

TECBLOG **HONDA B-SERIES PERMADRYPLUS[®] OIL PAN GASKET**

FEL-PRO[®] PERMADRYPLUS[®] OIL PAN GASKET FOR HONDA B-SERIES ENGINES!

PROBLEMATIC LEAKER

The Honda and Acura B-Series inline-4 engines were used in many Honda and Acura applications between 1989 and 2001. Available in 1.6L, 1.7L, 1.8L and 2.0L displacements, this family of Dual Overhead Cam (DOHC) engines was the first to feature Honda's VTEC variable valve timing system and higher-performing alternatives to the D-series SOHC engines. These reliable engines are found in many vehicles that are still on the road today, along with being a popular engine swap option for performance enthusiasts.

As with any engine, leaks can develop as time and miles go by. The oil pan gasket is a common leak found on the B-Series engines – unfortunately, many owners or shops may tighten the oil pan bolts to try to stop the leak.



Dimples surround each bolt hole



Leaking OE oil pan gasket

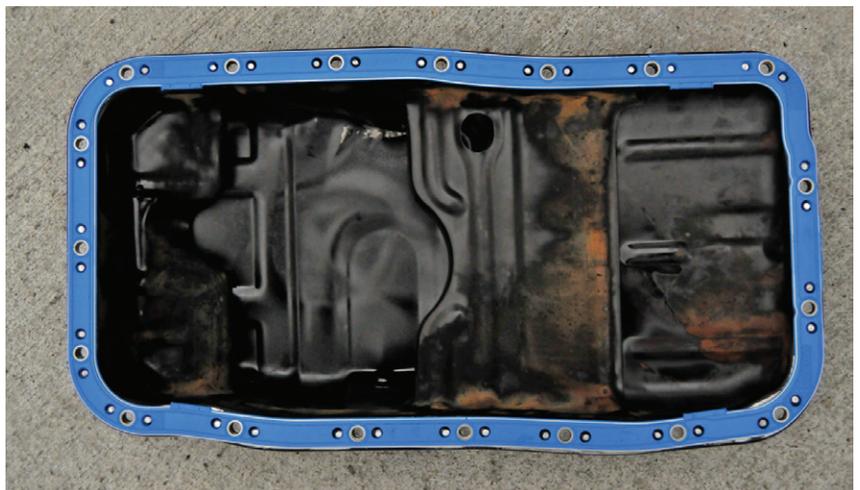
Tightening the bolts makes matters worse, as the oil pans on these engines have raised dimples that are stamped in the flange to prevent overcompression of the gasket on the assembly line.

By tightening the bolts beyond the original torque specification, these dimples can be crushed and the oil pan sealing flange can deform, creating leak paths and will result in an even worse leak!

At this point, the OE-style oil pan gasket design will no longer work, because it relies on the correctly formed dimples to prevent overcompression of the gasket. In this case, there are two options – replace the pan for over \$100, or install the new Fel-Pro[®] PermaDryPlus[®] oil pan gasket – OS 30630 T.

FEL-PRO[®] SOLUTION

Unlike OE-style gaskets for these engines – including many sold within the aftermarket – the new Fel-Pro[®] PermaDryPlus[®] oil pan gasket features a rigid, steel-core construction and built-in torque limiters that prevent overcompression of the gasket and over-torquing of the oil pan bolts, even in cases when the flange dimples have been deformed. This new gasket, designed and manufactured in the Fel-Pro Gaskets engineering and manufacturing complex in Skokie, Illinois, uses Fel-Pro's proprietary molded rubber formulation and precisely located dual sealing beads on each side of the steel core for exceptional sealing performance.



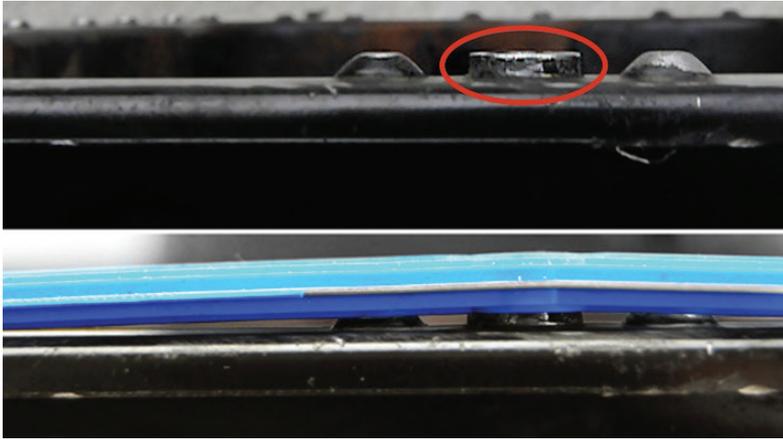
Fel-Pro[®] PermaDryPlus[®] oil pan gasket in place

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INSTALLATION TIP

FYI: The OE gasket does have two compression limiters molded into it – they can be found only on the transmission side of the pan. When removing the old gasket, these limiters can be left behind, stuck to the pan. If these limiters are left in place, the limiters built into the Fel-Pro® gasket will stack on top of them and result in an oil leak.

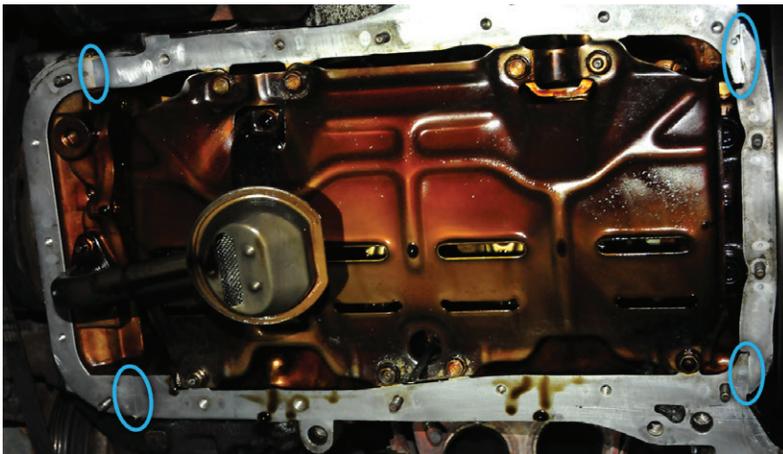
Be sure to inspect and remove them when cleaning the flange!



OE compression limiter, stuck to pan

CLEAN AND DRY

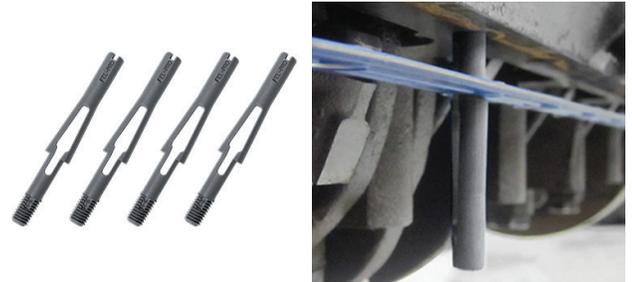
Like every Fel-Pro® PermaDryPlus® gasket, the OS 30630 T must be installed on clean and dry sealing surfaces with no sealers, adhesives or RTV applied to the gasket. The repair manual replacement procedure instructions should be followed for this gasket, as with all Fel-Pro gaskets unless otherwise noted. As directed by the repair manual for these applications, there are four areas on the engine block where RTV must be applied – the two joints created by the oil pump and the two joints created by the right side cover. RTV is needed at these points because the components coming together create joints which the gasket can't "flow" into. A little bit of RTV will get on the gasket when the gasket and pan are placed on the block, which is okay as long as RTV is not applied anywhere else.



Sealer locations

SNAP-UPS® INSTALLATION AIDS

Fel-Pro® oil pan SnapUps® are included with the gasket set and are a clean, simple and effective way to speed up the oil pan gasket installation. Simply thread them into the block where the oil pan bolts go, snap the oil pan gasket in place, then the pan itself and start threading the bolts in. Once the oil pan is secure, the SnapUps are easily removed and are reusable.



Example of SnapUps® in use

THE BEST SEALING SOLUTION

Installed properly, Fel-Pro®'s new OS 30630 T PermaDryPlus® oil pan gasket provides the best sealing solution for the aftermarket sealing surface conditions found on Honda B-Series engines. While this gasket is not part of the Fel-Pro Performance Gaskets line, it will work well in high performance and turbocharged applications where oil temperatures and crankcase pressure are higher.



A leak-free seal



fmmotorparts.com



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