DENSO

DENSO Refrigeration Unit — Aeon

Toyota Regius Ace Fridge Van

Australian — Japanese Imported Toyota Hiace KDH201

DENSO Aeon (CGA 138) Fridge / Freezer English Workshop Manual

Re-authored for workshop use on this vehicle · R134a · shareable floor edition



WORKSHOP MANUAL

Written so another workshop can service this fridge van without the Japanese-only books.
Keep with the vehicle · Read before work.

What this book is: An English re-authoring of the DENSO Aeon owner / operator manual, plus vehicle-specific photos and fuse finding for an Australian Japanese-import Toyota Hiace / Regius Ace **KDH201** with DENSO Aeon CGA 138 / R134a. Not a Toyota or DENSO official publication — for trade / workshop sharing.

Status: Full Aeon English body through faults (pages **1–42**) in this edition. Appendix = this van's photos + COOLER 15A / F3–F4 fuse notes. Ready for website share once reviewed.

■ Contents ■ — This workshop pack

Footer on Aeon body pages shows Aeon page 1–14 (matches the translated ■■). Front matter uses pack page numbers.

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Please read this section

Things you should know

1. About this manual

This manual covers precautions, correct use, maintenance, and fault response for DENSO refrigeration units (including optional equipment).

Depending on the vehicle, descriptions of equipment not fitted to your unit may appear. Please allow for differences between your specification and this text. Specifications may change without notice.

2. About the Fluorocarbons Emission Control Act (Japan)

This product is covered by Japan’s Fluorocarbons Emission Control Act. By law, the manager (user) of refrigeration / freezing equipment must:

Regulation of fluorocarbon emissions has been tightened by amendments: failure to meet obligations can lead to fines without prior administrative guidance. Please operate appropriately.

- Perform a **simple inspection at least once every 3 months**. See maintenance section in the full Aeon PDF for details.
- If refrigerant leakage or equipment failure is found, arrange **prompt repair** (dealer or nearest service station).
- **Record** inspection, servicing, and repair content and results, and **keep records for 3 years after disposal**.
- Filling and recovery of fluorocarbons must be done by a **Class I fluorocarbon filling / recovery operator**.
- When requesting disposal after refrigerant recovery, issue a **copy of the collection certificate**.

Please read this section

For safe use

1. Safety precautions

To use the refrigeration unit safely, read and follow the precautions in this manual.

2. Explanation of symbols

Symbol	Meaning
DANGER	Incorrect handling may cause death or serious injury, with high urgency.
WARNING	Incorrect handling may cause death or serious injury.
CAUTION	Incorrect handling may cause injury or property damage.
Prohibited	Action that must not be done.
Required	Action you must do (e.g. earthing).
Note	Product may be damaged or may not perform as designed.
Advice	Information useful when working.
Reference	Useful knowledge to be aware of.
Front/rear/left/right	Unless stated otherwise, as seen from the driver’s seat.

Serious injury includes blindness, burns, electric shock, fracture, poisoning, etc. that leave after-effects or need hospitalisation / long outpatient treatment.

3. Precautions when using / inspecting the refrigeration unit

DANGER

Do not operate the refrigeration control panel while driving. Attention to surroundings may drop, or driving may be impaired, causing an accident. Stop the vehicle before operating the panel.

WARNING

- **Do not run the engine in poorly ventilated places such as indoor car parks.** Risk of carbon monoxide poisoning.
- **Do not operate the refrigeration unit where flammable gas may leak.** Risk of ignition.
- **Do not operate at petrol stations or other explosive atmospheres.** Ignition of vaporised petrol can cause explosion, smoke, or fire.
- **Do not put volatile or flammable materials in the cargo compartment.**
- **If the unit is abnormal or faulty, stop it promptly.** Continued use can cause leakage, electric shock, smoke, or fire.
- **Do not touch rotating parts such as fans while the unit is running.**
- **Do not put sticks or hands into air intakes or outlets.** Internal fans can cause injury or damage.

WARNING (continued)

- **When cleaning, inspecting, or servicing, turn the control-panel run switch OFF, then stop the engine.** Leaving run ON and stopping only the engine can cause unexpected start-up.
- **Do not pour water on, or wash, electrical parts with water.**
- **Before closing the cargo door, confirm nobody is inside.**
- **Confirm the emergency alarm works** (horn sounds when the switch is ON).
- **If refrigerant or compressor oil leaks,** avoid eye contact, skin contact, inhalation, or ingestion.
- **If you find a refrigerant leak,** contact your dealer or nearest service station immediately.
- **If the vehicle is submerged above tyre height,** do not use the refrigeration unit; contact service immediately.
- **If refrigeration parts have been flooded,** do not use the unit; contact service immediately.

WARNING (continued)

- **When climbing a stepladder for cleaning or inspection, watch your footing.**
- **Do not allow oil, lubricant, solvent, or detergent onto resin parts.** Wipe thoroughly if contact occurs.
- **Before driving, check refrigeration parts (units, covers, etc.) for damage and secure mounting.** Repair play, cracks, or damage before operating.

CAUTION

- **When inspecting or cleaning, apply the parking brake and chock the wheels.**
- **Use only as a transport refrigeration unit.**
- **Do not climb on, hang from, or put your feet on the refrigeration unit.**
- **Do not touch refrigerant piping while the unit is running or immediately after stopping** — piping becomes hot.

4. Precautions during inspection / repair

WARNING

- **Do not run the refrigeration unit during inspection or repair.** Hang a “Work in progress” tag on the control panel.
- **Always wear work clothing, safety helmet, safety shoes, and safety glasses.**
- **Never dismantle or repair the unit unless you are a specialist.**
- **Do not modify the unit or change its specification.**
- **Do not use fuses other than the specified type and rating.** Copper wire as a fuse can cause fire / shock.
- **Do not transfer the refrigeration unit to another vehicle unless you are a specialist.**
- **Do not use non-specified refrigerant or compressor oil.**

CAUTION

If vehicle repair involves welding, disconnect the battery negative (–) terminal before starting welding. Otherwise the refrigeration unit may be damaged.

5. Precautions after an accident

WARNING

If a personal injury, property damage, or environmentally significant accident occurs, contact police, fire, or other public authorities promptly. Also contact your dealer or nearest service station to prevent secondary damage.

After an accident, do not use the refrigeration unit; have your dealer or nearest service station inspect it immediately. Broken or loosely fixed parts can detach while driving.

Please read this section

For long, optimal use

1. Requests for use

To use the unit for a long time in optimal condition, and to protect cargo quality, observe the following.

2. Before starting work

Before driving, check refrigeration parts for damage and secure mounting. After starting the engine, check for unusual noises. Repair any play, cracks, or damage before operating.

Inspect ice build-up on the cooling unit (evaporator) and elsewhere; defrost if iced. Operating while iced can cause failure and loss of performance.

[Reference] Defrost methods

- **Method 1:** Stop the unit, open the doors, and allow natural thawing.
- **Method 2:** In low ambient temperatures, stop the unit and pour lukewarm water on drain paths and the cooling unit (evaporator).

Cool the cargo and the compartment to the correct temperature **before** loading. If pre-cooling is poor, contact service before loading.

Leave gaps between cargo and compartment walls so cold air can circulate. Without gaps, temperatures become uneven and cargo quality falls.

Waterproof cargo that is sensitive to water (drops from the cooling unit or splash).

Run the refrigeration unit for at least 5 minutes once a week. Regular running helps prevent compressor failure.

3. During delivery

- Park in the shade whenever possible — strong sun can affect cooling performance.
- Open and close partitions quickly — cold air escapes while open.
- Load and unload refrigerated cargo quickly.
- **Stop the refrigeration unit before opening or closing partitions.** Frost while running can make it harder to pull temperature down again.
- Curtains help reduce outside-air entry and cold-air loss during loading/unloading.

4. After finishing work

• Open doors and partitions to dry the compartment — using without drying promotes ice.

• Clean and keep the compartment hygienic.

• **Do not use high-pressure or steam cleaners.** High pressure can deform condenser fins; steam can raise pressure and cause failure.

• If mud or dust is on the condenser fins, wash with water. After washing, run the unit to remove moisture from fans and motors.

5. Example cargo storage temperatures

Typical holding temperatures (indicative — Japanese chart F001059 is the authority):

Category	Examples (indicative)
Frozen foods	Ice cream; frozen fruit/juice; frozen fish/meat/ham — typically about −20 to −10 °C
Fresh foods	Processed/raw meat; eggs; sausage; bacon/ham — often about −5 to +5 °C (varies)
Dairy	Margarine; cheese; milk/cream; butter
Fresh seafood	Fresh fish/oysters; smoked fish
Fresh fruit	Grapes/apples; cherries/plums; melon/pears; citrus; banana
Vegetables / flowers	Asparagus; potato; onion; tomato; cut flowers
Confectionery	Yeast; honey; chocolate/candy
Other	Film; pharmaceuticals

Please read this section

Refrigerator parts layout

1. Component layout diagram

On this Regius Ace (CGA 138), the cooling unit (evaporator) sits on the cargo ceiling / bulkhead. Condensing / compressor parts and insulated refrigerant lines are on the vehicle; the DENSO control panel is in the dash below the radio. See Appendix photos.

(Original Aeon PDF page 12 is a parts layout drawing — replaced here with this-van layout notes and Appendix photographs.)



This van — cargo evaporator / cooling unit (CGA 138)

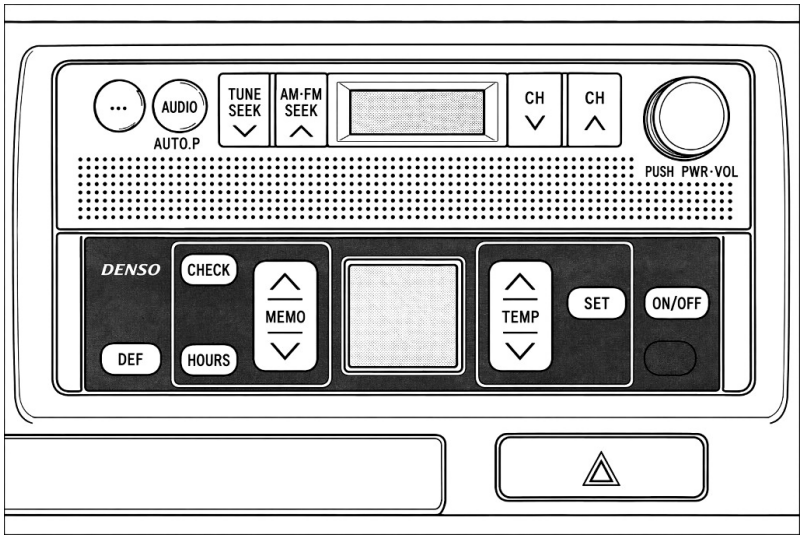
Please read this section

Control panel

1. Description of each part

This panel matches the DENSO Aeon controller (CHECK / DEF / HOURS / MEMO / TEMP / SET / ON-OFF).

No.	Name (on this panel)	Description
1	ON/OFF (run)	Starts / stops the refrigeration unit.
2	SET	Confirms setting changes and selects menus.
3	DEF	Starts manual defrost.
4	CHECK	Switches between normal display and setting / status screens.
5	TEMP ▲▼	Changes set temperature and other values.
6	MEMO ▲▼	Scrolls memories / menu items.
7	Display	Shows operating status, cargo temperature, etc.
—	HOURS	Opens hours / cycles related menus (with CHECK / SET as in Aeon book).



This van — DENSO Aeon panel in dash (below Toyota radio) — line drawing

2. Display description

Icons shown depend on your unit specification.

No.	Name	Description
1	Cargo temperature	Shows cargo temperature and various setting values.
2	Set temperature	Shows set temperature and setting items.
3	°C / °F / H	Temperature unit, or “H” during time display.
4	Compartment symbol	Shows front compartment while running.
5	SET symbol	Shown while set temperature is displayed.
6	Freeze icon	Lit during freeze operation.
7	Defrost icon	Lit during defrost (dEF).
8	Fault icon	Lit / flashing when a fault occurs (e.g. F4).
9	Maintenance icon	Lit when setting the clock.
10	Freezer icon	Compartment icon(s) light while running.

* This system does **not** cool the cargo compartment in separate zones. The display may show four segments, but **all four represent one compartment**.

Please read this section

Operation

1. Starting the refrigeration unit

1) Start the engine, then press the run switch (■ / ON).

The freeze icon, compartment icon(s), and set temperature light, and the unit starts.

2. Stopping the refrigeration unit

1) While the unit is running, press ■ / ON again.

The unit stops.

3. Changing the set temperature

1) While the unit is running, press ▲ or ▼ (TEMP).

The set temperature flashes.

2) Press ▲ or ▼ to the desired temperature.

[Reference] Temperature can be set in **0.5 °C** steps.

3. Changing the set temperature (continued)

3) Press **SET**.

The set-temperature change is complete.

[Reference]

- The new set temperature remains until changed again.
- If no switch is pressed for **5 seconds or more** before SET, the previous set temperature is kept.

4. Recalling a memory

The unit can store **3** set temperatures. Temperatures in memory can be changed when recalling. Available range and factory defaults (Memory 1 / 2 / 3) for mid-temperature use:

Use band	Adjustable range	Mem 1	Mem 2	Mem 3
Mid temperature	–7 to 30 °C	–5 °C	0 °C	5 °C

<Note> Perform the following **with the engine running and the refrigeration unit stopped**.

1) Press ▲ or ▼. Memory number and compartment icon flash.

2) Press ▲ or ▼ to the desired memory number.

[Reference] Default is Memory 1.

3) Press **SET**. Set temperature flashes.

4. Recalling a memory (continued)

4) Press ▲ or ▼ to the desired temperature.

[Advice] If you do not change temperature, go to the next step.

5) Press **SET**. Memory recall is complete.

[Reference]

- The recalled memory remains until recalled again.
- If no switch is pressed for **5 seconds or more** before SET, the previous memory remains.

5. Defrosting

Defrost can run **automatically** during operation, or **manually** from the control panel.

During long continuous running, ice builds on the cooling unit (evaporator). Leaving it reduces cooling. Manually defrost **1–2 times per week** to melt ice.

5-1. Automatic defrost

- During operation, sensors / timers start defrost automatically.
- During defrost, the panel shows **dEF**.
- When defrost finishes, freeze operation resumes automatically.

5-2. Manual defrost

1) While the unit is running, press **DEF**.

dEF flashes for 2 seconds, then stays lit; the defrost icon lights and defrost starts.

[Advice] Pressing **DEF** while **dEF** is flashing cancels defrost.
[Reference]

- If cargo temperature is **0 °C or above**, defrost may not start.
- When defrost finishes, freeze operation resumes automatically.
- Force-cancel manual defrost by **holding DEF for 1 second**.

6. Checking status / settings

You can check faults, operating hours / cycles, and set flashing of cargo temperature when it differs from set temperature by a set amount (out-of-range indication). See the pages below for each function.

Menu list

No.	Code	Name	Content	See
1	dtc2	Past diag	Past refrigeration faults	p.41
2	Hour	Hours (TRIP)	Hours since last reset	p.37
3	Cnt	Cycles (TRIP)	Cycles since last reset	—
4	Hur1	Hours (ECU corr.)	After ECU-change correction	—
5	Cnt1	Cycles (ECU corr.)	After ECU-change correction	—
6	Hur2	Total hours (ODO)	Cumulative hours	—
7	Cnt2	Total cycles (ODO)	Cumulative cycles	—
8	Err1	Out-of-range	Set out-of-range indication	p.21
9	dtc3	Past diag history	Faults with date/time	p.42
10	UtC	Clock reset	Year, date, time	p.23
11	T-bU	Buzzer on/off	Buzzer when a fault occurs	p.26
12	d-bU	Cargo-temp buzzer	Buzzer when cargo leaves band	p.28
13	notE	Note display	Charge, CG model, refrigerant	p.30
14	PrS	Pressure display	Set temp / cycle pressure	p.32

* TRIP = resettable data; ODO = non-resettable data. On this dash panel, enter menus via **CHECK / HOURS / MODE** (hold) as labelled — names vary slightly from the Japanese book.

7. Setting out-of-range temperature indication

When cargo temperature differs from set temperature by more than the value set here, the cargo-temperature display can flash to warn you.

1) Hold **MODE** (or CHECK long-press) for **3 seconds or more**.

Menu code flashes.

2) Press ▲ or ▼ until **Err1** flashes.

3) Press **SET**. Set value flashes.

[Reference] Factory default is **0.0 °C** (out-of-range indication off).

4) Press ▲ or ▼ to the desired value.

[Reference] Adjustable in **0.5 °C** steps from **0.0 to 20.0 °C**.

7. Out-of-range indication (continued)

5) Press **SET**. Out-of-range indication setting is complete.

[Reference]

- The new setting remains until changed again.
- Cancelling mid-setting, or no switch for **5 seconds or more**, keeps the previous setting.

8. Resetting the clock

You can reset year, month, day, and time.

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **UtC** flashes.

3) Press **SET**. Year flashes.

4) Press ▲ or ▼ to set the year.

[Reference]

- Year: **2020–2099**, 1-year steps.
- Hold ▲ or ▼ for fast change.

8. Resetting the clock (continued)

5) Press **SET** or **MODE**. Month flashes.

6) Press ▲ or ▼ to set the month (**01–12**). Hold for fast change.

7) Press **SET** or **MODE**. Day flashes.

8) Press ▲ or ▼ to set the day (**01–last day of month**). Hold for fast change.

9) Press **SET** or **MODE**. Hour flashes.

8. Resetting the clock (continued)

10) Press ▲ or ▼ to set the hour (**00–23**). Hold for fast change.

11) Press **SET** or **MODE**. Minutes flash.

12) Press ▲ or ▼ to set minutes (**00–59**). Hold for fast change.

13) Press **SET**. Clock reset is complete.

[Reference]

- Pressing **MODE** returns to year setting.
- Cancelling mid-setting, or no switch for **30 seconds or more**, keeps the previous setting.

9. Setting buzzer notification

When a diagnostic code appears, a buzzer can announce the fault.

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **T-bU** flashes.

3) Press **SET**. Setting flashes.

[Reference] Factory default is **OFF** (no buzzer).

4) Press ▲ or ▼ to set **On**.

9. Buzzer notification (continued)

5) Press **SET**. Buzzer setting is complete.

[Reference]

- The new setting remains until changed again.
- Cancelling mid-setting, or no switch for **5 seconds or more**, keeps the previous setting.

10. Setting buzzer for cargo-temperature deviation

When cargo temperature differs from set temperature by more than the out-of-range value (Err1), a buzzer can announce the deviation.

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **d-bU** flashes.

3) Press **SET**. Setting flashes.

[Reference] Factory default is **OFF** (no buzzer).

4) Press ▲ or ▼ to set **On**.

10. Cargo-temperature deviation buzzer (continued)

5) Press **SET**. Cargo-temperature deviation buzzer setting is complete.

[Reference]

- The new setting remains until changed again.
- Cancelling mid-setting, or no switch for **5 seconds or more**, keeps the previous setting.

11. Displaying notes

Shows refrigerant charge amount, CG model, refrigerant type, and compressor attachment kit.

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **notE** flashes.

3) Press **SET**. Refrigerant charge amount is shown.

This van: plate shows **CGA 138** · **R134a** only — confirm against the note display and the under-bonnet / unit plate in the Appendix.

11. Displaying notes (continued)

4) Press ▲ or ▼ to switch among refrigerant charge, CG model, refrigerant type, and compressor attachment kit part number.

5) Press **SET** or **MODE**. Note display ends.

[Reference] No switch for **120 seconds or more** returns to the normal display.

12. Switching pressure display

Enabling this setting lets you check high- and low-side pressures while the unit is running.

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **PrS** flashes.

3) Press **SET**. Setting flashes.

[Reference] Factory default is **OFF** (no pressure display).

4) Press ▲ or ▼ to set **On**.

5) Press **SET**. Pressure-display setting is complete.

[Reference]

- The new setting remains until changed again.
- Cancelling mid-setting, or no switch for **5 seconds or more**, keeps the previous setting.

6) If you turn pressure display **On** while the unit is stopped, press the run switch to start.

7) Press **MODE**. Upper left = high pressure **(H)**; lower left = low pressure **(L)**. Unit is **MPa**. Example: **H155** → **1.55 MPa**. Upper right = cargo temperature.

8) Press **MODE** again to return to the normal running screen.

Please read this section

Simple inspection

1. Performing simple inspections

Under Japan's Fluorocarbons Emission Control Act, the manager (user) of refrigeration / freezing equipment must perform a **simple inspection at least once every 3 months**. Australian workshops should still use this checklist as good practice and follow local refrigerant handling rules (licensed technicians, recovery where required).

2. Simple inspection items

- Unusual noise from the product
- External damage, corrosion, rust, oil seepage, frost on the heat exchanger, and other signs of fluorocarbon leakage

If anything abnormal is found, arrange prompt inspection / repair. Do not keep running a leaking system.

Cooling unit

- No oil seepage on the heat exchanger (evaporator)
- No unusual noise from inside the cooling unit
- Cold air from the outlets
- Drain holes and drain hose not blocked

Condensing unit

- No oil seepage on the heat exchanger (condenser)
- No unusual noise from the condenser motor

Compressor / piping / charge

- No oil seepage at compressor joints or refrigerant pipe connections
- No unusual noise from the compressor body
- Sight glass shows an appropriate charge (**about 15 minutes after freeze operation starts**). Continuous bubbles may mean undercharge — see Appendix photo of this van's sight glass.

Please read this section

Maintenance

1. About maintenance

For best performance, have maintenance done **yearly** at a competent refrigeration workshop.

2. Maintenance item list

Part / location	Check
Main refrigeration parts	Mountings: no cracks, rust, corrosion, looseness, or play
Bolt joints	No loose / corroded bolts, play, or flattened packing
Control panel	Switches and display operate normally
Hoses and piping	Mounting OK; no deformation, collapse, swelling, or damage; leak-test joints
Pipe / wiring clamps	No looseness or play
Wire harness	Connectors not loose / damaged; harness not damaged
Sight glass	Charge OK; abnormal if continuous bubbles
Engine-driven compressor	No oil leaks / abnormalities; overhaul as required
Magnet clutch	With run switch ON, check clutch operation and noise
V-belt	No wear or damage
Condenser fins / motor	No clogging / flattening; noise and rotation OK
Receiver	No damage
Evaporator fins / cooling motor	No clogging; noise and rotation OK
Drain hose	Mounted; no blockage, collapse, or damage

3. Periodically replaced parts

Recommended for periodic replacement. Visible wear — check often and replace early. Non-visible parts — replace at scheduled maintenance.

Replacement parts	Note
V-belt	Check for wear, hardening, cracks; replace as needed
Condenser motor	—
Cooling motor	—
Compressor	—
High / low pressure hoses	—
Receiver	Replace **whenever the refrigeration cycle is opened**
Magnet clutch	—

4. V-belt inspection

Confirm the V-belt has no wear or cracks.

5. Checking operating hours or cycles

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **Hour**, **Cnt**, **Hur1**, **Cnt1**, **Hur2**, or **Cnt2** flashes.

[Advice]

- **Hour** — hours since last reset (TRIP)
- **Cnt** — cycles since last reset (TRIP)
- **Hur1** / **Cnt1** — after ECU-replacement correction
- **Hur2** / **Cnt2** — cumulative (ODO)

3) Press **SET**. Part code and hours / cycles flash.

[Reference]

- ▲ / ▼ switch part code and hours / cycles.
- Hours auto-reset at **100,000 h**; cycles at **1,000,000**.
- No switch for **120 seconds** returns to the previous screen.

5-1. Parts shown for hours / cycles

Codes appear top to bottom. Which codes appear depends on specification.

Hours	Cycles	Part	Notes
H011	—	Refrigeration ECU	Unit run time
—	C010	(same)	Cumulative run cycles
H111	C111	Engine-driven compressor	—
H210	—	Cooling motor	—
H310	—	Condenser motor	—

Please read this section

Faults

1. If you think there is a fault

Temporarily stop using the unit and have a competent refrigeration workshop inspect it.

If the display shows the fault icon (■ — flashing or lit) and a **diag code** alternates with the set temperature, a fault has occurred — request inspection.

This van (workshop finding): F4 with dead cooling fan pointed at the cooling-fuse path — dedicated box Cooling 20A / Condenser 2, plus under-dash **COOLER 15A**. Fan motor was OK when powered directly. See Appendix fuse notes.

2. Abnormal indications on the control panel

If ■ or a diag code appears, request inspection. Depending on the fault, ■ may flash or stay lit:

■ state	Unit behaviour
Flashing	Serious fault affecting the unit — **unit stopped**
Lit	Unit continues running at **reduced capacity**

2-1. Diagnostic code list (common)

Same red emphasis as the Contents entry — scan here when the panel shows a code.

■	State	Code	Fault
Off	Normal	—	No fault
Flash	Stopped	F3, F4	Cooling fuse 1 / 2 blown
Flash	Stopped	PH1	High-pressure sensor fault
Flash	Stopped	PL1	Low-pressure sensor fault
Flash	Stopped	ErC1	Compressor lock
Lit	Continues	F3	Cooling fuse 1 blown
Lit	Continues	F4	Cooling fuse 2 blown
Lit	Continues	F11	Condenser fuse blown
Lit	Continues	E1	Cargo-temperature sensor fault
Lit	Continues	E4	Defrost sensor fault
Lit	Continues	LC1	Communication / panel power fault
Lit	Continues	P1	High/low pressure (gas / condenser / dirty core)

3. Checking past fault contents

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **dtc2** flashes.

3) Press **SET**. Diag code flashes.

[Reference]

- With multiple faults, ▲ / ▼ switches codes.
- No switch for **120 seconds** returns to the previous screen.
- **---** means no diag code to display.

4. Checking past diagnostic history (year, date, time, diag code)

1) Hold **MODE** for **3 seconds or more**. Menu code flashes.

2) Press ▲ or ▼ until **dtc3** flashes.

3) Press **SET**. Past diag history (year, date, time, diag code) is shown.

[Reference]

- With multiple faults, ▲ / ▼ switches history entries.
- No switch for **120 seconds** returns to the previous screen.
- **---** means no diag code to display.

End of DENSO Aeon English body. Appendix pages that follow are vehicle-specific photos and fuse finding for this Toyota Regius Ace (CGA 138 / R134a) — the pieces another workshop needs on the floor.

Appendix — This Regius Ace van (photos)

Unit: CGA 138 · **Refrigerant:** R134a only · **Fuse box cover:** C8639-44010 · **Inline:** COOLER 15A under dash

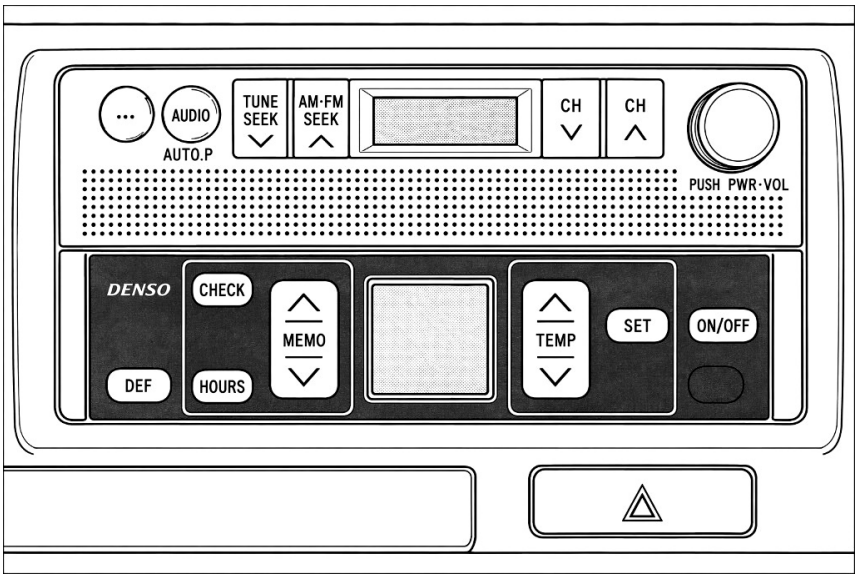


■■ CGA 138 · R134a ■■



Cargo evaporator

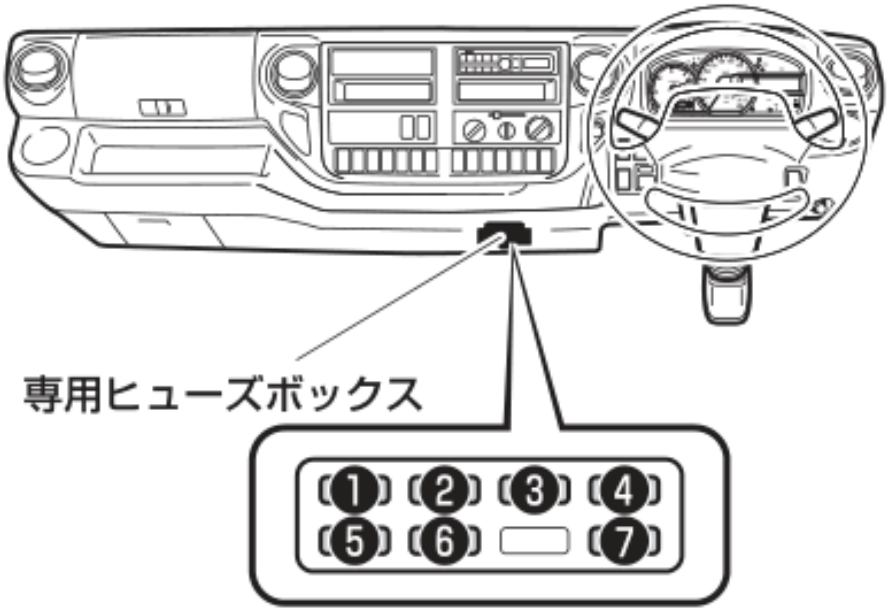
Appendix — Dash & fuse box



DENSO Aeon panel in dash (below radio) — line drawing



This van — dedicated fuse box cover C8639-44010 (Japanese label)



Dedicated fuse box location (Japanese book diagram) — numbered slots 1-7 match the fuse table

Appendix — Dedicated fuse box table (T1843114 p.50)

Left = original Japanese table from the book. Right = English translation of the same rows.

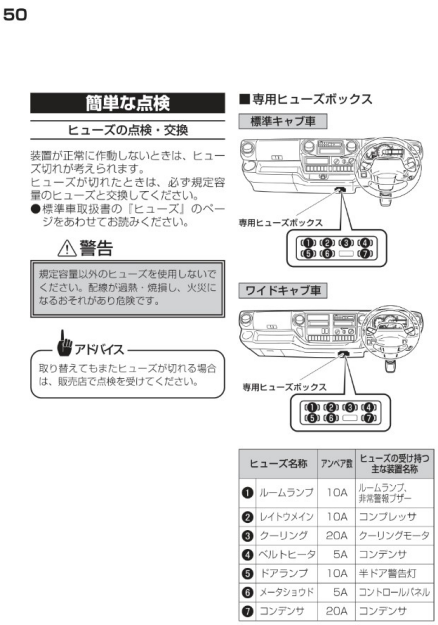
Book artwork is Dyna / Dutro; fuse **names** still apply. This Regius Ace cover is **C8639-44010** (Condenser 15A ×2 — no belt-heater 5A slot).

ヒューズ名称		アンペア数	ヒューズの受け持つ主な装置名称
❶	ルームランプ	10A	ルームランプ、非常警報ブザー
❷	レイトウメイン	10A	コンプレッサ
❸	クーリング	20A	クーリングモータ
❹	ベルトヒータ	5A	コンデンサ
❺	ドアランプ	10A	半ドア警告灯
❻	メータショウド	5A	コントロールパネル
❼	コンデンサ	20A	コンデンサ

No.	Fuse name	A	Main equipment
1	Room lamp	10A	Room lamp, emergency alarm buzzer
2	Reitou main (refrigeration main)	10A	Compressor
3	Cooling	20A	Cooling motor (F3 / F4 path)
4	Belt heater	5A	Condenser (belt heater)
5	Door lamp	10A	Half-door warning lamp
6	**Meter shade**	**5A**	**Control panel (LC1 if dead)**
7	Condenser	20A	Condenser

Left: ■■■■■■ / ■■■■■ / ■■ — **Right:** same rows in English. ⑥ Meter shade 5A → control panel.

Full page context (Japanese original)


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簡単な点検

ヒューズの点検・交換

装置が正常に作動しないときは、ヒューズ切れが考えられます。
ヒューズが切れたときは、必ず規定容量のヒューズと交換してください。
●標準車取扱書の『ヒューズ』のページをあわせてお読みください。

⚠警告

規定容量以外のヒューズを使用しないでください。配線が過熱・焼損し、火災になるおそれがあり危険です。

アドバイス

取り替えてもまたヒューズが切れる場合は、販売店で点検を受けてください。

■専用ヒューズボックス

標準キャブ車

専用ヒューズボックス

ワイドキャブ車

専用ヒューズボックス

ヒューズ名称		アンペア数	ヒューズの受け持つ主な装置名称
❶	ルームランプ	10A	ルームランプ、非常警報ブザー
❷	レイトウメイン	10A	コンプレッサ
❸	クーリング	20A	クーリングモータ
❹	ベルトヒータ	5A	コンデンサ
❺	ドアランプ	10A	半ドア警告灯
❻	メータショウド	5A	コントロールパネル
❼	コンデンサ	20A	コンデンサ

T1843114 printed page 50 — cab location drawings + table

Appendix — Under-dash COOLER 15A & ECU



Inline COOLER 15A + grey fridge ECU (DC 12V · “26”) — check for F3/F4

Appendix — Refrigerant circuit



Lines + pressure switch



Sight glass — clear after ~15 min run = OK; bubbles may mean low gas (green = UV dye)

Appendix — Fuse & fault notes (this van)

COOLER 15A under dash + dedicated box **Cooling 20A** / **Meter shade 5A** (panel). F4 = cooling fuse 2 path. Fan motor OK on this van when powered directly.

#	Name	A	Feeds
1	Room lamp	10	Room lamp / emergency buzzer
2	Reitou main	10	Compressor
3	Cooling	20	Cooling motor
4	Condenser	15	Condenser
5	Door lamp	10	Door warning
6	Meter shade	5	Control panel (LC1 if dead)
7	(blank)	—	Empty on this cover
8	Condenser 2	15	Condenser motor 2

Code	Meaning	Action
F3 / F4	Cooling fuse 1 / 2	Cooling 20A + Condenser 2 + COOLER 15A under dash
F11 / F12	Condenser motor fuse	Condenser / Condenser 2 on dedicated box
LC1	Control panel power	Meter shade 5A
P1	High/low pressure	Gas / condenser fan / dirty core

Aeon PDF: https://www.denso-solution.com/product/refrigerator_support_aeon/manual/pdf/index-refrigerator_support_aeon-manual01.pdf