

# Torn Turbine Hub Weld Leaves Honda Pilot Stranded



by Joe Rivera

It's no great surprise when a car that won't move forward or reverse gets brought into a transmission shop. It's a little less common with Hondas than some other cars, but it still happens.

In this case it was a 2007 Honda Pilot with 98,000 miles on the clock. That isn't usually a lot of miles for a Honda transmission to develop a problem, but again, it happens.

So the shop technician checked the fluid. Hmm... the fluid looked pretty good for a transmission that wouldn't move. A few light metal shavings, but nothing to get excited about. Certainly not enough to prevent the car from going into gear.

Okay, so how about pressures? No, they were good too. He couldn't check stall, because, well, it wouldn't go into gear. But there was nothing obviously wrong with this unit... except that it wouldn't move.

So the technician pulled the transmission out of the car, pulled it apart, and... nothing. There was a little wear — after all, it had almost 100k miles on it! — but nothing to jump out and say, "Over here... here's the problem!"

Maybe the converter? Honda converters usually hold up really well. But there was nothing else showing up in the transmission, so... no, everything appeared okay with the converter. The technician even slid the input shaft into place to make sure the turbine splines were okay. Everything looked good. So where was the problem?

Turns out it was inside the con-



Figure 1

verter all along; and from the looks of the broken weld (figure 1), we may be seeing a lot more of these Hondas in the future.

What happened was the weld that holds the splined hub to the turbine broke free, so there wasn't any torque reaching the transmission input shaft. Everything was working fine, except the drive train wasn't rotating, so of

course the car wouldn't move.

The real difficulty was finding the problem: Since the turbine turns freely inside the torque converter, sliding the input shaft in didn't reveal all that much. The turbine is *supposed* to rotate; there's really no way to be sure whether the entire turbine was rotating or just the hub.

Once we got the converter apart

the problem was obvious: The weld didn't hold. And from the looks of this weld, we're probably going to be seeing a lot more of these Hondas in the future with the same problem.

When fixing them, the converter rebuilder should machine the hub to make sure it sits down properly on the turbine, and provides enough clearance for the mating components (figure 2). And I'd recommend welding it on both sides to make sure it's secure.

Honda transmissions are usually pretty dependable, and their converters are all but bulletproof. But this problem is one that may be showing up more and more in shops across the country, and it's one that could be difficult to diagnose... unless you know where to look.



Figure 2

When fixing them, the converter rebuilder should machine the hub to make sure it sits down properly on the turbine, and provides enough clearance for the mating components



**LIBSON**  
**TWIN CITY**  
AUTO & TRUCK PARTS AND SERVICE

## Your go-to resource for New, Rebuilt, and Used European Transfer Cases and Differentials

*Transfer cases available for these European vehicles:*

- Mercedes-Benz
- Volkswagen
- Audi
- BMW
- Land Rover
- Porsche
- Saab
- Volvo
- And all other domestic and imported vehicles

**Save time and money** when you call Libson for units and parts from brands such as: AAM, Motive Gear, Auburn, Eaton and Dana. We also carry one of the USA's largest stocks of hard-to-find AAM, Auburn and Motive Gear parts.



**DRIVELINE HOTLINE...**  
**CALL 888-521-3537**

Libson Twin City Auto & Truck Parts and Service  
1218 Central Avenue NE • Minneapolis MN 55413 • 612-521-3537 • www.libsontruck.com