Read these instructions before use. It is essential that you follow these instructions to achieve optimum results.
IMPORTANT SAFEGUARDS

When using electrical appliances, basic safety precautions should always be followed including the following:

1. Read all instructions. Every user should read this manual.

2. To protect against electrical hazards, do not immerse the Chef’sChoice® Model 315XV in water or other liquid.

3. Make sure only clean knife blades are inserted in the Model 315XV.

4. Disconnect the appliance from its power source when not in use, before cleaning, during service and when replacing parts.

5. Avoid contacting moving parts.

6. Do not operate any appliance with a damaged cord or plug or after the appliance malfunctions, or is dropped or damaged in any manner.

   **U.S. customers:** You can return your sharpener to EdgeCraft’s factory for service where the cost of repair or electrical or mechanical adjustment can be estimated. When the electrical cord on this appliance is damaged, it must be replaced by the Chef’sChoice distributor or other qualified service to avoid the danger of electrical shock.

   **Outside U.S.:** Please return your sharpener to your local distributor where the cost of repair or electrical or mechanical adjustment can be estimated. If the supply cord of this appliance is damaged, it must be replaced by a repair facility appointed by the manufacturer because special tools are required. Please consult your Chef’sChoice distributor.

7. CAUTION! This appliance may be fitted with a polarized plug (one blade is wider than the other). To reduce the risk of electric shock, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not modify the plug in anyway.

8. The use of attachments not recommended or sold by EdgeCraft Corporation may cause fire, electric shock or injury.

9. The Chef’sChoice® Model 315XV is designed to sharpen knives. Do not attempt to sharpen scissors, ax blades or any blade that does not fit freely in the slots.

10. Do not let the cord hang over edge of table or counter or touch hot surfaces.

11. When in the “ON” position (Red flash on switch is exposed when “on”), the Chef’sChoice® sharpener should always be on a stable countertop or table.

12. **WARNING:** KNIVES PROPERLY SHARPENED ON YOUR CHEF’SCHOICE® WILL BE SHARPER THAN YOU EXPECT. TO AVOID INJURY, USE AND HANDLE THEM WITH EXTREME CARE. DO NOT CUT TOWARD ANY PART OF YOUR FINGERS, HAND OR BODY. DO NOT RUN FINGER ALONG EDGE. STORE IN A SAFE MANNER.

13. Do not use outdoors.

14. Appliance is not intended to be used or cleaned by children or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge of the hazards involved.

15. Do not use honing oils, water or any other lubricant with the Model 315XV.

16. For household use only.

17. **SAVE THESE INSTRUCTIONS.**
You are likely aware of which of your knives have 15 degree edges and which have the older 20 degree edges. Until recently virtually all knives sold in America were either made in Europe or the U.S. and these were universally sharpened at 20 degrees. Around year 2000 Asian style knives sharpened at 15 degrees became popular. Within the last few years most popular European and American brand knives converted to 15 degree edges.

The Model 315XV Asian Sharpener designed with the latest sharpening, polishing and stropping technology from Chef’sChoice gives you a precision sharpener that can quickly restore your contemporary 15° Euro/American and Asian style knives to their original factory sharpness. This new sharpener incorporates the highly precise angle control and the unique stropping materials that has made Chef’sChoice sharpeners the choice of leading chefs worldwide.

You will appreciate how the ultrafine abrasives in the stropping disks of this sharpener delicately hone and polish the extraordinary sharp edges characteristic of the contemporary blades. By following these Instructions you can also, if you wish, convert any of your thinner traditional 20° Euro/American style knives to the narrower 15° angle edge and experience a significantly improved performance. These instructions describe how each of your contemporary Euro/ American and Asian style knives, including the traditional single sided Japanese blades, can be edged with the Model 315XV.

**CONTEMPORARY 15° KNIVES**

Contemporary 15° knives differ from traditional 20° Euro/American style knives in that the most popular contemporary blades have a thinner cross section where the edge facets are formed. In addition each cutting edge facet is generally set at an angle substantially less than the conventional facets on traditional 20° Euro/American blades. The thinner blade behind the edge facets and the smaller angled facets of contemporary 15° blades reduce the amount of effort needed to cut or slice. Contemporary 15° type blades are ideal for preparing, slicing and chopping vegetables, for filleting fish and for preparing the popular sushi and sashimi. For more information on the design of contemporary 15° Euro/American and Asian style knives refer to the Description of Contemporary 15° and Traditional 20° Blades, page 9.

**UNDERSTANDING THE CHEF’SCHOICE® 315XV SHARPENER**

The Chef’sChoice® Model 315XV is designed to create a factory sharp 15° edge on all contemporary Euro/American and Asian style knives, all Chinese style cleavers and the traditional style single side Japanese blades. Because of the narrow sharpening angle and the fine diamond abrasives used in this sharpener, it is not recommended for routine sharpening of thick sporting knives, the heavier European style chef knives and European cleavers. These thicker knives can be sharpened in other Chef’sChoice® sharpeners such as Models 120, 15, 2000 and 2100.

The Model 315XV sharpener has one sharpening stage 1 followed by a stropping stage 2 as shown in Figure 1. The sharpening stage hones the edge at about 15 degrees with a fine diamond abrasive. The second stage strops and...
polishes the edge to a finer finish at a slightly larger angle. In both Stage 1 and Stage 2 the left side and right side of the blade are sharpened separately, which allows you to hone and strop each type of Asian knife correctly. The contemporary Japanese blades and Chinese cleavers should be honed and stropped on both sides of the blade. However, the traditional single bevel Japanese blade, such as the sashimi blade, must be sharpened and stropped primarily on the front side of the blade, which has the very large factory bevel (Bevel A. See page 9, Figure 9b for further details).

The Model 315XV is equipped with a manually actuated diamond dressing pad that can be used, if necessary, to clean any accumulated food or sharpening debris from the ultrafine abrasive surface of the Stage 2 polishing/stropping disks. We strongly urge that you always thoroughly clean your knives before sharpening them. Unless you are a heavy user, you should go months or even a year or more before you need to dress the stropping/polishing disks. Only if you sense a distinct decrease in polishing efficiency in Stage 3 is there any need to use this convenient feature described on page 10.

**Never operate the sharpener from the back side.** Use just enough downward pressure when sharpening to ensure uniform and consistent contact of the blade with the abrasive disks on each stroke. Additional pressure is unnecessary and will not speed the sharpening process. Avoid excessive cutting into the plastic enclosure. Accidental cutting into the enclosure however will not functionally impact operations of the sharpener or damage the edge.

Try a practice pull through the sharpener before you turn on the power. Slip the knife blade smoothly into the left slot between the left angle guide of Stage 1 and the plastic knife holding spring. Do not twist the knife. Move the blade down in the slot until you feel it contact the diamond disk. Pull it towards you lifting the handle slightly as you approach the tip. This will give you a feel for the spring tension. Remove the knife and read the instructions specific to the type of knife you will be sharpening.

**SHARPENING THE CONTEMPORARY EURO/AMERICAN AND ASIAN STYLE KNIFE**

Before sharpening your knife, refer to Description of Contemporary 15° and Traditional 20° blades, pages 9 and 10, to confirm which type of knife you have and that you do in fact have a double faceted blade. All double faceted Asian blades and newer Euro/American blades are defined as contemporary blades. Most of the popular Asian blades such as the Santoku currently sold in the United States are the double faceted contemporary design.
If your double faceted knife is very thin at the edge and it is relatively new it probably will not need to be pre-honed in Stage 1 before polishing. Instead, start in Stage 2, which will polish the edge with ultrafine abrasives. Turn on the power switch and sharpen in Stage 2 as follows:

**START BY POLISHING THE EDGE IN STAGE 2**

a. Pull the blade through the left slot of Stage 2 (see Figure 2) and then through the right slot of Stage 2. Make 2 pairs of pulls, alternating each pull in the left and right slots of Stage 2. You should take about 3 to 4 seconds for each pull for a 5 inch (12 cm) long blade.
b. Then make 3 pairs of alternating (left and right slot) faster pulls (about 1 second per pull for a 5 inch [12 cm] blade) in Stage 2.

If the knife is not yet shaving sharp, repeat steps a and b above. Again test the blade for sharpness. In the event the knife still is not sufficiently sharp it will be faster to first pre-hone it in Stage 1 as follows:

**USE HONING STAGE 1**

a. Pull the blade alternately through the left and right slots (see Figure 3) of Stage 1, making about 3 pair of alternating pulls, taking about 3 seconds for each pull. Check the edge carefully to confirm the presence of a burr (see Figure 4), which will be quite small since the Stage 1 abrasive is quite fine. To check for the burr, move your forefinger carefully across the edge as shown in Figure 4. (Do not move your finger along the edge—to avoid cutting your finger). If the last pull was in the right slot, the burr would appear only on the right side of the blade (as you normally hold it) and vice versa. The burr, when present, feels like a rough and bent extension of the edge; the opposite side of the edge feels very smooth by comparison. When a burr exists along the entire edge, proceed to strop and polish again in Stage 2.
b. If there is no burr continue honing in Stage 1, alternating left and right slots until a light burr develops. When a burr is present along the entire blade length proceed as below to polish again in Stage 2.
RETURN TO STROPPING/PolISHING STAGE 2

a. Make 3 pairs of pulls, alternating pulls in the left and right slots, taking 3 to 4 seconds per pull for a 5” blade. Make 3 pairs of faster pulls, alternating left and right slots, taking 1 second per pull. Test the blade for sharpness.

b. If the edge is not shaving sharp, make a few more pairs of fast pulls in Stage 2 until the edge is shaving sharp.

RE-SHARPENING THE CONTEMPORARY EURO/AMERICAN AND ASIAN STYLE BLADE

Re-sharpen by following the procedure above starting with Polishing in Stage 2 as described. Depending on its use, you should be able to re-sharpen to a razor edge 5 or more times using only Stage 2 before finding it necessary to again hone in Stage 1. Hone in Stage 1 only when you find it is taking too long in Stage 2 to bring the edge to razor sharpness. In that event, follow the sharpening sequence, using Stage 1 and 2, described above.

SHARPENING THE TRADITIONAL (SINGLE BEVEL) JAPANESE BLADE

Traditional Japanese knives are single sided and have a large factory bevel (Bevel A, page 9, Figure 9b) on one side of the blade. There are a large number of manufacturers of knives of this type which are used widely to prepare sashimi. The factory bevel (Bevel A) is commonly ground at about 10 degrees, but there are exceptions and that angle is not standardized at the factories. Designs of the traditional Japanese knives and the detailed structure of the cutting edges likewise varies widely from one manufacturer to the next, however there are some similarities. The cutting edge consists of a small primary facet on the front face of the blade and a much smaller secondary microfacet along the back face. Commonly the back side microfacet (Figure 10) can be easily seen only with a hand magnifier. The back face is ground flat at the factory or more commonly it is slightly hollow ground to ensure that an effective microfacet can be formed there as part of the cutting edge. Because of the lack of standardization, commonly the manual approach used to sharpen these knives has proven difficult, laborious and time consuming. The Chef’sChoice® Model 315XV Sharpener is designed to sharpen all traditional Asian blades and to create a factory-like edge.

Before you start to sharpen a traditional blade, examine it carefully in order to confirm that you have the traditional single bevel blade and to determine whether you have a right or left
handed type as described on page 9, Figure 9b. It is essential that you follow carefully the sharpening procedure and sequence as described below in order to achieve the optimum edge on your traditional blade.

**Note:** Do not attempt to sharpen any traditional blade thicker than \( \frac{1}{8} \) inch (3 mm) in the Model 315XV sharpener. (Control of the sharpening angle becomes difficult for such thick blades.) Again confirm which side of the blade has the large factory Bevel A. Hold the blade in your hand (as if you are cutting) and if the large factory bevel is on the right side of the blade, the blade is right handed. For the right handed blades start sharpening in the left slot of Polishing Stage 2 so that only the beveled side (right side) of the edge will contact the polishing wheel.

**STEP 1 - START IN POLISHING STAGE 2 (RIGHT HANDED BLADES)**

Pull the full length of the blade through the left slot of Stage 2 (Figure 5) about ten (10) times (take about 3 seconds for each pull of a 5 inch [12 cm] blade and proportionally longer for longer blades). Feel for a burr on back side of blade edge as shown in Figure 4. (The burr will be extremely small). If there is no burr, make ten (10) additional slow pulls through the left slot. If no burr is formed after these pulls proceed to Step 2; otherwise omit Step 2 and go to Step 3.

**STEP 2 – USING THE HONING STAGE 1 (RIGHT HANDED BLADES)**

If you were unable to develop a burr in Stage 2 as described in Step 1 you will need to hone the edge in Stage 1 as follows: Since your traditional blade is right handed you must hone only in the left slot of Stage 1 (see Figure 6). The number of pulls that you need to make depends on how dull your blade is. Duller blades will require more pulls.

Make ten (10) pulls in the left slot of Stage 1 and then check for a burr along the back side of the blade edge. (The burr created in Stage 1 will be small but easily felt as shown in Figure 4). Make certain the burr is present along the entire length of the edge. If there is no burr or only a partial burr, continue to make additional pulls all in the left slot about five (5) at a time and check for a burr after each group of five (5) pulls. Probably 20-30 total pulls in the left slot will be adequate to raise a burr; it is unlikely to take more than 50 left slot pulls to create the burr. When a burr is confirmed, proceed to Step 3.

**STEP 3 – FORMING THE FINAL EDGE (RIGHT HANDED BLADE)**

a. Make five (5) regular pulls 3-4 seconds only in the left slot of Stage 2 and then proceed to step b. below to remove any burr.

b. Make one (1) regular pull in right slot of Stage 2 along the back side of the edge.

c. Make several pairs of fast pulls (one [1] second each) in Stage 2 alternating in the left and right slots of Stage 2. The fast pulls with ultrafine abrasives polish the facet on the front side of the blade as well as the rear microfacet to create an extremely sharp edge.

d. Check the blade carefully for sharpness using a thin sheet of paper. The blade should be razor sharp. If not razor sharp repeat step 3c. above and retest the blade for sharpness.

**RESHARPENING THE TRADITIONAL JAPANESE BLADE (RIGHT HANDED)**

In general you will be able to resharpen quickly by making 3 or 4 pairs of fast pulls alternating in the left and right slots of Stage 2. Repeat this if necessary to obtain a razor sharp edge.

When resharpening only in Stage 2 becomes too slow to develop a sharp edge or if the edge has been damaged you will need to re-hone the edge in Stage 1. Use only the left slot of Stage 1. Generally you will find that about five (5) re-honing pulls will be sufficient in Stage 1 to speed the resharpening in Stage 2. After re-honing return to Stage 2 and repeat Step 3 above.
SHARPENING LEFT HANDED TRADITIONAL BLADES

The procedure you must use with left handed blades is similar to that procedure for right handed blades as detailed above – Except, in all cases the slots you must use are reversed. Where the sharpening procedure for right handed blades calls for use of the left slot, you must use the right slot when sharpening a left-handed blade. Likewise use the left slot where the right handed instructions call for using the right slot.

HOW TO CREATE THE 15° EDGE ON TRADITIONAL 20° EURO/AMERICAN BLADES

If you have a traditional 20° Euro/American brand knife, it is relatively simple to convert its edge to the 15° angle double faceted edge. Remember that the advantage of the 15° edge is due to the thinner cross-section of the typical contemporary 15° blade where the edge facets are formed, and the narrower angle (about 15°) of each edge facet. If the traditional 20° Euro/American style blade is thick and its thickness at the top of its edge facets is already large, some of the advantage of the 15° edge will not be realized. Consequently, the blade must be very thin where the facets are honed in order to realize the advantage of the 15° edge. You might consider this change first for one of your thinnest blades such as a thin utility blade or perhaps a thin paring knife.

To convert from the 20° Edge to the 15° Edge, start with the Honing Stage 1 as follows:

START IN HONING STAGE 1
Pull the full length of blade thru the left (Figure 7) and right slots of Stage 1, using the left and right slots on alternate pulls. (Take about 3-4 seconds for each pull on a 5” long blade). It will take about 20 pair of pulls to fully re-angle the edge of a thin blade. Thicker blades will generally require more pulls. Check for a burr (see Figure 4) and continue to make more pulls as necessary to create a small burr along the full length of the blade. Then proceed to Stage 2 as follows.

STROPPING AND POLISHING IN STAGE 2
a. Make about 4 to 5 pairs of pulls through Stage 2 (Figure 8), alternating each pull in the left and right slots (about 3 seconds for each pull on a 5 inch [12 cm] long blade.)
b. Then make 4 pairs of fast pulls alternating through the left and right slots. (1 second for each pull for a 5 inch [12 cm] blade.)

Figure 7. European blade in left slot Stage 1.  Figure 8. European blade in right slot Stage 2.
c. Check the blade for sharpness. For a sharper edge make a few more pairs of fast pulls as in step b and check for sharpness.

**RE-SHARPENING THE TRADITIONAL 20° EURO/AMERICAN BLADE**

Re-sharpen in Polishing Stage 2 as described above. You will be able to re-sharpen repetitively about 5-10 times using only Stage 2 as described above. After resharpening a number of times, you may want to hone in Stage 1 to speed the re-sharpening process. In Stage 1 make about 5 pairs of alternating slow pulls and check for a burr. When a burr exists, proceed to polish in Stage 2 as described above.

**DESCRIPTION OF CONTEMPORARY 15° AND TRADITIONAL 20° BLADES**

In general you will find that traditional 20° Euro/American blades have a sturdier cross-section than the more delicate and thinner contemporary 15° Euro/American Asian style blades. The variation among commercially available knives of any type is great and in fact some older traditional 20° Euro/American blades are very thin and certain Asian knives have a thicker cross-section designed for heavier work.

**1. CONTEMPORARY 15° EURO/AMERICAN AND ASIAN STYLE KNIVES, Fig. 9a**

In the last few years, most of the popular European and American brands have adopted the 15° edge angle, along with a thinner blade cross section, particularly adjacent to the edge. The more popular Asian style blades; the thin, light weight Santoku and Nakiri are generally double faceted (sharpened on both faces of the blade) as shown in Fig. 9a. There are other, somewhat heavier, double-faceted Asian knives, the Deba and Gyutou, popular in Asia, which are used for chopping hard vegetables, for tailing and filleting fish and for meats. These are basically Asian chefs knives designed for heavier duty work. The Chinese cleaver is included in this class.

**2. TRADITIONAL SINGLE BEVEL JAPANESE KNIVES, Fig. 9b**

The traditional Japanese knife is single beveled and has a wide factory bevel along one face of the blade above the small edge facet. These are sold as either right handed or left handed versions as shown in Fig. 9b. The wide factory bevel A is ground, commonly at about 10 degrees. The most popular example of this type blade is the sashimi knife also called Yanagi and Takohiki, designed as shown to the right. This lengthy, slicing blade is ideal for preparing very thin slices of raw tuna or salmon. The back of this blade is commonly hollow ground. A small single cutting facet of about 15° to 20° is created along the front of the edge of the sashimi blade as shown in Figure 9b and 10 in order to establish the geometry of the cutting edge. An even smaller cutting micro-facet (barely visible to the unaided eye) is customarily created on the back face of the blade to enhance the sharpness of the finished edge. Figure 10 shows a greatly enlarged cross-section view of a typical factory edge on the traditional single-bevel Japanese knife. The large factory bevel A serves to deflect the food slice away from the blade as it is cut.
3. TRADITIONAL 20° EUROPEAN/AMERICAN BLADES, Fig. 9c
While most of the Euro/American knives (shown on the right) have a thicker cross-section designed for heavier work, the range of blade thickness in these familiar blades is great and certain of these knives, such as the conventional paring, fillet and utility blades, have a relatively thin cross-section well suited to their intended application. Euro/American blades are universally double beveled (sharpened on both sides of the blade.)

DRESSING OF STROPPING/POLISHING DISK — STAGE 2
The Model 315XV is equipped with a built-in accessory to manually clean/dress the stropping/polishing disks in Stage 2. In the event these disks become glazed with grease, food or sharpening debris, they can be cleaned and reshaped by actuating the manual lever on the rear of the sharpener. This lever is located within a recess as shown in Figure 11 on the lower left corner as you face the rear of the sharpener. To actuate the cleaning/dressing tool, make sure the power is on and simply press the small lever in the recess to the right, hold about 3-4 seconds and then press to the left and repeat for 3-4 seconds. When the lever is moved in one direction, the dressing tool cleans and reshapes the active surface of one stropping/polishing disk. By next moving in the opposite direction you clean the other disk.

Use this clean/dress accessory only if the Stage 2 white disks are seriously darkened and when Stage 2 no longer appears to be stropping/polishing well. Using this tool removes material from the surface of the Stage 2 disks and hence, if used excessively, it will unnecessarily remove too much of the abrasive surface — wearing the disks out prematurely. If that should occur, factory replacement of the disks will become necessary. If you clean your knives regularly before sharpening you should need to clean or dress the Stage 2 disks only about once a year or less frequently.
1. Always clean all food, fat and foreign materials from knife before sharpening or resharpening. If soiled, carefully wash the blade before sharpening.

2. Use only light downward pressure when sharpening – just enough to establish secure contact with the abrasive disk.

3. Always pull the blades at the recommended speed and at a constant rate over length of blade. Never interrupt or stop the motion of the blade when in contact with abrasive disks.

4. Carefully follow the detailed procedures for each type blade for best results and to extend the useful life of your knives. The sharpening sequence is especially important with the single sided traditional blades.

5. The edge of the knife blade, while sharpening, should be held in a level position relative to the top of the counter or table. To sharpen the blade near the tip of a curved blade, lift the handle up slightly as you approach the tip of the blade but just enough to maintain audible contact with the honing or stropping disk as each section along the curved length of the edge is being sharpened.

6. To increase your proficiency with the Chef'sChoice® Model 315XV, learn how to detect a burr along the edge (as described on page 5). While you might be able to sharpen well without using this technique, it is the best and fastest way to determine when you have sharpened sufficiently in the preliminary steps. This will help you avoid oversharpening and ensure incredibly sharp edges every time. Cutting a tomato or a piece of paper is a convenient method of checking for finished blade sharpness.

7. Some contemporary Asian knives are dimpled and some contemporary and traditional Asian blades are made of layered Damascus steel. All of these should be sharpened accordingly to these instructions depending on whether the knife style is contemporary (two facets) or single sided traditional.

8. If your knife has a significant choil you may find it helpful to place your index finger within or just behind the choil (See Figures 12 and 13) as you insert the blade in the sharpener. Your finger can act as a “stop” and prevent you from inserting the blade so far that the choil area will catch on the front stop-bar of the sharpener as you begin to withdraw the blade. A little practice will help you perfect this technique. As you insert the blade let your finger slide down the front of the sharpener.

Figure 12. If your blade has a significant choil it may be helpful to place your finger behind it as shown when sharpening.

Figure 13. Insert your index finger as shown behind the choil as the knife is inserted into the sharpening slot (see Suggestion 8).
NORMAL MAINTENANCE

No lubrication is required for any moving parts, motor, bearings or sharpening surfaces. There is no need for water on abrasives. The exterior of the sharpener may be cleaned by carefully wiping with a soft damp cloth. Do not use detergents or abrasives.

Once a year or so as needed you should remove metal dust that will accumulate inside the sharpener from repeated sharpenings. Remove the small rectangular clean-out cover (Figure 14) that covers an opening on the underside of the sharpener. You will find metal particles adhered to a magnet attached to the inside of that cover. Simply rub off or brush off accumulated filings from the magnet with a paper towel or tooth brush and reinsert the cover in the opening. If larger amounts of metal dust have been created you can shake out any remaining dust through the bottom opening when the cover is removed. After cleaning, replace the cover securely with its magnet in place.

SERVICE

In the event post-warranty service is needed, return your sharpener to the EdgeCraft factory where the cost of repair can be estimated before the repair is undertaken. Outside the USA, contact your retailer or national distributor.

Please include your return address, daytime telephone number and a brief description of the problem or damage on a separate sheet inside the box. Retain a shipping receipt as evidence of shipment and as your protection against loss in shipment.

Send your sharpener (insured and postage paid) to:

EdgeCraft Corporation
825 Southwood Road
Avondale, PA 19311
Customer Service (800) 342-3255 or (610) 268-0500

Assembled in the U.S.A.
www.chefschoice.com

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