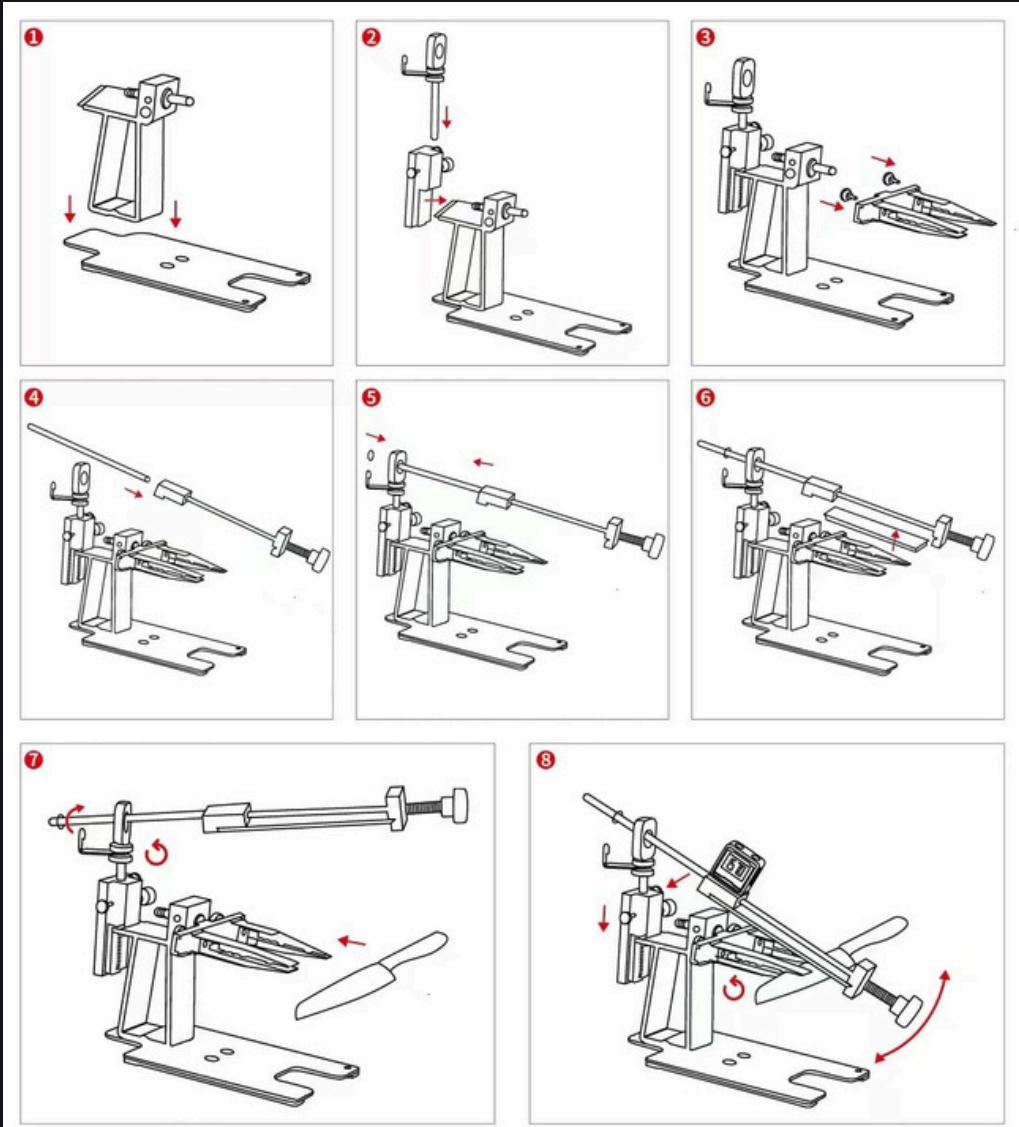


# ASSEMBLY & OPERATION MANUAL

## Quick Assembly Guide

Place the steel base on a stable, level surface.

- 1 Fasten the trapezoid bracket to the base using two screws from underneath.
- 2 Bolt the angle-adjust module from below to the bracket (2 screws); insert the guide arm from above and secure it with the screw.
- 3 Mount the knife jaws onto the width-adjust rail; fix the rail with the center screw to the brass block.
- 4 Insert the guide rod into the silver SHARPI stone holder and tighten the joint.
- 5 Check the arm travel – it should move smoothly without play.
- 6 Select and mount a diamond or ceramic plate in the stone holder.
- 7 Adjust jaw width, clamp the knife and tighten both screws.
- 8 Zero the inclinometer ( $0.00^\circ$ ); place it on the SHARPI part, set the angle and lock the position.



## Recommended angles

Tool type	Angle	Notes
Razors, scalpels	7-10°	Very thin, ultra-keen edge for delicate cuts.
Japanese kitchen knives	~15°	High precision, extremely sharp, delicate.
European kitchen knives	15-19°	Daily kitchen balance of sharpness vs durability.
Outdoor / survival knives	19-22°	Work-use edges, tougher, less bite.
Hunting / tactical knives	22-30°	Highly durable, less razor-like.
Cleavers, axes, machetes	30°+	Impact, chopping, hard targets.

• Smaller angle = keener but more delicate; larger angle = tougher but less aggressive.

## SHARPI stones overview

- Diamond 200-1000 – fast stock removal and re-profiling; very durable; typically used dry.
- Ceramic ~1500 – refinement after diamonds; use light pressure.
- Leather strop – final polish; edge-trailing only: move from spine toward edge (with the nap), never edge-leading.

# Tips, Maintenance & Troubleshooting

## Sharpening tips

- 1 Start with a lower grit; make full, even passes along the entire edge.
- 2 After 8-10 strokes, switch sides; progress to finer grits gradually.
- 3 Finish on the leather strop – edge-trailing, from spine toward edge (with the nap).
- 4 Maintain a constant angle throughout the process.

## Maintenance & care

- 1 Clean stones after each use with a soft brush and water; dry metal parts.
- 2 Avoid aggressive chemicals and lubricants; store the set in its case.
- 3 Regularly check screws, guides and jaws – play affects angle precision.
- 4 Protect metal parts occasionally with a light anti-corrosion oil.

## Troubleshooting

Edge sharpens unevenly — Knife is off-center in jaws → re-align.

Different angles side-to-side — Arm geometry mismatch → re-calibrate joint height.

Deep scratches from stone — Too coarse / contamination → clean or use a finer grit.

Sharpening takes too long — Stone is clogged / worn → clean or replace.

Edge won't take an apex — Angle too large / missing grit progression → adjust settings.

# Steel, Common Errors & Finish

## Steel properties vs. angle

- Hard steel (60-64 HRC) → very sharp but brittle — use a smaller angle, gentle strokes.
- Medium steel (57-59 HRC) → balance of sharpness and durability.
- Soft steel (54-56 HRC) → tough, less keen — use a larger angle and slightly higher pressure.

## Most common user errors

- Excessive pressure on the stone — accelerates wear and reduces edge quality.
- Skipping grit steps — leaves a rough, toothy edge.
- Not cleaning stones — reduces efficiency and accuracy.
- Incorrect column/bracket assembly — stability issues.
- No angle control — asymmetric edge.

## After use

- Clean and dry stones; remove swarf from the base and arm.
- Loosen screws and fold the system or place it in the case.
- Store in a dry place, away from moisture and dust.