WHEEL ALIGNER

Service Manual

V2100 / geoliner 630

TEEWA541G

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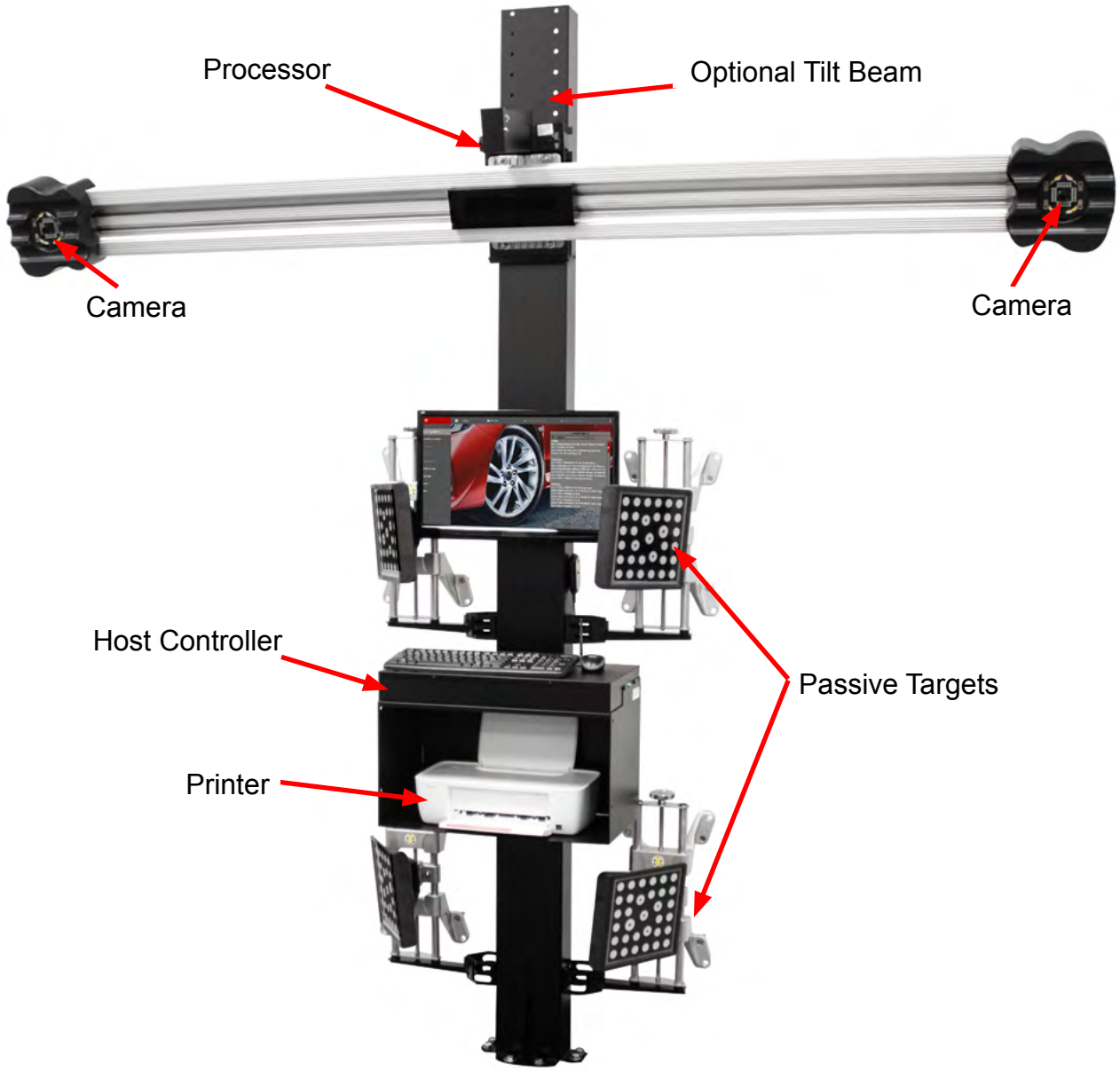
INTRODUCTION

GENERAL OVERVIEW

Equipped with our Next Generation user interface with intelligent, predictive alignment flow.



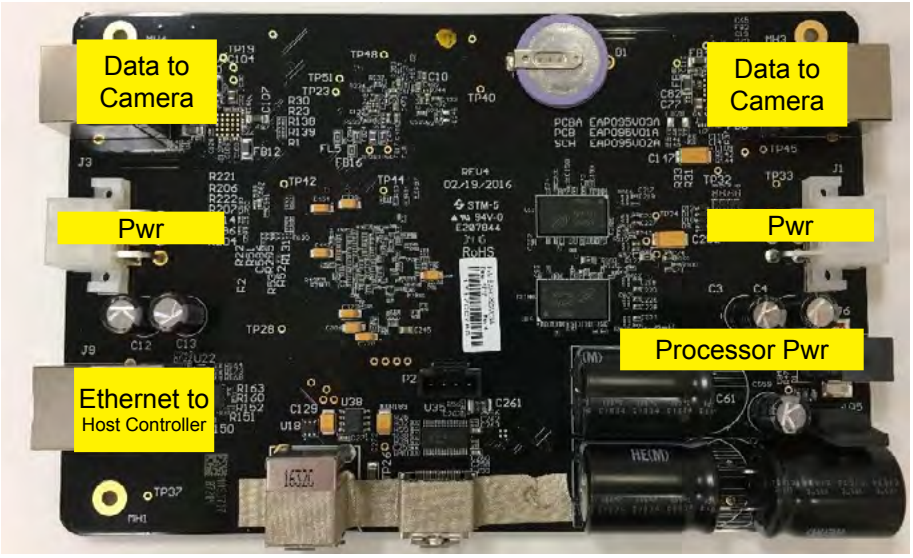
STRUCTURE OF THE ALIGNER

- Display Monitor - Displays all information
- Cameras - 2 Cameras
- Processor - 1 Processor processes all images from the cameras
- Host Controller - Used to to display images served from the processor.
- Printer Access - Houses Aligner Printer (connected via USB)
- Target & Clamps - AC700 Universal Clamps & 4-passive targets
- Tilt - Tilts camera beam to allow multiple alignment height. (Optional)

COMPONENTS OF THE ALIGNER

- Processor
- 19 VDC Power Supply
- Cameras (2)
- Host Controller
- Targets
- Clamps
- 12 VDC Power Supply

PROCESSOR



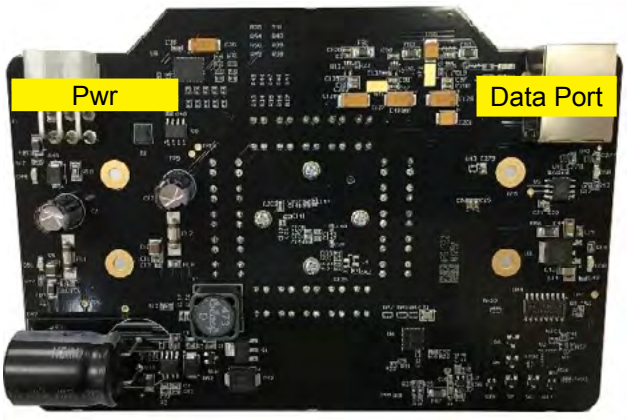
- Processes all images and data from the camera(s) and passes the information to the Host Controller for display.
- Contains the User Interface and the algorithms required to convert camera images into alignment data.
- Retains all information, Calibration data, Vehicle History, Preferences, etc.
- The Processor Board receives raw image data from the Left and Right Cameras where it is analyzed and processed before being sent to the Host Controller to be displayed as alignment data.
- Passes 19.0 VDC power from the Power Supply to each Camera.
- Regulates the 19.0 VDC to 5.0 VDC, which is then passed to each Camera.
- Distinguishes Left and Right Cameras via Data Communication

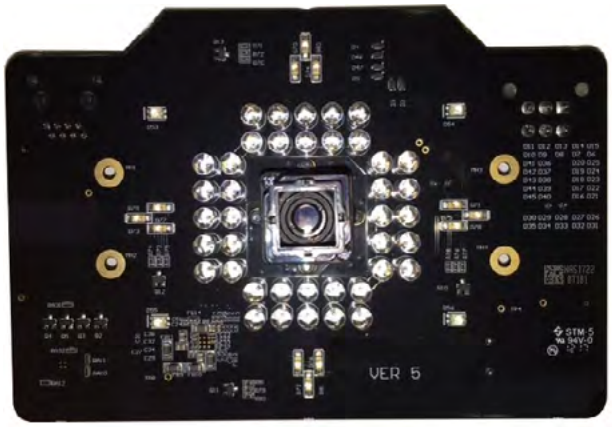
19V POWER SUPPLY

- 19.0 VDC Power Supply input of 100-240 VAC at 1.4 Amperes - 50/60 Hertz.
- Maximum output current of 3.15 Amperes.
- Processor Board passes the 19.0 VDC to the left and right side Cameras.

CAMERA

- L/R cameras are identical.
- Location (L/R) determined by the Processor.
- Each powered with 19.0 VDC and 5.0 VDC as supplied from the Processor Board.
- Communication between Cameras and the Processor Board is provided by hardwired Category 6 cables.
- 40 infra-red L.E.D.s on the board flash as controlled by the Processor Board to illuminate the Targets.
- Image data of the Targets are sent directly to the Processor Board for analysis and eventual display as alignment readings.





HOST CONTROLLER

- Purpose is to display the user interface and alignment data as served by the Processor.
- Powered by 12.0 VDC as provided by the 12.0 VDC Power Supply.
- Copies of the User Interface, Preferences, Alignment History and Calibration Factors are stored on the Host Controller. Items are used to restore the software in the event of a Processor replacement.
- Communication with the Processor is via a Category 6 cable.
- Communication to the SOE Cloud and the Mitchell Server (if subscribed) is via Wi-Fi at 2.4 ghz.

Not Used

12V POWER SUPPLY

- Located inside the electrical shelf inside the kiosk.
- Powers Host Controller.
- 12.0 VDC Power Supply input of 100-240 VAC at 0.8 Amperes - 50/60 Hertz.
- Maximum output current of 2.0 Amperes.

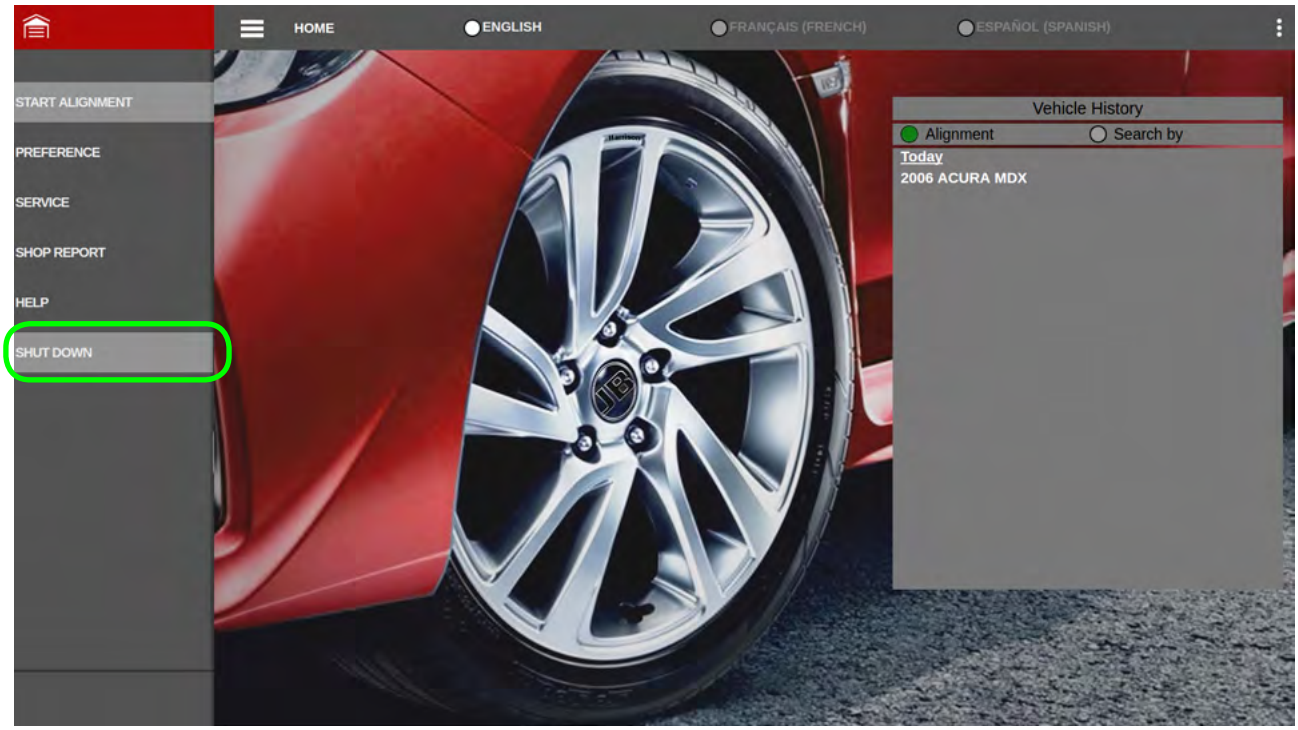
TARGETS & CLAMPS

- Both Front and Rear Targets are 8 inches by 8 inches in length and contain 33 circles.
- The Targets are attached to either AC700, AC200 or AC100 Clamps with a 24 inch rim capacity.
- The Targets and Clamps are assigned a specific wheel position on the vehicle as indicated by a decal attached to the clamp (yellow circle).
- The front targets have a deeper offsets bringing the target further away from the tire and wheel assembly
- The Clamps are equipped with a single sided claw.

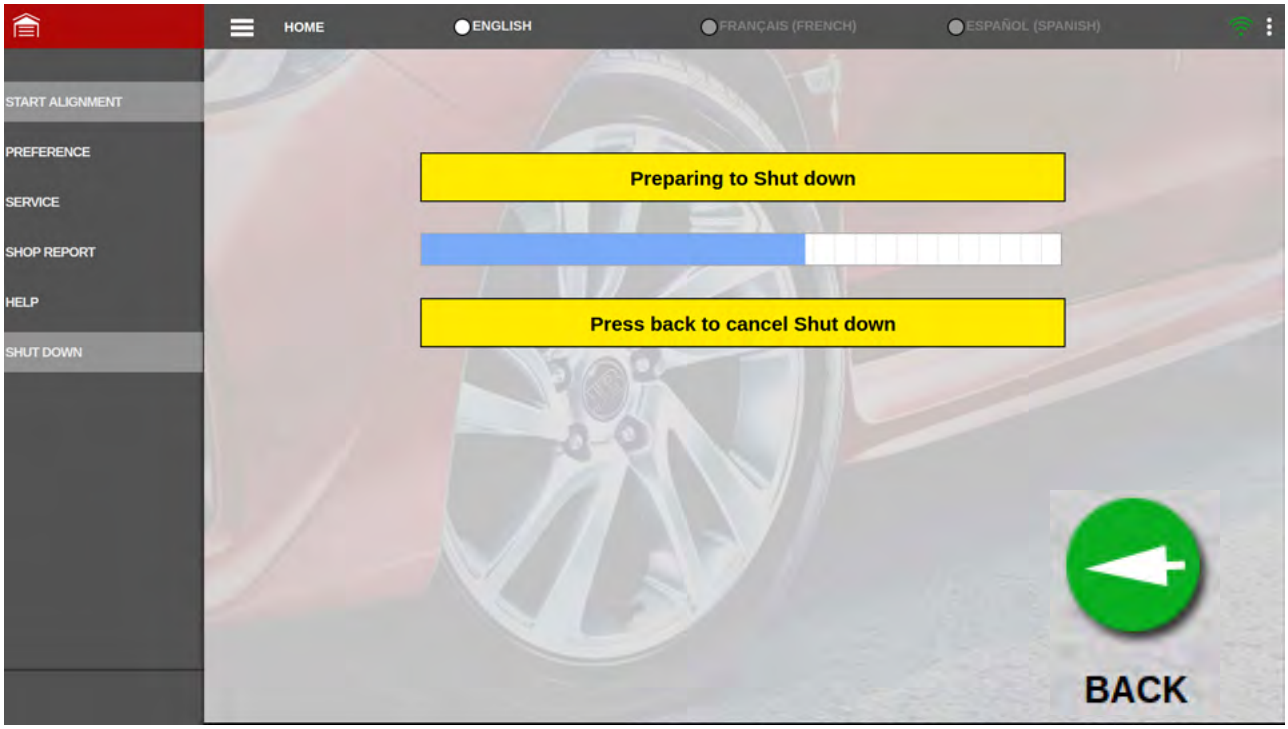
SHUT DOWN PROCEDURES

It is recommended that the system be shut down using this procedure. Although powering down the system by directly shutting off the power switch has been used, the “Shut Down” procedure ensures the Host Controller is properly powered down. The switch must be toggled off to shut down the cameras.

1. From the Main Menu click on “Shut Down”.



2. The user is given approximately 10 seconds to abort the unit Shut Down process by clicking on the <BACK> button.



CALIBRATION

The Calibration procedures is located in the “SERVICE” menu of the aligner software. It is never recommended calibrating a system unless a calibration issue is determined. Using proper troubleshooting techniques is recommend. Check to make sure all wheel clamps and targets are in good working condition. Loose targets and improperly mounted targets and wheel clamps will cause errors.

A system arriving from the factory to a site comes fully calibrated. A factory calibrated system has underwent procedures that can only be done at the factory and specification tolerancences are much tighter. Always verify that a system needs calibration before performing any of these procedures. A customer indicating that he/she thinks a system is incorrect does not mean it needs calibration.Operator error, Dirty or Bad turnplates and rear slip plates can cause a system to seem incorrect.

The following procedure should be done before any calibration. These steps will qualify the system.

*Perform a rollback using a vehicle with no worn or loose suspension parts. Insure that the suspension is settled properly. Proceed to Rear Meters. Roll the vehicle back and forth a few times while observing the meters for changes in camber or toe. Changes in camber or toe greater than 0.05 degrees while the vehicle is at a stand still indicates a possible Target Identification (TID) problem. Repeat this test while observing the Front Meters. View the Vehicle Demision page, if any demensions look abnormal may indicate an RCP is required. If all test verify ok, the system **DOES NOT** require calibration.*

Front Turnplates and Rear Slip plates must be in excellent working condition. With the weight of the vehicle resting on the front turnplates and rear slip plates the vehicle must float freely. Faulty/Rusty rack components will cause the suspension to bind and will create an inaccurate reading. Most alignment errors are a faulty rack or rack components. DO NOT OVERLOOK the obvious replacing good alignment equipment parts will not fix a faulty rack problem.

The Calibration procedures are listed below:

- **RCP Check**

  This procedure is used so that each camera can determine where the other camera is in space. Mathematical triangulation is done so that each camera can determine where each target mounted to the vehicle is at all times. Although the Left Camera cannot see the right targets mounted on the vehicle it is able to determine where exactly they are based on a correct RCP Check.

- **TST**

  This procedure should only be used by a customer that believes one or more of his target(s)/wheel clamps have been compromised due to it being dropped. This procedure is used to calculate the exact center of the target mounted to a wheel clamp. The vehicle used must have known good parts. Customer should call to have the system single bar calibrated.

- **BACKUP**

  This procedure backs up the current calibration factors of the system. A restore procedure is used to restore a systems calibration factors. It is recommended that all calibration factors be backed up to a flash drive before performing any service functions. It is also recommended that a system be backed up if a camera has been changed and calibrated. This should be done after an alignment check is done.

- **SINGLE BAR CALIBRATION**

  This procedure is used by an authorized service technician. This procedure requires special equipment. The bar and stands being used are precision tools and should always be handled and stored with care. This procedure is the same as TST however it applies additional information (offsets) to the system when used.

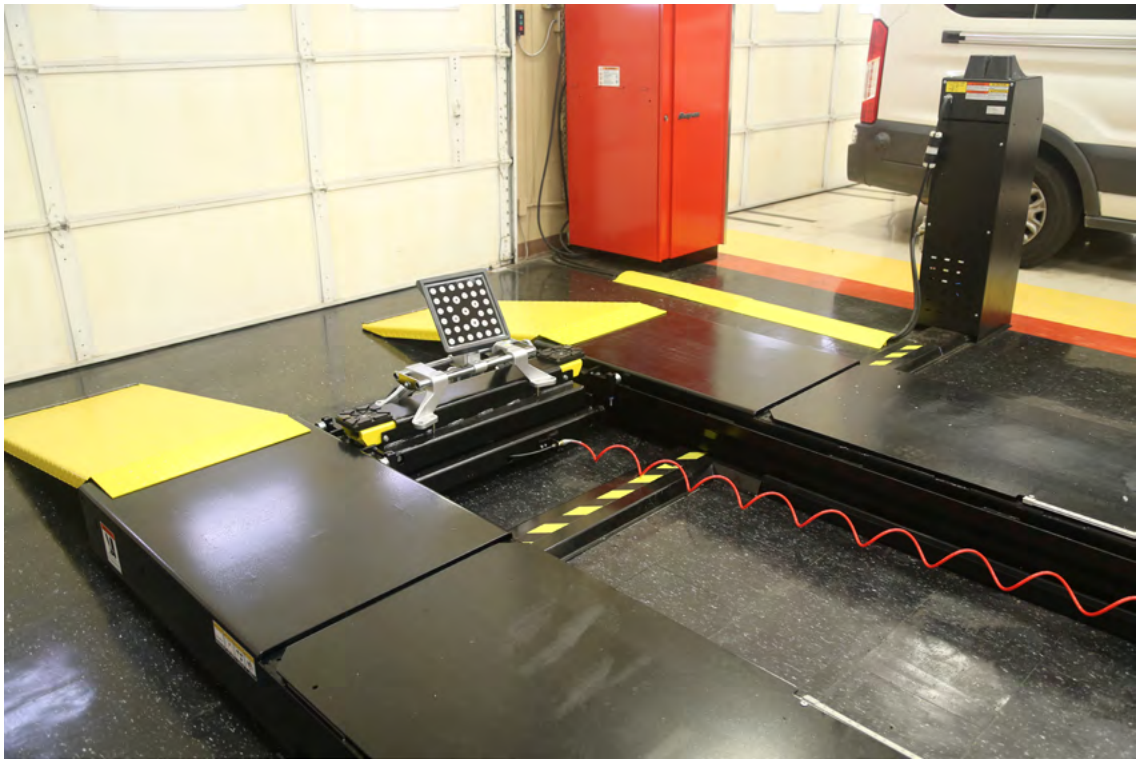
NOTES

RCP CHECK

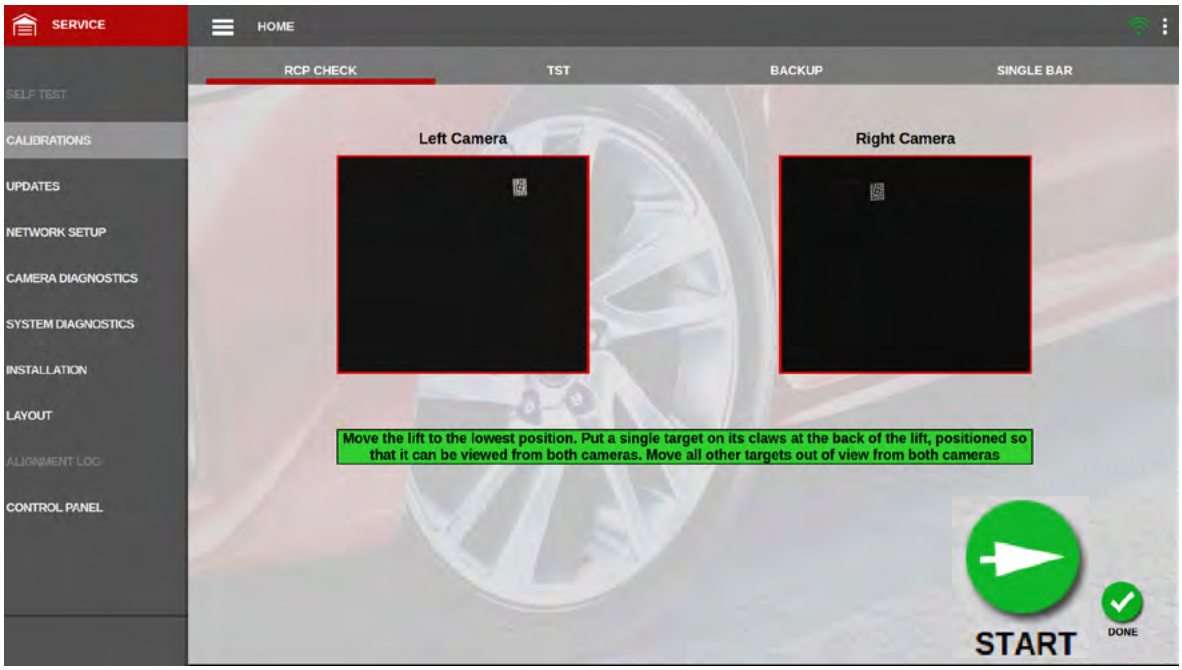
This procedure requires a front or rear target and clamp . A target from the system is okay. The target being used must meet the highest standards. A target that is cracked, smugded or distorted can affect the accuracy of this calibration procedure.

NOTE: NO OTHER TARGET CAN BE VISIBLE TO THE SYSTEM DURING THIS PROCEDURE.

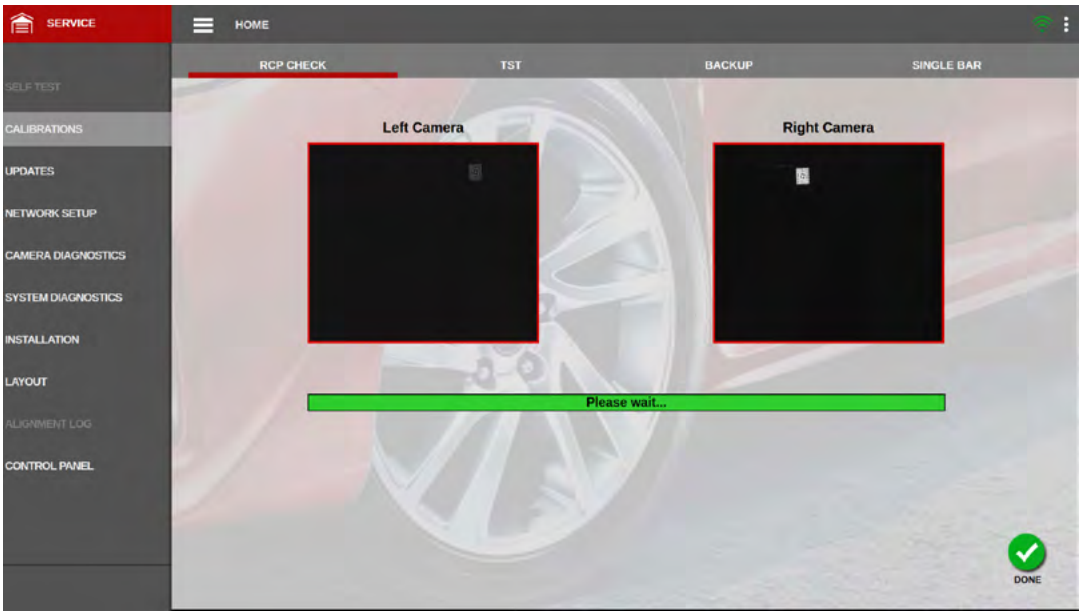
1. Place the target at the furthest point of rear of the alignment rack in the center. The target only needs to be in view of both cameras. It is not necessary that it be level side to side or tilted front to rear a certain amount, it only needs to be in clear site of both the left and right cameras.



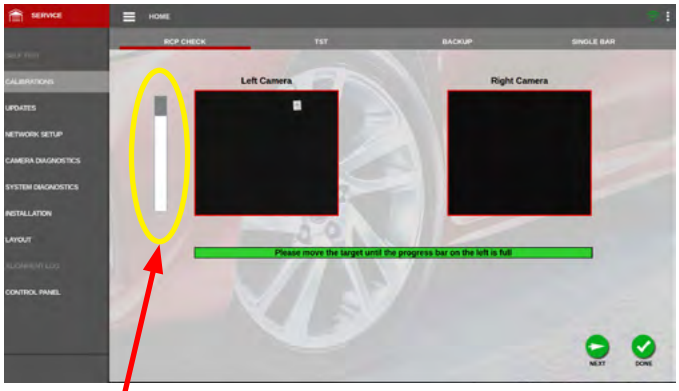
2. From the HOME screen click on <SERVICE> <CALIBRATION> and select RCP CHECK from the sub menu. Press the “START” button.



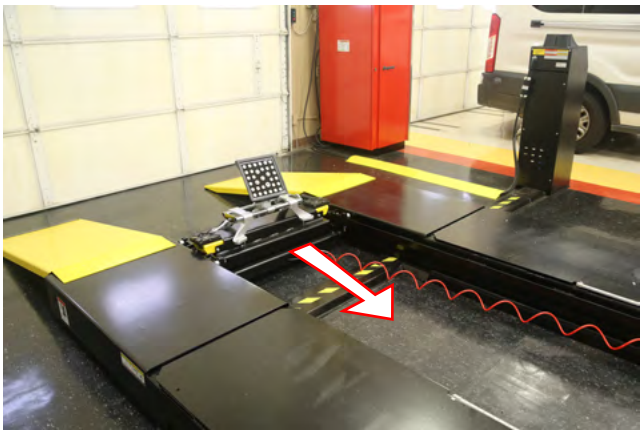
3. Once selected the cameras take data the system will prompt the user to wait while data is taken.Click “NEXT” when ready.

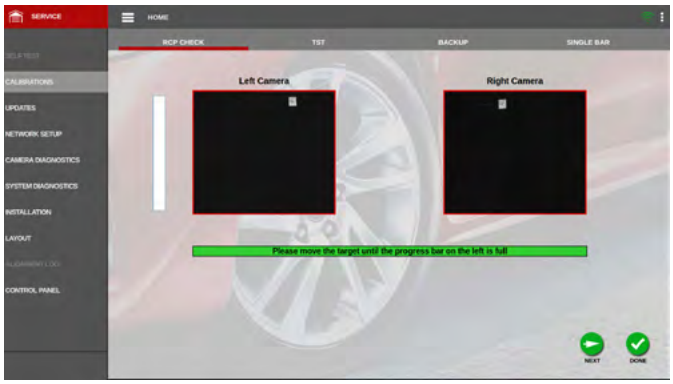


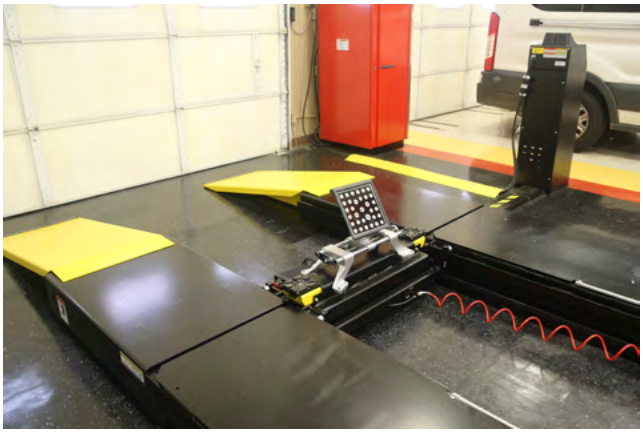
4. Once the targets are acquired and data is taken the system prompts the user the move the target until the progress bar is full. The target can be moved in any directions however rolling the jack forward is found to be the easiest.



Progress Bar





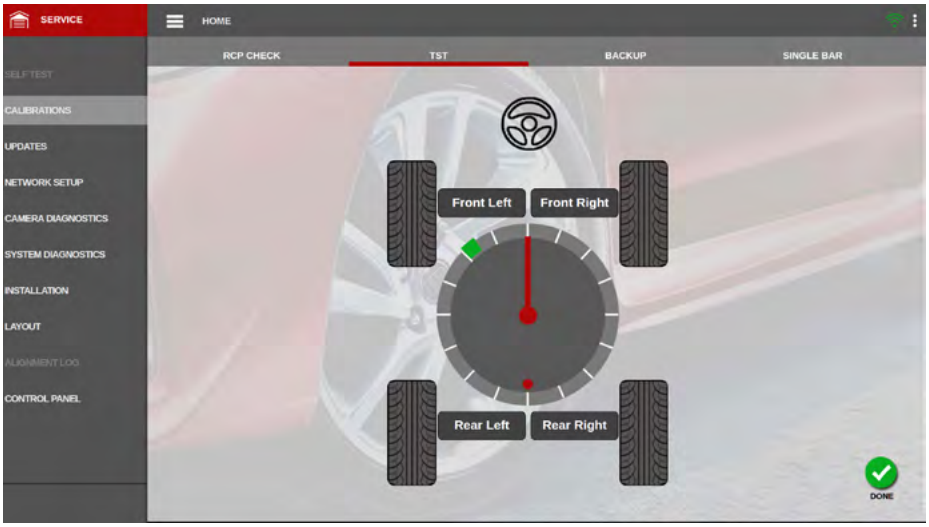


TST

This procedure is designed to be used by a customer ONLY. The customer must use a vehicle with known good parts. A vehicle with worn or loose parts will cause errors resulting in inaccurate alignment readings. If this procedure is done it is recommended to be followed up by a authorized service technician doing a single bar calibration when available.

1. Place a vehicle on the alignment rack and mount all 4 clamps and targets. Using the roller jacks raise the vehicle off the lift. Lower the vehicle down on the Locks of the roller jacks. A faulty roller jack can and will cause errors in this procedure resulting in in-accurate alignment angles.

2. From the HOME screen click on <SERVICE> <CALIBRATION> and select TST from the sub menu. This procedure performs TST 1 wheel at a time. The TST procedure can be used on 1 or more of the targets. It is not necessary to do all 4 wheels.



3. For these instructions the Right Front Wheel is chosen. Rotate the wheel assembly aligning the needle with the green indicator. A stop sign will appear. Hold this position, the system will automatically advance to the next step.

4. Rotate the wheel assembly again aligning the needle and stop point.

5. Rotate the wheel assembly again aligning the needle and stop point.

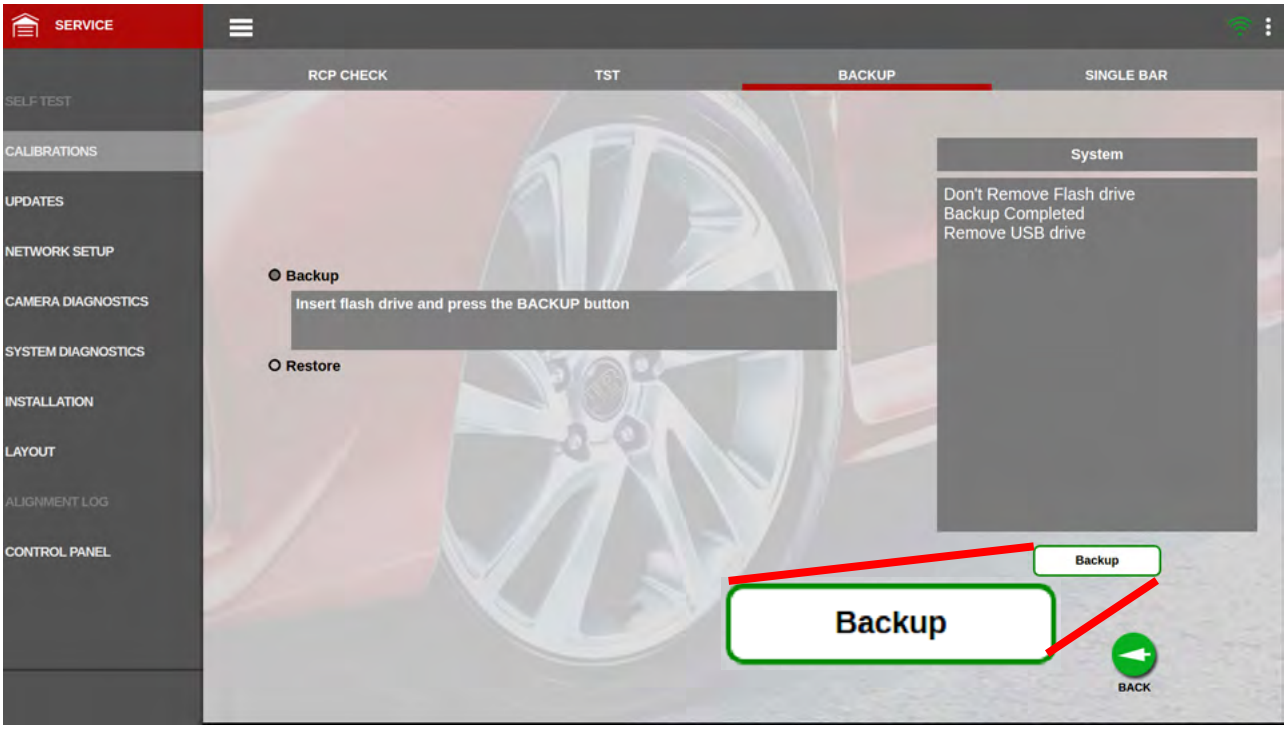
6. Rotate the wheel assembly again aligning the needle and stop point.

7. Opeartion complete. Proceed to additional wheels if needed.

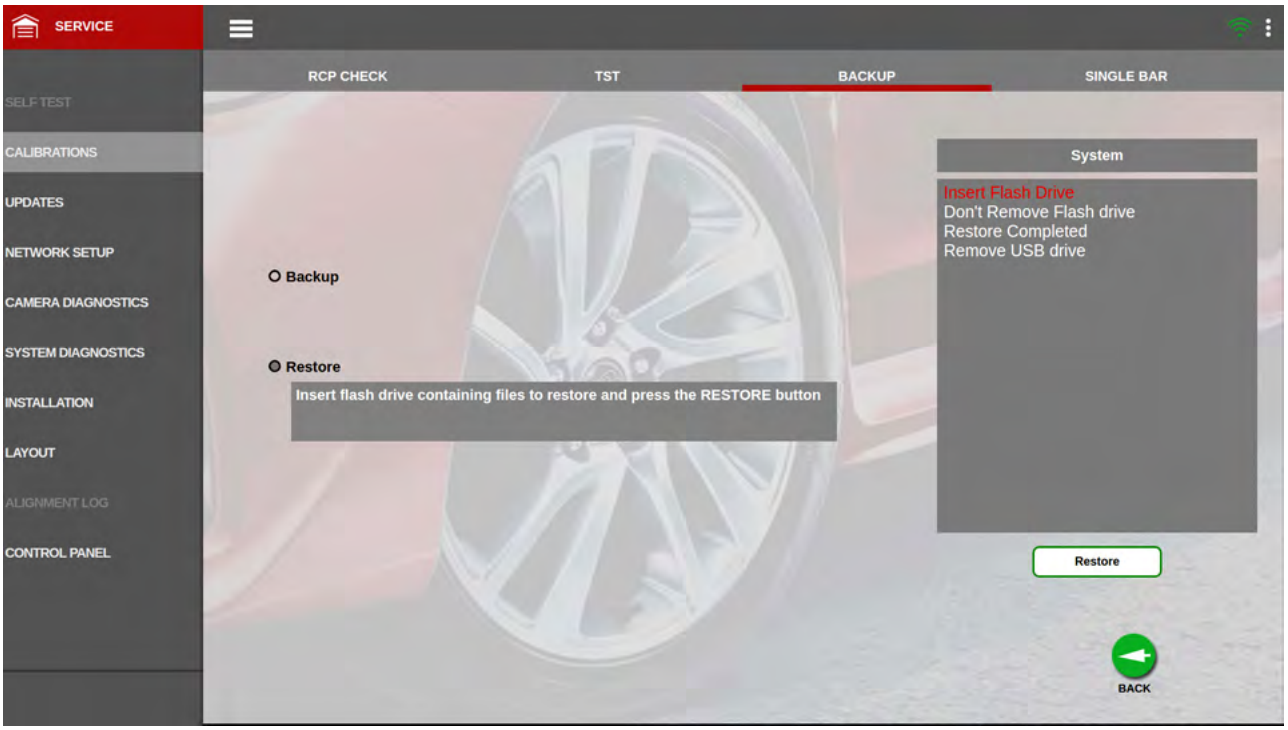
BACKUP

The Backup/Restore feature is used to backup and to restore all calibrations factors on the unit. It is recommended to backup all calibration factors before attepting to use any of the calibration features.

1. From the HOME screen click on <SERVICE> <CALIBRATION> and select BACKUP from the sub menu. From the back of the system place a flash drive into an empty USB port. Click on the “Backup” button when prompted. A prompt will appear after a successful backup.



2. If Restoring calibration factors to a system place the flash drive containing the files in an empty USB port. Click on the Restore button when prompted. Please NOTE if the Flash Drive is not inserted correctly the system will prompt the user to “*Insert Flash Drive*”

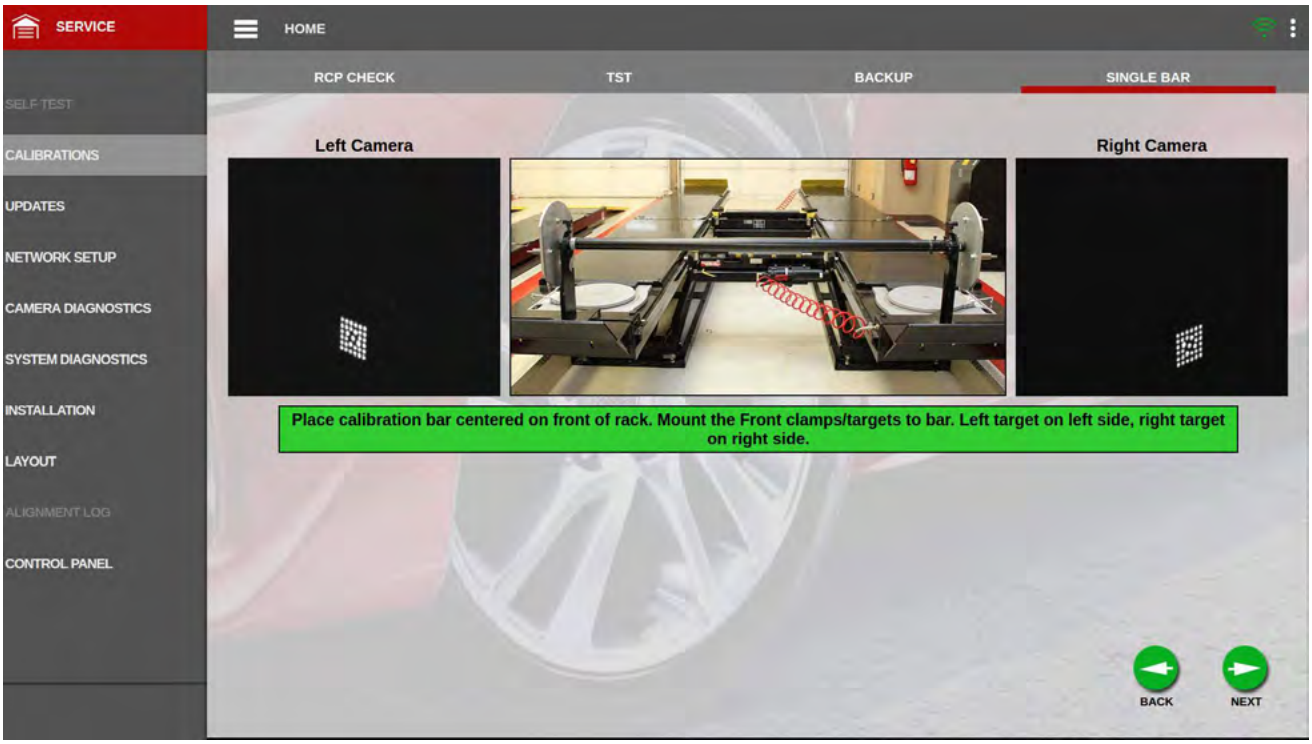


SINGLE BAR CALIBRATION

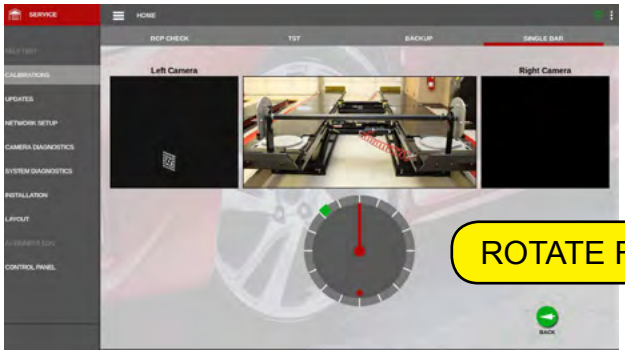
This procedure requires special equipment. The bar and stands being used are precision tools and should always be handled and stored with care. Place the calibration bar and stands at the rear of the alignment rack.
From the HOME screen click on <SERVICE> <CALIBRATION> and select SINGLE BAR from the sub menu. Once prompted rotate the calibration bar in the direction indicated and stop. The system will auto advance when ready.

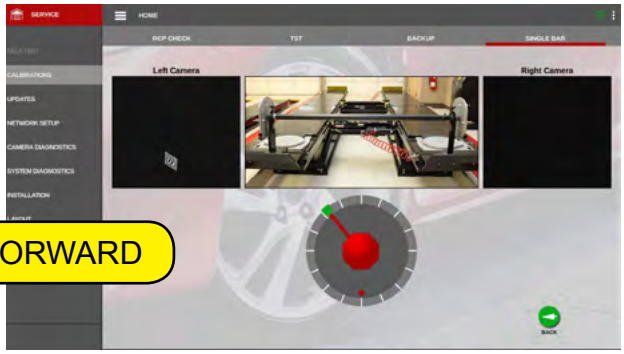
NOTE: THIS PROCEDURE IS REQUIRED WHEN A CAMERA OR TARGET IS CHANGED OR IF A HOST AND PROCESSOR IS CHANGED AT THE SAME TIME. ONLY PERFORM THIS IF NEEDED. DO NOT GUESS!!!

NOTE: MOUNT THE TARGETS AND WHEEL CLAMPS TO THE BAR ASSEMBLY BEFORE PRESSING THE NEXT BUTTON. THE BAR AND STANDS MUST BE STABLE DURING THIS PROCESS. MAKE SURE THE WHEEL CLAMP GRABBERS ARE FIRMLY ATTACHED TO THE PADDLES.



1.





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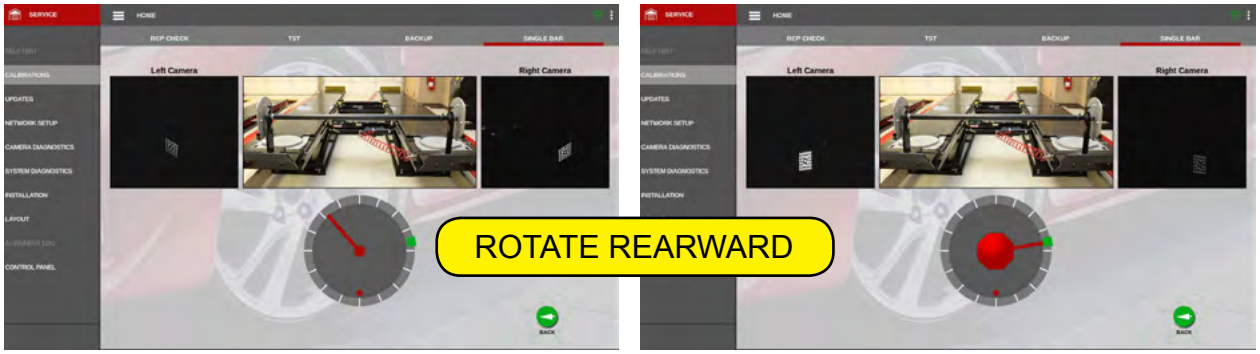
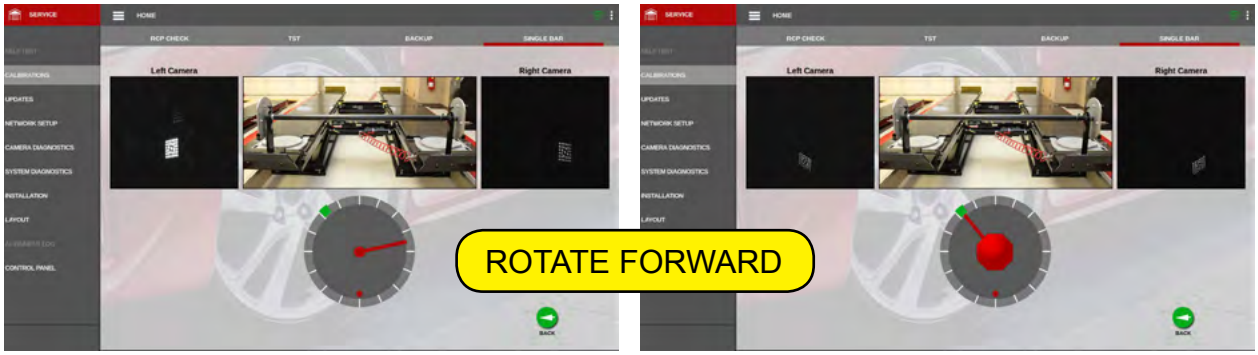
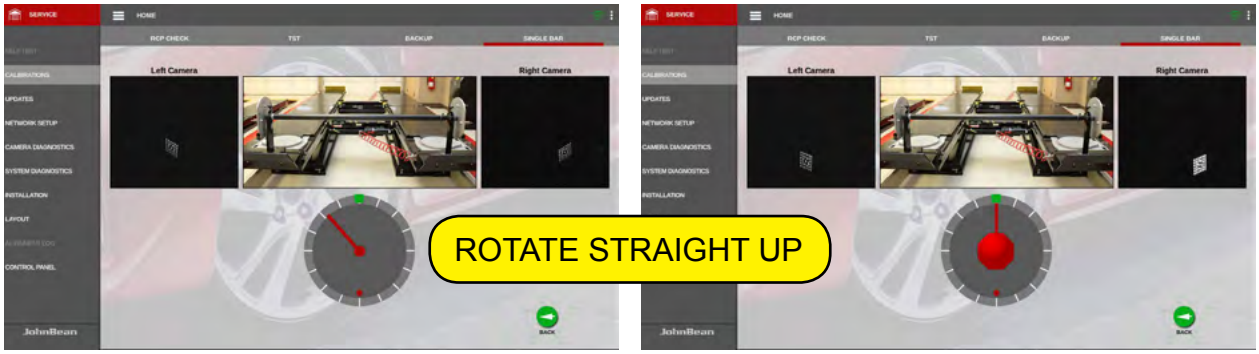

ROTATE REARWARD

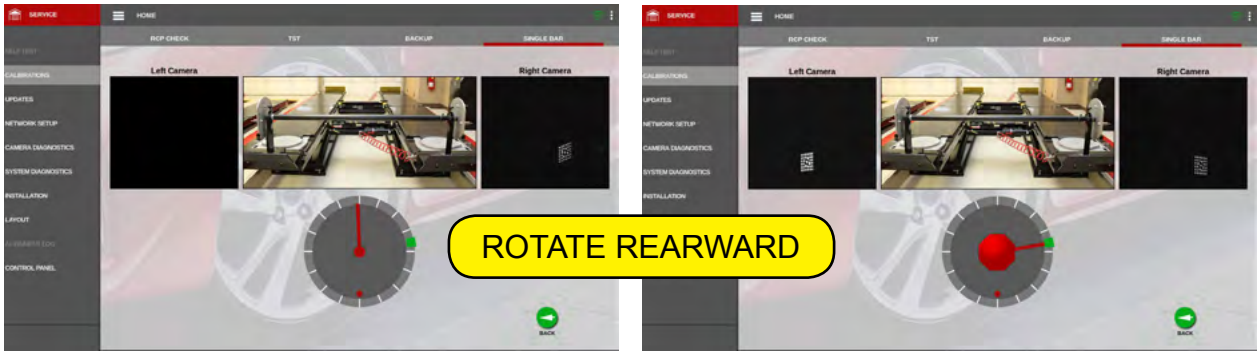
3.


ROTATE FORWARD

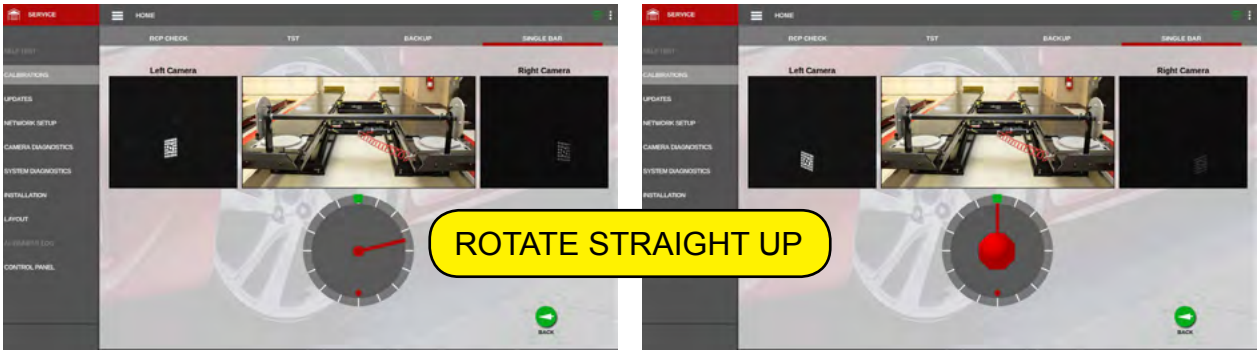
4.


ROTATE STRAIGHT UP

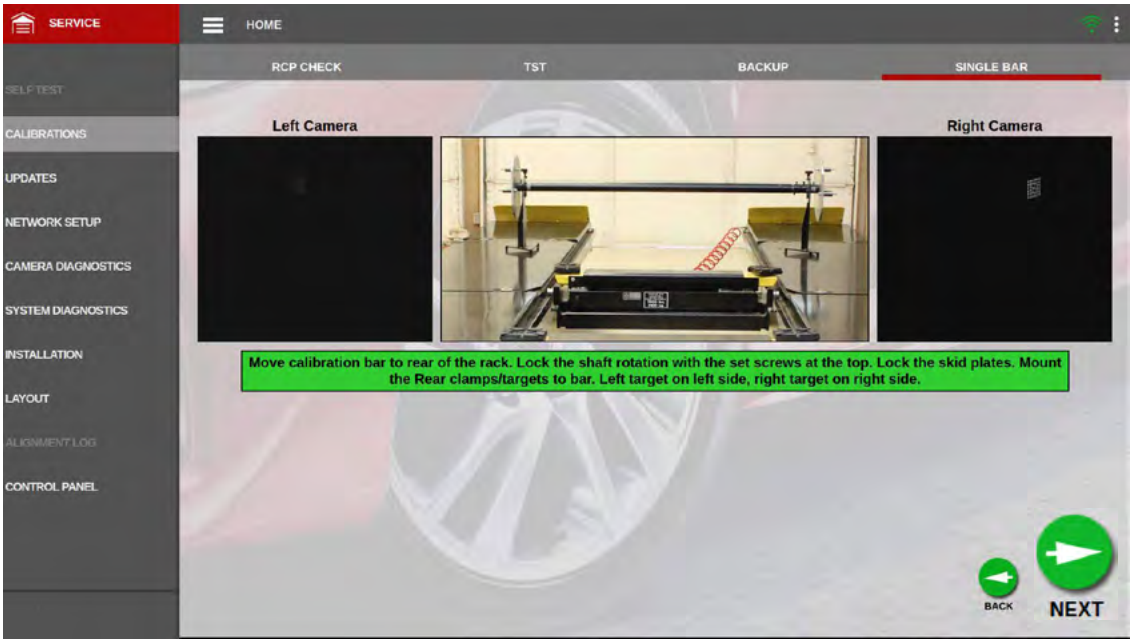
5.


ROTATE REARWARD

6.


ROTATE STRAIGHT UP

When the targets are completed the system will prompt the user to move the bar and stands to the rear of the rack. Move the bar and stands to the rear and mount the target and wheel clamps Click on the <***Next***> button when ready.



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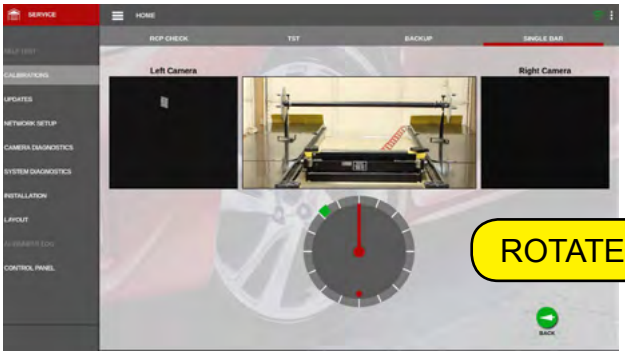
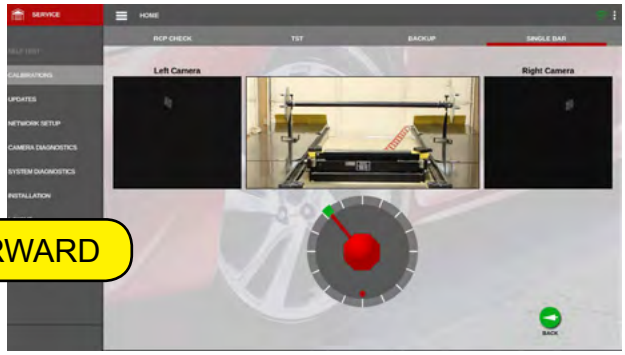


ROTATE FORWARD



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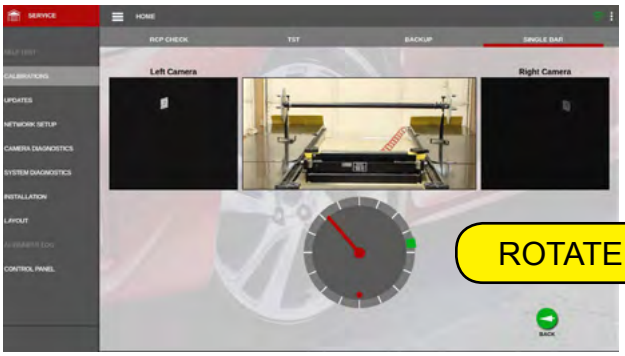
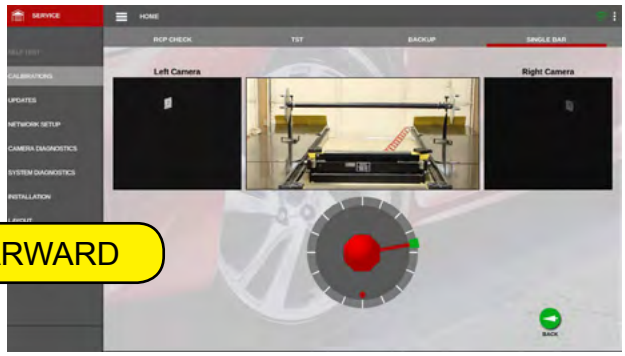


ROTATE REARWARD



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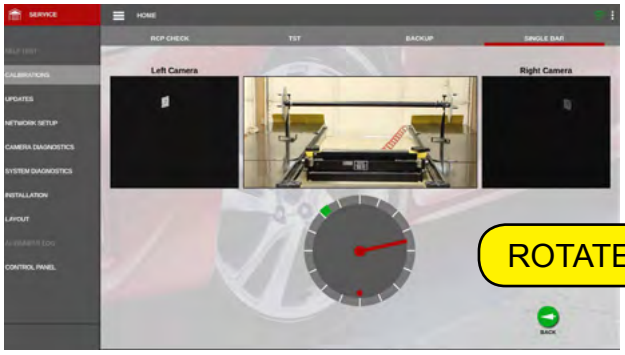
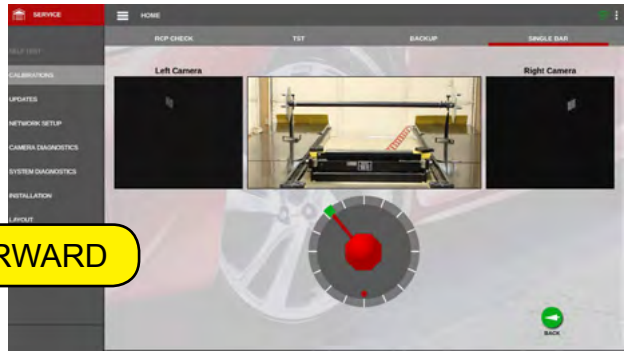


ROTATE FORWARD



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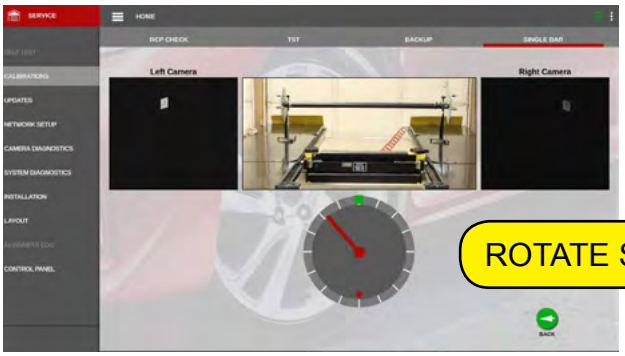
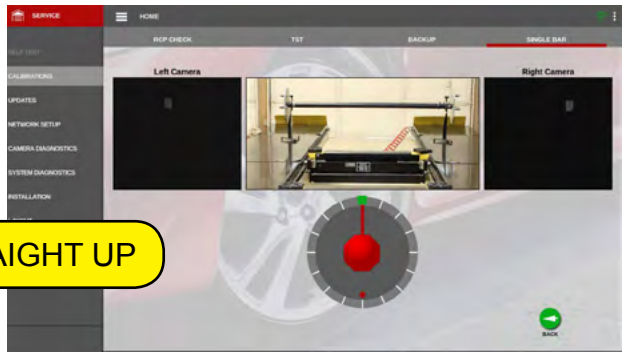
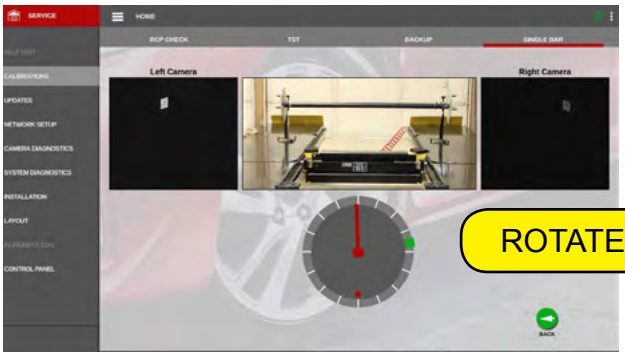


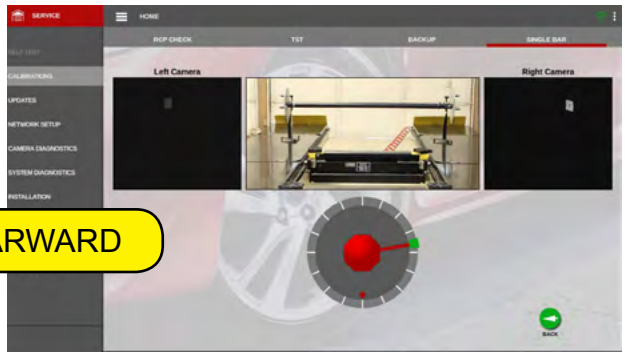
ROTATE STRAIGHT UP



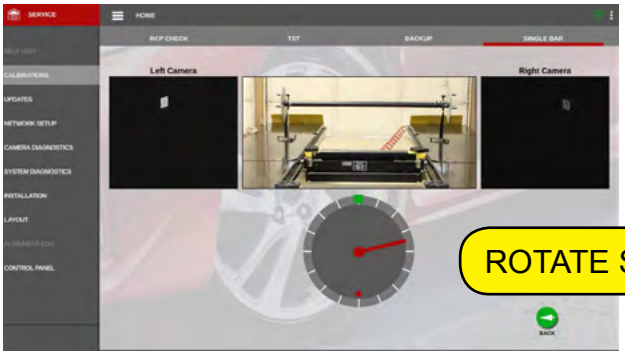
11.



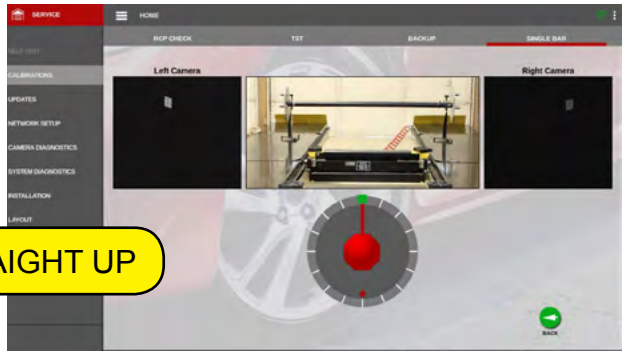
ROTATE REARWARD



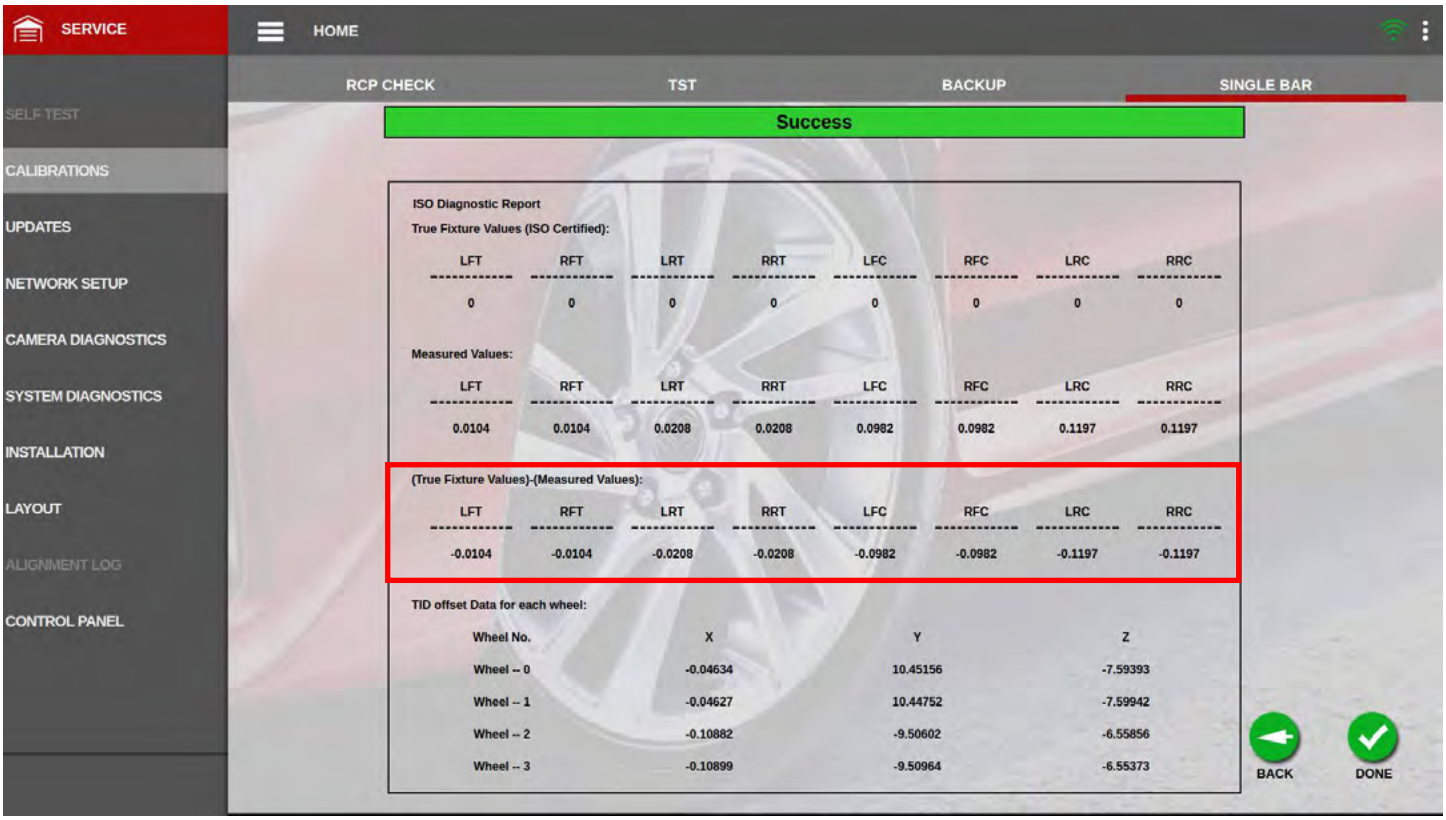
12.



ROTATE STRAIGHT UP



At the completion of a Single Bar Calibration a Diagnostic Report is shown. The numbers circled in Red are values generated from the calibration. The Min and Max are listed below the chart. If the values are above or below the tolerances it is suggested another Single Bar Calibration be done. Check the quality of the rack. Question the customer about rollbacks, if errors generally show up during the rollback process may indicate a problem with the rack. Check the targets and clamps. Check the quality of the bar and stands being used. The paddles must be tight and the assembly CAN NOT move during this process. Clean the rack of all debris.



LFT	Left Front Toe	+/- 0.25	LFC	Left Front Camber	+/- .50
RFT	Right Front Toe	+/- 0.25	RFC	Right Front Camber	+/- .50
LRT	Left Rear Toe	+/- 0.25	LRC	Left Rear Camber	+/- .50
RRT	Right Rear Toe	+/- 0.25	RRC	Right Rear Camber	+/- .50

If Calibration tolerances are outside of the min/max this may be caused by a faulty wheel clamp, a loose pod or target, a bad target, a faulty calibration bar or calibration is being performed on a unstable rack. All calibration stand contact points must be solid. The calibration is only as good as the equipment being used.

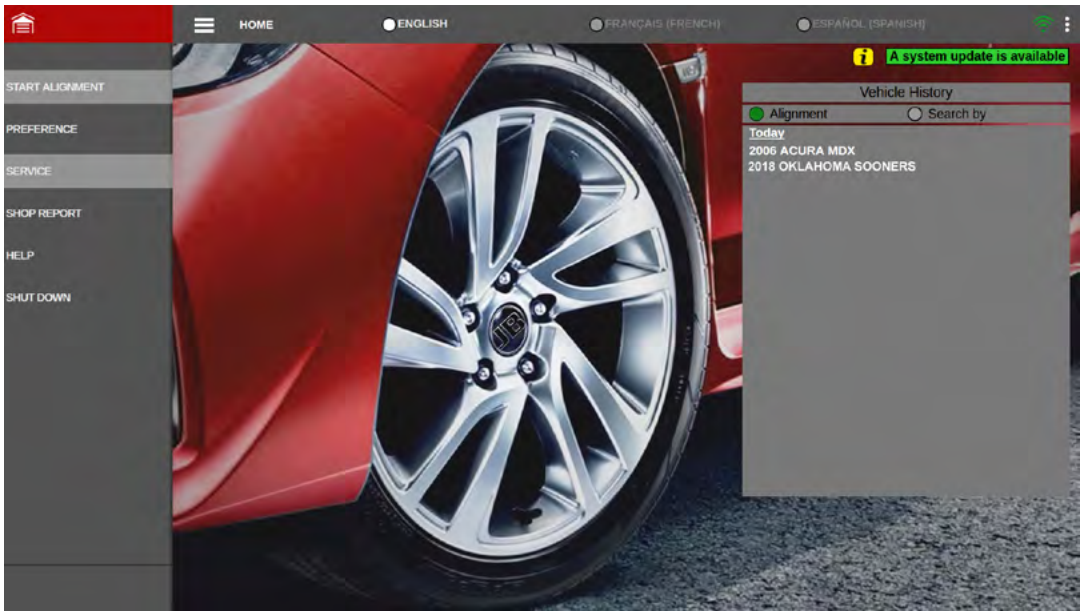
UPDATING THE SYSTEM

Providing the Alignment system is connected to the Internet through the customers network the system will continually check for updates in the background. This check is done automatically and transparent to the systems performance. If the system recognizes an update is available it will automatically download the the update and prompt the user that an update is available. The available update will remain with the system until the user applies the update. Users can also navigate to the <Service> page and click “Update” to manually check for an on-line update. If one is found, the top left of the screen will show a progress bar with information about the update.

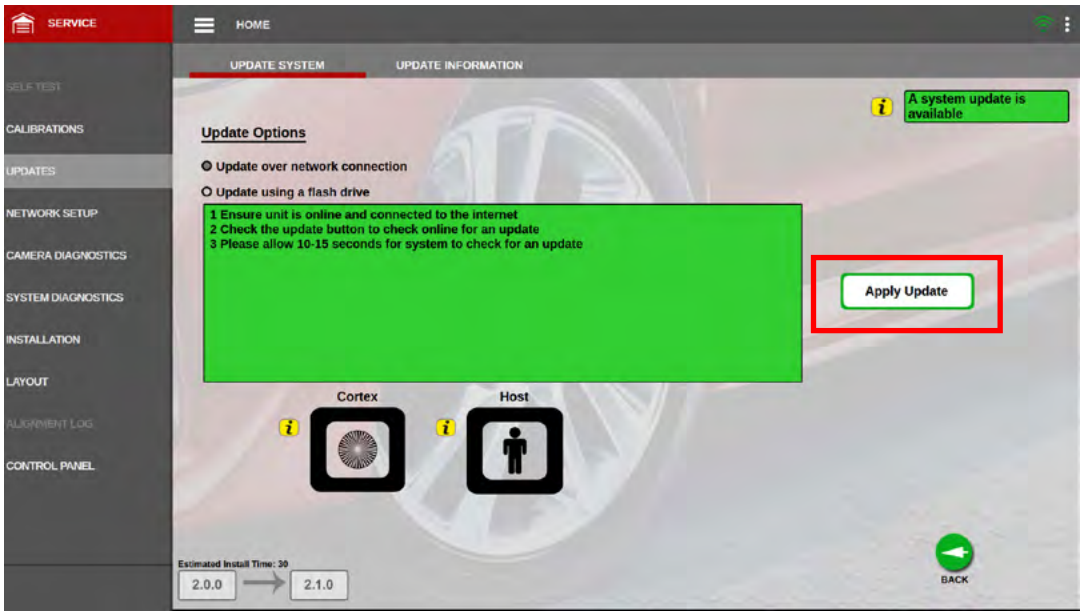
If the system is not connected to the Internet, the unit will have to be manually updated via a USB drive that can be ordered when the update is released

SYSTEM UPDATE (SOFTWARE)

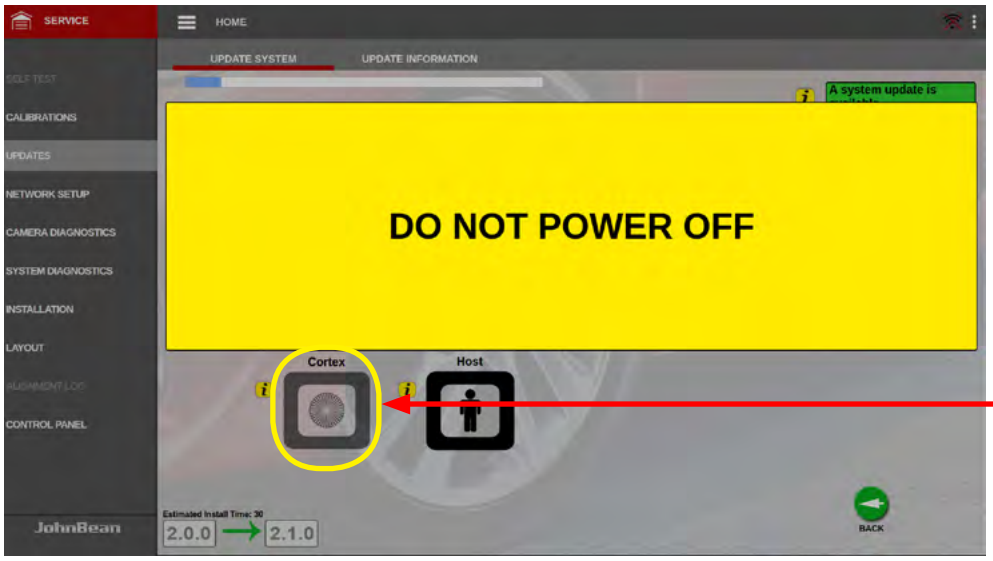
1. From the Home screen the user is prompted that an update to the system has been downloaded from the internet and is available for installation. By clicking on the <SERVICE> button the user is directed to the “UPDATE SYSTEM” page by default.



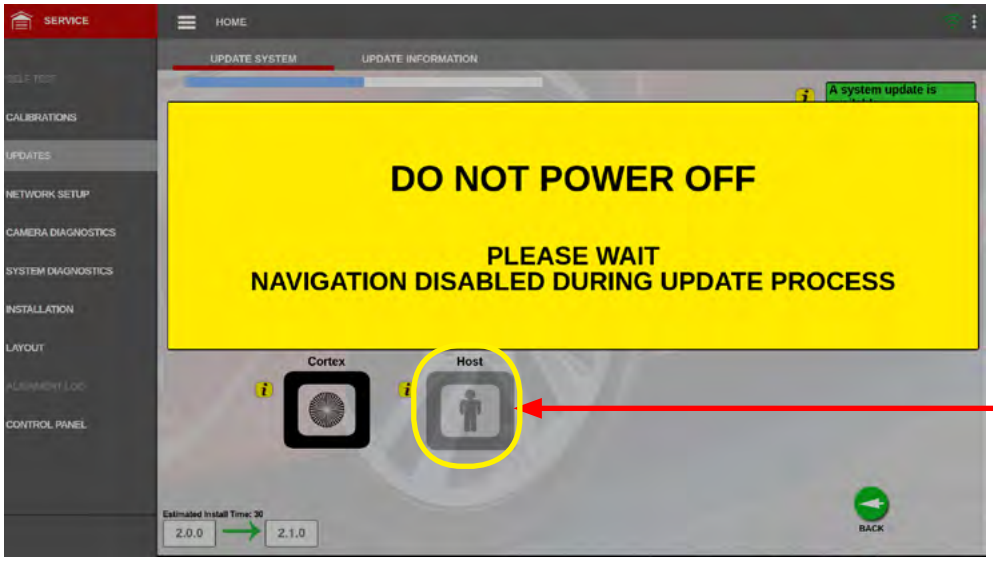
2. By clicking on the “APPLY UPDATE” the system will start applying the updates where needed, Cameras, Host Controller. Please note that the aligner cannot be powered down while updating.



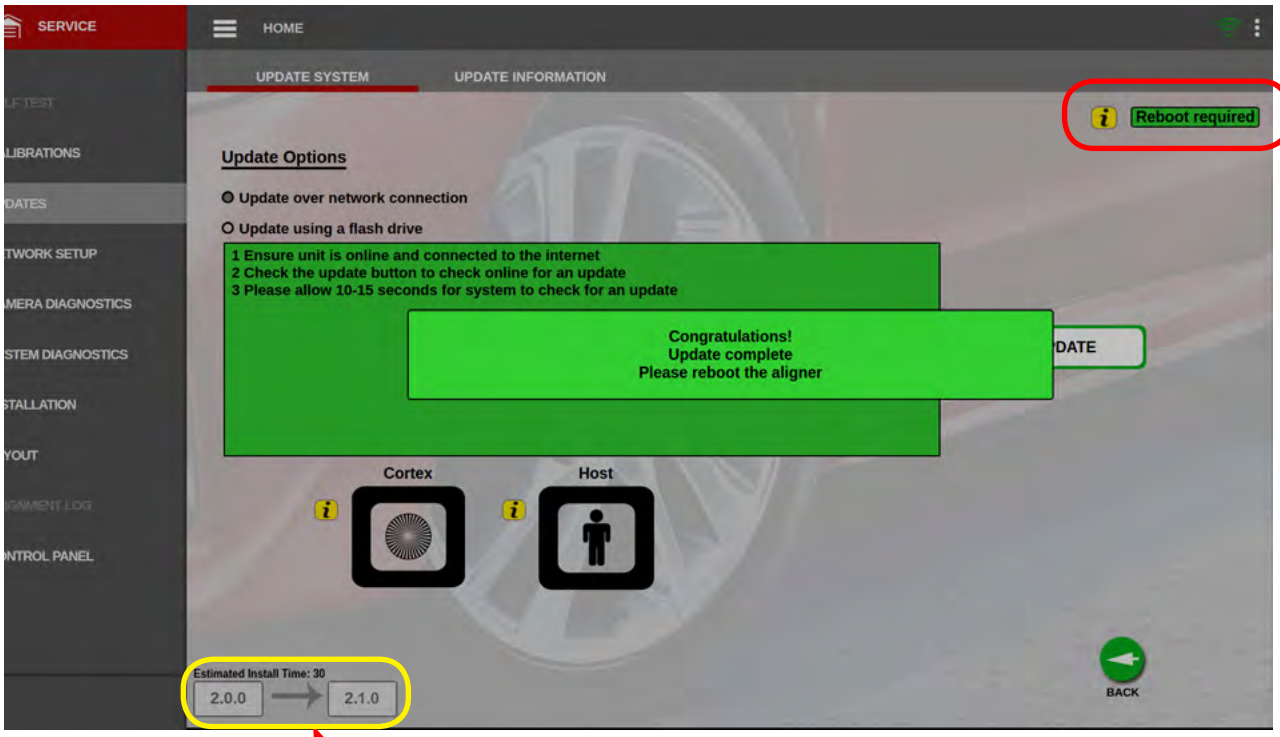
3. During the updating process the *Cortex/Host* indicator will blink to indicate the component currently being updated.



4. Navigation is not available during the updating process.



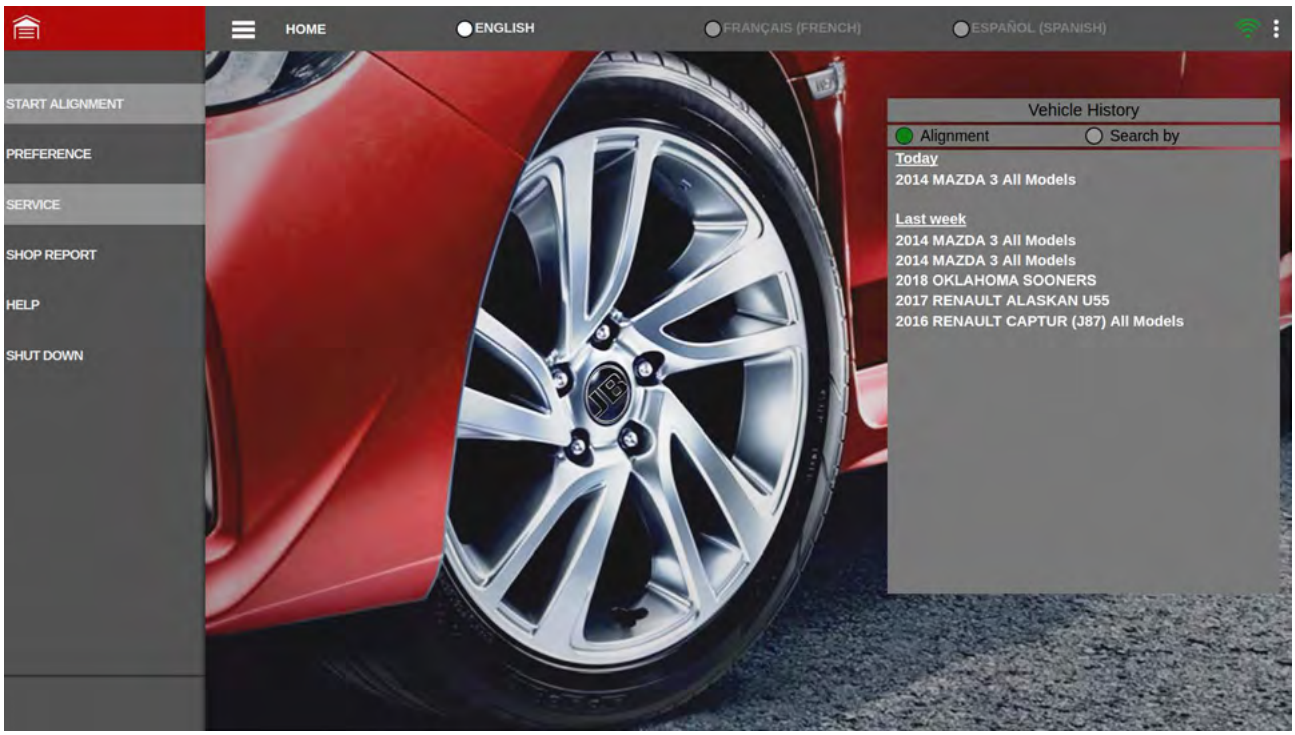
5. After all updates have been applied the update screen will inform the user that a reboot is required. After reboot, the new version numbers will be displayed in the lower left corner.



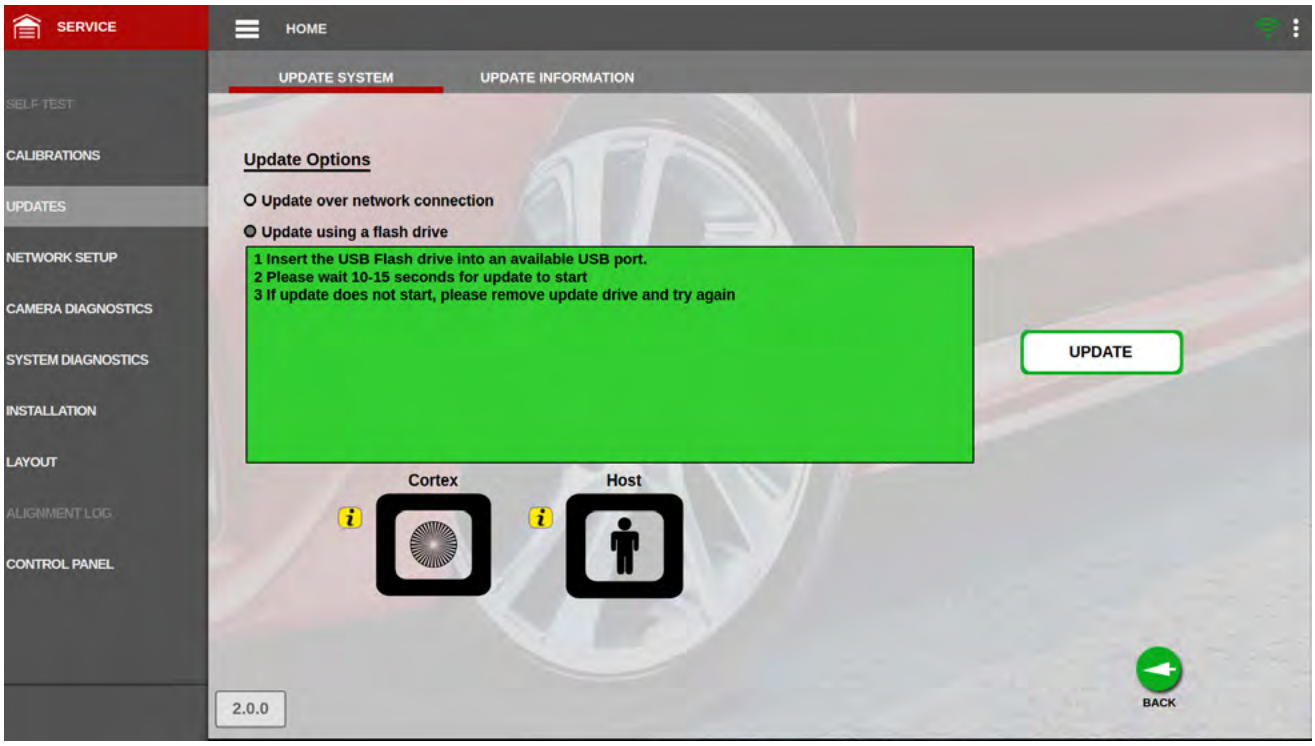
MANUAL UPDATE (SOFTWARE)

If a system is not connected to the Internet the system can manually be updated.

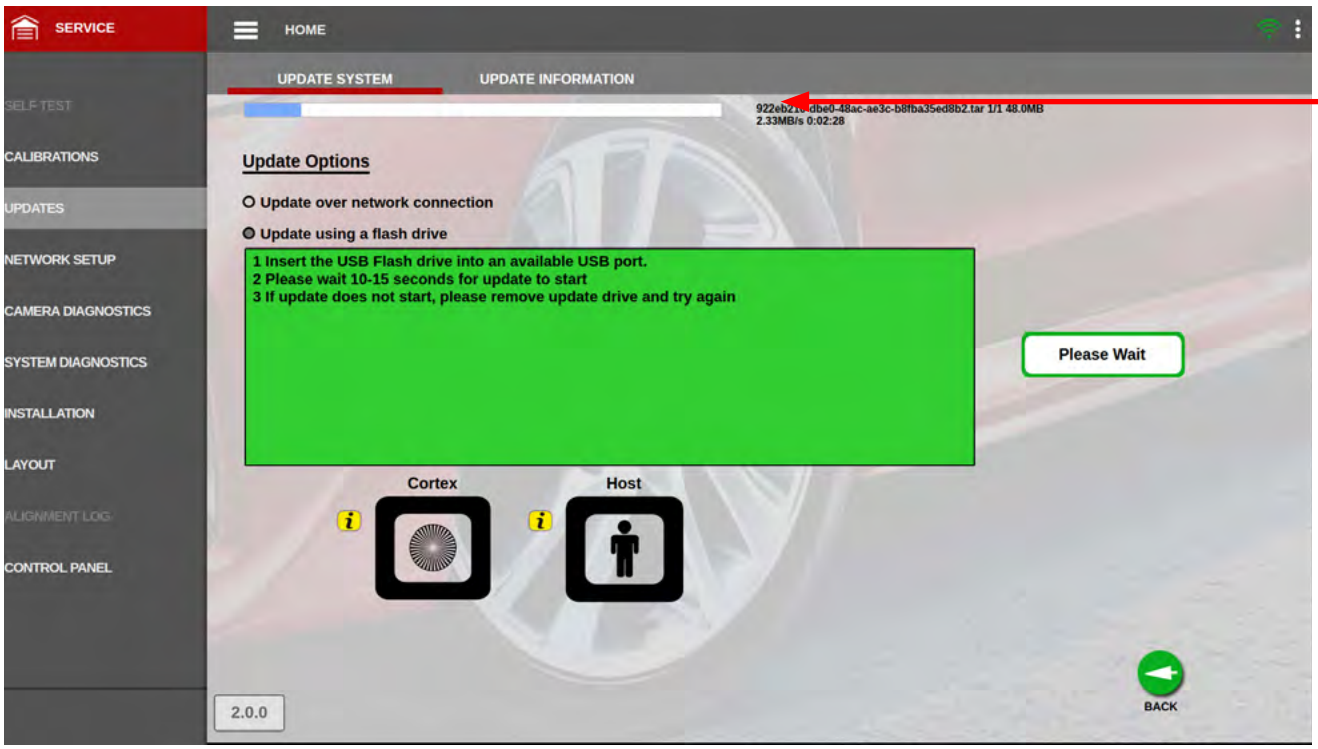
1. From the home screen click on <SERVICE>, the user is directed to the “UPDATE SYSTEM” page by default.



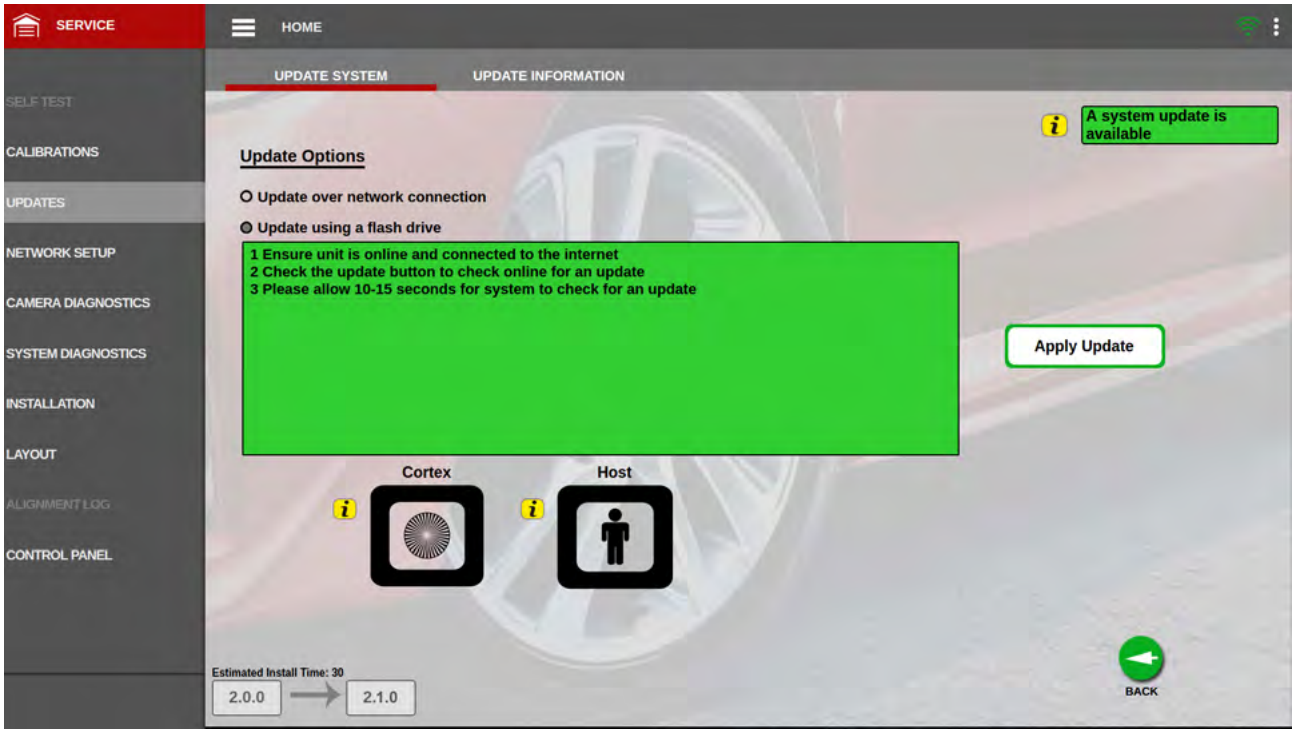
2. From the update system page insert the USB flash drive that contains the update into an open USB port. If the system does not have an open port un-plug the device and use the stand alone port.



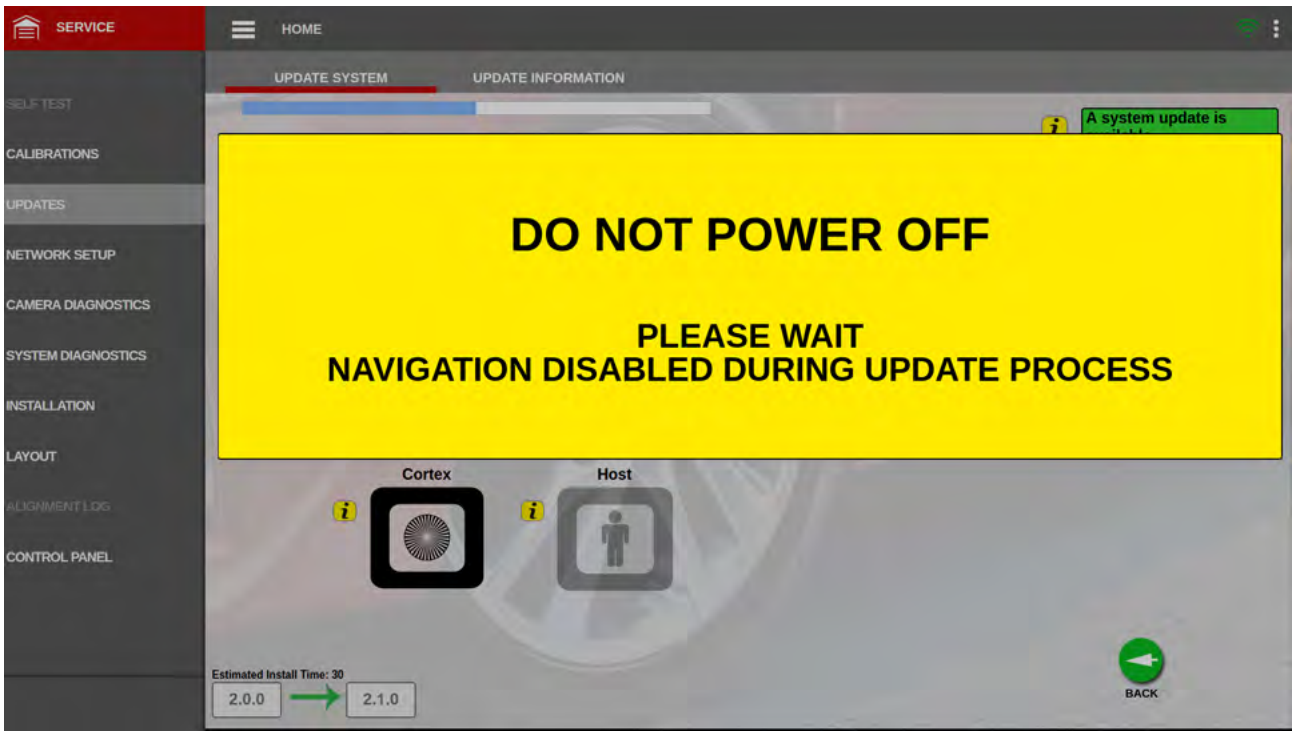
3. The system should recognize the USB flash drive automatically and begin the downloading process. This is confirmed by the progress bar at the top of the page along with the “Please Wait”.



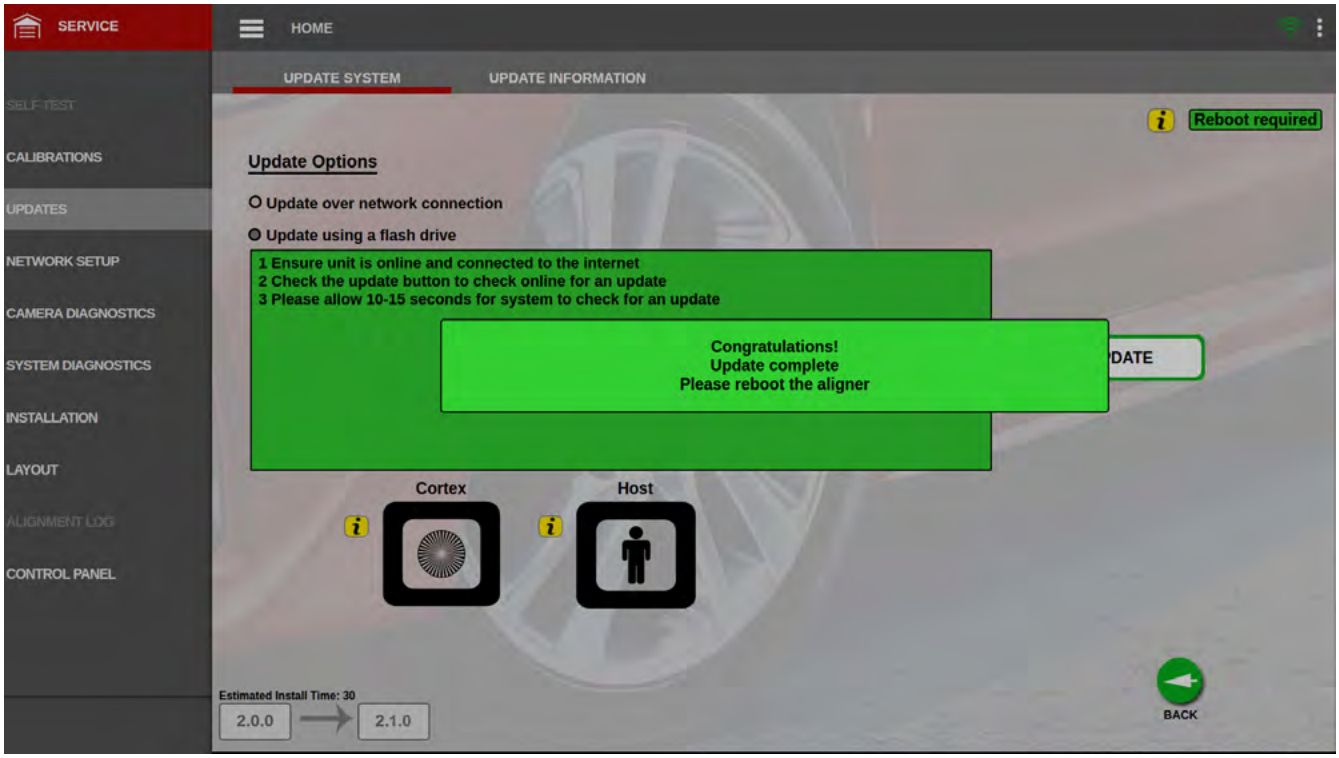
4. At the completion of the download process click on the “APPLY UPDATE” button to install the updates to the system.



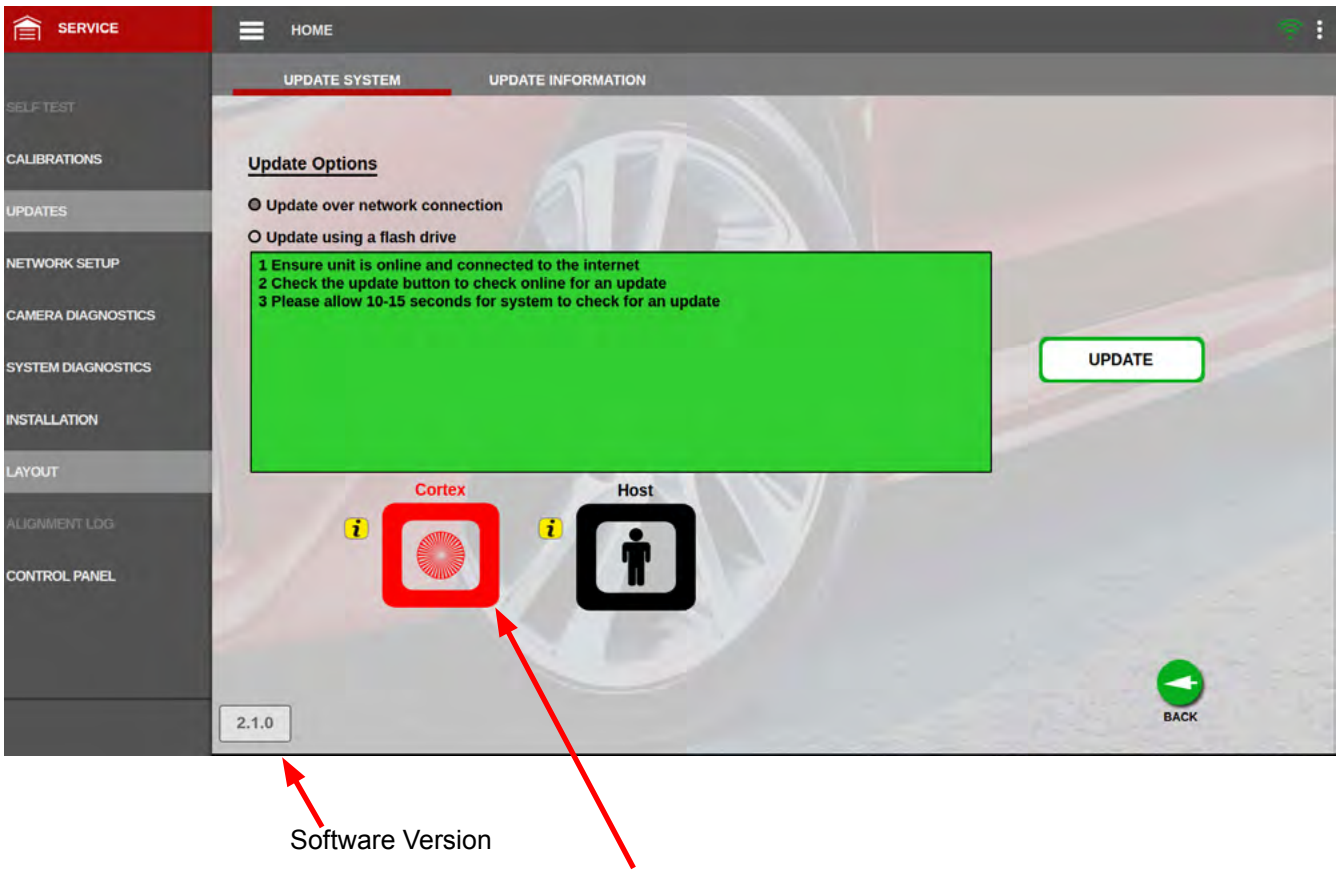
5. During the updating process a progress bar will show the loading process. DO NOT POWER OFF the system during this process, damage to the system will occur.



6. After all updates and backups have been applied the system will prompt for a reboot.



7. All new system information will be updated after the aligner reboots. The software version can be confirmed in the lower left corner.

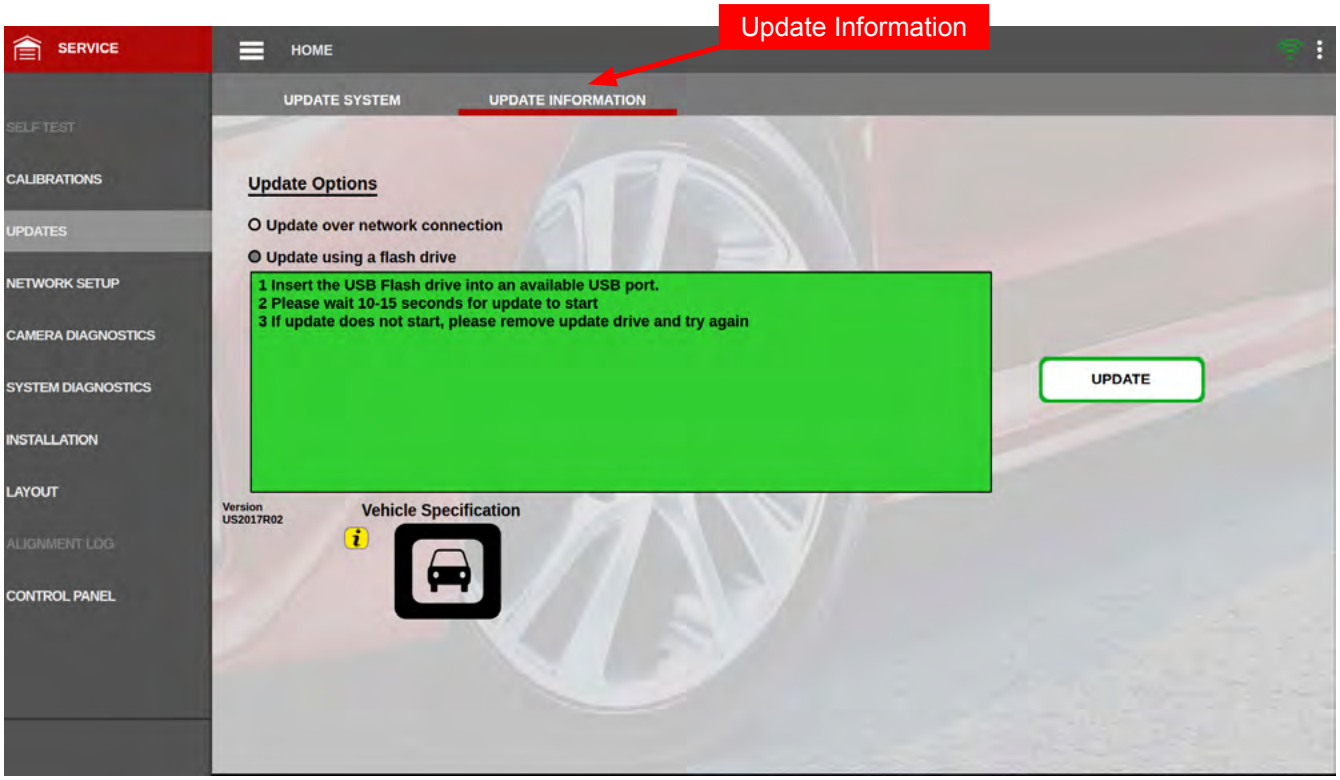


NOTE: A RED FLASHING ICON INDICATES THE UPDATE WAS NOT DONE PROPERLY. RE-DOWNLOAD THE UPDATE AND RE-APPLY IS NEEDED TO CORRECT THIS.

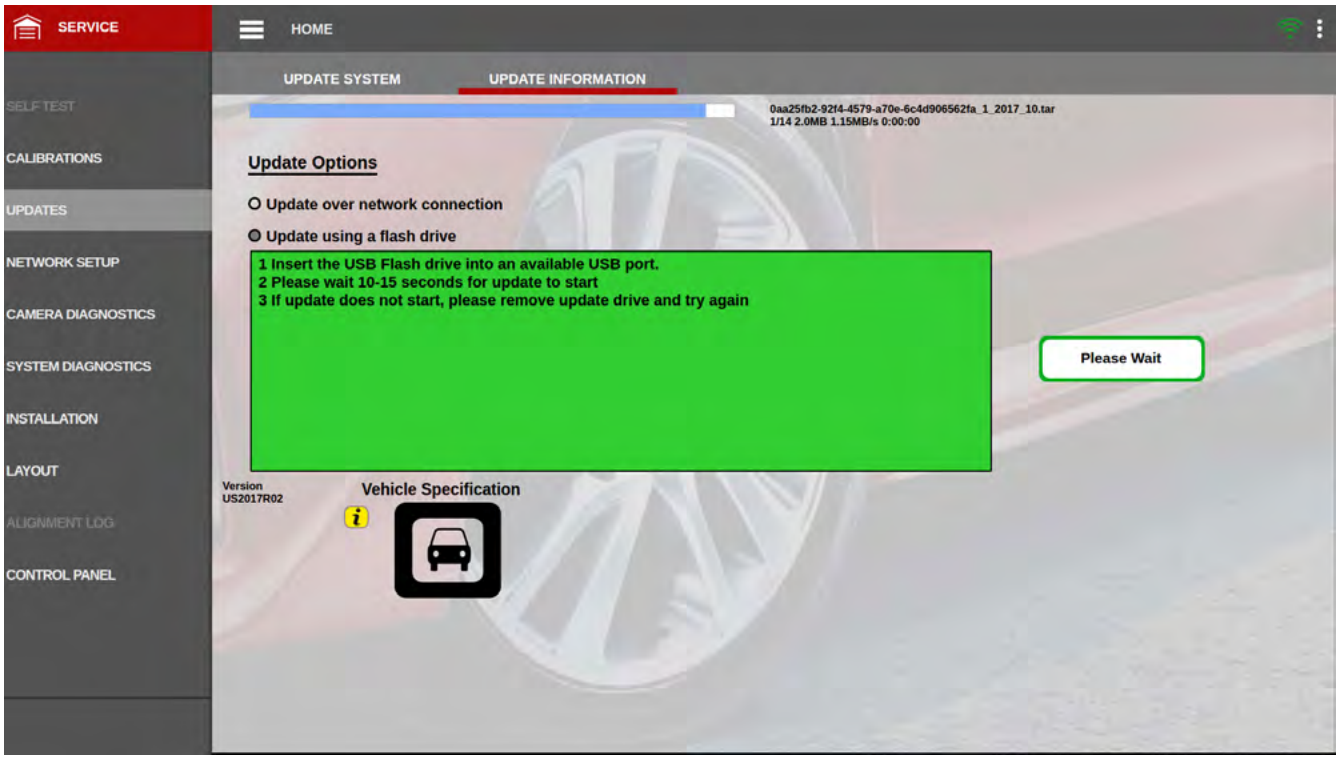
UPDATE INFORMATION (SPECS)

- This is used to update Vehicle Specification. If the system is connected to the cloud a spec update will auto download, the user needs to simply apply the update and reboot when required. The system MUST have access to a network before it will download the update. Spec update can be purchased and made available to each system.

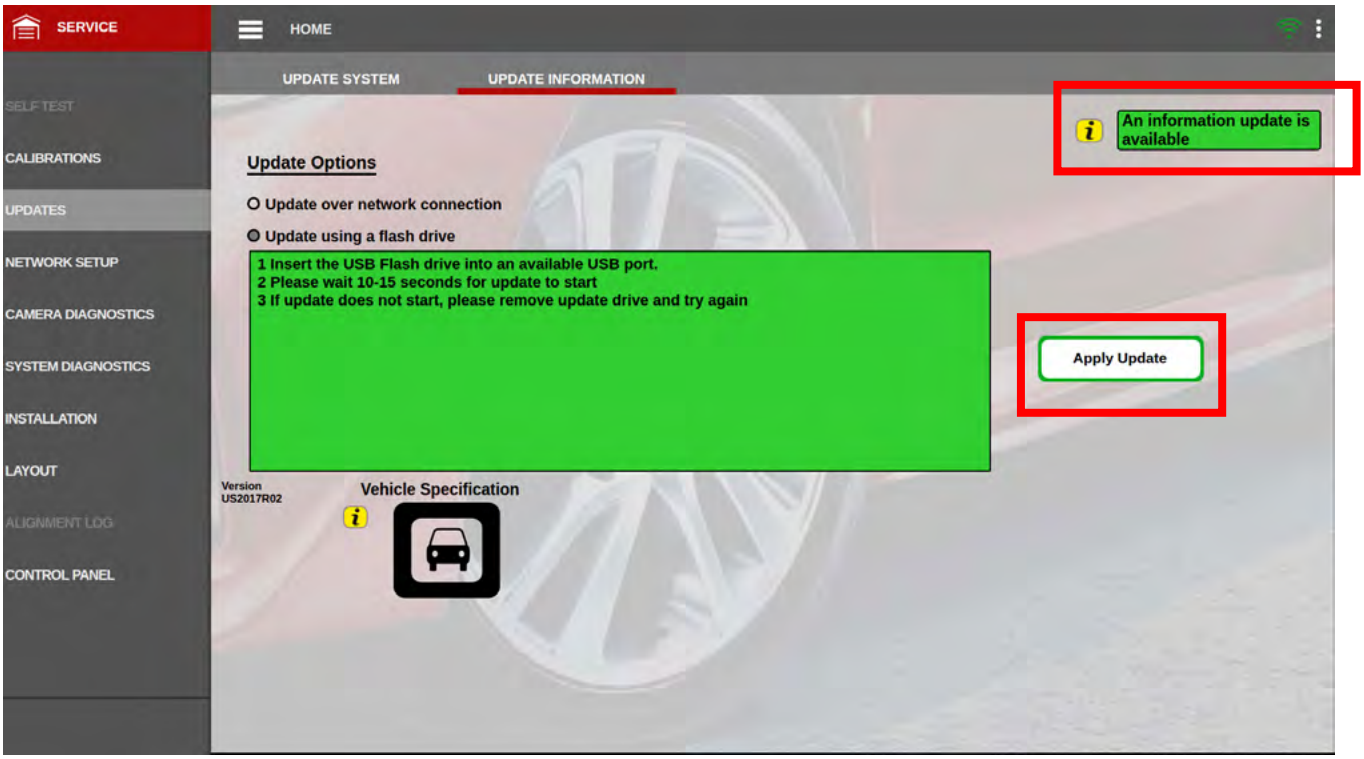
1. Navigate to <Service> <Updates> <Update Information> and insert the USB flash drive that contains the update. Click on the <Check Now> button. The system will auto install vehicle specification. Please note that Specification updates may also be made available on-line for purchase.



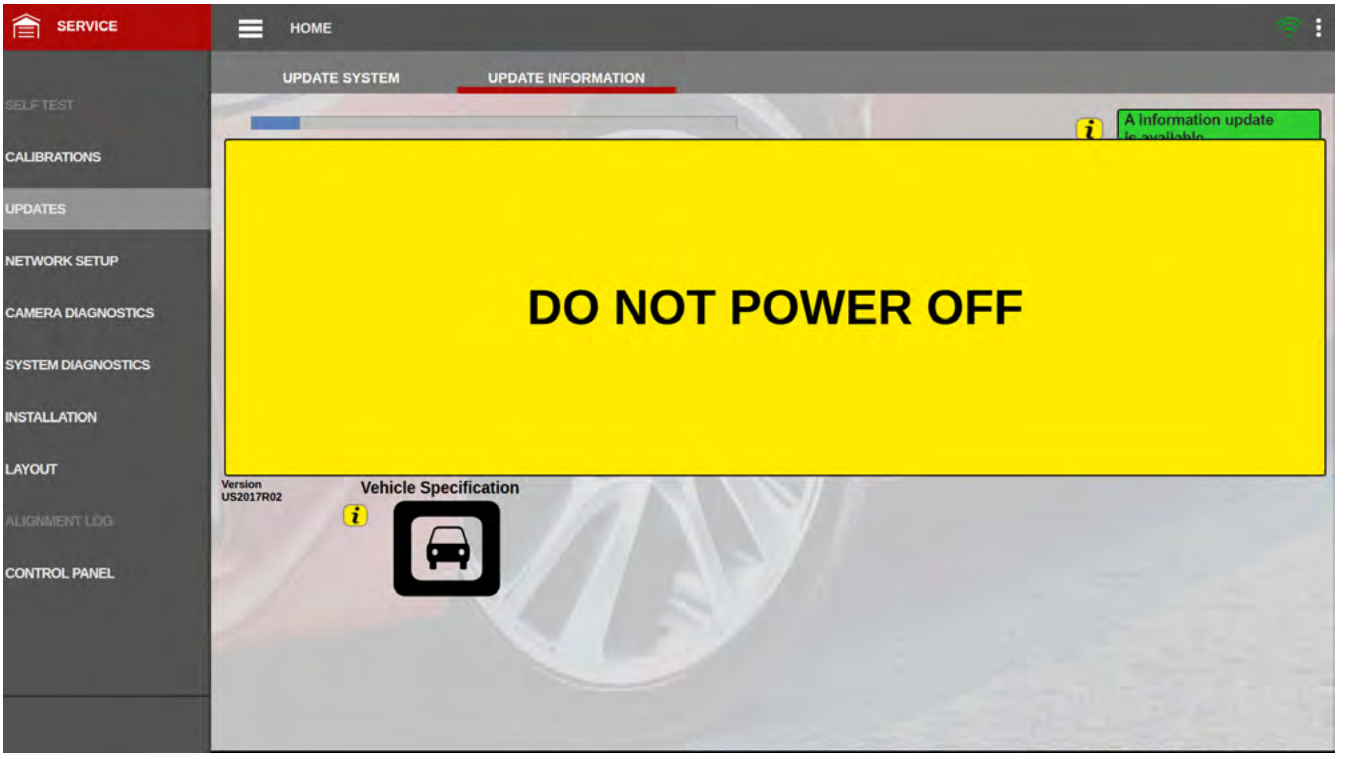
2. A progress bar will indicate that an update is being downloaded.



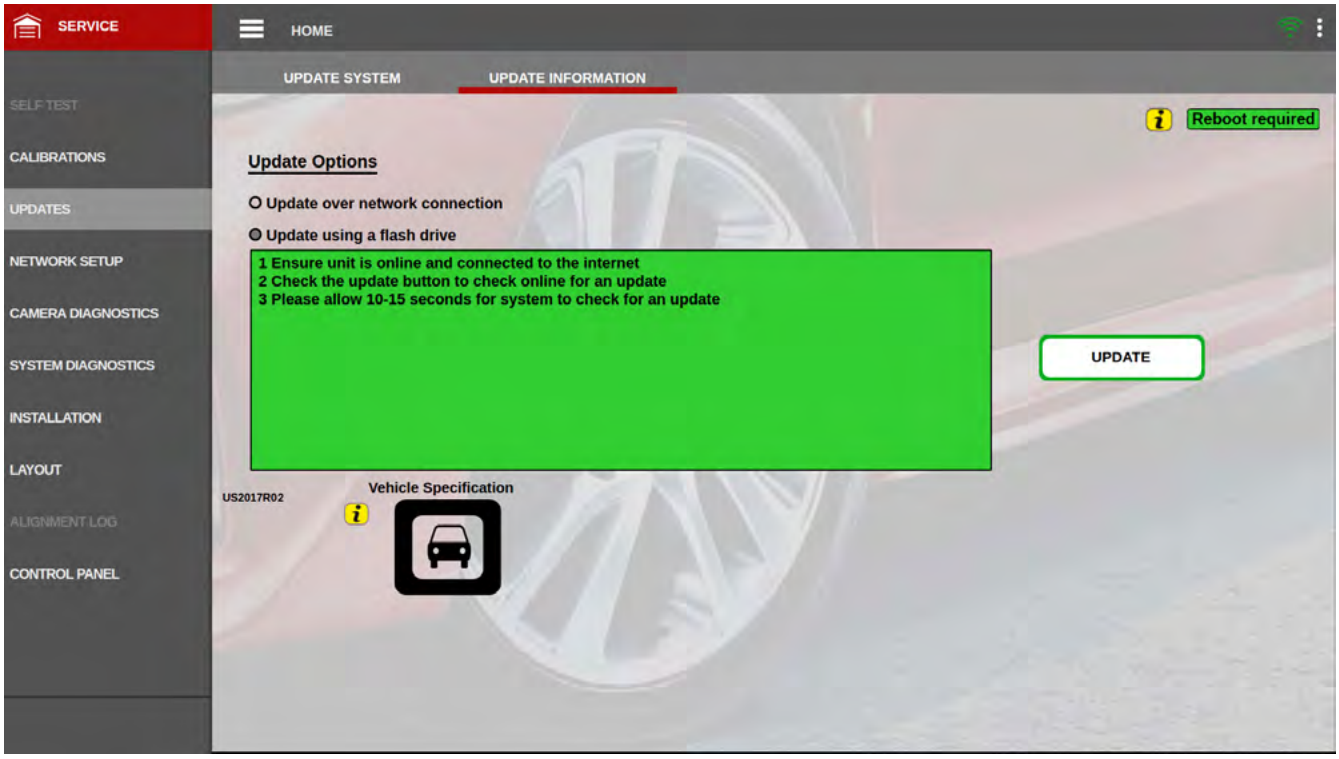
3. After the download completes the system will indicate “A information Update is available”. Click on <Apply Update> to install the specs. ***Please NOTE: This screen will appear if a network update is available.***



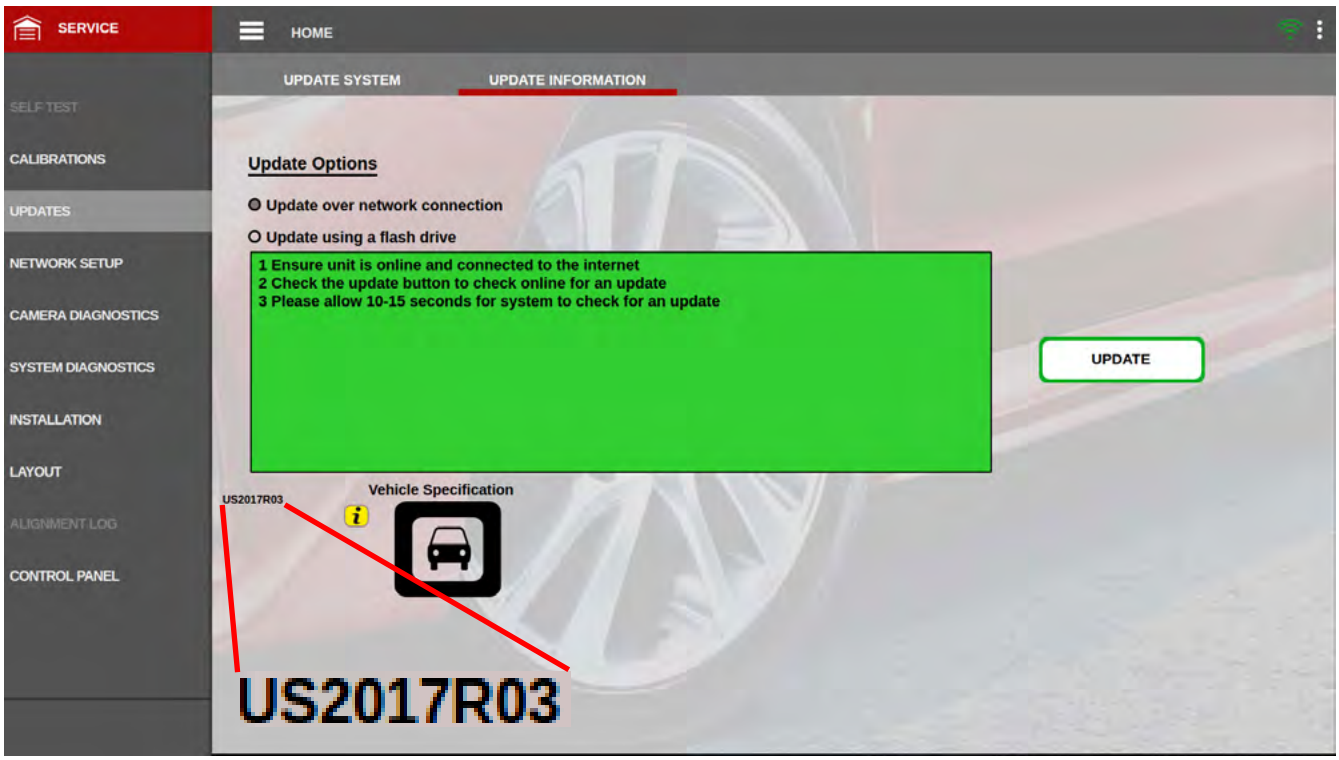
4. Do Not Power during the install, damage will occur to the system.



5. After the specifications are installed the system will prompt the user to reboot the system.



6. After rebooting the system the current specification revision will be reported.

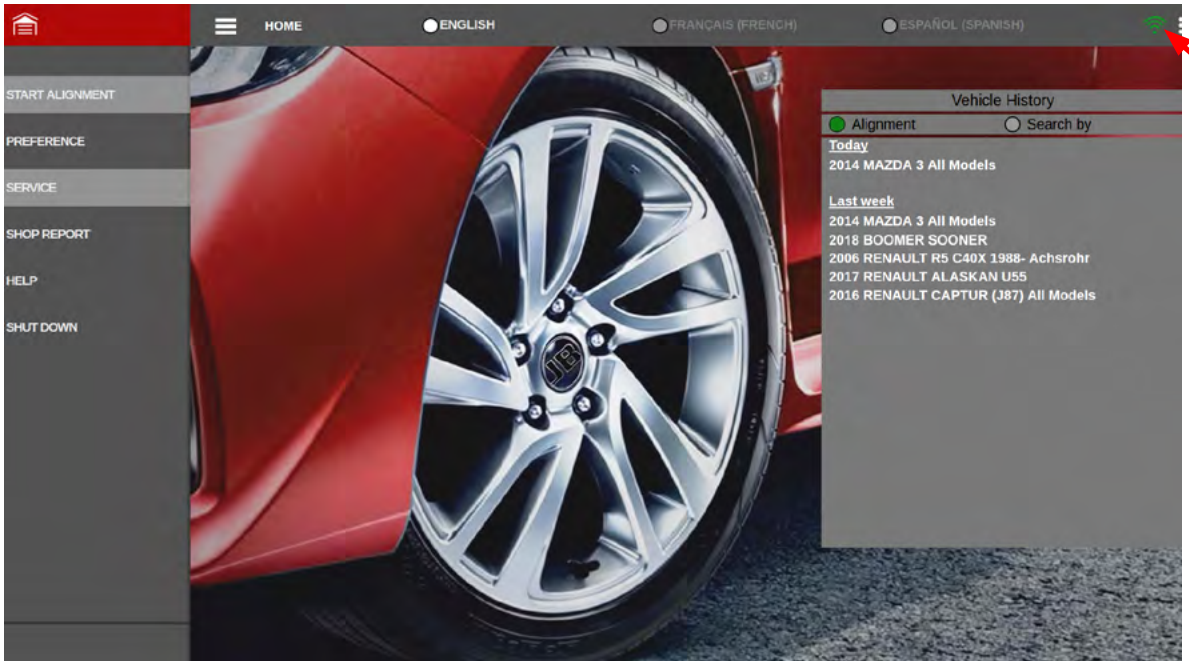


NETWORK SETUP

Wide Area Network (WAN), Printer and to test the Internet Services.

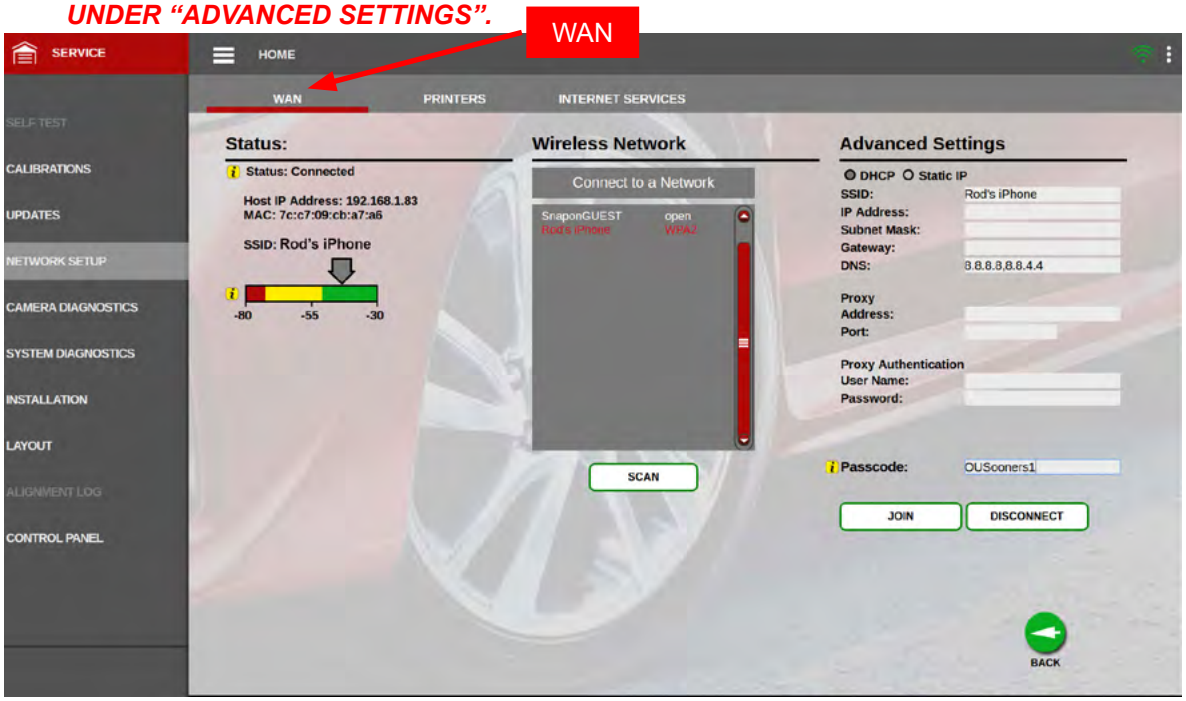
WAN

1. From the Home Screen click on <SERVICE>.



2. From the service menu click on <NETWORK SETUP>. Choose the WAN selection. It may be necessary to click on the SCAN option to find all of the local networks.

NOTE: IT MAY BE NECESSARY TO INVOLVE THE ON-SITE INFORMATION TECHNOLOGY EXPERT TO ACCESS A PROTECTED NETWORK. THIS EXPERT SHOULD UNDERSTAND ALL OF THE NECESSARY OPTIONS UNDER "ADVANCED SETTINGS".



Status
Indicates whether the system is connected or not a shows the signal strength of wireless network the system is connected too.

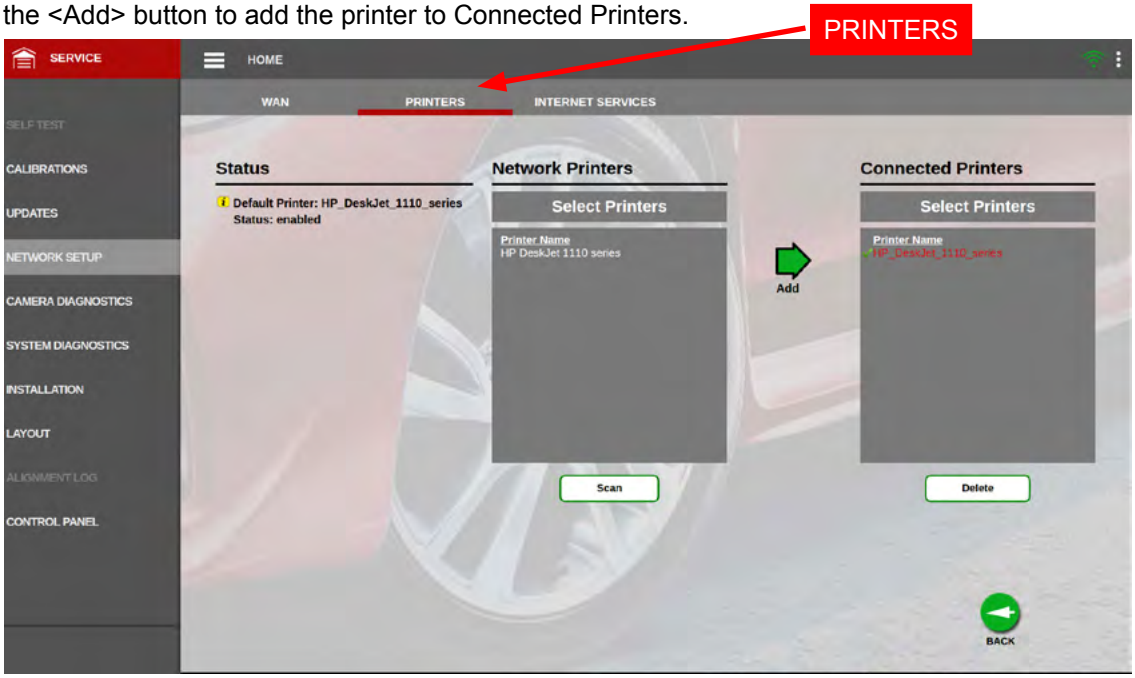
Wireless Network
Shows the wireless networks in the area. If system is open simply select it and click on join. If system is protected the password is needed.

Advanced Settings
This area may require an Network specialist. If a simple protected network is used, just enter the "Passcode" and click "join"

PRINTERS

This section is used to setup and select all wireless and USB wired printers to the system.

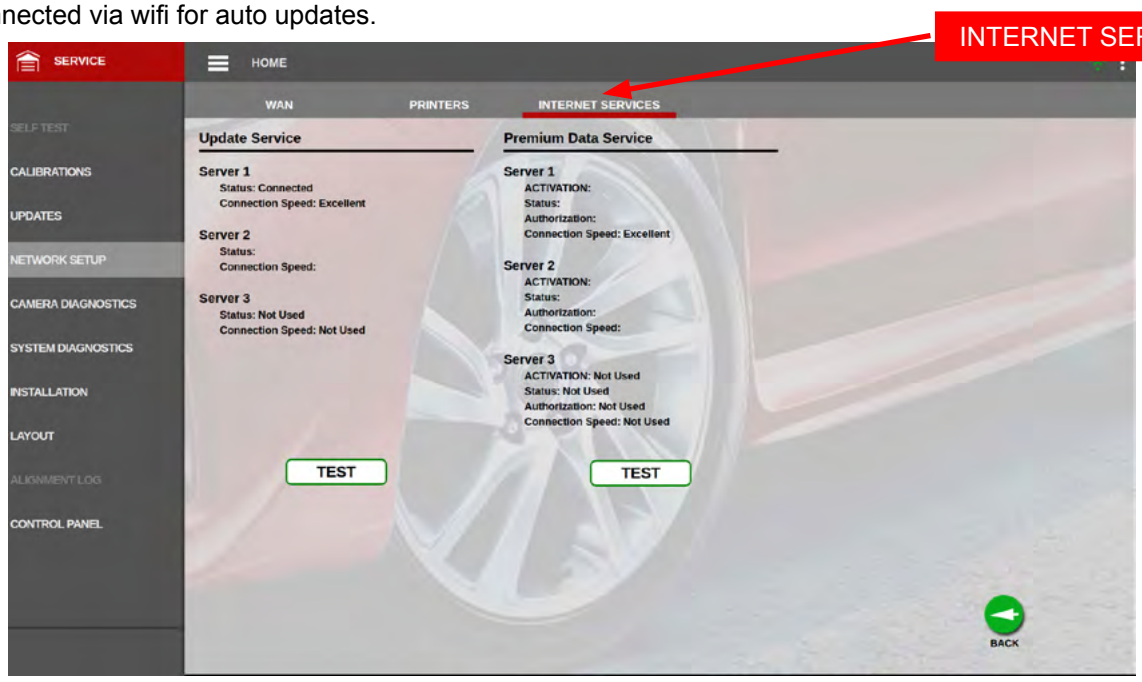
1. Simply plug in a USB printer to an open USB port on the back of the unit. Click on <SCAN> for the system to locate the connected Printer. If multiple printers are found under Network Printers select the printer to be used and click on the <Add> button to add the printer to Connected Printers.



NOTE: IF THE PRINTER IS NOT PRINTING CHECK ALL SUGGESTIONS BY THE PRINTER MANUFACTURE. IT MAY BE NECESSARY TO DELETE ALL OF THE PRINTERS AND THEN SCAN AND ADD THEM BACK TO CONNECTED PRINTERS.

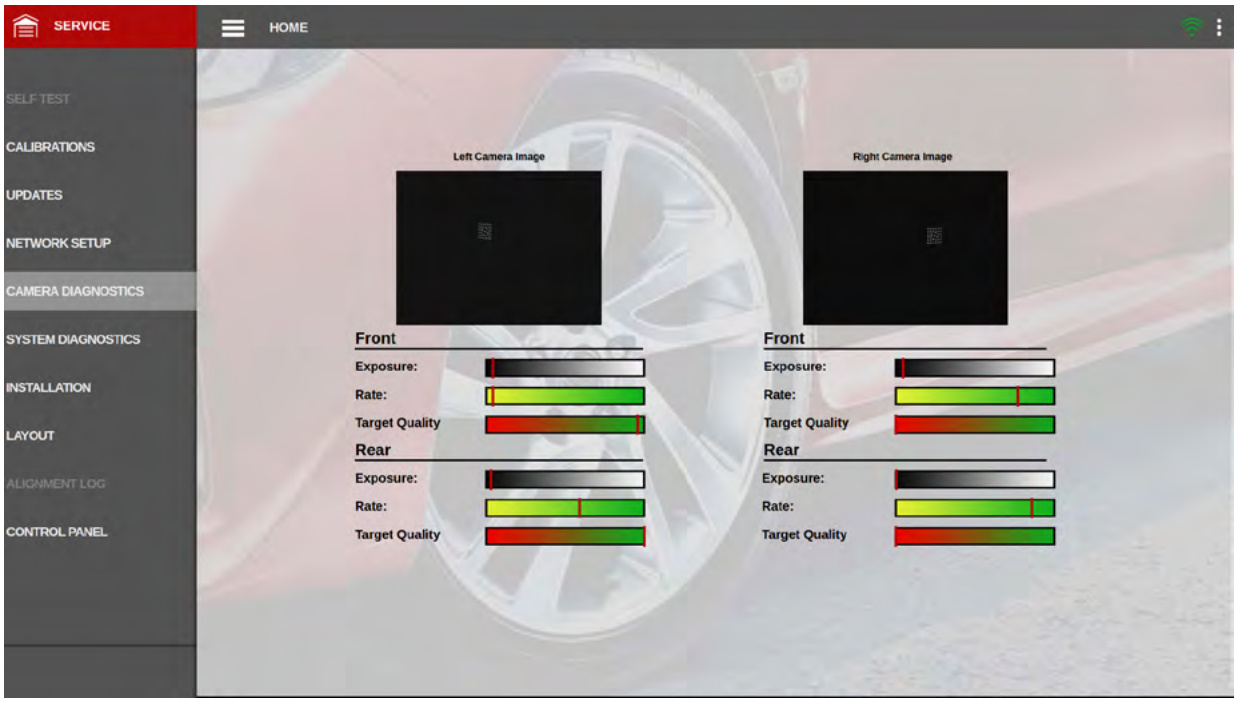
INTERNET SERVICES

This information is useful for verifying a cloud connection. When a system is fully activated it will connect to many different services to receive data for both the aligner (specs, software) and the customer (Mitchell, etc.) The system must be connected via wifi for auto updates.



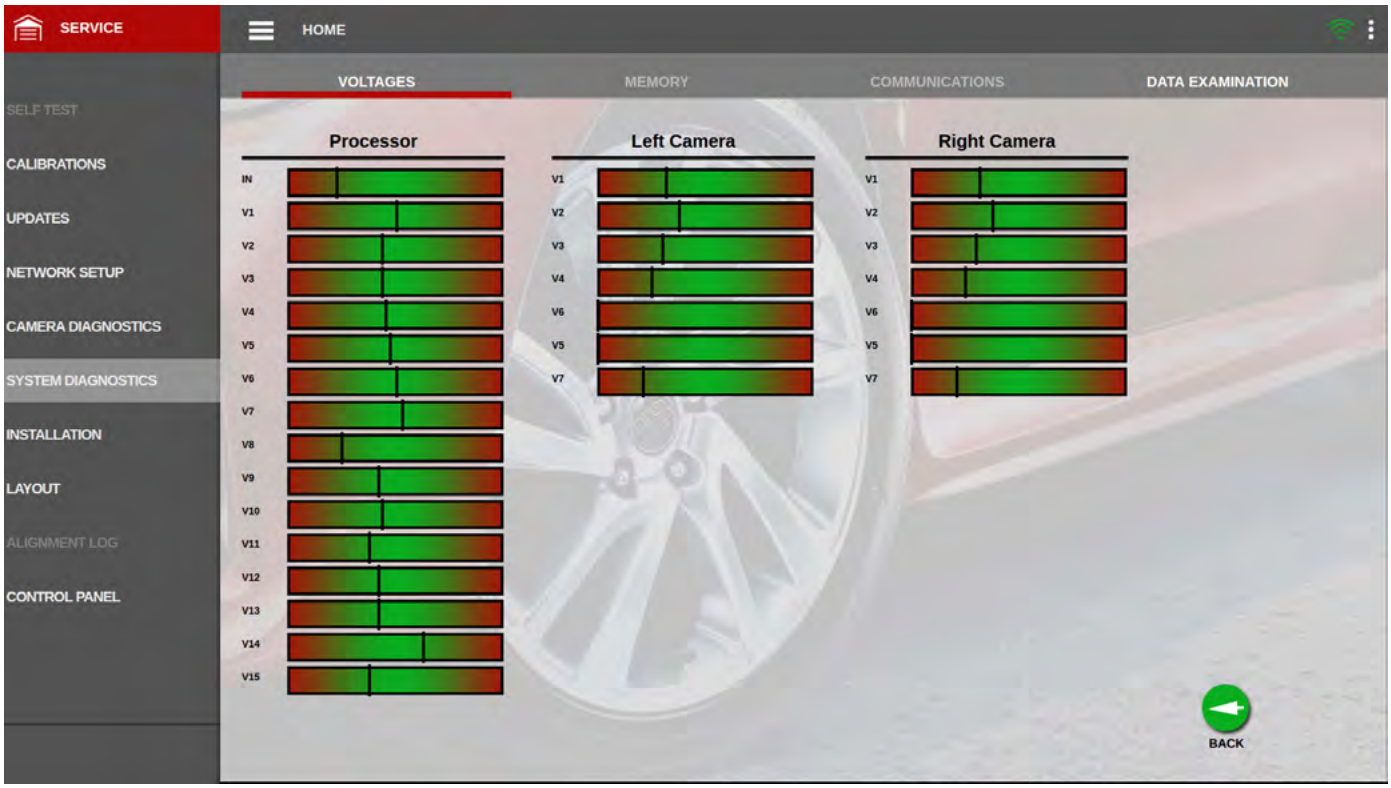
CAMERA DIAGNOSTICS

The Camera Diagnostic is used to troubleshoot “Target” and “Camera” Quality. The environment will change both the Exposure and Rate however each should be steady and all should be relatively equal. If a “Target Quality” is outside of the Green, clean the target(s) with a soft cloth and a quality glass cleaner. Never use a shop towel to clean the targets. Most shop towels have a chemical that may leave a haze on the target and or damage the target glass. Ensure the distance from the cameras to the targets are correct, racks installed at a greater than recommended distance will cause errors. Ensure that the targets are fixed to the wheel clamps correctly and are tight.



SYSTEM DIAGNOSTICS

VOLTAGES



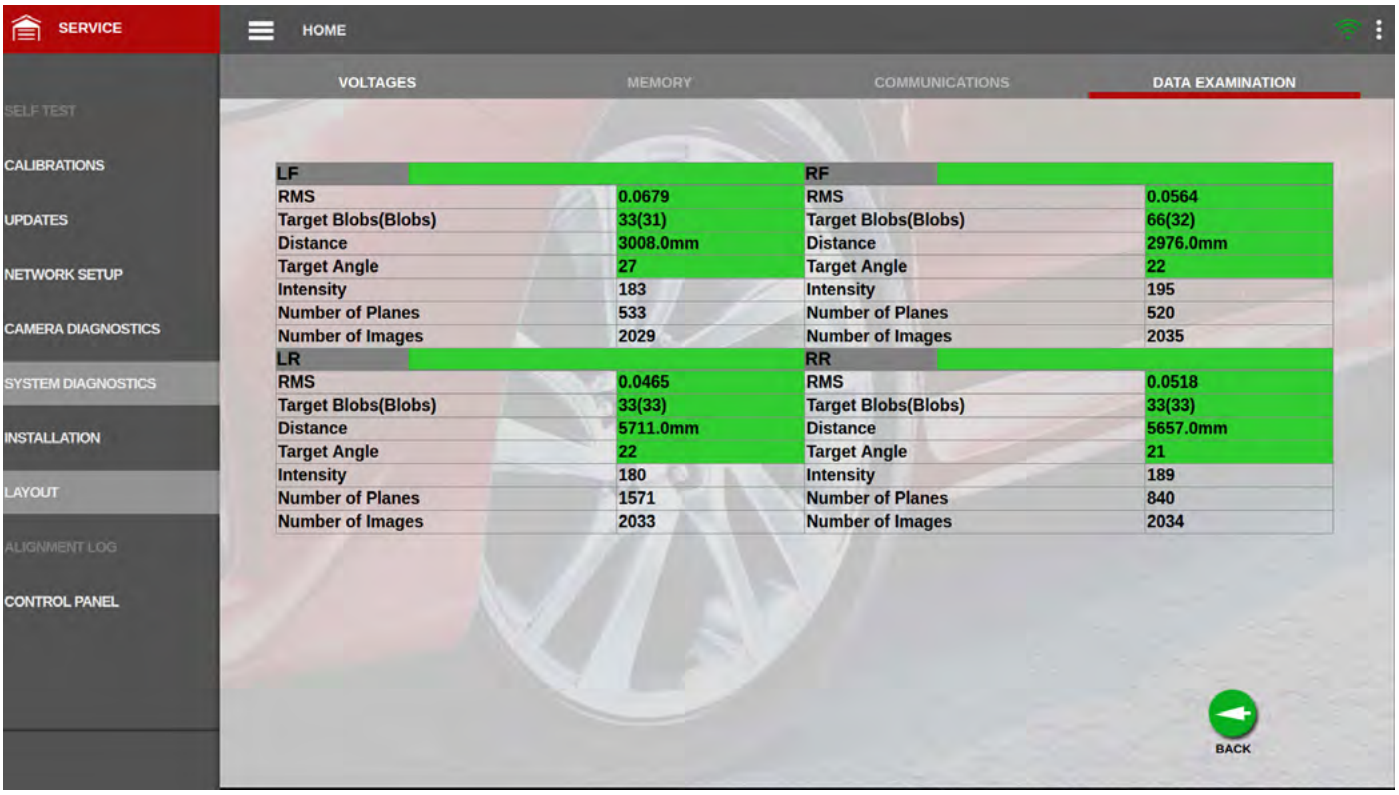
Processor
Green = Good
Red = Bad

V1 =
V2 =
V3 =
In =
V4 =
V5 =
V6 =
V7 =
V8 =
V9 =
V10 =
V11 =
V12 =
V13 =
V14 =
V15 =

LEFT AND RIGHT CAMERA
Green = Good
Red = Bad

V1 =
V2 =
V3 =
V4 =
V5 =
V6 =
V7 =

DATA EXAMINATION

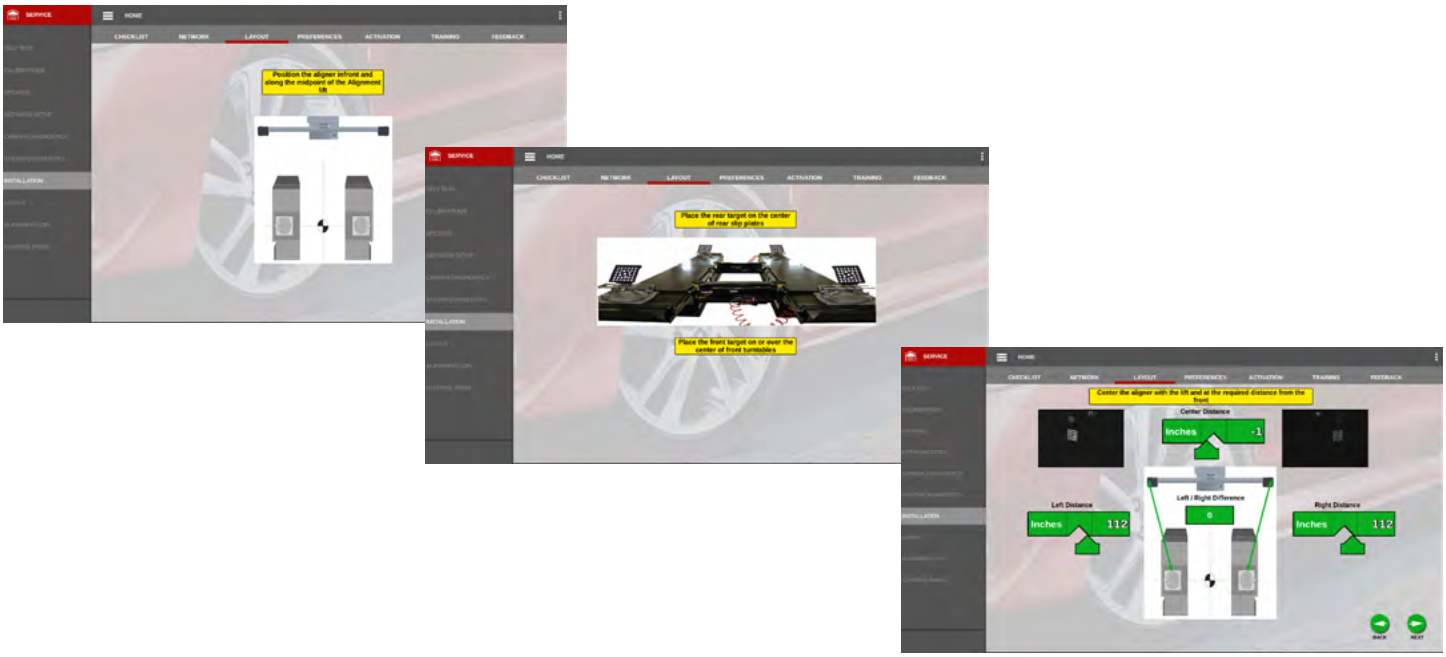


LF		RF	
RMS	0.0679	RMS	0.0564
Target Blobs(Blobs)	33(31)	Target Blobs(Blobs)	66(32)
Distance	3008.0mm	Distance	2976.0mm
Target Angle	27	Target Angle	22
Intensity	183	Intensity	195
Number of Planes	533	Number of Planes	520
Number of Images	2029	Number of Images	2035
LR		**RR**	
RMS	0.0465	RMS	0.0518
Target Blobs(Blobs)	33(33)	Target Blobs(Blobs)	33(33)
Distance	5711.0mm	Distance	5657.0mm
Target Angle	22	Target Angle	21
Intensity	180	Intensity	189
Number of Planes	1571	Number of Planes	840
Number of Images	2033	Number of Images	2034

Not used. See Camera Diagnostics chapter for troubleshooting Cameras and Targets?

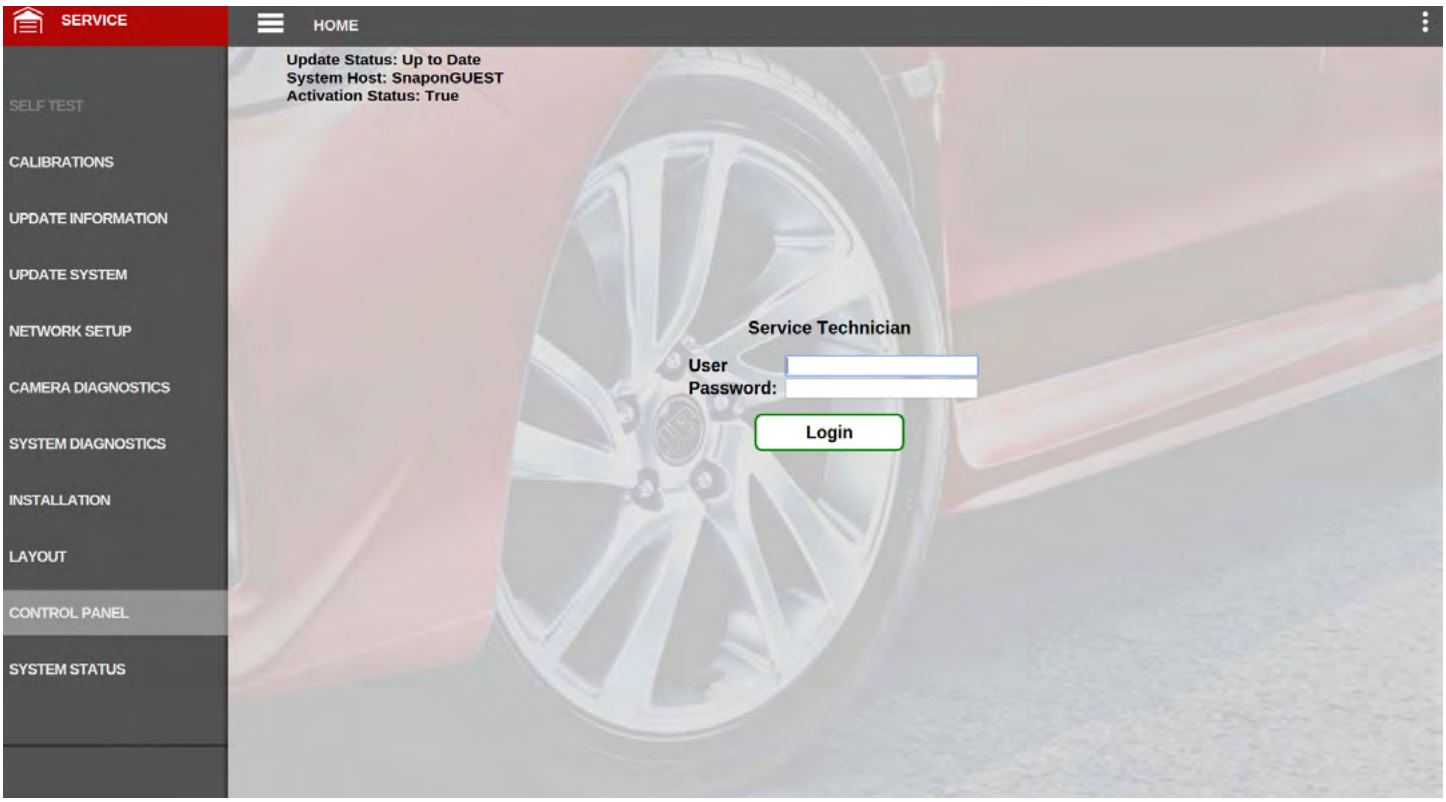
LAYOUT

This is used to help aid the technician in the installation and proper alignment of the system to the Alignment rack.



CONTROL PANEL

UNDER DEVELOPMENT



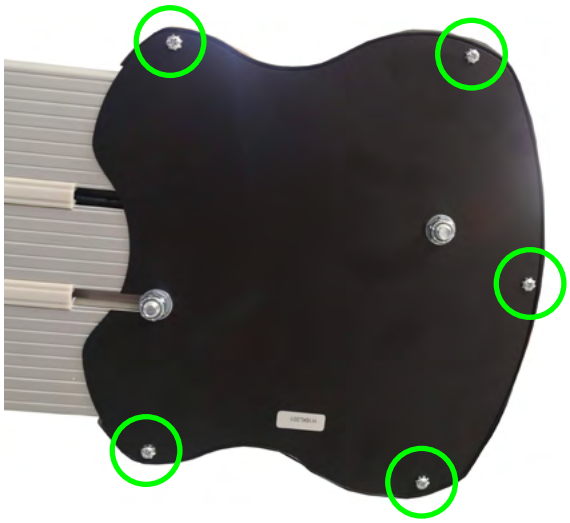
Currently this section is for engineering use only. If access is needed it will be under guidance of the engineering department.

COMPONENT REPLACEMENT

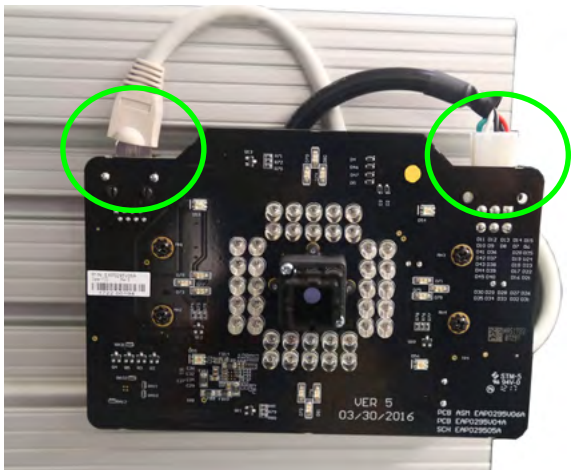
CAMERA REPLACEMENT

1. Shut down the system using the “Shut Down” procedure from the main menu. Unplug the unit from the power supply.

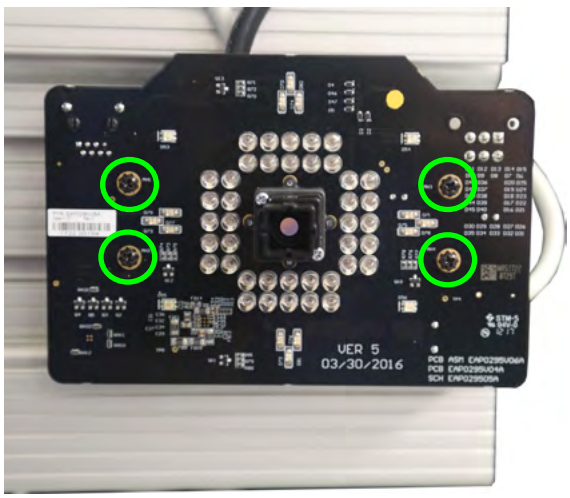
2. Remove the front cover by removing the 5 screws that are securing the camera cover in place. Set the cover and hardware to the side for reinstallation later.



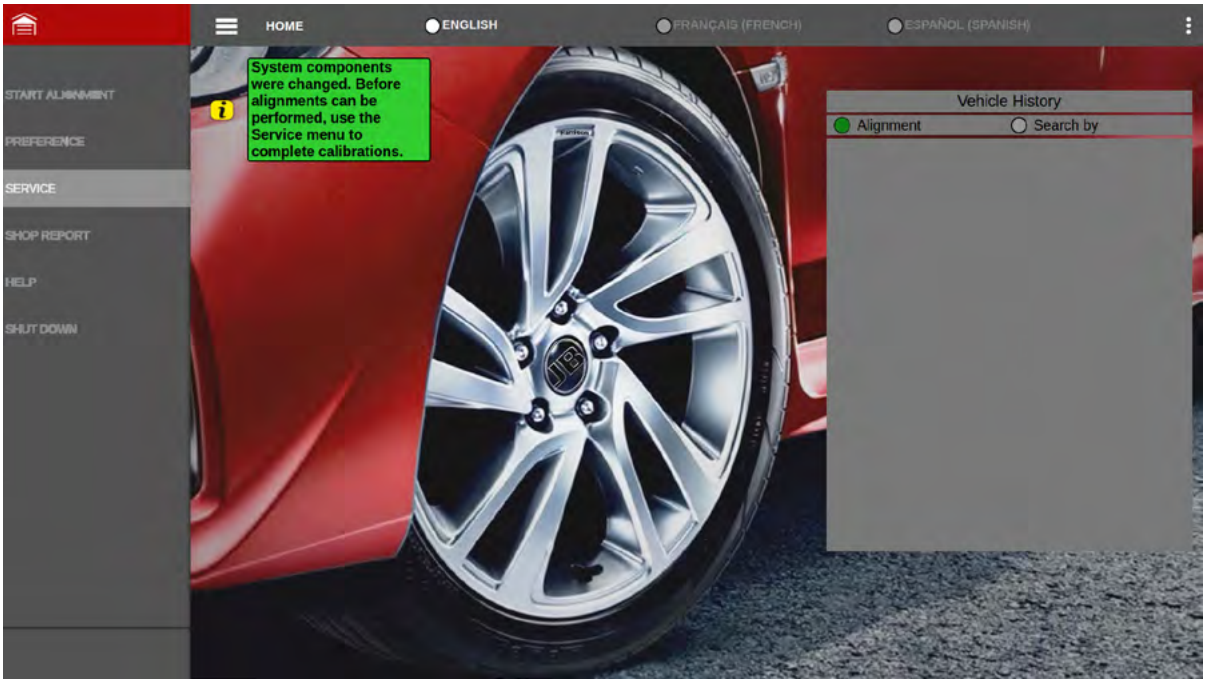
3. Unplug the power and data communication cable from the camera board as shown below.



4. Remove the camera board from the camera mount by removing the 4 screws shown below. Retain these screws from installing the new board. There may be spacers between the camera and camera mount - these are not required for installation and may be discarded.



5. Install the new camera board by reversing Steps 2 through 4.
6. Plug the unit back into the power supply. Power on the unit.
7. The home page will appear with only the service selection available. The message “System components were changed. Before alignments can be performed, use the Service menu to complete the following serive.

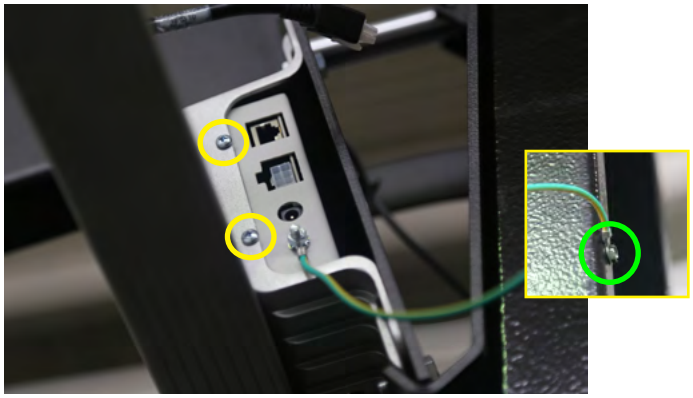


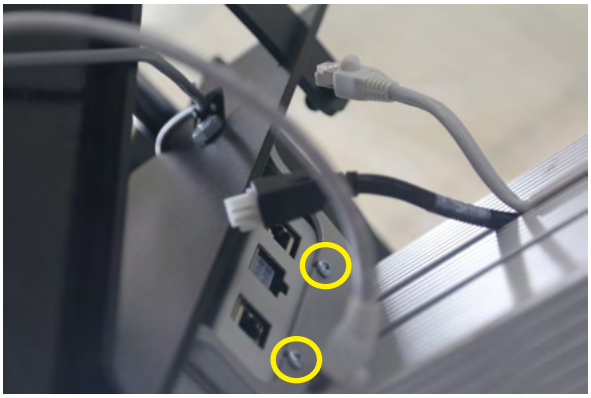
8. Click “Service”.
   - Network Setup
   - Printer Setup
   - RCP Check
   - Single Bar Calibration
   - Activation
9. Camera Replacement Complete

PROCESSOR BOARD REPLACEMENT

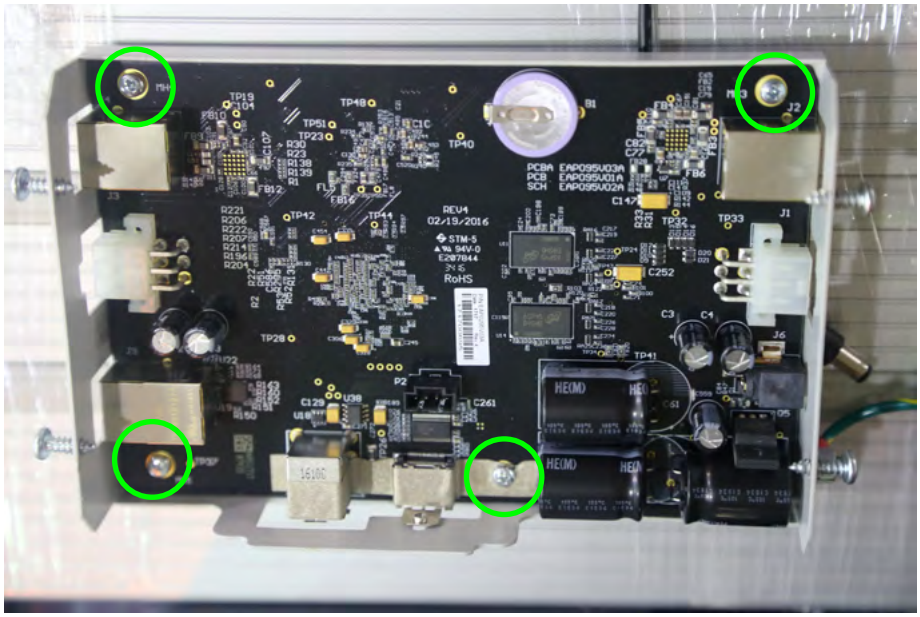
The following procedures are designed for Processor only. If both a Processor and Host Controller is replaced at the same time RCP Check and Single Bar Calibration is required.

1. Shut down the system using the “Shut Down” procedure from the main menu. Unplug the unit from the power supply.
2. Disconnect the grounding cable from the camera support.
3. Disconnect all cables from the processor board. Use a phillips screw driver to loosen the (4) screws that are securing the camera board mount to the beam mount. There are (2) screws on either side of the mount.



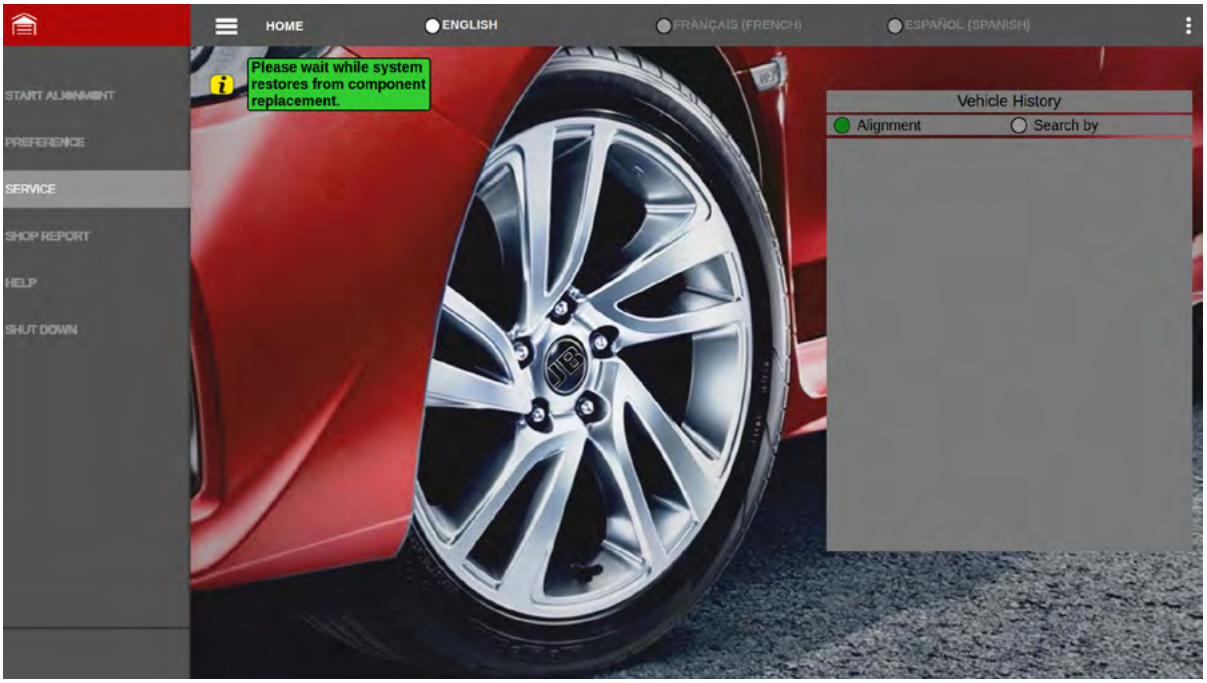


4. The processor board assembly can now slide out from between the tower and camera beam.Remove the (4) phillips head screws that are securing the processor board to the housing assembly.



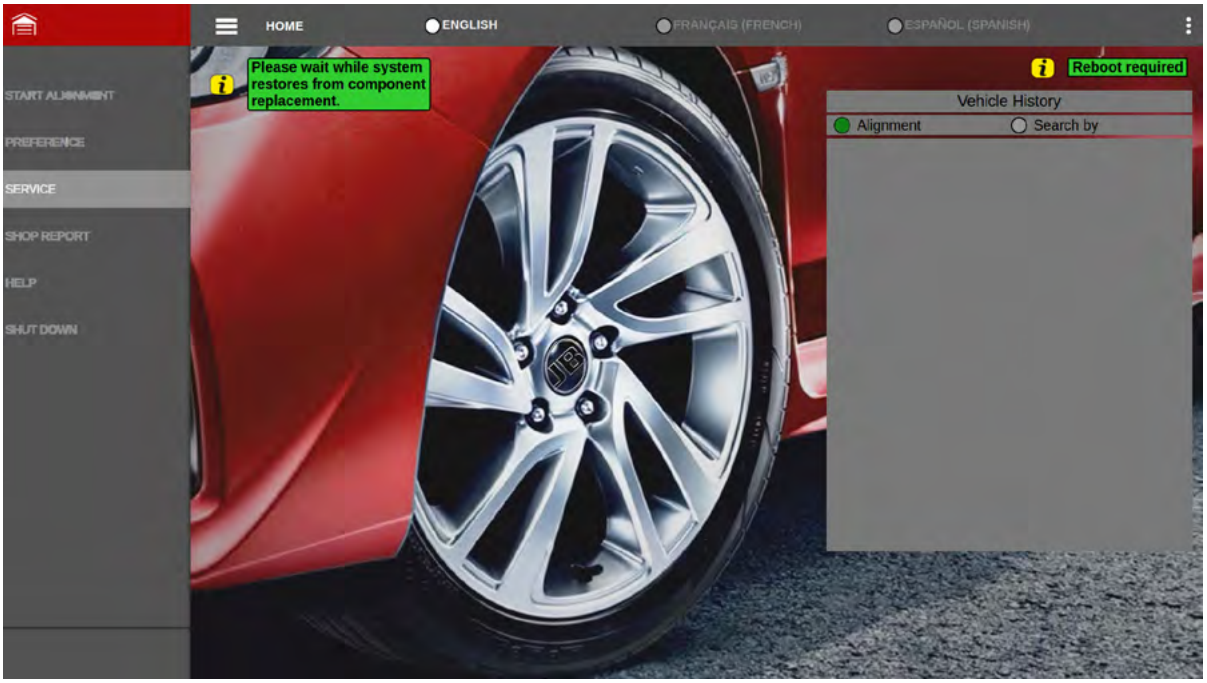
5. Install the new processor board by reversing the process outlined in Step 2 through 4.
6. Reconnect the power supply to the aligner and power on the unit.

7. The homepage will display with the message “Please wait while system restores from component replacement.”

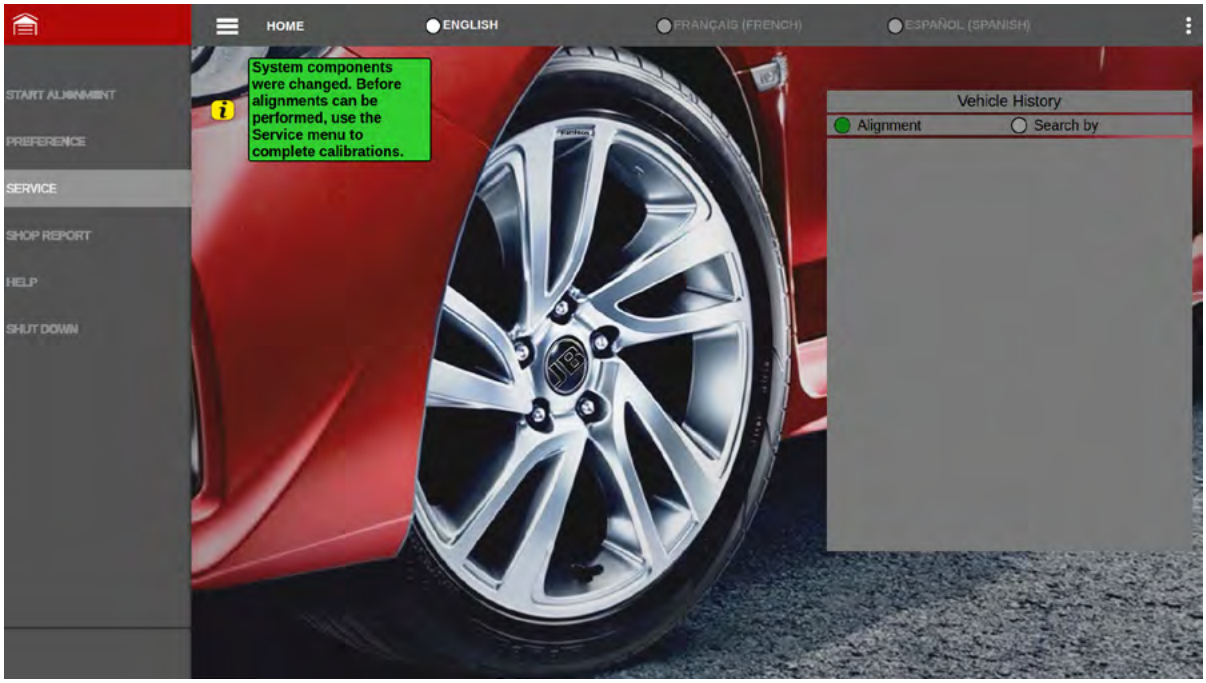


8. After approximately 10 minutes, “Reboot required” will appear in the upper right side of the screen.

9. Cycle the power on the unit to perform the reboot.



10. The homepage will display “System components were changed. Before alignments can be performed, use the Service menu to complete calibrations.”



11. Click “**Service**”.

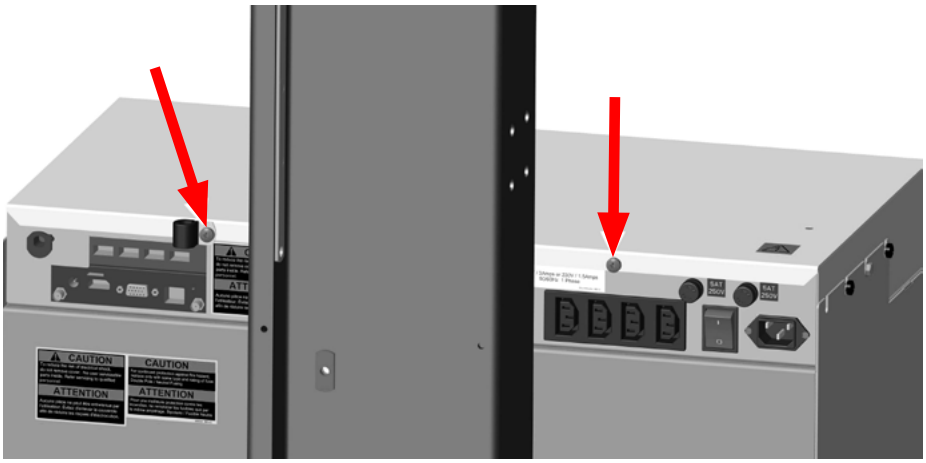
- Network Setup
- Printer Setup
- Activation
- **Calibration Required if both a Processor and Host is changed at the same time.**

HOST CONTROLLER REPLACEMENT

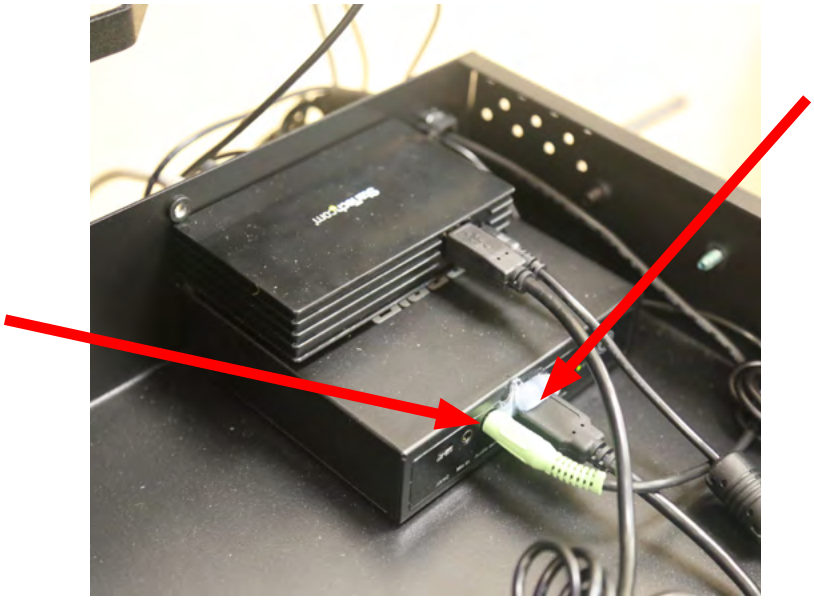
Turn off and unplug the unit from the power supply. Unplug all cables from the host controller.

1. Remove the keyboard and mouse from the top surface of the electrical shelf.

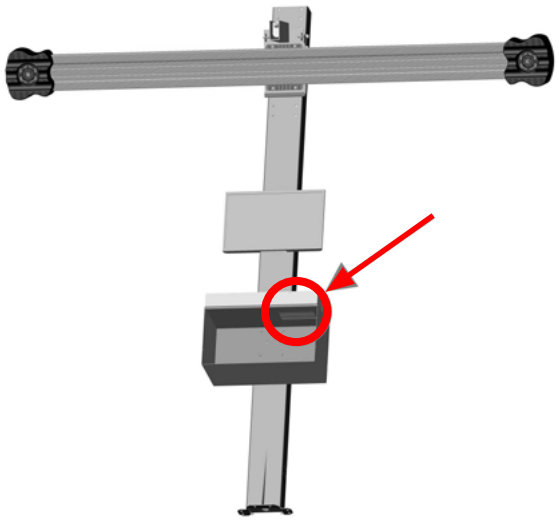
2. Remove the electrical shelf cover by removing the (4) phillips head screws. There are (2) in the front and (2) in the rear.

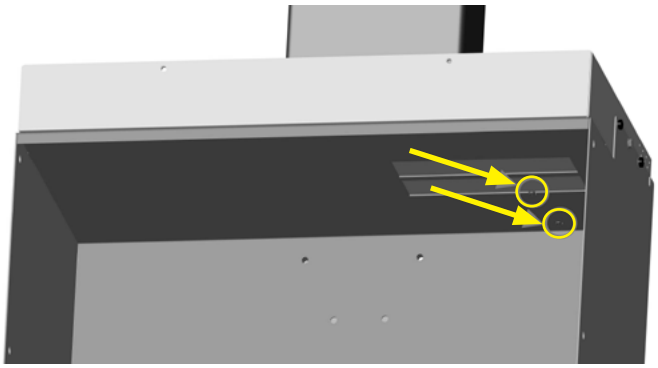


3. From the front of the host controller, disconnect the cable coming from the USB hub and the audio cable. The USB hub is attached to the host controller with hook and loop fastener. Pull the hub off of the host controller and set aside in the electrical shelf.



4. The host controller is secured in place by (2) phillips head screws that are located on the bottom side of the shelf. Remove these screws and set aside for reinstalling the new host controller. Remove the host controller.

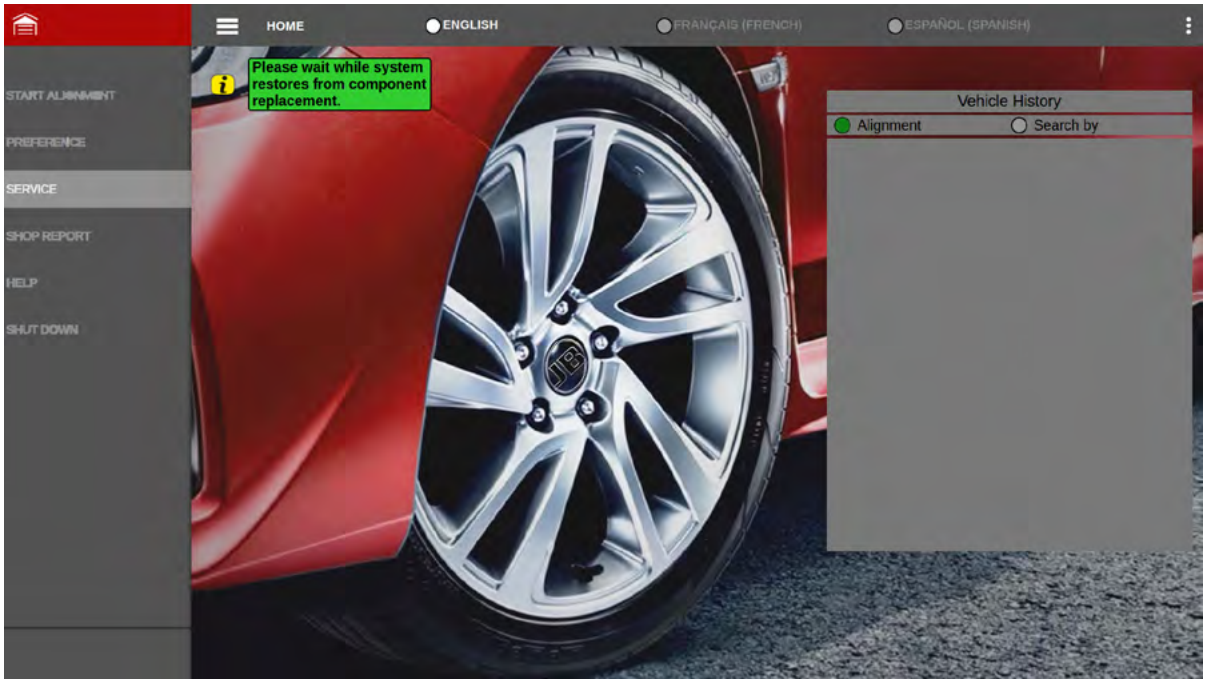




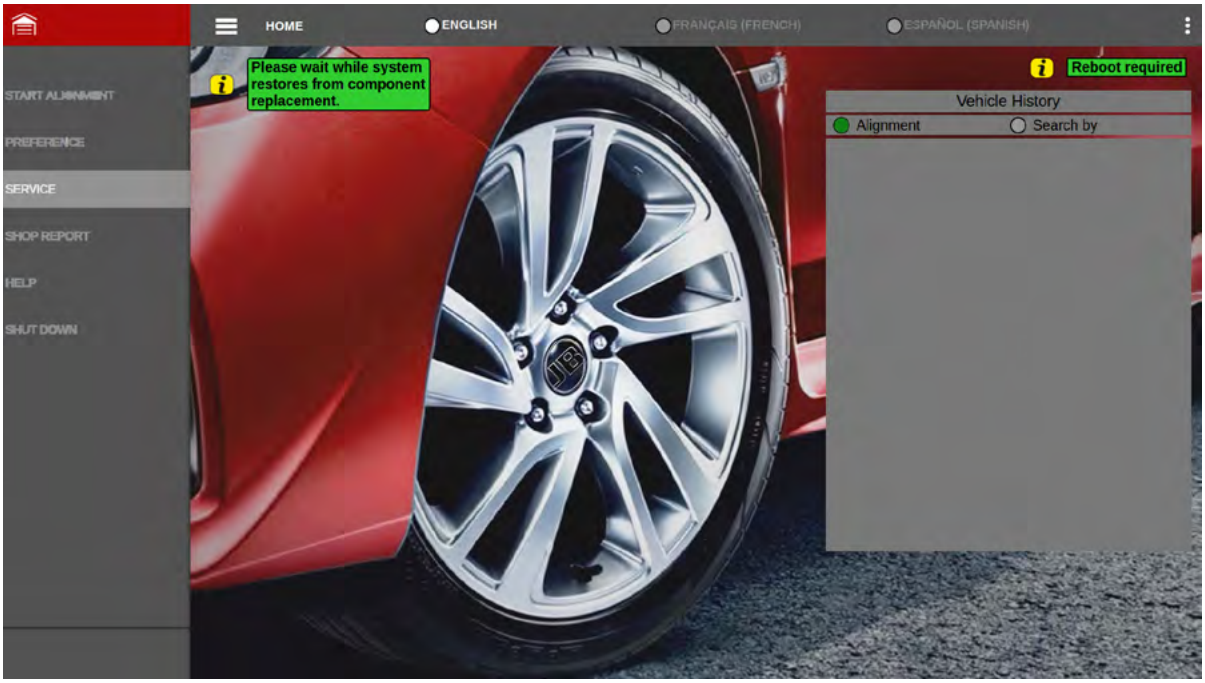
5. Install the new host controller by reversing Steps 2 through 6. Install the new Magnetic Antenna base by installing the antenna (supplied with the host controller) to the post on the magnetic base. Allow the antenna base to magnetically attach to the top surface of the electrical shelf. Attach the cable from the magnetic base to the post on the back of the new host controller.

6. Reconnect the power supply and power on the unit.

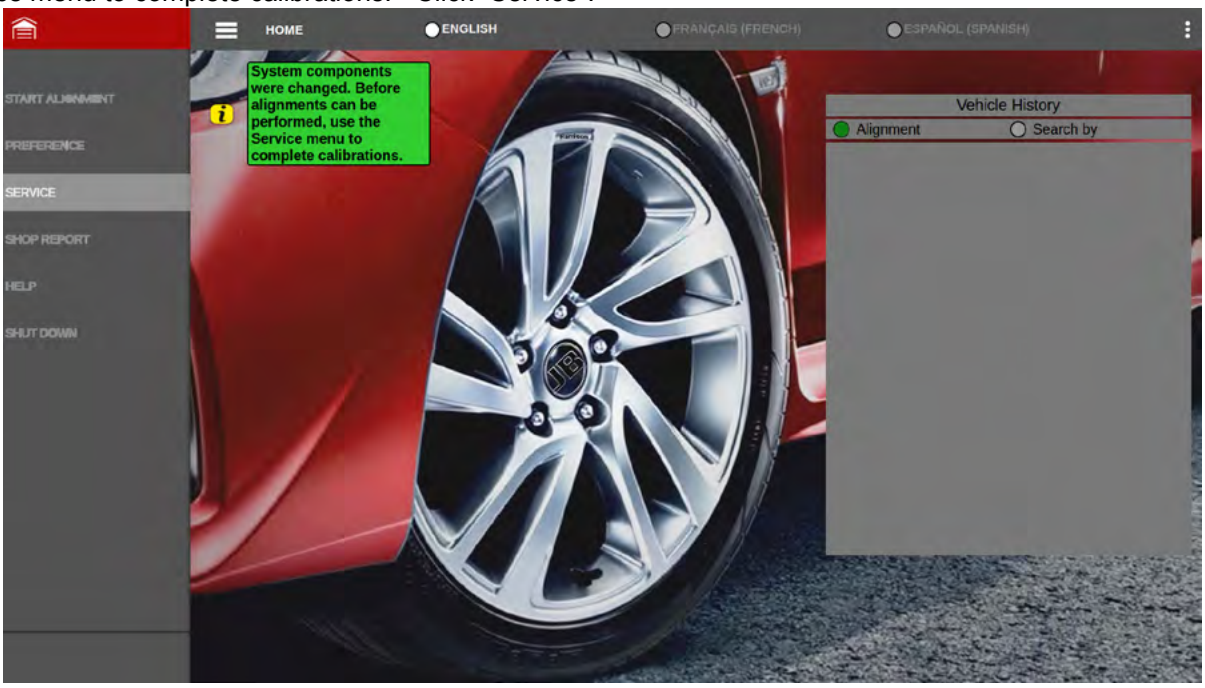
7. The homepage will display the message “Please wait while system restores from component replacement.”



8. After approximately 10 minutes, “Reboot required” will appear in the upper right side of the screen. Cycle the power on the unit to perform the reboot.



9. The homepage will display “System components were changed. Before alignments can be performed, use the Service menu to complete calibrations.” Click “Service”.



10. Click “**Service**”.

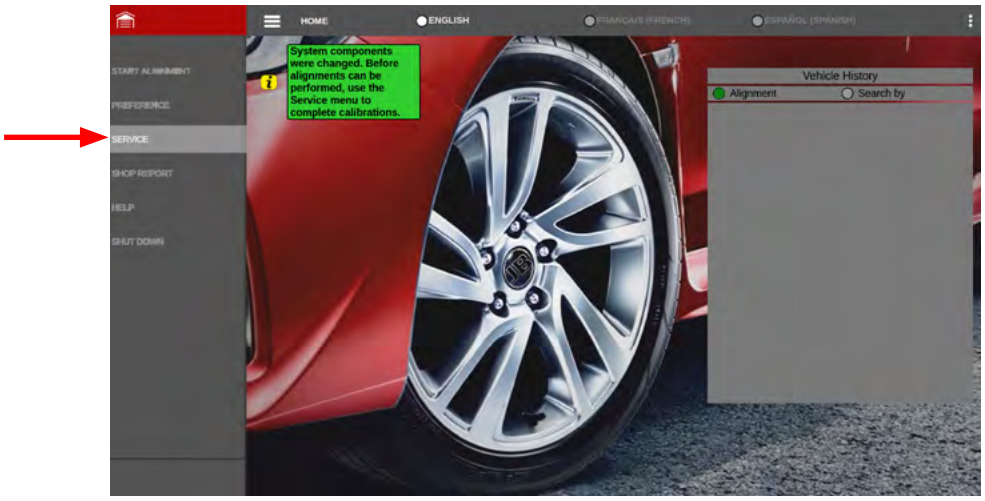
- Network Setup
- Printer Setup
- Activation
- **Calibration Required if both a Host and Processor is changed at the same time.**

SYSTEM COMPONENTS CHANGED / ACTIVATION

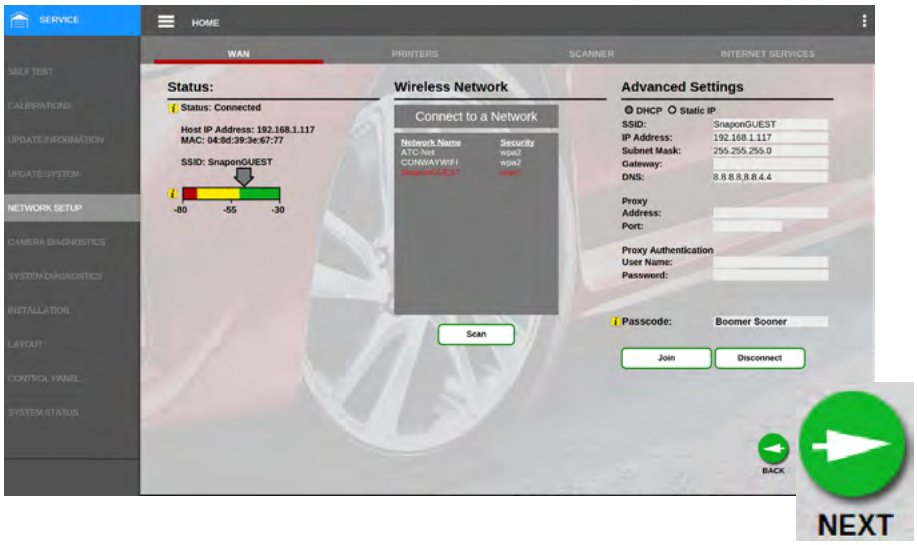
During each power on sequence the system will roll call all components in the system (Left Camera, Right Camera, Host Controller). This is done using an internal identfying number on each component (Host Controller, Processors PCB & Camera PCB's).

If a component has been changed the system notifies the user/tech on the "Home Screen" with a message after the system completely boots. The system will not allow the user to perform any alignments until they system is calibrated. This is done to prevent possible errors on an un-calibrated system. All menus of the aligner are locked out. The only active Menu that is active is the "Service" menu. The system will walk the user step by step through each process until all needed processes are done. After calibration and Network setup the system will require a reactivation to update the server with the latest system hardware.

1. Click on <SERVICE> from the home menu.



2. "NETWORK SETUP" is the required. Use the Network Setup in the manual for steps on setting up the network. Click on the <NEXT> button when finished.



3. The next steps (Calibration) will depend on the component that was changed. The possibilites are listed. The steps to complete each of the procedures can be found in this manual.

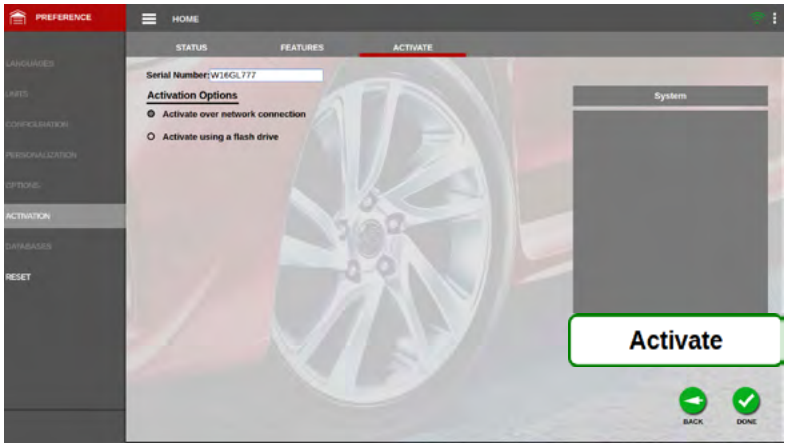
   - Calibration
     * RCP
     * Single Bar

An Activation is required so that the server is updated with the latest information. The activation can be done via the shop network or using a flash drive if the shop does not have external wifi.

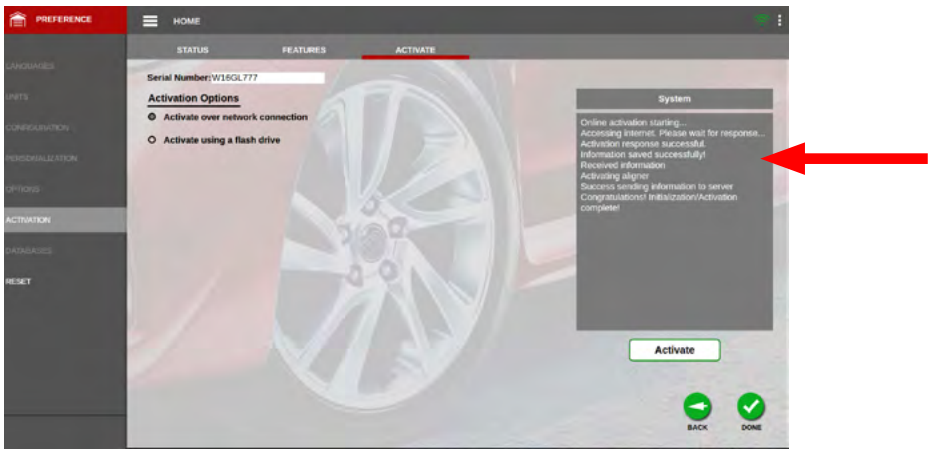
ACTIVATING OVER NETWORK CONNECTION

1. If activating over the shop network enter the serial number of the system. Double check the systems serial number. Click on the radio button “Activate over network connection”.

NOTE: ALL KEYSTROKES ARE RECORDED AS KEYSTROKES. PLEASE MAKE SURE THE “CAPS LOCK” IS SET TO ON. DO NOT USE THE SHIFT KEY.

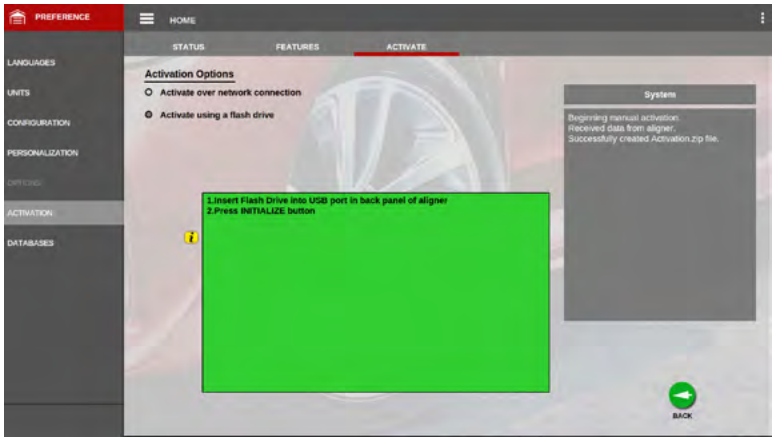


2. Once activated the system will report that it has successfully activated.



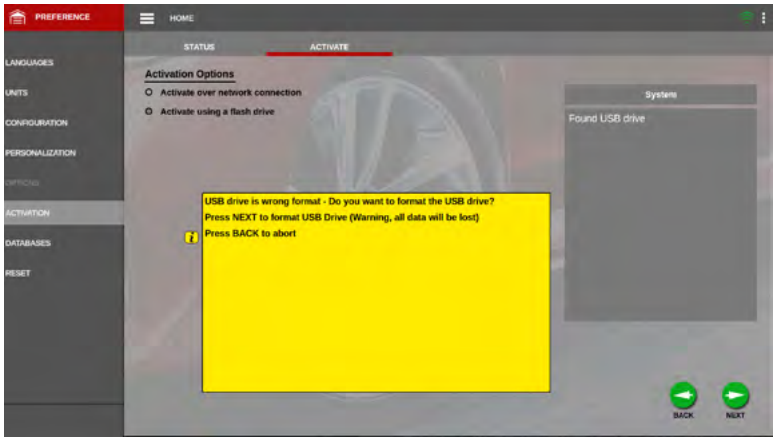
ACTIVATING USING A FLASH DRIVE

1. If activating using a flash drive, enter the serial number of the system. Double check the systems serial number. Click on the radio button “Activate using a flash drive”. The user is prompted to insert a USB Flash drive in a port in the back of the system.

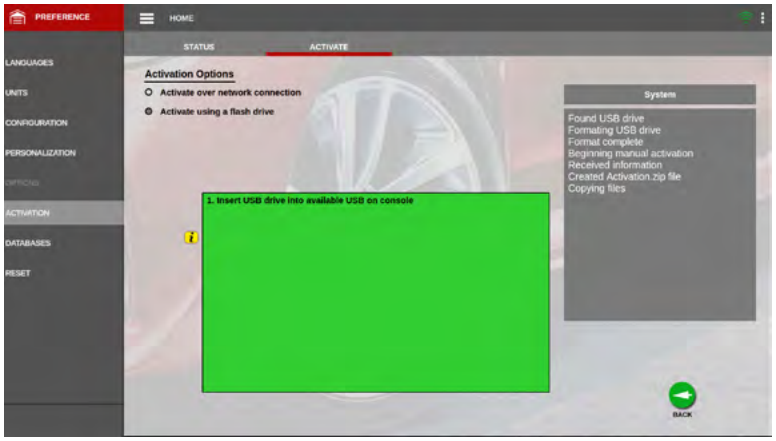


2. Once inserted the system will auto detect the flash drive. If the flash drive that is inserted is not formatted correctly the system will prompt the user and recommend formatting.

NOTE: FORMATTING THE FLASH DRIVE WILL ERASE ANY CONTENT THAT MAY BE STORED ON THE FLASH DRIVE. IT IS RECOMMENDED TO USE A CLEAN FLASH DRIVE. THE FLASH DRIVE BEING USED MUST ALSO HAVE ENOUGH SPACE TO ACCOMMODATE THE ACTIVATION.

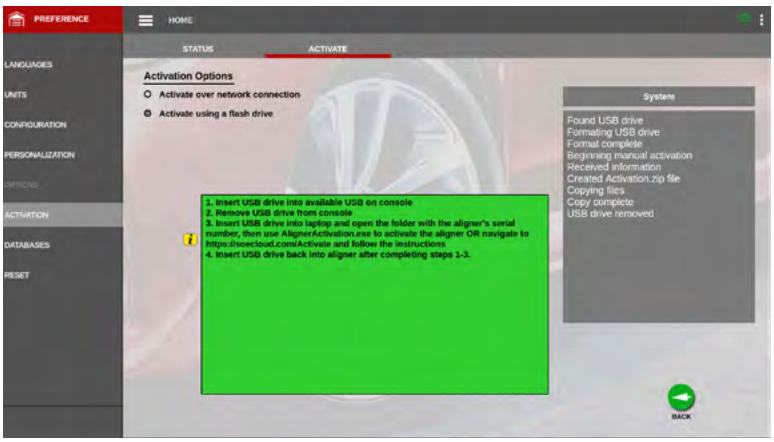


3. Once formatted the system will auto copy all needed activation files to the flash drive.

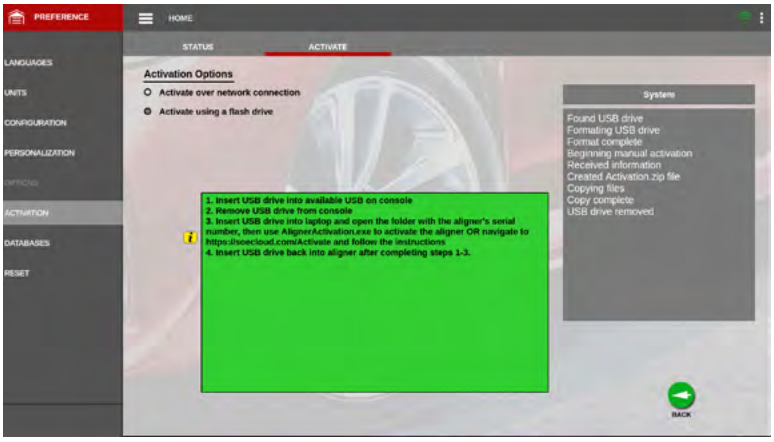


4. After the system copies all needed files to the flash drive they system will prompt the user to remove the flash drive.

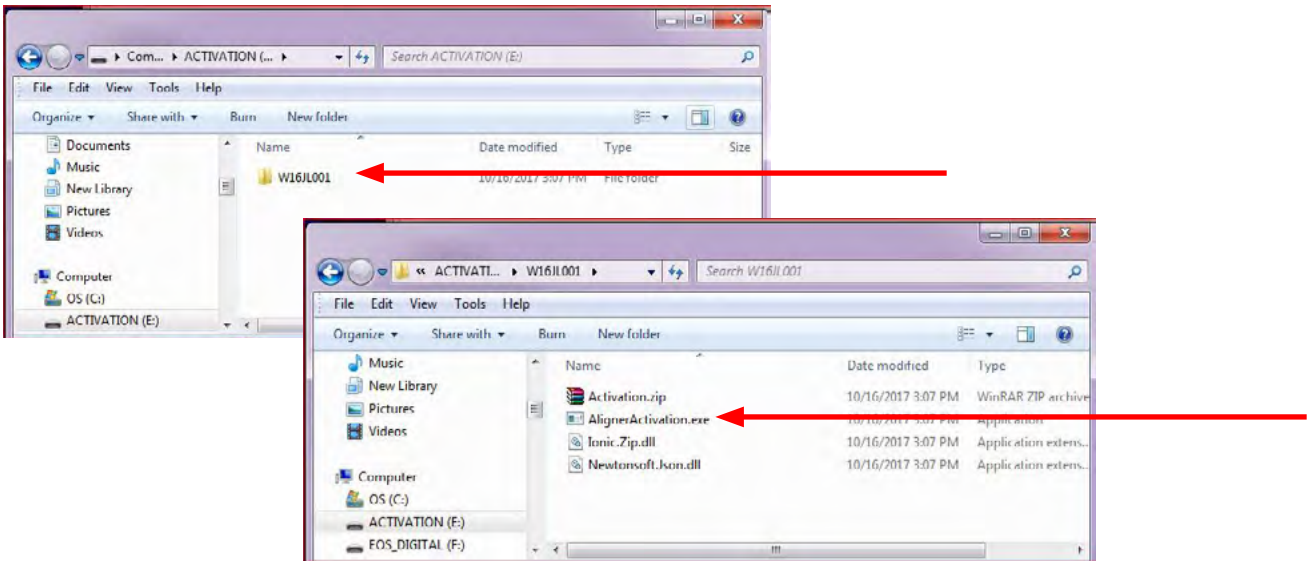
NOTE: THE ALIGNER CAN BE RETURNED TO SERVICE UNTIL ACTIVATION IS COMPLETED!



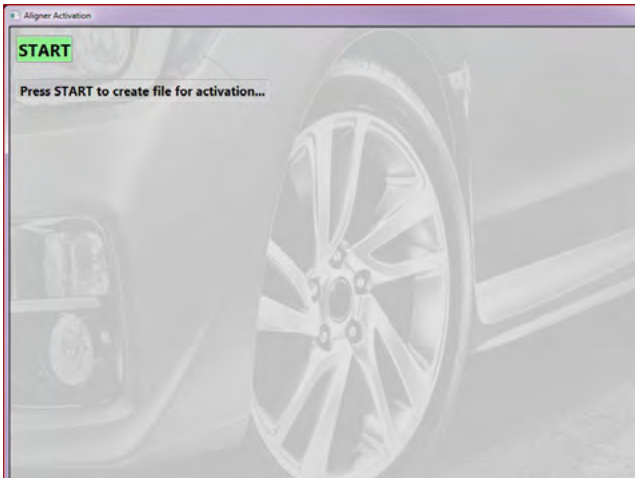
5. Once the flash drive is removed the user is prompted to insert the flash drive in a PC that is connected to the internet.

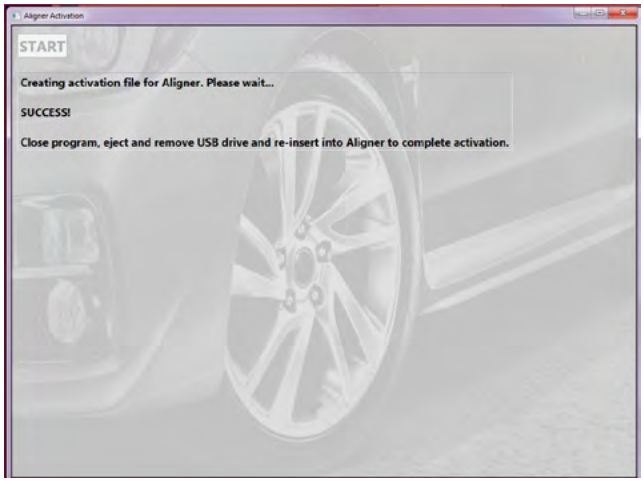


6. Insert the USB drive into a PC and open the folder with the aligner's serial number, double click on the file "AlignerActivation.exe to activate the aligner. Or navigate to https://soecloud.come/activate and follow intructions..



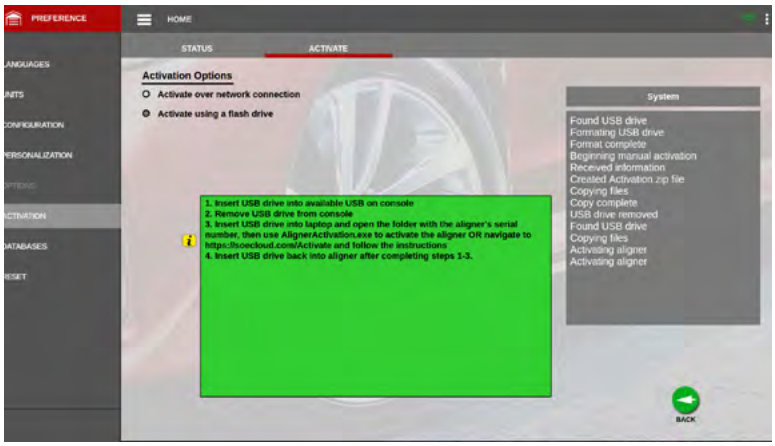
7. Once executed click on the “START” button of the activation APP to create the activation file on the USB Drive. After the activation is completed on the USB flash drive eject the flash drive and return the aligner.



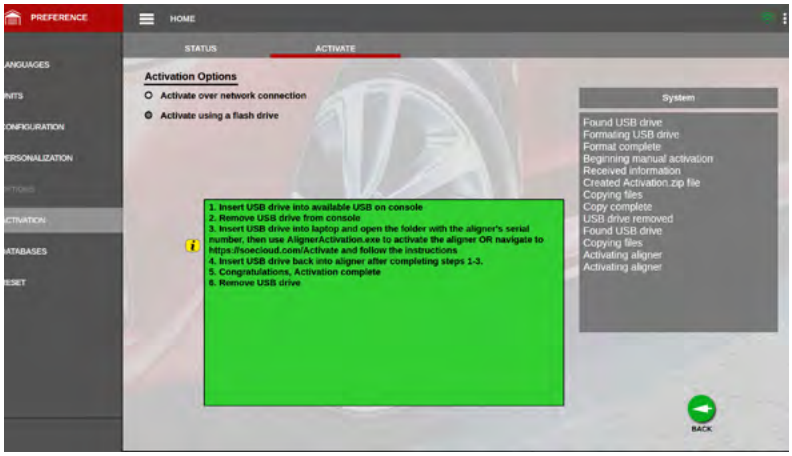


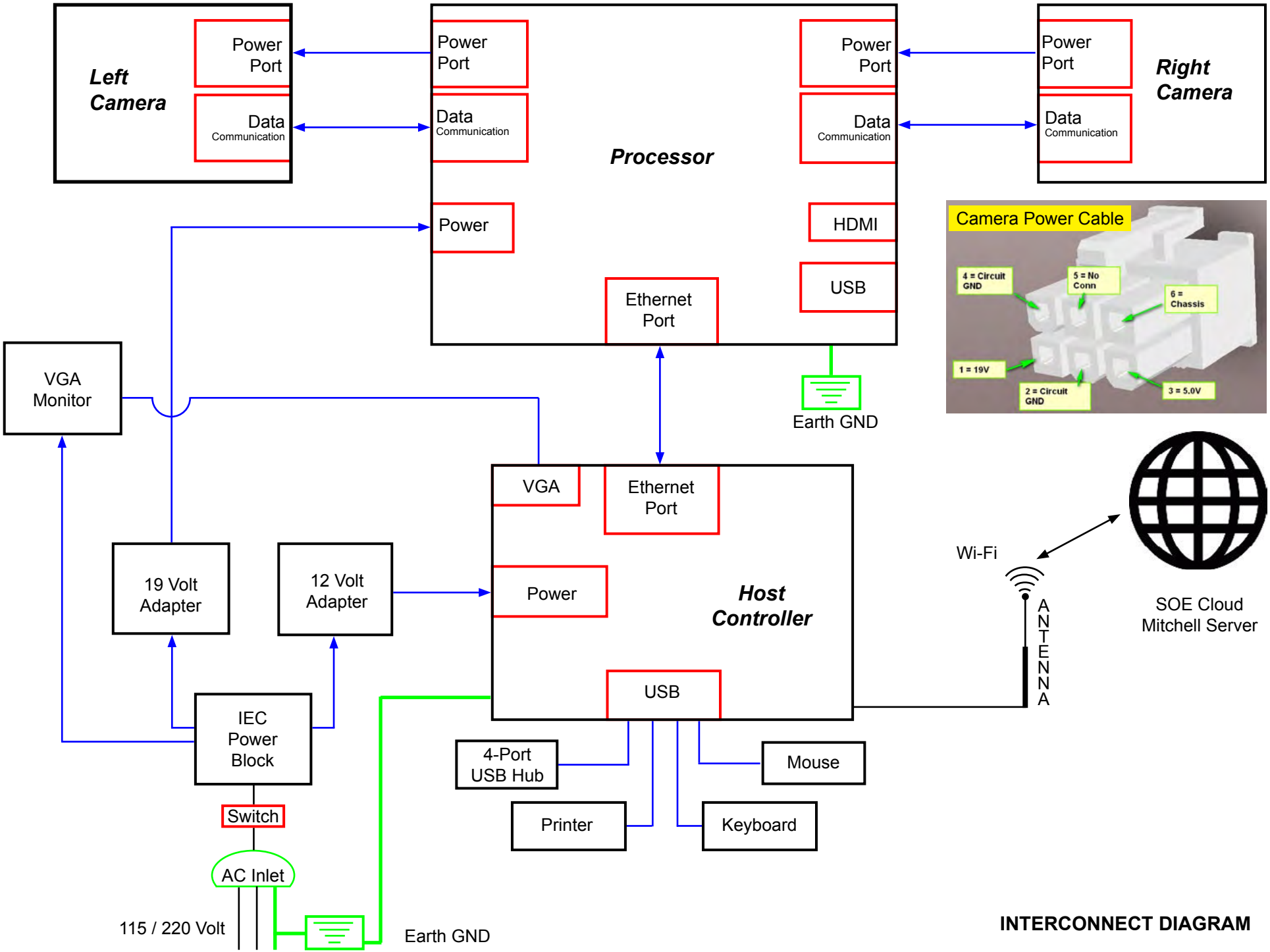
NOTE: IF RETURNING TO A SYSTEM THAT IS REQUIRING ACTIVATION, NAVIGATE TO THE ACTIVATION PAGE OF THE ALIGNER BEFORE CONTINUING!

8. Insert the USB flash drive containing the “Activate.zip” file in the USB port on the aligner requiring activation. The system should recognize the flash drive and copy the activation files to the aligner.



9. After completion the system should successfully activate. Remove the USB drive once completed.



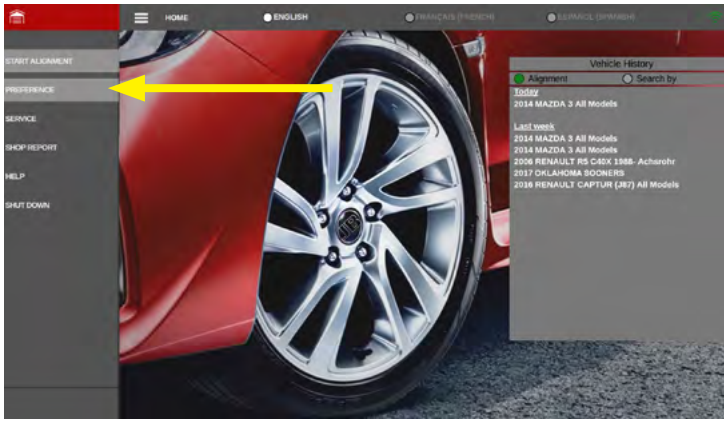


INTERCONNECT DIAGRAM

VIN SCANNER SETUP

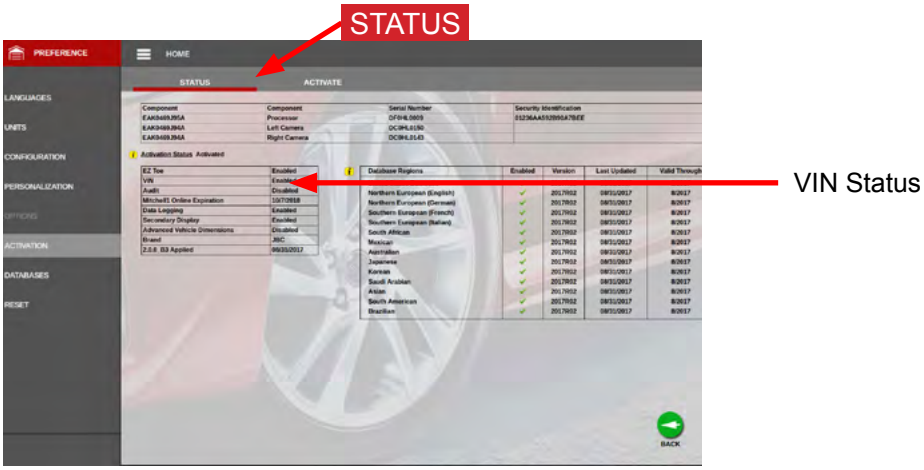
NOTE: THE VIN READER MUST FIRST BE ACTIVATED AT THE FACTORY LEVEL BEFORE IT WILL OPERATE CORRECTLY, ONCE IT INSTALLED IT MUST BE ACTIVATED AT A SOFTWARE LEVEL.

1. From the Home Screen click on <Preference>.



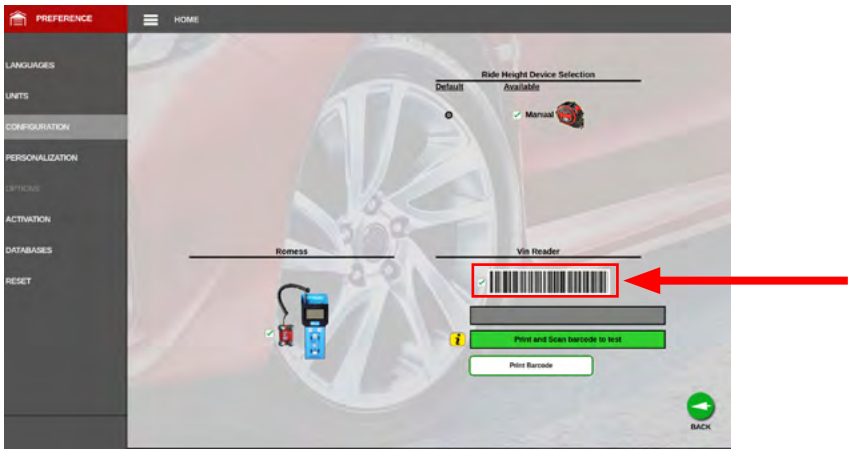
2. From the Preference screen click on the <ACTIVATION> and select <STATUS>.

3. Check to make sure VIN is Enabled, if not the VIN will not operate.

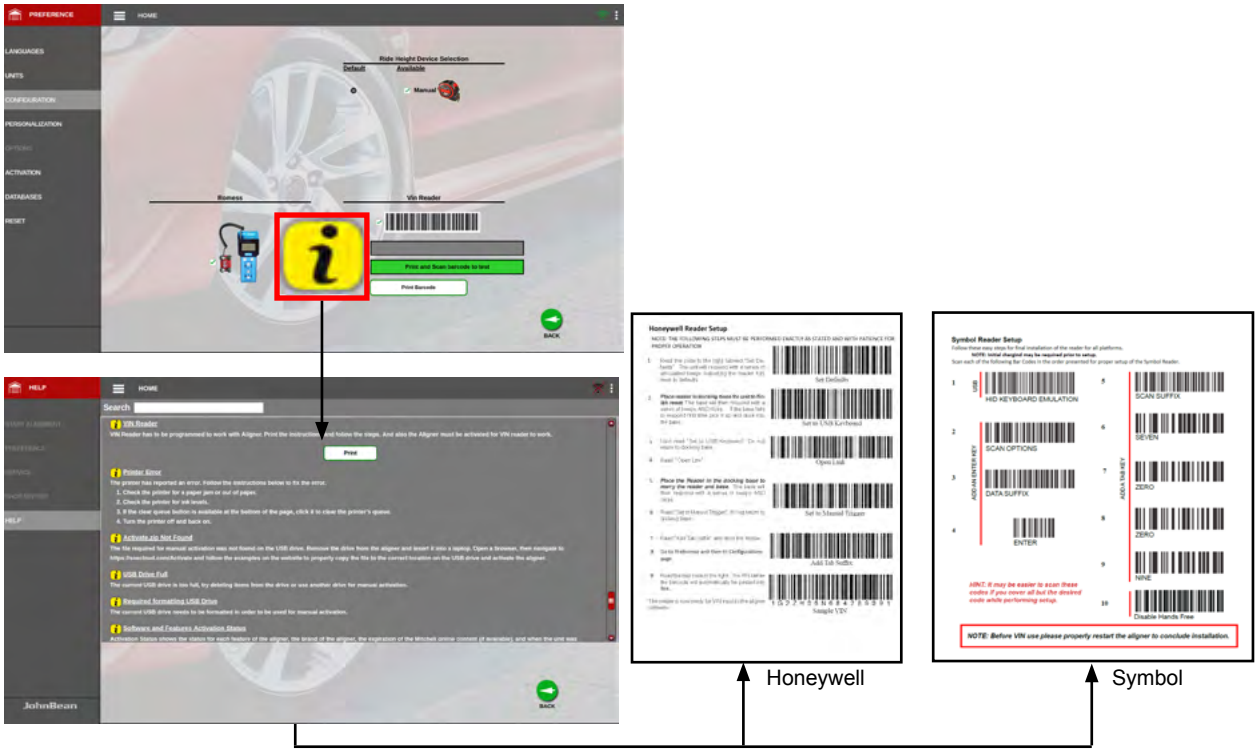


4. Connect all wiring from the VIN Reader to the aligner as outlined previously. The system will recognize the type of VIN Reader (Honeywell or Symbol) during the boot up process. This is very important.

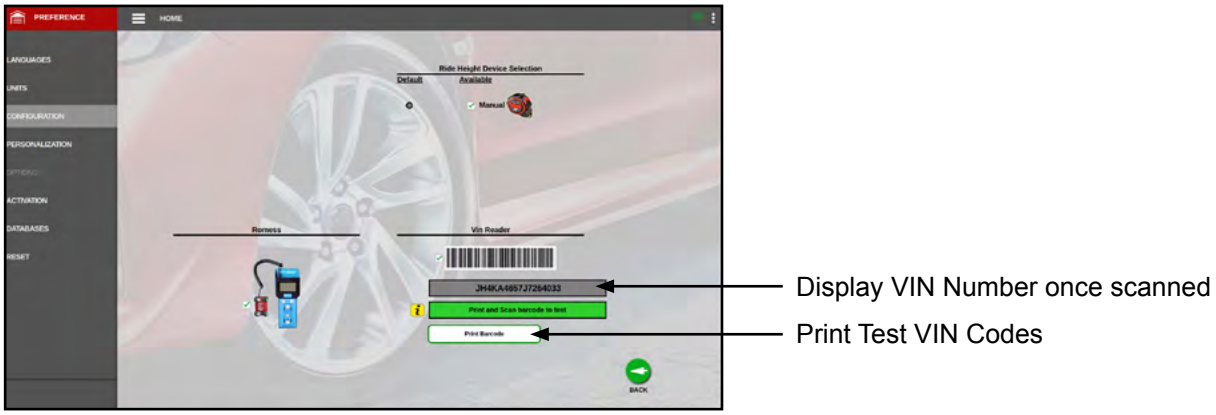
5. From the Preference screen click on the <CONFIGURATION> and check the VIN selection box.

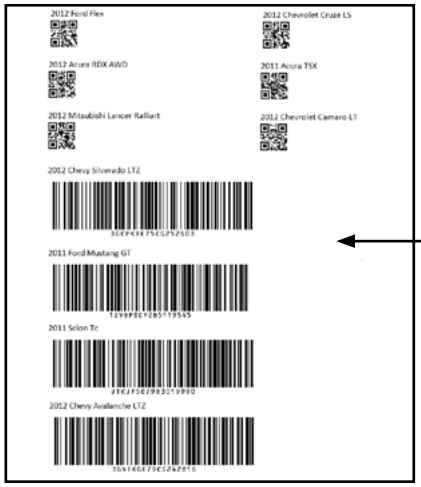


6. If the VIN scanner is not working properly then clicking on the yellow ‘i’ will show a help screen with instructions on how to print and scan additional training bar codes used to program the VIN reader with the necessary communications protocol to work with the aligner.



7. After proper setup of the installed VIN reader, click on the button <Print Barcode> to print out a page of test VIN codes. If the VIN Reader is installed correctly clicking scan a VIN from the test sheet, the VIN should show up in the test box.





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