

**NIRO, Inc.**  
**ELI LILLY COMPANY, Inc.**  
**CAROLINA, PUERTO RICO**  
**METOLIFT® M2052-00**  
**Serial No. 7185**

**METOLIFT® M2052-00**

INSTALLATION  
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MAINTENANCE  
--  
LUBRICATION

<u>Section</u>	<u>Page(s)</u>
Installation Instructions	2
Operating Instructions	3
Lubrication and Safety Points	4
Replacement Parts Diagram	5
Replacement Parts Lists	6
Slot Cover Disassembly	8
Vertical Limit Switch Adjustment	10
Chain Adjustment	11
M2052-00 General Arrangement Drawings	12
Controls System Drawings	13
Limited Warranty Statement	14
Expanded Documentation – Major Assembly Details and OEM Component Documentation	Appendix

**METOLIFT® M2052-00**  
**INSTALLATION INSTRUCTIONS**

1. Place the METOLIFT horizontally on the floor with the base plate in the approximate lift mounting location.
2. Remove all skidding and bolts leaving the METOLIFT cradled on the wood blocks.
3. Using a hoist with nylon strap, lift the METOLIFT into the upright position.
4. Position the METOLIFT in the exact floor location with the LOAD position sticker in the direction that the drum will be accepted.
5. Using a carpenter's level, make sure the column is vertically level; if not, insert shims under the baseplate as necessary to plumb the column.
6. Transfer the holes in the base plate to the floor and drill the proper size holes. (It is the installer's responsibility to purchase anchor bolts to secure the unit to the floor. 5/8" Hilti Kwik-bolts with at least 4-6" of penetration are recommended).
7. Screw nuts onto the anchor bolts to secure unit. Check level and re-shim as necessary.
8. Connect operator panels and enclosures in accordance with the schematics.
9. Connect supply hose of clean air in accordance with the general arrangement drawing.
10. Filter-lubricator-regulator should be adjusted to supply 90 psig with 1 drop of oil per 60 seconds of operation.

**METOLIFT® M2052-00**  
**OPERATING INSTRUCTIONS**

## Sequence of Operations

[TO BE DETERMINED BY CUSTOMER]

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## Description of Operations

OPERATOR	TYPE	FUNCTION
UP	Momentary (Deadman pushbutton)	Raises the forks to the top stop limit switch.
DOWN	Momentary (Deadman pushbutton)	Lowers the forks to the bottom stop limit switch.

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### **NOTES:**

- ◆ The Metolift should only be used to lift the specified equipment.
- ◆ The Metolift should only be used by trained and authorized personnel.
- ◆ Misuse of the Metolift can lead to equipment damage, personal injury or death.
- ◆ The Metolift is not provided with a lockout-tagout device. The customer should provide an OSHA-approved lockout-tagout device in the air supply line to the Metolift.
- ◆ The Metolift should not be used for human transport under any circumstances.
- ◆ The Metolift should be observed by the operator at all times during operation.

**METOLIFT® M2052-00**  
**LUBRICATION and SAFETY POINTS**

**LUBRICATION**

- L1. At Start Up and as required fill filter-lubricator-regulator with AIR LUBE 10W no-detergent oil. Adjusted to 1 drop per 60 seconds of operation.
- L2. Grease Chains every 6 months (SAE50-90 or equiv.).
- L3. Grease Track every 6 months (SAE50-90 or equiv.).

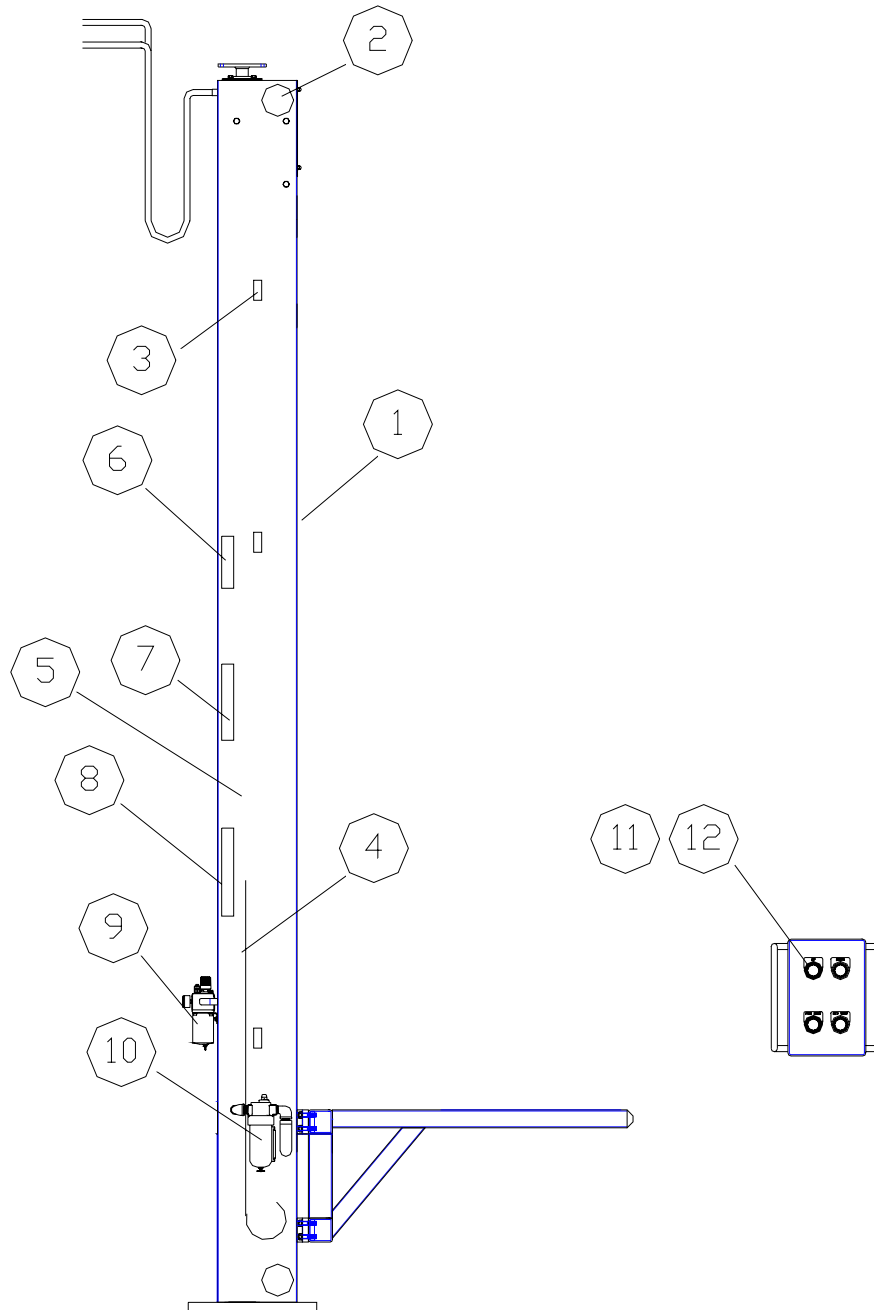
**SAFETY**

- S1. Inspect chains every 6 months and adjust if necessary. (See 'Chain Adjustment' in following pages).
- S2. Inspect floor and ceiling mounting bolts every 6 months.
- S3. Inspect bolts that mount forks to carriage every 6 months.

**UTILITY-POWER REQUIREMENTS**

90 PSIG of Air, 45 SCFM  
Filtered, Lubricated and Regulated

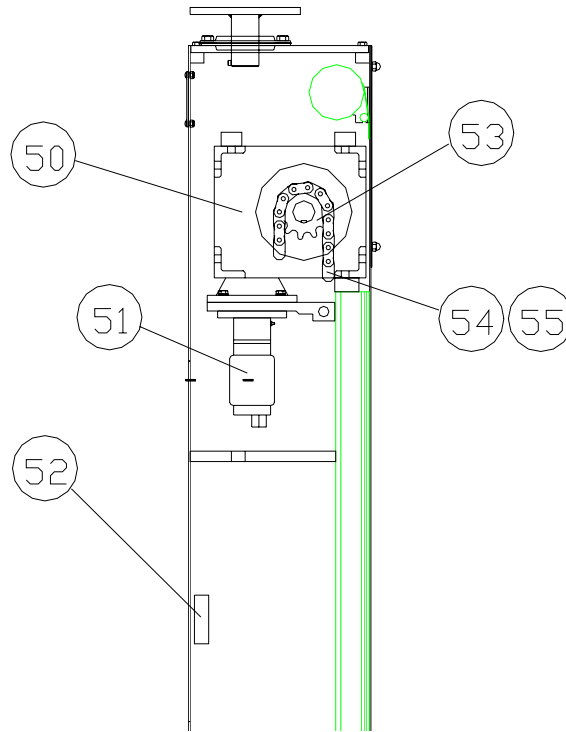
**METOLIFT® M2052-00**  
**REPLACEMENT PARTS DIAGRAM**



**METOLIFT® M2052-00**  
**REPLACEMENT PARTS LIST**

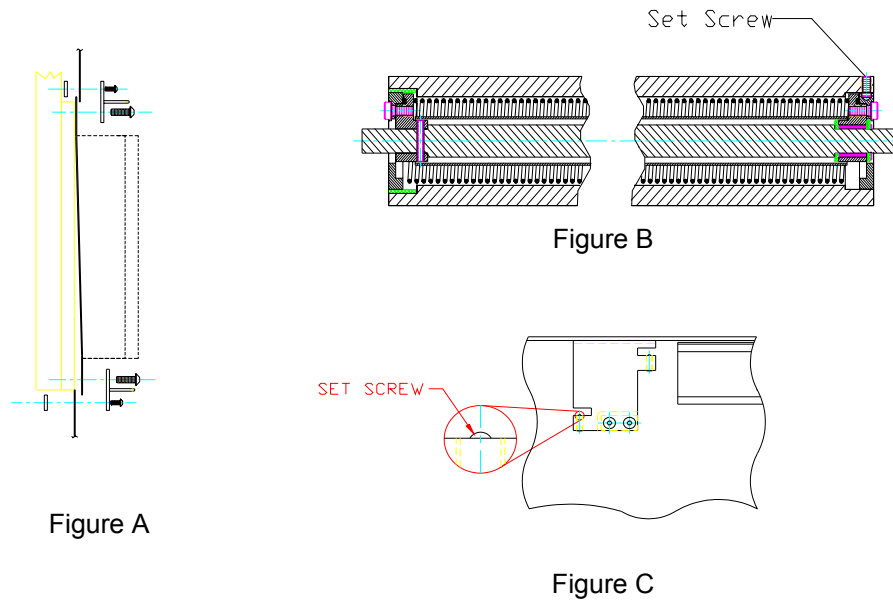
<b>METO PART #</b>	<b>Ref #</b>	<b>Description</b>	<b>Qty per M2052-10</b>
P-1700-028	-	Grease, Food Grade	A/R, 7# can
P-1700-035	-	Air Lubricator Oil, 10W non-detergent	A/R, pt
A6481-78-15	1	Slot Cover	2
A6130-321-2000	2	Slot Cover Roll Assy	2
P-0700-066	3a	Vertical Limit Switch Actuator	2
P-0700-034	3b	Vertical Limit Switch Cam	2
P-0700-028	3c	Vertical Limit Switch Valve, 3-way	2
(not used)	4		
(not used)	5		
P-0700-005	6	Valve, Lift Control	1
(not used)	7		
(not used)	8		
P-0900-0121	9	Filter-Lubricator-Regulator	1 (loose)
P-0900-014	10	Coalescing Filter	1 (loose)
A2401-20-113	11	Push Button Assembly	2
(not used)	12		

## TOP/LIFT DRIVE ASSEMBLY



METO PART #	Item #	Description	Qty per
<b>Top Assembly:</b>			
A2100-86-2	50	Gearbox, Modified, C38Q140	1
P-0100-021	51a	Air motor, IR 3840M	1
P-0100-0103	51b	Motor Repair Kit	-
P-0700-005	52	Motor Control Valve	1
P-0300-0211	53	Sprocket, #80, 11 teeth	2
P-0400-008	54	Chain, Roller, #80	A/R, ft
P-0400-031	55	Link, #80 Roller Chain	A/R

**METOLIFT® M2052-00**  
**SLOT COVER DISASSEMBLY**



The METOLIFT sanitary slot cover system consists of 4 basic components. The first is the FDA approved belting material that makes up the cover itself. This cover is wound around the top and bottom slot-cover roll assemblies (fig B). The roll assemblies are held in the column by the mounting plates with ball plungers (fig C) providing for ease of installation and removal. The roll assemblies are mounted behind the covers at the top and the bottom of the lift column.

When servicing items located inside the lift column, it is necessary to release the slot covers from the carriage mounting (fig A). Removing the larger button head screws while holding the handles does this. With the screws removed the slot cover can be gently recoiled to the top or bottom of the lift.

To remove the roll assemblies from the machine, disassemble as described above, then push the roll assembly out of its mounting slot. For top roll assembly, this may require the removal of the METOLIFT logo plate.

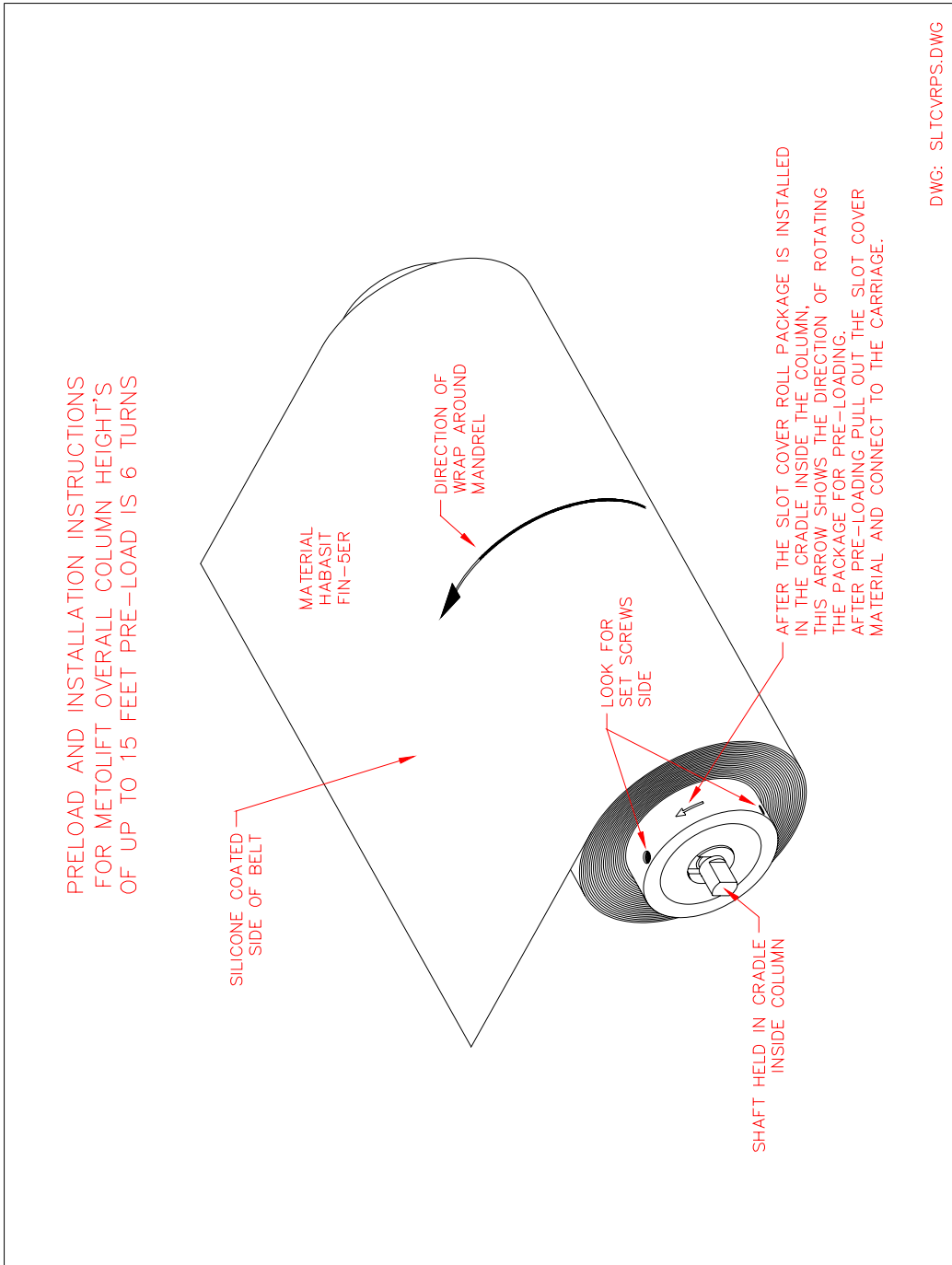
**NOTES:**

1. The roll assembly is not intended for service on site. Any problem should be referred to METO. Failed attempts to repair the roll assembly may jeopardize some components.
2. Caution must be exercised when replacing the slot cover material on the roll assembly. New materials must be wound in the same direction as the old. Failure to do so will result in reverse coiling of the spring and tearing of the slot cover if installed with the improper winding.

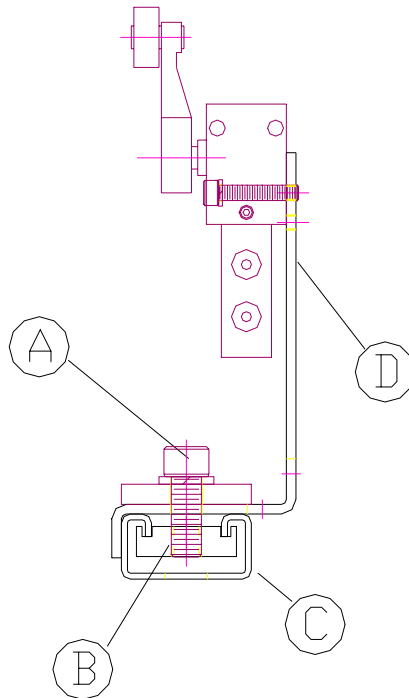


### SLOT COVER ASSEMBLY(cont'd)

If it becomes necessary to remove /repair/replace the roll assembly or the slot cover itself, it is important that the two be reassembled in proper relation to each other. Additionally, once mounted back in the column, it will require a preloading of the spring. Generally, 6 turns of the roll assembly, before extending the material back to the carriage, is required.



**METOLIFT®**  
**VERTICAL LIMIT SWITCH ADJUSTMENT**



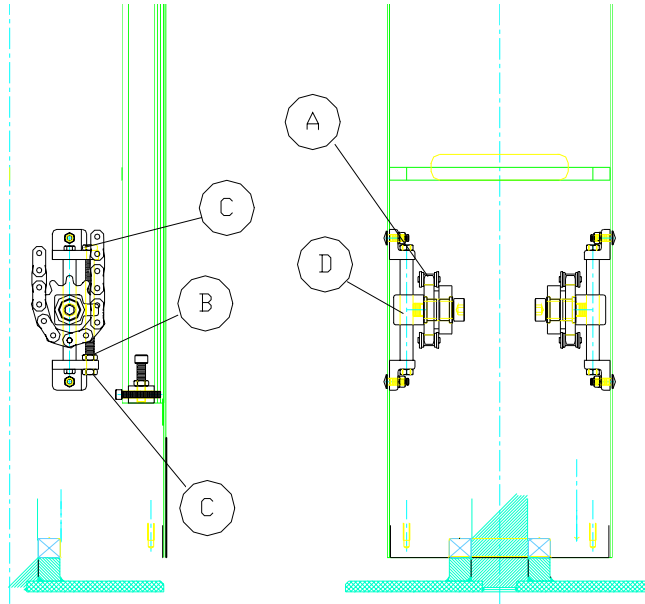
**Directions:**

1. Loosen mounting screw (A) that fastens mounting bracket/switch assembly (D) to mounting channel (C) sufficiently to disengage the locking channel washer (B).
2. Slide mounting bracket/switch assembly (D) up, or down, as required to adjust the height of the switch.
3. Tighten mounting screw (A) sufficiently to re-engage the channel lock washer (B) into the channel (C) .
4. Test for proper limit switch adjustment.

**NOTES:**

- The factory installs limit switches with small service loops to accommodate most adjustment ranges. Should it become necessary to have a large adjustment, it may be necessary to splice in additional wire/tubing.
- Some machines equipped with a PLC-based control system may use an encoding system to set vertical heights and stops. In this instance, adjusting the vertical switch may not have the desired effect and may have other adverse effects. Please consult your controls details to verify the means of height control. If your machine uses an encoder, adjustment of heights requires change to the PLC code.

## CHAIN ADJUSTMENT For LIFT CHAINS



1. Lift cradle at least 60" high and support with forklift or rigid support before working on chain adjustment.
2. Open slot-cover and locate lower sprockets (A) and chain tensioner assembly.
3. Loosen lock nut (B), rotate tension nut (C) to drive sprocket (D) block down. Tension chain to remove excess slack. NOTE: Do not over-tension chain as this will result in premature wear and will put excess loading on the lift drive.
4. Repeat step 3 for second chain tensioner assembly so as to maintain equal tensioning and alignment.
5. Tighten lock nut (B), against tensioner mounting bracket.

7046-1, Rev C

7046-400, -

## **LIMITED WARRANTY STATEMENT**

When used in accordance with Written Instructions and under normal operating conditions, METO manufactured products are guaranteed to be free from defects in material and workmanship for one (1) year from the invoice date. Any unit which proves defective during the stated period will be repaired or replaced, at the sole discretion of METO CORP., F.O.B. our plant, provided the defective part is returned properly packed with all freight charges prepaid to our plant.

This guarantee shall not apply to:

Complete assemblies such as motors and gear sets purchased from other manufacturers and incorporated into METO products. In case of failure of these assemblies, METO will honor the specific guarantee terms of the individual manufacture involved.

Equipment subjected to misuse, improper installation, alteration, neglect or accident,  
**is not covered under this warranty.**

This guarantee is limited to the original purchaser and is not transferable.

No warranties expressed or implied have been made other than those stated herein.

## **For Parts and Service**

### Contact:

METO Corporation  
165 Chestnut Street  
Allendale, NJ 07401

Phone: 201-825-4747

Fax: 201-825-2664

e-mail: [sales@metolift.com](mailto:sales@metolift.com)

**Appendix-**

**Expanded Documentation**

**Including**

**Subassembly Drawings**

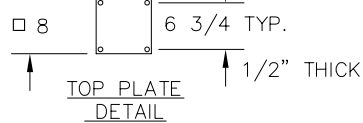
**And**

**Vendor Data**

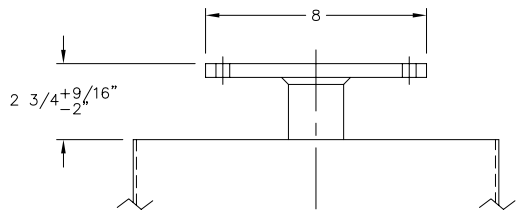
1/2" NPT COUPLING FOR AIR SUPPLY IN  
45 SCFM @ 80 PSIG CLEAN, DRY AIR REQUIRED

3/4" NPT COUPLING FOR AIR EXHAUST OUT  
COALESCING FILTER PROVIDED LOOSE

Ø11/16" FOR 5/8"  
ANCHOR BOLTS  
4 HOLES



TOP ADJUSTMENT  
DETAIL

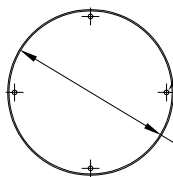


FILTER-REGULATOR-LUBRICATOR

Ø11/16" FOR 5/8"  
ANCHOR BOLTS.  
4 HOLES ON 22" B.C.

5/8" THICK  
Ø24

BOTTOM PLATE  
DETAIL



CONTROL BOX LOCATION

192

40 5/8

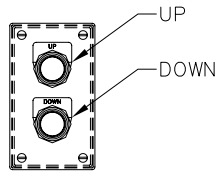
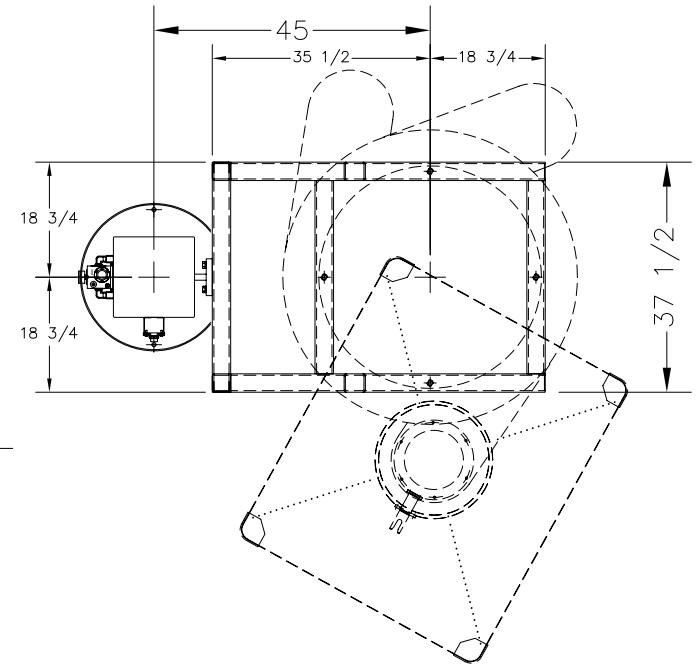
13 1/4

45

3 7/8

ROLLER SLOT COVER

123 SET MAXIMUM [133 3/4 AVAILABLE]  
12 1/2 SET MINIMUM



CONTROL BOX DETAIL  
(COLUMN MOUNTED)

\*CAPACITY  
CLASSIFIER OPERATING LOADS:  
1300# VERTICAL  
400# HORIZONTAL  
CLASSIFIER IS 730# STATIC

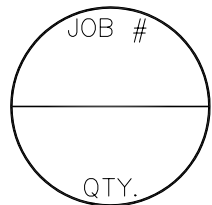
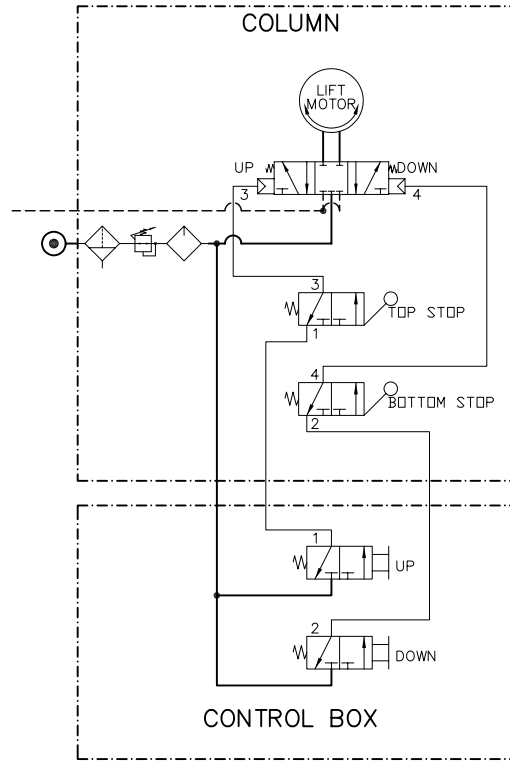
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REV.	DATE	CHANGE	BY
-	-	-	-
-	-	-	-
-	-	-	-

		ALLENDALE, NEW JERSEY, U.S.A. 07401			
PROJECT		NIRO, INC. LILLY DEL CARIBE CAROLINA, PR		DRAWN A.B. APPR. H.H.	
CAPACITY *	TITLE METOLIFT M2052-00 LIFTING KASON CLASSIFIER [ITEM # _____]				U.S.A.
MATERIAL 304 S.S.	FINISH 20-25 µin Ra	DATE 2/10/04	SCALE 1 : 32	DRAWING NUMBER A-7185-1	REV. -



ITEM	PART NO.	DESCRIPTION	QTY.
1	A-2100-400-3	VERTICAL LS ASS'Y, 3-WAY	2
2	A-2401-20-113	PUSHBUTTON ASS'Y, 3-WAY	2
3	P-0700-005	CONTROL VALVE, NUGGET 500	1



-	-	-	-
-	-	-	-
REV.	DATE	CHANGE	BY

		ALLENDALE, NEW JERSEY, U.S.A. 07401			
SERVICE FILTERED, REGULATED, LUBRICATED AIR, 90 PSIG		PROJECT ELI LILLY COMPANY, INC. CAROLINA, PR		DRAWN A.B. APPR. H.H.	
		TITLE PNEUMATIC SCHEMATIC M2052-00			
QUANTITY	NEXT ASS'Y	DATE	SCALE	DRAWING NUMBER	REV.
1	-	1/27/03	N/A	A-7046-400	-