

Ruben Atia sent the offer  
12:11 AM PST, 5 Mar 2018  
4 Articles

# 1 freightliner columbia parts

# 2 freightliner classic xl chrome parts - find popular chrome parts , write about average cost, different manufactures ? pros and cons of one of another. get creative :)

# 3 freightliner century parts - includes dash parts keyword and freightliner century headlights as top parts

#4 international dt466 parts

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We are looking for 1000 words page . The page needs to discuss the different truck parts for different truck models. We would like an intro about the model. Then could discuss the most common / most popular parts for that model. Each part would have a short description. Include average cost of such part. Perhaps, discuss the average life of each part.

Simple Example:

<https://truckparts2go.com/medium-duty-truck-parts/isuzu-npr-parts/>

Please provide a price per page. We have at least 20 pages for you to do. Must have good readability as checked by yoast plugin and no grammar mistakes.

**# 1 freightliner columbia parts**

# Freightliner Columbia 120

Freightliner Columbia is a Class 8 Heavy Duty conventional semi-truck, produced by the American manufacturer Freightliner. They are available in a variety of configurations—including: Day-cab, Mid-cab, and Sleeper-berth. They have an aerodynamic sloped hood.

When the Columbia Class was introduced in 2002, it was designed as a fleet truck.

Columbia is primarily used for long distant transportation of freight in trailers.

## Top Four Freightliner Columbia Parts

Every Freightliner truck arrives from the factory ready to work. This page presents the top four parts that every Columbia Driver should consider adding to their truck—to personalize their truck, and make their driving experience more pleasant.

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### Freightliner Columbia Auxiliary Power Unit (APU)

An APU is a small diesel generator attached to the frame of the truck. It generates DC power and AC power for use in the cab of the truck, and auxiliary systems in the truck's engine. Some APUs have air conditioners—to allow for comfortable cab temperatures for the driver, while resting or sleeping.

An APU can be used to power a block heater, to allow the truck's main engine to be easily started, even on the coldest mornings.

APUs usually have their own cooling, heating, and electrical systems—but some APUs are fully integrated into a truck's systems.

Some models can run for eight hours on 1 gallon of diesel.

DC Power	60 Amps @ 12 VDC
AC Power	5,000 Watts @ 110/120 VAC

APUs generally weigh less than 500 pounds. (Or less than 400 pounds, for systems without air conditioning).

Cost: An APU will cost between \$9,000 and \$12,000 (uninstalled).

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## Freightliner Columbia Inverter

Inverters convert the 12 volts direct current (VDC) of the truck's battery into 110 volts alternating current (VAC) used by most domestic appliances. They allow normal appliances to be run in your truck, without having the engine (or APU) running.

Their appeal can be summed up in two words: "convenience and economy":

**Convenience:** Anti-idling laws make it illegal (in certain parts of The United States) to idle a truck engine for hours. An invert allows you to run electrical equipment (such as computer, entertainment system, or cooking appliances), without idling the truck's engine or running an APU.

**Economy:** 110 VAC domestic equipment is easier to obtain than their 12 VDC counterparts. 12 VDC equipment is usually only available in speciality stores (which can be expensive), and is generally less powerful than 110 VAC equipment.

Most inverters are built with a low-voltage disconnect (LVD) set at 12.2 volts; so you don't run the truck's battery voltage down so low, that you can't get the truck's engine restarted.

A typical 1800 watt converter will run almost any device that a driver would install in their truck, but not necessarily at the same time. You can run a 16" LCD TV **and** charge you phone **and** make a cup of coffee at the same time—but a microwave oven takes all the power that the inverter can convert. If you want to run the microwave oven, you would need to switch off everything else, until you are finished with the oven.

A typical 600 watt converter will run only small devices: LCD TV, computer, or phone charger, It will NOT run a microwave, coffeepot, or toaster oven.

**Cost:** An 1800 watt converter will cost about \$200 (uninstalled). A 600 watt converter will cost about \$50 (uninstalled).

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## Freightliner Columbia Wheel Covers

A large variety of wheel covers are available. Simple, flat fiberglass covers that are designed to decrease wind resistance. And decorative chrome hub caps that are designed to make a more pleasing appearance.

**FUEL SAVING WHEEL COVERS** streamline wheel openings on trucks and trailers. This aerodynamic benefit saves a lot of fuel. This is especially true with higher speed applications, such as highway driving.

In some fuel efficiency tests, these wheel covers increased fuel savings by 2%—when covers were on all eight wheels of a tractor trailer.

Wheel covers are made in a variety of styles designed to fit a standard aluminum 22.5 x 8.25" wheel (generation 4). Wheel covers are made with a variety of materials and in a variety of colors. Most require no tools to install, and install in seconds.

Cost: A basic cover (made of cloth and firm wire) costs about \$50/cover. A stainless steel cover will cost about \$175/cover.

**DECORATIVE CHROME HUB CAPS** provide a shiny look to the wheels of the truck. They allow a driver to personalize their vehicles. Hub caps are usually chrome.

Cost: A basic hub cap costs about \$7/hub. A fully textured cap will cost about \$30/hub.

**DECORATIVE CHROME NUT COVERS** provide additional customization to a truck's wheel. Nut Covers are usually covered in chrome. Sometimes reflective material is used, in a variety of festive colors.

Cost: Nut covers cost \$15 to \$20 for a package of 10.

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## Freightliner Columbia Security Systems

There are a large variety of security systems available for Freightliner Columbia trucks. The goal of each system is to prevent unauthorized users from: moving the truck, gaining access to the interior to the truck cab, or tampering with the contents of the trailer.

On one end of the security spectrum are sophisticated, digital systems. On the other end of the security spectrum is the simple battery disconnect switch.

**DIGITAL SECURITY SYSTEMS** for Class 8 trucks are similar to security systems for standard automobiles, so learning how to operate the security equipment should take no special training. Some systems even include Remote Engine Start. Remote Engine Start allows the air conditioner (or heater) to be started before entering the cab of the truck, which dramatically increases operator comfort.

Cost: A basic unit typically costs about \$75. A full featured system will cost about \$300. (Plus cost of installation.)

Standard Security System features include:

- LCD display
- Long range FM radio technology
- Two LCD remote controls
- Arm / Silent arm
- Disarm
- Truck Locating
- Arm Reminding
- Rearm
- Central door lock
- Help Mode ("Panic")
- Engine Cutoff
- Programable access codes

Rechargeable batteries  
Low current draw  
105dB Siren

**A BATTERY DISCONNECT SWITCH** is a simple, low-tech device that prevents a truck's engine from being started. A switch is installed in a concealed location, usually under the hood or in the cab of the truck. Only someone that knows the location of the battery disconnect switch will be able to start the truck. Many switches are equipped with hasps to allow a pad-lock to be installed, further increasing the security of this system.

Cost: A simple disconnect switch mounted directly to the battery terminal will cost less than \$10. A lockable and concealable switch can cost up to \$80.

**# 2 freightliner classic xl  
chrome parts**

# Freightliner Classic XL

Freightliner Classic XL is a Class 8 Heavy Duty conventional semi-truck, produced by the American manufacturer Freightliner.

## TOP Three Freightliner Classic Parts

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### Freightliner Classic XL Hood Ornaments

There are hundreds of different designs for hood ornaments that can be used to personalize a Freightliner Classic XL. Almost all of the hood ornaments are chrome, or chrome and colored plastic. Other metals are sometimes used with the chrome, such as cope or brass. Some of the hood ornaments have LEDs, so the hood ornaments can be illuminated at night. (Usually the eyes of an animal.)

Drivers can personalize their trucks with little effort. The mounting pieces for a chrome hood ornament are a few screws and a bracket. Two or three holes can be drilled in the hood with simple hand tools. If there are lights, wires can be run to the hood ornament with little effort.

Cost: Most hood ornaments are priced between \$50 and \$80, very few cost more than \$130. Virtually no hood ornaments cost more than \$300.

#### **Iowa 80**

A large supplier of hood ornaments is Iowa 80:

<https://www.iowa80.com/browse/hood-ornaments/HOODORNMENT/>

Iowa 80 operates a small chain of seven truck stops, including a truck stop in Walcott, IA—which they claim is “The World’s Largest Truck Stop”.

Iowa 80 is a company with a good reputation with truck drivers. It is a company that is associated with good quality and value.

#### **Raney's**

Another supplier of hood ornaments is Raney’s:

<https://www.raneystruckparts.com/hood-ornaments/>

Raney’s has a showroom in Florida, but they seem to be a mostly web-commerce site.

The products on the Raney’s web-site appear to be similar to the merchandise found on the Iowa 80 web-site, but of inferior quality. Raney’s prices seem to be 20% cheaper than the prices on Iowa 80’s web-site.

Raney’s doesn’t enjoy Iowa 80’s good reputation.



### **E-Bay, Amazon, etc.**

Truck hood ornaments can be found on E-Bay and Amazon. They sell at no real discount under what can be found on the Iowa 80 web-site—and the choices are largely the same. Of course, with E-Bay, there is always the possibility of finding a rare (or one-of-a-kind) item.

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### Freightliner Classic XL Air Horns

An air horn has a small air chamber that contains a diaphragm. Compressed air, from the truck's braking system, flows across the diaphragm—causing it to vibrate, and produce sound waves. Attached to the chamber is tube, called a “flared bell”. The length of the flared bell determines the pitch of the sound. A longer flared bell creates a lower pitch.

Air horns are usually mounted singly (producing a single tone), or in pairs (producing two different tones). Sometimes the two horns are mounted on a single base, as a unit. A “train horn” is a horn with three or more horns mounted in a single unit.

Air horns that are concealed under the panels of a truck are usually painted black, so that they will not visually stand out. Air horns that are mounted on the roof of the truck cab are usually chromed, so that they can be clearly seen. Air horns that are mounted on fire engines are usually mounted on the roof of the cab, and painted red. Other colors are rarely used.

Air horns are generally used on highways. Normal automobile horns are used inside populated areas.

Drivers can personalize their trucks with little effort, if they are very handy with tools—or by hiring a mechanic. The mounting pieces for a chrome air horn are a few screws and a bracket. Two or three holes can be drilled in the roof with simple hand tools. Air lines get strung between the horn(s) and the air valve.

Cost: A single or double horn costs between \$120 and \$250. A “train horn” can cost up to \$500.

### **Iowa 80**

A supplier of air horns is Iowa 80:

<https://www.iowa80.com/browse/horns/HORNS/>

Iowa 80 has a very limited selection of air horns and accessories.

### **Raney's**

Another supplier of hood ornaments is Raney's:

<https://www.raneystruckparts.com/>

Raney's has a large selection of air horns and accessories.

In addition to standard truck air horns—Raney's has train horns, horns for motor cycles, and novelty horns.

Novelty horns include electronic noise-makers, that can imitate animal sounds and various alarms.

Accessories include solenoid air valves, mounting hardware, and tubing.

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## Freightliner Classic XL Steering Wheel

A professional driver spends hours at a time controlling his truck, using the steering wheel. Factory standard steering wheels are moderately comfortable to handle, and provide good control of the vehicle. A steering wheel will wear out after five to seven years of constant use. Replacement steering wheels are easily obtained, and can be easily mounted by any skilled mechanic.

A worn steering wheel can be used for an additional few months by covering the steering wheel ring with a steering wheel wrap or “half wrap”.

Extra fancy steering wheels have chrome spokes. Some steering wheels have hubs that are chromed as well. The gripping ring is almost always a soft foam material over a hard metal or plastic ring. Some rings are made of a decorative wood.

The spokes can be cut with flame patterns, GT circles, “banjo” holes, and other patterns.

Drivers should hire a mechanic to personalize their trucks with a new steering wheel.

Cost: A chromed steering wheel can cost as little as \$140, and as much as \$340.

### **Supply**

There seems to be little difference in steering wheel variety from vendor to vendor. The same steering wheels that are available at Iowa 80 are available at Raney's, and other places. Product quality seems similar. Product cost seems similar. There is no real advance ordering a steering wheel from a different place.

**# 3 freightliner century parts**

# Freightliner Century

Freightliner Century is a Class 8 Heavy Duty conventional semi-truck, produced by the American manufacturer Freightliner. They are available in a variety of configurations—including: Day-cab, Mid-cab, and Sleeper-berth. They have an aerodynamic sloped hood. The Freightliner Century was originally designed for Owner-Operators, but has found extensive service as a company truck.

The Freightliner Century is primarily used for long distant transportation of freight in trailers.

Freightliner Century was manufactured in the U.S. from 1996 to 2010, when it was replaced with the Freightliner Cascadia. The Freightliner Century is still being produced in Australia.

In 2007, the Century was redesigned—with larger "jeweled" headlamps in a “redesigned headlight housing”, a new grill, and a new bumper.

The Century 120 is the model number of the three axle tractor. The Century 112 is the model number of the two axle tractor

## TOP Four Freightliner Century Parts

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### Freightliner Century Dash Parts

#### **FUNCTION**

A dash kit is a decorative collection of parts, for customizing the dashboard of a truck. Typical kits include chrome or colored plastic parts that are screwed or glued in place.

Typical kits include: covers for rocker switches, key switch trim, heater control trim, radio control trim, wiper switch trim, etc.

Buying a kit is much cheaper than buying each decorative piece of trim separately.

Cost: \$200

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### Freightliner Century Headlight Housing

#### **FUNCTION**

The headlight housing contains the truck's headlight, turn indicators, marker lights, and daylight running lights (optional). The housing forms a single component that can be replaced quickly and easily, in case of damage to the front of the truck. Also, headlight housings can be exchanged for reasons of customizing or personal style.

## **OVERVIEW**

In 2007, the Century was redesigned—with larger "jeweled" headlamps in a "redesigned headlight housing", a new grill, and a new bumper.

Externally, the "redesigned headlight housing" is the same size and shape as the "original headlight housing". They both use the same mounting hardware and connectors—they are interchangeable. All model years of the Freightliner Century have the same headlight housing size and shape. Individual components in the housing may vary—but the housing as a whole can be exchanged with any other Century headlight housing.

There is a different headlight housing for the driver side and passenger side of the truck. Also, left-hand drive trucks (North America), have different headlights than right-hand drive (Australia).

## **REPLACING BULBS**

The cost of a single headlight is approximately \$32. A single headlight assembly (lamp, bracket, and wiring harness) is approximately \$165. An entire replacement headlight housing (lamp, bracket, wiring harness, turn indicators, and plastic housing) cost approximately \$129. If the headlight bracket is damaged, it can be cheaper to replace the entire headlight housing.

## **REPLACING THE ENTIRE HEADLIGHT HOUSING**

Freightliner Centuries are shipped from the factory with headlight housings that match the color of the hood and trim. Replacement housings usually don't match. Replacement headlight housings are generally black or chrome.

There is a growing trend to include LEDs in the headlight housings, similar to the trend in automobiles to have LEDs. LEDs are used as turn indicators, marking lights, and/or Daylight Running Lights (DRL). Factory standard OEM headlight housings (without LEDs) are still available.

Each headlight housing has a H7 (low beam) and a H9 (high beam), plus LEDs for running lights, turn indicators, etc. Headlight housings include a wire harness.

There have been attempts to replace the H7 and H9 with powerful LEDs. These systems have had very limited success in the automobile market, and virtually no acceptance by truck drivers.

## **ORDERING**

Many ads are unclear on quantity. Some pricing is "each". Other pricing is "pair". It can be confusing.

## **INSTALLATION**

Installation can be done with simple hand tools. Most drivers should have little difficulty installing a replacement headlight housing.

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## Freightliner Century Cabin Fan

### **FUNCTION**

A cabin fan is a very important piece of truck equipment. It is often overlooked, but it is essential to driver comfort. It can be operated for hours without seriously draining the truck's batteries.

In order to run an air conditioner, a truck needs to idle its engine, or a APU needs to be running. A fan is much cheaper to run. A fan doesn't provide as much cooling as an air conditioner—but many times, only airflow is needed to provide moderate cooling.

The usual place to put a fan is on the dash board—but many drivers install one or two fans in the berth, by the driver's feet—blowing air towards the driver's face. Combined with open windows and vents, a berth fan can cool a resting/sleeping driver.

Cost: \$25

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## Freightliner Century Thermoelectric Cooler

### **FUNCTION**

Eat healthier. Eat cheaper. Have cool beverages.

A typical cooler plugs into a 12 volt cigarette lighter socket. (No ice required.) The better coolers can be laid on their back (chest style) or placed vertically (upright style). A 40 quart cooler is large enough for one or two people.

### **HEALTHY**

It is important to keeping healthy on the road., but it is more difficult than keeping healthy at home. Good health is a combination of exercise, rest, and proper nutrition. With a cooler, it is easier to keep fresh food in the truck—and easier to balance convenience and good diet.

### **CHEAPER**

It is much more cost effect to buy a week's worth of food at a grocery store, than buying everything daily at a truck stop.

### **COOL**

With a cooler that can be carried in a truck, you will never get anything "cold"—but you can keep things cool enough to prevent spoiling. Some coolers claim to get 40-degrees Fahrenheit cooler than the surrounding temperature. However, a beverage that is even a few degrees cooler than the surrounding temperature is quite pleasant.

Cost: \$90 ~ \$110

**#4 international dt466 parts**

# International DT466 Parts (Navistar MaxxForce DT: 7.6 L)

DT is a line of diesel engines manufactured by the International Harvester Company between 1975 and 2016. They are six cylinder inline engines, and are primarily used in medium-duty trucks and buses. Prior to 1986, International Harvester used the DT engines in farm equipment and construction equipment.

The DT466 variant of the DT line of engines displaces 466 cubic inches (7.63637 liters).

“International Harvester” is now called “Navistar International Corporation”. The “International DT466” is now called “Navistar MaxxForce DT: 7.6 L”.

The Navistar DT466 diesel engine is a wet-sleeve engine. The cylinder sleeve is a separately machined part that fits into the cast cylinder bores. This separate sleeve is in direct contact with the engine coolant, hence the “wet”-sleeve description.

In 2007, the International DT line of engines were redesigned to comply with the United States Environmental Protection Agency's 2007 emissions regulations. At that time, the DT466 was renamed: Navistar MaxxForce DT: 7.6 L. Upgrades included: new twin turbochargers, upgrades to fuel injectors, upgrades to the EGR system, and upgrades to the cooling system.

In 2007, Navistar DT engines were available in three basic configurations:

MaxxForce DT: 7.6 L (466 cu in); 210–300 hp

MaxxForce 9: 9.3 L (570 cu in); 300–330 hp

MaxxForce 10: 9.3 L (570 cu in); 310–350 hp

There were also defense variants, which were designed to allow the engines to run on JP-8 (jet fuel).

In 2010, the International DT line of engines (now called “Navistar MaxxForce”) were redesigned again, to comply with the United States Environmental Protection Agency's 2010 emissions regulations.

In 2016, production was halted.

## Top Three International DT466 Parts

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### Rebuild Kit

There are two basic different kinds of rebuilds: in-frame and overhaul (out-of-frame).

#### **IN-FRAME**

An in-frame rebuild does not require the engine to be removed from the truck. The engine stays inside the vehicle frame. In general, the in-frame process is rebuilding an engine without the need to remove the front cover or crankshaft of the engine. An in-frame repair is intended mostly for regular preventive maintenance.



An **In-frame kit** does not contain gaskets for the front and rear body of the engine, only the main bearing, rod bearings, cylinder kits, upper gasket kit and oil pan gasket.

### **OVERHAUL (Out-of-Frame)**

An overhaul requires the engine to be removed from the truck. Often, the block of the engine needs to be machined: refacing or re-boring. Usually, the entire engine is disassembled. An overhaul is intended for more serious repairs caused by excessive wear, extreme age of equipment, or heat damage (cooling failure).

An **Overhaul Kit** comes complete with cylinder kits, main bearings, rod bearings, front and rear crankshaft seals and complete overhaul gasket kit.

Types of Engine Rebuild Kits:

- In-frame Engine Rebuild Kit

- In-frame Piston-less Engine Rebuild Kit

- In-frame Re-Ring Engine Rebuild Kit

- Out-of-frame Engine Rebuild Kit

- Out-of-frame Piston-less Engine Rebuild Kit

Prices:

- In-Frame Kit: \$800~\$1,000

- Overhaul Kit: \$1,200~\$1,500

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## Turbo

Turbochargers are common in truck diesel engines—to produce higher power, lower emissions, and improved fuel efficiency.

A turbo is a device that uses a small amount of engine back-pressure to force extra air (and proportionately more fuel) into the combustion chamber. This is more air and fuel than a naturally aspirated engine uses.

Original Equipment Manufacture (OEM) turbos are manufactured to the exact specifications of the International Harvester Company. An aftermarket new turbo is manufactured without such close specifications. With an aftermarket turbo, a third-party manufacturer is claiming that their product is “just as good” as a turbo that comes from the International Harvester Company, or from a licensed OEM. OEM equipment tends to be more expensive than aftermarket equipment. Aftermarket equipment is perceived as being less reliable.

There are a huge variety of turbos; each with a slightly different part number. Two otherwise identical engines that are produced in the same model year, could have different turbo part numbers. Picking the correct turbo is difficult and exacting process. Carefully note the part number of the turbo that is being replaced and the engine number itself.

A turbo is not a device that can be installed by a driver. A mechanic is required.

Cost:

Original New (OEM): \$500 (uninstalled)

Aftermarket New: \$350 (uninstalled)

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## Fan and Fan Clutch

A working fan and fan clutch are essential for proper working of the International DT466. Without proper cooling, an engine can quickly overheat—and experience expensive, permanent damage. An overheated engine can warp a head, which requires removing the engine from the truck to fix.

A fan should be free from defects; not missing blades, no cracks, not missing parts of blades. The fan clutch should spin freely when the engine is warm and turn with difficulty when the engine is cool.

The fan clutch usually a “viscous” clutch. The clutch is filled with a viscous (honey like) fluid. When the ambient temperature in the engine compartment is hot, the fluid is pumped between a driving plate and a driven plate—which causes friction, and the fan turns.

There are two basic ways to replace the fan clutch: removing the radiator and not removing the radiator.

**REMOVING THE RADIATOR** involves draining the cooling fluid, disconnecting hoses, and removing mounting brackets. This method is more difficult, expensive, and time consuming. Usually this method is only used if the radiator needs to be removed anyway.

**NOT REMOVING THE RADIATOR** is easier. It involves moving/removing: the fan shroud, small hoses, and cross-members. Draining the cooling systems is usually not necessary.

Neither of these is an easy repair. A driver very skilled with tools might attempt it, but a mechanic is generally required.

Replacing the fan is easier to accomplish. Fewer components need to be removed from the engine.

Many fan clutches are installed using left-hand threads.

If you are replacing either component, consider replacing both at the same time. If you are replacing the radiator, consider replacing the viscous fan clutch and fan at the same time.

Cost:

Viscous Fan Clutch (new): \$300 (uninstalled)

Viscous Fan Clutch (used): \$150 (uninstalled)

Fan: \$30 ~ \$50 (uninstalled)