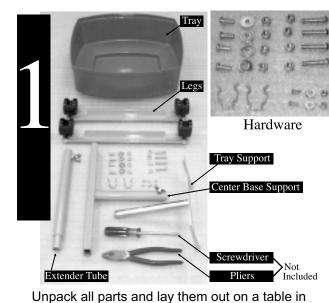
# ASSEMBLY AND USE INSTRUCTIONS FOR NEWGY ROBO-CADDY

Congratulations on your purchase of the Newgy Robo-Caddy. This product will give added versatility to your Newgy Robo-Pong Table Tennis Robot or serve as a handy holding device for table tennis balls during multi-ball or 1-on-1 training. Robo-Caddy is designed to accommodate either the Robo-Pong 2000 or 1000 robots.

When using the Robo-Caddy, you now have control over the height, the distance from the table, and the angle to the table that the ball is delivered from. You also still have the regular controls for head angle, oscillator range, and ball speed on the robot itself. This will allow an almost infinite number of possibilities to vary the ball trajectory to closely simulate many other shots in table tennis.

You will need a #2 Phillips screwdriver and a pair of pliers for the assembly.



front of you. Your table tennis table makes a handy

work surface if you first cover it with a cloth or

piece of cardboard to prevent scratching it.



Center Base Support using the  $1/4 \times 1 1/4$  bolts and the 1/4 locknuts. Be sure the leg lays on TOP of the Center Base Support as shown. Repeat with the other Leg.



Loosen the large wing nut on the upright tube of the center base support. Inert the small end of the Extension Tube into the top of the upright tube as shown. Tighten the large wing nut on the upright tube to fasten the Extension Tube in place.



Attach the Tray Support to the bottom of the Tray using the 1/4 x 5/8 screws, 3/4 washers, and 1/4 locknuts. The washers go directly under the head of the screws on the inside of the tray to protect the plastic from being marred.



Attach the Spring Clips to the bottom of the Tray using the  $\#6 \times 3/16$  screws, 1/2 washers, and #6 locknuts. The washers go directly under the head of the screws on the inside of the tray to protect the plastic from being marred.



Loosen the large wing nut of the Extender Tube and then insert the tube of the Tray Support into the top of the Extender Tube. Secure in place by tightening the large wing nut of the Extender Tube.

## Using Your Robo-Caddy

The Robo-Caddy can be used either as a robot carrier or as a multiball holder. With the Robo-Caddy serving as a robot carrier, you can move your Robo-Pong around in back of the table to simulate away from the table shots such as loops, lobs, and chops. Also you can place the robot close to the table to simulate serves such as the high toss forehand serve from the backhand corner. In addition, the Robo-Cady enables your Robo-Pong robot to produce a much greater range of angles and trajectories. The following instructions will five you an idea of the wide variety of ways the Robo-Caddy can make your Robo-Pong robot even more versatile:

#### Set-Up

To set up the Robo-Caddy for holding the robot, remove the Extender Tube and then insert the tube of the Tray Support into the top of the upright tube of the Center Base Support. Drop the Tray to its lowest position before tightening the large wing nut on the upright tube to secure it in place. Without the Extender Tube in place, the Robo-Caddy can be adjusted from approximately 12-19 inches high. This is the ideal height range to simulate all shots except extremely high lobs. All directions to follow will be without the Extender Tube in place unless specifically noted. Photo A illustrates what the Robo-Caddy looks like when it is in this configuration.

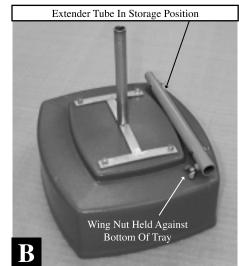
Snap the Extender Tube into the two Spring Clips on the bottom of the Tray to store it until it is needed again. Once inserted into the Spring Clips, turn the Extender Tube until the large wing nut contacts the bottom of the Tray. This prevents the wing nut from working its way loose and possibly losing it during storage. Photo B illustrates the Extension Tube when it is snapped in place in the Spring Clips.

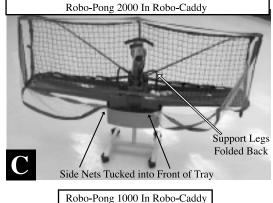
Place your robot in the Tray so it is level and stable. Robo-Pong 2000 robots are placed in the Tray with the robot s feet resting in the corners of the Tray (See Photo C). Tuck the ends of the 2000 s side nets into the Tray in front of the 2000 to keep them from dragging on the floor. Also, fold the support leg mechanism backward to get it out of the way. If you re going to leave the robot in the Robo-Caddy for a long time, you may want to completely remove the support leg mechanism by simply pulling out the pivot pin that attaches it to the Center Trough. Robo-Pong 1000 robots are placed in the Tray so the bottom of the robot s Ball Bucket is resting inside the recessed portion of the Tray s bottom (see Photo D).

To be able to move the robot around freely in back of the table, it is best to purchase a Connector Extension Cable (part #2000-221). The extension cable adds another ten feet to the length of the Connector Cable. With the extension cable in place, you may have the robot s Control Box in its normal position on the side of the table close to the end where you can easily adjust its settings. Now you can move the robot approximately 12 to 13 feet behind the table to simulate various strokes without having to move the Control Box. Photo E (on the next page) illustrates the use of the Connector Extension Cable with the robot set in a deep position and the Control Box in its normal position at the end of the table.

When you have the Robo-Caddy in the position you desire, lock the wheels in place by pushing the lock lever downward (see Photo F, next page).









When you re ready to move it to another position, unlock the wheels by pulling the lock lever upward so the Robo-caddy rolls freely.

You may use the Oscillator when you have the robot positioned away from the table. However, the oscillator ranges that are controllable by placing the Oscillator Control Levers in various positions (see page 5 of your Owner s Manual) will be different. Normally you will want to restrict the range more than when the robot is attached directly to the end of the table. You may also turn the Robo-Caddy at a slight angle to assist in getting the ball to land within your selected area of the table.

When used back away from the table, the Robo-Pong 2000 s net system will be of little use. We suggest you put more balls than normal in the robot to facilitate longer drills. Also a Newgy Pong Pal (item #18026) will assist in quick and easy pick up of the balls (See Photo G).

You may use the robot s auto return net system without taking the robot off the Robo-Caddy. Just raise the caddy to its highest position and place the robot as close to the table as you can (see Photo H). Now attach the side nets to your table net and voila! The net system is again functional, even though it is about 3 inches lower than normal. Some players even prefer this lower position because it gives a lower trajectory to the ball.

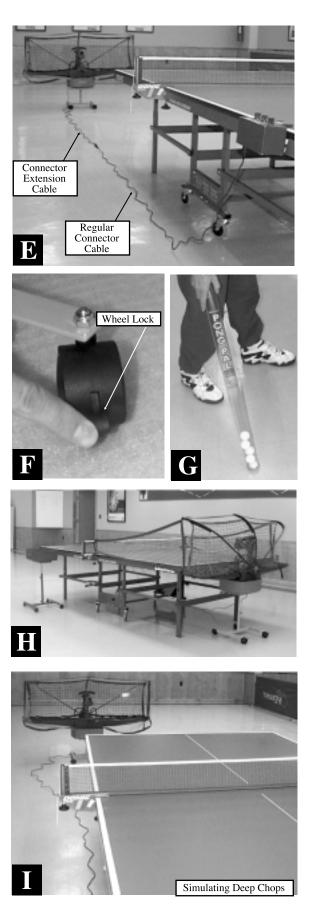
#### **Simulating Deep Chops**

Set up your robot about 6-8 feet behind the table. Drop the Tray to its lowest position. Turn the robot s head to Backspin . Select a Ball Speed of approximately 6 and a head angle of F . Now turn on the ball frequency to a comfortable level and you II get a low, heavy backspin, biting chop. Lower the ball speed and raise the head angle for a slower floating type of chop. See photo I for the typical set-up position of the Robo-Caddy for a chop return.

## **Simulating Loops**

Set up your robot about 3-4 feet in back of the table, at the forehand corner of the table, with the caddy turned to face your forehand corner (See Photo J, next page). The caddy should be dropped to its lowest position. This position closely simulates the normal position that an opponent would contact the ball when looping a blocked return or when re-looping. Turn the Ball Speed to 10, adjust the head angle to halfway between F and G, and select Topspin . Now turn on the Ball Frequency to a comfortable level and you II get a powerful, spiny, arcing loop return.

You may also raise the caddy to get different trajectories. At its lowest position, the ball will be delivered from approximately table height. At its highest position, the ball will be delivered from approximately net height.



#### Simulating Lobs

Raise the Robo-Caddy to its highest position. Set the robot up in the middle of and about 10 feet behind the table (see Photo K). Raise the head angle to G (its highest position), turn the ball speed to 10, and select Topspin . Now turn on the Ball Frequency to a comfortable level and you II get a high arcing topspin lob from deep behind the table. Perfect for practicing your forehand smash. For extra high lobs (if you have a high enough ceiling!), use the Extender Tube to raise the Cady another 11 inches. Also experiment with placing the robot wide to the side of the table and adding some sidespin to simulate a desperation lob of a hard, wide-angled smash.

# Simulating Forehand Serves from the Backhand Corner

One of the most common serves in modern table tennis is the high toss forehand serve from the backhand corner. With Robo-Caddy, you can now set up your Robo-Pong to closely match this effective type of serve. Place the robot at the backhand corner as close to the table as possible. Turn it so the robot s head faces your left table corner. Raise the caddy to its highest position. Twist the robot s head so the top of the head is at approximately the 4 or 5 o clock position (see Photo L). Adjust the Ball Speed to 2.5 and the head angle to B. Now you II get a short, low, spinney backspin/sidespin serve that is very similar to the typical high toss forehand serve. Vary the spin setting to practice against a variety of different spins or increase the ball speed to make the serve longer, faster, and more spinney.

## Using Robo-Caddy For Multi-Ball Practice

Multi-ball practice first started in China, where it is still used today to train millions of Chinese players. All Chinese coaches are masters at serving multiball. The idea for table tennis robots originally came from the concept of multiball training. As good as the Newgy Robo-Pong robots are, there are simply some things the robot can t do. Multi-ball training can fill in the gaps.

For multi-ball training, you will need 100-200 balls, the Robo-Caddy, and a coach or multi-ball server. To prepare the Robo-Caddy for multi-ball, put the Extender Tube in place and then raise the Tray until the coach can easily grab a ball from the tray without having to reach very much or bend his back. Fill the Tray will balls and the coach positions himself by the side of the table close to the net. Place the Robo-Cady directly in front of him and as close to the table as possible. See Photo M for the typical multi-ball set-up.

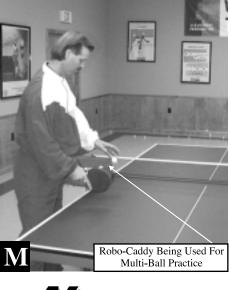
The trainee will be fed balls by the coach. The coach will grab a ball from the Tray, bounce it on the table, then strike it with his paddle to deliver a ball to the trainee. He will then pick up another ball and repeat the sequence until the drill is finished. Good multi-ball coaches can vary spin, speed, height, placement, and frequency of their deliveries. He will watch the trainee to pace his deliveries to make sure that the trainee is challenged, but not so much that he becomes frustrated.

Since the coach can change what he does to every ball he deliveries, he can simulate a wide variety of patterns that are typical of many table tennis rallies. For instance, he can start out with a short backspin serve that the trainee must step up to push back. The coach then delivers the next ball with heavy underspin deep to the trainee s backhand, who backhand loops it. The next ball is delivered with mild topspin to the wide forehand corner which the trainee forehand loops. And finally the pattern stops when the coach puts up and easy no-spin ball to the middle of the table. The trainee steps in and smashes that ball and then the pattern repeats. A good coach will make up many different patterns such as this to improve the weaknesses in the trainee s game.











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