

EZ Fold Motorized Height Adjuster

Electric 8'-10' Height Adjuster for Basketball Backboards

by DRAPER

Specifications—Direct Mount 8'-10' Motorized Height Adjuster

For electric 8'-10' height adjustment for rectangular or fan shaped backboards and goals, featuring a direct goal attachment, specify (503093/503095/503096/503097/503098/503099). The motorized height adjuster is designed to mount to virtually any style of backstop structure. All Draper backboards have a Lifetime Limited Warranty when used with the motorized height adjuster. Height adjuster includes a self-adhesive height scale that is graduated in 1" increments and labeled at 6" intervals. Height scale applied after installation to insure accuracy.

The motorized height adjuster is built with a main frame-assembly constructed of 2" x 2½" x ¼" steel angle and ¼" thick flat steel. Slip tubes consist of 2½" O.D. outer tubes and 2¼" O.D. inner tubes. The motorized height adjuster frame assembly is jig welded and factory assembled to ensure precise alignment and smooth operation. The motorized height adjuster is electrically operated via a 110-120-volt single-phase linear actuator with a 25% duty cycle. Electric linear actuator provides smooth reversible motion for loads up to 600 lbs. Linear actuator includes factory set cam style limit switches that will allow 24" of travel. The 503093 Height Adjuster is available with standard key switch, EZ Power wireless remote or EZ Stick power wand operation.

The motorized height adjuster's linear actuator assembly is bolted in place and easily removed for conversion to manual operation.

- 503093—For motorized 8'-10' height adjustment of rectangular bank.
- 503095—For motorized 8'-10' height adjustment of rectangular bank with wireless remote control.
- 503096—For motorized 8'-10' height adjustment of rectangular bank with EZ Slick Power Wand.
- 503097—For motorized 8'-10' height adjustment of fan bank.
- 503098—For motorized 8'-10' height adjustment of fan bank with wireless remote control.
- 503099—For motorized 8'-10' height adjustment of fan bank with EZ Slick Power Wand.

Please Mark Appropriate Selections

Select Backboard Mounting Style

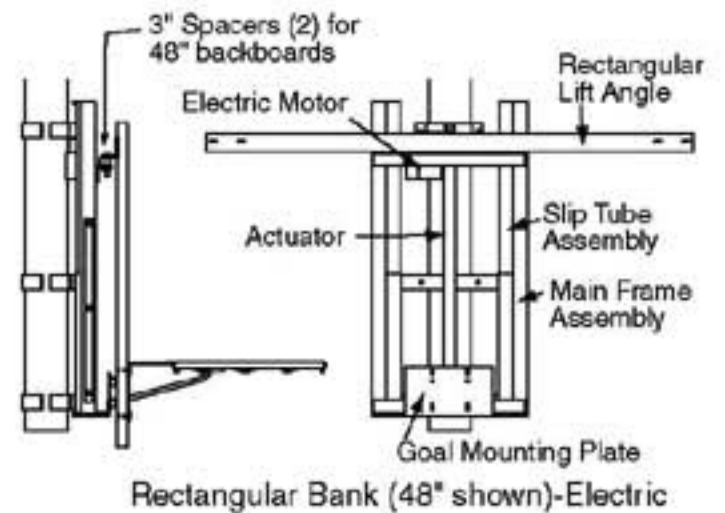
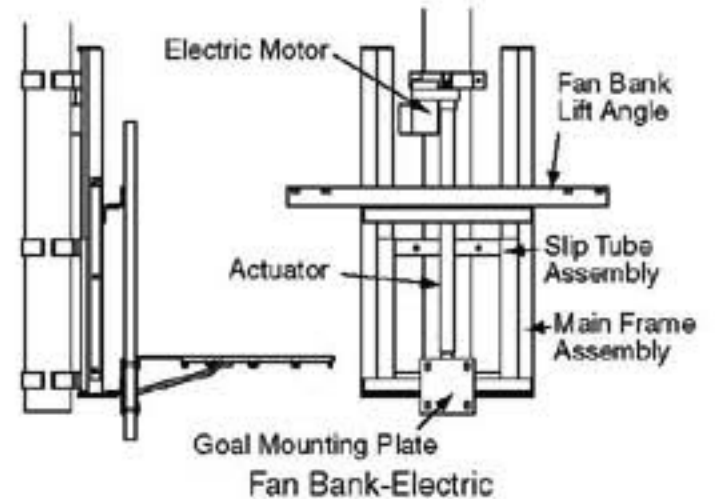
- Fan
 - Glass
 - Fiberglass
 - Aluminum
- Rectangular
 - 42" Glass
 - 42" Wood/Fiberglass
 - 48" Glass
 - 48" Wood/Fiberglass

Select Height Adjuster Mounting Style

- Mount Height Adjuster on Backstop
 - T-Stem Backstop
 - Wall-Mounted Backstop
 - Double Drop Backstop
- Mount Height Adjuster on Wall

Select Control Options

- Key Switch (standard) How Many? _____
- EZ Power Wireless Remote Control
- EZ Stick Power Wand



Please Note: 8'-10' unit is shown mounted to 6" O.D. stem. Unit can be mounted on any style backstop, or to the wall. The goal mounts to the unit through the backboard and into the goal mounting plate, thus placing less strain on the backboard.

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Email: basketballgoals@aol.com

website: www.Basketball-Goals.com

PROJECT: _____

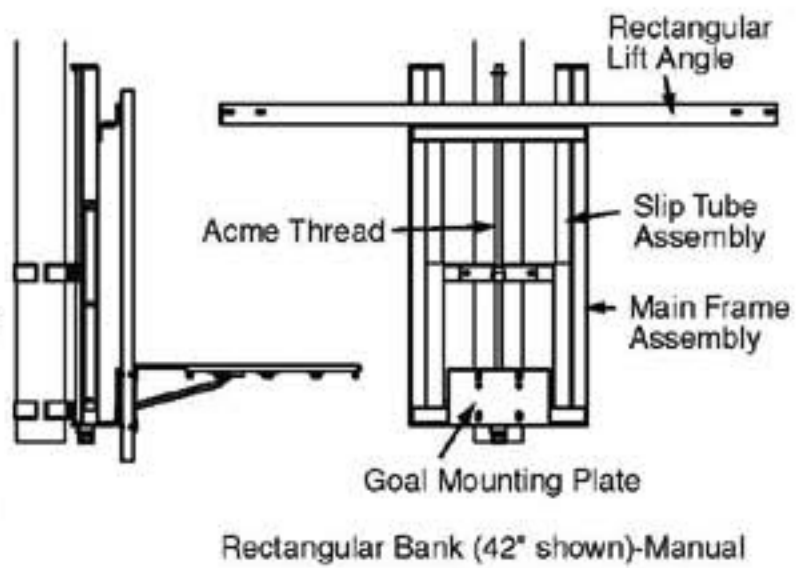
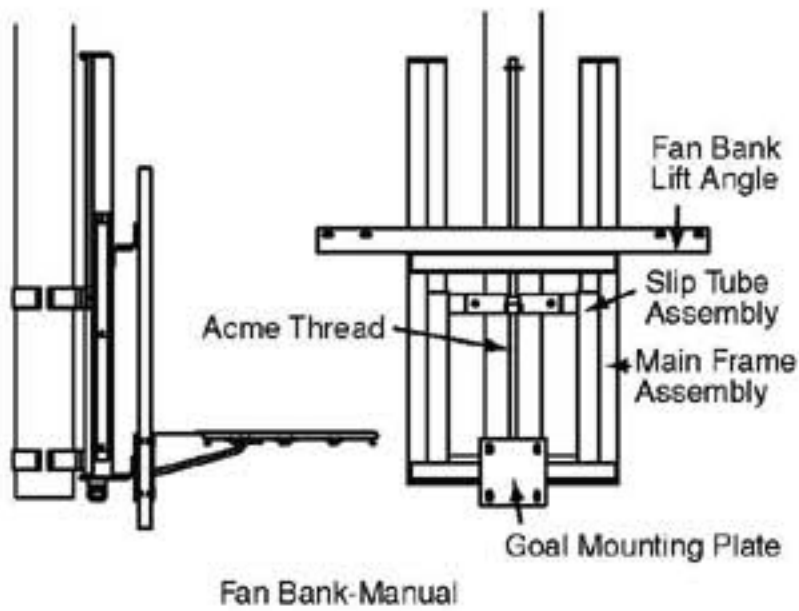
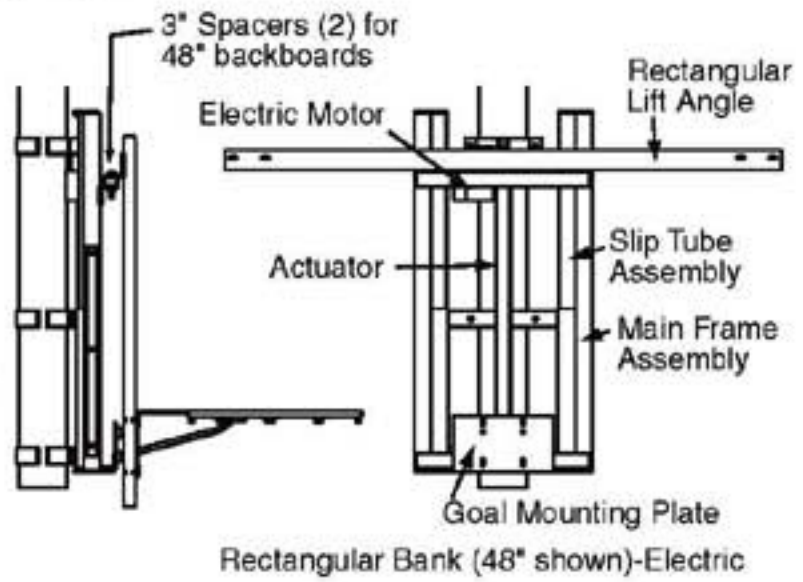
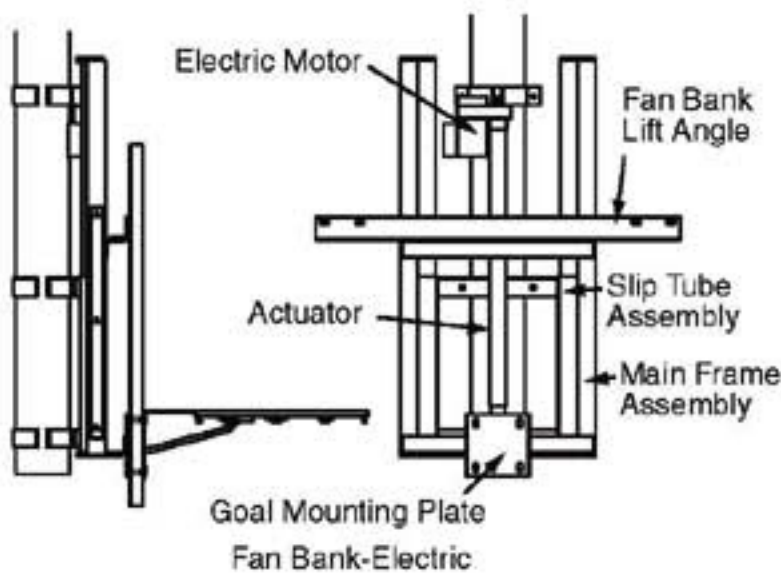
ARCHITECT: _____

CONTRACTOR: _____

SUPPLIER: _____

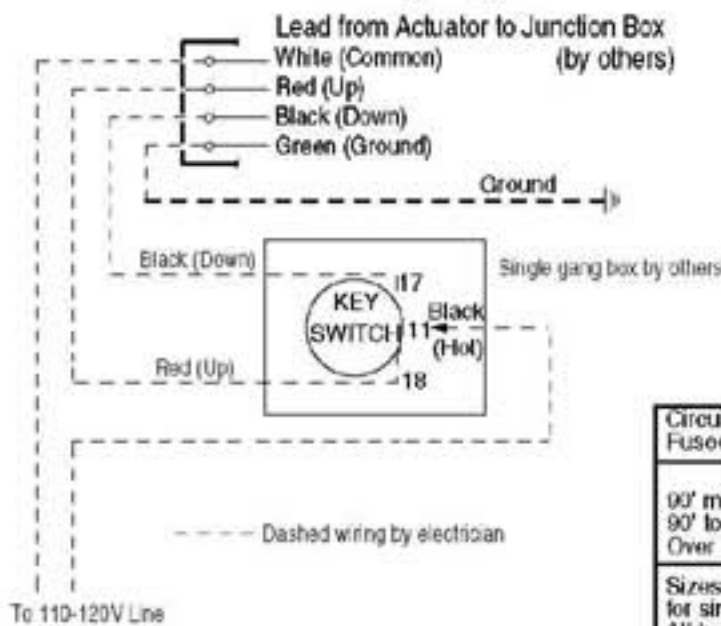
DATE: _____ REVISED: _____

Assembled Height Adjusters*



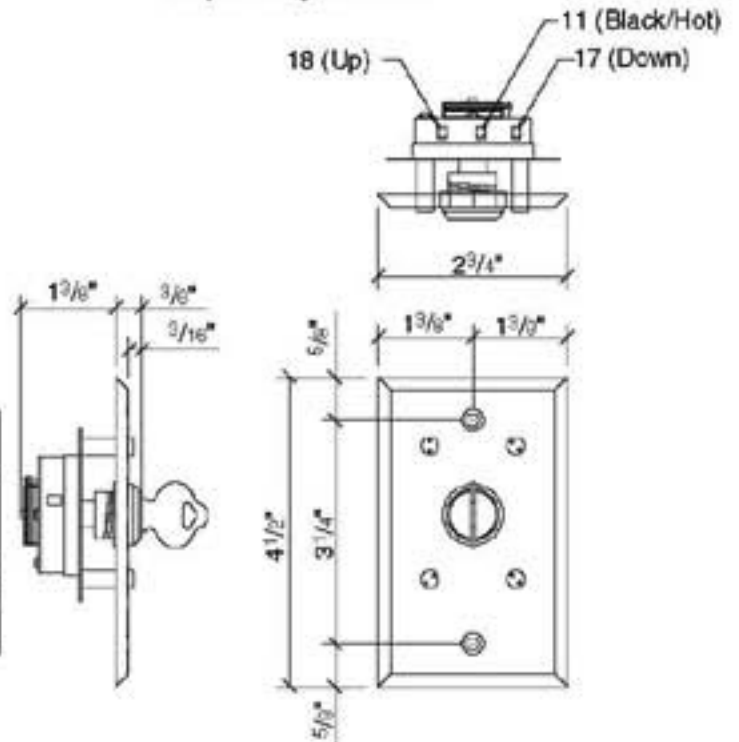
* Views shown are of Height Adjusters mounted on T-Stems; Height Adjusters are also available for non-T-Stem backstops.

Wiring Diagram



Circuit breaker rated amp. 20 amp.	
Fused circuit rated amp. 20 amp.	
Minimum Wire Size	
90' maximum run.....	12 ga.
90' to 140' run.....	10 ga.
Over 140'.....	8 ga.
Sizes of wall masonry boxes required for single and ganged key switches-- All boxes 2" deep and 4" high.	

Draper Key Switch



Installation Instructions

8'-10' Basketball Backstop Height Adjuster by Draper

Caution

- ① Locate and identify all pieces. Please note that clamps are packed separately from main unit.
- ② Do not paint inner slip tubes.
- ③ DO NOT use portable electric winch operator or electric drill to operate manual Height Adjusters.
- ④ For manual units, apply entire tube of lubricant (included) to T-Nut after installing threaded rod assembly.
- ⑤ For electric operators, make sure Actuator Tube is vertically plumb.
- ⑥ Electric Height Adjuster operates on 110-120v, 60-Hz current.
- ⑦ Make sure power is disconnected before wiring electric Height Adjuster.

Attaching to Backstop

- ① Bolt attachment brackets to Height Adjuster (see Fig. 1) These will be used to attach Height Adjuster to backstop frame.

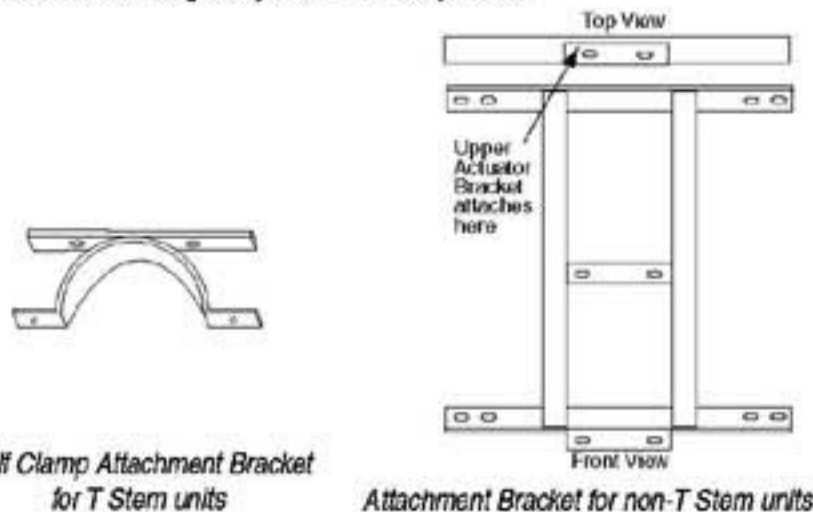


Figure 1

- ② Bolt rectangular or fan bank lift angle to Height Adjuster. These will be used to attach height adjuster to upper mounting holes of backboard. If mounting a rectangular bank: There are two sets of holes on top of the rectangular bank lift angle. For rectangular glass and fiberglass banks, use inside holes; for rectangular wood, use outside holes. On 48" rectangular banks, use spacer to attach lift angle to height adjuster. For glass rectangular banks, also use spacer between direct goal mount and bank (See Fig. 2).
- ③ Bolt Height Adjuster main unit to backstop frame.
- ④ Mount bank and goal to Height Adjuster (see diagrams of completed units on page 2) using 1/2" bolts through holes in lift angle and direct mount.

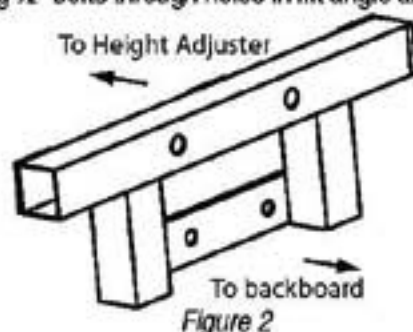


Figure 2

For Manual Height Adjusters—

- ① Attach Nut Carrier and T-Nut to Height Adjuster.
 - ② Install Threaded Rod Assembly through T-Nut and Nut Carrier (see Fig. 3).
 - ③ Apply entire tube of lubricant (included) to T-Nut from top and bottom. As the threaded rod operates through the T-Nut, the lubricant will be spread onto the threaded rod as necessary.
- Please Note:** Be sure to apply the entire tube as described. If the lubricant is missing from your package, contact Draper, Inc.
- ④ Test operation.

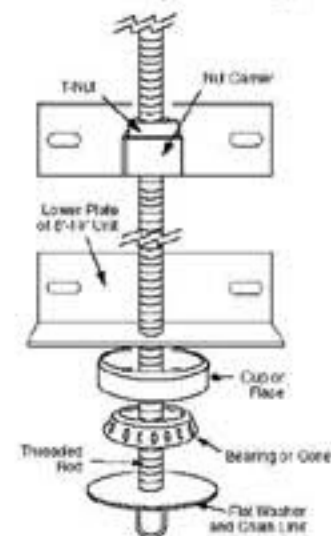


Figure 3

- ⑤ Position rim to exactly 10' above floor and apply self-adhesive height scale on right side of Height Adjuster (as seen from front of backboard).

For Electric Height Adjusters—

- ① Attach Upper Actuator Bracket (see Fig. 4) to T-Stem or frame of non-T backstop so that the center of the bracket is 12'10 1/2" above finished floor for rectangular backboards, and 12'11 3/4" for fan backboards, and attach Lower Actuator Bracket to Lower Plate of Height Adjuster.
- ② Attach electric operator to Upper Actuator Bracket.
- ③ Use test cord (not included) to extend Actuator Tube to match distance between brackets.
- ④ Attach Actuator Tube to Lower Actuator Bracket (see Fig. 4).

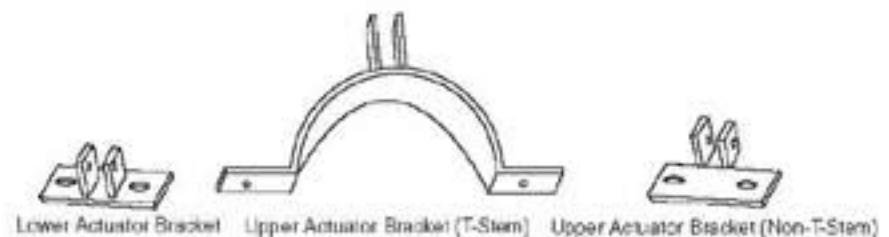


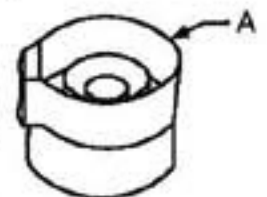
Figure 4

- ⑤ Wire according to wiring diagram on page 2.
- Note:** Make sure power is disconnected before wiring Height Adjuster.
- ⑥ Set lower limit of travel (see "Adjusting Limit Switches" below). Upper limit is pre-set. Test operation by verifying that Height Adjuster has at least 24" of travel, and that the full "up" position is at least 10" from the floor.
 - ⑦ Position rim to exactly 10' above floor and apply self-adhesive height scale on right side of Height Adjuster (as seen from front of backboard).

Adjusting Limit Switches

- ① The upper (raised) position is pre-set at the factory.
- ② The upper plastic ring (A) controls the "down" position. Should this need to be adjusted, simply rotate clockwise for more travel and counterclockwise for less travel.

Please Note: The inner tube must be turned out three full turns (3/4") for safe, repeatable operation. It can be turned out more if required by application and if the upper cam is adjusted properly to prevent driving the inner tube against the full extend positive stop.



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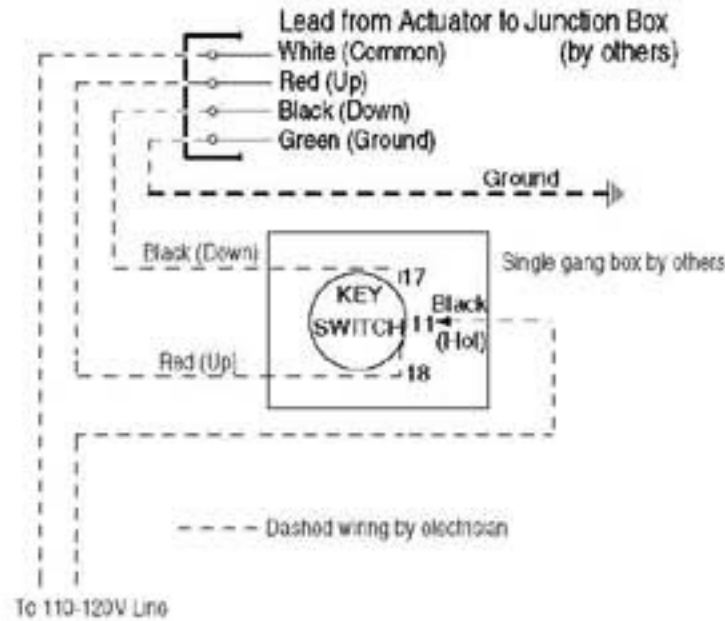
Email: basketballgoals@aol.com

website: www.Basketball-Goals.com

Please Note: See Page 2 for wiring diagrams and drawings of completed Height Adjusters.

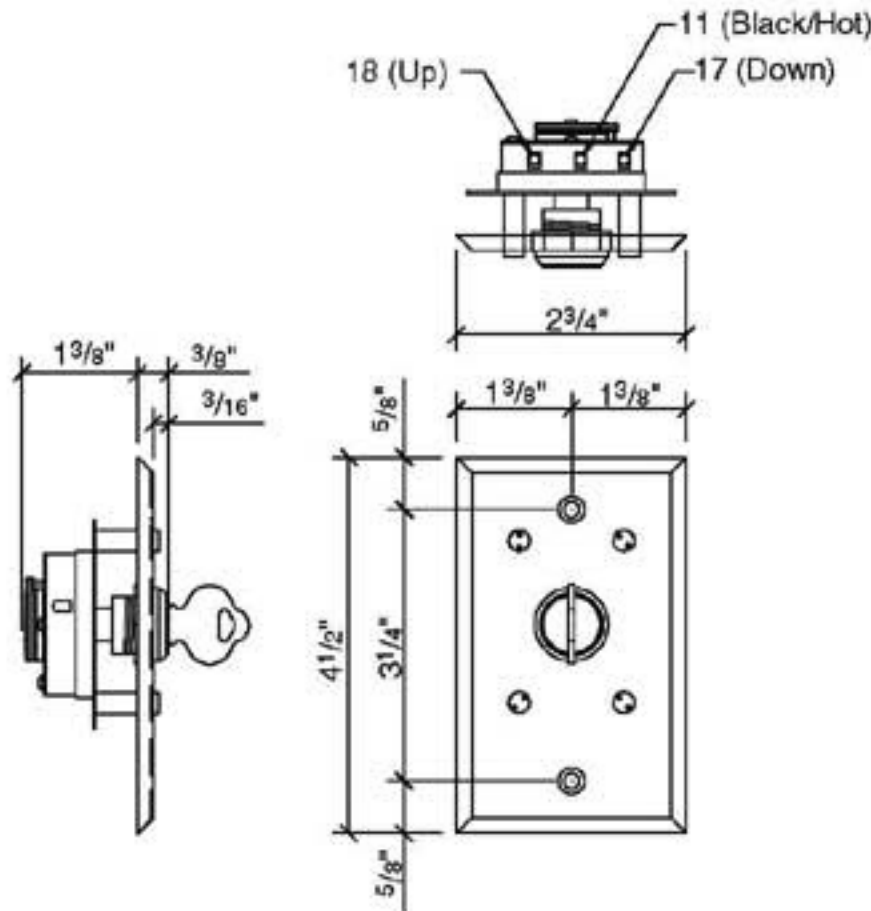
If you encounter any difficulties installing or servicing your 8'-10' Height Adjuster, call your dealer or Draper, Inc., in Spiceland, Indiana, 765/987-7999; fax 765/987-7142; or email draper@draperinc.com.

Wiring Diagram



Circuit breaker rated amp. 20 amp. Fused circuit rated amp. 20 amp.
Minimum Wire Size
90' maximum run..... 12 ga.
90' to 140' run..... 10 ga.
Over 140'..... 8 ga.
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Key Switch Diagram



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