupied when the platform is at least 1" below floor level.
  - 1. Make sure connector(s) to threshold sensors are properly connected.
  - 2. Call Product Support.
- Platform movement is prohibited beyond the position where the inner roll stop is fully deployed (up).
  - Check Inner Roll Stop Occupied and Inner Roll Stop Deployed Switches for wear or damage, and for proper operation.
- Platform movement shall be interrupted unless the outer barrier is deployed (up).
  - Check Outer Barrier Occupied / Raised limit switch, wires and connector.
  - In diagnostic mode, LCD should display a value of "1" for OBAR SW when outer barrier is deployed (up).

# Switch Adjustments

## Adjustment Procedures

**Full In:** When the Full In Switch is deactivated (depressed), inward travel of the lift during Stow function is stopped. Power is removed from the pump motor and In Solenoid.

The lift is fully stowed when the rubber bumpers are compressed 1/8" to 3/16" and the pump shuts off.

1. Fully deploy lift and lower platform to the ground.
2. Loosen set screw and rotate front cam so that screw is approximately at the 9:30 position.
3. Tighten set screw.
4. Stow lift.
5. If lift fully stows but pump continues to run, loosen set screw and rotate front cam clockwise.
6. If the lift stops and is not fully stowed, loosen set screw and rotate front cam counterclockwise.
7. Tighten set screw securely upon final adjustment.

**Full Out:** The Full Out Switch prohibits outward travel of the lift during Deploy function. Power is removed from the pump motor and the Out Valve when this switch is activated (pressed). The platform will not raise or lower until this switch is activated (pressed).

1. Fully deploy the lift and lower platform to the ground.
2. Loosen set screw and rotate the rear cam so the set screw is on top (12:00 position).
3. Rotate cam counterclockwise until switch is activated (pressed).
4. Tighten set screw securely upon final adjustment.

**Platform Unfold:** When the Platform Unfold Switch is activated (pressed), it will prohibit the lift from stowing anytime the platform is deployed (unfolded) during the Stow function. Up / Down travel of platform is only allowed when the switch is activated (pressed).

1. No adjustment available, bend microswitch lever if needed.

**Outer Barrier Occupied:** Power is removed from the pump and Up Valve when the switch is deactivated (depressed) while the Outer Barrier is occupied at 3" above the ground. Power is stopped to the pump and an audible and visual alarm will also be activated during the Up function.

1. No adjustment available, bend microswitch lever if needed.

**Inner Roll Stop Occupied:** The switch interrupts downward travel of the platform during the Down function by removing power from the Down Valve. An audible and visual alarm will also be activated at that time.

The switch is deactivated (depressed) two places during the lift cycle. First, when the Inner Roll Stop is occupied in the range of 1" below floor level to the

point when the Inner Roll Stop is locked in the upright position. This deactivation stops the downward travel and triggers an alarm.

Second, when the Inner Roll Stop is in the full up and locked position, the Inner Roll Stop Occupied Switch is also deactivated (depressed). This does not stop the platform or set off the alarm due to the deactivated (depressed) Inner Roll Stop Deployed Switch.

1. No adjustment available.

**Inner Roll Stop Deployed:** This switch is deactivated (depressed) when the Inner Roll Stop mechanically locks. The purpose of this switch is to override the Inner Roll Stop Occupied switch from stopping downward travel whenever the inner roll stop is deployed and locked.

1. See Floor Level for adjustment procedures.

**Floor Level Switch:** The Floor Level Switch has two functions. Power is removed from the pump motor and the Up Valve by the switch when activated (pressed) once the lifting cylinders have reached full extension.

The switch also allows threshold sensing when the switch is deactivated (depressed) denoting that the platform is 1" below floor level.

Inner Roll Stop Deployed is automatically adjusted when setting Floor Level.

1. Raise platform to floor level using the manual back up pump. Stop raising platform once inboard end of inner roll stop fully contacts vehicle floor.
2. Loosen the (4) screws attaching the microswitch bracket to the Rear Outer Vertical Channel.
3. Slide microswitch bracket down until microswitch is activated (pressed).
4. Tighten the (4) screws attaching the microswitch bracket.

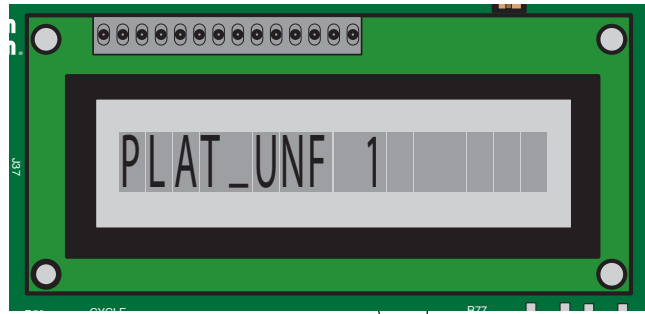
**Stow Level Switch:** The Stow Level Switch sets the height at which the platform will be manually folded. It also insures that the lift is compact enough to fit through the lift bay opening during the Stow function. The switch is activated (pressed) at and below Stow Level. Power is removed from the Down Valve when this switch is activated (pressed).

1. A good starting reference is to raise the platform so that the Outer Vertical Channel top edge is 1/2" lower than top edge of the Inner Vertical Channel (red Stow Level arrow decals should be aligned).
2. Loosen the (2) screws attaching the microswitch to the Rear Inner Vertical Channel.
3. Rotate the bottom of the microswitch bracket inward to lower Stow Level. To raise Stow Level, rotate the bottom of the microswitch bracket outward.
4. Tighten the (2) screws attaching the microswitch bracket.



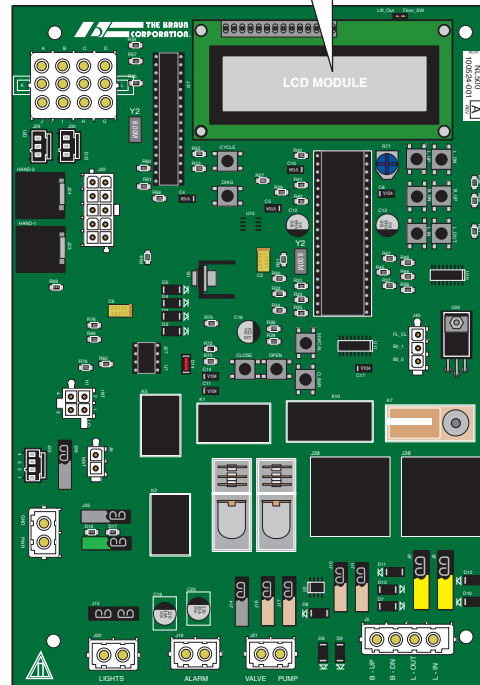
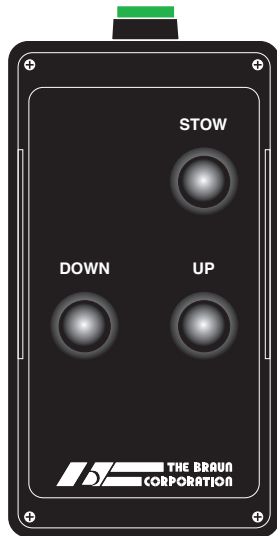
## LCD Diagnostic Codes

When all of the harnesses are correctly connected to the control board, the values shown in the chart below will display when the corresponding action is taken. “1” will appear on the LCD module as shown in the illustration at right. If any other value appears on the LCD screen during the specific diagnostic procedure, verify that the correct harness is properly connected to both the control board and the associated lift harness. Repeat the harness diagnostic procedure. If an incorrect value is still present after checking the harness and connections, contact The Braun Corporation Product Support Department.



**Hand-held Pendant**

All basic functions (UP, DOWN and STOW) should show a value of “1” when activated via the hand-held pendant.



LCD Display	Stowed	Full Out	Moving Up		At Floor Level	Moving Down		Ground Level	1” Below Floor Level
			Inner Roll Stop Locked	Inner Roll Stop Unlocked		Inner Roll Stop Locked	Inner Roll Stop Unlocked		
F_IN	1								
FOUT		1	1	1	1	1	1	1	1
FLV					1				
IN_RL_ST				1	1		1		1
1_IN_BLW				1			1		1
OBAR	= 1 When Outer Barrier is Activated								
PLAT_UNF	= 1 When Platform is Unfolded								
MAT	= 1 When Mat is Activated								
BEL_ST	= 1 When Lift is at or Below Stow Level								

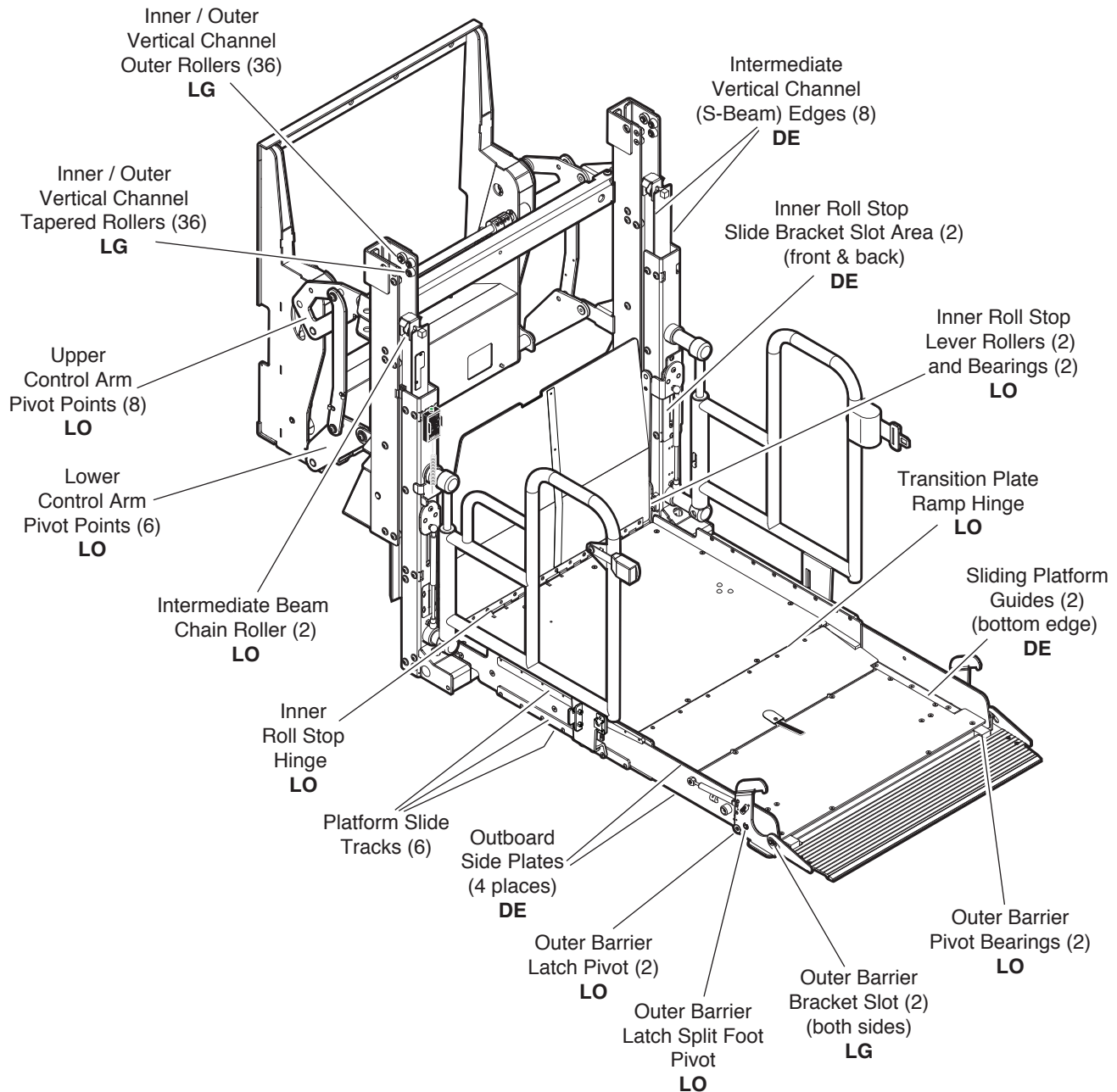


## **NOTES**

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# Maintenance and Lubrication

## Lubrication Diagram



See the Maintenance/Lubrication Schedule for recommended applications per number of cycles.

Lubricant	Type	Specified (recommended) Lubricant	Available Amount	Braun Part No.
<b>LO - Light Oil</b>	Light Penetrating Oil (30 weight or equivalent)	LPS2, General Purpose Penetrating Oil	16 oz. Aerosol Can	15807
<b>DE - Door-Ease</b>	Stainless Stick Style (tube)	Door-Ease Stick (tube)	1.68 oz.	15806
<b>LG - Light Grease</b>	Light Grease (Multipurpose)	Lubriplate	14 oz. Can	15805

## Maintenance and Lubrication Schedule

Proper maintenance is necessary to ensure safe, trouble free operation. Inspecting the lift for any wear, damage or other abnormal conditions should be a part of the transit agency daily service program. Simple inspections can detect potential problems.

The maintenance and lubrication procedures specified in the following schedule must be performed by a Braun authorized service representative at the scheduled intervals according to the number of cycles. All service procedures must be performed when the lift is fully on the ground. NL500 Series lifts are equipped with a cycle counter (digital display built into the electronic control board).

NL500 Series lifts are equipped with hardened pins and self-lubricating bushings to decrease wear, provide smooth operation and extend the service life of the lift.

When servicing the lift at the recommended intervals, inspection and lubrication procedures specified in the previous sections should be repeated. Clean components and the surrounding area before applying lubricants. LPS2 General Purpose Penetrating Oil is recommended where Light Oil is called out. Use of improper lubricants can attract dirt or other contaminants which could result in wear or damage to the components. Platform components exposed to contaminants when lowered to the ground may require extra attention.

Lift components requiring grease are lubricated during assembly procedures. When replacing these components, be sure to apply grease during installation procedures. Specified lubricants are available from The Braun Corporation (part numbers provided on previous page).

All listed inspection, lubrication and maintenance procedures should be

repeated at 750 cycle intervals following the scheduled 4500 cycle maintenance procedures. These intervals are a general guideline for scheduling maintenance procedures and will vary according to lift use and conditions. Lifts exposed to severe conditions (weather, environment, contamination, heavy usage, etc.) may require inspection and maintenance procedures to be performed more often than specified.

Discontinue lift use immediately if maintenance and lubrication procedures are not properly performed, or if there is any sign of wear, damage or improper operation. Contact your sales representative or call The Braun Corporation. One of our national Product Support representatives will direct you to an authorized service technician who will inspect your lift.

### **WARNING**

**Maintenance and lubrication procedures must be performed as specified by an authorized service technician. Failure to do so may result in serious bodily injury and/or property damage.**

<b>750 Cycles</b>	Outer barrier pivot bearings (2)	Apply Light Oil - See Lubrication Diagram
	Outer barrier latch pivot (2)	Apply Light Oil - See Lubrication Diagram
	Outer barrier latch split foot pivot	Apply Light Oil to both sides of slot. See Lubrication diagram
	Outer barrier bracket slot (both sides) - (2)	Apply Light Grease to both sides of slot. See Lubrication diagram
	Inspect outer barrier for proper operation	Correct or replace damaged parts.
	Inspect outer barrier latch for proper operation, positive securement, and detached or missing spring	Correct or replace damaged parts and/or relubricate. See Lubrication Diagram
	Verify FMVSS 403 / 404 Certification Checklist	See Certification Checklist Diagnostic Procedures
	Inspect lift for wear, damage or any abnormal condition	Correct as needed.
	Inspect lift for rattles	Correct as needed.
	Platform slide tracks (6)	Extend outer platform and use compressed air to remove any debris in the platform slide plate tracks.

## Maintenance and Lubrication Schedule

<b>1500 Cycles</b>	<b>Perform all procedures listed in previous section also</b>	
	Outer platform side plates (4 places) and sliding platform guides (2)	Apply Door Ease to top and bottom edges of outer platform side plates and bottom edges of sliding platform guides. See Lubrication Diagram.
	Upper control arm pivot points (8)	Apply Light Oil - See Lubrication Diagram
	Lower control arm pivot points (8)	Apply Light Oil - See Lubrication Diagram
	Platform pivot pin bearings (4)	Apply Light Oil - See Lubrication Diagram
	Transition plate ramp hinge	Apply Light Oil - See Lubrication Diagram
	Inner roll stop hinge	Apply Light Oil - See Lubrication Diagram
	Inner roll stop lever rollers (2) and bearings (2)	Apply Light Oil - See Lubrication Diagram
	Inner roll stop slide bracket slot area (2) - front & back	Apply Door Ease - See Lubrication Diagram
	Inner / outer vertical channel tapered rollers (36)	Apply Light Oil - See Lubrication Diagram. Use Light Grease during roller replacement.
	Inner / outer vertical channel outer rollers (36)	Apply Light Oil - See Lubrication Diagram. Use Light Grease during roller replacement.
	Hydraulic in/out cylinder upper pivot bushings (4)	Apply Light Oil
	Intermediate vertical channel (s-beam) edges (8)	Apply Door Ease - See Lubrication Diagram
	Inspect inner roll stop for: • Wear or damage • Proper operation. Roll stop should rest solidly on floor providing smooth transition. • Positive securement.	Resecure, replace or correct as needed.
	Inspect handrail components for wear or damage, and for proper operation	Replace damaged parts.
	Inspect microswitches for securement and proper adjustment.	Resecure, replace or adjust as needed. See Switch Adjustment section
	Make sure lift operates smoothly	Lubricate or correct as needed.
	Inspect external snap rings / e-clips: • Hydraulic cylinders (8) • Outer barrier latches (2) • Outer barrier latch split foot pivot (1) • Inner / outer vertical channel tapered rollers (36) • Inner / outer vertical channel outer rollers (36) • Inner roll stop rollers (4)	Resecure or replace if needed.
	Inspect all threaded fasteners for damage and positive securement.	Resecure or replace damaged fasteners. See Exploded View section for fasteners that require #242 General Purpose Blue Loctite (Braun #18822).
	Remove pump module cover and inspect: • Hydraulic hoses, fittings and connections for wear or leaks on pump, valve block and hand pump. • Harness cables, wires, terminals, fuses and connections for securement or damage	Resecure, replace or correct as needed.

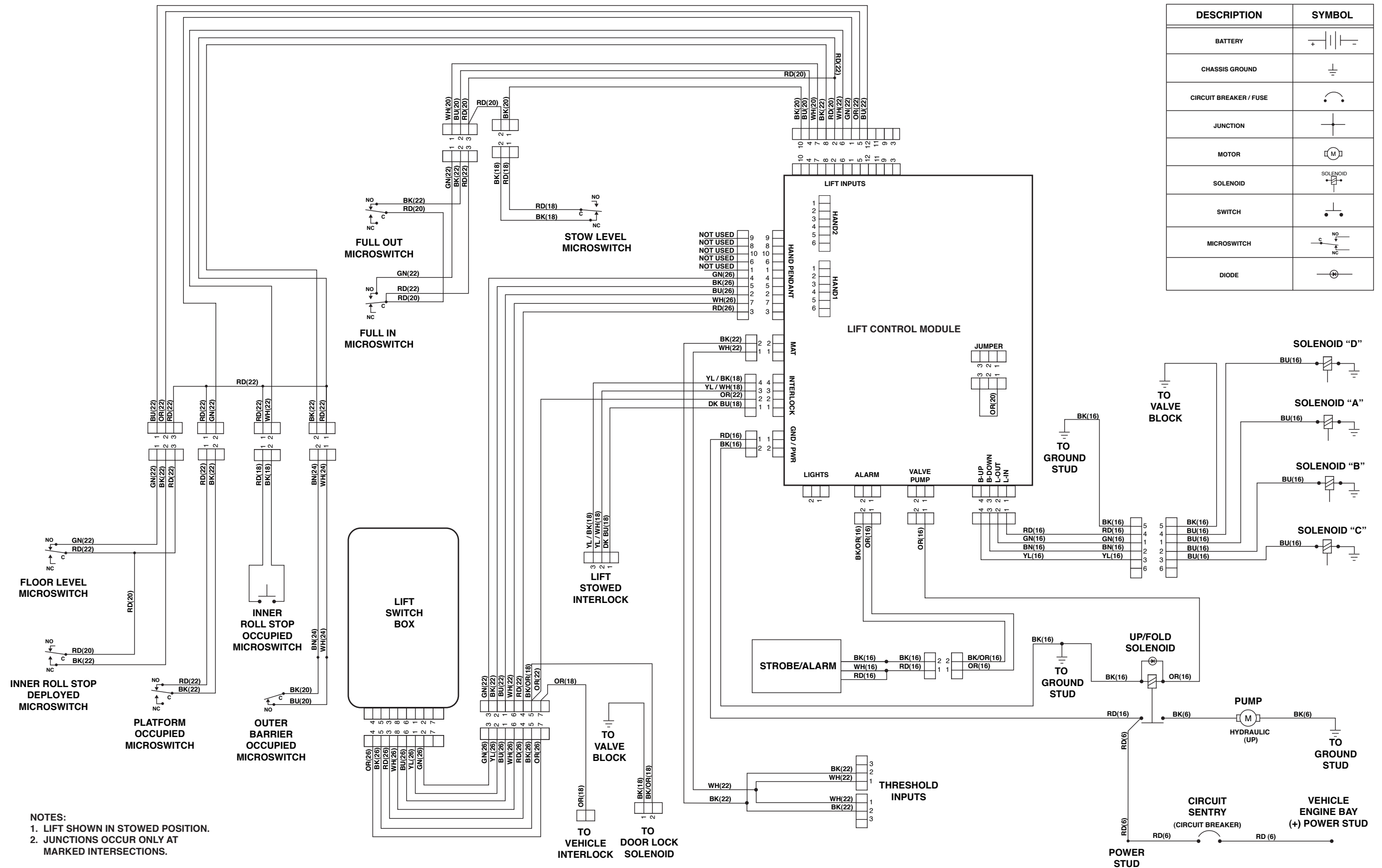
## Maintenance and Lubrication Schedule

<b>4500 Cycles</b>	<b>Perform all procedures listed in previous section also</b>	
	Inspect cotter pins: <ul style="list-style-type: none"> <li>• Upper control arms (2)</li> <li>• Outer barrier latch gas springs (2)</li> <li>• Spring tensions pulley bracket (1)</li> <li>• Vertical channel chain pins (8)</li> <li>• Platform pivot pins (2)</li> </ul>	Resecure or replace if needed.
	Hydraulic Fluid (Pump) - Check level. Note: Fluid should be changed if there is visible contamination. Inspect the hydraulic system (cylinder, hoses, fittings, seals, etc.) for leaks if fluid level is low.	Use Braun 32840-QT (Exxon® Univis HVI 26) hydraulic fluid (do not mix with Dextron III or other hydraulic fluids). Check fluid level with platform lowered fully and roll stop unfolded fully. Measure 3/4" from the top of the fill tube to locate fluid level.
	Inspect cylinders, fittings and hydraulic connections for wear, damage or leaks	Tighten, repair or replace if needed.
	Inspect vertical channels, bearings and pivot pins for visible wear or damage	Replace if needed.
	Inspect inner / outer vertical channel roller mounting bolts (72)	Tighten or replace if needed.
	Inspect platform pivot pin, bearings and vertical channels for wear, damage and positive securement	Replace damaged parts and resecure as needed. Apply Light Grease during reassembly procedures.
	Inspect gas springs (cylinders - 4) for wear or damage, proper operation and positive securement	Tighten, replace or correct as needed
	Inspect intermediate vertical channel (s-beam) chain roller bearing (2)	Apply light oil or replace as needed. See Lubrication Diagram.
	Inspect power cables	Resecure, repair or replace if needed.
<b>Consecutive 750 Cycle Intervals</b>	Mounting	Check to see that the lift is securely anchored to the vehicle and there are no loose bolts, broken welds, or stress fractures.
	Decals	Replace decals if worn, missing or illegible.
Repeat all previously listed inspection, lubrication and maintenance procedures at 750 cycle intervals.		

## **NOTES**

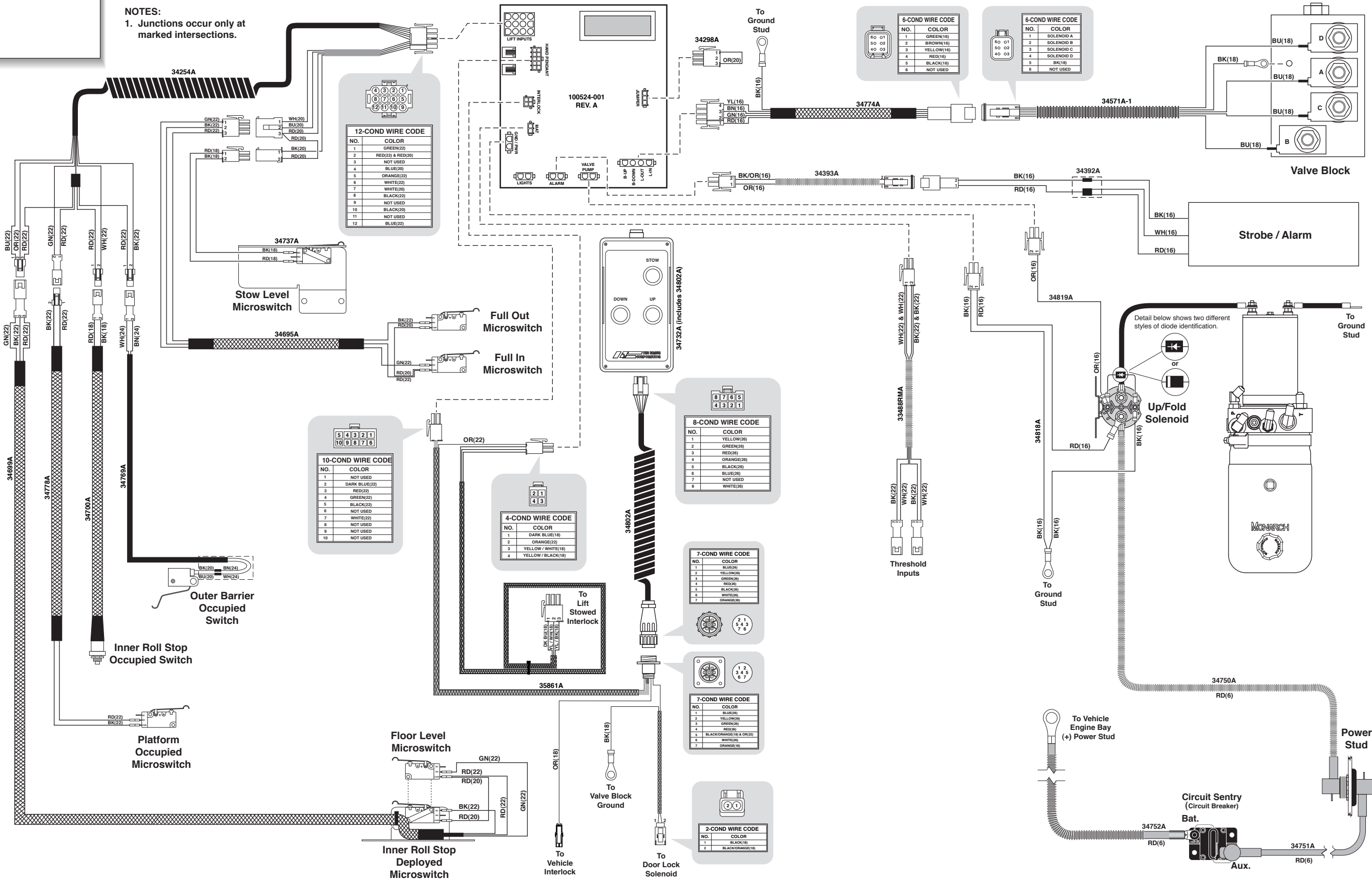
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## Lift Electrical Schematic





## Lift Wiring Diagram



## **NOTES**

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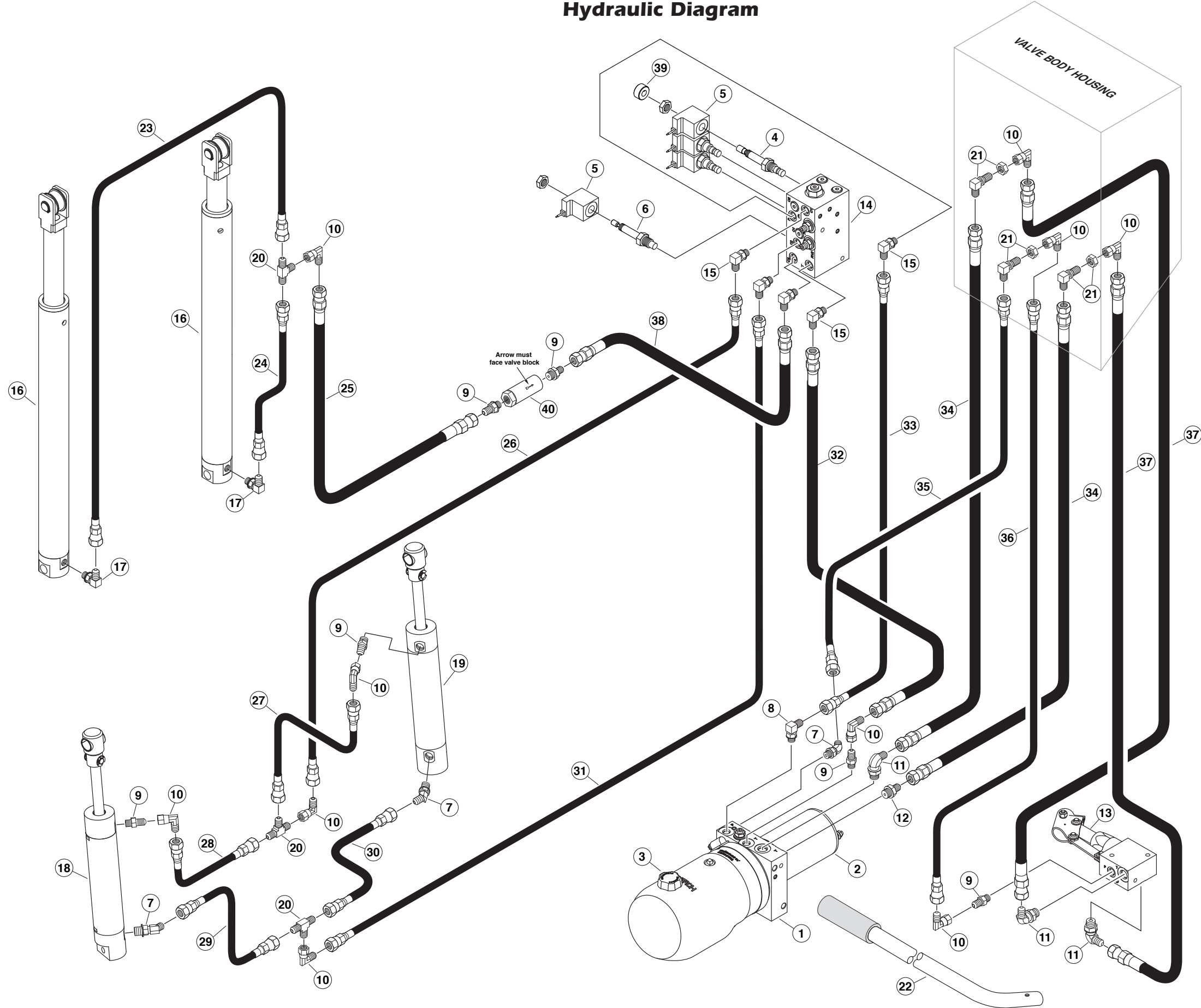
## Hydraulics Parts List

Item	Qty.	Description	Part #
1	1	Pump Assembly (M-3404-0101) 150G / 24V / Horizontal Mount (includes items 2 & 3)	34570
2	1	Motor, Pump - 24 Volt	34897
3	1	Cap, Reservoir Filler - Screw On	30167
4	3	Cartridge (only), "3-Way Valve"	34900
5	4	Coil (only)	34902
6	1	Cartridge (only), "2-Way Valve"	34901
7	3	Elbow, 45°, 7/16-20 JIC 37° Male x 7/16-20 SAE O-Ring Male	24505
8	1	Elbow, 90°, 7/16-20 JIC 37° Male x 7/16-20 SAE O-Ring Male	25085
9	6	Fitting, 7/16-20 SAE Male O-Ring to 7/16-20 JIC 37° Male	24504
10	10	Fitting, 90°, 7/16-20 JIC 37° Female Swivel x 7/16-20 JIC 37° Male	87592
11	3	Fitting, 90°, 9/16-18 O-Ring Male x 7/16-20 JIC 37° Male	87622
12	1	Fitting, 9/16-18 O-Ring x 7/16-20 JIC 37° Male	26787
13	1	Hand Pump	34572
14	1	Block, Manual Valve (includes items 4, 5 & 6) 34571A (includes items 4, 5, 6 & 15)	34571
15	5	Elbow, 7/16-20 JIC 37° Male x 7/16-20 SAE O-Ring Male	25085
16	2	Cylinder, Lifting	1515.6-0400A
17	2	Elbow, 90°, 7/16-20 SAE O-Ring Male x 7/16-20 JIC 37° Male, Orifice	26667
18	1	Cylinder, In/Out - Front	1514.3-9900A
19	1	Cylinder, In/Out - Rear	1514.3-9800A
20	3	Fitting, Tee, 7/16-20 JIC 37° Male x 3	30793
21	3	Elbow, 90°, 7/16-20 JIC 37° Male Bulkhead x 7/16-20 JIC 37° (with Nut)	28433
22	1	Handle w/Grip	34573
23	1	Hose Assembly, 62.5" x 1/8" Dia. Swivel Ends	34741A-062.5
24	1	Hose Assembly, 4.5" x 1/8" Dia. - Swivel Ends	34741A-004.5
25	1	Hose Assembly, 22" x 1/4" Dia. - Swivel Ends	35987A-022
26	1	Hose Assembly, 32" x 1/8" Dia. - Swivel Ends	345741A-032
27	1	Hose Assembly, 8" x 1/8" Dia. - Swivel Ends	16004A-008
28	1	Hose Assembly, 28" x 1/8" Dia. - Swivel Ends	16004A-028
29	1	Hose Assembly, 15" x 1/8" Dia. - Swivel Ends	16004A-015
30	1	Hose Assembly, 5.5" x 1/8" Dia. - Swivel Ends	16004A-005.5
31	1	Hose Assembly, 38" x 1/8" Dia. - Swivel Ends	16004A-038
32	1	Hose Assembly, 45" x 1/4" Dia. - Swivel Ends	32785A-045
33	1	Hose Assembly, 51" x 1/8" Dia. - Swivel Ends	16004A-051
34	2	Hose Assembly, 46" x 1/4" Dia. - Swivel Ends	32785A-046
35	1	Hose Assembly, 48" x 1/8" Dia. - Swivel Ends	16004A-048
36	1	Hose Assembly, 18" x 1/8" Dia. - Swivel Ends	16004A-018
37	2	Hose Assembly, 18" x 1/4" Dia. - Swivel Ends	32785A-018
38	1	Hose Assembly, 9" x 1/4" Dia. - Swivel Ends	35987A-009
39	3	Knob, Knurled - Manual Valve	35088
40	1	Valve-Pressure Compensator	30281
41	1	Kit, Pump Check Valves (Qty. 2) / Relief Valve (Qty. 1) - Not Shown	34898K
42	1	Kit, Hand Pump Check Valves - Main (Qty. 1) / Inlet (Qty. 1) / Outlet (Qty. 1) - Not Shown	34899K
43	1	Kit, Valve Block - Check Valve (Qty. 1) / Relief Valves (Qty. 2) - Not Shown	34903K

### Hydraulic Fluid

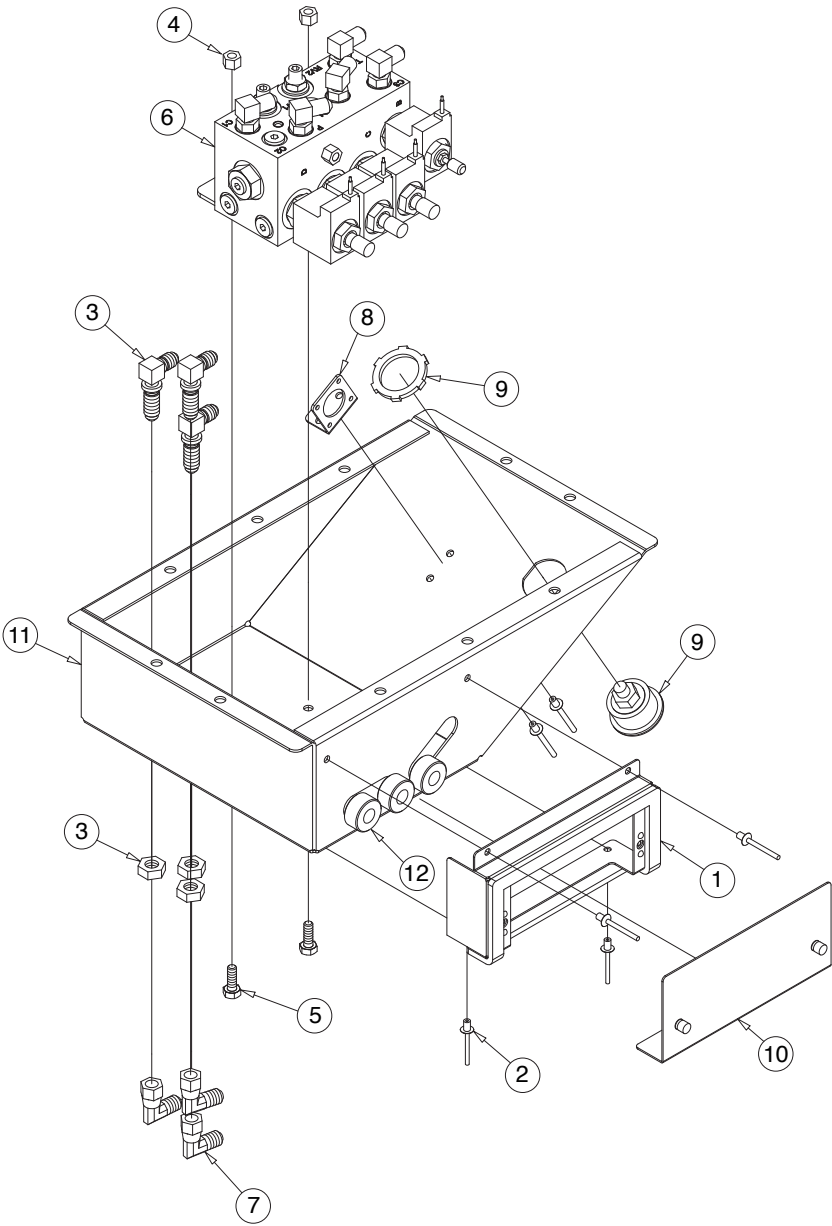
When adding or changing hydraulic fluid, use Braun 32840-QT (Exxon® Unisolv HVI 26) hydraulic fluid (do not mix with Dextron III or other hydraulic fluids).

Hydraulic Diagram



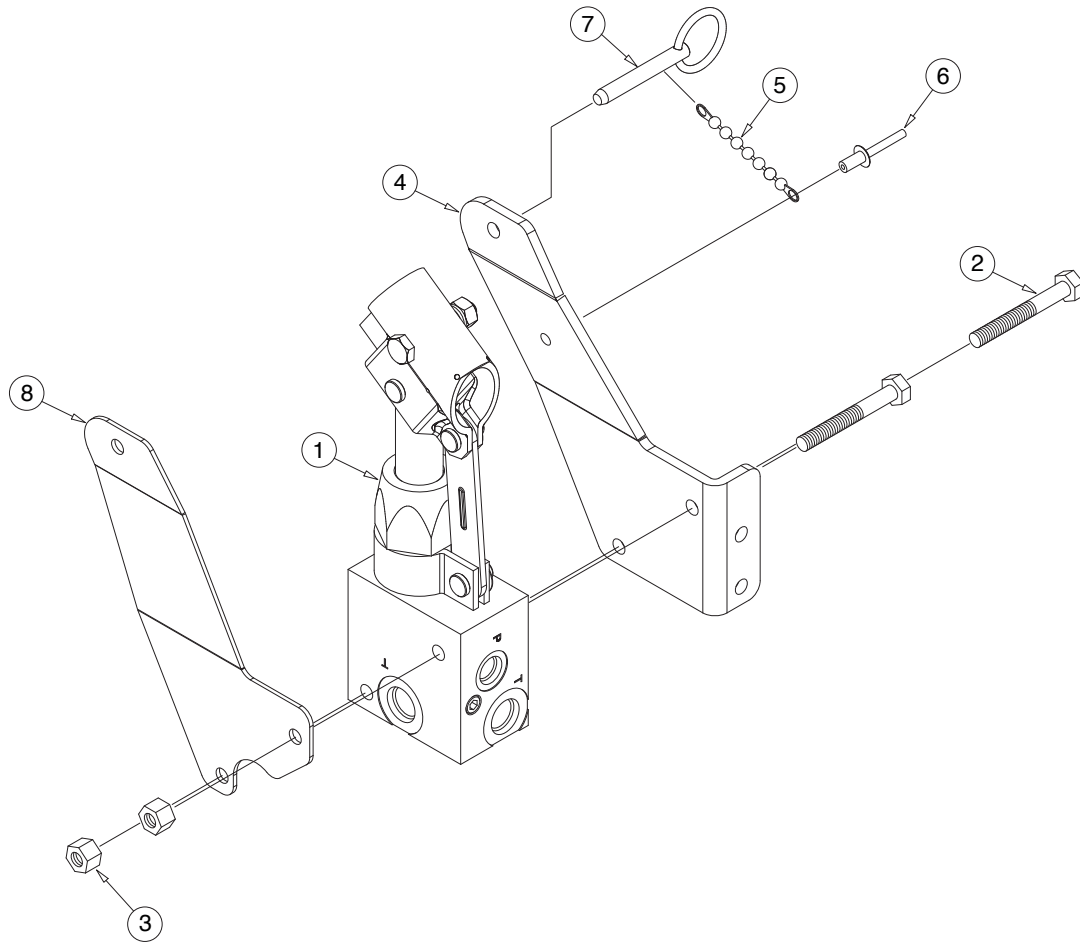
Unfold for:  
Hydraulics Diagram

Valve Block Housing Exploded View and Parts List



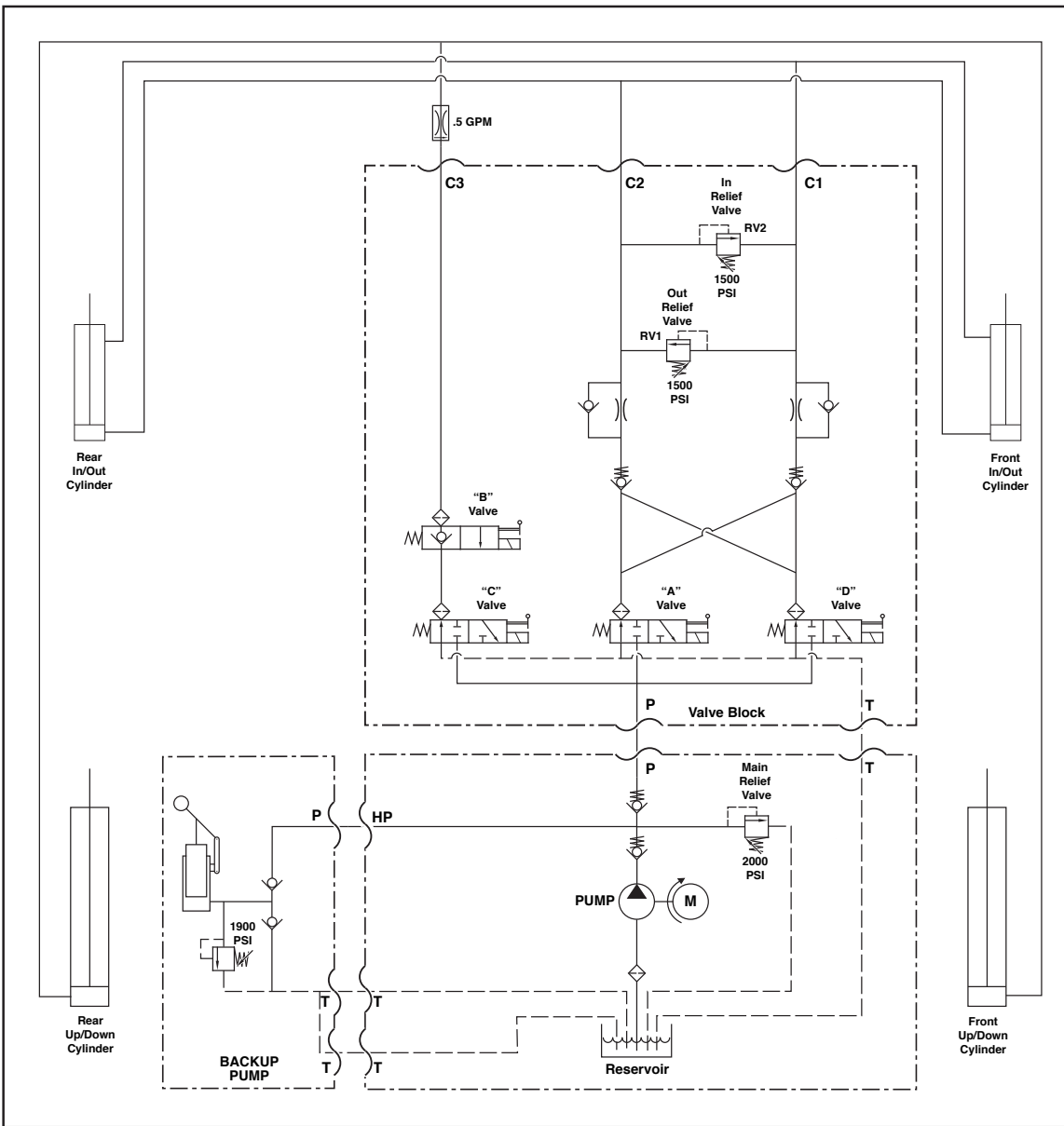
13	1	18643	DECAL-24 V. LABEL-MODULE (not shown)
12	3	35088	KNOB-KNURLED-MANUAL VALVE-NL500
11	1	500-0198W	WMT-HOUSING-SOLENOID VALVES
10	1	500-0203A	ASSY-COVER-SOLENOID VALVES
9	1	26084	FEED THRU STUD(COLE HERSEE PT# 46211-01)
8	1	500-0207	BKT-HAND PENDANT EXTENSION MTG
7	3	87592	FITTING-90 DEG 4JICFX#4JICM
6	1	34571A	ASSY-VALVE BLOCK
5	2	10970	BOLT-1/4-20 X 3/4 GR5-HEX/AUTO-BK
4	2	14614	NUT-1/4-20 NYLOCK/AUTO-BK
3	3	28433	ELBOW-BULKHEAD 7/16 JIC MX90° 7/16 JIC M
2	6	11513	RIV-POP-SD64BS-3/16"-.13/25/AUTO-BK
1	1	500-0204A	ASSY-COVER-SOLENOID VALVES
ITEM	QTY	PART NUMBER	DESCRIPTION

## Hand Pump Assembly Exploded View and Parts List



8	1	500-0200B	BRACKET-BOTTOM-HAND PUMP MTG
7	1	14675	PIN-DETENT-1/4" X 1 1/2"
6	1	11513	RIV-POP-SD64BS-3/16"-.13/.25"/AUTO-BK
5	1	36012	CHAIN-BEADED-2 3/8"
4	1	500-0200	BRACKET-HAND PUMP MTG (500-0200A = ITEMS 4 - 7)
3	2	14614	NUT-1/4-20 NYLOCK/AUTO-BK
2	2	10003	BOLT-1/4-20 X 2" HEX
1	1	34572	HAND PUMP- BAY LIFT
ITEM	QTY	PART NUMBER	DESCRIPTION

# Hydraulic Schematic



Description	Symbol	Description	Symbol
Fixed Displacement Pump		Pressure Compensated Flow Control	
Pump Motor		Hydraulic Port	
Backup Pump		2 Way 2 Position Solenoid Valve	
Single Acting Cylinder		3 Way 2 Position Solenoid Valve	
Dual Acting Cylinder		Relief Valve	
Check Valve		Filter Screen	
Unfold Orifice		Vented Reservoir	

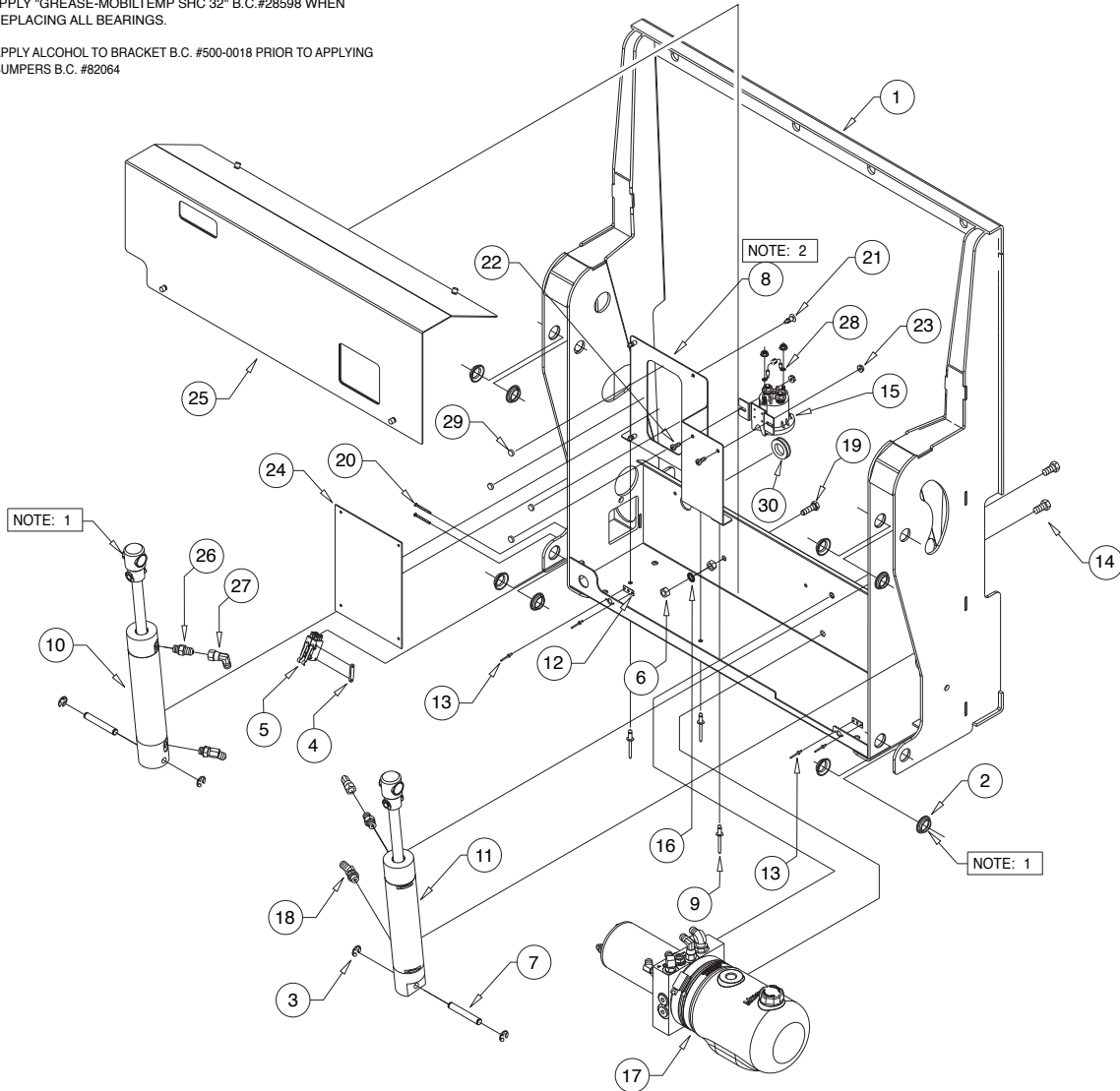


# Exploded Views and Parts Lists

## Mounting Base

### DWG. NOTES

- 1) APPLY "GREASE-MOBILTEMP SHC 32" B.C. #28598 WHEN REPLACING ALL BEARINGS.
- 2) APPLY ALCOHOL TO BRACKET B.C. #500-0018 PRIOR TO APPLYING BUMPERS B.C. #82064



15	1	34894-F24	SOLENOID-TROMBETTA-24 V./VENDOR #17808
14	2	12463	BOLT-3/8-16 X 3/4 GR5-HEX/AUTO-BK
13	8	19-13-0384	RIVET 3/32 DIA.. GRIP 18-8 SS DOMED
12	4	33889	RECEPTACLE-09-41-101-24
11	1	1514.3-9900A	CYLINDER-1514.3-COMPACT CYL./BF
10	1	1514.3-9800A	CYLINDER-1514.3-COMPACT CYL./BF
9	3	11513	RIV-POP-SD64BS-3/16"-13/25/AUTO-BK
8	1	500-0018	BKT-CONTROLLER/SOLENOID MTG
7	2	500-0186	PIN-CYLINDER MOUNT
6	2	10058	NUT-5/16-18 HEX/AUTO-BK
5	1	34695A	HARNESS-FULL IN/OUT-NL500
4	1	24998	PLATE-TAPPED #4-40 MICRO SWITCH
3	4	84383	E CLIP-3/8 SHAFT
2	8	24012	BEARING-FLANGE-3/4" X 1/4"-12FDU04
1	1	500-0187W	WMT-MOUNTING BASE
ITEM	QTY.	PART NO.	DESCRIPTION

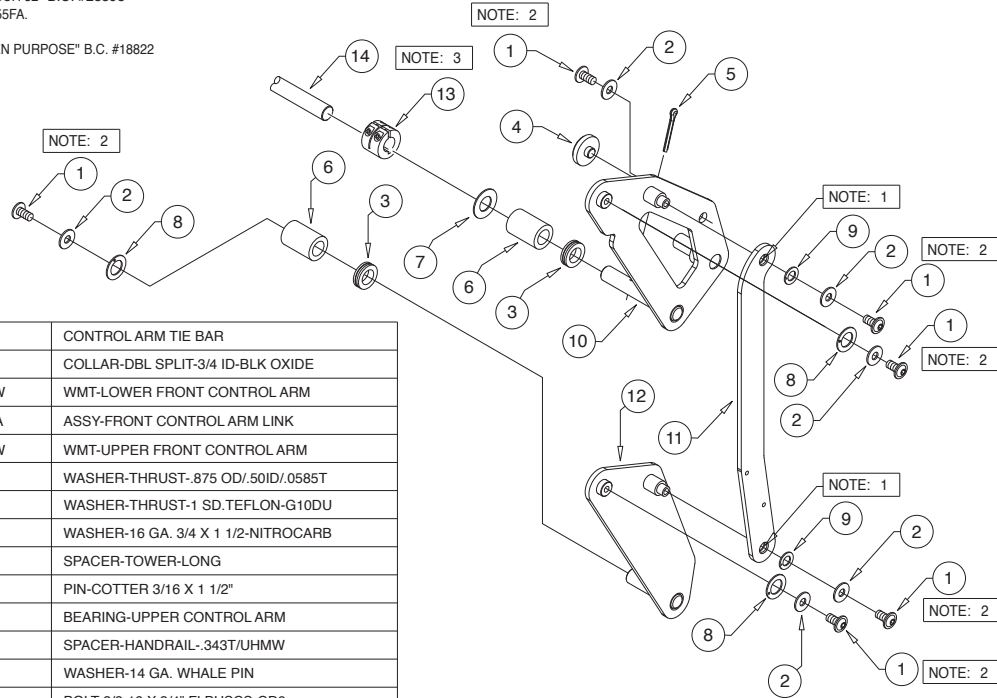
30	1	51267	GROM-ID .88"/GR .06"/GD 1.25"/.3" THK
29	4	82064	BUMPER-.5" DIA. X .25" HT RUBBER
28	1	73906A	DIODE ASSY-UP SOLENOID
27	2	87592	FITTING-90 DEG 4JICFX#4JICM
26	2	24504	FITTING-7/16-20/7/16-20/37"
25	1	500-0019A	ASSY-COVER w/WINDOWS
24	1	100524-001	ASSEMBLY-E/J LIFT CONTROLLER
23	2	18349	NUT-#10-32 W/LOCKWASHER/AUTO-BK
22	2	11535	SCREW-#10-32 X 1/2" PAN HD PHIL
21	4	31011	STANDOFF-SNAP IN-.213 CASEX.156 PCBX.25
20	2	85047-000	SCREW-4-40 X 1 1/4 RD HD MACH
19	1	10013	BOLT-5/16-18 X 1" HEX HD. CAP
18	2	24505	ELBOW-45°-7/16-20+7/16-20 SAE MALE O-RING
17	1	34570A	PUMP ASSY w/FITTINGS 1506-M-3404-0101
16	1	16368	WASHER-5/16" EXTERNAL TOOTH
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Upper / Lower Control Arms - Front

### DWG. NOTES

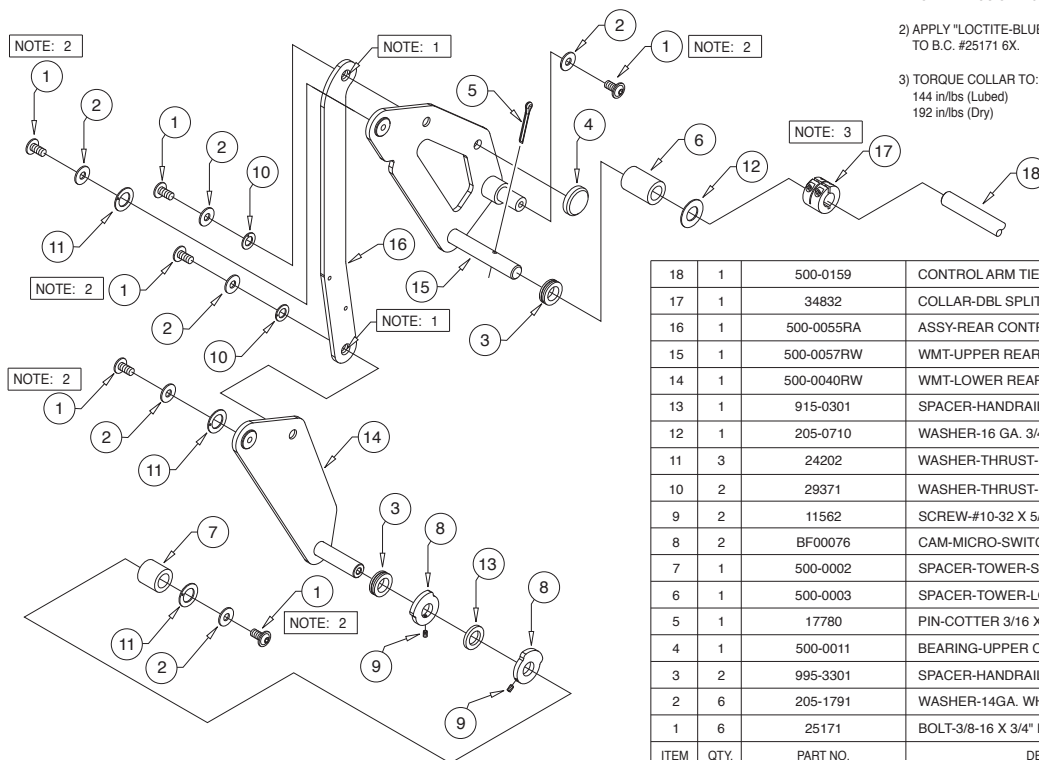
- 1) APPLY "GREASE-MOBIL TEMP SCH 32" B.C. #28598  
TO BEARINGS ON B.C. #500-0055FA.
- 2) APPLY "LOCTITE-BLUE/#242 GEN PURPOSE" B.C. #18822  
TO B.C. #25171 6X.
- 3) TORQUE COLLAR TO:  
144 in/lbs (Lubed)  
192 in/lbs (Dry)



14	1	500-0159	CONTROL ARM TIE BAR
13	1	34832	COLLAR-DBL SPLIT-3/4 ID-BLK OXIDE
12	1	500-0040FW	WMT-LOWER FRONT CONTROL ARM
11	1	500-0055FA	ASSY-FRONT CONTROL ARM LINK
10	1	500-0057FW	WMT-UPPER FRONT CONTROL ARM
9	2	29371	WASHER-THRUST-.875 OD/.50ID/.0585T
8	3	24202	WASHER-THRUST-1 SD.TEFLON-G10DU
7	1	205-0710	WASHER-16 GA. 3/4 X 1 1/2-NITROCARB
6	2	500-0003	SPACER-TOWER-LONG
5	1	17780	PIN-COTTER 3/16 X 1 1/2"
4	1	500-0011	BEARING-UPPER CONTROL ARM
3	2	995-3301	SPACER-HANDRAIL-.343T/UHMW
2	6	205-1791	WASHER-14 GA. WHALE PIN
1	6	25171	BOLT-3/8-16 X 3/4" FLBHSCS-GD8
ITEM	QTY.	PART NO.	DESCRIPTION

## Upper / Lower Control Arms - Rear

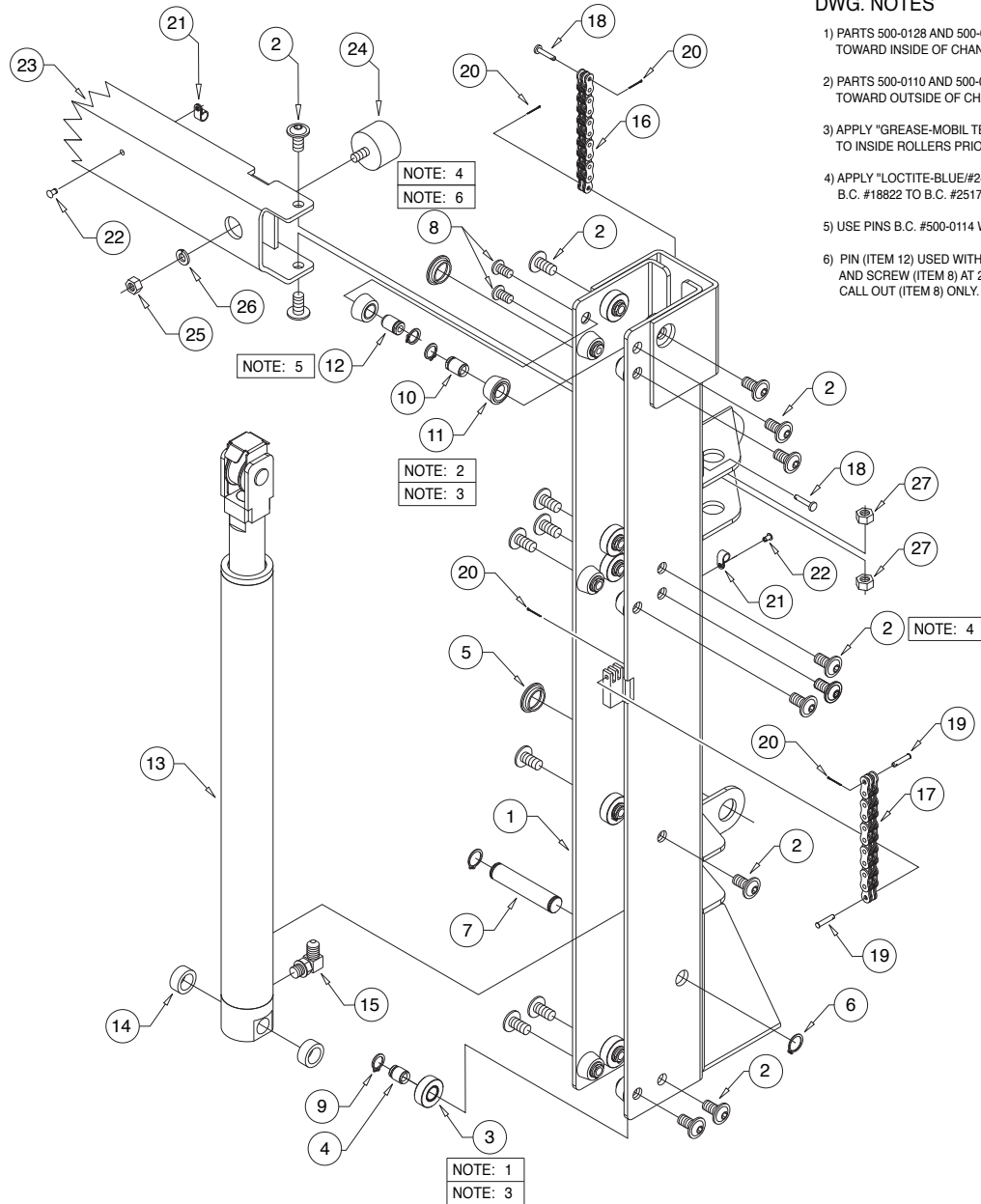
- 1) APPLY "GREASE-MOBIL TEMP SCH 32" B.C. #28598  
TO BEARINGS ON B.C. #500-0055FA.
- 2) APPLY "LOCTITE-BLUE/#242 GEN PURPOSE" B.C. #18822  
TO B.C. #25171 6X.
- 3) TORQUE COLLAR TO:  
144 in/lbs (Lubed)  
192 in/lbs (Dry)



18	1	500-0159	CONTROL ARM TIE BAR
17	1	34832	COLLAR-DBL SPLIT-3/4 ID-BLK OXIDE
16	1	500-0055RA	ASSY-REAR CONTROL ARM
15	1	500-0057RW	WMT-UPPER REAR CONTROL ARM
14	1	500-0040RW	WMT-LOWER REAR CONTROL ARM
13	1	915-0301	SPACER-HANDRAIL-.163 T/UHMW
12	1	205-0710	WASHER-16 GA. 3/4 X 1 1/2-NITROCARB
11	3	24202	WASHER-THRUST-1 SD.TEFLON-G10DU
10	2	29371	WASHER-THRUST-.875 OD/.50ID/.0585T
9	2	11562	SCREW-#10-32 X 5/16" SET/AUTO-BK
8	2	BF00076	CAM-MICRO-SWITCH ADJUST-BI FOLD
7	1	500-0002	SPACER-TOWER-SHORT
6	1	500-0003	SPACER-TOWER-LONG
5	1	17780	PIN-COTTER 3/16 X 1 1/2"
4	1	500-0011	BEARING-UPPER CONTROL ARM
3	2	995-3301	SPACER-HANDRAIL-.343 T/UHMW
2	6	205-1791	WASHER-14GA. WHALE PIN
1	6	25171	BOLT-3/8-16 X 3/4" FLBHSCS-GD8
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Inner Vertical Channel - Front



### DWG. NOTES

- 1) PARTS 500-0128 AND 500-0175A TO BE LOCATED TOWARD INSIDE OF CHANNEL 10X.
- 2) PARTS 500-0110 AND 500-0101A TO BE LOCATED TOWARD OUTSIDE OF CHANNEL 8X.
- 3) APPLY "GREASE-MOBIL TEMP SCH 32" B.C. #28598 TO INSIDE ROLLERS PRIOR TO ASSEMBLY 18X.
- 4) APPLY "LOCTITE-BLUE/#242 GEN PURPOSE" B.C. #18822 TO B.C. #25171(18X) AND B.C. #24440(2X).
- 5) USE PINS B.C. #500-0114 WITH SCREWS B.C. #25527.
- 6) PIN (ITEM 12) USED WITH TAPERED ROLLER (ITEM 11) AND SCREW (ITEM 8) AT 2 POSITIONS IDENTIFIED BY CALL OUT (ITEM 8) ONLY.

14	2	500-0088	SPACER-RAISE/LOWER CYLINDER
13	1	1515.6-0400A	ASSY-CYLINDER-15.625"/23.250 RETRACTED
12	2	500-0114	PIN-ROLLER-TAPERED-5/16-18
11	8	500-0101A	ASSY-ROLLER-TAPERED
10	6	500-0110	PIN-ROLLER-TAPERED
9	18	13273	RING-1/2 EXT SELF LOCK SNAP/AUTO-BK
8	2	24440	SCREW-5/16-18 X 3/4" BHSC/AUTO-BK
7	1	500-0133	CYLINDER PIN
6	2	84189	RING-RETAINING 5/8
5	2	24012	BEARING-FLANGE-3/4" X 1/4"-12FDU04
4	8	500-0128	PIN-ROLLER-OUTER
3	10	500-0175A	ROLLER-OUTER
2	18	25171	BOLT-3/8-16 X 3/4" FLBHSCS-GD8
1	1	500-0104FW	WMT-INNER VERTICAL CHANNEL-FRONT
ITEM	QTY.	PART NO.	DESCRIPTION

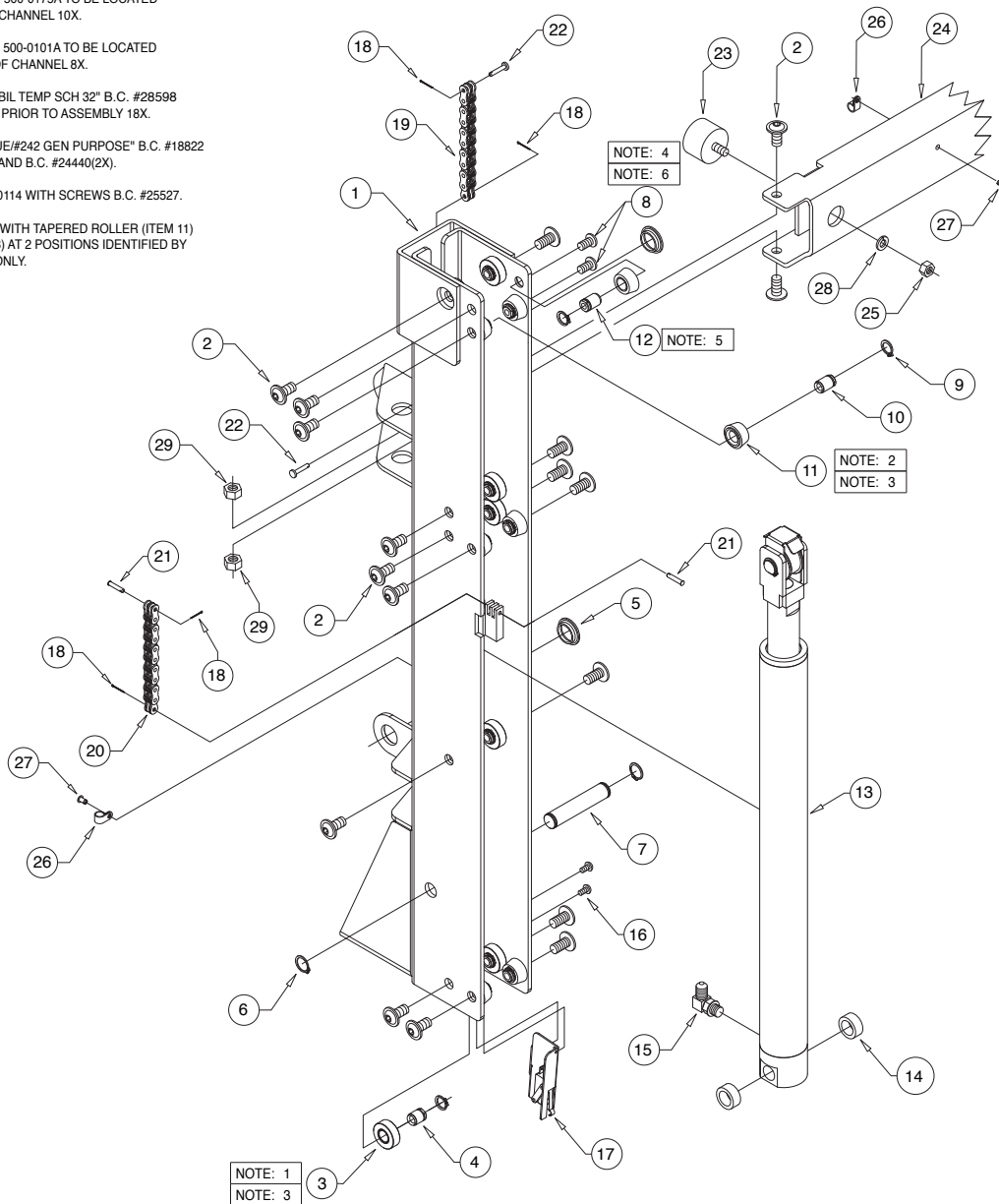
27	2	10059BKWP	NUT-3/8-16 HEX/AUTO-BK WITH PATCH
26	1	10068	WASHER-5/16" LOCK/AUTO-BK
25	1	10058	NUT-5/16-18 HEX/AUTO-BK
24	1	16114	BUMPER-RUBBER 1"-5/16-18 x 5/8 STUD
23	1	500-0064W	WMT-INNER VERTICAL CHANNEL
22	2	26362	RIVET-SNAP-BLACK-0.201 x .256/.295
21	2	11092	CLIP-CABLE 3/8" PLASTIC
20	4	23173	PIN-COTTER 1/32 x 1/2 (4x4)
19	2	34575	PIN-COTTERED-466 CHAIN-LO PRO HEAD
18	2	21759	PIN-COTTERED-4x4 LEAF CHAIN
17	1	21708R041	CHAIN-LEAF-4x4-.5 PITCH x 41"
16	1	21708R021	CHAIN-LEAF-4x4-.5 PITCH x 21"
15	1	26667	ELBOW-7/16-20 M/O-RNG/37"/.035 ORIFICE
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Inner Vertical Channel - Rear

### DWG. NOTES

- 1) PARTS 500-0128 AND 500-0175A TO BE LOCATED TOWARD INSIDE OF CHANNEL 10X.
- 2) PARTS 500-0110 AND 500-0101A TO BE LOCATED TOWARD OUTSIDE OF CHANNEL 8X.
- 3) APPLY "GREASE-MOBIL TEMP SCH 32" B.C. #28598 TO INSIDE ROLLERS PRIOR TO ASSEMBLY 18X.
- 4) APPLY "LOCTITE-BLUE/#242 GEN PURPOSE" B.C. #18822 TO B.C. #25171(18X) AND B.C. #24440(2X).
- 5) USE PINS B.C. #500-0114 WITH SCREWS B.C. #25527.
- 6) PIN (ITEM 12) USED WITH TAPERED ROLLER (ITEM 11) AND SCREW (ITEM 8) AT 2 POSITIONS IDENTIFIED BY CALL OUT (ITEM 8) ONLY.



15	1	26667	ELBOW-7/16-20 M/O-RNG/37°/.035" ORIFICE
14	2	500-0088	SPACER-RAISE/LOWER CYLINDER
13	1	1515.6-0400A	ASSY-CYLINDER-15.625"/23.250" RETRACTED
12	2	500-0114	PIN-ROLLER-TAPERED-5/16-18
11	8	500-0101A	ASSY-ROLLER-TAPERED
10	6	500-0110	PIN-ROLLER-TAPERED
9	18	13273	RING-1/2 EXT SELF LOCK SNAP/AUTO-BK
8	2	24440	SCREW-5/16-18 X 3/4" BHCS/AUTO-BK
7	1	500-0133	CYLINDER PIN
6	2	84189	RING-RETAINING 5/8
5	2	24012	BEARING-FLANGE-3/4" X 1/4"-12FDU04
4	10	500-0128	PIN-ROLLER-OUTER
3	10	500-0175A	ROLLER-OUTER
2	16	25171	BOLT-3/8-16 X 3/4" FLBHSCS-GD8
1	1	500-0104RW	WMT-INNER VERTICAL CHANNEL-REAR
ITEM	QTY.	PART NO.	DESCRIPTION

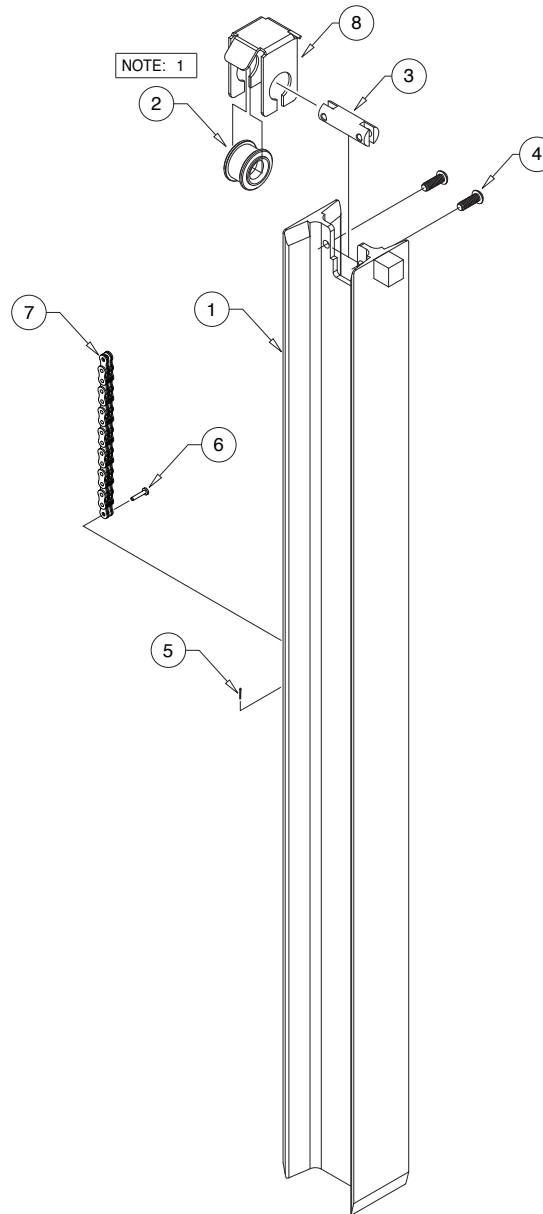
29	2	10059BKWP	NUT-3/8-16 HEX/AUTO-BK-WITH PATCH
28	1	10068	WASHER-5/16" LOCK/AUTO-BK
27	2	26362	RIVET-SNAP-BLACK-0.201" x .256/.295"
26	2	11092	CLIP-CABLE 3/8" PLASTIC
25	3	10058	NUT-5/16-18 HEX/AUTO-BK
24	1	500-0064W	WMT-INNER VERTICAL CHANNEL
23	1	16114	BUMPER-RUBBER 1" -5/16-18 x 5/8" STUD
22	2	21759	PIN-COTTERED-4x4 LEAF CHAIN
21	2	34575	PIN-COTTERED-466 CHAIN-LO PRO HEAD
20	1	21708R041	CHAIN-LEAF-4x4-.5 PITCH x 41"
19	1	21708R021	CHAIN-LEAF-4x4-.5 PITCH x 21"
18	4	23173	PIN-COTTER 1/32" x 1/2" (4x4)
17	1	34737A	HARNESS-STOW LEVEL w/SWITCH-NL500
16	2	30375	SCREW-#10-32 x 1/2" BHSCS/AUTO BLACK
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Intermediate Vertical Channel (S-Beam) - Front

### DWG. NOTES

1) APPLY "GREASE-MOBIL TEMP SHC 32" B.C. #28598  
TO INSIDE ROLLER PRIOR TO ASSEMBLY.



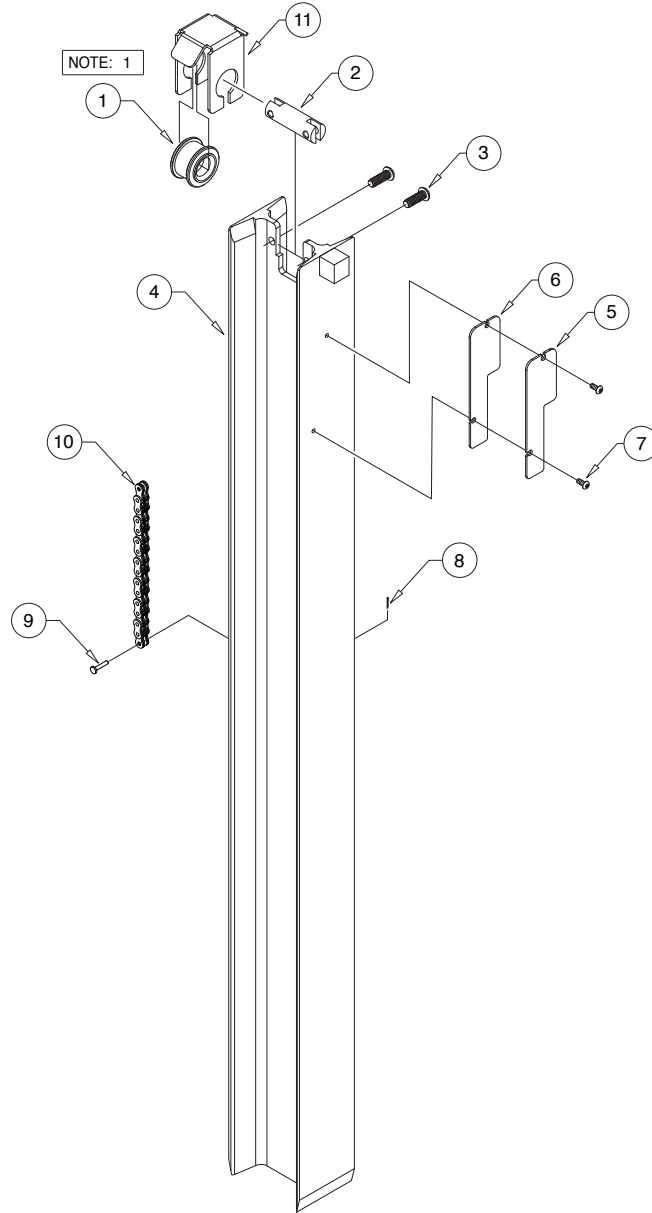
8	1	500-0736	GUARD-CHAIN ROLLER
7	1	21708R021	CHAIN-LEAF-4x4-.5 PITCH x 21"
6	1	21759	PIN-COTTERED-4x4 LEAF CHAIN
5	1	23173	PIN-COTTER 1/32 x 1/2 (4x4)
4	2	25371	BOLT-1/4-20 x 3/4" BHCS NYLK/BKZN
3	1	500-0112	PIN-ROLLER-I BEAM
2	1	500-0111A	ASSY-ROLLER-CHAIN-I BEAM
1	1	500-0100FWBKN	ASSY-I BEAM-FRONT
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Intermediate Vertical Channel (S-Beam) - Rear

### DWG. NOTES

1) APPLY "GREASE-MOBIL TEMP SHC 32" B.C. #28598  
TO INSIDE ROLLER PRIOR TO ASSEMBLY.



11	1	500-0736	GUARD-CHAIN ROLLER
10	1	21708R021	CHAIN-LEAF-4x4-.5 PITCH x 21"
9	1	21759	PIN-COTTERED-4x4 LEAF CHAIN
8	1	23173	PIN-COTTER 1/32 x 1/2 (4x4)
7	2	28141	SCREW-#8 x 3/8" BHCS-SS
6	1	500-0014	CAM-INNER-MICRO SWITCH-FLR LVL / INR ROL STOP DEPLOY
5	1	500-0015	CAM-OUTER-MICRO SWITCH-FLR LVL / INR ROL STOP DEPLOY
4	1	500-0100RWBKN	WMT-I BEAM-REAR
3	2	25371	BOLT-1/4-20 x 3/4" BHCS NYLK/BKZN
2	1	500-0112	PIN-ROLLER-I BEAM
1	1	500-0111A	ASSY-ROLLER-CHAIN-I BEAM
ITEM	QTY.	PART NO.	DESCRIPTION

## Exploded Views and Parts Lists

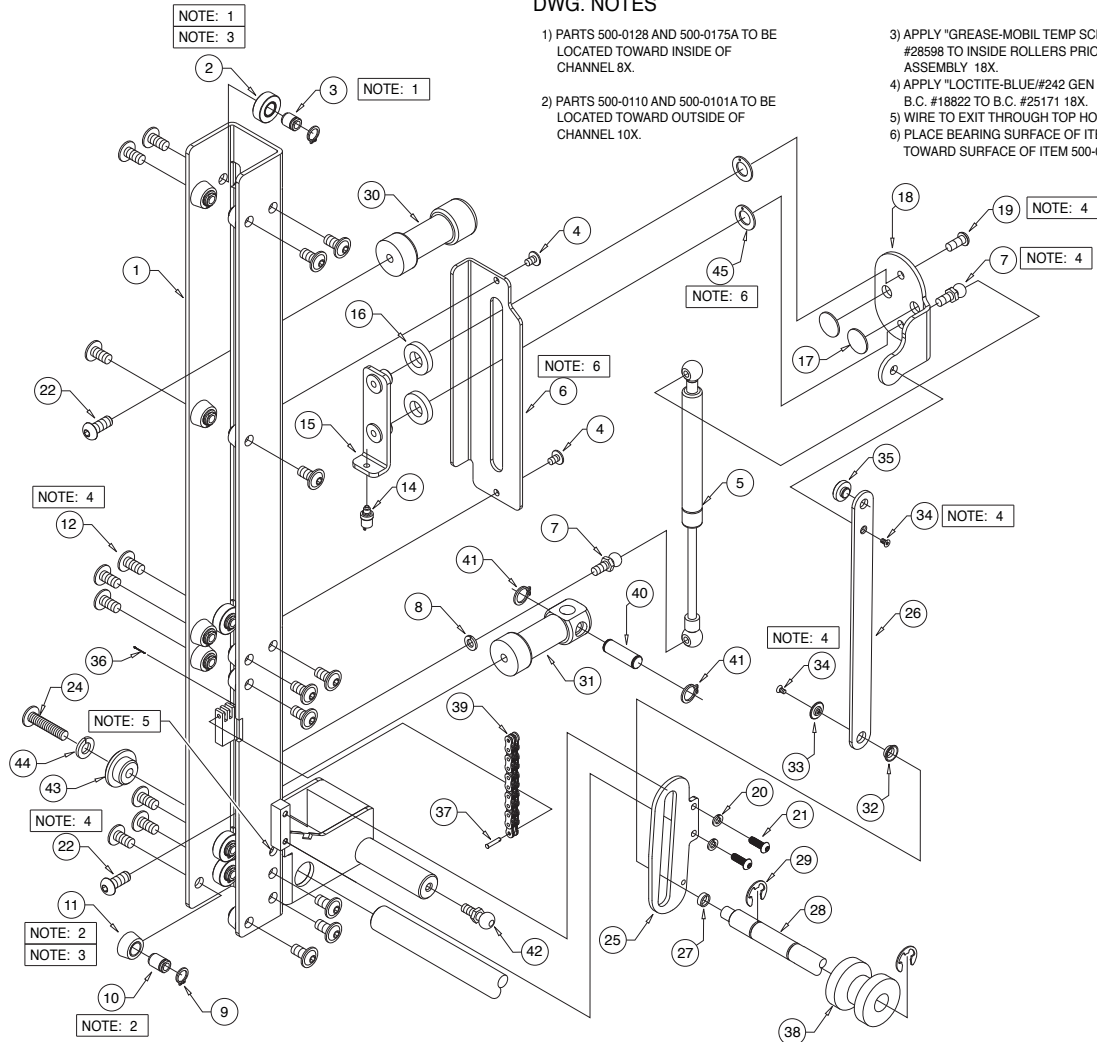
### Outer Vertical Channel - Front

### DWG. NOTES

- 1) PARTS 500-0128 AND 500-0175A TO BE LOCATED TOWARD INSIDE OF CHANNEL 8X.

- 2) PARTS 500-0110 AND 500-0101A TO BE  
LOCATED TOWARD OUTSIDE OF  
CHANNEL 10X.

- 3) APPLY "GREASE-MOBIL TEMP SCH 32" B.C.  
#28598 TO INSIDE ROLLERS PRIOR TO  
ASSEMBLY 18X.
- 4) APPLY "LOCTITE-BLUE/#242 GEN PURPOSE"  
B.C. #18622 TO B.C. #25171 18X.
- 5) WIRE TO EXIT THROUGH TOP HOLE.
- 6) PLACE BEARING SURFACE OF ITEM 29378  
TOWARD SURFACE OF ITEM 500-0023.



23	1	500-0195	PIN-PLATFORM PIVOT
22	2	21410	BOLT-1/2-13 x 1 1/4" BUTT/ALN
21	2	25371	BOLT-1/4-20 x 3/4" BHCS NYLK/BKZN
20	2	10067	WASHER-1/4" LOCK/AUTO-BK
19	1	24440	SCREW-5/16-18 X 3/4" BHCS AUTO-BK
18	1	500-0135F	IB GUIDE
17	2	34345	BUMPER-UHMW-1" X 0.065
16	2	34675	SPACER-FRONT IB GUIDE
15	1	500-0136FW	WMT-IB SPRING GUIDE-FRONT
14	1	34700A	HARNES-IB OCCUPIED-NL500
13	2	10091	CABLE TIE-11" SOLID (NOT SHOWN)
12	18	25171	BOLT-3/8-16 X 3/4" FLBHSCS-GD8
11	10	500-0101A	ASSY-ROLLER-TAPERED
10	10	500-0110	PIN-ROLLER-TAPERED
9	18	13273	RING-1/2 EXT SELF LOCK SNAP/AUTO-BK
8	1	10068	WASHER-5/16" LOCK/AUTO-BK
7	2	21301	BALL STUD-10mm/SEAT&LIFT-A 9008
6	1	500-0023	IB SLIDE BRACKET (500-0023A INCL. 6, 7, 14 - 19)
5	1	35628	ASSY-GAS SPRING-12.08 EXT/7.6 COM-580N/FAST
4	2	28252	SCREW-1/4-20 X 3/8" FLBHSCS
3	8	500-0128	PIN-ROLLER-OUTER
2	8	500-0175A	ROLLER-OUTER
1	1	500-0107FW	WMT-OUTER VERTICAL CHANNEL-FRONT
ITEM	QTY.	PART NO.	DESCRIPTION

45	2	29378	WASHER-THRUST-1.125" OD/.625" ID/.0585" THK
44	1	10069BK	WASHER-3/8" LOCK/AUTO-BK
43	1	35424	BUSHING-PLATFORM PIVOT
42	1	12611	BALL STUD 13MM 5/16-18 MALE (GAS SPRING)
41	2	20946	RING-1/2 EXT SNAP/AUTO-BK
40	1	34458	PIN-HANDRAIL SHAFT MOUNT-NL500
39	1	21708R041	CHAIN-LEAF-4x4-.5 PITCH x 41"
38	1	34349	ROLLER-IB RAISE-NL500
37	1	34575	PIN-COTTERED-466 CHAIN-LO PRO HEAD
36	1	23173	PIN-COTTER 1/32 x 1/2 (4x4)
35	1	34346	BUMPER-UHMW-1" x 0.234
34	2	24537	SCREW-#10-32 x 3/8 FL HD-HX SKT/AUTO-BK
33	1	990-0341	ADAPT-CYL/ROLL STOP LEVER-OUT
32	1	24442	BEARING-FLANGE-1/2" x 1/4" - .08FDU04
31	1	34348B	HANDRAIL MOUNTING SHAFT-BOTT-FRT-NL500
30	1	34348T	HANDRAIL MOUNTING SHAFT-TOP-FRT-NL500
29	2	84376	E CLIP-3/4" .580 GROVE DIA
28	1	34350	ROD-IB RAISE-NL500
27	1	500-2359	ROLLER BEARING-IB GUIDE SLOT-NL500
26	1	500-0047	IB DROP ADJUSTMENT BRACKET
25	1	500-0052	IB GUIDE
24	1	28977	SCREW-3/8-16 X 1 3/4" BHSCS
ITEM	QTY.	PART NO.	DESCRIPTION

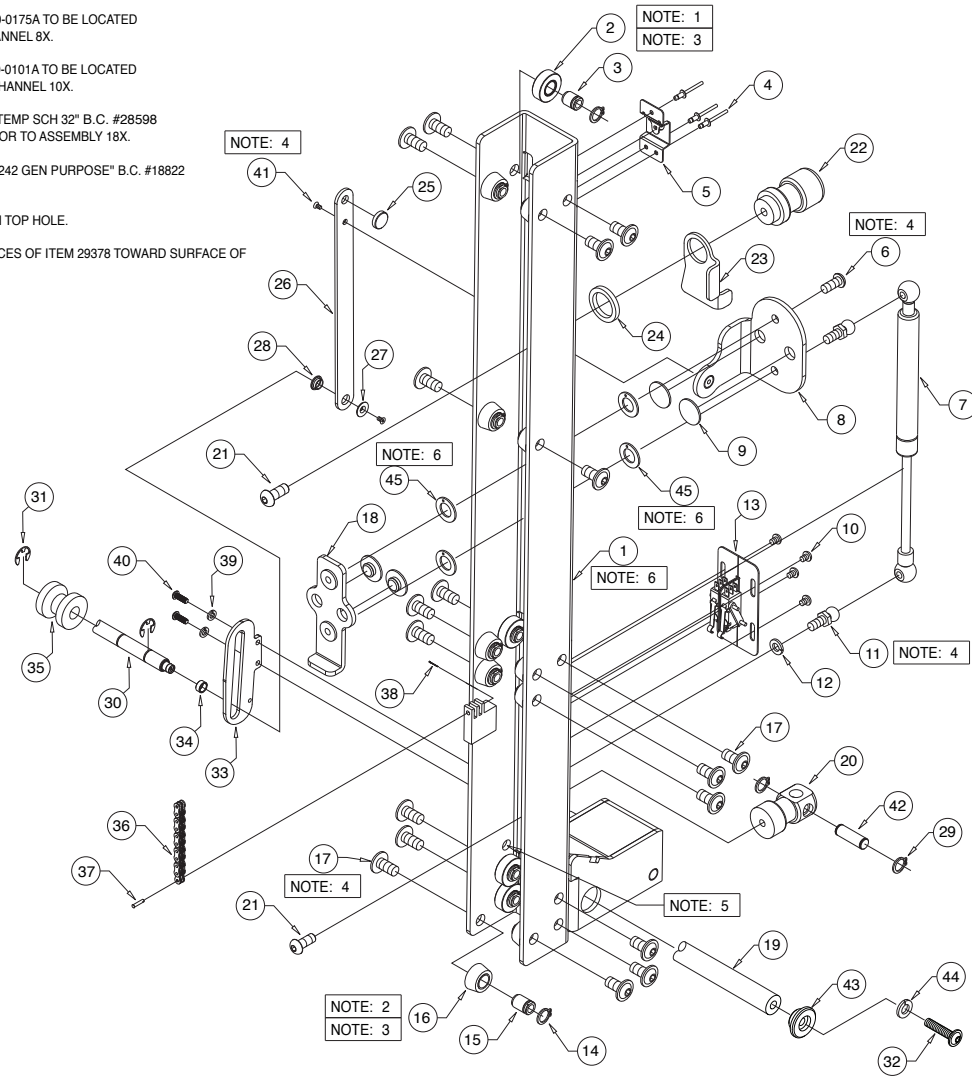


# Exploded Views and Parts Lists

## Outer Vertical Channel - Rear

### DWG. NOTES

- 1) PARTS 500-0128 AND 500-0175A TO BE LOCATED TOWARD INSIDE OF CHANNEL 8X.
- 2) PARTS 500-0110 AND 500-0101A TO BE LOCATED TOWARD OUTSIDE OF CHANNEL 10X.
- 3) APPLY "GREASE-MOBIL TEMP SCH 32" B.C. #28598 TO INSIDE ROLLERS PRIOR TO ASSEMBLY 18X.
- 4) APPLY "LOCTITE-BLUE/#242 GEN PURPOSE" B.C. #18822 TO B.C. #25171 18X.
- 5) WIRE TO EXIT THROUGH TOP HOLE.
- 6) PLACE BEARING SURFACES OF ITEM 29378 TOWARD SURFACE OF ITEM 500-0107RW.



23	1	500-0109Y	LATCH-PLATFORM STOW-NL500
22	1	34347T	HANDRAIL MOUNTING SHAFT-TOP-RR-NL500
21	2	21410	BOLT-1/2-13 x 1 1/4" BUTT/ALN
20	1	34347B	HANDRAIL MOUNTING SHAFT-BOTT-RR-NL500
19	1	500-0195	PIN-PLATFORM PIVOT
18	1	500-0136RW	WMT-IB SPRING GUIDE
17	18	25171	BOLT-3/8-16 X 3/4" FLBHSCS-GD8
16	10	500-0101A	ASSY-ROLLER-TAPERED
15	10	500-0110	PIN-ROLLER-TAPERED
14	18	13273	RING-1/2 EXT SELF LOCK SNAP/AUTO-BK
13	1	34699A	HARNES-FLRLVL/INNER ROLL STOP-NL500
12	1	10068	WASHER-5/16" LOCK/AUTO-BK
11	2	21301	BALL STUD-10mm/SEAT&LIFT-A-9008
10	4	81051-000	SCREW-10-32 X 1/4" BUTTON HEAD
9	4	34345	BUMPER-UHMMW-1" X 0.065
8	1	500-0135R	IB GUIDE-REAR
7	1	35628	GAS SPRING-12.08 EXT/7.6-COM-580N/FAST
6	1	24440	BOLT-5/16-18 X 3/4 BHSC AUTO-BK
5	1	84389	MCLIP-HAND CONTROL HANGER
4	3	12954	RIV-POP-SD43BS-1/8"-13/19/AUTO-BK
3	8	500-0128	PIN-ROLLER-OUTER
2	8	500-0175A	ROLLER-OUTER
1	1	500-0107RW	WMT-OUTER VERTICAL CHANNEL-REAR
ITEM	QTY.	PART NO.	DESCRIPTION

45	4	29378	WASHER-THRUST-1.125" OD/.625" ID/.0585" THK
44	1	10069BK	WASHER-3/8" LOCK/AUTO-BK
43	1	35424	BUSHING-PLATFORM PIVOT
42	1	34458	PIN-HANDRAIL SHAFT MOUNT-NL500
41	2	24537	SCREW-#10-32 x 3/8" FL HD-HX SKT/AUTO-BK
40	2	25371	BOLT-1/4-20 x 3/4" BHCS NYLK/BKZN
39	2	10067	WASHER-1/4" LOCK/AUTO-BK
38	1	23173	PIN-COTTER 1/32 x 1/2 (4x4)
37	1	34575	PIN-COTTERED-466 CHAIN-LO PRO HEAD
36	1	21708R041	CHAIN-LEAF-4x4-.5" PITCH x 41"
35	1	34349	ROLLER-IB RAISE-NL500
34	1	500-2359	ROLLER BEARING-IB GUIDE SLOT-NL500
33	1	500-0052	IB GUIDE
32	1	28977	SCREW-3/8-16 X 1 3/4" BHSCS
31	2	84376	E CLIP-3/4" .580" GROVE DIA
30	1	34350	ROD-IB RAISE-NL500
29	2	20946	RING-1/2" EXT SNAP/AUTO-BK
28	1	24442	BEARING-FLANGE-1/2" x 1/4"-.08FUDU04
27	1	990-0341	ADAPT-CYL/ROLL STOP LEVER-OUT
26	1	500-0047	IB DROP ADJUSTMENT BRACKET
25	1	34346	BUMPER-UHMMW-1" x 0.234"
24	1	34515	SPACER-UHMMW-HR LATCH
ITEM	QTY.	PART NO.	DESCRIPTION

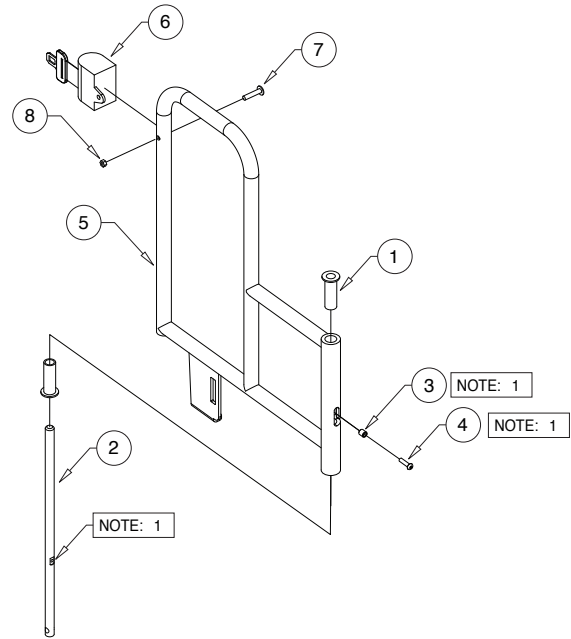
# Exploded Views and Parts Lists

## Handrail Assembly - Front

### DWG. NOTES

1) INSERT BOLT THROUGH CAM AND THREAD INTO SHAFT  
AFTER SHAFT HAS BEEN INSTALLED INTO HANDRAIL.

8	1	10059BKWP	NUT-3/8-16 HEX/AUTO-BK-WITH PATCH
7	1	28977	BOLT-3/8-16 X 1 3/4" FLBHSCS-GD8
6	1	19471T-M	BELT-RETRACTOR ONLY/NON-LOCKING/AMSAFE
5	1	500-0618FWY	WMT-HANDRAIL-FRONT-NL500
4	1	81000-000	BOLT-5/16-18 X 1 1/4-BHSC/AUTO-BK
3	1	34507	HR CAM FOLLOWER
2	1	34455	SHAFT-HANDRAIL PIVOT-NL500
1	2	500-0021	BUSHING-HANDRAIL-NL500
ITEM	QTY.	PART NO.	DESCRIPTION

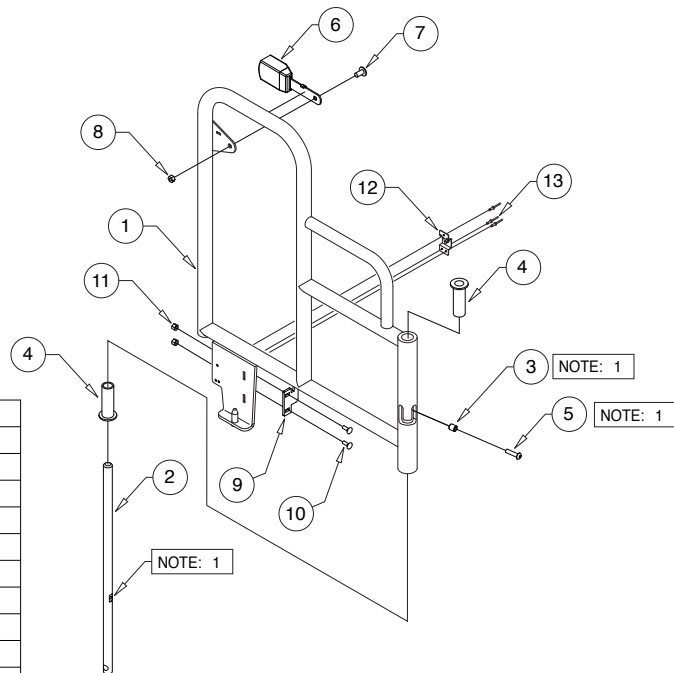


## Handrail Assembly - Rear

### DWG. NOTES

1) INSERT BOLT THROUGH CAM AND THREAD INTO SHAFT  
AFTER SHAFT HAS BEEN INSTALLED INTO HANDRAIL.

13	3	84205	RIV-POP-1/8"-.505"-SS
12	1	84389-S	M-CLIP-HAND CONTROL HANGER
11	2	14614	NUT-1/4-20 NYLOCK/AUTO-BK
10	2	13434	BOLT-CARR 1/4-20 X 3/4"/AUTO-BK
9	1	34813Y	LATCH-HANDRAIL-NL500
8	1	10059BKWP	NUT-3/8-16 HEX/AUTO-BK-WITH PATCH
7	1	25171	BOLT-5/16-18 X 2" FLBHSCS-GD8
6	1	28983-MOD	BUCKEL HALF ASSY/VISTA/NON-INTERLOCKED
5	1	81000-000	BOLT-5/16-18 X 1 1/4-BHSC/AUTO-BK
4	2	500-0021	BUSHING-HANDRAIL-NL500
3	1	34507	HR CAM FOLLOWER
2	1	34455	SHAFT-HANDRAIL PIVOT-NL500
1	1	500-0618RWY	WMT-HANDRAIL-REAR-NL500
ITEM	QTY.	PART NO.	DESCRIPTION

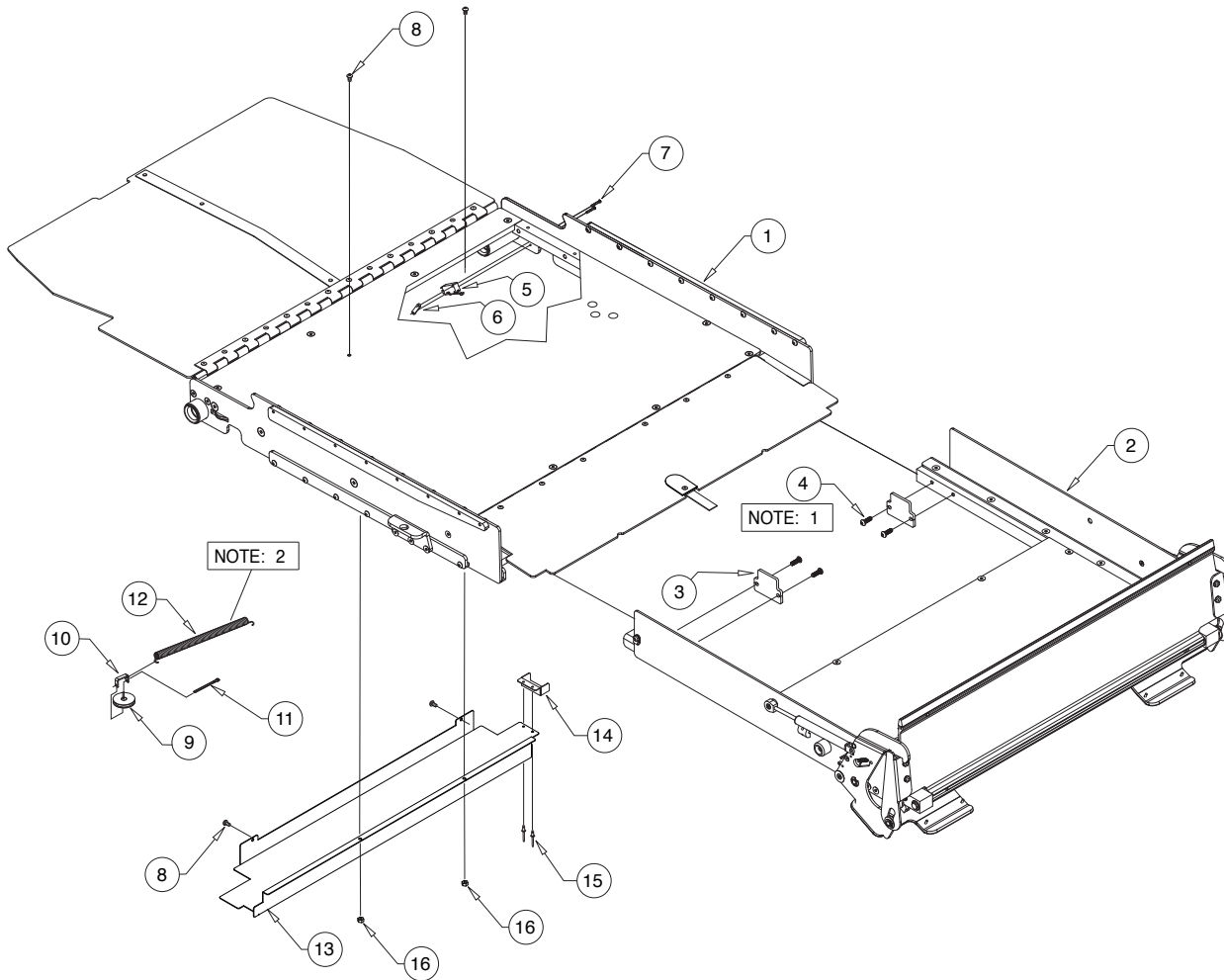


# Exploded Views and Parts Lists

## Platform Assembly

### DWG. NOTES

- 1) INSTALL PARTS B.C. #34357 AND B.C. 325371 AFTER OUTER PLATFORM IS INSTALLED INTO PLACE.
- 2) LOCATE SPRING HOOK INTO SPRING ATTACHMENT BRACKET ON THE BOTTOM SIDE OF THE PLATFORM INNER DECK.
- 3) USE (3) SCREWS FROM INNER ASSEMBLY AND RIVETS TO INSTALL GUARD INTO PLACE.



8	4	30375	SCREW-#10-32 X 1/2", BHCS/AUTO-BK
7	2	11483	SCREW-#4-40 X 3/4" RD. HD./AUTO-BK
6	1	24998	PLATE-TAPPED #4-40 MICRO SWITCH
5	1	34778A	HARNESS-PLATFORM OCCUPIED
4	4	25371	BOLT-1/4-20 X 3/4" RD. HD./AUTO-BK
3	2	34357	STOP-SLIDING PLATFORM-NL500
2	1	500-2197A	ASSY-PLATFORM-OUTER
1	1	500-0155A	ASSY-PLATFORM-INNER
ITEM	QTY.	PART NO.	DESCRIPTION

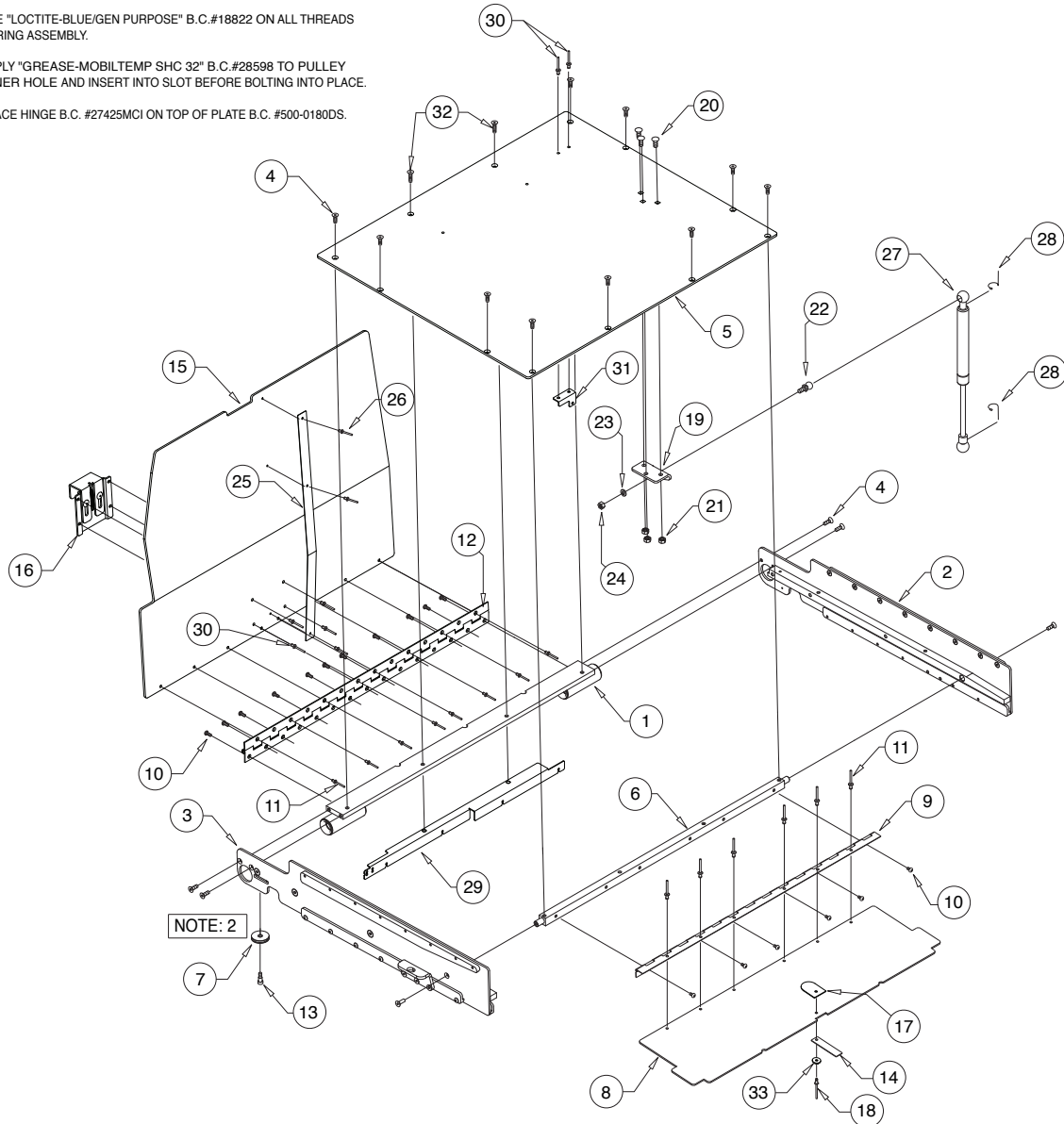
16	2	18349	NUT-#10-32 w/LOCKWASHER/AUTO-BK
15	2	12954	RIV-POP-SD43BS-1/8"-13/19"/AUTO-BK
14	1	500-0368	COVER-PLATFORM UNFOLD SWITCH
13	1	500-0369	GUARD-PULLEY/SPRING
12	1	34824	SPRING-EXTENSION-1/2" X 8 3/4"-.05" WIRE
11	1	10095	COTTER PIN-1/8" X 1 1/2"/AUTO-BK
10	1	500-0202	BRACKET-PULLEY SPRING TENSION
9	1	34598	PULLEY-SPRING TENSIONER
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Platform Sub-Assembly - Inner

### DWG. NOTES

- 1) USE "LOCTITE-BLUE/GEN PURPOSE" B.C.#18822 ON ALL THREADS DURING ASSEMBLY.
- 2) APPLY "GREASE-MOBILTEMP SHC 32" B.C.#28598 TO PULLEY INNER HOLE AND INSERT INTO SLOT BEFORE BOLTING INTO PLACE.
- 3) PLACE HINGE B.C. #27425MCI ON TOP OF PLATE B.C. #500-0180DS.



17	1	35313	PLATE-DECAL-ID NO. 7-STRAP-PLATFORM-NL500
16	1	500-0214A	ASSY-BKT-MOUNT-IB LATCH
15	1	500-0189YL	INBOARD BARRIER
14	1	34770	STRAP-PLATFORM TRANSITION HANDLE
13	1	82882	SCREW-5/16" X 3/8 SHLD SKT HD/SS
12	1	18619R029	HINGE-S.S. 2" X 1/4" X 29"
11	14	11513	RIV-POP-SD64BS-3/16"- .13/.25/AUTO-BK
10	17	30375	SCREW-#10-32 X 1 1/2" BHSCS/AUTO BLACK
9	1	27425MCI	HINGE-COVER-1.5" X 41.5"-SS
8	1	500-0180DS	PLATE-RAMP TRANSITION
7	1	34598	PULLEY-SPRING TENSIONER
6	1	34411-OB	BAR-INNER PLATFORM-NL500
5	1	500-0155DS	PLATFORM-INNER DECK
4	16	18708	SCREW-1/4-20 X 3/4"-FHSCS/AUTO BLACK
3	1	500-0179RA	ASSY-SIDEPLATE w/TRACKS-REAR
2	1	500-0179FA	ASSY-SIDEPLATE w/TRACKS-FRONT
1	1	34442A	ASSY-PLATFORM-CROSS BAR-NL500
ITEM	QTY.	PART NO.	DESCRIPTION

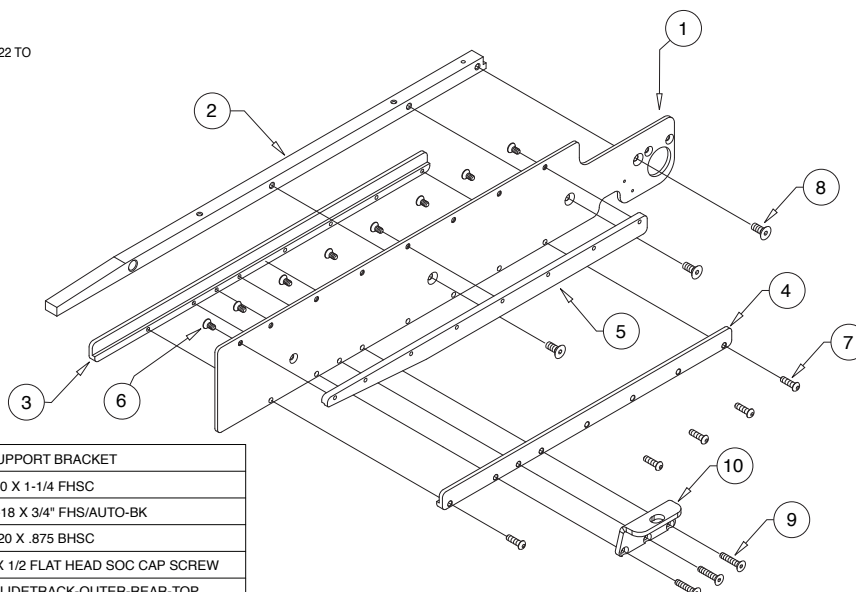
33	1	36084	BOOT-RIVET PROTECTOR
32	2	85019-000	FHSCS-1/4-20 X 1"
31	1	500-0212	BKT-SPRING ATTACHMENT
30	6	14993	RIV-POP-SD66BS-3/16"- .25/.38/AUTO-BK
29	1	500-0210	BKT-PLATFORM HARNESS ATTACHMENT
28	2	12608	CLIP-SPRING (GAS SPRING)
27	1	35031	GAS SPRING-14.47 EXT/9.02 COM-P1=1150N
26	3	12954	RIV-POP-SD43BS-1/8"- .13/.19/AUTO-BK
25	1	500-0188BK	PLATE-GUIDE PATH-IB
24	1	10058	NUT-5/16-18 HEX/AUTO-BK
23	1	10068	WASHER-5/16" LOCK/AUTO-BK
22	1	12611	BALL STUD-13MM,5/16-18 MALE (GAS SPRING)
21	3	11387	NUT-5/16-18 HEX LOCK
20	3	15858BK	BOLT-CARR 5/16-18 X 3/4/AUTO-BK
19	1	500-0209	BRACKET-GAS SPRING MOUNT-PLATFORM
18	1	11513	RIV-POP SD64BS-3/16"- .13/.25/AUTO-BK
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Platform Sub-Assembly - Inner Side Plate (Front)

### DWG. NOTES

1) APPLY "LOCTITE-BLUE /#242 GEN PURPOSE" B.C.#18822 TO ALL THREADS DURING ASSEMBLY.

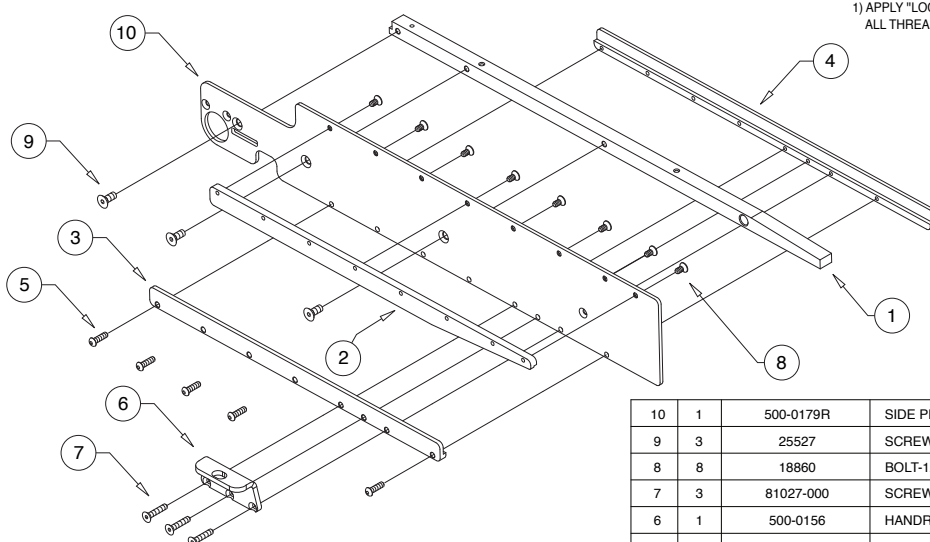


10	1	500-0156	HANDRAIL SUPPORT BRACKET
9	3	81027-000	SCREW-1/4-20 X 1-1/4 FHSC
8	3	25527	SCREW-5/16-18 X 3/4" FHS/AUTO-BK
7	5	40-2836-0	SCREW-1/4"-20 X .875 BHSC
6	8	18860	BOLT-1/4-20 X 1/2 FLAT HEAD SOC CAP SCREW
5	1	500-0304OFTBKN	PLATFORM SLIDETRACK-OUTER-REAR-TOP
4	1	500-0304OFBBKN	PLATFORM SLIDETRACK-OUTER-FRONT-BOTTOM
3	1	500-0304IFBKN	PLATFORM SLIDETRACK-INNER-FRONT
2	1	34410	SIDERAIL-INNER PLATFORM-NL500
1	1	500-0179F	SIDE PLATE INNER PLATFORM
ITEM	QTY.	PART NO.	DESCRIPTION

## Platform Sub-Assembly - Inner Side Plate (Rear)

### DWG. NOTES

1) APPLY "LOCTITE-BLUE /#242 GEN PURPOSE" B.C.#18822 TO ALL THREADS DURING ASSEMBLY.



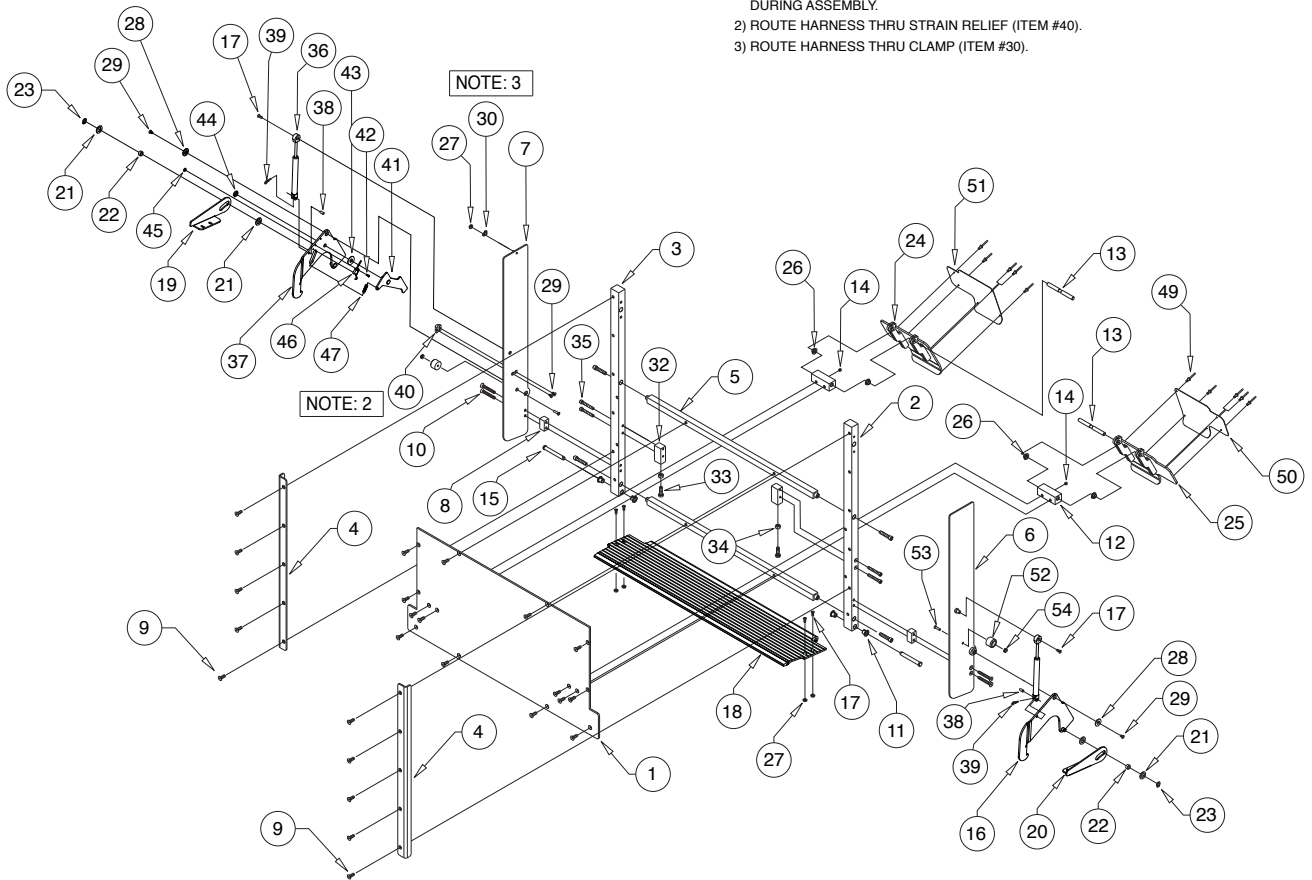
10	1	500-0179R	SIDE PLATE INNER PLATFORM
9	3	25527	SCREW-5/16-18 X 3/4" FHS/AUTO-BK
8	8	18860	BOLT-1/4-20 X 1/2 FLAT HEAD SOC CAP SCREW
7	3	81027-000	SCREW-1/4-20 X 1-1/4 FHSC
6	1	500-0156	HANDRAIL SUPPORT BRACKET
5	5	40-2836-0	SCREW-1/4"-20 X .875 BHSC
4	1	500-0304IRBKN	PLATFORM SLIDETRACK-INNER-REAR
3	1	500-0304ORBBKN	PLATFORM SLIDETRACK-OUTER-REAR-BOTTOM
2	1	500-0304ORTBKN	PLATFORM SLIDETRACK-OUTER-REAR-TOP
1	1	34410	SIDERAIL-INNER PLATFORM-NL500
ITEM	QTY.	PART NO.	DESCRIPTION

# Exploded Views and Parts Lists

## Platform Sub-Assembly - Outer

### DWG. NOTES

- 1) USE "LOCTITE-BLUE/#242 GEN PURPOSE" B.C.# 18822 ON ALL THREADS DURING ASSEMBLY.
- 2) ROUTE HARNESS THRU STRAIN RELIEF (ITEM #40).
- 3) ROUTE HARNESS THRU CLAMP (ITEM #30).



27	5	18349	NUT-#10-32 w/LOCKWASHER/AUTO-BK
26	4	24028	BEARING-PLASTIC-FLANGE-3/8ID X 1/4"
25	1	500-0070FW	WMT-ROLLSTOP FOOT-FRONT
24	1	500-0070RW	WMT-ROLLSTOP FOOT-REAR
23	2	13889	RING-3/8 RETAINING SNAP
22	2	945-0336N	BEARING-PLATFORM SLIDE
21	4	29371	WASHER-THRUST-.875 OD/.50 ID/.0585T
20	1	945-2202FN	BKT-LATCH/ROLL STOP/FRONT
19	1	945-2202RN	BKT-LATCH/ROLL STOP/REAR
18	1	500-2168A30Y	ASSY-ROLL STOP
17	6	17192P	SCREW-#10-32 X 1/2 FHDHXS-AUTO BLK-WPATCH
16	1	945-2206FN	LATCH-ROLL STOP/FRONT
15	2	24932BK	PIN-CLEVIS 3/8 X 3"EFF LEN-W/O HOLE/BK
14	2	11563	SCREW-1/4-20 X 1/4 SET CUP PT
13	2	500-2360	PIN-ROLLSTOP FOOT RETAIN
12	2	34387	BLOCK-ROLLSTOP FOOT MOUNT
11	4	28128	BEARING-FLANGE-10MM X 12MM-BB1012DU
10	4	40-4259-0	SCREW-1/4-20 X 2" FHSCS BLK
9	24	18708	SCREW-1/4-20 X 3/4" FHSCS-AUTO-BK
8	2	34446	BLOCK-PLATFORM/SIDEPLATE-NL500
7	1	500-0164RWBKN	WMT-SIDE REAR PLATFORM
6	1	500-0164FWBKN	WMT-SIDE FRONT PLATFORM
5	2	500-0163	CROSS BAR OUTER PLATFORM
4	2	500-0165BKN	ANGLE-SLIDING PLAT-GUIDE
3	1	500-0185R	OUTER PLATFORM-SIDE BAR-REAR
2	1	500-0185F	OUTER PLATFORM-SIDE BAR-FRONT
1	1	500-0197DS	PLATFORM-DECK-OUTER
ITEM	QTY.	PART NO.	DESCRIPTION

54	2	18349	NUT - #10-32 W/LOCKWASHER/AUTO-BK
53	2	26612BK	SCREW - #10-32 X 3/4" FHSCS/BLACK
52	2	35930	STOW GUIDE - PLATFORM - NL500
51	1	500-0169R	SKID - ROLL STOP FOOT - REAR
50	1	500-0169F	SKID - ROLL STOP FOOT - FRONT
49	10	84205	RIVET - 1/8 DIA X .515 POP SS
48	1	91010-000	CABLE TIE 3 3/4" BLACK (NOT SHOWN)
47	1	10774	SPRING - 1/4 X 1" EXT. w/HOOKS/AUTO - BK
46	1	34769A	HARN - ROLLSTOP OCC
45	1	32949	WELD NUT - #4-40 X 1/8" BARREL - ZINC
44	1	84383	E-CLIP - 3/8 SHAFT
43	1	17327	WASHER - .390 NYLON
42	1	11481	SCREW #4-40 X 3/8" RD. HD.
41	1	945-0207N	SWITCH LEVER
40	1	34779	STRAIN RELIEF-OUTER BARRIER HARNESS
39	2	36003	HAIRPIN-COTTER STAINLESS -.042"
38	2	34686	PIN-ROLLSTOP GAS SPRING
37	1	945-2206RN	LATCH-ROLL STOP-REAR
36	2	35127	GAS-SPRING-25LB-3.228 X 9.488
35	4	32971	SCREW-1/4-20 X 1 3/4 SHCS GRADE 8
34	2	10058	NUT-5/16-18 HEX/AUTO-BK
33	2	10013	BOLT-5/16-18 X 1" HEX/AUTO-BK
32	2	33411	BRACKET ADJUST-SPLIT FOOT
31	4	28781	SCREW-5/16-18 X 1 1/2" SHCS/BLK
30	1	28326	CLAMP-3/16 ID NYLON LOOP BLACK
29	4	24537	SCREW-#10-32 X 3/8 FL HD-HX SKT/AUTO-BK
28	2	990-0341	ADAPT-CYL/ROLL STOP LEVER-OUT
ITEM	QTY.	PART NO.	DESCRIPTION

# **Braun® Limited Warranty**

## **WARRANTY COVERAGE AND WARRANTY COVERAGE TIME PERIODS**

The Braun Corporation ("Braun") warranty covers certain parts of this wheelchair lift for three (3) years or 7500 cycles and the cost of labor to repair or replace those parts for one (1) year or 2500 cycles. This limited warranty covers substantial defects in materials and workmanship of the lift, provided that the lift is operated and maintained properly and in conformity with the owner's manual. The warranty period begins on the date that the product is delivered to the first retail purchaser by an independent, authorized dealer of Braun, or, if the dealer places the product into any type of service prior to retail sale, on the date the dealer first places the product in such service. This limited warranty applies only to the first purchaser. It may not be transferred.

## **WHAT BRAUN WILL DO TO CORRECT PROBLEMS**

In the event that a substantial defect in material or workmanship, attributable to Braun, is found to exist during the first year of warranty coverage, it will be repaired or replaced, at Braun's option, without charge for parts or labor to the owner, in accordance with the terms, conditions and limitations of this limited warranty. If the substantial defect in material or workmanship, attributable to Braun, is found to exist during the second or third year of warranty coverage, it will be repaired or replaced, at Braun's option, without charge to the owner for parts, only, in accordance with the terms, conditions and limitations of this limited warranty. The cost of labor for any repair or replacement in the second and third year of warranty coverage is the sole responsibility of the owner. This warranty does not cover labor costs in the second or third year of coverage.

Braun's obligation to repair or replace defective materials or workmanship is the sole obligation of Braun under this limited warranty. Braun reserves the right to use new or remanufactured parts of similar quality to complete any work, and to make parts and design changes from time to time without notice to anyone. Braun reserves the right to make changes in the design or material of its products without incurring any obligation to incorporate such changes in any previously manufactured product. Braun makes no warranty as to the future performance of this product, and this limited warranty is not intended to extend to the future performance of the product. In addition, the owner's obligation to notify Braun, or one of its authorized, independent dealers, of a claimed defect does not modify any obligation placed on the owner to contact Braun directly when attempting to pursue remedies under state or federal law.

## **LIMITATIONS, EXCLUSIONS AND DISCLAIMER OF IMPLIED WARRANTIES**

**ANY IMPLIED WARRANTY THAT IS FOUND TO ARISE BY WAY OF STATE OR FEDERAL LAW, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS, IS LIMITED IN DURATION TO THE TERMS OF THIS LIMITED WARRANTY AND IS LIMITED IN SCOPE OF COVERAGE TO THE SCOPE OF COVERAGE OF THIS LIMITED WARRANTY.**

Braun disclaims any express or implied warranty, including any implied warranty of fitness or merchantability, on items excluded from coverage as set forth in this limited warranty. Braun makes no warranty of any nature beyond that contained in this limited warranty. No one has authority to enlarge, amend or modify this limited warranty, and Braun does not authorize anyone to create any other obligation for it regarding this product. Braun is not responsible for any representation, promise or warranty made by any independent dealer or other person beyond what is expressly stated in this limited warranty. Any selling or servicing dealer is not Braun's agent, but an independent entity.

**BRAUN SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT MAY RESULT FROM BREACH OF THIS LIMITED WARRANTY OR ANY IMPLIED WARRANTY. THIS EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES SHALL BE INDEPENDENT OF ANY FAILURE OF THE ESSENTIAL PURPOSE OF ANY WARRANTY, AND THIS EXCLUSION SHALL SURVIVE ANY DETERMINATION THAT THIS LIMITED WARRANTY OR ANY IMPLIED WARRANTY HAS FAILED OF ITS ESSENTIAL PURPOSE.** This warranty does not cover, and in no event shall Braun be liable for towing charges, travel, lodging, or any other expense incurred due to the loss of use of the product or other reason.



## **Braun® Limited Warranty**

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

### **HOW TO GET SERVICE**

To obtain warranty service the owner must do all of the following:

1. Notify an authorized service center, of the claimed defect attributable to Braun, within the warranty coverage period designated above.
2. Provide the notification mentioned in (1), above, within ten (10) days of when the owner discovered, or should have discovered, the claimed defect.
3. Promptly schedule an appointment with and take the product to an authorized service center for service.
4. Pay any transportation costs and all expenses associated with obtaining warranty service.

Since Braun does not control the scheduling of service work at the independent dealerships you may encounter some delay in scheduling or completion of work. If you need assistance you may contact Braun, at 631 West 11th Street, Winamac, Indiana 46996; 1-800-THE-LIFT, (843-5438).

If two (2) or more service attempts have been made to correct any covered defect that you believe impairs the value, use or safety of the product, or if it has taken longer than thirty (30) days for repairs to be completed, you must, to the extent permitted by law, notify Braun directly, in writing, at the above address, of the unsuccessful repair(s) of the alleged defect(s) so that Braun can become directly involved in providing service pursuant to the terms of this limited warranty.

### **WHAT IS NOT COVERED**

This Limited Warranty does not cover any of the following: defects in materials, components or parts of the product not attributable to Braun, any material, component or part of the product that is warranted by another entity (Note: the written warranty provided by the manufacturer of the material, component or part is the direct responsibility of that manufacturer); items that are added or changed after the product leaves Braun's possession; additional items installed at any dealership, or other place of business, or by any other party, other than Braun; normal wear, tear, usage, maintenance, service, periodic adjustments, the effects of condensation or moisture from condensation; mold or any damage caused by mold; imperfections that do not affect the product for its intended purpose; items that are working as designed but that you are unhappy with; problems related to misuse, mishandling, neglect or abuse, including failure to maintain the product in accordance with the owner's manual, or other routine maintenance such as inspections, lubricating, adjustments, tightening of screws, sealing, wheel alignments or rotating tires; damage due to accident or collision, including any acts of weather or damage or corrosion due to the environment; theft, vandalism, fire, or other intervening acts not attributable to Braun; damage resulting from tire wear or tire failure; defacing, scratches, dents or chips on any interior or exterior surface of the product, including those caused by rocks or other road hazards, damage caused by off road use, overloading or alteration of the product, or any of its components or parts.

Defects and/or damage to interior and exterior surfaces and other appearance items may occur at the factory or when the product is in transit. These items are usually detected and corrected at the factory or by a dealer prior to delivery to the purchaser. You must inspect the product for this type of damage when you take delivery. If you find any such defect or damage you must notify the selling dealer, or Braun, at the time of delivery to have these items covered by this limited warranty and to have work performed on the items at no cost to you as provided by this limited warranty.



# **Braun® Limited Warranty**

## **EVENTS DISCHARGING BRAUN FROM OBLIGATION UNDER WARRANTY**

The following shall completely discharge Braun from any express or implied warranty obligation to repair or replace anything and void this warranty: misuse, neglect, collision, accidents, failure to provide routine maintenance (See Owner's Manual), unauthorized alteration, off road use, Acts of Nature, damage from weather or the environment, theft, vandalism, tampering, fire, explosions, overloading the product and odometer tampering.

## **LEGAL REMEDIES**

Any action to enforce any portion of this limited warranty, or any implied warranty, must be commenced within six (6) months after expiration of the warranty coverage period designated above or the action will be barred because of the passage of time. Any performance of repairs shall not suspend this limitation period from expiring. Any performance of repairs after the warranty coverage period has expired, or performance of repairs regarding any thing excluded from coverage under this limited warranty shall be considered "good will" repairs, and they will not alter the terms of this limited warranty, or extend the warranty coverage period or the filing limitation period in this paragraph. In addition, since it is reasonable to expect that the product will need some service during the warranty period, this warranty does not extend to future performance. It only sets forth what Braun will do and does not guarantee anything about the product for any time period. Nothing in this warranty, or any action of Braun, or any agent of Braun, shall be interpreted as an extension of any warranty period or the filing limitation period in this paragraph. Some states do not allow a reduction in the statute of limitations, so this reduction may not apply to you.

## **WARRANTY REGISTRATION and MISCELLANEOUS**

Your warranty registration records should be completed and delivered to the appropriate companies, including the Braun Delivery Checklist & Warranty form. That form must be returned to Braun within twenty (20) days of purchase. The Braun warranty will not be registered unless this warranty registration is completed and received by Braun. Failure to file this warranty registration with Braun will not affect your rights under this limited warranty as long as you can present proof of purchase, but it can cause delays in obtaining the benefits of this limited warranty, and it changes the start date of the warranty to the date of final assembly of the product by Braun.

Braun agrees to repair or replace any of its factory installed parts found to have substantial defects within the appropriate warranty period designated above, provided that the repair is authorized by Braun and carried out by an authorized service center (a Braun labor schedule determines the cost allowance for repairs). Braun will not honor any warranty claim for repairs or replacement of parts unless the claim is submitted with the appropriate paperwork, and the work is completed by an independent, factory authorized service center. The appropriate paperwork can be obtained by written or phone contact with Braun at the contact information in this warranty.

Braun reserves the right to designate where any warranty work can be performed. Braun also reserves the right to examine any defective workmanship or part prior to giving any authorization for warranty work. Braun's return authorization procedure must be adhered to in order to process any warranty claims.

**THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.**

# **"Providing Access to the World"®**



**Over 300 Braun  
Dealers Worldwide**

 **THE BRAUN  
CORPORATION®**  
"Providing Access to the World"



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International Corporate Hdqrs: P.O. Box 310 Winamac, IN 46996 USA  
1-800-THE LIFT® (574) 946-6153 FAX: (574) 946-4670

**Service Manual for:**

**Series A1**

**NL500**

**Lift Series**

**Public Use Wheelchair Lifts**

**BRAUN**  
**NL500**  
**SERIES**

**36090 Rev. A**  
**April 2012**

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