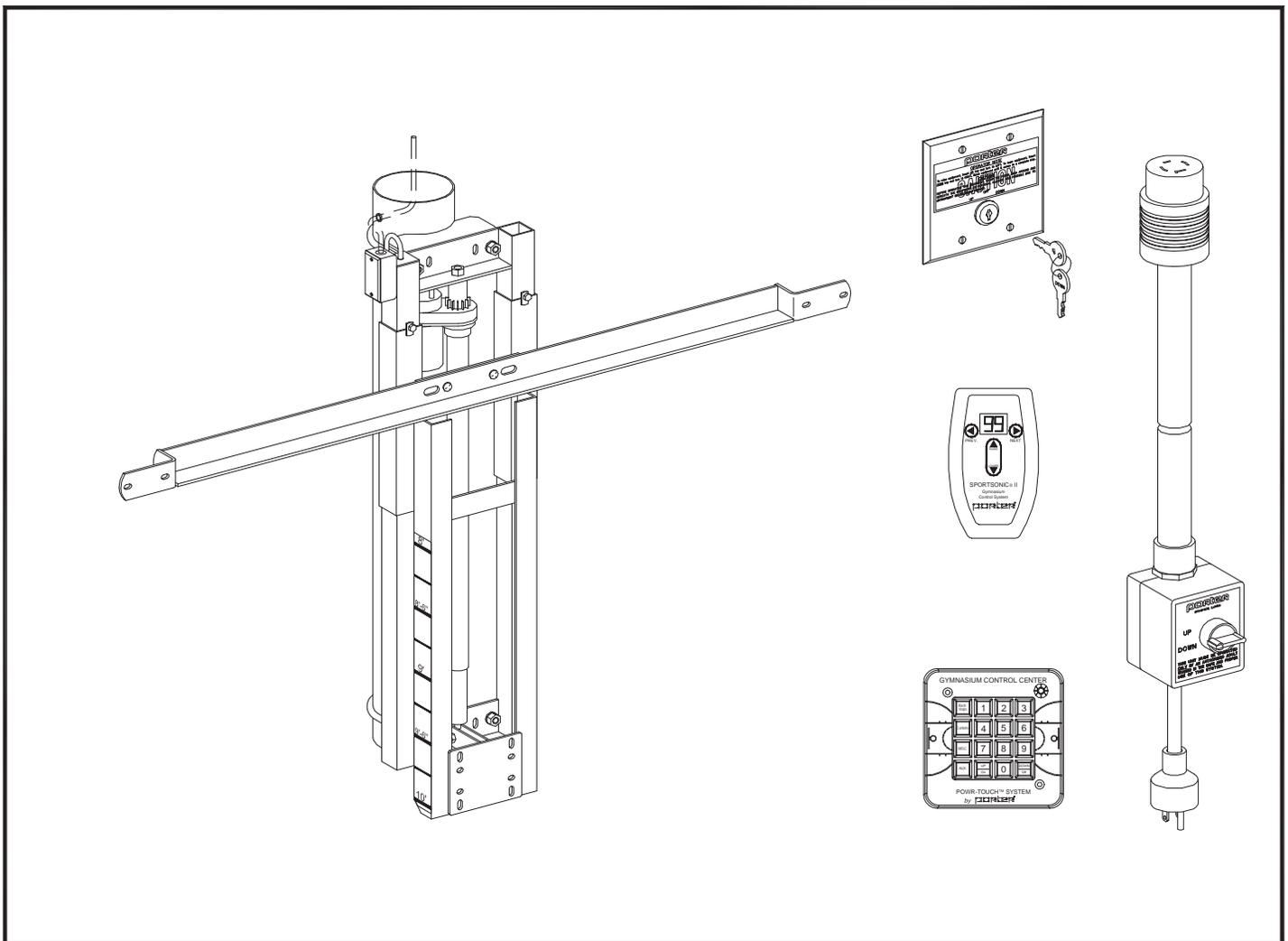




ASSEMBLY, INSTALLATION & MAINTENANCE INSTRUCTIONS

CENTER-STRUT[®] HEIGHT ADJUSTMENT UNITS
ELECTRIC OPERATION
For Use on No. 900 Line Backstops



Patent No's. 5,279,496; 6,056,654; 6,537,162. Other patents pending.

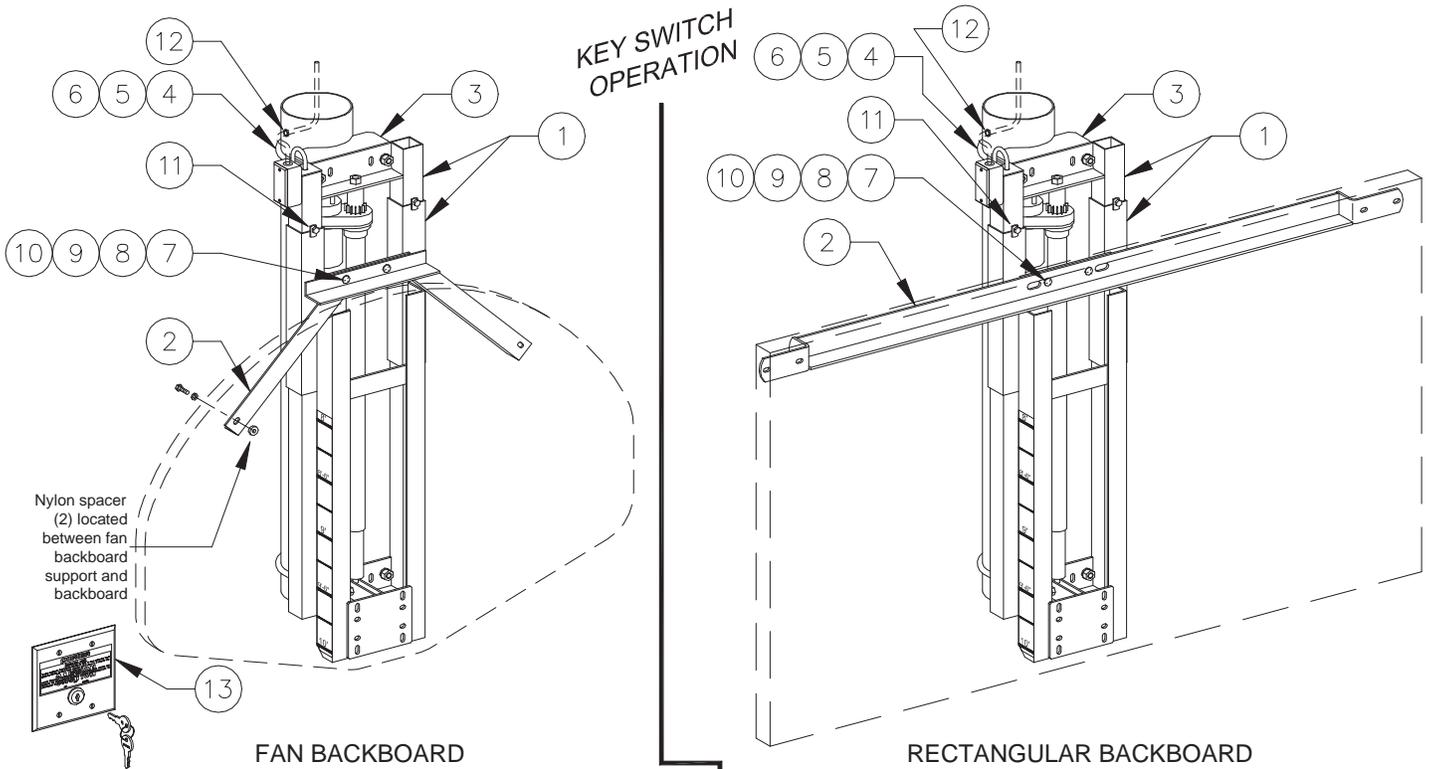
SAVE THESE INSTRUCTIONS FOR FUTURE USE

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PARTS LIST – KEY SWITCH OPERATION

CENTER-STRUT® HEIGHT ADJUSTMENT UNITS WITH KEY SWITCH OPERATION No. 00901-211 and 00901-506



FAN BACKBOARD

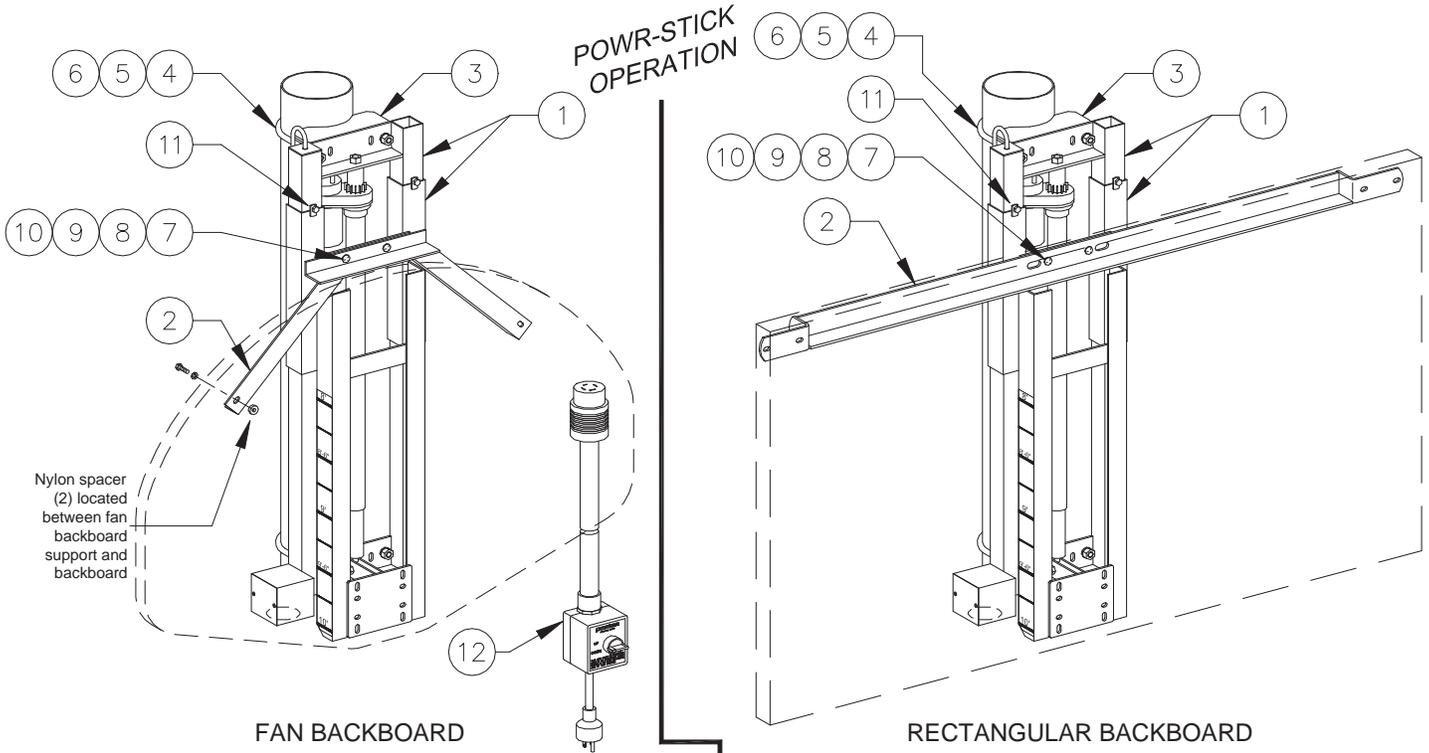
RECTANGULAR BACKBOARD

PARTS LIST - No. 00901-211			
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00213 002	HEIGHT ADJUSTER ASSEMBLY
2	1	FRME 00202 002	FAN BACKBOARD SUPPORT
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1 1/4" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	1	BUSH 00069 002	PLASTIC BUSHING
13	1	ELEC 00086 000	KEY SWITCH ASSEMBLY

PARTS LIST - No. 00901-506			
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00213 002	HEIGHT ADJUSTER ASSEMBLY
2	1	XEXT 91612 002	RECT. BACKBOARD EXTENSION
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1 1/4" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	1	BUSH 00069 002	PLASTIC BUSHING
13	1	ELEC 00086 000	KEY SWITCH ASSEMBLY

PARTS LIST – POWR-STICK OPERATION

CENTER-STRUT® HEIGHT ADJUSTMENT UNITS WITH POWR-STICK OPERATION No. 00902-211 and 00902-506



FAN BACKBOARD

RECTANGULAR BACKBOARD

PARTS LIST - No. 00902-211

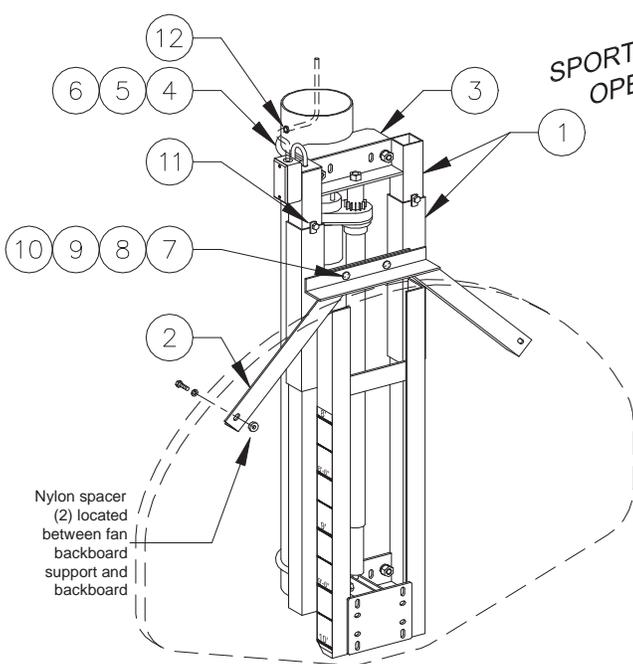
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00206 002	HEIGHT ADJUSTER ASSEMBLY
2	1	FRME 00202 002	FAN BACKBOARD SUPPORT
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1¼" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	→	00902 000	POWR-STICK ASSEMBLY (One Per Order)

PARTS LIST - No. 00902-506

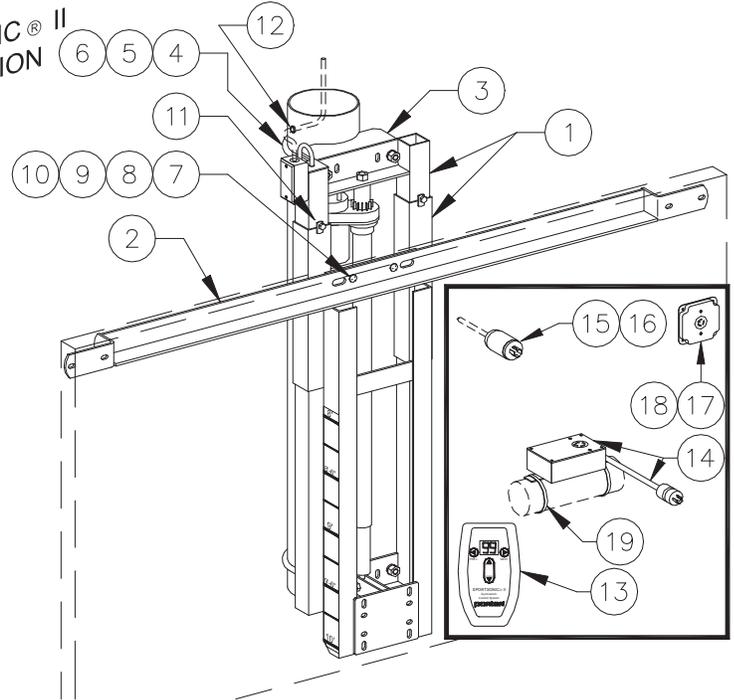
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00206 002	HEIGHT ADJUSTER ASSEMBLY
2	1	XEXT 91612 002	RECT. BACKBOARD EXTENSION
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1¼" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	→	00902 000	POWR-STICK ASSEMBLY (One Per Order)

PARTS LIST – SPORTSONIC® II OPERATION

CENTER-STRUT® HEIGHT ADJUSTMENT UNITS WITH SPORTSONIC® II OPERATION No. 00903-211 and 00903-506



FAN BACKBOARD



RECTANGULAR BACKBOARD

PARTS LIST - No. 00903-211

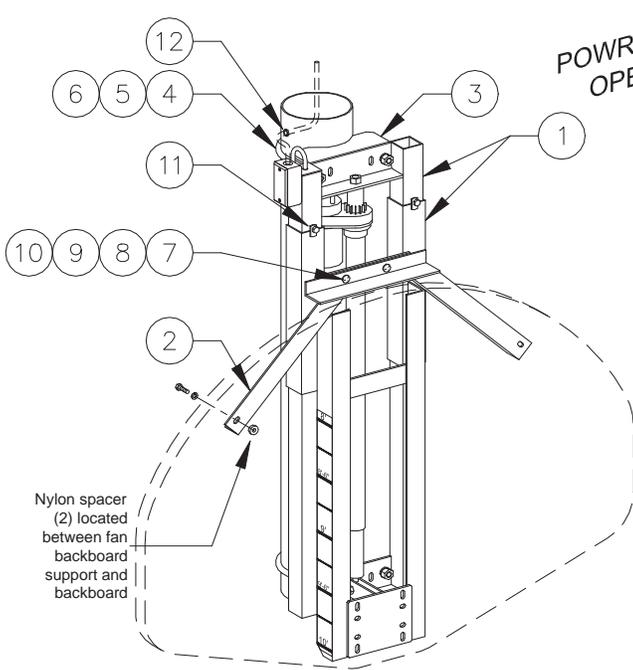
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00213 002	HEIGHT ADJUSTER ASSEMBLY
2	1	FRME 00202 002	FAN BACKBOARD SUPPORT
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1 1/4" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	1	BUSH 00069 002	PLASTIC BUSHING
13		12002-100	SPORTSONIC® II TRANSMITTER
14	1	XELC 12002 200	SPORTSONIC® II RECEIVER
15	1	ELEC 00013 100	4-PRONG TWIST-LOCK PLUG
16	1	ELEC 00140 000	STRAIN RELIEF INSERT
17	1	ELEC 00064 000	3-PRONG TWIST-LOCK RECEPTACLE
18	1	ELEC 00126 0G0	1/2" DEEP COVER PLATE
19	2	ELEC 00221 002	CABLE TIE - 14" Lg.

PARTS LIST - No. 00903-506

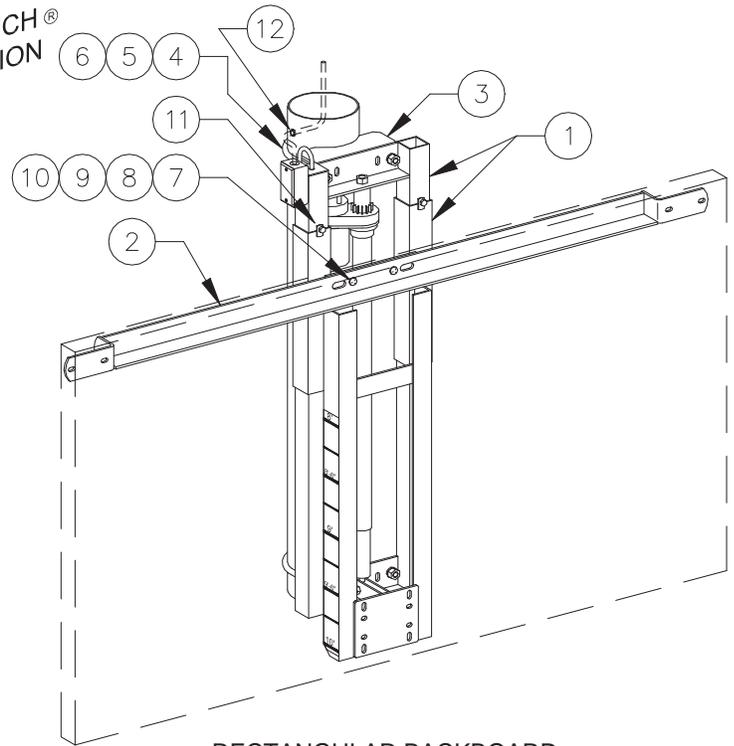
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00213 002	HEIGHT ADJUSTER ASSEMBLY
2	1	XEXT 91612 002	RECT. BACKBOARD EXTENSION
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1 1/4" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	1	BUSH 00069 002	PLASTIC BUSHING
13		12002-100	SPORTSONIC® II TRANSMITTER
14	1	XELC 12002 200	SPORTSONIC® II RECEIVER
15	1	ELEC 00013 100	4-PRONG TWIST-LOCK PLUG
16	1	ELEC 00140 000	STRAIN RELIEF INSERT
17	1	ELEC 00064 000	3-PRONG TWIST-LOCK RECEPTACLE
18	1	ELEC 00126 0G0	1/2" DEEP COVER PLATE
19	2	ELEC 00221 002	CABLE TIE - 14" Lg.

PARTS LIST – POWR-TOUCH® OPERATION

CENTER-STRUT® HEIGHT ADJUSTMENT UNITS WITH POWR-TOUCH® OPERATION No. 00904-211 and 00904-506



FAN BACKBOARD



RECTANGULAR BACKBOARD

PARTS LIST - No. 00904-211

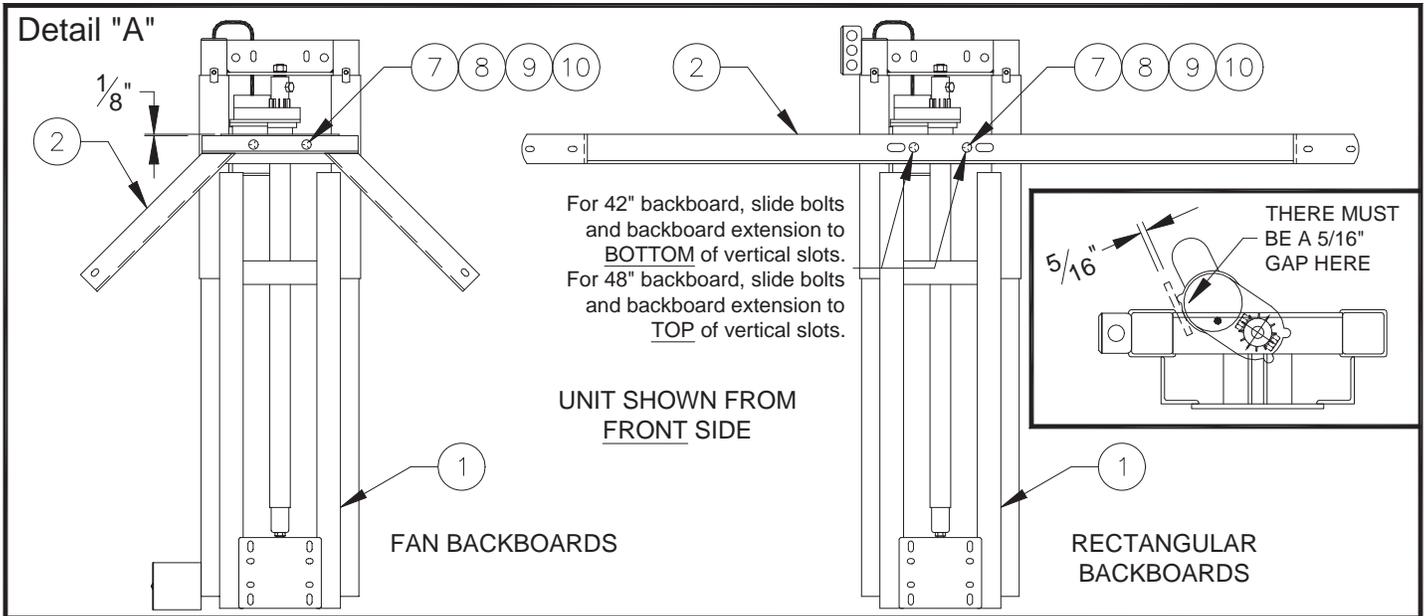
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00213 002	HEIGHT ADJUSTER ASSEMBLY
2	1	FRME 00202 002	FAN BACKBOARD SUPPORT
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1 1/4" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	1	BUSH 00069 002	PLASTIC BUSHING
POWR-TOUCH® CONTROL COMPONENTS INCLUDED ELSEWHERE			

PARTS LIST - No. 00904-506

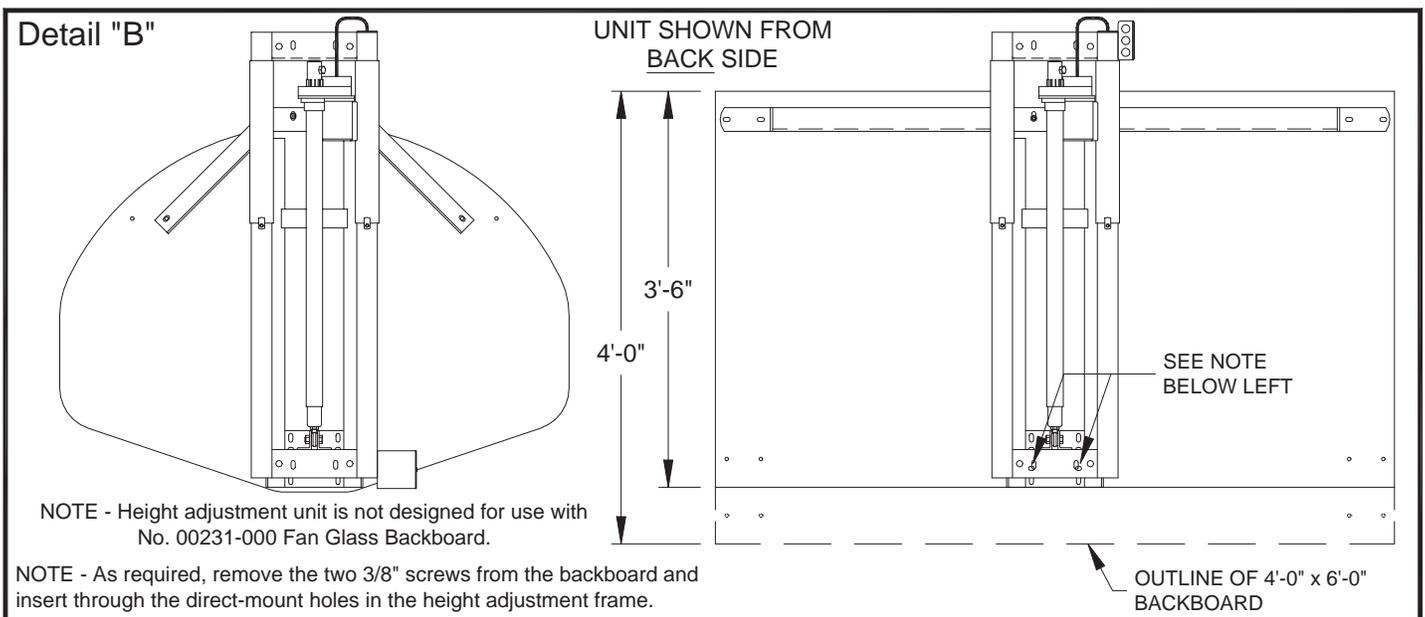
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	FRME 00213 002	HEIGHT ADJUSTER ASSEMBLY
2	1	XEXT 91612 002	RECT. BACKBOARD EXTENSION
3	2	CLMP 00056 002	MAST CLAMP
4	2	UBOT 00006 0E2	5/8" U-BOLT
5	4	HDWE 04006 000	5/8" LOCKWASHER
6	4	HDWE 03012 000	5/8" HEX NUT
7	2	HDWE 02073 0P0	3/8" x 1 1/4" Lg. CARRIAGE BOLT (Grade 5)
8	2	HDWE 05004 0E0	3/8" FLATWASHER
9	2	HDWE 04002 0E0	3/8" LOCKWASHER
10	2	HDWE 03002 0E0	3/8" HEX NUT
11	4	HDWE 01134 000	3/8" x 1/2" Lg. NYLON BOLT
12	1	BUSH 00069 002	PLASTIC BUSHING
POWR-TOUCH® CONTROL COMPONENTS INCLUDED ELSEWHERE			

ASSEMBLY OF HEIGHT ADJUSTER TO BACKBOARD

1. Unpack height adjustment unit and check all items against appropriate Parts List on Page 3, 4, 5 or 6, to ensure all parts and hardware are available to complete the installation.
2. Check to make sure the actuator has not shifted during shipping. There must be a 5/16" gap between the actuator and the frame. See Detail "A". Loosen the hardware and rotate the actuator as required, using a 5/16" thick plate as a spacer between the actuator and the frame.
3. Unpack the backboard and lay face down on the floor (using the carton to protect the face of the backboard) directly below the backstop support system where it is to be installed.
4. Bolt the upper backboard extension (2) to the height adjustment assembly (1). See Detail "A".

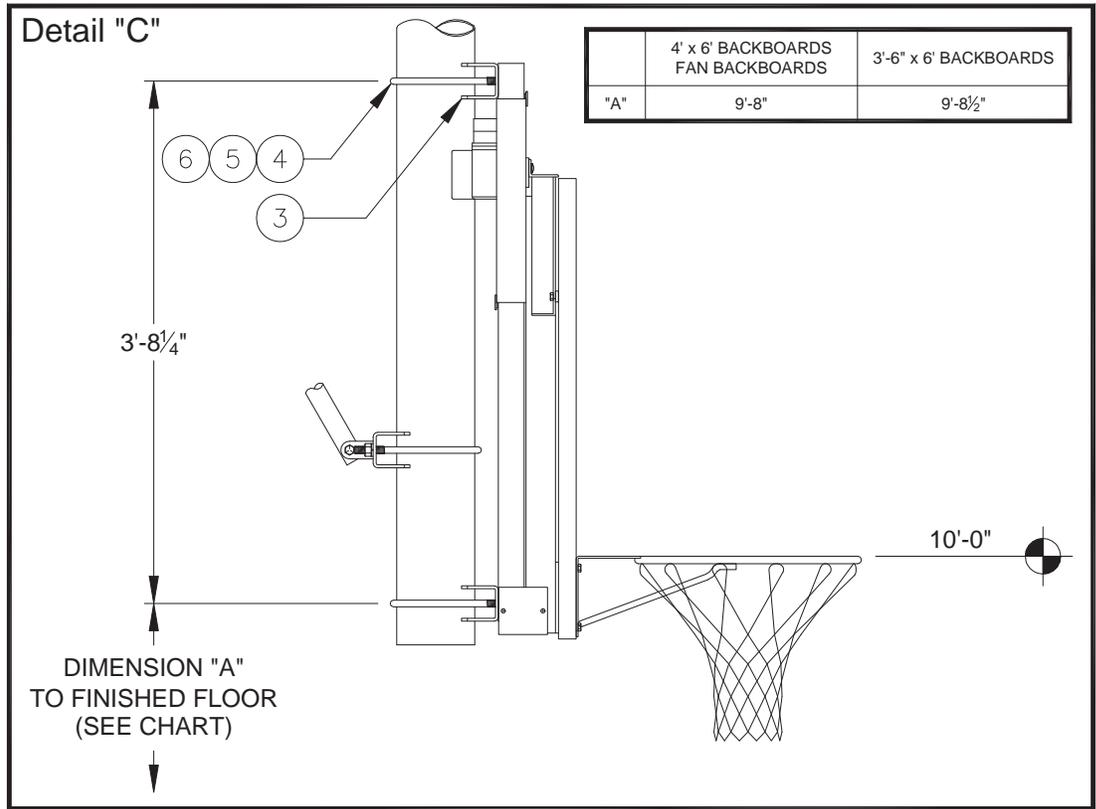


5. Lay the assembled height adjustment unit on the backside of the backboard with the attachment holes in alignment with the attachment inserts or slots on the backboard. Secure the upper backboard extension (2) to the backboard with the necessary hardware. (Hardware is optional – see custom packing list if applicable.) See Detail "B".



ATTACHMENT OF HEIGHT ADJUSTER TO BACKSTOP MAST

6. Hoist entire height adjustment assembly into position on the 6-5/8" O.D. drop tube. See Detail "C". Secure to 6-5/8" O.D. drop tube with the hardware provided with the height adjustment unit.



7. Attach goal to backboard and height adjustment Center-Strut® with hardware provided with the goal. Check goal with level before tightening the four bolts. See Detail "C".

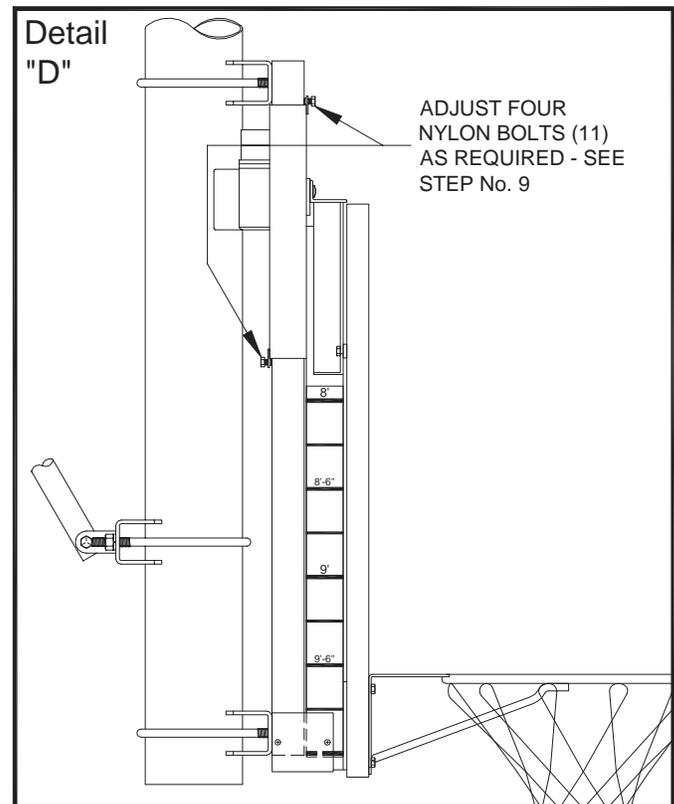
8. CHECK FOR 10'-0" GOAL HEIGHT:

For operation with Key Switch, Sportsonic® II, or Powr-Touch® keypad, use temporary electrical hook-up as required (see appropriate wiring diagram) to raise height adjustment unit to the highest position (bottomed out on the upper angle).

For operation with Powr-Stick, use the Powr-Stick to raise height adjustment unit to the highest position (bottomed out on the upper angle). See Detail "F" on Pg. 11 for proper use of the Powr-Stick.

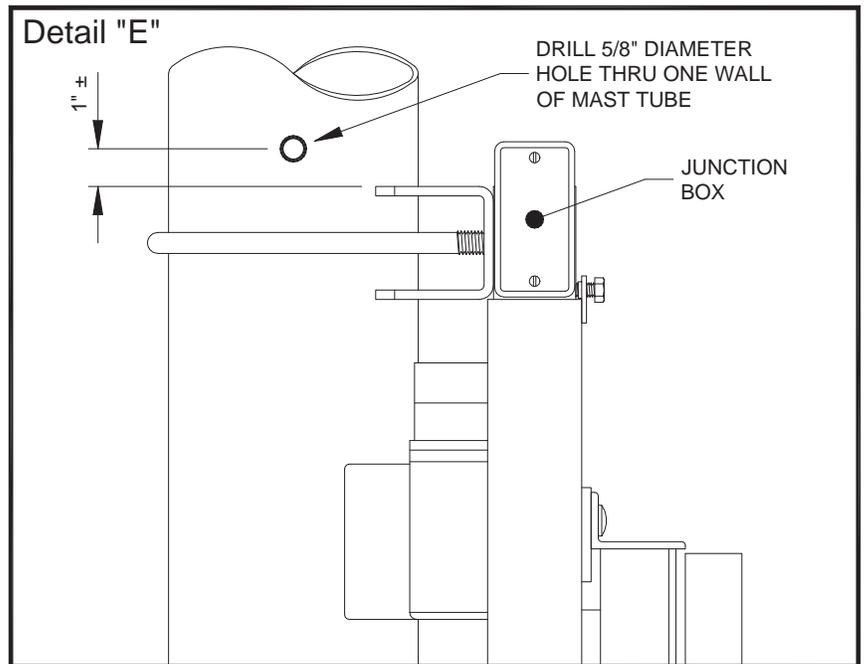
With the height adjustment unit raised to its highest position, check the 10'-0" goal height. Move height adjustment unit up or down on the 6-5/8" O.D. drop tube as required to acquire the 10'-0" goal height.

9. Install the four 3/8" x 1/2" lg. nylon bolts (11) into the four flat nuts on the height adjustment frame slide mechanism. The four nylon bolts may be adjusted to maximum backboard stability if required – Caution, over-tightening these nylon bolts could create undue friction and strain on the electric motor. See Detail "D".



10. Lubricate the two plated inside tubes with an aerosol dry lubricant, such as Sprayon™ #S00708 T.F.E. DRY LUBE. See detail on Page 14. Sprayon™ #S00708 T.F.E. DRY LUBE is available from Porter Athletic Equipment Company, in a 10 oz. aerosol can (Porter part number MISC00243000). Run height adjuster up and down (10' to 8') several times. NOTE – protect the floor with a drop cloth to prevent a slippery build-up on the gymnasium floor.

- 11. INSTALLER NOTE – ALL UNITS EXCEPT POWR-STICK OPERATION –** Drill a 5/8" diameter hole thru one wall of the 6-5/8" O.D. drop tube as shown in Detail "E". Install the plastic bushing (12) into this hole. This will allow the electrician to run the wiring from the junction box on the height adjuster assembly through the mast.



CHECK HEIGHT ADJUSTMENT OPERATION

- Proceed to Page 10 for wiring requirements and testing of height adjuster with Key Switch operation.
- Proceed to Page 11 for hook-up and testing of height adjuster with Powr-Stick operation.
- Proceed to Page 12 for wiring requirements and testing of height adjuster with Sportsonic® II operation.
- Proceed to Page 13 for wiring requirements and testing of height adjuster with Powr-Touch® operation.

WIRING REQUIREMENTS – KEY SWITCH OPERATION

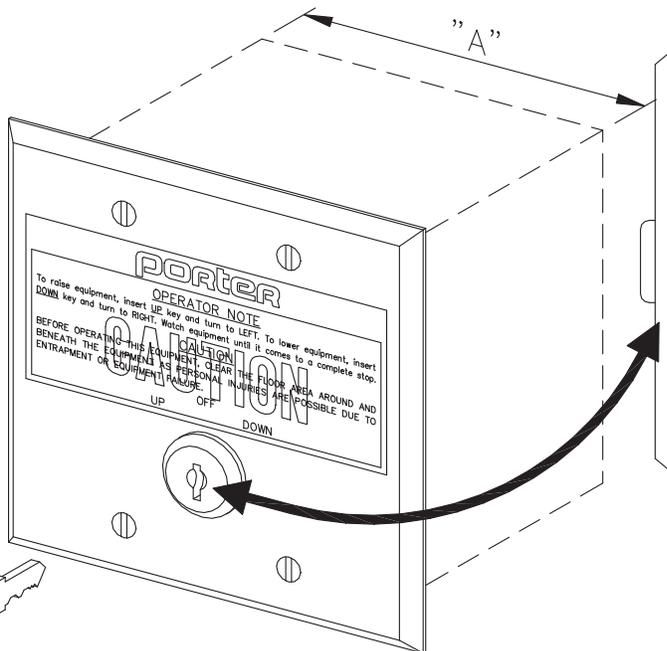
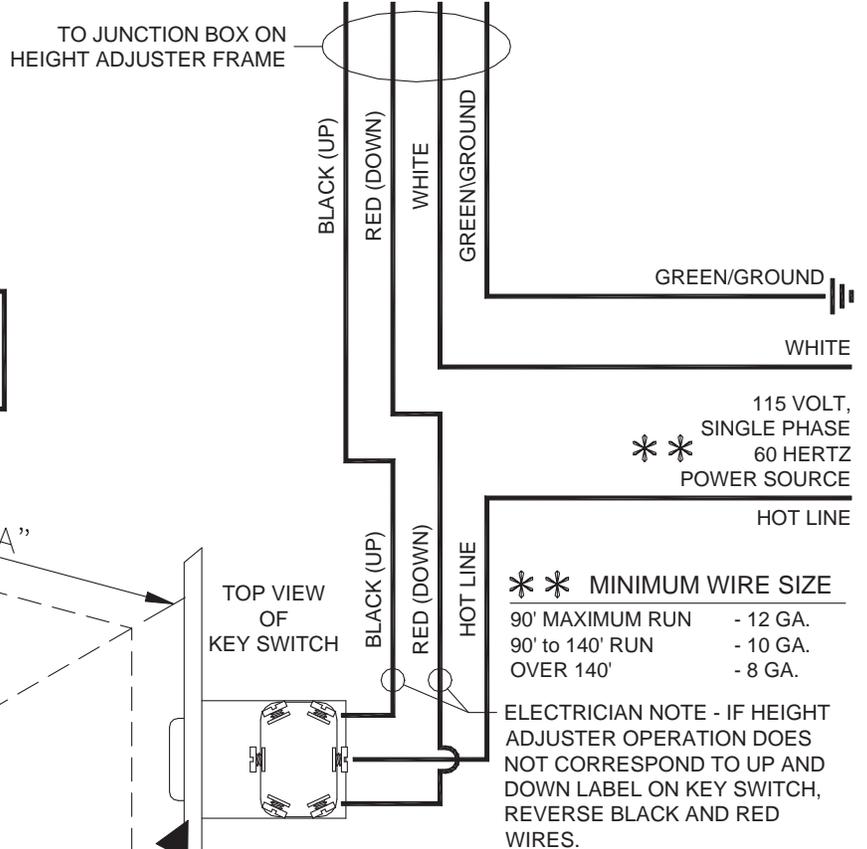
12. CHECK HEIGHT ADJUSTMENT OPERATION – In order to test operation of height adjuster, use a temporary hook-up, or test after unit has been hard-wired to the key switch per the diagram below. Operate unit down to the 8'-0" goal height, then back up to 10'-0".

NOTE – All wiring between the height adjuster and the key switch is to be done by an electrical contractor per the diagram below, to meet all local code requirements.

IMPORTANT NOTE - PERFORMANCE OF MOTOR IS BASED ON HAVING 115 VOLTS AT MOTOR TERMINALS. VOLTAGES LESS THAN 115 VOLTS WILL AFFECT HOISTING CAPACITY AND RESULT IN DAMAGE TO MOTOR, THUS VOIDING WARRANTY. **SUBSTITUTION** OF THIS KEY SWITCH WILL VOID ALL WARRANTIES AND WILL RENDER THE OPERATION OF HEIGHT ADJUSTER UNSAFE.

CAUTION
KEY SWITCH MUST BE MOUNTED ON THE WALL IN A LOCATION SO THAT THE EQUIPMENT IT IS CONTROLLING IS IN FULL VIEW OF THE OPERATOR.

NOTE
ELECTRICAL CONTRACTOR TO PROVIDE FIELD WIRING AS REQUIRED TO MEET ALL LOCAL ELECTRICAL CODES.



INDIVIDUAL KEY SWITCH MOUNTED IN A STANDARD 4½" SQUARE FLUSH-MOUNTED STAINLESS STEEL COVER PLATE FOR MOUNTING IN A 4" SQUARE x 3½" DEEP MASONRY BOX (THEPITT No. 691 OR EQUAL) BY ELECTRICAL CONTRACTOR. KEY SWITCHES MAY BE GANGED IN PAIRS IN ONE COVER PLATE - ONE FOR THE BACKSTOP, ONE FOR THE HEIGHT ADJUSTER. SEE TABLE BELOW FOR WALL BOX REQUIREMENTS - DIMENSION "A".

MOMENTARY KEY SWITCH FURNISHED WITH TWO KEYS (UP AND DOWN) TO PREVENT THE POSSIBILITY OF INSTANTANEOUS REVERSING OF THE MOTOR, WHICH COULD RESULT IN OVERRIDING THE LIMIT SWITCHES, OR PLACING UNDUE STRESS ON HOIST SYSTEM. DO NOT SEPARATE KEYS FROM EACH OTHER.

KEY SWITCH QTY.	"A" BOX WIDTH	THEPITT BOX No. (OR EQUAL)
1	3¾"	691
2	7⅞"	693

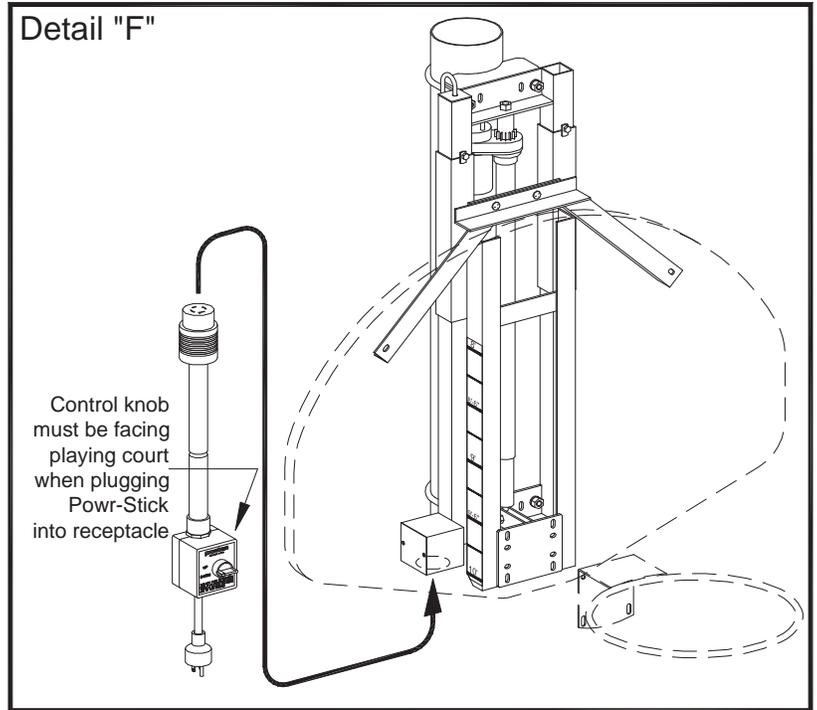
13. Give the UP and DOWN keys and this instruction booklet to the customer. Demonstrate the operation of the unit. Make the customer aware of the Cautions, the Warnings, and the Maintenance requirements listed on Page 14.

PROPER USAGE – POWR-STICK OPERATION

12. CHECK HEIGHT ADJUSTMENT OPERATION

– Connect top end of Powr-Stick to receptacle on bottom of height adjustment frame. Note that the control knob must be facing the playing court in order for the Powr-Stick to engage properly in the receptacle. See Detail "F". Operate unit down to the 8'-0" goal height, then back up to 10'-0".

13. Give the Powr-Stick and this instruction booklet to the customer. Demonstrate the operation of the unit. Make the customer aware of the Cautions, the Warnings, and the Maintenance requirements listed on Page 14.



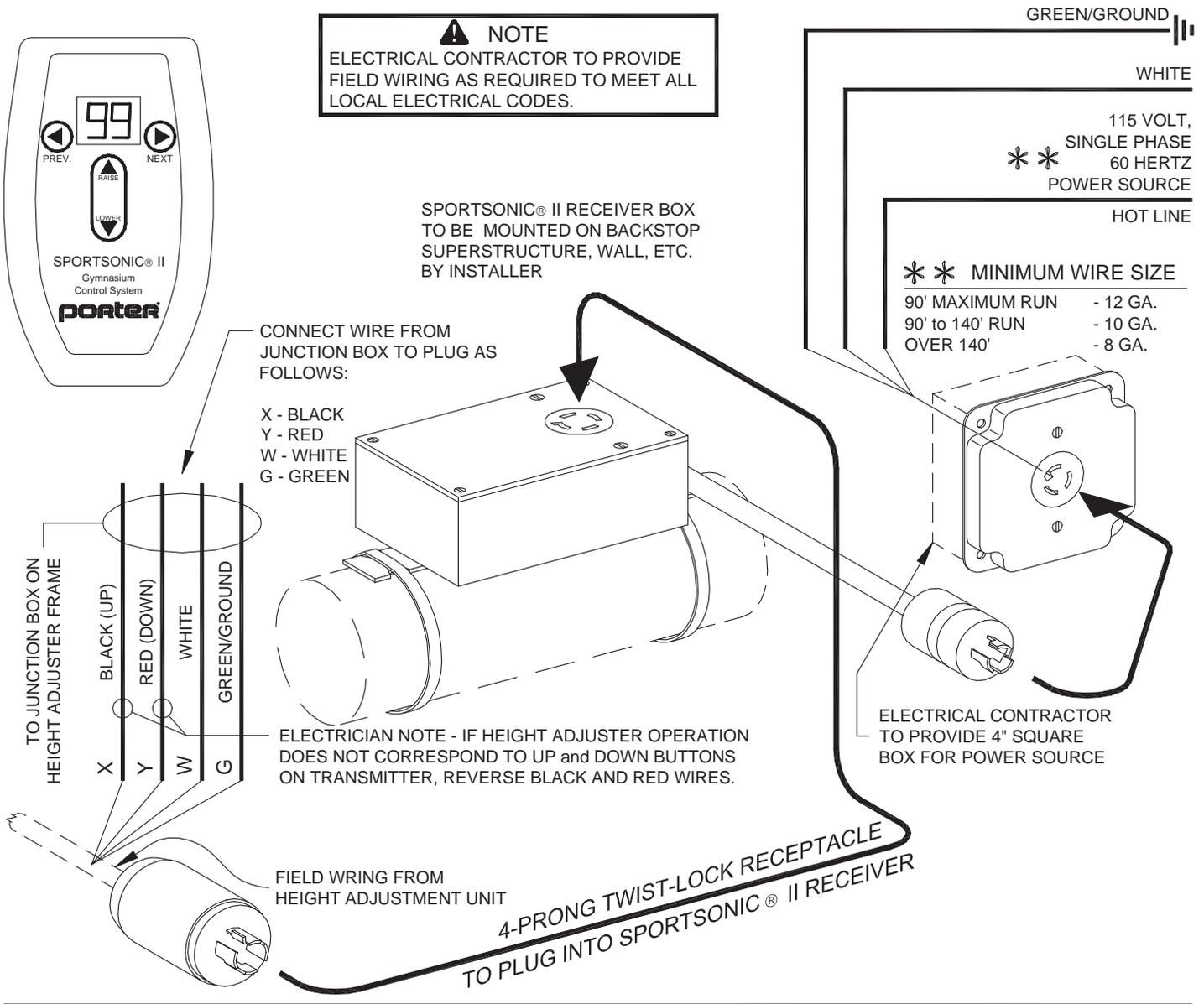
WIRING REQUIREMENTS – SPORTSONIC® II OPERATION

12. Install Sportsonic® II Receiver (14), and set all coding switches per the installation and operating instructions provided with each Sportsonic® II Transmitter. Connect plug (15) from height adjuster to receiver. Connect receiver to 3-prong twist-lock receptacle (17). See Diagram Below.

13. CHECK HEIGHT ADJUSTMENT OPERATION – In order to test operation of height adjuster, use a temporary hook-up, or test after unit has been connected to the Sportsonic® II Receiver per the diagram below. Operate unit down to the 8'-0" goal height, then back up to 10'-0".

NOTE – All wiring between the height adjuster and the Sportsonic® II Receiver is to be done by an electrical contractor per the diagram below, to meet all local code requirements.

IMPORTANT NOTE - PERFORMANCE OF MOTOR IS BASED ON HAVING 115 VOLTS AT MOTOR TERMINALS. VOLTAGES LESS THAN 115 VOLTS WILL AFFECT HOISTING CAPACITY AND RESULT IN DAMAGE TO MOTOR, THUS VOIDING WARRANTY.



14. Give the Sportsonic® II Transmitter and this instruction booklet to the customer. Demonstrate the operation of the unit. Make the customer aware of the Cautions, the Warnings, and the Maintenance requirements listed on Page 14.

WIRING REQUIREMENTS – POWR-TOUCH® OPERATION

12. CHECK HEIGHT ADJUSTMENT OPERATION – In order to test operation of height adjuster, use a temporary hook-up, or test after unit has been hard-wired to the Powr-Touch® relay panel per the diagram below. Operate unit down to the 8'-0" goal height, then back up to 10'-0".

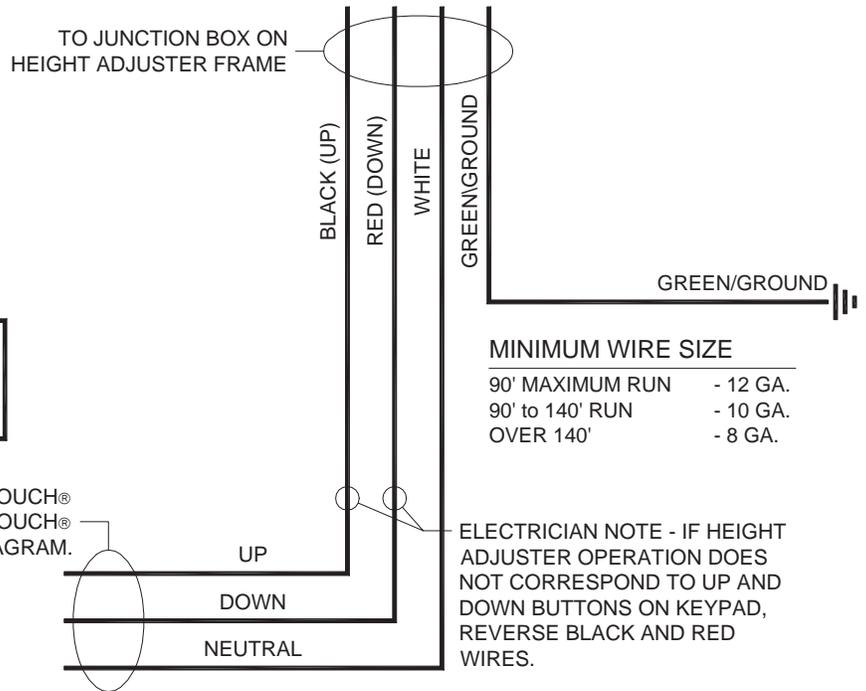
NOTE – All wiring between the height adjuster and the Powr-Touch® relay panel is to be done by an electrical contractor per the diagram below, to meet all local code requirements.

IMPORTANT NOTE - PERFORMANCE OF MOTOR IS BASED ON HAVING 115 VOLTS AT MOTOR TERMINALS. VOLTAGES LESS THAN 115 VOLTS WILL AFFECT HOISTING CAPACITY AND RESULT IN DAMAGE TO MOTOR, THUS VOIDING WARRANTY.

CAUTION
 POWR-TOUCH®
 KEYPAD MUST BE
 MOUNTED ON THE
 WALL IN A LOCATION
 SO THAT THE
 EQUIPMENT IT IS
 CONTROLLING IS IN
 FULL VIEW OF THE
 OPERATOR.

NOTE
 ELECTRICAL CONTRACTOR TO PROVIDE
 FIELD WIRING AS REQUIRED TO MEET ALL
 LOCAL ELECTRICAL CODES.

TO RELAY SET IN RELAY PANEL OF POWR-TOUCH®
 CONTROL SYSTEM. REFER TO POWR-TOUCH®
 INSTALLATION MANUAL FOR COMPLETE WIRING DIAGRAM.



MINIMUM WIRE SIZE

90' MAXIMUM RUN	- 12 GA.
90' to 140' RUN	- 10 GA.
OVER 140'	- 8 GA.

13. Demonstrate the operation of the unit to the customer. Give this instruction booklet to the customer. Make the customer aware of the Cautions, the Warnings, and the Maintenance requirements listed on Page 14.

WARNING: This product can expose you to Titanium Dioxide, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

CAUTION

When height adjustment unit is mounted on a folding-type backboard support system, always adjust the goal height to 10'-0" before hoisting or folding the unit, so as not to place undue strain on the hoist system or the height adjustment mechanism.

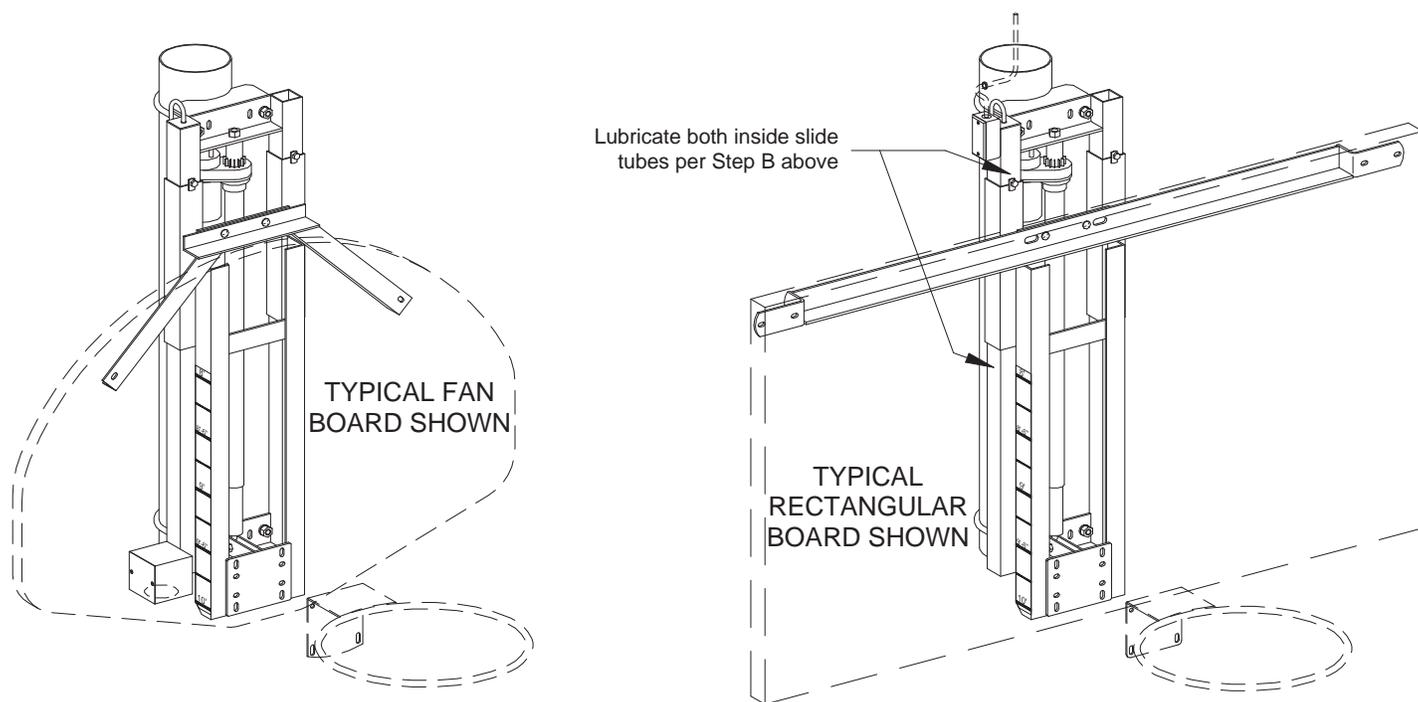
Always keep the operating device (Keys from Key Switch, Powr-Stick, or Sportsonic® II Transmitter) in the possession of a responsible adult who is trained in the proper use of this system.

WARNING

Before attempting any repairs, lower the unit to the lowest position (8'-0" goal height) to eliminate the possibility of the backboard dropping suddenly, which could result in serious injuries or death.

CARE AND MAINTENANCE

- A.** Periodically inspect height adjustment unit and support system for loose or defective parts – tighten or replace immediately as required.
- B.** Periodically (at least annually, depending on usage) lubricate the two plated inside tubes with an aerosol dry lubricant, such as Sprayon™ #S00708 T.F.E. DRY LUBE. Sprayon™ #S00708 T.F.E. DRY LUBE is available from your local Porter dealer or from Porter Athletic Equipment Company, in a 10 oz. aerosol can (Porter part number MISC00243000). Run height adjuster up and down (10' to 8') several times. NOTE – protect the floor with a drop cloth to prevent a slippery build-up on the gymnasium floor.



porter

601 Mercury Drive, Champaign, IL U.S.A., 61822
www.porterathletic.com
(888) 277-7778

SAVE THESE INSTRUCTIONS FOR FUTURE USE