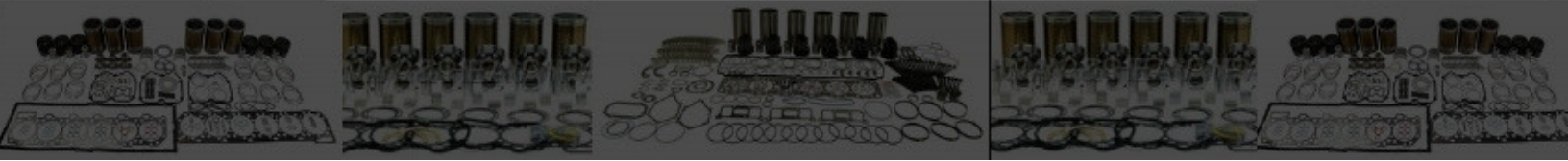


## Engine Rebuild Kits



## Diesel Engine Rebuild Kits: HHP Buying Guide

Have you noticed a loss in fuel economy? Are you consuming a lot of oil? Is there coolant in your crankcase? If you answered yes to any of these questions, you may want to evaluate your engine to see the extent of the damage. It might be time for an engine rebuild kit.

### Engine Rebuild Kits Explained

While rebuild kits can be expensive and shopping for one might seem an overwhelming task, they are vital to extending the life of your engine. A rebuild kit allows you to replace many of the components in the engine to fix any issues that might arise, from leaks throughout the engine to large-scale failure. The type of kit you need will depend both on the type of engine you have and the amount of damage sustained. Here at HHP we're ready to help make the rebuild kit buying process easier and to find the right kit for you! We offer a wide variety of kits - [click here](#) to take a look.

The video below also discusses things you should know when looking for a rebuild kit:



## ..... Signs Your Engine is Ready for a Rebuild Kit .....

There are a large number of things that could make it necessary for you to rebuild your engine. Here are just a few things that might be causing you problems a rebuild kit could fix:

- If your engine has overheated you might notice scoring on the piston skirt, or metal that has come off the piston skirt, adhering to the liner
- If your piston cooling nozzle isn't pointed in the correct direction, or if it's not supplying enough oil because it's broken or bent, there could be overheating in the bottom of the piston crown
- A malfunctioning injector could cause problems from scored cylinders to eroded pistons
- A lack of lubrication would cause overheating and heavy wiping or smearing of the bearing
- Your piston rings might be broken, which is fairly easy to see. Less easy to diagnose is if the rings are worn
- There might also be problems in the cylinder liner. For instance, you might notice a glazed liner, meaning the cross-hatch is no longer good
- An o-ring could have failed, allowing coolant to get into your engine oil
- You might also have liner cavitation, where coolant erodes all the way through to the inside of the liner, allowing coolant to get into the oil pan

## .....What to Look For When Purchasing an Engine Rebuild Kit .....

An engine rebuild kit is one of the biggest purchases you can make for your engine, and there are some things you want to think about as you move toward your purchase.

First, it's important to make sure you're getting a kit that's right for your engine. Different engine models have different needs, so be sure you're getting a kit whose parts are compatible with your particular engine. Having your engine serial number handy as you shop can help to ensure you're purchasing the right kit for the job.

It's also good to understand that there are different types of rebuild kits at different price points, and you'll want to make sure you're purchasing the right type of kit to help with whatever damage your engine has incurred. We offer three main levels of rebuild kits:

## The Re-ring Kit

A re-ring kit is the most basic level rebuild kit. It assumes that your pistons are still in good shape and reusable. It comes with a new head gasket set, a pan gasket set, a new set of liners, a new set of rings, and new main thrust bearings.

## The Inframe Kit

The next level of kit is the inframe rebuild kit. You would want this type of kit when there's obvious piston damage, or your pistons just aren't in good enough shape to reuse. It comes with everything from the re-ring kit, but also usually includes an upper engine gasket set and piston crowns and skirts or pistons, depending on the type of engine.

## The Out-of-Frame Kit

The most involved kit is the out-of-frame rebuild kit. This is typically required when you've experienced a catastrophic engine failure that calls for the removal of the crank or an engine block change. You might also want this type of kit if you're just looking to reseal all the leaks in your engine. An out-of-frame kit comes with everything from the inframe kit, but also comes with the additional gaskets needed for you to get the job done.

## .....OEM vs. Aftermarket Rebuild Kits.....

A lot of people think that when it comes to something as expensive and important as a rebuild kit, buying OEM is the only real option. Aftermarket kits have gotten a bad rep for having cheaply made, low quality parts—something that may be true for some aftermarket brands, but not HHP. You just have to be careful where you buy from, and that includes the OEM. There are some things about OEM kits you may not realize.

- **Used Parts in OEM Rebuild Kits** – Ever wondered why your OEM rebuild kit has a core charge? It's because that **OEM rebuild kit has used parts in it**. Replacing worn out parts with used parts doesn't make sense to us, which is why **all the rebuild kits at Highway and Heavy Parts include brand new, never used parts with zero core charges**. To top it off, the components of the rebuild kits at Highway and Heavy Parts come from the same manufacturers as the OEM. Simply stated, it's the same kit (minus the used parts), in a different box.
- **Price** – There's no doubt about it, OEMs are more expensive than aftermarket parts, often for no other reason than their "name brand" status and reputation. While they may be great at stocking parts for their newer engine models, you can run into difficulties if you need parts for an older engine. You might have to wait a while to get the parts you need, if they still carry them at all. With a quality aftermarket provider, you can get the exact parts to fit your engine quickly. Highway and Heavy Parts is proud to offer **quality aftermarket engine parts at 30%-50% below OEM prices**. Plus, the majority of HHP parts are **delivered in two days or less** to most areas.

- **Warranty** – You might even think that with an OEM comes a guarantee of quality—but they often don't back that up with a matching warranty. **The standard OEM warranty is usually between 6 months and a year.** But wouldn't it be nice to get the same or better quality parts with a longer warranty for less money? **The majority of Highway and Heavy Parts rebuild kits include a 2-year warranty—that's double what the OEM offers!** This way, not only are you getting the best quality parts, you can also rest easy knowing that if something were to go wrong, we've got you covered!
- **Parts Included** – When you're doing an engine rebuild, you want new parts in your engine, right? We agree, but OEMs don't always feel the same way. Often, they will market the cylinder kits as pre-assembled to save time during the rebuild, but that can hide the fact that they might be including used parts. It's harder to identify them if they're already assembled. Pretty sneaky, huh?

Even more than that, **many mechanics prefer to assemble their own to make sure it's done correctly**, rather than just trusting the manufacturer to do it for them. With a kit from HHP, know that you're getting all new, never used parts that will meet your exacting specifications (they meet or exceed the OEMs!). There's also no core charge, where an OEM would charge you for cores and then give you used parts.

Believe it or not, the OEM doesn't always manufacture their own parts. They'll use a third-party company to make the parts, and oftentimes these same companies supply the aftermarket sellers as well. It's the exact same product, just without the OEM label on it, or the OEM price. And even when aftermarket suppliers use different manufacturers, it's often because they are an even better quality part.

So don't just trust that the OEM has your best interest at heart, choose an aftermarket parts supplier you can trust. Chances are, you'll find that a quality aftermarket supplier like HHP can get you superior parts for lower prices after all.

## ..... Questions for Your Mechanic .....

If you're noticing a loss of fuel economy, loss of power, excessive oil consumption, coolant in your crankcase, or even catastrophic engine failure, it might be a good time to talk to your mechanic about an engine rebuild. They might be able to help you with the following questions:

- My engine isn't running like it used to. Do you think a rebuild might help restore it?
- How extensive is the damage to my engine?
- What type of kit would be the most beneficial to my engine?
- Are you noticing any piston damage, or would I be able to reuse those?

As always, our certified techs would be happy to help you through any questions you might have. Feel free to give us a call at 844-215-3406.