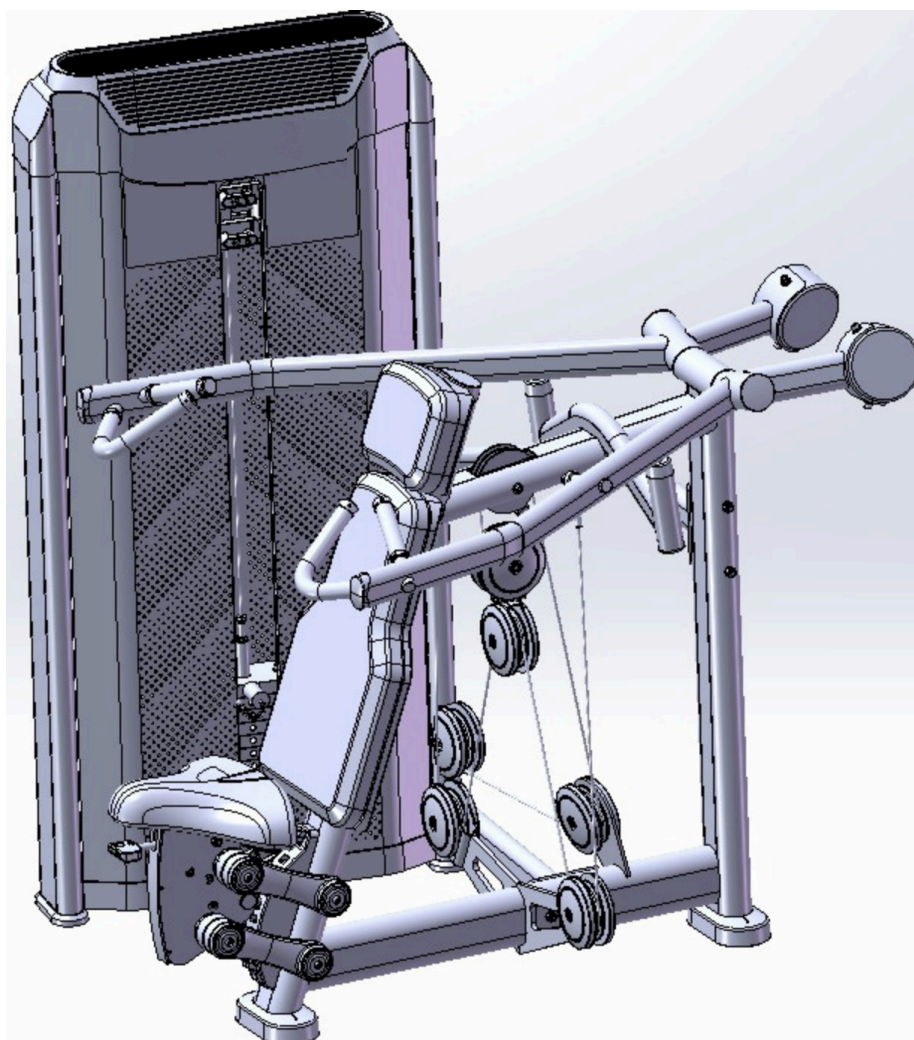


FRACTAL SERIES

Shoulder Press

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 → Final inspection

Use the PDF bookmarks to jump directly to a stage.

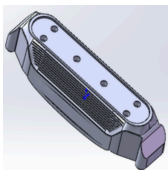
STAGE 1 / PARTS

Identify your components

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

REF 1

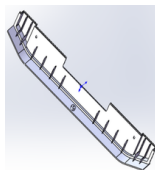
QTY 1



Large roof panel

REF 2

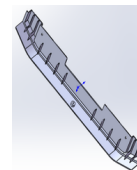
QTY 1



Front baseplate

REF 3

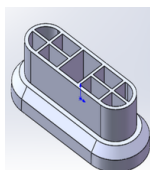
QTY 1



Rear base

REF 4

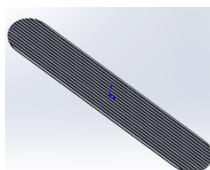
QTY 2



Base

REF 5

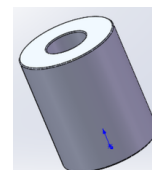
QTY 1



Top cover

REF 6

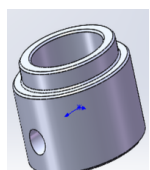
QTY 2



Weight counterbalance pad

REF 7

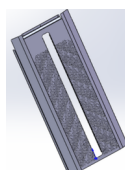
QTY 2



Guide rod fixing sleeve

REF 8

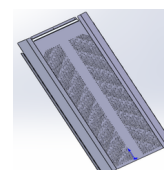
QTY 1



Front guard plate

REF 9

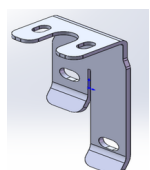
QTY 1



Rear guard plate

REF 10

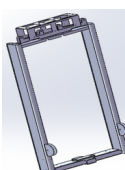
QTY 1



Counterweight bracket on small door

REF 11

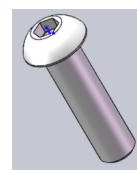
QTY 1



Small frame assembly

REF 12

QTY 2



Hex socket cap screw

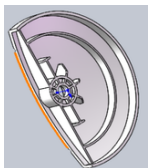
STAGE 1 / PARTS

Identify your components

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

REF 13

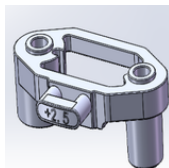
QTY 4



136 semi-circular pulley housing

REF 14

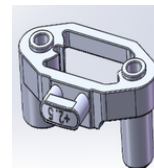
QTY 1



2.5 kilograms of auxiliary counterweight

REF 15

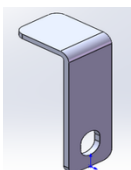
QTY 1



2.5 kilograms of auxiliary counterweight

REF 16

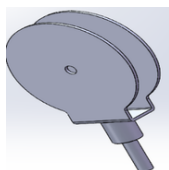
QTY 4



Anti-slip guard plate for skipping rope

REF 17

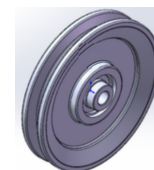
QTY 1



Pulley components

REF 18

QTY 7



Pulley

REF 19

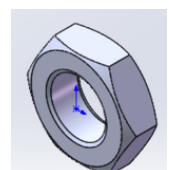
QTY 2



Weight-bearing guide rod

REF 20

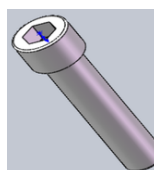
QTY 1



Hexagonal thin nut

REF 21

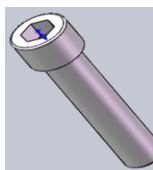
QTY 8



Hexagonal round head screw

REF 22

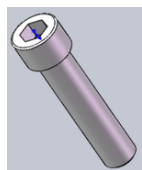
QTY 1



Hexagonal round head screw

REF 23

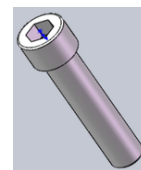
QTY 4



Hexagonal round head screw

REF 24

QTY 2

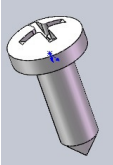
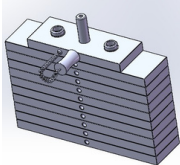
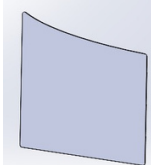


Hexagonal round head screw

STAGE 1 / PARTS

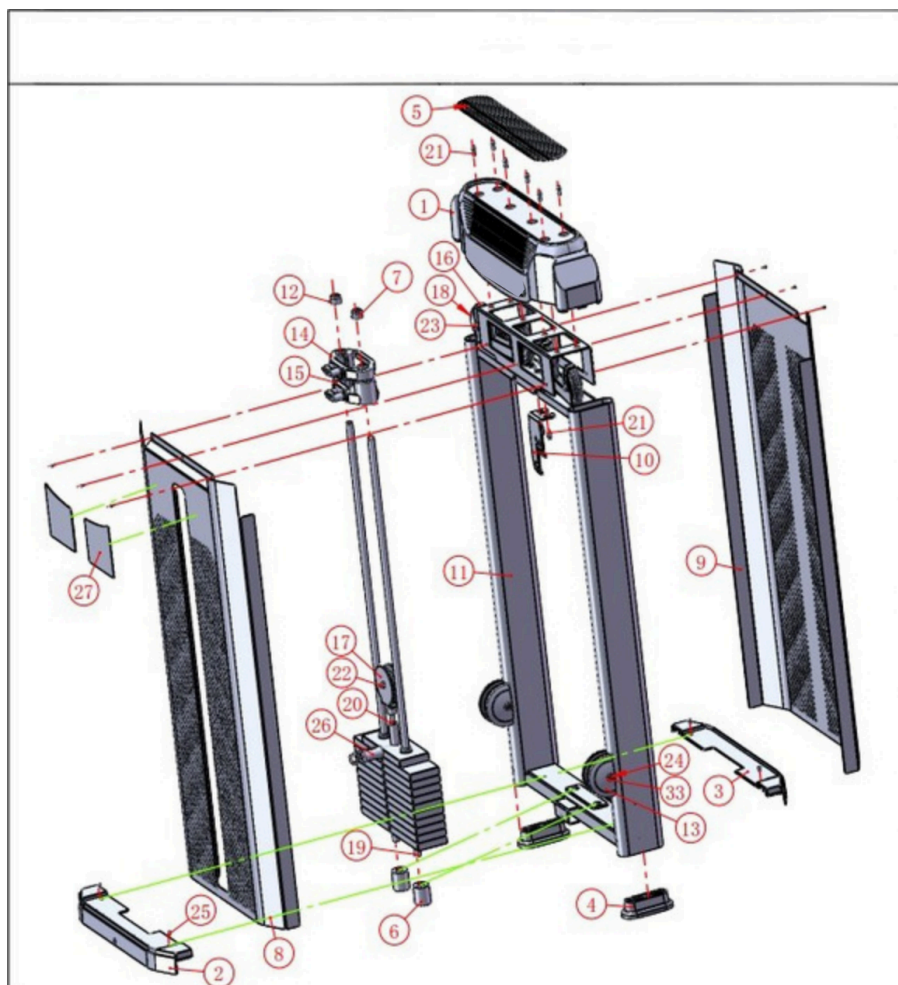
Identify your components

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

REF 25 QTY 12  Cross-slot pan-head self-tapping screws	REF 26 QTY 1  80 kg weight stack	REF 27 QTY 2  Decal
---	---	--

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: Assemble the Weight Tower

Use Stage 1 references. Keep the tower supported and the stack resting fully down while fitting its guides and pulleys.

1. Confirm the tower hardware

Use Stage 1 references. Screws 12 and 21–25 lack dimensions, and drawing callout 33 is missing from the list. Identify each supplied fastener and obtain its size and connection specification before fastening the tower components. Support tower frame 11 upright on a level floor.

2. Fit buffers, stack and guide rods

Keep stack 26 supported at its base. Fit buffers 6 and guide rods 19 in the illustrated relationship. Preserve plate order and selector access. The source shows the 80 kg stack as an assembly; obtain the plate-loading and lower guide-retention details if it arrives dismantled.

3. Fit upper guide components

Fit auxiliary weights 15 and 14 above the stack in the depicted order. Fit guide sleeves 7 and screws 12. Confirm the rods remain parallel and retained at both ends before loading the stack.

4. Install pulleys and covers

Fit pulleys 18, anti-jump guards 16 and housings 13 at their depicted positions. Fit pulley component 17 with screw 22 and thin nut 20 at the stack connection as shown, using the confirmed termination specification. Fit bracket 10, upper panel 1 and top cover 5 with the confirmed screws.

5. Fit the base pieces

Fit base pieces 2 and 3 and feet 4 as shown. Keep front guard 8 and rear guard 9 accessible until routing inspection. Confirm all tower and stack retainers; do not tension an uncertain cable attachment.

Check before continuing

Tower, guides, stack and pulley mounts are secure.

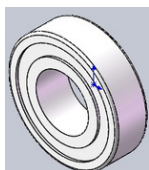
STAGE 2 / PARTS

Identify your components

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

REF 1

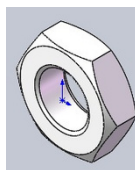
QTY 2



Deep groove ball bearing

REF 2

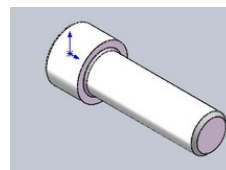
QTY 1



Hexagonal thin nut

REF 3

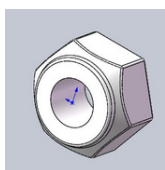
QTY 2



Socket-head screw M10 × 25

REF 4

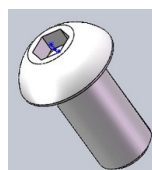
QTY 1



Locknut M12

REF 5

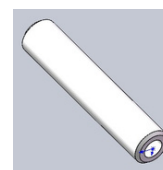
QTY 1



Socket-head screw M10 × 20

REF 6

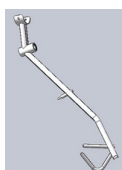
QTY 1



Hollow screw

REF 7

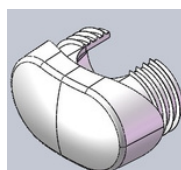
QTY 1



Left boom assembly

REF 8

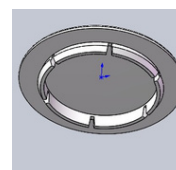
QTY 1



40 × 70 end cover (curved end)

REF 9

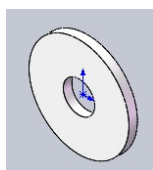
QTY 1



70 End cover

REF 10

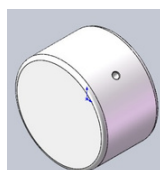
QTY 1



Big gasket

REF 11

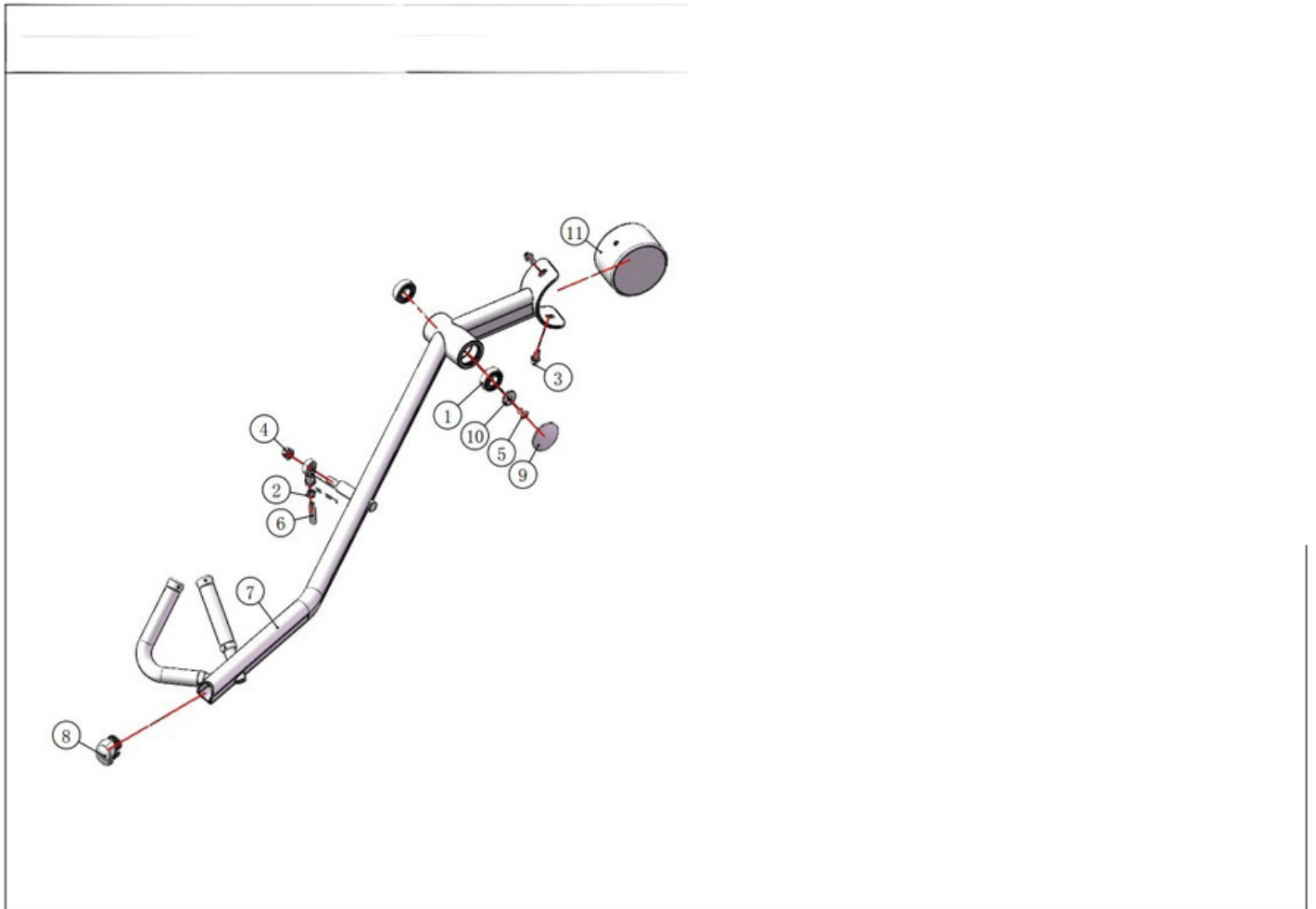
QTY 1



Circular counterweight

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: Prepare the Press Arm

The drawing details the left arm. Confirm the supplied right-arm assembly and mirrored retention before installing both arms.

6. Fit the arm bearings and retainer

Using Stage 2 references, seat bearings 1 in arm 7 in the illustrated orientation. Fit large washer 10, M10 × 20 screw 5 and end cover 9 at the depicted pivot end. Keep the arm supported until it is mounted and all pivot retainers are confirmed.

7. Fit the arm counterweight

Fit circular counterweight 11 at the outer end with M10 × 25 screws 3. Fit hollow screw 6, thin nut 2 and M12 locknut 4 at the depicted cable attachment. Confirm the supplied termination and adjustment specification before applying tension; fit end cover 8.

Check before continuing

Arm bearings, counterweight and cable attachment are confirmed.

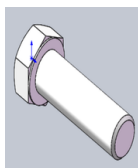
STAGE 3 / PARTS

Identify your components

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

REF 1

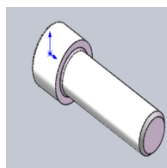
QTY 4



Hex-head bolt M10 × 20

REF 2

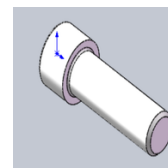
QTY 1



Socket-head screw M8 × 25

REF 3

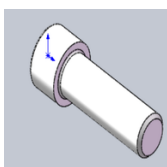
QTY 5



Socket-head screw M8 × 60

REF 4

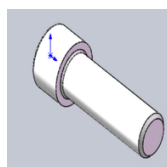
QTY 1



Socket-head screw M10 × 20

REF 5

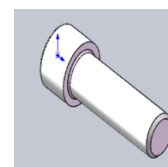
QTY 2



Socket-head screw M10 × 30

REF 6

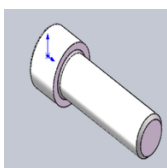
QTY 1



Socket-head screw M10 × 70

REF 7

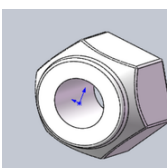
QTY 1



Socket-head screw M10 × 130

REF 8

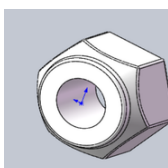
QTY 1



Locknut M8

REF 9

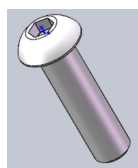
QTY 11



Locknut M10

REF 10

QTY 4



Socket-head screw M8 × 25

REF 11

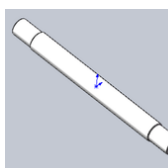
QTY 10



Pulley cover

REF 12

QTY 2



Long rotating shaft

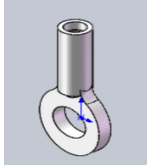
STAGE 3 / PARTS

Identify your components

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

REF 13

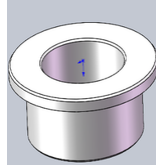
QTY 1



Fish-eye terminal

REF 14

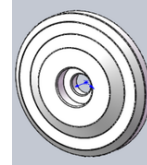
QTY 4



Sintered sleeve

REF 15

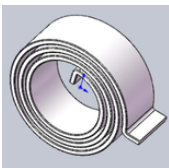
QTY 4



Aluminum cap

REF 16

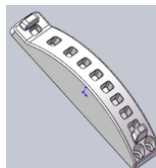
QTY 4



Coiled spring

REF 17

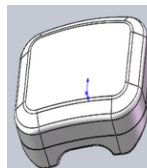
QTY 1



Gear block

REF 18

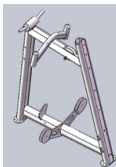
QTY 1



Head pad

REF 19

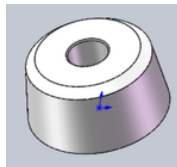
QTY 1



Main frame assembly

REF 20

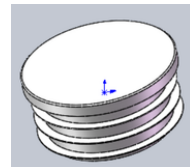
QTY 2



Limit pad

REF 21

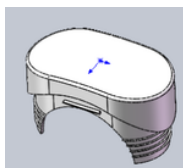
QTY 2



50 round pipe stoppers

REF 22

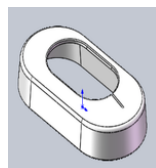
QTY 1



65 x 114 end cover

REF 23

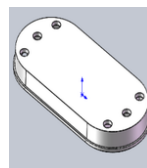
QTY 2



Anchor bolts

REF 24

QTY 2



Plastic parts for foundation

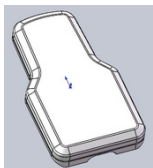
STAGE 3 / PARTS

Identify your components

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

REF 25

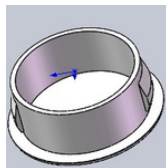
QTY 1



Backrest pad

REF 26

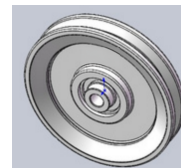
QTY 6



25 round hole plug

REF 27

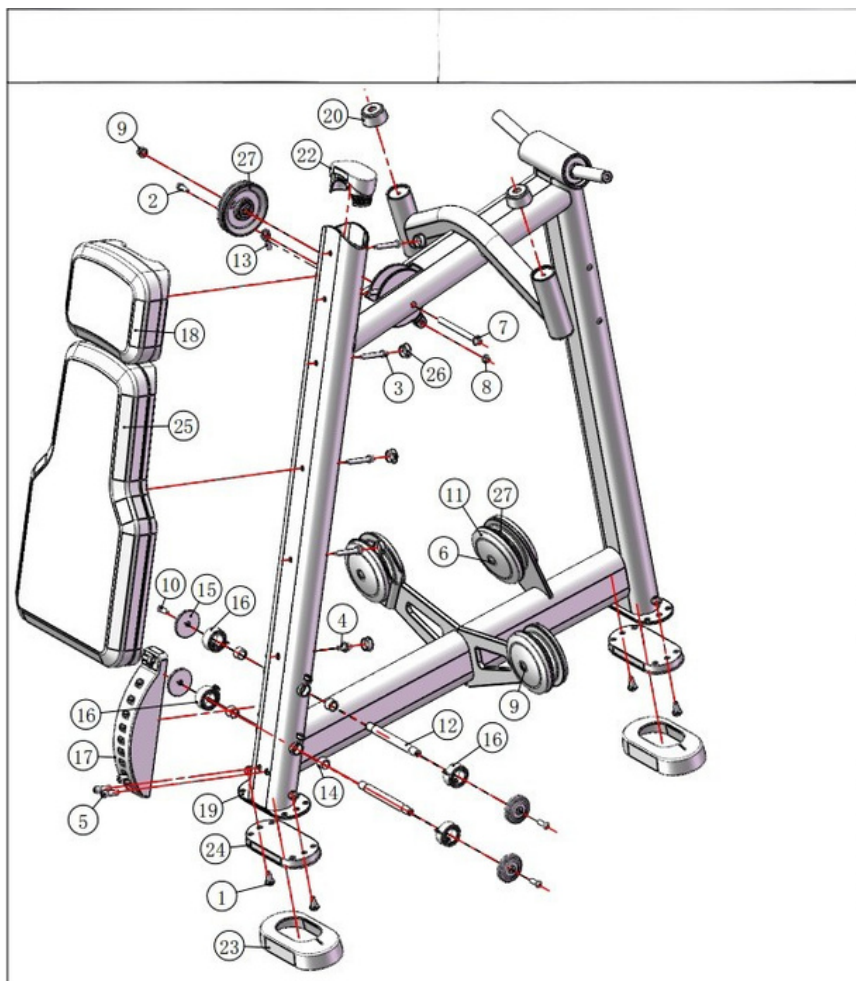
QTY 6



Pulley

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: Assemble the Seat-Support Frame

Part numbers restart in Stage 3. Do not improvise a spring setting or mismatched fastener pairing.

8. Support the frame and fit pads

Position main frame 19 securely. Fit head pad 18 and backrest 25 using M8 × 60 screws 3 at the illustrated points. Fit limit pads 20, end cover 22 and plugs 26 after checking the concealed fasteners.

9. Fit the fixed pulley group

Fit pulleys 27 and covers 11 using the depicted M10 × 70 screw 6 and M10 nuts 9 at their mounts. At the upper connection the drawing places M8 × 25 screw 2 with an M10 nut 9; confirm the correct matching hardware. Match all other pulley connections to the supplied kit before tightening.

10. Fit the cable eye and seat adjustment rack

Fit eye terminal 13 at its illustrated upper-frame attachment with M10 × 130 screw 7 and the confirmed mating hardware. Attach adjustment rack 17 with M10 × 30 screws 5. Confirm terminal retention and rack alignment before connecting the seat.

11. Fit the seat shafts and springs

Fit long shafts 12, sleeves 14 and four coiled springs 16 in the illustrated relationship to the frame. Fit aluminum caps 15 with M8 × 25 screws 10. Keep the seat linkage supported; obtain spring orientation, preload and shaft-retention specifications before setting any loose springs.

12. Complete the feet and frame checks

Fit foot parts 23 and 24 with M10 × 20 bolts 1 and nuts 9 as depicted; the list calls item 23 anchor bolts, so confirm its actual function. Fit round plugs 21 and the depicted M10 × 20 screw 4. Check all pad, pulley and shaft mounts.

Check before continuing

Frame, pads, pulleys, cable eye and seat-shaft retainers are secure.

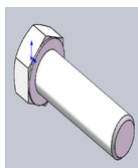
STAGE 4 / PARTS

Identify your components

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

REF 1

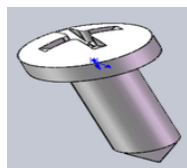
QTY 1



Socket-head screw M10 × 60

REF 2

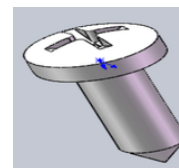
QTY 6



Cross-groove disc head self-tapping screw

REF 3

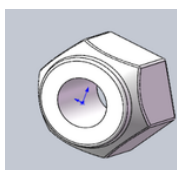
QTY 12



Cross-groove disc head self-tapping screw

REF 4

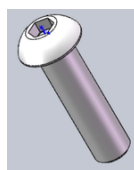
QTY 1



Locknut M10

REF 5

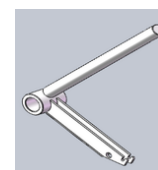
QTY 4



Socket-head screw M8 × 25

REF 6

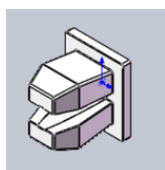
QTY 1



Adjustment frame assembly

REF 7

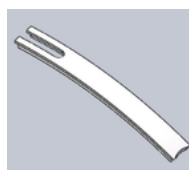
QTY 16



Plastic snap

REF 8

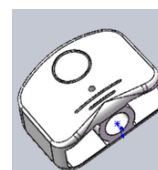
QTY 1



Seat frame baffle

REF 9

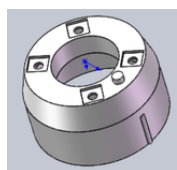
QTY 1



Adjustment handle

REF 10

QTY 4



Cover guard

REF 11

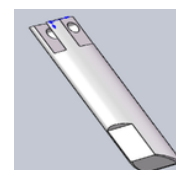
QTY 2



Long rotating shaft

REF 12

QTY 1



Adjust pin shaft

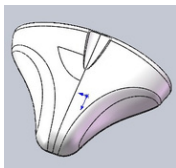
STAGE 4 / PARTS

Identify your components

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

REF 13

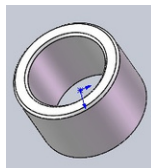
QTY 1



Seat cushion

REF 14

QTY 4



Sintered sleeve

REF 15

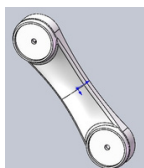
QTY 1



Tension spring

REF 16

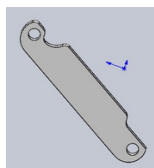
QTY 4



Crank

REF 17

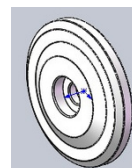
QTY 1



Adjust connecting plate

REF 18

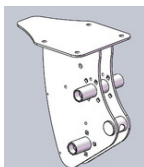
QTY 4



Aluminum cap

REF 19

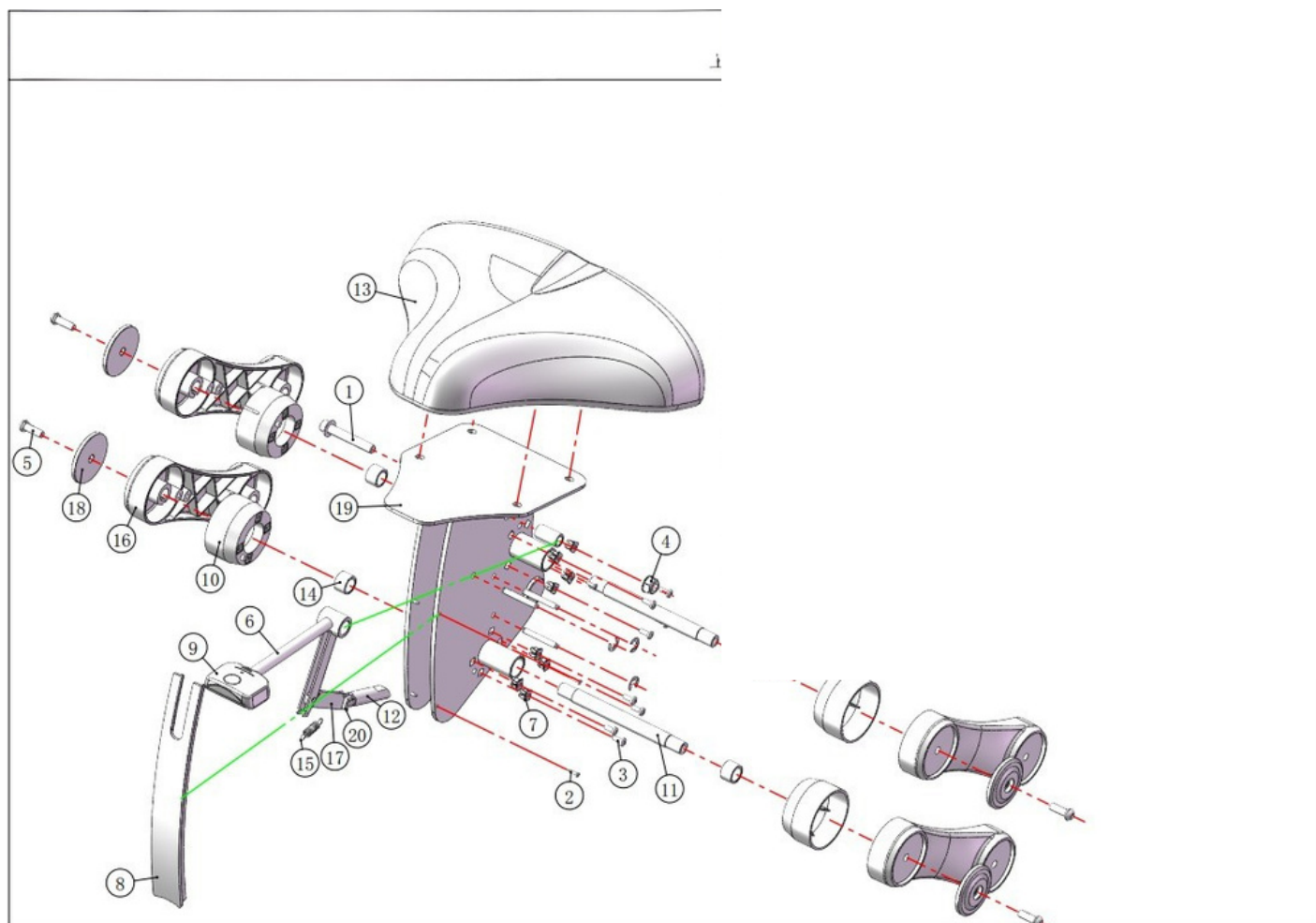
QTY 1



Seat frame assembly

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 the Seat Linkage

Use Stage 4 references and confirm all spring and linkage settings before removing supports.

13. Fit the cranks and seat shafts

Support seat frame 19. Fit bushings 14, shafts 11 and four cranks 16 in the shown order, then aluminum caps 18 and M8 × 25 screws 5. Keep the crank pairs aligned and supported until connected to the main-frame shafts.

14. Assemble the adjustment handle

Fit adjustment frame 6, handle 9, adjustment pin shaft 12 and connecting plate 17 as illustrated. Fit tension spring 15 at its depicted connection using the confirmed spring specification. Fit M10 × 60 screw 1 and locknut 4 at the shown joint. Callout 20 is missing from the list; confirm that component before completing the mechanism.

15. Fit the cushion and linkage guards

Fit seat cushion 13 to frame 19 using its confirmed supplied fasteners; these are not separately identified in the list. Fit guard covers 10, snaps 7 and seat baffle 8 with the illustrated screws 2 and 3 after inspecting the linkage. Confirm both self-tapping screw sizes.

16. Check adjustment engagement

With the seat supported, operate the handle and confirm the linkage moves freely and locks fully into the adjustment rack. Check every shaft end, crank and spring connection. Do not load the seat if the lock remains partly engaged or any spring setting is unconfirmed.

Check before continuing

Seat cushion, cranks, shafts, guards and adjustment lock are secure.

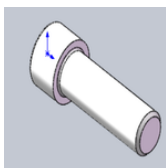
STAGE 5 / PARTS

Identify your components

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

REF 1

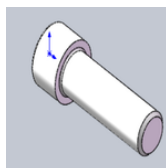
QTY 1



Socket-head screw M10 × 25

REF 2

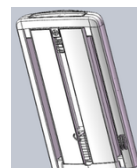
QTY 1



Socket-head screw M10 × 85

REF 3

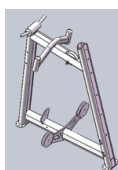
QTY 1



Small frame assembly

REF 4

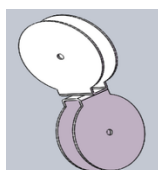
QTY 1



Main frame assembly

REF 5

QTY 1



Pulley frame assembly

REF 6

QTY 1



Left boom assembly

REF 7

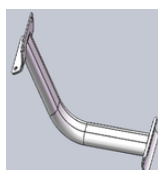
QTY 1



Right boom assembly

REF 8

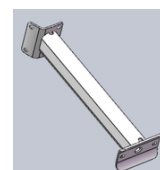
QTY 1



Upper connecting braces assembly

REF 9

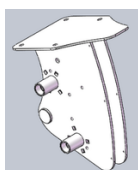
QTY 1



Bottom connecting braces assembly

REF 10

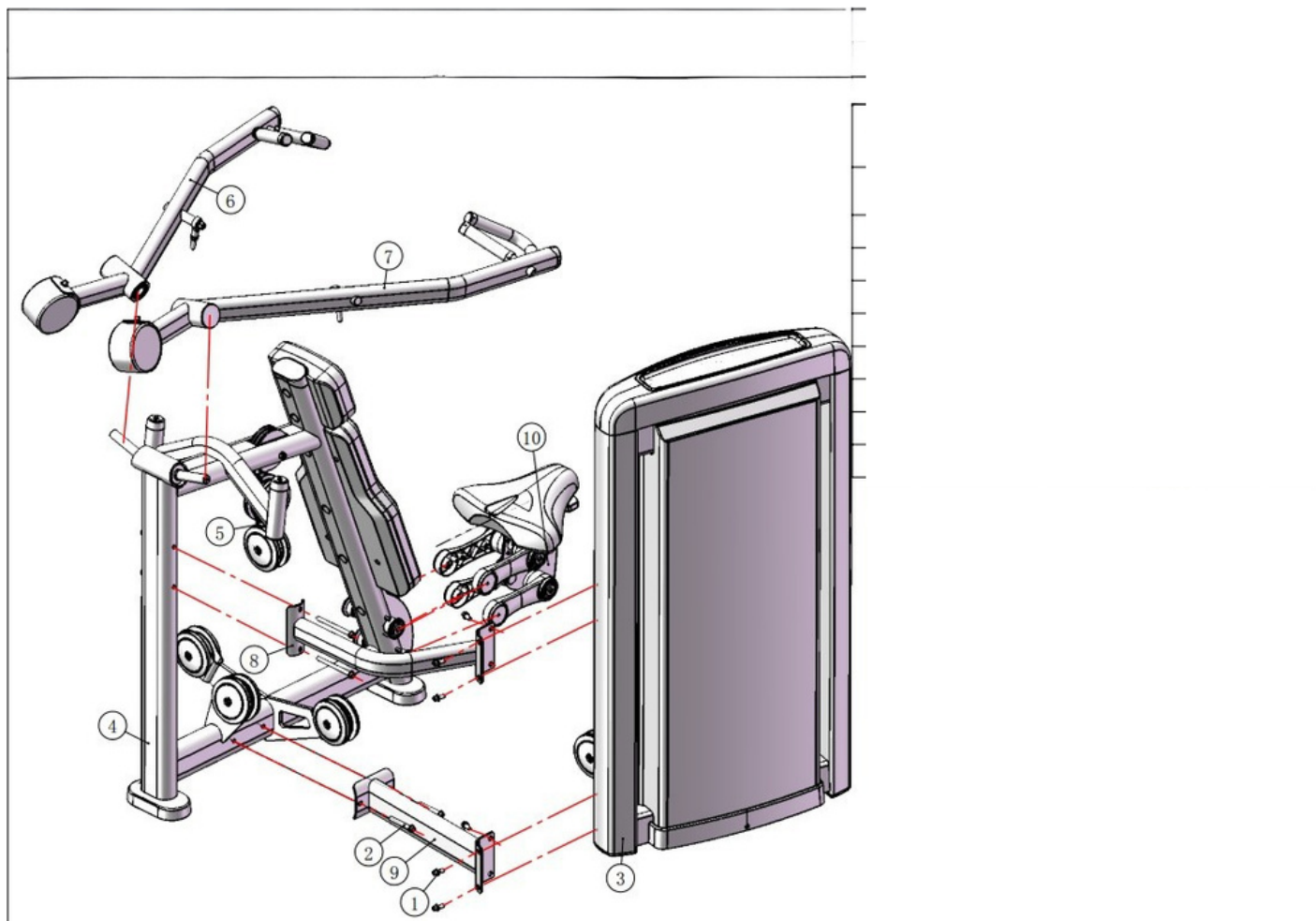
QTY 1



Seat frame assembly

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: Join the Frames and Moving Arms

Use Stage 5 references. Preserve factory-adjusted subassemblies and keep both press arms supported.

17. Connect the tower and exercise frame

Support tower 3 beside main frame 4 and align upper brace 8 and lower brace 9. Fit M10 × 25 screws 1 and M10 × 85 screws 2 at their depicted connections. The list gives only one of each screw despite multiple joints; obtain the complete hardware quantities and mating parts before fastening.

18. Install the supported arms and seat

Fit left arm 6 and right arm 7 to the upper pivots with their confirmed Stage 2 bearing and retention components. Position pulley frame 5 and seat assembly 10 as illustrated. Connect the seat cranks to the main-frame shafts, confirming all spring settings, caps and retainers before releasing support.

19. Check alignment and retention

Secure both connecting braces and verify the frame stands evenly. Confirm both press arms and their counterweights are retained, the seat lock engages fully and the floating pulley assembly is correctly mounted. Obtain any missing attachment specifications before routing the cables.

Check before continuing

Both frames, arms, seat linkage and pulley assembly are secure.

STAGE 6 / DRAWING 1 OF 1

Assembly stage 6



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

Stage 6: Route Both Cables and Test

Resolve all hardware, spring and cable-setting omissions before the machine enters service.

20. Trace the stack cable

Keep the stack down and both arms supported. Follow the green route in the schematic from the stack over the tower-top pulley pair, down through the lower redirects and around the linked central pulley assembly. Identify its endpoint and attachment against the supplied machine before tensioning.

21. Trace the arm cable

Follow the brown route from one terminal eye around its lower pulley, over the lower pulley of the central assembly and around the opposite lower pulley to the other terminal eye. Match each eye to the intended arm attachment. Keep the two cable routes distinct and seated within every groove.

22. Verify terminations and install guards

Confirm all hollow screws, eye terminals, locking nuts and central pulley connections against the supplied specifications. Cable lengths and complete adjustment settings are omitted from the source; obtain them for loose or uncertain cables. Fit Stage 1 guards 8 and 9 with confirmed screws 25 after routing inspection.

23. Test at the lowest resistance

Confirm fastener torque and floor-fixing requirements, then fully lock the seat. Select the lowest stack load and move both press arms slowly through their permitted ranges. Check controlled independent and combined movement, smooth stack lift and full return, and no slack, binding or contact with covers. Stop if any retainer, arm counterweight or adjustment lock shifts.

Check before continuing

Both arms, seat adjustment, cable routes and all guards 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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