

Wick Rejection Reversal

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Price-Action Reversal (Mean Reversion)	H1	www.algotbot.live

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Overview

Wick Rejection Reversal is a pure price-action Expert Advisor that trades pin-bar (rejection-candle) reversals at the extremes of a recent swing window. It uses **no indicators whatsoever** — every decision is derived from the raw geometry of a single candle and where that candle sits inside the lookback range.

The core idea is simple. A candle with a dominant wick and a small body is the market's clearest fingerprint of a failed push: price probes a level, gets violently rejected, and snaps back before the close. The EA only acts when that rejection happens at a meaningful extreme — a **hammer** that tags the lookback window's low (sellers rejected → **LONG**) or a **shooting star** that tags the window's high (buyers rejected → **SHORT**).

Stops are placed just past the rejection wick — the exact price at which the reversal idea is invalidated — and targets are a fixed risk/reward multiple of that structural stop. The strategy is counter-trend by nature (a mean-reversion flavour) and is designed for liquid instruments such as **GBP/USD** or **XAU/USD** on the **H1** timeframe, though it works on any liquid symbol or timeframe.

Note: Because the strategy reads only raw candle geometry, it has no warm-up period for indicators and no lagging smoothing. It simply needs enough closed bars to measure the lookback window before it can evaluate a setup.

How It Works

The EA evaluates one freshly-closed candle per bar. On each new bar it inspects the **most-recently-closed candle** (the "pin candidate") and compares it against the structure of the bars that preceded it. Only one position is held at a time per the strategy's magic number.

The Pin Candidate

For the closed candle, the EA measures pure geometry from its open, high, low and close:

- **Range** = High – Low (the full candle span)
- **Body** = |Close – Open| (the open-to-close distance)
- **Upper wick** = High – max(Open, Close)
- **Lower wick** = min(Open, Close) – Low

A candle qualifies as a *small-body* candidate when $\text{body} \leq \text{BodyRatio} \times \text{range}$ — an indecisive body relative to the candle's full span.

The Lookback Window

The window's **highest high** and **lowest low** are measured purely from raw price over the `Lookback` bars that *precede* the pin (shifts 2 ... Lookback+1). This means the pin is judged against prior structure, and its own wick is then folded in by the "tag" test below.

Entry Logic

LONG — BULLISH PIN (HAMMER) REJECTING THE WINDOW LOW

A LONG is taken when *all* of the following hold:

- Small body: $\text{body} \leq \text{BodyRatio} \times \text{range}$
- Dominant lower wick: $\text{lowerWick} \geq \text{WickRatio} \times \text{range}$ (deep rejection of lower prices)
- Negligible overhead supply: $\text{upperWick} \leq \text{body}$
- Closed strong, in the upper third: $(\text{Close} - \text{Low}) \geq 0.66 \times \text{range}$
- The candle's **Low tags or undercuts the window's lowest low** (rejection at support)

SHORT — BEARISH PIN (SHOOTING STAR) REJECTING THE WINDOW HIGH

A SHORT is the exact mirror — all of the following hold:

- Small body: $\text{body} \leq \text{BodyRatio} \times \text{range}$
- Dominant upper wick: $\text{upperWick} \geq \text{WickRatio} \times \text{range}$
- Negligible lower rejection: $\text{lowerWick} \leq \text{body}$
- Closed weak, in the lower third: $(\text{High} - \text{Close}) \geq 0.66 \times \text{range}$

- The candle's **High tags or exceeds the window's highest high** (rejection at resistance)

Exit Logic — Stop Loss & Take Profit

Exits are fully structural and set at order time; there is no trailing stop or indicator-based exit.

- **Buffer** = $\text{BufferFrac} \times \text{range}$ — a small cushion placed beyond the rejection wick.
- **Long:** entry at the Ask; $\text{SL} = \text{pinLow} - \text{buffer}$; $\text{risk} = \text{entry} - \text{SL}$; $\text{TP} = \text{entry} + \text{RiskReward} \times \text{risk}$.
- **Short:** entry at the Bid; $\text{SL} = \text{pinHigh} + \text{buffer}$; $\text{risk} = \text{SL} - \text{entry}$; $\text{TP} = \text{entry} - \text{RiskReward} \times \text{risk}$.

If the computed risk is zero or negative the trade is skipped. The stop sits just past the wick because that is where the rejection thesis is proven wrong; the target is simply that structural distance multiplied by the **RiskReward** factor.

Worked example — Long (Hammer)

Suppose a hammer closes with $\text{Low} = 1.27000$ and the EA fills the buy at $\text{Ask} = 1.27250$, with $\text{range} = 0.00400$ and $\text{BufferFrac} = 0.15$. $\text{Buffer} = 0.15 \times 0.00400 = 0.00060$, so $\text{SL} = 1.27000 - 0.00060 = 1.26940$. $\text{Risk} = 1.27250 - 1.26940 = 0.00310$. With $\text{RiskReward} = 2.0$, $\text{TP} = 1.27250 + 2.0 \times 0.00310 = 1.27870$.

One trade at a time: while a position with this magic number is open, no new signals are taken. Each setup is evaluated once per freshly-closed bar, so signals never re-fire intrabar.

Strategy in Action

The illustration below shows an example of how the strategy identifies a setup and triggers its entry and exit. This is a simplified, illustrative example for educational purposes — not real market data.



Illustrative example only. Actual market behaviour varies.

Parameters

Parameter	Default	Description
Lots	0.10	Fixed trade volume in lots. Range 0.01–1.00, step 0.01.
Lookback	20	Number of bars preceding the pin used to define the swing window's high and low. Range 5–60, step 1.
WickRatio	0.60	Minimum dominant-wick size as a fraction of the candle range ($wick \geq WickRatio \times range$). Higher = stricter rejection. Range 0.40–0.85, step 0.05.
BodyRatio	0.30	Maximum body size as a fraction of the candle range ($body \leq BodyRatio \times range$). Lower = smaller, more indecisive body required. Range 0.10–0.50, step 0.05.
RiskReward	2.0	Take-profit distance as a multiple of the structural stop distance. Range 1.0–5.0, step 0.5.
BufferFrac	0.15	Stop-loss cushion placed beyond the rejection wick, as a fraction of the candle range. Range 0.00–1.00, step 0.05.
Magic	9207	Magic number identifying this EA's positions, so it manages only its own trades.

Recommended Settings

The defaults are tuned for liquid majors and metals on H1. Use the following as a sensible starting point and adjust per instrument volatility and your risk tolerance.

- **Symbols:** GBP/USD or XAU/USD (works on any liquid symbol).
- **Timeframe:** H1 (the geometry generalises to other timeframes).
- **Lookback:** 20 bars — long enough to define a meaningful swing extreme without becoming stale.
- **WickRatio / BodyRatio:** 0.60 / 0.30 for clean, well-formed pins. Raise `WickRatio` (e.g. 0.70) for fewer but higher-conviction signals.
- **RiskReward:** 2.0 — a balanced asymmetric target. Lower it on choppier instruments where 2R is rarely reached.
- **BufferFrac:** 0.15 — keeps the stop just clear of the wick to avoid being clipped by noise.

Tip: Because this is a counter-trend reversal strategy, it performs best when used selectively at strong, well-defined range extremes. On strongly trending instruments, consider tightening `WickRatio` and reducing position size, since reversals against a powerful trend fail more often.

How to Install on MetaTrader 5

- 1 Copy `WickRejectionReversal.ex5` to your MT5 `MQL5\Experts\` folder
- 2 Restart MetaTrader 5 and refresh the Navigator panel
- 3 Drag the EA onto a chart matching the recommended symbol and timeframe
- 4 Configure the input parameters and click **OK**
- 5 Enable **Algo Trading** in the MT5 toolbar

Risk Warning

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