

OFFICIAL USER GUIDE



HVAC Appliance Tracking System

Field Technician & Driver Reference Manual

Complete guide to scanning, cataloging, and tracking appliances from decommissioning through the full recycling lifecycle — including Freon recovery documentation and carbon impact reporting.

EDITION

Version 1.0

FOR

Technicians & Drivers

YEAR

2026

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Getting Started

Everything you need to log in, understand your role, and navigate the app for the first time.

1.1 — Roles in the System

The app supports three primary user roles. Your experience will vary based on which role you are assigned.



Field Technician

Scans appliances on-site, logs serial numbers, captures data tags, documents Freon recovery, and assigns appliances to a pickup company.



Driver / Pickup

Confirms pickup of appliances, logs transport details, and hands off appliances to the recycling facility with a digital record.



Recycling Company

Receives appliance, confirms processing, and closes the appliance passport once fully processed.

1.2 — Logging In

1

Open the App

Launch the HVAC Tracking app on your mobile device or tablet. Your company admin will provide a download link or app store listing.

2

Enter Your Credentials

Use the email address and temporary password provided by your company administrator.

3

Set a New Password

On first login you will be prompted to create a new password. Choose something memorable with at least 8 characters.

4

Select Your Company

If you belong to multiple companies or work as a contractor, select the correct company from the dropdown before proceeding.

If you forget your password, tap **Forgot Password** on the login screen and a reset link will be sent to your email within 2 minutes.

1.3 — App Navigation Overview



Dashboard

Your daily summary — pending pickups, recently scanned appliances, and any items requiring attention.



Scan

Open the camera to scan a serial number or data tag barcode/QR code from an appliance.



My Jobs

All appliances and jobs currently assigned to you, sorted by status and date.



Reports

Carbon impact summaries, Freon recovery logs, and audit-ready documentation exports (admin/manager only).

i Company Assignment

Every action in the app is automatically tagged to your company account. Appliances you scan are added to your company's database and linked to your user profile. You cannot access another company's appliances or jobs.

Scanning Appliances

The core of your workflow — capturing appliance data accurately in the field using your phone's camera.

2.1 — What You Will Scan

Most appliances have two important labels you need to capture:

Serial Number Tag

Usually found on the back or inside the door panel. Contains a unique identifier for that specific unit. This is the primary ID used to track the appliance throughout its lifecycle.

Looks like: A white sticker with a barcode and alphanumeric code (e.g., `XC22-00483-A`)

Data / Specification Tag

Provides manufacturer details: brand name, model number, refrigerant type (R-22, R-410A, etc.), BTU capacity, and manufacture date.

Looks like: A larger label with multiple fields, often yellow or silver.

2.2 — Step-by-Step Scanning Process

1 Open the Scan Screen

From the app home screen, tap the **Scan** button (camera icon) at the bottom of the screen dashboard.

2 Point Camera at the Serial Number

Hold your phone steady, 6–12 inches from the label. The app will automatically detect and capture the barcode. You will feel a brief vibration and hear a beep when it is captured.

3 Confirm the Serial Number

The app displays the scanned serial number. Verify it matches what is printed on the label. If it doesn't match, tap **Re-scan** or enter it manually.

4 Scan the Data Tag

After confirming the serial number, the app prompts you to scan the data tag. Repeat the process: hold steady and let the camera capture it automatically.

5 Complete the Appliance Entry Form

Fill in any fields the app was unable to read automatically (see 2.3 below). Take a photo of required by your company.

6

Assign and Save

Select the company that owns this job from the dropdown, then tap **Save Appliance**. The appliance is saved in the database with your user profile attached.

2.3 — Appliance Entry Fields

After scanning, you may need to fill in or verify the following fields:

Manufacturer REQUIRED	Brand name (e.g., Carrier, Trane, Lennox, Rheem)
Model Number REQUIRED	Full model string from the data tag
Serial Number REQUIRED	Auto-filled from scan — confirm accuracy
Appliance Type REQUIRED	Central AC, Heat Pump, Furnace, Package Unit, etc.
Refrigerant Type REQUIRED	R-22, R-410A, R-32, or other — from data tag
Refrigerant Capacity (lbs) REQUIRED	Total factory charge weight listed on data tag
Year Manufactured OPTIONAL	If visible on the data tag or derivable from serial
Condition REQUIRED	Working, Non-Working, or Unknown
Photo OPTIONAL	Photo of the appliance and/or labels for verification
Notes OPTIONAL	Any relevant observations (damage, missing parts, etc.)

💡 Pro Tip

Poor lighting? Tap the flashlight icon in the scan screen to turn on your device's torch. For reflective surfaces, try scanning at a slight angle to reduce glare.

2.4 — Manual Entry (When Scanning Fails)

If the barcode is damaged, faded, or unreadable, tap **Enter Manually** below the scan viewfinder.

number exactly as it appears on the label, including dashes and letters. For the data tag, fill in each field individually using the data tag as reference.

⚠ Important

Manual entries are flagged in the system for quality review. Your supervisor may follow up to verify accuracy. Always photograph the appliance and both labels when entering manually.

i Offline Mode

The app works without an internet connection. Scanned appliances are saved locally and automatically sync when you reconnect to Wi-Fi or cellular data. A sync icon will appear in the header while items are pending sync.

Appliance Digital Passport

Every appliance in the system has a Digital Passport — a permanent, unalterable record that follows the unit from the moment it is scanned all the way through its complete recycling process.

3.1 — What is the Digital Passport?

The Digital Passport is the core concept of the HVAC Tracking system. Think of it as a birth-to-death record for each appliance. Once a technician scans an appliance, a unique passport is created. Every person who interacts with that appliance — the tech, the driver, the recycling company — adds their digital signature to the record.

The passport cannot be deleted or altered retroactively. Every action is timestamped, geo-tagged, and signed by the user who performed it. This creates an auditable chain of custody that satisfies regulatory and industry compliance requirements.

3.2 — Passport Lifecycle Timeline



Technician Scans

Appliance is scanned, cataloged, and assigned to your company. Serial number, model, and refrigerant type are recorded.



Driver Pickup

A driver confirms pickup and logs the date, time, vehicle, and destination facility. The passport record is updated.



Arrives at Facility

The recycling company scans the appliance on arrival, confirming receipt and logging the intake date and location.



Refrigerant Recovered

A certified technician recovers any remaining refrigerant. The amount recovered, technician ID, and recovery date are logged.



Appliance Processed

The unit is disassembled and materials are separated (metal, foam, compressor oil, etc.). Processing notes and final disposition are logged.

are logged.



Passport Closed

The recycling company marks the passport complete. A final certificate of destruction is issued and at record.

3.3 — What the Passport Contains

IDENTITY

- Unique Passport ID (system-generated)
- Serial number and model number
- Manufacturer and appliance type
- Year of manufacture
- Refrigerant type and original factory charge

ORIGIN

- Technician name and employee ID
- Company name and account
- Date and time of scan
- GPS coordinates of scan location
- Photo(s) of the appliance and labels

CHAIN OF CUSTODY

- Driver name and vehicle ID
- Pickup date, time, and location
- Receiving facility name and address
- Arrival confirmation timestamp
- All intermediate transfer events

ENVIRONMENTAL RECORD

- Amount of refrigerant recovered (lbs)
- Recovery technician certification number
- Carbon impact equivalent (lbs CO₂e)
- Materials recovered (metal, foam, oil)
- Certificate of destruction number

3.4 — Viewing a Passport

To view any appliance's passport, tap **My Jobs**, select an appliance from the list, and then tap **View Passport**. You can see the full timeline, all attached documents, and current status at a glance.

The passport can be shared as a PDF or a secure link directly from this screen. Use this when a contractor, regulator, or auditor needs proof of proper appliance disposal.

Pro Tip

Passport status indicators: **Blue** = In Progress, **Yellow** = Awaiting Pickup, **Orange** = In Transit, **Green** = Recycled & Closed.

i Compliance Note

The Digital Passport is designed to meet EPA Section 608 recordkeeping requirements for refrigerant as well as state-level appliance recycling regulations. Always ensure your entries are complete and accurate. Incomplete passports cannot be closed by the recycling company.

Driver Pickup Workflow

As a driver, your job is to safely collect decommissioned appliances and transport them to the recycling facility — with every step logged in the app.

4.1 — Receiving a Pickup Assignment

Pickup jobs are created by field technicians or your company dispatcher after appliances have been decommissioned. You will receive a notification in the app when a job is assigned to you.

1 View Your Assignment

Tap **My Jobs** then select the **Pickups** tab. Each card shows the pickup address, number of appliances, and scheduled date/time.

2 Accept or Schedule the Job

Tap the job card and review the appliance list. Tap **Accept Job** to confirm you will handle it. If you cannot accept, tap **Schedule** to allow your dispatcher to reassign.

3 Review Appliance List

Before leaving for the pickup, review the full list of appliances at the location. Note any special flags (e.g., appliances still containing refrigerant that has not yet been recovered).

⚠ Important

Never transport an appliance flagged as **"Freon Not Yet Recovered"** without first notifying your supervisor. Regulations require refrigerant to be recovered before transport in most jurisdictions.

4.2 — At the Pickup Location

1 Arrive and Check In

Open the job in the app and tap **I Have Arrived**. This logs your arrival time and GPS location.

2 Scan Each Appliance

Scan the serial number of each appliance you are loading. The app will match it to the technician's entry. If an appliance does not match — do not load it and contact your dispatcher.

3 Confirm Physical Condition

For each scanned appliance, confirm the physical condition: No Damage, Minor Damage, or Major Damage. Note any damage in the comments field.

4 Photograph the Load

Before closing the truck, take a photo of the loaded appliances from the app's camera screen. The photo is attached to the job record.

5 Start Transport

Tap **Depart Pickup Location**. The app records your departure time. All appliances on this job are marked as *In Transit* in the system.

4.3 — Arriving at the Recycling Facility

1 Check In at the Facility

When you arrive at the recycling facility, open the job and tap **Arrived at Facility**. Select the status from the dropdown list.

2 Hand Off to Facility Staff

The facility will scan each appliance on arrival using their own device. Confirm the number of appliances matches your manifest.

3 Get a Digital Receipt

After the facility confirms receipt, the app generates a digital handoff receipt. Both you and the facility representative will have a copy in the system. Your job is now *Delivered*.

Pro Tip

If you arrive at a facility and they do not have the app or cannot scan, select **Manual Handoff** on the job screen and enter the facility contact name. Your supervisor will be notified to follow up.

4.4 — Handling Exceptions

Appliance Not at Location

Open the job, tap the appliance, and select

Not Found at Location

. Add a note and the app notifies the technician who scanned it.

Extra Appliances at Location

If there are unscanned appliances at the pickup site, do not load them without approval. Use

Report Unscanned Appliance

to alert your dispatcher.

Accident or Damage During Transport

Use

Report Incident

from the job screen. Fill in the incident form and upload photos. This creates a flag on the passport for all affected appliances.

i Your Name on the Passport

As the driver, your name, employee ID, vehicle details, and every timestamp are permanently attached to the appliance's Digital Passport for the jobs you handle. Accuracy matters — it is part of the regulatory requirements.

Recycling Company Process

As a recycling facility, you are the final stop in the appliance lifecycle. Your role is to receive, process, and officially close each Digital Passport.

5.1 — Receiving Appliances

1

Receiving Mode

From the app dashboard, tap **Receive Appliances**. This puts the app into receiving mode, incoming deliveries.

2

Scan Each Incoming Appliance

As appliances are unloaded from the truck, scan each serial number barcode. The app ins the appliance's passport and confirms it was expected at your facility.

3

Verify the Manifest

Once all appliances are scanned, compare your count against the driver's manifest display. Any discrepancies are flagged automatically.

4

Confirm Receipt

Tap **Confirm Receipt** for the delivery. The driver's job is marked Delivered and both parties timestamped receipt. All appliances transition to *At Facility* status.

Pro Tip

If the driver does not have the app, you can initiate a manual receipt by entering the job number from the paperwork. Contact your account manager if you encounter a delivery with no associated digital record.

5.2 — Processing Appliances

Each appliance must be processed in sequence. The app enforces this order to ensure compliance. You cannot close a passport without completing each required step.

STEP A

Refrigerant Recovery

Before any disassembly, a certified technician must recover all remaining refrigerant. See Section 4 for documentation requirements. Mark as complete in the app once recovery is finished.

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STEP B

Compressor Oil Drain

Log the volume of compressor oil drained and the disposal method (recycled, sent for processing)

STEP C

Foam Removal

Log whether the appliance contained CFC-blown or HFC-blown foam insulation. This is required for impact calculation.

STEP D

Metal Shredding / Material Recovery

Record the weight of ferrous and non-ferrous metals recovered. These values contribute to the final summary in reports.

5.3 — Closing the Passport

1

Mark All Steps Complete

Each processing step (A–D above) must be checked off in the app. Incomplete steps prevent passport closure.

2

Upload Supporting Documents

Attach any required documents — refrigerant recovery forms (EPA 608 records), weight tickets, and processing reports — directly from this screen.

3

Issue Certificate of Destruction

Tap **Close Passport & Issue Certificate**. The system generates a Certificate of Destruction number, timestamp, and your facility's digital signature.

4

Distribution

The certificate is automatically sent to the original technician's company, the driver's company, and is stored in the appliance passport forever. No manual emailing required.

i Batch Processing

If you process many appliances from the same company in one day, use **Batch Close** from the dashboard. This lets you close up to 50 passports at once after confirming all processing steps are complete for each.

Freon Recovery & Documentation

Proper refrigerant recovery and documentation is a legal requirement under EPA Section 608. This section explains how to log every recovery event correctly in the app.

6.1 — Why This Matters

Refrigerants such as R-22 (Freon), R-410A, and R-32 are potent greenhouse gases. A single pound of R-22 has a global warming potential (GWP) of 1,810 — meaning it traps 1,810 times more heat than CO₂ over 100 years. Proper recovery and documentation:



Ensures Legal Compliance

EPA Section 608 mandates that refrigerant be recovered before appliance disposal. Violations can result in fines up to \$44,539 per day, per violation.



Calculates Carbon Impact

The app uses your recovery data to calculate the CO₂ equivalent prevented from entering the atmosphere, which is a key metric in your company's environmental reports.



Creates the Audit Trail

Regulatory agencies and utility programs (e.g., Appliance Recycling programs) require proof of refrigerant recovery. The app generates this documentation automatically.

6.2 — Logging Freon Recovery (Technician)

Field technicians recover refrigerant before the appliance is picked up. Here is how to log it:

1

Open the Appliance Record

Navigate to the appliance in **My Jobs** and tap **Log Refrigerant Recovery**.

2

Confirm Refrigerant Type

The refrigerant type is pre-filled from the data tag scan. Verify it is correct. If the appliance was retrofitted with a different refrigerant, update it here.

Fill in the Recovery Form

3 Fill in the Recovery Form

Complete all required fields (see 6.3 below).

4 Sign the Record

Tap **Sign & Submit**. The app will use your stored EPA 608 certification number (set up in your profile). Your digital signature and certification number are attached to the record.

⚠ Important

Only personnel with a valid EPA Section 608 certification may perform refrigerant recovery. Your EPA certification number must be on file in your app profile before you can submit a recovery record. Contact your admin to add or update it.

6.3 — Freon Recovery Form Fields

Refrigerant Type REQUIRED	R-22, R-410A, R-32, R-407C, etc.
Amount Recovered (lbs) REQUIRED	Weight recovered — read directly from recovery machine gauge
Amount Remaining (estimated) REQUIRED	Remaining charge that could not be recovered (enter 0 if fully recovered)
Recovery Machine ID / Model REQUIRED	Serial or model number of the recovery equipment used
Recovery Date & Time REQUIRED	Auto-filled from device clock — verify accuracy
Technician EPA 608 Cert. # REQUIRED	Auto-filled from your profile — verify it is current
Disposal Method REQUIRED	Reclaim, Destroy, Return to Supplier, or Reuse On-Site
Reclaim Facility Name OPTIONAL	Required if Disposal Method = Reclaim or Destroy
Cylinder ID / Tracking # OPTIONAL	If refrigerant is stored in a labeled recovery cylinder
Notes OPTIONAL	Any anomalies, leaks, or non-standard conditions observed

6.4 — Understanding the Carbon Impact Calculation

The app automatically calculates the carbon impact of recovered refrigerant using the IPCC AR4 Potential (GWP) values:

REFRIGERANT	GWP (CO ₂ E PER LB)	COMMON USE
R-22 (HCFC-22)	1,810×	Pre-2010 AC units
R-410A	2,090×	Modern residential AC
R-32	675×	Newer mini-splits
R-407C	1,774×	Commercial systems
R-134a	1,430×	Refrigerators

Example: Recovering 3 lbs of R-22 prevents the equivalent of **5,430 lbs (2.46 metric tons)** of CO₂ from entering the atmosphere. This appears in your company's environmental impact report.

 Pro Tip

You can view your personal recovery totals and carbon impact score in **My Profile → My Environmental Impact**. This is a great snapshot to share with customers who ask about responsible disposal.

 Record Retention

EPA Section 608 requires refrigerant recovery records to be retained for a minimum of 3 years. The app retains records indefinitely and makes them available for export at any time.

Reports & Analytics

The app automatically generates reports from your data. No manual spreadsheets needed — everything is calculated and formatted for you.

7.1 — Available Reports



Carbon Impact Report

Available to: Managers, Admins

Shows total CO₂ equivalent prevented through refrigerant recovery, broken down by refrigerant type, technician, and time period. Exportable as PDF or CSV for use in sustainability reporting.

Total lbs recovered

CO₂e prevented (metric tons)

By refrigerant type

By technician

By date range



Appliance Inventory Report

Available to: All Roles

Lists all appliances in the system for your company, filterable by status, type, technician, or date range.

Total units scanned

By appliance type

By

By status

By technician



Chain of Custody Report

Available to: Managers, Admins

Full audit trail for any appliance — who scanned it, who picked it up, which facility received it, and when the passport was closed.

Passport timeline

All participants

Timestamps & GPS

Attached documents

Certificate of Destruction #



Freon Recovery Log

Available to: Technicians, Managers

Detailed refrigerant recovery record for regulatory compliance. Includes technician certification numbers, equipment used, and amounts recovered.

Recovery events

EPA cert. numbers

Recovery machine IDs

Refrigerant amounts

Disposal methods



Company Performance Summary

Available to: Admins

High-level overview of your company's activity — total units processed, average processing time, and environmental impact over a selected period.

Units scanned

Units fully processed

Average cycle time



Recycler Activity Report

Available to: Recycling Company

For recycling facilities — shows initial processing status, open passports, and units recovered.

Units received

Units processed

Open pa

Total CO₂e prevented

Total lbs refrigerant recovered

Metals recovered (lbs)

Certificates issued

7.2 — Generating a Report

1. Tap **Reports** in the bottom navigation bar.
2. Select the report type from the list.
3. Set your filters — date range, technician, company, appliance type, etc.
4. Tap **Generate Report**. Most reports are ready within a few seconds.
5. Tap **Export** to download as PDF, CSV, or Excel. The file is sent to your email and also saved in **Saved**

7.3 — Scheduled Reports

Admins can set up automated report delivery on a schedule:

Weekly Summary

Delivered every Monday morning — shows the prior week's scans, pickups, and Freon recovery totals.

Monthly Carbon Impact

Sent on the 1st of each month — full CO₂e impact report for the prior month, ready for sustainability reporting

Quarterly Compliance Package

A bundled PDF of all Freon recovery logs and Certificates of Destruction for the quarter — ideal for regulators

To configure scheduled reports, go to **Settings** → **Reports** → **Schedule** (Admin access required).

Pro Tip

The **Carbon Impact Report** is particularly useful for utility rebate programs, ENERGY STAR claims, and sustainability disclosures. Save a copy after each quarter for your records.

Data Accuracy

Reports are only as accurate as the data entered in the field. Incomplete Freon recovery forms, missing numbers, or unresolved manual entries will cause discrepancies in totals. Encourage your team to complete fields at the time of scanning.

Glossary

Key terms and definitions used throughout this guide and in the HVAC Tracking app.

Terms & Definitions

Digital Passport	A permanent, unalterable record created for each appliance the moment it is installed. It tracks every person and step in the appliance's lifecycle from decommissioning through disposal.
Serial Number	A unique identifier assigned to a specific appliance unit by the manufacturer. It is the primary key to track an appliance in the system.
Data Tag	A label affixed to an appliance listing technical specifications: manufacturer, model number, refrigerant type, factory charge, voltage, and BTU capacity.
Model Number	A code that identifies the model (not the individual unit). Multiple units can share the same model number but each will have a unique serial number.
Refrigerant	A chemical compound used in HVAC systems for heat exchange. Common types include R-22 (Freon), R-410A (Puron), and R-32.
R-22 / Freon	An older refrigerant phased out under the Montreal Protocol due to its ozone-depleting properties. Very common in pre-2010 equipment. High GWP of 1,810.
R-410A / Puron	The refrigerant that replaced R-22 in most residential HVAC equipment from 2010 onwards. It has a GWP of 2,090. Being phased out in favor of lower-GWP alternatives.
GWP (Global Warming Potential)	A measure of how much heat a greenhouse gas traps compared to CO ₂ over a 100-year period. A refrigerant with GWP of 1,810 traps 1,810 times more heat per pound than CO ₂ .
CO₂e (Carbon Dioxide Equivalent)	A standard unit for expressing the impact of greenhouse gas emissions. Calculated by multiplying the weight of a refrigerant by its GWP value.
EPA Section 608	U.S. Environmental Protection Agency regulation that governs the handling, recycling, and reclaim of refrigerants. Technicians must be certified under Section 608 to handle refrigerants.
Freon Recovery	The process of removing refrigerant from an appliance before it is disposed of. The refrigerant is captured in a recovery cylinder and can be recycled or reclaimed.

disposal or reclaim.

Recovery Machine

Specialized equipment used to extract refrigerant from an HVAC appliance and store it in a recovery cylinder. Must be EPA-approved.

Reclaim

The process of reprocessing used refrigerant to like-new specifications, making it ready for reuse. Distinct from recovery (which just removes it from the appliance).

Chain of Custody

The documented sequence of possession and handling of an item. In this system, it tracks every person who touched an appliance from initial scan through final recycling.

Certificate of Destruction

A document issued by the recycling facility confirming that an appliance has been properly processed and its materials recovered or disposed of responsibly.

Passport Status

The current stage of an appliance's lifecycle in the system. Statuses include Awaiting Pickup, In Transit, At Facility, Processing, and Closed.

Batch Close

A feature for recycling facilities to close multiple appliance passports at once when all processing steps are complete.

Manual Entry

A fallback method for logging appliance data by typing it directly when scanner entries are flagged for quality review.

Compressor Oil

Lubricating oil inside the HVAC compressor. Must be drained and disposed of according to local hazardous waste regulations during appliance processing.

CFC-blown / HFC-blown Foam

Insulation foam in refrigerators and freezers that may contain blowing agent with high GWP. Proper foam destruction during recycling prevents these gases from being released.

Offline Mode

The app's ability to record scans and data without an active internet connection, saving it automatically when connectivity is restored.

Dispatcher

A company staff member who assigns pickup jobs to drivers and manages the scheduling of appliance pickups.

Need More Help?

If you encounter a term or workflow step not covered in this guide, contact your company administrator or reach out to the support team through the app by tapping **Help** → **Contact Support**.