

Vision Box™

User's Manual

Model Number: KZV-1000



Important Information

Read this manual first before attempting to operate the Vision Box.

Important information for future reference

Product Model Number: KZV-1000

Product Serial Number: _____

Date of Initial Use: _____

Customer Service Information:

For Customer and/or Technical Support please contact us at:

Phone: 1-800-896-7890
8am – 6pm EST Monday – Friday

Mailing Address: Hy-Ko Products Company
60 Meadow Lane
Northfield, OH 44067-1415

Fax: 330-467-7442

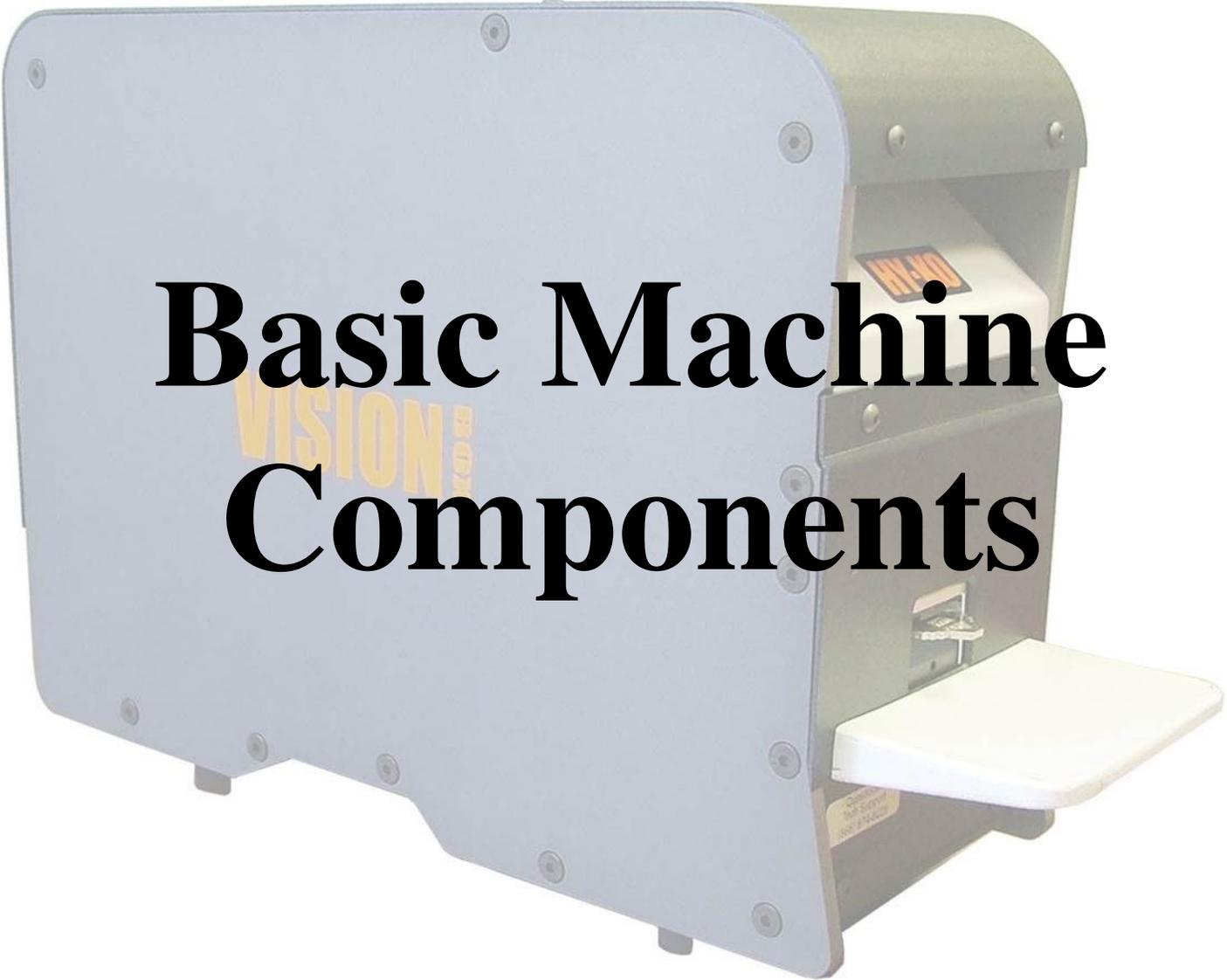
E-Mail: cservice@hy-ko.com

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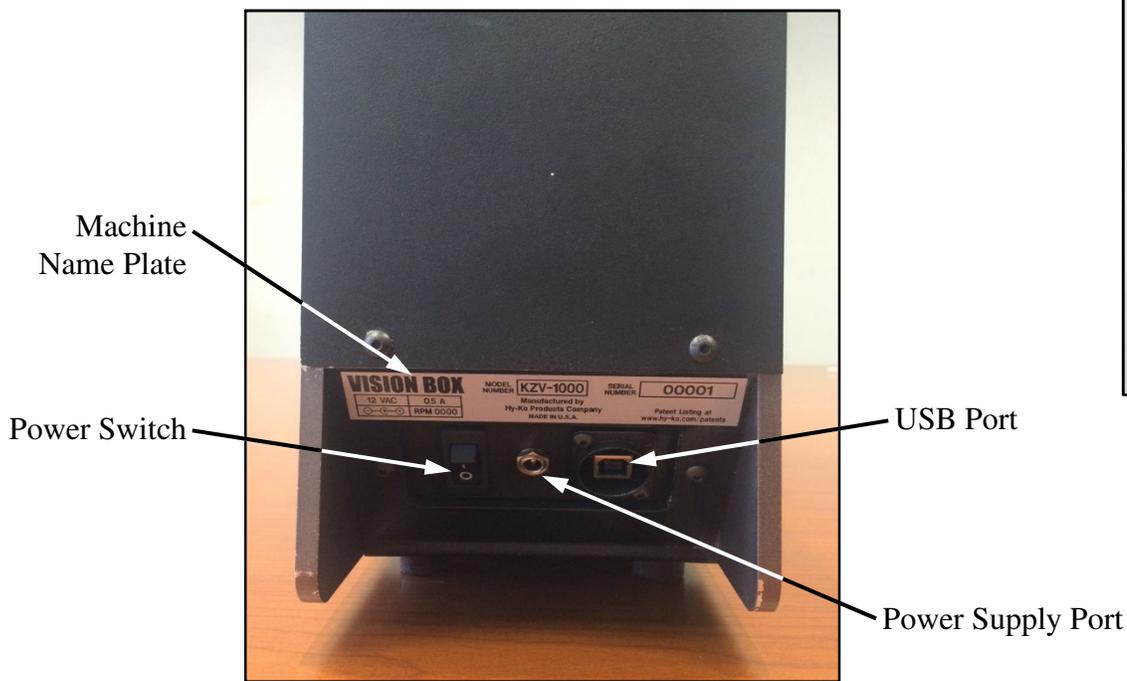


Basic Machine Components

Hy-Ko Products Company

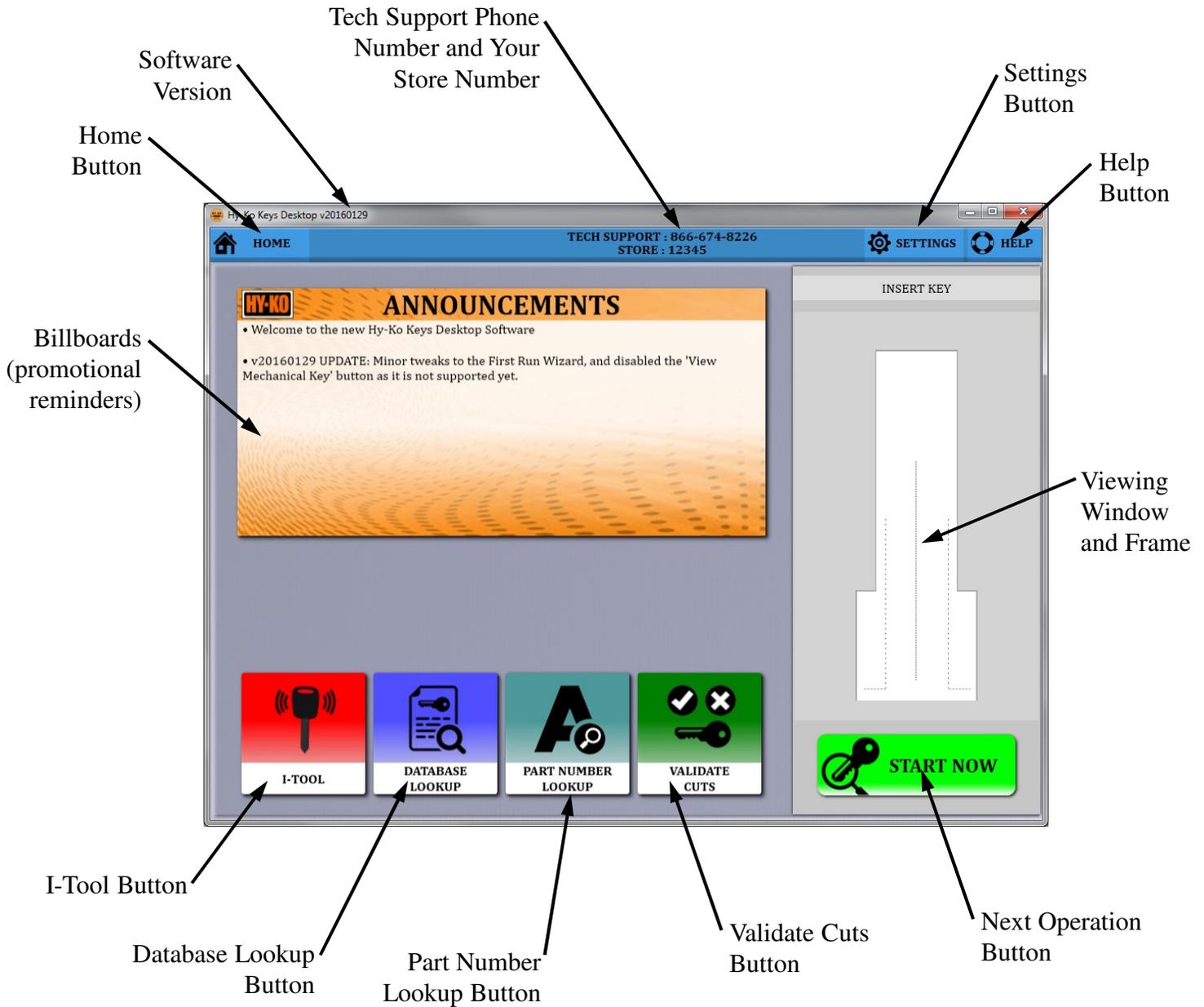
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Machine Component Locations



Camera Calibration Tool

Main Screen







Initial Setup

Initial Setup

Downloading and Installing the Software

- You will need access to the internet and **administrative rights** on the computer you are using to be able to download and run the installer to load the Vision Box software.
- **DO NOT connect the Vision Box to the computer prior to downloading and installing the software.**
- Open an internet window and follow the instructions below to run the installer.

•Go to **hykokeys.com**, log in to your C3 account, select **SOFTWARE UPDATES**, look for the **Vision Box**, and select **Download the Software**.



- Read and accept all of the installer default settings.
- Trust/Continue Anyway if presented with any Windows security warnings.
- Hit Finish to complete the installer.
- Plug the Vision Box into a 110V outlet and turn on the power switch on the back of the machine.
- Connect the Vision Box to the computer using the supplied USB cable.
- Wait for the new camera hardware to be found and automatically installed.
- Launch the new software.

Initial Setup

Opening the Software

Make sure the Vision Box is connected to the computer prior to starting the initial setup.

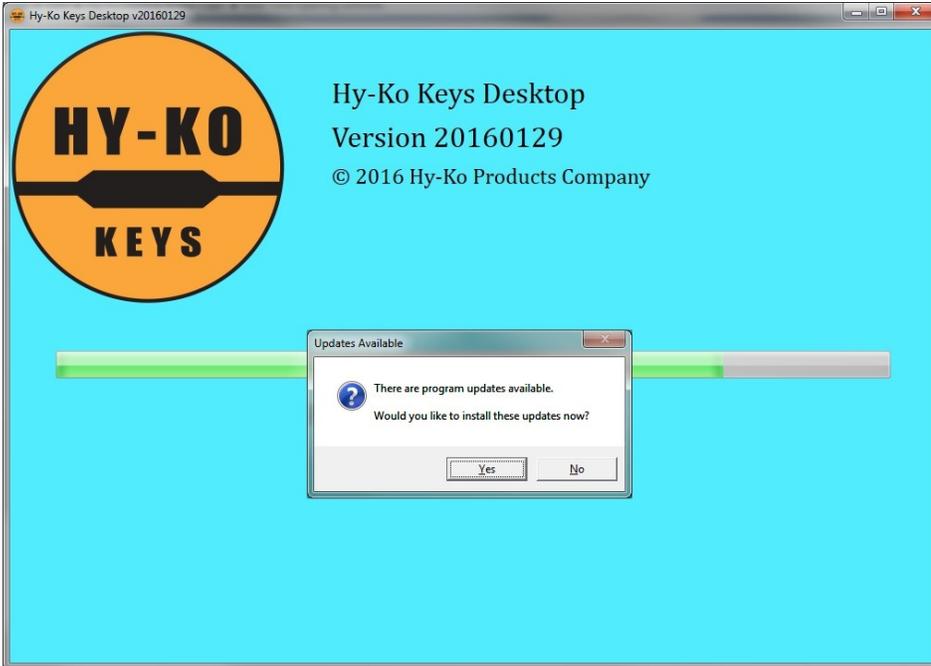


fig. 1

- When opening the software for the first time you may be prompted that there are updates available. Click 'Yes' to download these updates (see fig. 1).

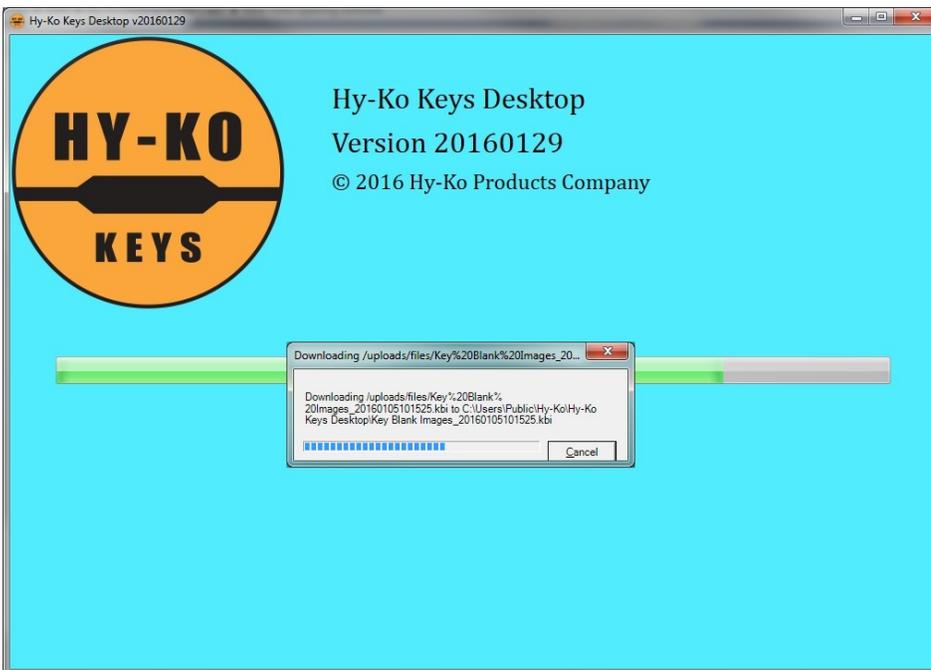


fig. 2



NOTE:

Be patient as the downloading process can take a few minutes. These updates are to make sure you have the latest files for the software.

Initial Setup

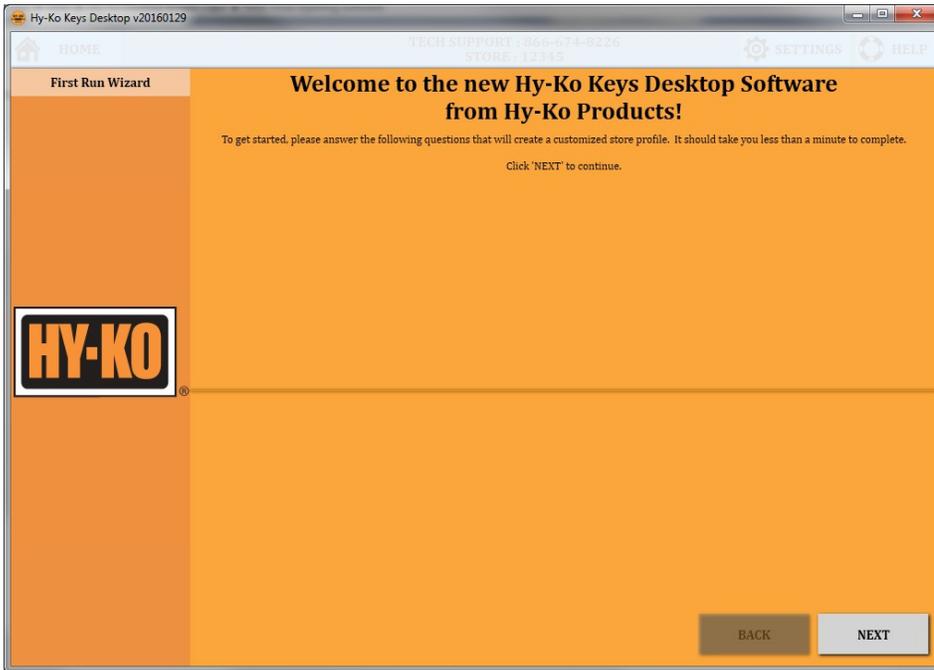


fig. 3

- When the updates are complete a **'First Run Wizard'** will open. Click **'NEXT'** (see fig. 3).

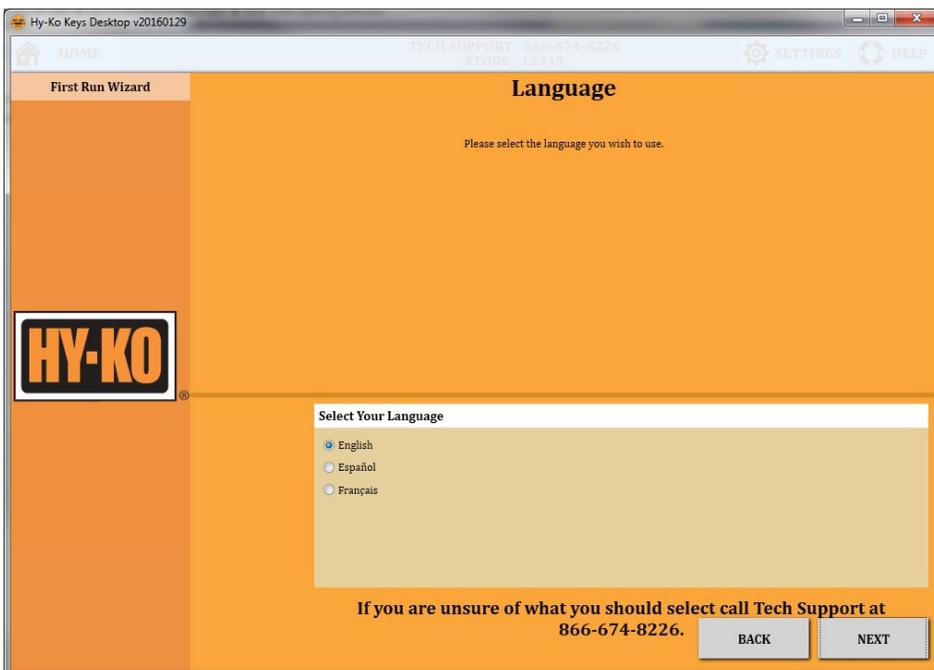


fig. 4

- Choose your language then click **'NEXT'** (see fig. 4).

Initial Setup

Hy-Ko Keys Desktop v20160129

HOME TECH SUPPORT : 866-674-8226 STORE : 12345 SETTINGS HELP

First Run Wizard

Store Registration

Please enter your store number used to access <http://www.hykokeys.com>



Enter Your Store Information

Store Number 12345

If you are unsure of what you should select call Tech Support at 866-674-8226.

BACK NEXT

fig. 5

- Enter your store number as it was registered with Hy-Ko Products Company then click **'NEXT'** (see fig. 5).



NOTE:

If you are not sure as to the proper store number format, call the Tech Support number shown at the bottom of the screen (see fig. 5).

Hy-Ko Keys Desktop v20160129

HOME TECH SUPPORT : 866-674-8226 STORE : 12345 SETTINGS HELP

First Run Wizard

V-Tool(VATS) Selection

The V-Tool is a handheld device that reads VATS ChipKey values for accurate new ChipKey selection.

If your store has a V-Tool then select 'Yes'.



Does your store have a V-Tool(VATS)?

YES

NO

If you are unsure of what you should select call Tech Support at 866-674-8226.

BACK NEXT

fig. 6

- Choose whether or not your store makes VATS keys then click **'NEXT'** (see fig. 6).

Initial Setup

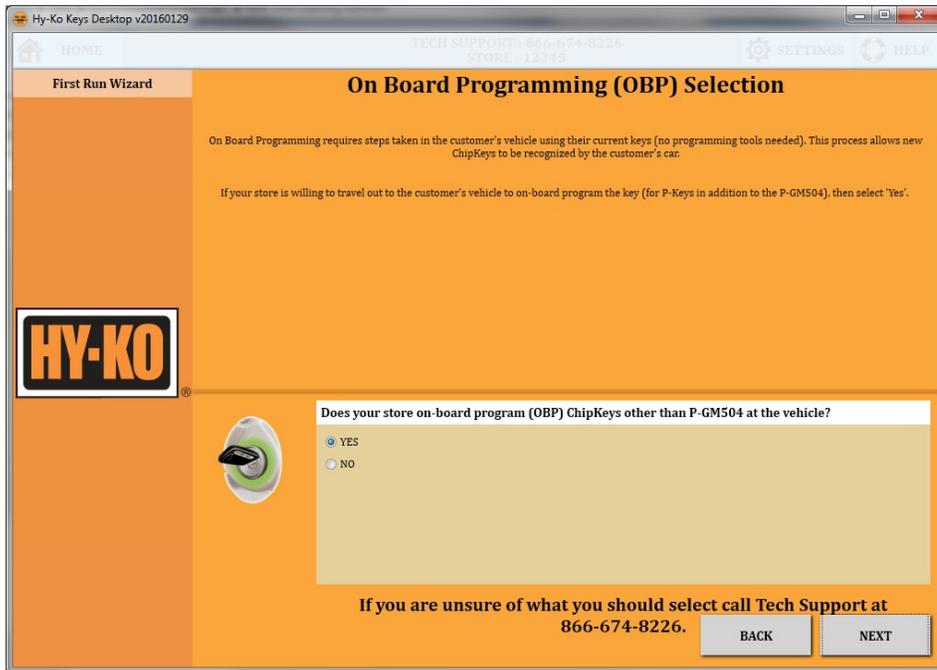


fig. 7

- Choose whether or not you your store on-board programs chipkeys other than the P-GM504 then click **'NEXT'** (see fig. 7).

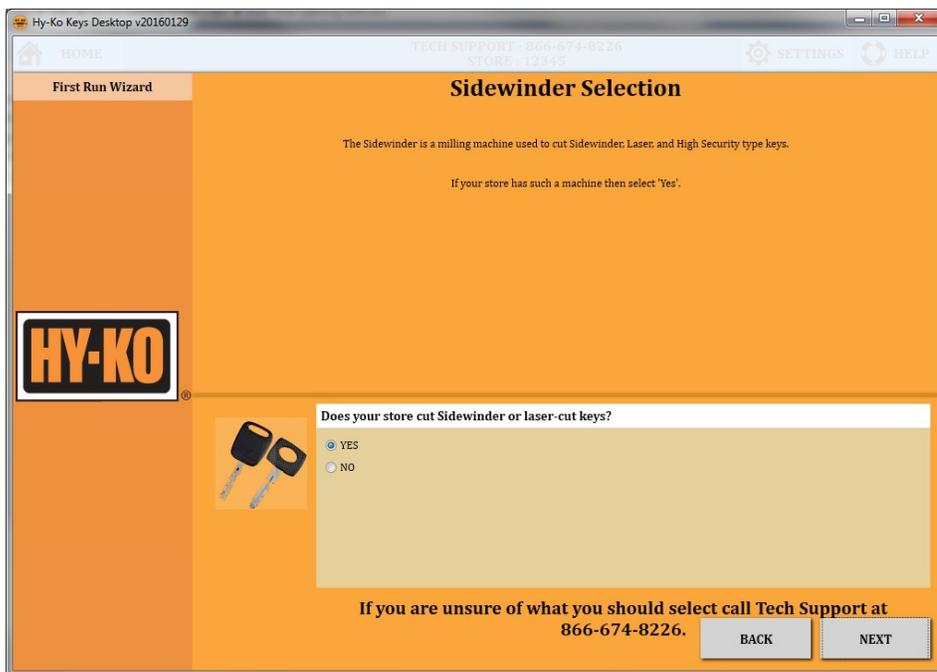


fig. 8

- Choose whether or not your store cuts sidewinder keys then click **'NEXT'** (see fig. 8).

Initial Setup

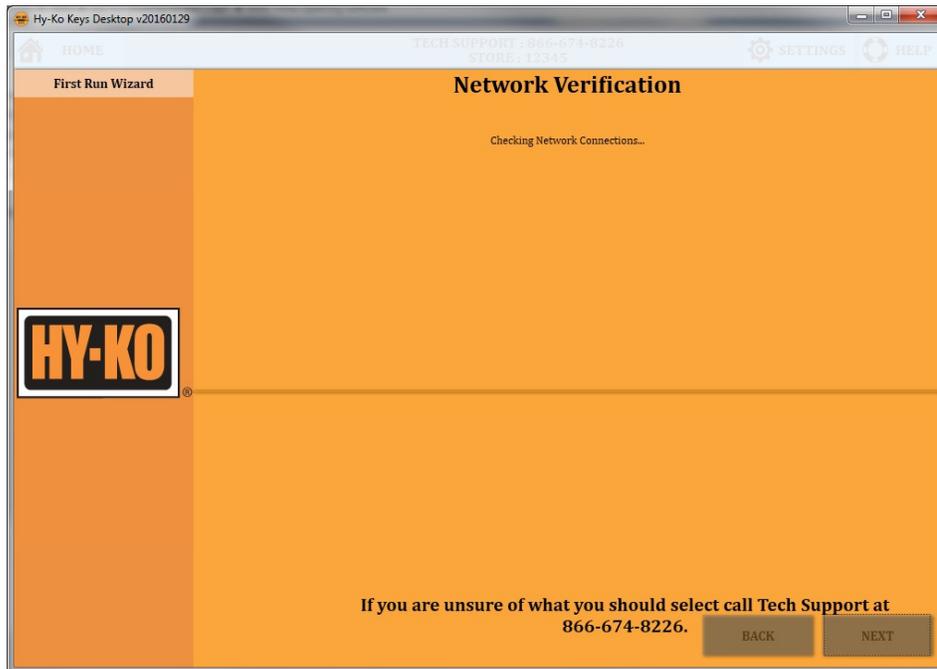


fig. 9

- Once the questions have been answered the software will check the computer's network connections (see fig. 9).

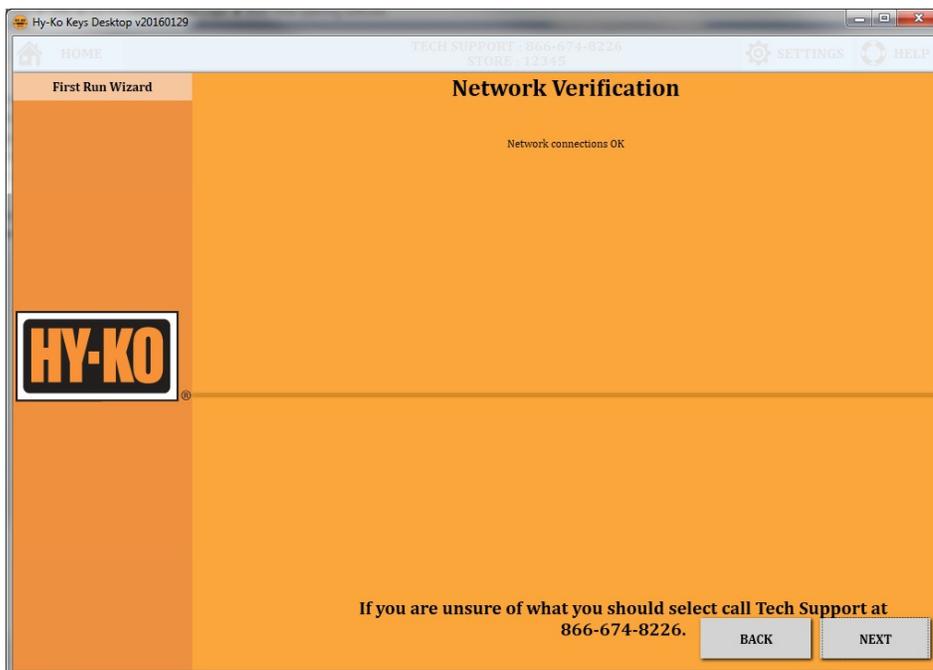


fig. 10

- Once the network connections have been verified click **'NEXT'** (see fig. 10).

Initial Setup

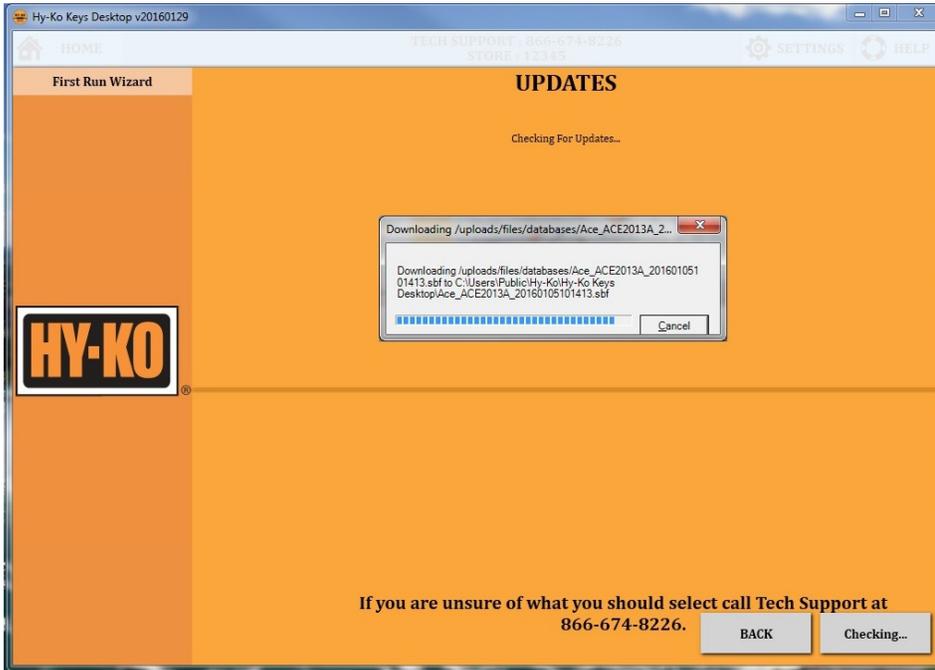


fig. 11

- More updates will begin to download. Be patient as the downloading process can take a few minutes. These updates are to make sure you have the latest vehicle applications for the database (see fig. 11).

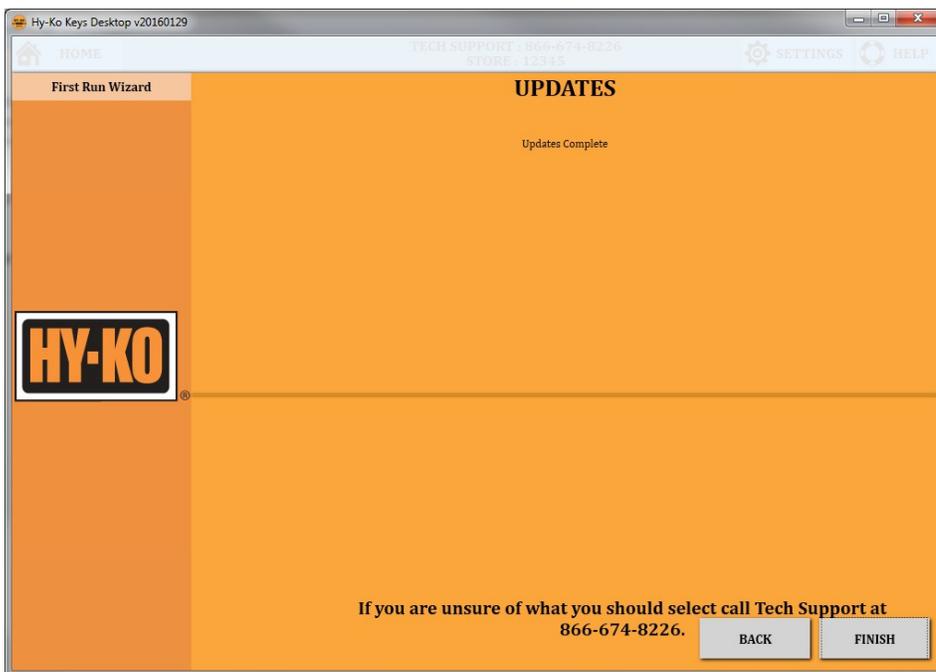


fig. 12

- Once all the files have been downloaded click '**FINISH**' (see fig. 12).

Calibration

After running through the 'First Run Wizard' you will be taken directly to the calibration screen (see fig. 13).

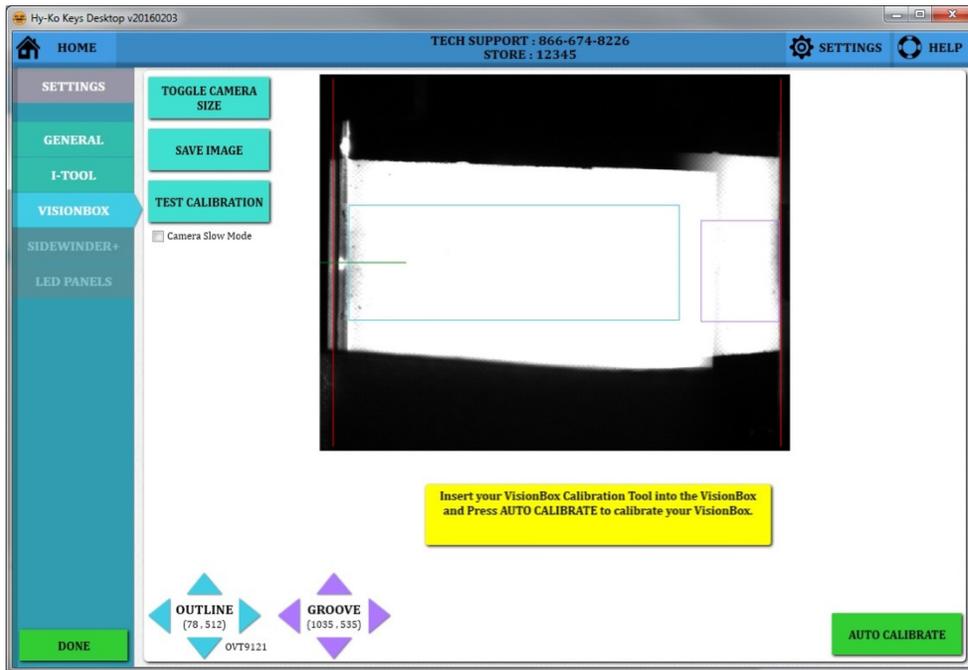


fig. 13

- You will need the Camera Calibration Tool that came with the machine (see fig. 14).



fig. 14



- Insert the Camera Calibration Tool into the Vision Box with the text on the head of the tool facing up (see fig. 15).



fig. 15

fig. 16



NOTE:

You want to insert the tool into the Vision Box as straight and centered as possible (see fig. 16).

Calibration

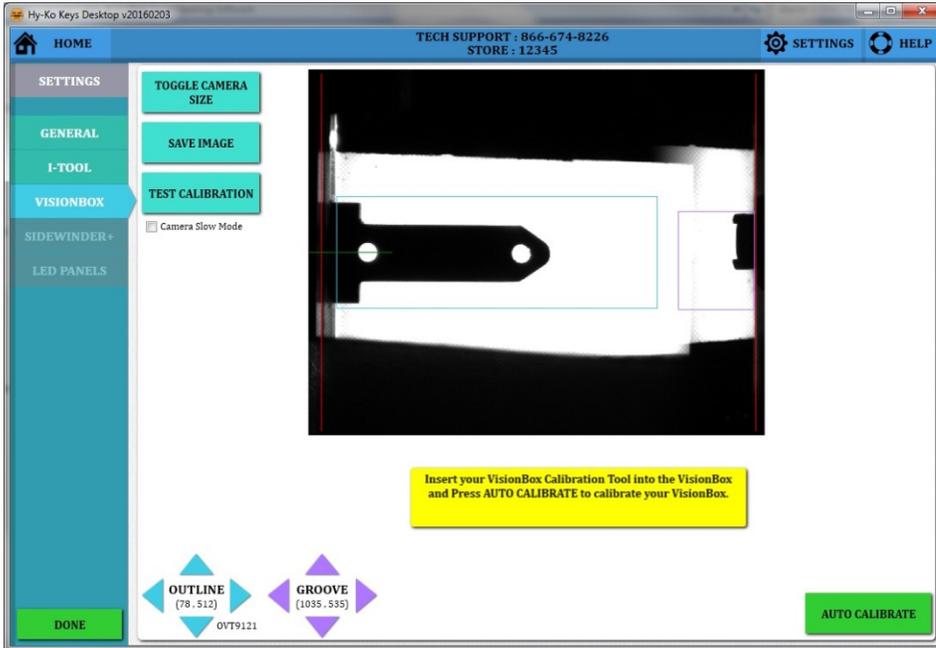


fig. 17

- Once the tool is in the Vision Box and can be seen on the screen click **'AUTO CALIBRATE'** (see fig. 17).

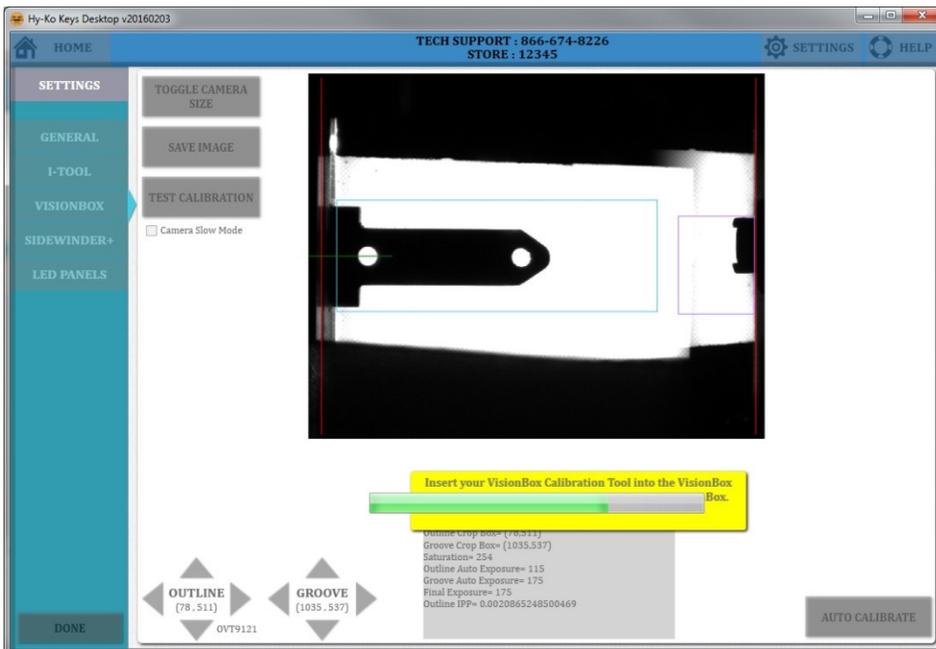


fig. 18

- The Vision Box will begin by scanning the Camera Calibration Tool (see fig. 18).

Calibration

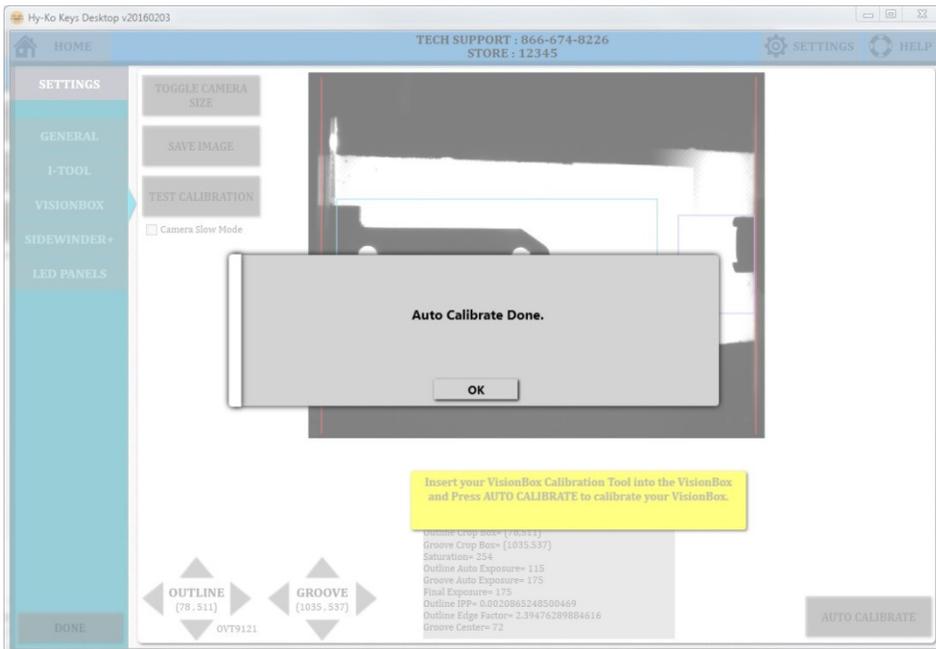


fig. 19

- Once the scanning has been completed click 'OK' (see fig. 19).

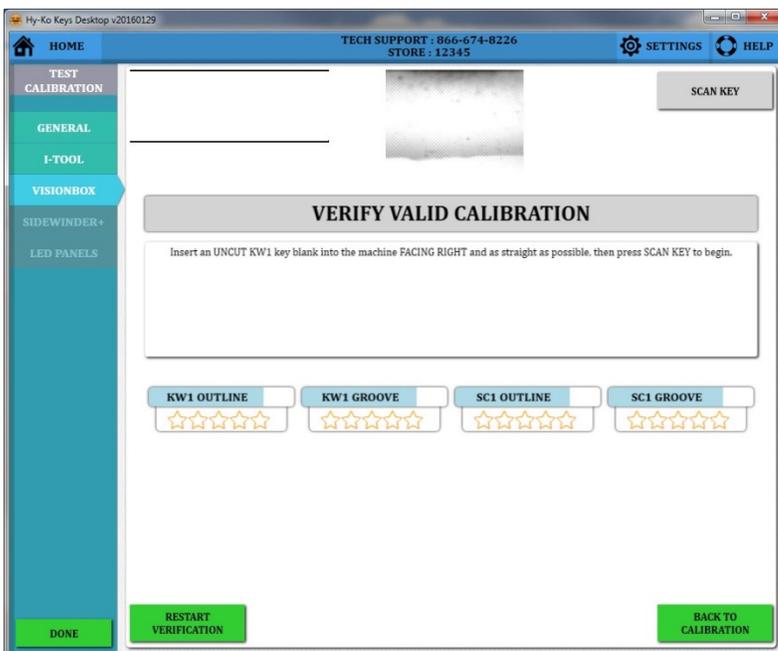


fig. 20

- Remove the Camera Calibration Tool from the Vision Box (see fig. 20).



NOTE:

For the next step you will need an uncut KW1 key blank (see fig. 21).



fig. 21

Calibration



fig. 22

- Insert an UNCUT KW1 key blank into the Vision Box (see fig. 22) so that the edge that would get cut is facing to the right then click 'SCAN KEY' (see fig. 24).



NOTE:

You want to insert the key as far into the Vision Box as you can and also as straight and centered as possible.



Edge that would be cut

fig. 23

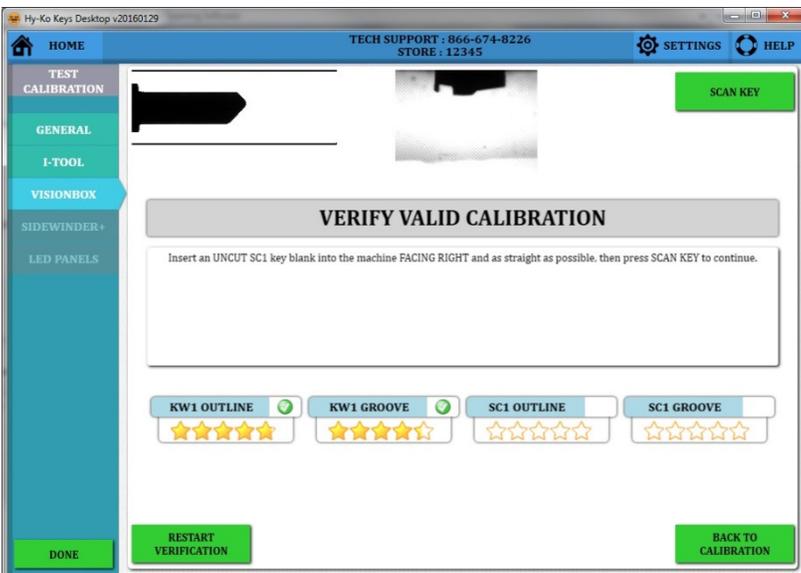


fig. 24

- The Vision Box will scan the uncut KW1 and then provide results based on a 5-star rating (see fig. 24).
- Once the key has been rated remove the KW1 from the Vision Box.



NOTE:

For the next step you will need an uncut SC1 key blank (see fig. 25).



fig. 25

Calibration



fig. 26

- Insert an UN CUT SC1 key blank into the Vision Box (see fig. 26) so that the edge that would get cut is facing to the right then click ‘SCAN KEY’ (see fig. 28).



NOTE:

You want to insert the key as far into the Vision Box as you can and also as straight and centered as possible.



Edge that would be cut

fig. 27

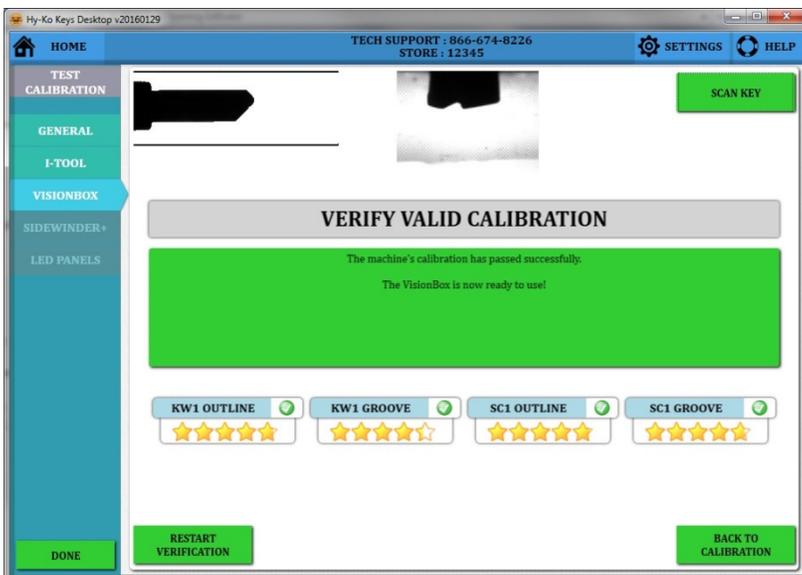


fig. 28

- The Vision Box will scan the uncut SC1 and then provide results based on a 5-star rating (see fig. 28).
- Once the key has been rated remove the SC1 from the Vision Box.
- With the machine fully calibrated, click the ‘DONE’ button to go to the home screen (see fig. 28).
- You can select ‘BACK TO CALIBRATION’ or ‘RESTART VERIFICATION’ if poor ratings were received.





Scanning House & Padlock Keys

Hy-Ko Products Company

Phone: (800) 896-7890 Fax: (330) 467-7442 E-Mail: cservice@hy-ko.com

Scanning House & Padlock Keys

Scanning Single-Sided House & Padlock Keys

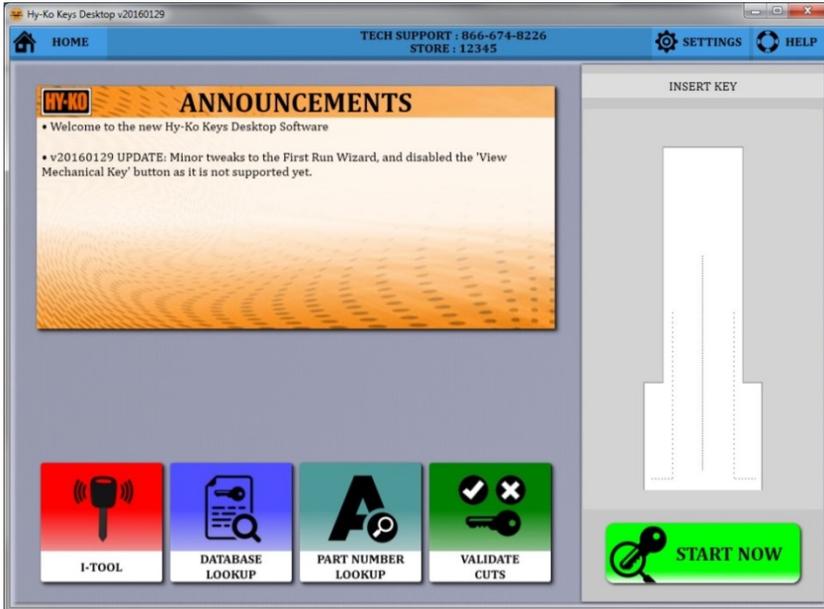


fig. 29

- To scan a key you want to start on the Home Screen. If the software is not on the Home Screen click **'HOME'** in the upper left corner of the screen (see fig. 29).



fig. 30

- Insert the key into the Vision Box (see fig. 31). You will see the image of the key blade in the scanning window on the right side of the screen (see fig. 30).



fig. 31



NOTE:

You want to insert the key into the Vision Box as straight as possible so the image of the blade doesn't touch the sides of the scanning window. When inserted correctly, the frame of the scanning window will be green. It does not matter which way you insert the key. The cuts can be to the right or the left.

Scanning House & Padlock Keys



fig. 32

- If the key is inserted into the Vision Box and it is too crooked to be seen within the scanning window, the frame of the scanning window will turn red. Move the head of the key to straighten it until the frame turns green (see fig. 32).
- Once the key is in the correct orientation click the **'START NOW'** button at the bottom of the scanning window.

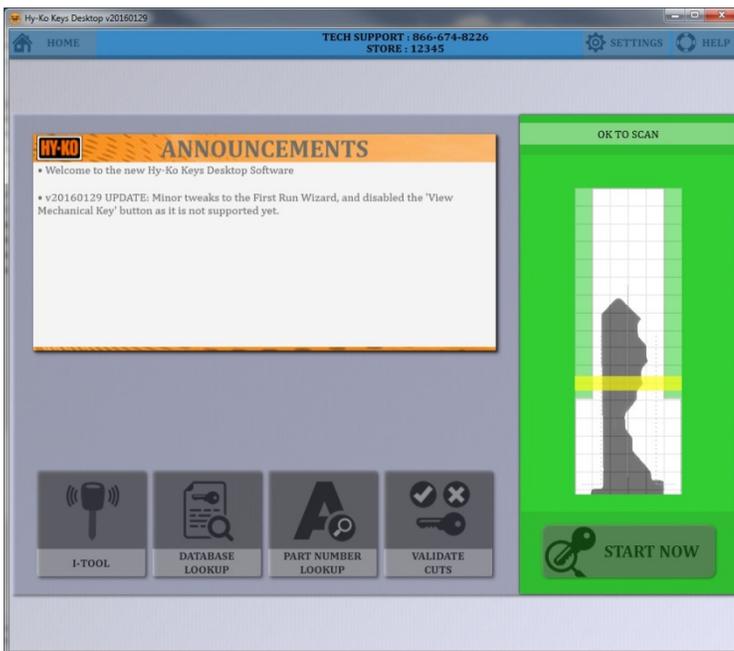


fig. 33

- The Vision Box will begin the scanning process of the key. (see fig. 33). Do not touch the key at this time.

Scanning House & Padlock Keys

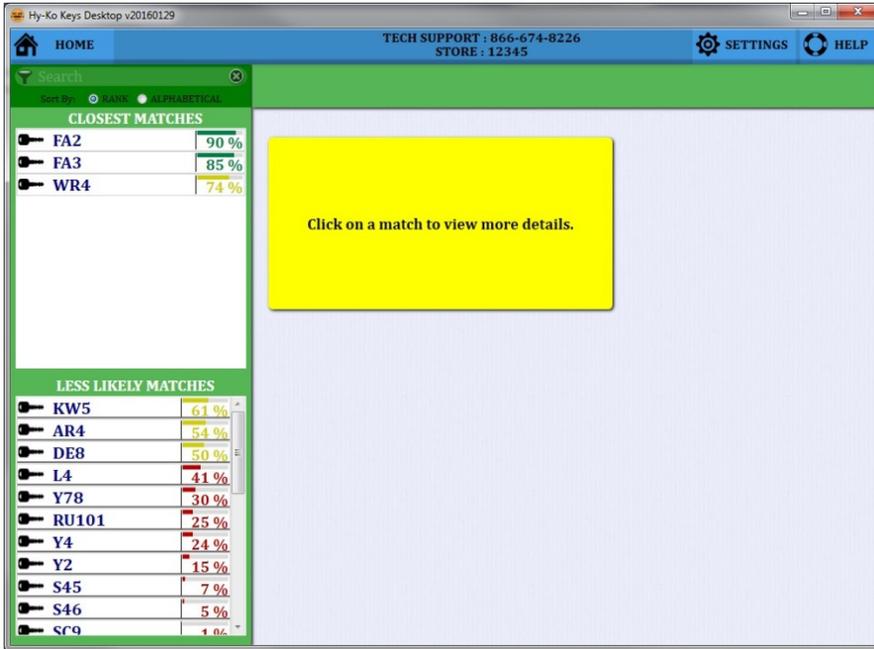


fig. 34

- When the Vision Box is finished scanning the key, you will be taken to the results screen (see fig. 34).

- The closest matches will be at the top ranked by percentage. Lower ranking keys will be at the bottom.



NOTE:

To narrow down your results even further, click the **‘SEARCH’** window in the top, left corner of the software, just below the **‘HOME’** button. You can type in any identifying numbers or letters that are on the key.

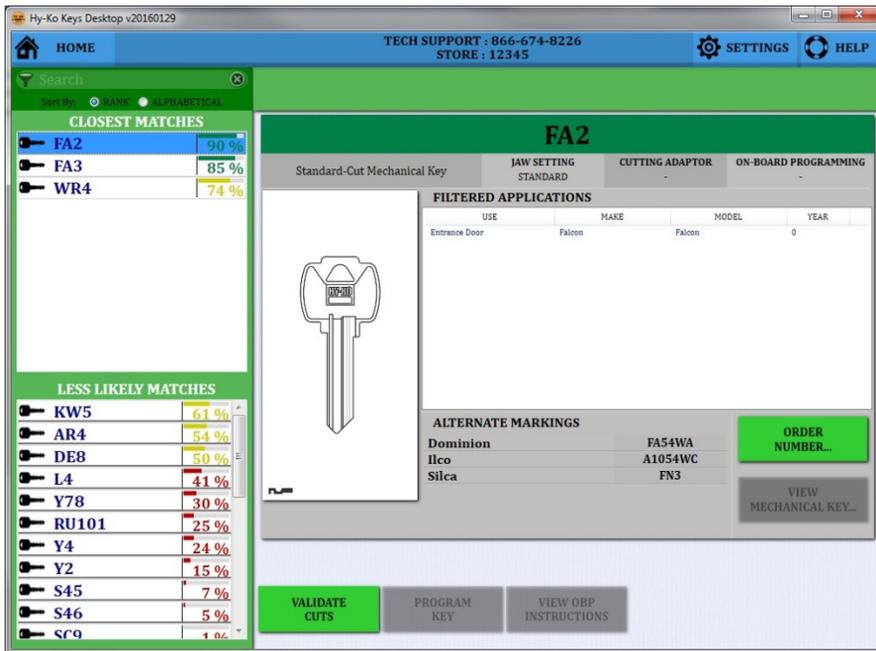


fig. 35

- Click on any key number to see the information on that particular key. An image of the blank and the cross section will be shown as well as other manufacturer part numbers and applications (see fig. 35).

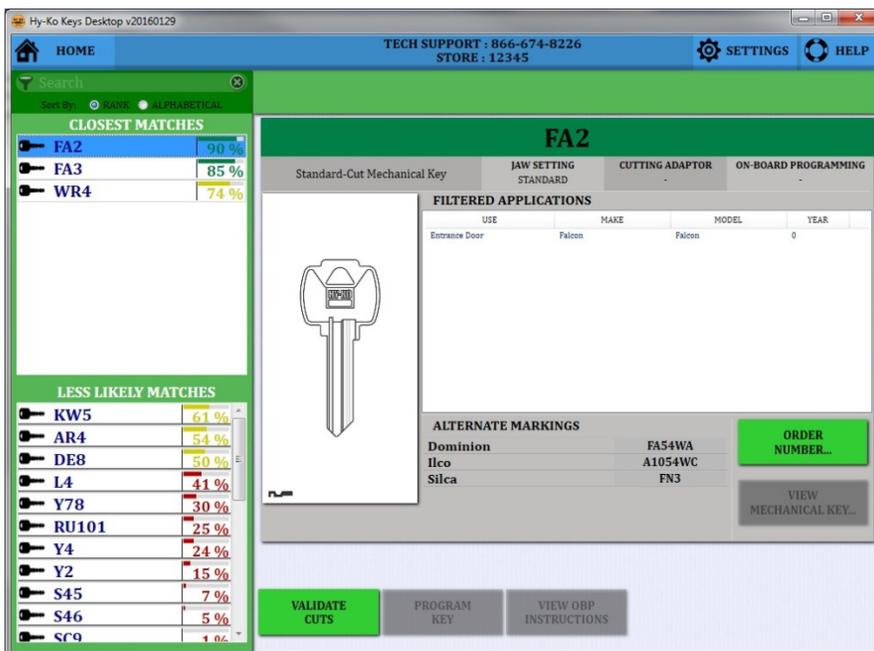


NOTE:

The keys listed at the top with the higher ranking doesn't mean that your key is definitely one of those. You still need to compare the actual key with the information in the software or by visually comparing it with a blank.

Scanning House & Padlock Keys

Once you have determined the correct key blank to choose, you can remove the customer's key. If you have the key blank you need in stock you are now able to cut it using the appropriate key cutting machine.



- Once you have completed cutting the key you can return to the Vision Box to validate the cuts on the new blank in relation to the customer's key (see fig. 36).

- From the results screen click the **'VALIDATE CUTS'** button.

fig. 36

Scanning House & Padlock Keys



fig. 37

- After clicking on the 'VALIDATE CUTS' button you will be instructed to insert the newly cut key into the Vision Box (see fig. 37).

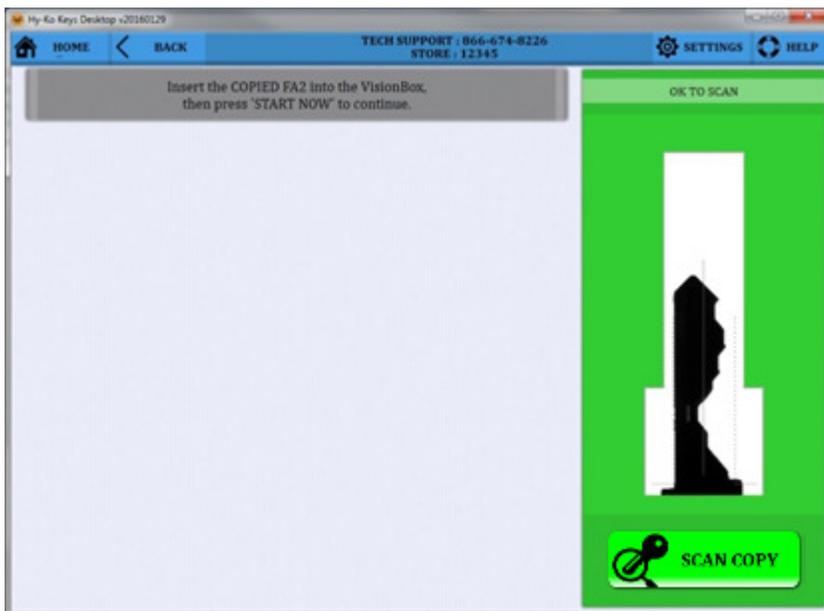


fig. 38

- Insert the newly cut key into the Vision Box (see fig. 39). You will see the image of the key blade in the scanning window on the right side of the screen (see fig. 38).



fig. 39



NOTE:

You want to insert the key into the Vision Box as straight as possible so the image of the blade doesn't touch the sides of the scanning window. When inserted correctly, the frame of the scanning window will be green. It does not matter which way you insert the key. The cuts can be to the right or the left.

Scanning House & Padlock Keys

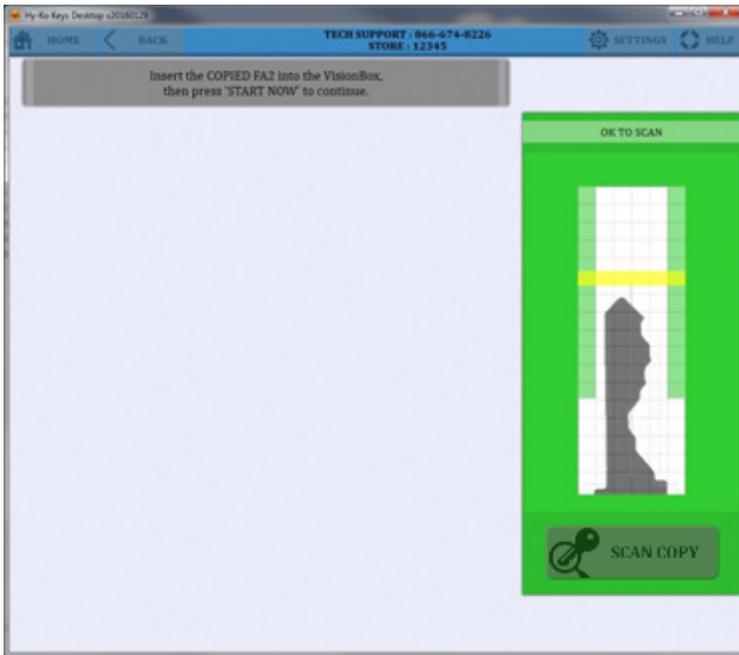


fig. 40

- Click **'SCAN COPY'**. The Vision Box will begin the scanning process of the key (see fig. 40). Do not touch the key at this time.

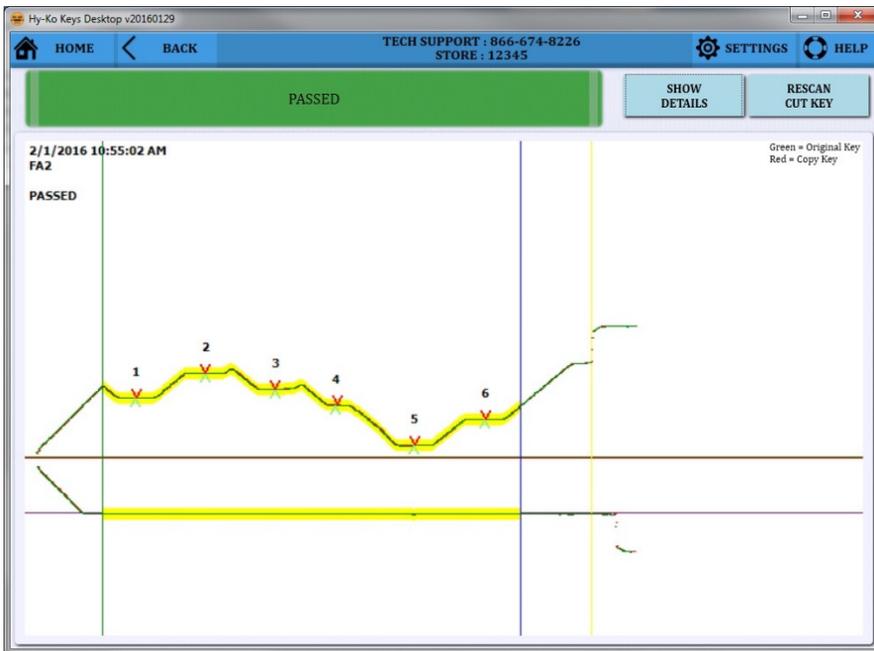


fig. 41 **'PASSED'**. At this point, you are finished and can give the customer their new key.

- You can return the software to the Home Screen by clicking the **'HOME'** button.

- When the Vision Box is finished scanning the key, you will be taken to the validation results screen (see fig. 41).

- The screen shows an image of the newly cut key on top of the customer's key. The green marks show the spacing locations of the customer's key and the red marks are for the newly cut key.

- If the key was correctly cut there will be a green bar at the top of the screen that says

Scanning House & Padlock Keys



fig. 42

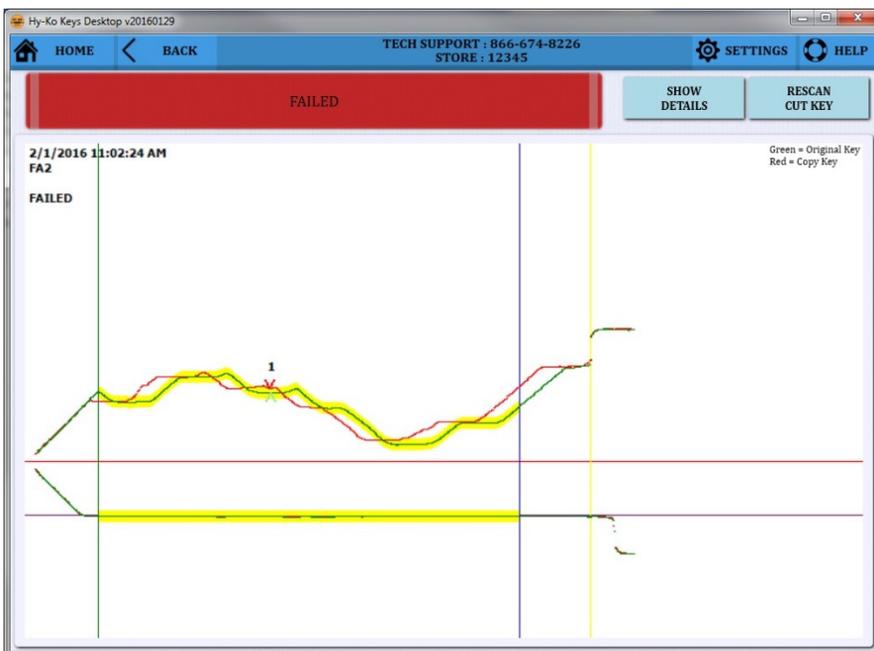


fig. 43

- To see more detailed information on the validation click on the **'SHOW DETAILS'** button at the top right of the screen. The button will switch to saying **'HIDE DETAILS'** which you can click on to hide the detailed information (see fig. 42).
- This information will show you the differences in the key cuts in thousandths of an inch.

- If the newly cut key fails the inspection, you will get a red bar at the top of the screen that says **'FAILED'**. You will also see the image of the newly cut key, in red, on top of the customer's key, in green (see fig. 43). From this data, you will have to decide if the key has burrs that need to be brushed off, the key was miscut, the wrong blank was used, or some non-critical variation caused the failure. Non-critical variations include tip shape variations, non-functional blade thickness variations and non-functional notches.

- You can return the software to the Home Screen by clicking the **'HOME'** button.

Scanning House & Padlock Keys

Scanning Double-Sided House & Padlock Keys

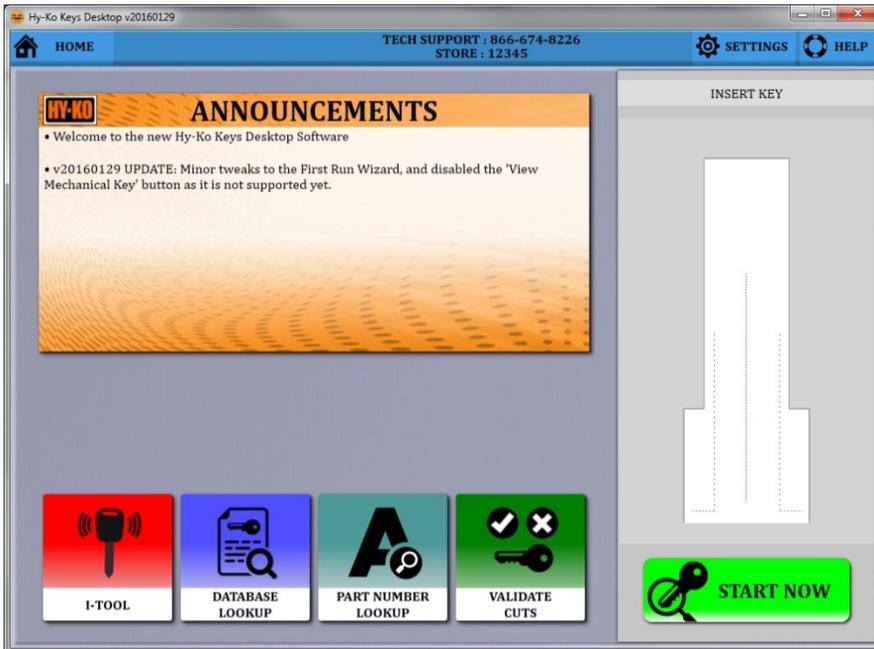


fig. 44

- To scan a key you want to start on the Home Screen. If the software is not on the Home Screen click **‘HOME’** in the upper left corner of the screen (see fig. 44).

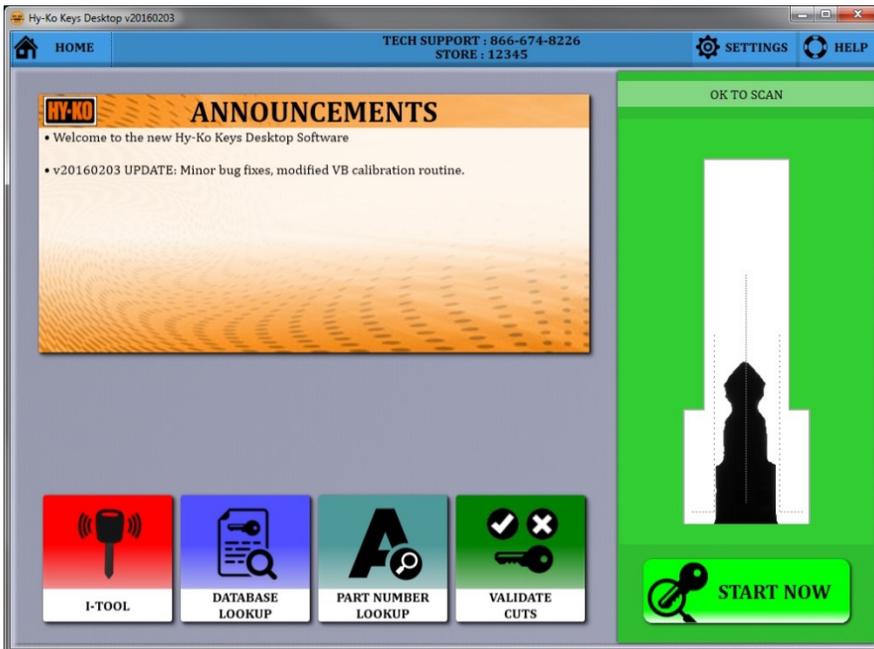


fig. 45

- Insert the key into the Vision Box (see fig. 46). You will see the image of the key blade in the scanning window on the right side of the screen (see fig. 45).



fig. 46



NOTE:

You want to insert the key into the Vision Box as straight as possible so the image of the blade doesn't touch the sides of the scanning window. When inserted correctly, the frame of the scanning window will be green.

Scanning House & Padlock Keys

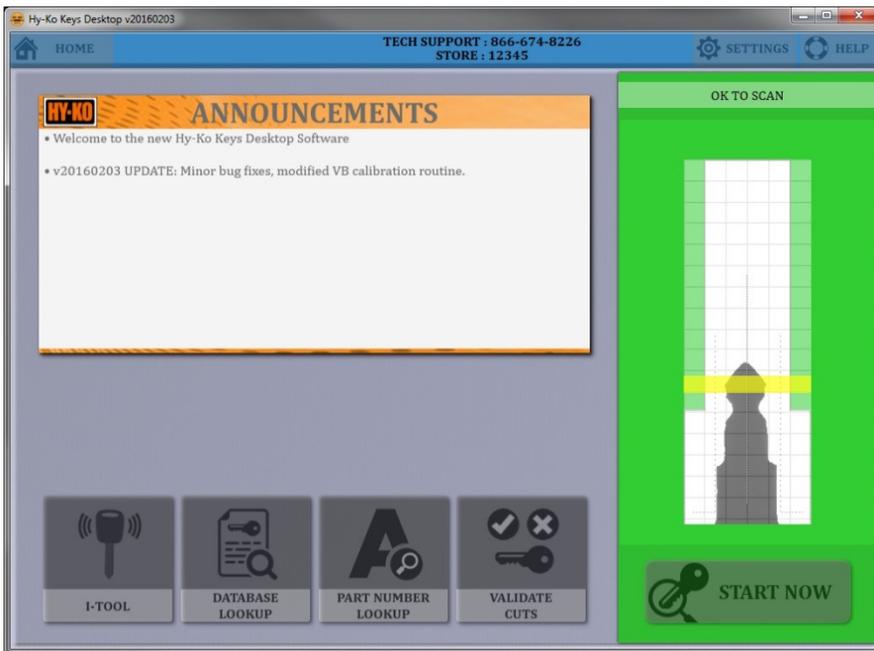


fig. 47

- Click **'START NOW'**. The Vision Box will begin the scanning process of the key (see fig. 47). Do not touch the key at this time.

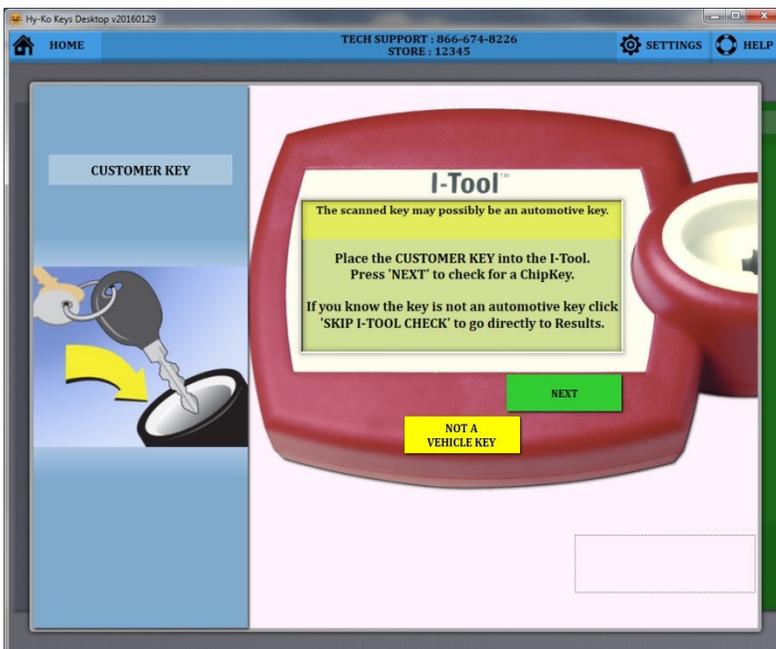


fig. 48

- Being a double-sided key the Vision Box will assume that the key is an automotive key and take you to the I-Tool screen (see fig. 48).
- Knowing that this key is not for a vehicle click the **'NOT A VEHICLE KEY'** button.

Scanning House & Padlock Keys

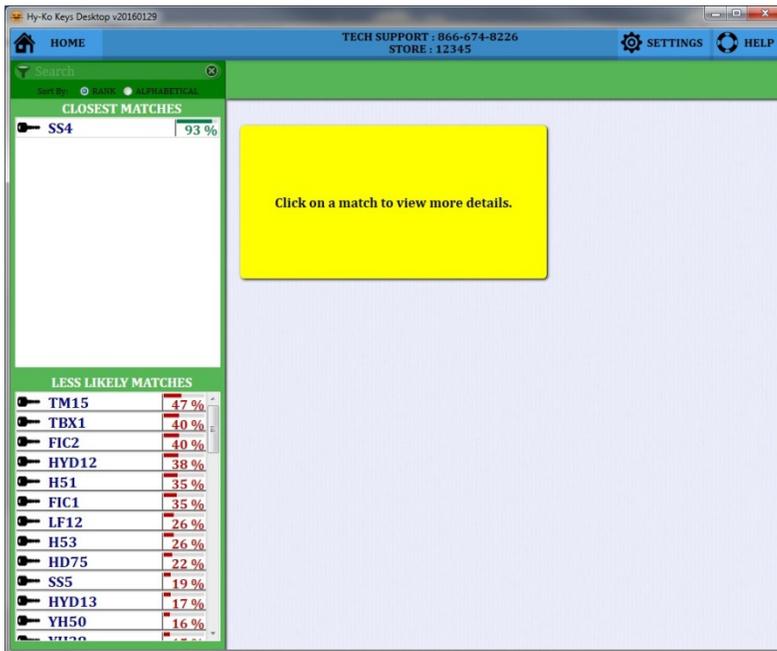


fig. 49

- By skipping the I-Tool check, you will be taken to the Results Screen (see fig. 49).
- The closest matches will be at the top ranked by percentage. Lower ranking keys will be at the bottom.

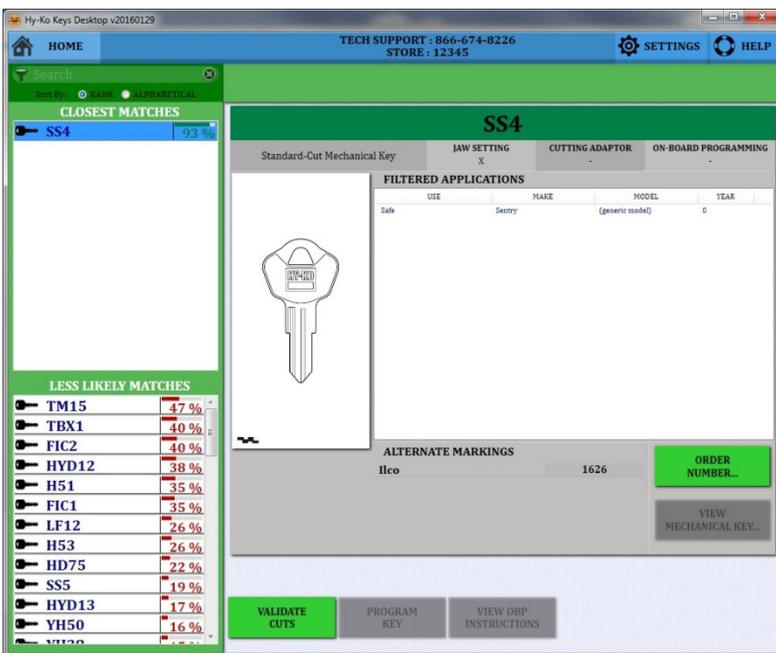


fig. 50

- Click on any key number to see the information on that particular key. An image of the blank and the cross section will be shown as well as other manufacturer part numbers and applications (see fig. 50).



NOTE:

The keys listed at the top with the higher ranking doesn't mean that your key is definitely one of those. You still need to compare the actual key with the information in the software or by visually comparing it with a blank.

Scanning House & Padlock Keys

Once you have determined the correct key blank to choose, you can remove the customer's key. If you have the key blank you need in stock you are now able to cut it using the appropriate key cutting machine.

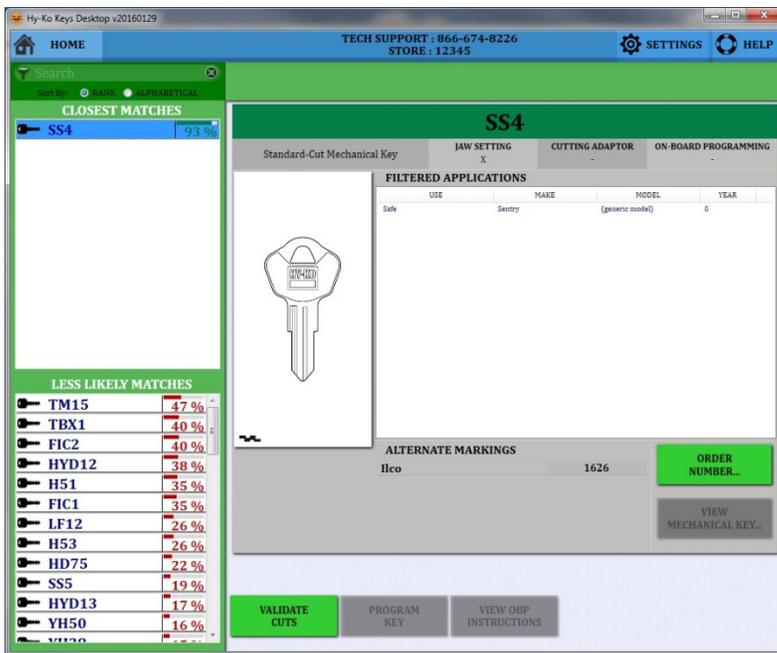


fig. 51

- Once you have completed cutting the key you can return to the Vision Box to validate the cuts on the new blank in relation to the customer's key (see fig. 51).
- From the results screen click the **'VALIDATE CUTS'** button.

To follow the steps for validating the cuts of the newly cut key, refer to pages 28-30 .



Scanning Vehicle Keys

Hy-Ko Products Company

Phone: (800) 896-7890 Fax: (330) 467-7442 E-Mail: cservice@hy-ko.com

Scanning Vehicle Keys

Scanning Vehicle Keys

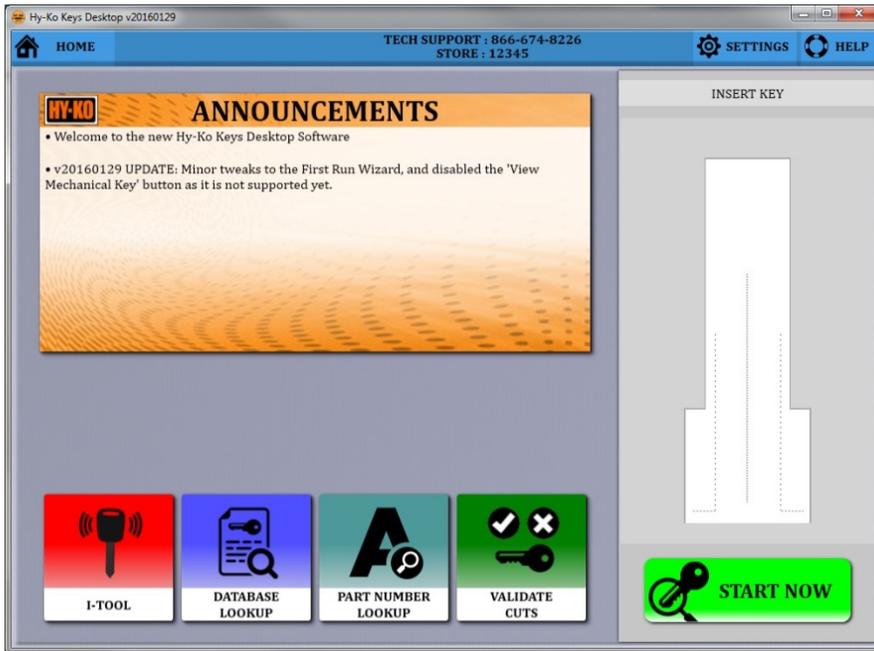


fig. 52

- To scan a key you want to start on the Home Screen. If the software is not on the Home Screen click **‘HOME’** in the upper left corner of the screen (see fig. 52).

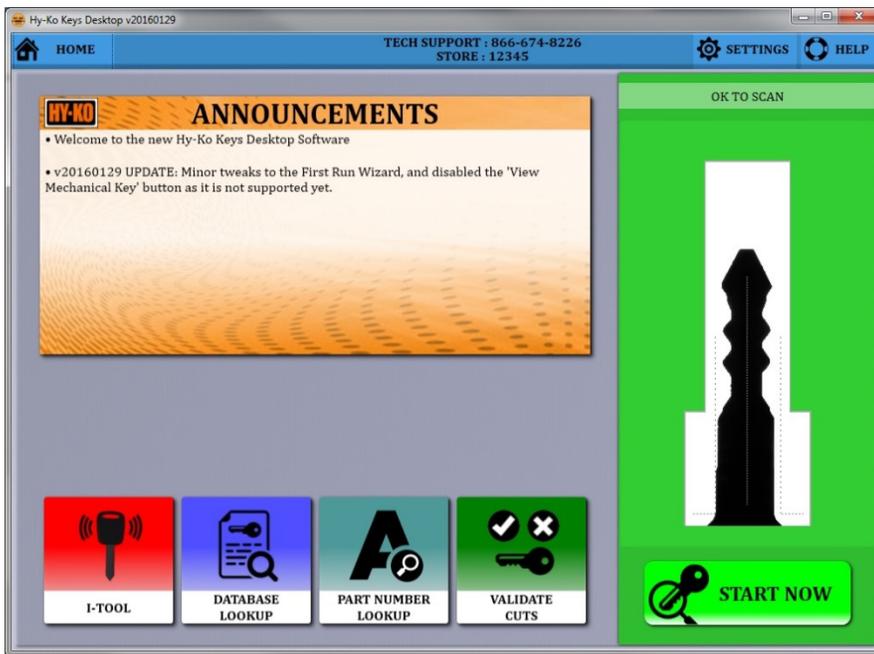


fig. 53

- Insert the key into the Vision Box (see fig. 54). You will see the image of the key blade in the scanning window on the right side of the screen (see fig. 53).



fig. 54



NOTE:

You want to insert the key into the Vision Box as straight as possible so the image of the blade doesn't touch the sides of the scanning window. When inserted correctly, the frame of the scanning window will be green.

Scanning Vehicle Keys

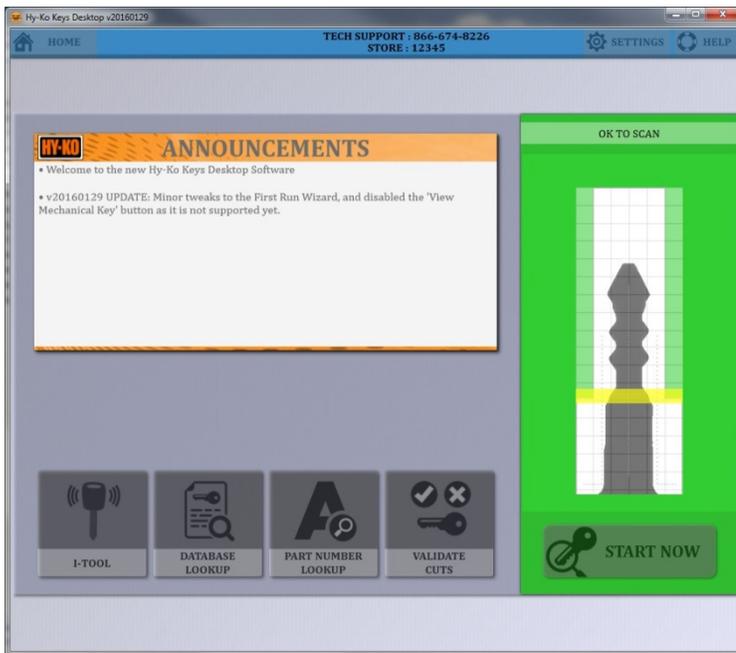


fig. 55

- Click **'START NOW'**. The Vision Box will begin the scanning process of the key (see fig. 55). Do not touch the key at this time.

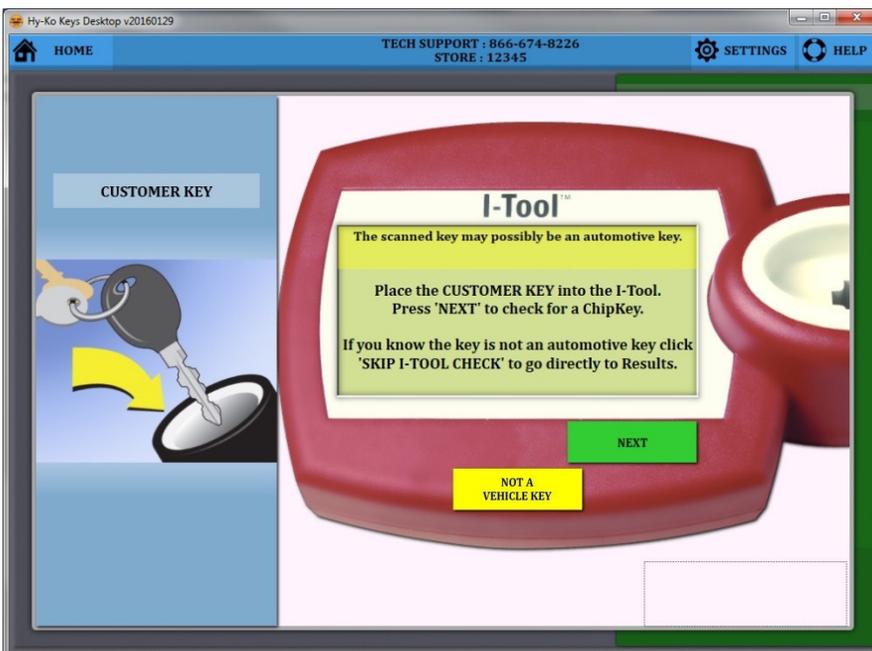


fig. 56

- Being a double-sided key the Vision Box will assume that the key is an automotive key and take you to the I-Tool screen (see fig. 56).
- Take the key out of the Vision Box and insert it in the cup of the I-Tool. Click **'NEXT'** on the image of the I-Tool on the software.

To follow the steps for mechanical vehicle keys, refer to pages 38-42.

To follow the steps for I-Key vehicle keys, refer to pages 43-49.

To follow the steps for A-Key vehicle keys, refer to pages 50-59.

To follow the steps for the P-GM504 vehicle keys, refer to pages 50-55.

Scanning Vehicle Keys

Scanning Vehicle Keys: Mechanical Keys

continued from page 37.



fig. 57

- No Chipkey will be detected as noted on the screen (see fig. 57).
- The software will automatically take you to the next screen to begin entering the vehicle information.

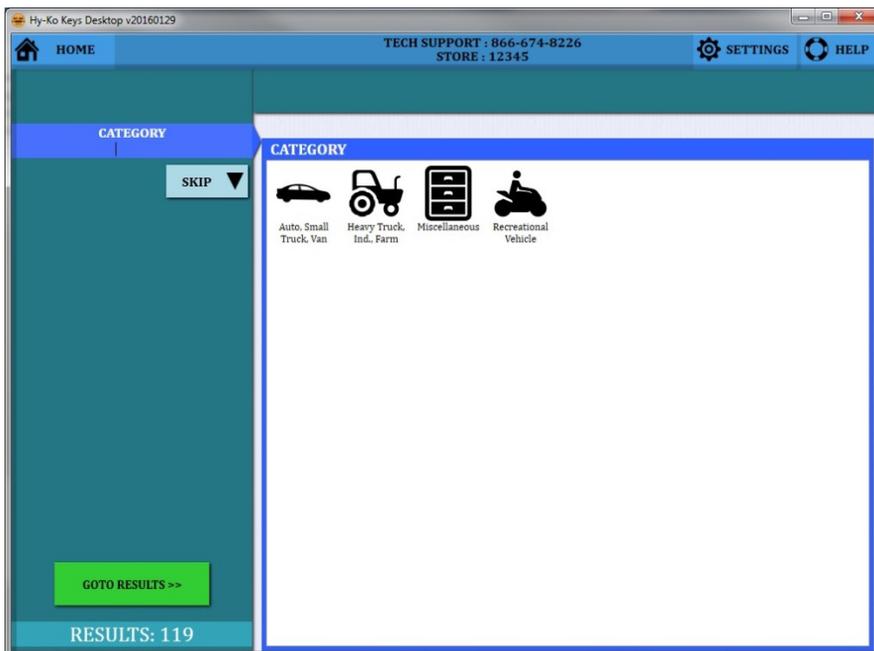


fig. 58

- Choose 'Auto, Small Truck, Van' for the category (see fig. 58).

Scanning Vehicle Keys

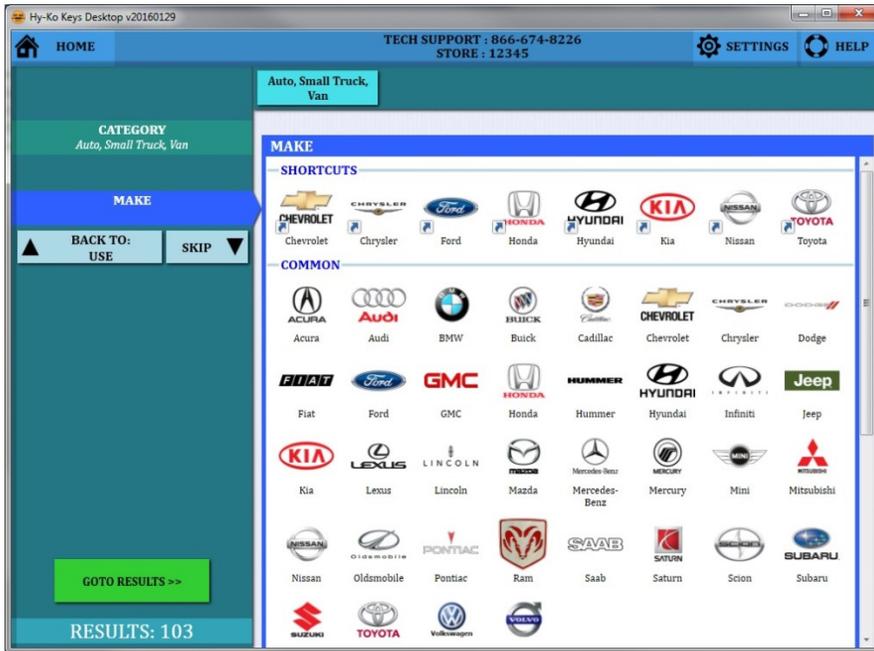


fig. 59

- Choose the Make by clicking on the appropriate manufacturer logo or by typing it in the 'MAKE' box on the left (see fig. 59).



NOTE:

You can add and remove vehicle make 'SHORTCUTS' by right-clicking on an icon. You can have a maximum of eight shortcuts at the top of the screen.

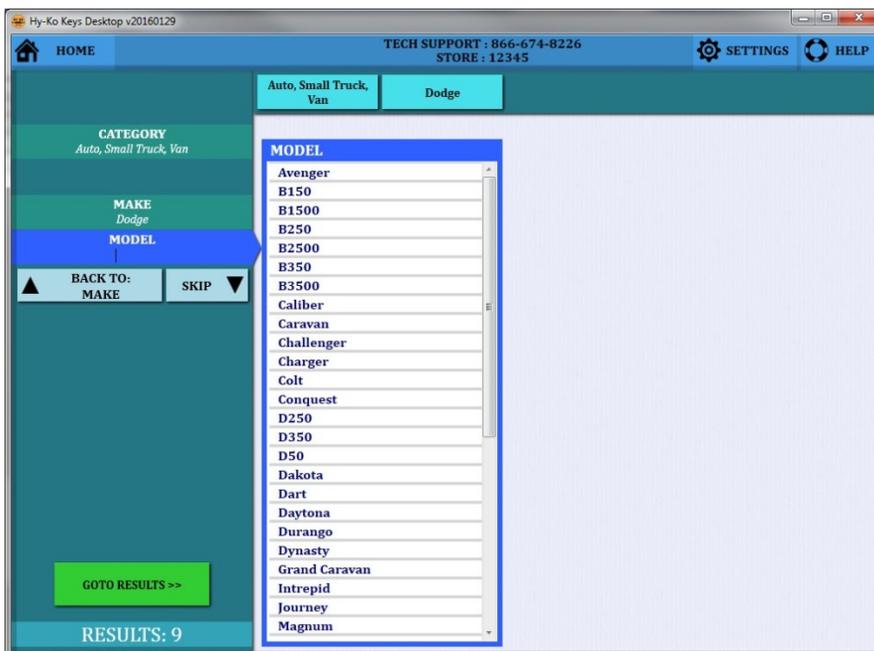


fig. 60

- Choose the Model by clicking on it from the list or by typing it in the 'MODEL' box on the left (see fig. 60).

Scanning Vehicle Keys

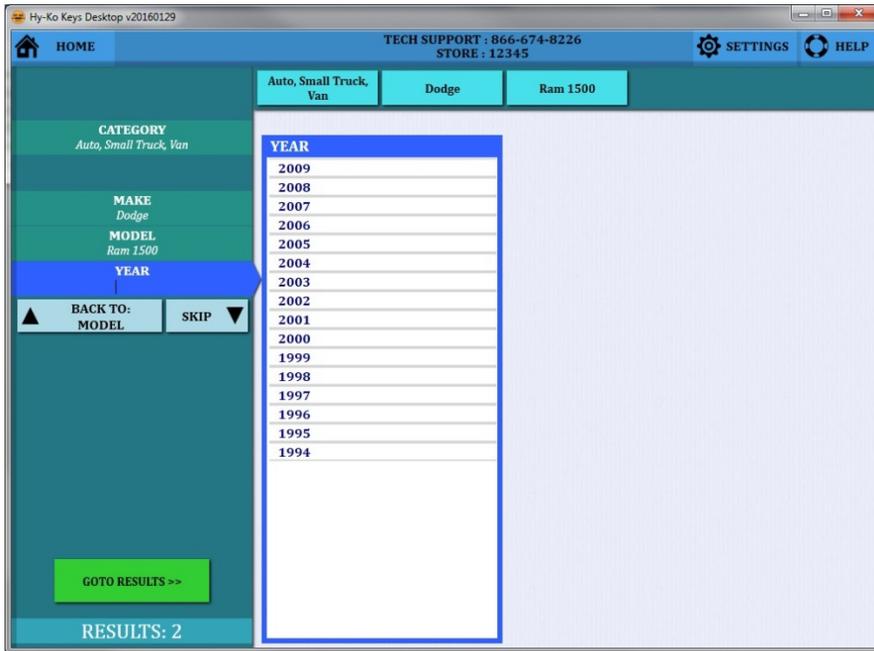


fig. 61

- Choose the Year by clicking on it from the list or by typing it in the 'YEAR' box on the left (see fig. 61).



NOTE:

If you are unsure about any of the information, click on 'GO TO RESULTS' in the lower, left corner of the screen. However, the results will be more specific if you enter in all the information.

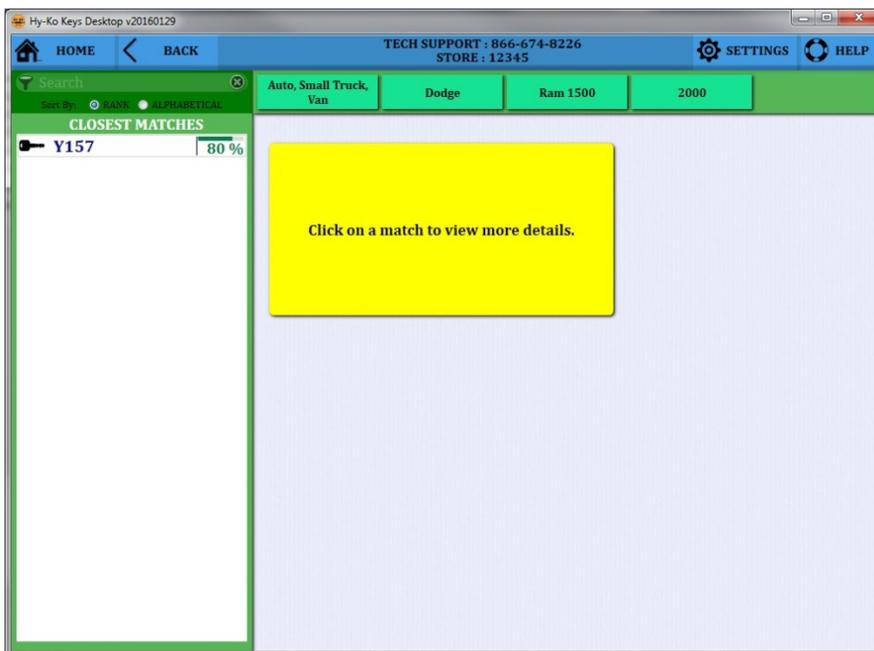


fig. 62

- Your list of possible keys for the vehicle chosen will be shown at the left (see fig. 62).
- The closest matches will be at the top ranked by percentage.

Scanning Vehicle Keys

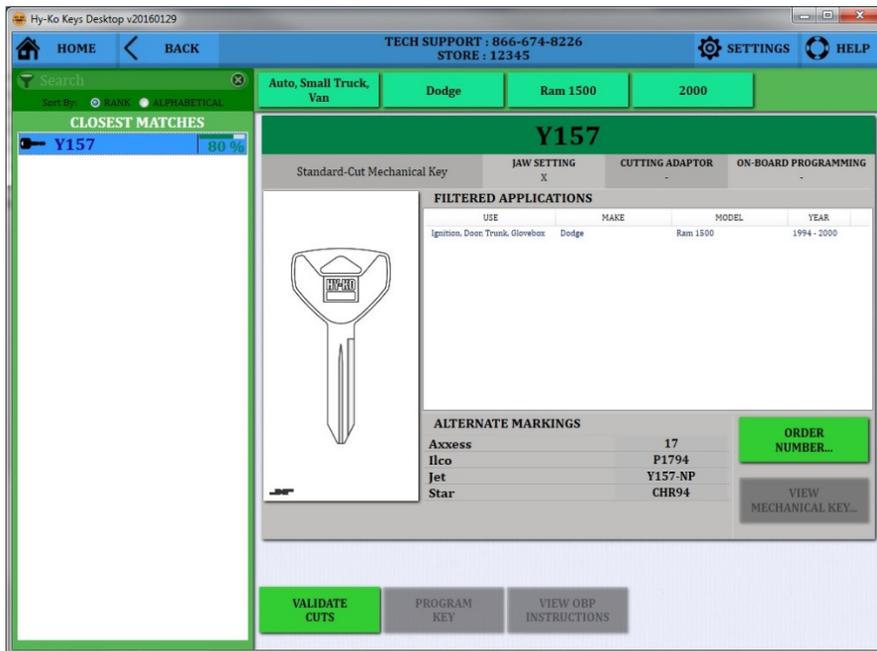


fig. 63

- Click on any key number to see the information on that particular key. An image of the blank and the cross section will be shown as well as other manufacturer part numbers and applications (see fig. 63).

Once you have determined the correct key blank to choose, you can remove the customer's key. If you have the key blank you need in stock you are now able to cut it using the appropriate key cutting machine.



Scanning Vehicle Keys

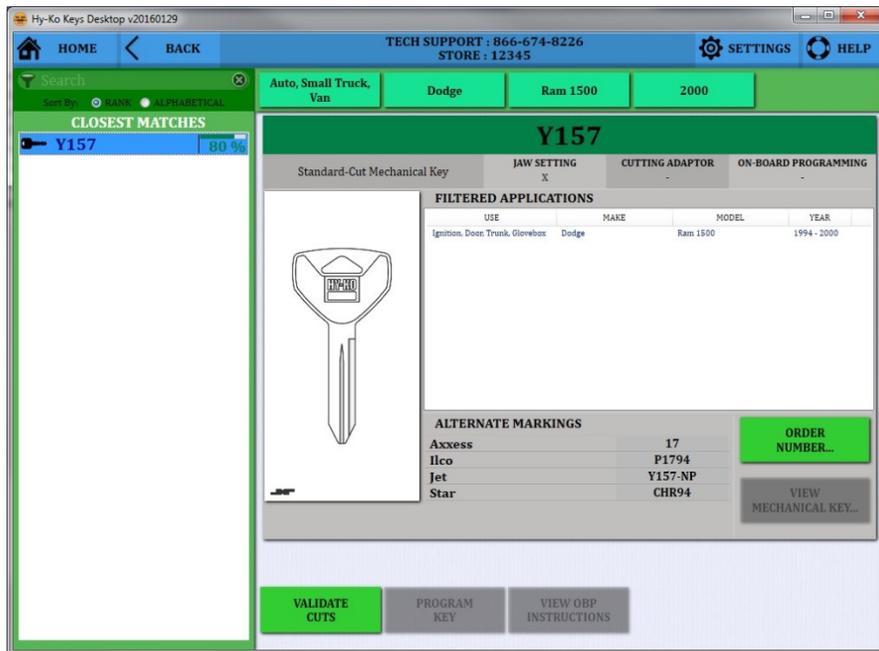


fig. 64

- Once you have completed cutting the key you can return to the Vision Box to validate the cuts on the new blank in relation to the customer's key (see fig. 64).

- From the results screen click the 'VALIDATE CUTS' button.

To follow the steps for validating the cuts of the newly cut key, refer to pages 28-30 .

Scanning Vehicle Keys

Scanning Vehicle Keys: I-Keys

continued from page 37.

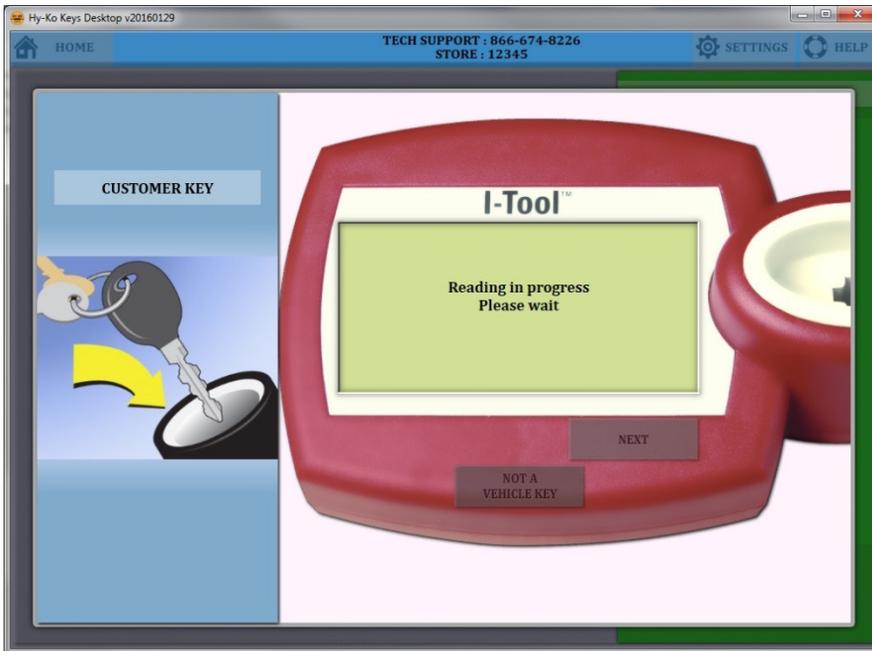


fig. 65

- The I-Tool will read the customer's key (see fig. 65). You can see the progress on the picture of the I-Tool on the software.

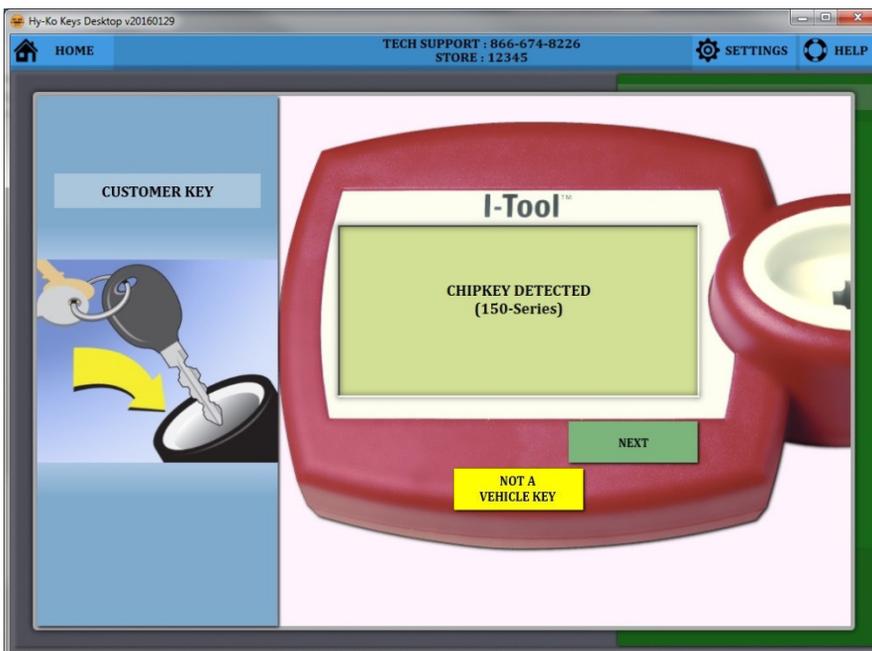


fig. 66

- When I-Tool has completed reading the customer's key, the type of chipkey is displayed on the picture of the I-Tool on the software (see fig. 66).

Scanning Vehicle Keys

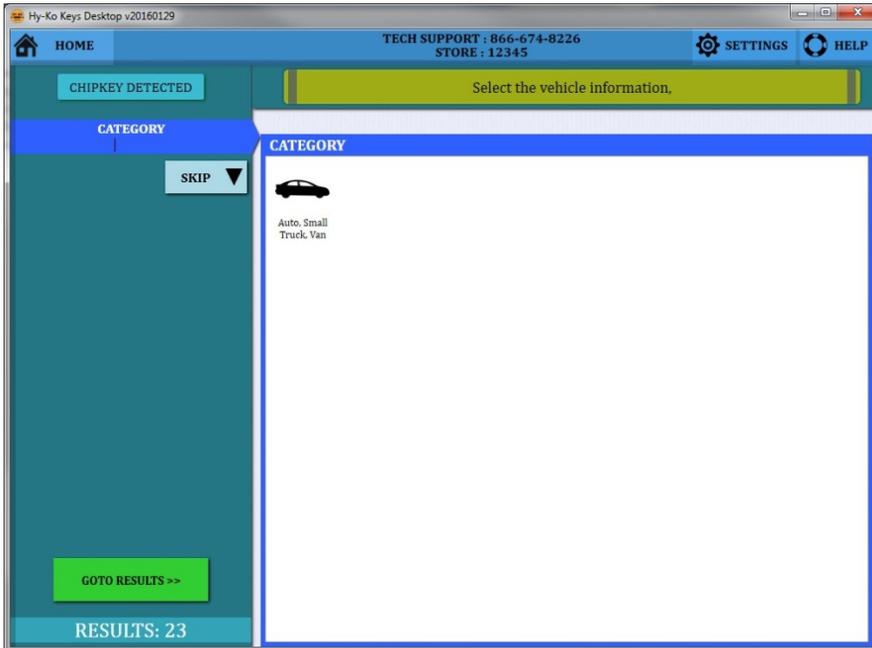


fig. 67

- Choose 'Auto, Small Truck, Van' for the category (see fig. 67).

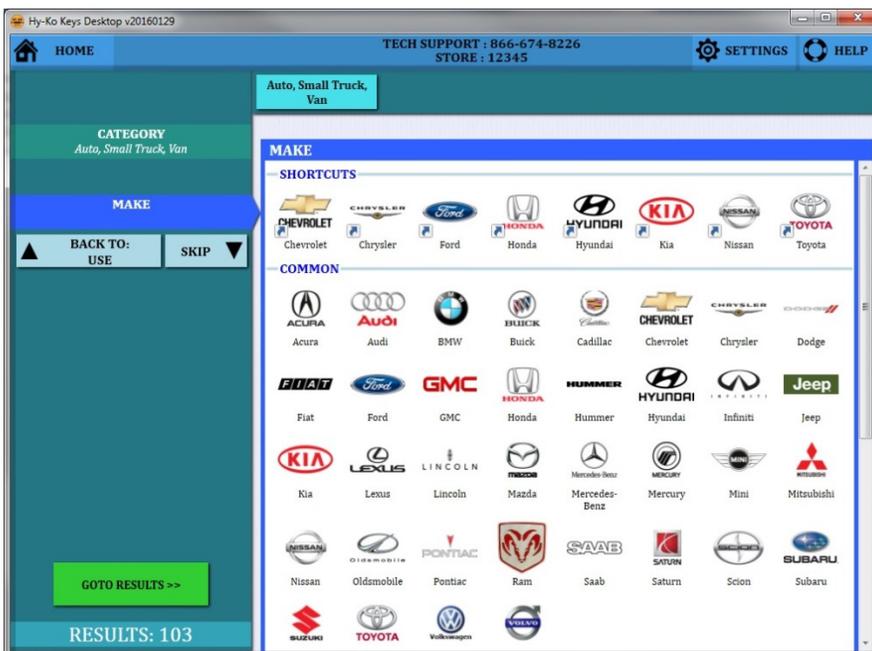


fig. 68

- Choose the Make by clicking on the appropriate manufacturer logo or by typing it in the 'MAKE' box on the left (see fig. 68).



NOTE:

You can add and remove vehicle make 'SHORTCUTS' by right-clicking on an icon. You can have a maximum of eight shortcuts at the top of the screen.

Scanning Vehicle Keys

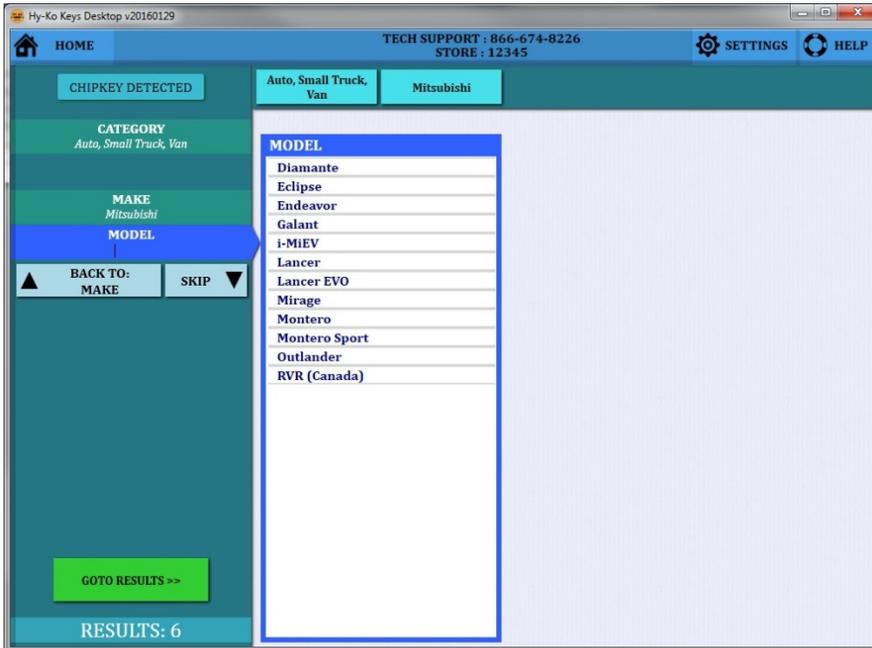


fig. 69

- Choose the Model by clicking on it from the list or by typing it in the 'MODEL' box on the left (see fig. 69).

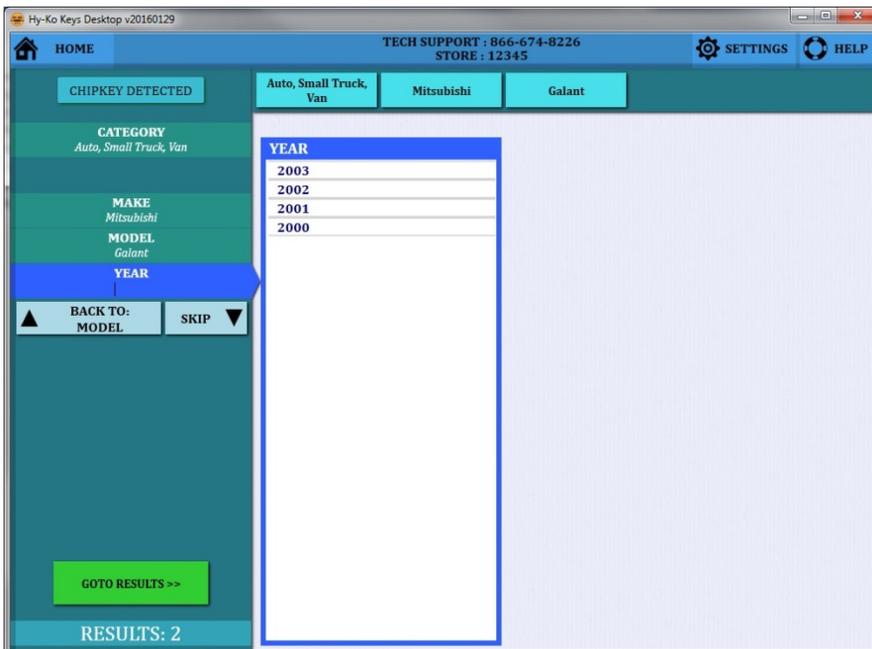


fig. 70

- Choose the Year by clicking on it from the list or by typing it in the 'YEAR' box on the left (see fig. 70).



NOTE:

If you are unsure about any of the information, click on 'GO TO RESULTS' in the lower, left corner of the screen. However, the results will be more specific if you enter in all the information.

Scanning Vehicle Keys

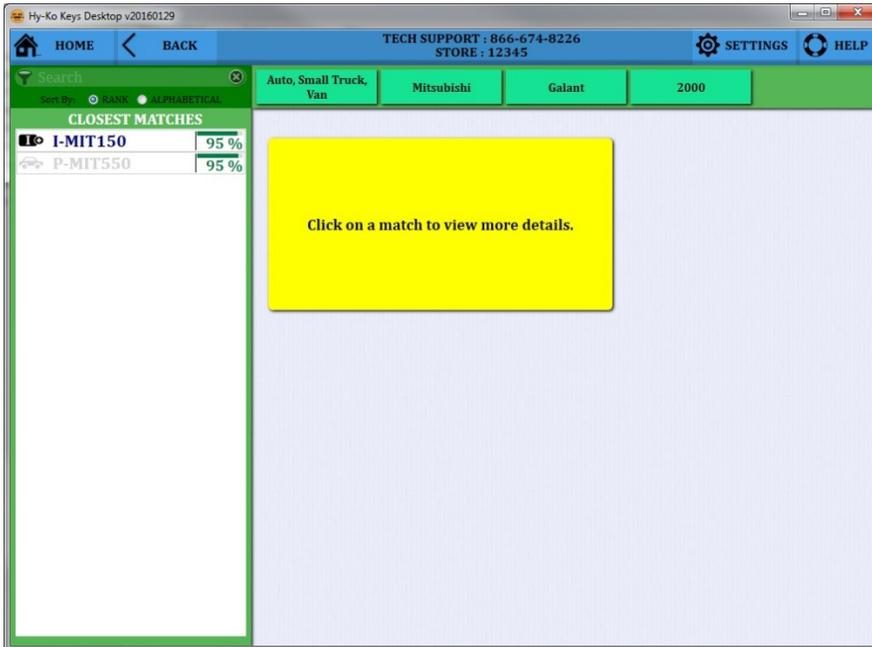


fig. 71

- Your list of possible keys for the vehicle chosen will be shown at the left (see fig. 71).
- The closest matches will be at the top ranked by percentage.

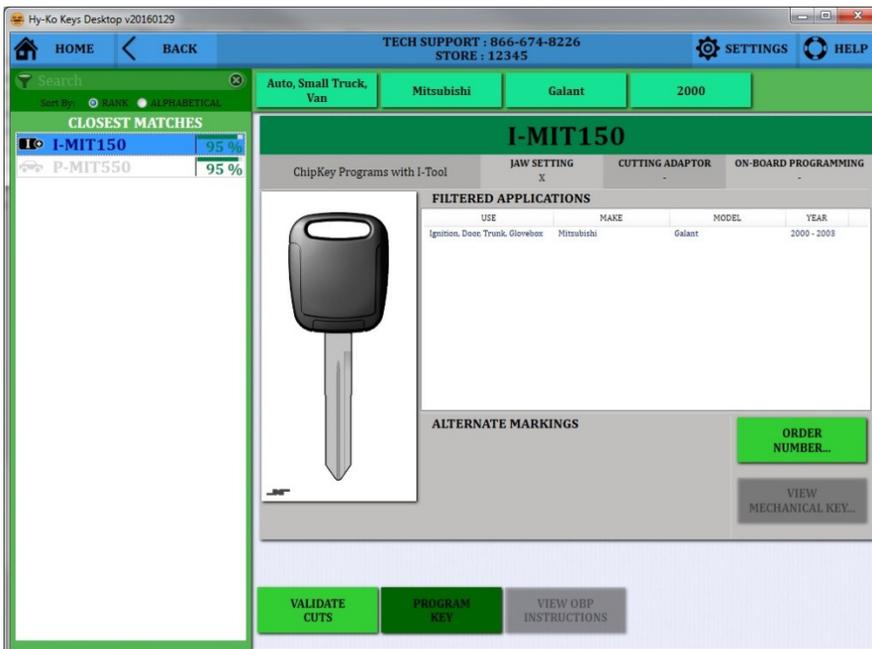


fig. 72

- Click on any key number to see the information on that particular key. An image of the blank and the cross section will be shown as well as other manufacturer part numbers and applications (see fig. 72).
- When you have chosen the correct key you need, click on the '**PROGRAM KEY**' button at the bottom of the screen.

Scanning Vehicle Keys



fig. 73

- The software will switch to the I-Tool screen (see fig. 73).
- Insert the new I-Key into the I-Tool and click the 'NEXT' button on the image of the I-Tool on the software.

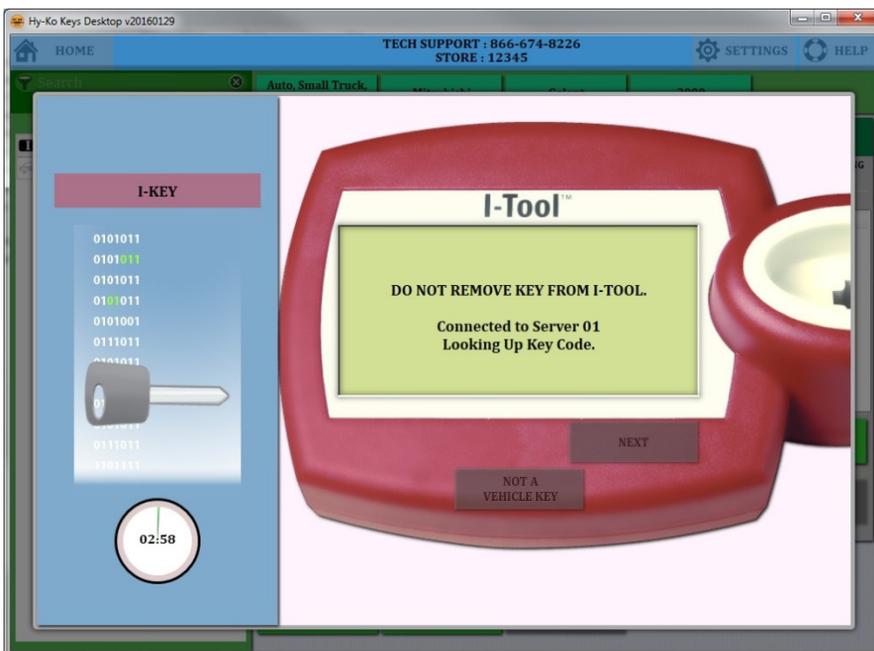


fig. 74

- The I-Tool will begin the process of looking up the key code (see fig. 74). Do not touch the key at this time.

Scanning Vehicle Keys



fig. 75

- When the programming is complete, there will be a green screen on the picture of the I-Tool on the software (see fig. 75). At this point, you can remove the new I-Key from the I-Tool.
- To return to the Results screen, click the **'NEXT'** button.

Once you have programmed the ChipKey, you are now able to cut it using the appropriate key cutting machine.



Scanning Vehicle Keys

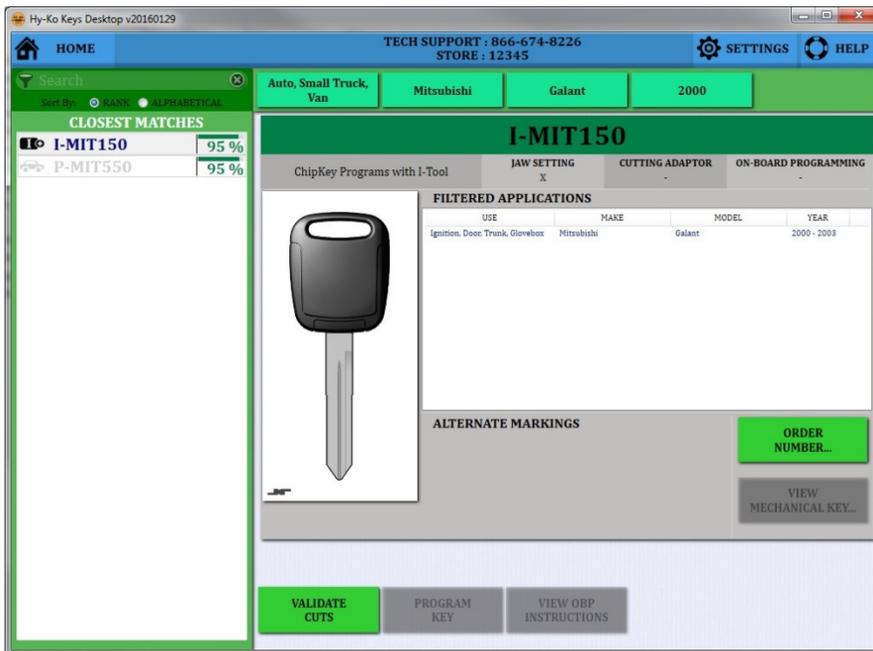


fig. 76

- Once you have completed cutting the key you can return to the Vision Box to validate the cuts on the new blank in relation to the customer's key (see fig. 76).

- From the results screen click the 'VALIDATE CUTS' button.

To follow the steps for validating the cuts of the newly cut key, refer to pages 28-30 .

Scanning Vehicle Keys

Scanning Vehicle Keys: A-Keys continued from page 37.

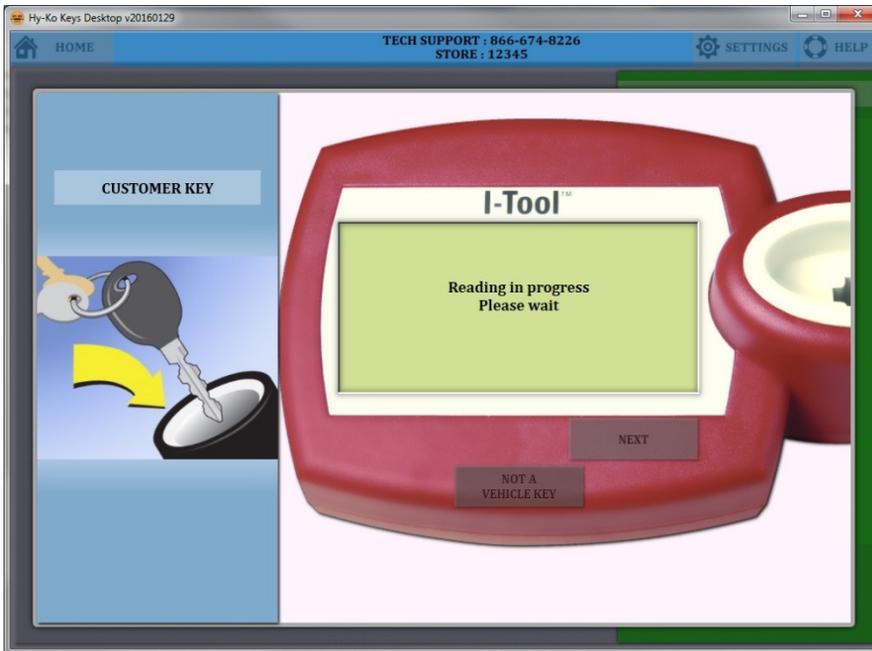


fig. 77

- The I-Tool will read the customer's key (see fig. 77). You can see the progress on the picture of the I-Tool on the software.

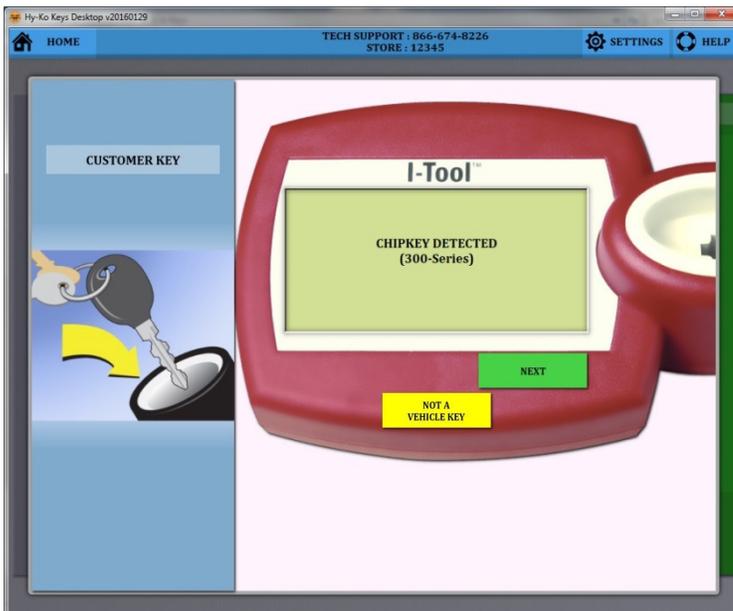


fig. 78

- When I-Tool has completed reading the customer's key, the type of chipkey is displayed on the picture of the I-Tool on the software (see fig. 78).

Scanning Vehicle Keys

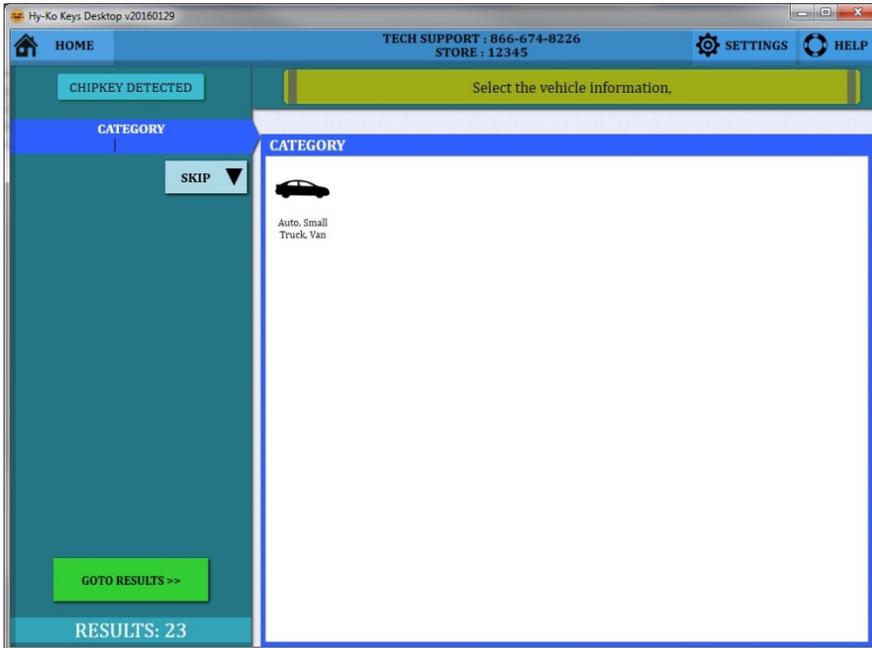


fig. 79

- Choose 'Auto, Small Truck, Van' for the category (see fig. 79).

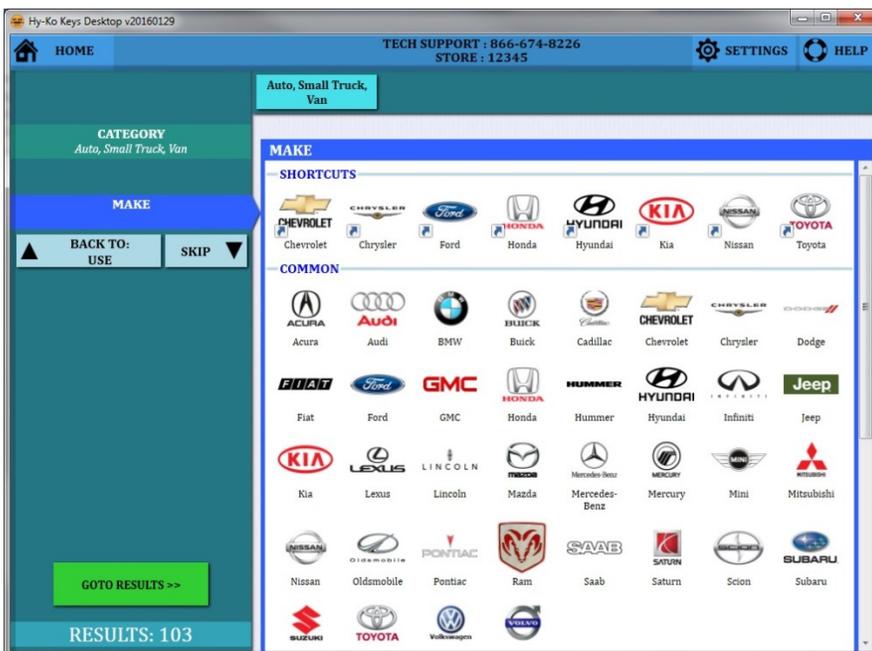


fig. 80

- Choose the Make by clicking on the appropriate manufacturer logo or by typing it in the 'MAKE' box on the left (see fig. 80).



NOTE:

You can add and remove vehicle make 'SHORTCUTS' by right-clicking on an icon. You can have a maximum of eight shortcuts at the top of the screen.

Scanning Vehicle Keys

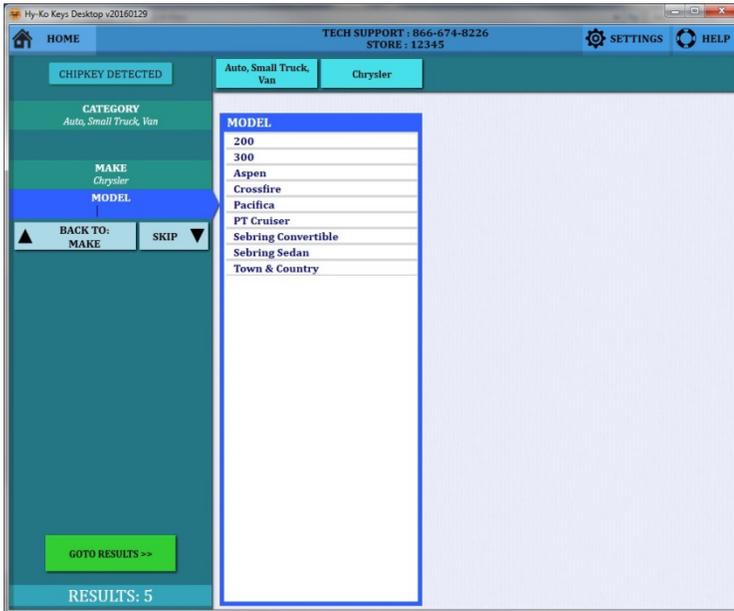


fig. 81

- Choose the Model by clicking on it from the list or by typing it in the 'MODEL' box on the left (see fig. 81).

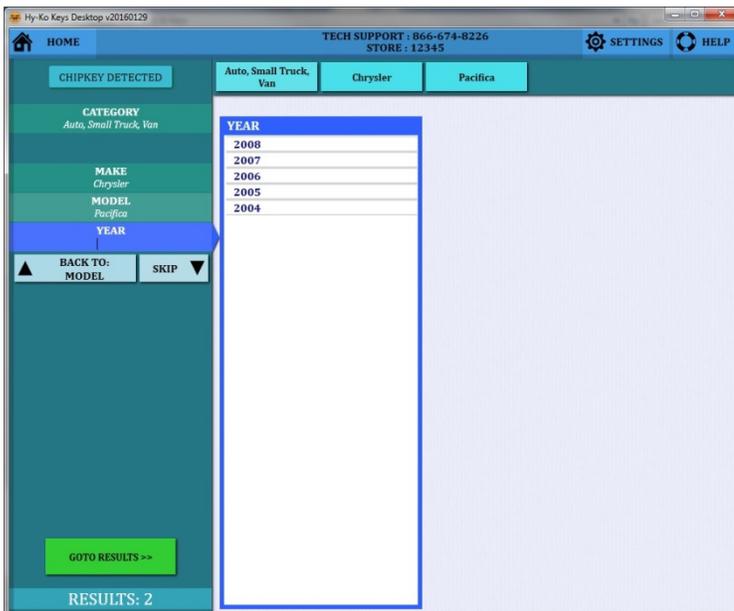


fig. 82

- Choose the Year by clicking on it from the list or by typing it in the 'YEAR' box on the left (see fig. 82).



NOTE:

If you are unsure about any of the information, click on 'GO TO RESULTS' in the lower, left corner of the screen. However, the results will be more specific if you enter in all the information.

Scanning Vehicle Keys

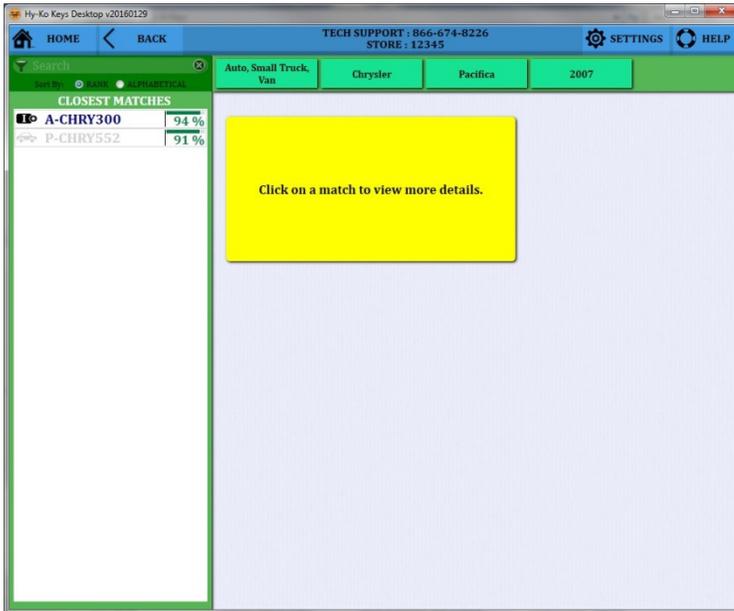


fig. 83

- Your list of possible keys for the vehicle chosen will be shown at the left (see fig. 83).
- The closest matches will be at the top ranked by percentage.

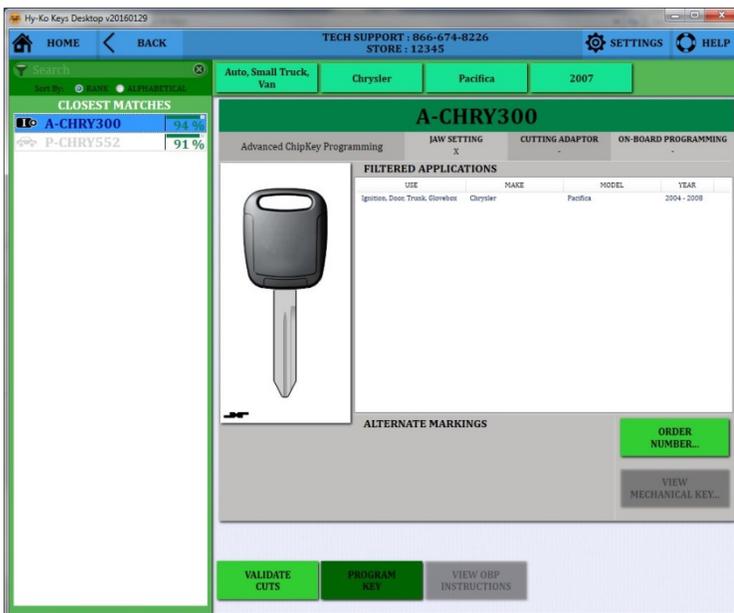


fig. 84

- Click on any key number to see the information on that particular key. An image of the blank and the cross section will be shown as well as other manufacturer part numbers and applications (see fig. 84).
- When you have chosen the correct key you need, click on the **'PROGRAM KEY'** button at the bottom of the screen.

Scanning Vehicle Keys

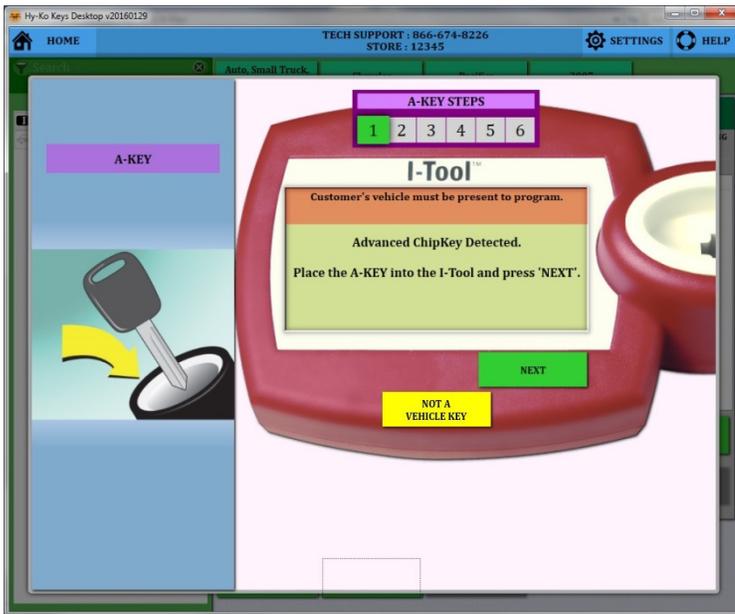


fig. 85

- The software will switch to the I-Tool screen (see fig. 85).
- Insert the new A-Key into the I-Tool and click the 'NEXT' button on the image of the I-Tool on the software.



NOTE:

For A-Keys, the customer's vehicle must be present to complete the programming procedure.

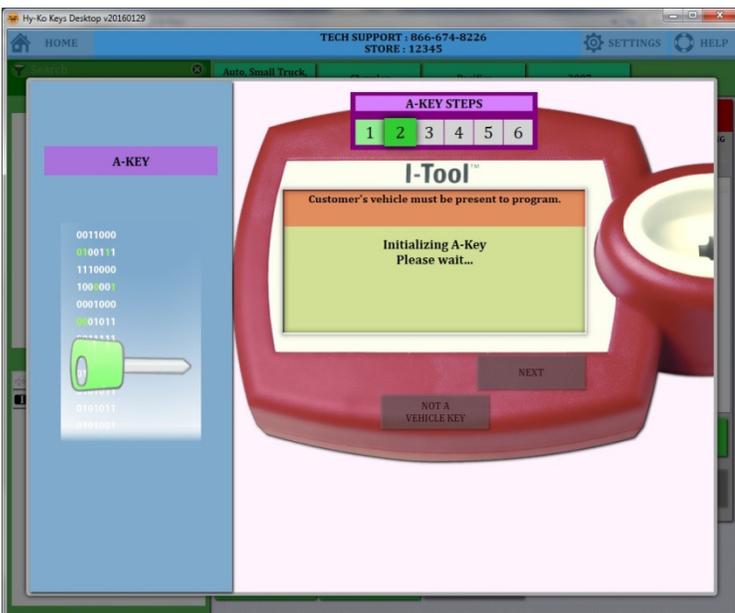


fig. 86

- The I-Tool will begin the process by initializing the new A-Key. This preps the key to be programmed (see fig. 86).

Scanning Vehicle Keys

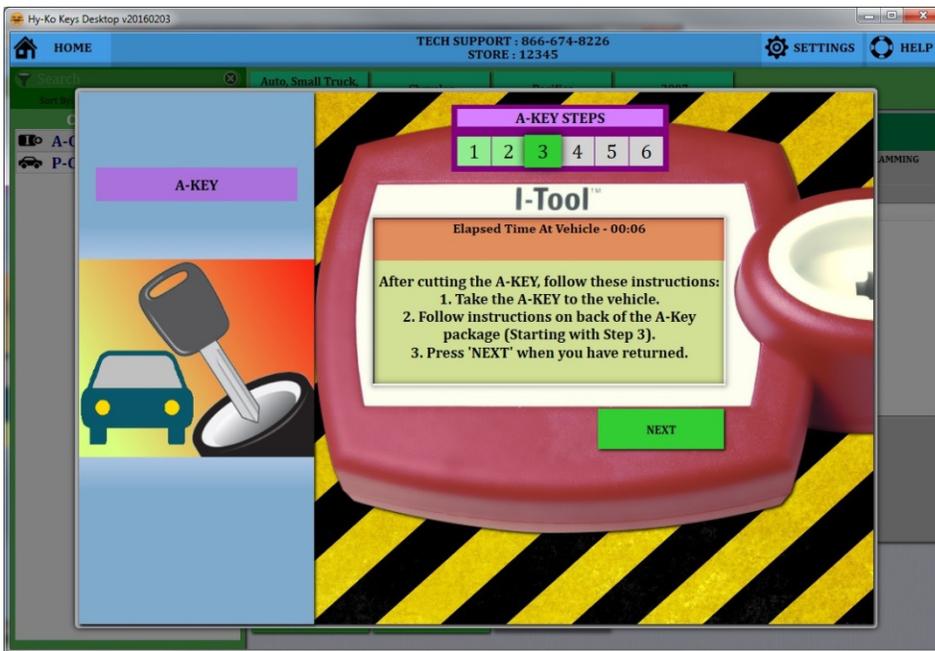


fig. 87

- When the key is fully initialized, you will have to cut it and then take it out to the vehicle to go through an on-board programming procedure (see fig. 87). At this point, you can remove the new A-Key from the I-Tool.

Before you can go any further in the programming procedure, you must cut the ChipKey, using the appropriate key cutting machine.



- Once the new A-Key is cut, go out to the vehicle and follow the programming procedure on the package of the key starting with step 3 (see fig. 88).



fig. 88

Scanning Vehicle Keys



fig. 89

- After completing the on-board programming procedure at the vehicle, return to the software and click on the **'NEXT'** button to pick up the programming sequence where you left off (see fig. 89).

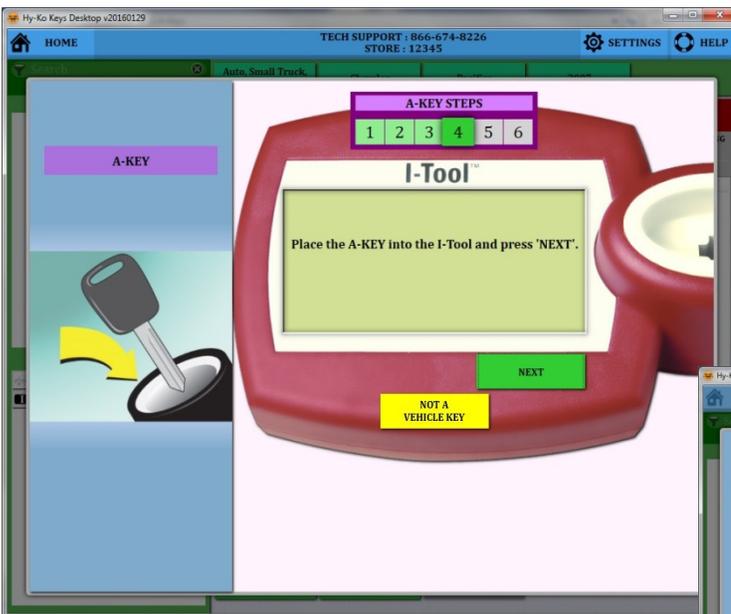


fig. 90

- Insert the new A-Key into the I-Tool and click the **'NEXT'** button (see fig. 90).

- The I-Tool will begin processing the data that was obtained from the vehicle by the A-Key (see fig. 91).



fig. 91

Scanning Vehicle Keys



fig. 92

- Remove the new A-Key and insert the customer's key into the I-Tool and click the 'NEXT' button on the image of the I-Tool on the software (see fig. 92).
- The I-Tool will begin processing the data from the customer's key and the vehicle (see fig. 93).

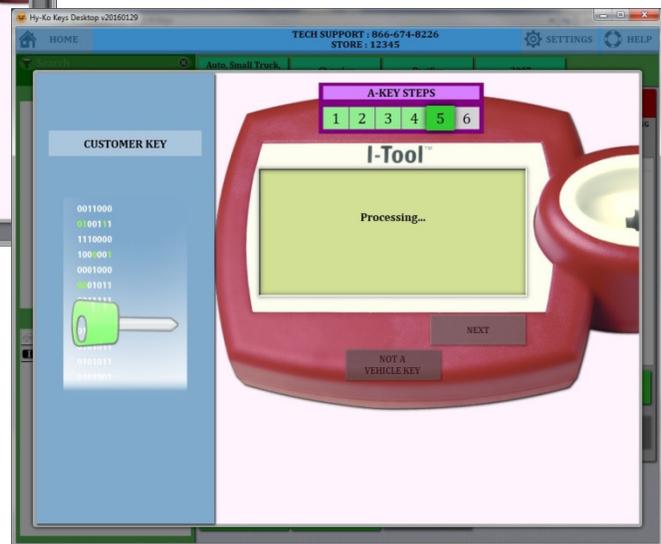


fig. 93

- The I-Tool will connect to a server to finalize the coding process (see fig. 94). Do not touch the key at this time.

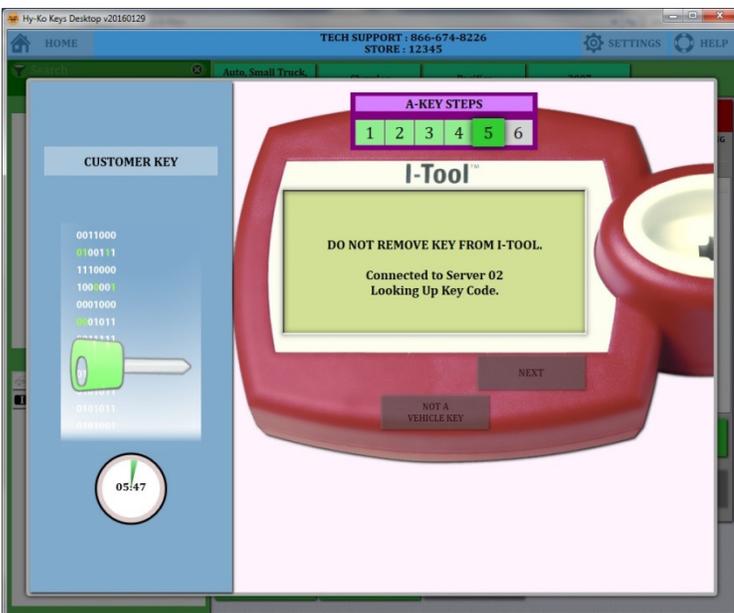


fig. 94

Scanning Vehicle Keys

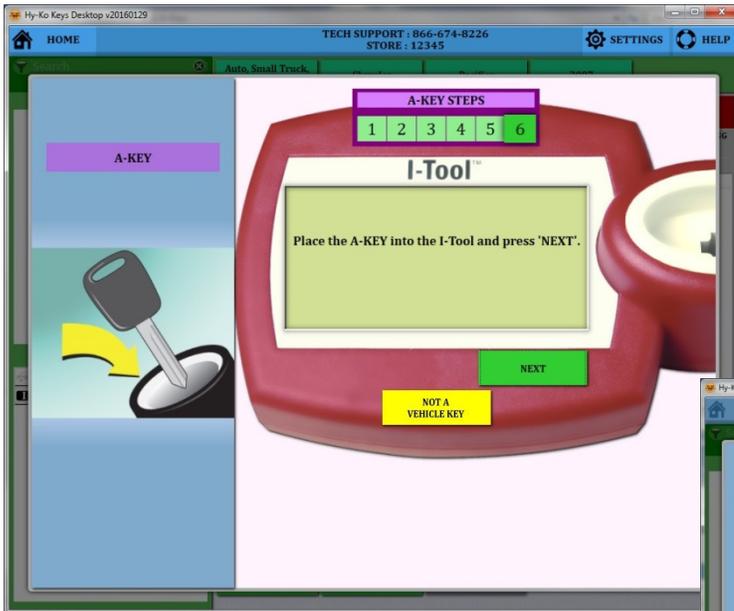


fig. 95

- Remove the customer's key and re-insert the new A-Key into the I-Tool and click the 'NEXT' button on the image of the I-Tool on the software (see fig. 95).
- The I-Tool will begin the process of writing the new code to the new key (see fig. 96).

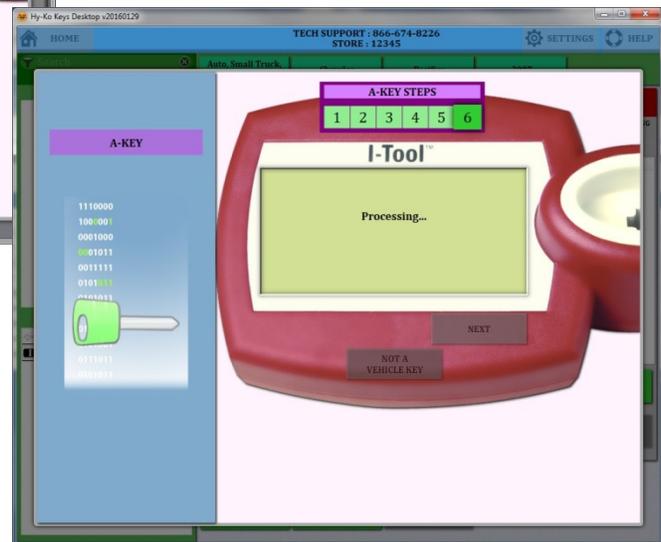


fig. 96

- When the programming is complete, there will be a green screen on the picture of the I-Tool on the software (see fig. 97). At this point, you can remove the new A-Key from the I-Tool.
- To return to the Results screen, click the 'NEXT' button.

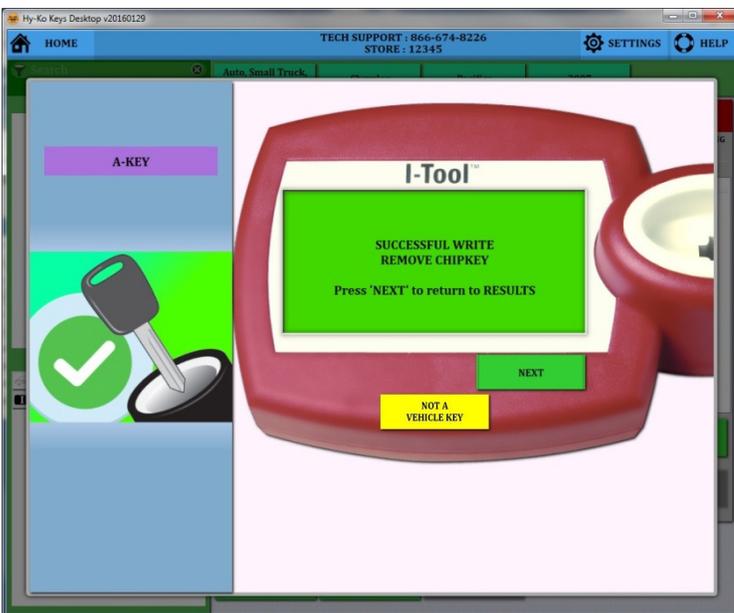
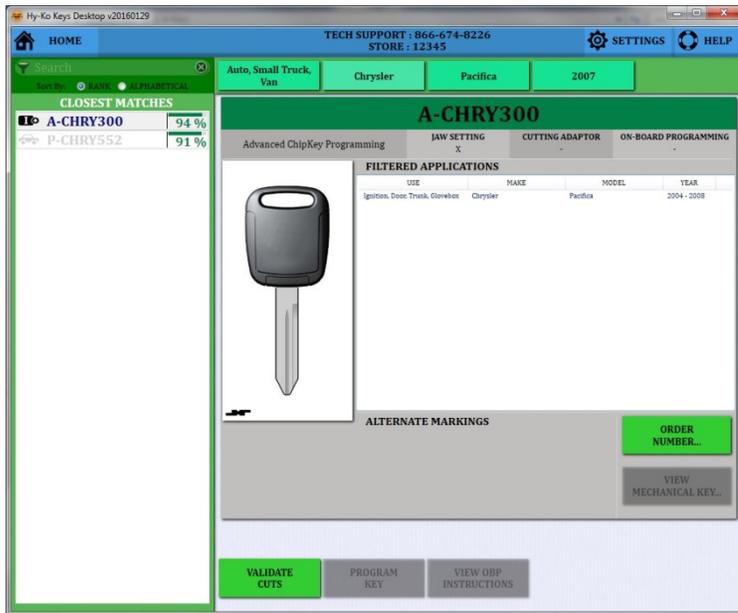


fig. 97

Scanning Vehicle Keys



- Once you have completed cutting and programming the key you can return to the Vision Box to validate the cuts on the new blank in relation to the customer's key (see fig. 98).
- From the results screen click the **'VALIDATE CUTS'** button.

fig. 98

To follow the steps for validating the cuts of the newly cut key, refer to pages 28-30 .

Scanning Vehicle Keys

Scanning Vehicle Keys: P-GM504

continued from page 37.

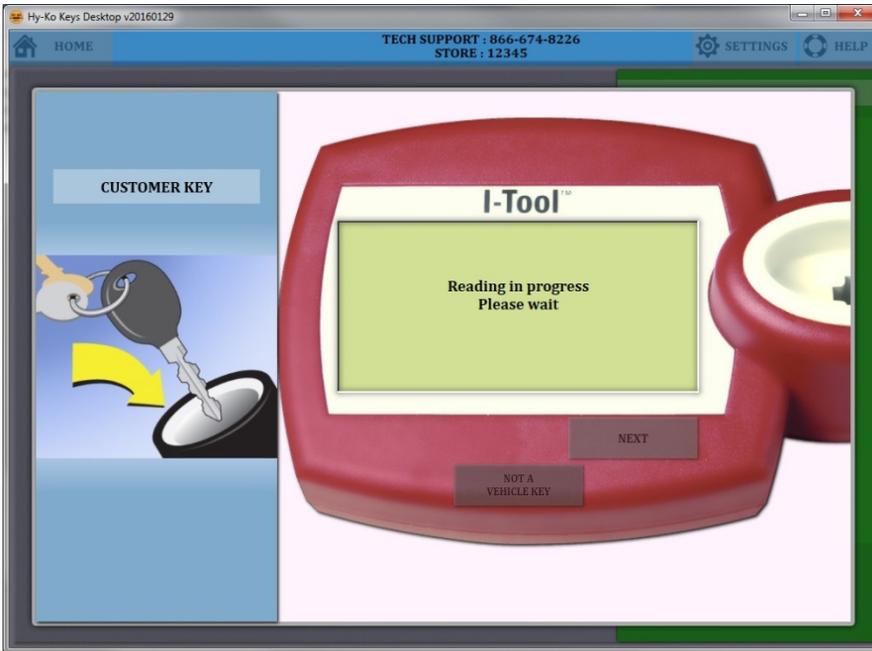


fig. 99

- The I-Tool will read the customer's key (see fig. 99). You can see the progress on the picture of the I-Tool on the software.

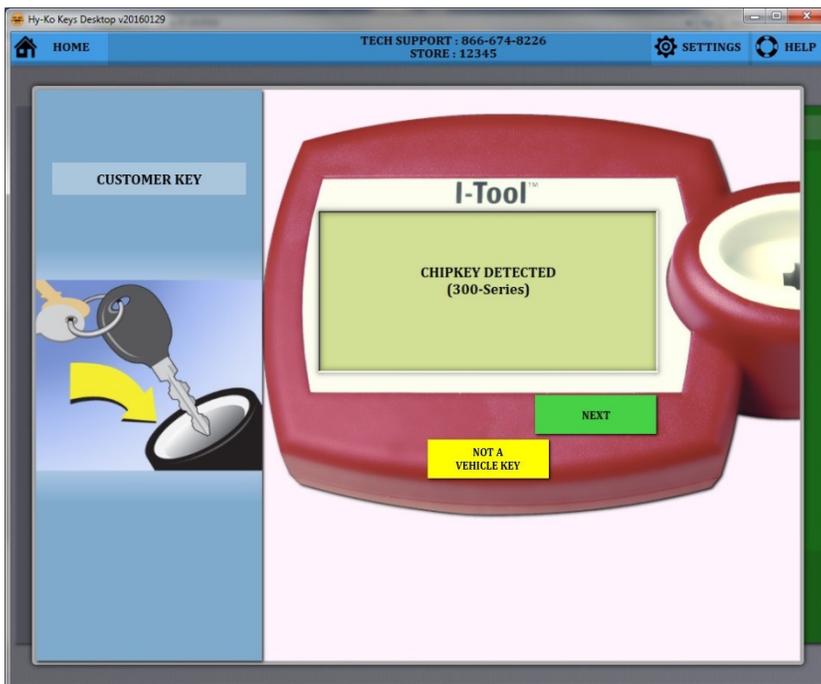


fig. 100

- When I-Tool has completed reading the customer's key, the type of chipkey is displayed on the picture of the I-Tool on the software (see fig. 100).

Scanning Vehicle Keys

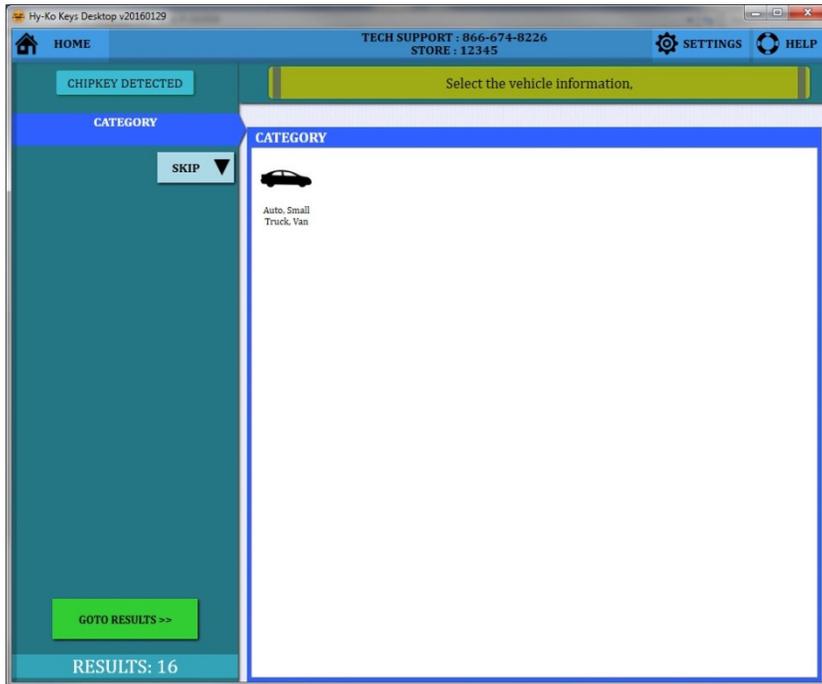


fig. 101

- Choose 'Auto, Small Truck, Van' for the category (see fig. 101).

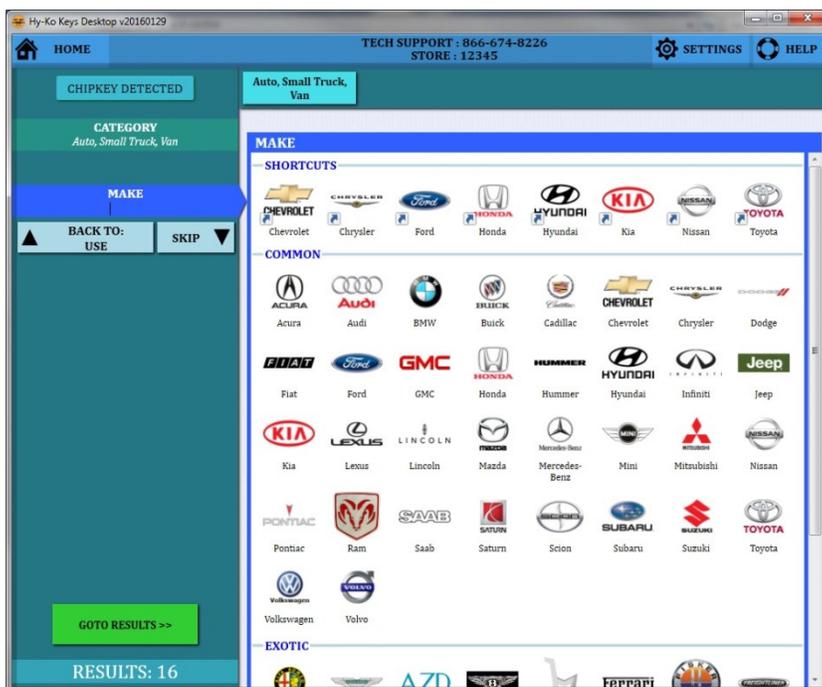


fig. 102

- Choose the Make by clicking on the appropriate manufacturer logo or by typing it in the 'MAKE' box on the left (see fig. 102).



NOTE:

You can add and remove vehicle make 'SHORTCUTS' by right-clicking on an icon. You can have a maximum of eight shortcuts at the top of the screen.

Scanning Vehicle Keys

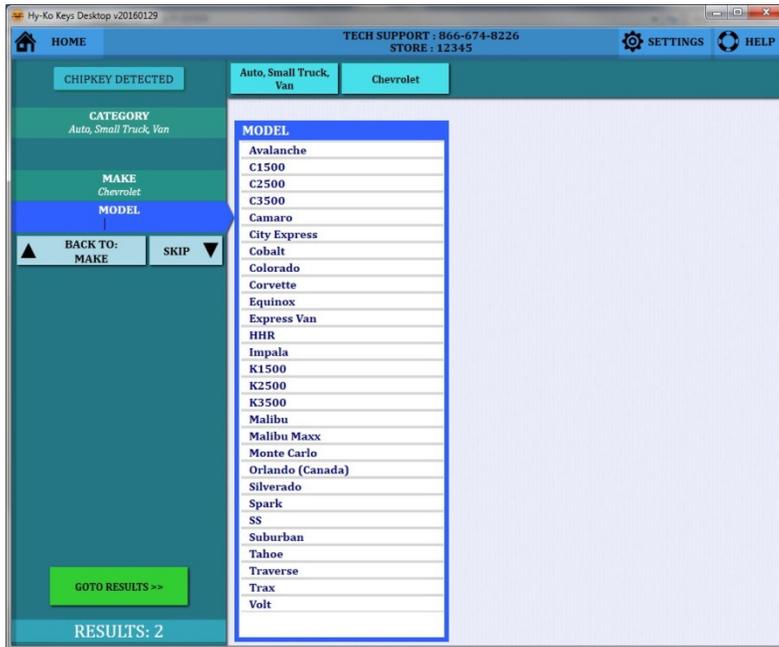


fig. 103

- Choose the Model by clicking on it from the list or by typing it in the ‘**MODEL**’ box on the left (see fig. 103).

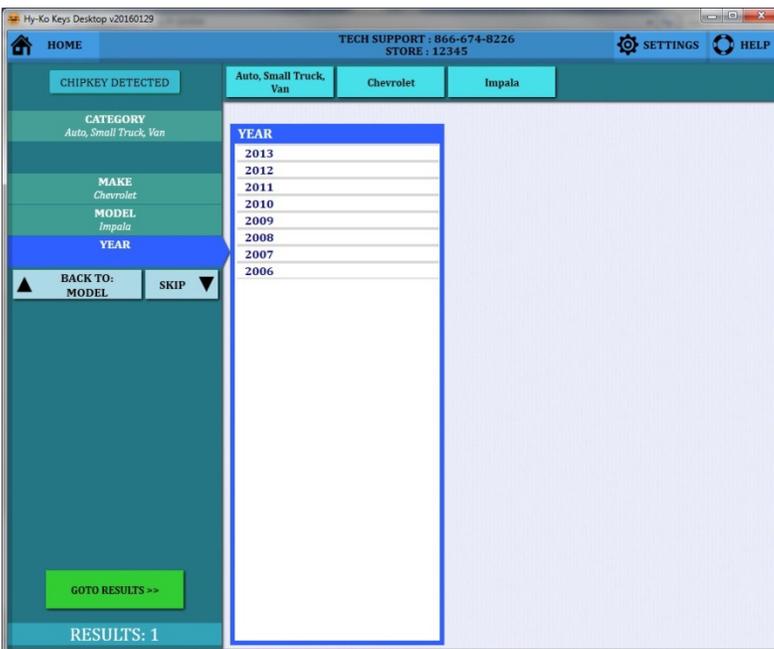


fig. 104

- Choose the Year by clicking on it from the list or by typing it in the ‘**YEAR**’ box on the left (see fig. 104).



NOTE:

If you are unsure about any of the information, click on ‘**GO TO RESULTS**’ in the lower, left corner of the screen. However, the results will be more specific if you enter in all the information.

Scanning Vehicle Keys

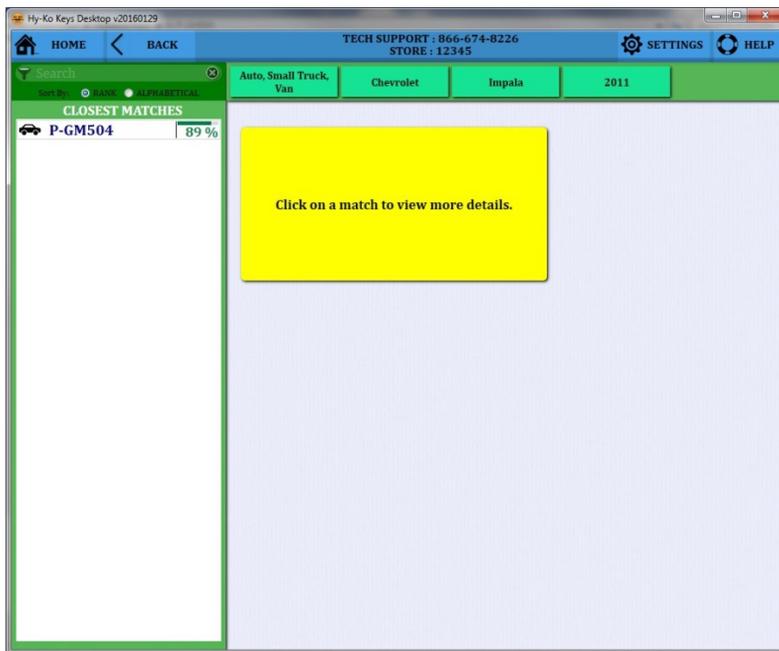


fig. 105

- Your list of possible keys for the vehicle chosen will be shown at the left (see fig. 105).
- The closest matches will be at the top ranked by percentage.



NOTE:

Although the customer's key reads as a 300-series chipkey, the P-GM504 is the key to use due to its ease of programming compared to the 300-series chipkey.

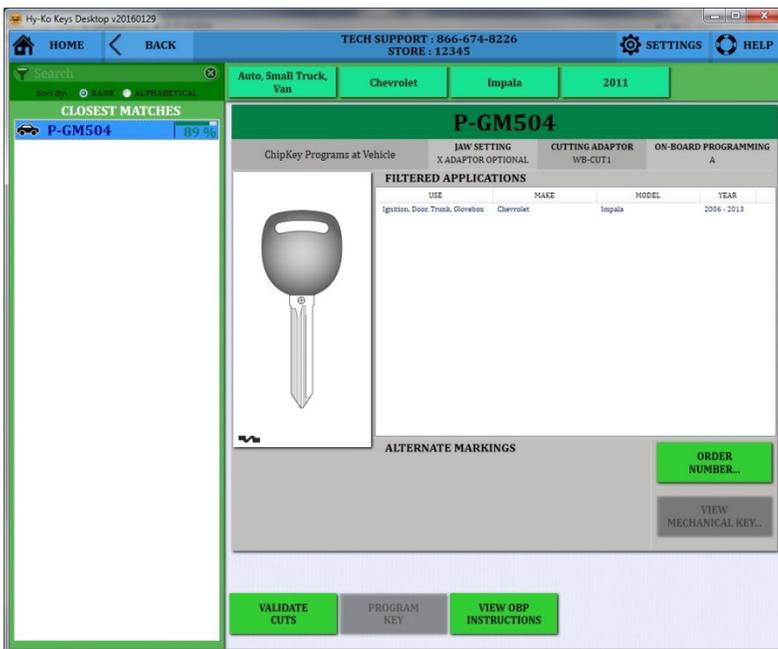


fig. 106

- Click on any key number to see the information on that particular key. An image of the blank and the cross section will be shown as well as other manufacturer part numbers and applications (see fig. 106).



NOTE:

Different P-Keys have different programming instructions or no programming is available. Always check the instructions before cutting a P-Key.

- To check the programming instructions, click on the '**VIEW OBP INSTRUCTIONS**' button at the bottom of the software or reference the back of the P-GM504 package.

Scanning Vehicle Keys

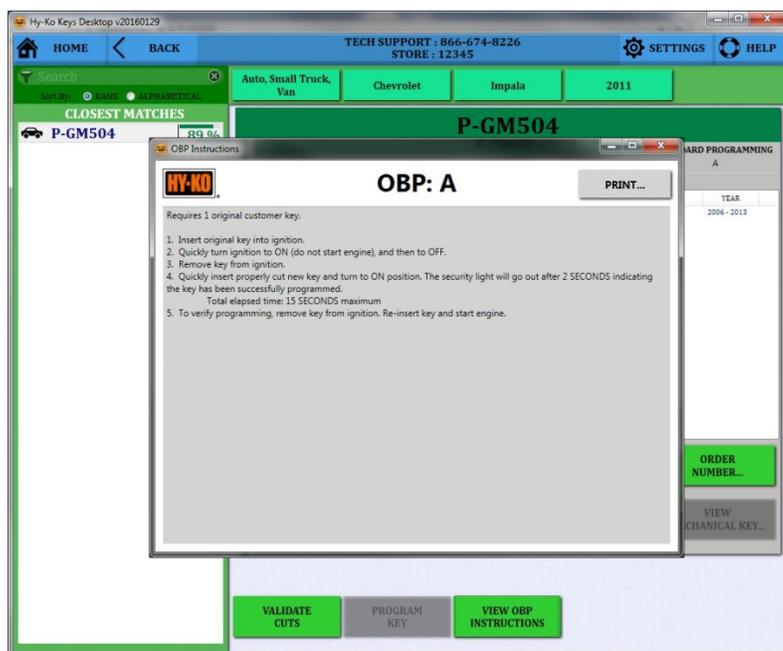


fig. 107

- A pop-up window will appear showing the on-board programming (OBP) instructions for the P-GM504 (see fig. 107). You can either write them down or click the **‘PRINT’** button in the top, right corner of the pop-up window to print the instructions.

- Follow these instructions at the vehicle to program the P-GM504. Once complete, the key is fully programmed.

Once you have determined the correct key blank to choose, and that it can be programmed at the vehicle, you can remove the customer’s key. If you have the key blank you need in stock you are now able to cut it using the appropriate key cutting machine.



Scanning Vehicle Keys

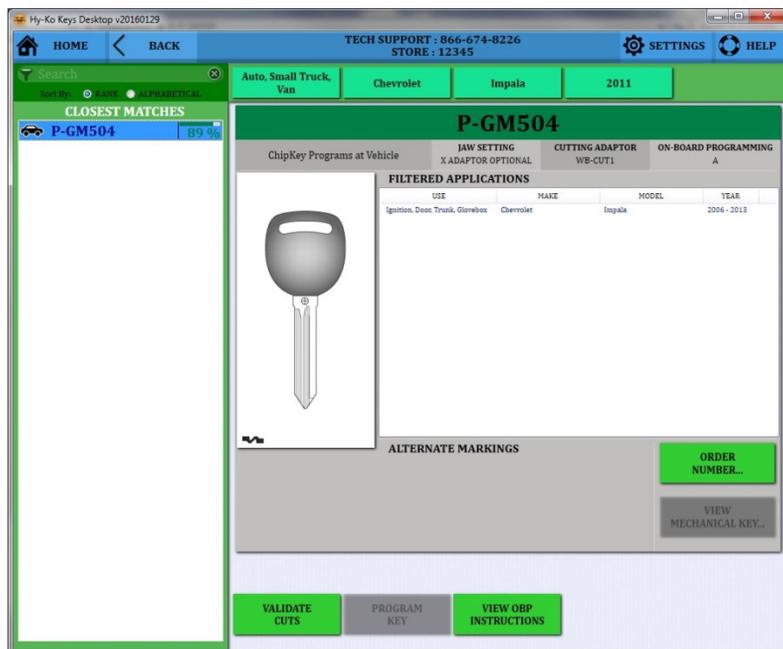


fig. 108

- Once you have completed cutting the key you can return to the Vision Box to validate the cuts on the new blank in relation to the customer's key (see fig. 108).
- From the results screen click the '**VALIDATE CUTS**' button.

To follow the steps for validating the cuts of the newly cut key, refer to pages 28-30 .

Scanning Vehicle Keys

Scanning Other Vehicle Keys

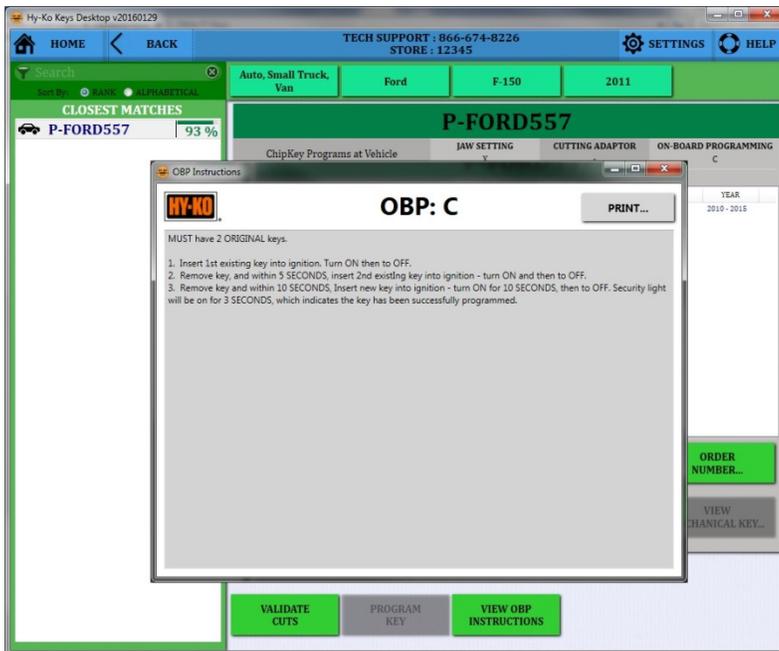


fig. 109

- When scanning a customer's key that has a chip in it and it requires a P-Key other than the P-GM504, you must make sure that you can still program the new key.
- In some cases the on-board programming procedure requires that two original, working keys be present to program the new key to the vehicle (see fig. 109). If the customer doesn't have two original working keys, they will have to go back to a dealership to get a new key.

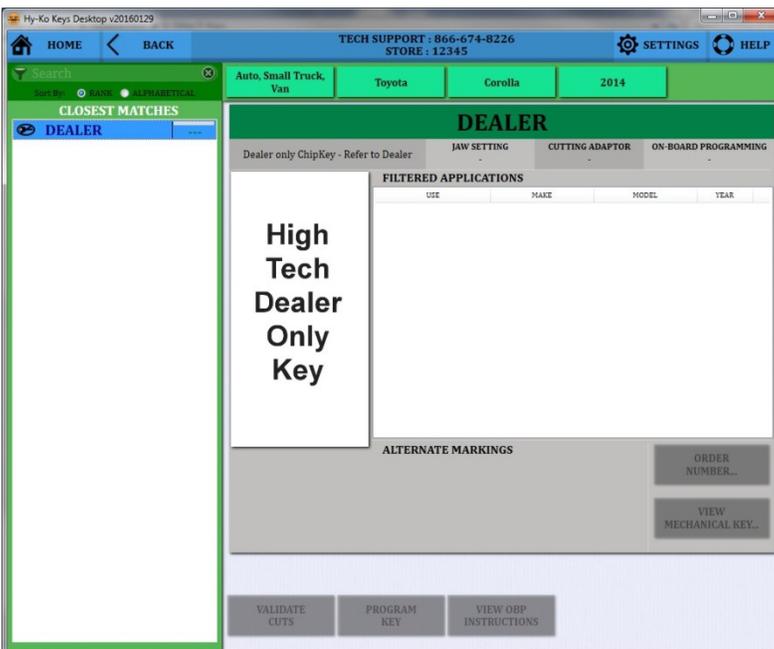


fig. 110

- There are instances where the only key listed will be a DEALER key. In this case, there is no aftermarket key and/or programming procedure available so the customer will have to go back to the dealership to get a new key (see fig. 110).



Apps

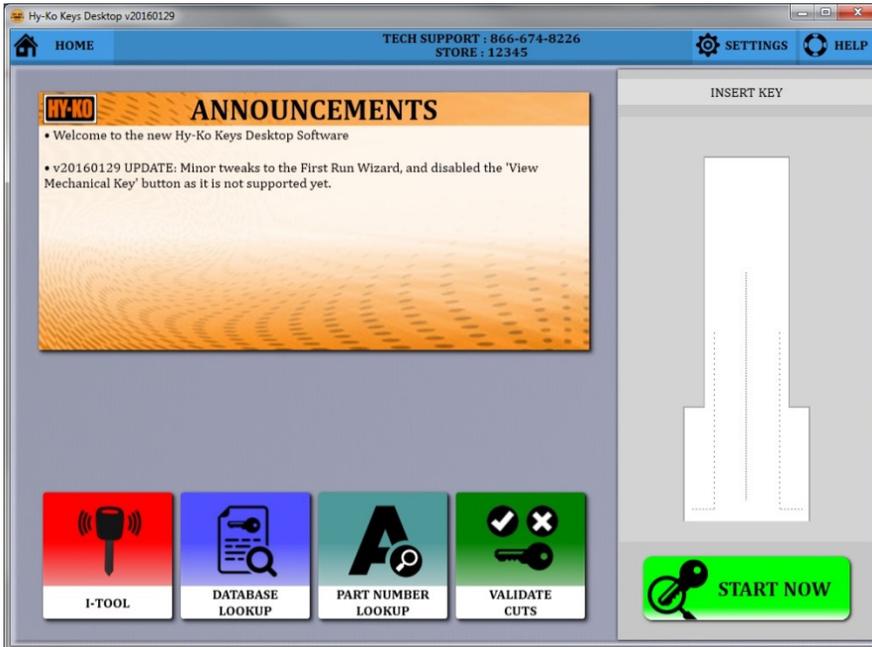


fig. 111

- On the main screen of the software, there are four app buttons at the bottom (see fig. 111).

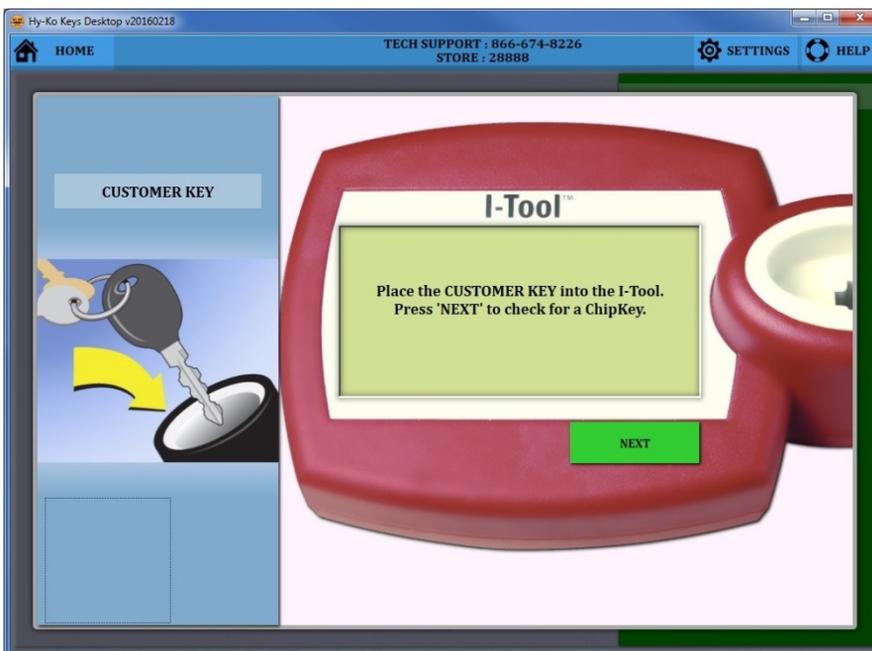


fig. 112

- The 'I-TOOL' app allows you to do only the ChipKey reading and programming portion of the sequence (see fig. 112).

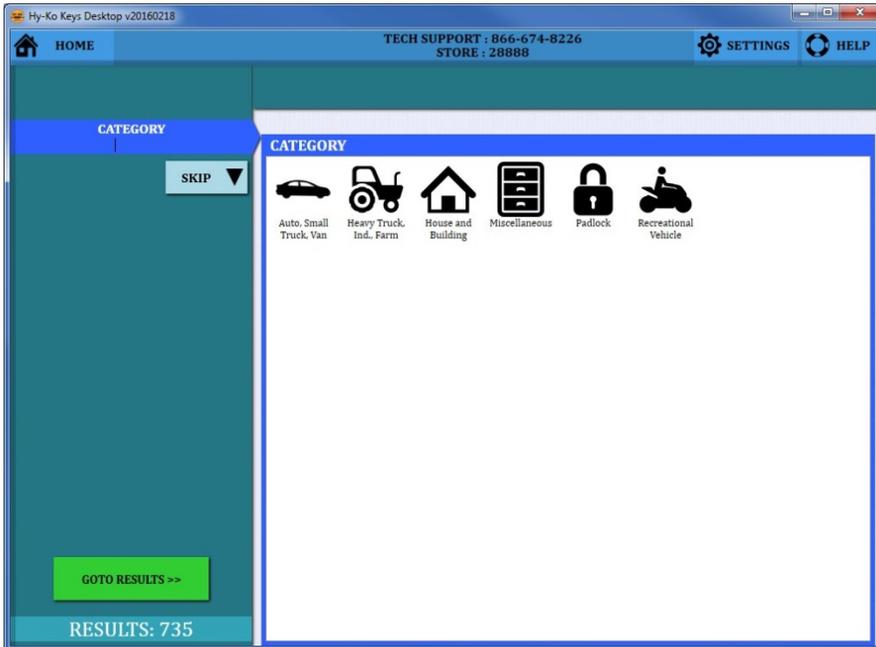


fig. 113

- The **'DATABASE LOOKUP'** app allows you to look up a key blank using usage/application information (see fig. 113).

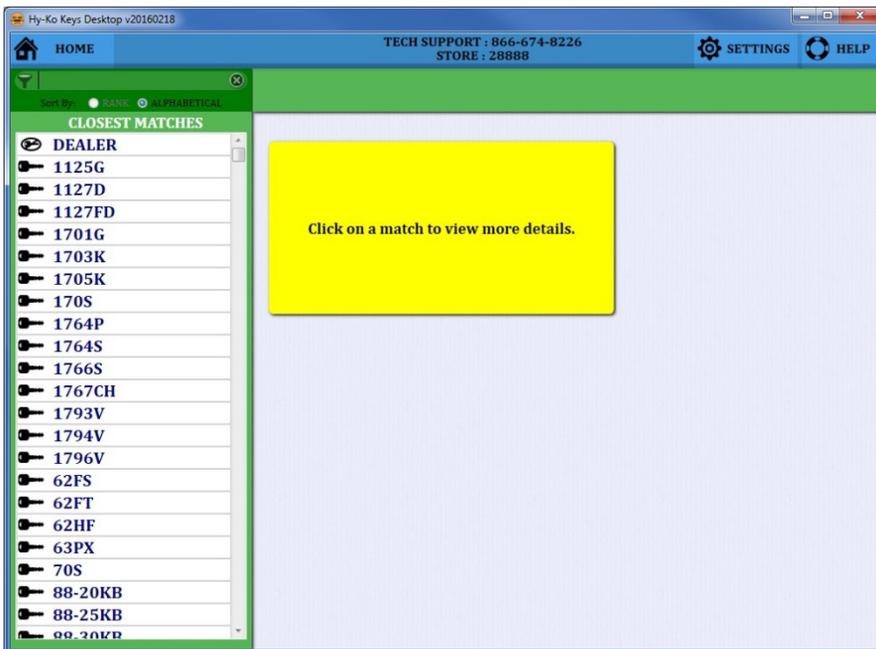


fig. 114

- The **'PART NUMBER LOOKUP'** app allows you to look up a key blank using any portion of a part number (see fig. 114).



fig. 115

- The **‘VALIDATE CUTS’** app allows you check the cuts between two already cut key blanks (see fig. 115). You start by inserting the first cut key blank into the Vision Box and then click the **‘VALIDATE CUTS’** button on the main screen.



Settings

Settings

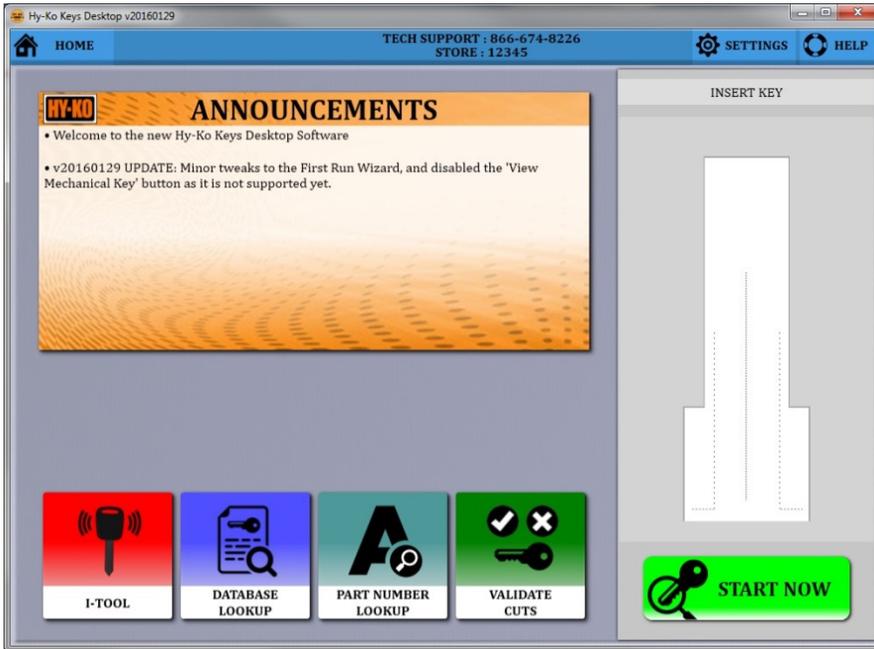


fig. 116

- The **'SETTINGS'** button in the upper, right corner of the main screen will take you to the configuration and setup screens (see fig. 116).

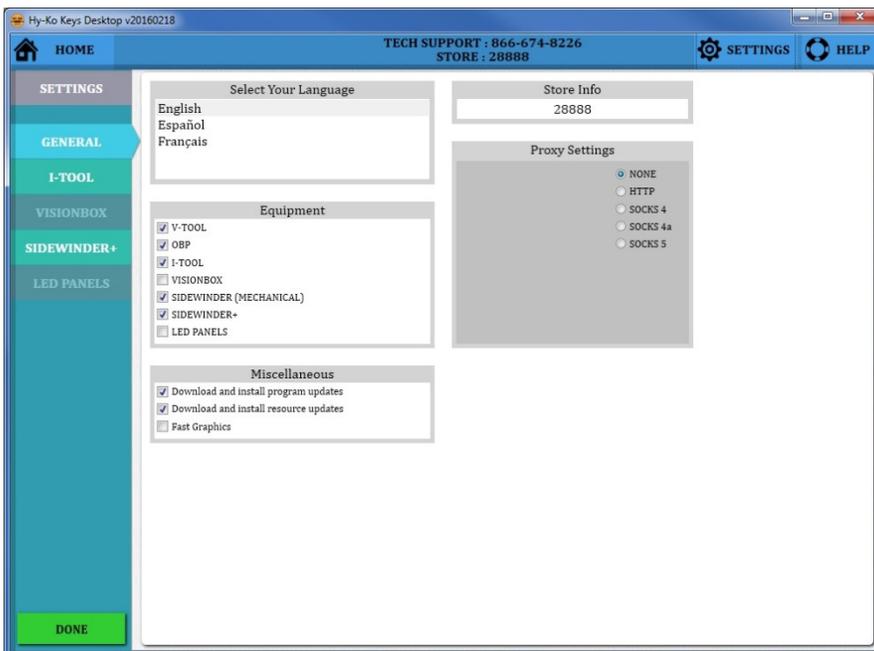


fig. 117

- The **'GENERAL'** tab allows you to change basic items such as language, store number, what equipment is used, proxy settings and automatic updates (see fig. 117).

Settings

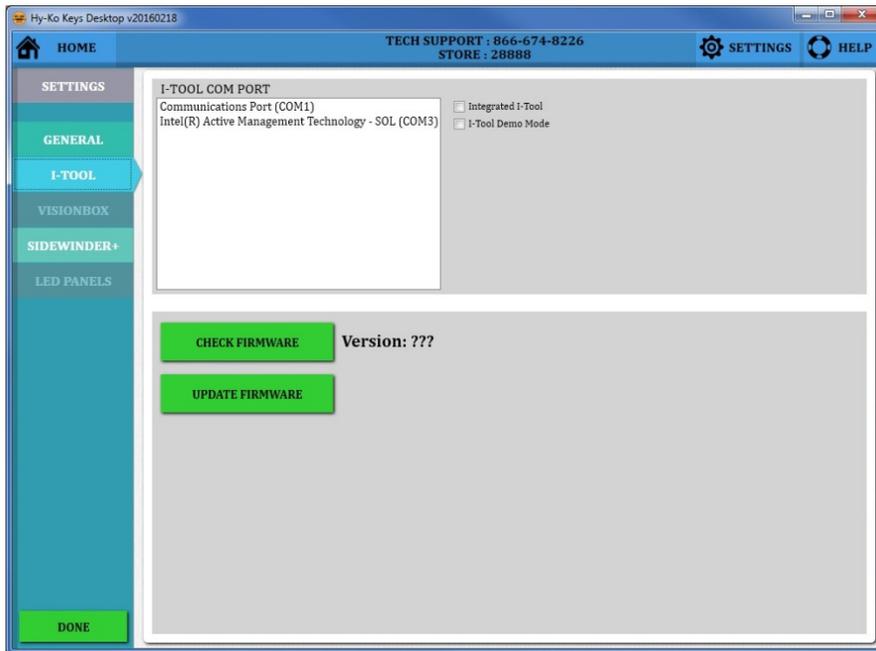


fig. 118

- The **'I-TOOL'** tab allows you to check the firmware of the I-Tool as well as change the communication port (see fig. 118).

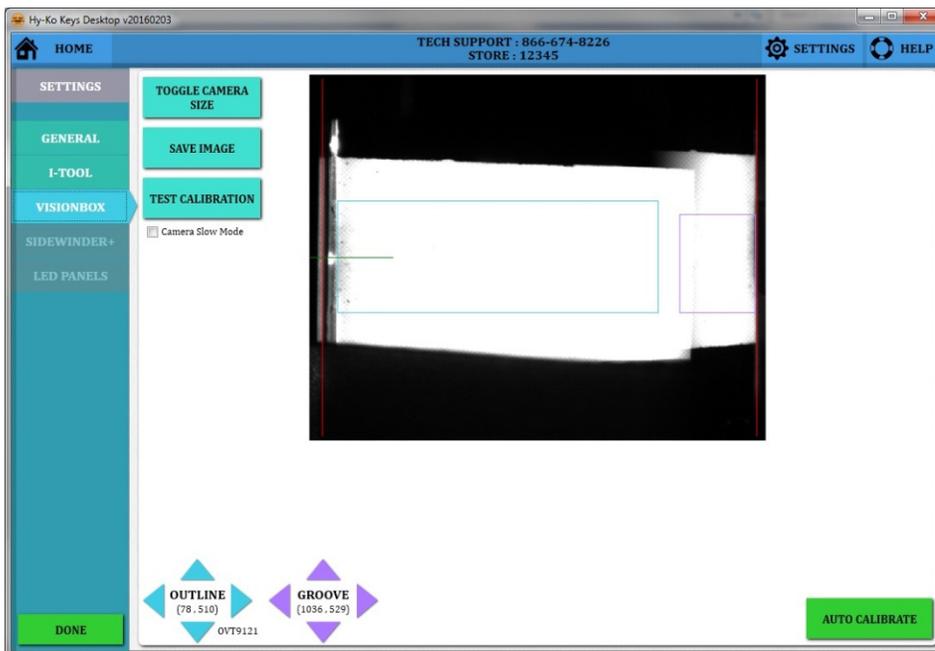


fig. 119

- The **'VISION BOX'** tab is where you can calibrate and test the Vision Box. This process is the same as what was shown in the **'Initial Setup'** section of this manual (see fig. 119).





Help



fig. 120

- The **'HELP'** button in the upper, right corner of the main screen will bring up four buttons in the center of the main screen (see fig. 120).

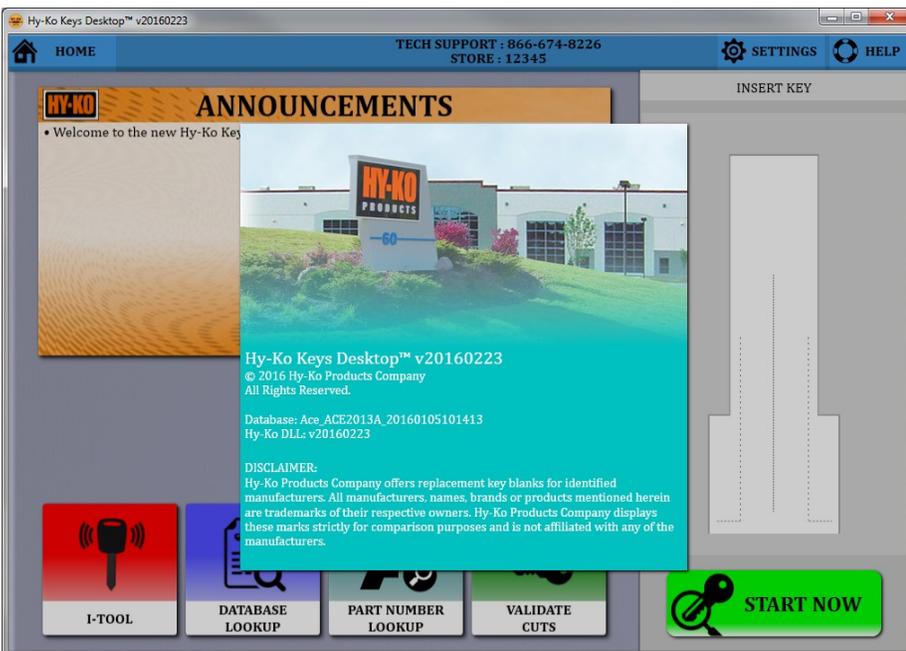


fig. 121

- The **'ABOUT'** button will bring up a disclaimer and show you the software version as well as the database version (see fig. 121).

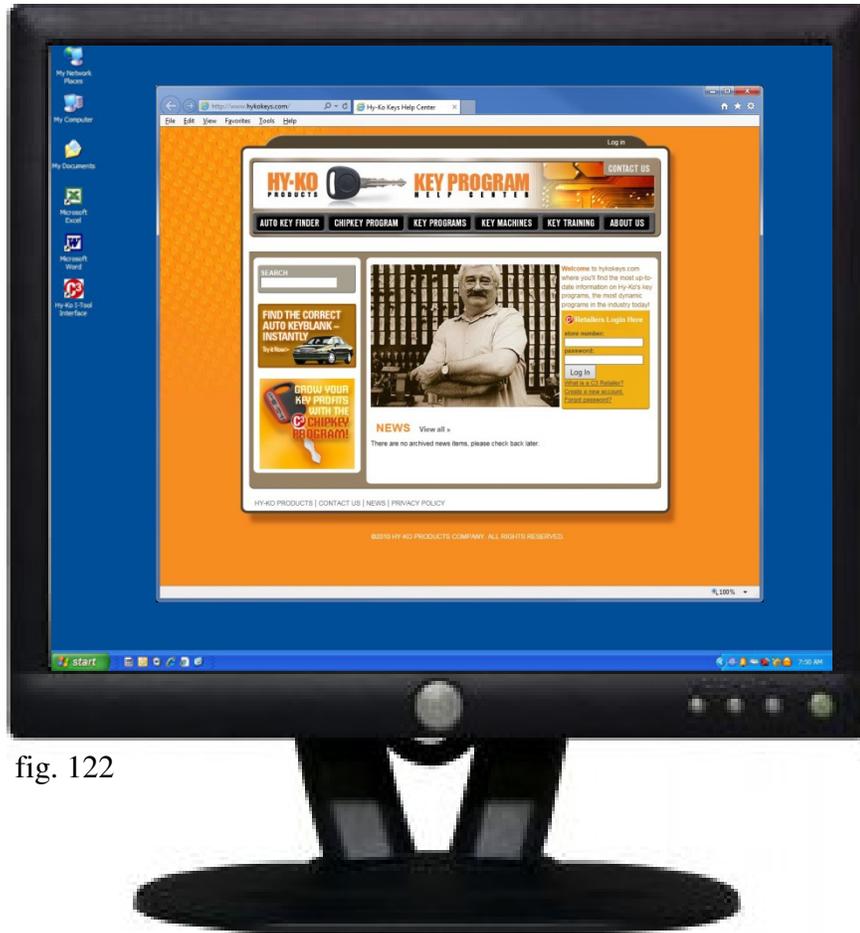


fig. 122

- The ‘HYKOKEYS.COM’ button will launch an internet window and open the hykokeys.com website (see fig. 122).

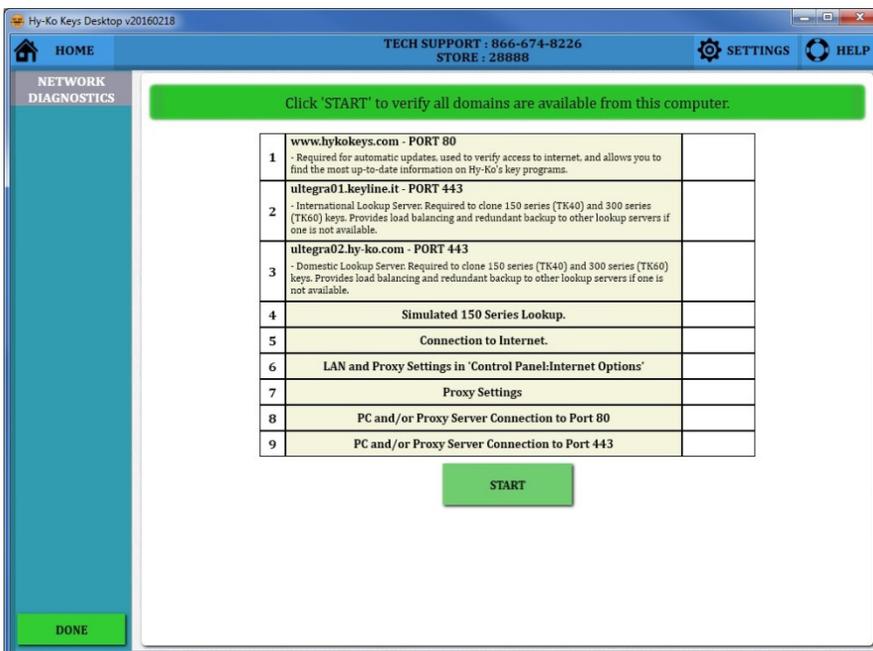


fig. 123

- The ‘NETWORK DIAGNOSTICS’ button will allow you to run a diagnostic analysis of your computer network with respect to the needs of this software program (see fig. 123).

Help

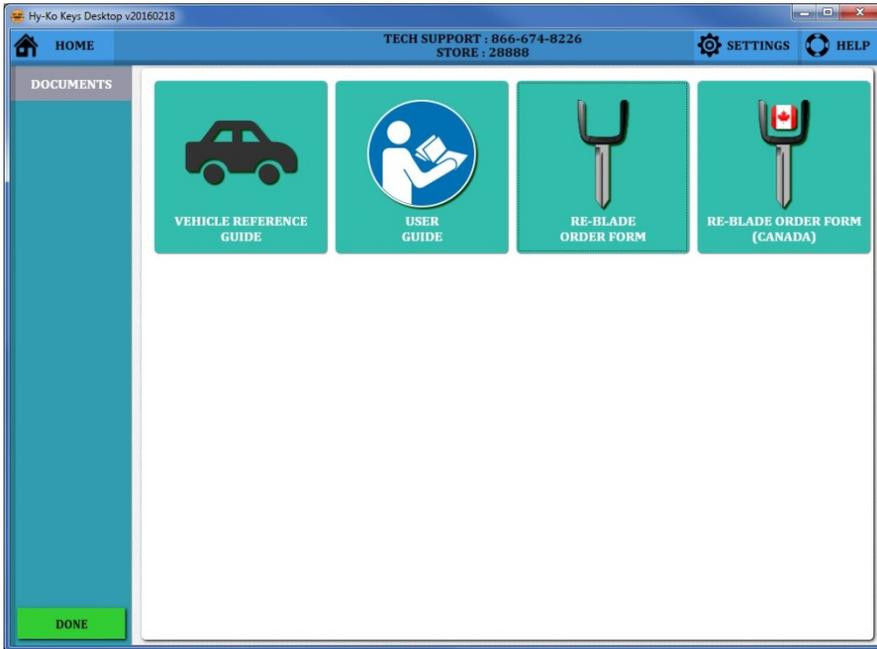


fig. 124

- The **‘DOCUMENTS’** button will open a window showing you all the documents that you can click on and open pdf files of (see fig. 124).



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Hy-Ko Products Company

Phone: (800) 896-7890 Fax: (330) 467-7442 E-Mail: cservice@hy-ko.com

