

Wick Sweep Reversal Hedge

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Liquidity-Sweep Reversal + Breakout Hedge	M15 / H1	www.algoBot.live

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Overview

Wick Sweep Reversal Hedge is a pure price-action Expert Advisor that fades liquidity sweeps at the edges of recent structure — and protects every fade with a built-in breakout hedge. It uses no indicators whatsoever: every decision is derived from raw candle geometry (highs, lows, bodies and wicks) and the swing structure around price.

The core premise is that resting orders (stop losses, pending breakouts) cluster just beyond obvious swing highs and lows. Price often spikes through these "liquidity shelves" to trigger that resting flow, then snaps back inside the range. When a single candle pokes its wick beyond a shelf but *closes back inside* with a decisive body, the EA reads it as a sweep-and-reclaim and enters the reversal in the reclaim direction.

Because a sweep can occasionally be a *genuine* breakout rather than a fakeout, the EA simultaneously parks a stop order just beyond the swept extreme. If the reversal fails, the fade is stopped out and the hedge fires in the breakout direction to recover the loss. If the reversal works, the hedge never triggers and is cancelled once it has aged past its expiry window.

In one sentence: the EA buys reclaims of a swept support and sells rejections of a swept resistance, with a structure-based stop, a reward-multiple target, and a protective breakout hedge resting at the swept extreme.

How It Works

The strategy acts **once per closed bar** on the chart timeframe. On each new bar it appends the just-closed candle to a rolling window, manages any resting hedge, and — only when completely flat — evaluates whether the most recent candle is a valid sweep-and-reclaim.

1. Mapping the structure shelves

Over a window of `Lookback` bars (preceding the signal candle), the EA records the highest high (the **swing high** / resistance shelf) and the lowest low (the **swing low** / support shelf). It also computes the **average candle body** across that same window, which becomes the yardstick for momentum conviction.

2. Detecting the sweep

The most recently closed candle is the **signal candle**. A sweep is registered when the candle pierces a shelf with its wick but closes back on the inside:

- **Bullish sweep:** the low prints *below* the swing low, yet the close finishes *above* it (support reclaimed).
- **Bearish sweep:** the high prints *above* the swing high, yet the close finishes *below* it (resistance rejected).

3. Confirming the rejection (price action only)

A bare sweep is not enough. Two filters must agree before an entry is allowed:

- **Dominant rejection wick** — the relevant wick (lower wick for longs, upper wick for shorts) must be at least `WickRatio` × the body. This confirms price was firmly rejected, not merely drifting. The body reference is floored at 10% of the candle range to avoid dividing by a near-zero body.
- **Momentum conviction** — the signal candle's body must exceed `BodyFactor` × the recent average body. A decisive reclaim, not a tentative one.
- **Direction agreement** — a bullish reclaim must close above its open (green); a bearish rejection must close below its open (red).

4. Entry, stop and target

When all conditions align, the EA opens a market order in the reclaim direction at a fixed `Lots` volume (normalized to the broker's volume step, min and max):

- **Stop loss** is parked just beyond the swept extreme, offset by a *buffer* equal to `HedgeBufferPct` × the signal-candle range (floored at 5% of the range).
- **Risk** is the distance from entry to that stop. If the structure stop is tighter than the symbol's minimum stop distance, the trade is skipped.
- **Take profit** sits at `RewardMultiple` × risk beyond the entry.

Worked example — bullish reclaim

Swing-low support sits at 1.0840. A candle wicks down to 1.0832 (sweeping the shelf) but closes back at 1.0851 with a long lower wick and a body larger than the recent average. With a range of ~30 pips and `HedgeBufferPct` = 0.15, the buffer is ~4.5 pips, so the stop is placed near 1.0827. If the reclaim entry (Ask) is 1.0852, the risk is ~25 pips and, at `RewardMultiple` = 1.8, the target is ~45 pips higher near 1.0897.

5. The breakout hedge

Immediately after the reversal entry, the EA places a **stop order at the swept extreme** — the same level as the protective stop:

- For a long fade it parks a **Sell-Stop** just below the swept low.
- For a short fade it parks a **Buy-Stop** just above the swept high.

If the "reversal" turns out to be a real breakout, price continues through the swept extreme: the fade hits its stop loss *and* the hedge triggers, riding the continuation to recover (and potentially exceed) the loss. The hedge carries its own stop (back at the reclaim level) and a mirror-image target at `RewardMultiple` × risk in the breakout direction. The hedge is only placed if its trigger price is at least the symbol's minimum stop distance away from the current price.

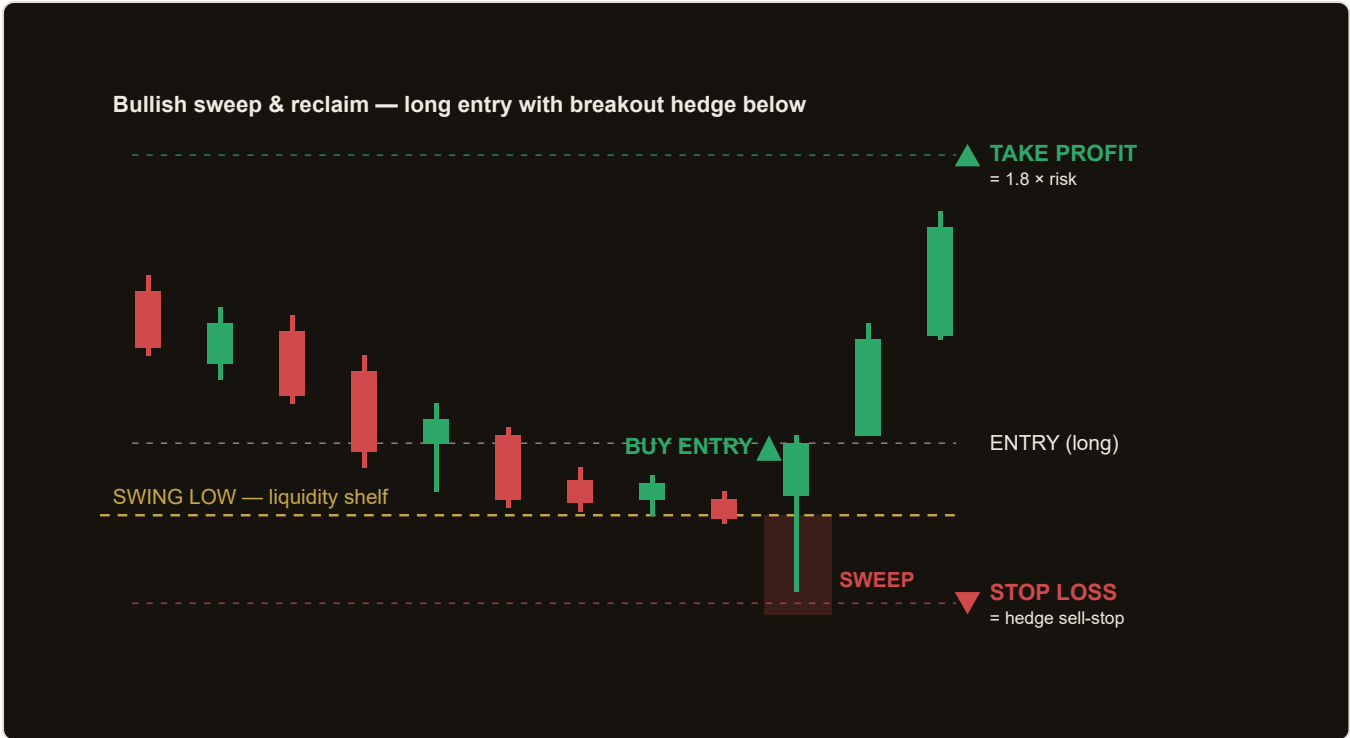
6. Cancelling stale hedges

If the reversal resolves cleanly (hits target or is closed) without a breakout, the resting hedge becomes redundant. While the EA is flat with only a pending order outstanding, it counts bars since entry and cancels the hedge once it has aged past `HedgeExpiryBars`. This keeps the chart clean and prevents an old, irrelevant order from firing on unrelated price action.

Strictly one trade at a time. The EA looks for a new setup only when there is no open position *and* no pending order of its own. This serial behaviour keeps risk contained to a single reversal-plus-hedge structure at any moment.

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 **bullish** case: price sweeps below the swing-low support shelf, reclaims it with a long-wicked conviction candle, and the EA enters long with its stop (and resting breakout hedge) just beneath the swept low.



Illustrative example only. Actual market behaviour varies.

Parameters

All inputs are exposed in the MT5 EA properties dialog. Defaults, ranges and step sizes are shown below.

Parameter	Default	Description
Lookback	12	Number of bars used to map the swing-high / swing-low structure shelves and the average body before the signal candle. Range 5–40, step 1.
WickRatio	1.0	Minimum ratio of the rejection wick to the candle body required for a valid sweep. Higher values demand a more pronounced rejection. Range 0.4–3.0, step 0.1.
BodyFactor	1.1	The signal candle's body must exceed this multiple of the recent average body (momentum conviction). Higher = stricter, fewer signals. Range 0.6–3.0, step 0.1.
RewardMultiple	1.8	Take-profit distance expressed as a multiple of risk (the entry-to-stop distance). Also sets the mirror target on the hedge. Range 1.0–4.0, step 0.1.
HedgeBufferPct	0.15	Buffer placed beyond the swept extreme, as a fraction of the signal-candle range (floored at 5% of range). Defines both the structure stop and the hedge trigger level. Range 0.02–0.6, step 0.01.
HedgeExpiryBars	6	Cancel a resting hedge order after this many bars when the reversal resolves without a breakout. Range 1–30, step 1.
Lots	0.10	Fixed order volume, normalized to the broker's volume step, minimum and maximum. Range 0.01–1.0, step 0.01.
Magic	740120	Magic number used to tag and isolate this EA's positions and pending orders from other trades on the account.

Tuning tip: raise `WickRatio` and `BodyFactor` together to trade only the cleanest, most decisive sweeps (fewer but higher-quality entries). Lower them on quieter ranging instruments where rejections are subtler. Widen `HedgeBufferPct` on noisy symbols so the stop and hedge sit clear of normal wick noise.

Recommended Settings

Because the logic is structure- and range-relative rather than fixed in pips, the EA adapts across symbols and timeframes. The following are sensible starting points, not guarantees — always validate on your own broker's data first.

- **Symbols:** liquid majors and indices where stop-hunt sweeps around obvious swing levels are common (e.g. EURUSD, GBPUSD, XAUUSD, US30).
- **Timeframe:** M15 for more frequent setups, or H1 for cleaner structure and fewer false sweeps. Match `Lookback` to the swing rhythm you can see on the chart.

- **Lookback:** 10–16 captures the most recent actionable structure; increase toward 25–40 to fade only major shelf sweeps.
- **RewardMultiple:** 1.6–2.0 balances hit-rate against payoff; the breakout hedge partially offsets the cost of a wider target.
- **Risk:** keep `Lots` conservative. Remember that a failed fade can result in *both* the stop loss and a hedge being active in the market — size accordingly.

Hedging & account type. This EA places a pending stop order in the opposite direction while a position is open. It therefore requires a **hedging** MT5 account (not netting), and a broker that permits the buy-stop / sell-stop distances at your chosen symbol. Confirm your account mode before live deployment.

How to Install on MetaTrader 5

- 1 Copy `WickSweepReversalHedge.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

Backtest first. Run the EA in the MT5 Strategy Tester on several months of "Every tick based on real ticks" data for your target symbol and timeframe before committing real capital. Pay particular attention to how often the hedge fires and whether stale hedges are being cancelled as expected.

Risk Warning

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