

# Swing Shelf Rejection Reversal

Expert Advisor Documentation

## PLATFORM

MetaTrader 5 (MT5)

## TYPE

Price-Action Reversal

## TIMEFRAME

Any (H1+ Recommended)

## WEBSITE

[www.algotbot.live](http://www.algotbot.live)

**⚠ Important Disclaimer** This document is for educational and informational purposes only. It does not constitute financial or investment advice. Trading forex, CFDs, and other leveraged instruments involves substantial risk of loss and is not suitable for all investors. Past backtest performance does not guarantee future results. Never trade with capital you cannot afford to lose.

## Overview

**Swing Shelf Rejection Reversal** is a pure price-action reversal system. It uses no indicators anywhere — every decision is derived from raw bar geometry, which makes the strategy timeframe-agnostic and able to run on whatever timeframe you attach it to.

The core idea is that recent fractal swing highs and swing lows are the only "real" support and resistance levels — shelves drawn by price itself. Price routinely pokes just beyond such a shelf to grab resting stop orders, then snaps back inside it (a spring below support or an upthrust above resistance). Swing Shelf Rejection Reversal trades that *false break*, but only when the closing candle is a clean rejection pin that confirms the move was rejected.

- **Long setup** — price dips to or below the latest swing-low shelf but *closes back above it* on a bullish candle with a dominant lower wick (sellers were rejected).
- **Short setup** — price pokes to or above the latest swing-high shelf but *closes back below it* on a bearish candle with a dominant upper wick (buyers were rejected).

Stops sit just beyond the rejection wick, and targets are a fixed reward-to-risk multiple of that wick-defined risk. The result is a self-contained reversal engine with no external dependencies.

# How It Works

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## 1. Building the Shelves (Fractal Pivots)

On each newly closed bar the EA scans for a confirmed fractal pivot. A candidate bar sitting `SwingLookback` bars back is tested against the `SwingLookback` neighbours on each side:

- If the candidate's high is strictly greater than every neighbour's high, it is a **swing high** and becomes the active *resistance shelf*.
- If the candidate's low is strictly lower than every neighbour's low, it is a **swing low** and becomes the active *support shelf*.

Because the pivot must have equal neighbours on both sides, the EA only confirms a shelf after it has fully formed — there is no repainting. Each shelf persists until it is either replaced by a newer pivot or consumed by a trade.

## 2. The Rejection Signal Candle

The freshly closed bar (shift 1) is the signal candle. Its geometry is measured directly:

```
range      = High - Low
lowerWick  = min(Open, Close) - Low
upperWick  = High - max(Open, Close)
buffer     = range * StopBufferFraction
```

A candle qualifies as a rejection pin only when the relevant wick dominates the candle's range, measured by `WickRatio`. A bullish signal needs a long lower wick; a bearish signal needs a long upper wick.

## 3. Entry Logic

### LONG ENTRY — SPRING BELOW SUPPORT

A buy is sent when **all** of the following are true:

- An active support shelf exists.
- The signal candle is bullish ( `Close > Open` ).
- The candle's low pierced the shelf ( `Low ≤ Support` ).
- The candle closed back above the shelf ( `Close > Support` ).
- The lower wick is at least `WickRatio` of the candle range.

### SHORT ENTRY — UPTHRUST ABOVE RESISTANCE

A sell is sent when **all** of the following are true:

- An active resistance shelf exists.

- The signal candle is bearish (  $\text{Close} < \text{Open}$  ).
- The candle's high pierced the shelf (  $\text{High} \geq \text{Resistance}$  ).
- The candle closed back below the shelf (  $\text{Close} < \text{Resistance}$  ).
- The upper wick is at least  $\text{WickRatio}$  of the candle range.

#### 4. Stop Loss & Take Profit

Risk is defined entirely by the rejection wick plus a small buffer:

- **Long** — Stop Loss is placed at  $\text{signalLow} - \text{buffer}$ . Take Profit is  $\text{entry} + \text{RewardRisk} \times \text{risk}$ , where  $\text{risk} = \text{entry} - \text{stop}$ .
- **Short** — Stop Loss is placed at  $\text{signalHigh} + \text{buffer}$ . Take Profit is  $\text{entry} - \text{RewardRisk} \times \text{risk}$ , where  $\text{risk} = \text{stop} - \text{entry}$ .

**Note:** The buffer is a fraction of the signal candle's own range (  $\text{StopBufferFraction}$  ), so the stop adapts automatically to volatility — wider candles get wider stops, tighter candles get tighter stops.

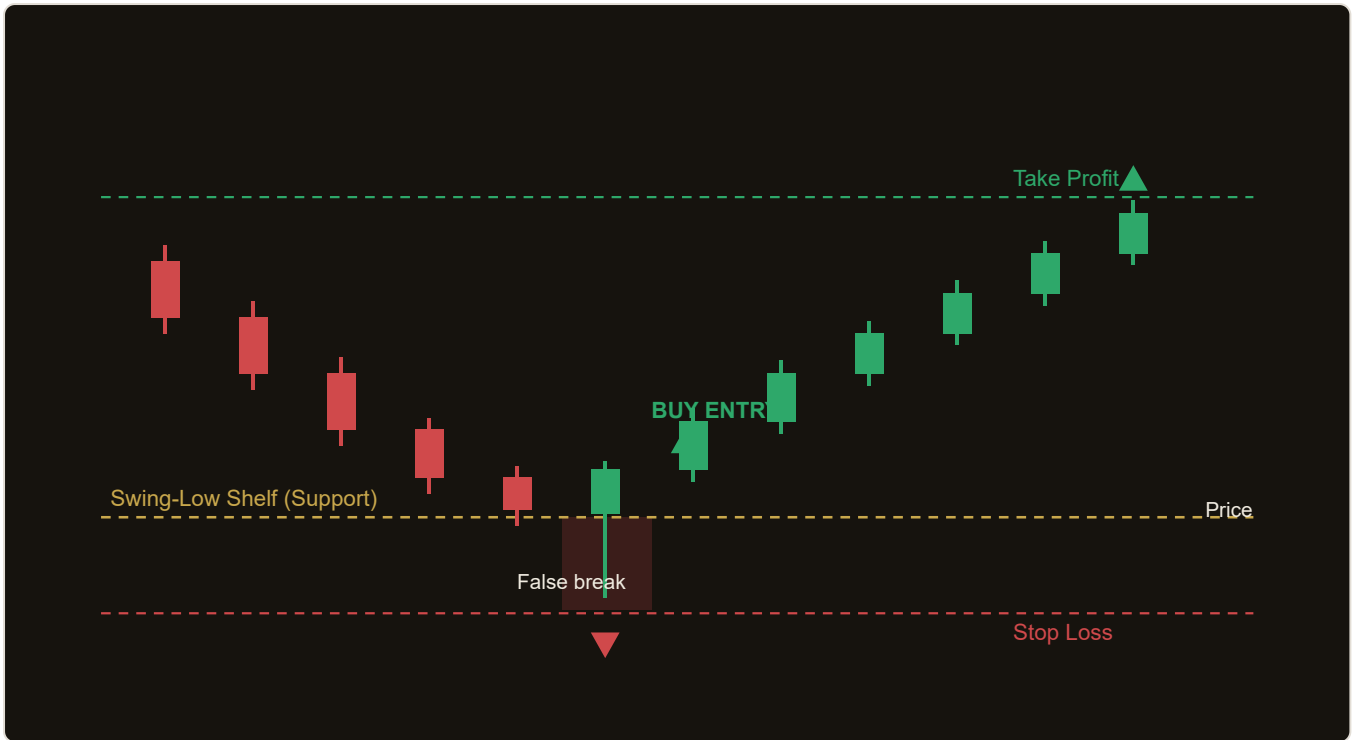
#### 5. Trade Management Rules

- **One position at a time** — the EA holds at most a single open position per magic number. No new signal is acted on while a trade is live.
- **One action per bar** — logic runs once per closed bar, never intrabar.
- **Shelf consumption** — once a shelf produces a trade it is cleared, preventing repeated entries against the same exhausted level.
- **No trailing** — each position rides to either its fixed Stop Loss or Take Profit; there is no intermediate adjustment.

## Strategy in Action

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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. It depicts a **long** setup: price springs below the swing-low support shelf, prints a bullish rejection pin with a dominant lower wick, and reverses up to target.



*Illustrative example only. Actual market behaviour varies.*

## Parameters

Parameter	Default	Description
SwingLookback	3	Number of bars required on each side of a candidate bar for a confirmed fractal pivot. Higher values demand more significant swings. Range 2–6, step 1.
RewardRisk	2.0	Take-Profit distance as a multiple of the wick-defined risk. A value of 2.0 targets twice the distance from entry to stop. Range 1.0–4.0, step 0.5.
WickRatio	0.5	Minimum rejection-wick size as a fraction of the signal candle's total range. Higher values require a more pronounced pin. Range 0.3–0.7, step 0.1.
StopBufferFraction	0.15	Extra Stop-Loss buffer beyond the wick, expressed as a fraction of the signal candle range. Adapts the stop to volatility. Range 0.0–0.5, step 0.05.
Lots	0.10	Fixed trade volume in lots. Range 0.01–1.0, step 0.05.
Magic	7340	Magic number identifying this EA's positions, allowing it to coexist with other strategies on the same account.

## Recommended Settings

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Because the strategy is timeframe-agnostic, it works on any chart period — but it behaves best where swing structure is meaningful and noise is reduced. As a starting point:

- **Timeframe:** H1 or higher. Lower timeframes generate more (and noisier) shelves; higher timeframes produce fewer but cleaner reversal setups.
- **Symbols:** Liquid instruments that respect support/resistance — major FX pairs, gold, or index CFDs.
- **SwingLookback = 3:** A balanced pivot definition. Increase toward 5–6 to trade only the most prominent swings.
- **WickRatio = 0.5:** Demands a genuine rejection. Raise toward 0.6–0.7 for stricter, higher-quality pins at the cost of fewer trades.
- **RewardRisk = 2.0:** A conservative 1:2 target. Lower for a higher hit rate, raise for larger winners.

### Example configuration (EUR/USD, H1)

SwingLookback = 4, WickRatio = 0.55, RewardRisk = 2.0, StopBufferFraction = 0.15, Lots = 0.10. This favours well-formed swing shelves and clean rejection pins while keeping risk defined by each candle's own volatility.

**Tip:** Always validate any parameter set in the MT5 Strategy Tester across several years and market regimes before considering live deployment. Size **Lots** to your account so that a single stop-out risks only a small, controlled percentage of equity.

## How to Install on MetaTrader 5

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- 1 Copy `SwingShelfRejectionReversal.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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