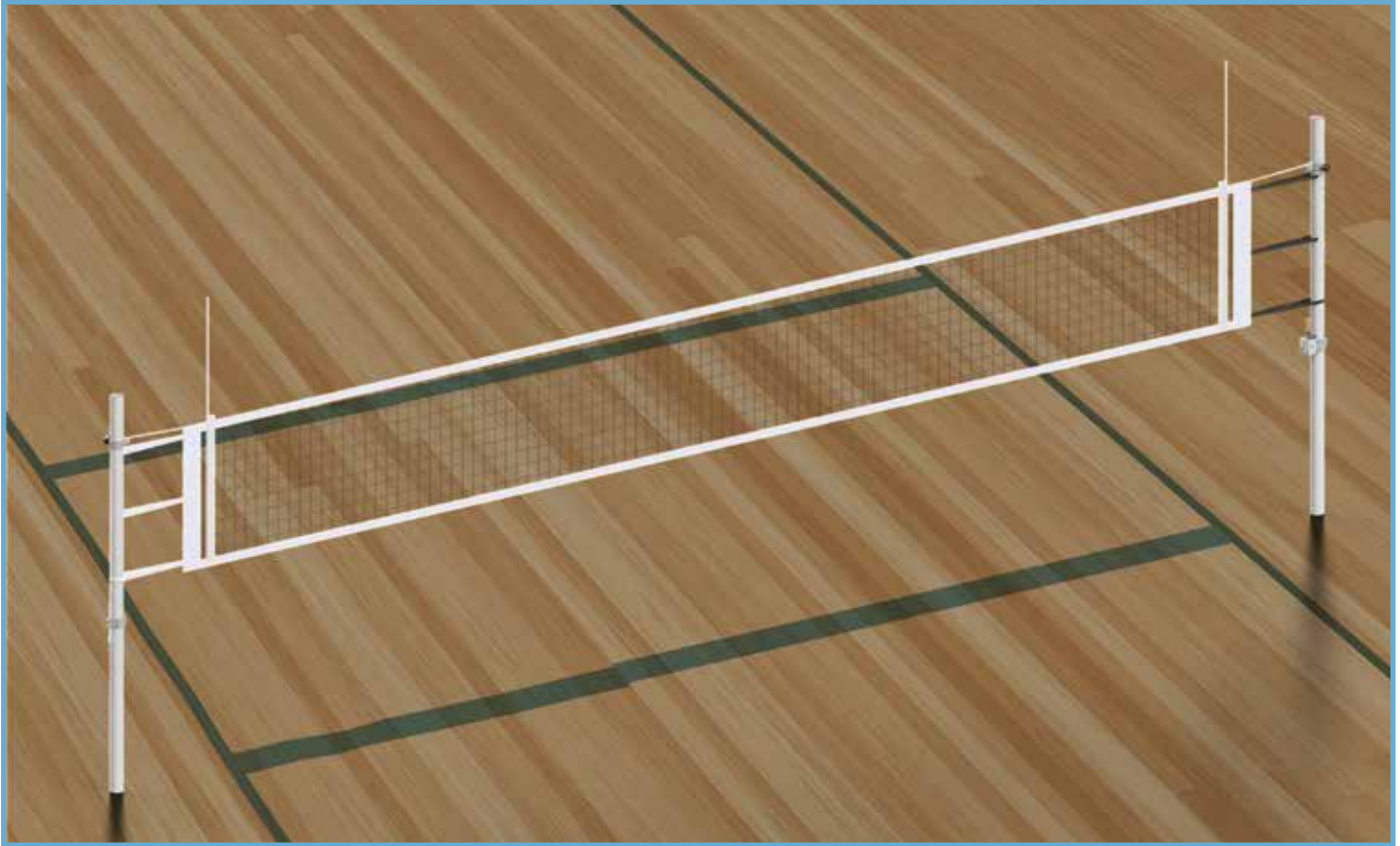


Combination Volleyball System

Highly maneuverable, volleyball system with infinite net height adjustment

INSTRUCTIONS

INSTALLATION & OPERATION



Please Note: These instructions are meant as a guide only.
They do not imply any responsibility on the part of Draper, Inc. for improper installation or faulty workman ship at the jobsite.

CAUTION

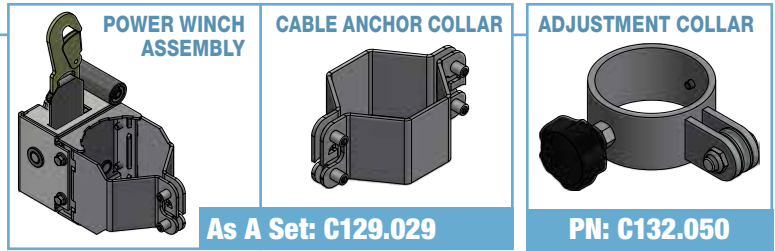
1. Over-tightening top cable can damage equipment and possibly cause injury.
2. Center of net will sag slightly. This is natural. Do not try to compensate by over-tightening top cable. (See "Net Height" information below.)
3. Make sure proper parts and accessories have been shipped. Do not attempt to install any accessories that are not intended for your Volleyball System.
4. Do not attempt to operate the winch by using an electric drill; hand crank only.
5. Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and invalidates warranty.

Please Note: Custom products/installations may not be reflected by this document. Call Draper, Inc. if you have questions about your installation.

If you have any difficulties installing or servicing your CVS Volleyball System, call your dealer or Draper, Inc.

Section 1 - Assembling Vertical Standards

1. Attach **POWER WINCH ASSEMBLY** to one of the $3\frac{1}{2}$ " (89mm) O.D. upright tubes and temporarily tighten near the center of the standard with hex wrench.
2. Attach **CABLE ANCHOR COLLAR** onto the other $3\frac{1}{2}$ " (89mm) O.D. upright tube and temporarily tighten near the center of the standard with hex wrench.
3. Install one **SLIDING ADJUSTMENT COLLAR** on each upright tube. Make sure collar is installed so guide pin is located on the narrow vertical channel.
4. Attach **ENDCAPS** to both ends of standards.
5. Install **VERTICAL STANDARDS** in floor sleeves (see *VB_FloorSleeves_Inst* for details).
6. Locate the center of the **WINCH ASSEMBLY** 47" (1.19M) up from the playing surface and tighten screws with hex wrench.
7. Locate the center of the **CABLE ANCHOR COLLAR** 47" (1.19M) up from the playing surface and tighten screws with hex wrench.



NOTE: It will be necessary to move winch and cable anchor collar when using CVS volleyball system for nets heights other than Mens/Womens Volleyball.

8. For initial set up, you will start by setting at MENS height. Position the center of the **SLIDING ADJUSTMENT COLLAR** approximately 1" (25mm) above the desired net height or 8' 0- $\frac{5}{8}$ " (2.45M) above the playing surface. Make sure guide pin is in the narrow vertical channel and tighten hand knob to secure in place. Hand knob should tighten so that it is fully inside wider vertical channel.

Section 2 - Attaching Net to Standards

1. Unroll net on floor between standards.
2. If not already in place, install $\frac{1}{2}$ " (13mm) fiberglass rods in ends of net.
3. String net between standards by sliding looped cable over pulley on **SLIDING ADJUSTMENT COLLAR**.
4. Unspool the 2" (51mm) nylon strap from **POWER WINCH**. Hook one end of the **TOP NET CABLE** in hook on belt. Hook opposite end of **TOP NET CABLE** to **CABLE ANCHOR COLLAR** on the other standard.

NOTE: Make sure the cable is running cleanly through sheaves.

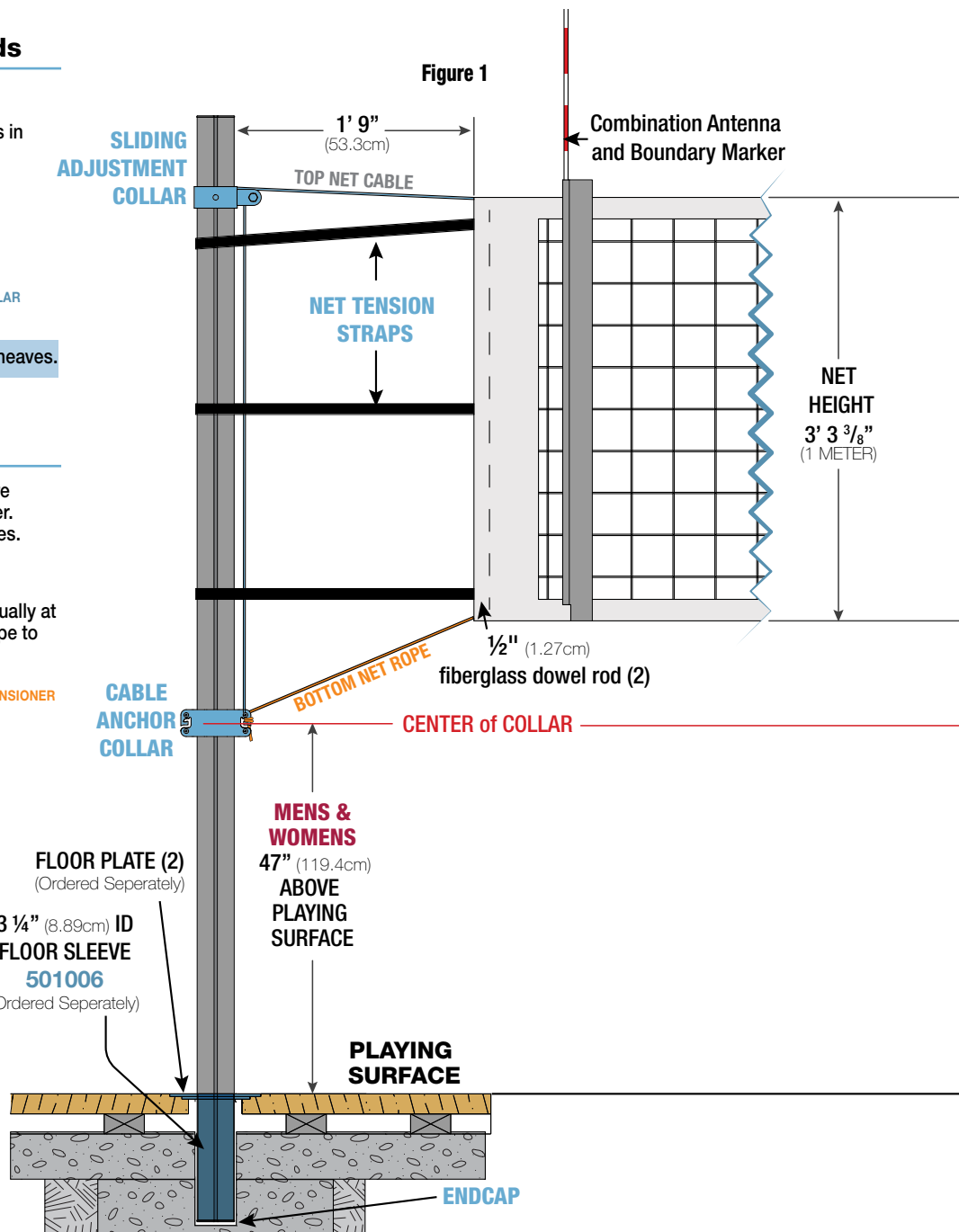
Section 4 - Tensioning the Net

1. Tighten net by turning **WINCH HANDLE** clock wise. Measure distance from playing surface to the top of net at center. Rules allow net to be $\frac{3}{4}$ " (19mm) higher at court sidelines.
2. Set net height to 7' 11 $\frac{5}{8}$ " (2.43m).
3. Tie a loop in one end of the **BOTTOM NET ROPE**. Loop is usually at end with **CABLE ANCHOR COLLAR** for convenience. Hook rope to **CABLE ANCHOR COLLAR** (or power winch).
4. Insert the remaining end of **BOTTOM NET ROPE** into **ROPE TENSIONER** and clip it to the **POWER WINCH** (or cable anchor collar).
5. Wrap 1" (25mm) wide **NET TENSION STRAPS** once around standards and tighten using buckles.

NOTE: Winch incorporates a worm gear type mechanism. To loosen top cable, turn winch handle counterclockwise.

5. Remeasure at center to ensure proper net height.

The Combination Volleyball System is now set for regulation MENS volleyball.



Official Net Heights for USVBA, NCAA, and NFSA (Volleyball)

VOLLEYBALL	GIRLS	BOYS
Grades 1-6 (Elem.)	6'1" (1.85m)	6'1" (1.85m)
Grades 7-9 (Middle School)	7' 4 1/8" (2.24m)	7' 4 1/8" (2.24m)
Grades 9-12 (Sr. High)	7' 4 1/8" (2.24m)	7' 11 5/8" (2.43m)
Collegiate & International	7' 4 1/8" (2.24m)	7' 11 5/8" (2.43m)

BADMINTON	5'1"
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TENNIS	3'6"
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Note: Regulation net heights are set at center of net. Ends of net (at court lines) cannot exceed the regulation height by more than 3/4" (2 cm). Allow 3/4" (2 cm) net sag at all settings.

Section 5 - Attaching Net Height Labels

Section 5.1 - Womens Volleyball Net Height

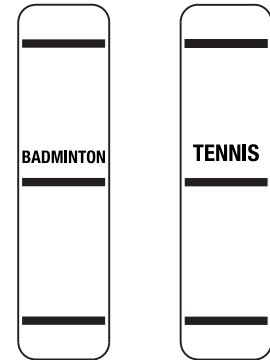
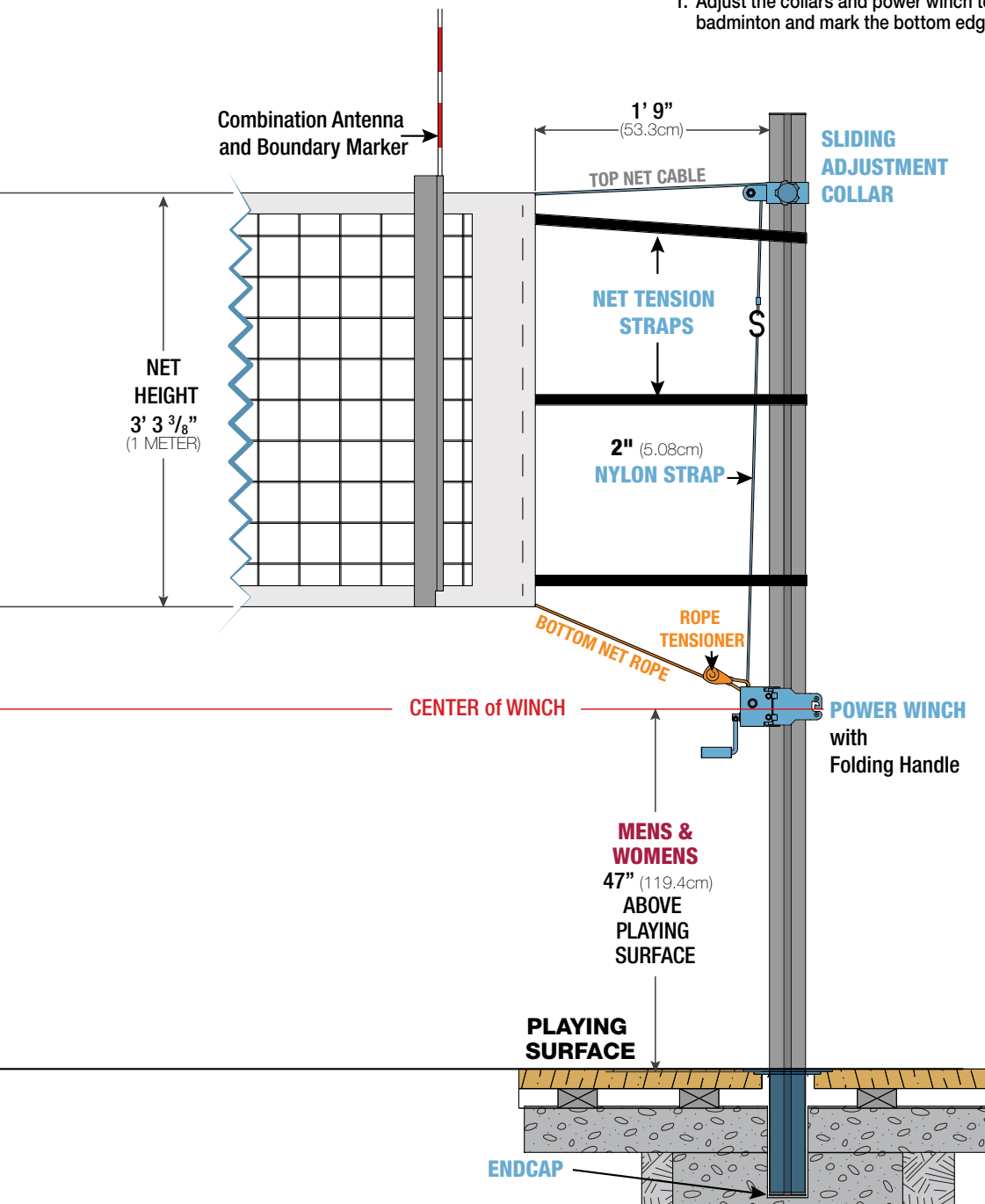
1. After the MENS position of **SLIDING ADJUSTMENT COLLAR** has been determined, make a mark on the standard at the bottom edge of **ADJUSTMENT COLLAR**.
2. Loosen the **ADJUSTMENT COLLAR** and slide it down the post. You may need to unwrap the top **NET TENSIONING STRAP**.
3. Locate the **NET HEIGHT LABELS**. Align the bottom **MENS** line (see Fig. 2) with the mark made in step 1 and apply the label in the wide vertical channel. Both **MENS** and **WOMENS** net heights are now marked on the post.

Section 5.2 - Badminton & Tennis Net Height Labels

The **POWER WINCH**, **CABLE ANCHOR COLLAR** and **ADJUSTMENT COLLARS** are all designed to slide down to accommodate nets appropriate for badminton and tennis (502110 -Tennis Net recommended).

1. Adjust the collars and power winch to the appropriate height for badminton and mark the bottom edge of the adjustment collar.
2. Loosen the adjustment collar and slide it down the post.
3. Align the bottom line on the **BADMINTON** label with the mark.
4. Repeat steps 1-3 for Tennis

Figure 2



Section 6 - Safety Label

1. Attach the net strap safety label to the interior curved surface of the post IN CLEAR VIEW of the winch operator.



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ATTENTION:
To tighten net straps, ALWAYS pull loose end TOWARD volleyball post.

500014 Volleyball Net

500016 Combination
Antenna and Boundary Marker

