General Bar Code Guidelines
Pep Boys has a commitment to increasing supply chain efficiency. Barcode scanning is a proven way to identify products at the item level. At the point of sale, bar codes provide a quicker more efficient checkout. Inventory is also tracked more accurately then in the past.

In the late 90's the Pep Boys bar code program expanded to include scanning at the point of receipt within our distribution centers. All Pep Boys vendors are required to apply ITF-14 Shipping Container Codes to all shipping containers that contain a multiple of the same product.

Pep Boys has adopted the GS1global standards. GS1 (Formally Uniform Code Council and EAN International) governs bar code standards worldwide.

The Pep Boys Bar Code Guidelines contain recommendations for compliant marking of retail items, and cases of products received at our distribution centers. Vendors are responsible for providing accurate and compliant bar code symbols on items and cartons. If quality problems arise, the vendor must resolve them quickly.

Your organization may wish to contact GS1 with any questions regarding bar code compliance, assignments or technology.

Bar Code Structures/Symbologies
All Bar Codes must contain both the bar-coded symbols and a Human Readable Interpretation beneath each symbol. The HRI is important because if the bar code is damaged or of poor quality the text is used as a back up.

Following is a list of the bar code structures/symbologies that are used at POS.

- The "UPC-A bar code" (GTIN-12)
  This is by far the most common and well-known symbology. A UPC-A bar code is the bar code you will find on virtually every consumer good on the shelves of your local store. It is usually called a "UPC bar code" or "UPC Symbol." This is not completely accurate since there are a number of other UPC formats.

  UPC-A encodes 11 digits of numeric (0 through 9) message data along with a trailing check digit, for a total of 12 digits of bar code data. An example of a typical UPC-A bar code is:
➢ Manufacturer Code:
The manufacturer code is a unique code assigned by the GS1 to each manufacturer or company that distributes goods that will include a UPC-A bar code. All products produced by a given company will use the same manufacturer code. Again, GS1 is in charge of assigning manufacturer codes. A company may not choose one randomly or without consulting with GS1 since this would result in multiple manufacturers using the same code.

➢ Universal Product Code (UPC E)
This bar code UPC-E is a variation of the UPC-A symbol that is used for number system 0. By suppressing zeroes, UPC-E codes can be printed in a very small space and used for labeling small items.
European Article Number (EAN-13/GTIN13)

An EAN is a 13-digit, all numeric code that will identify the consumer package. The code consists of a country/MFG prefix code, a product code and a MOD10 check digit.

A typical EAN-13 bar code looks something like this:

![EAN-13 Bar Code Diagram](image)

European Article Number (EAN-8/GTIN8)

EAN-8 is the EAN equivalent of UPC-E in the sense that it provides a "short" bar code for small packages. As can be seen in the following graphic, an EAN-8 bar code is shorter than an EAN-13 bar code, although somewhat longer than an UPC-E bar code.

![EAN-8 Bar Code Diagram](image)

Shipping Container Codes:

A Shipping Container Code is placed on all packages used to ship an item, including sleeves, over-packs, cases, pallets, etc. For example, a case of oil would contain both a retail bar code and a shipping container code, as the case is salable and shippable.
SCC-14/ITF-14 (Shipping Container Code) or EAN-14. The most common symbology for SCC-14 is the Interleaved 2of5 (I2of5). A SCC-14 (using I2of5) is 14-digits in length. It consists of a packaging indicator, a MFG prefix code, product code and a MOD10 check digit.
Bar Code Quality

Quality in the use of bar codes is achieved when the right code, in the right place, reads every time.

Every selling unit intended for retail sale should be marked with a UPC/EAN. All shipping units containing multiples of the same product that are not sold by the case should be marked with an ITF-14.

Never use the individual product barcode on the outside of a multipack.

Numbering
- **Manage Uniqueness** - A number should not be reused for at least 4 years after the last shipment to any retailer or distributor. All stock should be depleted before reusing a UPC, EAN or SCC.
- **Variants** - Every variant of the item is allocated a unique separate bar code. If a product is sold either by the piece or by the case, do not place the individual barcode on the outside of the case. The case barcode should be different and should be the only one on the outside of the case. Products changed or customized for seasonal promotions should carry a unique UPC.
- **Check Digit** - verify the Check Digit is a MOD10 check digit and calculated correctly.

Bar Coding
- **Color Scheme** – In order for a barcode symbol to be recognized by a scanner, there must be sufficient contrast. Scanners read bar codes by using a red light to recognize the contrast between the bars and spaces of the symbol. Colors that scan effectively need to be selected. Black bars against a white background are the safest choice, but other combinations will also work.
- **Size** – The nominal size of a UPC is 100% magnification factor or 1.469 inches wide (from the far left hand side number to the far right hand side number) by 1.02 inches tall (from the top of the bar code to the bottom of the human readable numbers).
- **Quiet Zone** – The quiet zone is vital to the bar-code label. This enables the scanner to identify the beginning and the end of the bar code. As a rule, the quiet zone should be ten times the dimension of the narrowest element in the bar code (X dimension) or 1/4 inch, whichever is greater. An undersize quiet zone may render a bar code unreadable, or readable only in one direction.
- **Light Margin** – A sufficient light margin area is essential. The light margin area should be free of any wordings, graphics, other markings or closures that may affect the reading of the symbol by...
the scanner. When using stickers, avoid printing the bar code too close to the edge of the label, or printing additional text or lines too close to the bar code.

Bar Code Symbol Placement
The location of your bar code is very important. Boxed goods should have the U.P.C. on the top or sides of the product. The symbol for carded items should be on the front or back. All bar codes (UPC, EAN, SCC-14) should be printed and placed in a vertical bar configuration (picket fence).

Placement of bar codes is independent of print technology and symbology employed.

Additional Pep Boys Policy Requirements
Pep Boys expects its vendor partners to provide accurate quality bar code information for all merchandise on the new item set-up sheet. Accurate bar code information should be reflective of appropriate part numbers, quantity, packaging etc.

This information must be entered into our item master in order for the bar code to scan.

- **Bar Codes** – All salable units of an item must be bar coded with either a UPC or an EAN. All items that are repacked must be bar coded with a SCC-14. If an item is both a salable unit and a repacked unit, it should contain both a UPC/EAN and a SCC-14.

- **Changes** – Any changes to an item, regarding bar codes or its associated attributes, (dimensions, manufacturer part number, weight, description, etc.) must be forwarded to the Pep Boys Merchant 30 days in advance of the effective date of the change.

- **Quality** – Quality bar code information reflects important traits such as print quality, bar code size, placement and other physical characteristics of a bar code and the human readable characters.

- **Audits** – The Pep Boys Bar Code Coordinator will perform periodic audits of bar codes for quality assurance purposes. Product lines will be randomly selected for quality assurance audits. The vendor partner will be evaluated on bar code accuracy, print quality, readability, size, placement of bar code and scannability. Pep Boys will inform you if you have persistent bar code problems.
Pep Boys Bar Code Receiving Requirements

All items received at Pep Boys must be bar coded.

- Salable items will be coded with a unique EAN or UPC (retail bar codes),
- Shipping units must contain a unique SCC, (ITF-14)
- An item that is both Salable and a Shipping Unit will contain both a retail bar code (EAN or UPC) and an SCC, both of which will be unique.

If an item(s) comes into a Pep Boys distribution center incorrectly bar coded, Pep Boys will have the option to either refuse the merchandise or return it to the vendor, freight collect, or allow the vendor 24 hours to provide the distribution center with the correct labels.

Non-Compliance Program

The Pep Boys non-compliance program is designed to improve merchandise flow and improve inventory accuracy throughout our collective supply chain. The program assesses penalties (charge backs) to vendors not complying with our standard receiving requirements, as the infraction caused an increase in manpower and administration expense and caused delays in supplying merchandise to our stores.

The overall goal of the program is to ensure each supplier understands the importance Pep Boys places upon these Bar Code Receiving Requirements. Compliance greatly increases the speed that our inventory in-transit moves between our Distribution Centers and Stores.

Infractions or charge backs will be incurred anytime a Bar Code Receiving Requirement is violated. Please refer to the Pep Boy’s Supplier Compliance Portal document for information about Non-Compliance Penalties.
FAQ’S

How do I get a barcode number for my product?

The way to obtain a barcode is to register with GS1 (the Uniform Code Council). Once you have registered, you will be supplied with a unique EAN.UCC Company prefix that allows you to build barcodes. To register visit their website, and fill out their online application. The entire process will take about five business days.

Which portion of my U.P.C. (GTIN) is my company prefix?

A U.P.C. (called a GTIN) is 12 digits long. It starts with your U.P.C. Company Prefix and ends with a check digit. The numbers between these two are referred to as item reference numbers that you will assign to your products. U.P.C. Company Prefix length determines how many U.P.C Barcodes you can create.

I ran out of barcodes. Why can’t I add more barcode (GTIN) capacity to my current prefix?

Each company prefix comes with a set number of barcodes that are based on the number of digits left in the 12-digit UPC once the UPC Company Prefix and check digit are accounted for. If you need more, you must license another company prefix.

What is a Shipping Container Code?

The Shipping Container Code is a 14-digit barcode placed on the outside of your shipping carton or pallet. The SCC-14 allows us to scan your shipment of multiple units as it comes into their warehouse. This barcode is used in the warehouses and referred to by a number of names, including SCC-14, GTIN-14, ITF-14, Shipping Container Code, Master Carton Code, and others.

If my product has a pack quantity of “1”, do I need to use an SCC?

No. For items with a pack of one, the product UPC will be accepted in place of the SCC-14. When the shipping carton has a pack of one, and then only the UPC will be expected.

Where should the ITF-14 be placed on the carton?

We prefer the ITF-14 label be printed on or applied to at least two sides of the carton. The main facing and side facing.
Further Information
If you need further information from Pep Boys, please contact our Bar-Code Coordinator

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