



TeardownTwin

Take it apart with your phone. Put it back together with the same photos.



USER'S GUIDE · **Version 1.0**

Any **iPhone** · iOS 17 or newer

No internet, no account, nothing leaves the phone

A reference, one section per screen: a photo of the whole screen, then what every button on it does. Start at the screen you are looking at.

What is in this guide

One section per screen. A photo of the whole screen, and then what every button on it does.

You are about to open something and take parts out of it. An hour from now there will be screws on the table and nothing on them says which hole they came from. Before you undo anything you photograph the spot; then you tap the photo where each screw sits, and a coloured circle stays there. You describe each pile of screws once, and it gets a letter — that letter is the name of a cup on your bench. When it is time to put it all back, the app hands you the same photos in reverse order and you tick the circles off.

That is the whole idea. Everything below is the buttons that do it. Find the screen you are looking at, turn to its section.

§	SCREEN	WHAT IT IS
1	Projects	Every teardown on this iPhone. Where you start a new one, and where an archive is read back in.
2	Project hub	One project at a glance: where you stopped, what to buy before you start, and the way into the three modes.
3	Teardown	The working screen: photograph, tap where the screws were, describe each pile once. Then the list of steps, which is where their order is changed and where the search lives.
4	The photo, full screen	The photo big: for placing marks accurately, and for drawing warnings on it.
5	Fastener group	One form per pile of screws. The letter that goes on the cup is handed out here.
6	Part	One card per part you took off.
7	Assembly	The same photos backwards, ticked off as things go back in.
8	Export	The printed manual, the cup labels, a plain-text copy and the archive.
9	Settings	Units, the buzz, disk space, and the handover mode.

TWO THINGS TO KNOW BEFORE YOU START

There is no internet in this app and no account to sign into. Nothing is uploaded and nothing is backed up for you: if the phone is lost, the teardown is lost with it. The archive in section 8 is the only backup there is, and making one takes two taps.

The app cannot look at a photo and work out what a screw is. Everything it knows about your screws is what you typed or said into it.

The screenshots come from the app itself, and the photographs inside them are real: every circle sits on a screw that is really there. The opened machine is somebody else's — the simulator has no camera.

1 Projects

Every teardown on this iPhone. This is the first screen and the only one you can reach without a project.

Project name — the search field. Type and the grid narrows as you go; the cross clears it.

Active / Archive — two tabs with counts. Archiving takes a finished job off the front page without deleting a thing.

The card — tap it to open the project. It shows the name, where the machine came from and where it goes, how many steps and parts are logged, what it weighs on disk, when you last touched it and, in orange, the step you stopped on.

Settings — the gear at the top right. Section 9.

WHAT A CARD CAN DO

Swipe the card to the left, or hold your finger on it. Four actions are in the swipe strip; holding shows all five.

Rename — changes the name and nothing else. Photos, steps and marks are not touched.

Duplicate — for a second machine of the same model. The plan comes across: steps, parts, trays and their letters; the evidence — photos, marks, drawings, voice notes — stays with the original. The sheet says exactly that, with numbers, before you press **Make the copy**. It is in the hold menu only: the swipe strip has room for four buttons at a size you can hit.

Archive / Unarchive — moves the card between the two tabs.

Export — the export screen for that project, without opening the project first. Section 8.

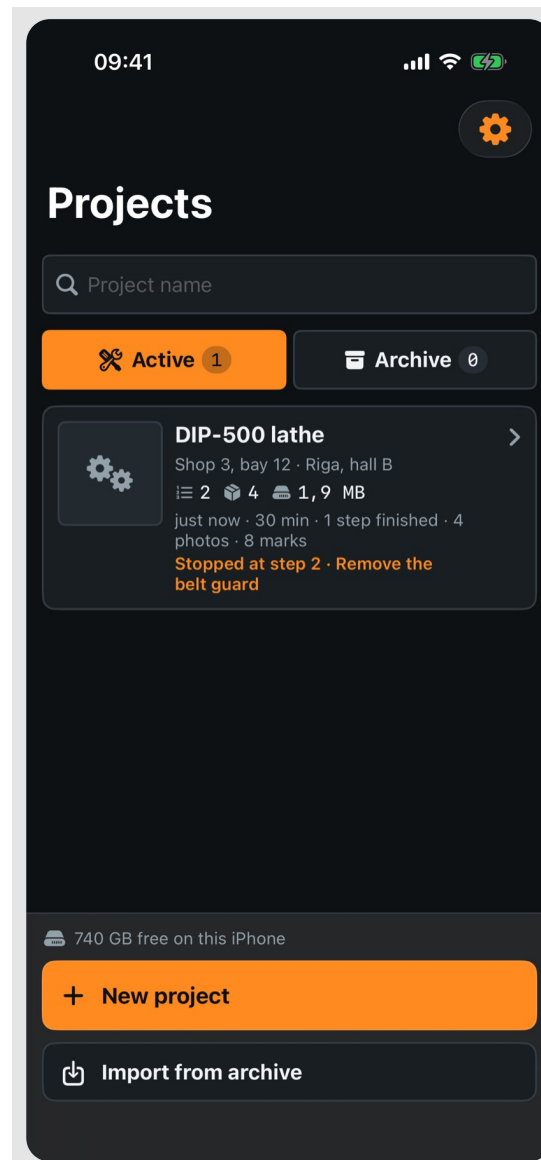
Delete — lists what will go, counted, before it goes. This one cannot be undone.

THE BOTTOM PANEL

Free space — how much room is left on the iPhone. It turns into a warning when the room is short.

New project — asks for a name, which you can leave empty, and opens the new project straight away.

Import from archive — reads a **.zip** archive or a lone **project.json** back in. It always makes a *new* project and never merges or overwrites, so importing yesterday's archive cannot cost you today's work; when it is done it reports what arrived, counted. The button is on the empty list too — a new phone with an archive on it is exactly the case it was written for.



One project on the bench. The orange line on the card is where you stopped last time.

IF THE LIST IS EMPTY

Three different empty screens say three different things: no projects at all, nothing matching what you typed, or everything sitting in the Archive. Not the same problem, and the screen does not pretend they are.

2 Project hub

One project at a glance, and the way into the three modes.

Where you stopped — which step, when you last worked, and what you got through. It is worked out from the job itself, not from which screen happened to be open last.

Pick up where you left off — opens the right mode on the right step. There is no button when there is nothing to return to.

Project — where the machine came from, where it goes, who is on it, the units and the date. Empty lines are left out.

The five tiles — parts removed out of parts logged, fasteners logged, steps completed, photos taken, and what the project weighs on disk.

BEFORE YOU START

Buy — the fasteners that will not hold a second time. The app puts them here itself, from what you recorded as single use, and you can add anything it cannot know: thermal paste, tape, a gasket.

Tools — worked out from the drives and the kinds of fastener you logged. One line per tool, with the cups that need it.

Ticking a line — tap anywhere on the row. Ticked lines go grey and stay on the list; they also print, marked as ticked off. You tick at home and read the list in the shop, where there is nothing to check against.

The two grey lines under Tools — the app knows the shape of the drive, not its size: “Phillips”, never “PH0”. And it says how many cups told it nothing at all about a tool, so a short list is not mistaken for “nothing else needed”.

MODES AND CHECKS

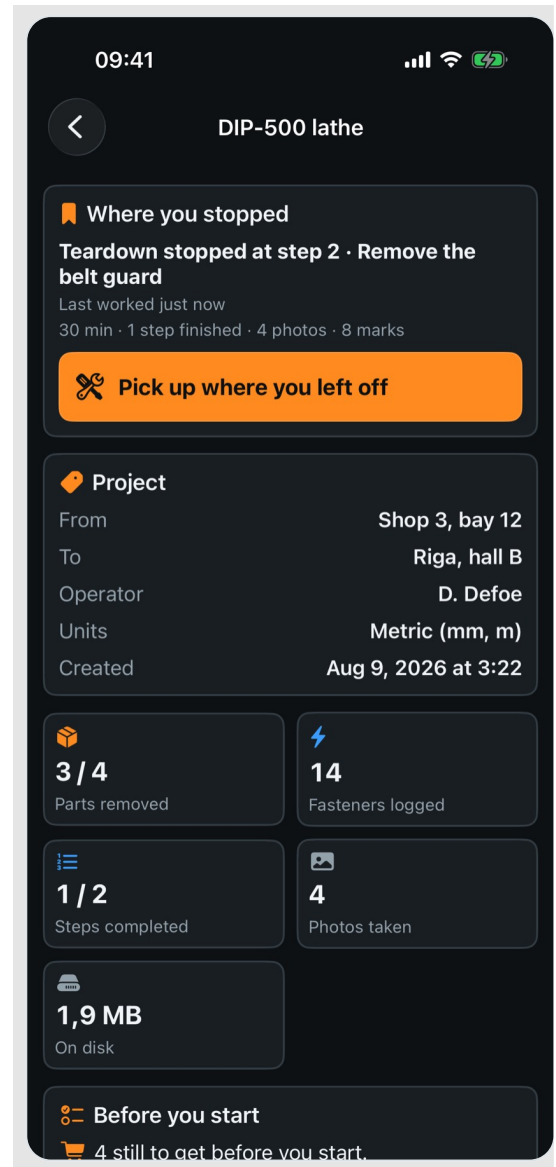
Teardown — the working screen. Section 3.

Assembly — the reverse checklist. Section 7. It stays off until one step has been recorded, and says so.

Export — paper and archive. Section 8. Off until there is at least one step or one part.

Data check — gaps the app can see for itself: a step with no photos, a part with no fasteners recorded, a step where something came off before the thing sitting on it. Or “No gaps found”.

Recent steps — the last five, newest first.



The top of the hub. It scrolls on past what is shown: the two “before you start” lists, the three mode buttons, the data check and the last few steps.

3 Teardown

The working screen, where the hours go. The photo stays in front of you the whole time; the list under it scrolls.

THE TOP OF THE SCREEN

✕ — leaves the mode. Nothing is lost and the open step stays open.

Step 2 of 2 — the list of steps, overleaf. Beside it, whether this step is running or finished.

THE PHOTO

Tap it — the app asks **What is at this spot?**: **Fastener group**, **Removed part** or **Note**. After the pile has been described once, every further tap drops another circle of the same group — six screws are six taps.

Drag a circle to move that mark; pinch to zoom in.

Note — about the spot rather than a thing in it. Empty words are allowed: a note is often made to be spoken instead.

The arrows in the corner — the same photo full screen, for aiming at a hole a few pixels wide. Section 4.

The yellow banner — look-alike piles whose lengths differ: a long screw in a short hole goes through the board. It also refuses two piles sharing one cup.

PHOTOS AND WHAT THEY ARE OF

Choose type — raises the camera. Seven choices say what the shot is *of the place*: overview, before and after removal, close-up, nameplate, cable, damage. Two more make a record — **Fastener group** and **Parts removed** shoot what is in your hand and open its form with the photo on it.

The chips under the strip — which photo your taps land on; marks always go on the photo at the top. Tapping a thumbnail instead opens that frame full screen, with its own marks.

DOWN THE LIST

Voice note — hold the button and say it. Once recorded: play, length, date and a bin, but no record button — recording over it would destroy the old sentence silently.

Step clip — up to fifteen seconds of movement, played back at full, half or quarter speed. Delete before filming again.

Note cards — one per note mark above: the words, its own voice note, and **Remove this mark**.

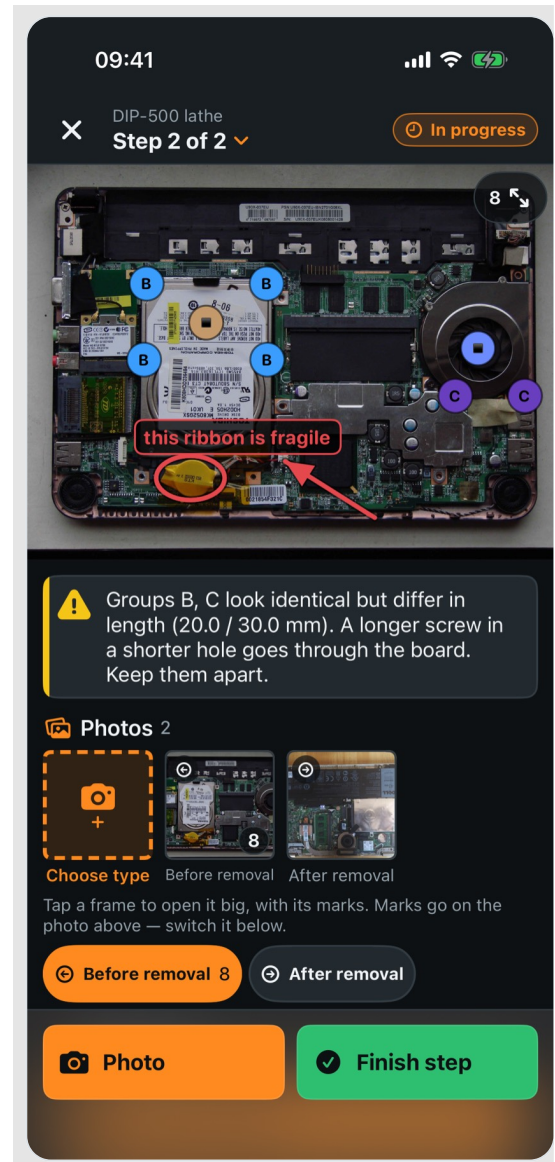
Fastener groups and **Parts removed** — one row per pile and per part, each with its own photos under it. Tap for the form (section 5) or the card (section 6).

Undo — appears in the bottom panel as soon as there is something to undo: a step moved, a pile or a part deleted. One action only, the last.

THE BOTTOM PANEL

Start step N — begins the next step. **Photo** and **Finish step** replace it while a step runs, **Reopen** appears once it is closed.

Finish step — a summary before the parts leave the bench: title, tools, hazards, and what the step holds.



Step 2. Four blue circles are cup B, two purple ones cup C, the two squares are parts. The arrow and the red words were drawn on by hand.

The list of steps

Tapping the step number at the top of the teardown opens it. Two jobs live here: the order of the steps, and the search.

A row — its number, title and what you wrote about it, then what it holds: parts, fasteners, photos and the time you spent. Yellow chips are the hazards you flagged. Tapping a row opens that step.

The two arrows — move that step one place earlier or later. This is the only place in the app where the order changes, and it matters: assembly and the printed manual both run this list backwards. The arrow at each end of the list is switched off rather than silent, because a button that does nothing reads as a fault.

Start step N — adds the next step and takes you to it.

Done — closes the list.

SEARCH

The field appears by itself once the project holds more than thirty records — steps, parts and cups together. On a project of nine there is nothing to search for and it would only be in the way.

What it looks in — cup letters and labels, the name you gave a pile and what kind it is, part names and categories, step titles, step numbers, descriptions, tools, warnings, and the words of every note left on a photo.

A result — its icon, its name, where it sits and what kind of thing it is. Tapping one takes you to the thing itself: the screen moves to its step and the form or card opens on top.

A single letter is read as a cup letter or a step number, not as part of a word — otherwise “b” drags out half the project. From two letters on it matches inside words again.

While you are searching the arrows are gone, and the line under the field says so. “One place up” in a filtered list would not mean what you see: the neighbour on the screen is not the neighbour in the teardown.

WHY ARROWS AND NOT DRAGGING

Dragging a row lives in the same finger movement as scrolling. Keeping them apart needs either an edit mode — another screen, another word — or a long press, and then a list you are simply scrolling through in a work glove starts picking rows up on its own.



Two steps. The arrows on the right move one step up or down; the arrow at the end of the list is switched off.

4 The photo, full screen

The same photo, big. It has three jobs: look at it, place marks accurately on it, and draw a warning on it.

The heading — what the shot is of, the words you wrote under it, when it was taken and how many marks it carries.

Bin — deletes the photo, and everything drawn or marked on it goes with it. It asks first, and the question has both answers.

x — closes and puts you back where you came from.

Zoom in / Fit to screen — one button, both ways. A pinch does the same, and dragging moves the zoomed photo around.

Previous / Next — the other photos of the same step. The counter between them says where you are.

PLACING MARKS

Arriving here from **Place marks** in a form (sections 5 and 6) changes the screen: it holds one photo only, and every tap drops another mark of that group.

Remove last mark — undoes a miss. It is the one button from the form you need while aiming; the rest describe the thing, and that is done before or after, not instead.

Done — placing is finished and the photo closes.  only closes the photo; the mode carries on.

ANNOTATE

Annotate — for what a circle cannot say: “do not lever here”, “this ribbon is fragile”, “the plug comes out this way”. You get a coloured border round the screen, a banner naming the tool, and the chosen tool filled in, so the mode is never in doubt.

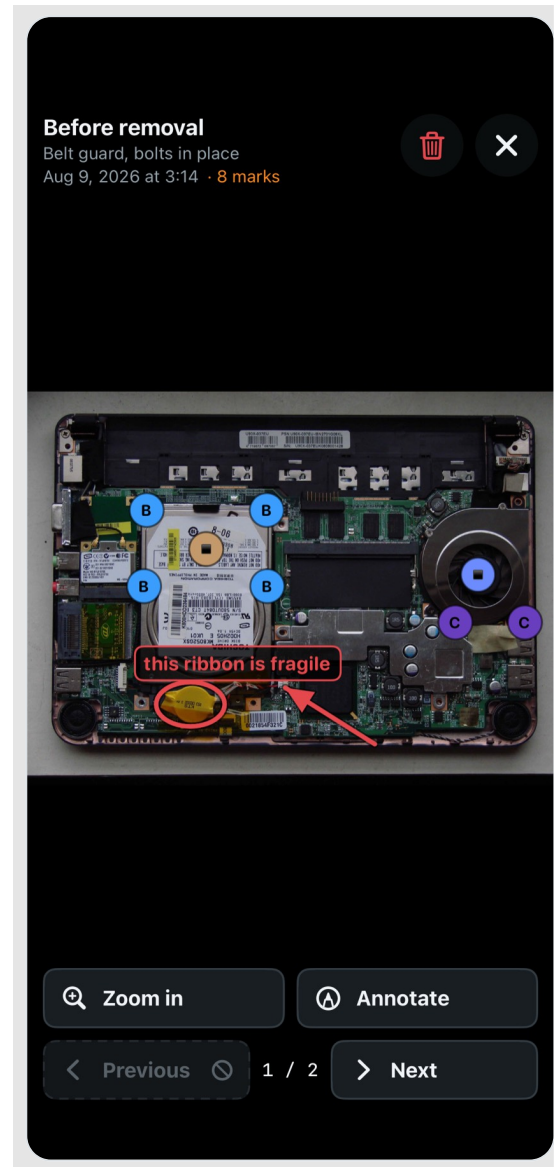
Arrow, Circle, Text — drag to draw the first two; tap for the third and type the word. Tap a shape to select it: its ends appear, drag an end to reshape it, the middle to move it whole. **Edit words** changes a word.

Move — the fourth tool, which draws nothing. Arrows and circles are drawn by dragging and the zoomed photo is moved by dragging too; this is how you say which you meant.

The bin in this mode removes one drawing, not the photo, and it names what is going.

Done — leaves annotating but keeps the photo open, because after drawing on a photo you look at it.

Where they show up — drawings go on photos of the place only. They then appear everywhere that photo does: the working area, the assembly screen, and the printed manual.



The photo of the place, opened from the strip. Marks, the drawn arrow and the words are all on the one frame.

5 Fastener group

One form per pile of screws. You fill it in once, and the letter at the top is the name of a cup on the bench.

Photos of these fasteners — the screws themselves, lying in the tray. On reassembly this is what tells you which of six identical piles on the bench is **B**. The camera is right here in the card, and a photo opens full screen with a bin.

Name — your own words for this pile: “the long ones from the hinge”. Leaving it empty is fine; the pile is then named by its letter and what it is.

Where they were — the step photos this group is marked on, its own marks bright and everyone else's dimmed. Tap one to open it big. There is no bin here: the frame belongs to the step and carries other people's marks.

Type — screw, bolt, nut, washer, clip and the rest, with a field of your own words under **Other** for anything not on the list. Below it, the length.

Measure it off a photo — for when you do not have a rule. Put a coin next to the screws and shoot them together; then draw a line across the coin, say which coin it is, draw a line along the screw, and the sheet works the length out. It offers the number and you accept it by pressing **Use N mm** — it never writes a length into the form by itself. The coin stays recorded on that photo, so the second screw a week later needs no new coin.

Quantity — how many are in the cup.

Tray — the letter, and a label of your own if you want something else written on the cup.

Notes — anything else: “seized, cut off with a grinder”.

Voice note — hold and say it, for what is quicker said than typed.

THE PANEL AT THE BOTTOM

Place marks — closes the form and opens the working photo full screen, where every tap adds another mark of this group. Section 4.

Remove last mark — takes back the last circle you dropped.

Done — closes the form. There is no separate save: what you type is kept as you type it.

Delete — removes the pile and its marks, after a question with both answers. The teardown screen offers one undo straight after.

Group B. The line under the title is what the app already knows about this pile; the form scrolls on past what is shown.

THE LETTER IS NEVER HANDED OUT TWICE

Letters run across the whole project and none is ever issued twice — not even after you delete the group that had it. A gap in the alphabet costs nothing; two cups called **C** on one bench cost you the job.

6 Part

One card per part you took off. Same shape as the fastener form, and the same rule: the photo first, the words after.

Photos of the part — the part itself on the bench. On reassembly this is what tells you which of the removed parts is this one. The camera is in the card; a photo opens full screen with a bin.

Name — what you call it. “Belt guard”.

– **1 +** — quantity, for identical parts that came off together: a set of four levelling feet is one card, quantity four.

Category — twenty-one kinds, from housing and cover to sensor and hose, with a field of your own words under **Other**. What you type there replaces the category everywhere the part is named — on the screen, in the report and in the archive.

Mounted on — which part this one sat on. This is worth filling in: it is the only thing that tells the app what has to come off before what. Leave it empty and the assembly order is simply the list of steps, reversed — the assembly screen says as much, out loud.

Held by — which piles of screws held this part. The list shows every group of the step and says which are already claimed by another part.

Where it sat — the step photos this part is marked on, its own marks bright and the rest dimmed. Read only, same as in the fastener form.

Notes — “terminal box faces the operator side”.

Voice note — hold and say it.

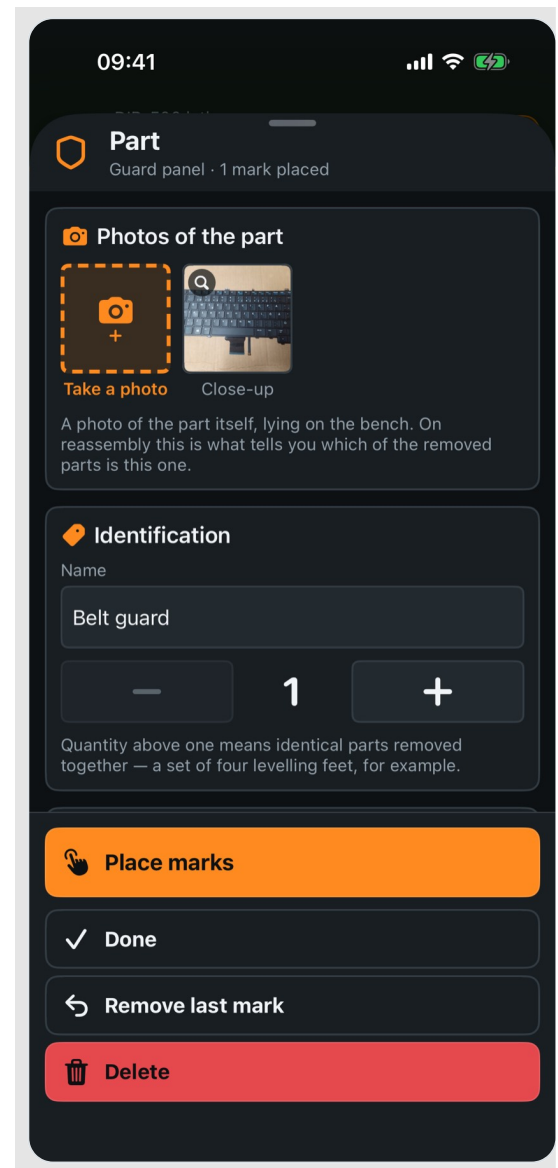
THE PANEL AT THE BOTTOM

Place marks — closes the card and opens the working photo full screen; every tap marks another place this part sat. Section 4.

Remove last mark — takes back the last circle.

Done — closes the card. Nothing else to save.

Delete — removes the part and its marks after a question with both answers, and one undo is offered on the teardown screen afterwards.



A guard panel, one mark placed. The card scrolls on past what is shown: category, what it was mounted on, what held it, and where it sat.

PARTS GET COLOURS THE WAY PILES GET LETTERS

Every part gets its own colour when you create it, and that colour is not handed out again either. On a photo a screw is a letter in a circle and a part a small square, so the two never read as the same thing.

7 Assembly

The same photos, backwards. The last thing you took off is the first thing that goes back, and you tick each circle as its screw goes in.

The counter, top right — how many items are back in out of how many there are. It counts *things you hold in your hand* — bolts and removed parts — not circles on photos, so a pile logged as eight bolts with no marks still counts eight.

Assembly · step 1 of 2 — tap it for the list of steps in assembly order.

Take fasteners from trays — the cups this step needs, with the letter and how many out of each. This is the row you read before you reach for anything.

Tap a circle — that fastener is back in; it turns green and gets a tick. Tap it again to take it back. Marks cannot be dragged here: where things sat was settled during the teardown.

Hazards — first on the list, above everything else, because below it you are already reaching for the machine. Each one names the danger and what to do about it.

Order is the teardown, reversed — says where this order came from, and admits when nothing linked the steps together so the order is simply the list turned round.

Voice note and step clip — playback only, no recording and no bin. This is the minute they were made for: “unclip the left catch first”, said three days ago over the open machine. The clip also plays at half and quarter speed.

Note cards — the words and recordings left on the photo you are looking at, to read and to listen to.

Fasteners to fit — one row per cup: what it is, how many are back in. **Mark all** ticks the whole cup off at once and **Clear** puts it back. Under a row sit the photos of that pile, so you can see which is which.

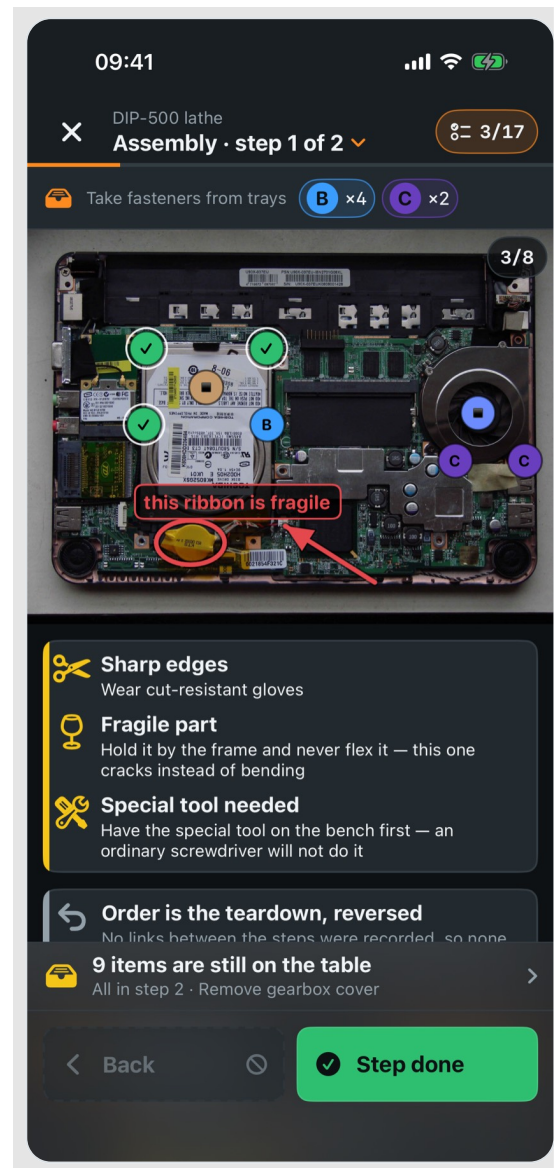
Parts to put back — the same for parts, each with its own photos.

THE BOTTOM PANEL

N items are still on the table — tap it for the whole list of what is not back in yet and which step each belongs to. Tap a line to jump straight to that step.

Back / Step done — move through the steps. On the last one it says **Finish**.

Leaving with things still out — the app asks rather than argues, and offers three answers: **Show me where**, **Finish anyway** and **Cancel**.



Three of eight back in: green with a tick, so the state reads without relying on colour. The cups this step needs are named at the top.

8 Export

Four files, ticked independently. One of them is paper you work from; one of them is the only backup this app has.

The four tiles at the top — steps, parts, photos and what the project weighs, so you know what is about to be packed.

WHAT YOU CAN EXPORT

Assembly manual (PDF) — the teardown in reverse: step 1 of the document is the last thing you took off, so working from page one leaves you with an assembled machine. Every step gets its photo with the marks drawn into the picture, the fastener table that goes with it, the hazards, and the two lists to sort out before you start. Made to be printed and ticked off in pencil.

Fastener labels (PDF) — one label per pile: the big letter, how many, what they are and a photo of them. Eight to a sheet of A4 with dashed cut lines, on ordinary paper. The letter system only works while the letter is on the cup, and this is how it gets there. Greyed out until there is at least one pile.

Assembly manual (text) — the same document as a plain text file plus a folder of small photos, so it opens on anything, with no app and no PDF reader. It does not replace the paper: the circles are not drawn into these pictures, they are written out in words underneath. The card says so before you press.

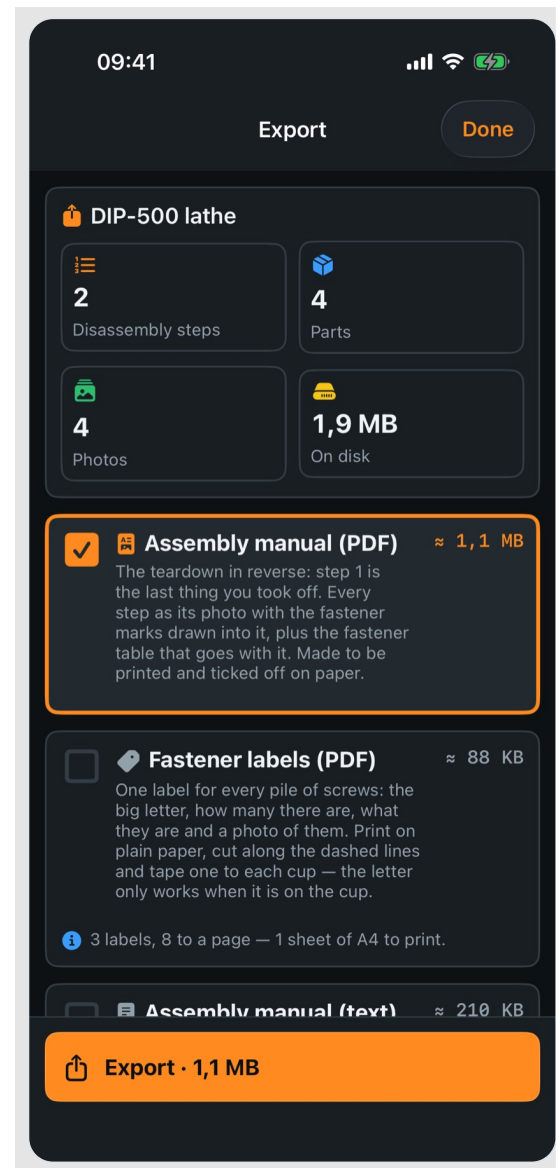
Project archive (ZIP) — everything: photos at full size, marks, drawings, voice notes, clips and the record itself. This is the file that **Import from archive** in section 1 reads back. Turning **Include photos** off makes it small, but photos are then not what comes back.

RUNNING IT

Export — the one button at the bottom; it names how many files and how big. While it runs, **Done** is switched off and the sheet will not be swiped away.

If one part fails the others still finish and you are told which one did not. A PDF that is ready goes to whoever needs it even if the archive did not pack.

Share the file — the usual iPhone share sheet: AirDrop, Files, mail, a message. This is how the file leaves the phone; the app itself never sends anything anywhere.



The first two of the four. The size beside each line is an estimate made before anything runs, so you know the cost before you press.

MAKE THE ARCHIVE THE DAY YOU FINISH THE TEARDOWN

Nothing is backed up for you. Export the ZIP and put it somewhere that is not this iPhone — Files, a laptop, a memory stick. A teardown cannot be photographed again: the machine is already in pieces.

9 Settings

Reached by the gear at the top of the project list. Five cards, and one of them changes what the whole app offers.

Assembly only — for handing this iPhone to whoever puts the machine back together. Tapping a project then goes straight to the assembly checklist, and everything that records or changes a teardown is gone: no camera, no marks, no forms, no delete. New projects, importing, renaming, duplicating, archiving, deleting, export, the project overview and the teardown screen are hidden while it is on — the card lists them. The gear stays reachable, because it is the way out.

Units — metric or imperial. It changes what you see and nothing else: lengths are always stored in millimetres and converted only for display, so switching back and forth never alters what was recorded.

Haptics — the buzz that confirms a tap. A shop is too loud for sound and your eyes are on the machine, so vibration is the only confirmation that gets through a work glove.

Test the buzz — fires one, so you know what you switched off.

STORAGE

Used by projects / Free on device — the two numbers that decide whether the next teardown fits.

Storage split — how the space divides between photos, exports and everything else.

Recalculate sizes — measures the folders again, for after a big delete.

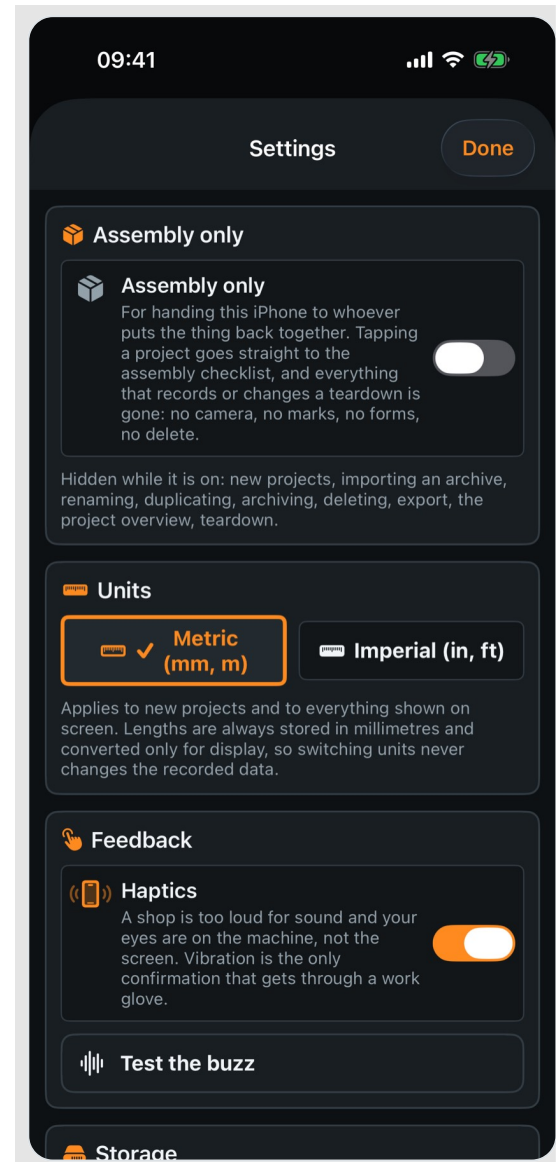
Clean up leftover files — removes files on disk that no project points at any more. When there are none it says so instead of pretending to work.

THE LAST TWO CARDS

Shop notes — a short reminder of the things that cost you the whole job rather than a small inconvenience: shoot the overview before you touch anything, two photos per step, get a readable frame of every nameplate.

Service — one line of diagnostics with a button to copy it, for when something needs reporting, and

Reset settings to defaults. That resets the three switches on this screen, assembly-only among them, and the question says so. It does not touch a single project.



The handover switch, units and the buzz. Storage and the service card are further down the same screen.

NOTHING HERE CAN DELETE YOUR WORK

The only place that can wipe the whole record is a rescue screen you would see instead of the app if the store ever failed to open, and it sits behind two questions in a row. Teardown photos cannot be taken again, so the app never tidies up on your behalf.