

Fleet & NSN Parts Inventory Control Center

Admyon Systems

Building Smarter Business Solutions

Dashboard



PartsSystem
CONTROL CENTER

Refresh

Logout

Good Afternoon,
John Harris

Here's what's happening with your inventory today.



Export Active Stock
Total Active Stock



Low Stock Alert
0 Items Low



TOTAL PARTS OH
0



EST. VALUE
\$0.00

Cost Per Vehicle

EXPORT

Vehicle / Asset ID	Total Cost
--------------------	------------



Receive Parts
Add incoming stock to inventory



Issue Parts
Assign parts to vehicles or users



Transaction Log
View all receiving /issuing history.



Manage Database
Edit Users, Parts, and Locations.

Project Overview

The Fleet & NSN Parts Inventory Control Center is a highly secure, specialized Warehouse Management System (WMS) designed for defense contractors and heavy fleet operators. It strictly tracks specialized components using National Stock Numbers (NSN/NIIN), monitors part conditions (New vs. Refurbished), and accurately allocates maintenance costs to specific vehicles and assets.

Business Problem

Organizations maintaining defense equipment, aviation assets, or heavy logistics fleets struggle with strict inventory compliance. Standard software cannot track parts using complex NSN/NIIN military formats or differentiate between "New" and "Refurbished" conditions. When mechanics pull parts from the warehouse without accurately logging them against a specific fleet vehicle or work order, inventory shrinks rapidly, and the true maintenance cost per vehicle becomes impossible to calculate.

Our Solution

Admyon Systems engineered a secure, PIN-authenticated Inventory ERP that enforces total accountability. The system features a robust NSN/NIIN parts catalog and requires personnel to explicitly link any issued part to a specific vehicle or asset ID. By incorporating granular warehouse mapping (Aisle, Rack, Shelf, Bin) and a live "Cost Per Vehicle" tracking dashboard, the platform guarantees that every nut, bolt, and hose is accounted for and properly costed.

Key Features

- Defense-Grade Part Tracking (NSN / NIIN & Alternate Part Numbers)
- Automated "Cost Per Vehicle / Asset" Allocation
- Part Condition Tracking (New, Used, Refurbished)
- Granular Warehouse Location Mapping (Inside/Outside, Aisle, Rack, Shelf, Bin)
- Secure 4-Digit PIN Authentication for Personnel
- Live Low-Stock Alerts based on Minimum Order Quantities

Technologies Used

Technology	Used
Microsoft Access	✓
VBA (Visual Basic for Applications)	✓
SQL	✓

System Modules

- Secure System Login
- Control Center Dashboard
- Manage Parts (Master Catalog)
- Manage Inventory (Receive & Issue Parts)
- Master Transaction Log
- Database Management (Vehicles, Locations, Users)

Screenshots

PartsSystem Control Center

Dashboard

Refresh
Logout

Good Afternoon,
John Harris

Here's what's happening with your inventory today.



Export Active Stock
Total Active Stock



Low Stock Alert
0 Items Low



TOTAL PARTS OH
0



EST. VALUE
\$0.00



Receive Parts
Add incoming stock to inventory



Issue Parts
Assign parts to vehicles or users



Transaction Log
View all receiving .issuing history.



Manage Database
Edit Users, Parts, and Locations.

Cost Per VehicleEXPORT

Vehicle / Asset ID	Total Cost
--------------------	------------

A high-level executive dashboard providing instant visibility into Total Active Stock, Low Stock Alerts, and a critical "Cost Per Vehicle" ledger to monitor ongoing fleet maintenance expenses.

Manage Parts Catalog (NSN/NIIN)

Manage Parts

Part Number

2380C44

Description

SEAL, NONMETALLIC SP;

NSN NIIN

5330-01-342-3715

Alternate PN

0

Category

Bulk

Min Order Qty

5

Add New

Save

Delete

Import New Parts

Part Number	Description	NSN NIIN	Alternate PN	Category	Min Order Qty
11662995	SEAL, NONMETALLIC SP;	5330-01-342-3715	0	Bulk	5
12308212	HOSE, NONMETALLIC;	4720-00-177-0671	0	Bulk	5
11662995-1	SEAL, NONMETALLIC SP;	5330-01-140-6556	0	Bulk	0
11662995-3	HOSE, NONMETALLIC;	4720-01-045-2605	0	Bulk	0
11662995-4	HOSE, NONMETALLIC;	4720-01-106-6615	0	Bulk	0
11662995-5	HOSE, NONMETALLIC;	4720-01-110-4315	0	Bulk	0
12309272-17	HOSE, NONMETALLIC;	4720-01-240-3058	0	Bulk	0
12309272-4	HOSE, NONMETALLIC;	4720-01-215-9698	0	Bulk	0
12309272-7	HOSE, NONMETALLIC;	4720-00-278-4892	0	Bulk	0
12328582-3	RUBBER SHEET, CELLUL;	4720-01-462-1281	0	Bulk	0
12328582-5	RUBBER SHEET, CELLUL;	9320-01-473-2620	0	Bulk	0
12328582-9	RUBBER SHEET, CELLUL;	9320-01-561-9690	0	Bulk	0
12328583-10	RUBBER STRIP;	9320-01-162-3714	0	Bulk	0
12328583-17	RUBBER STRIP;	5330-01-185-0501	0	Bulk	0
12328583-19	RUBBER STRIP;	9320-01-244-4800	0	Bulk	0
12328583-2	RUBBER STRIP;	5330-01-225-1043	0	Bulk	0
12328583-20	RUBBER STRIP;	5330-01-181-6481	0	Bulk	0
12328583-3	RUBBER STRIP;	9320-01-338-2385	0	Bulk	0
12328583-5	RUBBER STRIP;	5330-01-181-6482	0	Bulk	0
12328583-6	RUBBER STRIP;	5330-01-162-3866	0	Bulk	0
12328583-7	RUBBER STRIP;	5330-01-162-3867	0	Bulk	0
12328583-8	RUBBER STRIP;	5330-01-162-3865	0	Bulk	0
12328583-9	RUBBER STRIP;	5330-01-434-4842	0	Bulk	0
12328584-2	RUBBER SHEET, SOLID;	9320-01-162-3715	0	Bulk	0
12328675-1	HOSE, NONMETALLIC;	4720-01-162-3861	0	Bulk	0
12330526-1	HOSE, NONMETALLIC;	4720-01-215-9699	0	Bulk	0
12330526-2	HOSE, NONMETALLIC;	4720-00-580-6944	0	Bulk	0
12330526-3	HOSE, NONMETALLIC;	4720-01-389-0281	0	Bulk	0
1322164806-1	HOSE, NONMETALLIC;	4720-00-847-1710	0	Bulk	0
20R1ECS-C-32XR	HOSE, NONMETALLIC;	4720-00-189-2777	0	Bulk	0
28C715A48AC1217	RUBBER SHEET, SOLID;	9320-01-501-0006	0	Bulk	0
8724783-1	HOSE, AIR DUCT;			Bulk	0

The master parts directory specifically designed to handle military and aviation compliance, tracking precise NSN/NIIN codes, alternate part numbers, and establishing Minimum Order Quantities (MOQs).

Issue Parts (Check Out) Form

Issue Parts

Issue Parts (Check Out)

Part Number

Category

NSN / NIIN

Description

Issued To (Personnel) *

Assign to Vehicle/Asset *

Quantity to Issue *

Condition *

Take From Location *

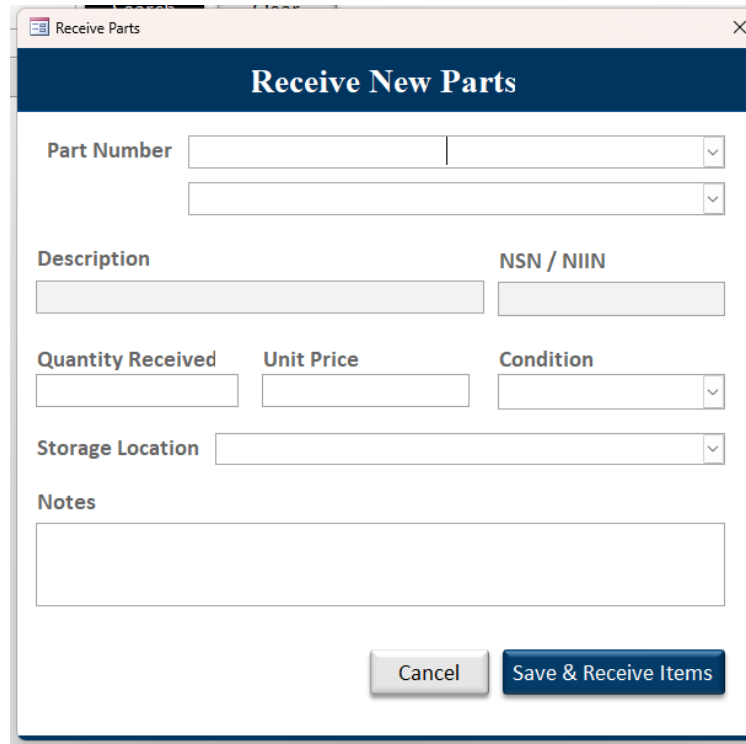
Reason / Work Order Notes

Cancel

Confirm Issue

A strict accountability interface where personnel must log out parts by assigning them to a specific Vehicle/Asset, noting the part's condition, and attaching relevant Work Order notes.

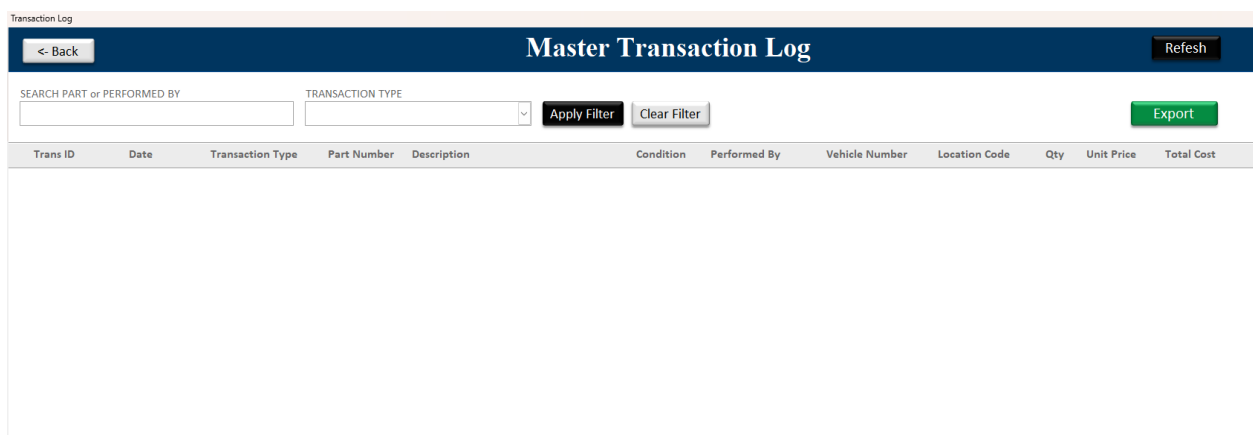
Receive New Parts



The 'Receive New Parts' form is a modal window with a dark blue header. It contains several input fields: 'Part Number' with a dropdown, 'Description' and 'NSN / NIIN' as text inputs, 'Quantity Received', 'Unit Price', and 'Condition' as text inputs with a dropdown for 'Condition', and 'Storage Location' as a dropdown. There is a large 'Notes' text area at the bottom. At the bottom right, there are two buttons: 'Cancel' and 'Save & Receive Items'.

The inbound logistics module for warehouse managers to log incoming stock, capture unit pricing, define the exact condition, and assign the inventory to a specific storage location.

Master Transaction Log



The 'Master Transaction Log' interface features a dark blue header with a '< Back' button and a 'Refresh' button. Below the header, there are search filters: 'SEARCH PART or PERFORMED BY' with a text input, 'TRANSACTION TYPE' with a dropdown, and buttons for 'Apply Filter', 'Clear Filter', and 'Export'. The main area is a table with the following columns: Trans ID, Date, Transaction Type, Part Number, Description, Condition, Performed By, Vehicle Number, Location Code, Qty, Unit Price, and Total Cost. The table is currently empty.

Trans ID	Date	Transaction Type	Part Number	Description	Condition	Performed By	Vehicle Number	Location Code	Qty	Unit Price	Total Cost
----------	------	------------------	-------------	-------------	-----------	--------------	----------------	---------------	-----	------------	------------

An unalterable audit trail that logs every single inventory movement (Receiving and Issuing), capturing who performed the action, the total cost, and the associated vehicle.

Database Management (Locations & Vehicles)

frmDatabaseManagement

<- Back

Database Management

() Refresh

Manage Users, Master Parts, Vehicles, and Locations

Manage Parts

Manage Users

User ID	First Name	Last Name	Email	Job Title	Phone Number	Badge Number	Role	Passcode	Date Added
(New)									2026-08-08 15:50

Save

Manage Vehicles

Vehicle ID	Vehicle Number	Description
(New)		

Save

Conditions

New
Refurbished
Used

Save

Manage Locations

Location ID	Location Code	Inside Outside	Aisle	Rack	Shelf	Bin
(New)						

Save

The administrative backend enabling granular physical warehouse mapping (Aisles, Racks, Shelves, Bins) and the continuous addition of new fleet vehicles to the system.

Business Benefits

- ✓ Achieved 100% accurate fleet maintenance costing by forcing part issuances to be linked to specific vehicles
- ✓ Ensured defense/military compliance by natively supporting NSN/NIIN tracking formats
- ✓ Reduced inventory shrinkage and theft through secure PIN-based logins and unalterable transaction logs
- ✓ Optimized warehouse picking speeds by implementing a granular Aisle/Rack/Bin mapping system
- ✓ Minimized equipment downtime by utilizing automated low-stock alerts to trigger timely reordering

Project Highlights

- NSN/NIIN Compliance
- Fleet Maintenance Costing
- Asset Condition Tracking (New/Refurbished)
- Secure Audit Trails
- Granular Warehouse Mapping

Future Enhancements

Future versions of this system may include:

- Barcode and QR code scanner integration for rapid receiving and issuing of parts on the warehouse floor.
- Automated Purchase Order (PO) generation triggered instantly when parts hit their Minimum Order Quantity.
- API integration with fleet telematics systems to predict part failures based on vehicle mileage or engine hours.
- A mobile tablet interface for mechanics to request parts directly from the maintenance bay.

Project Summary

The Fleet & NSN Parts Inventory Control Center demonstrates Admyon Systems' capability to build software for the most rigorous and compliant industrial environments. By bridging the gap between exact warehouse locations, part conditions, and specific fleet vehicles, the platform equips maintenance facilities with flawless inventory visibility and precise operational costing.