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2018 Ford GT Service and Repair Manual

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Charge Air Cooler (CAC) - Raptor

303-12C Intake Air Distribution and Filtering - 3.5L EcoBoost (BM)	2022 F-150
Removal and Installation	Procedure revision date: 08/5/2021

Charge Air Cooler (CAC) - Raptor

Removal

NOTICE

The turbocharger compressor vanes can be damaged by even the smallest particles. When removing any turbocharger or engine air intake system component, ensure that no debris enters the system. Failure to do so may result in damage to the turbocharger.

NOTE

Removal steps in this procedure may contain installation details.

1. Remove the CAC (charge air cooler) cooling fan.

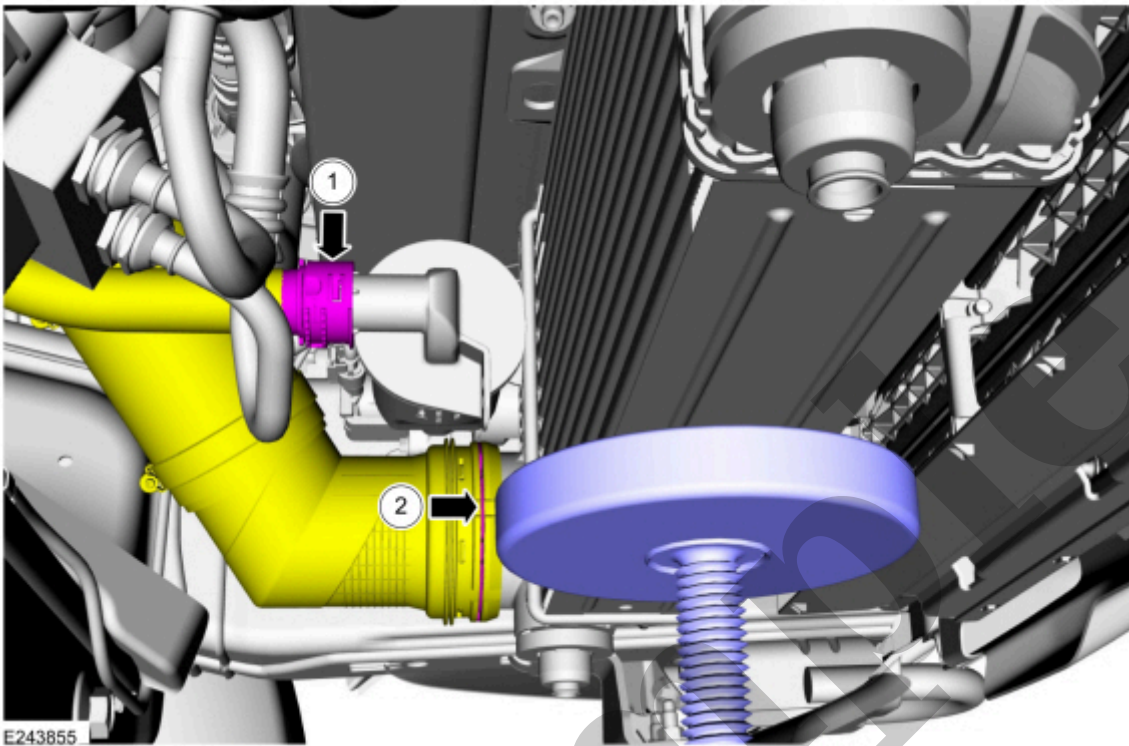
Refer to: [Charge Air Cooler \(CAC\) Cooling Fan - Raptor](#)(303-12C Intake Air Distribution and Filtering - 3.5L EcoBoost (BM), Removal and Installation).

2. Using an axle stand, support the CAC (charge air cooler) .

Use the General Equipment: Vehicle/Axle Stands

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4. 1. Disconnect the bypass valve tube.
2. Release the clip and position the CAC (charge air cooler) outlet pipe aside.



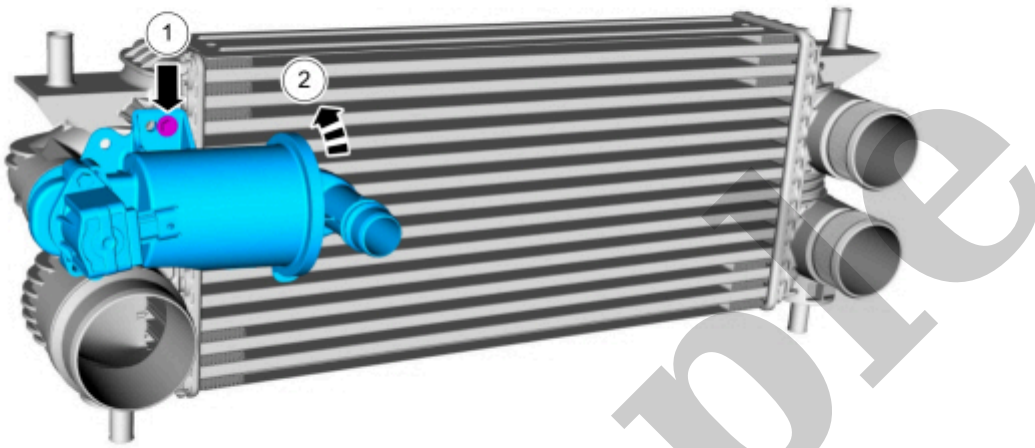
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5. 1. Disconnect the turbocharger bypass valve electrical connector.
2. Detach the retainers and position the wiring harness aside.

1. Remove the bolt from the turbocharger bypass valve.

Torque : 62 lb.in (7 Nm)

2. Rotate the turbocharger bypass valve and remove from the CAC (charge air cooler) .



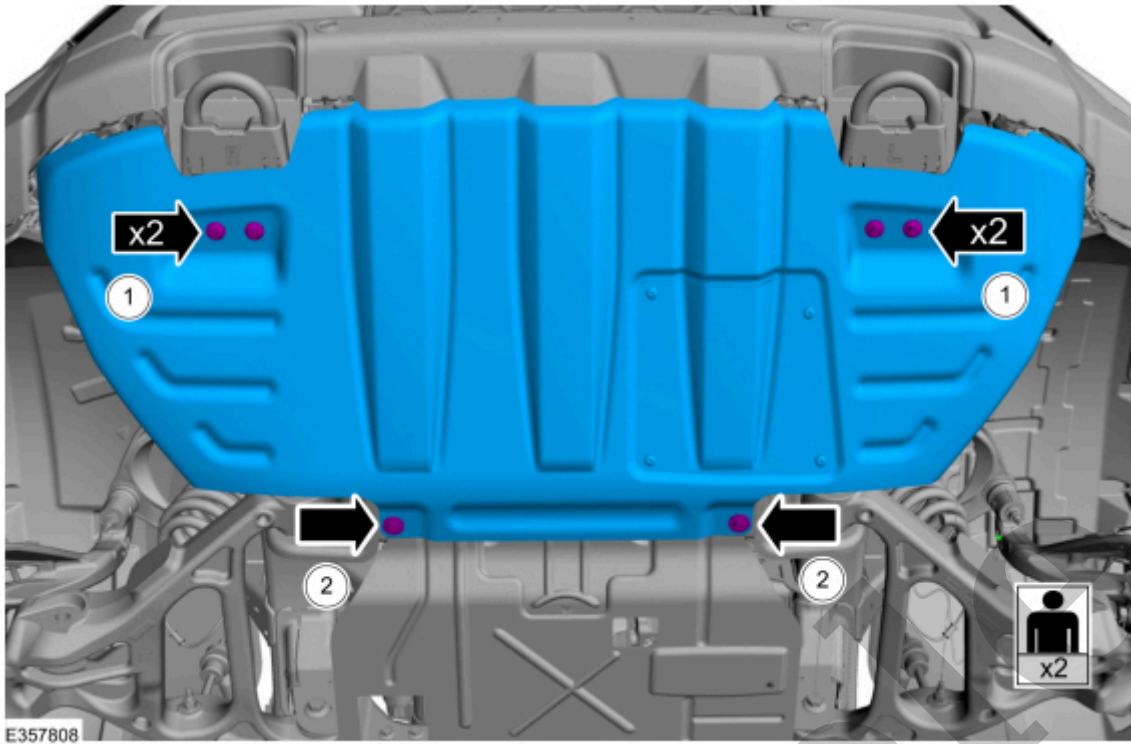
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Installation

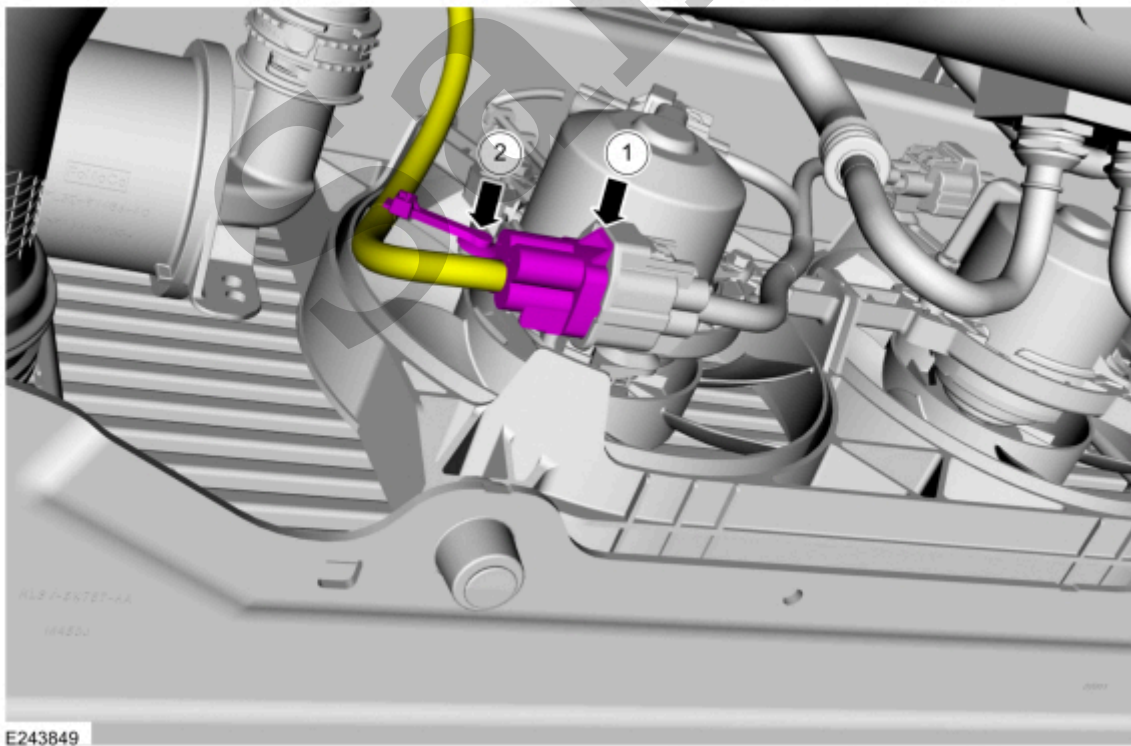
1. Inspect the turbocharger or engine air intake system components and clean, if necessary.
2. To install, reverse the removal procedure.

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[Click here to learn about symbols, color coding, and icons used in this manual.](#)

3. 1. Disconnect the CAC (charge air cooler) cooling fan electrical connector.
2. Detach the retainer and position the wiring harness aside.



Charge Air Cooler (CAC) Intake Pipe - Raptor

303-12C Intake Air Distribution and Filtering - 3.5L EcoBoost (BM)	2022 F-150
Removal and Installation	Procedure revision date: 08/5/2021

Charge Air Cooler (CAC) Intake Pipe - Raptor

Removal

NOTICE

The turbocharger compressor vanes can be damaged by even the smallest particles. When removing any turbocharger or engine air intake system component, ensure that no debris enters the system. Failure to do so may result in damage to the turbocharger.

NOTE

Removal steps in this procedure may contain installation details.

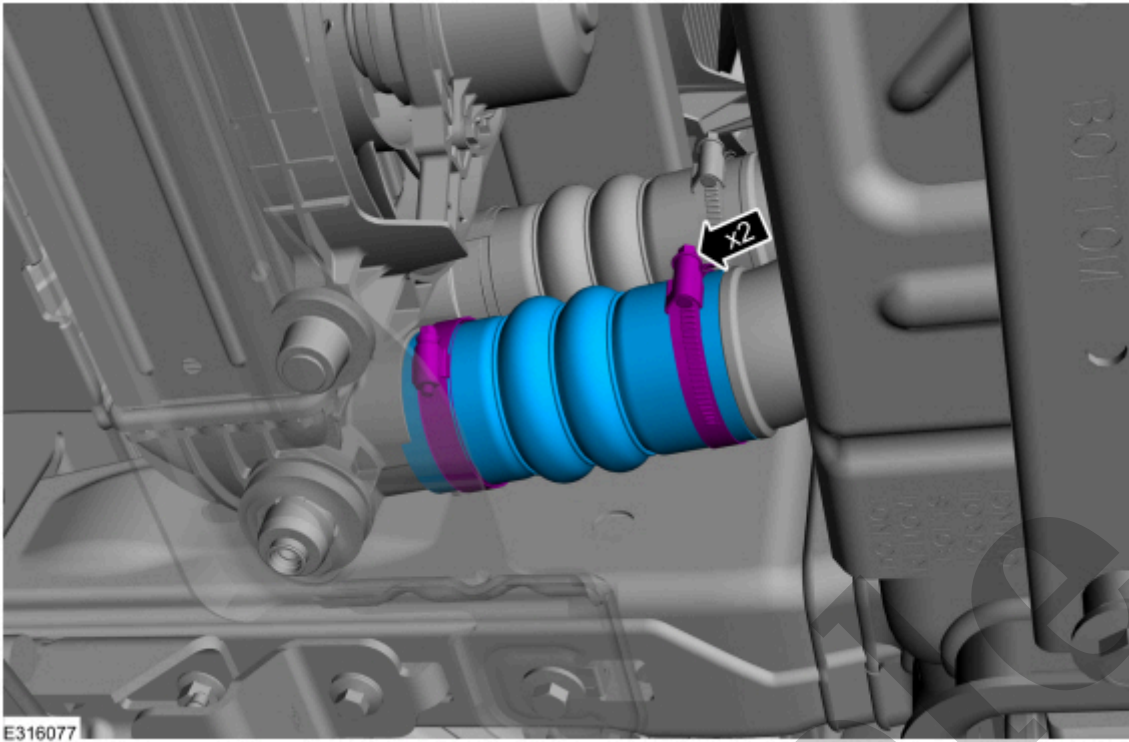
Charge air cooler (CAC) intake pipe - Left side

1. Remove the air cleaner outlet pipe LH (left-hand) .

Refer to: [Air Cleaner Outlet Pipe LH](#)(303-12C Intake Air Distribution and Filtering - 3.5L EcoBoost (BM), Removal and Installation).

2. Remove the air cleaner.

Refer to: [Air Cleaner](#)(303-12C Intake Air Distribution and Filtering - 3.5L EcoBoost (BM), Removal and Installation).



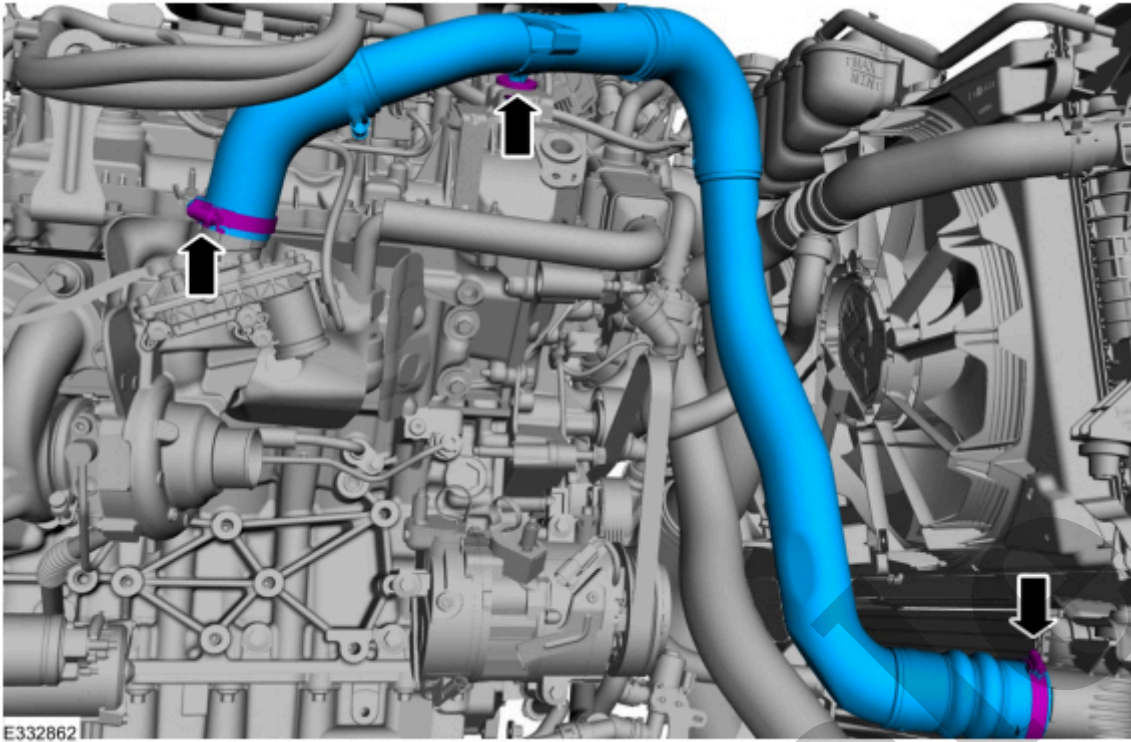
[Click here to learn about symbols, color coding, and icons used in this manual.](#)

6. **NOTE**

The clamp can be accessed through the fender splash shield.

Loosen the clamp and remove the CAC (charge air cooler) intake pipe LH (left-hand) .

Torque : 48 lb.in (5.4 Nm)



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

Installation

1. Inspect the turbocharger or engine air intake system components and clean, if necessary.
2. To install, reverse the removal procedure.

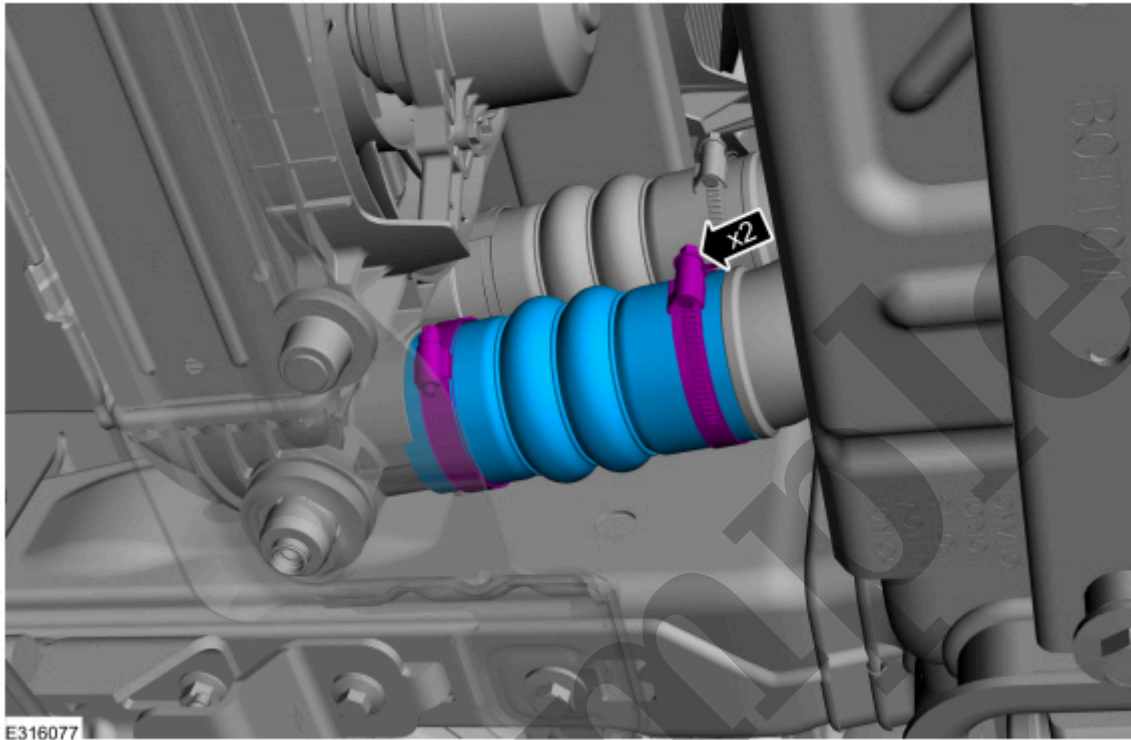
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3. With the vehicle in NEUTRAL, position it on a hoist.

Refer to: [Jacking and Lifting - Overview](#)(100-02 Jacking and Lifting, Description and Operation).

4. Loosen the clamps and remove the bellows connector.

Torque : 48 lb.in (5.4 Nm)



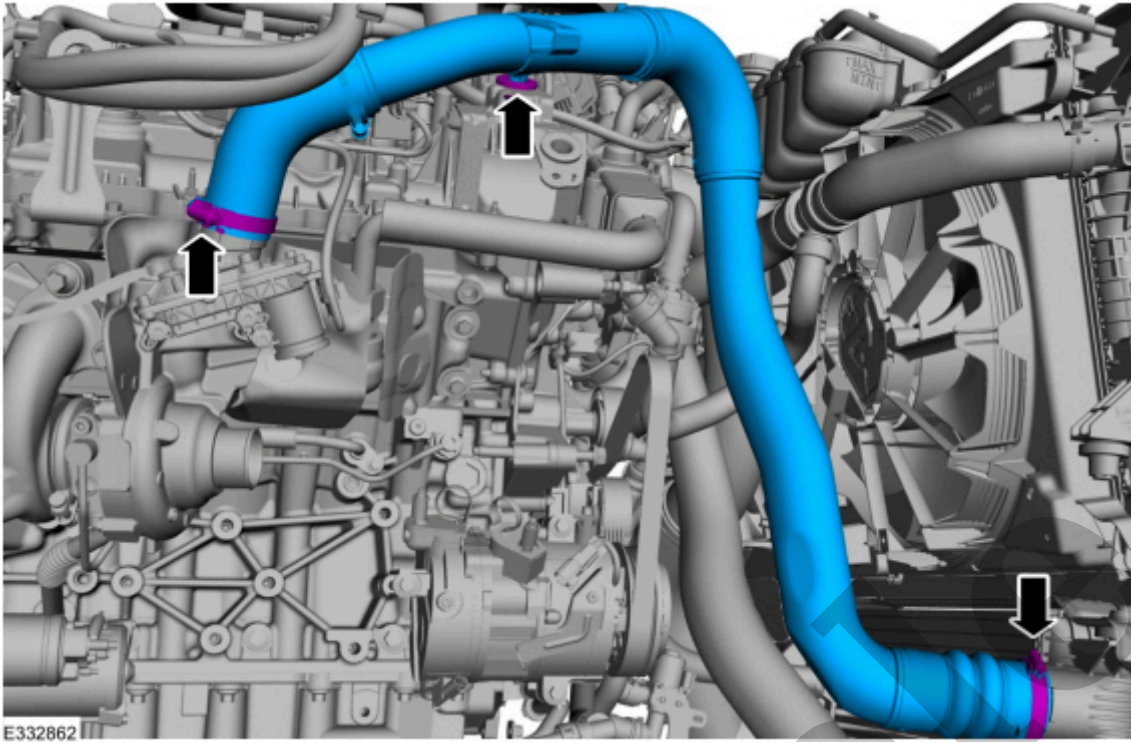
[Click here to learn about symbols, color coding, and icons used in this manual.](#)

5. **NOTE**

The clamp can be accessed through the fender splash shield.

Loosen the clamp and remove the CAC (charge air cooler) intake pipe LH (left-hand) .

Torque : 48 lb.in (5.4 Nm)



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

Installation

1. Inspect the turbocharger or engine air intake system components and clean, if necessary.
2. To install, reverse the removal procedure.

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