

# Scissor Lift SL - 240V

Ceiling-recessed video projector lift

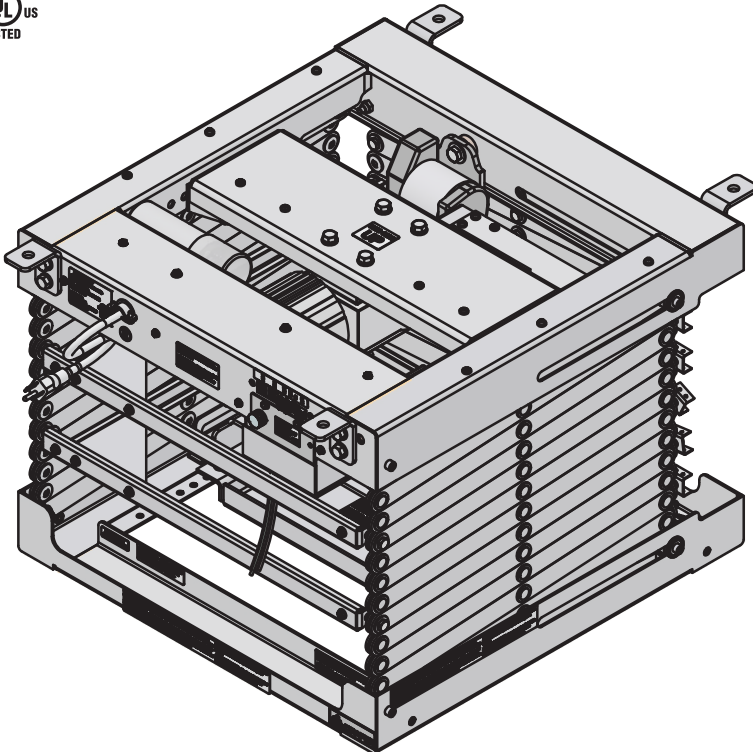
## NOTICE:

These Instructions apply **ONLY** to Scissor Lifts Manufactured **AFTER October, 15th, 2022**. Instructions for Lifts Manufactured Prior to this date can be found: [HERE](#)

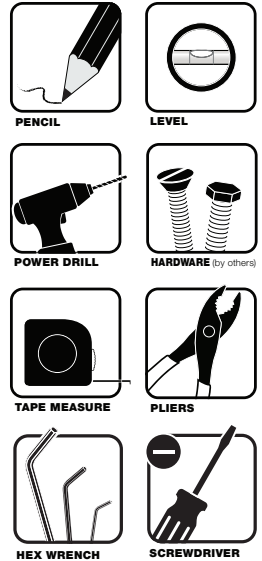
## INSTRUCTIONS

### INSTALLATION & OPERATION

### Overview - Components



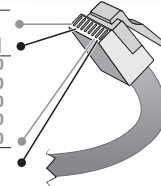
#### TOOLS REQUIRED



#### MAKING YOUR OWN CABLES?

##### PIN OUTS

- 1 - UP
- 2 - DOWN
- 3 - NOT USED
- 4 - NOT USED
- 5 - NOT USED
- 6 - NOT USED
- 7 - NOT USED
- 8 - COM



### Overview - Planning

- Based on screen location and projector specifications, determine proper position for projector installation.
- Confirm that there is adequate space for installation and operation. Minimum clearance above ceiling level varies according to height of projector, optional projector mounting bracket, optional ceiling closure and optional Environmental Housing.
- Arrange to provide service access to the unit.
- Installer is to provide an RJ45 cable, for each switch, with a connector on one end to connect to the lift and open on the other end to connect to each switch
- When installed with Environmental Air Space Housing unit is suitable for use in an environmental air space in accordance with Section 300.22(C) of the National Electrical Code, and Section 2-128, 12-010(3) and 12-100 of the Canadian Electrical Code, Part 1, CSA C22.1.
- Total capacity of lift including cables, closure, projector, and bracket:

<b>SL4</b>	<b>132 LBS.</b>	<b>60KG</b>
<b>SL6</b>	<b>125 LBS.</b>	<b>56.7KG</b>
<b>SL8</b>	<b>118 LBS.</b>	<b>53.5KG</b>
<b>SL10</b>	<b>108 LBS.</b>	<b>49KG</b>
<b>SL12</b>	<b>100 LBS.</b>	<b>45.4KG</b>

#### As Soon As Lift Arrives

- Open carton and inspect for damage.
- Locate the following parts:
  - The unit itself
  - Controls
  - Any optional equipment

**CAUTION**  
 Read and understand all warnings (Page 2 of this document) before beginning installation.

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If you have any difficulties installing or servicing your Scissor Lift SL, call your dealer or Draper, Inc.

PLEASE READ - **Safety Information**

**Important Safety Information**



**WARNING**

**Important Safety Information**

**Improper installation and use of the Scissor Lift can result in serious injury or death. Primarily, injuries can occur if the unit falls due to imprecise installation, mishandling of the unit during installation, or installation on an insufficient wall or ceiling structure. Please use extreme care.**

1. Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and could result in serious injury.
- ▲ **DANGER: To reduce risk of shock:**
2. Always disconnect power from lift before cleaning.
- ▲ **WARNING—To reduce risk of burns, fires, electric shock or injuries to persons:**
3. Turn off power and any nearby equipment or cables carrying electricity before connecting switches, wires, controls, or electrical components.
4. Use this lift only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.
5. Never operate this lift if it has a damaged cord or plug. If it is not working properly, call your dealer or the manufacturer for assistance/repair.
6. Keep cords away from heated surfaces.
7. Never operate lift with air opening blocked. Keep openings free of debris.
8. Never drop or insert any object into any opening.
9. Do not use outdoors.
10. Do not wire motors in parallel without written permission from Draper, Inc.

11. Test lift prior to installation.
12. During testing or operation, carefully watch the surrounding area for any potential safety concerns including nearby persons or objects.
13. After installation, the entire system, including all sensors, should be carefully tested to ensure safe and normal operation. Extreme care should be taken during testing to remain clear of moving parts to avoid possible injury.
14. ▲ **WARNING** - To prevent operation by unauthorized persons the locking switch cover **MUST** be installed over the 3-button wall switch for installations where the lift show position will descend to a height less than 8 feet above the floor. The actuating switch controls shall be located within sight of the projector lift.
15. Operation of unit should be performed only by authorized and qualified personnel, who have been trained in its safe and effective operation and understand its safety features.
16. The safety features of the unit should never be disabled, bypassed, or overridden. The system should not be operated until all safety features are properly and completely installed, calibrated, and tested.
17. Unit may need to comply with local, state, or district rules and regulations, in particular when installed in schools. All applicable rules and regulations should be reviewed before installation and use.

▲ **WARNING:** Risk of Electric Shock—connect this product to a properly grounded electrical supply.

**Important installation/operating Instructions**

▲ **WARNING:** To prevent injury, this apparatus must be securely attached to the building structure in accordance with the instructions.

▲ **Caution:** Do not operate lift without a minimum of 15 lbs. of weight attached to the pan. Operating without weight may cause cables to unspool.

18. Installation and calibration of the unit should only be performed by an authorized, qualified, and experienced professional. In particular, electrical work and wiring [indicated in diagram by dashed lines] must be completed only by a qualified professional electrician who has read this manual completely and is familiar with the construction and operation of this equipment and the hazards involved.
19. Do not affix the unit to walls or ceilings that have inadequate strength to permanently hold the unit during use. It is the owner's and installer's responsibility to confirm the wall or ceiling to which the unit attaches is sufficient to permanently hold the weight and stress loads of the unit at all times. Draper®, Inc., is not responsible for improper installation, application, testing, or workmanship related to the product at place of installation.
20. It is the installer's responsibility to make sure appropriate fasteners are used for mounting.
21. All hardware must be installed level. Unit must be level and square.
22. Never leave the area while operating the unit during installation, maintenance, or normal operation, unless it is secure and safe.
23. Before testing or operation, carefully inspect the entire area and path (especially underneath) of unit to be sure no persons or objects are in the area.
24. Failure to precisely follow installation guidelines invalidates all warranties.
25. Do not obstruct operation of Scissor Lift with fingers or any object. Serious injury or damage could result.
26. Lift to be used with product weighing no more than: See chart on page 1.
27. Scissor Lift is designed to accommodate ceiling suspended equipment.

28. Equipment should not be allowed to rest on optional ceiling closure during operation (refer to section titled "Installing Projector").
29. Entire bottom of unit must be unobstructed to permit proper operation. Sufficient clearance must be allowed below projector or optional ceiling closure: 4' for Model SL4, 10' for Model SL10, etc.
30. Unit operates on 240V AC 50 Hz. current. 14 amps current draw (2 amps for lift, 12 amps for outlet).
31. Verify the show position when testing lift. Make required changes by referring to adjustment instructions on page 4 of this document.
32. ▲ **WARNING** - To prevent risk of injury, verify that no person is in the vicinity of the device before raising or lowering.
33. The maintenance/service factory limit setting must not be adjusted to a lower position than the preset factory limit setting. In addition, Draper does not recommend setting show position at the maintenance/service position—for example, if you wish to have 8 foot show position, order a lift with at least a 10 foot maintenance position.
34. When the Scissor Lift is to be installed in "other space used for environmental air" the optional environmental air space housing must be installed per instructions to isolate the lift from the "other space used for environmental air."
35. When Scissor Lift is NOT installed in environmental air space housing and optional ceiling closure, the ALTERNATE wiring for up limit switch may be used (see Alternate Wiring schematic on page 7).
36. Custom products/installations may not be reflected in this manual. Call Draper, Inc., if you have questions about the installation of custom products or any questions about your installation.

▲ **Caution:** Before servicing unit, disconnect hardwired control and remote control.

**Note:** Unit has been thoroughly inspected and tested at factory and found to be operating properly prior to shipment.

## Section 1 - Hanging Unit

**Please note:** If using Environmental Air Space Housing option, see installation instructions included with Environmental Air Space Housing.

The Scissor Lift may be installed in a variety of ways; recessed above the ceiling, or suspended below the ceiling. The lift should be supported by four 3/8" threaded mounting rods or bolts with locking nuts.

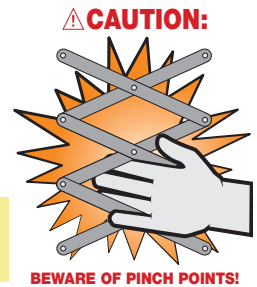
If ceiling recessed, the entire unit (including the projector) should set approximately 1 1/2" above the finished ceiling in its "stored" position. The threaded rods should pass through the corner mounting flanges and be secured by nuts above and below. The unit should then be guy wired or blocked to prevent swinging.

**Please Note:** Scissor Lift must be installed in accordance with the requirements of the Local Building Codes, the Canadian Electrical Code (CEC), CAN/CSA C22.1 and the National Electric Code (NEC), NFPA 70, as required. An appropriate disconnect device shall be provided as part of the building installation.

### All installations should observe the following guidelines:

1. Installer must ensure that all fasteners and supports are of adequate strength to securely support Lift and projector. Hardware structure should be able to hold at least four (4) times the combined weight of the lift, projector, housing, closure, and ceiling material attached to closure.
2. Fastening methods must be suitable for mounting surface, and securely anchored so that vibration or abusive pulling on unit will not weaken installation.
3. Bottom of unit must be unobstructed after installation. Sufficient clearance must be allowed below projector or optional ceiling closure.
4. Do not use unit to support adjacent ceiling, light fixtures, etc.
5. Do not complete the ceiling below unit until electrical connections have been completed and unit has been operated successfully.
6. Use slots on the projector plate and on the closure to adjust the unit to ensure proper alignment of ceiling closure relative to ceiling opening.

**CAUTION:** DO NOT hang from, "ride," or pull down on the unit. This could create a failure and cause damage and/or injury.



## Section 2 - Operation

- **Lift Low Voltage Control - LVC-S - PN:121225 (Included):** 3-button UP-STOP-DOWN switches stop at any point desired and operate in any sequence. Factory adjusted limit switches automatically stop lift when fully up or fully down. Installer should incorporate an all-pole disconnect in fixed wiring available with RF or IR remote.

Used WITH SP-KSM - Key Switch - 121022 to program Scissor Lift.

- **Key Operated Switch - SP-KSM - PN:121022 (Included):** Key-operated power supply switch controls power to lift and switches. When "off", switches will not operate lift. Key may be removed from switch in either "on" or "off" position.

Used WITH LVC-S - 121225 to program Scissor Lift.

- **RS232 / RS485** - Serial communication and network communication optionally available. Draper GUI Available for Download.
1. Before operating or testing the unit, make sure the packaging has been removed from the unit. Remove the corrugated block from the cardboard sleeve (bottom-most packaging material), then collapse the sleeve and remove it, along with the rest of the packaging.
  2. When unit is first operated, be cautious! If unit fails to operate properly, press "STOP" and recheck electrical connections before proceeding. Cycle unit down and up several times to confirm satisfactory operation

### Low Voltage Trigger (Voltage Range: 3 - 28 VDC - Non polarized)

Input provided for Low Voltage Trigger from projector.

### Optional Infrared Control - PN: 300349

If ordered, a 3-button transmitter with "UP", "STOP" & "DOWN". IR eye is provided. IR eye connects to IR port on lift and the eye must be installed with line of sight for transmitter. Transmitter will operate lift between CLOSED & SHOW positions only.

### Optional RF Control - PN: 121226

If ordered, a three-button transmitter with "UP", "STOP", and "DOWN" is provided. The RF transmitter will need to be learned to the control board in the lift.

#### To Enter Pairing Mode:

Press and HOLD the "RF Pairing" button, on the LVC-V, for 3 seconds.

The LED will flash for Approx. 15 Seconds, indicating remote is Pairing Mode.

#### To Learn Remote:

While LED is flashing, Press and HOLD the program button on back of transmitter for 1 second. The LED will stop flashing.

**To Reset:** Press and HOLD the "RF Pairing" button for 7 seconds.

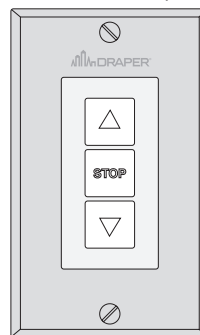
LED will begin to flash.

#### Exit Pairing Mode:

Press and HOLD the "RF Pairing" button for 1 second. The LED stops flashing.

### SHOW POSITION CONTROL

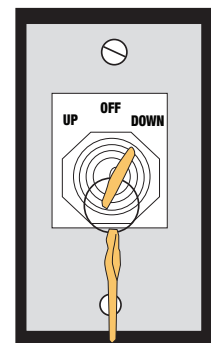
One three-button switch with "UP", "DOWN", and "STOP" buttons is provided to operate lift between closed and show position. Using installer supplied cable, connect switch to "WALL" port on lift.



**LVC-S SWITCH 121225**  
Up & Show

### SERVICE POSITION CONTROL

One momentary key switch is provided to operate lift to service position. Using installer supplied cable, connect switch to "KEY" port on lift.



**SP-KSM KEY SWITCH 121022**  
Service

### Both switches are required for programming

Additional momentary switches or control systems using dry contact closure, can be connected to the switch cables, or in conjunction with the provided switches, for multiple station control.

**CAUTION:** When operating for the first time, cycle unit down and up several times to confirm satisfactory operation. Be prepared to cut POWER if necessary.

**Caution:** Do not pull on or touch safety belt when unit is in motion. If belt locks, the cables will unspool.

**WARNING:** To prevent operation by unauthorized persons the locking switch cover MUST be installed over the 3-button wall switch for installations where the lift show position will descend to a height less than 8 feet above the floor. The actuating switch controls shall be located within sight of the projector lift.

**WARNING:** To prevent risk of injury, verify that no person is in the vicinity of the device before raising or lowering.

**Caution:** Obstructing bottom pan may cause cables to unspool.

**Caution:** Do not operate Scissor Lift without a minimum of 15 lbs. of weight attached to the pan. Operating without weight may cause cables to unspool

## Section 3 - Adjusting for Level or Center of Gravity

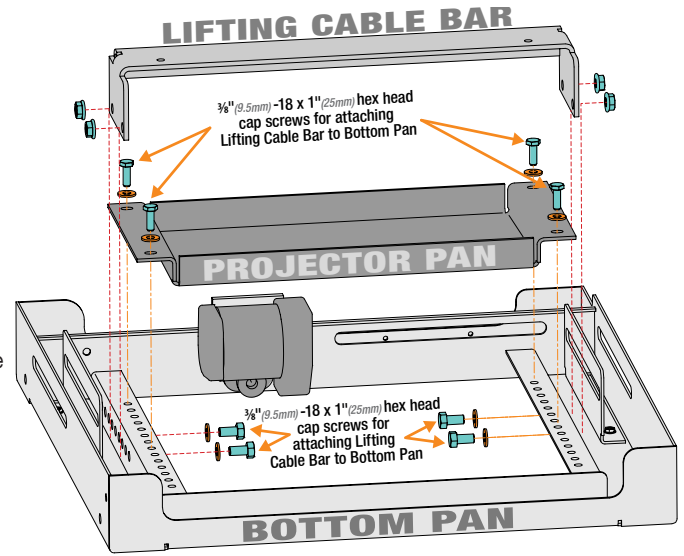
### Preferred Method—Adjusting Projector Pan

The Projector Pan can be moved forward or back.

1. Ensure Bottom Pan is supported.
2. Remove the Lifting Cable Bar.
3. Remove screws holding Projector Pan on Bottom Pan.
4. Move Projector Pan forward or back.
5. Replace screws.
6. Replace Lifting Cable Bar.

### Secondary Method—Adjusting Lifting Cable Bar (if above does not work)

1. Run unit to its "Service" position and ensure Bottom Pan is level.
2. Ensure Bottom Pan is not more than  $\frac{3}{4}$ " (19mm) out of level. However, the pan does not have to be perfectly level, as long as its positioning is consistent and repeatable in "Show" and "Closed" positions.
3. Ensure Bottom Pan is supported.
4. Remove screws holding Lifting Cable Bar to the Projector Pan.
5. Move Lifting Cable Bar forward or back.
6. Replace screws.
7. Check level again. If still not level, repeat.



## Section 4 - Installing Projector

Draper's optional Universal Projector Mount will hold up to 26 lb (12kg).

See Installation Instructions included with Universal Projector Mount.

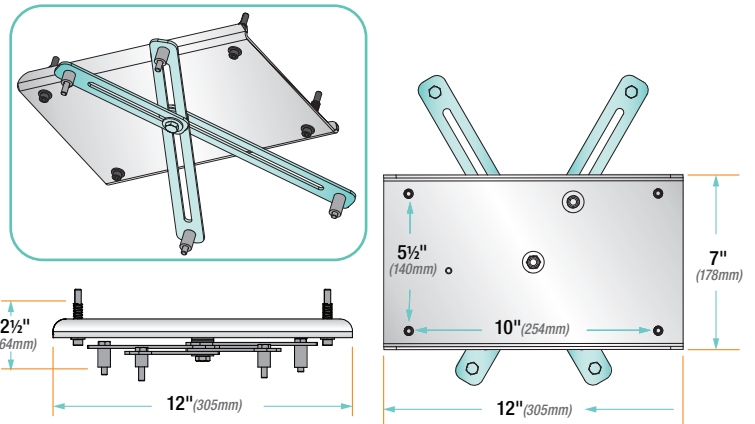
If not using Draper's Universal Projector Mount, generally the video projector should be suspended from the bottom pan according to projector manufacturer's instructions.

**If installing with a small closure, maximum projector size is:**  
18" x 8 $\frac{3}{4}$ " (45.7 x 22.2 cm) (width x length x Environmental Air Space Housing height).

**If installing with a large closure, maximum projector size is:**  
18" x 18" (45.7 x 45.7 cm) (width x length x housing height).

When drilling initial holes for mounting projector, or if for any reason the hole placement must be changed, completely lower lift before attempting to drill holes. When attaching projector bracket to plate, make sure screws are short enough that they do not touch the motor/roller above the plate when lift is closed.

Unit and projection system should be operated, checked and adjusted as necessary at this time (see Sec. 8 for limit adjustment procedures).



**CAUTION:** Keep fingers & other objects away from ceiling closure when unit is operating. Serious injury or damage can result.

## Section 5 - Attaching Universal Projector Mount to Projector Pan

**Please Note:** If unit is ordered with optional Universal Projector Mount pre-installed, disregard these instructions.

If unit is NOT ordered with optional Universal Projector Mount pre-installed, it is necessary to install a new Projector Pan, which includes the Universal Projector Mount's rectangular plate.

1. Lower unit until the Bottom Pan is resting on a tabletop or other stable and sturdy surface.
2. Remove Lifting Cable Bar from Bottom Pan.
3. Remove bolts holding Projector Pan to Bottom Pan.
4. Remove Projector Pan and set aside.
5. Place new Projector Pan with Universal Mount into place.
6. Re-attach Projector Pan to Bottom Pan.
7. Re-attach Lifting Cable Bar to Bottom Pan.

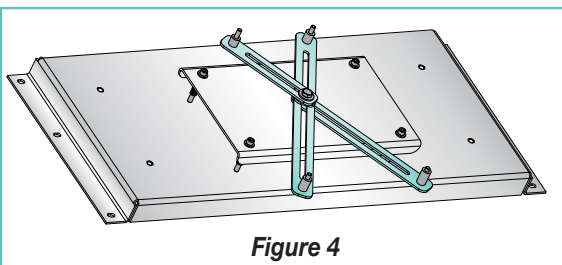
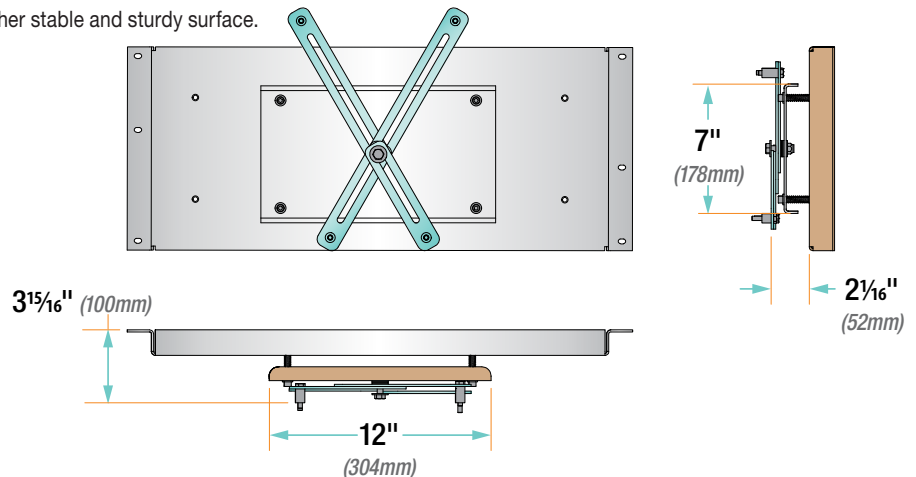


Figure 4



## Section 6 - Installing Optional Environmental Air Space Housing

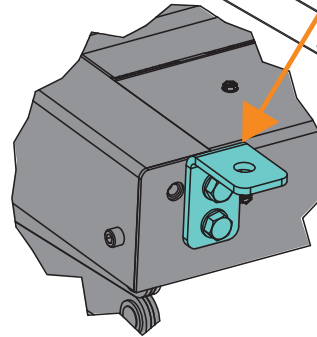
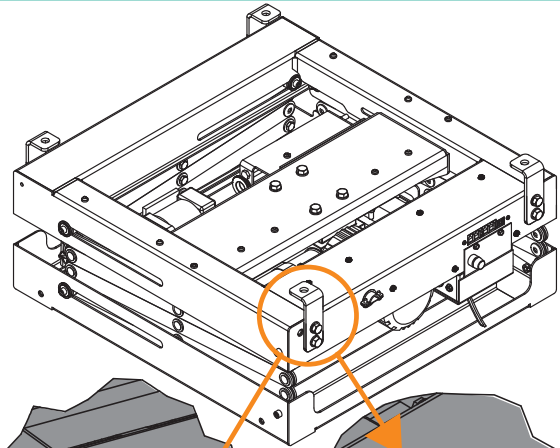
The Environmental Air Space Housing ships in pieces, and must be assembled by the installer. Height is set by drilling out the knockouts at the desired locations then using screws to connect side panels.

Draper recommends installing an access panel in the ceiling to allow future access. The optional Environmental Air Space Housing must be installed to isolate the lift from the "other space used for environmental air." Includes trim ring for ceiling opening.

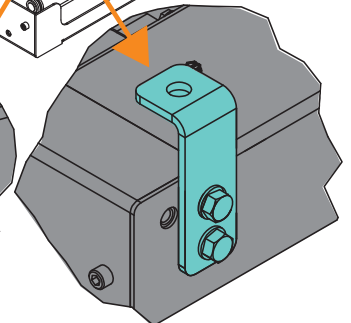
**See installation instructions included with Environmental Air Space Housing.**

**Please Note:** When using the Environmental Air Space House "SL" size, the mounting brackets attached to the top four corners of the Scissor Lift must be removed, and replaced with brackets which are shipped with the Environmental Air Space Housing (see Fig. 5).

**Please Note:** The factory wiring of 'UP' Limit Switch MUST ALWAYS be used when SL is installed in Environmental Air Space Housing and optional ceiling closure.



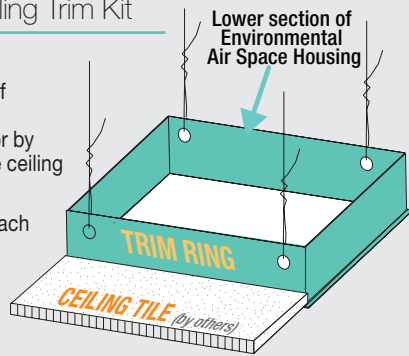
**Standard Environmental Housing Bracket Arrangement**  
(B, E, U Sizes)



**SL Environmental Housing Bracket Arrangement**

### Installing Optional Ceiling Trim Kit

1. Install Lift.
2. Install bottom section of housing in opening by suspending with wire, or by mounting directly to the ceiling joists (if space permits).
3. Install projector and attach optional ceiling closure.



## Section 7 - Installing Ceiling Closure

If unit is equipped with a ceiling closure system, use either as is, or in conjunction with a piece of existing ceiling tile.

Please refer to diagrams at right for instructions.

1. If installing with ceiling tile, it may be necessary to cut tile so overall dimensions are same as (or slightly less than) closure panel. Place tile into trim frame. Lay closure panel on top (back side) of ceiling tile, and tighten screws to hold in place.
2. If installing large closure, attach brackets to bottom of projector plate.
3. Attach 5/16" (8mm) threaded rods to slots in projector plate or brackets.

**CAUTION:** Ensure nuts and bolts attaching brackets to Lift are completely tightened.

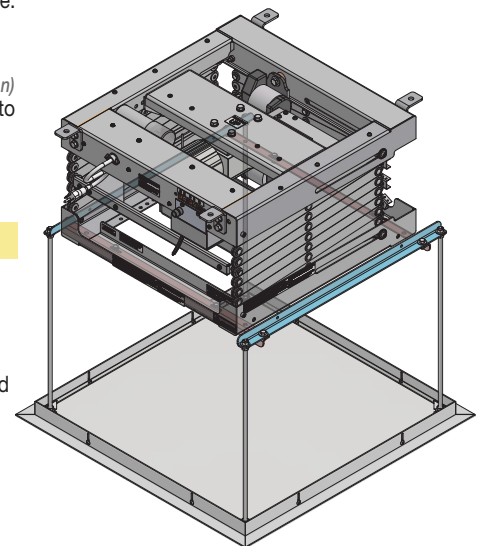
4. Run unit "up" until bottom pan stops at highest position. Mark position on 5/16" (8mm) rods flush with ceiling level and cut rods to length (removing from pan if convenient).
5. Run unit "down" until bottom pan stops at "show" position.
6. Attach closure to lower end of 5/16" (8mm) rods by slipping into four corner slots and secure with nuts above and below slots.
7. Run unit "up" again to highest position. Measure distance by which panel fails to reach required "closed" height for surrounding ceiling.

**CAUTION:** Make sure nuts are completely tightened.

8. Run unit "down" then re-adjust mounting of 5/16" (8mm) rods in traveling grid to raise panel required distance.
9. Test unit operation to confirm that panel will stop in closed position just before touching ceiling.

**CAUTION:** DO NOT hang from, "ride," or pull down on unit. This could create a failure and cause damage and/or injury.

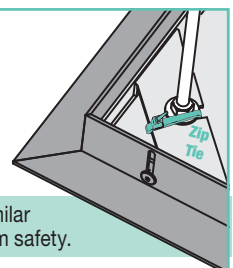
**PLEASE NOTE:** Immediately upon completing surrounding ceiling, operate unit to confirm that optional ceiling closure panel stops 1/8" (3mm) short of ceiling in closed position. If closure panel touches ceiling, motor may continue operating after lift is closed. If it continues to cycle once lift is closed, a failure may occur, making unit descend rapidly and cause damage and/or injury.



### For Additional Safety:

1. Be sure the nuts that attach the threaded rods to the closure panel are tight.
2. Wrap a plastic wire tie around the mounting tab and the threaded rod at all four corners of the closure panel.

**Please Note:** Do NOT use a paper-covered or similar wire tie — use only plastic wire ties for maximum safety.

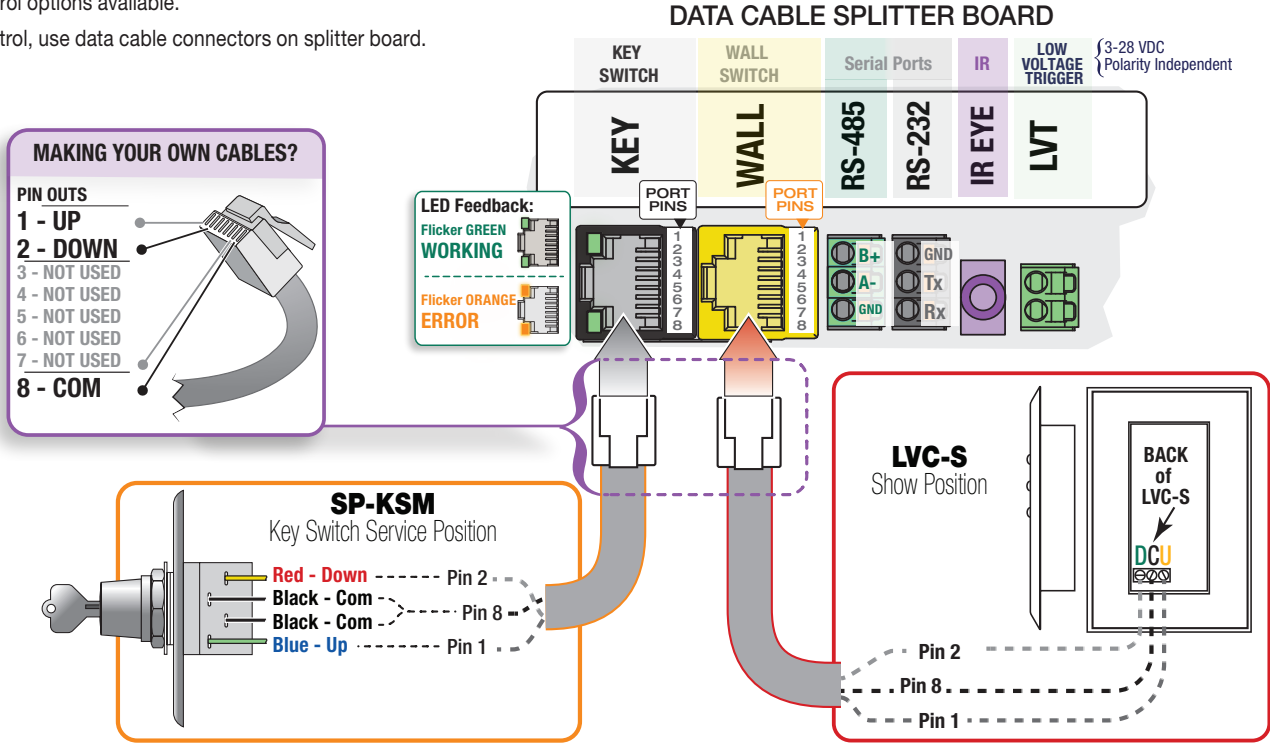


## Section 8 - Connecting Controls to Data Cable Splitter Board

1. Controls plug into the Data Cable Splitter Board (See diagram below) which is located on the Top Frame on the front side of the lift, using RJ45 connectors.
2. IR or RF Control options available.
3. For serial control, use data cable connectors on splitter board.

**Please Note:**

Any control, including automated dry contact systems, being connected to the wall switch input **MUST** send a momentary signal.



## Section 9 - Changing the Show Position

**NOTE: BOTH** Wall Switch & Key Switch **REQUIRED** for this procedure.

**PLEASE NOTE:** Lift **MUST** be put into **PROGRAMMING MODE**.

### Section 9.1 - Entering Programming Mode

1. Move lift to the CLOSED (*fully up*) position.
2. While lift is at the CLOSED position, **Press and hold Wall Switch UP + Key Switch UP for 15 Seconds** and release once the lift begins to move.
3. The show position is now cleared and ready for a new show position to be set.

**PLEASE NOTE:** At this point the Key Switch will not operate until the new "Show Position" has been set. Also the 3-Button Wall Switch changes into a maintain, push and hold type button, for continuous movement. This allows for easy setting of new "Show Position"

### 9.2 - Procedure for setting show position:

1. Now that the show position has been cleared, use wall switch up and down buttons to get lift into desired show position.
2. While lift is at desired show position, **Press and hold Key Switch UP** until lift begins to move upward. Lift will begin a calibration cycle where it will move upward for two seconds, stop then move down for one second.

### Section 9.3 - Exiting Programming Mode

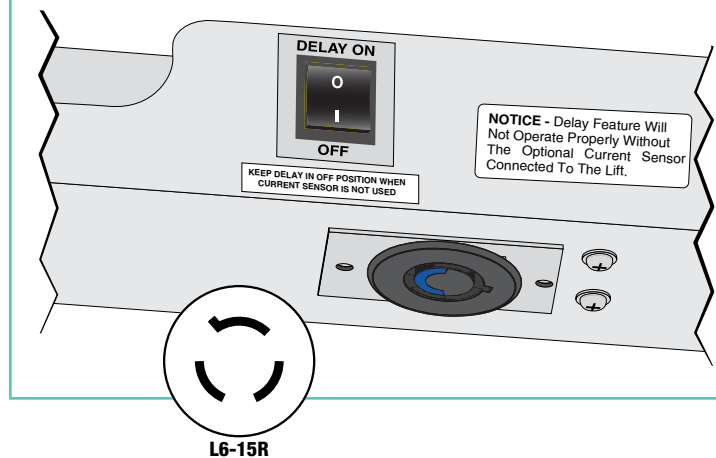
1. Move lift to the CLOSED (*fully up*) position.
2. While lift is at the CLOSED position, **Press and hold Wall Switch UP + Key Switch DN for 15 Seconds** and release once the lift begins to move.
3. The show position is now set.

## Section 10 - Optional Delay Feature

1. When the Optional Delay Feature is installed the Delay Switch must be in the "Delay On" position for normal operation.
2. If the Optional Delay Feature is installed and the "Show Position" requires adjusting, then the "Delay Switch" must be switched to OFF while adjusting the show position.

**CAUTION:** Be sure all switches are in OFF position before adjusting limit switch. Always be prepared to shut lift off manually when new adjustment is being tested. Please refer to wiring diagram.

**PLEASE NOTE:** If the Scissor Lift loses power, the DOWN function will not work until you operate the lift in the UP direction using the wall switch. This allows the lift's control encoder to recognize it's "home" location.



## Section 11 - Electrical Connections

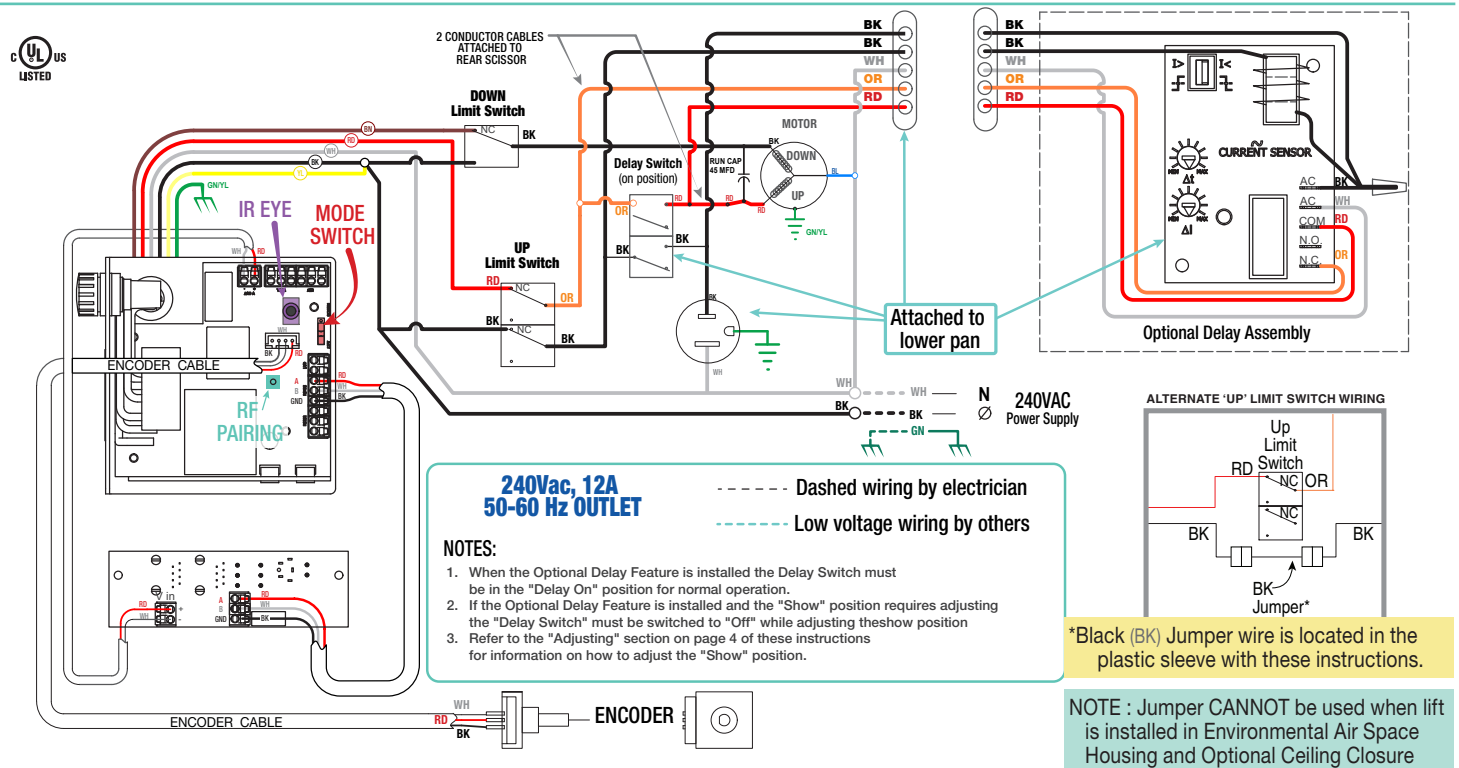
Lift operates on 240V, 60 Hz. current. 14 amps current draw (2 amps for lift, 12 amps for Outlet) Lift ships with internal wiring complete and control switch(es) fully boxed. Wire to connect lift to switch(es) and switch(es) to power supply should be furnished by installer.

**Please Note:** Lift must be installed in accordance with requirements of Local Building Codes, Canadian Electrical Code (CEC), CAN/CSA C22.1 and National Electric Code (NEC), NFPA 70. An appropriate disconnect device shall be provided as part of building installation.

**CAUTION:** All operating switches should be "off" before power is connected.

A junction box is provided for field connections. Unit ships with internal lift wiring complete. Use switch to lower lift and remove packing. Remove temporary wiring and complete permanent wiring to electricity and to switches. Wire to connect unit to power supply and to switches should be furnished by installer. Connections should be made in accordance with wiring diagram. Lift should be operated and checked prior to installing projector and/or optional ceiling closure.

## Section 12 - Wiring Schematic



## Section 13 - RS232 and RS485 Serial Port Protocols

### Sending Lift Commands

START	ADDRESS	COMMAND	END
1 Char	2 Chars	1 - 6 Chars	1 Char
L	XX	YYYYY	!

XX = Decimal motor group address with range from 01 to 32. Note it always has to be 2 characters, so a 0 has to precede 1 digit addresses.

YYYYY = command from the following table:

### EXAMPLES:

COMMAND	ACTION
L01R!	Move Channel 1 to Fully Retracted.
L11E!	Move Channel 11 to Fully Extended.

### COM Port Settings:

Port Speed:	9600 baud
Data Bits	8
Parity	NONE
Stop Bits	1
Flow Control	X On / X Off

COMMAND	ACTION
E	FULLY EXTEND
R	FULLY RETRACT
S	STOP
SP1	Go to FIRST show position
SP2	Go to SECOND show position
P	PREVIOUS show position
N	NEXT show position
ADDSP	ADD show position
DELSP	DELETE show position
ID	Identify channel
SET	SET splitter board channel
ADD	ADD a communication channel (Setting main board)
DEL	DELETE a communication channel (Setting main board)
FS1	Restore MAIN BOARD to Factory Settings
FS2	Restore SPLITTER BOARD to Factory Settings
FS0	TILT to PREVIOUS STOP
GETFV1	Get MAIN BOARD Firmware Version Number
GETFV2	Get SPLITTER BOARD Firmware Version Number

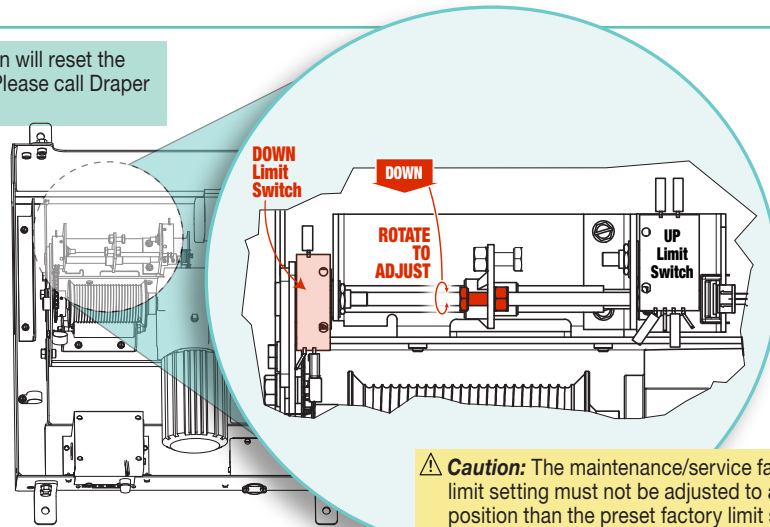
## Section 14 - Adjusting Limit Switches

**PLEASE NOTE:** Changing the fully open or fully closed position will reset the electronic controls and cause the lift to operate improperly. Please call Draper before attempting these adjustments.

### Adjusting FULLY DOWN position

1. Limit switches for the Scissor Lift are preset at the factory. The DOWN limit switch is set for the fully down (maintenance) position for the size lift you have ordered. The limit switch assembly is located inside the lift and behind the Lifting Cable Drum.
2. The Down limit switches shown in the drawing are for setting the "Fully Down" position. This can be adjusted manually by loosening the screw to reduce the travel.

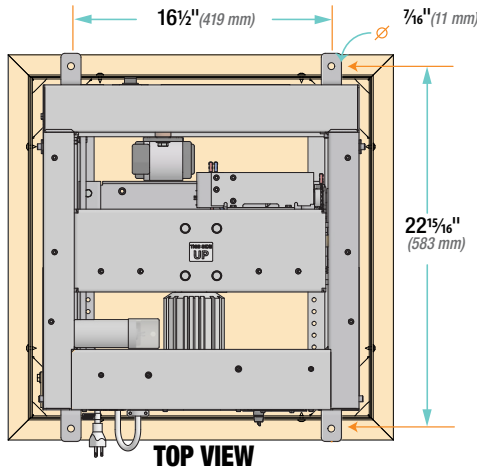
**⚠ Caution:** Down line switch should not be set lower than preset factory position



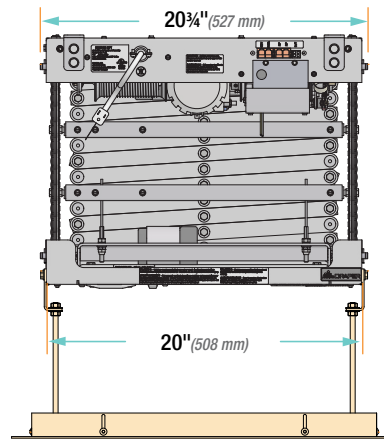
**⚠ Caution:** The maintenance/service factory limit setting must not be adjusted to a lower position than the preset factory limit setting. In addition, Draper does not recommend setting show position at the maintenance/ service position.

## Section 17 - Dimensions

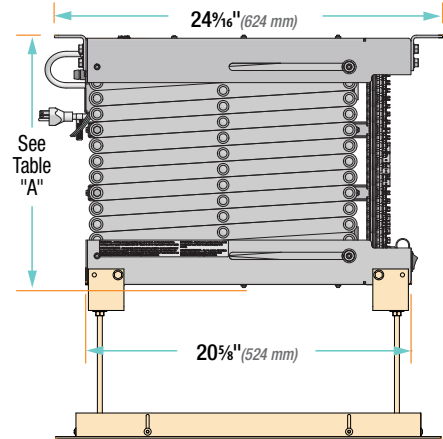
Model	Closed Height	Extended Height
SL4	8" (20.3cm)	4' (121.9cm)
SL6	10" (25.4cm)	6' (182.9cm)
SL8	12" (30.4cm)	8' (243.8cm)
SL10	14" (35.6cm)	10' (304.8cm)
SL12	16" (40.6cm)	12' (365.8cm)



**TOP VIEW**



**FRONT VIEW**



**SIDE VIEW**

There are four sizes of closure. See separate instructions for details and dims.

There are four sizes of closure. See separate instructions for details and dims.

## Scissor Lift Inspection and Maintenance

Draper recommends inspecting the Scissor Lift at least annually or every 300 cycles—whichever comes first.

A recommended maintenance schedule includes:

- **Cables:** Check for fraying.
- **Drive Chain Gears:** Check for rust, breaks, secure attachment.
- **Closure:** Ensure threaded rod remains seated firmly in the closure panel corners, and that nuts remain tight. If they are loose, tighten them.
- **Fasteners along scissor arm assemblies:** Make sure they are not loose. If any are loose, hand tighten the nuts.

**Please Note:** There is no need to tighten nut in the top scissor which slides back and forth in the side slot in the lift. Tightening this fasteners assembly will cause the unit to lock up and lead to damage to the unit.