



[Manuals.plus](#) /

- › [Haynes Publishing](#) /
- › Haynes Repair Manual for Subaru Legacy (2010-2016) & Forester (2009-2016)

Haynes Publishing Subaru Legacy (2010-2016), Subaru Forester (2009-2016)

Haynes Repair Manual for Subaru Legacy (2010-2016) & Forester (2009-2016)

Comprehensive Automotive Repair and Maintenance Instructions

[Introduction](#) [Using This Manual](#) [Maintenance](#) [Repairs](#) [Specifications](#) [Support](#)

INTRODUCTION TO YOUR HAYNES REPAIR MANUAL

This Haynes Repair Manual provides comprehensive, step-by-step instructions for the maintenance, service, and repair of Subaru Legacy (2010-2016) and Subaru Forester (2009-2016) vehicles. It is designed for the do-it-yourselfer, offering detailed guidance based on a complete disassembly and reassembly of the vehicle.

The manual covers a wide range of procedures, from basic routine maintenance and troubleshooting to complex engine overhauls. Each instruction is accompanied by clear photographs to assist in understanding and execution.

Subaru Legacy & Forester

Legacy □ 2010 thru 2016

Forester □ 2009 thru 2016



Haynes Repair Manual

Based on a complete teardown and rebuild



Includes essential information for today's more complex vehicles

Figure 1: Front cover of the Haynes Repair Manual for Subaru Legacy (2010-2016) and Forester (2009-2016). The cover features a white Subaru Legacy with the engine compartment visible, illustrating the manual's focus on detailed vehicle repair.

HOW TO USE THIS MANUAL

The Haynes manual is structured to guide you through various tasks with clarity. Procedures are presented in a logical, step-by-step format, supported by numerous photographs and illustrations.

Key Features:

- **Step-by-Step Instructions:** Each task is broken down into manageable steps, ensuring a clear understanding of the process.
- **Photographic Guidance:** Over 700 photographs illustrate components and procedures, aiding visual learners.
- **Troubleshooting Sections:** Dedicated sections help diagnose common issues before beginning repairs.
- **Wiring Diagrams:** Comprehensive diagrams are included for electrical system diagnosis and repair.

Important Exclusions:

This manual does **not** include information specific to six-cylinder and diesel engine models. Users with these specific engine types should consult alternative resources for detailed instructions.

MAINTENANCE PROCEDURES

Regular maintenance is crucial for the longevity and optimal performance of your Subaru Legacy or Forester. This manual provides detailed instructions for routine checks and service tasks.

Covered Maintenance Topics:

- **Chapter 1:** Tune-up and routine maintenance
 - **Chapter 3:** Cooling, heating, and air conditioning systems
 - **Chapter 4:** Fuel and exhaust systems
 - **Chapter 5:** Engine electrical systems
 - **Chapter 6:** Emissions and engine control systems
-

12 Additional steering and suspension system information and illustrations can be found in Chapter 10.

Driveaxle boot check

13 The driveaxle boots are very important because they prevent dirt, water and foreign material from entering and damaging the constant velocity (CV) joints. Oil and grease can cause the boot material to deteriorate prematurely, so it's a good idea to wash the boots with soap and water. Because it constantly pivots back and forth following the steering action of the front hub, the outer CV boot wears out sooner and should be inspected regularly.

14 Inspect the boots for tears and cracks as well as loose clamps (see illustration). If there is any evidence of cracks or leaking lubricant, they must be replaced (see Chapter 8).

17 Air filter check and replacement (every 15,000 miles or 12 months)

1 The air filter is located inside a housing in the engine compartment. Separate the cover halves and remove the air filter element (see illustration).

2 Inspect the outer surface of the filter element. If it is dirty, replace it. If it is only moderately dusty, it can be reused by blowing it clean from the back to the front surface with compressed air. Because it is a pleated paper type filter, it cannot be washed or oiled. If it cannot be cleaned satisfactorily with compressed air, discard and replace it. While the cover is off, be careful not to drop anything down into the housing.

Caution: Never drive the vehicle with the air filter removed. Excessive engine wear could result.

3 Wipe out the inside of the air filter housing.
4 Place the new filter into the housing, making sure it seats properly.
5 The remainder of installation is the reverse of removal.

18 Brake fluid change (every 30,000 miles or 30 months)

Warning: Brake fluid can harm your eyes and damage painted surfaces, so use extreme caution when handling or pouring it. Do not use brake fluid that has been standing open or is more than one year old. Brake fluid absorbs moisture from the air. Excess moisture can cause a dangerous loss of braking effectiveness.

1 At the specified intervals, the brake fluid should be drained and replaced. Since the brake fluid may drip or splash when pouring it, place plenty of rags around the master cylinder to protect any surrounding painted surfaces.

2 Before beginning work, purchase the specified brake fluid as listed in this Chapter's Specifications.

3 Clean dirt and debris from the master cylinder reservoir cap. Remove the cap from the master cylinder reservoir.

4 Using a hand suction pump or similar device, withdraw the fluid from the master cylinder reservoir.

5 Add new fluid to the master cylinder until it rises to the base of the filler neck.

6 Bleed the brake system at all four brakes (see Chapter 9) until new and uncontaminated fluid is expelled from the bleeder screw. Maintain the fluid level in the master cylinder as you perform the bleeding process. If you allow the master cylinder to run dry, air will enter the system.

7 Refill the master cylinder with fluid and check the operation of the brakes. The pedal should feel solid when depressed, with no sponginess. Verify the brake fluid level before driving (see Section 4).

Warning: Do not operate the vehicle if you are in doubt about the effectiveness of the brake system.

19 Drivebelt check, adjustment and replacement (every 30,000 miles or 30 months)

Check

1 The drivebelts are located at the front of the engine and play an important role in the overall operation of the vehicle and its components. Due to their function and material make-up, the belts are prone to failure after a period of time and should be inspected and adjusted periodically to prevent major engine damage.

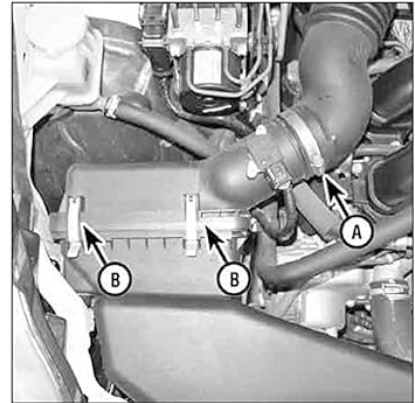
2 The number of belts used on a particular vehicle depends on the accessories installed. Drivebelts are used to turn the alternator, power steering pump and air conditioning compressor.

3 With the engine off, open the hood and locate the belts at the front of the engine. Using your fingers (and a flashlight, if nec-

essary), move along the belts checking for cracks and separation of the belt plies. Also check for fraying and glazing, which gives the belt a shiny appearance. Check the ribs on the underside of the belt. They should all be the same depth, with none of the surface uneven (see illustration).



16.14 Inspect the inner and outer driveaxle boots for loose clamps, cracks or signs of leaking lubricant



17.1 Loosen the intake hose clamp (A), then unclasp the clips (B) to get to the air filter element

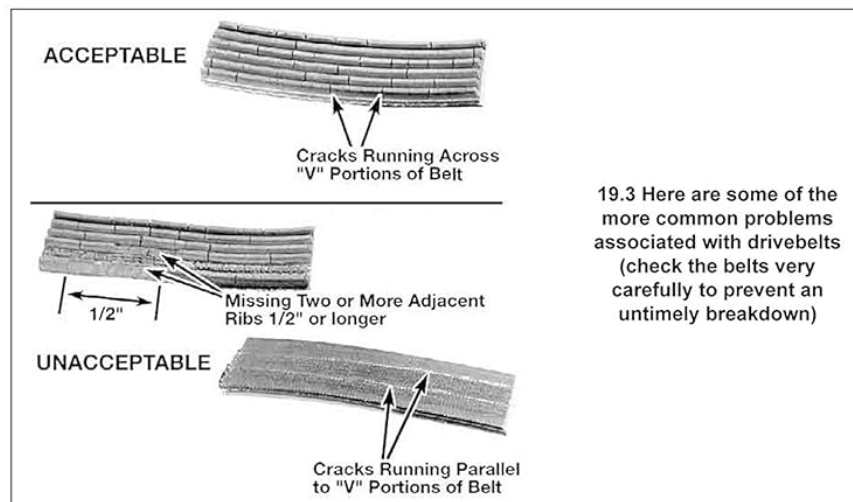


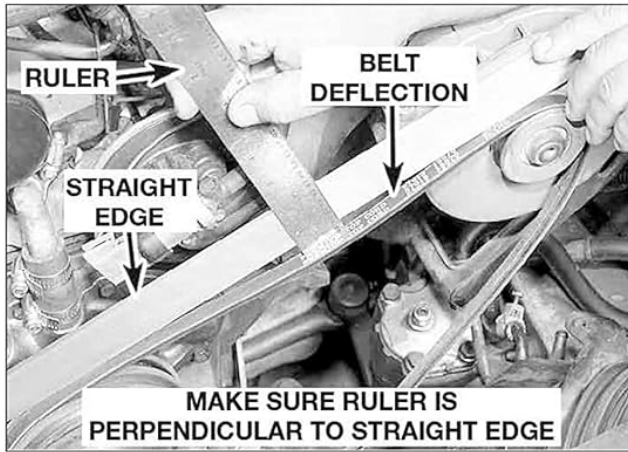
Figure 2: An example page from Chapter 1, "Tune-up and routine maintenance," detailing procedures for drivebelt inspection and adjustment, as well as air filter check and replacement. The page includes diagrams of engine components to aid in identification and procedure execution.

REPAIR PROCEDURES

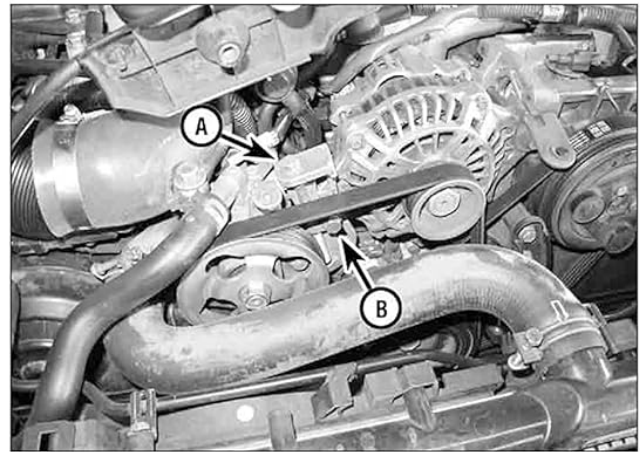
For more involved repairs, the manual offers comprehensive guidance to help you confidently tackle various vehicle systems.

Covered Repair Topics:

- **Chapter 2:** Engines (Part A: Engines, Part B: General engine overhaul procedures)
 - **Chapter 7:** Transaxle (Part A: Manual transaxle, Part B: Automatic transaxle)
 - **Chapter 8:** Clutch & driveline
 - **Chapter 9:** Brakes
 - **Chapter 10:** Suspension and steering systems
 - **Chapter 11:** Body
 - **Chapter 12:** Chassis electrical system & Wiring diagrams
-



19.4 Measuring drivebelt deflection with a straightedge and ruler



19.7 Typical 2013 and earlier turbocharged Forester model alternator/power steering pump drivebelt adjustment tensioner bolt (A) and lock bolt (B) locations



19.16 Typical "stretchy belt" removal technique

4 On 2013 and earlier turbocharged Forester models, the tension of front (alternator/power steering pump) belt is checked by pushing on the belt at a distance halfway between the pulleys. Push firmly with your thumb and see how much the belt moves (deflects) (see illustration). As rule of thumb, the belt should deflect approximately 1/4-inch.

Adjustment (2013 and earlier turbocharged Forester models, alternator/power steering pump belt)

Note: On 2013 and earlier turbocharged Forester models, the air conditioning compressor is of a unique design, called a "stretchy belt," which provides tension without the use of a mechanical tensioner; if the belt is loose it must be replaced (see Steps 13 through 17).

5 The belt adjuster is located mid-way between the alternator and power steering pump pulleys and is equipped with a tensioner bolt and a lock bolt.

6 Remove the drivebelt cover mounting bolt(s) (see illustration 19.18).

7 To adjust tension on the belts, loosen the lock bolt and turn the tensioner bolt to loosen or tighten the belt tension (see illustration).

8 Hold the assembly in position and check the belt tension. If it is correct, tighten the lock bolt until just snug, then recheck the tension. If the tension is still correct, tighten the lock bolt.

9 Do not use a prybar to move the assembly while the belt is being adjusted. Be sure the drivebelt is correctly aligned within each pulley before applying complete tension to the drivebelt.

Replacement

2013 and earlier turbocharged Forester models

Alternator/power steering pump belt

10 To replace the belt, follow the above procedures for drivebelt adjustment, but slip the belt off the pulleys and remove it.

11 Take the old belt with you when purchase a new one in order to make a direct comparison for length, width and design.

12 Place the belt over the pulley and adjust

the belt as described in Steps 5 through 9.

Air conditioning compressor belt

13 The air conditioning drivebelt is of a unique design, called a "stretchy belt," which provides tension without the use of a mechanical tensioner.

14 Disconnect the cable from the negative terminal of the battery (see Chapter 5).

15 Remove the alternator/power steering pump drivebelt as described previously (see Steps 5 through 9).

16 Insert a long prybar behind the belt, using a bracket or solid casting as a prying point. Rotate the engine clockwise with a socket and breaker bar on the crankshaft pulley bolt while you lever the belt towards the front of the vehicle, forcing the belt up and off the air conditioning compressor pulley as it turns (see illustration).

Warning: While performing this step, rotate the engine by hand only (do not use the starter).

Caution: Then belt can be easily damaged when prying it off, so work carefully.

Note: If the belt is not going to be re-used, you can simply cut it off.

17 Route the new belt under the crankshaft pulley, then over the air conditioning compressor pulley and rotate the engine again; the belt should pop over the pulley on the compressor. Reinstall and adjust the alternator/power steering pump belt.

Caution: Make sure the belt is centered properly on both pulleys.

All models except 2013 and earlier turbocharged Forester models

18 Remove the drivebelt cover mounting bolt and detach the cover (see illustration).

19 Rotate the belt tensioner clockwise using a wrench on the pulley bolt to release tension on the drivebelt (see illustration).

Caution: Do not loosen the drivebelt tensioner pulley bolt or it will be necessary to replace the entire tensioner with a new one.

Figure 3: An example page from Chapter 1, "Tune-up and routine maintenance," illustrating the process of checking drivebelt deflection and adjustment for 2013 and earlier turbocharged Forester models. Diagrams show how to use a ruler for measurement and the location of belt tensioners.

MANUAL SPECIFICATIONS

Attribute	Detail
-----------	--------

Publisher	Haynes Manuals N. America, Inc.
Publication Date	June 15, 2017
Language	English
Print Length	368 pages
ISBN-10	1620922576
ISBN-13	978-1620922576
Item Weight	1.33 pounds
Dimensions	8.38 x 0.75 x 10.75 inches

SUPPORT AND FURTHER ASSISTANCE

For additional support or inquiries regarding this Haynes Repair Manual, please refer to the publisher's official resources. Haynes Publishing is known for its comprehensive automotive and motorcycle repair manuals. While this manual is designed for self-sufficiency, specific questions or complex issues may require professional consultation or direct contact with the publisher.

For general information about Haynes manuals and their methodology, you may visit the [Haynes Publishing website](#).

