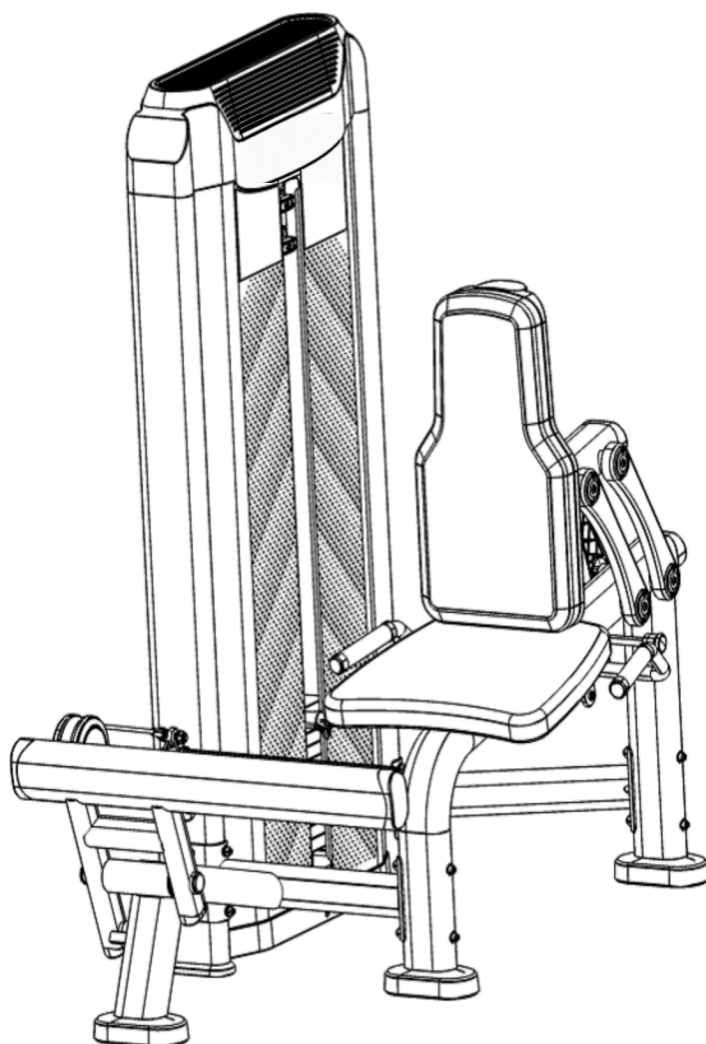


FRACTAL SERIES

Calf Extension

Assembly & Owner Guide



BUILT TO PERFORM.

Read before assembly. Keep this guide for future reference.

01 / PREPARE

Before you begin

Set up your space

Assemble indoors on a level, stable surface with clear access around the equipment. Protect the floor and allow enough room to lay out the frame and hardware.

Check every part

Unpack and compare the components with the illustrated lists. Keep hardware grouped by stage. Reference numbers identify parts in the drawings; they may restart at each stage. Quantities are for the corresponding source list and should not be added across stages.

Prepare tools and help

Have metric hex keys and suitable metric wrenches or sockets ready for the listed fasteners. Use sufficient help to support heavy frames and moving assemblies. Keep hands clear of pinch points and never work beneath an unsupported load.

Follow the assembly drawings

Work through the stages in order. Match each numbered callout with its parts list. Confirm orientation before fitting fasteners. A part described as an assembly is supplied as a component; the wording does not instruct you to weld it.

Check connections before use

Use the specified hardware at each joint. Confirm that fasteners are secure and moving parts operate freely. If a part, dimension or connection is unclear, stop and contact Build A Gym before continuing.

ASSEMBLY SUPPORT

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02 / SAFETY

Use and care safely

- Use the equipment indoors in a dry, supervised area. Keep the surrounding floor level and unobstructed.
- Children under 12 must not use this equipment. Provide appropriate supervision and assistance for other users who need it.
- Before each use, inspect moving components, fasteners, pins and attachments. Have loose or damaged parts corrected before use.
- Wear suitable exercise clothing and athletic shoes. Warm up before exercise and use slow, controlled movements.
- Increase resistance gradually. Stop exercising if you feel pain, discomfort or anything unusual, and consult a doctor.
- Consult your doctor before starting an exercise program.
- Keep hands, clothing and other objects clear of moving parts. Make sure adjustment pins and any safety stops are fully engaged.
- Clearly mark the equipment “Out of Use” during servicing or repair. Keep this guide available for future reference.

Your assembly sequence

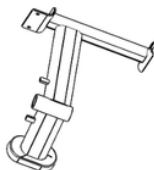
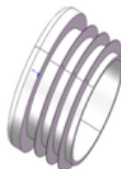
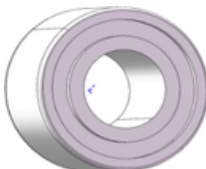
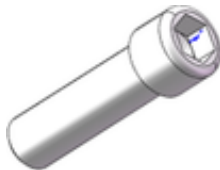
Stage 1 → Stage 2 → Stage 3 → Stage 4 → Stage 5 → Stage 6 → Stage 7 → Stage 8 → Final inspection

Use the PDF bookmarks to jump directly to a stage.

STAGE 1 / PARTS

Identify your components

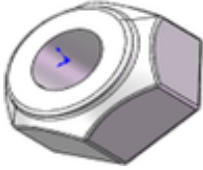
Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Small door	REF 2 QTY 1  Main frame seat	REF 3 QTY 1  Footrest base
REF 4 QTY 1  Footplate	REF 5 QTY 1  Connecting brace	REF 6 QTY 1  Rotating shaft
REF 7 QTY 2  Large spacers	REF 8 QTY 2  Tube plug	REF 9 QTY 2  Deep groove ball bearings
REF 10 QTY 18  Washers Ø10.3xØ20 × 1.2	REF 11 QTY 10  Spring washer Ø10	REF 12 QTY 8  Socket-head screw M10 × 25

STAGE 1 / PARTS

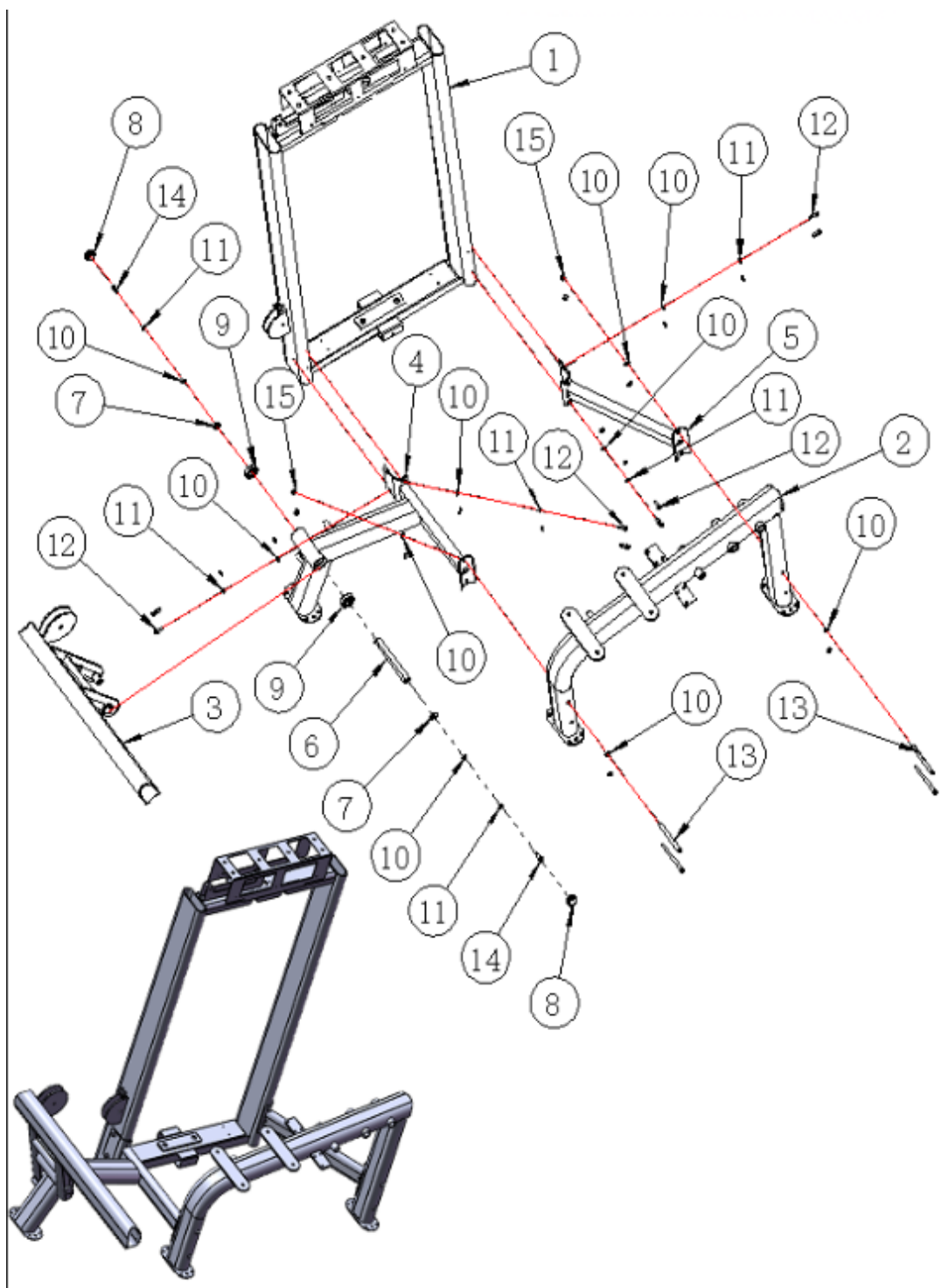
Identify your components

Match each reference and quantity to the drawing for this stage.

REF 13 QTY 4  Socket-head screw M10 × 135	REF 14 QTY 2  Socket-head screw M10 × 30	REF 15 QTY 4  Locknut M10
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STAGE 1 / DRAWING 1 OF 1

Assembly stage 1



Match the numbered callouts to the Stage 1 parts list. Position the components as shown and use the listed hardware at each connection.

Stage 1: Join the Frame and Foot Pivot

Use Stage 1 references. Do not release a supported moving assembly until both pivot retainers are fitted.

1. Position the tower and seat frame

Stand and brace tower frame 1 and main seat frame 2 on a level floor in the illustrated relationship. Identify connecting brace 5 and the lower connection structure. Keep the foot assembly supported throughout assembly.

2. Install the frame connections

Fit brace 5 and the illustrated lower connection plates. Use M10 × 25 screws 12, spring washers 11 and washers 10 at the depicted plate joints. Fit M10 × 135 screws 13 with washers 10 and locknuts 15 at the seat-frame through-connections. Align the frames before securing all joints.

3. Install the footrest pivot

Support footrest base 3 and footplate assembly 4 in the drawn orientation. Fit bearings 9 and rotating shaft 6 through the aligned pivot. Fit large spacers 7, washers 10, spring washers 11 and M10 × 30 screws 14 at the shown ends, then plugs 8.

4. Verify the pivot and frame

Confirm the shaft cannot slide out and the foot assembly moves without binding. Keep it controlled until the cable attachment is verified. Check every frame and brace connection before proceeding.

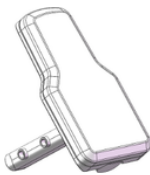
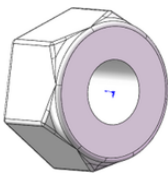
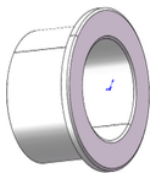
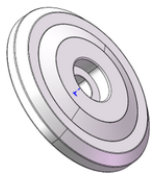
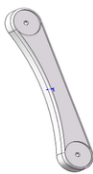
Check before continuing

Frame joints and foot pivot are secure and aligned.

STAGE 2 / PARTS

Identify your components

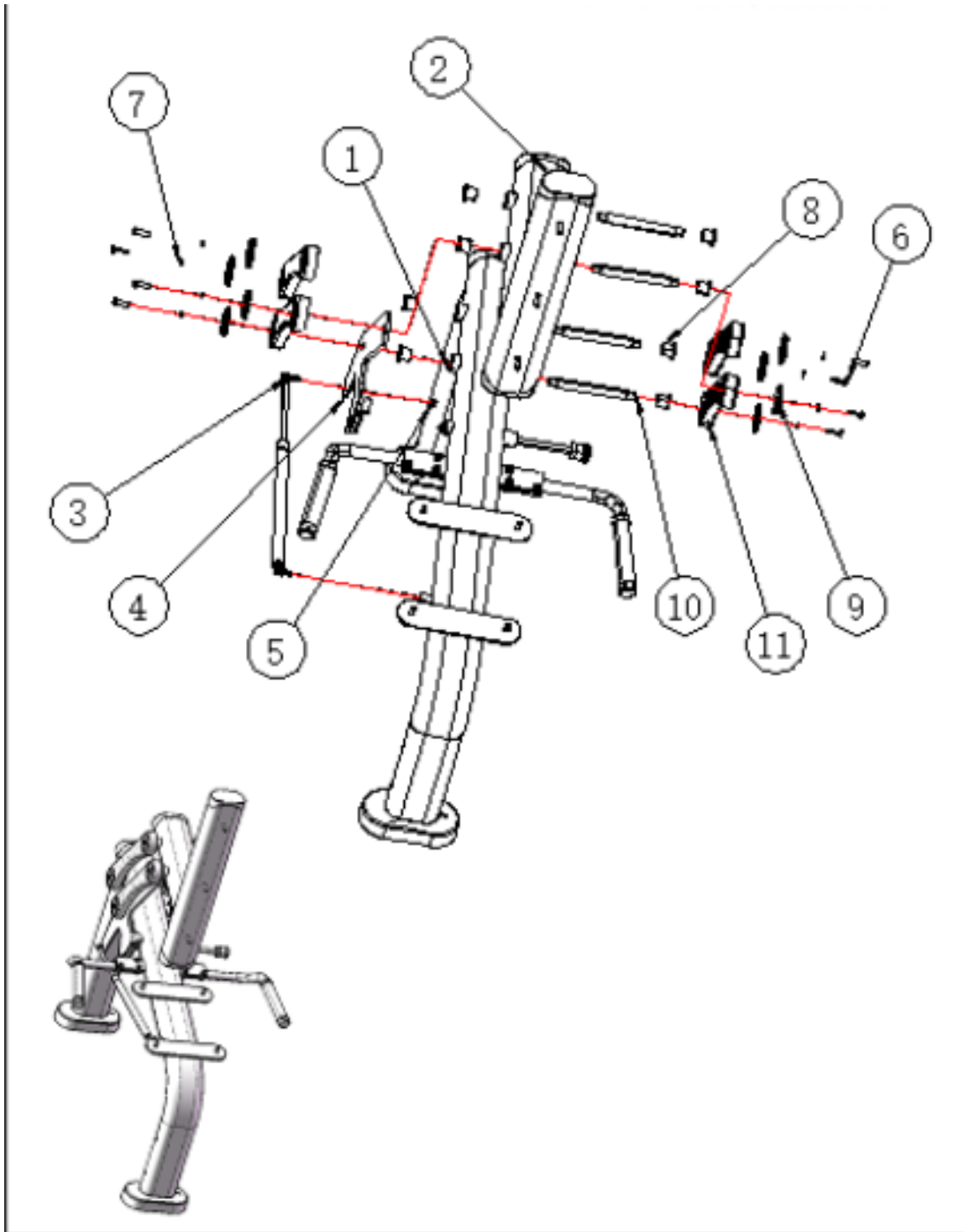
Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Main frame assembly	REF 2 QTY 1  Backrest assembly	REF 3 QTY 1  Gas springs
REF — QTY 1  Adjustment plate	REF 5 QTY 1  Locknut M8	REF 6 QTY 8  Hexagon pan head screws M8 x 30
REF 7 QTY 8  Spring washer Ø8	REF 8 QTY 8  Sintered bushing	REF 9 QTY 8  Aluminum cover
REF 10 QTY 4  Short fixed shaft	REF 11 QTY 4  Long crank	

“—” means the source does not specify this value. Confirm it with Build A Gym before assembly.

STAGE 2 / DRAWING 1 OF 1

Assembly stage 2



Match the numbered callouts to the Stage 2 parts list. Position the components as shown and use the listed hardware at each connection.

Stage 2: Assemble the Seat Linkage

Use Stage 2 references. Confirm the adjustment-plate identity and any omitted attachment detail with the supplied kit.

5. Fit the four crank links

Support main frame 1 and backrest assembly 2. Fit bushings 8, short shafts 10 and four cranks 11 in the shown arrangement. Fit covers 9 and retain them with M8 × 30 screws 6 and spring washers 7 at the depicted shaft ends.

6. Connect the gas spring and adjustment plate

Keep the seat/backrest mechanism supported. Position gas spring 3 and the illustrated adjustment plate, labeled 4 in the drawing but unnumbered in the list. Fit the shown M8 locknut 5 and verify all supplied mounting and release components before removing support.

7. Check every adjustment position

Preserve factory gas-spring settings. With support available, move the seat mechanism slowly, fully engaging its adjustment lock at each checked position. Verify all four crank links remain aligned and no shaft or pad mount shifts.

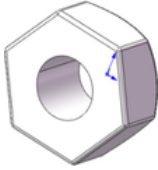
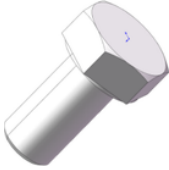
Check before continuing

The linkage is retained, moves freely and locks without drift.

STAGE 3 / PARTS

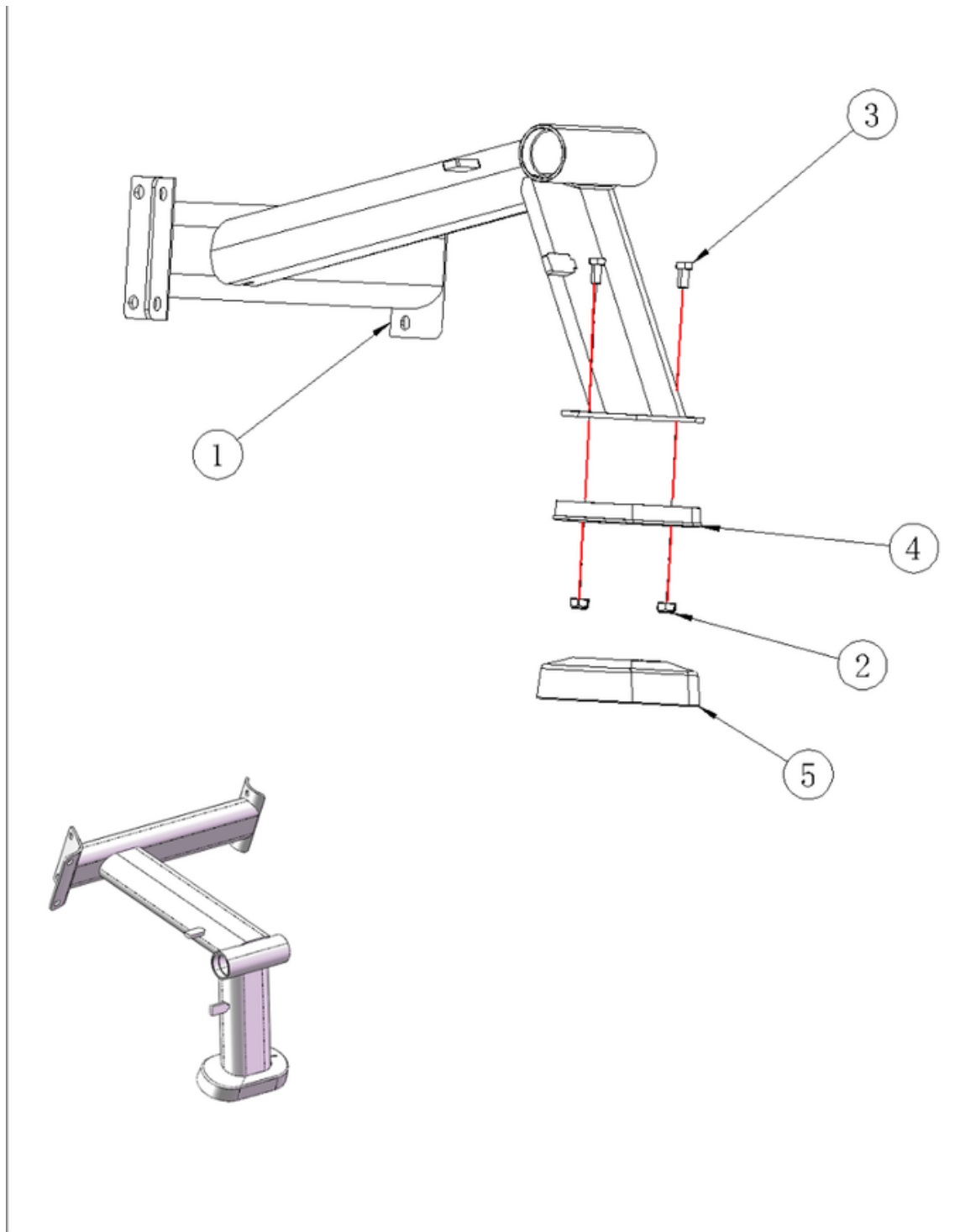
Identify your components

Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Footrest assembly	REF 2 QTY 2  Locknut M10	REF 3 QTY 2  Hex head bolt M10 × 20
REF 4 QTY 1  Footrest plastic parts	REF 5 QTY 1  Ground foot cover	

STAGE 3 / DRAWING 1 OF 1

Assembly stage 3



Match the numbered callouts to the Stage 3 parts list. Position the components as shown and use the listed hardware at each connection.

Stages 3–5: Finish Feet and Pads

Follow the Stage 3 drawing above, then the Stage 4 and Stage 5 drawings that follow. Part numbers restart at each stage.

8. Fit the footrest ground support

Using Stage 3 references, position footing part 4 and ground cover 5 beneath footrest assembly 1. Secure the shown M10 × 20 bolts 3 and M10 locknuts 2. Confirm the foot stands fully on the floor.

9. Fit the foot-contact plates

Using Stage 4 references, attach both footplates 5 to foot assembly 1 with M5 × 15 screws 2 and spring washers 3 at the illustrated holes. Fit end caps 4 and 6. Keep the contact surfaces free of loose parts.

10. Retain the foot-assembly sleeve and covers

Fit cushioning sleeve 11 and pulley covers 7 at the depicted pivot/connection point in the Stage 4 drawing. Retain with M10 × 70 screw 9, washers 10 and M10 locknut 8. Check the assembly is retained and the cable-side connection remains accessible.

11. Install the backrest cushion

Using Stage 5 references, attach backrest cushion 3 to frame 1 with M8 × 35 screws 5, spring washers 6 and washers 7. Fit end caps 2 and plugs 4 after fastening. Verify both seat and backrest pads are secure.

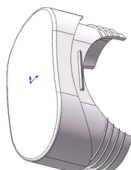
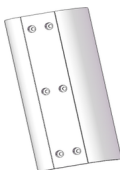
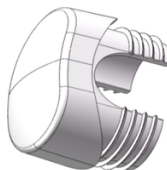
Check before continuing

Feet, contact plates, connection covers and pads are secure.

STAGE 4 / PARTS

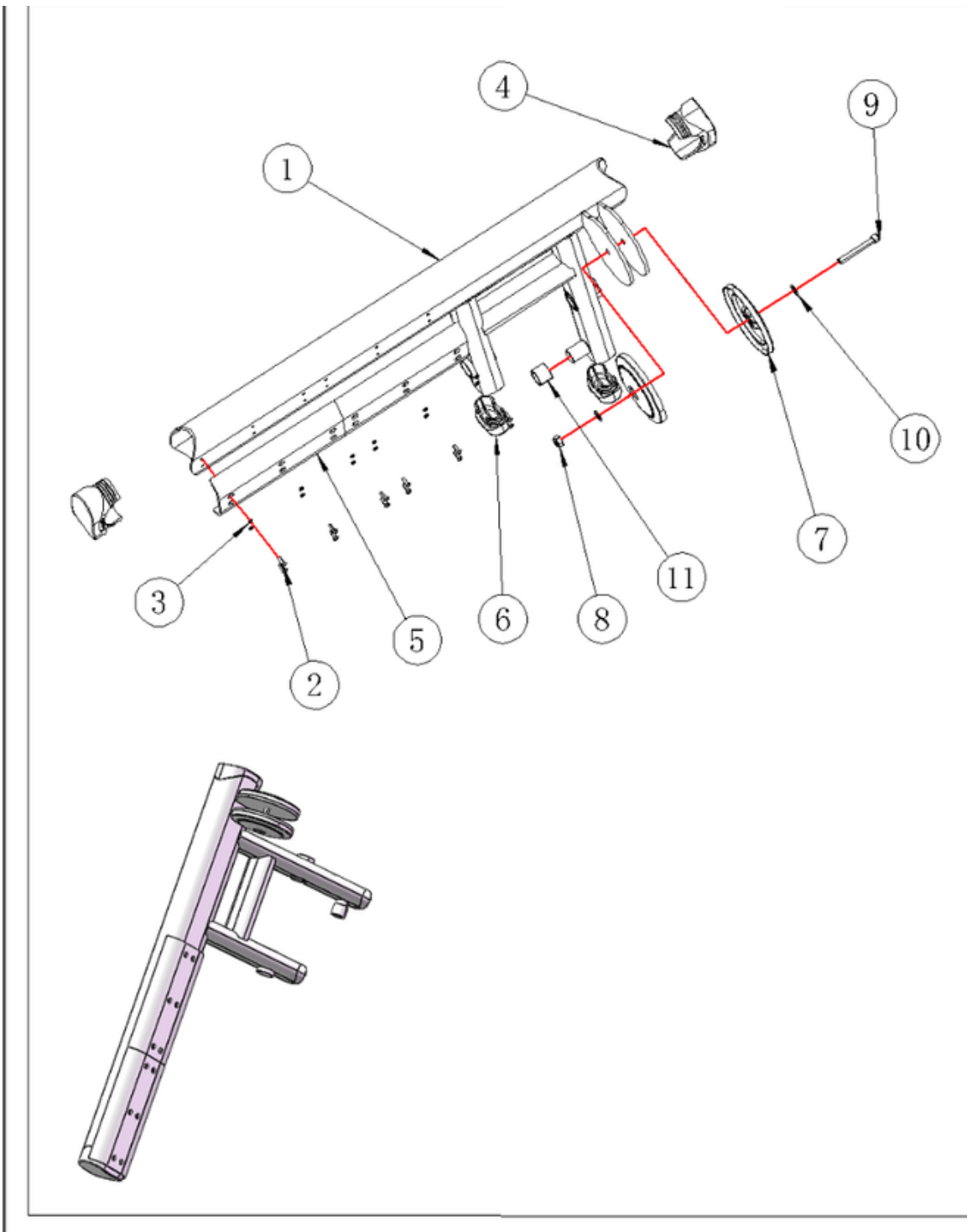
Identify your components

Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Foot assembly	REF 2 QTY 12  Socket-head screw M5 × 15	REF 3 QTY 12  Spring washer Ø 5
REF 4 QTY 2  65 × 114 End Caps (curved end)	REF 5 QTY 2  Footplate	REF 6 QTY 2  40 × 70 end caps (curved end) mouth)
REF 7 QTY 2  Pulley cover	REF 8 QTY 1  Locknut M10	REF 9 QTY 1  Socket-head screw M10 × 70
REF 10 QTY 2  Washers Ø10.3xØ20 × 1.2	REF 11 QTY 1  Cushioning sleeves	

STAGE 4 / DRAWING 1 OF 1

Assembly stage 4

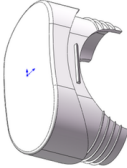
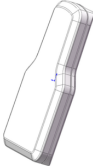
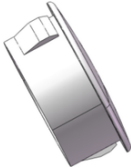


Match the numbered callouts to the Stage 4 parts list. Position the components as shown and use the listed hardware at each connection.

STAGE 5 / PARTS

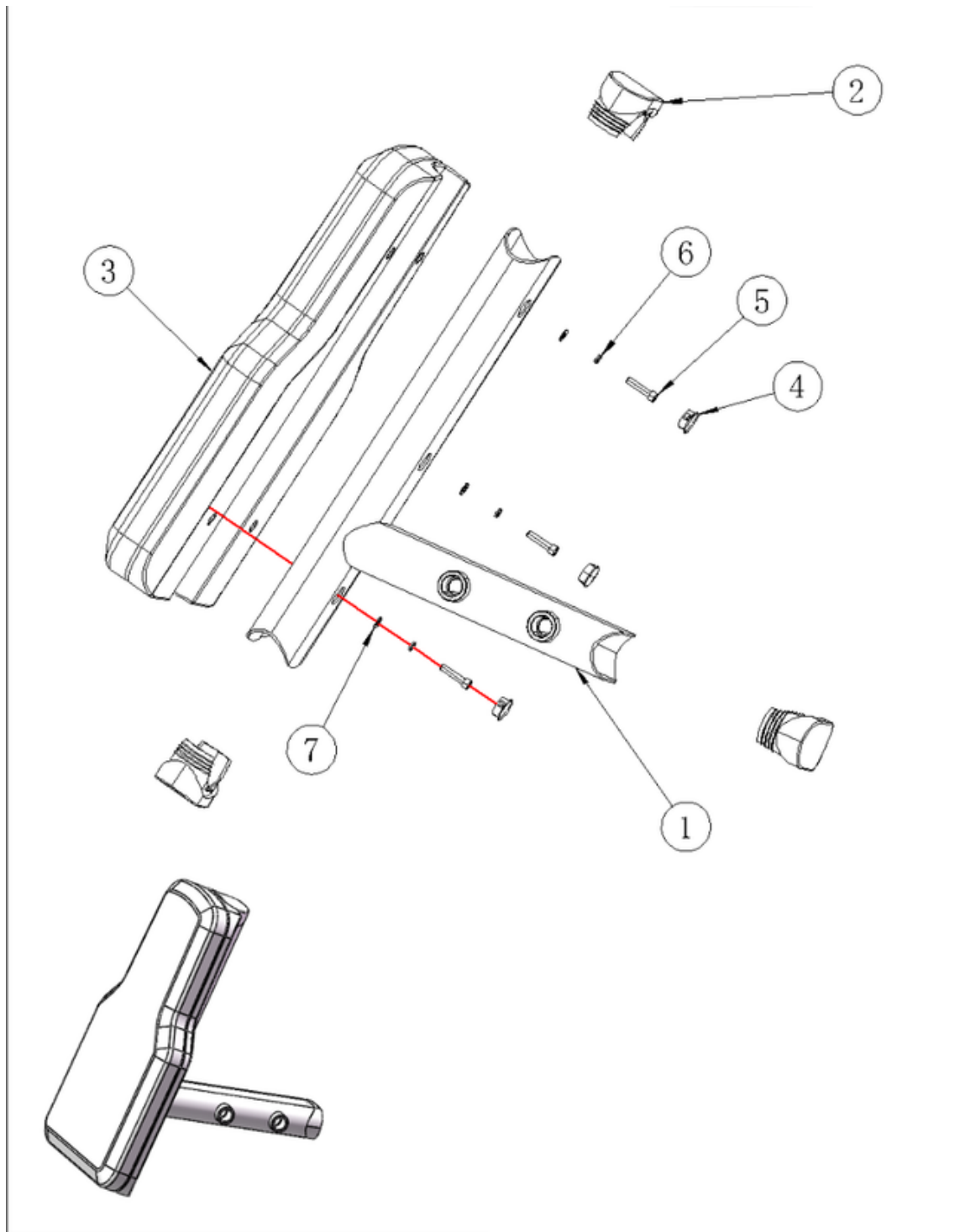
Identify your components

Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Backrest assembly	REF 2 QTY 3  65 × 114 End Caps (curved end)	REF 3 QTY 1  Backrest cushions
REF 4 QTY 3  25 Round hole plugs	REF 5 QTY 3  Socket-head screws M8 × 35	REF 6 QTY 3  Spring washer Ø8
REF 7 QTY 3  Washers Ø8.3xØ16 × 1		

STAGE 5 / DRAWING 1 OF 1

Assembly stage 5

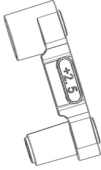
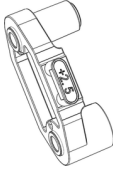
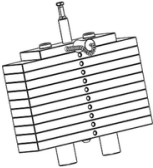
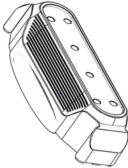
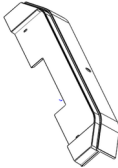
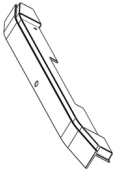
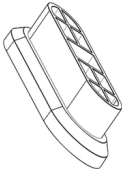
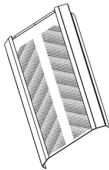


Match the numbered callouts to the Stage 5 parts list. Position the components as shown and use the listed hardware at each connection.

STAGE 6 / PARTS

Identify your components

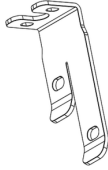
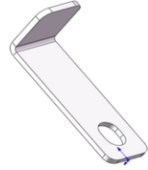
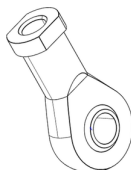
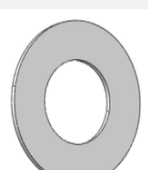
Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Small frame assembly	REF 2 QTY 1  Sub-counterweigh t	REF 3 QTY 1  Sub-counterweig ht
REF 4 QTY 1  Balance and recombination	REF 5 QTY 1  Large upper cover	REF 6 QTY 2  Front base
REF 7 QTY 1  Rear base	REF 8 QTY 2  Base	REF 9 QTY 1  Top cover
REF 10 QTY 1  Front guard	REF 11 QTY 1  Rear guard	REF 12 QTY 2  Guide rod retaining sleeve

STAGE 6 / PARTS

Identify your components

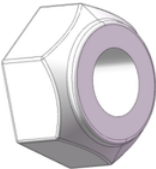
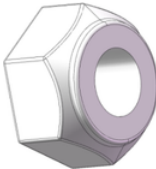
Match each reference and quantity to the drawing for this stage.

REF 13 QTY 2  Counterweight guide bar	REF 14 QTY 1  Counterweight bracket on small door	REF 15 QTY 2  Anti-skipping rope guard
REF 16 QTY 3  Pulleys	REF 17 QTY 2  136 Semi-circular pulley shell	REF 18 QTY 1  Joint bearings
REF 19 QTY 12  Cross groove pan head self-tapping screw	REF 20 QTY 6  Washer Ø10.3xØ20 x 1.2	REF 21 QTY 8  Washers Ø8.3xØ16 x 1
REF 22 QTY 12  Washers Ø5.3xØ10 x 1	REF 23 QTY 2  Washer Ø12.2xØ24 x 1.2	REF 24 QTY 12  Spring washer Ø5

STAGE 6 / PARTS

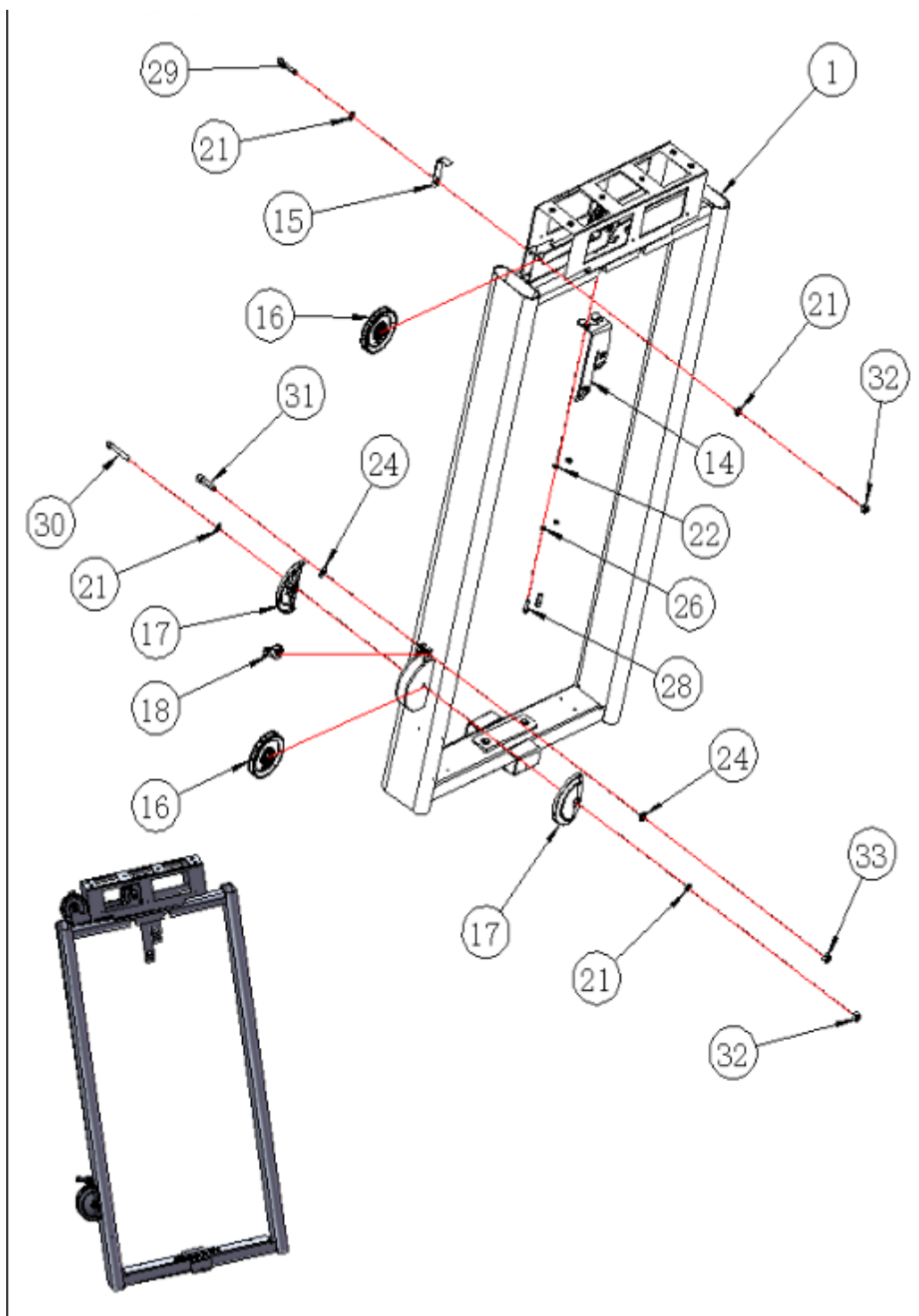
Identify your components

Match each reference and quantity to the drawing for this stage.

REF 25 QTY 8  Spring washer Ø8	REF 26 QTY 2  Hexagon pan head screws M6 x 25	REF 27 QTY 8  Socket-head screw M8 x 25
REF 28 QTY 2  Socket-head screw M10 x 50	REF 29 QTY 1  Socket-head screw M10 x 65	REF 30 QTY 1  M12 bolt · length to confirm
REF 31 QTY 3  Locknut M10	REF 32 QTY 1  Locknut M12	

STAGE 6 / DRAWING 1 OF 3

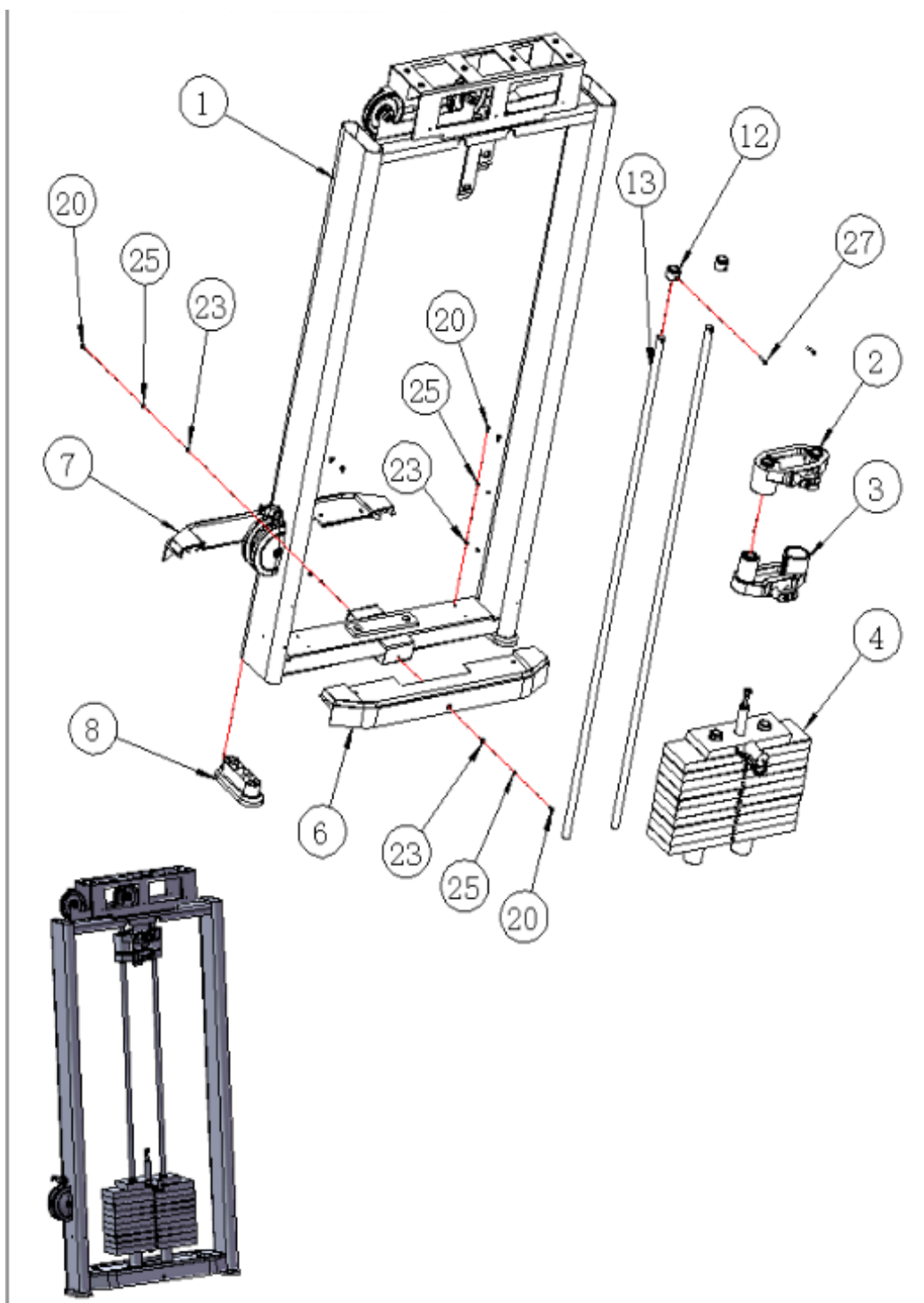
Assembly stage 6



Match the numbered callouts to the Stage 6 parts list. Position the components as shown and use the listed hardware at each connection.

STAGE 6 / DRAWING 2 OF 3

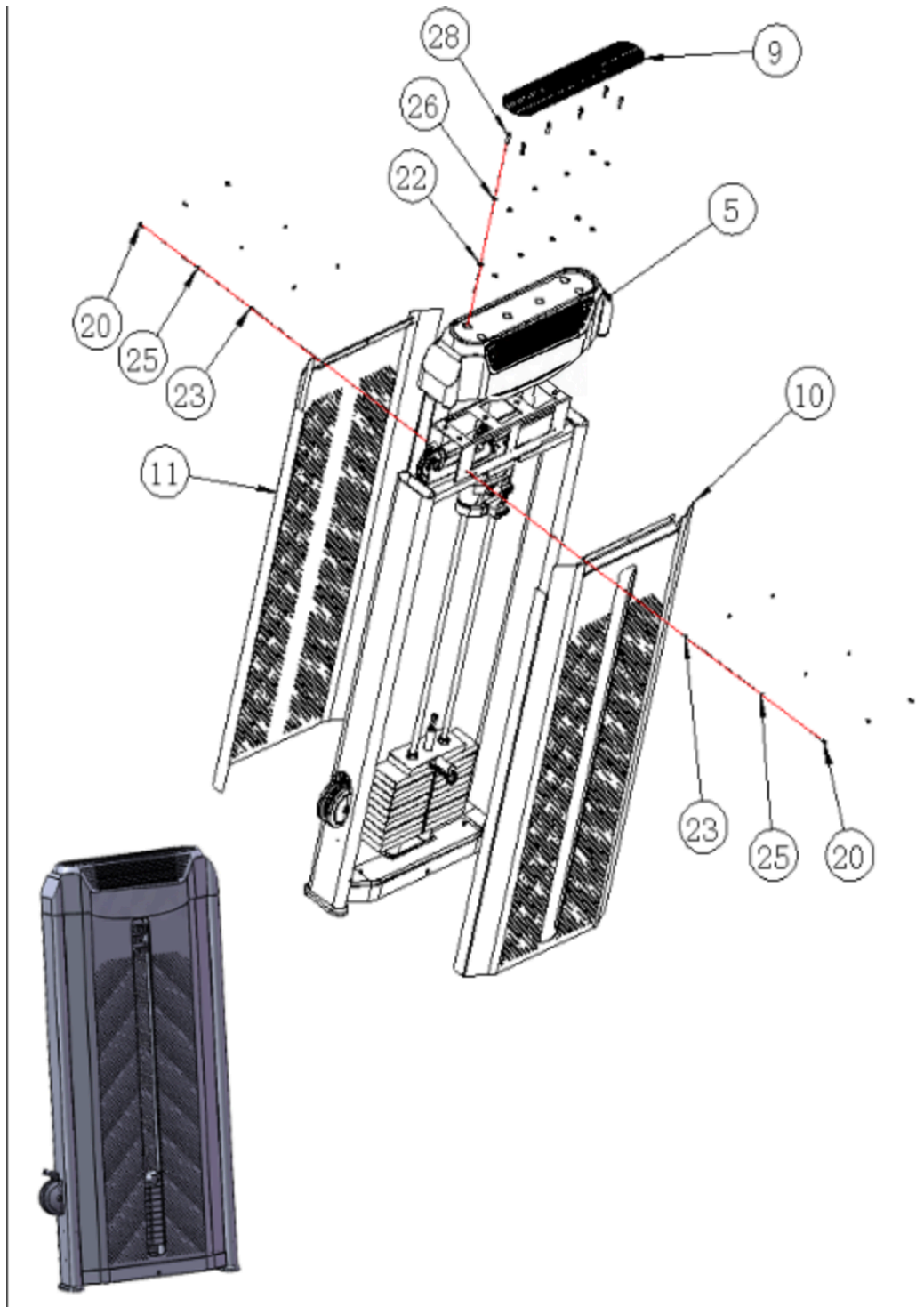
Assembly stage 6



Match the numbered callouts to the Stage 6 parts list. Position the components as shown and use the listed hardware at each connection.

STAGE 6 / DRAWING 3 OF 3

Assembly stage 6



Match the numbered callouts to the Stage 6 parts list. Position the components as shown and use the listed hardware at each connection.

Stage 6: Assemble the Tower

Use the three Stage 6 drawings together. Match parts by shape and confirmed hardware identity where the source numbers conflict.

12. Resolve the tower hardware references

The Stage 6 drawings and parts list disagree on several hardware numbers, including guard screws and guide-sleeve fasteners; drawing callout 33 is also absent from the list. Bolt 30 has an uncertain listed length. Confirm the correct hardware mapping and bolt lengths before assembling these connections.

13. Fit tower pulleys and base components

Fit the three tower pulleys, anti-jump guards and semicircular shells in the positions shown in drawing 1. Use the confirmed axle bolts, washers and locknuts at each location. Fit the joint bearing at the lower side connection without changing an existing adjustment. Install the base pieces shown in drawing 2.

14. Install the supported stack and guides

If supplied dismantled, first use the Stage 7 stack instructions. Keep the stack supported at its base and insert both guide rods in the shown orientation. Fit the secondary weights above the main stack in their depicted order, then guide-retaining sleeves. Confirm buffers, lower mounts and both upper retainers before removing support.

15. Fit the upper bracket and cover

Secure the tower bracket and large upper cover at the depicted mounting points using the confirmed fastener mapping. Fit the top cover. Keep front and rear guards accessible until the cable routing and terminations have been verified.

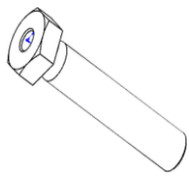
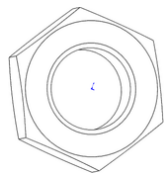
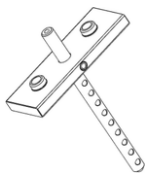
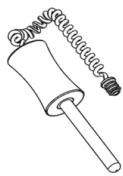
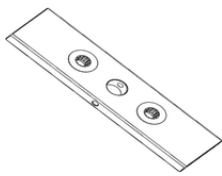
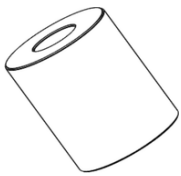
Check before continuing

Tower pulleys, guide rods, stack retainers and cover mounts are secure.

STAGE 7 / PARTS

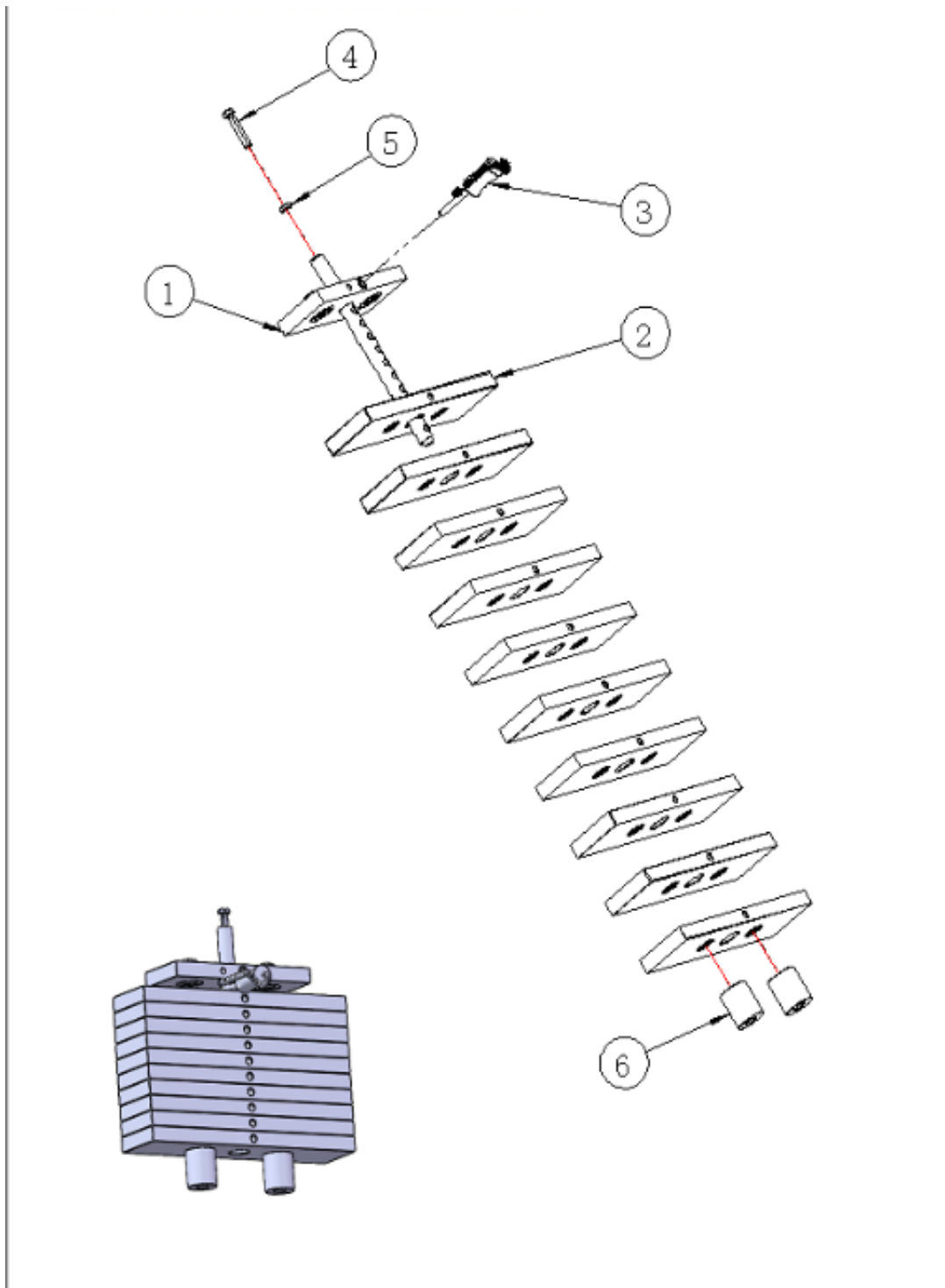
Identify your components

Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Hollow screws	REF 2 QTY 1  Hexagonal thin nut	REF 3 QTY 1  Weighted head sheet
REF 4 QTY 1  Weight selector pin	REF 5 QTY 10  Weight plates	REF 6 QTY 2  Counterweight cushioning

STAGE 7 / DRAWING 1 OF 1

Assembly stage 7



Match the numbered callouts to the Stage 7 parts list. Position the components as shown and use the listed hardware at each connection.

Stage 7: Verify the Weight Stack

This stage details the stack shown assembled in Stage 6. A correctly supplied stack can be inspected without dismantling it.

16. Identify the stack parts

The Stage 7 drawing and list assign different numbers to the top plate, selector pin, hollow screw, thin nut and weight plates. Identify these parts by their illustrations and obtain the corrected reference mapping before assembling loose parts. The supplied list calls for ten weight plates and two lower buffers.

17. Assemble and retain the plates

Keep the plates supported and preserve the shown order and selector-hole direction. Position the buffers below the plates and fit the top plate/selector stem as illustrated. Complete the guide-rod installation in Stage 6. Verify the selector pin enters the intended plate fully.

18. Confirm the cable attachment

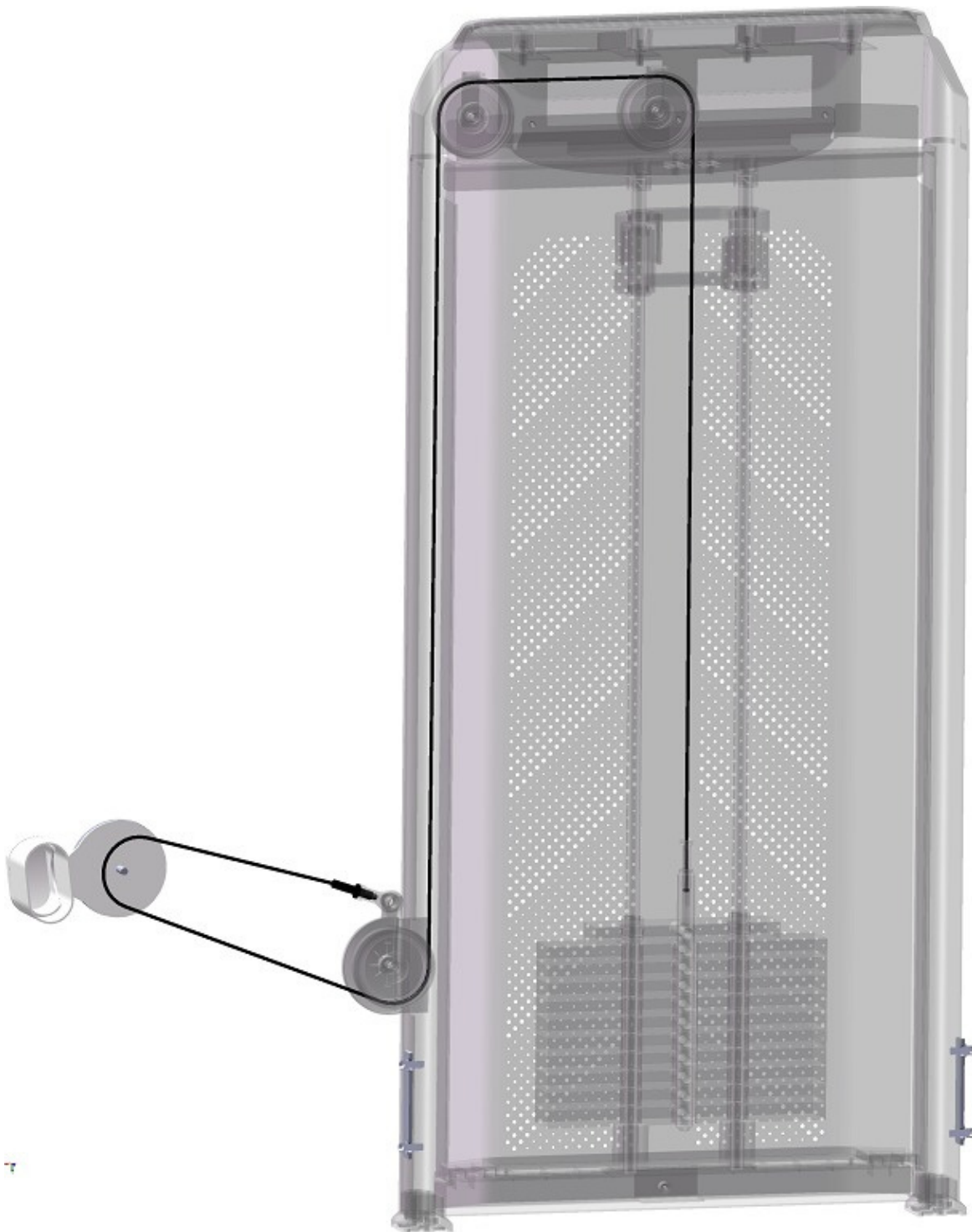
Inspect the hollow screw and thin locking nut at the top plate. Confirm the supplied cable termination, required thread engagement and locking method before applying tension. Keep the stack fully down; do not use an unconfirmed attachment.

Check before continuing

Plates are supported by their buffers, guides are retained and the selector and cable attachment are confirmed.

STAGE 8 / DRAWING 1 OF 1

Assembly stage 8



Trace the cable using this view and the following step-by-step instructions. Confirm all cable terminations and adjustments before applying tension.

Stage 8: Route, Guard and Test

Use the transparent cable view above to verify routing on the actual machine.

19. Trace the cable route

Follow the cable from the top of the stack over the two upper tower pulleys, down around the lower side pulley and around the foot-assembly connection shown at the left. Confirm its fixed termination and the relationship to the moving foot support. Keep the stack down and foot assembly supported.

20. Check pulleys and cable retention

Verify the cable lies in every groove and clears guards, fasteners and the frame. Check each pulley axle, anti-jump guard and the foot-side bearing connection. Preserve any factory routing. Obtain missing cable length, termination and adjustment details before fitting a loose cable.

21. Fit guards and finish fastening

Fit the tower front and rear guards using the Stage 6 hardware mapping confirmed earlier. Check all frame, seat, footplate, pivot and pad fasteners. Confirm the required torque and floor-fixing requirements with Build A Gym before use.

22. Test at the lowest resistance

Set and lock the seat position, then select the lowest stack load. Move the foot support slowly through a controlled calf-extension range. Confirm smooth pivot movement, cable tracking, stack lift and full return to the buffers. Stop for slack, binding, guard contact or any loose attachment.

Check before continuing

All movement, adjustment and cable checks must pass before exercise.

FINAL CHECK

Ready for the first use?

☐ **Frame and hardware**

Confirm that the frame is stable, all required hardware is installed and all connections are secure.

☐ **Adjustments and safeties**

Check that adjustment pins, locking mechanisms and any safety stops engage fully. Verify that pads and handles are secure.

☐ **Moving parts**

Carefully check the full range of movement. Confirm that moving assemblies clear the frame and guards without binding.

☐ **Product-specific inspection**

Check the cable path, guide retention, pads and every adjustment lock.
The stack must lift and return fully, with all guards and connections secure.

☐ **Keep the equipment ready**

Inspect before every use. Wipe contact surfaces dry after use. Have a qualified technician address damaged parts, unusual movement or noise before further exercise.

Need help with assembly?

Contact Build A Gym with your product name, assembly stage, part reference and a clear photo of the issue.

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