Who Should Consider Using the Stock Repair Strategy

- An investor who owns shares purchased at a price above the current market price, and who is looking to break-even on this position.
- An investor who is willing to give up any profit potential above his break-even point.
- An investor who is unwilling to commit additional funds to his current position.
- An investor who is unwilling to assume any additional downside risk.

*Please note: This transaction must be done in a margin account

The goal of the strategy is to reduce the investor’s break-even price, without having to assume any additional downside risk.

Definition
The Repair Strategy is built around an existing stock position, usually a stock that is now trading at a lower price than the investor’s original cost. For every 100 shares held, 1 call option is purchased, and 2 call options with a higher strike price are sold; these purchases and sales are structured in such a fashion that the investor’s cash outlay is minimal or none.

How to Use the Repair Strategy
Please note: Commissions and taxes have not been taken into consideration in these examples, and can have a significant effect on returns.
An investor purchased a non-optionable stock and seeing its value decline after this purchase, and who is now simply looking to break-even, has two choices: “hold and hope” or “double up”.

The “hold and hope” strategy requires that the stock retraces its fall all the way back to the investor’s purchase price, an event that may be a long time in the making. The “double up” strategy, i.e., purchasing additional shares at a now lower price, does lower the investor’s break-even point, but it requires that additional funds be committed to the strategy, and it increases the downside risk of the position.

An investor who finds himself with an unrealized loss on an optionable stock, has a third alternative: the Repair Strategy. For example, an investor could have purchased 500 shares of YZYZ stock at $50 and seen the value of these shares fall to the current price of $40. To establish the Repair Strategy, this investor could purchase 5 60-day 40 calls at $3 and simultaneously sell 10 60-day 45 calls at $1.50. Note that the cost of the purchased calls ($3 x 5 x 100 = $1,500) is fully offset by premium received from the sale of the written calls ($1.50 x 10 x 100 = $1,500).

The 5 purchased calls give the investor the right to purchase an additional 500 shares at a cost of $40 per share. The 10 written calls means that the investor could be obligated to sell 1,000 shares of YZYZ at $45. He currently holds only 500 shares, but, if needed, could exercise his long calls and purchase another 500 shares at $40.
Establishing the Repair Strategy: Long 5 60-day 40 Calls, Short 10 60-day 45 Calls

I. YZYZ falls to $35 at option expiration in 60 days
If at expiration in 60-days, the price of YZYZ has continued to decline and is now at $35, both the long 40 calls will expire worthless, and the short 45 calls will expire worthless. Since the investor initiated the option position at no cost and all of these options have expired worthless, the option strategy has had no impact on the overall position. The investor has seen an additional $5 loss accrue on the original shares, the same as would have resulted had he simply held on to his shares.

It should be noted that if the Repair Strategy is utilized on a stock that continues to decline, it will not protect the investor from any further decrease in the price of the underlying stock. If the investor is expecting the price of YZYZ to continue to fall, a strategy other than the Repair Strategy should be considered.

II. YZYZ is unchanged at $40 at option expiration in 60 days
If at expiration in 60-days, the price of YZYZ is unchanged at $40, the situation is very similar to the above: all of the call options expire worthless, and the investor is left with his stock position. Once again the Repair Strategy has neither helped, nor made things any worse.

III. YZYZ is up to $45 at expiration in 60 days
If YZYZ has rallied to $45 at expiration, the investor's long calls will then be worth $5. The short $45 calls will expire worthless. The investor will have a $5 profit on the options, keeping in mind that the position was initiated for no cost. On the long stock position, at $45, the unrealized loss will be reduced to $5. Taking this $5 loss on the stock, and the $5 profit on the option position, the investor breaks-even on the overall position.

Notice that what the investor has succeeded in doing is lowering his break-even point from a stock cost of $50, to $45. Also note that the Repair Strategy does need the underlying to at least partially recover in order to obtain the desired result.

IV. YZYZ is up to $50 at expiration in 60 days
Should YZYZ rally back to $50 by option expiration, the investor's position will be as follows:

• Long stock will break-even
• Long 5 of the 40 calls, each now worth $10
• Short 10 of the 45 calls, each now worth $5.

The net value of the options equals zero:

\[(5 \times 10 \times 100) - (10 \times 5 \times 100) = 0.\]

The value of the options cancel out, the stock is at break-even, and so the overall position breaks-even. This is the “downside” of the Repair Strategy: the best the investor can do is to break even.

The following table summarizes the investor’s overall position for various stock prices at expiration. Note that the “cost” of the options is not taken into account since the option position was initiated for no net cost.

<table>
<thead>
<tr>
<th>Stock at Expiration</th>
<th>Gain (Loss) on Stock</th>
<th>Value of 40 Calls</th>
<th>Value of 45 Calls*</th>
<th>Net Gain (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>(15)</td>
<td>0</td>
<td>0</td>
<td>(15)</td>
</tr>
<tr>
<td>40</td>
<td>(10)</td>
<td>0</td>
<td>0</td>
<td>(10)</td>
</tr>
<tr>
<td>45</td>
<td>(5)</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50</td>
<td>0</td>
<td>10</td>
<td>(2 X -5)</td>
<td>0</td>
</tr>
<tr>
<td>55</td>
<td>5</td>
<td>15</td>
<td>(2 X -10)</td>
<td>0</td>
</tr>
</tbody>
</table>

* The value of the short calls is multiplied by 2 since the investor sold 10 calls, versus a long position of 500 shares, and a long position of 5 calls.
**Determining Strike Prices**

One consideration when establishing the Repair Strategy is which option should be purchased, and which should be sold. Note that in the above example, the unrealized loss on the stock was 10 dollars and the strike price interval between the options chosen was $5, half the unrealized loss. If an investor was holding a stock now trading at 90 with an original cost of 110 (i.e.; a $20 unrealized loss), she should look to purchase the 90 calls and sell the 100 calls. If an investor purchases at-the-money options, then he should look to sell out-of-the-money options that are approximately at the half-way mark between the current stock price and the original acquisition cost.

Can the Repair Strategy be implemented for all stocks that are trading below the purchase price? Unfortunately not. The strategy will work for most stocks that are down 20% from their entry point (using options that may have 60 to 90 days to expiration), but will prove inadequate for stocks down 40% or 50%. In the later cases, investors will find that selling two out-of-the-money calls will not generate enough premium to finance the one at-the-money call purchased.

Finally, very often, the strategy can be initiated for a small credit or a small debit. Investors should still consider the strategy in those cases were they may have to pay $0.25 or $0.50 for initiating the position. They may find that the overall benefits of the strategy are worth a minimal outlay.
## Summary Table

Use per share amounts

<table>
<thead>
<tr>
<th>Stock Price at Expiration</th>
<th>(1) Gain (Loss) on Stock</th>
<th>(2) Expiration Value of Lower Strike Calls</th>
<th>(3) Expiration Value Upper Strike Calls</th>
<th>(4) Per share Cost of Initiating Position</th>
<th>(5) Net Gain (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS*</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US**</td>
<td></td>
<td></td>
<td>0</td>
<td>(2 x ___)</td>
<td></td>
</tr>
</tbody>
</table>

Net Gain (Loss) = 1 + 2 + 3 + 4

* LS = Lower Strike (Calls Purchased)
** US = Upper Strike (Calls Sold)
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