

6 Reasons Why Your VLOOKUP is Not Working

Apr 9 by Alan Murray Excel, Excel functions, Excel tips, Excel Vlookup 24 Comments

The VLOOKUP function is the most popular lookup and reference function in Excel. It is also one of the trickiest and the dreaded #N/A error message can be a common sight.

This article will look at the 6 most common reasons why your VLOOKUP is not working.

1. [You Need an Exact Match](#)
2. [Lock the Table Reference](#)
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5. [VLOOKUP Cannot Look to its Left](#)
6. [Your Table Contains Duplicates](#)

You Need an Exact Match

The last argument of the VLOOKUP function, known as *range_lookup*, asks if you would like an approximate or an exact match.

In most cases people are looking for a particular product, order, employee or customer and therefore require an exact match. When looking for a unique value, FALSE should be entered for the *range_lookup* argument.

This argument is optional, but if left empty, the TRUE value is used. The TRUE value relies on your data being sorted in ascending order to work.

The image below shows a VLOOKUP with the *range_lookup* argument omitted, and the incorrect value being returned.

=VLOOKUP(H3,B3:F11,2)

	A	B	C	D	E	F	G	H	I
1									
2		ID	Fruit	Quantity	Price	Value		ID	Fruit
3		23	Banana	50	£ 0.30	£ 15.00		41	Apple
4		34	Apple	23	£ 0.40	£ 9.20			
5		67	Pomegranate	44	£ 0.70	£ 30.80			
6		41	Kiwi	79	£ 0.30	£ 23.70			
7		90	Peach	103	£ 0.25	£ 25.75			
8		62	Strawberry	71	£ 1.10	£ 78.10			
9		13	Pear	88	£ 0.50	£ 44.00			
10		18	Blackberry	39	£ 1.00	£ 39.00			
11		55	Pineapple	21	£ 1.00	£ 21.00			

Solution

If looking for a unique value, enter FALSE for the last argument. The VLOOKUP above should be entered as **=VLOOKUP(H3,B3:F11,2,FALSE)**.

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Lock the Table Reference Ultimate Suite for Excel Professionals

Maybe you are looking to use multiple VLOOKUPS to return different information about a record. If you are planning to copy your VLOOKUP to multiple cells, you will need to lock your table.

The image below shows a VLOOKUP entered incorrectly. The wrong cell ranges are being referenced for the *lookup_value* and *table_array*.

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		ID	Fruit	Quantity	Price	Value		ID	Quantity	Price	Value	
3		23	Banana	50	£ 0.30	£ 15.00		41	79	=VLOOKUP(I3,C3:G11,3,FALSE)		
4		34	Apple	23	£ 0.40	£ 9.20						
5		67	Pomegranate	44	£ 0.70	£ 30.80						
6		41	Kiwi	79	£ 0.30	£ 23.70						
7		90	Peach	103	£ 0.25	£ 25.75						
8		62	Strawberry	71	£ 1.10	£ 78.10						
9		13	Pear	88	£ 0.50	£ 44.00						
10		18	Blackberry	39	£ 1.00	£ 39.00						
11		55	Pineapple	21	£ 1.00	£ 21.00						
12												

Solution

The table that the VLOOKUP function uses to look for and return information from is known as the *table_array*. This will need to be referenced absolutely to copy your VLOOKUP.

Click on the references within the formula and press the F4 key on the keyboard to change the reference from relative to absolute. The formula should be entered as `=VLOOKUP(H3,B3:F11,4,FALSE)`.

In this example both the *lookup_value* and *table_array* references were made absolute. Typically it may be just the *table_array* that needs locking.

A Column Has Been Inserted

The column index number, or *col_index_num*, is used by the VLOOKUP function to enter what information to return about a record.

Because this is entered as an index number, it is not very durable. If a new column is inserted into the table, it could stop your VLOOKUP from working. The image below shows such a scenario.

`=VLOOKUP(I3,B3:G11,3,FALSE)`

	A	B	C	D	E	F	G	H	I	J
1										
2		ID	Fruit		Quantity	Price	Value		ID	Quantity
3		23	Banana		50	£ 0.30	£ 15.00		41	0
4		34	Apple		23	£ 0.40	£ 9.20			
5		67	Pomegranate		44	£ 0.70	£ 30.80			
6		41	Kiwi		79	£ 0.30	£ 23.70			
7		90	Peach		103	£ 0.25	£ 25.75			
8		62	Strawberry		71	£ 1.10	£ 78.10			
9		13	Pear		88	£ 0.50	£ 44.00			
10		18	Blackberry		39	£ 1.00	£ 39.00			
11		55	Pineapple		21	£ 1.00	£ 21.00			

The quantity was in column 3, but after a new column was inserted it became column 4. However the VLOOKUP has not automatically updated.

Solution 1

One solution might be to protect the worksheet so that users cannot insert columns. If users will need to be able to do this, then it is not a viable solution.

Solution 2

Another option would be to insert the MATCH function into the *col_index_num* argument of VLOOKUP.

The **MATCH** function can be used to look for and return the required column number. This makes the *col_index_num* dynamic so inserted columns will no longer affect the VLOOKUP.

The formula below could be entered in this ex Ultimate Suite for Excel Professionals

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above.

=VLOOKUP(I3,B3:G11,MATCH(J2,B2:G2,0),FALSE)

The Table has got Bigger

As more rows are added to the table, the VLOOKUP may need to be updated to ensure that these extra rows are included. The image below shows a VLOOKUP that does not check the entire table for the item of fruit.

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		ID	Fruit	Quantity	Price	Value		ID	Fruit			
3		23	Banana	50	£ 0.30	£ 15.00		77	=VLOOKUP(H3,B3:F11,2,FALSE)			
4		34	Apple	23	£ 0.40	£ 9.20						
5		67	Pomegranate	44	£ 0.70	£ 30.80						
6		41	Kiwi	79	£ 0.30	£ 23.70						
7		90	Peach	103	£ 0.25	£ 25.75						
8		62	Strawberry	71	£ 1.10	£ 78.10						
9		13	Pear	88	£ 0.50	£ 44.00						
10		18	Blackberry	39	£ 1.00	£ 39.00						
11		55	Pineapple	21	£ 1.00	£ 21.00						
12		77	Grapes	44	£ 1.20	£ 52.80						
13		93	Plum	71	£ 0.60	£ 42.60						

Solution

Consider formatting the range as a table (Excel 2007+), or as a dynamic range name. These techniques will ensure that your VLOOKUP function will always be checking the entire table.

To format the range as a table, select the range of cells you want to use for the *table_array* and click **Home > Format as Table** and select a style from the gallery. Click the **Design** tab under Table Tools and change the table name in the box provided.

The VLOOKUP below shows a table named *FruitList* being used.

	A	B	C	D	E	F	G	H	I	J	K
1											
2		ID	Fruit	Quantity	Price	Value		ID	Fruit		
3		23	Banana	50	£ 0.30	£ 15.00		77	=VLOOKUP(H3,FruitList,2,FALSE)		
4		34	Apple	23	£ 0.40	£ 9.20					
5		67	Pomegranate	44	£ 0.70	£ 30.80					
6		41	Kiwi	79	£ 0.30	£ 23.70					
7		90	Peach	103	£ 0.25	£ 25.75					
8		62	Strawberry	71	£ 1.10	£ 78.10					
9		13	Pear	88	£ 0.50	£ 44.00					
10		18	Blackberry	39	£ 1.00	£ 39.00					
11		55	Pineapple	21	£ 1.00	£ 21.00					
12		77	Grapes	44	£ 1.20	£ 52.80					
13		93	Plum	71	£ 0.60	£ 42.60					
14											

VLOOKUP Cannot Look to its Left

A limitation of the VLOOKUP function is that it cannot look to its left. It will look down the leftmost column of a table and return information from the right.

Solution

The solution to this involves not using VLOOKUP at all. Using a combination of the INDEX and MATCH functions of Excel is a common alternative to VLOOKUP. It is far more versatile.

The example below shows it being used to return information to the left of the column you are looking in.

[Learn more about using INDEX and MATCH](#)

=INDEX(B3:B13,MATCH(H3,C3:C13,0))

	A	B	C	D	E	F	G	H	I
1									
2		Fruit	ID	Quantity	Price	Value		ID	Fruit
3		Banana	23	50	£ 0.30	£ 15.00		62	Strawberry
4		Apple	34	23	£ 0.40	£ 9.20			
5		Pomegranate	67	44	£ 0.70	£ 30.80			
6		Kiwi	41	79	£ 0.30	£ 23.70			
7		Peach	90	103	£ 0.25	£ 25.75			
8		Strawberry	62	71	£ 1.10	£ 78.10			
9		Pear	13	88	£ 0.50	£ 44.00			
10		Blackberry	18	39	£ 1.00	£ 39.00			
11		Pineapple	55	21	£ 1.00	£ 21.00			
12		Grapes	77	44	£ 1.20	£ 52.80			
13		Plum	93	45	£ 0.60	£ 27.00			

Your Table Contains Duplicates

The VLOOKUP function can only return one record. It will return the first record that matches the value you looked for.

If your table contains duplicates then VLOOKUP will not be up to the task.

Solution 1

Should your list have duplicates? If not consider removing them. A quick way to do this is to select the table and click the **Removes Duplicates** button on the **Data** tab.

Check out the [AbleBits Duplicate Remover](#) for a more complete tool for handling duplicates in your Excel tables.

Solution 2

Ok, so your list should have duplicates. In this case a VLOOKUP is not what you need. A PivotTable would be perfect to select a value and list the results instead.

The table below is a list of orders. Let's say you want to return all the orders for a particular fruit.

Order ID	Fruit	ID	Quantity	Price	Value
113	Banana	23	50	£ 0.30	£ 15.00
114	Apple	34	23	£ 0.40	£ 9.20
115	Banana	23	44	£ 0.70	£ 30.80
116	Kiwi	41	79	£ 0.30	£ 23.70
117	Peach	90	103	£ 0.25	£ 25.75
118	Banana	23	71	£ 1.10	£ 78.10
119	Pear	13	88	£ 0.50	£ 44.00
120	Apple	34	39	£ 1.00	£ 39.00
121	Pear	13	21	£ 1.00	£ 21.00
122	Banana	23	44	£ 1.20	£ 52.80
123	Kiwi	41	45	£ 0.60	£ 27.00

A PivotTable has been used to enable a user to select a Fruit ID from the report filter and a list of all the orders appears.

	A	B	C	D	E	F	G
1	ID	23					
2							
3	Fruit	Order ID	Sum of Value				
4	Banana	113	£15.00				
5		115	£30.80				
6		118	£78.10				
7		122	£52.80				
8	Grand Total		£176.70				
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							

PivotTable Field List

Choose fields to add to report:

- Order ID
- Fruit
- ID
- Quantity
- Price
- Value

Drag fields between areas below:

Report Filter: Column Labels:

Row Labels: Values:

Defer Layout Update: Update

Trouble Free VLOOKUPS

This article demonstrated a solution to the 6 most common reasons a VLOOKUP function is not working. Armed with this information you should enjoy a less troublesome future with this awesome Excel function.


About the Author

Alan Murray is an IT Trainer and the founder of [Computergaga](#). He offers online training and the latest tips and tricks in Excel, Word, PowerPoint and Project.

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24 Responses to "6 Reasons Why Your VLOOKUP is Not Working"

1  *Sripathi Uday Kumar* says:
August 12, 2014 at 10:05 am


Thank you, it was helpful.

Reply

2  *Daniel* says:
October 23, 2014 at 10:06 am


The trapfall of VLOOKUP being not able to "look to right" wasn't known to me before. Very helpful!

Reply

3  *shahram* says:
November 10, 2014 at 7:17 pm


Thank you, it was helpful.

Reply

4  *anil says:*
December 2, 2014 at 4:25 am


when we using vlookup it is show is same number in all colons

Reply

5  *Dan says:*
January 9, 2015 at 10:18 am

Sometimes the error may be because it has not calculated properly. If you have calculation set to manual rather than automatic, this can also cause an error when using vlookup or index match. Once the worksheet calculation is set to automatic, it works again (set it to automatic by going to the Formulas tab and then Calculation Operations and set to Automatic).


Reply

 *Joe says:*
February 10, 2015 at 2:26 pm

Dan,

THANK YOU!!! Hours wasted, but many more hours saved. The Automatic setting in Calculation Operations did it. Karma credits in the heapful submitted your way.

Reply


 *Preeti says:*
June 4, 2015 at 8:08 am

Thank u Dan.

I was trying to copy formula and wasted hours. ur just one line comment solved my problem in a tick


:)

Reply

6  *Silvina says:*
January 14, 2015 at 11:12 am


Thanks a lot! very helpful :)

Reply

7  *Oskar says:*
January 26, 2015 at 1:01 am

thanks a lot for this information

Reply


8  *Brian says:*
April 7, 2015 at 4:27 pm

Hopefully someone can help me. My vlookup is returning the correct values in my columns but it returns the same value until it comes across another non-zero value. For example the correct value of row 10 is 259 but it will return 259 for rows 11, 12, and 13. Row 14 will correctly show 864 but then rows 15 and 16 will too.

Has anyone come across this?


thanks,

Reply

9  *Alan Murray says:*
April 8, 2015 at 10:48 am


Hard to say why without seeing the spreadsheet but would expect there to be an error in the lookup value argument. I would check the reference.

Reply

10  *Ahmed says:*
May 18, 2015 at 8:35 am

thank you

Reply

- 11  *Andy says:*
May 25, 2015 at 3:44 am


Hi Don,

Having calculation set from manual to automatic is very helpful. Save lots of time.

Thank you very much.


Andy

Reply

- 12  *Tu N says:*
June 17, 2015 at 8:56 pm

Thank you, thank you, thank you for the manual - automatic guide.

Reply

- 13  *K.Mahedner reddy says:*
July 20, 2015 at 9:49 pm


can any help me put

i had a sheet of name of the employs and their working hours, here the problem is in my sheet i had two names similar...(EX: mahesh as two time in the sheet)

when i use vlookup in the table for my sheet i am not getting the second name

how can i get the second name in the sheet.....by using vlookup


Reply

- 14  *Alan Murray says:*
July 21, 2015 at 7:18 am

VLOOKUP won't be able to. It will only return the first name from the sheet.


You will need more than 1 VLOOKUP. Or a macro would be needed for multiple occurrences of a name.

Reply

- 15  *Harshad says:*
July 23, 2015 at 6:01 am


Thanks for sharing. I had some hidden columns so my VLOOKUP was not working! Fixed it after reading Point 3. on your list.

Reply

- 16  *Kate says:*
August 5, 2015 at 4:24 pm


i am doing a very simple lookup and I am getting the #n/a. Trying to pull a number into my master. The first column on both is my ref. the formula is =vlookup(A2,PLANC,2,false). Very very simple. I checked to make sure there was a match and there was and no duplicates were found. Help!

Reply

- 17  *Alan Murray says:*
August 5, 2015 at 8:49 pm

Hard to say exactly without seeing the file. Check that there is definitely a match, so no spaces after the number. And also check the formatting of both the lookup_value and on the table_array to check they are the same.

Reply

- 18  *Mark W says:*
August 10, 2015 at 9:34 pm

I am trying to write a VLookup formula to bring on hand data into a sheet that details sales volume. My formula is:: =VLOOKUP(A2,AA\$2 Ultimate Suite for Excel Professionals

Item B1007080SHF3MDO2BS***GG is not present on the target range; Item B1007080SHF3MDO2BSR***GG is there, with a required response value of 409.

When I apply the VLookup to both fields, I get the value of 409 for BOTH, so the 'exact value' part of the formula does not seem to be working. I have both lists sorted A-Z. It does not seem to matter if I format both columns as text or numbers, same issue (the full data set column does have values that are numbers only & alpha-numeric in both the search criteria and the target range).

Reply



Alan Murray says:

August 11, 2015 at 7:34 am

It looks like the VLOOKUP is using the ** characters as a wildcard.

Reply

19



Mark W says:

August 11, 2015 at 1:23 pm

That might be. My ERP system only allows * as special characters so all my item number data exports have * in them. Do you know of a way to prevent this?

Reply

20



Alan Murray says:

August 11, 2015 at 1:54 pm

You might be able to concatenate a string. Wrap the * in "" to indicate that you want to refer to that character literally and not as a wildcard.

Otherwise you might be able to use the EXACT function with INDEX and MATCH instead of VLOOKUP. Information on this can be found below.

http://www.computergaga.com/tips/lookup_formulas/case_sensitive_lookup.html

I have not tested this, but think it should work. This function does what its name suggests and ensure the strings match.

Reply

21



Belinda says:

August 31, 2015 at 6:18 pm

Watched the YouTube video and it was brilliant instruction!

Saved me loads of time and frustration.

Thanks so much.

Reply

Post a comment

Name

E-mail (not published)

Send

Unfortunately, due to the volume of comments received we cannot guarantee that we will be able to give you a timely response. When posting a question, please be very clear and concise. We thank you for understanding!

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