FORGEX

STRENGTH REFINED

Lifting Safely And Lifting Well

The FORGEX handbook for warming up, bracing, loading safely and training alone with confidence.

START HERE

How to use this handbook

This guide covers the habits that keep lifters healthy: preparing properly, bracing under load, setting up equipment so a failed rep is a non event, progressing sensibly and knowing the difference between normal training soreness and a warning sign. Read it once from front to back, then keep it near your rack as a reference.

Nothing here replaces qualified coaching or medical advice. If you have an existing injury or a health condition, speak to a professional before starting a new programme.

Contents

Section	What it covers
1. Before you lift	Kit checks, clothing, space and the session plan
2. The warm up	A ten minute sequence that prepares you properly
3. Bracing and breathing	Creating trunk pressure that protects your spine
4. Setting up your equipment	Rack pins, collars, benches and flooring
5. Training alone safely	How to bail from every major lift
6. Loading and progression	Adding weight without adding risk
7. Technique faults	Ten common faults and the cue that fixes each
8. Warning signs	When to stop, when to rest, when to seek help
9. Starter programme	A printable twelve week plan

SECTION ONE

Before you lift

Two minutes of checks prevents most home gym accidents. Run through this list at the start of every session.

- **Space.** Clear the lifting area. Nothing on the floor within a full stride of the bar.
- **Equipment.** Check rack bolts are tight, pins are seated in both uprights and the bench is locked at the angle you want.
- **Bar and plates.** Sleeves spin freely, plates are loaded evenly and pushed fully onto the sleeve.
- **Footwear.** Flat, firm soles for squats and deadlifts. Never lift heavy in soft running shoes or socks on a hard floor.
- **Hydration and fuel.** Something to drink within reach, and food at least sixty minutes before heavy work.
- **The plan.** Know your lifts, sets, reps and loads before you start so you are never improvising under fatigue.

Clothing and accessories

A belt supports heavy sets above roughly eighty five percent of your best; it is not needed for warm ups or accessory work. Wrist wraps help on heavy pressing, knee sleeves keep the joint warm, and chalk improves grip on pulls. None of these replace technique, and all of them should be earned rather than assumed.

SECTION TWO

The ten minute warm up

A warm up raises temperature, opens the ranges you are about to load, and rehearses the pattern. Anything else is optional.

1. **Three minutes easy cardio.** Bike, row or skip. Warm, not tired.
2. **Two minutes joint prep.** Ankle rocks, hip openers and thoracic rotations before lower body work. Band pull aparts, shoulder circles and wrist circles before pressing.
3. **Five minutes ramp sets.** Build to your first working set in four steps rather than one jump.

Ramp set template

Set	Load	Reps	Purpose
1	Empty bar	10	Groove the pattern
2	40 percent	5	Raise temperature
3	60 percent	3	Rehearse the brace
4	80 percent	1	Prime the nervous system
5	Working weight	Prescribed	First real set

Leave static stretching until after the session. Held stretches before heavy work reduce force output for a short period and do nothing to reduce injury risk.

SECTION THREE

Bracing and breathing

Bracing creates pressure inside the abdomen so your trunk becomes a rigid column, transferring force between hips and shoulders instead of leaking it through a soft midsection. It is the most important skill in lifting.

1. Breathe into the belly, not the chest. Feel it expand at the front, the sides and the lower back.
2. Tighten the abdominal wall as though bracing for a prod in the stomach. Do not suck in.
3. Pull the ribs down so they stack over the hips rather than flaring upwards.
4. Hold that pressure for the whole repetition, and breathe at the lockout between reps.

Using a belt

A belt gives your abdominal wall something to push against, which increases the pressure you can create. Set it so you can slide a flat hand underneath, then brace outwards into it. Learn to brace without a belt first, then add one for your heaviest sets only.

Breathing on longer sets

On sets of eight or more, take a short top up breath at the easiest point of each repetition while keeping part of the brace. Never fully relax between reps under a heavy bar.

SECTION FOUR

Setting up your equipment

Correct setup turns a failed repetition into a minor inconvenience. Get these heights right before you load the bar.

Lift	Rack height	Safety pins or straps
Back squat	Bar at mid chest, so you press up slightly to unrack	Two centimetres below your deepest bar position
Front squat	Bar at collarbone height	Just below your bottom position
Bench press	Bar hooks so the elbows stay slightly bent at the start	Chest height with a fist of clearance
Overhead press	Bar at shoulder height	Level with the top of the shoulders
Rack pull	Bar just below or above the knee	Set both pins level and check with a tape

Collars, benches and flooring

- Use collars for squats, pulls and overhead work so plates cannot shift mid rep.
- Leave collars off when you bench alone, so you can tip the bar and let the plates slide if you fail.
- Check the bench is locked before every set and that the feet sit flat on the floor, not part on a mat.
- Deadlift and drop on rubber over a solid base. Never drop bumper plates onto tile, laminate or bare concrete.
- Keep the lifting lane clear for at least two and a half metres for pulls and carries.

SECTION FIVE

Training alone safely

Most home gym owners train alone, and that is perfectly safe when you can bail from every lift you attempt. Practise each of these with an empty bar until it is automatic.

How to bail

Lift	If the rep fails
Bench press	Lower the bar to the safety pins, slide out from underneath, then reset. Without pins, tip the uncollared bar and let the plates slide off one side.
Back squat	Keep the brace, sit down slowly onto the pins, then step forwards out from under the bar.
Overhead press	Bend the knees and lower the bar to the front shoulders, then to the pins. Never throw it forwards.
Deadlift	Do not fight a rep past the knee. Lower it under control and reset; there is no shame in a missed pull.

Session rules for solo lifters

- Keep a phone within reach of the rack, not across the room.
- Tell someone when you are attempting a heavy single.
- Leave one or two repetitions in reserve on most working sets.
- Attempt true maximum lifts only when the setup is right and you feel sharp.
- Stop the session if your technique breaks down rather than pushing one more set.

SECTION SIX

Loading and progression

Progress means doing more work over time. Adding weight is only one of the ways to do that, and for most lifters it stops working within a few months of starting.

Method	How it works	Best for
Add reps	Same load, one more rep per set	Everyone, most of the time
Add sets	Same load and reps, one more set	Building work capacity
Add load	Two and a half kilos upper, five lower	When all sets feel easy
Slow the tempo	Three second lowering phase	Technique and control
Add a pause	One second at the hardest position	Breaking through a sticking point

Reps in reserve

Judge every set by how many clean repetitions you had left. Two in reserve builds strength almost as fast as training to failure, with a fraction of the fatigue and risk. Log it next to the weight so you can see the trend across weeks.

Deloading

Every sixth week, halve your number of working sets and keep the loads the same. If two sessions in a row feel unusually heavy, take that lighter week early. Fatigue hides strength; rest reveals it.

SECTION SEVEN

Ten technique faults

Each of these appears constantly in home gyms. Reduce the load ten percent, apply the cue and film a set from the side.

Fault	Fix
Knees caving in the squat	Spread the floor apart with your feet
Heels lifting in the squat	Widen the stance slightly and work on ankle range
Hips shooting up on the deadlift	Push the floor away and pause below the knee on lighter sets
Back rounding on the hinge	Shorten the range until the back stays flat
Bar drifting forwards overhead	Push the head through the window as the bar clears the face
Elbows flaring on the bench	Tuck to around sixty degrees and keep forearms vertical
Wrists collapsing on presses	Grip harder and stack the wrist over the elbow
Shrugging during rows	Set the shoulder blades down before you pull
Bouncing out of the bottom	Pause for one second at the lowest position
Holding your breath for whole sets	Breathe at the lockout while holding part of the brace

SECTION EIGHT

Warning signs

Learn the difference between the discomfort of hard training and the signals that something is wrong.

Normal

- General muscle soreness that appears a day later and eases with movement.
- Fatigue that resolves after a night of good sleep.
- A hard set that feels heavy but moves smoothly.

Stop the set

- Sharp, localised pain in a joint or at a muscle attachment.
- Pain that changes how you move the weight.
- Pins and needles, numbness or a limb that feels weak.
- Dizziness, chest tightness or unusual shortness of breath.

Seek medical advice

- Pain that persists at rest or wakes you at night.
- Swelling, visible bruising or loss of range in a joint.
- Any injury that has not clearly improved within two weeks.

Returning after a niggle: drop to fifty percent of your usual load, keep the range pain free and add ten percent per session while it stays comfortable.

SECTION NINE

Twelve week starter programme

Three full body sessions a week. Rest two to three minutes between heavy sets and ninety seconds on accessories.

Day one

Exercise	Sets	Reps
Back squat or goblet squat	3	5
Bench press	3	6
Single arm dumbbell row	3	10 each side
Romanian deadlift	3	8
Plank	3	40 seconds

Day two

Exercise	Sets	Reps
Trap bar or conventional deadlift	3	5
Overhead press	3	6
Lat pulldown or chin up	3	8
Bulgarian split squat	3	8 each side
Dead bug	3	8 each side

Day three

Exercise	Sets	Reps
Front squat or leg press	3	8
Incline dumbbell press	3	10
Chest supported row	3	10
Hip thrust	3	10
Farmer carry	3	40 metres

Add weight when every set finishes with two clean repetitions left. Take a lighter week in week six and week twelve. Log every session.

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