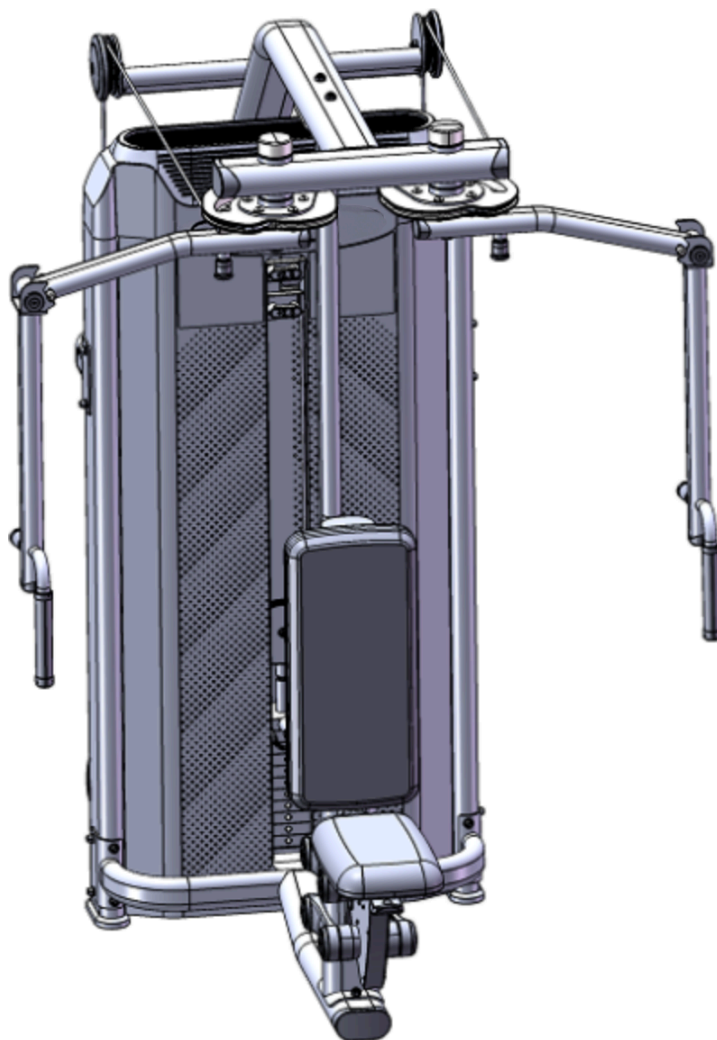


FRACTAL SERIES

Pec Fly / Rear Delt

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

Build A Gym • (512) 591-8553 • buildagym.com

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

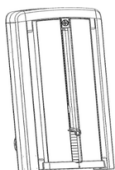
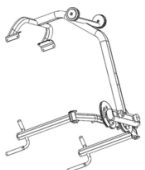
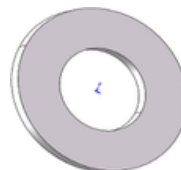
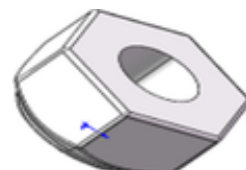
Stage 1 → Stage 2 → Stage 3 → Stage 4 → Stage 5 → Stage 6 → Stage 8 → Final inspection

Use the PDF bookmarks to jump directly to a stage.

STAGE 1 / PARTS

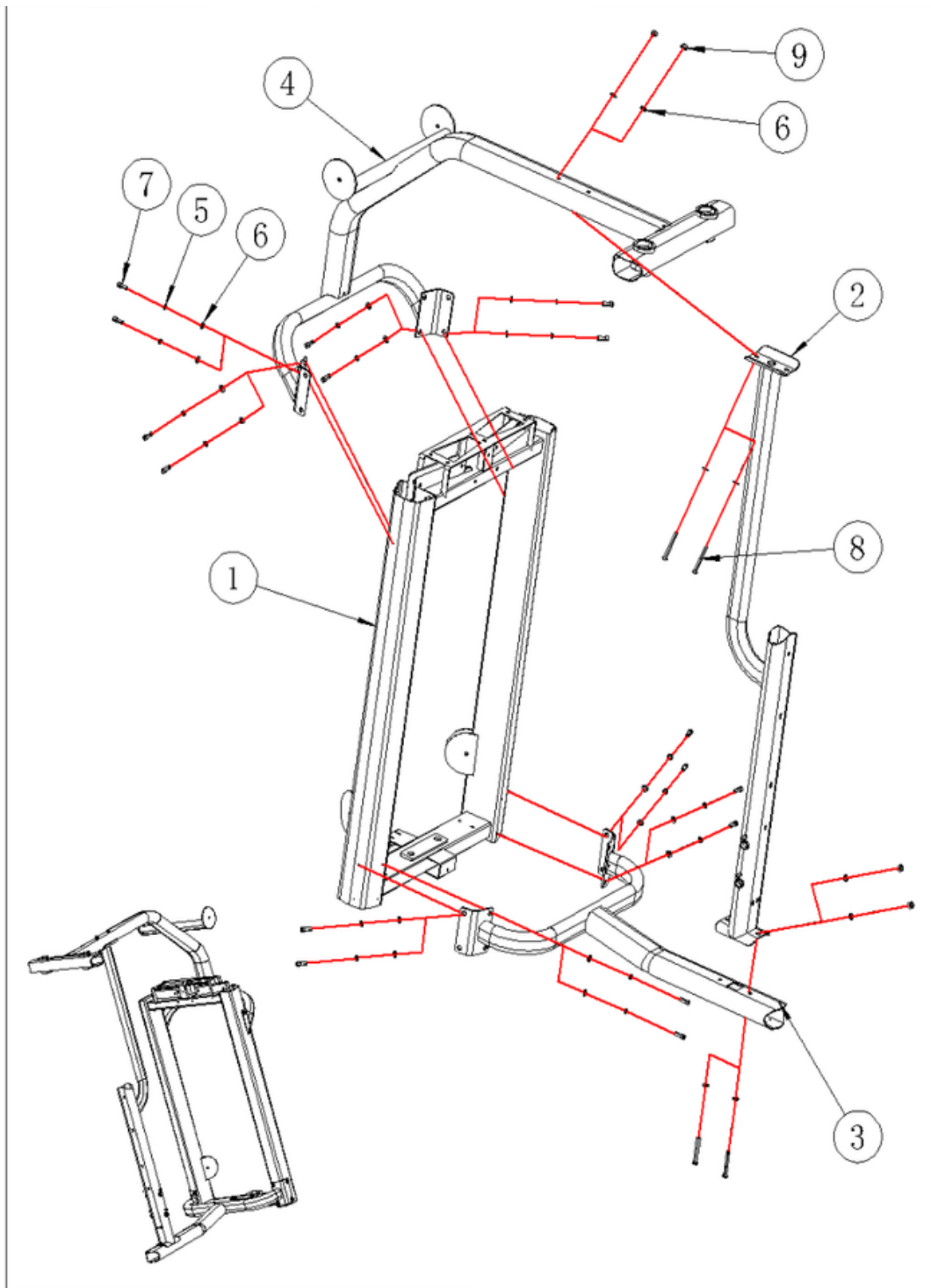
Identify your components

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

REF 1 QTY 1  <p>Small door</p>	REF 2 QTY 1  <p>Main frame</p>	REF 3 QTY 1  <p>Lower main frame</p>
REF 4 QTY 1  <p>Upper main frame</p>	REF 5 QTY 16  <p>Spring washer Ø10</p>	REF 6 QTY 24  <p>Washers Ø10.3xØ20 x 1.2</p>
REF 7 QTY 16  <p>Socket-head screw M10 x 25</p>	REF 8 QTY 4  <p>Socket-head screw M10 x 85</p>	REF 9 QTY 4  <p>Locknut M10</p>

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: Connect the Main Frames

Use Stage 1 references. The upper frame is heavy and must remain supported during joining.

1. Support the tower and frame pieces

Position tower 1, main upright 2, lower frame 3 and upper frame 4 as shown. Keep the tower and overhead frame supported until all structural joints are secure.

2. Connect the upper and lower frames

Use M10 × 25 screws 7, spring washers 5 and washers 6 at the depicted tower mounting plates and lower-frame joints. Fit main upright 2 between the lower and upper assemblies.

3. Secure the overhead connection

Fit M10 × 85 screws 8, washers 6 and locknuts 9 at the upper through-joint shown. Start every structural fastener before completing alignment, then secure all joints and confirm stability before removing supports.

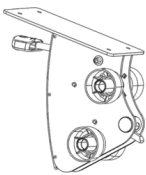
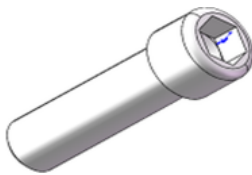
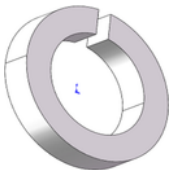
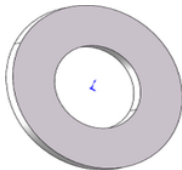
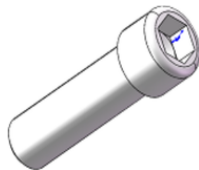
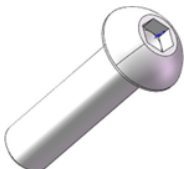
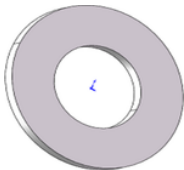
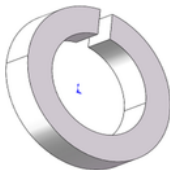
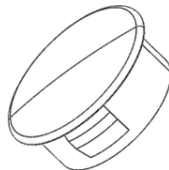
Check before continuing

Tower, lower frame, main upright and overhead frame are secure.

STAGE 2 / PARTS

Identify your components

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

REF 1 QTY 1  <p>Seat</p>	REF 2 QTY 1  <p>Main frame assembly</p>	REF 3 QTY 2  <p>Socket-head screw M10 × 30</p>
REF 4 QTY 1  <p>Spring washer Ø10</p>	REF 5 QTY 1  <p>Washers Ø10.3xØ20 × 1.2</p>	REF 6 QTY 2  <p>Socket-head screw M10 × 20</p>
REF 7 QTY 8  <p>Socket-head screw M8 × 30</p>	REF 8 QTY 4  <p>Socket-head screw M8 × 25</p>	REF 9 QTY 3  <p>Socket-head screw M8 × 30</p>
REF 10 QTY 7  <p>Ø8.3xØ16 × 1 Washer</p>	REF 11 QTY 16  <p>Ø Spring washer 8</p>	REF 12 QTY 4  <p>25 Round hole plugs</p>

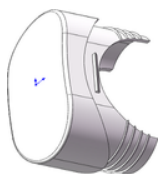
STAGE 2 / PARTS

Identify your components

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

REF 13

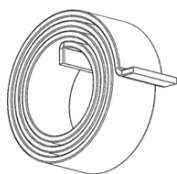
QTY 1



65 × 114 end caps

REF 14

QTY 4



Coil spring

REF 15

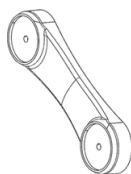
QTY 8



Aluminum cap

REF 16

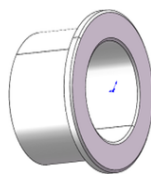
QTY 4



Crank

REF 17

QTY 4



Sintered bushing

REF 18

QTY 4



Long swivel shaft

REF 19

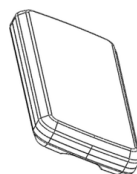
QTY 1



Cushion

REF 20

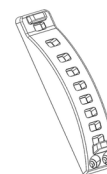
QTY 1



Back pad

REF 21

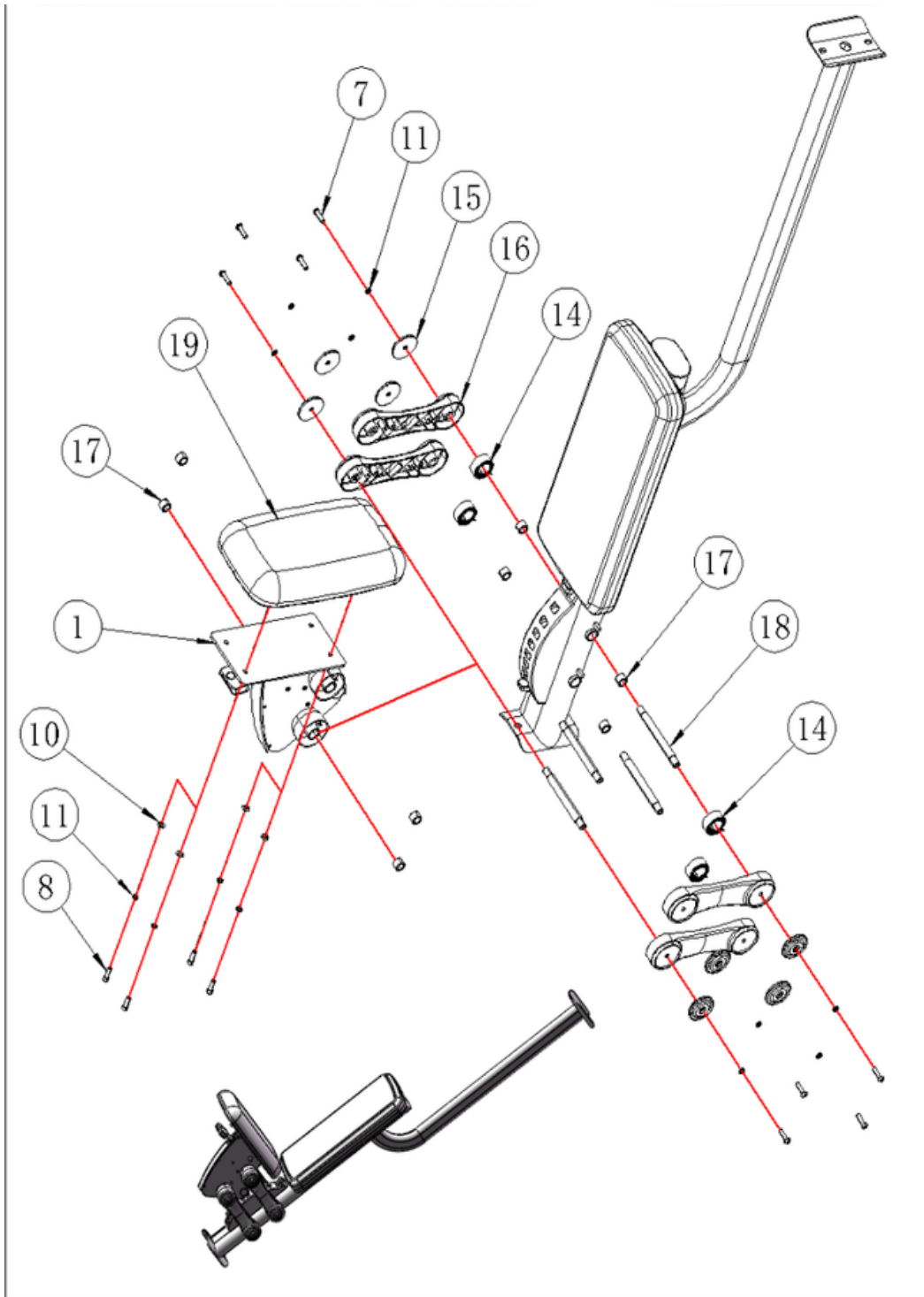
QTY 1



Gear block

STAGE 2 / DRAWING 1 OF 2

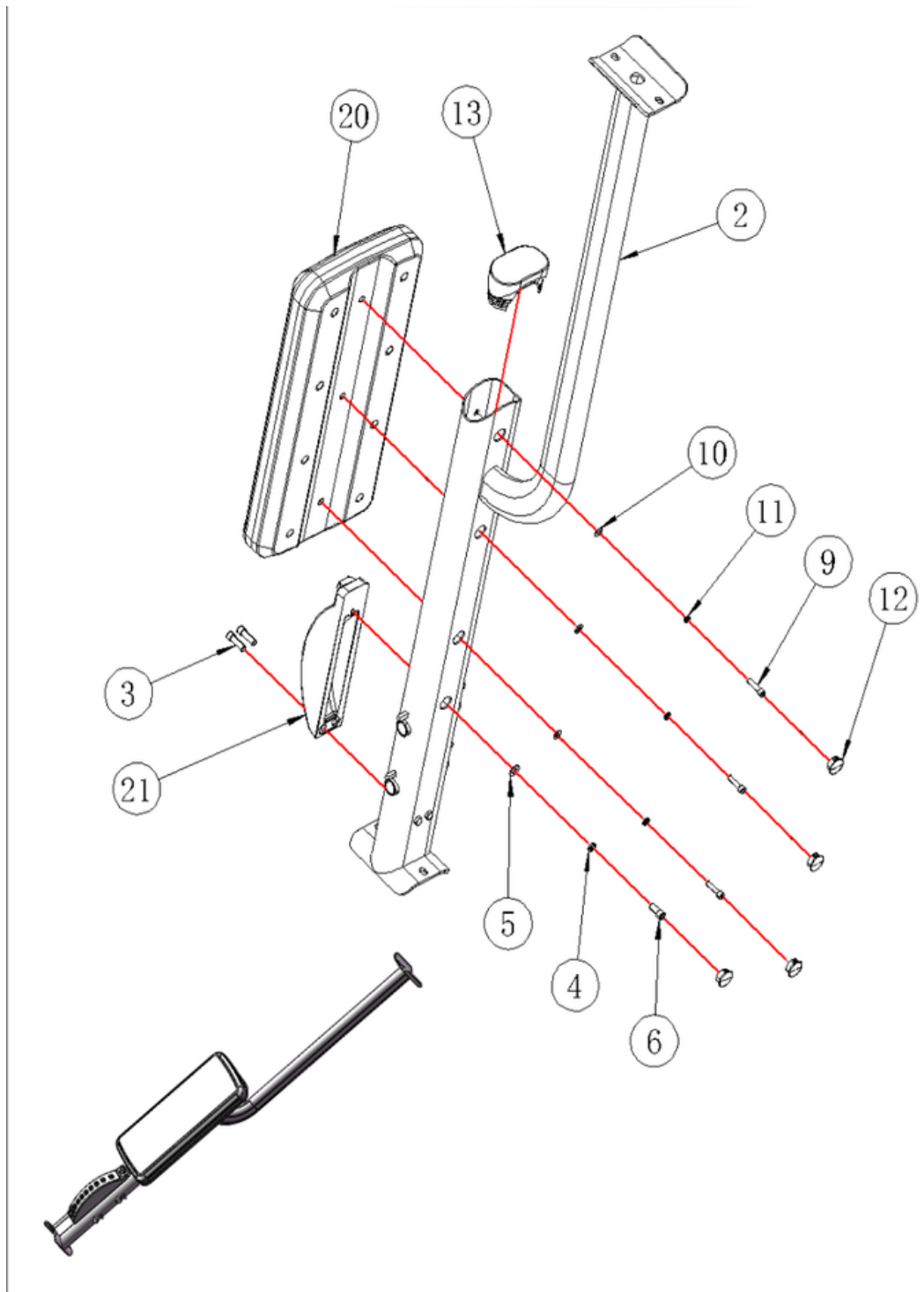
Assembly stage 2



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 / DRAWING 2 OF 2

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 the two Stage 2 drawings together. Keep the seat supported until all four links are retained.

4. Fit the seat stop and back pad

Using drawing 2 references, fit gear block 21 to main frame 2 with M10 × 30 screws 3. Attach back pad 20 using M8 × 30 screws 9, spring washers 11 and washers 10. Check depicted screws 6 and their washers 4 and 5 at the lower mounting points.

5. Assemble the four seat links

Support seat assembly 1. Fit shafts 18, bushings 17 and four cranks 16 as shown in drawing 1. Fit spring components 14 without changing their factory setting; obtain the setting if supplied loose. Retain the crank ends with caps 15, spring washers 11 and M8 × 30 screws 7.

6. Fit the cushion and finish adjustment

Secure cushion 19 to its seat plate with M8 × 25 screws 8, spring washers 11 and washers 10. Fit end cap 13 and plugs 12 after fastening. Verify the seat moves without binding and locks securely against its stop. Confirm any quantity mismatch against the supplied hardware kit.

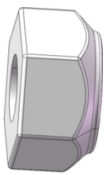
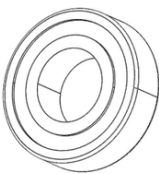
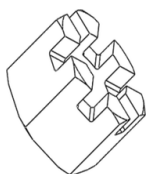
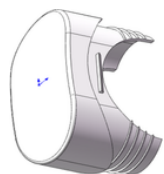
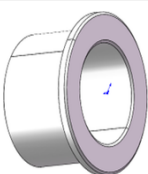
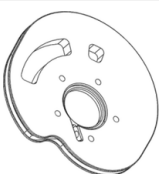
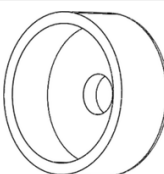
Check before continuing

Seat links, springs, pad fixings and adjustment lock are secure.

STAGE 3 / PARTS

Identify your components

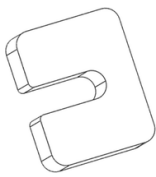
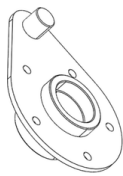
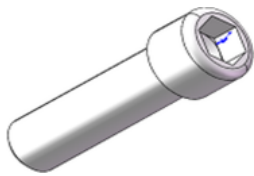
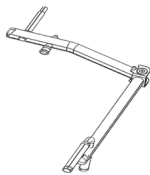
Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Upper main frame assembly	REF 2 QTY 12  Locknut M10	REF 3 QTY 10  Hexagon pan head screws M10 × 20
REF 4 QTY 24  Washers Ø10.3xØ20 × 1.2	REF 5 QTY 8  Deep groove ball bearings Ø52xØ25 × 15	REF 6 QTY 2  Cotter pins
REF 7 QTY 2  Hex slotted nut	REF 8 QTY 2  Cushioning sleeves	REF 9 QTY 2  65 × 114 end caps
REF 10 QTY 2  Powder compartment	REF 11 QTY 2  Wire reels	REF 12 QTY 2  Aluminum cover

STAGE 3 / PARTS

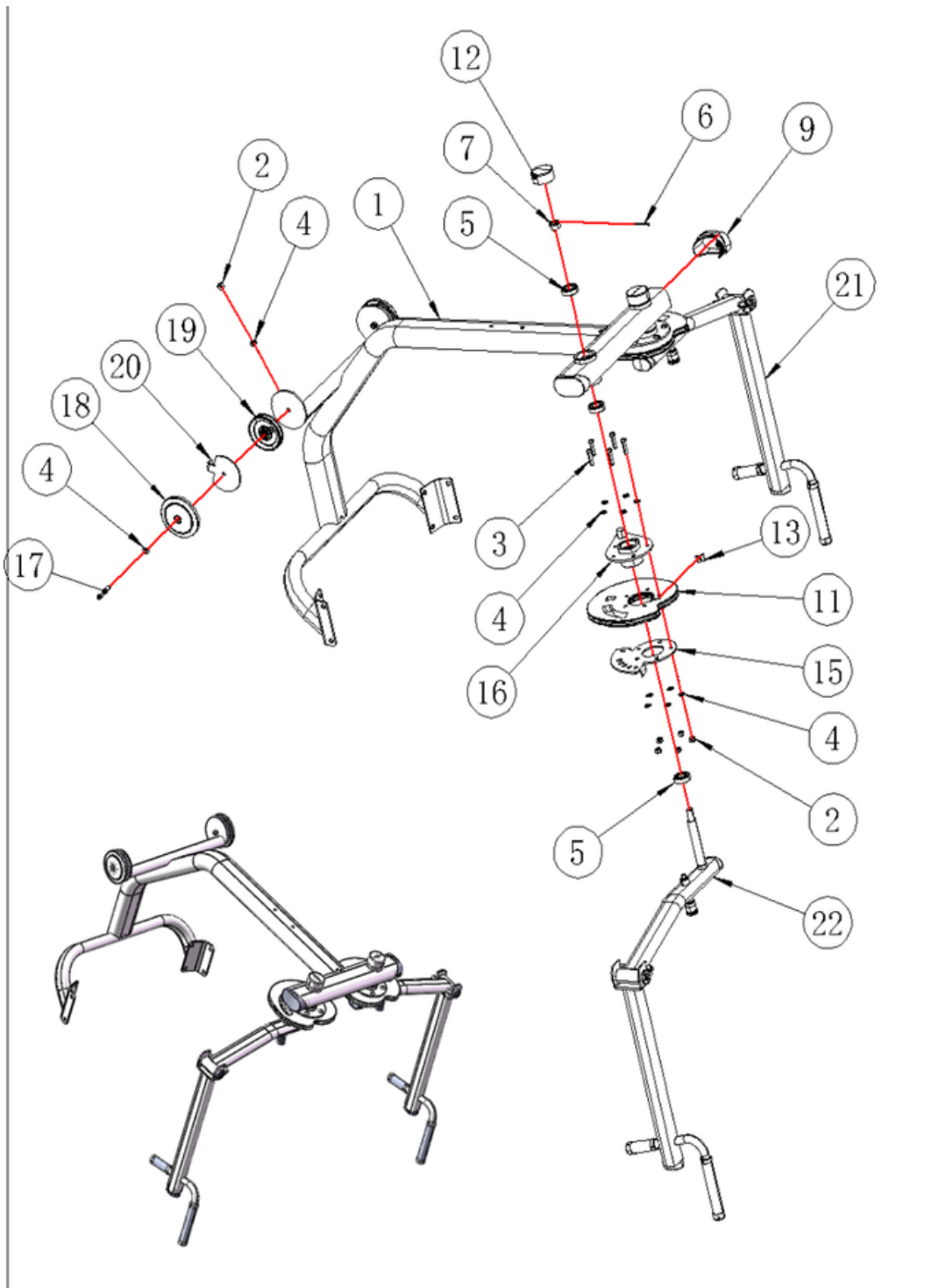
Identify your components

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

<div>REF 13QTY 2</div> <div></div> <div>Fixing plates</div>	<div>REF 14QTY 1</div> <div></div> <div>Select board on right</div>	<div>REF 15QTY 1</div> <div></div> <div>Select board on left</div>
<div>REF 16QTY 2</div> <div></div> <div>Limit assembly</div>	<div>REF 17QTY 2</div> <div></div> <div>Socket-head screw M10 x 55</div>	<div>REF 18QTY 2</div> <div></div> <div>Pulley cover</div>
<div>REF 19QTY 2</div> <div></div> <div>Pulleys</div>	<div>REF 20QTY 2</div> <div></div> <div>Pulley plates</div>	<div>REF 21QTY 1</div> <div></div> <div>Left arm</div>
<div>REF 18QTY 1</div> <div></div> <div>Right arm</div>		

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.

Stage 3: Install Both Swing Arms

Keep both arms supported until their shafts and selector assemblies are positively retained.

7. Identify the two arm assemblies

The drawing identifies left arm 21 and right arm 22; the parts list incorrectly repeats reference 18 for the right arm. Keep the right arm distinct from pulley cover 18 and confirm the corrected reference before fitting loose parts.

8. Assemble the arm pivots

Support each arm at upper frame 1. Seat bearings 5 at the depicted upper and lower positions. Stack limit assembly 16, the correct left/right selector plate 15 or 14, cable reel 11 and fixing plate 13 in the shown order; preserve the mirrored orientation.

9. Secure the pivot and selector layers

Fit the depicted screws 3, washers 4 and locknuts 2 to the selector layers. Fit slotted nut 7 and cotter pin 6 at each shaft, then cover 12. Confirm the required bearing adjustment and cotter-pin locking method from the supplied specification; do not guess a preload.

10. Install the upper redirect pulleys

Fit pulleys 19, pulley plates 20 and covers 18 with M10 × 55 screws 17, washers 4 and locknuts 2. Fit the shown end caps 9 and confirm every pulley turns freely. Identify listed items 8 and 10 against the kit if their placement is unclear before closing the assembly.

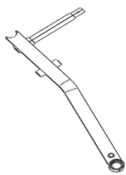
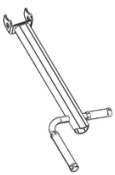
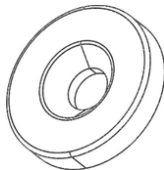
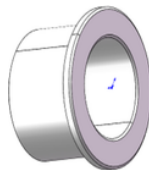
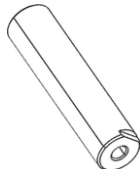
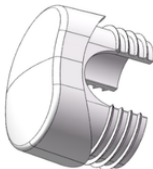
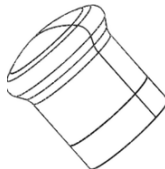
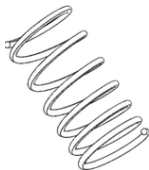
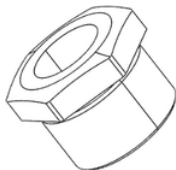
Check before continuing

Both arm pivots, selector layers and upper pulleys are secure and move freely.

STAGE 4 / PARTS

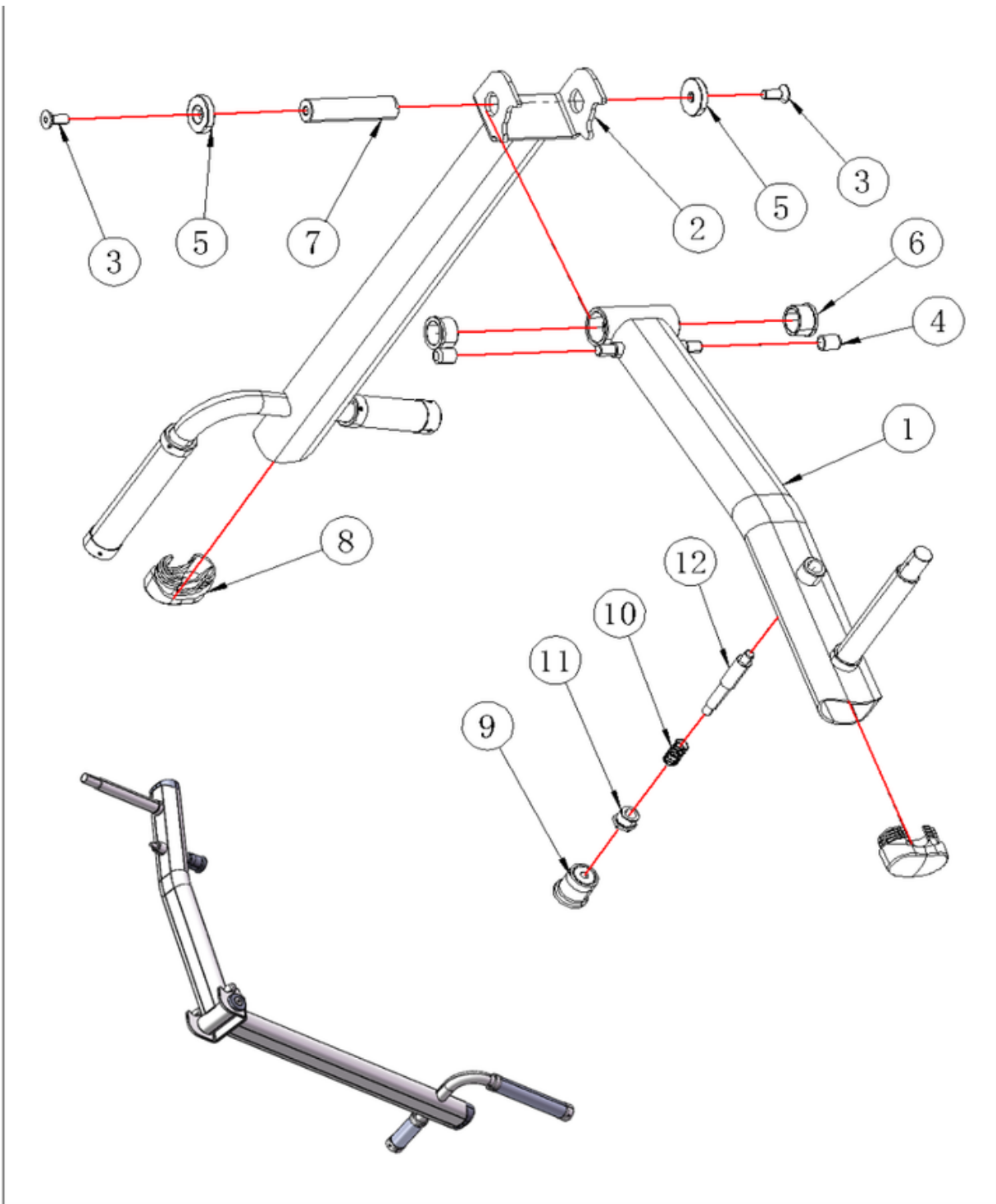
Identify your components

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

REF 1 QTY 1  <p>Boom is connected and assembly</p>	REF 2 QTY 1  <p>Right boom assembly</p>	REF 3 QTY 2  <p>Countersunk socket screw M10 × 25</p>
REF 4 QTY 2  <p>Protective cap</p>	REF 5 QTY 2  <p>End caps of axle frame plate</p>	REF 6 QTY 2  <p>Sintered bushing</p>
REF 7 QTY 1  <p>Rotating shaft Ø25 × 103</p>	REF 8 QTY 2  <p>40 × 70 end caps</p>	REF 9 QTY 1  <p>Latch cap</p>
REF 10 QTY 8  <p>Spring</p>	REF 11 QTY 1  <p>Hex nut</p>	REF 12 QTY 1  <p>Pull pin Ø16 × 106</p>

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 4: Complete the Arm Adjustments

This detail shows one side. Use the correct matching hardware for the opposite side.

11. Fit the handle-arm pivot

Using Stage 4 references, align handle arm 2 with connecting arm 1. Fit bushings 6 and shaft 7 as illustrated. Fit end retainers 5 and countersunk M10 × 25 screws 3 at both ends, with protective caps 4 where shown.

12. Assemble the adjustment pin

Fit pull pin 12, spring 10, hex nut 11 and cap 9 in the illustrated order. Fit end caps 8. The listed spring quantity does not match the single depicted pin assembly; confirm quantities and mirrored-arm hardware against the kit.

13. Check both exercise positions

Complete and inspect the corresponding assembly on the opposite arm using its matching parts. Check full selector engagement at each tested setting and verify that both handle pivots are retained, move freely and clear the frame.

Check before continuing

Both handle arms and their position locks are secure.

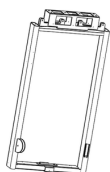
STAGE 5 / PARTS

Identify your components

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

REF 1

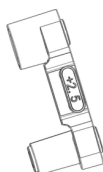
QTY 1



Small frame assembly

REF 2

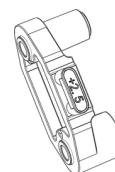
QTY 1



Sub-counterweigh t

REF 3

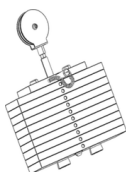
QTY 1



Sub-counterweig ht

REF 4

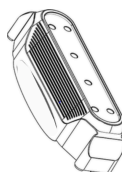
QTY 1



Balance and recombination

REF 5

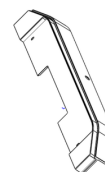
QTY 1



Large upper cover

REF 6

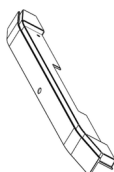
QTY 2



Front base

REF 7

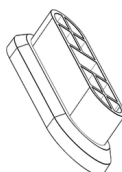
QTY 1



Rear base

REF 8

QTY 2



Base

REF 9

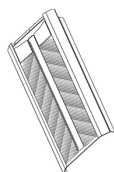
QTY 1



Top cover

REF 10

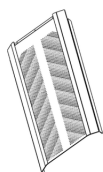
QTY 1



Front guard

REF 11

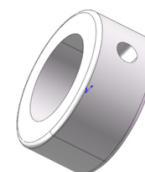
QTY 1



Rear guard

REF 12

QTY 2

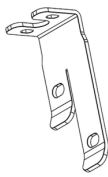
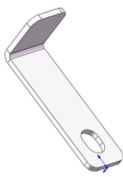
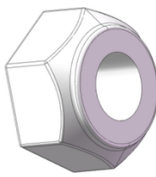


Guide rod retaining sleeve

STAGE 5 / 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 the small door	REF 15 QTY 6  Anti-skipping rope guard
REF 16 QTY 6  Pulleys	REF 17 QTY 4  136 Semi-circular pulley shell	REF 18 QTY 12  Cross groove pan head self-tapping screw
REF 19 QTY 12  Washer Ø10.3xØ20 x 1.2	REF 20 QTY 8  Washers Ø8.3xØ16 x 1	REF 21 QTY 12  Washers Ø5.3xØ10 x 1
REF 22 QTY 12  Spring washer Ø5	REF 23 QTY 8  Spring washer Ø8	REF 24 QTY 6  Locknut M10

STAGE 5 / PARTS

Identify your components

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

REF 25

QTY 2



Hexagon pan head screws M6 × 25

REF 26

QTY 2



Hexagon pan head screws M10 × 50

REF 27

QTY 8



Socket-head screw M8 × 25

REF 28

QTY 2



Socket-head screw M10 × 50

REF 29

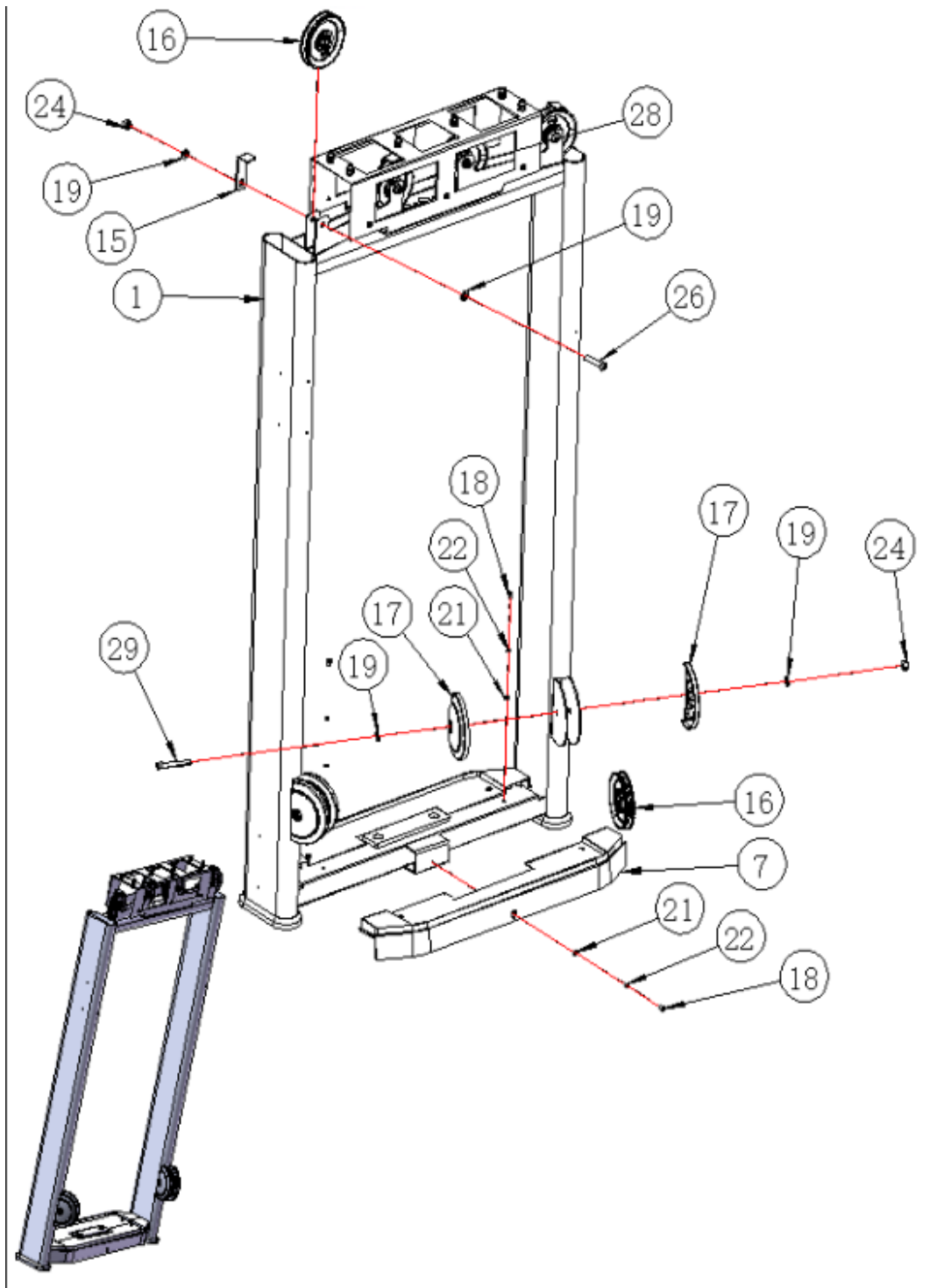
QTY 2



Socket-head screw M10 × 65

STAGE 5 / DRAWING 1 OF 3

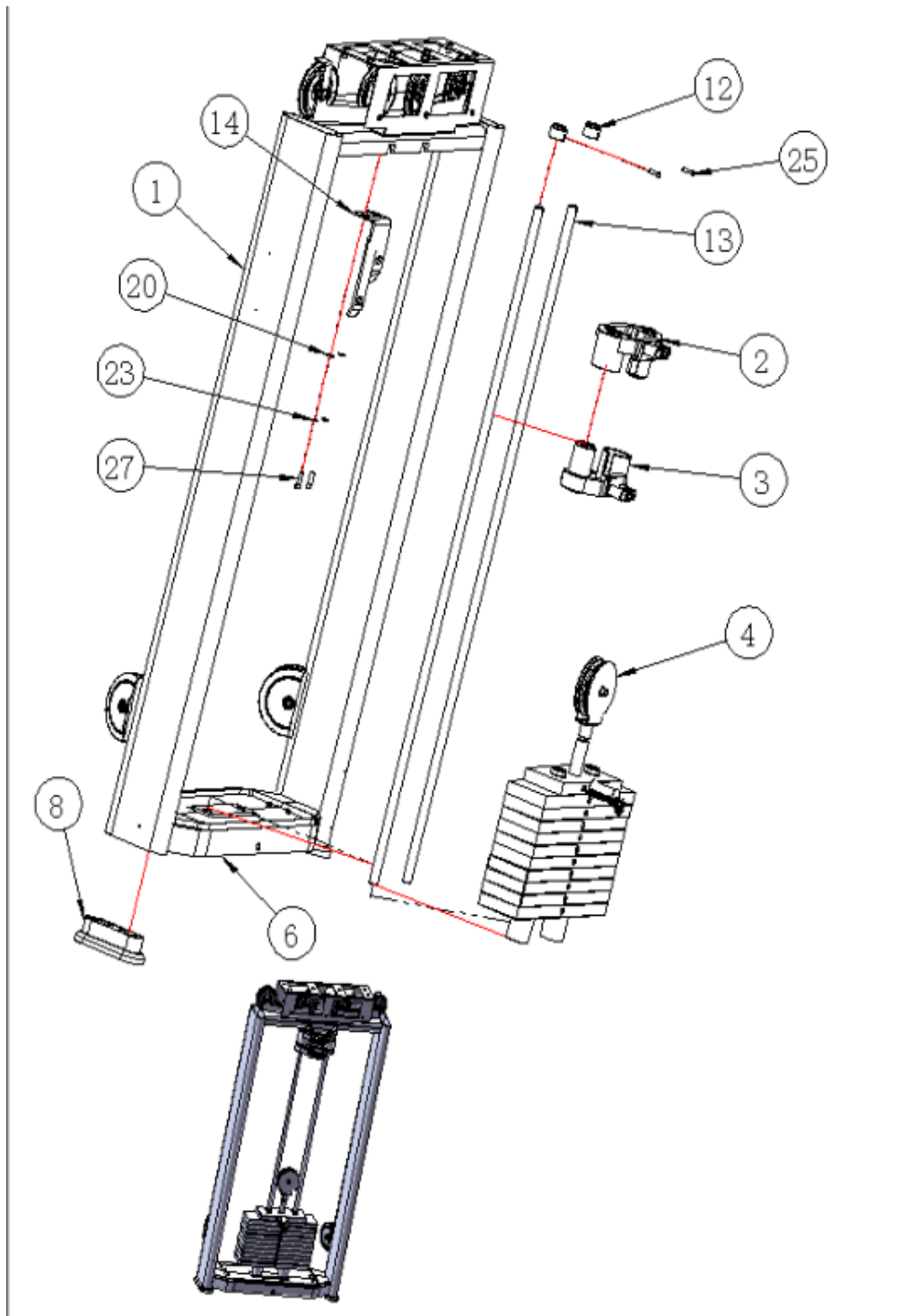
Assembly stage 5



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

STAGE 5 / DRAWING 2 OF 3

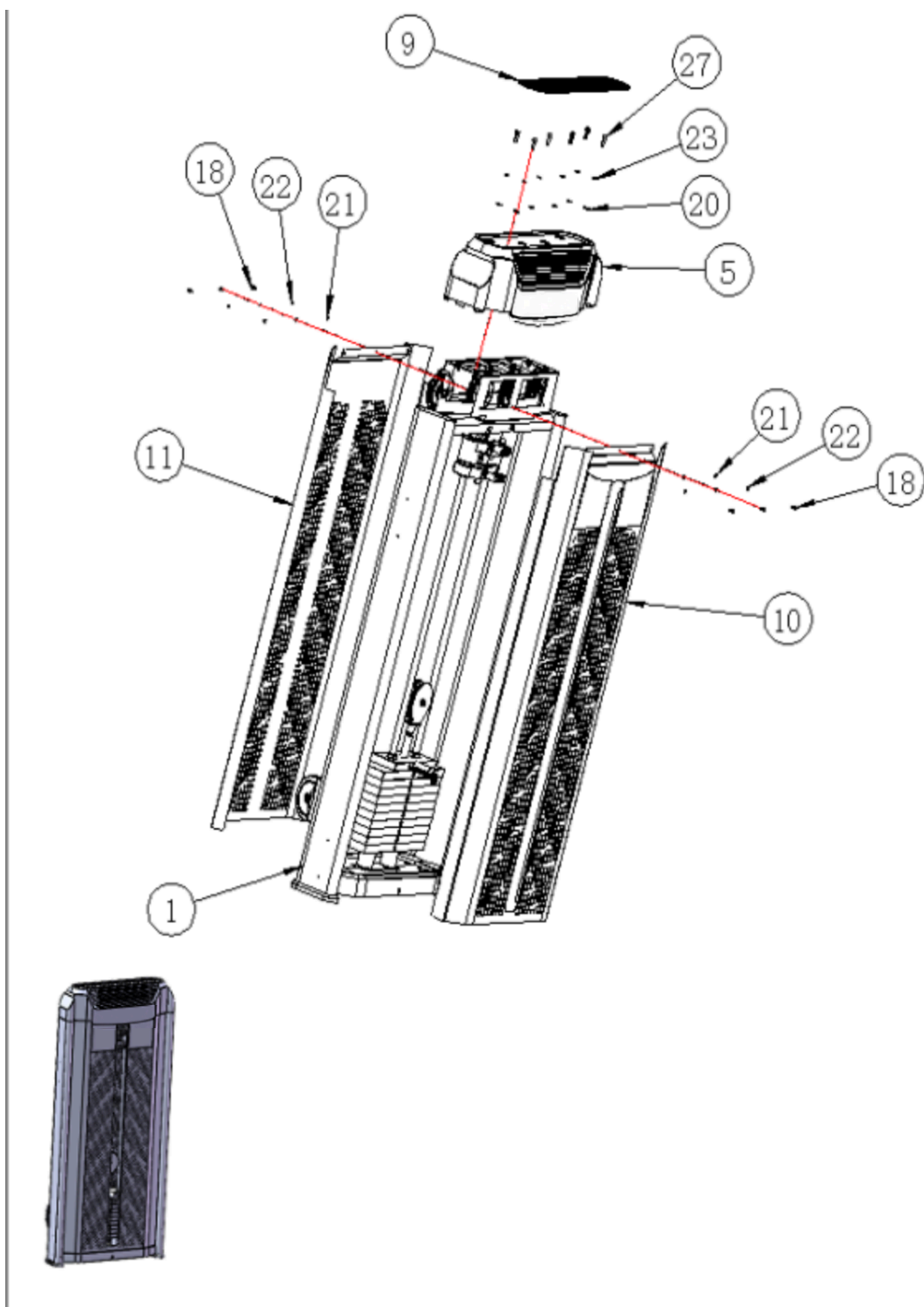
Assembly stage 5



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

STAGE 5 / DRAWING 3 OF 3

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 5: Assemble the Tower

Part numbers restart in Stage 5. This tower has multiple upper and lower redirects; match every pulley to the drawing.

14. Install the tower pulleys and guards

Using drawing 1, fit pulleys 16 and anti-jump guards 15 at the upper mounts with the depicted M10 × 50 screws 26 or 28, washers 19 and locknuts 24. Fit the lower pulleys and shells 17 with M10 × 65 screws 29 at their indicated locations.

15. Fit the base and supported stack

Attach base pieces 6 and 7 with screws 18, spring washers 22 and washers 21. If the stack is dismantled, use the Stage 6 plate-order drawing. Keep assembly 4 supported while fitting guide rods 13, and confirm its lower buffers and retention.

16. Secure guide rods and secondary weights

Fit secondary weights 3 and 2 above the stack in the illustrated order. Secure sleeves 12 with M6 × 25 screws 25. Attach bracket 14 with M8 × 25 screws 27, spring washers 23 and washers 20. Confirm both guides remain parallel and retained.

17. Fit the upper cover and feet

Secure upper cover 5 and top cover 9 with screws 27, spring washers 23 and washers 20 where shown. Fit feet 8. Keep front and rear guards 10 and 11 accessible until the cable route and moving stack pulley are checked.

Check before continuing

Tower pulleys, guide retention, base pieces and covers are secure.

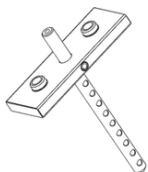
STAGE 6 / PARTS

Identify your components

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

REF 1

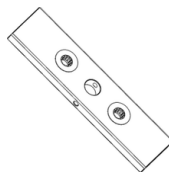
QTY 1



Weighted head sheet

REF 2

QTY 10



Weight plates

REF 3

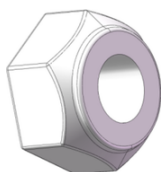
QTY 1



Counterweight latches

REF 4

QTY 1



Locknut M10

REF 5

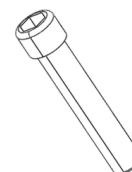
QTY 2



Washers Ø10.3xØ20 x 1.2

REF 6

QTY 1



Socket-head screw M10 x 50

REF 7

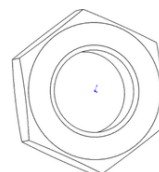
QTY 1



Pulleys

REF 8

QTY 1



Hex nut M12

REF 9

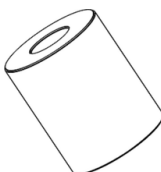
QTY 1



Component — see illustration

REF 10

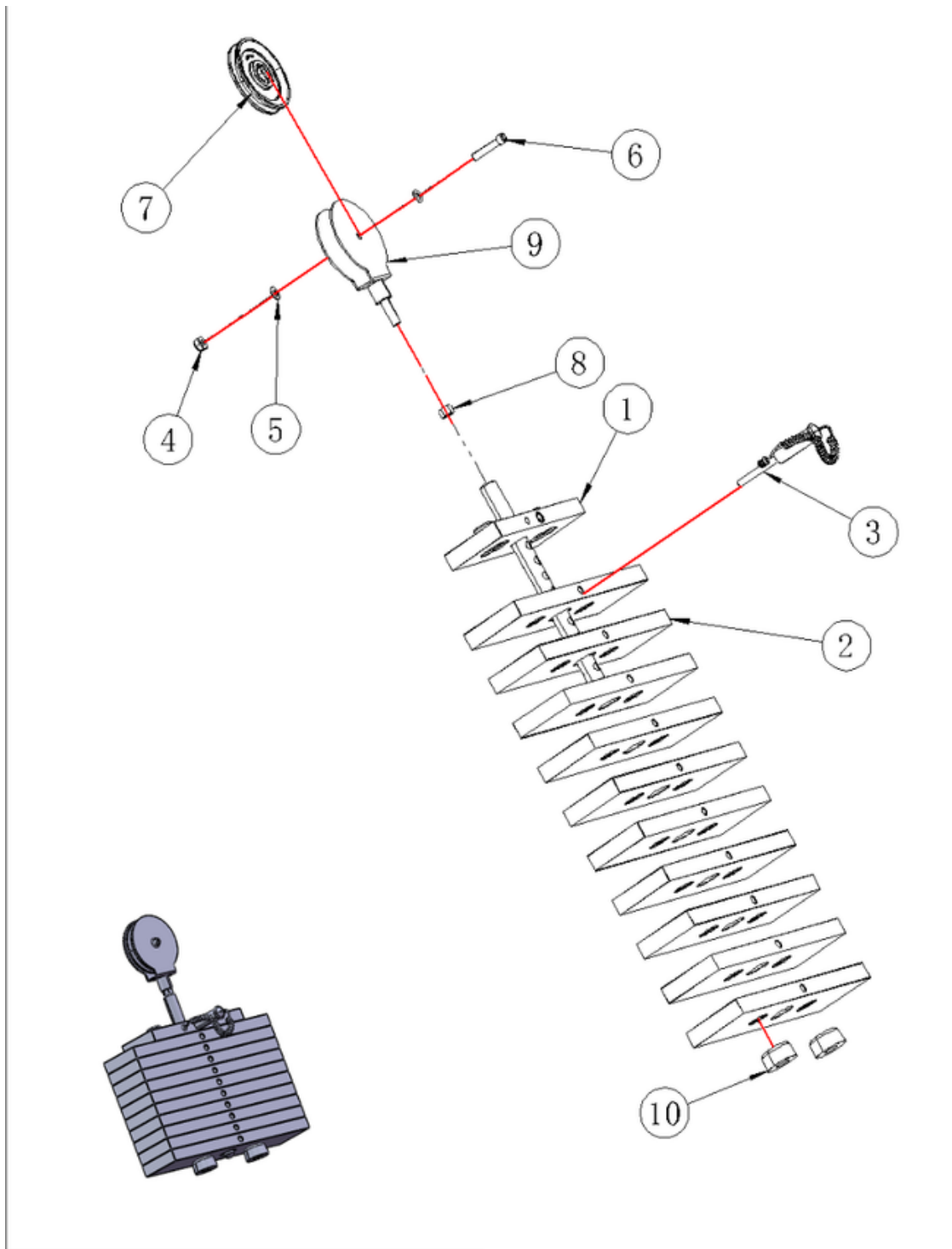
QTY 2



Counterweight cushioning

STAGE 6 / DRAWING 1 OF 1

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 Stack Pulley

The stack pulley moves with the selected plates and must be retained before cable tensioning.

18. Fit the stack components

Using Stage 6 references, fit buffers 10, ten listed weight plates 2 and top plate-selector stem 1 in the illustrated order. Preserve selector-hole orientation and keep all plates supported. Complete guide retention in Stage 5 and check selector pin 3 engages fully.

19. Fit the moving pulley assembly

Identify item 9 as the illustrated threaded pulley housing and confirm its specification against the kit. Fit pulley 7 inside it with M10 × 50 screw 6, washers 5 and locknut 4. Fit the housing into top plate 1 with M12 nut 8; obtain the required thread engagement and locking specification before loading.

20. Check pulley movement and retention

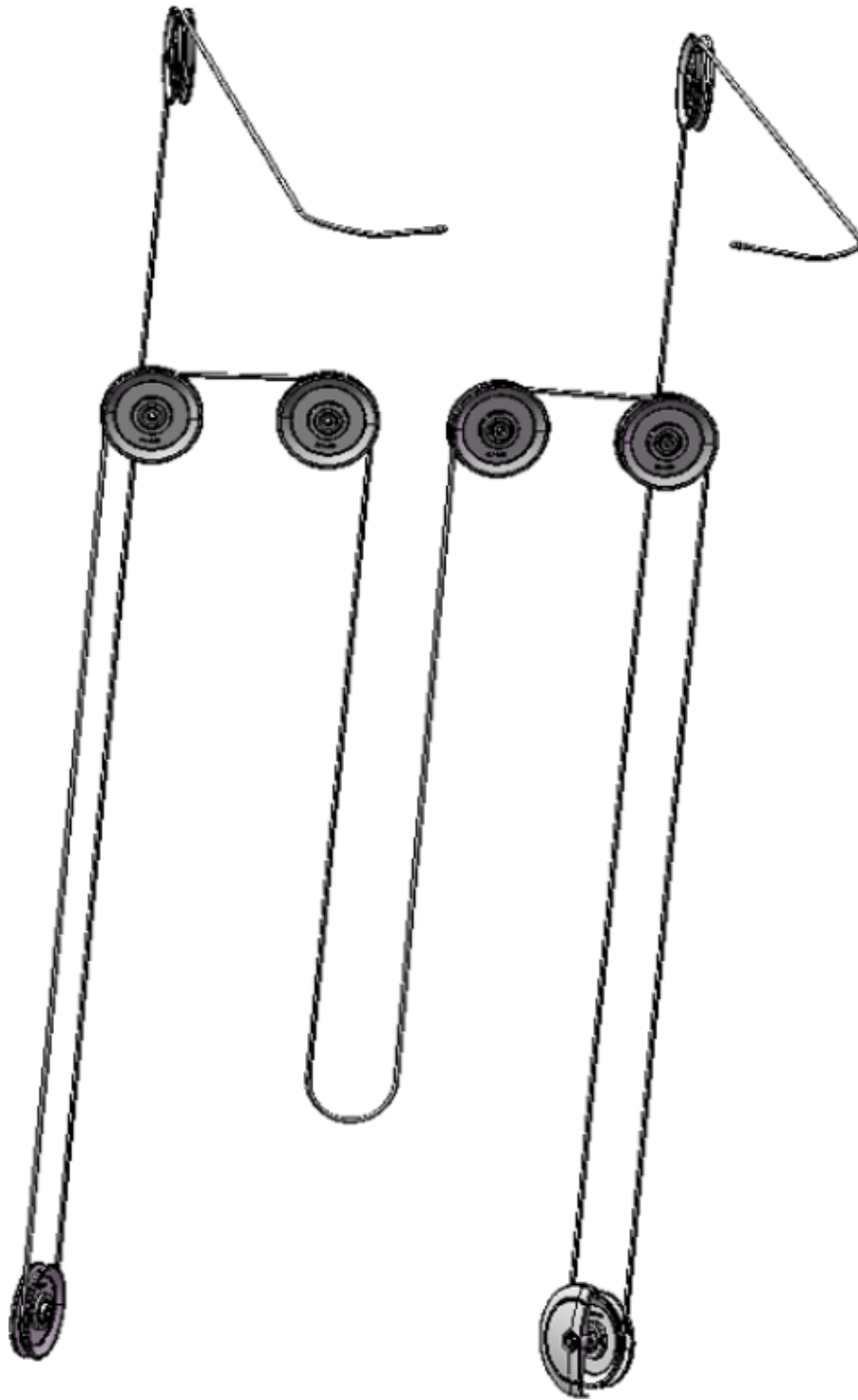
Verify the moving pulley turns freely, its housing is secure and the supported stack remains aligned on both rods. Inspect a correctly supplied stack and pulley without unnecessary dismantling.

Check before continuing

Selector, guides and moving pulley are secure.

STAGE 8 / DRAWING 1 OF 1

Assembly stage 8



Trace the cable using this schematic and the following instructions.
Confirm all cable terminations and adjustments before applying tension.

Cable Routing and Final Test

The source skips the Stage 7 label and calls its final cable drawing Stage 8; no extra assembly drawing is supplied.

21. Trace the shared cable route

Keep the stack fully down. Use the source schematic labelled Stage 8 to trace the cable between the two arm connections, over their upper redirects, through the tower redirects and around the moving stack pulley. Confirm the central cable loop against the actual pulley housing before tensioning.

22. Verify both arm terminations

Check both cable-reel attachments and every pulley groove against the supplied kit. The source omits cable length and complete termination settings; obtain them for loose or uncertain cable ends. Confirm selector movement cannot trap or dislodge the cable.

23. Fit guards and check all fasteners

Secure Stage 5 front guard 10 and rear guard 11 with screws 18, spring washers 22 and washers 21 after route inspection. Confirm screw 18 dimensions from the kit. Check all frame, seat, pivot and pulley fixings; obtain torque and floor-fixing requirements before use.

24. Test at the lowest resistance

Lock the seat and both arm-position selectors. With the lowest stack load, test each arm separately and then together in both exercise modes. Confirm smooth stack lift and full return without cable slack, rubbing, binding or shifting attachments.

Check before continuing

Both exercise modes, arm locks, guards and cable connections pass inspection.

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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