

STRIDE

RAPTOR RIG SYSTEMS



INSTALLATION MANUAL

THE BEAST

RAPTOR MULTIFUNCTIONAL POWER RACK · WEIGHT STACK VERSION

PRODUCT LINE
RAPTOR Rig

DOCUMENT
Installation Manual

STRIDE EUROPE
strideeurope.com

01

SYSTEM OVERVIEW

The Beast is the RAPTOR Multifunctional Power Rack: a full power rack combined with a **dual cable machine**. Two integrated weight stacks drive adjustable cable trolleys on the front uprights, alongside a lat-pulldown station with seat and leg roller, pull-up station, J-cups, safety features and plate storage — all on the RAPTOR platform (75 × 75 × 3 mm steel profile, ø17 mm holes at 80 mm centre spacing, M16 hardware).

02

VERSIONS

CONFIGURATION	DESCRIPTION
Weight Stack version	Dual integrated weight stacks — this manual follows the factory assembly drawings for this version
Plate-loaded version	Same frame with plate-loaded cable system
Height 230 cm	Standard — RAPTOR 2.40 m uprights
Height 265 cm	Extended version — RAPTOR 2.75 m uprights

The RAPTOR series uses two upright heights only (2.40 m / 2.75 m). Squat spacing 1100 mm, interval spacing 1800 mm.

Tools not included: the delivery contains all hardware (bolts, washers, nuts), but no tools — bring your own Allen keys, wrenches and torque wrench.

03

AT A GLANCE

Material / finish	Powder-coated steel
Steel gauge	75 × 75 mm tubes · 3 mm wall
Hole grid	ø17 mm · 80 mm spacing · M16
Colour	Black
Product weight	314 kg
Use	Indoor only
Shipping	1 set = 2 wooden cases 2280 × 500 × 520 mm · 334 kg



WEIGHT STACK VERSION

04 DIMENSIONS & CLEARANCE

2306 mm

HEIGHT · 230 CM VERSION †

1050 mm

INSIDE WIDTH (BETWEEN UPRIGHTS)

1819 mm

OVERALL WIDTH

1800 mm

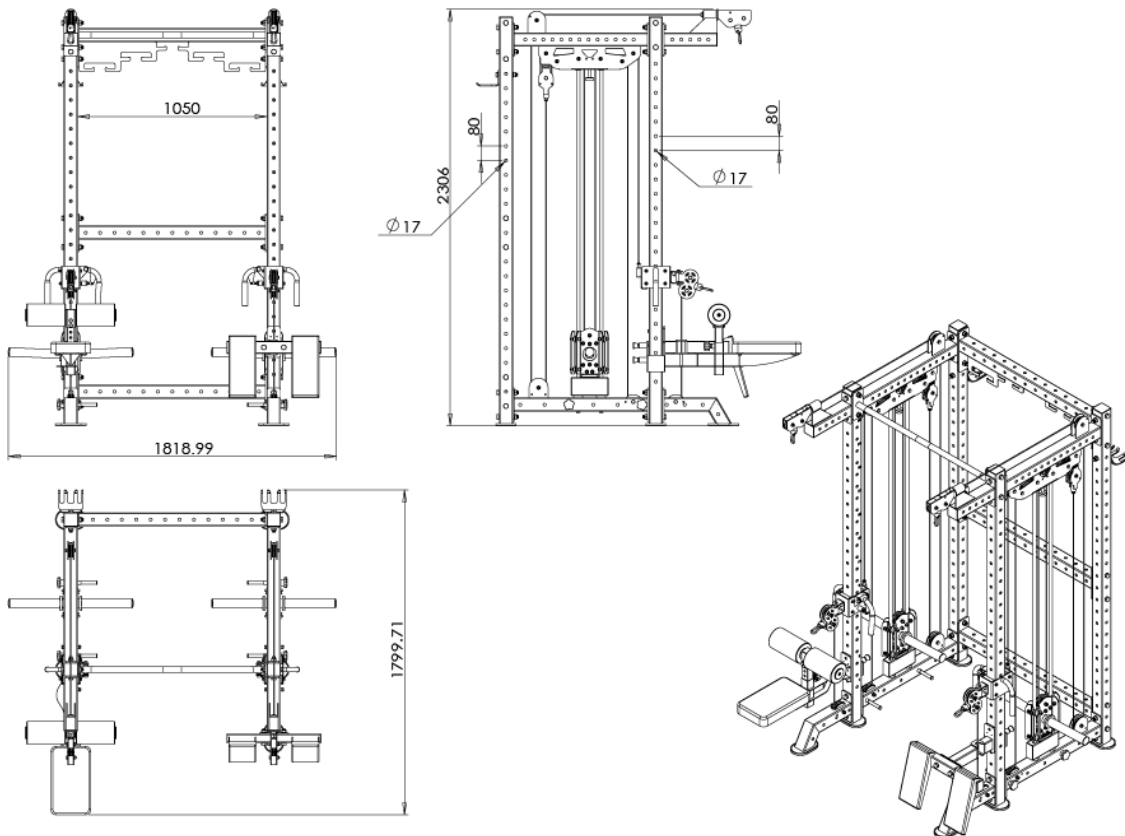
OVERALL DEPTH

ø17 / 80 mm

HOLE DIAMETER / SPACING

314 kg

PRODUCT WEIGHT



RAPTOR MULTIFUNCTIONAL POWER RACK · DIMENSION SHEET

† Dimensions per technical drawing (230 cm version shown). The commercial spec sheet lists 1695 mm width and 2600 mm height for the extended configuration — the drawing values are taken as authoritative in this manual; discrepancy to be confirmed. The 265 cm extended version uses 2.75 m uprights.

Important — Clearance: keep at least **1 m** free around the rack, including the full cable-trolley travel on both sides and the lat-pulldown seat at the front. Allow ceiling clearance above the pull-up station.

05 WEIGHT STACKS & CABLE SAFETY

Each weight stack runs from **10 to 210 lbs (4.5–94.5 kg)** in 10 lb (4.5 kg) increments, with dual-unit labels and colour-coded weight bands. Load is selected with a **magnetic selector pin** on a retention coil: the pin cannot fall out under vibration and cannot be misplaced.

- Insert the selector pin **fully to the stop** before every set — a half-seated pin can release under load
- Never change the pin position while the stack is raised
- Keep hands clear of the stack and guide rods during use
- The cables must follow the factory routing exactly (step 6) — a wrongly positioned wire rope will derail or fray under load

06 FASTENER OVERVIEW

HARDWARE	USED FOR
Hex bolts M16 × 110 / 120 / 130 / 80	Frame, crossmembers, top frame, seat unit
Washers ø16 · aircraft nuts M16	All M16 connections
Hex socket cap screws M10 × 125 · M10 × 20/25	Weight-stack top mounts, seat unit
Washers ø10 · aircraft nuts M10	All M10 connections
Hex bolts M6 × 40 · aircraft nuts M6	Bracket details (views C / D)
Allen bolts M8 × 10 · washers ø8	STRIDE side panels

Fastener sizes per the factory assembly drawings; quantities per the packing list in each wooden case. Every step drawing (p. 06–10) labels its own hardware.



WEIGHT STACK · MAGNETIC SELECTOR PIN

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BEFORE YOU BEGIN

■ REQUIRED TOOLS (NOT INCLUDED)

- Metric Allen key set and socket / wrench set (M16 / M10 / M8 / M6)
- Torque wrench
- Spirit level (≥ 600 mm), tape measure, rubber mallet
- Step ladder or platform — the top frame sits at 2.3–2.65 m

■ PERSONNEL & HANDLING

- **Minimum two installers** — total weight 314 kg, individual frames and stacks are heavy
- Keep both wooden cases (334 kg) palletised until unpacked at the installation location
- Plan half a day for a first-time installation

■ SAFETY

- Wear safety shoes and gloves during assembly
- Never leave a raised frame unsupported before it is linked and bolted
- Keep all bolts hand-tight until the full frame is standing and square, then torque
- Do not load, hang or pull on any cable before the final inspection is complete
- The wire-rope routing warnings in the drawings are mandatory, not advisory

08

SITE & FLOOR REQUIREMENTS

■ FLOOR

- Level, rigid, load-bearing floor — structural concrete recommended (product weight 314 kg plus training loads)
- Compensate unevenness with shims before final tightening; the guide rods must end up plumb
- Floor anchoring of the feet is strongly recommended

■ ENVIRONMENT

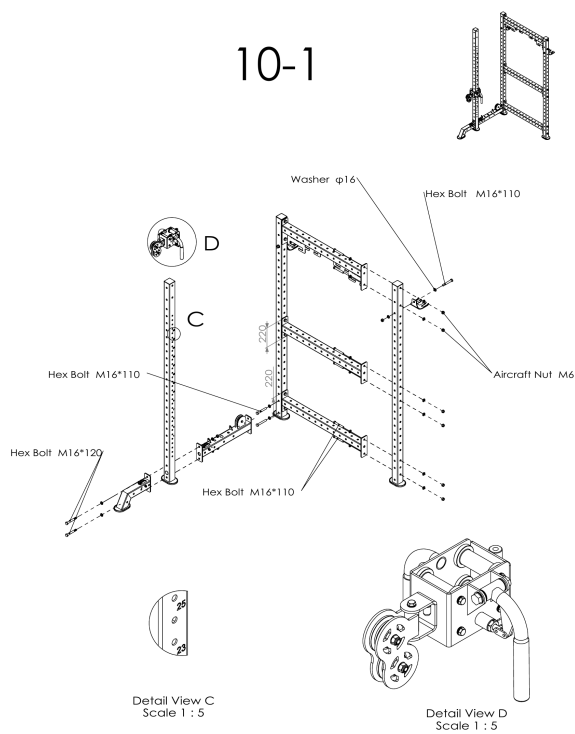
- Indoor, dry environment only — not suitable for outdoor installation or storage
- Check ceiling height against the chosen version (230 / 265 cm) plus pull-up clearance
- Keep 1 m clearance around the unit including cable-trolley travel

Specifications to confirm: tightening torques and floor-anchor specifications are not included in this revision — confirm with STRIDE Europe before installation.

09 ASSEMBLY SEQUENCE

1 REAR FRAME

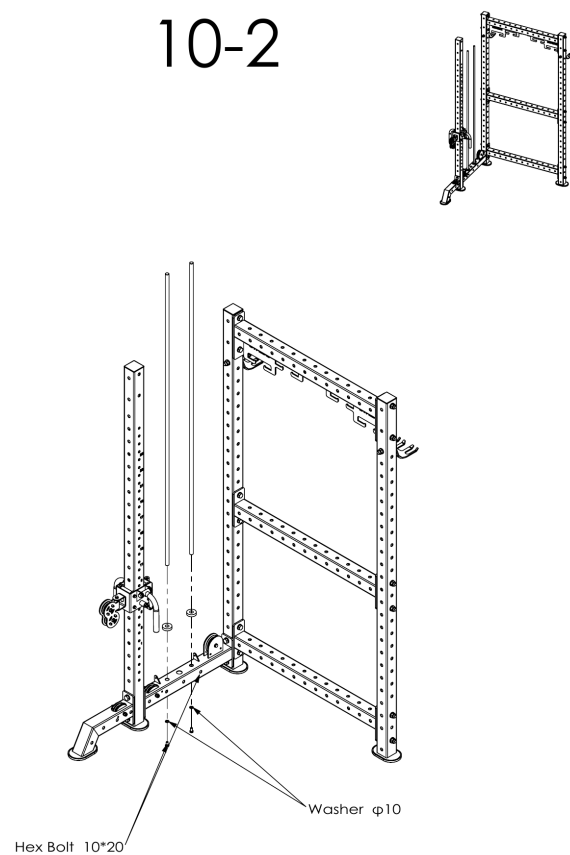
Assemble the rear uprights with their crossmembers and the pulley-trolley brackets (detail views C & D). Hardware: M16×110 / M16×120 hex bolts with ø16 washers and M6 aircraft nuts as labelled. Hand-tight only.



FACTORY DRAWING 10-1

2 WEIGHT-STACK GUIDE RODS

Fit the guide rods for both weight stacks to the rear frame and secure them at the base (10×20 hex bolts, ø10 washers). The rods must be parallel and plumb — check with a level before continuing.

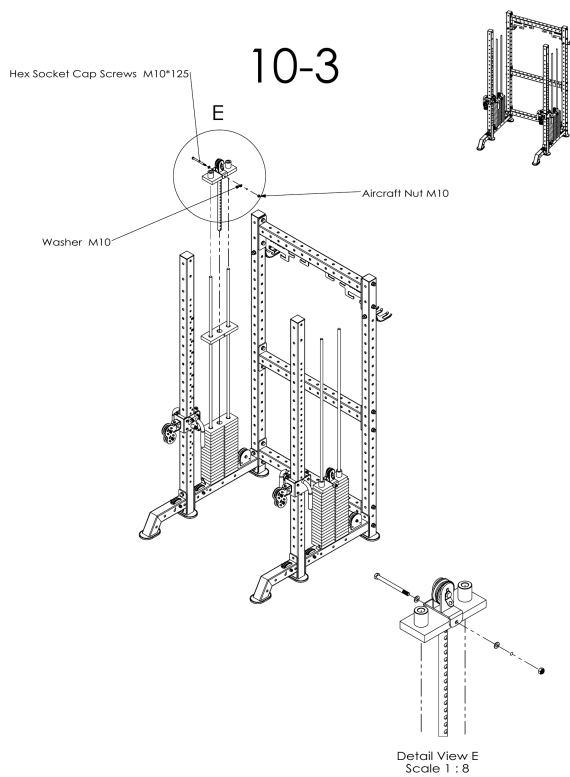


FACTORY DRAWING 10-2

3

WEIGHT STACKS & TOP MOUNTS

Slide the stack plates over the guide rods, then fit each stack top mount and pulley with the M10×125 hex socket cap screws, Ø10 washers and M10 aircraft nuts (detail view E).

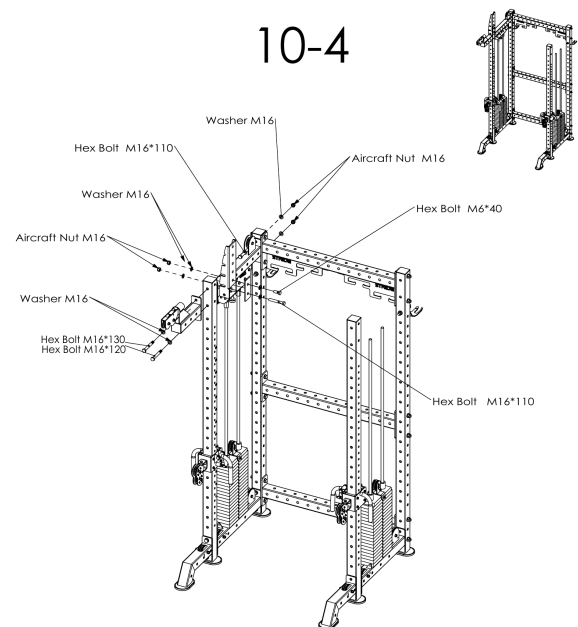


FACTORY DRAWING 10-3

4

FRONT UPRIGHTS

Raise the front uprights and connect them to the rear frame with the crossmembers — M16×110 / ×120 / ×130 hex bolts, M6×40 bolts and aircraft nuts exactly as labelled. Support each upright until bolted on both sides.

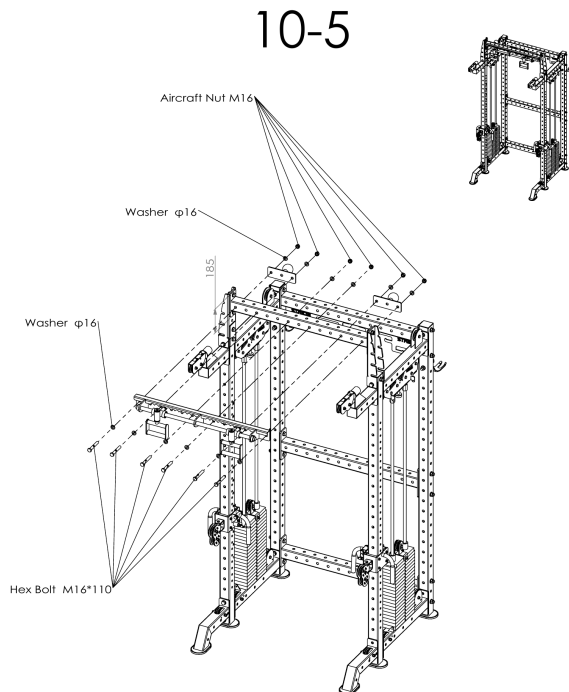


FACTORY DRAWING 10-4

5

TOP FRAME & PULLEY CARRIERS

Mount the top crossmembers and pulley carriers onto both frames — M16×110 hex bolts with ø16 washers and M16 aircraft nuts throughout. Square the rack, then torque the full frame.

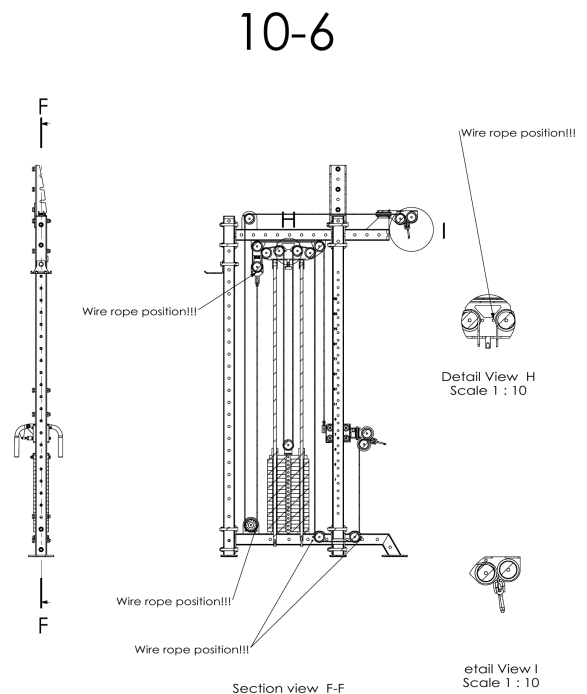


FACTORY DRAWING 10-5

6

WIRE ROPES — CRITICAL

Route both cables exactly as shown in section F-F and detail views H & I. Every **“wire rope position”** callout is mandatory: a wrongly routed cable will derail or fray under load. Verify the routing against the drawing before tensioning.



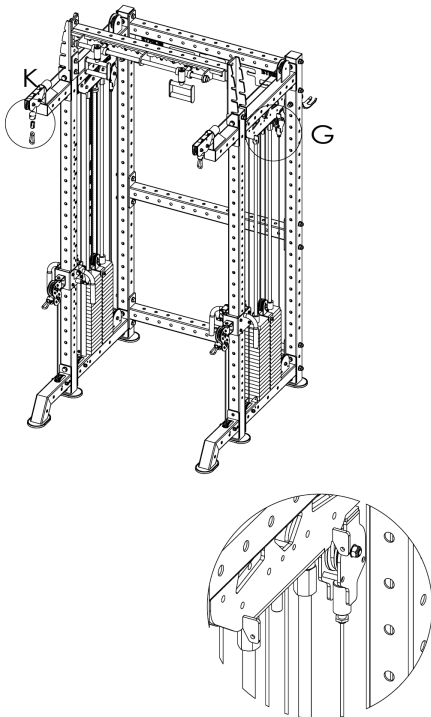
FACTORY DRAWING 10-6

7

CABLE TROLLEYS & GUIDE PULLEYS

Fit the adjustable cable trolleys and guide pulleys (detail views G & K). Run each cable through its full travel by hand and verify it stays seated in every pulley groove.

10-7



Detail View K
Scale 1 : 10

Detail View G
Scale 1 : 5

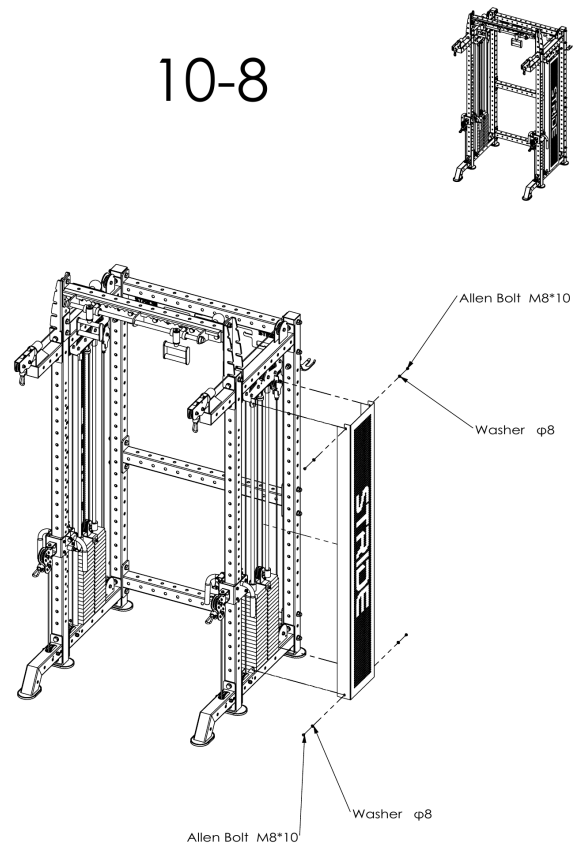
FACTORY DRAWING 10-7

8

STRIDE SIDE PANELS

Mount the perforated STRIDE branding panels to the side of the frame with the M8×10 Allen bolts and ø8 washers, logo facing out.

10-8



Allen Bolt M8*10

Washer ø8

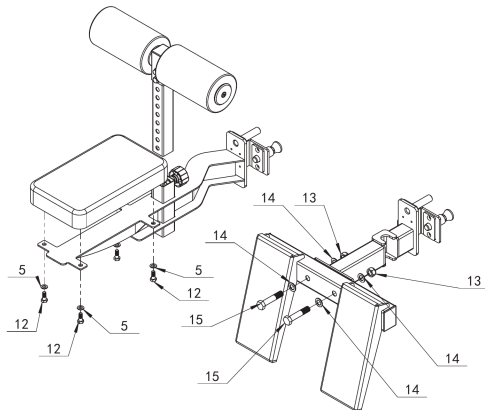
FACTORY DRAWING 10-8

9

LAT-PULLDOWN SEAT & LEG ROLLER

Assemble the seat and leg-roller unit and mount it to the front frame — M10 washers, M10×25 bolts, M16 washers and M16×80 bolts (items 5, 12-15 in the drawing legend).

10-9



5. 12. 13. 14. 15.
M10 M10×25 M16 M16 M16×80

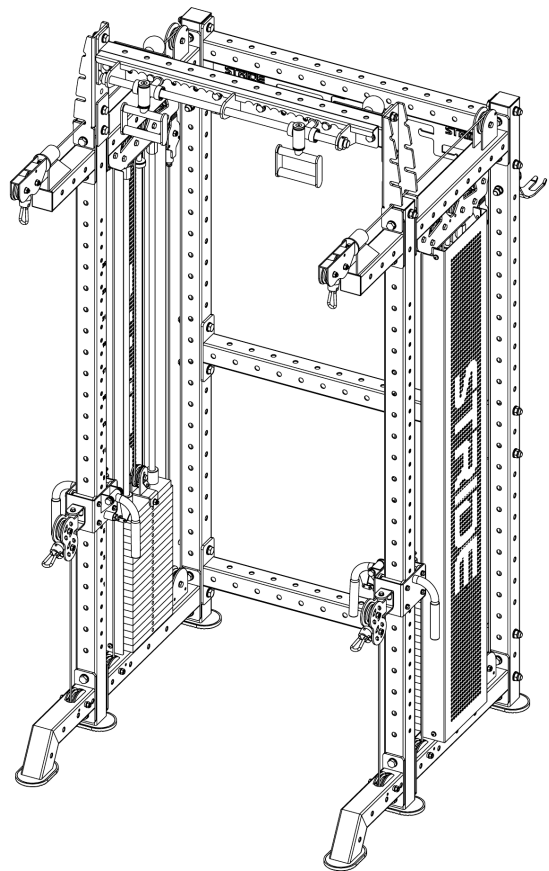
FACTORY DRAWING 10-9

10

FINAL ASSEMBLY CHECK

Compare the completed unit with the overview drawing, level and torque the entire frame, fit the magnetic selector pins, and pull both cables through their full stroke under light load before releasing the rack for use.

10-10



FACTORY DRAWING 10-10

10

FINAL INSPECTION & MAINTENANCE

FINAL INSPECTION CHECKLIST

- | | |
|---|--|
| ☐ All M16 / M10 / M8 / M6 fasteners torqued to specification | ☐ Cable trolleys lock securely at every position |
| ☐ Rack level and plumb in both directions | ☐ Magnetic selector pins present, on retention coils, seating fully |
| ☐ Weight-stack guide rods parallel and plumb; stacks travel freely | ☐ Seat and leg roller secure; J-cups and attachments seated |
| ☐ Wire ropes routed exactly per section F-F and detail views H / I | ☐ STRIDE panels fixed; no sharp edges or missing hardware |
| ☐ Cables seated in every pulley groove through full travel | ☐ 1 m clearance zone around the unit is free |

■ MAINTENANCE

- Re-check all fasteners one week after installation and monthly thereafter
- Inspect both wire ropes monthly for fraying, kinks or corrosion — replace immediately if damaged
- Check every pulley for free rotation and wear
- Keep the guide rods clean; lubricate lightly if stack travel becomes rough
- Wipe surfaces with a mild detergent — no aggressive solvents

■ IN SERVICE

- Selector pin fully seated before every set
- Never adjust trolleys or pins under load
- Report cable damage immediately and take the station out of use

Handover: leave this manual with the customer and point out the wire-rope inspection interval and the magnetic selector pin instructions to the facility manager.