

This procedure was developed by Dan Jansen and I have been unable to reach him for additional questions. I hope it helps you with your ABS problems. I would suggest that you check all connections to each wheel sensor and clean each sensor before you elect to take your ABS module apart.

www.guslikas.com/autorepair.htm

'Photos of ABS Module Repair' From Dan Jensen

[Image 1 of 12]

1. Remove the windshield washer bottle neck by rotating it forward. It may be tight but it will rotate. You might want to remove the cover (blue) and screen (white) (not shown) for better control.



'Photos of ABS Module Repair' From Dan Jensen

[Image 2 of 12]

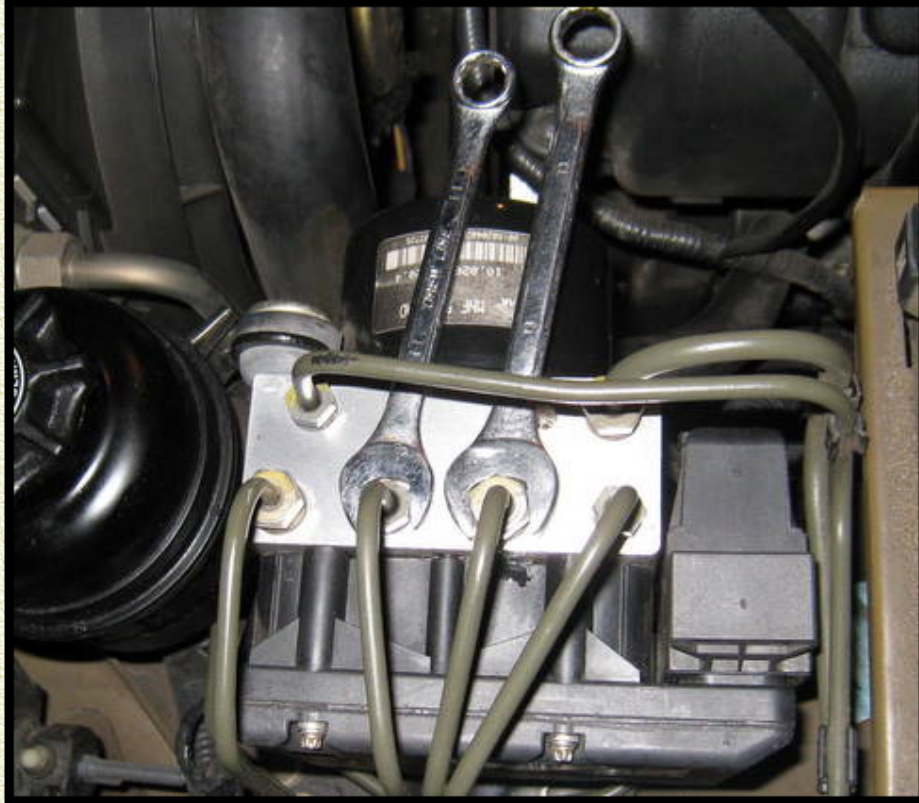
2. Lift the retaining lever on the main harness and pull the harness from the module (positioned behind the oil dipstick in this view to keep it out of the way) and then remove the ABS motor plug.



'Photos of ABS Module Repair' From Dan Jensen

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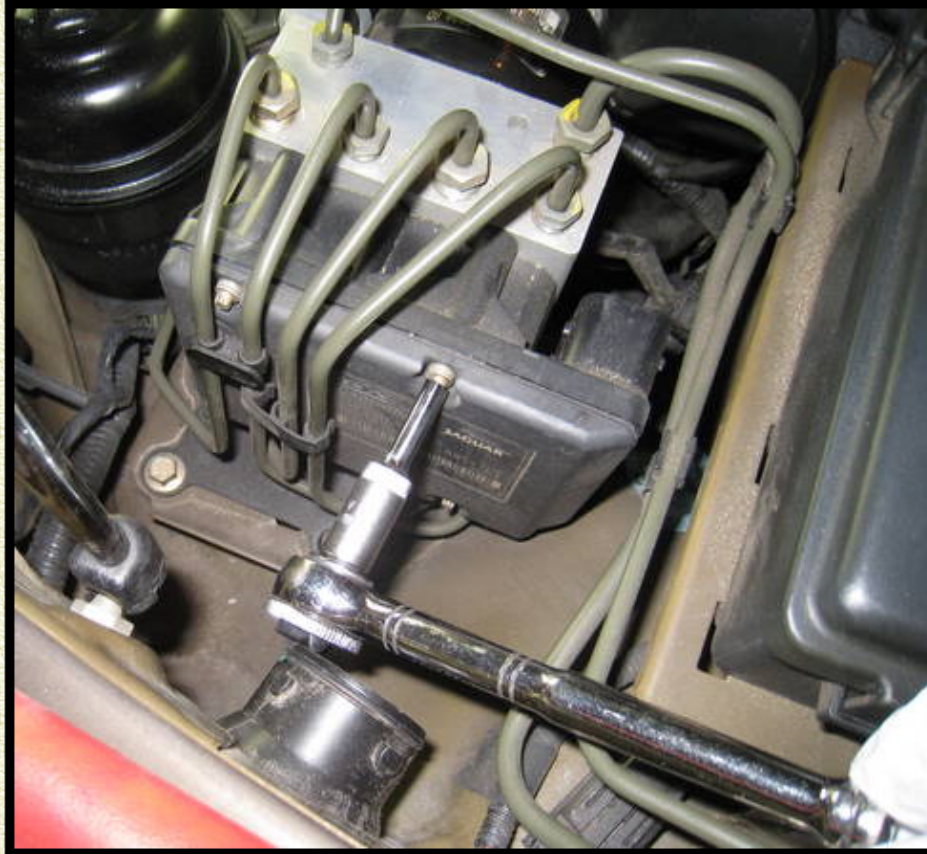
3. Loosen the nuts on the four hydraulic lines attached to the ABS valve body. The larger nuts are 13 mm and the smaller are 11 mm. Loosening the nuts allows the lines to be rotated slightly as needed during the next step.



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4. Use an E5 star socket to remove the four bolts holding the module to the ABS valve body. I purchased a six-piece star socket set from Harbor Freight for \$8 (P.N. 95178-1VGA).



www.jagrepair.com

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5. Lift the hydraulic lines from the valve body, pull them slightly outward, pull the module outward and off the ABS valve extensions, and then slide the module toward the front of the car and free of the ABS unit.



'Photos of ABS Module Repair' From Dan Jensen

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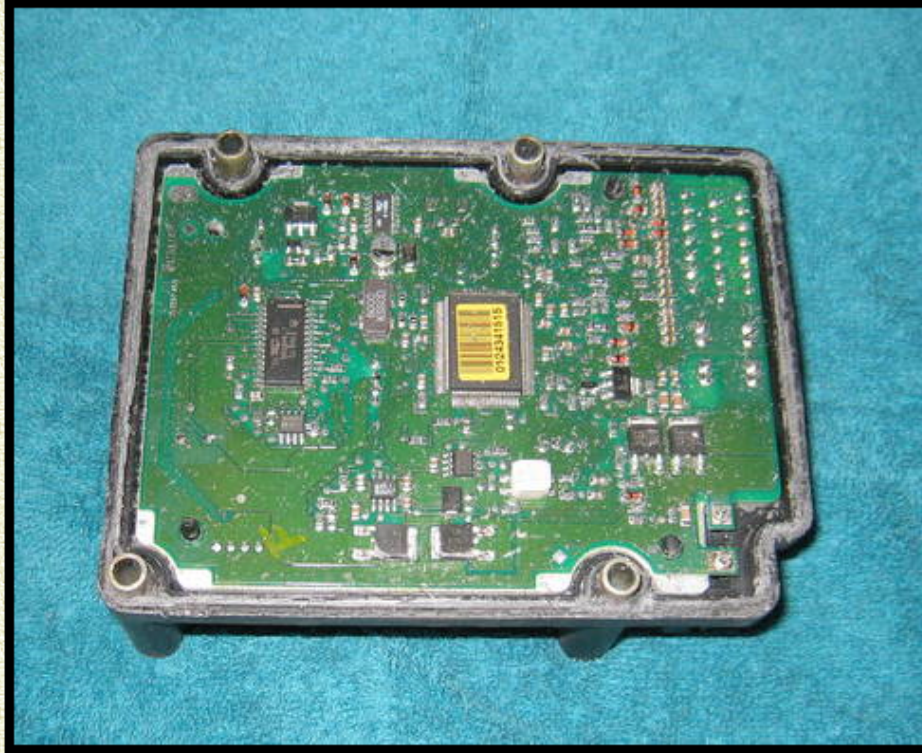
6. Use a fine-tooth hacksaw to cut the cemented joint between the module cover and body on all sides until the blade contacts the metal spacers. Then use a sharp, partially extended box knife to cut through the remainder of the joint. Use of a box knife without hacksawing first did not work for me.



'Photos of ABS Module Repair' From Dan Jensen

[Image 7 of 12]

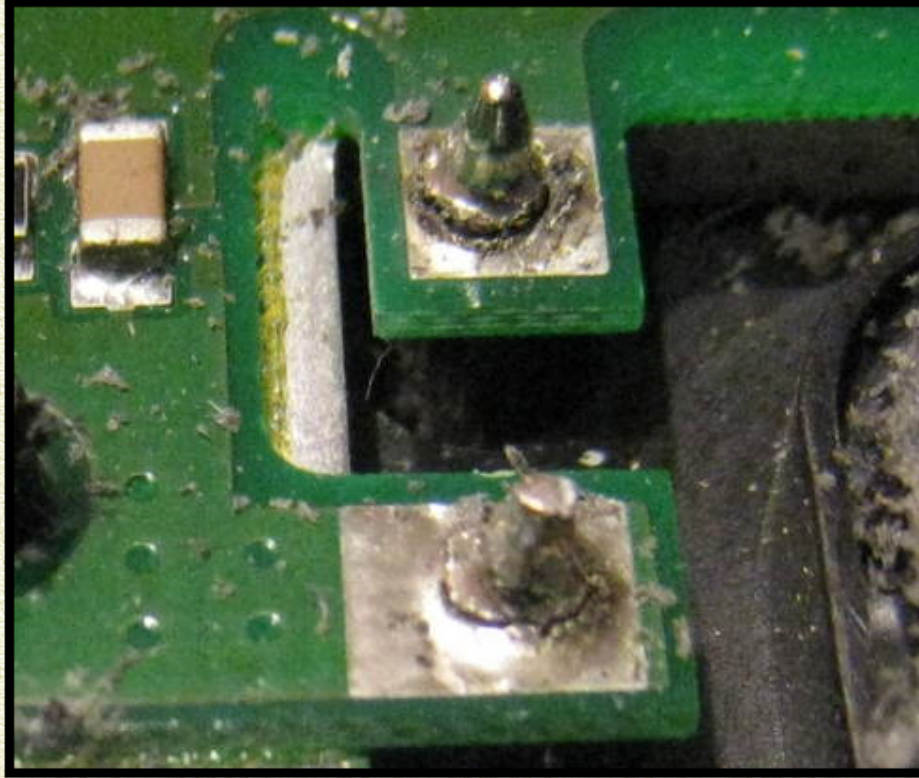
7. Use a screwdriver to gently pry the module cover off of the body to reveal the printed circuit board (PCB). The ABS motor solder joints are in the lower right corner of the PCB.



'Photos of ABS Module Repair' From Dan Jensen

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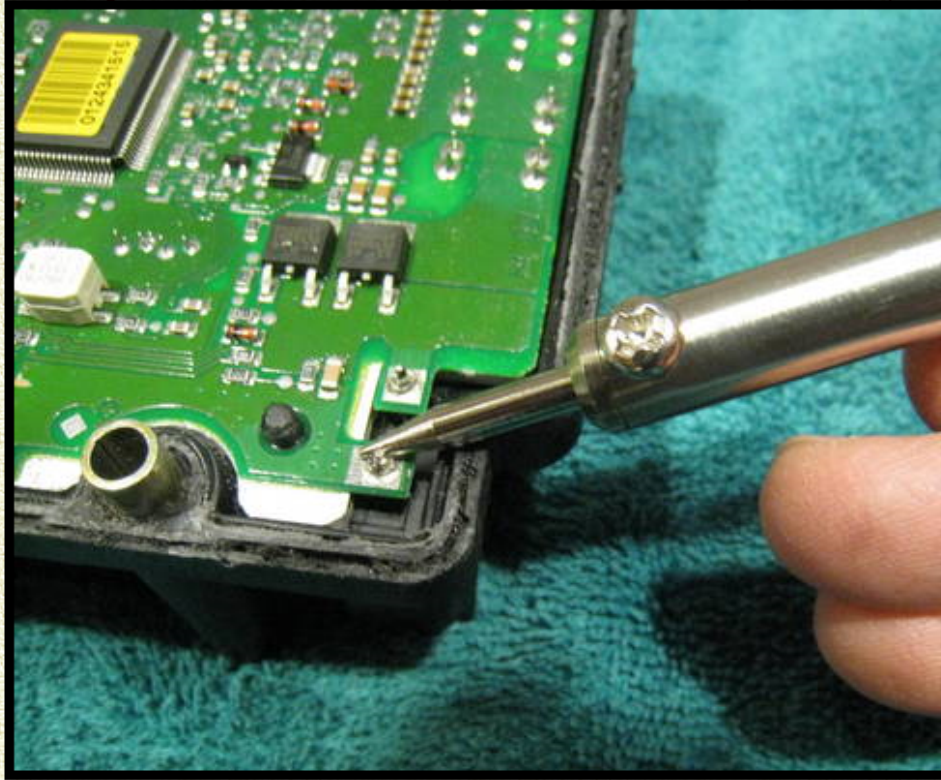
8. A tight shot of the ABS motor solder joints revealing that both had failed. This could be seen using a pair of medium-power reading glasses, but was much more apparent when I viewed a photo of the joints on my computer screen.



'Photos of ABS Module Repair' From Dan Jensen

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9. Heat the solder joints on one side with a 30W, 120V pencil-point soldering iron (Harbor Freight P.N. 47887-0VGA, \$5) until the solder melts (10-15 sec).



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'Photos of ABS Module Repair' From Dan Jensen

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10. Add a bit more solder from a spool of fine-gauge solder and then let things cool. Verify that good solder joints have been prepared. Apply RTV to the module cover and position it on the module body.



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11. Place the module between the jaws of a vise and GENTLY tighten. Wait ~24 hr for the RTV to cure. Reinstall the module in the reverse order of removal.



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'Photos of ABS Module Repair' From Dan Jensen

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12. During the final reassembly step, use a gloved hand to hold the washer bottle in place. I could not reattach the neck without doing this.

