

Technical Service Bulletin

Date: 4/14/2008

Product Description: All AMSOIL Synthetic Engine Oils

Subject: Service intervals for Subaru vehicles equipped with a turbocharger

OBJECTIVE:

Communicate a revised AMSOIL INC. crankcase lubricant drain interval recommendation for both engine oil and filters on turbocharger equipped engines sold by Subaru. The revised recommendation was initiated in response to Subaru's Technical Service Bulletin on the subject.

ISSUES:

Subaru published Service Bulletin # 02-103-07 on October 19, 2007 identifying a problem with the oil delivery system on turbo charged vehicles. There is a mesh screen located inside the banjo bolt that filters the oil and becomes prematurely clogged. The Subaru solution is to decrease the oil change interval by 1/2 to 3750 miles (6,000 km) or 3-3/4 months for both the crankcase oil and filter, and inspect the screen and oil supply pipe at every oil change. Failure to clear, clean or replace the clogged mesh screen results in oil starvation and failed turbochargers.

TECHNICAL DISCUSSION:

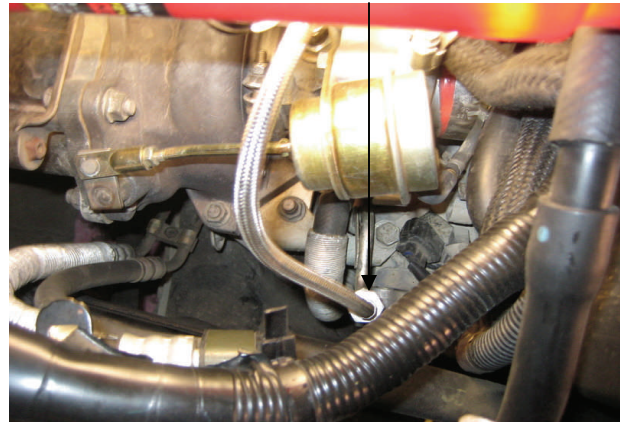
This mechanical problem is not being linked to lubricant performance and the only solution at this time is to inspect this screen more often, or according to a published service bulletin from Forced Performance aftermarket turbo company, remove the screen(2). But through telephone discussions with Subaru, they advise against individual owners removing the screen.

According to the Subaru bulletin, the problem appears to be compounded when the vehicle is operated under severe driving conditions, such as moderate to hard acceleration and engine braking on a somewhat regular basis. Under severe conditions, the engine oil is consumed more quickly than un-

der normal driving conditions due to high intake manifold vacuum created under these driving conditions. Subaru recommends the oil be checked at every fuel fill up.

Forced Performance turbo company reported in one case that a '05 Baja with regular 3,000 mile oil changes still exhibited this this problem.

The picture below outlines the location of the banjo bolt and mesh screen:



Submitted By: DZ Reviewed By: DP/AA Approved By: Alan Amatzio Approval Date: 4/14/08

Distribution: Internal All

Page 1 of 2



Technical Service Bulletin

Product Description: All AMSOIL Synthetic Engine Oils

Subject: Service intervals for all Subaru vehicles equipped with turbocharger

RECOMMENDATION:

AMSOIL synthetic engine oils are your best defense against the potential problems outlined in this document. AMSOIL synthetic motor oils prevent deposit formation because they contain high levels of detergents and dispersants that help keep small particles from agglomerating. These features will help minimize screen clogging; however, they will not prevent clogging if the particles are too large.

Until Subaru issues other corrections or makes engineering revisions in new vehicles, AMSOIL must recommend the following Subaru drain interval:

3,750 miles, 6,000 km or 3-3/4 months for both the crankcase oil and filter.

The screen and oil supply pipe must also be inspected at every oil change. Keep track of your maintenance records. In the event of a turbo failure, you will need to provide this information for Subaru to honor your warrant.

Source:

1. Subaru service bulletin #02-103-07
2. Forced Performance bulletin #12/1/07
3. WWW.forcedperformance.net

Submitted By: DZ Reviewed By: DP/AA Approved By: Alan Amatuzio Approval Date:

Distribution: Internal All

Page 2 of 3