

FlipGroup()

Rotates a group of atoms and bonds 180° about an axis. The bond that connects the group to another structure defines this axis.

Syntax (see Format for syntax statements)

```
Collections    bool = coll.FlipGroup();  
              // coll contains the crossing bond that connects the group to the rest  
              of the molecule, and at least one atom from the group you want to flip.  
              Figure 2 illustrates a crossing bond.
```

Returns

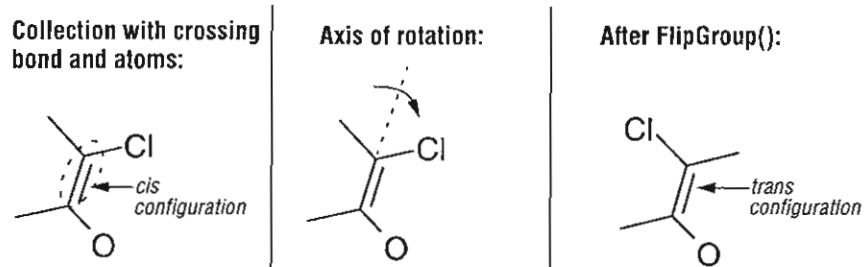
Boolean Returns TRUE if successful, otherwise returns FALSE.

Description

Turns a group of atoms and bonds 180° about an axis. The bond (the *crossing bond*) that connects the group to another structure defines this axis. Figure 2 illustrates a crossing bond.

In `coll.FlipGroup()`, `coll` contains the crossing bond and at least one atom that is in the group of atoms that you want to turn. Figure 2 illustrates how `FlipGroup()` operates with a sample molecule.

Figure 2 Sample molecule and FlipGroup()



When `FlipGroup()` turns a group of atoms and bonds, it maintains all stereoconfiguration for those particular atoms and bonds. For example, if you flip a group that contains wedge bonds, up bonds become down bonds, down bonds become up bonds, and either bonds remain either bonds.

You should only use `FlipGroup()` with two-dimensional structures. If you use `FlipGroup()` with a three-dimensional structures, it does not flip the group and returns `FALSE`.

Note: In Cheshire Standard, you can use `FlipGroup()` to adjust items in the root member only. In Cheshire Advanced, you can use `FlipGroup()` to adjust items in any member (the *root member* or an *Rgroup member*.)

Example

This script illustrates how `FlipGroup()` operates on a molecule. You can use this script with a molecule such as the one in Figure 2.

```
function flipGroupEx() {  
  // creates collection with the crossing bond  
  crossing_bond=Find(B_CONFIG, B_CONFIG_Z).Find(B_PTPOLOGY,  
  B_PTPOLOGY_CHAIN);  
  // create collection with crossing bond and atom  
  bond_atom=crossing_bond.ToAtoms().FirstAtom() | crossing_bond;  
  // flips the structure  
  bond_atom.FlipGroup();  
}
```

See also

`Orient()`, `Rotate()` - for 2D, `Rotate()` - for 3D, `RotateGroup()`,
`Translate()`