

# Tail Pivot Reversal

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Price-Action Reversal	H1 – H4	<a href="http://www.algotbot.live">www.algotbot.live</a>

**⚠ 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

**Tail Pivot Reversal** is a pure price-action Expert Advisor that trades reversals off rejection candles — with *no indicators of any kind*. No moving averages, no oscillators, no ATR. Every decision is derived straight from raw candle geometry: highs, lows, opens, closes, and the wicks between them.

The core idea is simple. When price thrusts to a **fresh local extreme** and is immediately rejected, it prints a candle with a long “tail” (the rejection wick) on the extreme side and a small body that closes back *away* from the extreme — a classic pin / rejection bar. That tail is the footprint of an auction that ran out of buyers at a high, or sellers at a low.

Rather than fading the tail blindly on its close, Tail Pivot Reversal demands **confirmation**. It arms a pending stop order through the opposite (body) end of the rejection bar and is only filled if the very next bar trades back through that level — proving the reversal has genuine follow-through. The pending order lives for exactly one bar; if it does not trigger, it is cancelled so a stale signal never lingers.

**Why a pending stop order?** Fading a pin bar at its close means guessing. By placing a stop order beyond the bar and waiting for price to reclaim it, the EA only enters when the market *itself* confirms the turn. Trades that never get confirmation simply expire — unclaimed risk costs nothing.

## How It Works

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### Bar-by-bar processing

The EA acts only on the open of a brand-new bar (the forming bar at shift 0). On each new bar it performs the following sequence:

1. Cancel any pending order from the previous bar that did not trigger — an arm is valid for exactly one bar.
2. If a position is already open on this symbol/magic, do nothing further — the stop-loss and take-profit manage it and the EA never stacks a second trade.
3. Require at least `Lookback + 2` bars of history before evaluating a signal.
4. Examine the just-closed bar (shift 1) as the candidate rejection candle.

### Reading the rejection candle

From the just-closed bar the EA computes its raw geometry:

- **Range** = High – Low (must be positive, else skip).
- **Body** = |Close – Open|.
- **Upper wick** = High – max(Open, Close).
- **Lower wick** = min(Open, Close) – Low.
- **Mid** = (High + Low) / 2 — the bar's midpoint.

The candle is rejected outright unless its body is small: `body ≤ (MaxBodyPct / 100) × range`. A dominant tail, not a strong directional candle, is what the strategy is after.

### Bullish setup — tail at a fresh low

A reversal *up* is armed when all of the following hold for the rejection bar:

- **Fresh low** — its Low is strictly below the Low of every one of the prior `Lookback` bars.
- **Dominant lower wick** — `lowerWick ≥ TailRatio × range` (the rejection of the lows dominates the bar).
- **Close in the upper half** — `Close ≥ mid` (price snapped back up).

When confirmed, a **BUY STOP** is placed:

```
trigger = sigHigh + (TriggerBufferPct/100) * range // reclaim above the bar
sl      = sigLow - (StopBufferPct/100) * range // just beyond the tail
risk    = trigger - sl
tp      = trigger + RewardRisk * risk
```

## Bearish setup — tail at a fresh high

The mirror image arms a reversal *down*:

- **Fresh high** — its High is strictly above the High of every one of the prior `Lookback` bars.
- **Dominant upper wick** —  $\text{upperWick} \geq \text{TailRatio} \times \text{range}$ .
- **Close in the lower half** —  $\text{Close} \leq \text{mid}$ .

When confirmed, a **SELL STOP** is placed below the bar's low, with the stop-loss just above the rejected high and the take-profit a `RewardRisk` multiple of the risk distance below the trigger.

### Worked example (bullish)

Suppose the rejection bar has High = 1.10500, Low = 1.10000 (range = 0.00500) and closes at 1.10400 with a long lower wick. With the defaults (TriggerBuffer 5%, StopBuffer 10%, RewardRisk 2.0):

- trigger =  $1.10500 + 0.05 \times 0.00500 = 1.10525$
- sl =  $1.10000 - 0.10 \times 0.00500 = 1.09950$
- risk = 0.00575 → tp =  $1.10525 + 2.0 \times 0.00575 = 1.11675$

The BUY STOP fills only if the next bar trades up to 1.10525; otherwise it is cancelled on the following bar.

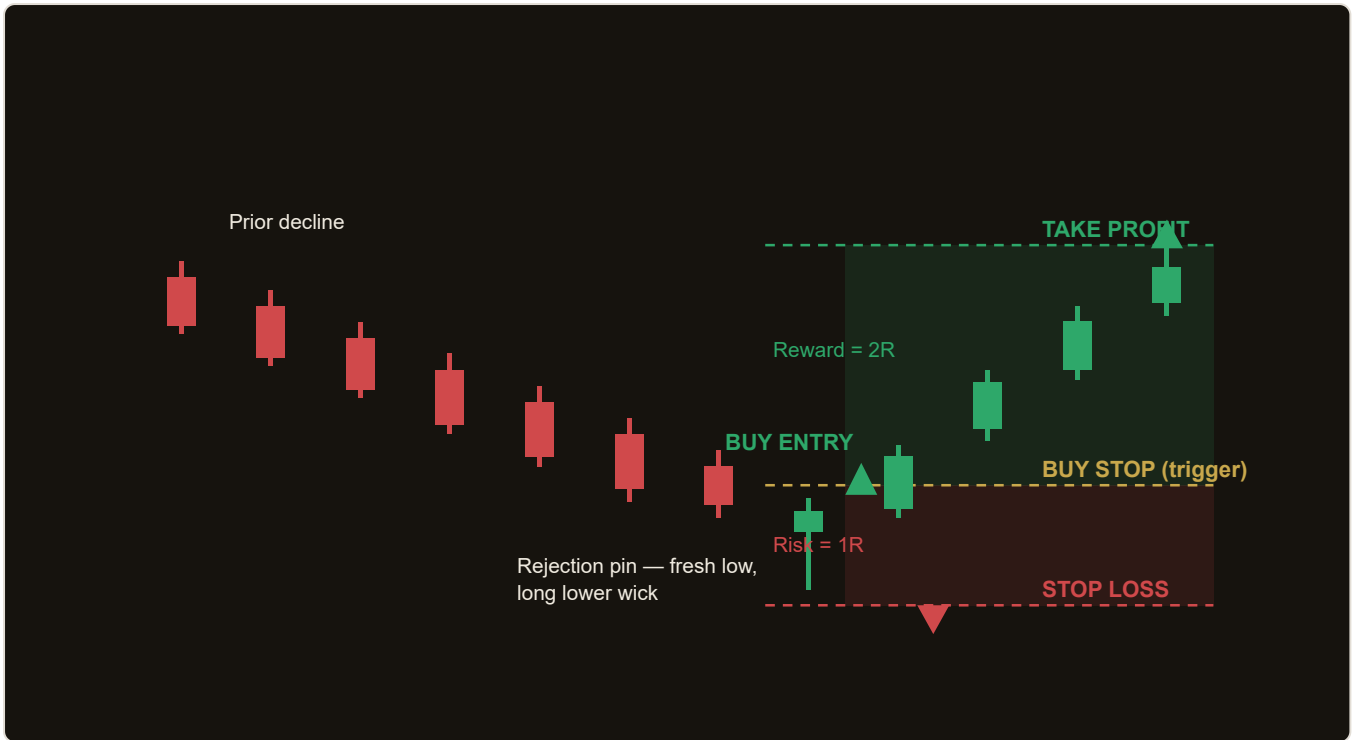
## Exits and position management

- **Stop-loss** sits structurally just beyond the rejected tail extreme — if the reversal idea is wrong, price simply runs back through the tail.
- **Take-profit** is a fixed `RewardRisk` multiple of the measured risk distance.
- **One trade at a time** — the EA never opens a second position on the same magic number while one is live.
- **One-bar validity** — an untriggered pending order is cancelled on the next bar, so the EA only ever trades the freshest confirmed signal.

## 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.



*Illustrative example only. Actual market behaviour varies.*

## Parameters

Parameter	Default	Description
Lookback	10	Number of bars behind the rejection bar that must be cleared for its extreme to count as "fresh." Range 4–40, step 1.
TailRatio	0.55	The rejection wick must be at least this fraction of the bar's total range. Higher = stricter, more dominant tail. Range 0.35–0.80, step 0.05.
MaxBodyPct	40.0	The candle body must be no larger than this percent of the bar range — keeps the EA on small-bodied pin bars. Range 10–70%, step 5.
RewardRisk	2.0	Take-profit distance as a multiple of the measured risk (trigger–to–stop). 2.0 = a 2:1 target. Range 0.5–5.0, step 0.5.
TriggerBufferPct	5.0	Entry-stop buffer placed beyond the rejection bar, as a percent of its range. Larger demands stronger confirmation. Range 0–30%, step 1.
StopBufferPct	10.0	Stop-loss buffer beyond the rejected tail extreme, as a percent of the bar range. Range 0–50%, step 5.
Lots	0.10	Fixed order volume in lots. Range 0.01–1.0, step 0.05.
Magic	5207	EA magic number used to identify and manage this strategy's own orders and positions.

## Recommended Settings

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Because the strategy is purely structural, it behaves consistently across instruments — but it benefits from timeframes where pin bars carry meaning and noise is filtered out.

- **Timeframe:** H1 to H4 are the sweet spot. Lower timeframes produce more, noisier tails; daily charts give fewer but cleaner signals.
- **Symbols:** liquid major FX pairs (EUR/USD, GBP/USD, USD/JPY) and major indices, where rejection wicks reflect real auction failures rather than thin-liquidity spikes.
- **Reward:Risk:** the default `2.0` suits trending markets; lower it toward `1.0–1.5` in choppy ranges to bank reversals faster.
- **Selectivity:** raise `TailRatio` toward 0.65–0.70 and lower `MaxBodyPct` for fewer, higher-quality pins.

**Tuning tip:** `Lookback` controls how “significant” the extreme must be. A small value (4–6) reacts to short-term pivots and trades more often; a large value (20–40) waits for major swing extremes and trades rarely but with more context. Always re-confirm any change with a backtest on your chosen symbol and timeframe.

## How to Install on MetaTrader 5

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- 1 Copy `TailPivotReversal.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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