

# Failed Auction Reversal

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Price-Action Reversal	M30	<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

**Failed Auction Reversal** is a pure price-action counter-trend Expert Advisor that fades failed breakouts at the edges of recent range. A "failed auction" is one of the cleanest signs that a directional move has run out of willing participants: price pushes to a *fresh* extreme — a new high or low beyond the recent swing window — but instead of accepting those prices it is rejected, and the *same* bar closes back through the level it just broke, finishing on the wrong side and in the wrong end of its own range.

The breakout printed liquidity above the old high (or below the old low) and then failed; the path of least resistance flips, and the EA takes a trade in the opposite direction of the failed probe. **No indicators are used at all.** Every condition is raw candle geometry measured against a raw swing window — making the logic fully transparent, deterministic, and easy to reason about. The strategy was designed for EUR/USD or XAU/USD on the M30 timeframe but works on any liquid symbol or timeframe.

**Core idea:** A genuine probe beyond the range that *snaps back inside* on the same candle is a rejection, not a breakout. Failed Auction Reversal fades that rejection, placing the stop just beyond the rejected wick — exactly where the idea would be proven wrong.

## How It Works

---

On every new bar the EA inspects the most-recently-closed candle (the "signal bar", shift 1) and measures it against the swing window formed by the `Lookback` bars that came *before* it (shifts 2 through `Lookback + 1`). The window's highest high and lowest low define prior resistance and support; their difference is the window height used to size a meaningful probe.

### Entry Logic

A trade requires four geometric conditions to align on the single signal bar. The EA evaluates two mirror-image setups:

#### FAILED UPSIDE AUCTION → SELL

- **Genuine probe:** the signal bar's high exceeds the prior window's highest high by at least `PenetrationFrac × windowHeight` (not a trivial one-tick poke).
- **Breakout rejected:** the signal bar's close falls back *below* that prior highest high — the new high was not accepted.
- **Bearish body:** the close is below the open, confirming the snap-back.
- **Decisive location:** the close is parked in the lower third of the bar's own range ( `(Close - Low) ≤ CloseLocation × Range` ).

#### FAILED DOWNSIDE AUCTION → BUY (MIRROR)

- **Genuine probe:** the signal bar's low pierces the prior window's lowest low by at least `PenetrationFrac × windowHeight`.
- **Breakout rejected:** the close climbs back *above* that prior lowest low.
- **Bullish body:** the close is above the open.
- **Decisive location:** the close is parked in the upper third of the bar's range ( `(High - Close) ≤ CloseLocation × Range` ).

**One position at a time.** The EA acts only once per freshly-closed bar and holds a single open position per its magic number ( `7314` ). No pyramiding, no averaging.

### Exit Logic — Stop Loss & Take Profit

Both stops are *structural*: they sit just beyond the rejected wick — the precise price at which the failed-auction thesis is invalidated. A buffer of `BufferFrac × Range` is added so the stop is not clipped by a marginal re-test.

- **SELL stop loss:** `signalHigh + BufferFrac × Range` (just above the rejected probe high).
- **BUY stop loss:** `signalLow - BufferFrac × Range` (just below the rejected probe low).

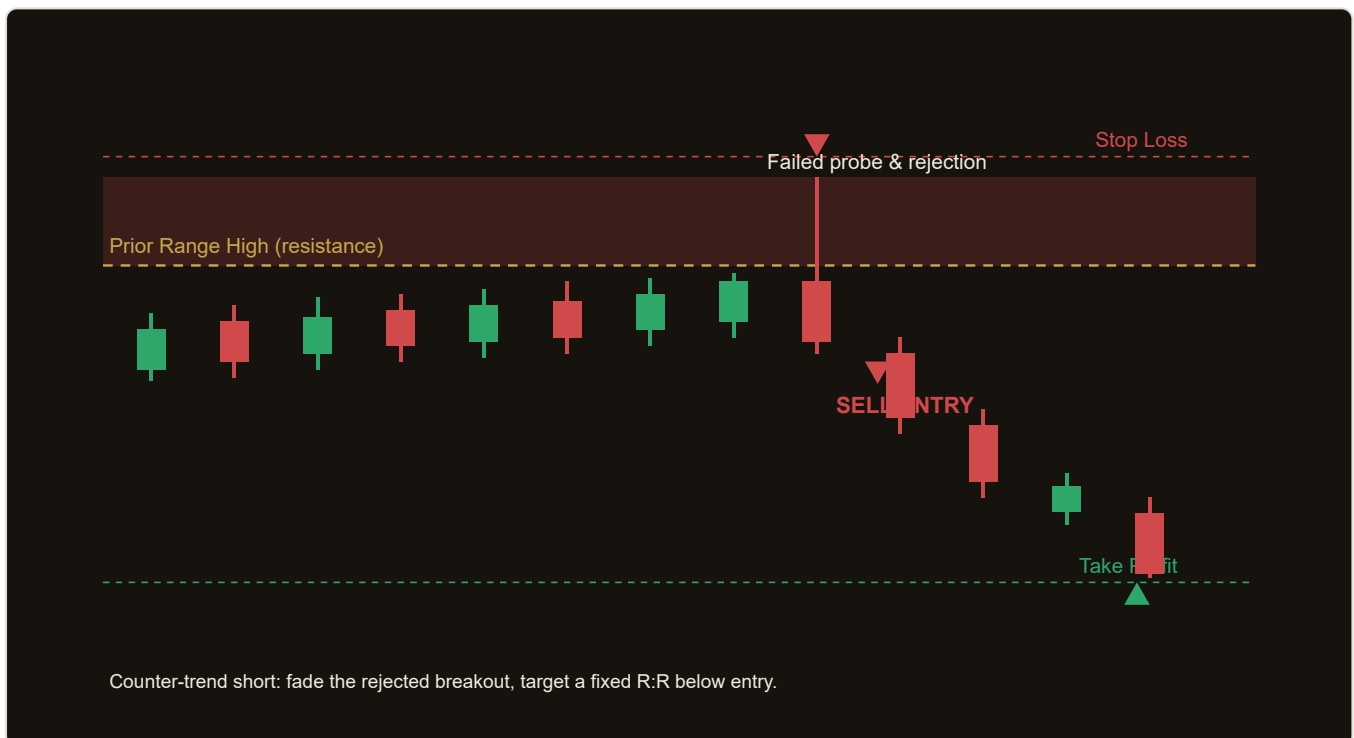
- **Take profit:** a fixed reward-to-risk multiple of that structural stop. The risk distance is  $|\text{entry} - \text{stop}|$ , and the target is placed at  $\text{RiskReward} \times \text{risk}$  away from entry in the trade direction.

#### Worked example — failed upside auction (SELL)

Suppose the prior window high is 1.08500 and the signal bar prints a high of 1.08560 (a genuine probe) but closes at 1.08470 — back below resistance, bearish, in the lower third of its range. With  $\text{BufferFrac} = 0.10$  and a bar range of 50 pips, the stop sits 5 pips above the high at 1.08610. If the entry (bid) is 1.08465, the risk is ~14.5 pips and, at  $\text{RiskReward} = 2.0$ , the take profit is placed ~29 pips below at roughly 1.08175.

## 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. It depicts a **failed upside auction**: price probes above prior range resistance, is rejected on the same candle, and the EA fades the move with a short.



*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	18	Length of the prior swing window, in bars, used to define range high/low (range 6–60, step 1).
PenetrationFrac	0.05	Minimum probe beyond the range, as a fraction of window height, for the breakout to count as genuine (range 0.00–0.40, step 0.01).
CloseLocation	0.33	How far into the far third of its range the signal bar must close, as a fraction of bar range (range 0.15–0.50, step 0.05).
RiskReward	2.0	Take-profit distance as a multiple of the structural stop risk (range 1.0–5.0, step 0.5).
BufferFrac	0.10	Stop buffer beyond the rejected wick, as a fraction of bar range (range 0.00–1.00, step 0.05).
Magic	7314	Magic number identifying this EA's positions; ensures one trade at a time per strategy.

## Recommended Settings

---

The defaults are tuned for EUR/USD or XAU/USD on the M30 timeframe. Use the following guidance when adapting the EA to other instruments or risk appetites:

- **Symbol & timeframe:** EUR/USD or XAU/USD on **M30**. The logic is timeframe-agnostic, but higher timeframes produce fewer, cleaner failed auctions.
- **Lookback:** 18 bars balances responsiveness and structure. Raise toward 30–40 for ranges that develop slowly; lower toward 8–12 for faster instruments.
- **PenetrationFrac:** 0.05 demands a real probe while filtering one-tick noise. Increase it to require deeper, more emphatic failed breakouts.
- **CloseLocation:** 0.33 (the far third) keeps only decisive snap-backs. Tightening toward 0.15–0.20 makes signals rarer but stronger.
- **RiskReward:** 2.0 is the baseline. Counter-trend trades can tolerate 1.5–3.0 depending on how cleanly the instrument mean-reverts.
- **Lots:** size so the structural stop risks a small, fixed fraction of equity per trade.

**Tip:** Because every rule is raw candle geometry, the EA is fully deterministic and reproduces identically in the Strategy Tester. Optimise `Lookback`, `PenetrationFrac` and `CloseLocation` together — they jointly control how strict the "failed auction" definition is.

## How to Install on MetaTrader 5

---

- 1 Copy `FailedAuctionReversal.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 (EUR/USD or XAU/USD, M30)
- 4 Configure the input parameters and click **OK**
- 5 Enable **Algo Trading** in the MT5 toolbar

**Note on bar timing.** The EA evaluates signals only on the close of a bar and acts once per freshly-formed bar. It needs at least `Lookback + 3` bars of history before it can trade, so allow the chart to fully load after attaching.

## Risk Warning

---

Trading foreign exchange, CFDs, and other leveraged financial instruments involves substantial risk of loss and is not suitable for all investors. The strategies and tools described in this document are provided for **educational purposes only** and do not constitute financial advice, investment recommendations, or solicitation to trade. Counter-trend strategies in particular can incur repeated losses during strong trends. Always consult a qualified financial adviser before making trading decisions. Past backtest performance is not indicative of future results.