# **Service Bulletin**

Mazda North American Operations Irvine, CA 92618-2922



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Subject: Bulletin No: 05-014/06

**AUTOMATIC TRANSMISSION COOLER/LINES FLUSHING PROCEDURE** 

Last Issued: 12/12/2006

#### **BULLETIN NOTE**

This bulletin supersedes the previous bulletin K-005/98, issued on 04/22/98. The APPLICABLE MODELS and DESCRIPTION have been revised.

### **APPLICABLE MODEL(S)/VINS**

1995-2007 B-Series (A/T only)

1997-2003 Protege (A/T only)

1997-2005 Miata (A/T only)

1997-2002 626 (A/T only)

1997-2002 Millenia (A/T only)

1997-2006 MPV (A/T only)

2001-2006 Tribute (A/T only)

2003-2007 Mazda6 (A/T only)

2004-2007 Mazda3 (A/T only)

2004-2007 RX-8 (A/T only)

2006-2007 Mazda5 (A/T only)

2006-2007 MX-5 (A/T only)

2007 CX-7 (A/T only)

#### **DESCRIPTION**

Automatic Transmission (A/T) oil cooler/lines must be power flushed completely before an overhauled or replacement A/T is installed. One of the causes of repeat A/T failures is an internal automatic transmission fluid (ATF) restriction at the inlet side of the oil cooler. This restriction is usually caused by an accumulation of metal particles and debris (from a previous A/T failure) on the internal mesh type baffle of the oil cooler. Power flushing will remove the restriction by back flushing the cooler/lines followed by forward flushing. This will in turn ensure full ATF flow for the transmission when it is operating.

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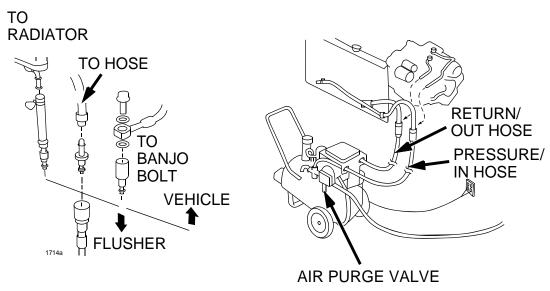
NOTE: Repeat repairs caused by improper or lack of cooler line flushing will not be covered under warranty,

and are subject to review and debit by Mazda

#### **Recommended Power Flushing Equipment**

Part Number	Description
GTHTTCF7AR	G-Tech A/T Cooler Line Flusher

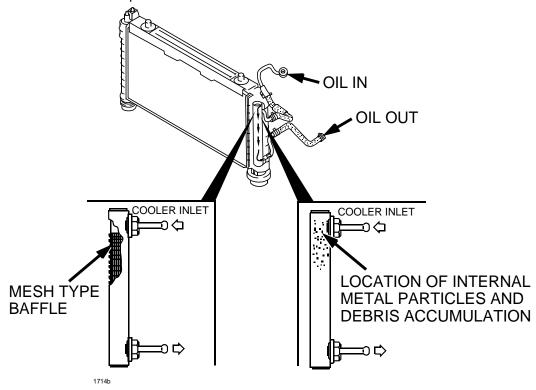
# THREE WAYS TO ATTACH THE FLUSHER TO THE VEHICLE



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#### **REPAIR PROCEDURE**

Before power flushing, inspect the hoses/lines and clamps. Power flushing must begin with back flushing followed by forward flushing to quickly dislodge the restriction. If back flushing is not performed before forward flushing, the restriction could further reduce the ATF flow through the internal mesh type baffle of the cooler and flushing will not be effective or possible.



If the cooler is not properly flushed, oil flow from the cooler to the transmission will not be enough to lubricate the transmission. The most common cause of repeat transmission failure is lack of lubrication to the front and rear planetary gears.

#### **Inspecting Oil Lines & Clamps**

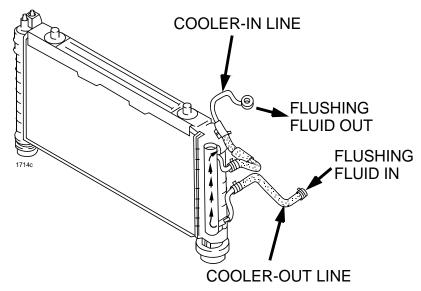
Be sure to inspect the lines (hoses/pipes) for cuts, crimps (pinched), cracks or any other damage before reusing them. If any problem exists or the hose comes off when applying oil pressure, replace it.

**CAUTION:** Always use new clamps when replacing hoses.

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#### **Back Flushing**

1. Using the Power Flushing Equipment manufacturer's instructions, connect equipment so the flushing fluid flows in the opposite direction of normal fluid flow.



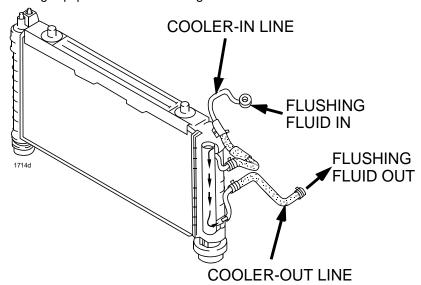
2. Flush oil cooler/lines until discharge fluid is clean.

**CAUTION:** If the cooler can not be properly flushed using recommended equipment, send the radiator out for sublet cleaning or replace.

**NOTE:** Refer to the Workshop Manual or Automatic Transmission Quick Reference Guide listed under Mazda Training Material on the MS3 website for exact location of cooler line inlet/outlet fittings.

#### **Forward Flushing**

1. Connect power flushing equipment so the flushing fluid flows in the direction of normal fluid flow.



2. Flush oil cooler/lines until discharge fluid is clean.

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## PART(S) INFORMATION

Part Number	Description	Qty.	Notes
GTHTTCF-TF	Flushing Fluid	1	Contact Snap-On at 1-877-768-6657
GTHTTCF-TF-12	Flushing Fluid	12	Contact Snap-On at 1-877-768-6657
GTHGNBP2-2	Filters	2	Contact Snap-On at 1-877-768-6657
GTHNBP-12	Filters	12	Contact Snap-On at 1-877-768-6657

#### **WARRANTY INFORMATION**

#### NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair. Refer to the Warranty Wizard for warranty term information.
- When you submit a warranty claim on automatic transmission complete replacement, add the following operation number and labor hours to the operation number and labor hours for automatic transmission complete R&R.

Operation Number / Labor Hours:	K0101XRU/0.4 hrs.
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