

## ArtiSential | Fully Articulating Laparoscopic Instrument




### Training Exercises 2019






Practice replicating the movements taking place in each of the videos below. Record your best times to track your progress. Each video can be found at the url below, or scan the QR Code.





[www.medigroup.com.au/artisential-training](http://www.medigroup.com.au/artisential-training)










**Note: For all training, keep two instruments in your hands, even if only using one instrument for the exercise.**

Exercise		Video	Instructions	Target Time	My Times
1	Instrument Orientation		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> With the right hand, touch all four corners of each of the modules of the ArtiSential training tool. Try to keep the head of the instrument at 90° to each of the modules. Repeat with the left hand.	1:00	
2	Wristed Movement		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Place a peg in the top of the module. With the right hand, touch the peg, then rotate 90° each time. Repeat with the left hand.	0:40	
3	Base to Top Peg Board (Right Hand)		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Place all the pegs on the bottom peg board, then with your right hand, transfer all the pegs to the top peg board.	1:30	

Exercise		Video	Instructions	Target Time	My Times
4	Base to Top Peg Board (Left Hand)		<b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b> Place all the pegs on the bottom peg board, then with your left hand, transfer all the pegs to the top peg board.	1:30	
5	Peg Rotation (Right Hand)		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Set up the peg board as shown, with the rectangular pegs along the top. With your right hand, rotate the side pegs by 90°, and the top pegs by 180°.	1:00	
6	Peg Rotation (Left Hand)		<b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b> Set up the peg board as shown, with the rectangular pegs along the top. With your right hand, rotate the side pegs by 90°, and the top pegs by 180°.	1:00	
7	Right to Left Peg Board Transfer (Right Hand)		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Place the pegs as shown in the right-hand peg board. Using your right hand, transfer the pegs to the left-hand peg board.	1:10	
8	Left to Right Peg Board Transfer (Left Hand)		<b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b> Place the pegs as shown in the left-hand peg board. Using your left hand, transfer the pegs to the right-hand peg board.	1:10	

Exercise		Video	Instructions	Target Time	My Times
9	Right to Left Peg Board Transfer (Two Hands)		<b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b> Place the pegs in the right-hand peg board. Pick a peg up with your right hand, then transfer the peg to your left hand, then place it in the left-hand peg board. Repeat for all pegs.	2:10	
10	Left to Right Peg Board Transfer (Two Hands)		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Place the pegs in the left-hand peg board. Pick a peg up with your left hand, then transfer the peg to your right hand, then place it in the right-hand peg board. Repeat for all pegs.	2:10	
11	Bottom to Top Peg Board Transfer (Two Hands)		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Place the pegs in the bottom peg board. Using two hands, transfer all pegs to the top board (6 pegs each hand).	1:00	
12	Forehand Suturing (Right Hand)		<b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b> Use the suture training pad and needle with thread cut short. Perform a series of <b>4 x forehand sutures</b> . To do this, mount the needle, pass this through the tissue using a curved action at right angles to the tissue. With your left hand, grasp the needle, then curve the needle gently through the tissues. This allows you to more quickly remount the needle.	1:40	

Exercise		Video	Instructions	Target Time	My Times
13	Backhand Suturing (Right Hand)		<p><b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b></p> <p>Use the suture training pad and needle with thread cut short. Mount the needle for backhand suturing in your needle holder. Perform a series of <b>4 x backhand sutures</b>. To do this, use the needle holder in your right hand to pass the needle into the tissue, using a curved action. Then use the grasper in your left hand to remove the needle, also using a curved action.</p>	1:40	
14	Continuous Forehand Suturing (Right Hand)		<p><b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b></p> <p>Take a full length suture and perform a line of <b>5 x continuous sutures</b>. Using two instruments allows you to pull the suture tight with either hand and more quickly remount the needle.</p>	2:50	
15	Continuous Forehand Suturing (Left Hand)		<p><b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b></p> <p>Take a full length suture and perform a line of <b>5 x continuous sutures</b>. Using two instruments allows you to pull the suture tight with either hand and more quickly remount the needle.</p>	2:50	
16	Continuous Backhand Suturing (Right Hand)		<p><b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b></p> <p>Take a full length suture and perform a line of <b>5 x continuous backhand sutures</b>. Using two instruments allows you to pull the suture tight with either hand and more quickly remount the needle.</p>	3:10	

Exercise		Video	Instructions	Target Time	My Times
17	Continuous Backhand Suturing (Left Hand)		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Take a full length suture and perform a line of <b>5 x continuous backhand sutures</b> . Using two instruments allows you to pull the suture tight with either hand and more quickly remount the needle.	3:10	
18	Knot Tying (Right Hand)		<b>RH: Needle Holder</b> <b>LH: Bipolar Grasper</b> Take a suture and pass a forehand suture through the tissue. Grasp the needle with your left hand and pull the suture through to the correct length. Go around the needle holder up to three times. With your right hand, grasp the other end of the suture and pull through to make the knot tight. Reverse the direction and go back the other way around the needle holder once or twice, then pull the knot tight in the opposite direction. Repeat once more in each direction.	1:45	
19	Knot Tying (Left Hand)		<b>RH: Bipolar Grasper</b> <b>LH: Needle Holder</b> Take a suture and pass a forehand suture through the tissue. Grasp the needle with your right hand and pull the suture through to the correct length. Go around the needle holder up to three times. With your left hand, grasp the other end of the suture and pull through to make the knot tight. Reverse the direction and go back the other way around the needle holder once or twice, then pull the knot tight in the opposite direction. Repeat once more in each direction.	1:45	