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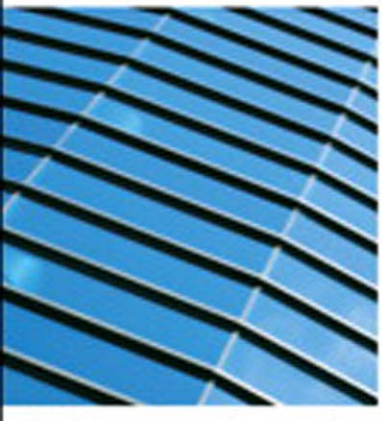
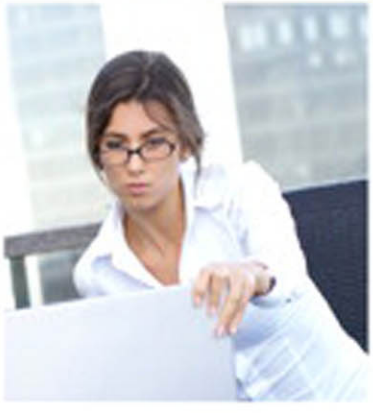


STYLE GUIDE

FOR BUSINESS AND TECHNICAL COMMUNICATION

Tools for Highly Effective Communication™

FIFTH EDITION



FranklinCovey

Style Guide™

FOR BUSINESS AND TECHNICAL COMMUNICATION

FIFTH EDITION

Hyphens

Hyphenation is one of the trickier aspects of English. There are many rules of hyphenation—including some that apply only in limited circumstances—and all of the rules have exceptions. Below are the most common conventions of hyphen usage. For further discussions of hyphenation, refer to *The Chicago Manual of Style*, *The Gregg Reference Manual*, or the *United States Government Printing Office Style Manual*. See References.

Fundamentally, hyphens show a connection. Typically, the connection is between two words or occasionally between a prefix and a word. The connected words (known as compounds) can function as nouns, verbs, or adjectives:

Connected words as nouns

brother-in-law
ex-mayor
follow-up
foot-pound
know-how
run-through
self-consciousness
two-thirds

Connected words as verbs

to blue-pencil
to double-space
to spot-check
to tape-record

Connected words as adjectives

all-around person
black-and-white print
coarse-grained wood
decision-making authority
high-grade ore
high-pressure lines
interest-bearing notes
little-known program
long-range plans
low-lying plains
matter-of-fact approach
off-the-record comment
old-fashioned system
part-time employees
30-fold increase
three-fourths majority
twenty-odd inspections
up-to-date methods
well-known researcher
high-level edit

Hyphens

1. Hyphenate two or more words that act together to create a new meaning.
2. Hyphenate two or more words that act together to modify another word.
3. Do **not** hyphenate connected words that function as adjectives if they occur **after** the word they modify.
4. Hyphenate compound numbers from twenty-one to ninety-nine and compound adjectives with a numerical first part.
5. Do **not** hyphenate connected words that act as adjectives if the first word ends in *-ly*.
6. Avoid using hyphens with most prefixes.
7. Hyphenate words that must be divided at the end of a line.

Unfortunately, not all connected (or compound) nouns, verbs, and adjectives require hyphens. Here are a few of the exceptions:

Connected but unhyphenated nouns

ball of fire
breakdown
fellow employee
goodwill
problem solving
quasi contract
takeoff
trademark
trade name

Connected but unhyphenated verbs

to downgrade
to handpick
to highlight
to proofread
to waterproof

Connected but unhyphenated adjectives

barely known researcher
bright red building
crossbred plants
halfhearted attempts
highly complex task
10 percent increase
twofold increase
unselfconscious person
worldwide problem

As the above examples illustrate, connected words have three possible forms. They can appear as two separate words (*highly motivated*), as one word formed by connecting the two original words with a hyphen (*high-pressure*), and as one word formed by joining the original two words (*highbrow*). See Compound Words.

1. Hyphenate two or more words that act together to create a new meaning:

a counterflow plate-fin
the V-space between units
the F-22A airplane
one-half of the annular ring
to double-check the tests

This rule indicates a potential use of the hyphen, not a mandatory one. In some instances the two words become a single word, without a hyphen: *highlight, bumblebee, barrelhead*. In other instances, the two words remain separate: *base line, any one* (one item from a group), *amino acid*. The words sometimes remain separate because combining them would produce strange-looking forms: a*minoacid, beautyshop, breakfastroom*. Because the presence or absence of a hyphen is often a matter of convention, check a current dictionary if you are not sure how the compound word should be written. See Capitals for the proper capitalization of hyphenated words in titles.

2. Hyphenate two or more words that act together to modify another word:

brazed-and-welded construction
cross-counterflow unit
engine-to-recuperator mountings
full-scale testing
no-flow heat exchanger
pressure-drop decrease
3-year, multimillion-dollar program
12-foot-wide embayment
up-to-scale modeling
U-tube arrangement
well-documented success

This rule applies only when the connected or compound modifier occurs **before** the word it modifies. See rule 3 below.

3. Do *not* hyphenate connected words that function as adjectives if they occur *after* the word they modify:

The boiler was brazed and welded.
The compartment is 32 feet wide.
The program is well documented.

but

The brazed-and-welded boiler
The 32-foot-wide compartment
The well-documented program

NOTE: An exception to this rule is the use of a hyphen after a verb when the connected words have an inverted order:

They were sun-bathing. (*or* a bathe in the sun)
That transaction was tax-exempt. (*or* exempt from tax)
They were on a fire-watch. (*or* a watch for fire)

4. Hyphenate compound numbers from twenty-one to ninety-nine and compound adjectives with a numerical first part:

thirty-four
eighty-one
five-volume proposal
13-phase plan
24-inch tape
500-amp circuit
4- or 5-year audit cycle

but

22 percent fee

See COMPOUND WORDS and NUMBERS.

5. Do *not* hyphenate connected words that act as adjectives if the first word ends in *–ly*:

highly motivated engineer
poorly conceived design
vastly different approach
completely revised program

NOTE: The words ending in *–ly* are actually adverbs. The *–ly* form indicates the structure of the modifying phrase, so a hyphen is unnecessary.

6. Avoid using hyphens with most prefixes:

counterblow
midpoint
nonperson
progovernment
supercar
undersea

NOTE 1: Hyphens do appear when the prefix precedes a capitalized word:

un-American
mid-August

NOTE 2: Hyphens are sometimes necessary to prevent confusion: *re-treat* (to treat again) versus *retreat* or *un-ionized* versus *unionized*. If you are not sure whether a prefix requires a hyphen, refer to a current dictionary. See COMPOUND WORDS and REFERENCES.

7. Hyphenate words that must be divided at the end of a line.

Words are always divided between syllables, and hyphens should appear at the end of the line where the word division has occurred. Try not to end more than two consecutive lines with hyphens. Try not to divide at the end of the first line or at the end of the last full line in a paragraph. Do not divide the last word on a page.

Hyphens and Technical Terminology

The use of hyphens in technical expressions varies considerably. Technical writers often violate the rules of hyphenation when they believe that the technical expression will be clear:

We will need a high pressure hose.

In this sentence, *high* modifies *pressure*. The sentence refers to a hose that is capable of withstanding high pressures. It is not a pressure hose that happens to be high (off the ground). Yet if we followed the rules of hyphenation strictly, the sentence should be:

We will need a high-pressure hose.

Hyphens are often omitted in technical expressions because the context clarifies the expression. In many cases, however, missing hyphens can cause confusion or a complete lack of comprehension, as in this sentence from an aircraft maintenance manual:

Before removing the retaining pin, refer to the wing gear truck positioning actuator assembly schematic.

Nontechnical (or technical but unknowledgeable) readers can only guess which words are associated with which other words. Does *truck* link with *wing gear*, or does *truck* modify *positioning*? Hyphens would help clarify the modifier relationships:

wing-gear truck-positioning actuator assembly

Proper use of hyphens will not baffle knowledgeable technical readers, and it will help those readers who are not familiar with a technical expression. See ADJECTIVES.

Illustrations

Illustrations, diagrams, and drawings include a wide range of graphics whose purpose is to depict parts, functions, relation-ships, activities, and processes that would be difficult or impossible to describe in text.

Illustrations can help you visualize or conceptualize an idea or a discovery. Rather than merely talk about an idea, try sketching it. A sketch, no matter how rough, can be a valuable tool for you and for others who may be trying to visualize what you are thinking.

The many sketches in Leonardo da Vinci's notebooks are outstanding examples of how illustrations can help in the visualization of concepts. In his notebooks, da Vinci (1452–1519) sketched many images from nature, such as the components of a bird's wing or the muscles in a human arm. Then he used these images to visualize (conceptualize) machines and tools that used the same natural or physical principles.

Figure 1 is an example of a da Vinci sketch. In this instance, da Vinci conceived of a tank-like machine, whose base (in the left image) contained the wheels and gears for providing motion. The right image shows the base covered with a shielded top that would hold men and weapons. The combination of engineering details with the dust clouds suggests rapid movement.

Illustrations

1. Use illustrations, diagrams, and drawings to visualize a system, process, or piece of equipment that would be difficult to describe in text.
2. Use symbols, icons, or other recognizable illustrations to convey messages to readers.
3. Use color to enhance your illustrations, symbols, icons, and logos.
4. Keep illustrations simple, and give each one a perspective that enables readers to understand it.
5. Label each illustration clearly and, if necessary, label the parts of the object shown.
6. In a series of illustrations, make the viewing angle consistent.
7. Ensure that all letters, numbers, and labels are horizontally oriented on the drawing or illustration.
8. If necessary for clarity, remove surrounding detail from illustrations.
9. Use line patterns in an illustration to show how different subsystems interact within a system.
10. If your drawing shows a process, structure the process from top to bottom and left to right.
11. Use special-purpose illustrations when necessary.

Producing good illustrations almost always requires a professional graphic artist. The following discussion does not address the art or mechanics of creating effective illustrations, diagrams, and drawings. Instead, it focuses on how writers should conceive of and use illustrations and what writers can do to assist graphic artists.

For further information on illustrations and graphics, see Graphics for Documents and Graphics for Presentations. See also Charts, Color, Graphs, Maps, Photographs, and Tables. Always include an informative caption for every illustration. See Captions.

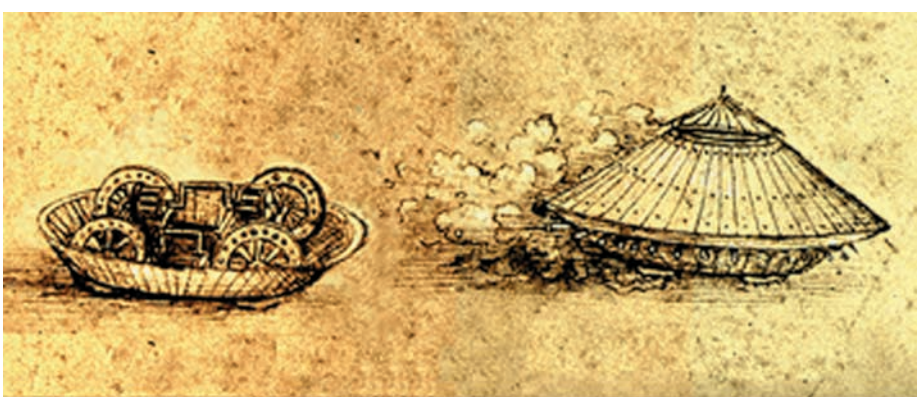

Figure 1. Leonardo da Vinci's Sketch of a Tank (Right Image) and Its Working Mechanisms (Left Image). *Although he lived in the fifteenth century, da Vinci's sketches foreshadowed mechanical or engineering discoveries that only appeared centuries later.*

1. Use illustrations, diagrams, and drawings to visualize a system, process, or piece of equipment that would be difficult to describe in text.

Illustrations are very effective at showing views of objects or systems that do not exist (a drawing of a proposed tool), that

are abstractions (organizational or functional systems), or that would be impossible to show otherwise (exploded views or cutaways).

Illustrations allow readers to see inside something that is sealed; to see opposite and hidden sides of an object simultaneously; and to see, in close-up, details that would otherwise not be visible. Exploded views like figure 2 allow you to see how components of an assembly fit together.

Like an orange sliced in half, a cutaway or cross section can show hidden detail. Figure 3 shows a cross section of the components of a virus particle. Although drawn to reflect the actual structure of the particle the illustration uses nonrealistic, contrasting colors to make the components more distinguishable. A cutaway can show the internal structure of a mechanism that is normally sealed (see figure 4).

Introduce illustrations in text before they appear. Number them and refer to them by figure number.

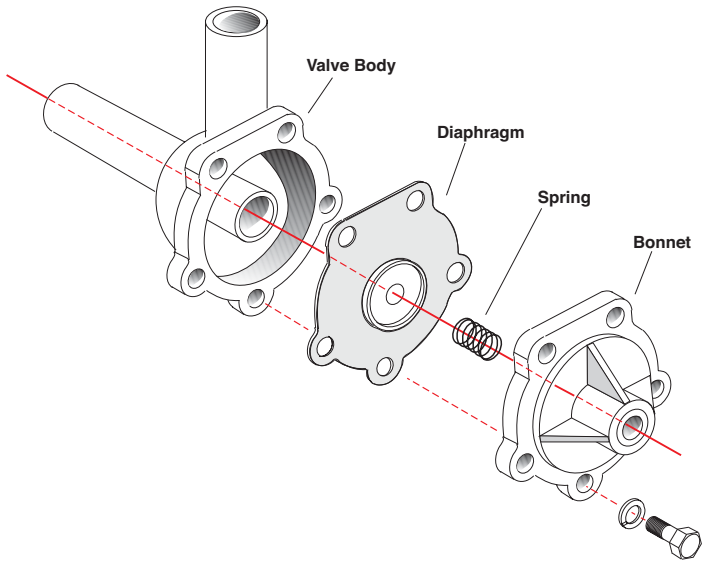

Figure 2. Spring-Actuated Diaphragm. *Remove the bonnet slowly to prevent losing small parts that are under spring compression.*

2. Use symbols, icons, or other recognizable illustrations to convey messages to readers.

Symbols and icons are increasingly valuable communication tools, especially within the international business and technical communities. Figure 5 is an illustration of two of the many symbols that have become international through use if not through governmental agreements. Such symbols usually have an associated color.

This rule contrasts with the suggestion in rule 1 that you use illustrations to conceptualize or visualize your ideas. Actually, as you conceptualize your document or your presentation, you may want to explore your options for using possible symbols or icons. Icons, especially those registered as corporate trademarks or corporate logos, are more and more sophisticated, often with branded colors. See the model documents at the end of the *Style Guide* for examples of various organizational logos. See Intellectual Property.

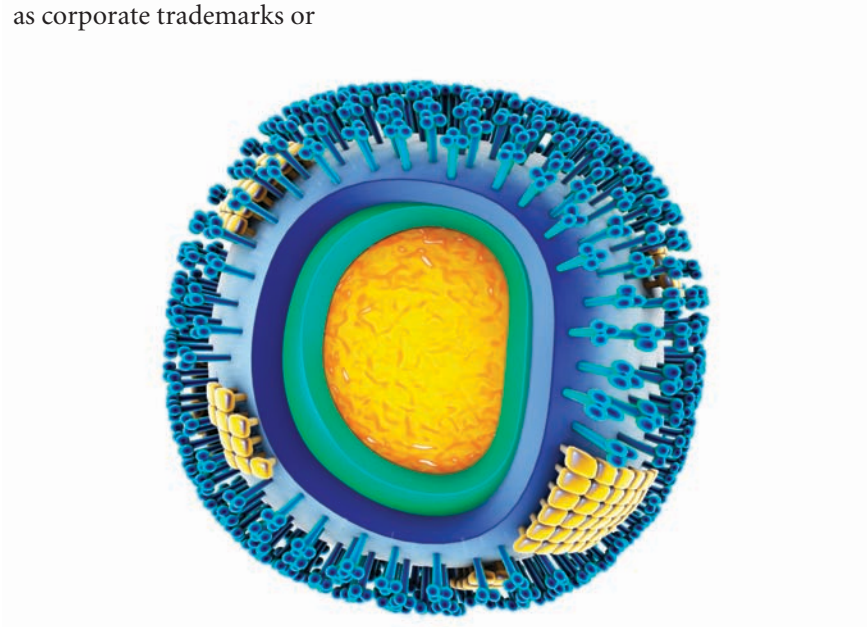

Figure 3. A Cross-Section View of a Virus Particle. *The genetic material (orange) is enclosed by a protein coat (green) and a lipid envelope (blue). The protein spikes on the envelope (blue and yellow) bind to the host cell.*

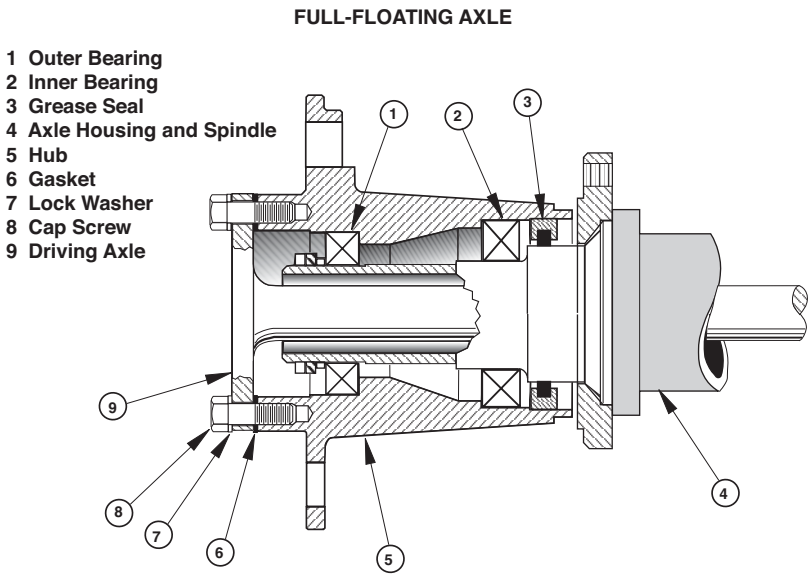

Figure 4. Full-Floating Axle. *Radial and axial thrust loads are carried by the spindle, leaving the driving axle free of all but torque loads.*

3. Use color to enhance your illustrations, symbols, icons, and logos.

Figures 1, 3, 5, 6, 9, and 11 illustrate various ways to use color in illustrations.

Sometimes, you may find that full color is not feasible, based on printing or production costs. An option is to work with two colors. Figure 6 is an example of an illustration using only shades of a single color to represent the different modular furniture. This illustration would be an attractive addition to a document that uses only black text. Of course, the blue-gray color could appear elsewhere in the text beyond this single graphic, most probably in the headings and subheadings or in marginal callouts.

If you decide not to use color, be sure to prepare your illustrations and to design your document so that your message will still be clear and appear professional. In illustrations, for example, you may need to use shading or design patterns instead of color to distinguish between different steps or components of machines.

Always preview sample pages (for documents) or slides (for presentations) to determine if your choice of colors reproduces effectively on paper or onscreen. See Color, Graphics for Documents, and Graphics for Presentations.

Figure 5. Standard Symbols. *Symbols such as the two shown are increasingly used in international communication.*

4. Keep illustrations simple, and give each one a perspective that enables readers to understand it.

Illustrations and drawings should be focused. That is, they should present a single concept. They should be clean and uncluttered. Everything not pertaining to the single concept should be eliminated. No detail

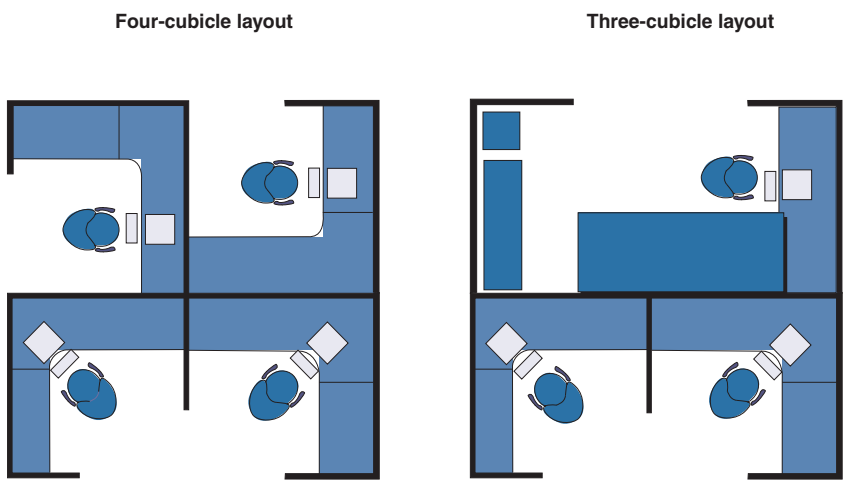

Figure 6. Two Layouts Within a Cubicle Arrangement. *The arrangements shown here, as seen from above, present only two of the many options available.*

should be present that does not contribute to the presentation of that single concept.

As well as being simple, a good illustration has a clear perspective. Illustrations allow you to distort reality, so you must ensure that readers understand the perspective from which the illustration presents its subject. Illustrations almost always show their subjects out of context. Therefore, you might need to establish what the reader is viewing and how that thing relates to other things in its real environment.

Size scales might be necessary if the size and relationship of the object depicted to other things in its environment are not clear. You can also use labels to indicate size, direction, orientation, and nomenclature. If you do not indicate size and distance relationships, readers might not be able to determine the correct proportions of the object shown or its correct orientation in the world outside the illustration or drawing.

5. Label each illustration clearly and, if necessary, label the parts of the object shown.

Figure 2 shows a typical nomenclature illustration. The valve body is shown as one unit because it is not the focus of the illustration. The diaphragm, spring, and bonnet are the reason this illustration exists, so each is labeled separately. Center lines drawn through the axis of each part show how the parts fit together.

Labeling of the significant parts of a drawing is crucial for reader comprehension. You may use word labels, lines, and arrows (figures 2 and 3), or you may use numbers, letters, or symbols in the drawing itself (figure 4) with an explanation block.

6. In a series of illustrations, make the viewing angle consistent.

If you are showing the same object in a series of illustrations, and the point of the series is to show assembly/disassembly steps or operational phases, ensure that readers see the object from the same perspective in each illustration. Changing the perspective is very confusing.

7. Ensure that all letters, numbers, and labels are horizontally oriented on the drawing or illustration.

The text appearing on any part of a drawing or illustration should never be vertically oriented unless the bases of the individual letters or numbers are horizontal, as in this example:

E
X
A
M
P
L
E

The lettering and numbering on an illustration should be oriented so that readers can read it without reorienting the illustration. If you run out of space, use arrows and move the labels away from the busy area of the illustration. If necessary, omit the labels and use letters, numbers, or symbols and an explanation block (see rule 5 above).

8. If necessary for clarity, remove surrounding detail from illustrations.

Figure 7 shows a schematic drawing or illustration in which surrounding but irrelevant detail has been removed. You often see this sort of illustration in subsystem pictorials. Removing the surrounding detail allows readers to focus on the system being shown. The drawing isolates its subject and therefore provides an excellent focus.

9. Use line patterns in an illustration to show how different subsystems interact within a system.

If you are showing how different subsystems fit together and function, you might need to use different line patterns, as in figure 8. The line patterns allow readers to isolate

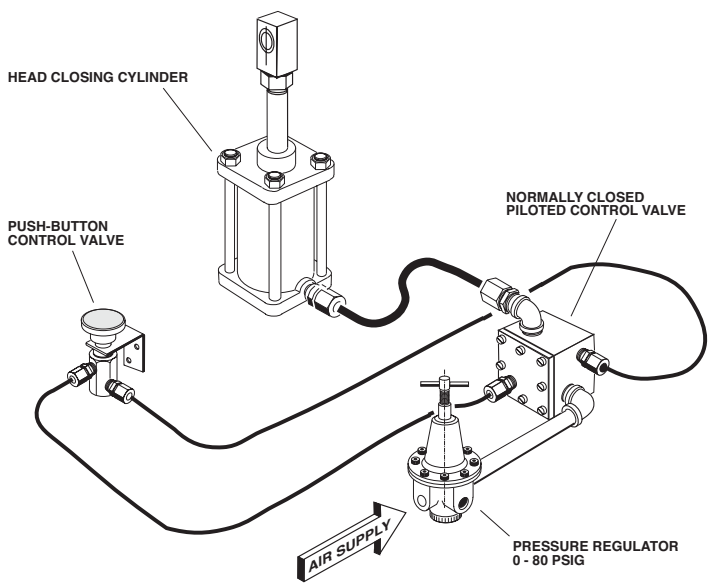

Figure 7. Pneumatic Operating and Control System. *By eliminating electrical controls, potential spark hazards are avoided, allowing operation in hazardous environments.*