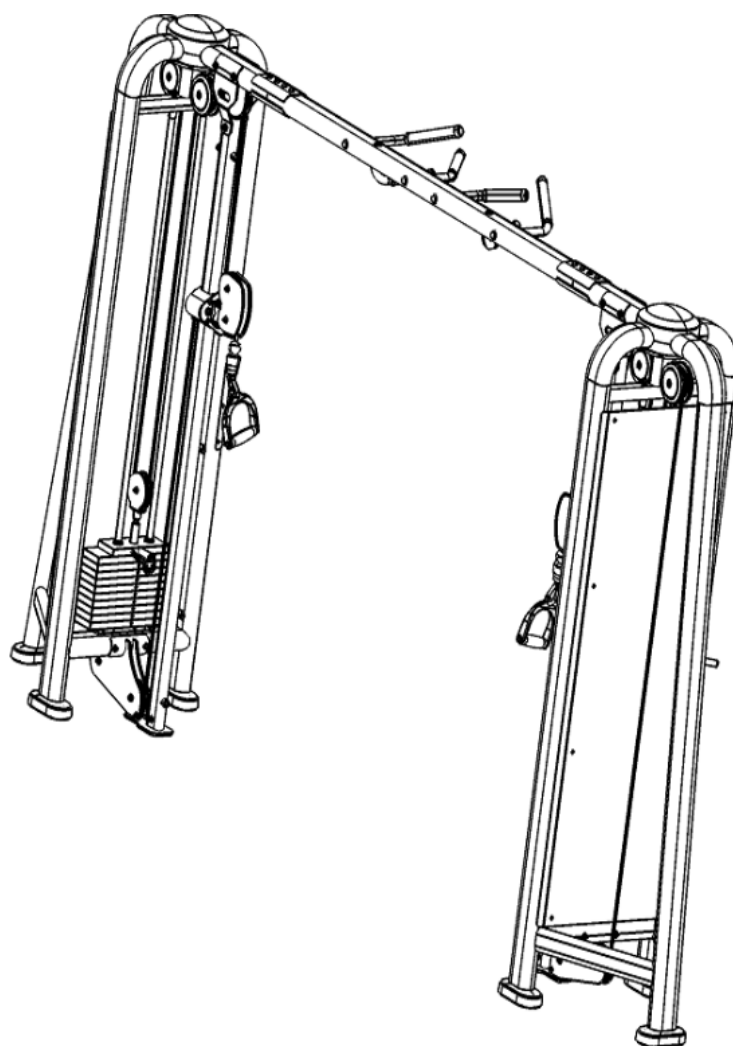


FOUNDATION SERIES

Dual Cable Crossover

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 → 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



Right main frame

REF 2

QTY 1



Left main frame

REF 3

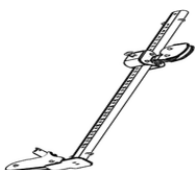
QTY 1



Slide the left component

REF 4

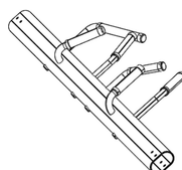
QTY 1



Slide component to right

REF 5

QTY 1



Beam assembly

REF 6

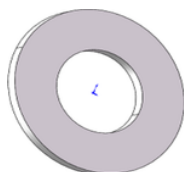
QTY 8



Socket-head screw M10 x 135

REF 7

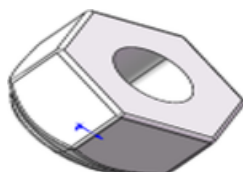
QTY 36



Washer Ø10.3xØ20 x 1.2

REF 8

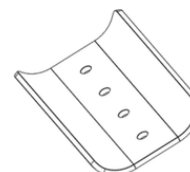
QTY 18



Locknut M10

REF 9

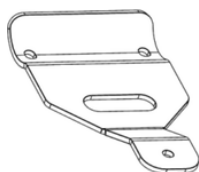
QTY 4



Connecting plates

REF 10

QTY 4



Upper fixing plate

REF 11

QTY 8



Socket-head screw M10 x 90

REF 12

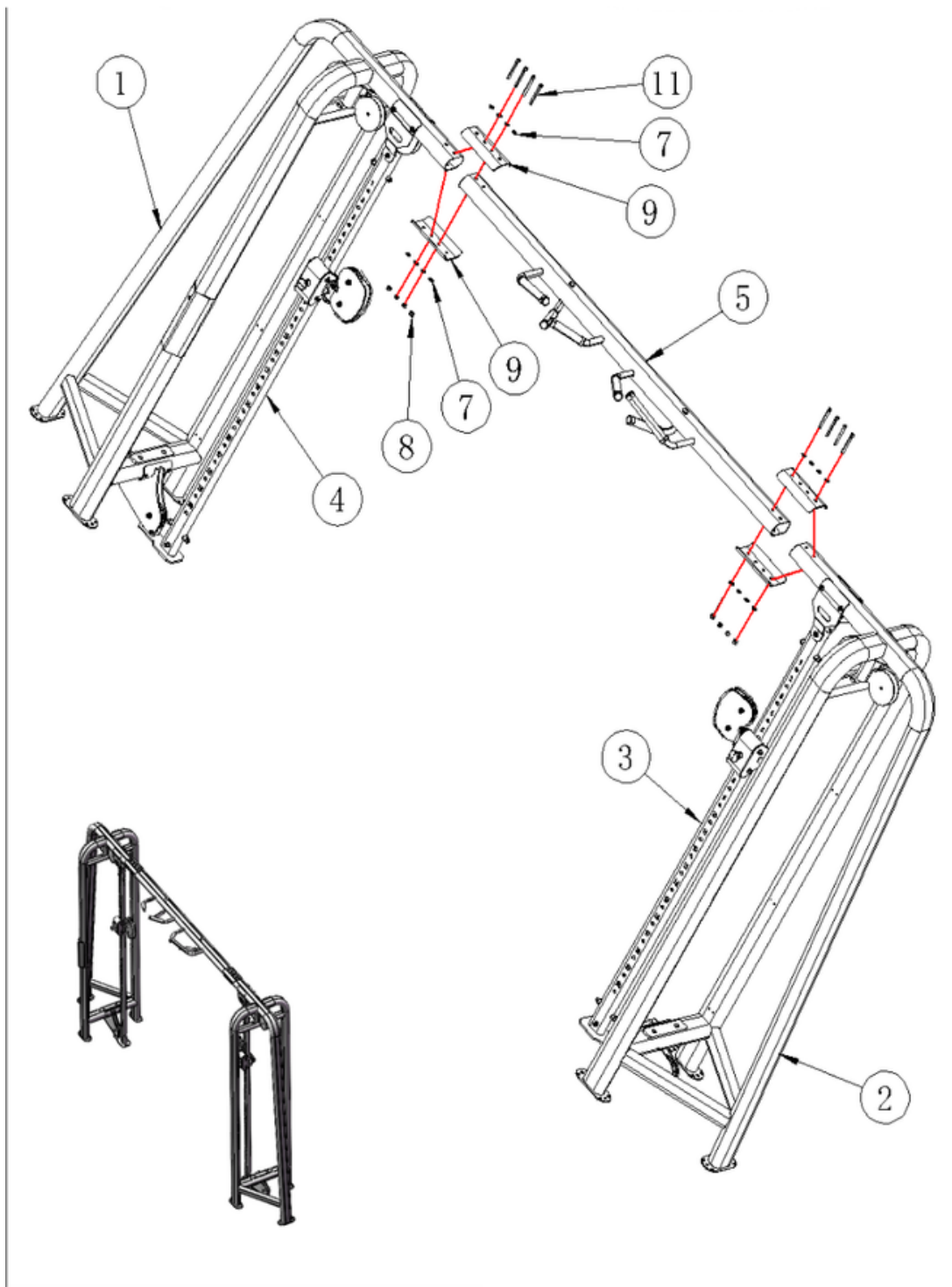
QTY 2



Socket-head screw M10 x 65

STAGE 1 / DRAWING 1 OF 2

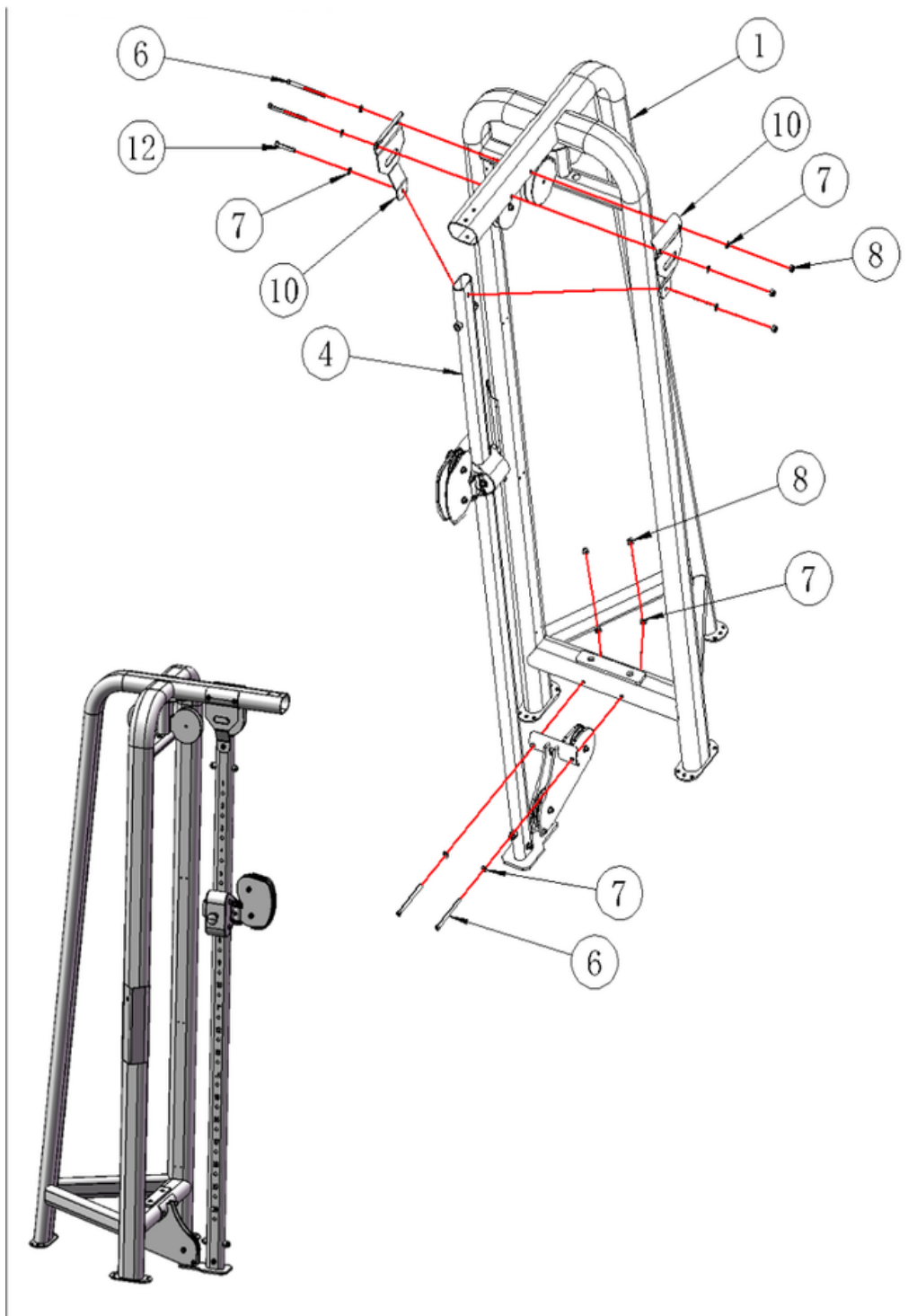
Assembly stage 1



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 / DRAWING 2 OF 2

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 Crossover Frame

The later stages show tower, carriage and stack subassemblies. Complete any loose subassembly before fitting it in this main-frame sequence. Keep both towers and the overhead beam independently supported.

1. Position and brace both towers

Identify right tower 1, left tower 2 and slide assemblies 4 and 3. Place them in the orientation shown, with carriages facing the exercise area. Do not release a tower until it is securely braced.

2. Fit the slide assemblies

Use drawing 2 on each tower. Attach the lower slide mounting plate with screws 6 (M10 x 135), washers 7 and nuts 8. Position upper fixing plates 10 and fit the separately marked screws 6 and 12 (M10 x 65) with washers and nuts.

3. Fit the overhead beam

With sufficient help, support beam 5 between both towers. Place connecting plates 9 around each beam end. Install screws 11 (M10 x 90), washers 7 and nuts 8 at every marked hole, starting all fasteners before tightening.

4. Align and secure the frame

Align the towers and beam without forcing holes together. Secure all frame joints, check that the feet sit firmly, and confirm required torque and floor-fixing requirements before applying load.

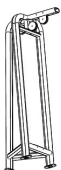
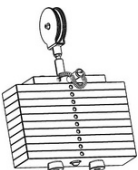
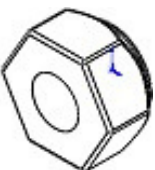
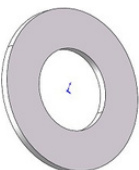
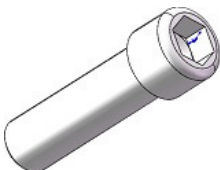
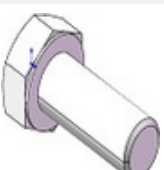
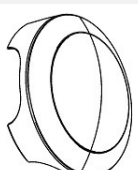
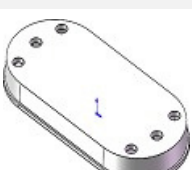
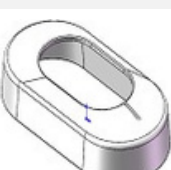
Check before continuing

Both slide assemblies and both beam ends are secured.

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  Pendant board	REF 3 QTY 1  New regular 80kg configuration
REF 4 QTY 9  Locknut M10	REF 5 QTY 6  Washer Ø10.3xØ20 x 1.2	REF 6 QTY 2  Socket-head screw M10 x 65
REF 7 QTY 6  Hex head bolt M10 x 20	REF 8 QTY 1  Lower top cover	REF 9 QTY 1  Upper top cover
REF 10 QTY 3  Footing plastic parts	REF 11 QTY 3  Ground foot cover	REF 12 QTY 3  Pulley

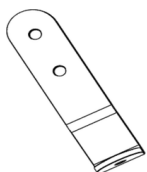
STAGE 2 / PARTS

Identify your components

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

REF 13

QTY 8



Fixing plates

REF 14

QTY 2



Guide shaft retaining sleeve

REF 15

QTY 2



Counterweight guide bar

REF 16

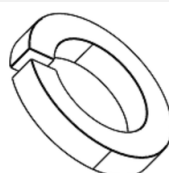
QTY 1



Acrylic sheathing

REF 17

QTY 16



Spring washer Ø 6

REF 18

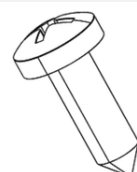
QTY 2



Shaft is used with elastic retaining ring Ø25

REF 19

QTY 4



Cross groove pan head self-tapping screw ST4.8 × 15

REF 20

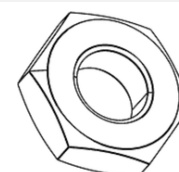
QTY 2



Socket-head screw M8 × 60

REF 21

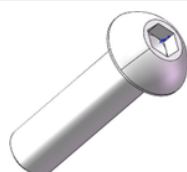
QTY 2



Hex thin nut M8

REF 22

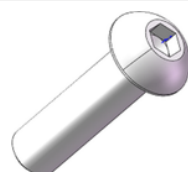
QTY 24



Socket-head screw M6 × 15

REF 23

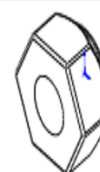
QTY 6



Allen pan head screws M5 × 10

REF 24

QTY 8

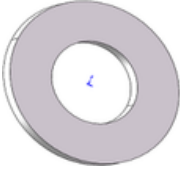
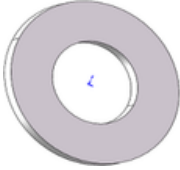
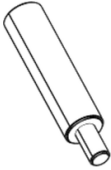


Locknut M6

STAGE 2 / PARTS

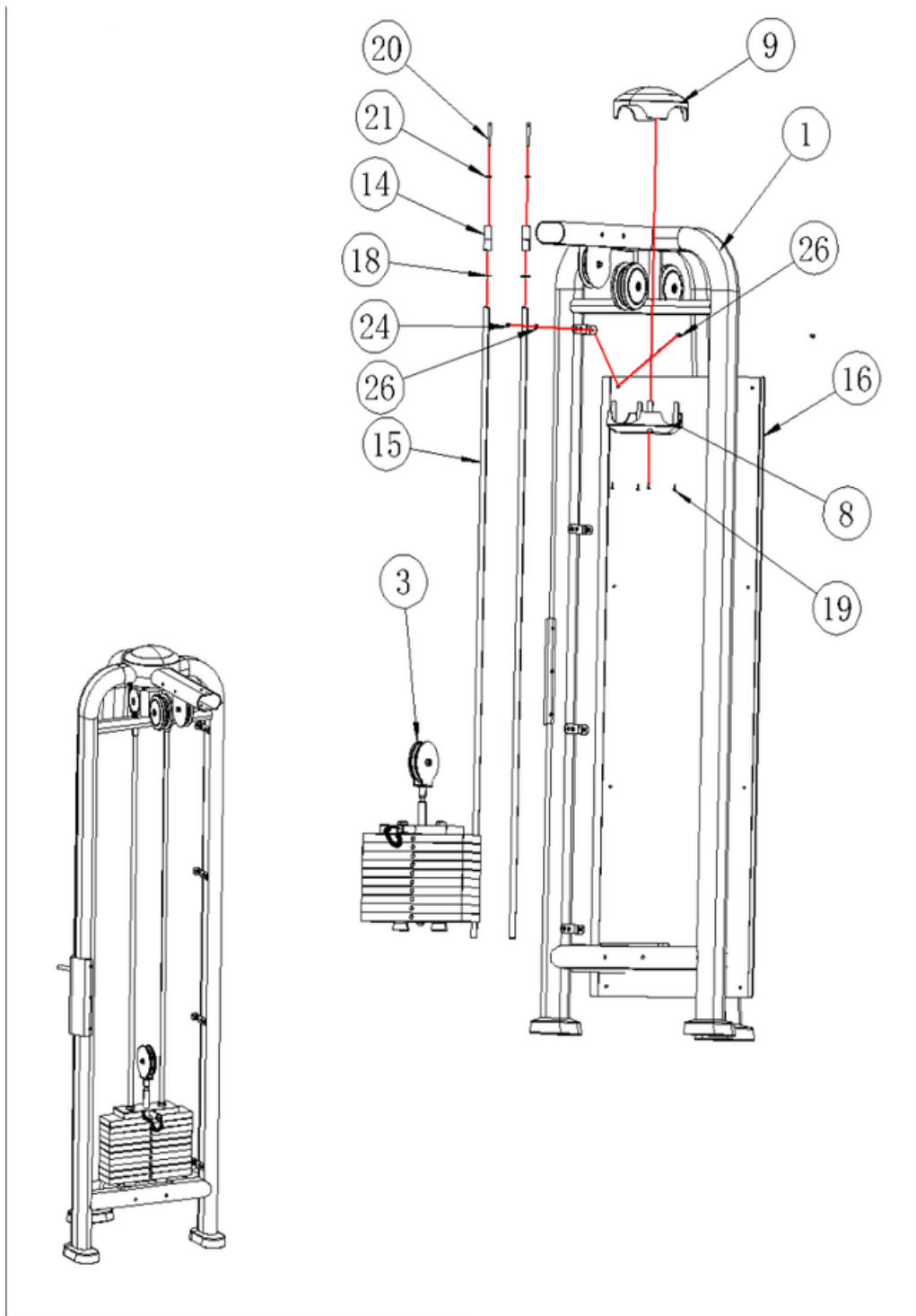
Identify your components

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

REF 25 QTY 6  Washer Ø5.3xØ10 × 1	REF 26 QTY 32  Washer Ø6.3xØ12 × 0.5	REF 27 QTY 4  Pulley cover
REF 28 QTY 1  Round protective cover	REF 29 QTY 1  Hanging rod	REF 30 QTY 1  Socket-head screws M10 × 40

STAGE 2 / DRAWING 1 OF 2

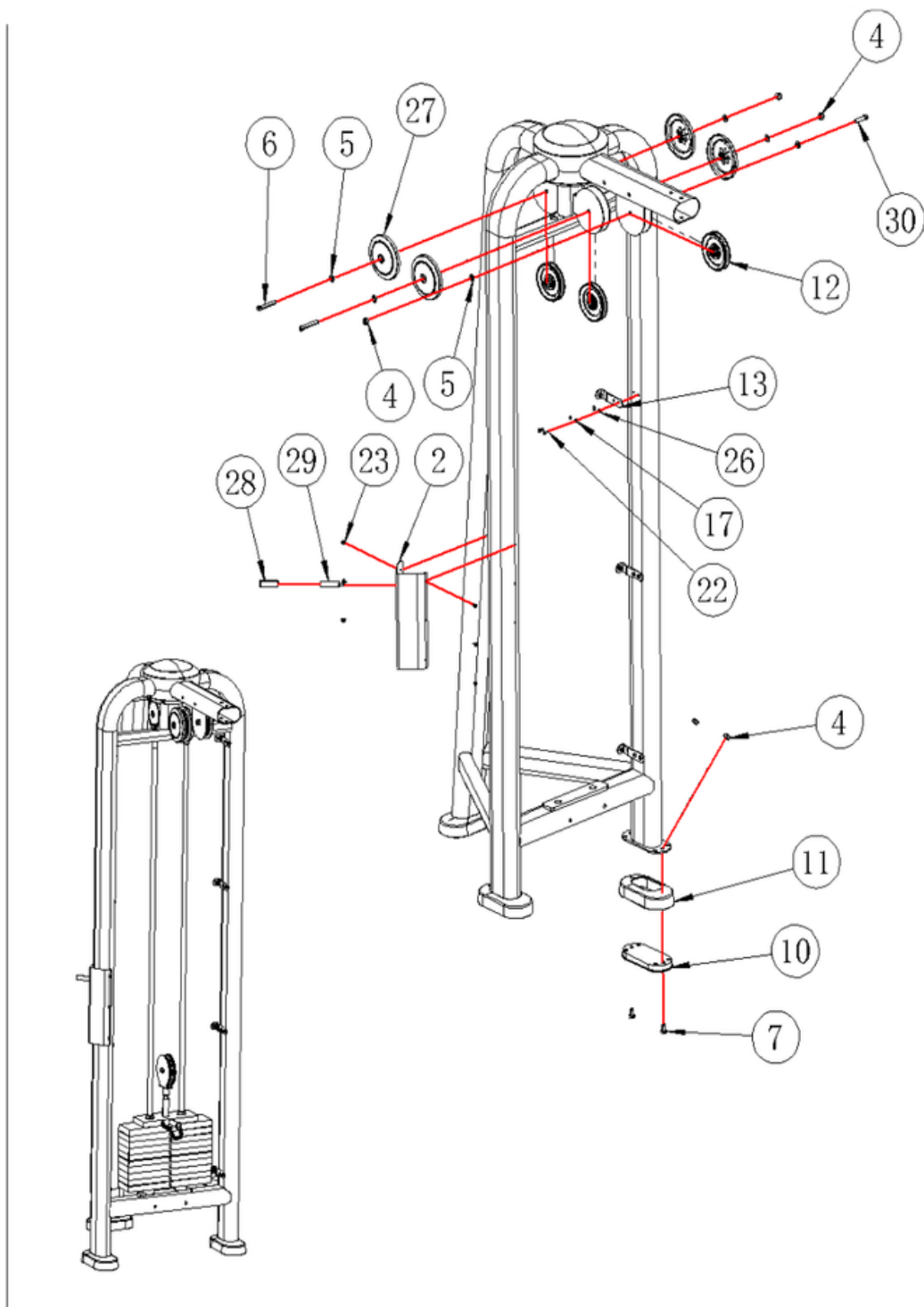
Assembly stage 2



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: Prepare Each Tower

Use Stage 2 references and repeat for the opposite tower. Keep all stacks supported at their base while working around the guides.

5. Fit the tower feet and small fittings

Use drawing 2 to fit foot components 10 and 11 with bolts 7 (M10 x 20) and nuts 4. Fit mounting board 2, hanging rod 29 and cap 28 at their marked locations with screws 23.

6. Fit the tower pulleys

Fit pulleys 12 with the illustrated screws 6 (M10 x 65) and 30 (M10 x 40), washers 5 and nuts 4 at the separate axle positions. Fit covers 27 in the shown order. Check each pulley turns freely after fastening.

7. Install the stack and guides

Prepare the stack using Stage 4 first if delivered loose. Position stack assembly 3 and guide rods 15 in the frame, preserving selector alignment. Fit retaining sleeves 14, rings 18, screws 20 (M8 x 60) and thin nuts 21 at the illustrated upper positions. Confirm all lower guide retainers before releasing support.

8. Prepare the covers

Fit fixing plates 13 using screws 22, washers 26 and spring washers 17 where shown. Fit top covers 8 and 9 with screws 19. Leave guard 16 accessible until stack and cable checks are complete, then secure it with the illustrated screws, washers and nuts.

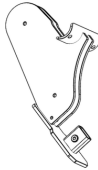
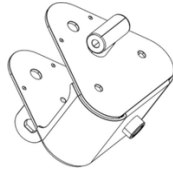
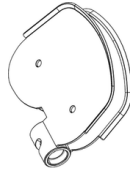
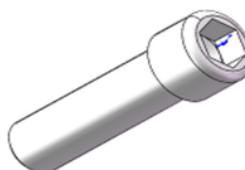
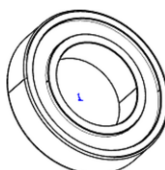
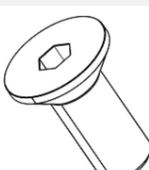
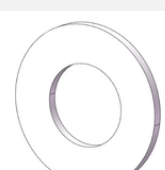
Check before continuing

Guide ends and pulley axles are secure; guards remain accessible for inspection.

STAGE 3 / PARTS

Identify your components

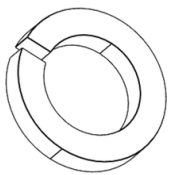
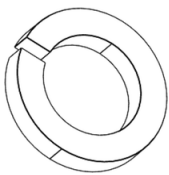
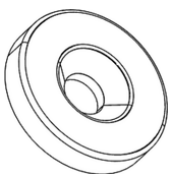
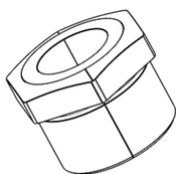
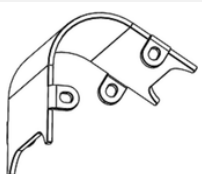
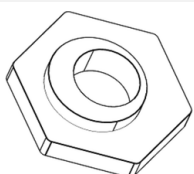
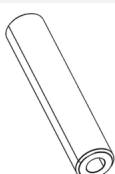
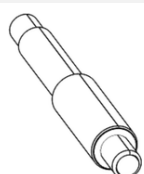
Match each reference and quantity to the drawing for this stage.

REF 1 QTY 1  Lower fixing frame assembly	REF 2 QTY 1  Right pulley box assembly	REF 3 QTY 1  Pulley fixation Component assembly
REF 4 QTY 6  Socket-head screw M10 × 25	REF 5 QTY 2  Socket-head screws M10 × 40	REF 6 QTY 8  Deep groove ball bearings Ø30xØ17 × 7
REF 7 QTY 2  Countersunk socket screw M10 × 25	REF 8 QTY 1  Pulley	REF 9 QTY 4  Hexagon pan head screws M6 × 12
REF 10 QTY 6  Locknut M10	REF 11 QTY 4  Washer Ø6.3xØ12 × 0.5	REF 12 QTY 16  Washer Ø10.3xØ20 × 1.2

STAGE 3 / PARTS

Identify your components

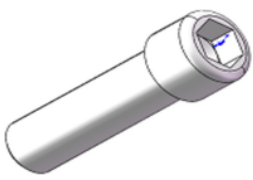
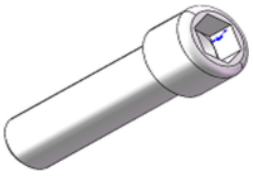
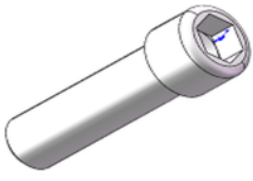
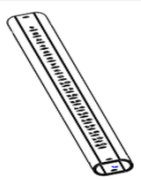
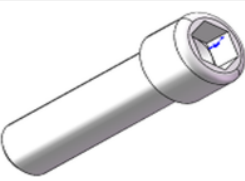
Match each reference and quantity to the drawing for this stage.

REF 13 QTY 4  Spring washer Ø 6	REF 14 QTY 8  Spring washer Ø10	REF 15 QTY 2  Washer Ø15.3xØ21 x 0.5
REF 16 QTY 2  End caps of axle frame plate	REF 17 QTY 1  Spring	REF 18 QTY 1  Hex nut
REF 19 QTY 1  Pull-pin cap	REF 20 QTY 1  Guards	REF 21 QTY 2  Eccentric nut
REF 22 QTY 3  Shaft Ø17 x 86	REF 23 QTY 8  Spacer	REF 24 QTY 1  Pull pin Ø16 x 106

STAGE 3 / PARTS

Identify your components

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

REF 25 QTY 1  Shaft Ø17 × 68	REF 26 QTY 3  Rollers	REF 27 QTY 1  Ø90 pulley
REF 28 QTY 4  Limit set	REF 29 QTY 1  Hexagon pan head screws M10 × 120	REF 30 QTY 2  Socket-head screw M10 × 20
REF 31 QTY 1  Socket-head screw M10 × 120	REF 32 QTY 2  Ø115 pulley	REF 33 QTY 2  Socket-head screws M10 × 55
REF 34 QTY 1  Conditioning tube	REF 35 QTY 1  Socket-head screw M8 × 55	REF 36 QTY 1  Locknut M8

STAGE 3 / PARTS

Identify your components

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

REF 37

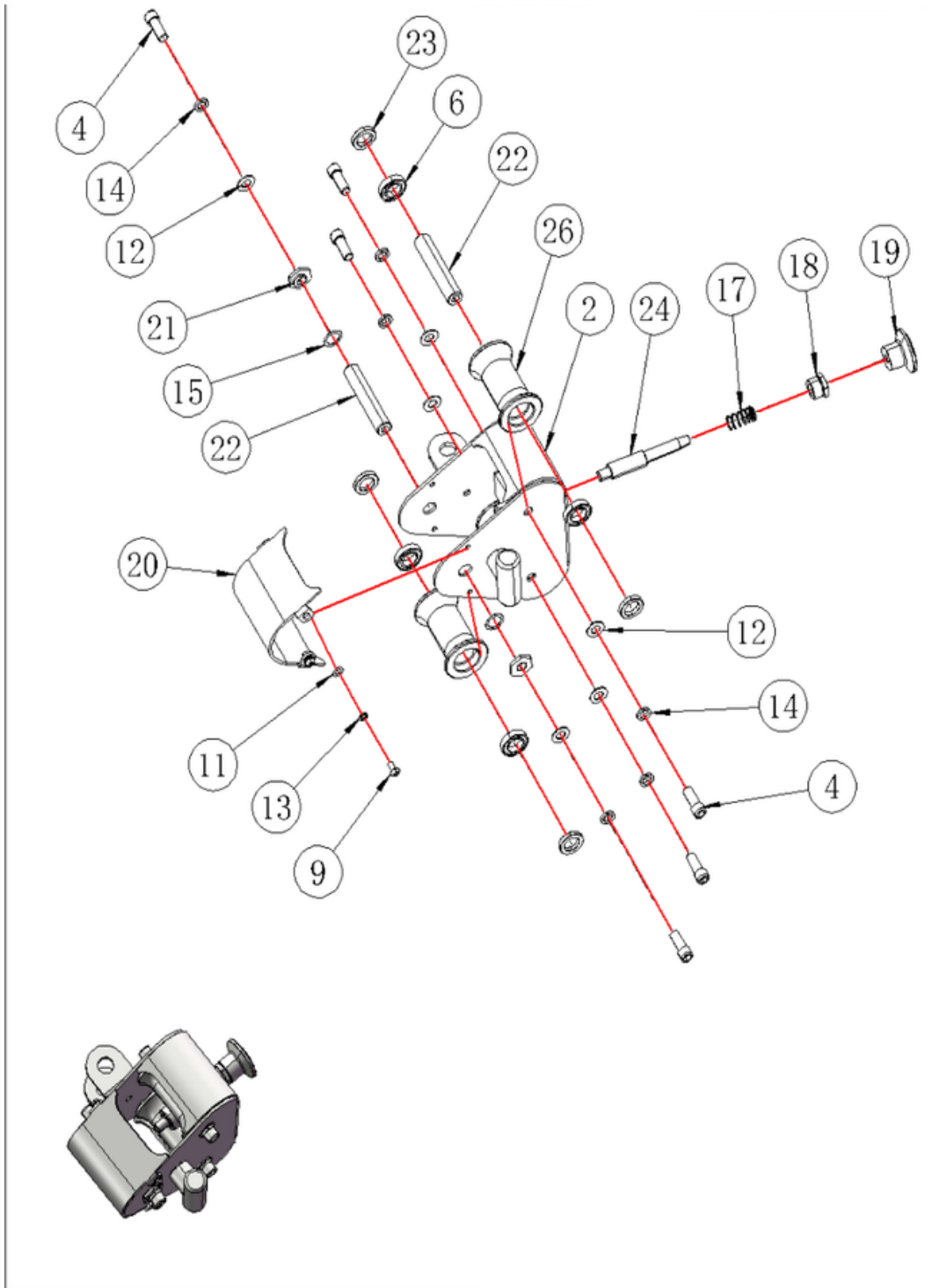
QTY 2



Washer Ø8.3xØ16 × 1

STAGE 3 / DRAWING 1 OF 3

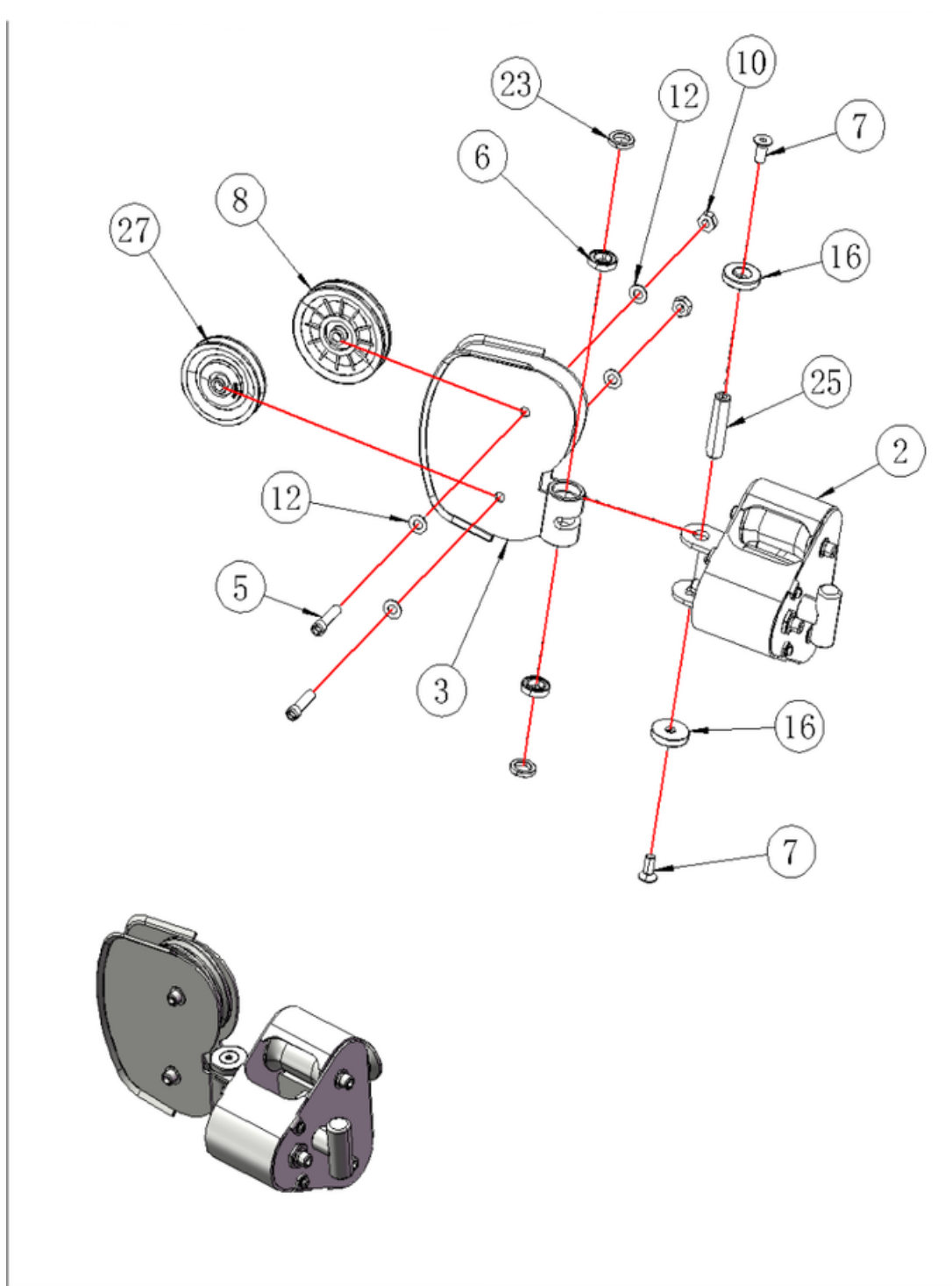
Assembly stage 3



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 / DRAWING 2 OF 3

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: Build the Carriage

Use drawings 1 and 2 of Stage 3. Preserve any correctly assembled factory carriage; do not dismantle it merely to follow these steps.

9. Fit the carriage rollers

Place rollers 26, shafts 22, bearings 6 and spacers 23 in box 2 as shown. Fit eccentric nuts 21 and washers 15 at their marked locations. Retain the shaft ends with screws 4, spring washers 14 and washers 12. Confirm the required roller adjustment before use.

10. Fit the locking pin and guard

Install pin 24, spring 17, nut 18 and cap 19 in the shown order. Check that the pin retracts and returns fully. Fit guard 20 with screws 9, spring washers 13 and washers 11.

11. Build the swivel pulley bracket

Use drawing 2 to place pulleys 8 and 27 in bracket 3. Fit screws 5 (M10 x 40), washers 12 and nuts 10. Maintain the shown pulley orientation and free rotation.

12. Join the swivel to the carriage

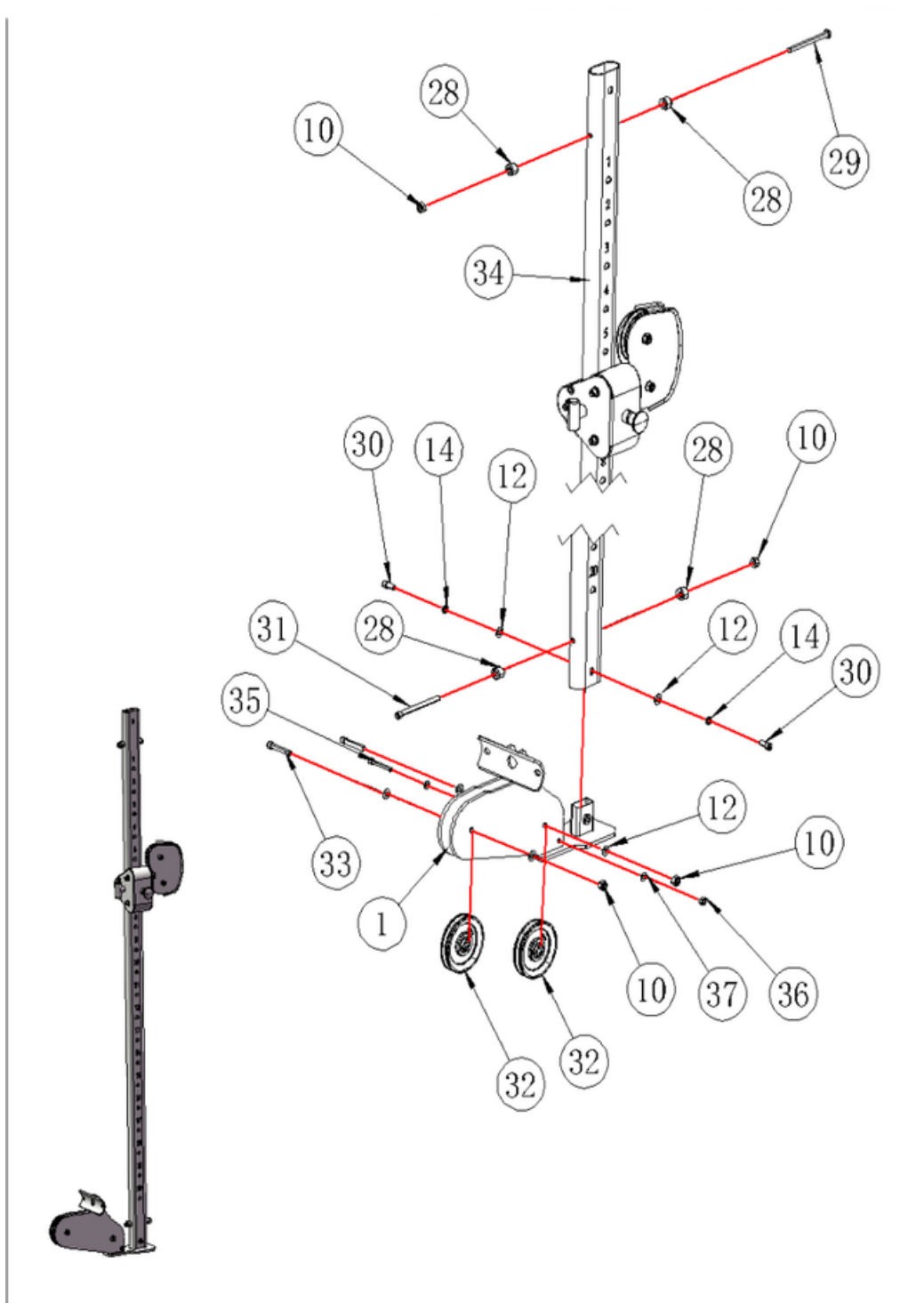
Align bracket 3 with box 2 using bearings 6, spacer 23 and shaft 25. Fit end caps 16 and countersunk screws 7 at both ends. Check secure retention and smooth swivel movement without excessive play.

Check before continuing

Rollers, locking pin, swivel shaft and pulley axles are retained.

STAGE 3 / DRAWING 3 OF 3

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: Fit the Adjustment Upright

Use drawing 3 of Stage 3. Keep the carriage supported until it is captured on the upright and both end stops are installed.

13. Position the carriage on the upright

Fit the carriage to adjustment tube 34 in the illustrated orientation. Engage its pin in a hole and keep independent support in place while installing the end stops.

14. Fit the end stops

Fit limit pieces 28 at the upper and lower stop locations with screws 29 and 31 (both M10 x 120) and nuts 10 as shown. Verify both stop sets are securely retained.

15. Attach the lower bracket

Join lower frame 1 to the upright with screws 30 (M10 x 20), spring washers 14 and washers 12. Fit both pulleys 32 using screws 33, washers 12 and nuts 10. Use screw 35, washers 37 and nut 36 at the separate shown connection.

16. Install and check both slide assemblies

Return to Stage 1 to attach the completed slides to their corresponding towers. Check carriage travel and pin engagement while supported; neither carriage may run off an end or contact a loose stop.

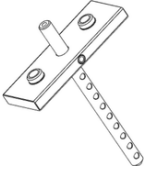
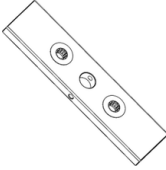
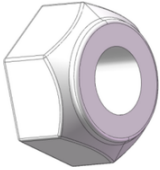
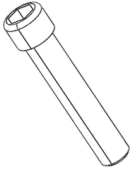
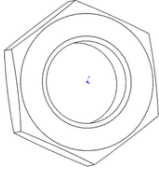
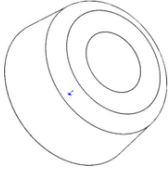
Check before continuing

Both slides are installed and their carriages lock positively.

STAGE 4 / PARTS

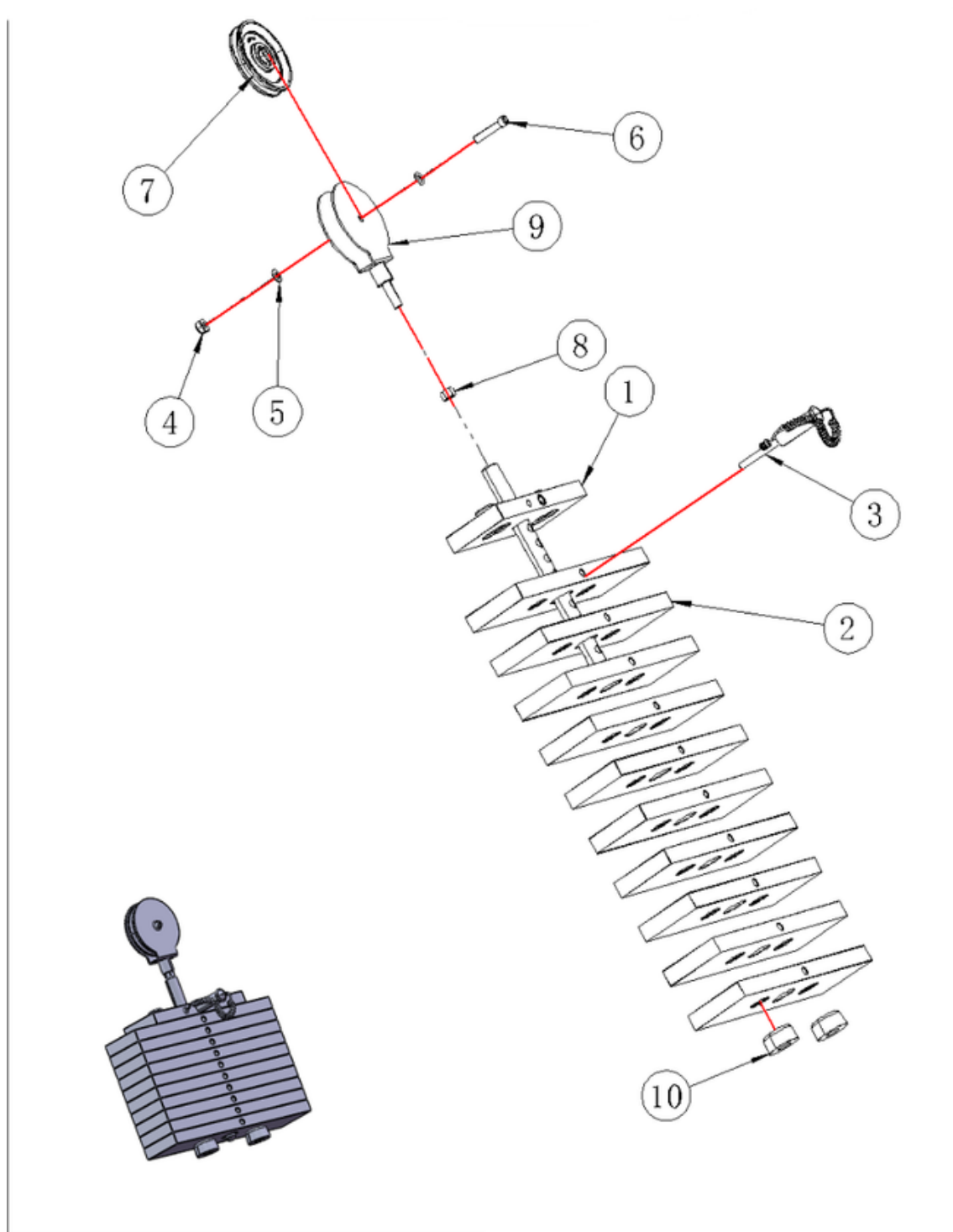
Identify your components

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  Weight selector pin
REF 4 QTY 1  Locknut M10	REF 5 QTY 2  Washer Ø10.3xØ20 × 1.2	REF 6 QTY 1  Socket-head screw M10 × 50
REF 7 QTY 1  Pulley	REF 8 QTY 1  Hex nut M12	REF 9 QTY 1  Component — see illustration
REF 10 QTY 2  Counterweight cushioning		

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: Assemble Each Weight Stack

Use Stage 4 references. Keep plates individually supported while loading; never place fingers beneath suspended plates.

17. Prepare the plate stack

Identify cushions 10, ten plates 2, top plate 1 and selector pin 3. Fit the cushions at the base positions and load plates onto the tower guides in the illustrated orientation, with all selector holes facing the same direction. Fit the top plate and selector stem above them.

18. Fit the stack pulley

Install pulley 7 in bracket 9 using screw 6 (M10 x 50), washers 5 and nut 4. Attach the bracket at the top-plate connection with nut 8 as shown. Confirm the required thread engagement and locking arrangement with Build A Gym before applying tension.

19. Check stack selection

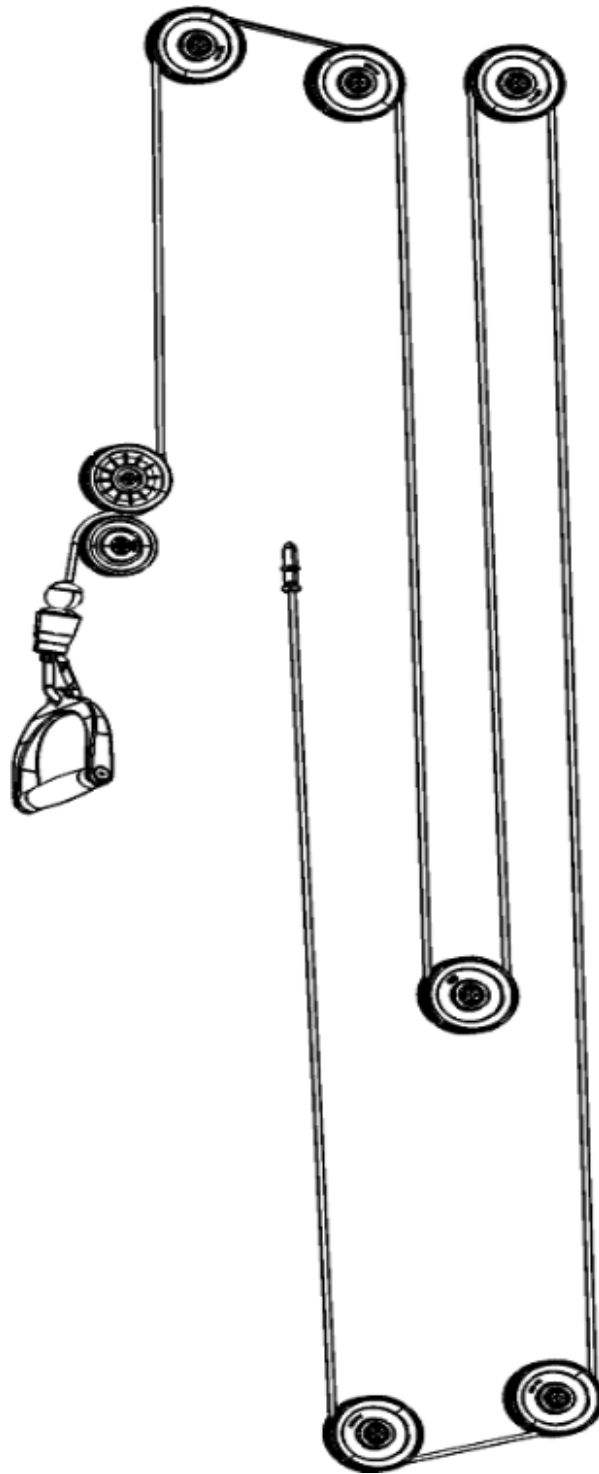
Secure the tower guide ends using Stage 2. Insert selector pin 3 fully into each intended selection with the stack resting down. Check that plates align and that the pulley and stem attachments are retained. Repeat for the second tower.

Check before continuing

Both stacks are aligned and all guide and pulley attachments are confirmed.

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 5: Route and Test the Cables

Use the final cable drawing for each side. It does not specify the complete end-fastening procedure or a numbered pulley sequence.

20. Verify each cable path

With the stack down, trace the cable from the handle carriage through the pictured upper and lower pulleys and stack pulley. Keep it seated in each groove and inside all retainers. Preserve factory routing; obtain exact confirmation of any disconnected path or termination before tensioning.

21. Finish guards and attachments

Check all cable stops, end fittings, clips, pulley axles and guide retainers. Secure both tower guards and all covers. Verify carriage locks and frame joints, then confirm installation torque and floor-fixing requirements.

22. Test both sides separately

Select the lowest available load. Move each handle slowly and check that its stack lifts and returns fully without cable slack, rubbing, binding or derailment. Test supported carriage adjustment and positive lock engagement at each setting being checked.

Check before continuing

Both sides pass their individual checks 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 each station separately: cables, stack guides, handles and adjustment locks.
Do not use until all attachments and routing are confirmed and every stack returns fully.

☐ **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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