

Coolant reservoir- C2Z29118ES

Reservoir hose- C2Z4547

Front crossover coolant pipe- AJ89664

Rear crossover coolant pipe- AJ814007

Water pump- C2Z21781

Water pump connection- C2Z 18658

Water pump O-ring- AJ8 11539

Oil cooler seal- 38990585

Intake manifold gasket-

Replacing front/rear/ coolant lines, water pump, and water pump connector tube 2011

Jaguar XJ

1. Put the vehicle up on ramps/lift and remove the splash guard (T30 socket and 5/16 or 8 mm socket). Once the splash guard has been removed, flush the coolant system
 - a. To flush the coolant system, release the plug on the coolant line on the driver's side. Allow old coolant to flow out, then flush with distilled water. You'll need to use a flathead to get it loose probably
2. Put the splash guard back on
3. Remove the supercharger so that you can access the serpentine belt- Requires flathead and 5/16 or 8 mm socket
 - a. Loosen hose off with pliers by loosening the hose clamp
 - b. Squeeze off driver side tube with tab
4. Disconnect map sensor and connections to the central supercharger intake and any other connections (There should be 3-4)
5. Remove upper radiator hose, use pliers to loosen the clamps
6. Remove central supercharger intake
7. Disconnect the fuel line which is attached to the top of the intake manifold (T30)
 - a. Disconnect the two connections on either side of the intake manifold 11/16 wrench required
8. Unscrew the two screws at the very back of the hood (T30)- right up against the dash
9. Spray an air gun along the sides of the intake manifold to minimize debris getting into the cylinders (bad)
10. Remove the Intake manifold cover

- a. 10 10 mm bolts along the side and back- some are hard to get to
- b. There are two connections you'll have to feel for underneath to get the manifold cover off
- c. Two wire harnesses you'll have to pop loose
- d. A third connector you'll have to find and remove
- e. Cover the holes with duct tape

11. With the intake manifold cover removed (and central supercharger intake), you can easily access the front and rear coolant lines, water pump, and water pump connector tube

- a. Remove the water pump
 - i. Remove the tension in the serpentine belt. This will allow you to better access the water pump Use 3/8 ratchet to pull the tensioner. Pull UP and pull off the belt
 - ii. Disconnect hose that leads into the water pump
 - 1. Disconnect from the elbow nearby, not the hose that directly goes into the pump
 - iii. Remove the belt tensioner
 - 1. 15 mm socket
 - 2. Need to do this to get to the lower mounting bolt
 - iv. Remove the four mounting bolts off the water pump (T30)
 - v. Disconnect the remaining clamp from the water pump
 - vi. Replace the connector tube before putting the new water pump in
 - 1. Turn and pull CC to take out

2. Push and turn CW to put new one in
- b. Steps 1-4 can be completed simultaneously if you have the right number of people
- c. Put the water pump connector tube in
- d. Rear coolant line
 - i. Disconnect hose and temperature sensor from rear line
 - ii. Disconnect 4 T30 bolts
- e. Front coolant line
 - i. 4 bolts (T30)
 - ii. Take off the central supercharger intake
 - iii. Disconnect top of the line from the hoses
 - iv. Undo the bolts