

**MEMORANDUM TO FILE**

2/9/2005

**Reference:** EA04-023 (Ford Focus Rear Door Latch Failure)

**Subject:** Addition to file

**From:** ~~JFA~~ John Abbott, Safety Defects Specialist

**To:** Case File Assistant

**Please add to the public file.**

**Memo from VRTC, dated 9/21/04, regarding inspection of a subject latch.**

# MEMO



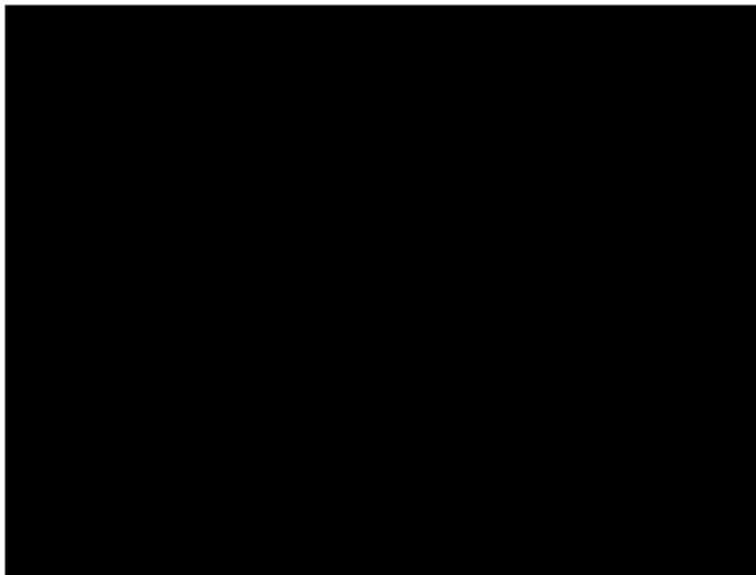
**TO:** John Abbott  
**FROM:** Gary Hewett  
**SUBJECT:** Ford Focus Door Latch, DCD4081  
Complaint Latch from VIN [REDACTED]

**Date:** September 21, 2004

**cc:**

---

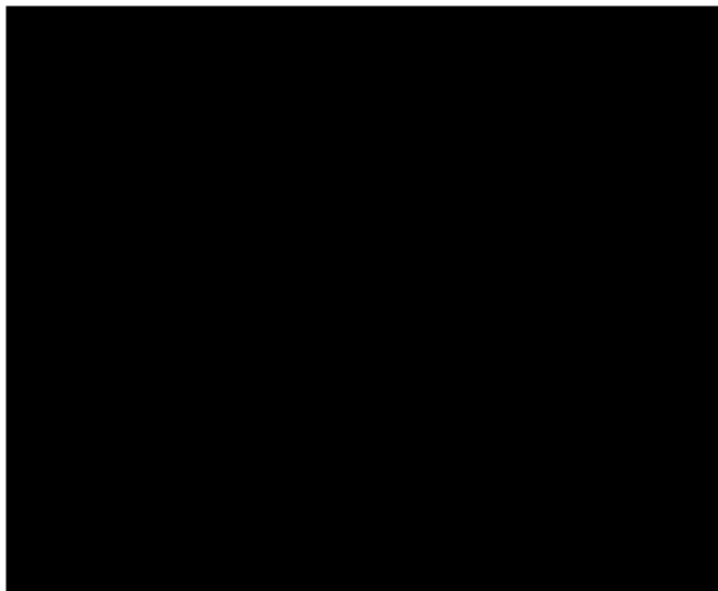
Figures 1 through 7 below show the complaint latch removed from the MY 2000 Ford Focus (85k miles) in Reynoldsburg, OH.



**Figure 1 Complaint Latch with Sticking Pawl**

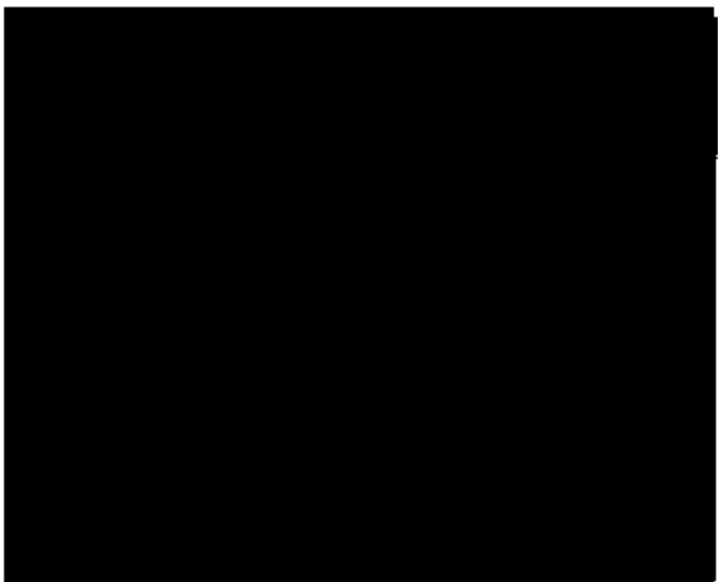
Figure 1 shows the door latch with the plastic cover (left side of figure) removed to show the pawl and latch mechanism. The return springs on the pawl and latch have been removed. The pawl was stuck in the unlatched position approximately as shown. The spring was not strong enough to move the pawl.

The pawl could be moved by hand but it would stick again. Moving the pawl by hand did not seem to help the pawl move any easier.



**Figure 2 Latch, Pawl and Bracket**

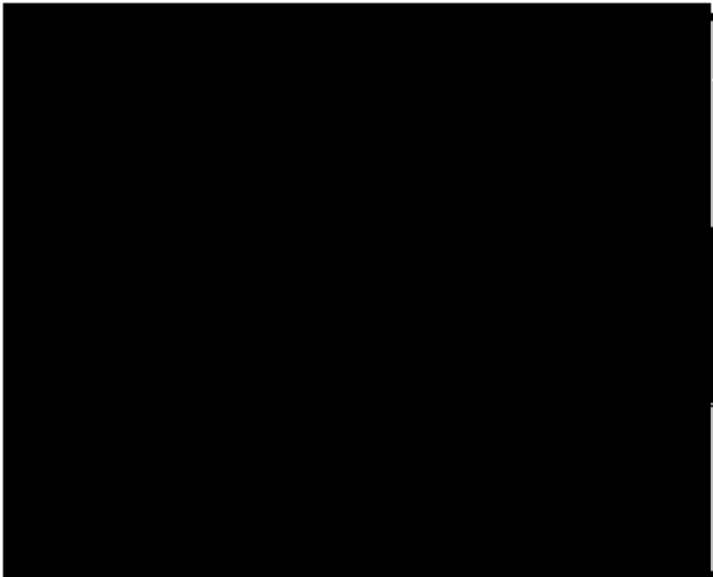
Figure 2 shows the latch and pawl removed from the bracket. The dark powdery material was examined under the microscope. It appeared to be a mix of dirt, sand, corrosion and grease that is referred to below as grime.



**Figure 3 Opposite side of Pawl Pivot Hole**

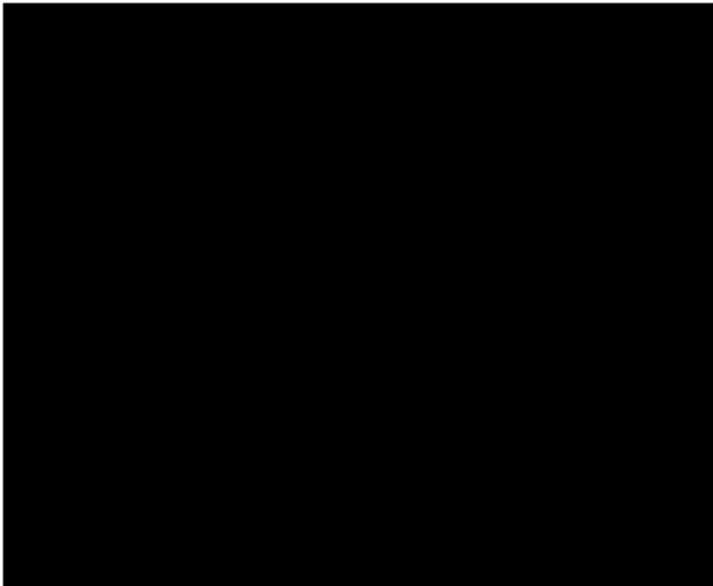
Figure 3 shows the back side of the pawl. This was the side in contact with the bracket. The pivot hole in the pawl was coated with a layer of grime. A clump of hardened material that may have been lubricant is visible on the lower left edge of the pawl.

The pawl was manufactured with a plastic cover. The plastic cover on this pawl was cracked in several places and is gouged off on the right side of the hole in Figure 3. It is not clear what purpose the plastic serves; perhaps it was intended to reduce friction.



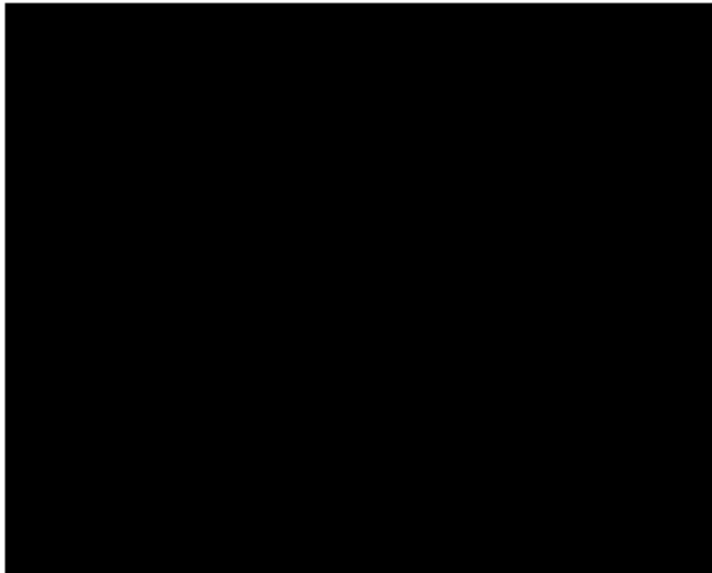
**Figure 4 Pawl PivotPin**

The pawl pivot-pin bearing surface was covered with grime. The flanged portion of the pin fits against the forward (toward front of vehicle) side of the pawl to hold the pawl in place. The other part of the pin in front of the flange (upper part in this figure) holds the pawl torsion spring.



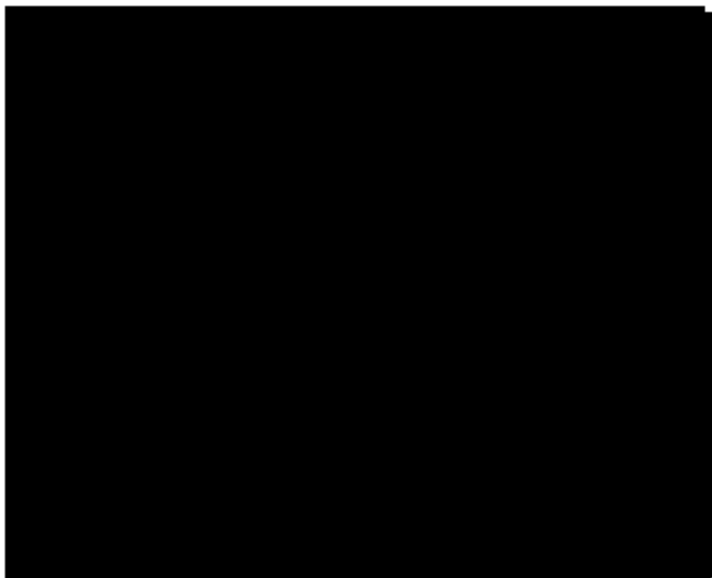
**Figure 5 Opposite side of Latch**

Figure 5 shows the latch surface that was in contact with the bracket. The red dots on the upper left side were placed by VRTC for positive identification of the part from the dealer.



**Figure 6 Corrosion on Bracket at Pawl Pin Hole**

Figure 6 shows a small area (3 cm x 1.5 cm) of corrosion on the bracket underneath the pawl. Some scratched areas are visible on the lower left side of the figure and on the right center of the figure where the pawl scraped the surface of the bracket. Both of these scratched areas are on raised, embossed sections of the bracket that are presumably intended to support the pawl. The friction of the pawl against these surfaces is probably what causes the pawl to stick.



**Figure 7 Corrosion on Bracket at Latch Pin Hole**

This shows an area of corrosion on the bracket underneath the latch. The hole on the left supports the latch pin.

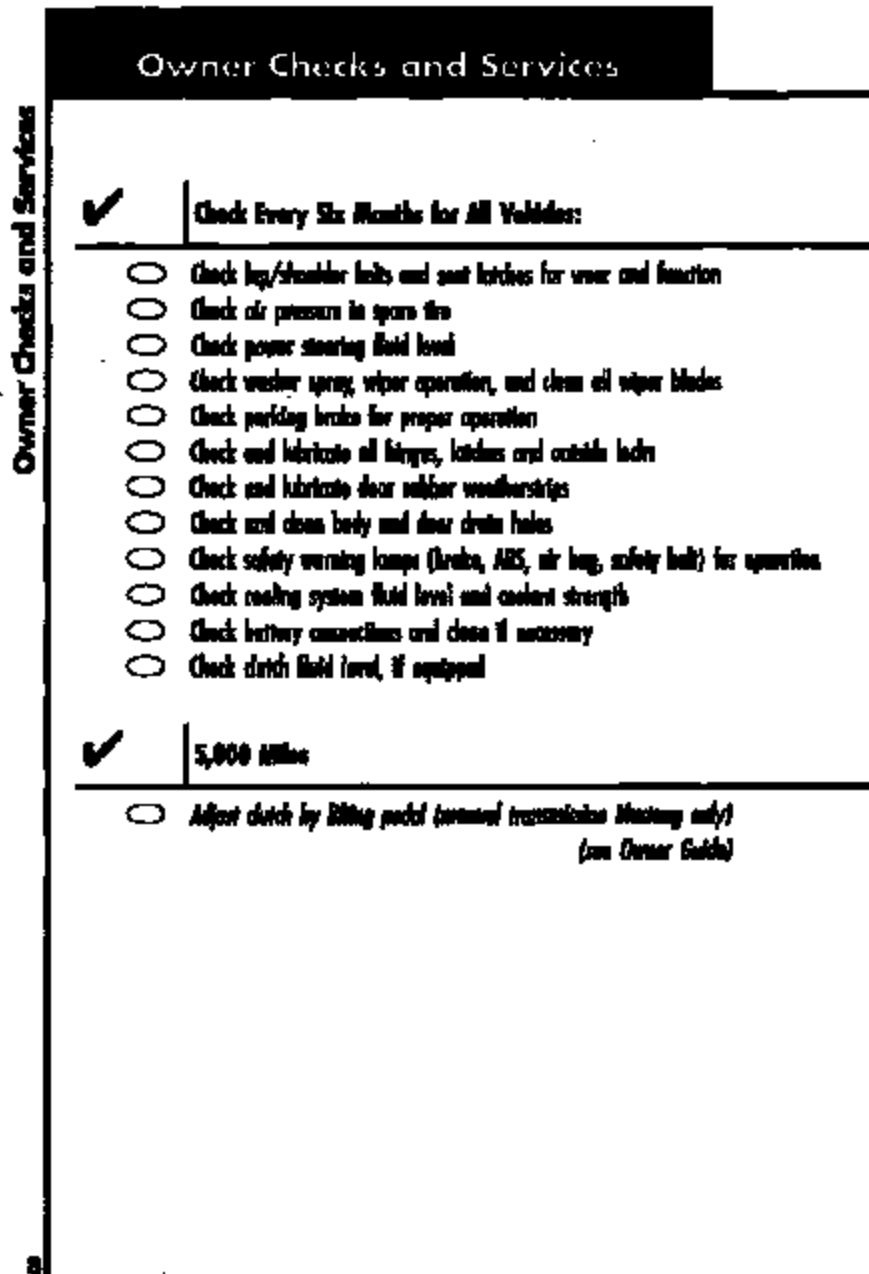


Figure 8 Ford Focus Maintenance Guide

A page from the Ford Focus Maintenance Guide is shown in Figure 8. It calls for the owner or a service technician to "Check and lubricate all hinges, latches and outside locks" every six months.

This "catch-all" lubrication requirement for latches and hinges would also cover hood and trunk latches. A recent investigation into hood latches also found corrosion problems. Based on that investigation, if the six-month maintenance is followed, the parts will probably not corrode. However, if the parts are not serviced for several years, and corrosion is already started, then lubrication may not help.

Owner's manuals from other Ford models call for a multi-purpose grease or a spray lubricant. We will have a Focus owner's manual tomorrow for comparison.