# Title

> **graph twoway pcarrowi —** Twoway pcarrow with immediate arguments

## Description

pcarrowi is an immediate version of twoway pcarrow; see [U] **19 Immediate commands** and [G-2] **graph twoway pcarrow**. pcarrowi is intended for programmer use but can be useful interactively.

## Quick start

Directional arrow plot from $(5, 1)$ to $(4, 7)$

```
twoway pcarrowi 1 5 7 4
```

Overlay arrow plot on a scatterplot of observed values of x and y

```
twoway scatter y x || pcarrowi 36 22 40 21
```

Same as above, labeling the arrow "My label" at 2 o'clock

```
twoway scatter y x || pcarrowi 36 22 40 21 (2) "My label"
```

Same as above, but specify a large font for the label and place label near the arrowhead

```
twoway scatter y x || pcarrowi 36 22 40 21 (2) "My label", ///
    mlabsize(large) headlabel
```

Specify a large arrowhead and a medium-small barb size

```
twoway pcarrowi 36 22 40 21, msize(large) barbsize(medsmall)
```

## Menu

Graphics > Twoway graph (scatter, line, etc.)

## Syntax

> <u>tw</u>oway pcarrowi *immediate_values* $\left[\, , \right.$ *options* $\left.\right]$

where *immediate_values* is one or more of

> $\#_{y1}$ $\#_{x1}$ $\#_{y2}$ $\#_{x2}$ $\left[\, (\#_{\text{clockposstyle}}) \right]$ $\left[\, \text{"}\textit{text for label}\text{"} \right]$

See [G-4] *clockposstyle* for a description of $\#_{\text{clockposstyle}}$.

## Options

*options* are as defined in [G-2] **graph twoway pcarrow**, with the following modifications:

If "*text for label*" is specified among any of the immediate arguments, option mlabel() is assumed.

If ($\#_{\text{clockposstyle}}$) is specified among any of the immediate arguments, option mlabvposition() is assumed.

## Remarks and examples                                                     stata.com

Immediate commands are commands that obtain data from numbers typed as arguments. Typing

```
. twoway pcarrowi 1.1 1.2 1.3 1.4  2.1 2.2 2.3 2.4, any_options
```

produces the same graph as typing

```
. clear
. input y1 x1 y2 x2
        y1          x1          y2          x2
  1. 1.1 1.2 1.3 1.4
  2. 2.1 2.2 2.3 2.4
  3. end
. twoway pcarrowi y x, any·options
```

twoway pcarrowi does not modify the data in memory.

pcarrowi is intended for programmer use but can be used interactively. In *Basic use* of [G-2] **graph twoway pcarrow**, we drew some simple clock hands from data that we input. We can draw the same graph by using pcarrowi.

```
. twoway pcarrowi 0  0  0  1  0  0  1  0
```
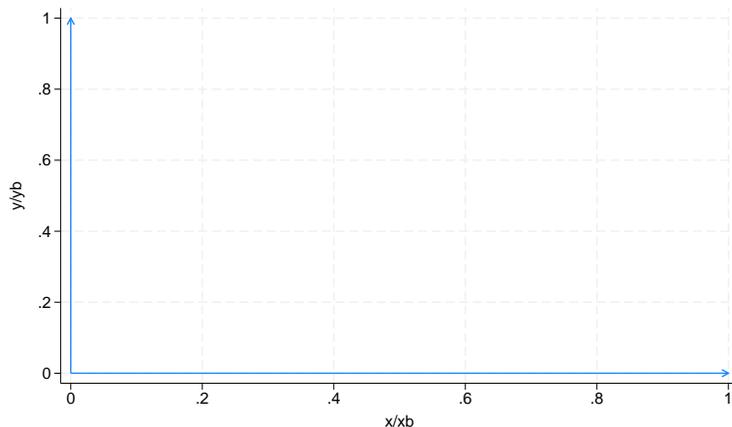


We can also draw the annotated second example,

```
. twoway pcarrowi 0  0  0  1  (3) "3 o'clock"
                  0  0  1  0 (12) "12 o'clock",
                  aspect(1) headlabel plotregion(margin(vlarge))
```
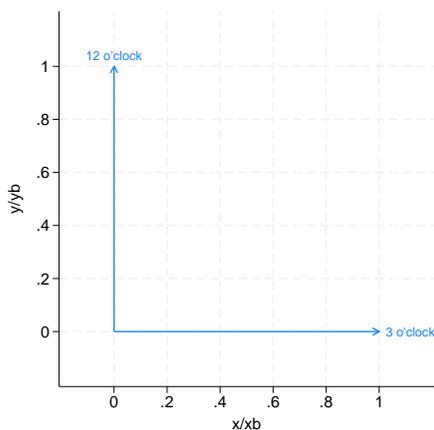


As another example, in [G-3] *added_text_options*, we demonstrated the use of option text() to add text to a graph:

```
. twoway qfitci  mpg weight, stdf ||
         scatter mpg weight, ms(O)
                 text(41 2040 "VW Diesel", place(e))
                 text(28 3260 "Plymouth Arrow", place(e))
                 text(35 2050 "Datsun 210 and Subaru", place(e))
```

Below we use pcarrowi to obtain similar results:

```
. twoway qfitci  mpg weight, stdf ||
         scatter mpg weight, ms(O) ||
         pcarrowi 41 2200 41 2060 (3) "VW Diesel"
                  28 3460 28 3280 (3) "Plymouth Arrow"
                  35 2250 35 2070 (3) "Datsun 210 and Subaru",
                  legend(order(1 2 3))
```
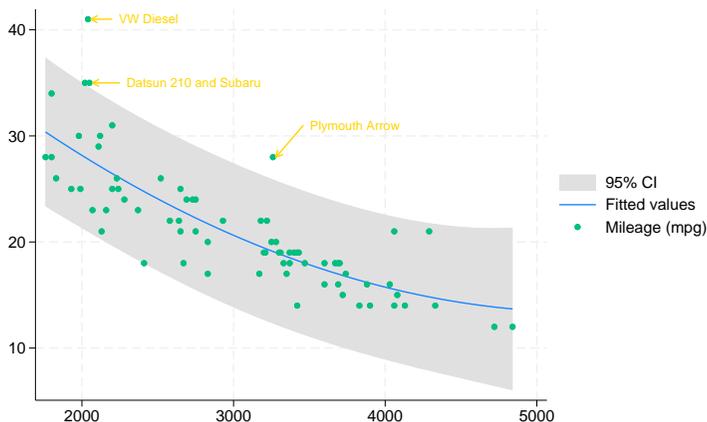


## Also see

[G-2] **graph twoway** — Twoway graphs

[G-2] **graph twoway pcarrow** — Paired-coordinate plot with arrows

[G-2] **graph twoway scatteri** — Scatter with immediate arguments

[U] **19 Immediate commands**