

— Instruction Manual —

VB77

Carbon Fiber Volleyball Systems
 (Either in packages or components ordered separately)



Customer Service
 (800) 247-7668

PARTS LIST					
Item	Qty	Description	Item	Qty	Description
A	2*	VB77 Standards	J	2	Nylon Net Collars
B	2	VB51P-XX Pole Padding	K	3	Carabineer
C	2	VB23-CV Floor Plates (If Applicable)	L	1	3/16" Allen Wrench
D	2	VB23 or VB235 Floor Sockets (If Applicable)	M	2	Knurled Knob
E	4	Cable Covers (If Applicable)	N	6	Rope Ratchet (Provided with Net)
F	1	VB1250K Net with Storage Bag	O	1	1/8" Allen Wrench
G	2	Volleyball Antennas (VB13)	P	1	1/4" Allen Wrench
H	1	Winch	Q	2	Positive Lock Pin
I	1	Top Net Cable Attachment Screw			

- ◆ Inspect all contents prior to installation. Report any missing parts to dealer immediately.
- ◆ **Read all instructions before proceeding!**

Caution:

The telescoping poles are under spring pressure, make sure the knurled knob is tight and/or the detent pin that positions the inner pole is in place at all times to eliminate the risk of possible injury.

Figure 1

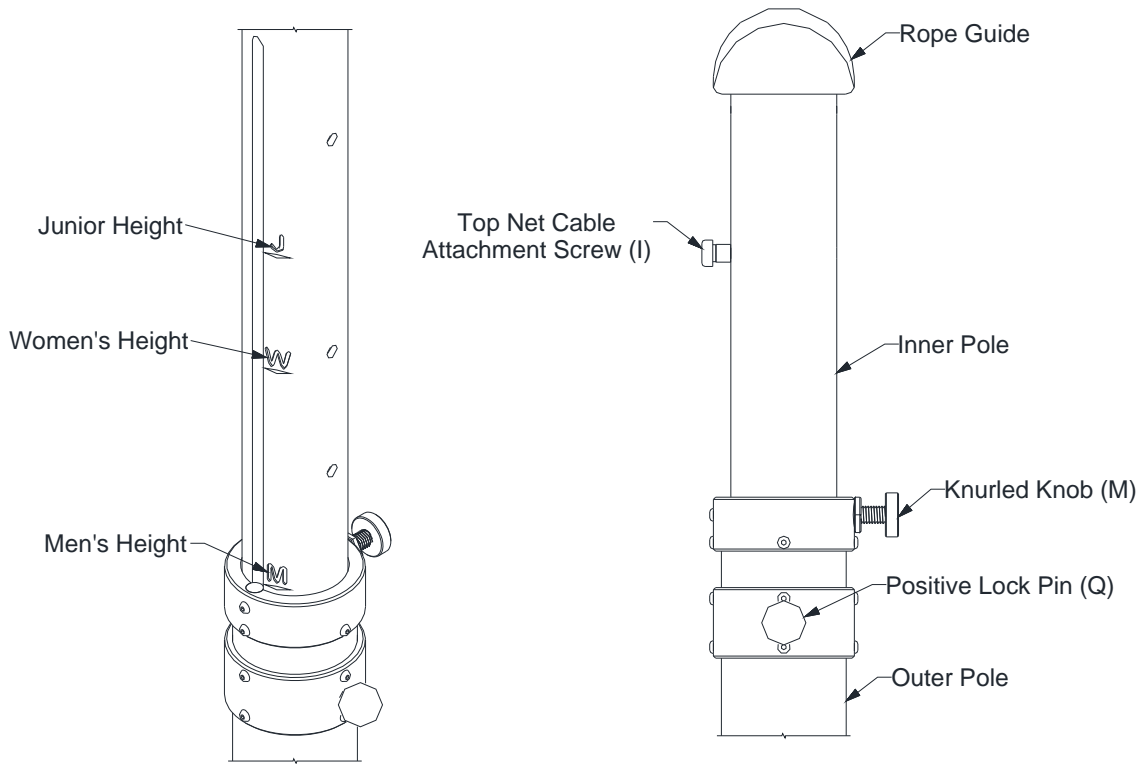
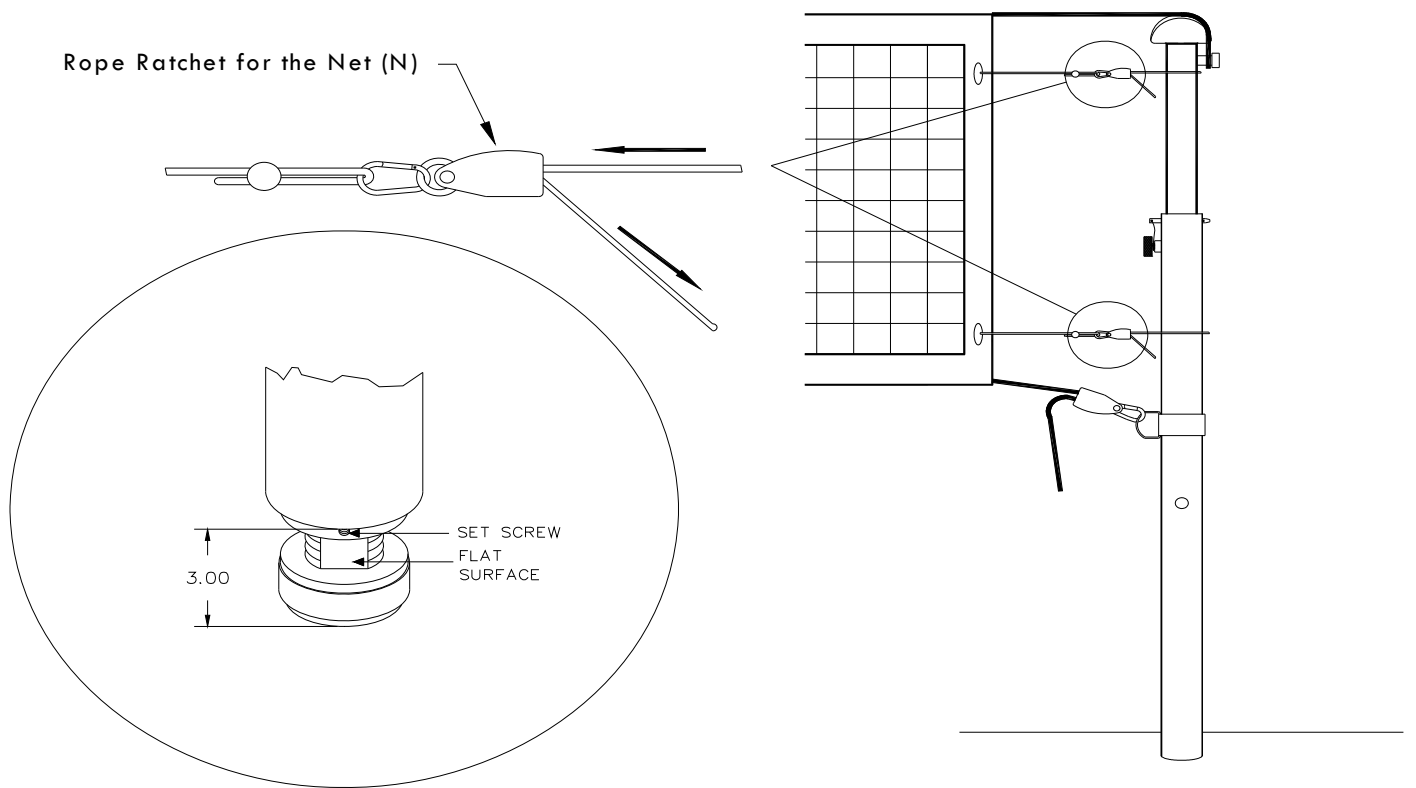


Figure 2



Initial Standard Height Adjustment

NOTE:

The Bison Centerline systems have been designed to “set and play”, after initial set-up all net height guess work is eliminated. The inner pole has machined marks provided for men's, women's and junior's official height. The outer pole has an adjustable bottom foot factory pre-set for 10" floor sockets. Please read and follow the instructions below carefully to make fine tuning adjustments if needed.

1. Set *VB77 Standards* (A) into *Floor Sockets* (D). Loosen the *Knurled Knob* (M), remove the *Positive Lock Pin* (Q) and raise the inner pole of the *VB77 Standard* (A) to either the men's, women's or junior's height markings on the pole. This line should be just visible above the top of the outer pole. See Figure 1.
2. Lay the net out finding the end with the factory installed rope ratchet device on the bottom rope. Install the opposite end of the net to the non-winch standard by running the black top rope over the rope guide and attaching the loop to the *Attachment Screw* (I) previously installed. Then attach the other end of the net to the winch standard by running the black top rope over the rope guide and connect it to the 2" winch strap using the *Carabineer* (K). See Figures 1 & 2.
3. Install one of the *Nylon Net Collars* (J) found in the hardware kit to each pole approximately 2" - 3" below the bottom of the net. Then attach the *Rope Ratchet* (N) device on the winch end to the D-ring on the collar and attach the other end of the bottom rope to the D-ring using one of the *Carabineers* (K) in the hardware kit. See Figure 2.
4. Turn the winch handle tightening the top rope of the system to eliminate the slack in the rope. Center the net between the two *VB77 Standards* (A). Finish tightening the top rope using the *Winch* (H) and pull the loose end of the bottom rope through the *Rope Ratchet* (N) to tighten the bottom rope.
5. Install the *Rope Ratchet* (N) kit by running the rope through the small holes in the sides of the net and around the pole connecting them to the *Rope Ratchet* (N) device and then tighten all four devices evenly to achieve desired net tension and maintain proper net placement between the *VB77 Standards* (A).
6. Measure the net height in the center of the net to the floor. If your *VB77 Standards* (A) are set to junior height it should measure 7' (84"). Set to women's height it should measure 7'4-1/8" (88 1/8") and if your *VB77 Standards* (A) are set to men's height it should measure 7'11-5/8" (95 5/8"). If your measurement is different please write it down and proceed to the next step. If your measurement is correct than you are ready to play.
7. If not at the correct height, compute how high or too low, loosen the net on the *VB77 Standards* (A) and proceed to step #8.
8. Loosen set screw in the collar of the bottom adjustable foot with the 1/8" *Allen Wrench* (O). Turning the adjustable foot clockwise will lower net height, counter-clockwise will raise net height. Each revolution of the adjustable foot will raise or lower pole by approximately 3/16". Make sure you use full revolutions, the set screw must mate with the machined flat on the adjustable foot to eliminate screw damage. Tighten set screw. See Figure 2.
9. It is advised to repeat steps 1-7 at this time. If your adjustments were correct you are ready to play. Repeat instructions #7-#8 if further adjustment is needed.
10. You can make some slight modifications to fine tune the net height by raising and lowering the collars, by tightening/loosening the winch, and by adjusting the tension on the side rope ratchets if necessary.
11. When you are confident that the initial net setup is complete trim excess top and bottom rope as desired. Burn ends with a lighter to eliminate fraying.

NOTE :

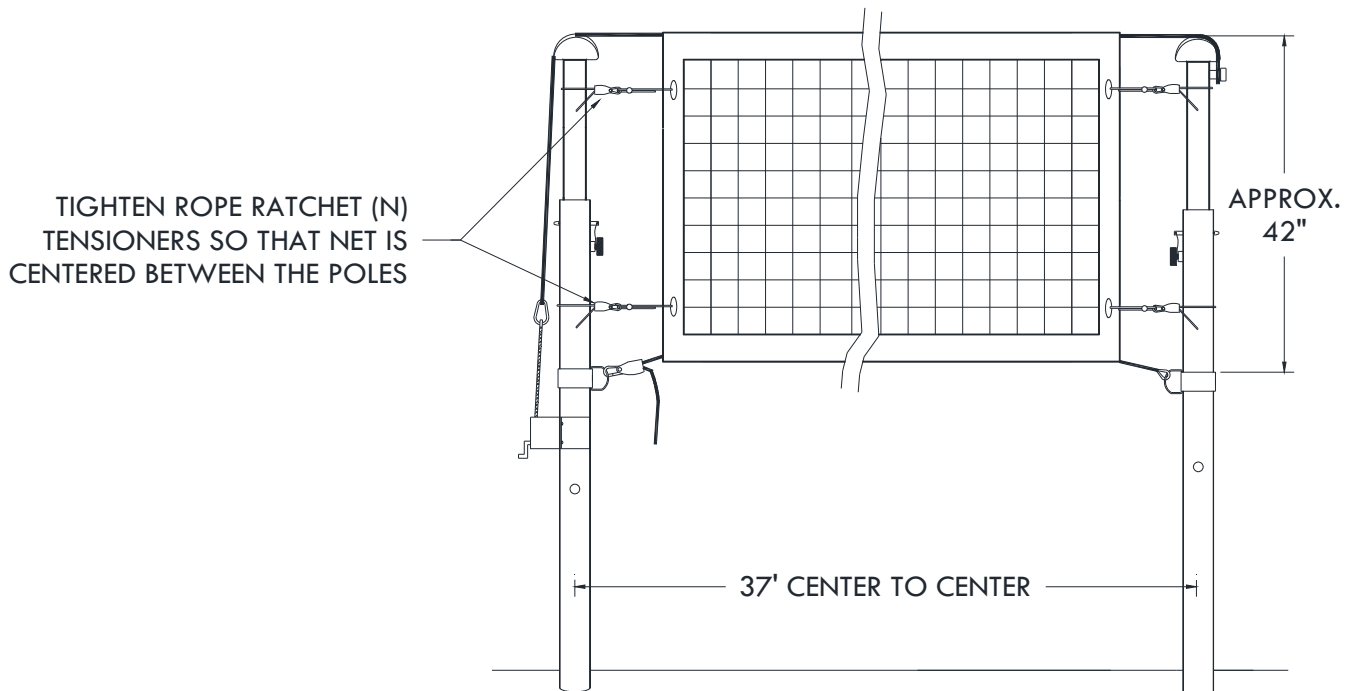
Excessive tightening of top rope is not necessary. Crank the winch until poles start to flex. Further tensioning results in lowering of the top rope. Achieve proper height using the inner pole adjustment and to achieve proper net tensioning use the rope ratchets.

Height Adjustment for a Single Court System

1. Starting with a loose top net cable, loosen the *Knurled Knobs* (M), remove the *Positive Lock Pins* (Q) and adjust the inner poles to the desired height indicated by the height markings machined on the inner poles and then tighten the *Knurled Knobs* (M) and if you are adjusting to one of the official heights marked on the poles you can reinsert the positive lock pin. See Figure 1.
2. Adjust *Nylon Net Collars* (J) so that they are 2"-3" below the bottom of the net.
3. Crank top rope tight with the *Winch* (H), then pull bottom rope tight through the *Rope Ratchet* (N).
4. Attach *Rope Ratchet Net Tensioning Ropes* around pole and hook ends together, then center net between poles as in previous instructions and apply desired tension. See Figures 2 & 3.

- ◆ **NOTE :** Excessive tightening of top rope is not necessary. Crank the winch until poles start to flex. Further tensioning results in lowering of the top rope. Achieve proper height using the inner pole adjustment and to achieve proper net tensioning use the rope ratchets.

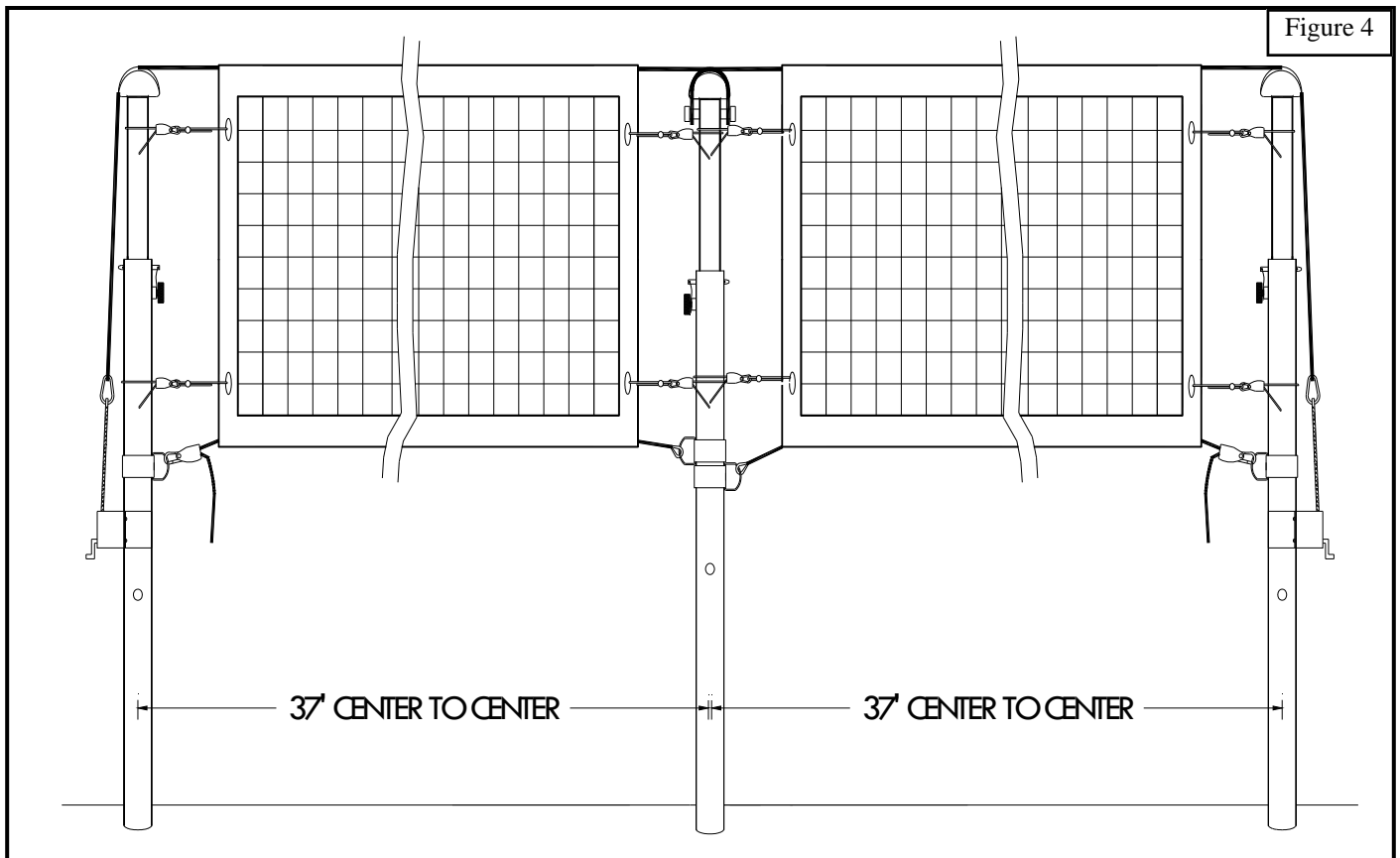
Figure 3



Height Adjustment for a Side by Side Court System

Both Nets the Same Height

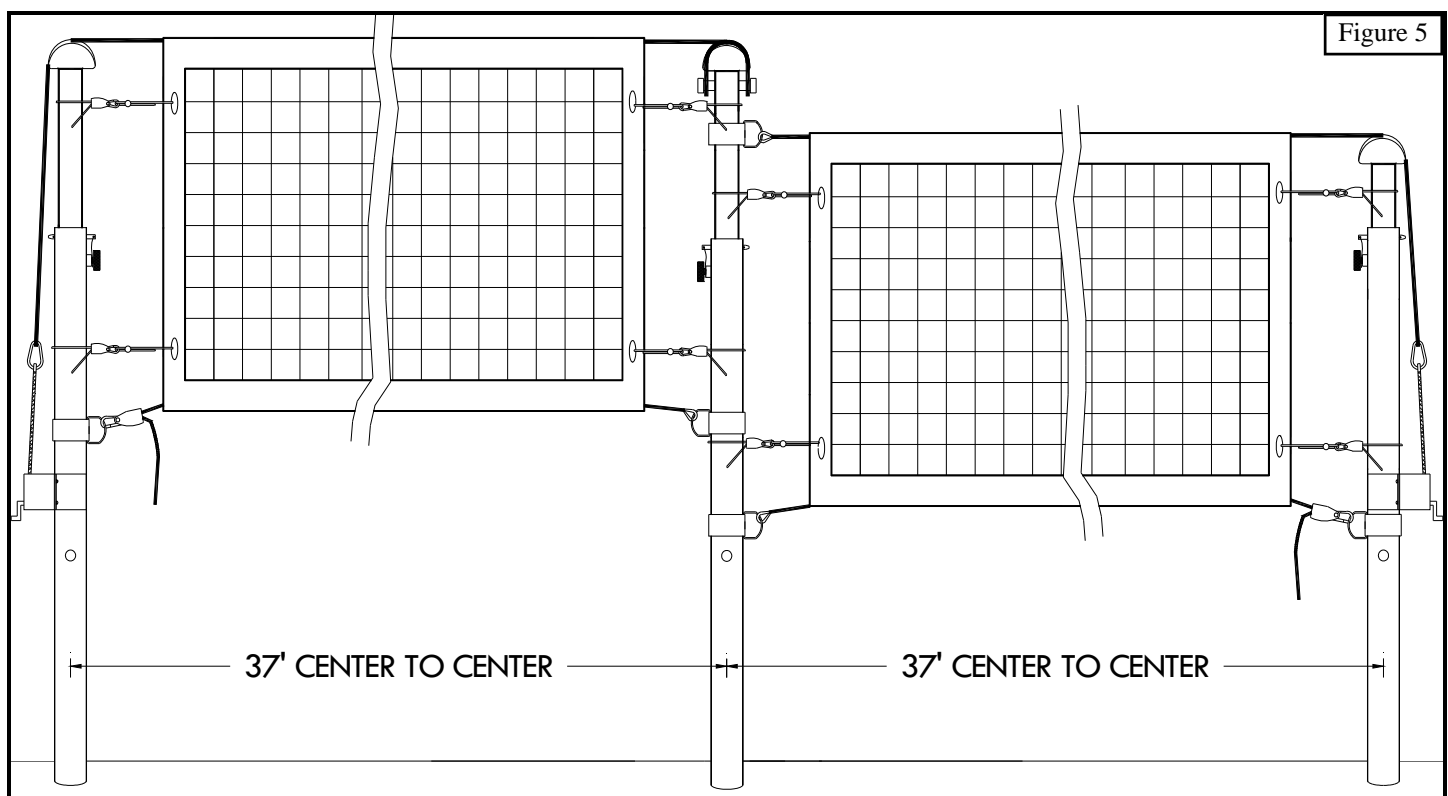
1. Remove tension from both nets with the *Winches* (H).
2. Adjust all three poles by loosening the *Knurled Knobs* (M), removing the *Positive Lock Pins* (Q) and then adjusting the inner poles to the desired height and then retightening the *Knurled Knobs* (M) and replace the pins if adjusted to one of the official heights. See Figure 1.
3. Tighten both nets using the *Winches* (H), retighten bottom ropes and reinstall and tighten *Rope Ratchet* (N) See Figures 2 & 4.



Height Adjustment for a Side by Side Court System *cont.*

Nets at Different Heights

1. Remove tension from both nets with the *Winches* (H).
2. Attach one of the *Nylon Net Collars* (J) provided in the hardware kits to the center standard towards the top. See Figure 5.
3. Loosen the *Knurled Knobs* (M) and remove the *Positive Lock Pins* (Q) of all three poles, adjust the net that will be at the greater height, then retighten those two poles. See Figure 1.
4. Adjust the *Nylon Net Collar* (J) on the center pole to the desired height for the second court and tighten.
5. Adjust the lower net court winch pole and tighten the *Winch* (H). See Figure 5.
6. Reattach and tension both bottom ropes.
7. Attach all *Rope Ratchets*(N) per previous instructions. See Figure 2.
8. On multiple side by side court systems, the *Winch* (H) on the court adder poles should be placed above the collars so web strap will not interfere with bottom rope attachment.



Custom Floor Socket Sleeves & Deep Socket Adapters

1. If you have purchased the *Bison VB77 Standards* (A), for use in existing sockets that are not 3" diameter call *Bison Customer Service* department at 1-800-247-7668 for custom floor socket sleeves available at no additional cost.
2. You will need to provide the inside diameter of the floor socket and the depth of the socket from the playing surface to the bottom.
3. If the *Adapter Sleeves* fit loosely in the floor sockets they can be shimmed with thin metal strips or layers of duct tape can be wrapped around the outside of the sleeve at the top and the bottom until sleeve is snug inside the existing floor sockets.
4. If your pre-existing floor sockets are more than 12" deep from the finished floor to the bottom of the socket, call the *Bison customer service* department at 1-800-247-7668 for information on the *VB10/20 Deep Socket Adapter Kits* available at no additional cost.

Court Diagram

