

05

WRX AND WRX STi RECOMMENDED WINTER/SNOW TIRES

Yokohama Tires has provided us with their recommendations for fitting Winter/snow tires to the above referenced vehicles.

They are:

**WRX: 90104; 205/55R16;
94H; Extra Load**

**WRX STi: 90112; 225/45R17;
94H; Extra Load**

Yokohama is working with The Tire Rack to have a supply of these tires available.

As always, if you have any questions concerning this, contact the Technical Support Line.

09

H6 DRIVEABILITY

If you get an H6 vehicle in the shop with a driveability concern, i.e. hesitation, please make certain the owner is using a premium grade fuel, 91 octane or higher, in the vehicle.

With the recent increase in fuel prices, there may be some people who have dropped down a notch or two in octane ratings to save a few pennies. While this is understandable, these

vehicles were designed to operate properly on a Premium grade fuel. If the owner says they are using a premium grade fuel, ask them if they tend to buy just ONE brand. If so, suggest they try another brand to see if the concern goes away. Different companies blend their fuels differently.

We've had first hand experience with this at the Support Line. Understand also that it will take a few tanks of the different brand of fuel for the Engine Control Module (ECM) to 're-learn' its operating parameters on this different fuel.

If you are able to duplicate the owner's concern, we suggest you perform a 'Clear Memory' function of the ECM and then road test the vehicle again. If the concern has gone away, then the most likely cause of the problem is the fuel being used in the vehicle at that time.

Another factor to take into consideration is the use of oxygenated or reformulated fuels, know as State Winter Oxygenated Gasoline. Oxygenates

H6-3.0

are fuel additives (alcohols and ethers) that contain oxygen which can boost gasoline's octane quality, enhance combustion, and reduce exhaust emissions. The term oxygenated gasoline most commonly refers to the wintertime program that reduces emissions of carbon monoxide (CO) from motor vehicles. Although required by the federal Clean Air Act, winter oxygenated gasoline programs are implemented by the states. For more information on state fuel programs go to: www.epa.gov/otaq/regsfuels/oxy-area.pdf



CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

The Subaru TechTIPS newsletter is intended for use by professional technicians ONLY. Articles are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and knowhow to do the job correctly and safely. If a condition is described, DO NOT assume that your vehicle has or will have that condition. Impreza, Legacy, Justy, Loyale, Outback, Forester, Subaru SVX, WRX, WRX STi, L.L. Bean, Baja, "Quality Driven" and "Driven By What's Inside" are Registered Trademarks.

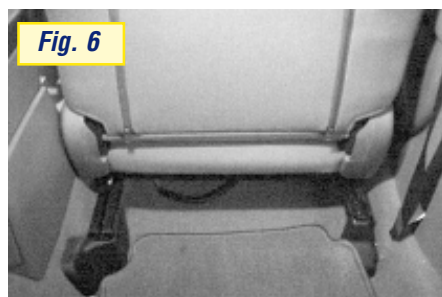
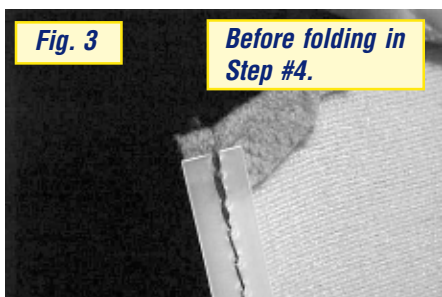
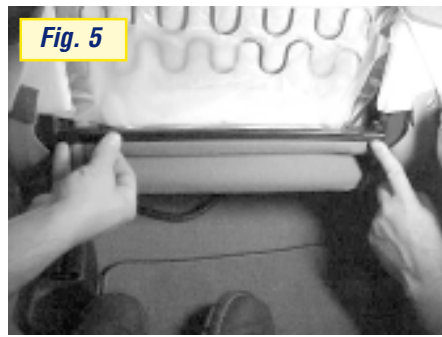
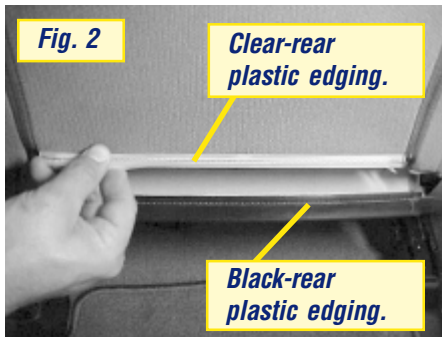
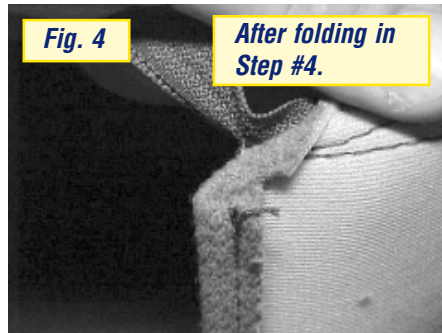
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If you encounter a concern where the front seatback cover has come loose from the seatback, the cover can be easily reattached without removing or replacing any parts. The following procedure should be used to reattach the driver or passenger-side seatback cover.

- 1) Move the front seat backrest to the full upright position.
- 2) Move the front seat to the full front-end position.
- 3) Sit in the rear seat facing the suspect seat cover.
- 4) Fold the clear plastic hook as depicted in Fig. 4.
- 5) On the lower portion of the seatback cover, pull down on the clear rear plastic edging and engage it into the black plastic edging located on the seatback (see Fig. 2 for illustration).
- 6) You will hear a snap when the seatback cover is fastened properly.
- 7) Return the seat back to its original position.

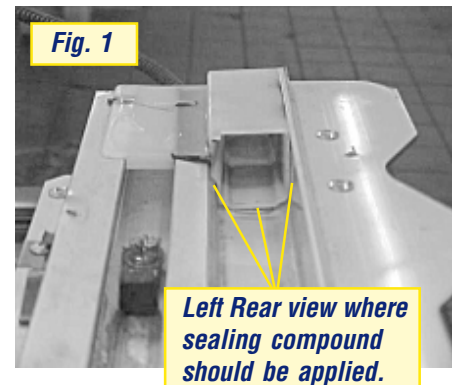
NOTE: Reimbursement can be obtained by submitting a warranty claim during the Basic New Car Limited warranty period using the operation number and fail code for the seatback cover. Labor hours are limited to straight time.

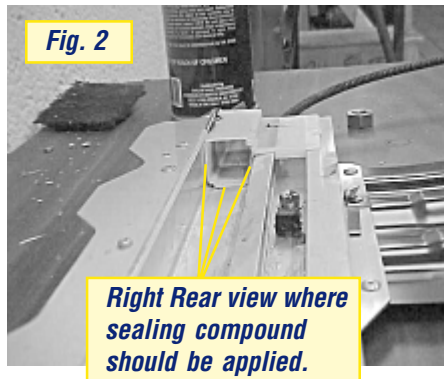


If you encounter any evidence of water leaks in the roof trim panel and/or headliner, it may be caused by a shortage of sealing compound at the end of the rear drain caps. You will need to lower the sunroof assembly to access the end of the rear drain caps. Please see instructions below to access the rear drain caps without removing the sunroof assembly. See chart below for vehicle applicability.

Procedure for repairing suspect sunroof leak:

- 1) Retract the sunroof glass all the way open.
- 2) Disconnect the battery ground cable.
- 3) Remove roof trim panel. <Ref. to service manual and/or Subaru STIS web-site for removal instructions>
- 4) Disconnect the rear drain tubes from the sunroof frame.
- 5) Disconnect the sunroof harness connector.
- 6) Remove the rear bolts from the sunroof assembly to lower the assembly enough to access the rear end caps through the sunroof opening.
- 7) Apply a small bead of 3M Heavy Drip-Chek Sealer (**3M P/N 05113508531**) or equivalent between the rear drain cap and the water channel (see fig. 1 and 2 for an illustration of application points).





8) Install in the reverse order of removal.

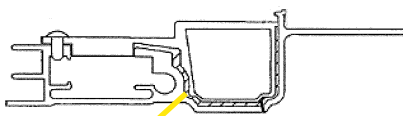
CAUTION: Be careful not to snag the harness during assembly.

NOTE:

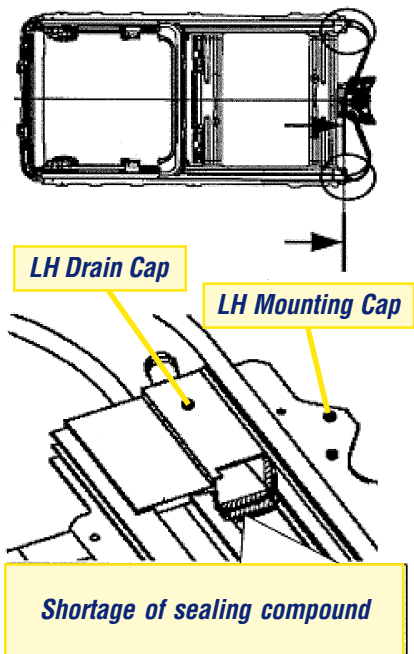
-- Make sure to connect the harness connector.

-- When installing the drain tubes, insert them 15mm(.59 in) or more over the snout of the drain cap.

-- RTV sealer is not a viable substitute for 3M Heavy Drip-Chek Sealer.



Cross-section view. Dashed line indicates area that should be resealed.



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PHASE II 4EAT STUD LEAK REPAIR

While diagnosing a transmission leak on a Phase II 4EAT, it is advisable to inspect the left-side transmission stud area (see fig. 1 for illustration). If the transmission leak originates from this stud, please perform the following repair.

- 1) Remove the left-front tire.
- 2) Separate the left-hand stabilizer link from the lower control arm (also referred to as transverse link).
- 3) Separate the left-front balljoint from the lower control arm.
- 4) Remove the axle shaft pin.
- 5) Remove the axle shaft from stub shaft and place out of the way.
- 6) Remove the transmission stud nut from the stud (see fig. 1 for stud location).
- 7) Remove the transmission stud.

NOTE: Regardless of the method used to retract the stud from the main case, be sure to inspect the stud for damage and replace if necessary.

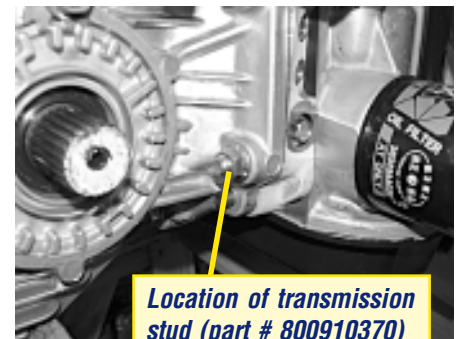
8) Wrap the stud (whether it is old or new) with Teflon tape.

9) Reinstall the stud and tighten the stud to 13-ft. lbs.

10) Reinstall the stud nut and torque to 30-ft. lbs.

11) Reinstall the axle shaft, pin, swaybar link, balljoint, and tire in reverse order.

NOTE: Axle shaft pins are not re-usable. Please install a new axle shaft pin during re-assembly.



02

OIL FILTER APPLICATION CLARIFICATION

As mentioned on page 8 of the August 2003 TIPS, the 2003MY and 2004MY turbo vehicles come equipped with and should only use oil filter P/N 15208AA080. Non-turbo vehicles for the 2003MY and 2004MY can use P/N 15208AA060 or 15208AA080.

Some confusion has come up with 2004MY Forester non-turbo models coming through with the smaller 15208AA080 filter installed.

The 15208AA080 filter has been installed by FHI in production since last April.

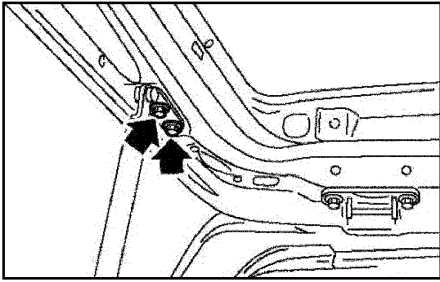
FHI says it is acceptable to use either the 15208AA060 or the smaller 15208AA080 oil filter on non-turbo vehicles but, the smaller 15208AA080 filter is the only one recommended for use on the turbo models.

We hope this information helps clear this matter up and apologize for the confusion.

Please also be aware that a parts bulletin was issued concerning the oil filter P/N 15208AA080. The Parts Bulletin was #PT120103, dated 5/8/03.

12**2004MY FORESTER
REAR GATE DAMPER
STAY**

Pay special attention to Forester vehicles built during July and August of 2004 for a potentially loose Rear Gate Damper Stay (both driver and passenger side). If this condition is found during PDI please torque the two identified bolts as specified (5.5 ft.lbs.) in the Subaru Service Manual.

**02****HEAD GASKET REPAIRS****Attn: Subaru Service Mgr. and
Warranty Personnel**

Be advised that when replacing cylinder head gaskets as a result of an oil or coolant leak, labor operation C 243-111, Engine Compression and/or Cylinder leak down testing, is not required. Labor operation C 245-001, Engine oil and/or coolant leak, testing and diagnosis have been added as an option to be used with head gasket operation numbers. Please provide this information to the appropriate personnel at your dealership.

**2003 CALENDAR OF
SUBARU HOLIDAYS****New Year's Day**

Wednesday, January 1, 2003

Presidents' Day

Monday, February 17, 2003

Memorial Day

Monday, May 26, 2003

Independence Day

Friday, July 4, 2003

Labor Day

Monday, September 1, 2003

Thanksgiving

Thursday, November 27, 2003

Friday, November 28, 2003

Christmas

Thursday, December 25, 2003

Friday, December 26, 2003

New Year's Day

Thursday, January 1, 2004

"TechTIPS" INPUT & SUGGESTIONS

This is **your** chance to offer suggestions for use in future issues of *TechTIPS!*

MODEL: _____

YEAR: _____

VIN: _____

Description of situation encountered: _____

Your suggestion for repair procedure, product improvements, etc.: _____

Please attach separate sheets, if necessary. You may also want to include Service Manual diagrams or references, or your own drawings to assist in describing your suggestion. All information submitted becomes the property of Subaru of America, Inc. Permission is granted to Subaru of America, Inc. to print your name and suggestions in T.I.P.S. and other Subaru of America, Inc. publications. Mail items to: PO Box 6000, Cherry Hill, NJ 08034-6000.

Your Name: _____ **Signature:** _____

Dealer's Name: _____ **City:** _____

Date: _____ **Dealer Code:** _____