

ON THE MARK Instructor's Notebook

The ON THE MARK Instructor's Notebook series is written and designed by Gary Anderson, DCM

Improving the Kneeling Position

The *Instructors' Notebook* is a teaching and coaching resource for junior coaches and instructors. It seeks to present the most effective methods of teaching marksmanship to new shooters. Use *On the Mark Instructors' Notebook* articles to guide your work with beginning and new shooters. This edition of the *Instructors' Notebook* covers the next steps in kneeling position instruction that can be covered after new shooters master kneeling position basics (see 05/02 issue of *JSCN News*). The CMP also solicits comments from shooting coaches and instructors about effective ways of teaching marksmanship they have developed. Please send your comments to DCM@odcmp.com.



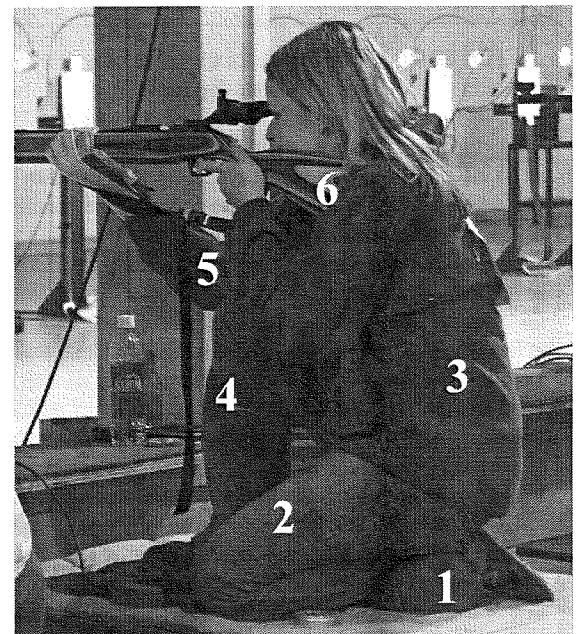
Kneeling Position Check Points

The first step in improving a position is to recheck the position to make sure its basic configuration is correct. The kneeling positions used by each shooter should correspond with the checkpoints illustrated and described on this page. If a shooter is not following each checkpoint, work with that shooter to correct the position before focusing on the improvement techniques described on the next page.

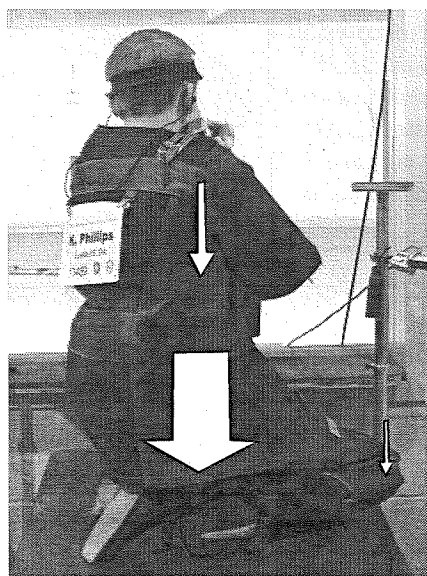


- 1. Kneeling Roll.** Turn the roll so it points 30-60 degrees away from the line of fire. The size of the kneeling roll controls body height. Start with a roll filled about 2/3 full. Make a crease in the center of the roll to support the ankle.
- 2. Right Foot and Leg.** Place the extended right toe behind the kneeling roll. Keep the right foot vertical. Rest the ankle on the kneeling roll and point the right knee the same direction that the kneeling roll points (30-60 degrees away from target).
- 3. Body/Torso.** Sit on the right heel. Place the heel in the center of the buttocks. Rest almost all of the body weight on the heel. Roll the shoulders down; do not attempt to hold the body erect. Turn the body about 30 degrees from the target. The shooter should shoot "out of the position," not across the position.

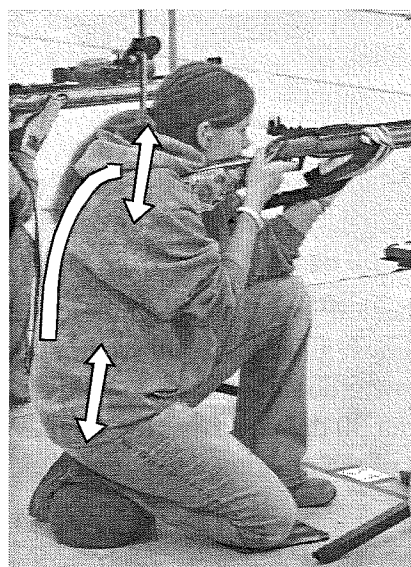
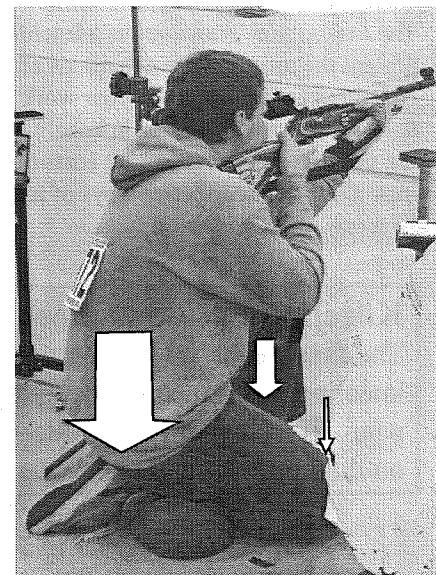
- 4. Left Leg.** Keep the left leg vertical or angled forward; do not angle the lower leg back to the rear. The left heel should be directly below the knee or slightly forward of the knee, but not to the rear of a point below the knee.
- 5. Left Arm.** The correct left elbow location is different for different shooters; it may be behind the knee (above), forward of the knee (right, rare) or on the knee. Find a relaxed body position with the weight back on the heel and then drop the elbow to the knee or leg without reaching forward or pushing the torso back.
- 6. Butt Location and Head Position.** Place the butt plate up in the shoulder so that the head is nearly erect, tipped only slightly towards the target. After the rifle butt is in position, draw the support hand back until the sights are raised to the level of the target.
- 7. Sling Support.** Establish a vertical plane in the support arm and make sure the sling supports all the rifle weight.



Improving the Kneeling Position



1. Balance. To achieve a stable hold, the kneeling position must be balanced precisely. Kneeling has three possible support points, the right heel, the left heel and the right knee. To correctly balance the position, almost all body, rifle, left leg and left arm weight must balance above the right and left heels, with little or no weight on the right knee. In a correctly-balanced position, the only weight pressing down on the right knee should be some of the weight of the right leg. The illustrations to the left and right show how to balance the position. The arrows in the photos are sized to show the proportions of body-rifle system weight that rests on each support point. One of the keys to making sure the body-rifle system weight is balanced above the two heels is to pay close attention to the head position. The head must remain erect and can be tipped toward the target, but never to the right. For some shooters, canting the rifle to the left may help achieve better balance (see photo on right).



2. Eliminate Body Tension. One of the most important ways to achieve a steady hold in kneeling is to eliminate as much body tension as possible. Muscle tension anywhere in the torso or upper body will cause the rifle to oscillate or swing back and forth. The first step in eliminating unneeded body tension is to roll the shoulders forward and down while sitting on the kneeling roll. It requires muscle tension to sit up straight in an erect posture; it requires little or no tension to slump down. Let the muscles in the back go; drop the shoulders down. The second step in eliminating body tension is to pay careful attention to aligning the shoulders and hips. Imaginary lines drawn through the shoulders and hips should be parallel to each other. If the shoulders and hips are not aligned, the spine will be twisted and under tension. Eliminate this tension by aligning the shoulders and hips. The third step in eliminating body tension in kneeling involves correctly balancing the position (see #1 above). When the weight of the body-rifle system is precisely balanced over the right and left heels, significantly less muscle tension is needed to maintain the body posture than when the position is out of balance. The fourth step in eliminating body tension in kneeling is to find the specific location for placing the left elbow on the left knee or leg that removes as much tension as possible from the torso. Experiment by shifting the elbow slightly forward or rearward while noting changes in tension, especially in the lower back. Select a precise left elbow location that yields the least amount of tension in the back. When working to reduce and eliminate body tension in kneeling, it is essential that each of these steps be worked on separately. Best results are attained by following the order described here.

3. Adjust Position Height. The kneeling position is without question the most complex shooting position. It involves achieving a correct inter-relationship of differing torso-arm-leg lengths. The size of the kneeling roll is the basic means of varying position height. Kneeling rolls can be as large as 18 cm (7.2 in.) in diameter. Kneeling rolls can also be only partially filled so that when a crease is formed in the center of the kneeling roll, the right instep or ankle is only one or two centimeters above the floor. This and the type of footgear worn can vary the height of the body above the floor by approximately seven inches. To begin, it is best to select a median kneeling roll size where the instep is three or four inches above the floor. If the shooter has a torso that is long in proportion to the lengths of the arms and legs, take filling out of the kneeling roll to lower the body position. If the shooter has a relatively short torso and longer arms, a higher kneeling roll may be required. One way to evaluate this is to see how far back the left hand must be located on the fore end to raise the rifle to a level where the head position is acceptable. If the angle of the left forearm is too high, lower the kneeling roll to lower the body position. If left forearm is too flat, the kneeling roll may need to be increased in size to raise the body. When fine-tuning a kneeling position to eliminate body tension, small changes in kneeling roll height may help place the torso in just the right location to free it from tension.

4. Inner Position & Shot Technique. Another key to outstanding kneeling shooting requires paying close attention to how the position feels (the inner position) and to how the shot technique is executed. Good kneeling shooting requires that the shooter develop an acute sense of how the muscles in the torso and arms feel while preparing for and firing the shot. After placing the rifle in position, take a few seconds to mentally check whether the weight of the body-rifle system feels like it is precisely balanced above the two heels. If it does not feel balanced, shift the position slightly to balance it correctly. Take a few additional seconds to check how the muscles of the back and left arm feel. If the back muscles feel tense, make a conscious effort to let the muscle tension go. If the left arm muscles feel tense, make a conscious effort to let the arm relax so that the sling is the only thing holding up the rifle. Many shooters use their breathing technique to facilitate relaxation. They relax the back and arm muscles each time they exhale prior to starting the shot. Once the hold begins, it is critical to focus complete visual attention on the sight picture and to keeping hold movements precisely centered while adding pressure on the trigger to break the shot.