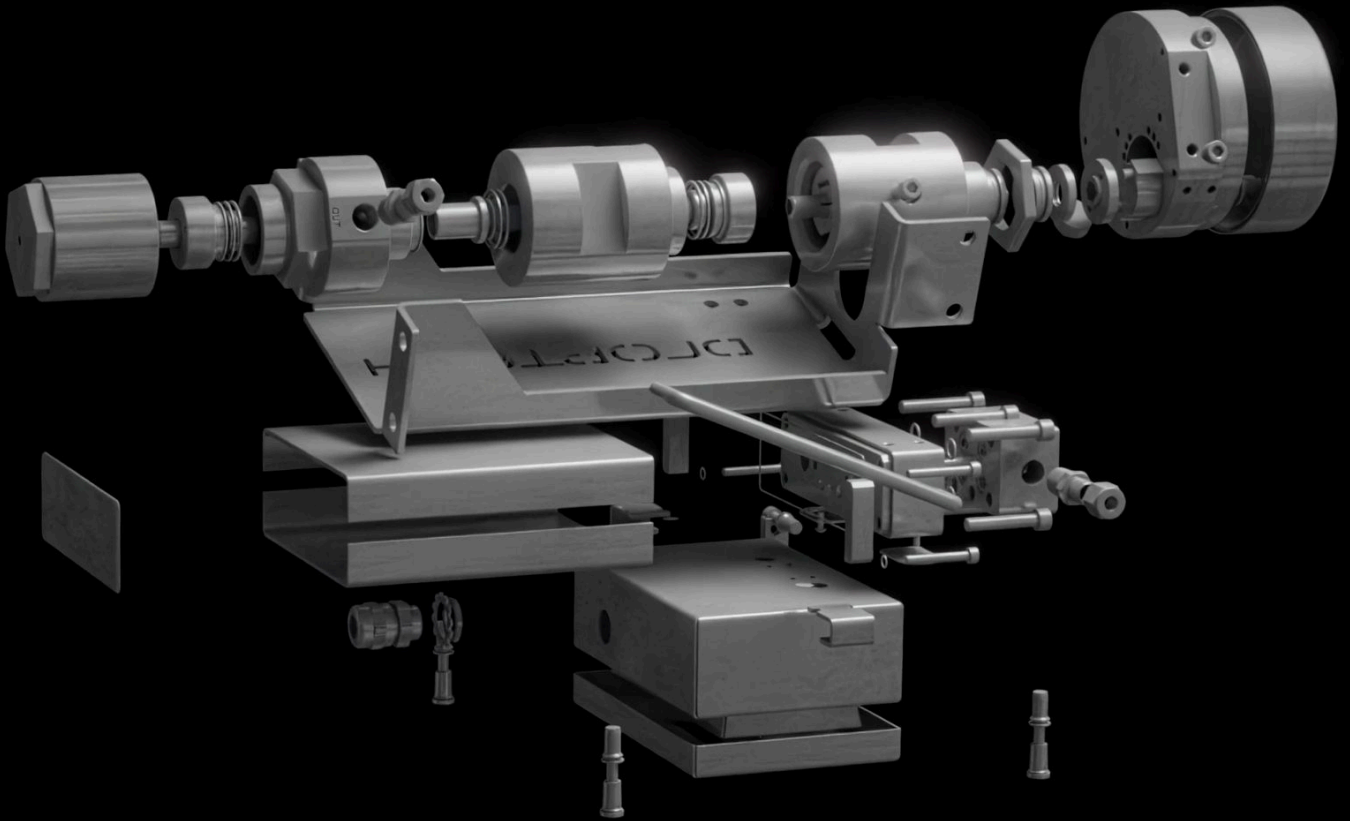




FIELD GUIDE / 2026 EDITION

Five Steps. Every Part in Order. Rendered Once.

What to prepare at each step of a 3D assembly animation, which CAD exports work, where your engineers review and how long each step usually takes, from brief to delivery.

START HERE

Why assembly animation schedules slip

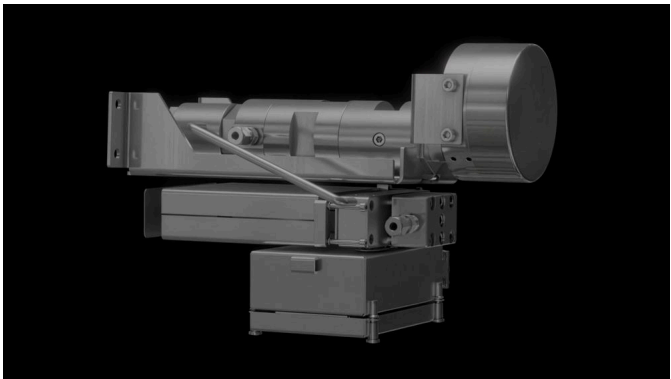
An assembly animation rarely runs late because rendering is slow. It runs late because the person who knows the real assembly order sees the film too late: the engineer after the parts are animated, the service team after the edit is locked.

Every late comment throws away work that already exists. A part that cannot physically move that way means new animation; a changed fastener means a new model and new shots; an engineer who sees the sequence for the first time in the final film means both.

REVIEWED AT THE END		REVIEWED AT EACH STEP
01	The engineer first sees the sequence when it is rendered	The engineer approves the step list before anything moves on screen
02	Heavy CAD files are discovered halfway through animation	Files are checked and simplified in the first days
03	The sales cut and the installer cut are argued about in one film	Separate cuts are planned from the same model at the storyboard
04	Timing is judged in the final render	Timing is approved on the animatic, before rendering

The approved step list is the asset. The frames are the output.

A part-by-part step list checked by your engineer and a storyboard with the camera angles are the cheapest part of an assembly animation and the part everything else depends on. Fix them first and every later step renders what is already agreed.



Maverick Frame industrial valve assembly animation stills.

THE ROADMAP

What to approve at each step, and who reviews it

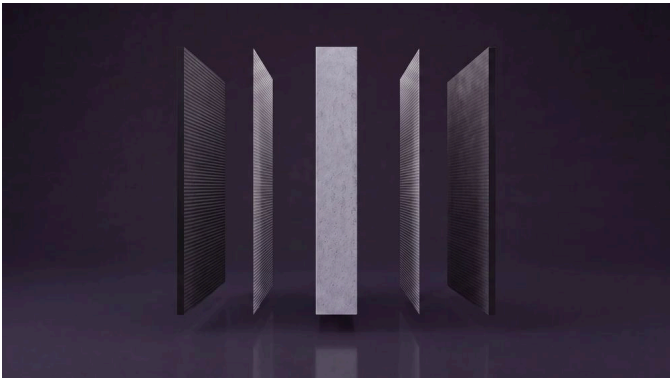
The five steps below are the ones on our assembly animation page. For each: what is produced, who on your side reviews it, and what the next step inherits instead of redoing it.

STEP	PRODUCE AND APPROVE	WHO REVIEWS IT	CARRIES OVER
Brief & CAD	Audience, channels, runtime; CAD or STEP files, drawings, manuals and brand guidelines collected	Product or marketing lead	The brief every later step is checked against
Step list	The assembly order part by part, with fasteners and tools	Design or manufacturing engineer	The exact sequence every shot follows
Storyboard	Camera angles, callouts and timing for each step, as frames and a rough animatic	Engineer for accuracy, marketing for the story	The shot list, the callouts and the timing
Animation	Model preparation, materials, animation and rendering in full quality	Engineer for motion, you for timing	The approved shots for every version
Delivery	Edit, labels and sound; a master plus cutdowns for web, trade shows, manuals and social	Marketing, service or documentation team	A clean 3D model for the next film

Start where you are

If you already have the assembly order in a manual, start at Step list and ask for it to be reviewed by your engineer before any shot is animated. That is what lets the sales cut, the installer guide and the training version reuse the same shots.

Not every project passes through all five steps with the same weight. A short exploded view for a product page may go from Brief to Animation in days; a step-by-step installation guide always needs a step list your engineer has signed. The order still holds.



Maverick Frame wall system exploded view animation stills.



HOW LONG IT TAKES

One 30-second film, step by step

A composite of one 30-second assembly or exploded-view film of a product with a few dozen parts, with CAD available and one engineer reviewing on your side. Studio days and review days are listed separately, because your engineer's calendar decides the schedule as much as ours does.

STEP	WHO WORKS	WORKING DAYS
01	Brief: kick-off, files, audience and channels	studio1 day
02	CAD check and simplification	studio2 days
03	Step list: assembly order part by part	studio1 day
04	Step list review for accuracy	your engineer2 days
05	Storyboard: angles, callouts, rough animatic	studio2 days
06	Storyboard review	your engineer2 days
07	Animation: materials, animation, rendering	studio5 days
08	Animatic review: motion and timing	your engineer1 day
09	Delivery: edit, labels, sound, cutdowns	studio2 days
Studio working days		13 days
Review days on your side		5 days

Brief to delivery, one 30-second film18 days

In calendar time, with reviews returned on scheduleabout 4 weeks

13

STUDIO WORKING DAYS

5

REVIEW DAYS ON YOUR SIDE

3

REVIEWS BEFORE RENDERING

1

MODEL FOR EVERY VERSION

Hundreds of parts, no CAD files, several audience versions, more languages or a formal documentation sign-off add time. Tell us the date of the launch, the trade show or the manual print run and we plan the steps backwards from it.



Maverick Frame assembly and exploded view animation stills.



THE ONE PAGE

What to send us at each step

The teams whose logos sit on our service pages do not send long specifications. At each step they send a few things like these, usually in the body of an email, and it is enough to quote from and to start work.

01	Brief: the audience	Who will watch: buyers, installers, technicians or investors, and where it will play.
02	Brief: the files	STEP or IGES exports, native CAD, or drawings and photos if there is no model yet.
03	Brief: the parts	A parts list or bill of materials, and which parts the viewer must see.
04	Step list: the order	The real assembly sequence, from the manual, the line or the engineer's notes.
05	Step list: the reviewer	Who checks the sequence and the motion, and how long they need.
06	Storyboard: the look	Brand colours and two or three references for materials and lighting.
07	Animation: the timing	Any fixed lengths, such as a trade-show loop or a product page slot.
08	Delivery: the versions	Formats, languages, cutdowns and whether labels are burnt in or added later.
09	Every step: the date	The launch, the trade show or the manual print run. We plan backwards from it.

A new film, the same model

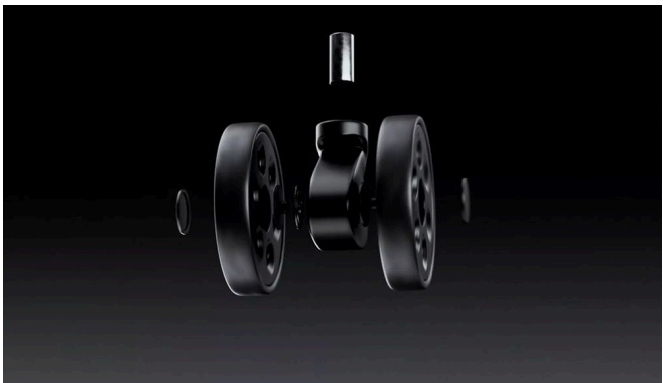
If we made your film, the next one starts with one email: the new audience, the steps and the date. The prepared model and materials are on file, so the work starts from new shots, not from new modelling.

Our terms are on the next page

Market rates, timelines and what counts as a revision round are set out on page 06. The schedule on page 04 is a composite, not a promise for every project.



Maverick Frame mechanism and production line animation stills.



WHAT THINGS COST

Market rates and our terms, so you can check any quote

Ranges seen across the market in 2026, freelancer to studio. Use them to sanity-check any quote, including ours.

DELIVERABLE	FREELANCER	STUDIO
Single exterior still	\$100 - 300	\$250 - 600
Single interior still	\$120 - 350	\$300 - 700
Package of 5 - 8 views	\$600 - 1,500	\$1,500 - 4,000
Animation, per minute	\$1,000 - 3,000	\$3,000 - 8,000

Our standard timelines and revision terms. They are what we quote unless a project needs something else, and we say so before work starts.

STAGE OR DELIVERABLE	MAVERICK FRAME STANDARD
First draft of a still	3 to 5 working days from a complete brief
Finished stills, package of 5 - 8	2 to 3 weeks, drafts included
Animation, up to one minute	4 to 6 weeks, storyboard and preview first
Revision rounds included	Two at draft stage, one on the final image
What counts as a round	One consolidated list of comments, sent at once
Rush delivery	Half the time for about 40% more, when the schedule allows

Line up a studio before the deadline is on fire

The most expensive projects we see are not the badly briefed ones. They are the ones briefed in a panic, after the first supplier failed and the launch date did not move. Vet one or two studios while nothing is urgent.

A note on in-house: one artist needs around ten software subscriptions, a workstation and a stack of adjacent skills - modelling, lighting, post-production and client communication. It pays off only when that person is busy every day. Below that, the arithmetic favours outsourcing on its own.

NEXT

Send us the CAD and the date

CAD or STEP files, drawings, a manual, a parts list or just a first draft of the brief, in whatever state, and the date the film is needed. We reply with a scope, a schedule and a price, in writing and without a sales call.

The contact form	maverickframe.com/contacts/
Assembly animation	maverickframe.com/services/3d-assembly-animation/
Or simply	reply to the email this guide arrived in.

Written by the people who read these briefs

Dim Kuzmenko is a co-founder of Maverick Frame Studio. The figures in this guide come from our own inbox and our own rate card, not from an industry survey.