

**PCF's for TC2000 and TCNet Users**

# **3 MAJOR SIGNALS**

**Volume II:**

**The Hammer**

**The Shooting Star**

**The Harami**

A Candlestick Forum publication – Years of Candlestick Analysis made available in concise formats. Information that when learned and understood will revolutionize and discipline your investment thinking.

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# PCF's for Major Signals

## PCF's For Individual Candlestick Signals

The PCF's (Personal Criteria Formulas) for Candlestick signals are excellent search parameters for high profit trades. Knowing how a Candlestick signal is formed, combined with using a formula, enhances the knowledge of the physical structure of the signal. Searches requiring the appearance of specific signals can be pinpointed using the program. The TC2000 search software provides instantaneous results.

Once the proper formula is entered into TC2000's search program, an investor will greatly reduce the time required to search for specific trades. As a matter of fact, the investor will usually have many more high profit potential trades than they will need for any given time period. This creates a whole new dynamic when the investor is ready to commit funds to the market. An investor can fine-tune many confirming indicators against a number of potential trades to zero in on the best possible trade. This is completely opposite to investment management philosophies of approximately a decade ago. Instead of investment situations having to be sought out with an extensive amount of elbow grease, the supply is such that the many opportunities have to be honed down to a reasonable amount.

This book will be directed towards the second group of the most influential signals. The Hammer, a highly recognized signal, has great trend implications. The Shooting Star illustrates a clear indication of change in investor sentiment. The Bullish and Bearish Harami patterns both have clear and powerful change of trend characteristics.

Keep in mind that the utilization of individual searches is *not* the most effective or efficient method for finding the best trades on a daily basis. The book titled "**Using TC2000 to Find the Best Candlestick Trades**" has a better process for getting to the most profitable trades in a hurry. It is the opinion of the Candlestick Forum staff that the search process from this book is the most effective. However, when a specific pattern is required, for whatever reason, knowing how to design the search criteria supplies an immense advantage. And in keeping with the underlying philosophy of Candlestick analysis, to impose upon any investor to use an investment process is exactly the opposite of what is intended. Decades upon decades of "common" investment truisms conveyed by the Wall Street crowd have led to many years of unimpressive returns. But it has made the Wall Street community billions of dollars.

You are going to find that each signal is extremely easy to formulate. You will also find that the formulas follow a "common sense" approach. To refresh your memory, the full description of each signal will be re-presented in this book. Along with the description will be the formulas for searching for each signal.

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## **Create Your Own Destiny**

Each e-book in this series will consist of three separate signals. This is to allow investors to add more criteria to searches. The Candlestick Forum will suggest parameters to make the search productive. Fortunately, we are in an age of computer technology that provides new information and software capabilities as we write this. This means that you, having the basics of a signal formula, have the opportunity to assemble combinations of criteria. Your testing of criteria, based upon logical assumptions, may have the potential to produce high percentage trade results.

The Japanese rice traders experienced results that made them wealthy beyond all common expectations. Their wealth, created from the statistical results of observing high probability reversal signals, became legendary. This was accomplished without the use of any sophisticated calculating equipment, just simple graphic charts. You have the advantage, after learning the basic formulas, for developing successful signals to further enhance those results. The capabilities of today's computing systems, and the continuous improvements being made on almost a daily basis, give anybody the opportunity to devise a combination of viable criteria that produces an extraordinary set of results.

As described in the PCF Volume I E-book for the Doji, Kicker and Engulfing patterns, the easy to understand formulas for these signals will be written along with the basic search criteria the Candlestick Forum uses to minimize its trading universe. It may or may not be constructive for the type of investing that you do.

Simply put, the formulas that you will be able to load into your TCNet or TC2000 software programs will appear very simple. What you are able to do to the results after you have the basics could be a major revelation for producing unheard of returns. Try everything, have fun with it!

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# HAMMERS

Paper Umbrella (Karakasa)

## HAMMERS (TAKURI)

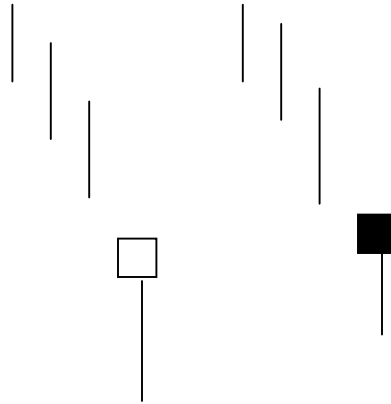


Figure 1 – 1

### Description

The Hammer is comprised of one candle. It is easily identified by the presence of a small body with a shadow at least two times greater than the body. Found at the bottom of a downtrend, this shows evidence that the bulls started to step in. The color of the small body is not important, but a white candle has slightly more bullish implications than the black body. A positive day is required on the following day to confirm this signal.

### Criteria

1. The lower shadow should be at least two times the length of the body.
2. The real body is at the upper end of the trading range. The color of the body is not important although a white body should have slightly more bullish implications.
3. There should be no upper shadow or a very small upper shadow.
4. The following day needs to confirm the Hammer signal with a strong bullish signal.

### Signal Enhancements

1. The longer the lower shadow, the higher the potential of a reversal occurring.
2. A gap down from the previous day's close sets up for a stronger reversal move provided the day after the Hammer signal opens higher.
3. Large volume on the Hammer day increases the chances that a blow-off day has occurred.

## Pattern Psychology

After a downtrend has been in effect, the atmosphere is very bearish. The price opens and starts to trade lower. The bears are still in control. The bulls then step in. They start bringing the price back up towards the top of the trading range. This creates a small body with a large lower shadow. This represents that the bears could not maintain control. The long lower shadow now has the bears questioning whether the decline is still intact. A higher open the next day would confirm that the bulls had taken control.

Figure 1 - 2



This downward, extensive trading range and a run back up by the end of the day's trading is described by the Japanese traders as "the bears hammering out the bottom of the trend". The fact that the longs finally made themselves present makes this a signal. Follow-up buying the next day proves that the buyers are staying with it.

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## The Hammer Formula

The search for the Hammer formations is an obviously often-used search format. It will have an inordinate number of decision-making appearances. The Japanese say to always take notice of a Hammer at the oversold area.

The Hammer Signal has a fairly simple formula. It requires a formula that shows the trading range of the day is 3 times greater than the distance between the open and the close AND that the open and close is in the top third of the trading range. This is represented as

$$(((H-L)>3*(O-C)) \text{ AND } ((C-L)/(.001+H-L)>0.6 \text{ AND } ((O-L)/(.001+H-L)>0.6))$$

No spaces are in the formula. But remember, the signal alone does not mean that a meaningful reversal has occurred. The Candlestick Forum searches try to narrow down the universe of stocks that are reasonably tradable. "Tradable" is defined as all stocks trading above \$5.00 per share. The parameter is in effect due to the potential of margining. Most brokerage firms will not margin stocks trading below \$5.00.

$$C1>5$$

Next, we are interested in stocks that are easy to get into and out of, i.e., liquidity. Most investors will want at least 200,000 shares to be trading each day.

$$V>2000$$

This number is expressed as units of 100 on TC2000. The price and volume parameters will reduce the universe of 9,900 stocks down to 1,900 to 2,700, depending upon the conditions of the markets. This will search New York Stock Exchange, American Stock Exchange and NASDAQ stocks.

The next consideration involves where the trading is occurring in reference to the stage of the trading. Searching for the bottom reversal would include requiring the Stochastics to be in the oversold area. This is a standard setting on the TC2000 system. When adding Stochastics to this EasyScan search, the Stochastics settings employ a sliding scale. This allows the investor to set it at the range best suited for their search. Wanting to be alerted to Hammers at the bottom of the market, the Stochastics scale can be set at 20 or below. This obviously represents stocks that have been moving in a downward direction for a while. Conversely, finding Hammers at the top means setting the Stochastics scale at 80 and greater.

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## Hammers at the Bottom

1.  $C > 5$
2.  $V > 2000$
3. **Stochastics short term – H Set scale to 20 and below**
4.  **$((H-L) > 3 * (O-C))$  AND  $((C-L) / (.001 + H-L)) > 0.6$   
AND  $((O-L) / (.001 + H-L)) > 0.6$**

This is the best search for finding the Hammer signal at the bottom of a sustained downtrend. If this search is performed each night, the result of the trend change can be monitored prior to the open the next day. In the example of the oversold occurrence of the Hammer, if the bid/ask is higher before the open of the next trading day (this can be observed with the TCNet program) you will know to buy immediately. If you witness a lower open, you will be prepared to put a buy stop, to open a position, at the close of the previous day. The rationale being that if the price opened lower after the Hammer signal and it came back up through the close of the previous day, that would be good evidence that the buyers were still taking over control.

Remember, the Hammer followed by a gap up (see our e-book **“Big Profits Using Candlestick Signals and Gaps”**) is a great foreteller of a strong rally starting. Before the open the next day, look for positions that show an upward move in the bid and ask prices. That is the position to buy aggressively (see our e-book **“Profitable Candlestick Entry and Exit Strategies”**). The information about what to look for when establishing or closing a trade can increase your portfolio substantially by identifying the strong movers from the weak movers.

There will be nothing to stop your research, using TC2000 or TCNET, to expand upon criteria that can fine-tune the search. The Candlestick Forum is currently back-testing the results of many criteria combinations to better identify which combinations of parameters produce the highest probabilities of being correct and producing the strongest profit moves.

Depending upon market conditions, Hammers are good indicators that J-hook patterns may be forming. The different aspect of the J-hook pattern is that the stochastics may not have made it back down to the oversold area before prices started to curl back up. In this case, a more general search should be undertaken. Use the same parameters as the Hammer search at the bottom, except eliminate the stochastics criteria.

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## General Hammer Search

1.  $C > 5$
2.  $V > 2000$
3.  $((H-L) > 3 * (O-C)) \text{ AND } ((C-L) / (.001 + H-L) > 0.6)$   
 $\text{AND } ((O-L) / (.001 + H-L) > 0.6)$

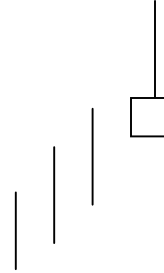
This will create a list of Hammer formations that aren't necessarily at a point in a trend that would make the Hammer a true "Buy" signal. This list will have charts needing to be studied closer to discover any J-hook patterns forming. A Hammer forming after a partial pullback may be indicating the bottom of that small pullback. If the stochastics appear to be flattening out in its downward trajectory, watch for a new uptrend to be starting soon.



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# SHOOTING STAR

## **SHOOTING STAR** (Nagare Boshi)



**Figure 2 - 1**

### **Description**

The Shooting Star is also comprised of one candle. It is easily identified by the presence of a small body with a shadow at least two times greater than the body. It is found at the top of an up trend. The Japanese named this pattern because it looks like a shooting star falling from the sky with the tail trailing it.

### **Criteria**

1. The upper shadow should be at least two times the length of the body.
2. The real body is at the lower end of the trading range. The color of the body is not important although a black body should have slightly more bearish implications.
3. There should be no lower shadow or a very small lower shadow.
4. The following day needs to confirm the Shooting Star signal with a black candle or better yet, a gap down with a lower close.

### **Signal Enhancements**

1. The longer the upper shadow, the higher the potential of a reversal occurring.
2. A gap up from the previous day's close sets up for a stronger reversal move provided:
3. The day after the Shooting Star signal opens lower.
4. Large volume on the Shooting Star day increases the chances that a blow-off day has occurred, although it is not a necessity.

### **Pattern Psychology**

After a strong up-trend has been in effect, the atmosphere is bullish. The price opens and trades higher. The bulls are in control. But before the end of the day, the bears step in and

take the price back down to the lower end of the trading range, creating a small body for the day. This could indicate that the bulls still have control if analyzing a Western bar chart. However, the long upper shadow represents that sellers had started stepping in at these levels. Even though the bulls may have been able to keep the price positive by the end of the day, the evidence of selling was apparent. A lower open or a black candle the next day reinforces the fact that selling is going on.

The obvious feature of the Shooting Star is its shadow above everything else at the end of a sustained rally. The fact that the tail/shadow sticks way up in the air indicates that the bulls tried to move the price up to new heights, but the sellers started coming in at that level. Seeing more selling the next day reveals that the sellers have now taken control.

Figure 2 - 2



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## The Shooting Star Formula

The same search criteria for price and volume can be used in the search. The Shooting Star, being a topping signal, needs the stochastics criteria of the overbought parameters. The formula for the Shooting Star is closely related to the Hammer except in reverse.

**$((H-L) > 4 * (O-C) \text{ AND } ((H-C) / (.001 + H-L) \geq 0.75) \text{ AND } ((H-O) / (.001 + H-L) \geq 0.75))$**

Essentially this formula is looking for the majority of the trading range to be above the open and close of the trading day.

### Shooting Stars at the Top

1.  **$C > 5$**
2.  **$V > 2000$**
3. **Stochastics short term – H Set scale to 80 and above**
4.  **$((H-L) > 4 * (O-C) \text{ AND } ((H-C) / (.001 + H-L) \geq 0.75) \text{ AND } ((H-O) / (.001 + H-L) \geq 0.75))$**

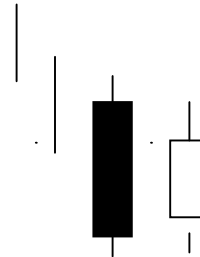
Again, as described in the Hammer explanation, a general search for Shooting Stars can be performed without the stochastics criteria. This search would locate the uptrends that have not moved up to the overbought area and are starting to turn back down. This search would be more relevant in a declining market.

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# HARAMI

(Harami)

## **BULLISH HARAMI**



**Figure 3 - 1**

## **Description**

The Harami is an often-seen formation. The pattern is composed of a two-candle formation in a down-trending market. The body of the first candle is the same color as the current trend. The first body of the pattern is a long body, the second body is smaller. The open and the close occur inside the open and the close of the previous day. Its presence indicates that the trend is over.

The Japanese definition for Harami is “pregnant woman” or “body within”. The first candle is black, a continuation of the existing trend. The second candle, the little belly sticking out, is usually white, but that is not always the case (see the Homing Pigeon signal). The location and size of the second candle will influence the magnitude of the reversal.

## **Criteria**

1. The body of the first candle is black and the body of the second candle is white.
2. The downtrend has been evident for a good period. A long black candle occurs at the end of the trend.
3. The second day opens higher than the close of the previous day and closes lower than the open of the previous day.
4. Unlike the Western “Inside Day”, just the body needs to remain in the previous day’s body, whereas the “Inside Day” requires both the body and the shadows to remain inside the previous day’s body.
5. For a reversal signal, further confirmation is required to indicate that the trend is now moving up.

## Signal Enhancements

1. The longer the black candle and the white candle, the more forceful the reversal.
2. The higher the white candle closes up on the black candle, the more convincing that a reversal has occurred, despite the size of the white candle.

## Pattern Psychology

After a strong downtrend has been in effect and after a selling day, the bulls open the price higher than the previous close. The shorts get concerned and start covering. The price finishes higher for the day. This is enough support to have the short sellers take notice that the trend has been violated. A strong day the next day would convince everybody that the trend was reversing. Usually the volume is above the recent norm due to the unwinding of short positions.

The Harami acts as a very good barometer for how the next trend is going to perform. A Harami that forms at the bottom of the previous long candle body indicates that the reversal is going to be made slower. The higher the Harami forms on the last black candle, the stronger the next rally should be.

Figure 3 - 2

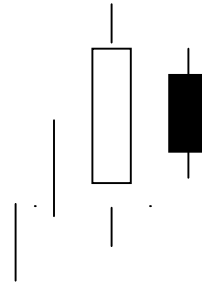


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# HARAMI

(Harami)

## **BEARISH HARAMI**



**Figure 3 – 3**

### **Description**

The Bearish Harami is the exact opposite of the Bullish Harami. Again, the pattern is composed of a two-candle formation. The body of the first candle is the same color as the current trend. The first body of the pattern is a long body. The second body is smaller. The open and the close occur inside the open and the close of the previous day. Its presence indicates that the trend is over.

### **Criteria**

1. The body of the first candle is white and the body of the second candle is black.
2. The up-trend has been apparent. A long white candle occurs at the end of the trend.
3. The second day opens lower than the close of the previous day and closes higher than the open of the prior day.
4. For a reversal signal, confirmation is needed. The next day should show weakness.

### **Signal Enhancements**

1. The longer the white candle and the black candle, the more forceful the reversal.
2. The lower the black candle closes down on the white candle, the more convincing that a reversal has occurred, despite the size of the black candle.

## Pattern Psychology

After a strong up-trend has been in effect and after a long white candle day, the bears open the price lower than the previous close. The longs get concerned and start taking profits. The price finishes lower for the day. The bulls are now concerned as the price closes lower. It is becoming evident that the trend has been violated. A weak day after that would convince everybody that the trend was reversing. Volume increases due to the profit taking and the addition of short sales.

Figure 3 - 4



## The Harami Formulas

The Harami is a two-day formula. Simply stated, we are looking for a candle whose open is greater than yesterday's close and whose close is less than yesterday's open. The formula being:

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**((O1>C1) AND (C>O) AND (C<=O1) AND (C1<=O) AND ((C-O)<(O1-C1)))**

As with the previous searches, the set of criteria looks like this:

### **Haramis at the Bottom**

- 1. C>5**
- 2. V>2000**
- 3. Stochastics short term – H Set scale to 20 and below**
- 4. ((O1>C1) AND (C>O) AND (C<=O1) AND (C1<=O) AND ((C-O)<(O1-C1)))**

And as can be anticipated, the bearish Haramis would have the opposite formulas:

- 1. C>5**
- 2. V>2000**
- 3. Stochastics short term – H Set scale to 80 and above**
- 4. ((C1>O1) AND (O>C) AND (O<=C1) AND (O1<=C) AND ((O-C)<(C1-O1)))**



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## Conclusion

As we wrote in our previous PCF book on the Doji, Kicker, and Engulfing patterns, knowing what the formulas are for each signal is an added aspect for remembering what they look like. Combining the physical makeup of the signals with the investment sentiment behind the formation of the signals provides a vivid image of what went into the makeup of each signal. The TC2000 software provides the opportunity to discover new and unfound search combinations that have not been attempted before. Use the program. You have the same potential for testing theories as the most sophisticated professionals on Wall Street. Find something new. You have an excellent start. The formulas put before you are the result of hundreds of years of statistical analysis.

You can find excellent trades as well as anybody can. Take the next step. Use your logic to cultivate a series of search programs that produce high probability trades. You have a multitude of research parameters at your fingertips. You could find the next close to perfect trades. Put the probabilities on your side.

The added benefit of being in a group of investors, all concentrating on the elements involved with Candlestick analysis, is the synergy created by many people looking at the usage of the same information. The Candlestick Forum can boast of over fifteen years of expertise in the Candlestick method. This expertise can educate many investors who never had the correct exposure to the signals.

The formulas in this book are the basics required to do signal searches through the total universe of stocks. They will find the trades that create a high probability of correct trades. This phenomenon was created by hundreds of years of observation by successful rice traders. They contributed all the input they had available to develop a high probability set of parameters to cultivate successful trades, sifting out the less desirable trade setups. This all being done without the aid of computers.

It has been and is consistently being brought to our attention that the information the Candlestick Forum distributes could be bringing in much higher prices than what we are charging. We realize that. But we do not anticipate receiving big money from charging for information. The information that is going out inexpensively and/or free to Members has a much greater potential return.

For the past decade, Mr. Bigalow has studied Candlesticks. He is totally convinced that what has existed throughout the centuries has great statistical value for producing above average returns from the markets today. Yet his view of Candlesticks is that it is a framework of investment concepts that still has the majority of its tremendous potential ahead of it. His analogy is that the Candlestick method today is equivalent to Henry Ford setting a motor on a buggy frame. The concept is better than anything out there on the market.

Now comes the era that can rapidly turn that motorized buggy into a speedster with all the accessories. Mr. Bigalow's own research and investment strategy developments have

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made Candlestick trading a very successful and consistent trading program. His purpose for developing a consortium for teaching and assembling knowledge about the Candlestick method is impressive. His improvements and creative endeavors are going to be limited by his scope of knowledge.

Members of the Candlestick Forum not only receive the benefit of learning the correct usage of the Candlestick method. Our Members are also contributing their own unique knowledge and experience to the group, which serves as an “information pool” each Member can access. This in turn allows the opportunity for all Members to increase the probabilities of producing correct trades even further. As in the motorized buggy analogy, the buggy is running. If everybody drove one home and started making improvements on it, with all the new technology that is being made available every day on our computer systems, in a few years, each person may have a slightly better motorized buggy.

However, if everybody came to the shop (The Candlestick Forum) each day and worked on the buggy, the cumulative knowledge of everybody working together on improvements will have a huge synergistic effect that comes from many pockets of knowledge working on the same improvements. This is the essence of the Candlestick Forum.

Japanese Candlesticks are still in their infancy in the U.S. investment arena. The people who have been joining the Candlestick Forum are people who are not happy with the returns or investment philosophies that are making Wall Street wealthy and investors moderate returns at best.

The information made available to investors is not being kept secret. Use it and apply your investment concepts to it. If you find something that appears to improve returns, let the Candlestick Forum know. Your information may be viable or it may not. But having that information disseminated to the rest of the Members may stimulate somebody else’s mental proficiency, and the combination of ideas could improve the probabilities of producing a correct trade by a percentage or two. Every trade statistic improved by even the smallest percentage reduces the possibilities of making a bad trade.

Use these formulas to do your searches. You will find very profitable trades!

Good Investing!

**Stephen W. Bigalow and the Staff of The Candlestick Forum**

[www.candlestickforum.com](http://www.candlestickforum.com)