# 1996 Chevrolet C2500 PICKUP

Submodel: | Engine Type: V8 | Liters: 6.5

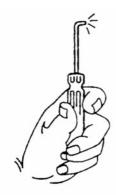
Fuel Delivery: FI | Fuel: DIESEL

## Oil Cooler Line Replacement

## **Removal Procedure**

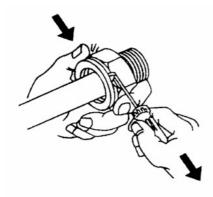
The optional oil cooler is either an integral part of the radiator or this is a separate unit placed in front of the radiator. The cooler lines and hoses are serviceable.

- 1. Set the parking brake.
- 2. Remove the plastic cap from the connector by pulling back along the pipe.



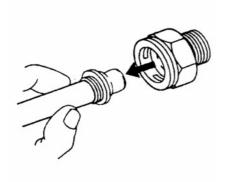
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3. Use a small, pick-type tool or screwdriver in order to release one of the open ends of the retaining ring from the connector fitting.



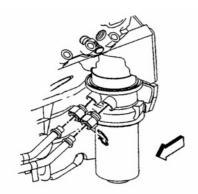
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- 4. Rotate the retaining ring out of position on the connector fitting and remove the ring completely.
- 5. Discard the retaining ring clip.

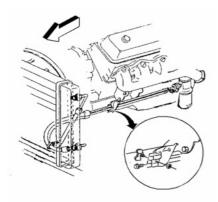


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6. Pull outward on the pipe in order to remove the pipe from the connector fitting.

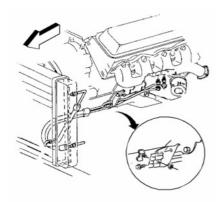


- 7. For the 4.3L, remove the bolt and the clamp from the bracket.
- 8. Remove the oil cooler lines from the oil cooler fittings.



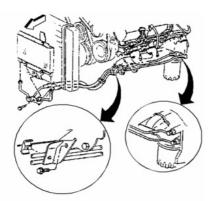
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- 9. For the 5.0L and the 5.7L, remove the bolt and the clamp from the bracket.
- 10. Remove the oil cooler lines from the oil cooler fittings.



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- 11. For the 7.4L, remove the bolt and the clamp from the bracket.
- 12. Remove the oil cooler lines from the oil cooler fittings.



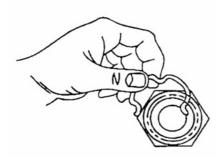
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- 13. For 6.5L, remove the bolt and the clamp from the bracket.
- 14. Remove the oil cooler lines from the oil cooler fittings.
- 15. Remove and discard the oil filter.
- 16. Clean all of the components in a suitable solvent, and dry them with compressed air.

- Use a clean solvent and compressed air in order to backflush the oil the oil cooler and lines.
- Use compressed air in order to remove the cleaning solvent.
- \_ Flush the system, using the same type of oil normally circulated through the cooler.
- 17. Inspect all of the fittings, connectors and cooler lines for damage or distortion.

#### **Installation Procedure**

- 1. Install the oil filter.
- 2. Install the retaining clip into the connector fittings. Do not reuse the existing retaining clips removed from the cooler line connector fittings. The retaining clips being put into the cooler line connector fittings must be new.



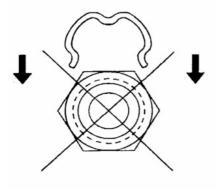
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3. Using your thumb and forefinger, insert a new retaining clip into one of the three connector fitting recesses. Make sure the retaining clip engages all three slots in the connector fittings. Failure to properly install the connector clips could cause the cooler lines to come loose and cause damage to the engine.



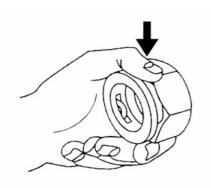
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4. With one end of the retaining clip engaged in the connector fitting slot, use your thumb to rotate the retaining clip around the connector fittings, until it snaps into place.

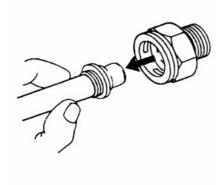


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5. Do not install the new retaining ring onto the fitting by pushing the retaining ring.

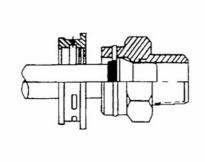


- 6. Ensure that the three retaining ring ears are seen from inside the fitting and that the retaining ring moves freely in the fitting slots.
- 7. Install the new retaining ring into the remaining quick connect fittings.



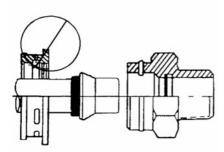
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- 8. Install the cooler lines to the vehicle. Ensure the cooler line being installed has a plastic cap on each end that connects to the quick connect fitting. If no plastic cap exists, or the plastic cap is damaged, obtain a new cap and position on to the cooler line prior to the cooler line installation.
  - Before connecting the lines, test the oil flow through the cooler.
  - \_ If oil flow restriction is not present, connect the oil lines to the connector fitting.
  - $\underline{\ \ }$  If oil flow restriction is present, replace the radiator. Refer to Radiator Replacement .

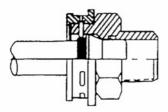


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- 9. Install the cooler line into the quick connect fitting.
- 10. Insert the cooler line end into the quick connect fitting until a click is either heard or felt.

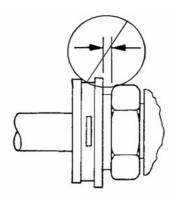


- 11. Do not use the plastic cap on the cooler line in order to install the cooler line into the fitting.
- 12. Pull back sharply on the cooler line in order to ensure that the cooler line is fastened into the quick connect fitting.



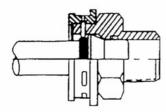
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- 13. Position (snap) the plastic cap onto the fitting. Do not manually depress the retaining ring when installing the plastic cap onto the quick connect fitting.
- 14. Ensure that the plastic cap is fully seated against the fitting.



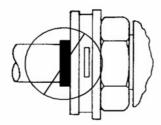
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15. Ensure that no gap is present between the cap and the fitting.

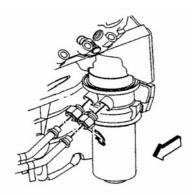


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16. Ensure that the yellow identification band on the tube is hidden within the quick connect fitting. A hidden yellow identification band indicates proper joint seating.



- Do not install the cooler line end into the fitting incorrectly. 17.
- If you cannot position the plastic cap against the fitting, remove the retaining ring from the quick connect fitting per Step 3 of the cooler line removal procedure. Check the retaining ring and the tube end in order to ensure neither is bent. Replace the cooler line or the retaining ring if necessary, and reinstall per Step 2 of the cooler line installation 18.
- 19. Install the cooler line into the quick connect fitting again in order to install the remaining cooler lines into the remaining quick connect fittings.

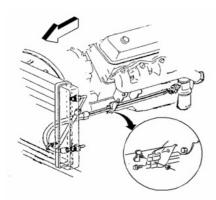


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20. For the 4.3L, install the oil cooler lines to the oil cooler fittings.

Tighten the oil cooler fittings to 24 N·m (18 lb ft).

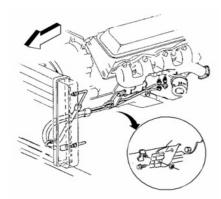
Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.



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21. For the 5.0L and the 5.7L, install the oil cooler lines to the oil cooler fittings.

Tighten the oil cooler fittings to 24 N·m (18 lb ft).



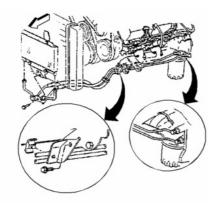
22. For the 7.4L, install the oil cooler lines to the oil cooler fittings.

Tighten Tighten the oil cooler fittings to 24 N·m (18 lb ft).

- 23. Install the oil cooler lines to the clip.
- 24. Install the bolt to the clip.

#### Tighten

Tighten the bolt to 6 N·m (53 lb in).



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25. For diesel engines, install the oil cooler lines to the oil cooler fittings.

#### Tighten

Tighten the oil cooler fittings to 24 N·m (18 lb ft).

- 26. Install the oil cooler lines to the clip.
- 27. Install the bolt to the clip.

Tighten Tighten the bolt to 6 N·m (53 lb in).

28. Tighten the bolt and the clamp to the bracket.

# Tighten

Tighten the bolt to 9 N·m (80 lb in).

29. Run the engine. Check the cooling system for leaks.