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FCC NOTICES

Master Radio Model: M0714M3 FCC ID: 2ADCCM0714M3
APS Model: M112PB FCC ID: 2ADCCM112PB

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

- This device may only be used with the approved antenna that is shipped with the unit and installed per the installation instructions. The use of any other antennas will invalidate the units' FCC Part 15 certifications.
- To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication. Operating the device with the supplied antenna will ensure that this requirement is met.

This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. A separation distance of 20 cm should be observed to maintain compliance with the FCC's RF exposure guidelines set out in OET Bulletin 65.

YOUR NEW DOG

Congratulations on purchasing your new Device On Guard (The DOG™) and APS Asset Positioning Sensor™ (APS) system. It has been designed to help you protect and maintain your vehicles. It is capable of monitoring your vehicles 24 hours a day, 7 days a week and automatically notifying you by text message (SMS) of potential problems within seconds. With this system in place, the most recent status of The DOG™-protected vehicles is available at the click of a button from anywhere in the world.

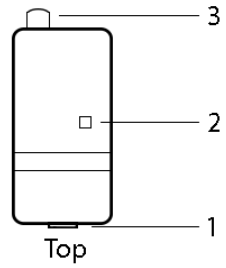
UNPACKING

After unpacking, make sure the following items are included in the box and are in good condition:

Figure 1-1: The DOG™ package contents

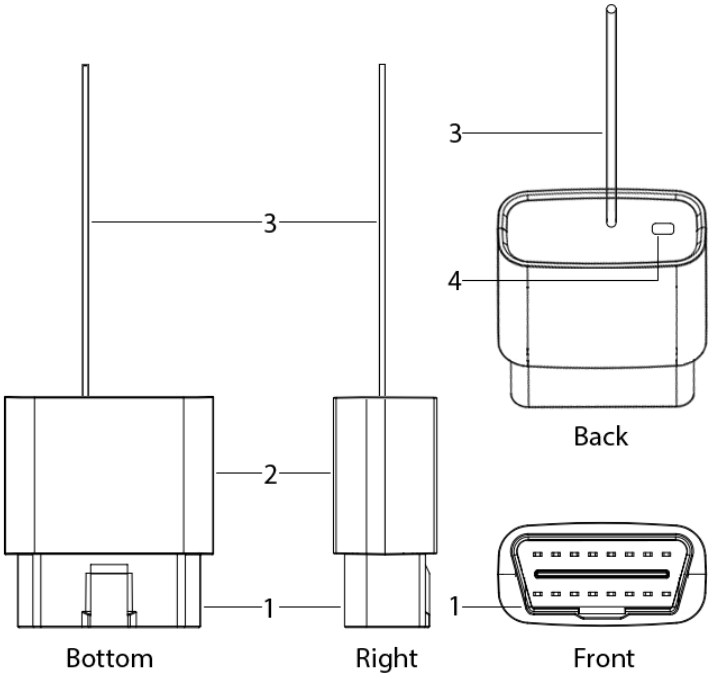
If you find that any item is missing or appears to be damaged, please contact your sales representative.

IDENTIFYING COMPONENTS



1. Micro-USB port
2. LED indicator
3. Antenna connector

Figure 1-2: Master radio diagram



1. OBD connector
2. Case
3. Antenna
4. LED indicator

Figure 1-3: APS diagram

PRODUCT FEATURES

- 24/7 world-wide access to check on your The DOG™-protected vehicles
- 1250 foot line of sight (LoS) range with minimal external interference to cover nearly any size lot
- Low power consumption while plugged into vehicle allowing the units to be left plugged in without draining your batteries
- Text message (SMS) alerts for critical vehicle events so you can respond within seconds
- Obtain vehicle information such as diagnostic trouble codes, fuel level (on supported vehicles), and battery life so you can increase the odds that the vehicle will start for the customer

CONNECTING THE MASTER

Selecting a Location

Test the location for external radio frequency (RF) interference prior to installing the system.

The Master should be located within 1250 feet of all required monitoring points on the lot. If large obstructions prevent LoS at certain locations, range may be reduced at those points.

Placing the Antenna

When installing the antenna indoors, it should be placed 10 feet off the ground and in a centrally located building. If necessary, obtain a longer USB cable with the required micro-USB connector. The included antenna should be securely fastened to the antenna connector on the 3DR radio unit (Master).

Remove all obstructions between the Master and all required vehicle locations if possible to ensure adequate signal strength.

Testing the System

The micro-USB connector on the USB cable should be plugged into the micro-USB port on the Master. The other end of the USB cable includes a standard USB connector that should be plugged into the computer. If the computer is not on, power it up. After the computer is on, the LED on the Master will be red. After two seconds the LED will turn green.

Run the PC test software and then install an APS into a vehicle. When it has been plugged in, the LED will turn on when transmitting and then turn off quickly when it gets a response from the Master. The LED will stay on for 2 seconds and repeat 3 times if it does not reach or hear Master response. Start the vehicle and then check the PC test software to ensure the vehicle is visible. If there is no visible response, please refer to the Troubleshooting section.

The vehicle should be driven to the furthest points on the entire lot to confirm reception at each point. If there is any point that the APS cannot be detected from, then additional steps will need to be taken to determine how to mitigate the issue. If reception is successful from the furthest points on the lot and locations hidden behind large obstructions, then the installation has been completed.

CONNECTING THE APS

The APS is designed to work on all 1996 and newer OBD-2-compliant cars, trucks, SUVs, and minivans manufactured for use inside the United States. There are a small number of makes and models that do not adhere to the SAE J1962 standard that may require a special adapter cable.

Locate the OBD-2 port on the vehicle. Note that in some vehicles, the port is upside down. The OBD-2 port connector should look like the following:

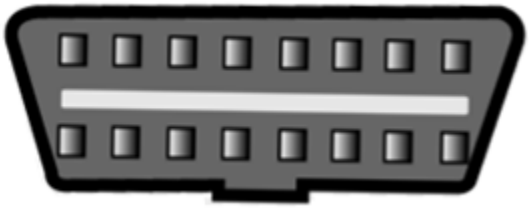


Figure 1-4: OBD-2 port

Some manufacturers such as Ford, BMW, and Mercedes cover the connector with a hinged door or rubber cover. In those cases, open the cover or door and plug in the device. The most common OBD-2 port location is under the dashboard.

Figure 1-5: Common OBD-2 port location

Less common OBD-2 port locations are as follows:

- Right side of steering column

- Behind fuse box panel or coin box
- Top instrument panel
- Under dash parcel tray
- Inside glove box
- Behind ash tray
- Near hand break

INSTALLING THE SOFTWARE

Before installing the software, obtain the CustomerID, SiteID, and database server settings from a Stay Secure Systems Customer Support Representative for the location where the software will be installed. These settings will be used to connect to The DOG™ database server and uniquely identify the location along with the external IP address. The representative should also supply you with all necessary software to install the system.

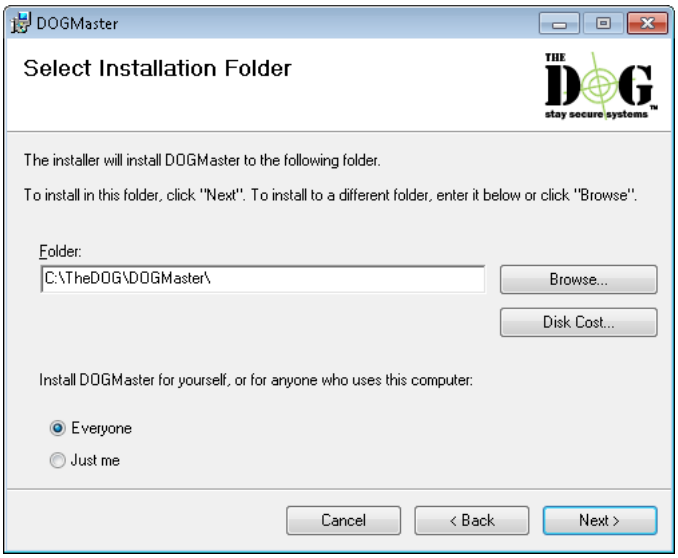
DOGMaster Service

The DOGMaster Service is a Windows-based service that communicates with the APS at your locations and records vehicle and APS data to the database server. The service should be installed on a Windows-based system with at least one available USB port to accommodate the Master radio. Only one system per location running the DOGMaster Service is required.

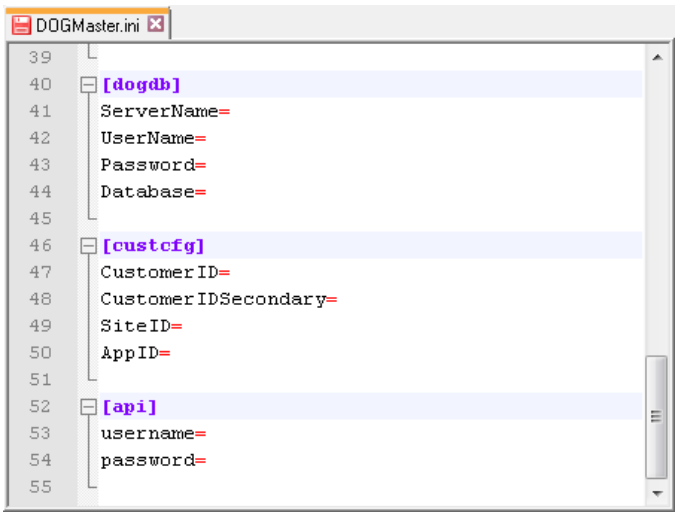
To install the service, please follow the steps listed below:

1. Plug the Master into a USB port on the designated DOGMaster server. Windows should install the driver automatically.

2. Run the DOGMasterSetup.msi installation program on the DOGMaster server. Use the default installation folder settings.



3. Navigate to the installation folder and update the DOGMaster.ini configuration file with the settings obtained from Customer Support.



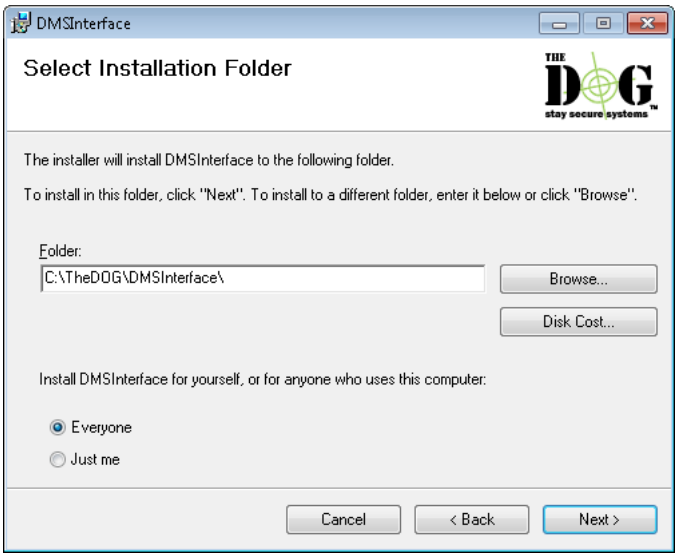
4. Start the DOGMaster service or reboot the computer and check the DOGMaster.log located in the installation folder to ensure the service is running without any errors. If an error is encountered, please contact Customer Support for assistance.

DMSInterface Service

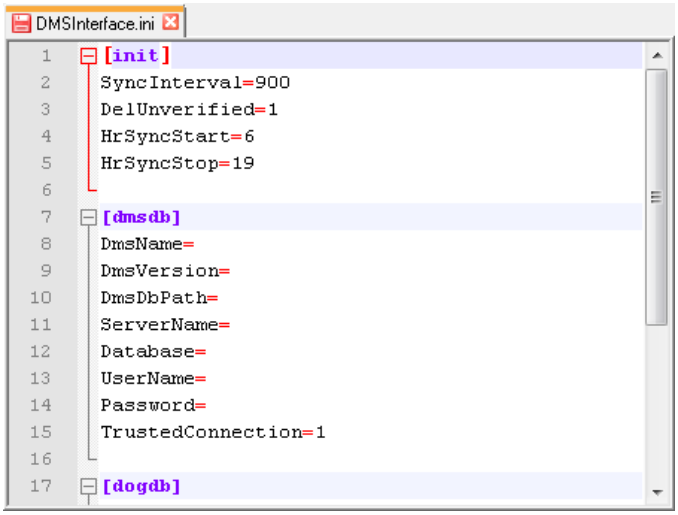
The DMSInterface Service is a Windows-based service that synchronizes your Dealer Management System (DMS) vehicle inventory with the database server. The service should be installed on the same system hosting your DMS database or a Windows-based system located on the same physical network as your DMS. Only one DMSInterface is needed per customer DMS database.

1. Verify your DMS is supported. If your DMS is currently unsupported, then a DMSInterface may be created for it.

2. Run the DMSInterfaceSetup.msi installation program on the DMS server. Use the default installation folder settings.



3. Navigate to the installation folder and update the DOGMaster.ini configuration file with the settings obtained from Customer Support.

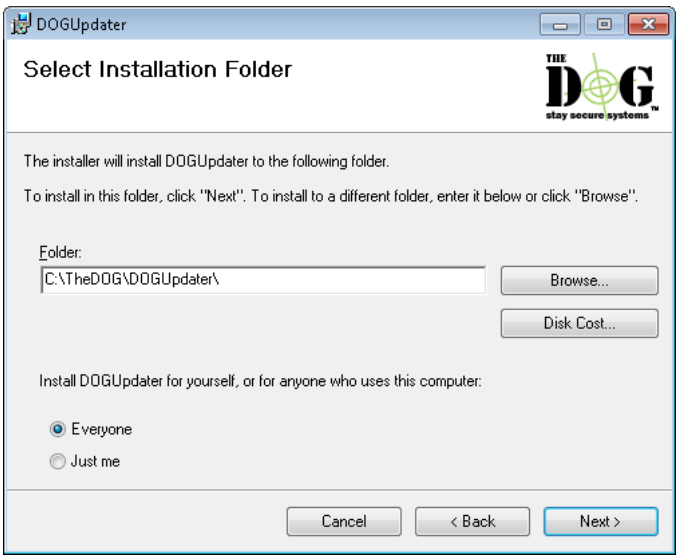


4. Start the DOGMaster service or reboot the computer and check the DMSInterface.log located in the installation folder to ensure the service is running without any errors. If an error is encountered, please contact Customer Support for assistance.

Updater Service

The Updater Service is a Windows-based service that keeps The DOG™-based software automatically updated. The service should be installed on all servers running the DOGMaster and DMSInterface Services.

1. Run the DOGUpdaterSetup.msi installation program on the DOGMaster server. Use the default installation folder settings.



2. Check the DOGUpdater.log located in the installation folder to ensure the service is running without any errors. If an error is encountered, please contact Customer Support for assistance.

RFID Workstation Setup

RFID readers should be plugged into all Windows-based workstations in order to allow scanning RFID cards. If the user will only be viewing data, then an RFID reader is not required. All workstations should have Internet access.

Plug the RFID reader into an available USB port. The driver should automatically be installed by Windows. If the driver does not successfully install, then the reader should be unplugged, the MX5UtilitySetup.exe should be installed, and then the reader should be plugged back in.

CONFIGURING THE SYSTEM

Web Application

Navigate to https://dealer.deviceonguard.com/ to arrive at the main web application.

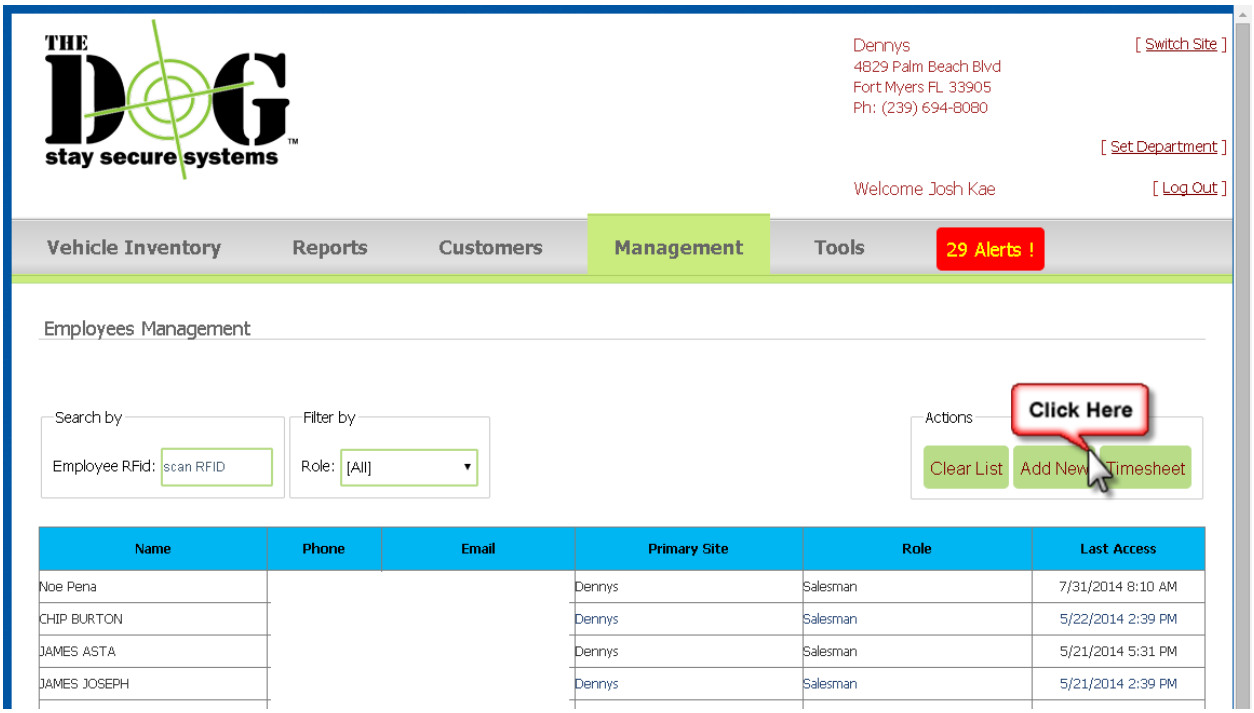
Logging In

1. Scan your RFID to validate your user name or optionally change the [Access using] dropdown to "Email Address" and enter your registered email address.

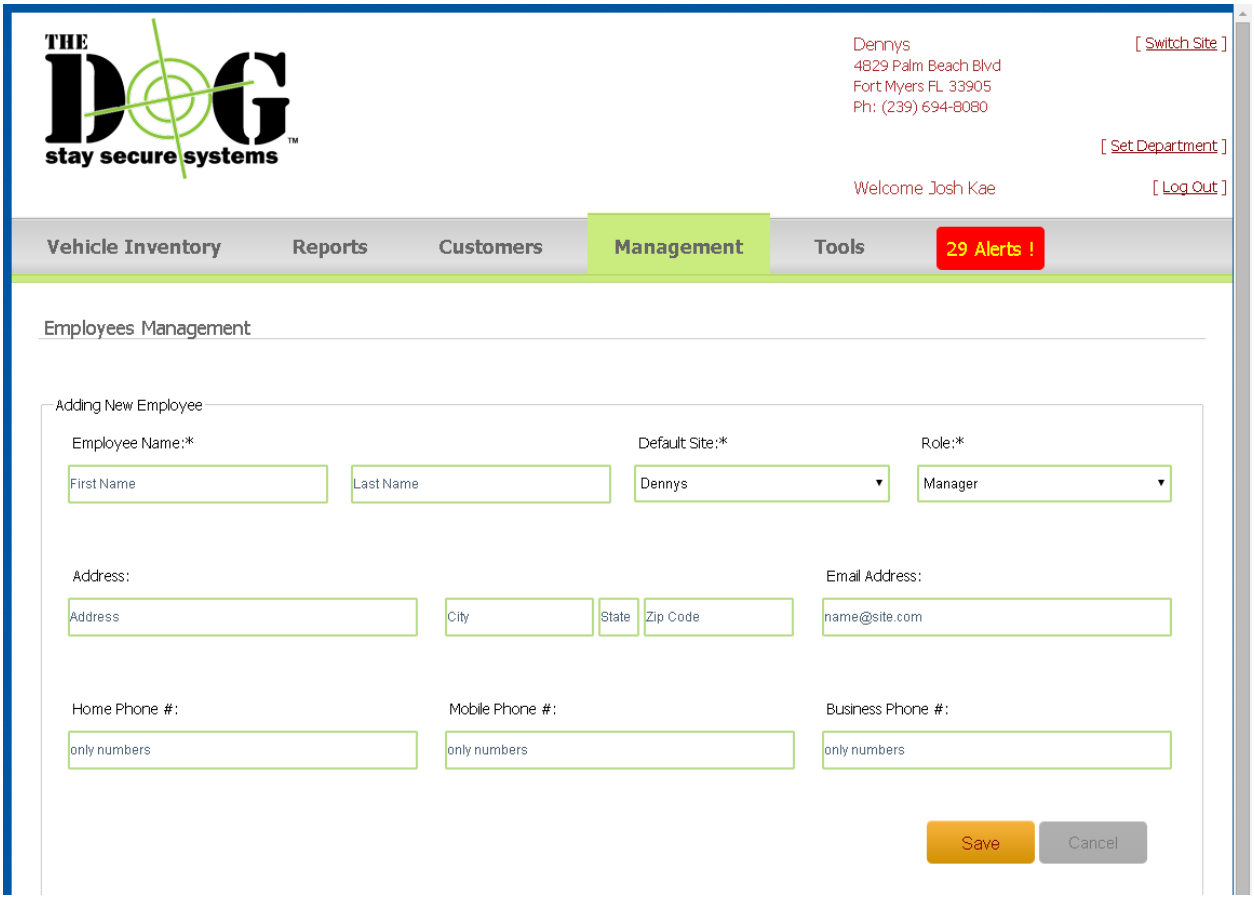
2. Enter your password and left click the [Log In] button or press the [Enter] key on your keyboard.

Setting Up Employees

1. Navigate to Management > Employees and click [Add New].

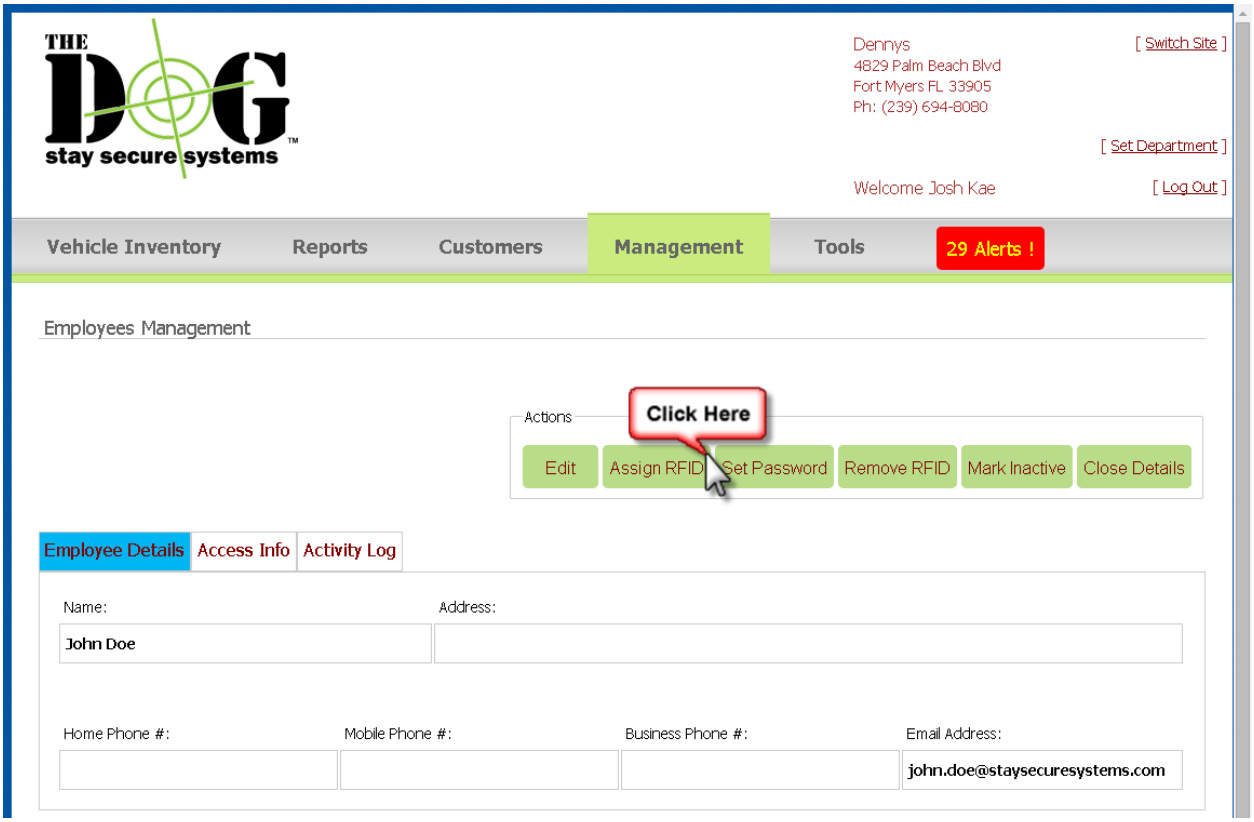


2. Fill in the employee details. All fields marked with an "*" are required. Click [Save] when finished.

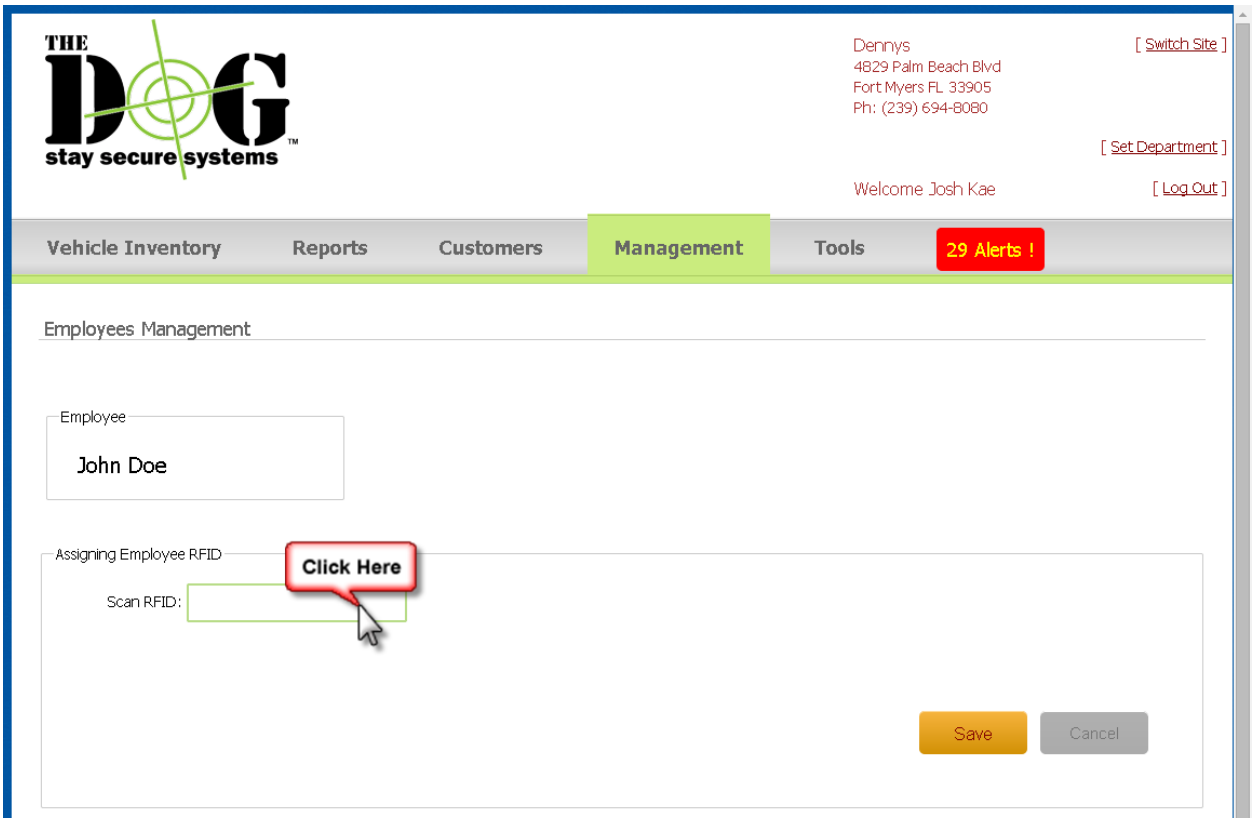


3. Click on the employee name in the employee list.

4. Click [Assign RFID].



5. Click in the [Scan RFID] field to select it and then scan the RFID to be assigned.



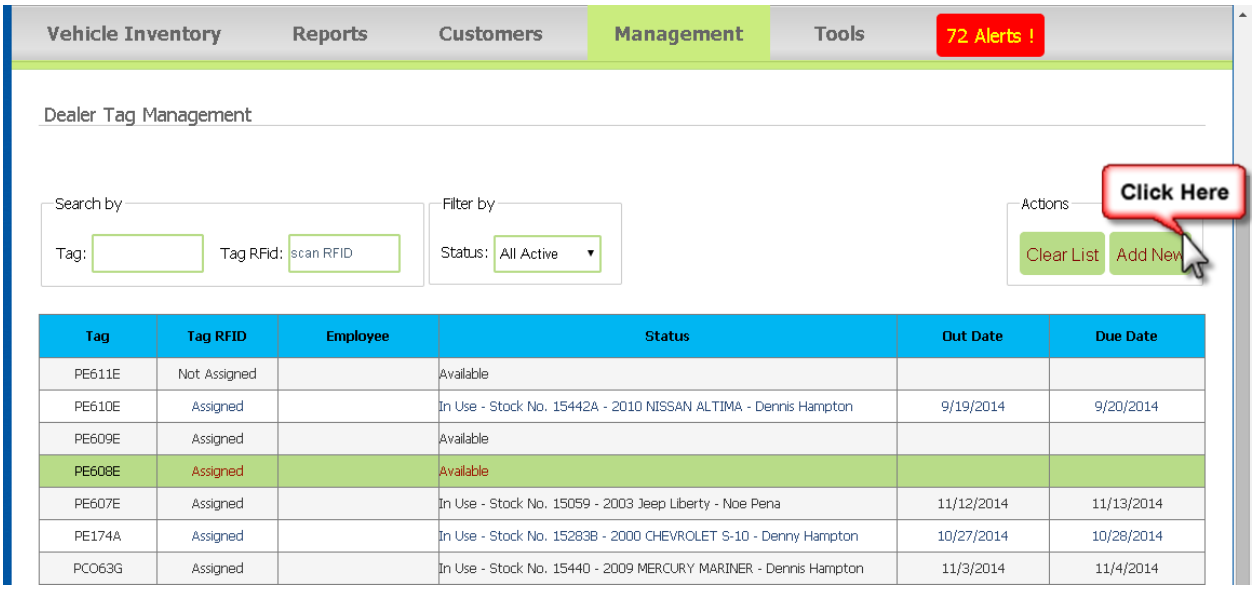
6. Click the [Set Password] button and enter the new password as required. When finished, click [Close] to return to the Employees Management screen.

7. Give the RFID to the employee. The RFID should be permanently attached to their key chain.

Setting Up Dealer Tags

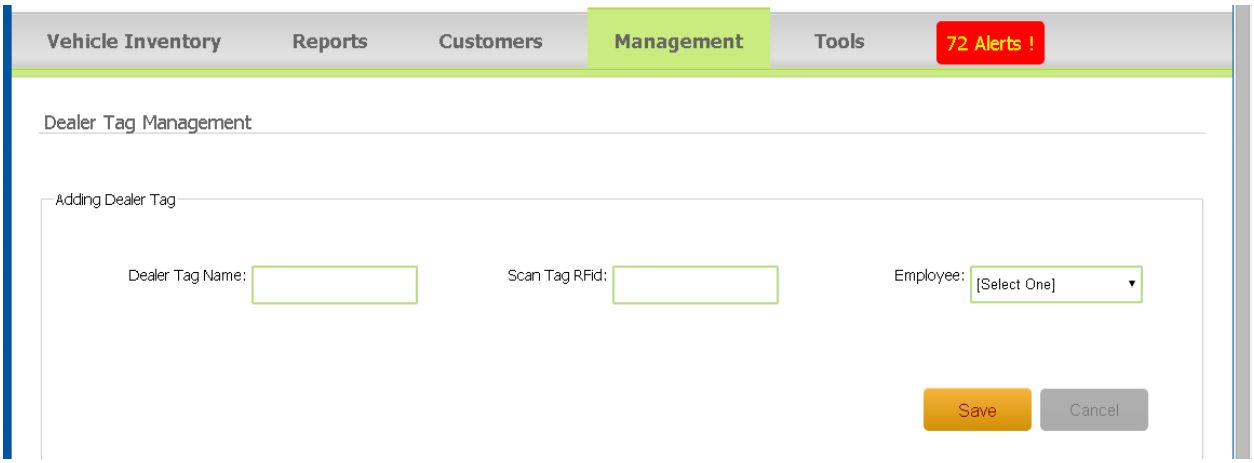
Before setting up the dealer tags in the system, ensure all of them have the proper type of RFID permanently affixed.

1. Navigate to Management > Dealer Tags and click [Add New].



Tag	Tag RFID	Employee	Status	Out Date	Due Date
PE611E	Not Assigned		Available		
PE610E	Assigned		In Use - Stock No. 15442A - 2010 NISSAN ALTIMA - Dennis Hampton	9/19/2014	9/20/2014
PE609E	Assigned		Available		
PE608E	Assigned		Available		
PE607E	Assigned		In Use - Stock No. 15059 - 2003 Jeep Liberty - Noe Pena	11/12/2014	11/13/2014
PE174A	Assigned		In Use - Stock No. 15283B - 2000 CHEVROLET S-10 - Denny Hampton	10/27/2014	10/28/2014
PCO63G	Assigned		In Use - Stock No. 15440 - 2009 MERCURY MARINER - Dennis Hampton	11/3/2014	11/4/2014

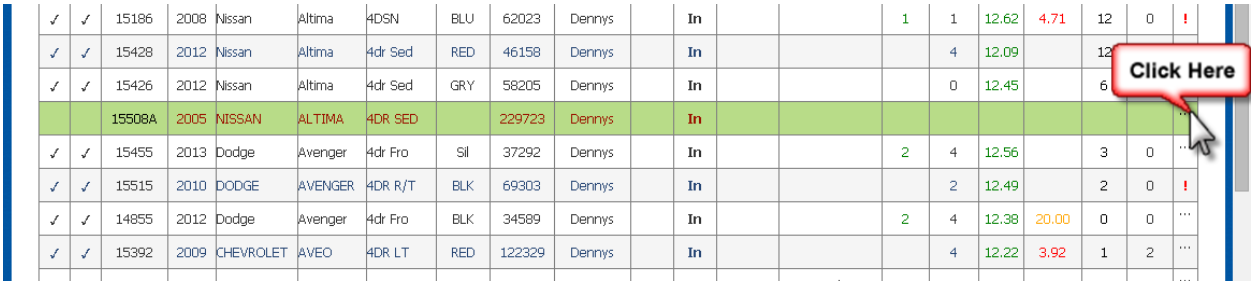
2. Enter the dealer tag name and scan the RFID. Optionally assign the dealer tag to an employee.



Setting Up Vehicle Keys

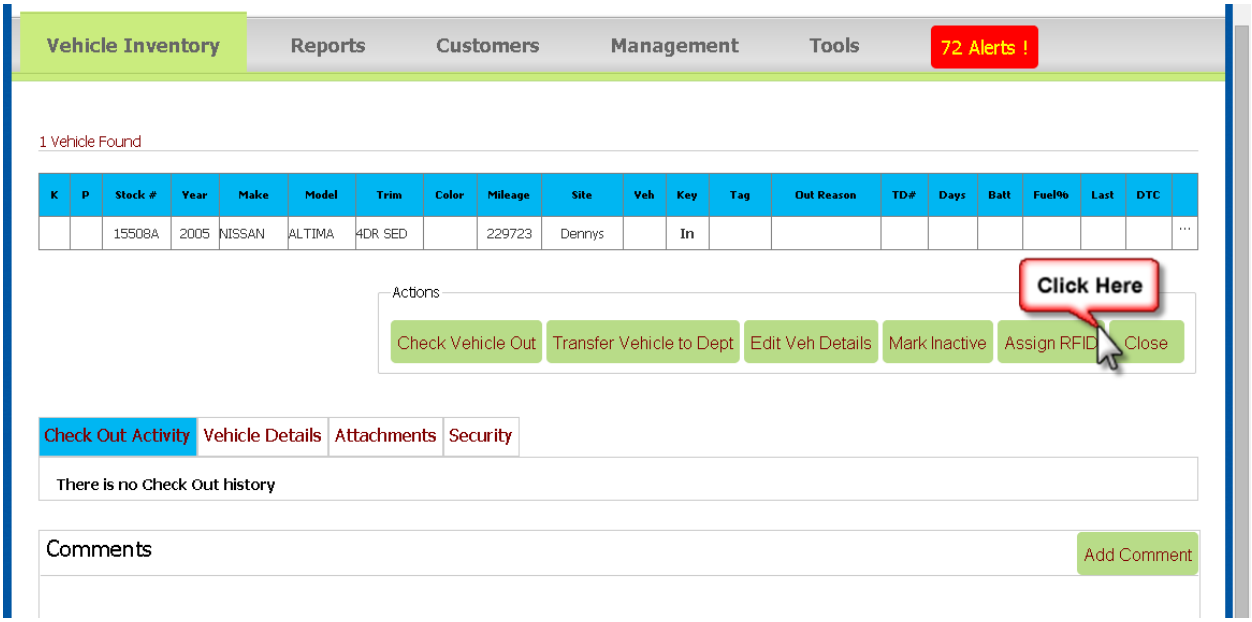
Before setting up the vehicle keys in the system, ensure all of them have the proper type of RFID attached to the key ring.

1. From the Vehicle Inventory screen, view the vehicle details by clicking on the "…"

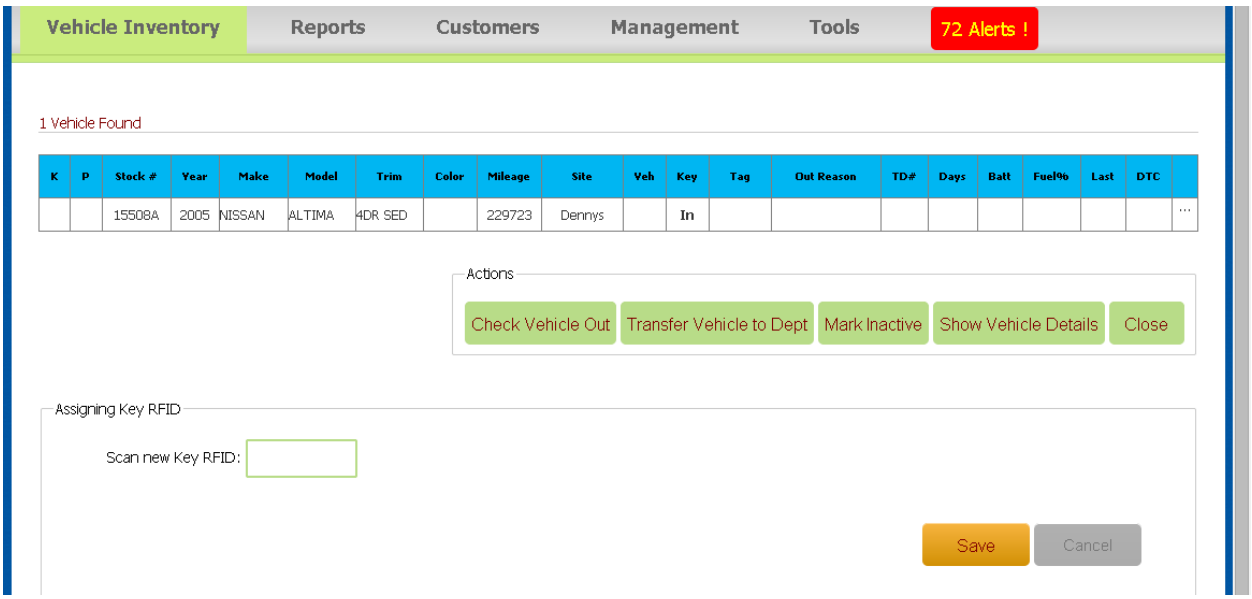


✓	✓	15186	2008	Nissan	Altima	4DSN	BLU	62023	Dennys		In			1	1	12.62	4.71	12	0	!
✓	✓	15428	2012	Nissan	Altima	4dr Sed	RED	46158	Dennys		In				4	12.09		12		
✓	✓	15426	2012	Nissan	Altima	4dr Sed	GRY	58205	Dennys		In				0	12.45		6		
		15508A	2005	NISSAN	ALTIMA	4DR SED		229723	Dennys		In									
✓	✓	15455	2013	Dodge	Avenger	4dr Fro	Sil	37292	Dennys		In			2	4	12.56		3	0	
✓	✓	15515	2010	DODGE	AVENGER	4DR R/T	BLK	69303	Dennys		In				2	12.49		2	0	!
✓	✓	14855	2012	Dodge	Avenger	4dr Fro	BLK	34589	Dennys		In			2	4	12.38	20.00	0	0	
✓	✓	15392	2009	CHEVROLET	AVEO	4DR LT	RED	122329	Dennys		In				4	12.22	3.92	1	2	

2. Click [Assign RFID].



3. Scan the key RFID and click [Save].



OPERATING THE DOG

Listed below are instructions for operating The DOG™ system. The system has been designed to be simple and effective.

General Operations

Navigate to dealer.deviceonguard.com to arrive at the main web application. The following instructions assume you have "Manager"-level permissions. If you need assistance or have questions, please contact Customer Support.

Logging In

Please see the instructions posted under Configuring the System. The default screen displayed upon successfully logging in is the Vehicle Inventory list.

Logging Out

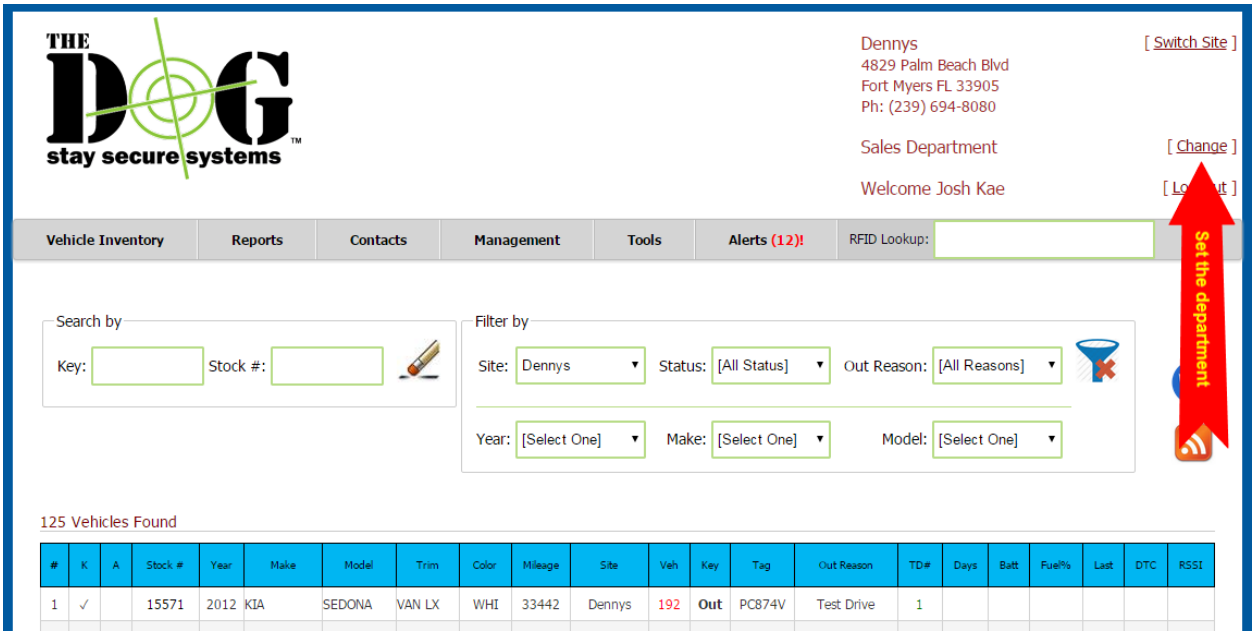
When finished in the system, click the [Log Out] link located in the top right corner of the screen. The system will log you out and record the date and time.

Departments

Follow the instructions listed below to set the department where the workstation is located. This feature will allow you to specify with greater detail where your vehicles are located within a specific site when transferring vehicles between departments (Internal Transfer).

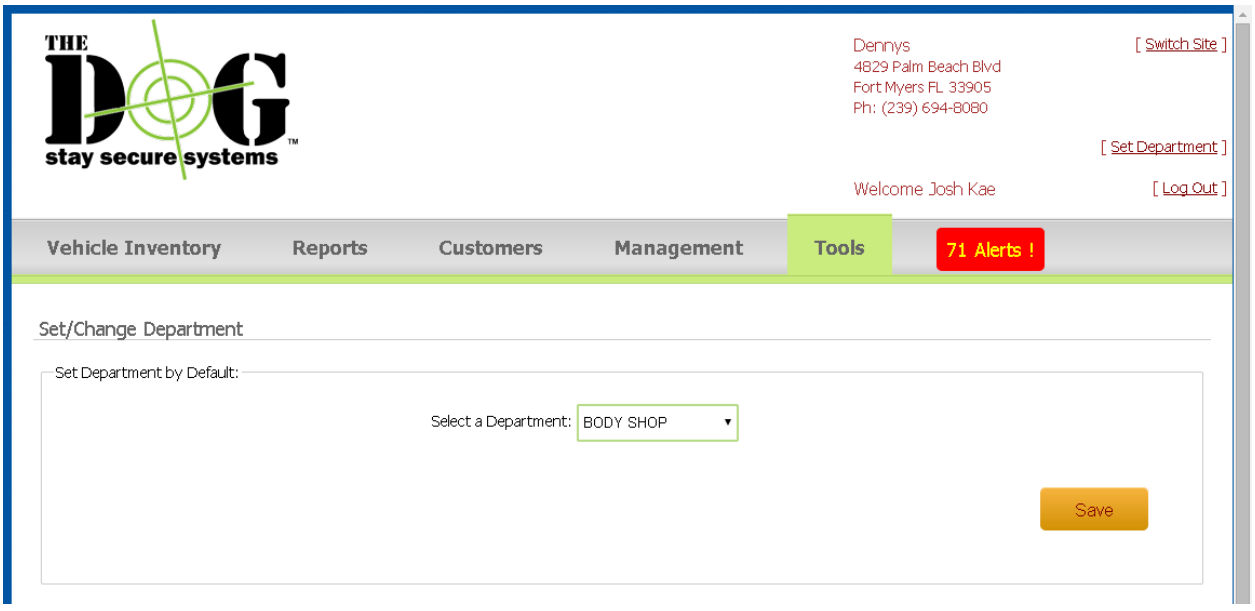
General Layout

The currently selected department is listed in the top right corners of the application. The [Change] option allows the user to quickly set or edit the selected department.



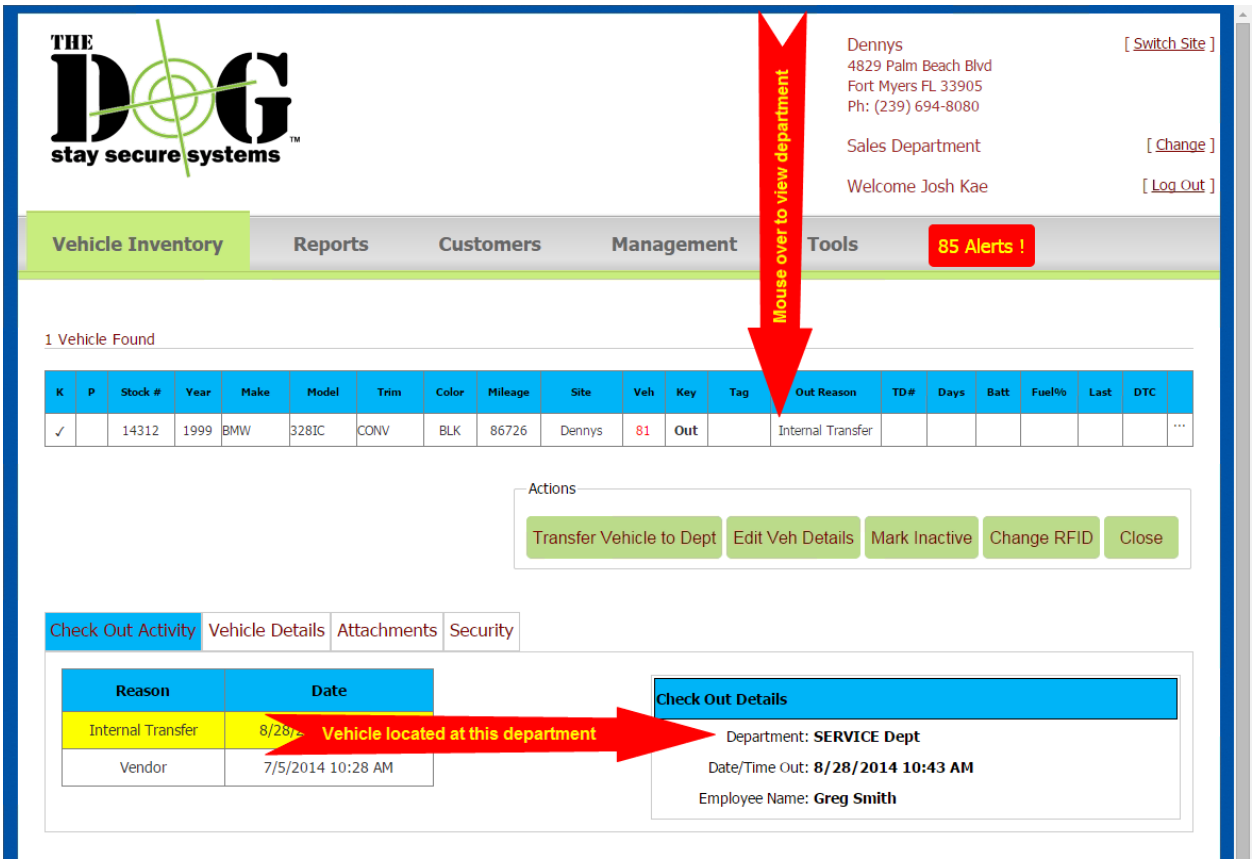
Setting the Department

Click the [Change] link to display the Set/Change Department screen. The [Select a Department] dropdown will allow you to set the department as needed. Click the [Save] button when finished to save your changes.



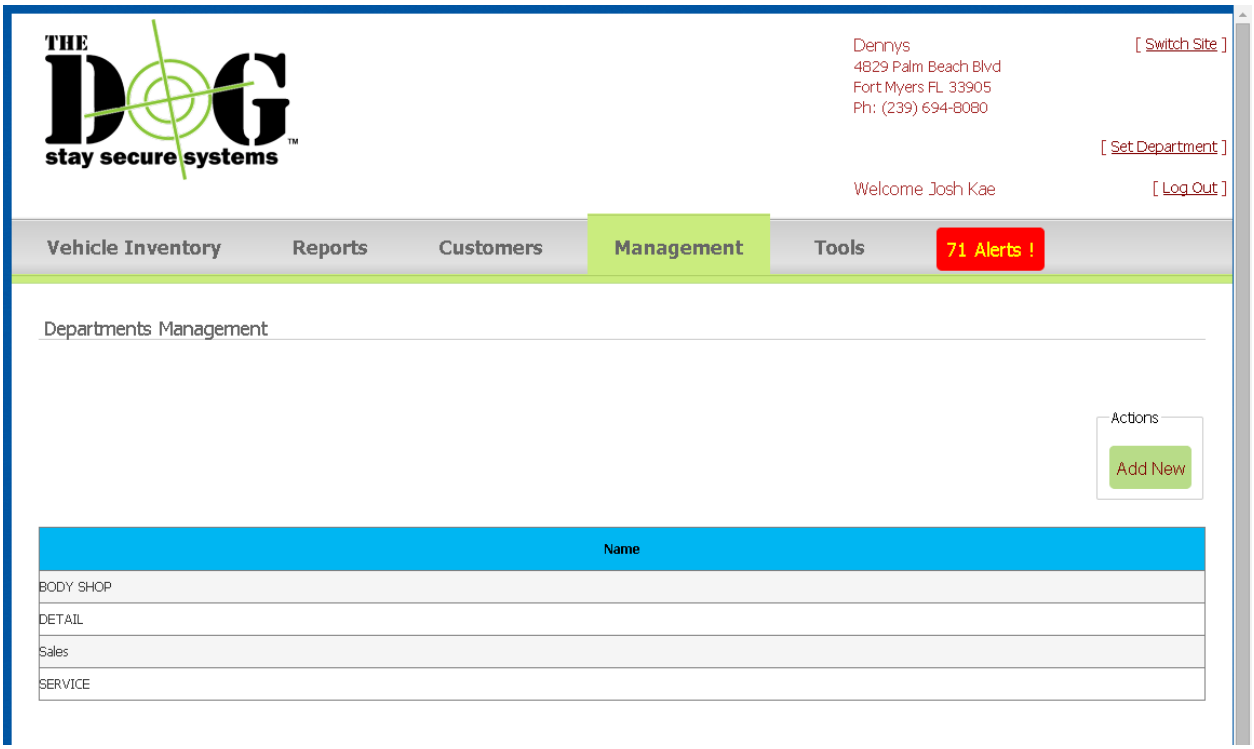
Viewing the Check Out Details

While viewing the Check Out Activity for a vehicle, the department name will be displayed for Internal Transfers. For convenience, the department name is displayed for Internal Transfers while hovering your mouse cursor over the Out Reason field.

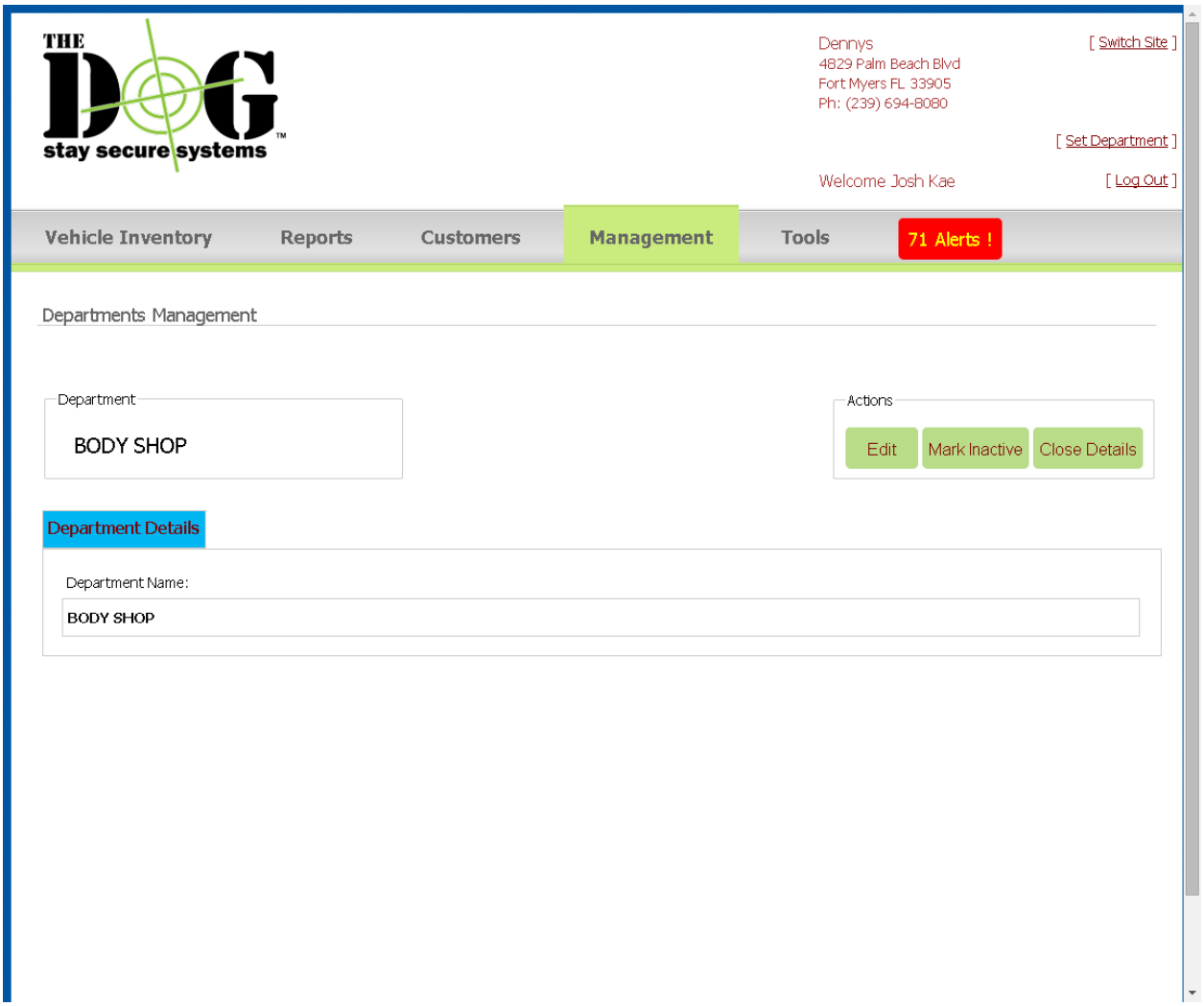


Managing Departments

Navigate to the Management navigation link and select Departments from the dropdown list to view all available departments. From this screen you may add new departments or edit existing ones.

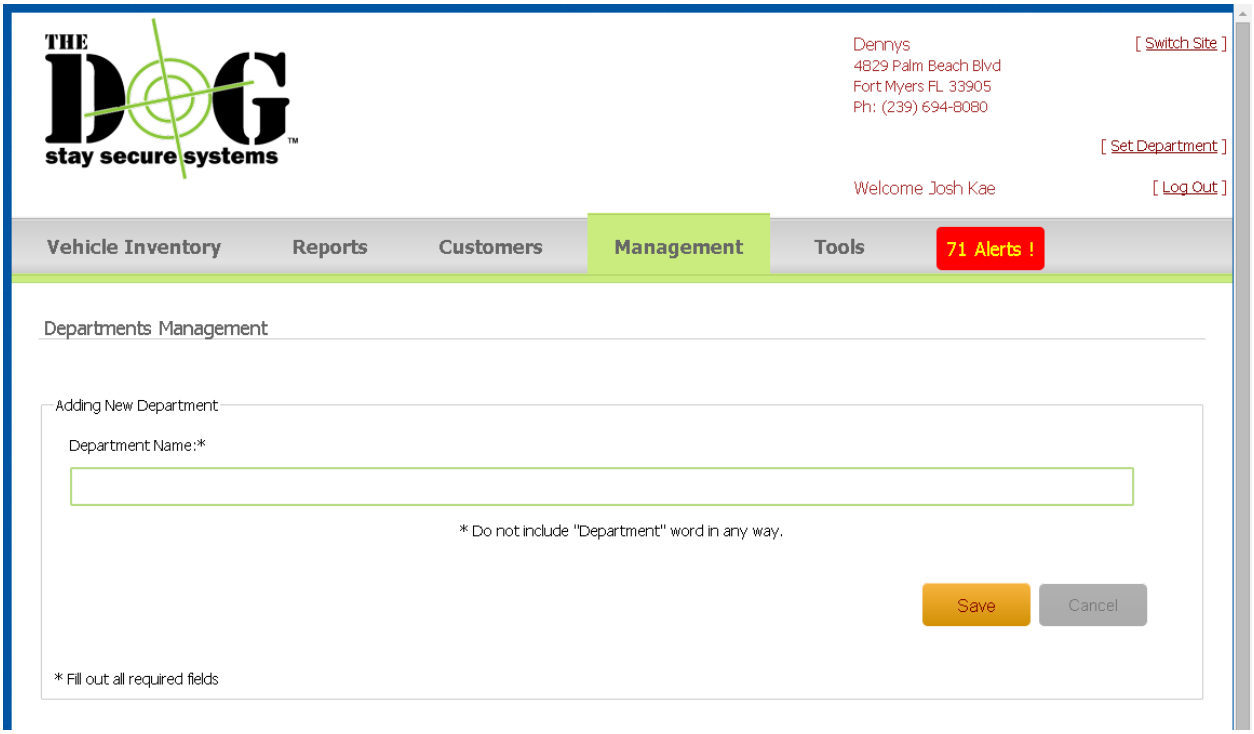


To edit an existing department, click on a department name in the list. The "Sales" department cannot be edited. When a vehicle is transferred to the "Sales" department, it is considered available for sale. This is the default department when no department is specified.



Department Details

To add a new department, click the [Add New] button on the Departments Management list view screen. Make sure the new department name is unique. Click [Save] when finished.

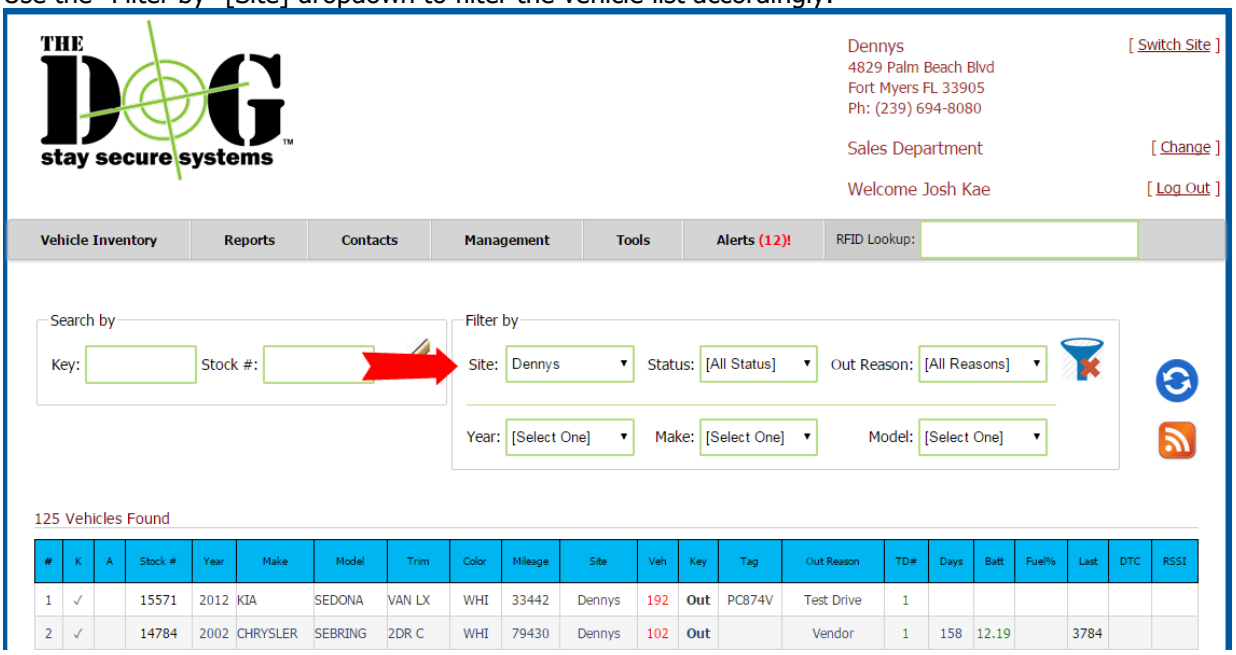


Switching Locations

The default site is visible in the top right corner of the application. The site is used to specify the default filter used on the Vehicle Inventory list view.

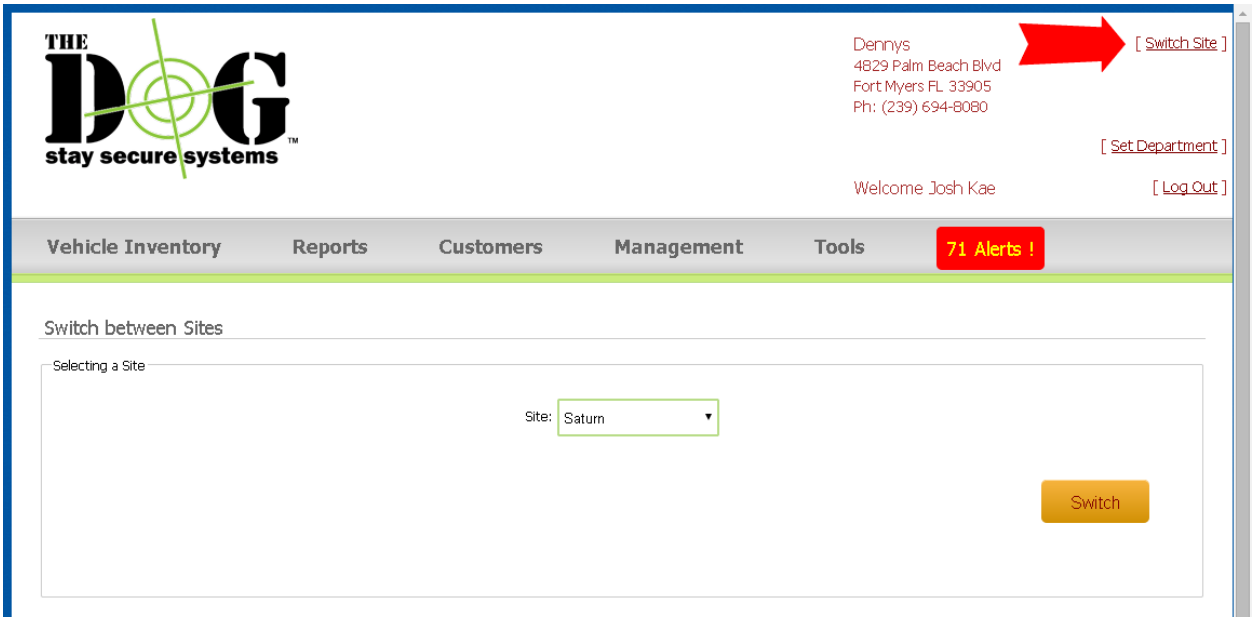
Filtering Vehicles by Site

Use the "Filter by" [Site] dropdown to filter the vehicle list accordingly.



Changing the Default Site

Click the [Switch Site] link to change the default site. You will then have the option to change the site using the displayed dropdown. Click [Switch] to save your selection.



Vehicle Inventory

The Vehicle Inventory screen is the default screen displayed upon logging into the application.

General Layout

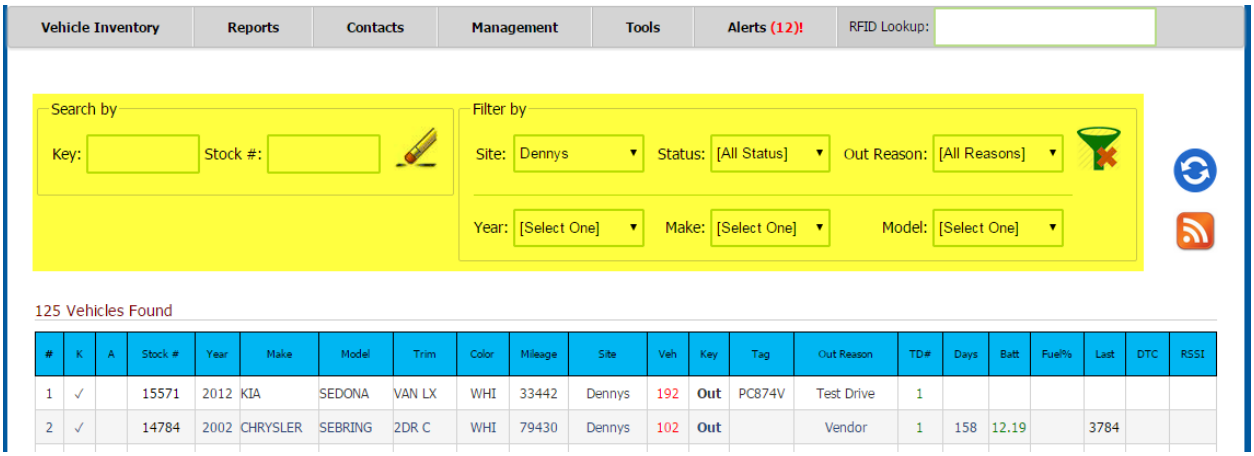
The screen displays general vehicle details, RFID status, check out details, battery information, OBD-related data, and other information useful for effectively managing your vehicle fleet.

Searching and Filtering

Use the "Search by", "Filter by", and [Clear List] options to filter the Vehicle Inventory list. Vehicles can be searched by specific stock number or using an assigned RFID attached to the vehicle keys. "Search by" RFID is the default and will be highlighted yellow when the Vehicle Inventory list is initially displayed. When using the "Search by" option, only a single vehicle record should be displayed.

List results can be filtered by Site, Status (In, Out, Running), and Out Reason.

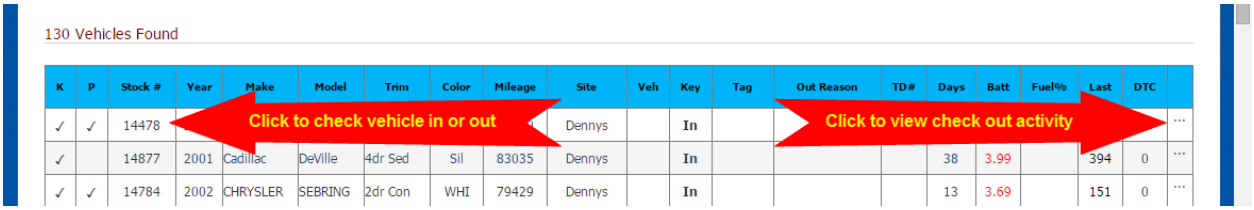
The "Search by" and "Filter by" options can be reset to their default values by clicking on the [Clear List] button.



#	K	A	Stock #	Year	Make	Model	Trim	Color	Mileage	Site	Veh	Key	Tag	Out Reason	TD#	Days	Batt	Fuel%	Last	DTC	RSSI
1	✓		15571	2012	KIA	SEDONA	VAN LX	WHI	33442	Dennys	192	Out	PC874V	Test Drive	1						
2	✓		14784	2002	CHRYSLER	SEBRING	2DR C	WHI	79430	Dennys	102	Out		Vendor	1	158	12.19		3784		

Selecting a Vehicle

Click on a vehicle stock number to check the vehicle out if the status is currently "In." If the vehicle is currently "Out", you will be presented with the option to check the vehicle in.

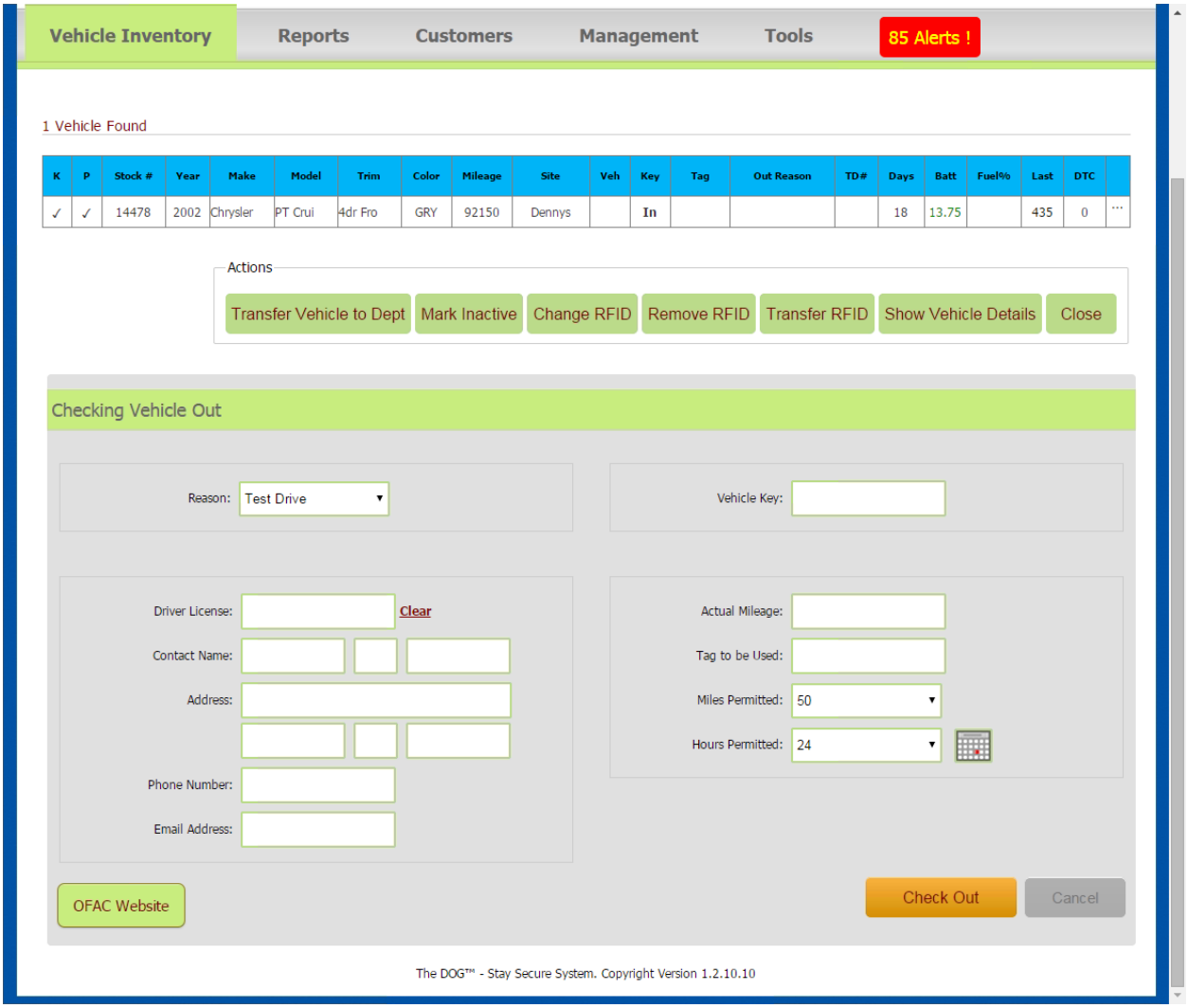


K	P	Stock #	Year	Make	Model	Trim	Color	Mileage	Site	Veh	Key	Tag	Out Reason	TD#	Days	Batt	Fuel%	Last	DTC	
✓	✓	14478							Dennys		In									···
✓		14877	2001	Cadillac	DeVille	4dr Sed	Sil	83035	Dennys		In				38	3.99		394	0	···
✓	✓	14784	2002	CHRYSLER	SEBRING	2dr Con	WHI	79429	Dennys		In				13	3.69		151	0	···

Checking a Vehicle Out

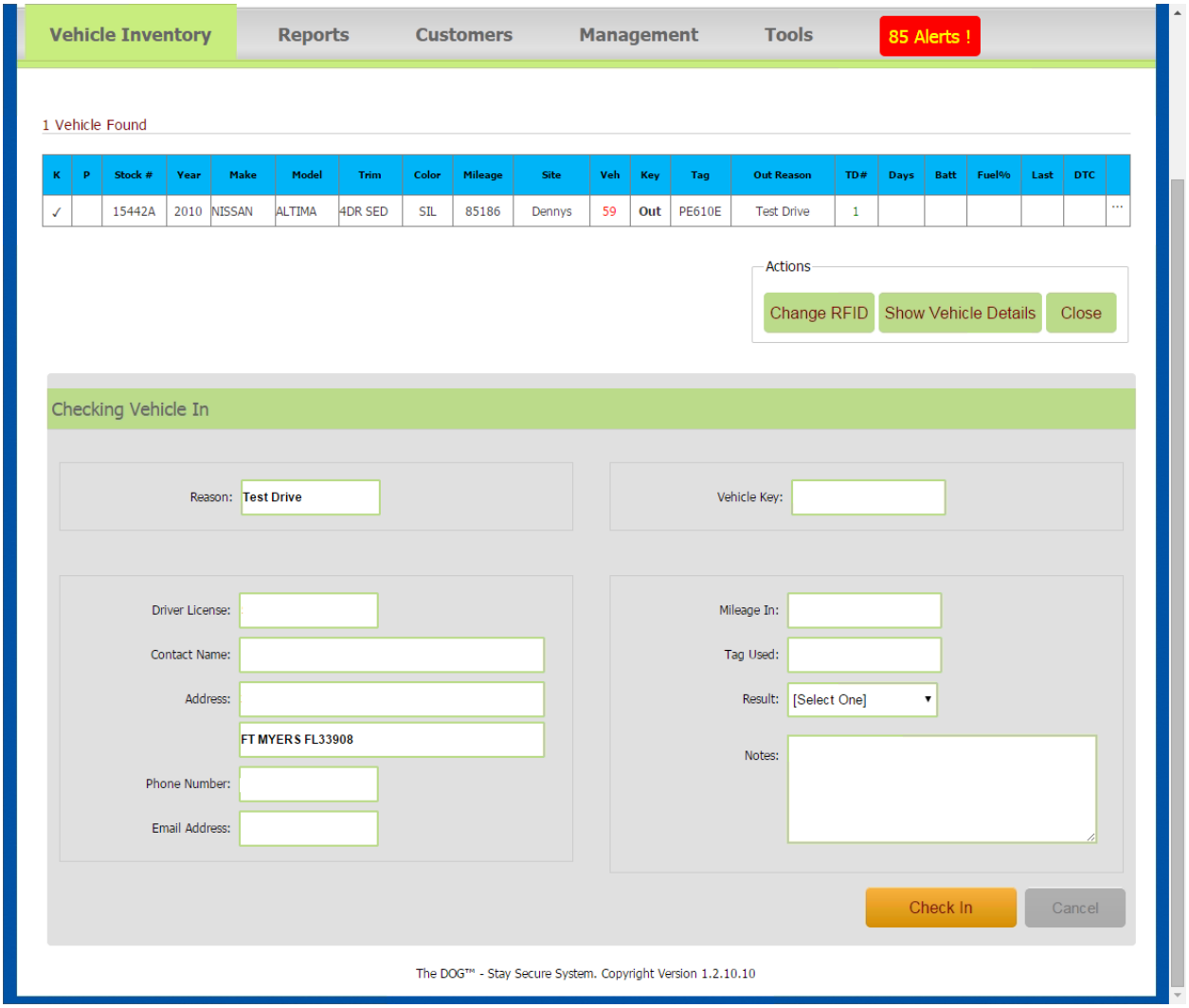
To check a vehicle out, select the "Reason" from the dropdown list. Depending on the "Reason" selected, the displayed options will change.

If performing a "Test Drive", put the cursor in the Driver License field and then slide the customer's driver license through the magnetic strip/RFID reader. The customer's information should be displayed in the appropriate fields. Fill in the rest of the customer information as needed. You will be required to scan the vehicle keys in the Vehicle Key field if the vehicle was selected by clicking directly on the stock number. The vehicle mileage should be entered in the "Actual Mileage" field and the dealer tag should be scanned using the RFID reader after this field has been selected. Click the [Check Out] button to complete the check out process. If any required information is missing, those fields will be marked with a red asterisk indicating missing or invalid information.



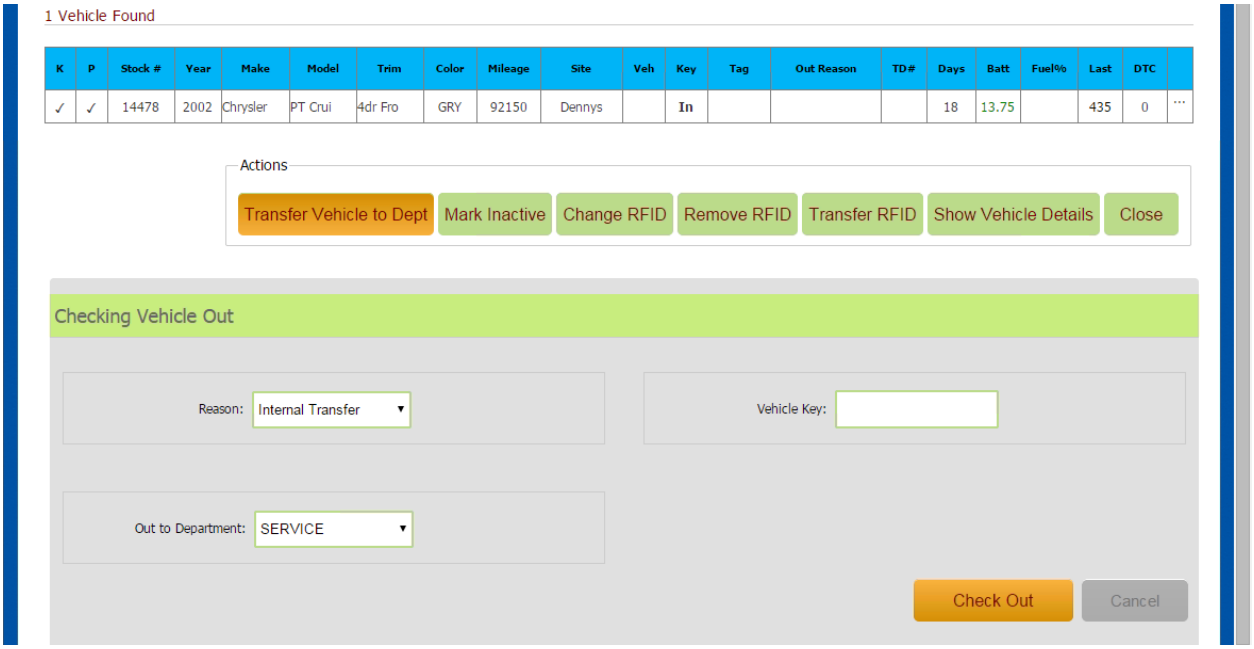
Checking a Vehicle In

Check a vehicle back in by selecting the vehicle through stock number or scanning the keys using the RFID reader. After the vehicle has been selected, scan the keys if necessary in the "Vehicle Key" field, enter the mileage, scan the dealer tag, select the Result, and optionally enter notes. Click [Check In] to complete the process.



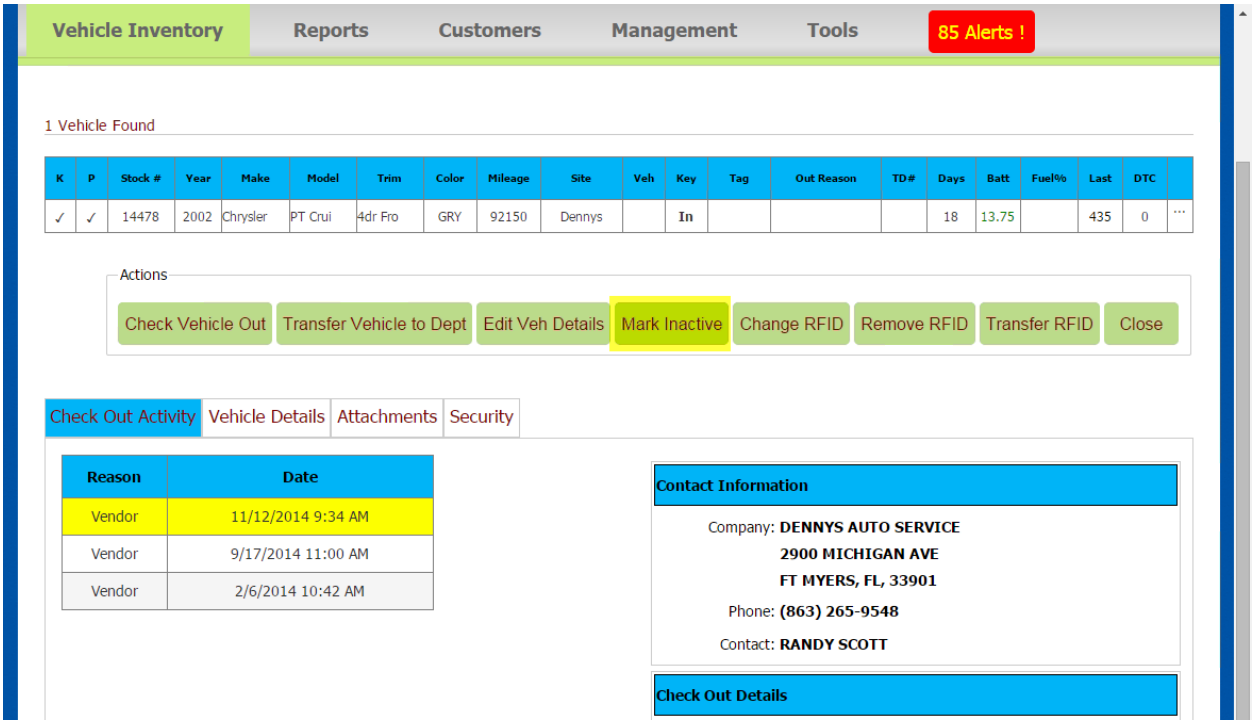
Transferring to Department

Vehicles are checked out to a specific department by using the "Internal Transfer" option. This option should only be used when the department is physically located at the same site as the sales department. If the department is at a different physical location, that location can be setup as a Vendor or Site, depending on whether a separate DOGMaster server will be deployed at that location.



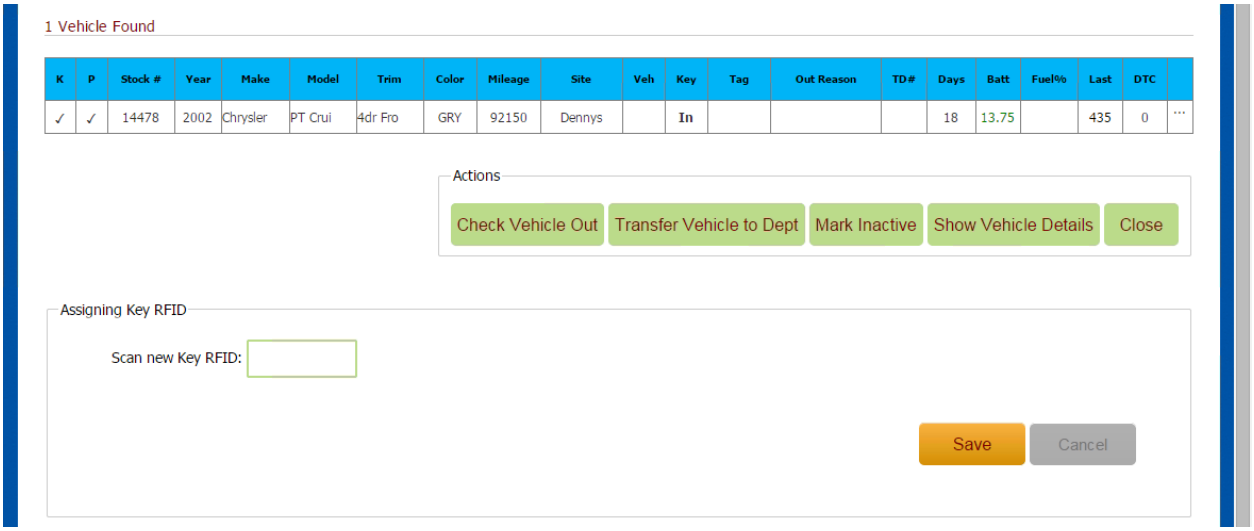
Mark Inactive

Vehicles that should be removed from the system are marked inactive. An inactive vehicle is removed from the list, but not deleted from the system. To mark a vehicle inactive, select the vehicle and then use the [Mark Inactive] button.



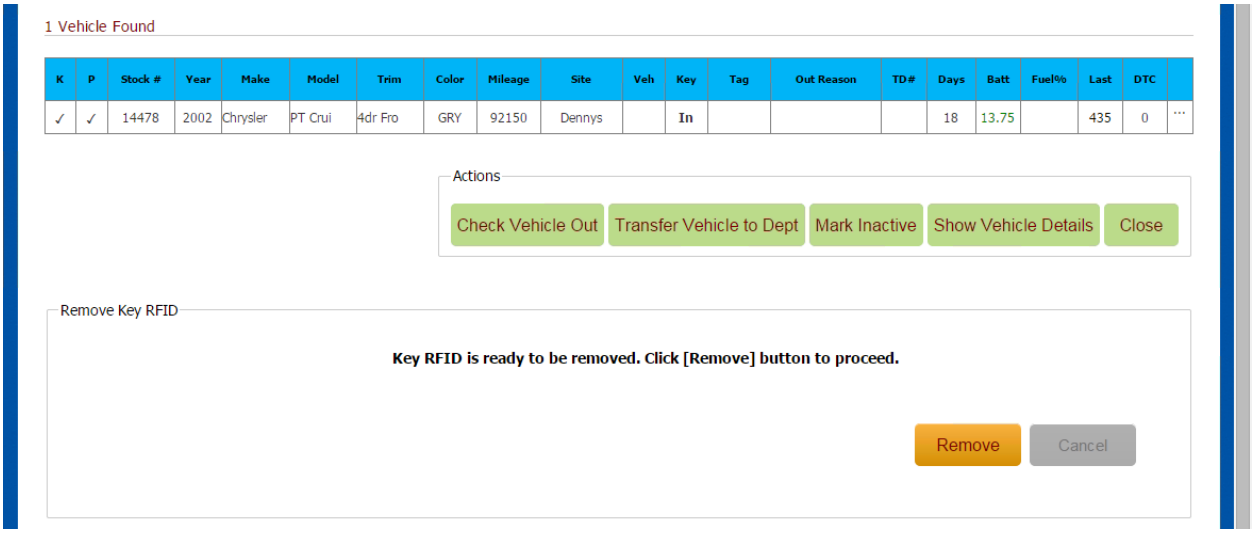
Change RFID

To change the currently assigned key RFID, attach a new RFID to the vehicle keys and click on the [Change RFID] button on the vehicle selection screen. The following screen will be displayed, giving you the option to assign the new RFID. Click [Save] when finished to complete the process.



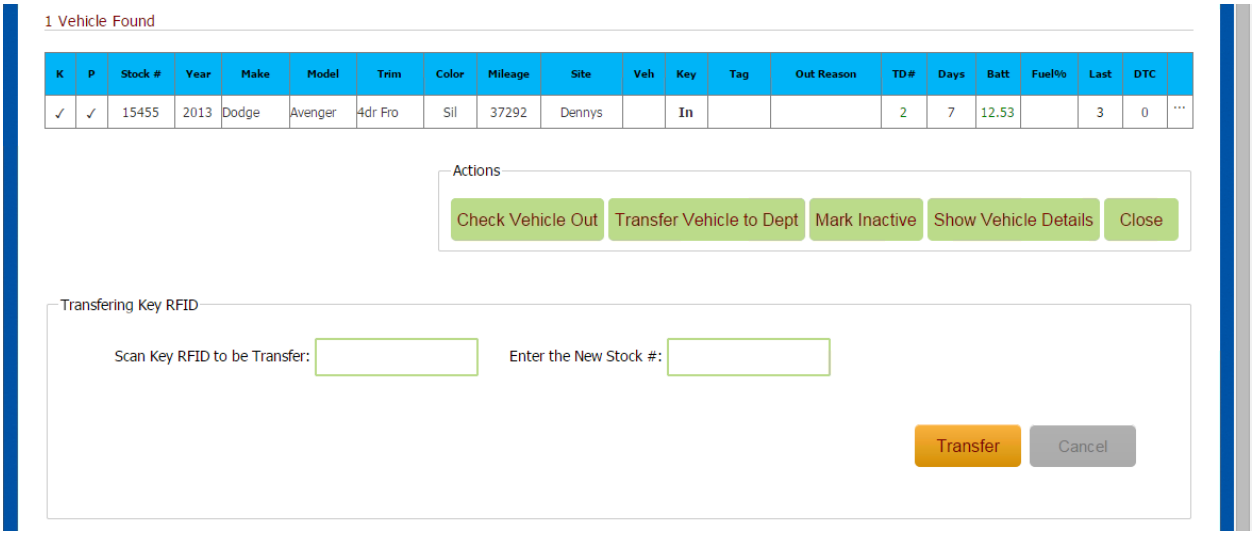
Remove RFID

To remove the currently assigned key RFID, click the [Remove RFID] button on the vehicle selection screen. The following screen will be displayed, giving you the option to remove the RFID. Note: The vehicle may not be checked out until a valid RFID has been assigned to the keys. It is recommended that the RFID be left on the keys when a vehicle has been sold in order to facilitate quicker vehicle and customer lookup searches whenever the customer returns to your location.



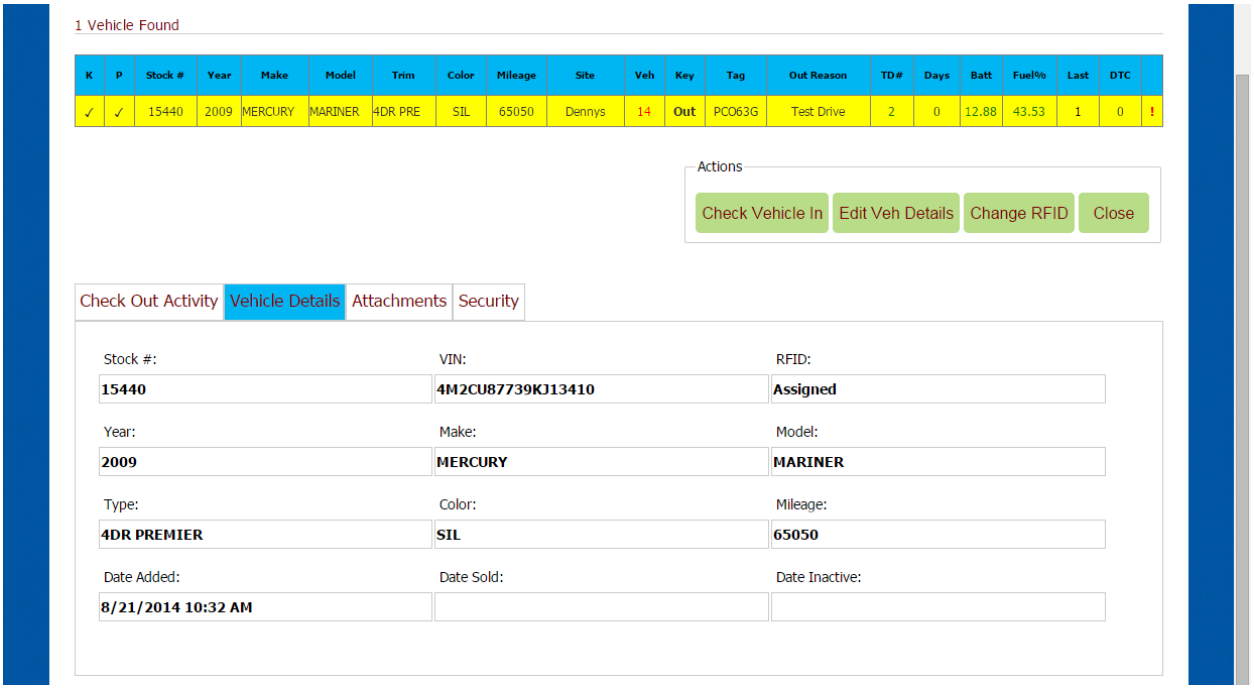
Transfer RFID

The "Transfer RFID" option is provided as a quick means of removing the key RFID from one vehicle and assigning it to another. Note: It is recommended that each vehicle permanently retain an RFID on the keys. Follow the onscreen instructions to complete the process.

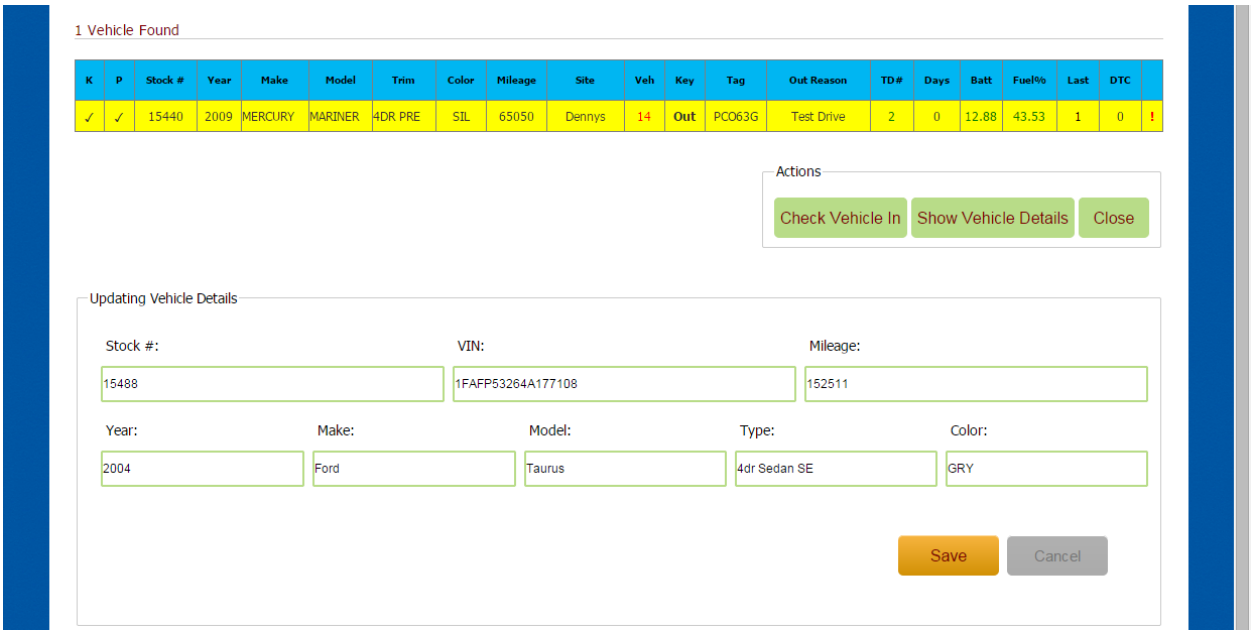


Show Vehicle Details

Vehicle details are viewable by selecting a vehicle and then clicking on the "Vehicle Details" tab. General information about the vehicle is displayed on this screen.

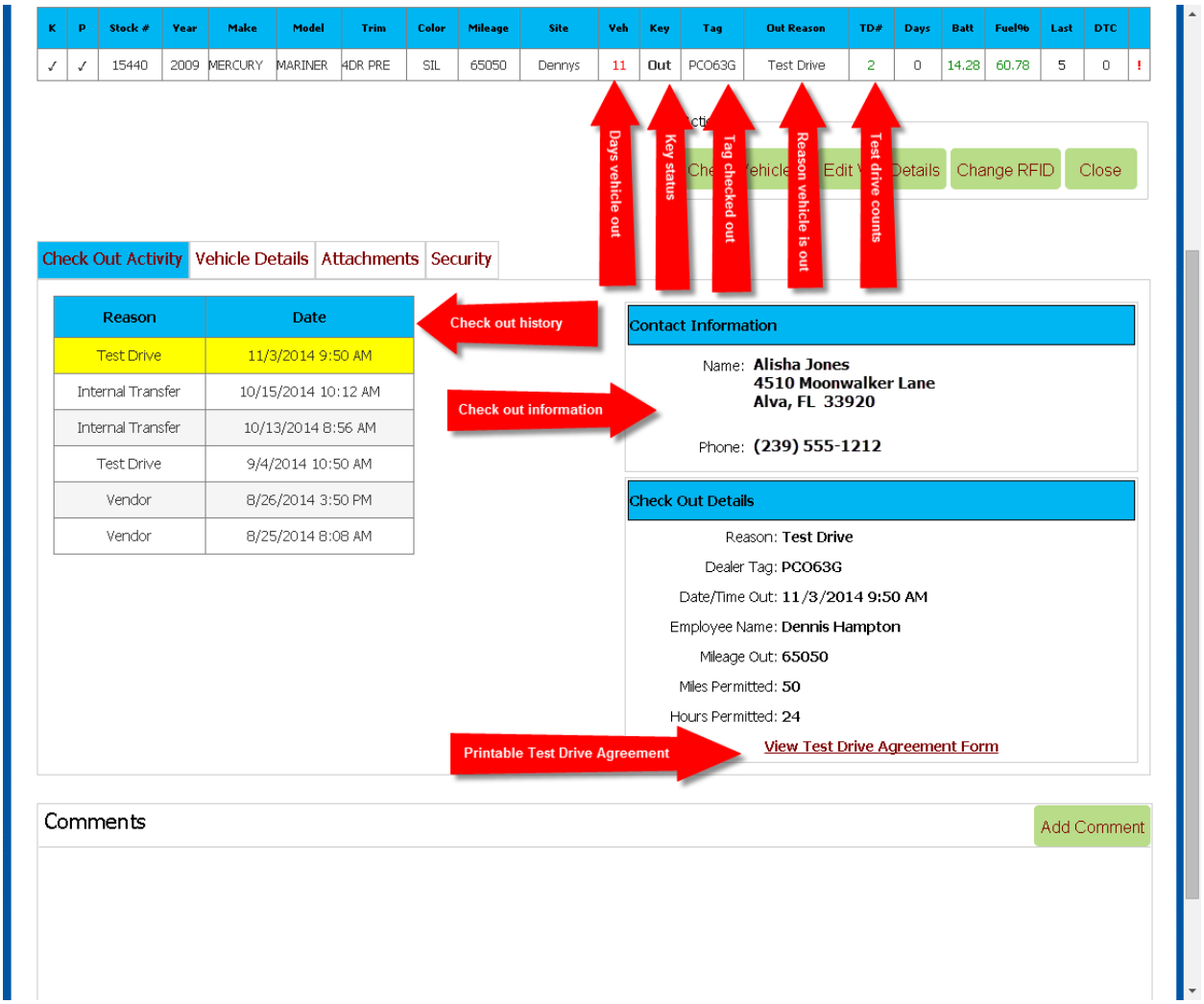


To edit the vehicle details, click the [Edit Veh Details] button. Note: If using the DMSInterface vehicle inventory syncronization service, the vehicle details should not be updated manually. Changes will transfer automatically from the DMS.



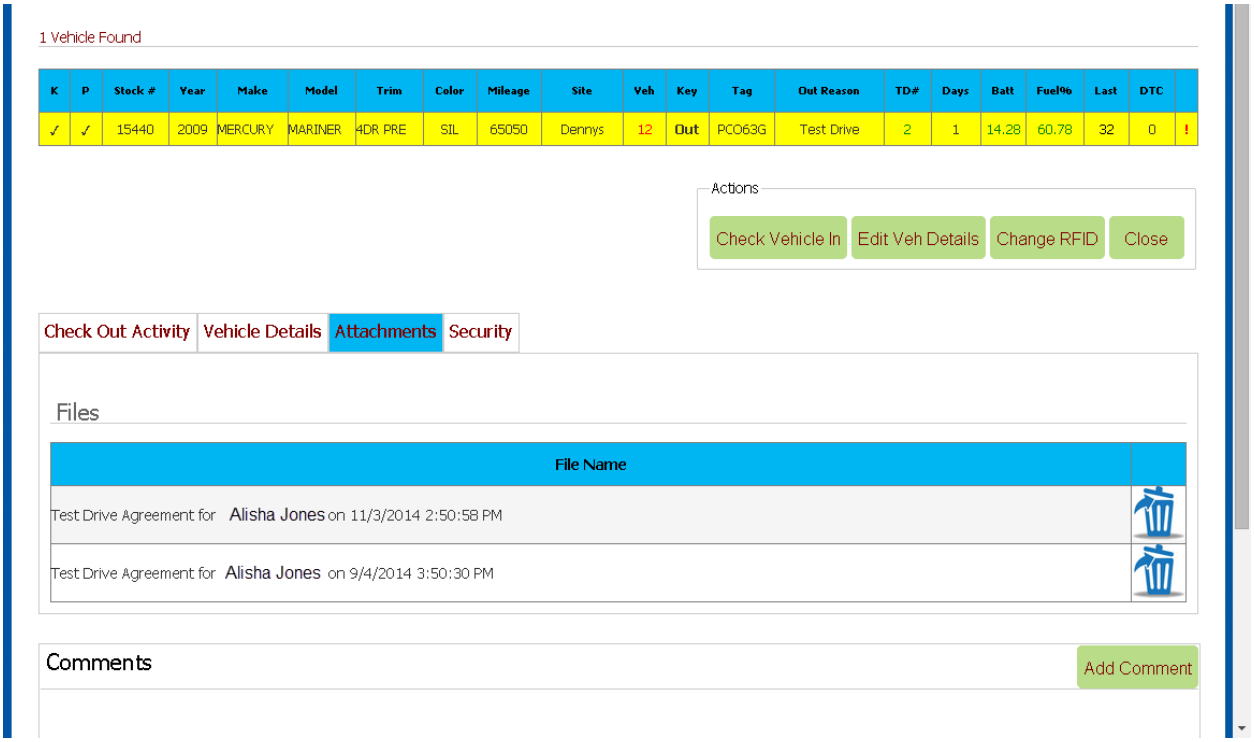
Check Out Activity

All check out history for a single vehicle is viewable on the Check Out Activity tab. Click in the table displayed on the left displaying Reason and Date to view a single check out record.



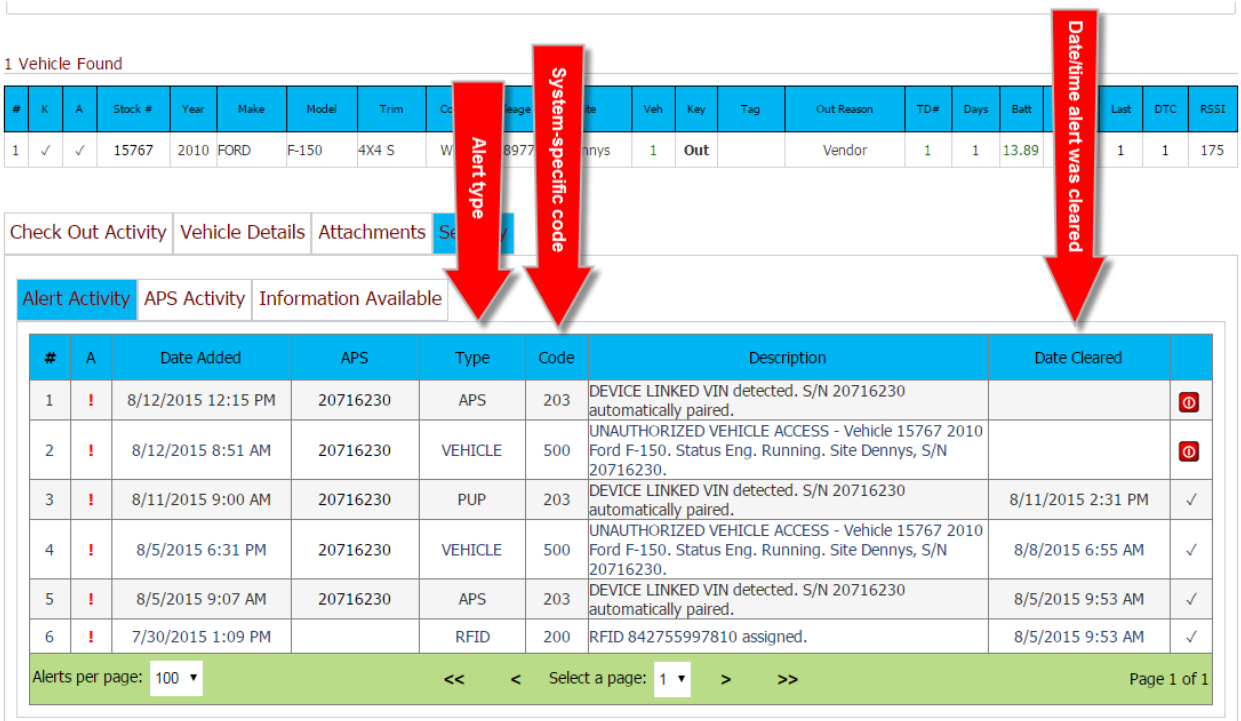
Attachments

From the vehicle selection screen, click on the "Attachments" tab to view all files attached to the vehicle record. PDF attachments including Test Drive Agreements are easily accessible from this tab.



Alert Activity

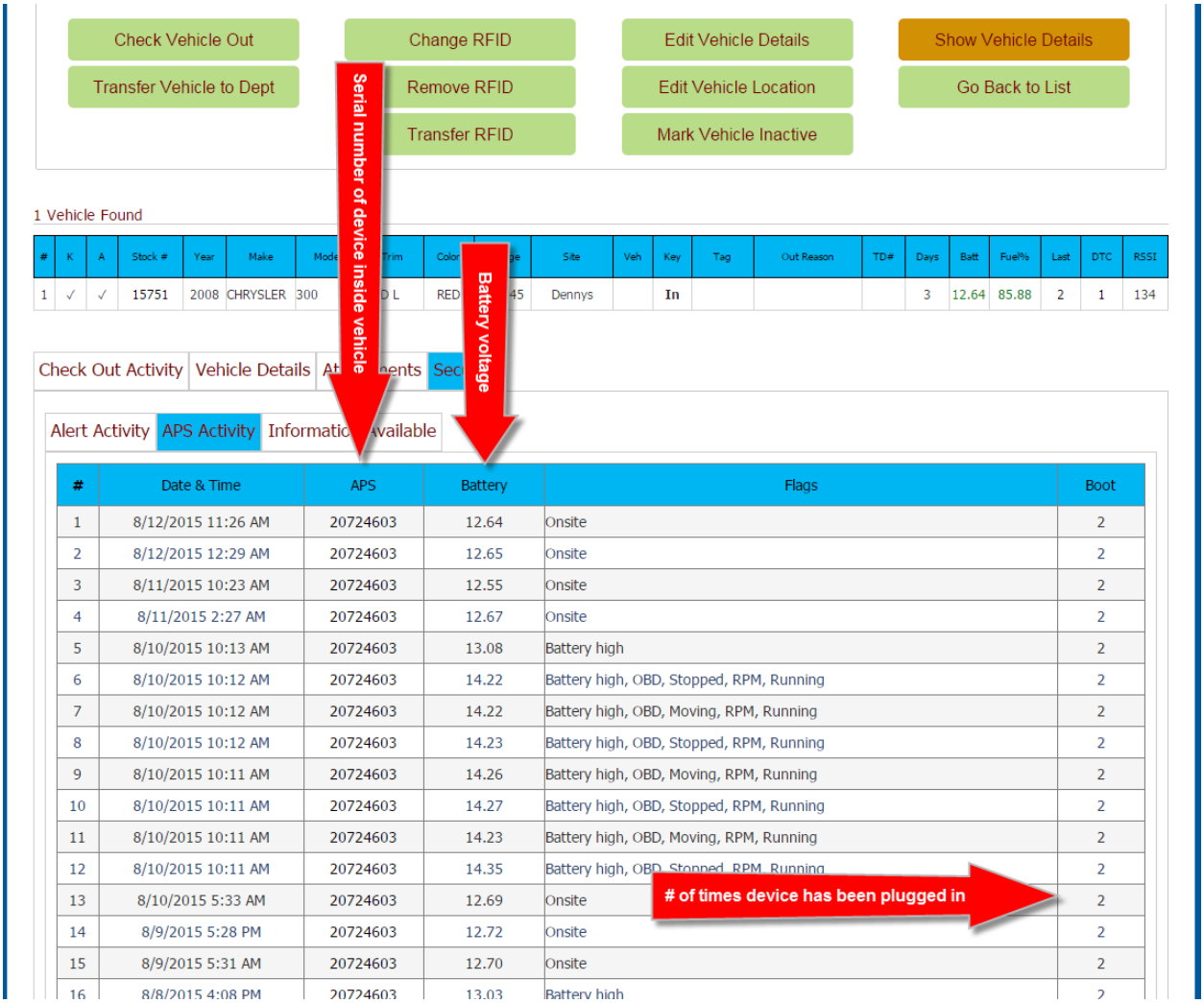
From the vehicle selection screen, click on the "Security" tab and "Alert Activity" child tab to view all security alerts for the vehicle. Events are listed in date descending order.



APS Activity

From the vehicle selection screen, click on the "Security" tab and click on the "APS Activity" child tab to view a filtered list of all device events. Date, "APS" serial number, battery voltage, predicted vehicle state (flags), and the number of times device has started up (boot count) are displayed in a sortable table.

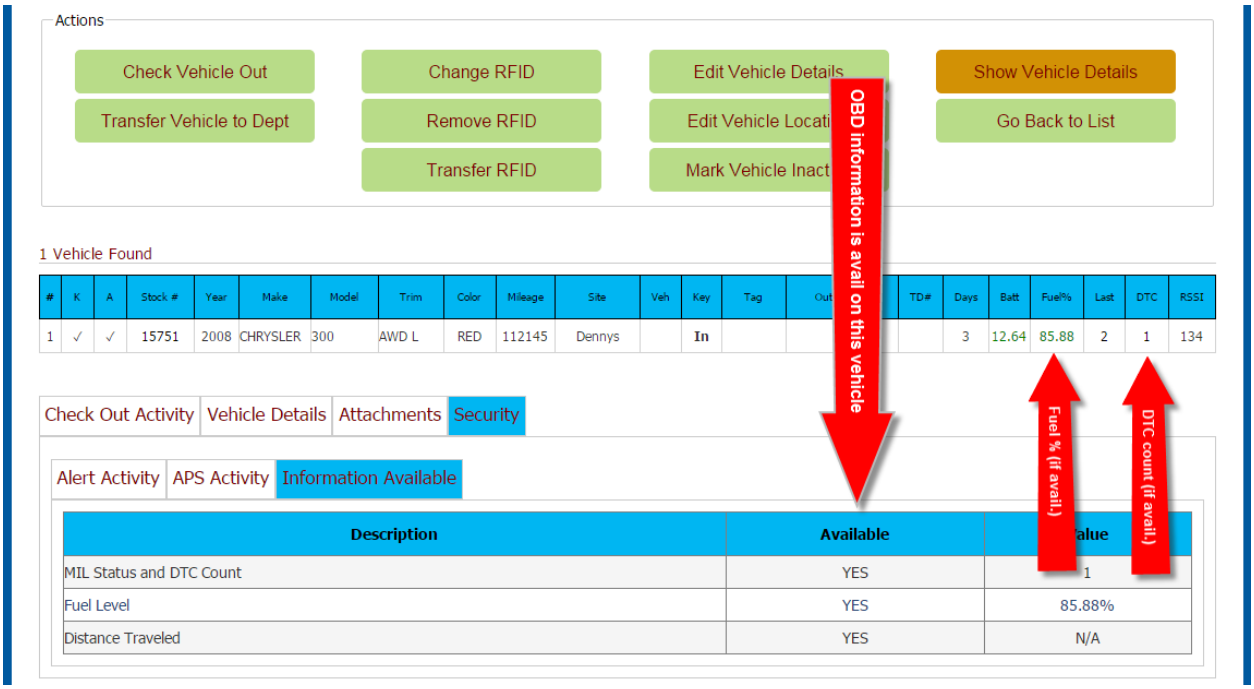
Flags indicate vehicle state based on a variety of factors, including battery voltage, OBD information, and other factors.



#	Date & Time	APS	Battery	Flags	Boot
1	8/12/2015 11:26 AM	20724603	12.64	Onsite	2
2	8/12/2015 12:29 AM	20724603	12.65	Onsite	2
3	8/11/2015 10:23 AM	20724603	12.55	Onsite	2
4	8/11/2015 2:27 AM	20724603	12.67	Onsite	2
5	8/10/2015 10:13 AM	20724603	13.08	Battery high	2
6	8/10/2015 10:12 AM	20724603	14.22	Battery high, OBD, Stopped, RPM, Running	2
7	8/10/2015 10:12 AM	20724603	14.22	Battery high, OBD, Moving, RPM, Running	2
8	8/10/2015 10:12 AM	20724603	14.23	Battery high, OBD, Stopped, RPM, Running	2
9	8/10/2015 10:11 AM	20724603	14.26	Battery high, OBD, Moving, RPM, Running	2
10	8/10/2015 10:11 AM	20724603	14.27	Battery high, OBD, Stopped, RPM, Running	2
11	8/10/2015 10:11 AM	20724603	14.23	Battery high, OBD, Moving, RPM, Running	2
12	8/10/2015 10:11 AM	20724603	14.35	Battery high, OBD, Stopped, RPM, Running	2
13	8/10/2015 5:33 AM	20724603	12.69	Onsite	2
14	8/9/2015 5:28 PM	20724603	12.72	Onsite	2
15	8/9/2015 5:31 AM	20724603	12.70	Onsite	2
16	8/8/2015 4:08 PM	20724603	13.03	Battery high	2

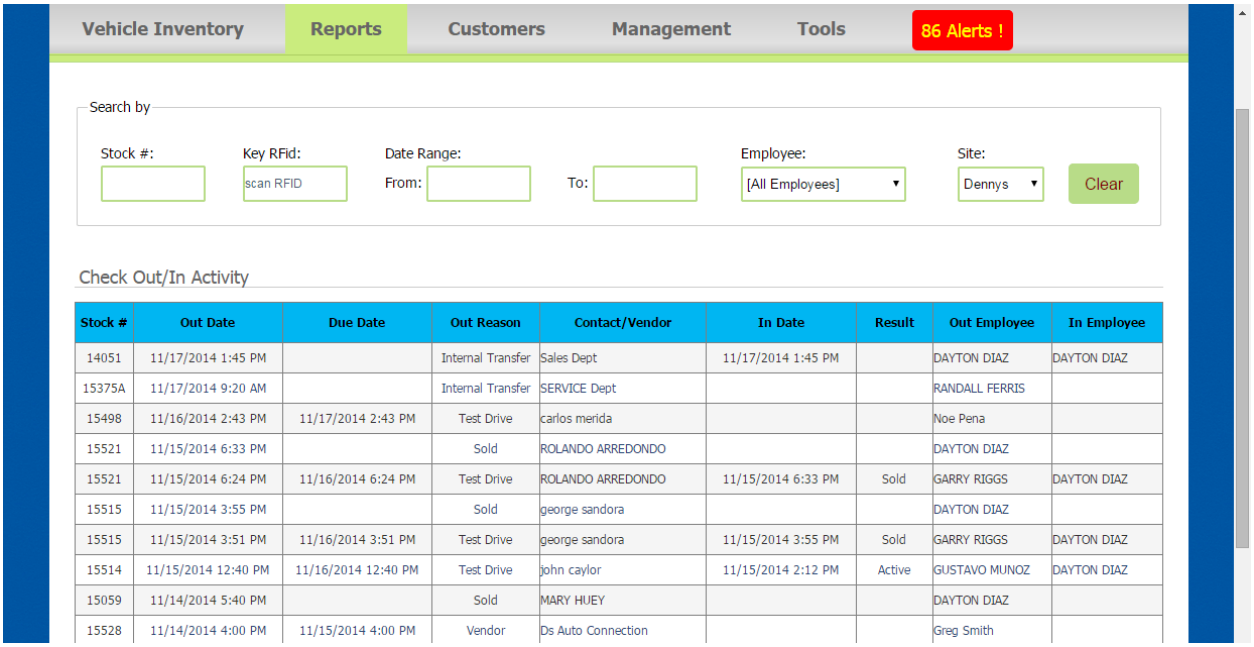
Information Available

The "Information Available" tab displays supported OBD information provided by the vehicle. All possible OBD information supported by the vehicle is not displayed on this screen.



Reports

The Reports tab displays check out and check in activity. The available filters are displayed at the top of the page. Paging options are available at the bottom of the page.

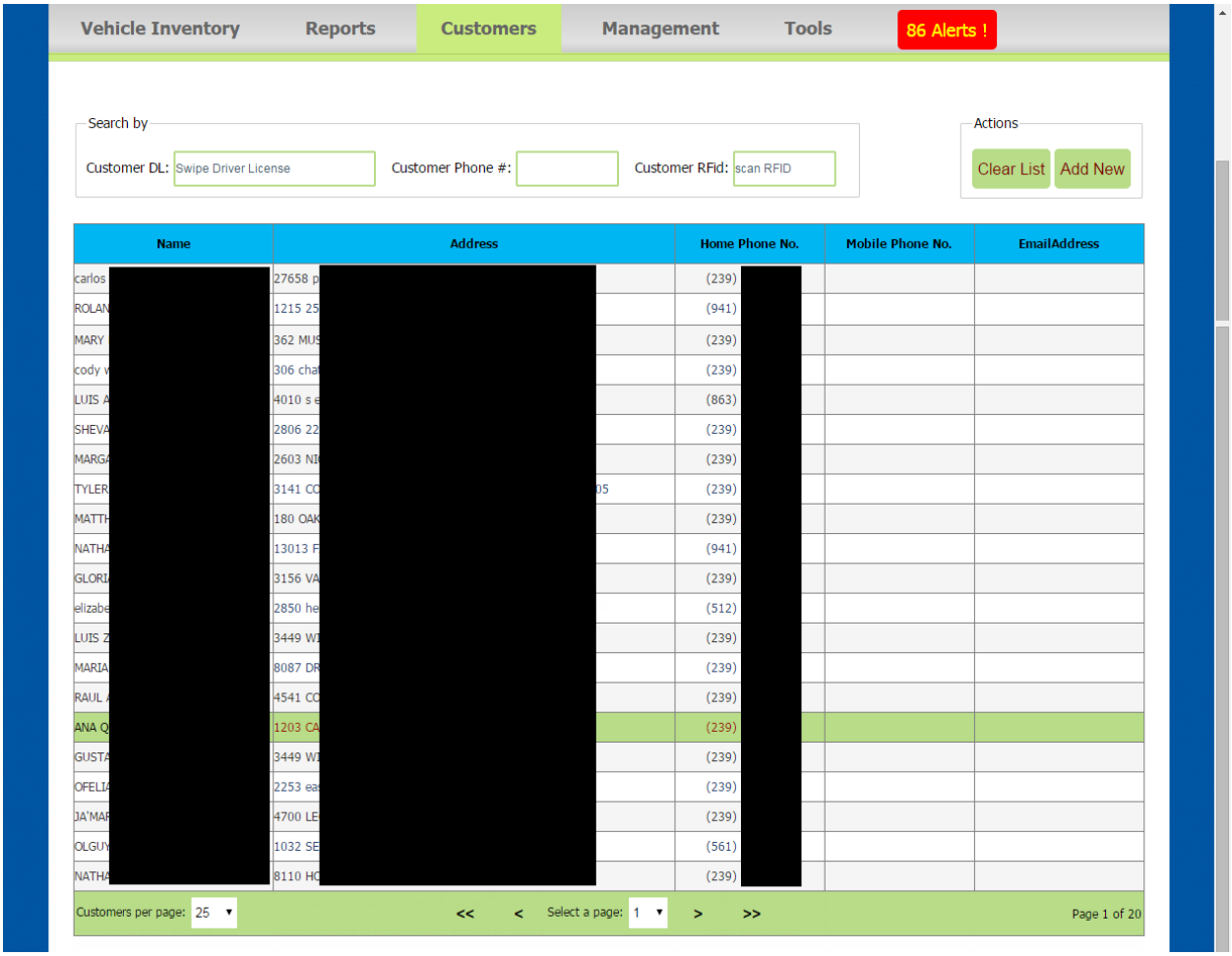


Customers

The Customers page allows you to view and edit existing customer records in the system.

General Layout

The Customers list page displays all available customers in the system. Various searching, filtering, paging, and sorting options are available.

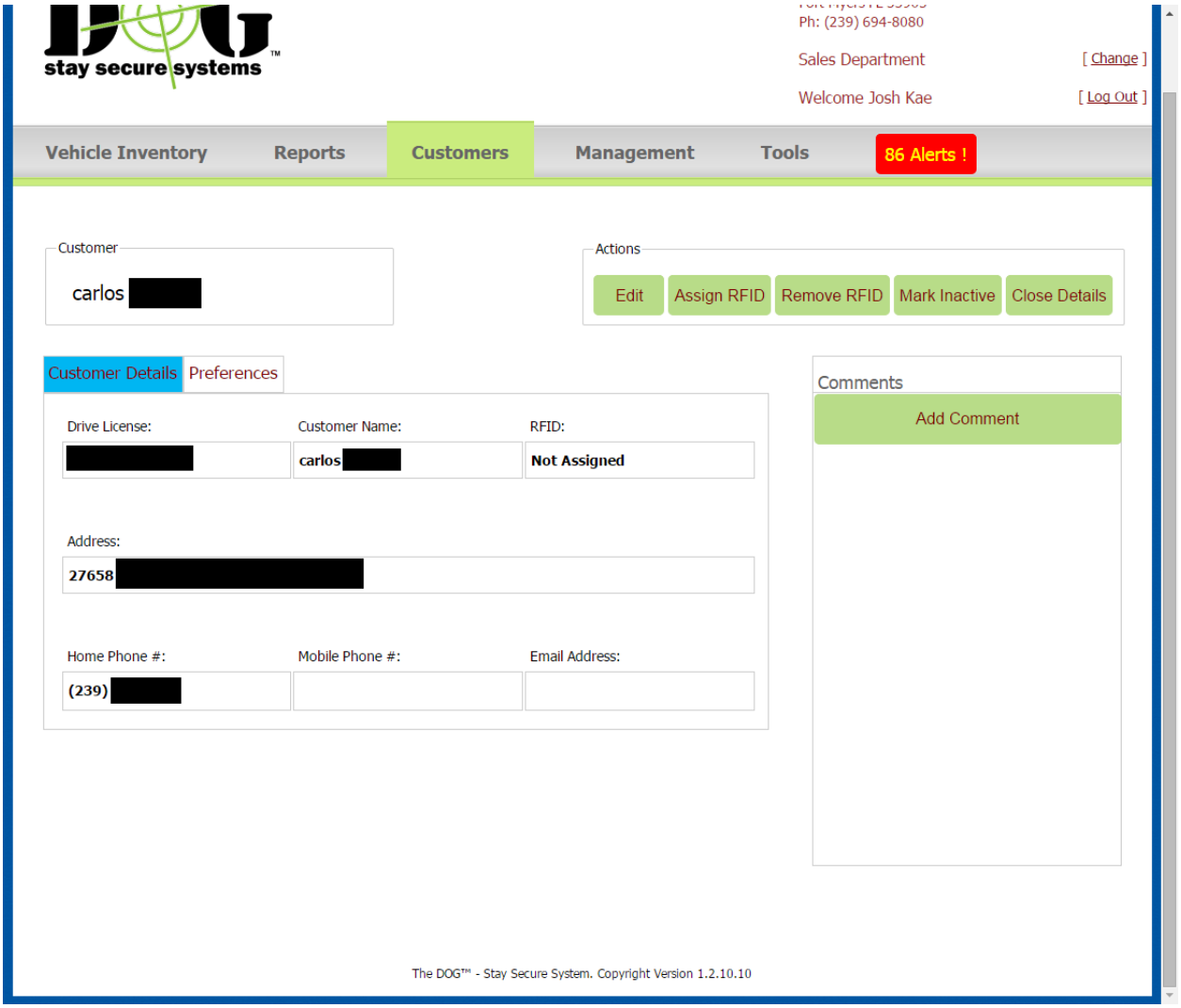


Searching and Filtering

Customers may be searched by driver license (DL), phone number, or by assigned RFID.

Customer Details

Click on a customer name or scan the customer's RFID to view the customer details. From the customer details page, the record can be edited, RFID assigned and removed, and record made inactive.

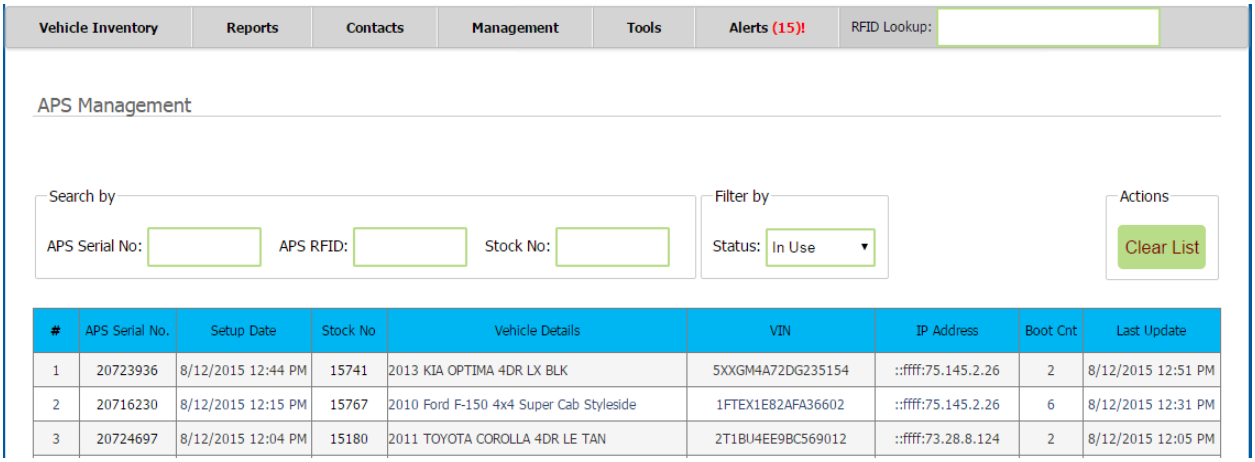


APS

APS "devices" are displayed in the Management > APS screen.

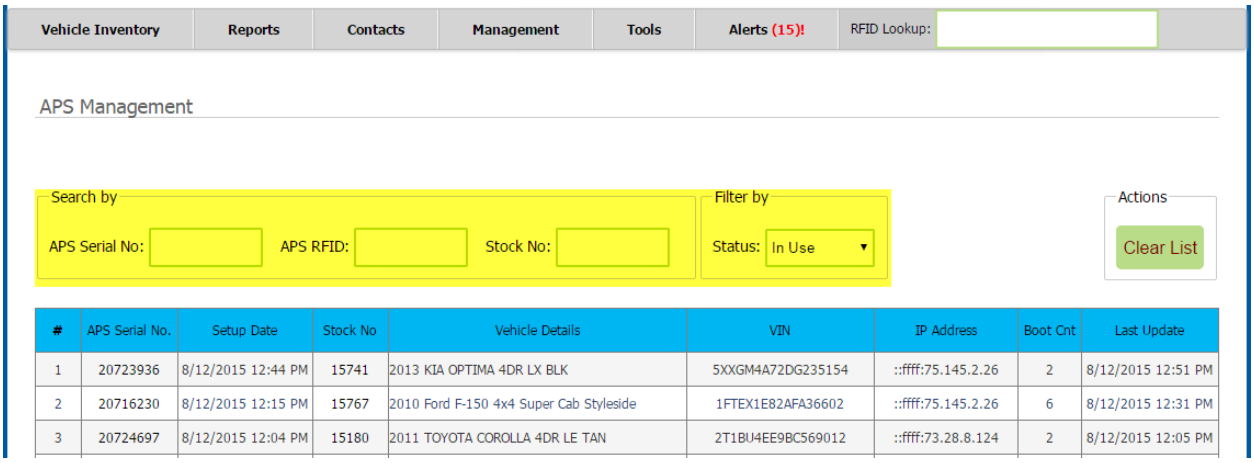
General Layout

All "APS" devices assigned to your account are displayed on the APS Management list. APS linked to running vehicles will be highlighted in orange.



Searching and Filtering

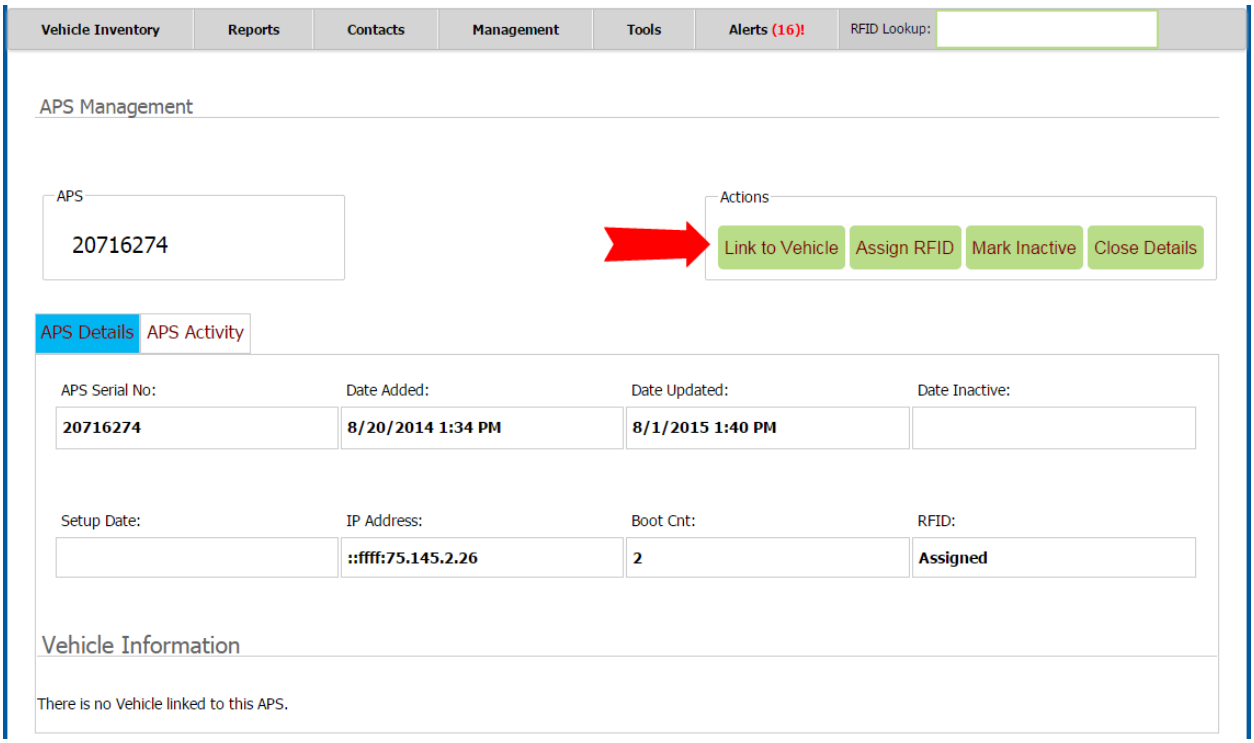
APS may be searched by serial number, assigned RFID, or linked stock number. To search by serial number or stock number, type in the information in the fields provided. To search by RFID, the APS must be scanned using the RFID reader after the cursor has been placed in the APS RFID field.



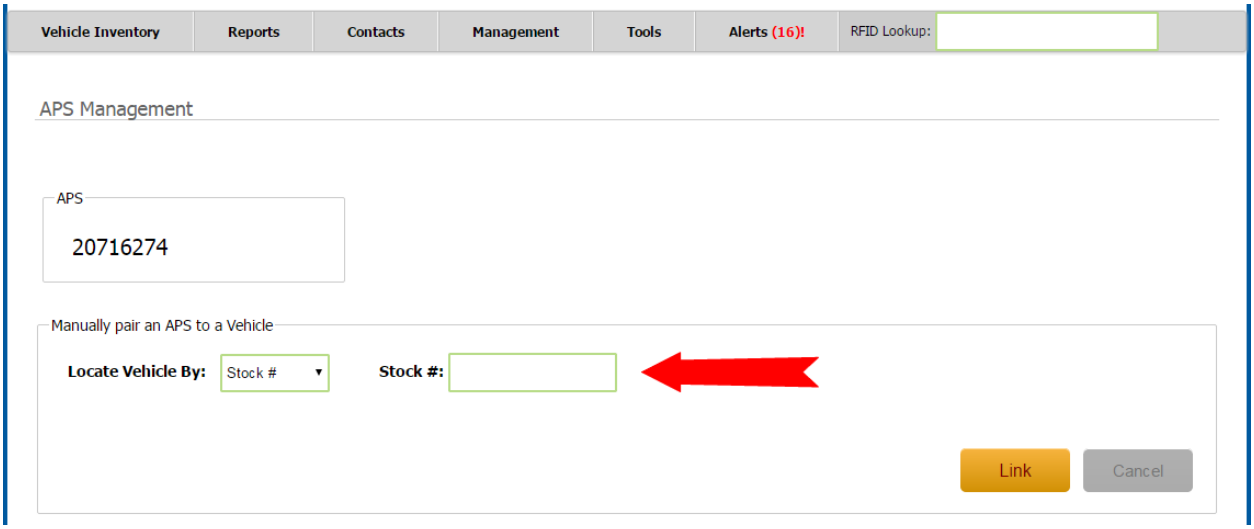
Linking to a Vehicle

Select an APS that is not currently assigned to a vehicle by setting the Status filter to "Available". Plug the APS device into the vehicle's OBD port and start the vehicle. If the vehicle was manufactured prior to 2008 and the APS is not automatically linked to the vehicle, follow the steps listed below:

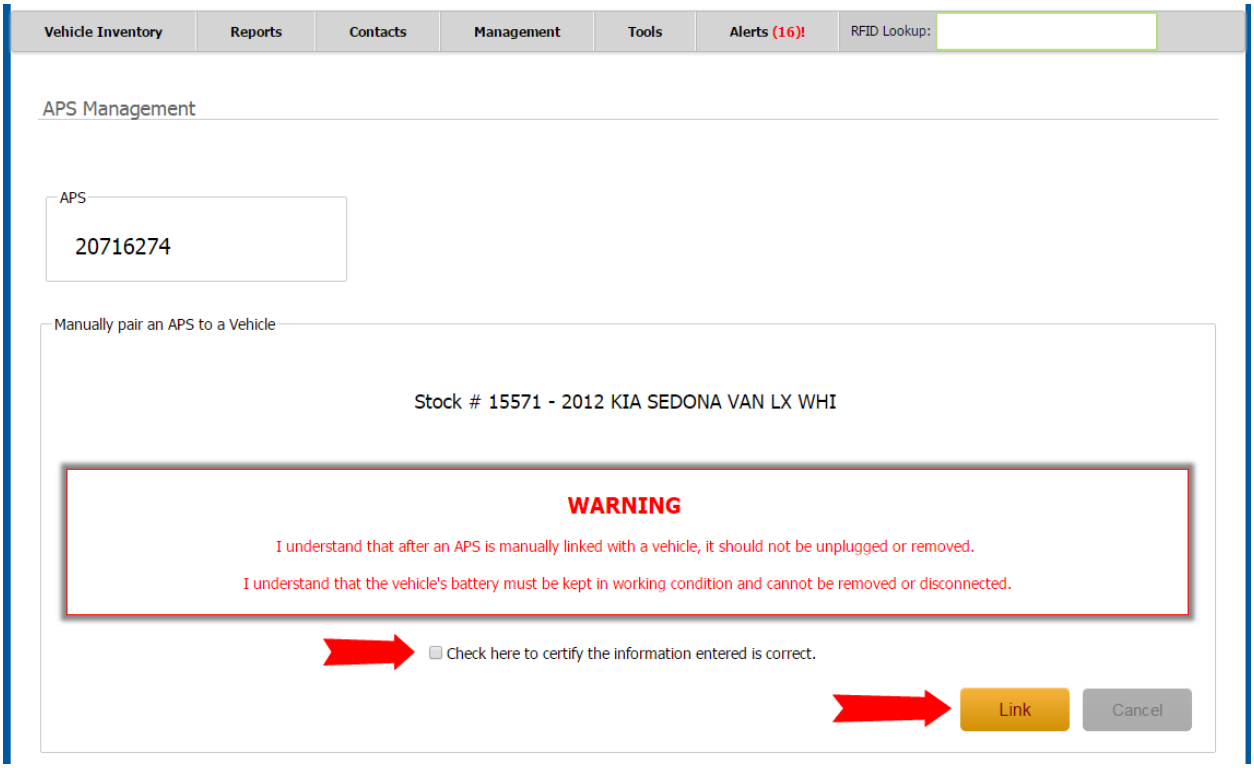
1. Click the [Link to Vehicle] button.



2. Change the "Locate Vehicle By" dropdown list if necessary and then enter the required information. After entering the vehicle identifying information, the vehicle details should be displayed.



3. If the vehicle details are correct, check the box if you agree with the WARNING items and then click the [Link] button to complete the process.

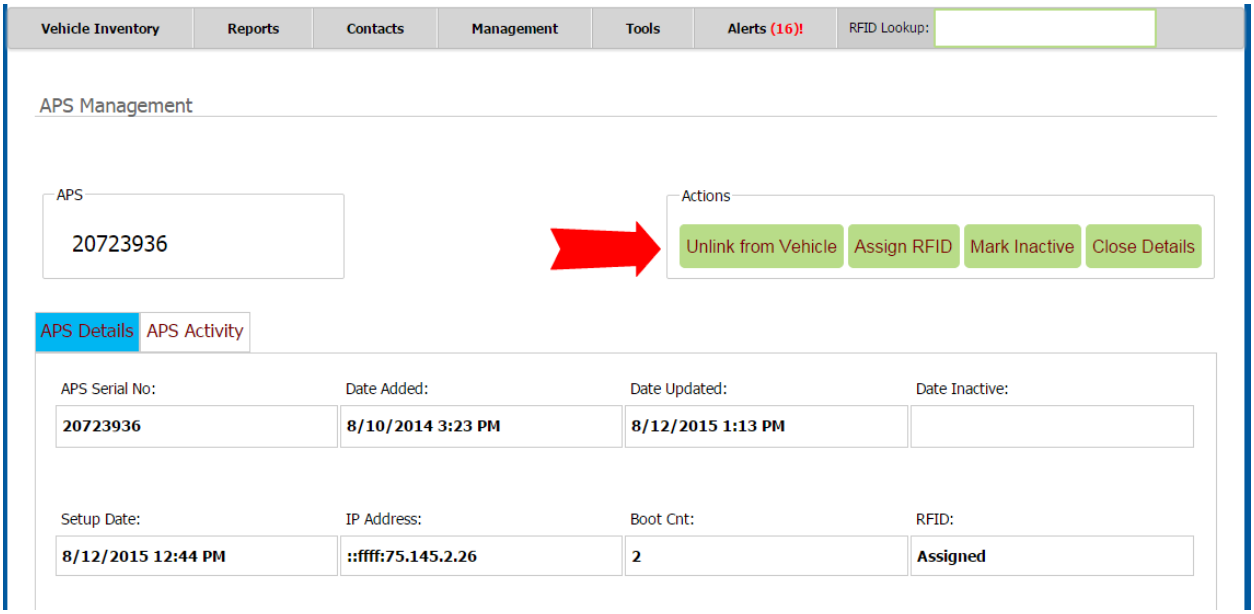


4. An Alert Activity event will be created when the vehicle is successfully linked.

After an APS has been manually linked to a vehicle, it must remain plugged in at all times and the vehicle's battery must be maintained in order to ensure normal APS operations. If the APS becomes unplugged or the battery becomes disconnected or becomes low, then the manual linking procedure must be repeated.

Unlinking from a Vehicle

To unlink an APS from a vehicle, click the [Unlink from Vehicle] button. Once a vehicle has become unlinked, new APS Activity events will no longer be displayed in the Vehicle Details > Security > APS Activity page. Note: If the APS remains in the vehicle after manual unlinking and the vehicle is started, the APS will automatically re-link to the vehicle if the VIN is reported by the vehicle.



Assign RFID

Each APS device has an internal RFID. Click the [Assign RFID] button and then scan the APS using the RFID reader to assign the RFID to the APS.

Mark Inactive

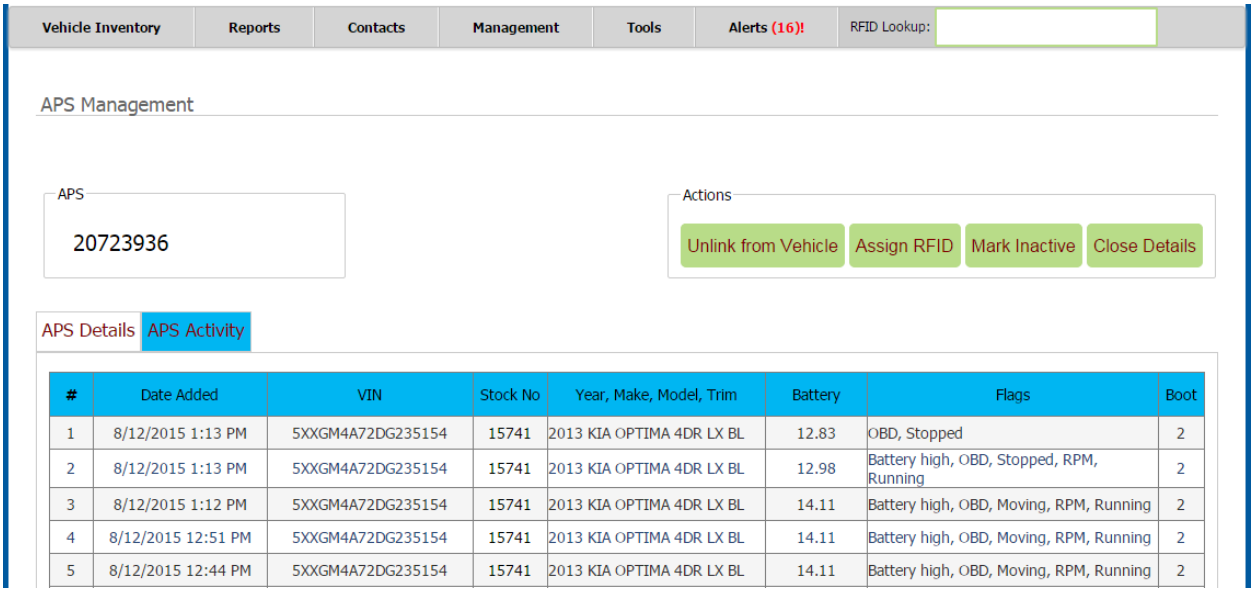
Use the [Mark Inactive] button to remove a device from the APS Management list. Marking a device inactive does not delete the record.

APS Details

The APS Detail page displays information about the device and the currently linked vehicle (if applicable).

APS Activity

The APS Activity tab displays all related events for a specific device serial number. In contrast with the APS Activities displayed on the Vehicle Details page, the APS's Activity tab is helpful for diagnosing unexpected behavior with a specific device.



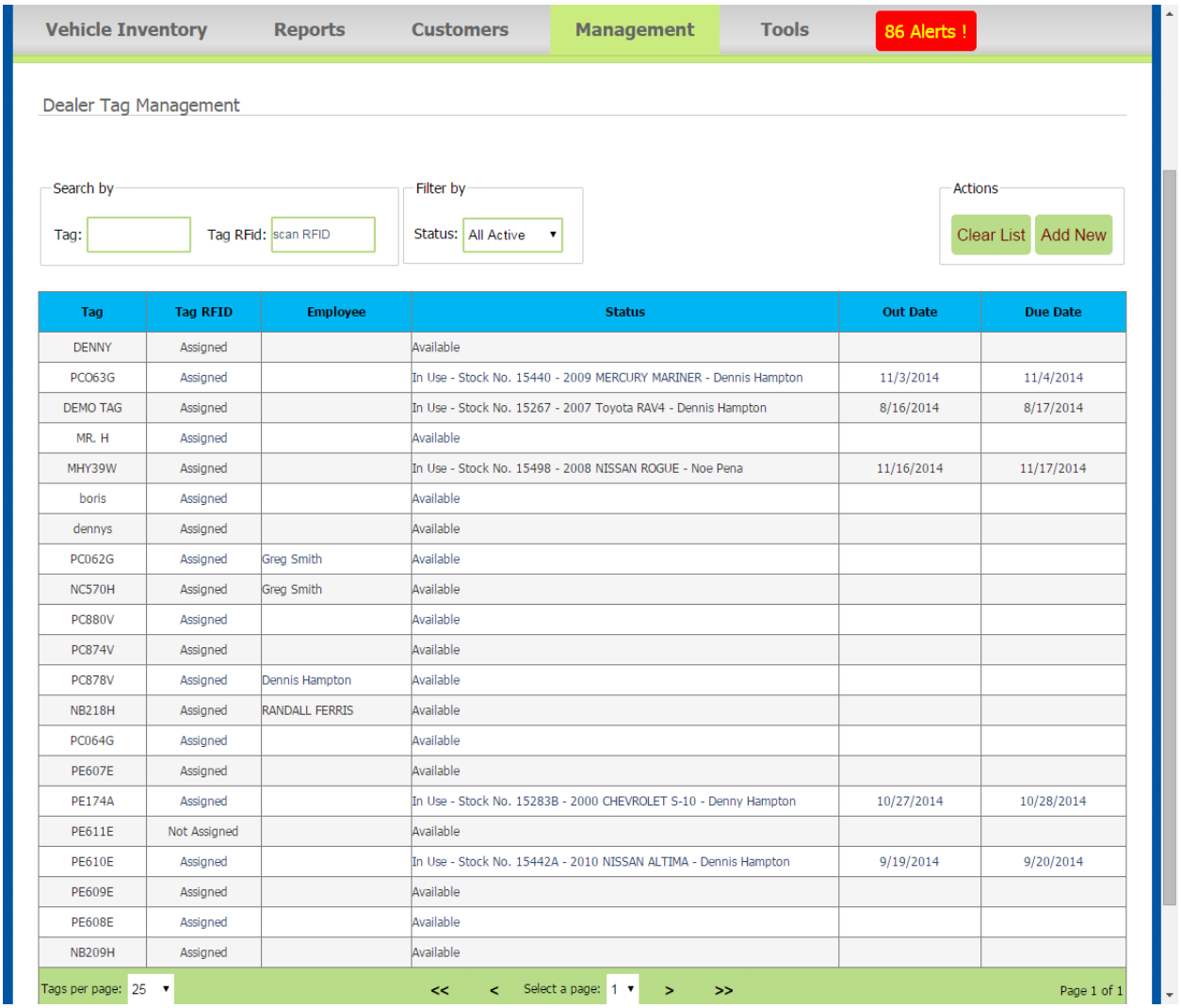
#	Date Added	VIN	Stock No	Year, Make, Model, Trim	Battery	Flags	Boot
1	8/12/2015 1:13 PM	5XXGM4A72DG235154	15741	2013 KIA OPTIMA 4DR LX BL	12.83	OBD, Stopped	2
2	8/12/2015 1:13 PM	5XXGM4A72DG235154	15741	2013 KIA OPTIMA 4DR LX BL	12.98	Battery high, OBD, Stopped, RPM, Running	2
3	8/12/2015 1:12 PM	5XXGM4A72DG235154	15741	2013 KIA OPTIMA 4DR LX BL	14.11	Battery high, OBD, Moving, RPM, Running	2
4	8/12/2015 12:51 PM	5XXGM4A72DG235154	15741	2013 KIA OPTIMA 4DR LX BL	14.11	Battery high, OBD, Moving, RPM, Running	2
5	8/12/2015 12:44 PM	5XXGM4A72DG235154	15741	2013 KIA OPTIMA 4DR LX BL	14.11	Battery high, OBD, Moving, RPM, Running	2

Dealer Tags

All dealer-assigned tags are viewable in the Management > Dealer Tags list.

General Layout

The Dealer Tag Management screen displays the tag, RFID assignment status, currently assigned employee, and check out status of the tag.



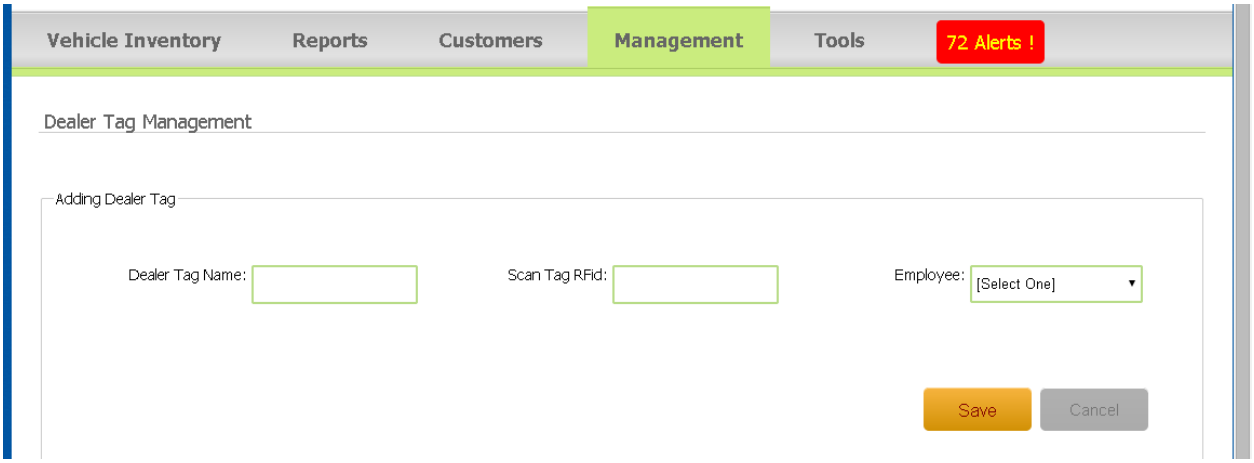
Tag	Tag RFID	Employee	Status	Out Date	Due Date
DENNY	Assigned		Available		
PC063G	Assigned		In Use - Stock No. 15440 - 2009 MERCURY MARINER - Dennis Hampton	11/3/2014	11/4/2014
DEMO TAG	Assigned		In Use - Stock No. 15267 - 2007 Toyota RAV4 - Dennis Hampton	8/16/2014	8/17/2014
MR. H	Assigned		Available		
MHY39W	Assigned		In Use - Stock No. 15498 - 2008 NISSAN ROGUE - Noe Pena	11/16/2014	11/17/2014
boris	Assigned		Available		
dennys	Assigned		Available		
PC062G	Assigned	Greg Smith	Available		
NC570H	Assigned	Greg Smith	Available		
PC880V	Assigned		Available		
PC874V	Assigned		Available		
PC878V	Assigned	Dennis Hampton	Available		
NB218H	Assigned	RANDALL FERRIS	Available		
PC064G	Assigned		Available		
PE607E	Assigned		Available		
PE174A	Assigned		In Use - Stock No. 15283B - 2000 CHEVROLET S-10 - Denny Hampton	10/27/2014	10/28/2014
PE611E	Not Assigned		Available		
PE610E	Assigned		In Use - Stock No. 15442A - 2010 NISSAN ALTIMA - Dennis Hampton	9/19/2014	9/20/2014
PE609E	Assigned		Available		
PE608E	Assigned		Available		
NB209H	Assigned		Available		

Searching and Filtering

Tags can be searched and filtered by the tag, assigned RFID, and by status.

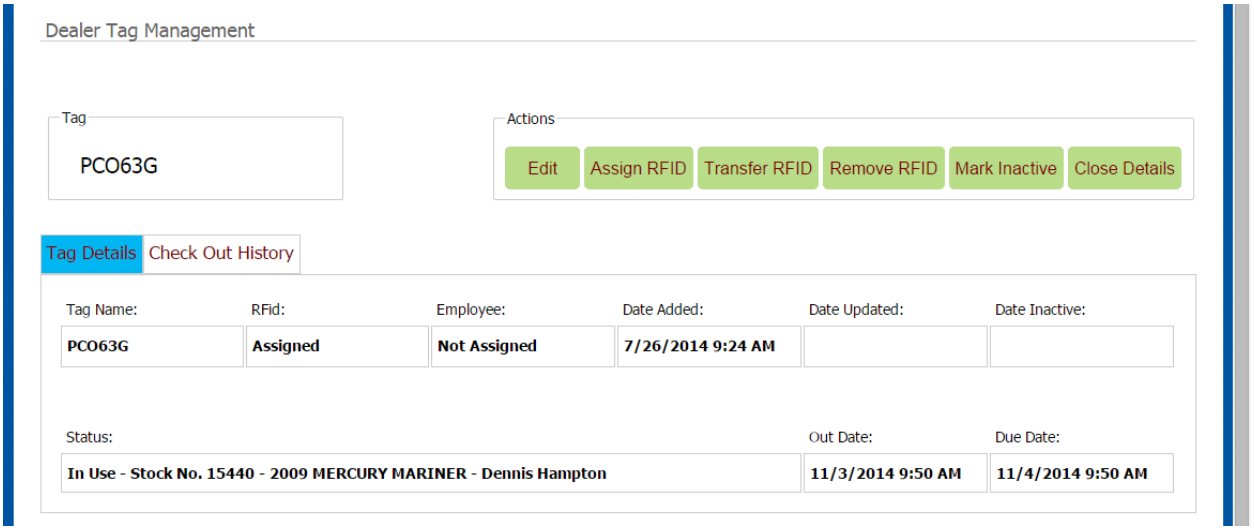
Add New

Click the [Add new] button on the Dealer Tag Management list to add a new dealer tag. The tag name and assigned RFID should be set. An employee may optionally be set to indicate the assignment of a dealer tag to a specific employee.



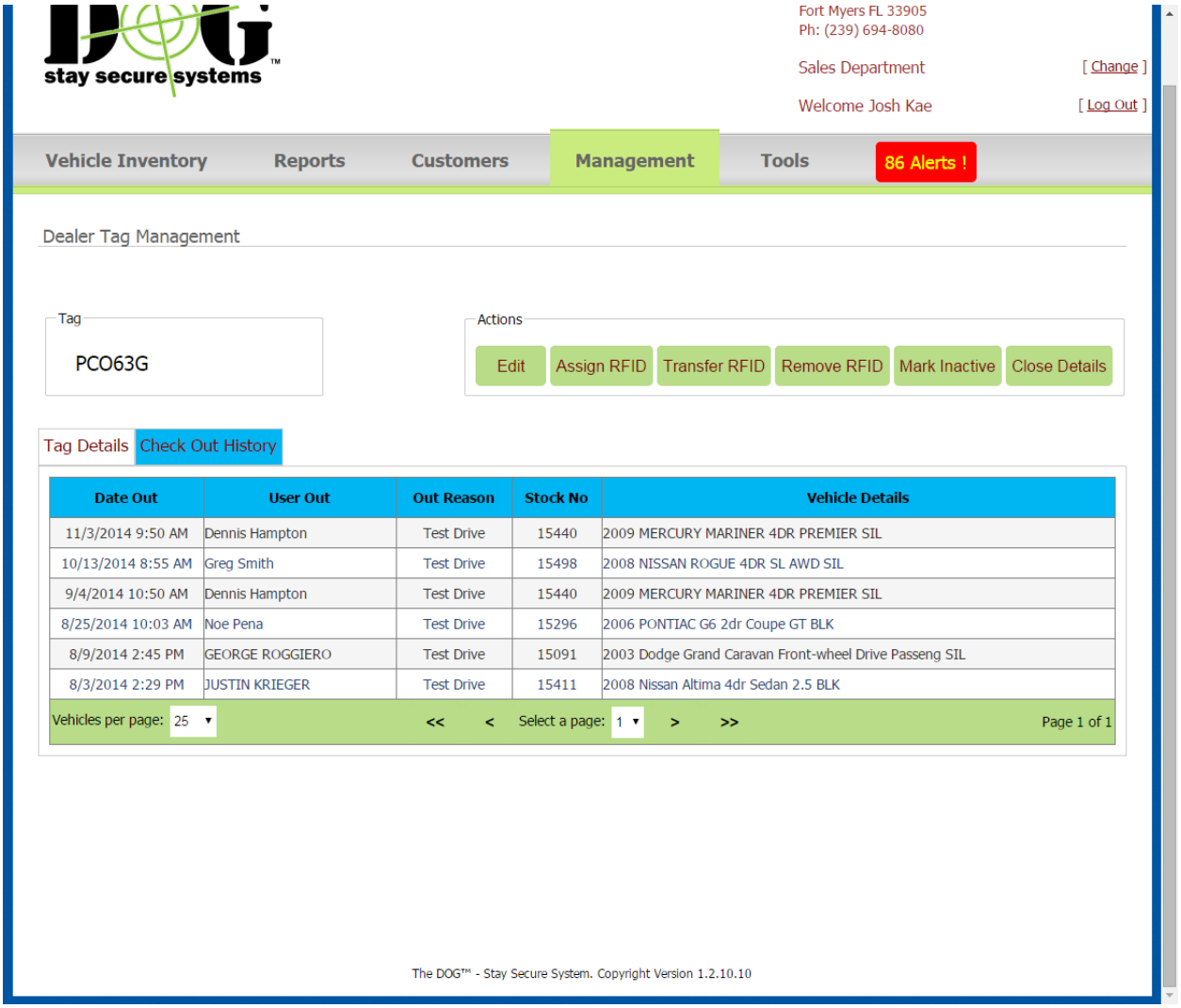
Tag Details

Tag details displays general information about the dealer tag. If the tag is currently checked out, the check out status and date fields will be filled in.



Check Out History

Check out history for the dealer tag is displayed using the "Check Out History" tab. This screen may be useful in determining who last used a dealer tag in cases where it cannot be located.

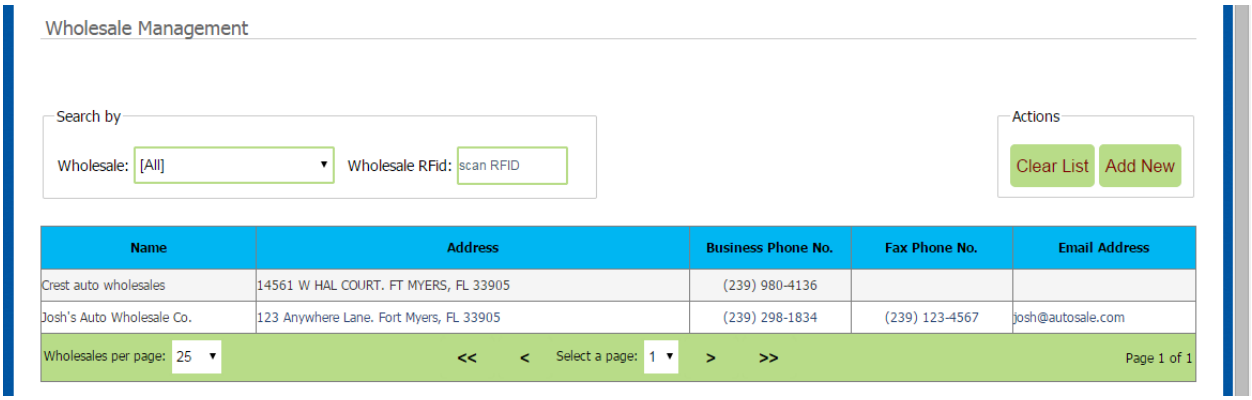


Wholesale

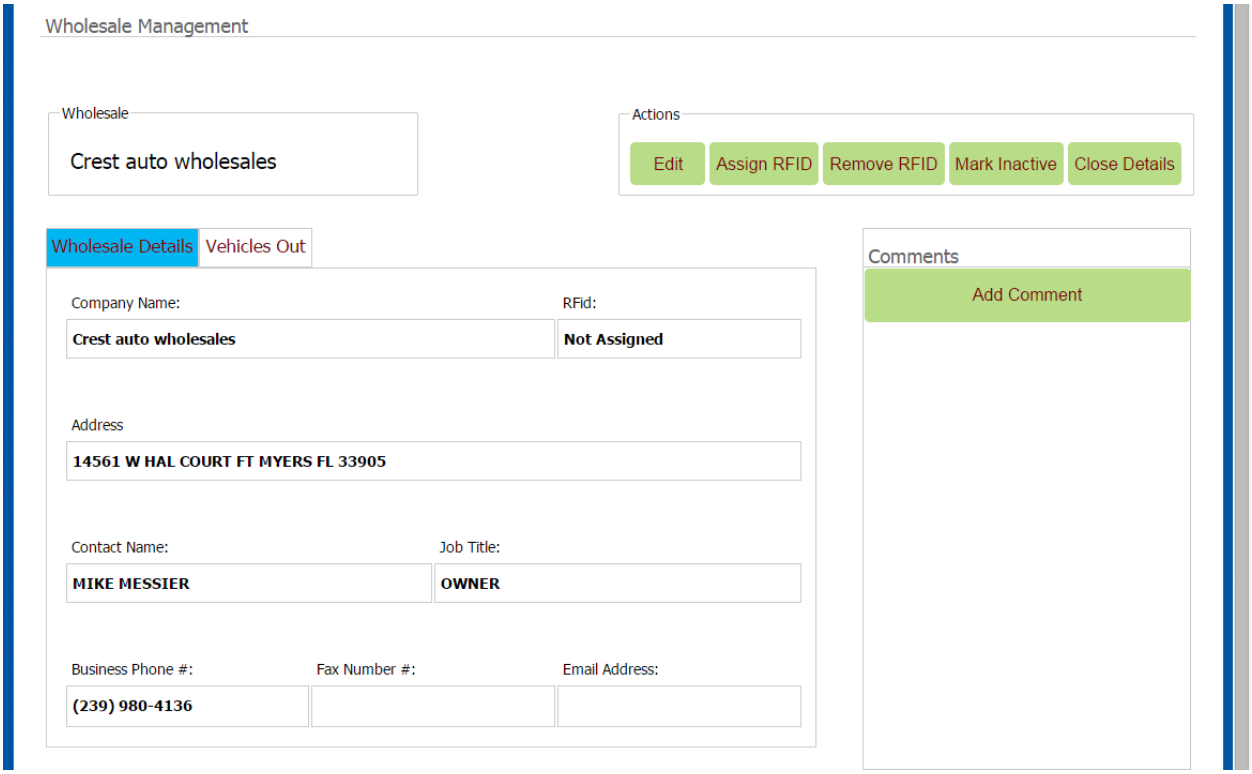
Vehicles sold to a wholesale company should be checked out as "Wholesale" to indicate who is buying the vehicles. Once the sale has been completed in your DMS, the vehicles will be filtered from the Wholesale list view.

Viewing Vehicles Assigned to Wholesale

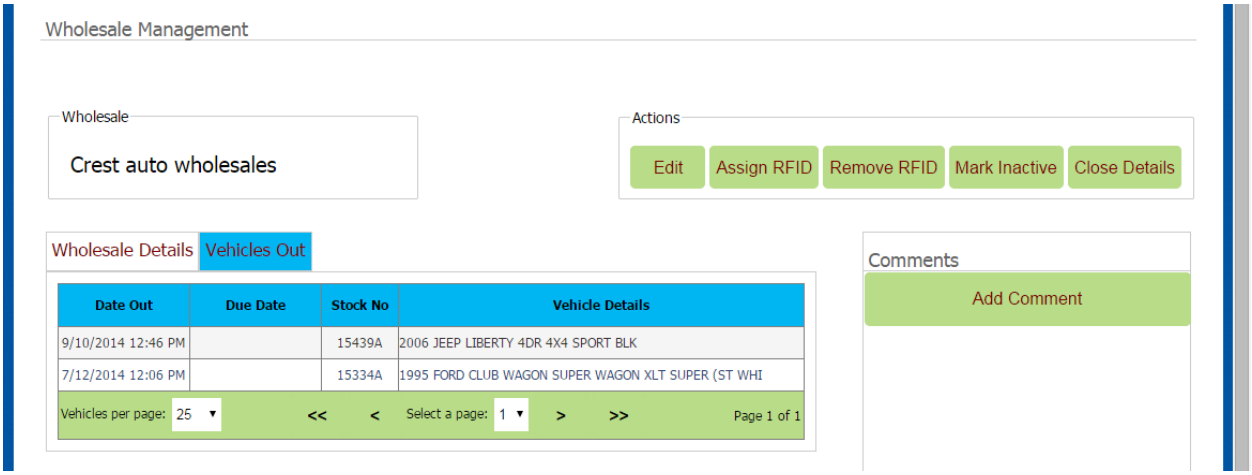
Navigate to Management > Wholesale to view the Wholesale Management page.



Click on a wholesale company name to view the Wholesale Details tab. From here, you may edit the information, edit RFID information, mark the record inactive, and view all vehicles checked out to this company.

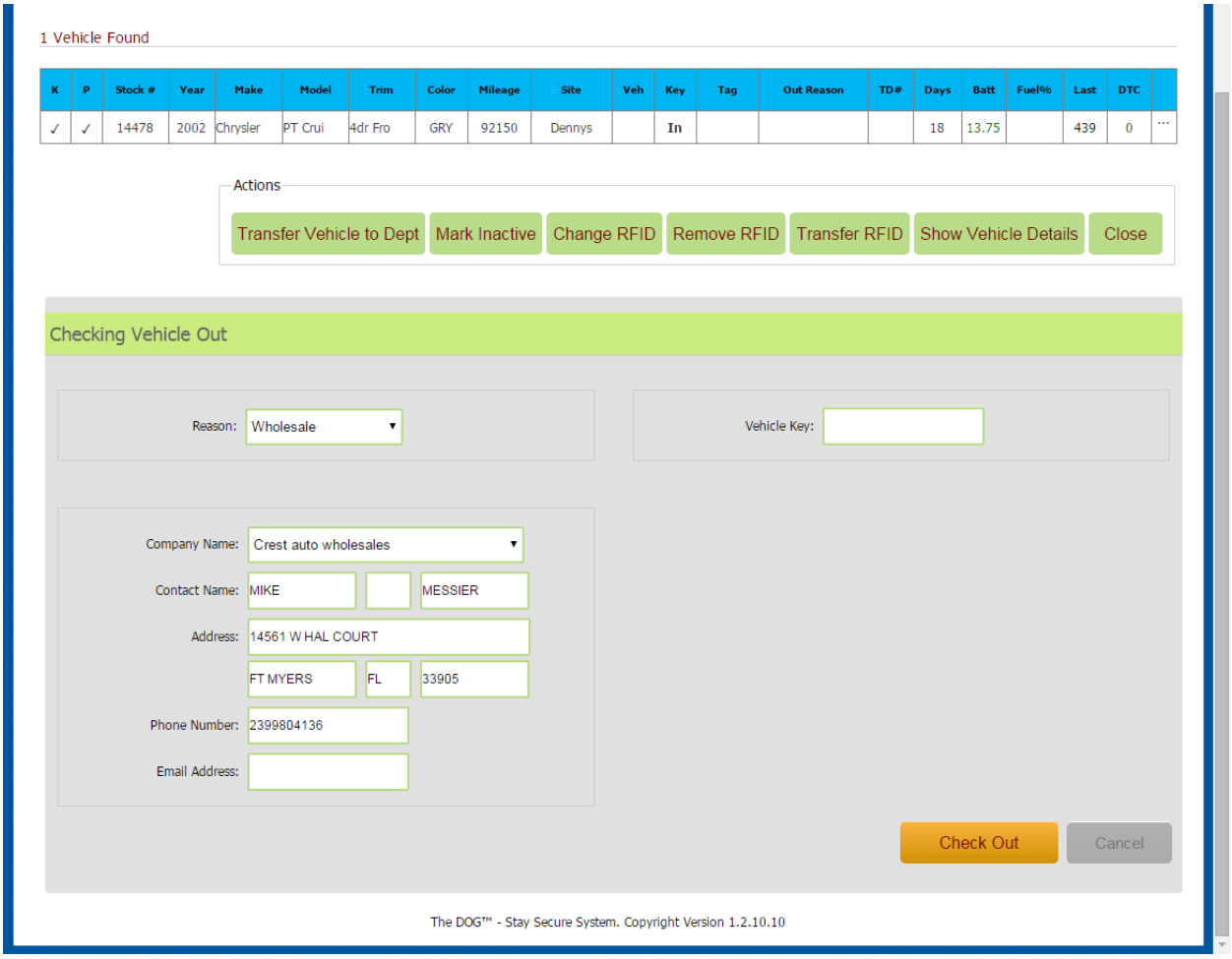


The Wholesale "Vehicles Out" tab displays all vehicles checked out (sold) to the wholesale company.



Checking Vehicles Out to Wholesale

Vehicles that will be sold to a wholesale company should be checked out similarly to a Test Drive. Ensure the "Reason" dropdown is changed to Wholesale and then select the company name from the dropdown. Scan the key RFID if necessary and then click [Check Out].

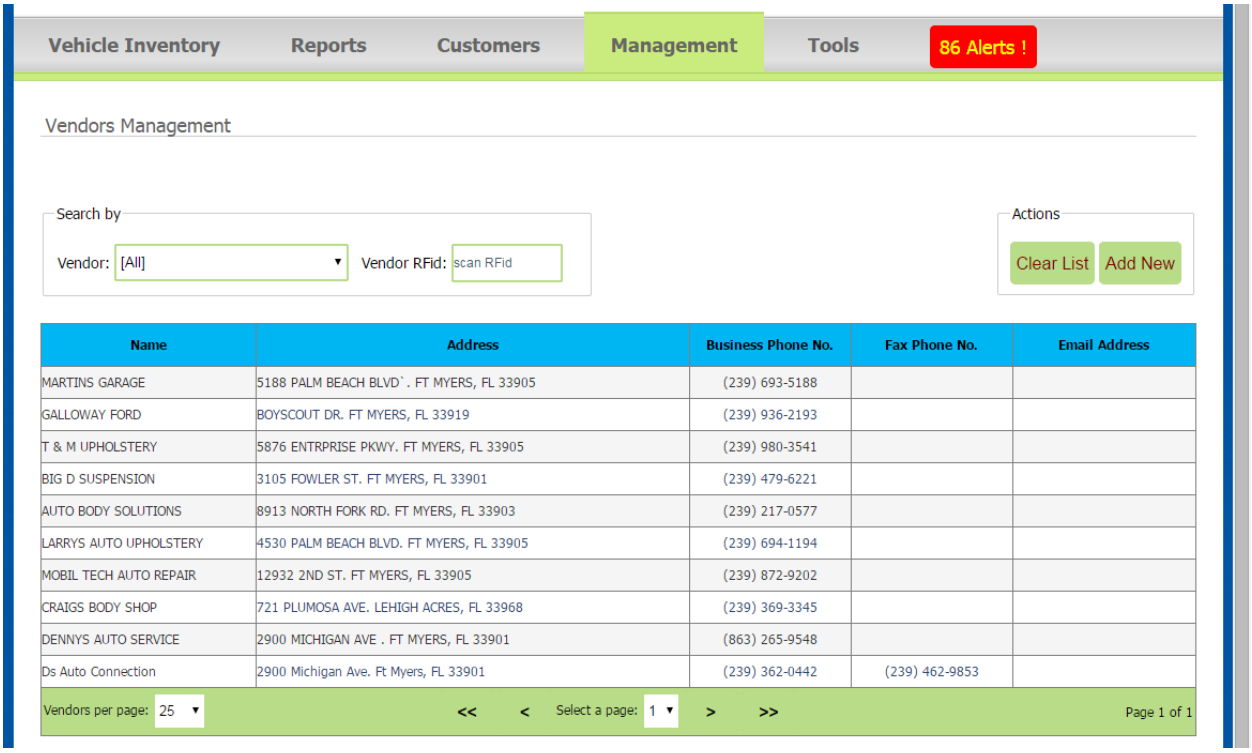


Vendors

Vendors Management allows you to add and edit vendors in the vendor check out screen. Navigate to Management > Vendors to view Vendors Management.

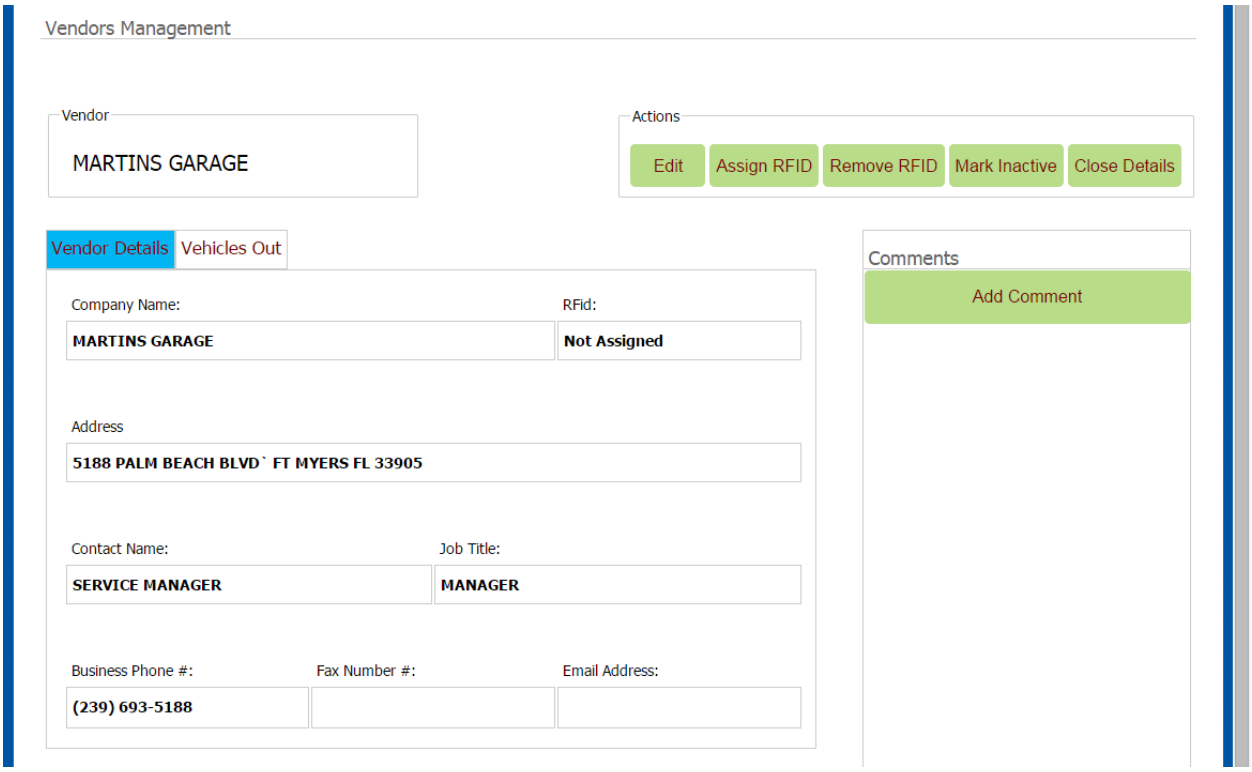
Vendor List

The Vendors Management screen displays all active vendors. The list can be filtered by using the Vendor dropdown list or scanning the vendor's assigned RFID tag. Clear the current "Search by" filters by using the [Clear List] button. Click the [Add New] button to add new a new vendor record.



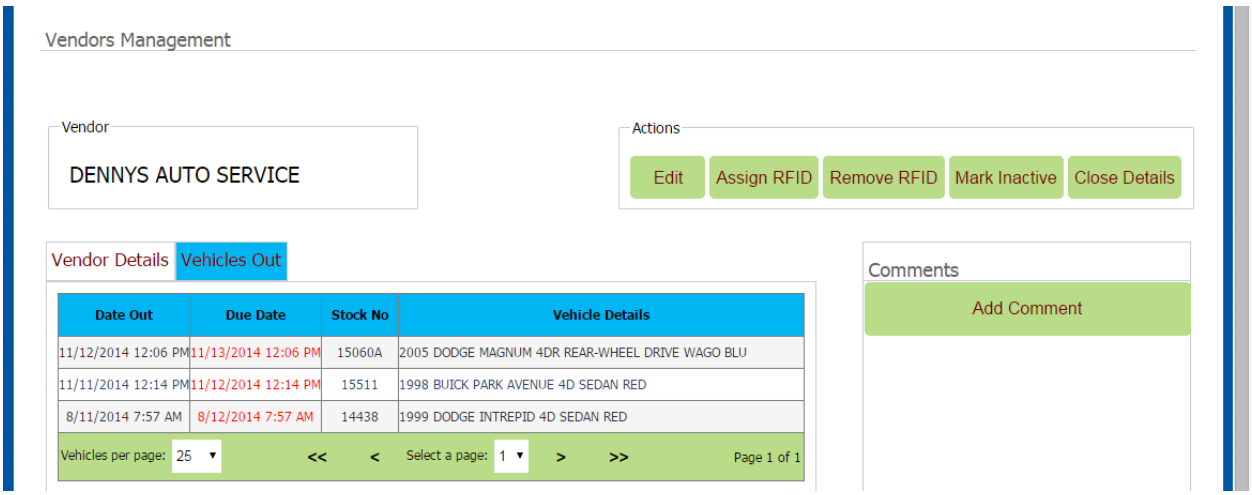
Vendor Details

Click on the vendor name to view the Vendor Details. General information about the vendor is displayed. The details may be edited by using the [Edit] button. An RFID may be assigned or removed using the [Assign RFID] and [Remove RFID] buttons respectively. If the vendor is no longer being used, click the [Mark Inactive] button to remove the vendor from the list.



Vehicles Out

Click the "Vehicles Out" tab on the Vendor Details page to view all vehicles currently checked out to the vendor. If the vehicle's due date has been exceeded, it will be highlighted in red.

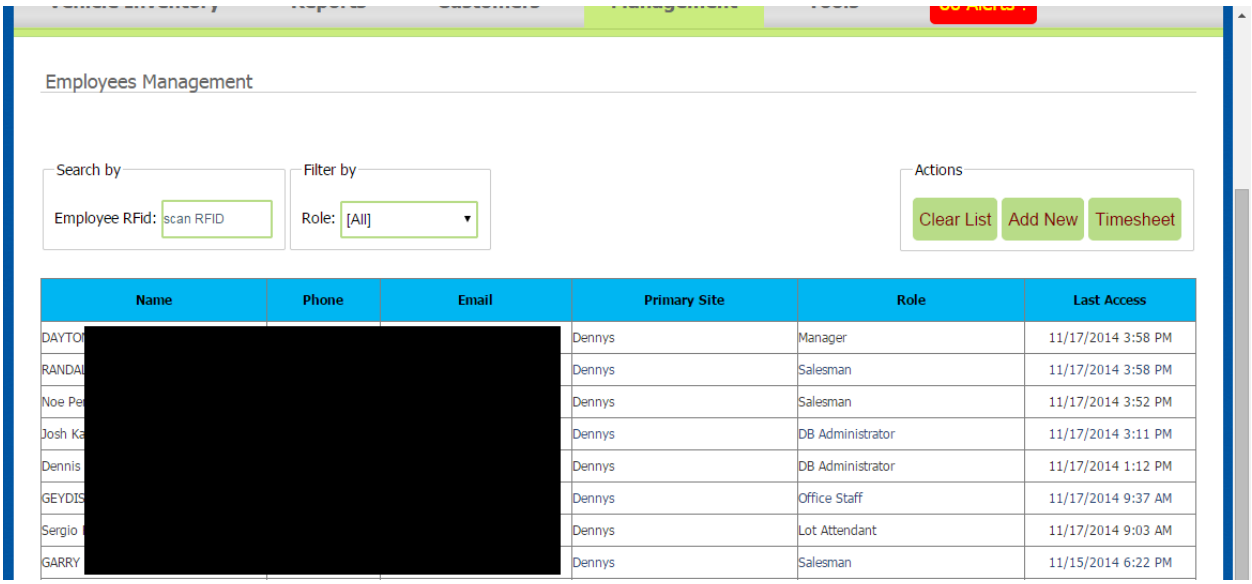


Employees

Employees Management allows you to add and edit employee login accounts. Navigate to Management > Employees to view Employees Management.

Employee List

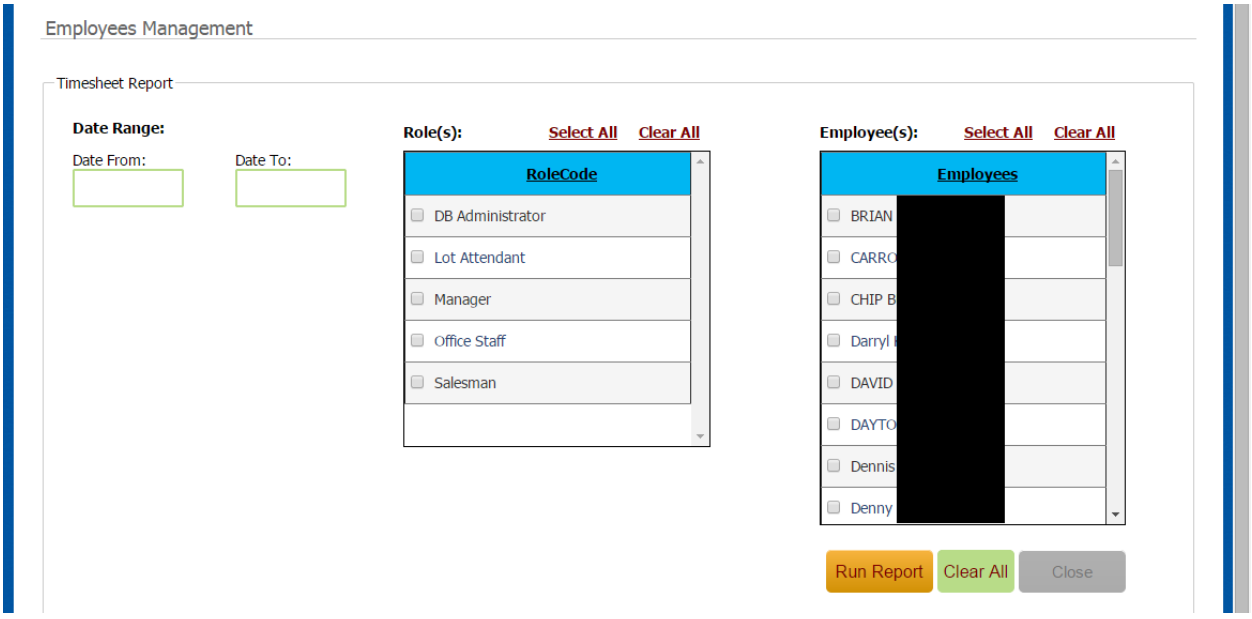
The Employees Management list displays all currently active employee records. The list may be filtered by assigned employee RFID tag or by Role. The list filters may be removed by clicking the [Clear List] button. The [Add New] button allows you to add new employee records. The [Timesheet] button will allow you to create a timesheet report based on employee login and logout activity.



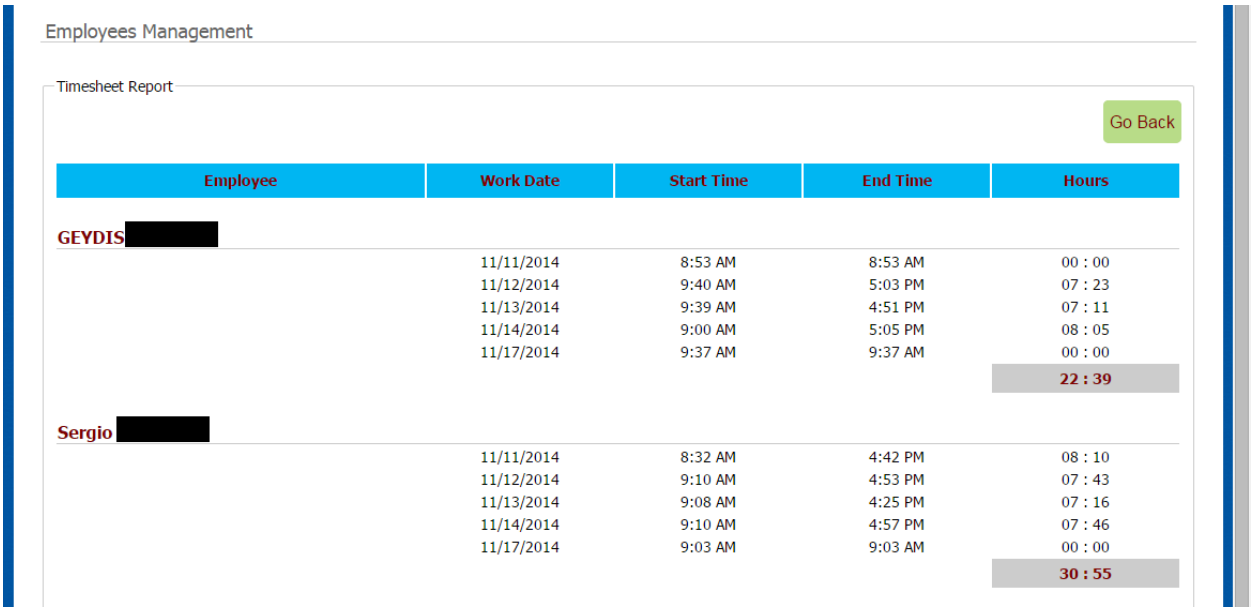
Timesheet Report

Each day an employee logs in to the system, the start date/time is captured. The last time the employee logs in or out of the system, the end date/time is captured.

The Timesheet Report option allows you to set the criteria for viewing employee login and logout history. Criterial is based on date range and either employee role or employee name.

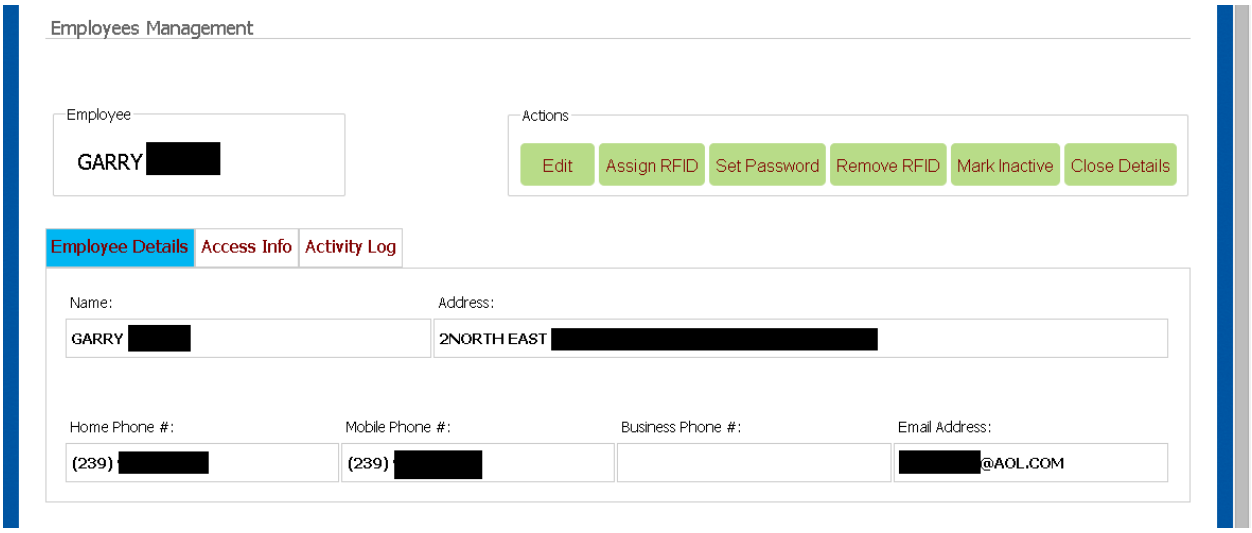


After selecting the criteria, click [Run Report] to view the results.

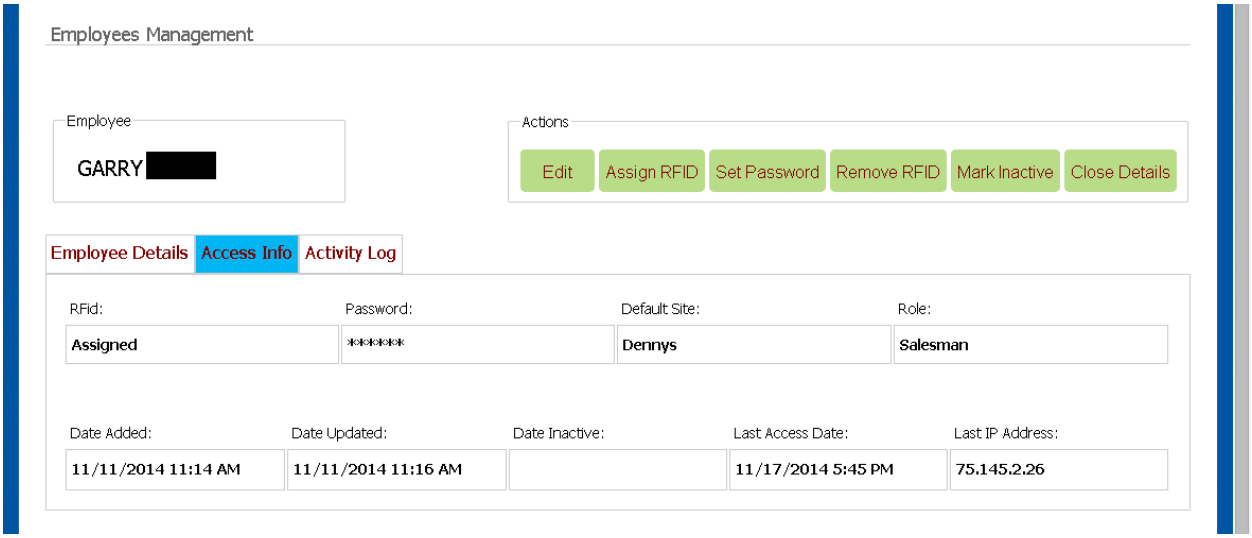


Employee Details

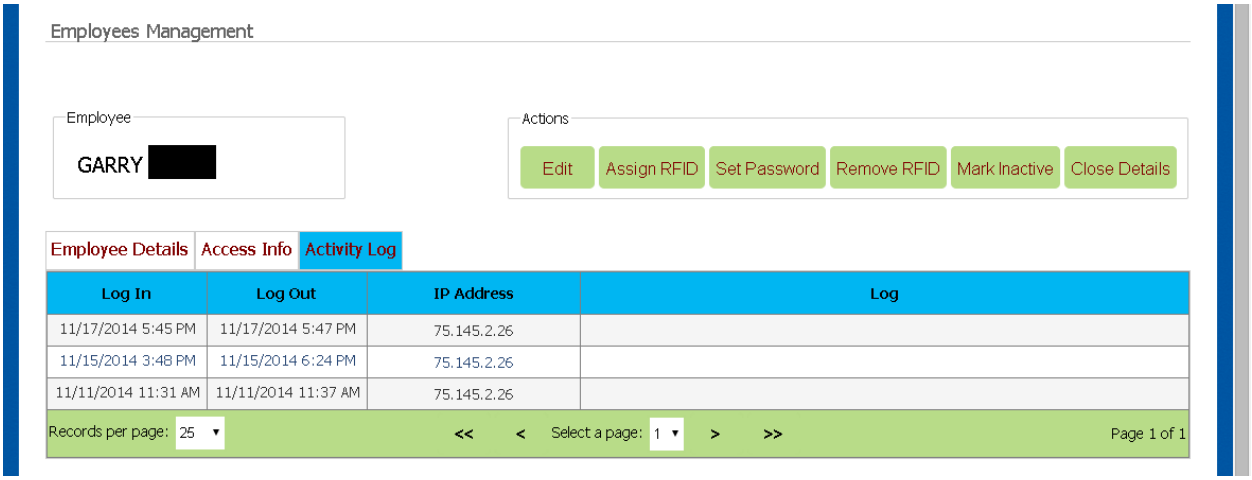
Employee details displays employee name and contact information. You may edit the existing information, assign or remove an RFID, set the employee login password, or mark the record inactive.



The "Access Info" tab displays additional employee details and the most recent employee activity.



The "Activity Log" displays all daily employee log in and lot out activity.

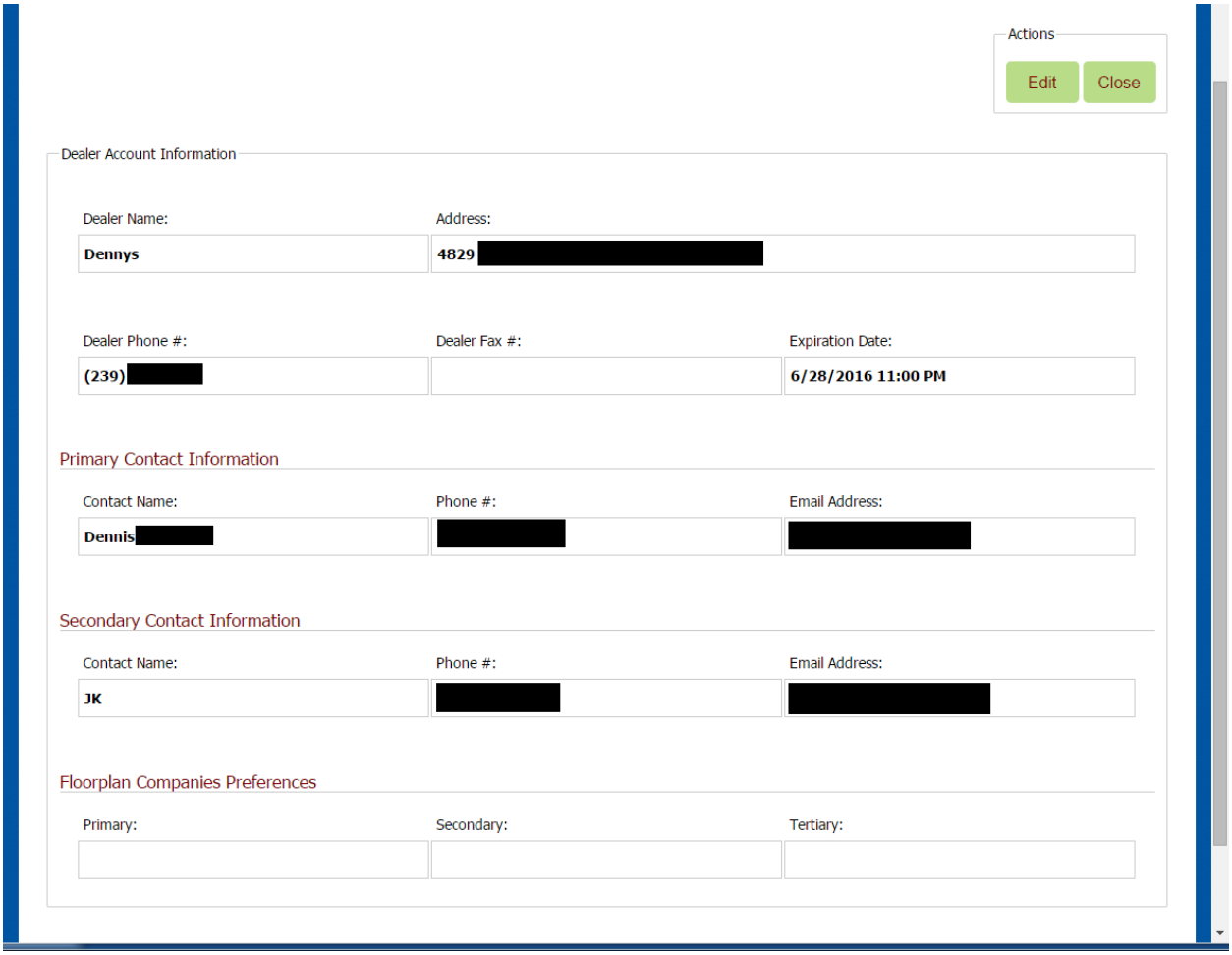


Company Account

The Company Account page displays the site information for the currently selected location.

General Layout

The primary contact's phone number should be a mobile number capable of receiving test messages (SMS). Important security and system alerts are sent to this number.

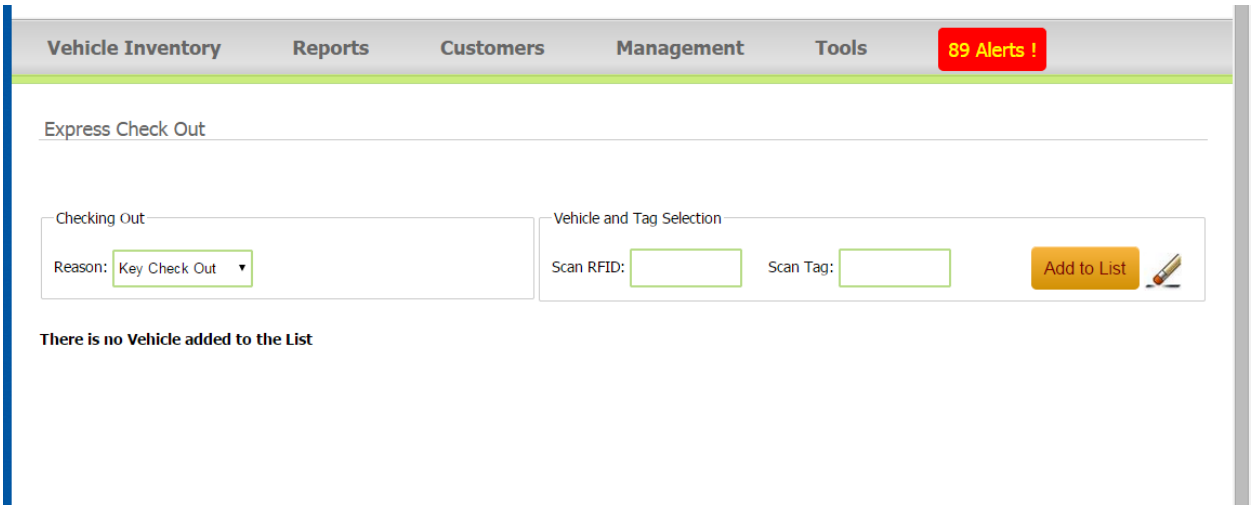


Express Checkout

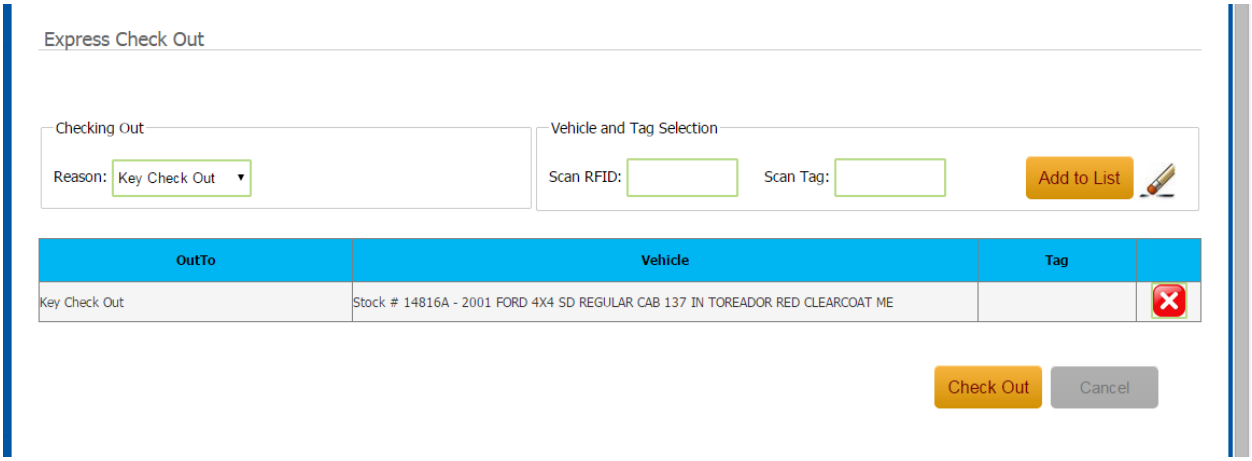
Express Checkout provides the ability to quickly check out multiple vehicles. Navigate to Tools > Express Checkout.

General Layout

To check out multiple vehicles, select the Reason from the dropdown box and then provide any necessary information such as key RFID and dealer tag RFID. Click [Add to List] to add the item to a check out list. Repeat the process as many times as necessary.



When finished adding items to the list, click [Check Out] to check out all vehicles added to the check out list.

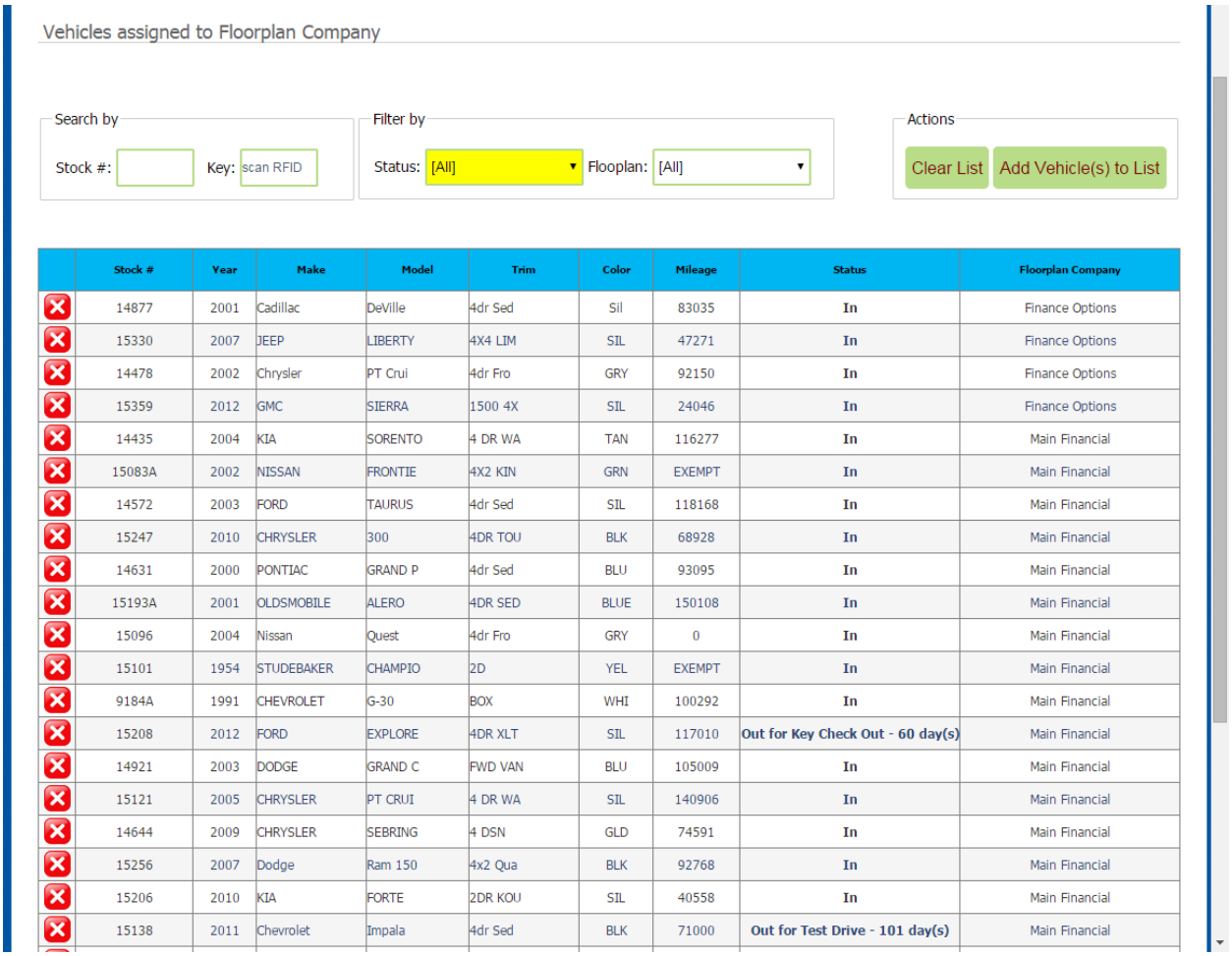


Vehicles on Floorplan

Vehicles may be assigned to a floor plan by navigating to Tools > Vehicles on Floorplan.

Vehicle Floorplan List

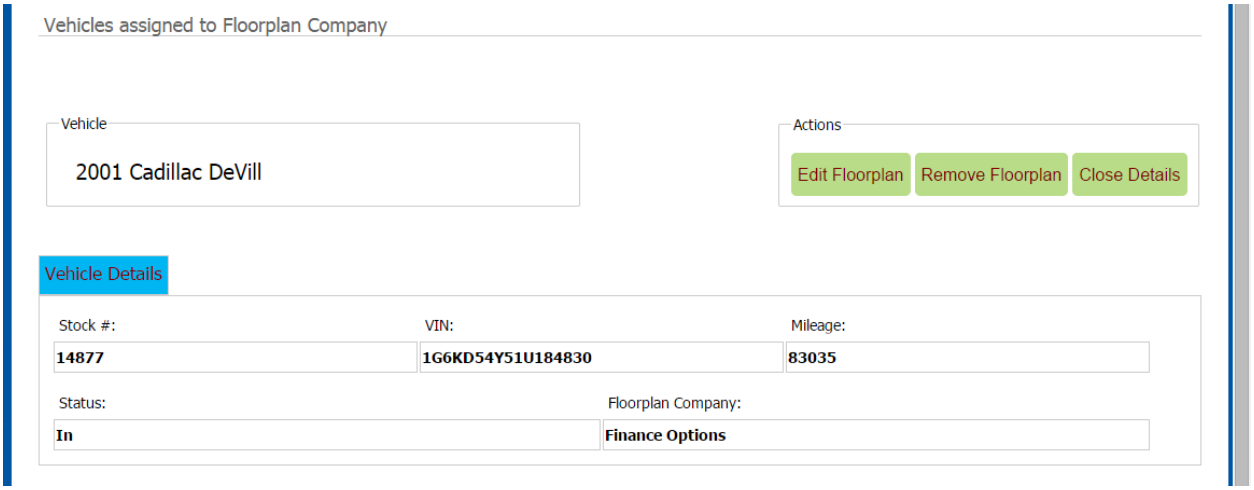
The Vehicles on Floorplan page displays all vehicles currently assigned to a floor plan. Searching, filtering, and paging options are displayed on the page.



	Stock #	Year	Make	Model	Trim	Color	Mileage	Status	Floorplan Company
	14877	2001	Cadillac	DeVille	4dr Sed	Sil	83035	**In**	Finance Options
	15330	2007	JEEP	LIBERTY	4X4 LIM	SIL	47271	**In**	Finance Options
	14478	2002	Chrysler	PT Crui	4dr Fro	GRY	92150	**In**	Finance Options
	15359	2012	GMC	SIERRA	1500 4X	SIL	24046	**In**	Finance Options
	14435	2004	KIA	SORENTO	4 DR WA	TAN	116277	**In**	Main Financial
	15083A	2002	NISSAN	FRONTIE	4X2 KIN	GRN	EXEMPT	**In**	Main Financial
	14572	2003	FORD	TAURUS	4dr Sed	SIL	118168	**In**	Main Financial
	15247	2010	CHRYSLER	300	4DR TOU	BLK	68928	**In**	Main Financial
	14631	2000	PONTIAC	GRAND P	4dr Sed	BLU	93095	**In**	Main Financial
	15193A	2001	OLDSMOBILE	ALERO	4DR SED	BLUE	150108	**In**	Main Financial
	15096	2004	Nissan	Quest	4dr Fro	GRY	0	**In**	Main Financial
	15101	1954	STUDEBAKER	CHAMPIO	2D	YEL	EXEMPT	**In**	Main Financial
	9184A	1991	CHEVROLET	G-30	BOX	WHI	100292	**In**	Main Financial
	15208	2012	FORD	EXPLORE	4DR XLT	SIL	117010	**Out for Key Check Out - 60 day(s)**	Main Financial
	14921	2003	DODGE	GRAND C	FWD VAN	BLU	105009	**In**	Main Financial
	15121	2005	CHRYSLER	PT CRUI	4 DR WA	SIL	140906	**In**	Main Financial
	14644	2009	CHRYSLER	SEBRING	4 DSN	GLD	74591	**In**	Main Financial
	15256	2007	Dodge	Ram 150	4x2 Qua	BLK	92768	**In**	Main Financial
	15206	2010	KIA	FORTE	2DR KOU	SIL	40558	**In**	Main Financial
	15138	2011	Chevrolet	Impala	4dr Sed	BLK	71000	**Out for Test Drive - 101 day(s)**	Main Financial

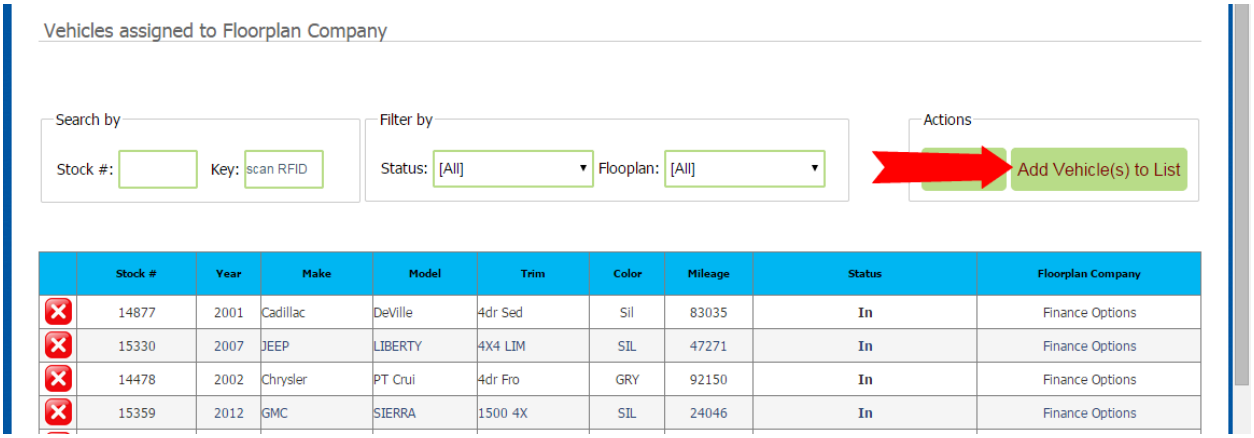
Vehicle Details

Click on a stock number in the Vehicle Floorplan list to view the vehicle details.

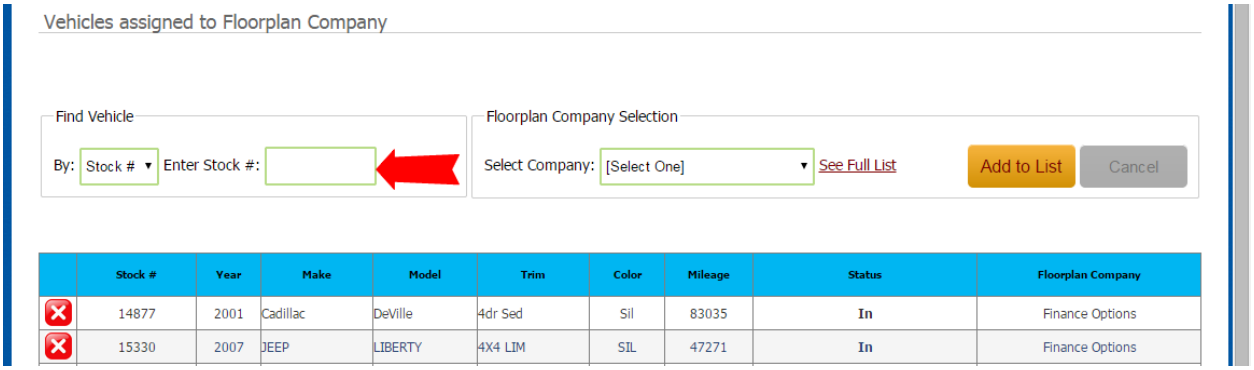


Adding Vehicles to List

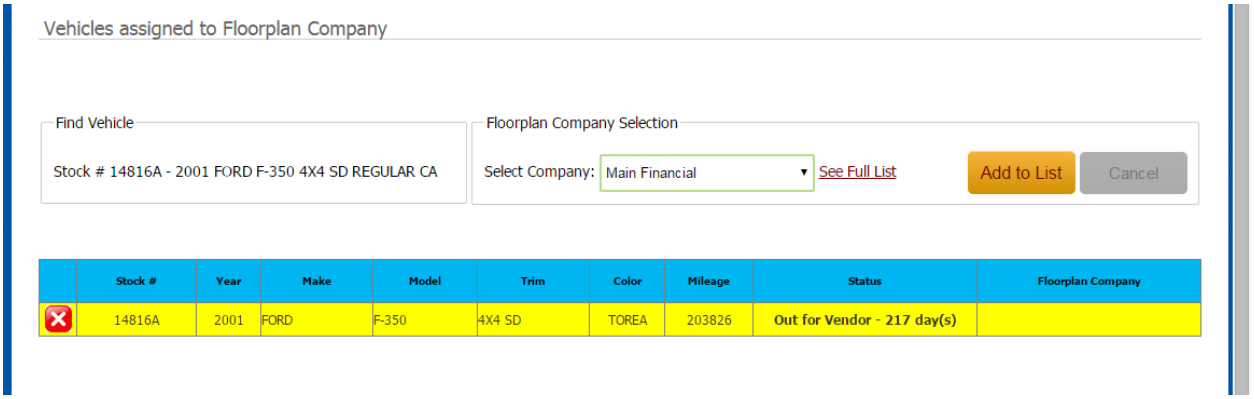
Vehicles may be assigned to a floorplan from the Vehicle Floorplan list by using the [Add Vehicle(s) to List] button.



Adjust the "By" dropdown and follow the onscreen directions.

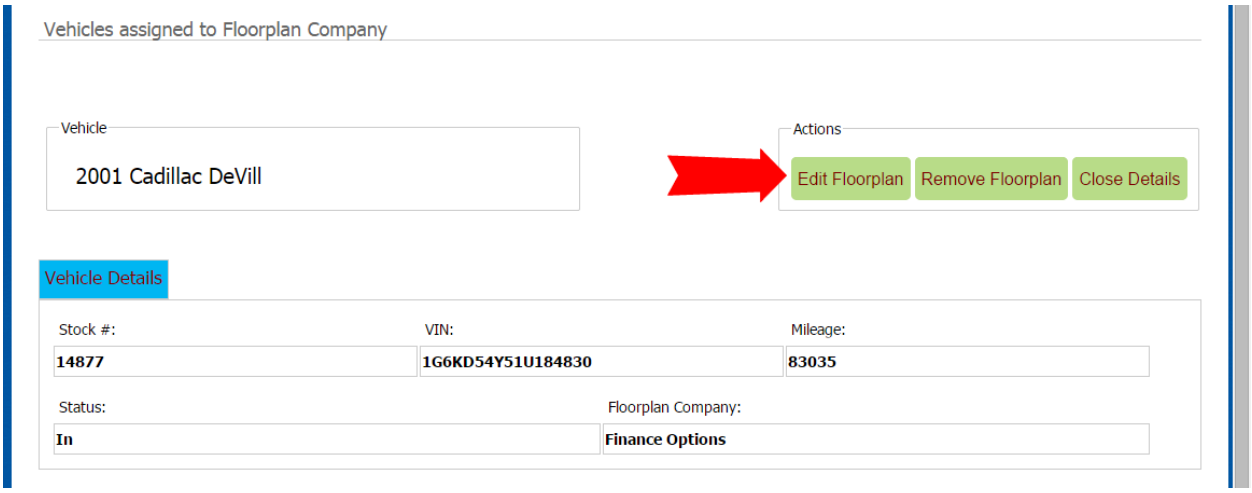


Select the floorplan company from the dropdown list and then click [Add to List] to assign the floorplan to the vehicle.

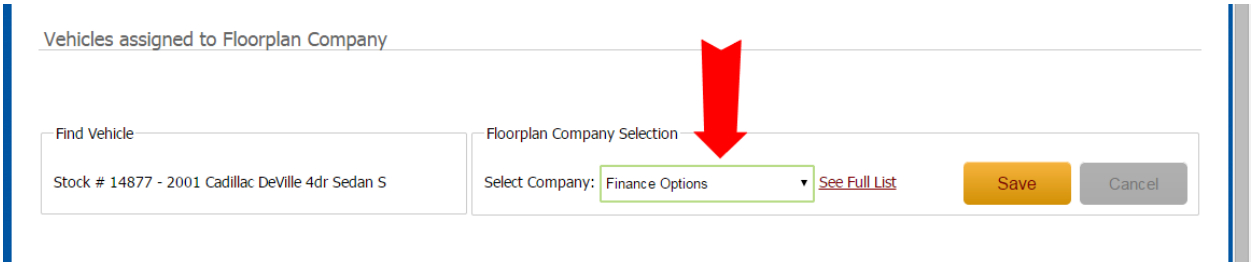


Edit Floorplan

From the floorplan vehicle details screen, click on [Edit Floorplan].

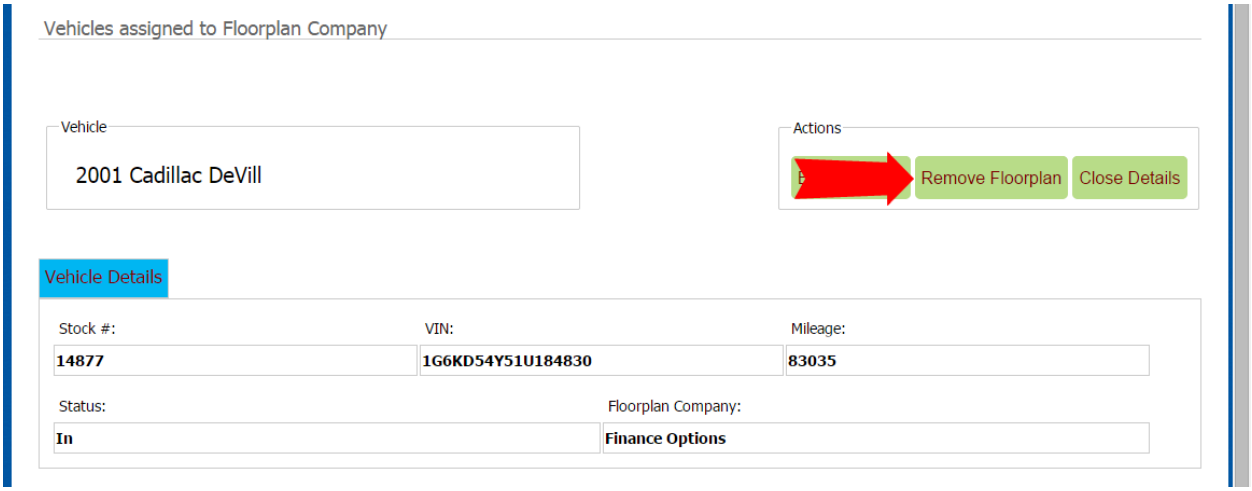


Select the floorplan company from the dropdown list and then click [Save].

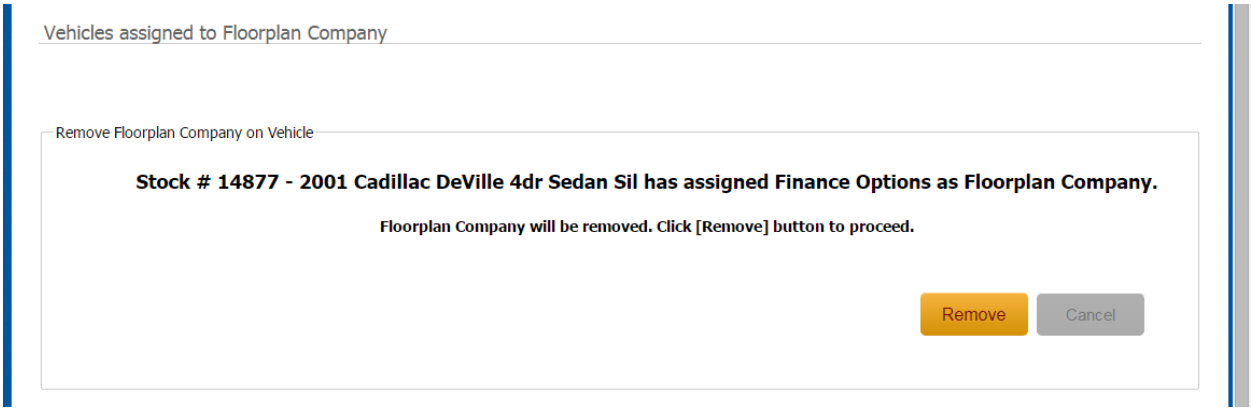


Remove Floorplan

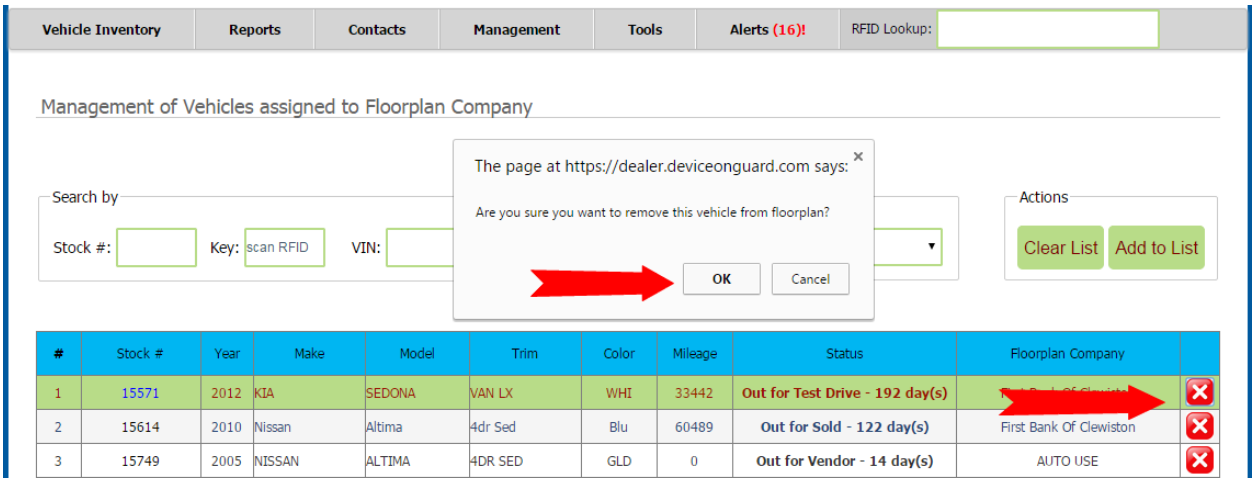
From the floorplan vehicle details screen, click on [Remove Floorplan].



Click [Remove] to complete the process.



You may also remove vehicles from floorplan from the Floorplan Vehicle list screen. Click on the red "x" to remove the floorplan from the vehicle. A popup confirmation dialog will appear. Click [OK] on the dialog to complete the process.

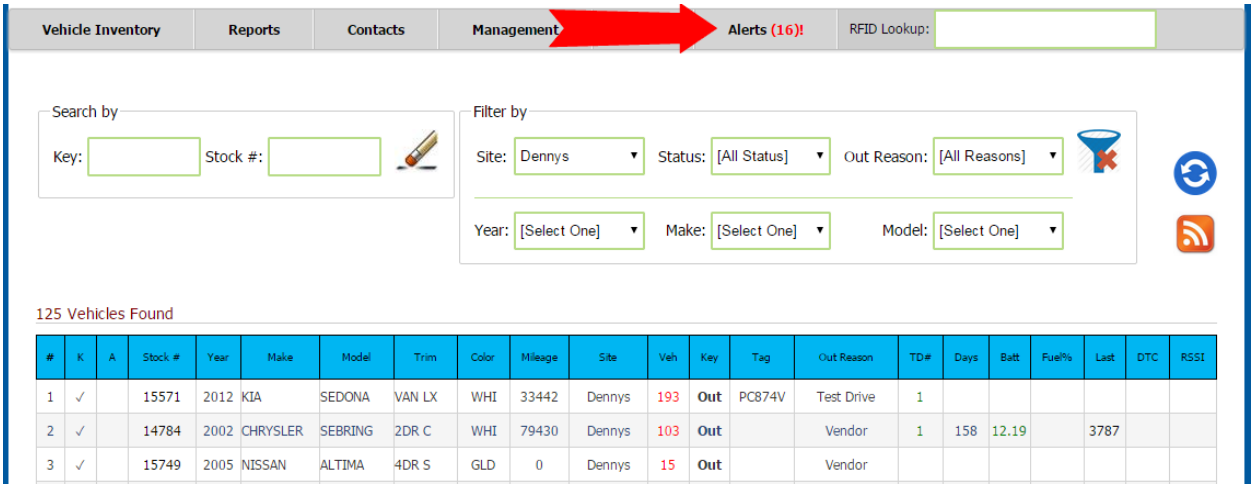


Alerts

The security alerts notifies users of problems that may require immediate action. Important alerts are also sent via SMS (text message) to the primary contact at each site.

General Layout

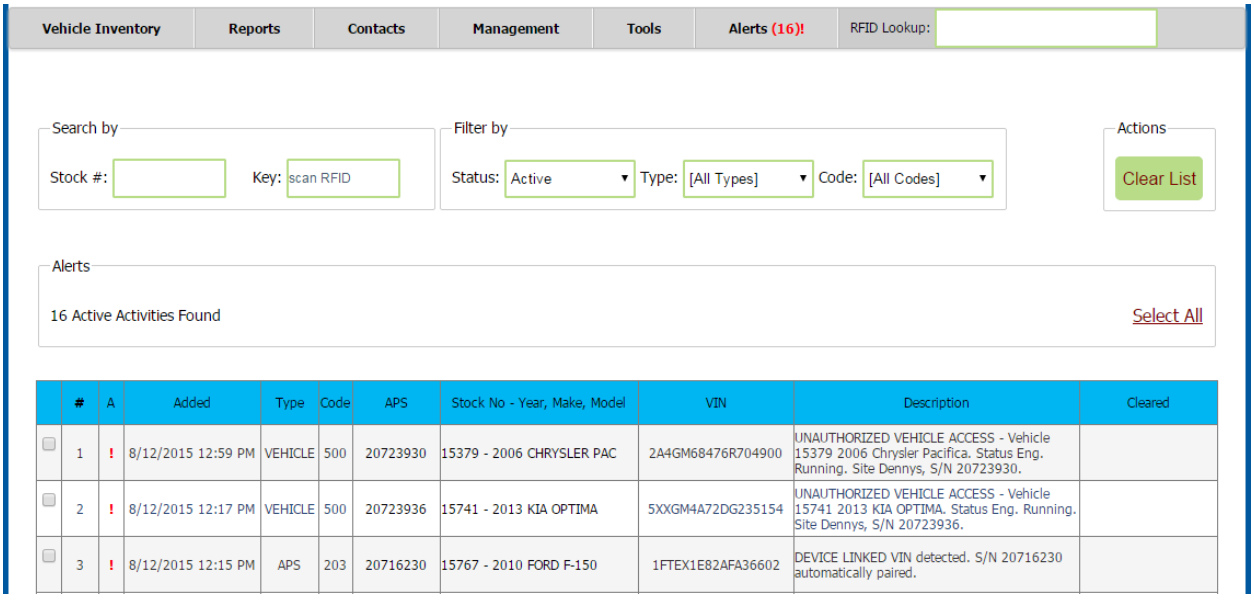
The current count of all active alerts is displayed on the right of the Tools menu. Vehicles with an active security alert are flagged with a red "!" in the right-most column of the Vehicle Inventory screen.



#	K	A	Stock #	Year	Make	Model	Trim	Color	Mileage	Site	Veh	Key	Tag	Out Reason	TD#	Days	Batt	Fuel%	Last	DTC	RSSI
1	✓		15571	2012	KIA	SEDONA	VAN LX	WHI	33442	Dennys	193	Out	PC874V	Test Drive	1						
2	✓		14784	2002	CHRYSLER	SEBRING	2DR C	WHI	79430	Dennys	103	Out		Vendor	1	158	12.19		3787		
3	✓		15749	2005	NISSAN	ALTIMA	4DR S	GLD	0	Dennys	15	Out		Vendor							

Searching and Filtering

Click the Alerts menu to view all alerts. Searching, filtering, and paging options are available.



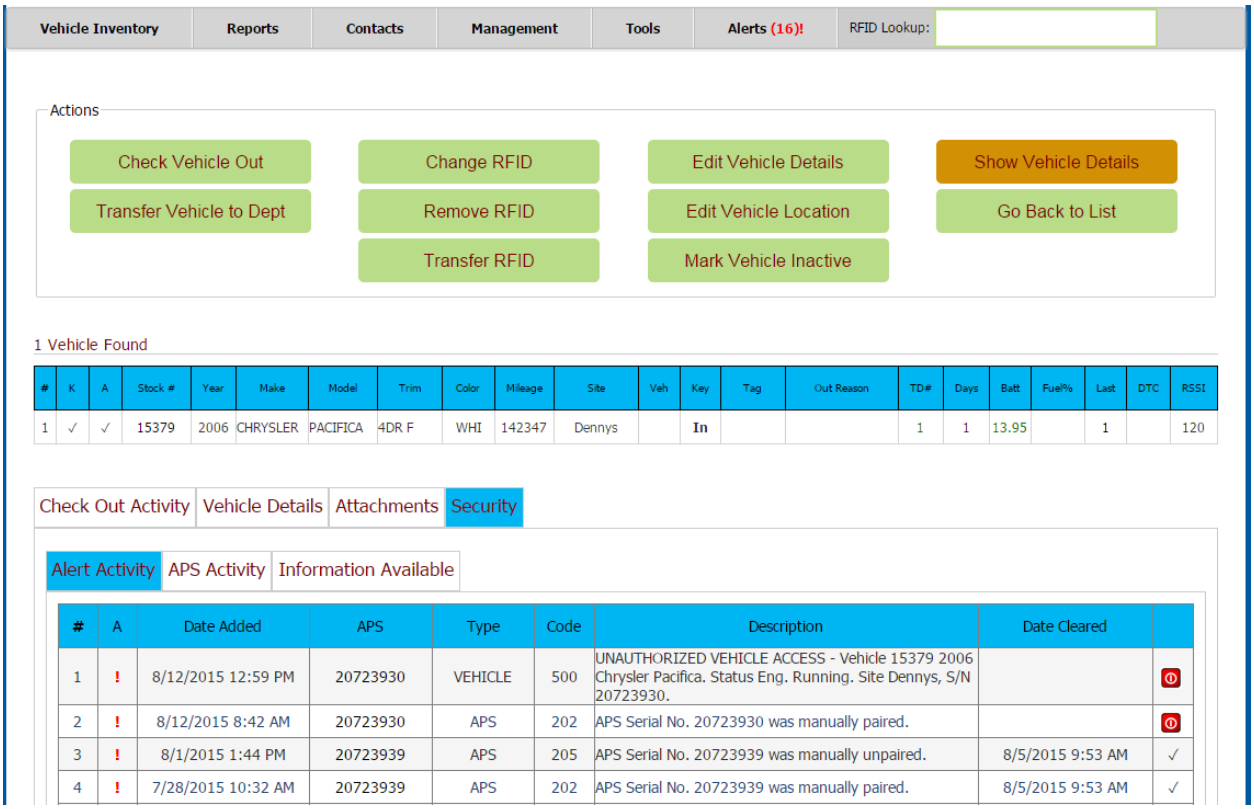
	#	A	Added	Type	Code	APS	Stock No - Year, Make, Model	VIN	Description	Cleared
☐	1	!	8/12/2015 12:59 PM	VEHICLE	500	20723930	15379 - 2006 CHRYSLER PAC	2A4GM68476R704900	UNAUTHORIZED VEHICLE ACCESS - Vehicle 15379 2006 Chrysler Pacifica. Status Eng. Running. Site Dennys, S/N 20723930.	
☐	2	!	8/12/2015 12:17 PM	VEHICLE	500	20723936	15741 - 2013 KIA OPTIMA	5XXGM4A72DG235154	UNAUTHORIZED VEHICLE ACCESS - Vehicle 15741 2013 KIA OPTIMA. Status Eng. Running. Site Dennys, S/N 20723936.	
☐	3	!	8/12/2015 12:15 PM	APS	203	20716230	15767 - 2010 FORD F-150	1FTEX1E82AFA36602	DEVICE LINKED VIN detected. S/N 20716230 automatically paired.	

Deactivating Alerts

Click on the red icon in the right-most column to clear the single security alert. The date/time and username of the user who cleared the alert will be stored.

Vehicle Alert Activity

All alerts for a vehicle are viewable from the vehicle's Security > Alert Activity tab.



#	K	A	Stock #	Year	Make	Model	Trim	Color	Mileage	Site	Veh	Key	Tag	Out Reason	TD#	Days	Batt	Fuel%	Last	DTC	RSSI
1	✓	✓	15379	2006	CHRYSLER	PACIFICA	4DR F	WHI	142347	Dennys		In			1	1	13.95		1		120

#	A	Date Added	APS	Type	Code	Description	Date Cleared	
1	!	8/12/2015 12:59 PM	20723930	VEHICLE	500	UNAUTHORIZED VEHICLE ACCESS - Vehicle 15379 2006 Chrysler Pacifica. Status Eng. Running. Site Dennys, S/N 20723930.		
2	!	8/12/2015 8:42 AM	20723930	APS	202	APS Serial No. 20723930 was manually paired.		
3	!	8/1/2015 1:44 PM	20723939	APS	205	APS Serial No. 20723939 was manually unpaired.	8/5/2015 9:53 AM	✓
4	!	7/28/2015 10:32 AM	20723939	APS	202	APS Serial No. 20723939 was manually paired.	8/5/2015 9:53 AM	✓

APPENDIX A

Master Radio Specifications

APPENDIX B

APS Specifications

The CPU LED is flashed 5 times in ½ second to indicate CPU is running. The CPU LED is flashed 10 times in ½ second to indicate start of radio initialization. The CPU LED is flashed 5 times in ½ second to indicate normal operation starting. For the first 30 seconds of normal operation, the radio will send and receive every 5 seconds. The CPU LED will flash once a second. The CPU LED is extinguished to conserve battery life from then on.

Timing is based on the 4 Mhz crystal so no time calibration is required.

Battery voltage and thresholds are presented in raw un-calibrated form. A calibration factor, CalFactor, is stored in The DOG™ and can be used by the PC. A default value is provided without calibration.

Normal Operation

Current APS state is transmitted periodically to the Base Station. The interval is specified in the PollDelay parameter.

Every 10ms, battery voltage is read and compared to the threshold values. The filtering attempts to remove noise 5 times larger and ignores ramping battery voltage changes. The 4-pole filter looks for about a 1 second drop. The filtering reduces by about 1/2 the measured voltage so a 0.1 volt drop must use a DomeLightThreshold value representing about half of that (0.05 volts).

Alarm Conditions

An alarm only occurs for about 1 second at the start of the drop but can be extended by AlarmHoldTime. Only one of the battery alarms is issued at a time. DomeLight is further inhibited for DomeLightBlock seconds after other battery alarms. NOTE that multiples of these alarms can occur at once since they overlap. For example: A LowBattery can also appear as Starting (but possibly not DomeLight if the long-term average has changed). A priority filter selects a single flag among Charging, LowBattery , Starting, and DomeLight in that order.

If an alarm is issued (added) or removed, the radio is instructed to transmit the current APS state. It is transmitted AlarmSends times with AlarmResendDelay between each. If all alarms cease (Flags=0), the previous alarm flags are extended and may continue to be sent for AlarmHoldTime. In that way, short spurious 0's during DomeLight and Charging and etc. alarms are ignored until all alarms have ceased for AlarmHoldTime. • While alarms conditions are present, APS state is transmitted every AlarmPollDelay instead of PollDelay, except if LowBattery is the only alarm condition, then LowBatPollDelay is used.

General Transmission Operation

When transmission is needed, the radio is brought out of sleep mode. If it does not respond, the radio is reinitialized. The previous receive RSSI value is retrieved from the radio and inserted into the outgoing message and the CRC is calculated. The message is sent. The DOG™ will wait up to three seconds for an

optional response. If a response arrives, it can contain new configuration settings. The radio is put back to sleep after three seconds or a response arrives. If The DOG™ configuration has changed, it will be saved to Flash. The settings stored in the radio are not affected.

APPENDIX C

TROUBLESHOOTING

Vehicle Not Reporting

1. Ensure your account is not delinquent.
2. Check your Internet connection.
3. Ensure the DOGMaster computer is running.
4. Ensure the antenna and Master are properly connected.
5. Ensure the DOGMaster service is running.
6. Check the APS to ensure it is plugged into the vehicle.
7. Ensure the APS is powering on.
8. Check the APS and ensure it is visible to the Master.
9. Check the application and ensure the vehicle's VIN is being received or the APS has been manually linked to the vehicle.