

## Introduction

This document provides instructions for installing an accessory on a Cat® Utility Vehicle (CUV). Do not perform any procedure in this document until you have read and understood the information contained in this document and the Operation and Maintenance Manual.

## Safety Section

<p><b>⚠ WARNING</b></p> <p>Do not operate or work on this product unless you have read and understood the instruction and warnings in the relevant Operation and Maintenance Manuals and relevant service literature. Failure to follow the instructions or heed the warnings could result in injury or death. Proper care is your responsibility.</p>	<p><b>⚠ WARNING</b></p> <p>Personal injury can result from improper handling of chemicals. Make sure you use all the necessary protective equipment required to do the job. Make sure that you read and understand all directions and hazards described on the labels and material safety data sheet of any chemical that is used. Observe all safety precautions recommended by the chemical manufacturer for handling, storage, and disposal of chemicals.</p>
<p><b>⚠ WARNING</b></p> <p>Failure to follow all safety guidelines prescribed in this document and by governing authorities and regulatory agencies may result in severe injury or death of personnel or machine damage.</p>	<p><b>⚠ WARNING</b></p> <p>Before servicing/performing maintenance on the machine, electrical power must be physically disconnected; battery cables must be disconnected from the battery. All applicable lock out and tag out procedures must be followed.</p>
<p><b>⚠ WARNING</b></p> <p>When removing a major component or attachment, ensure that it is properly blocked or secured before removing mounting hardware. An assembly that is disconnected without proper blocking may shift or fall, resulting in serious injury or death of personnel or machine damage.</p>	<p><b>⚠ WARNING</b></p> <p>Observe the safe working load limits of all lifting and blocking devices and keep a safe distance from suspended/blocked loads. Personnel may be seriously injured or killed by falling loads.</p>
<p><b>⚠ WARNING</b></p> <p>Personal injury or death can result from improper maintenance procedures. To avoid injury or death, follow the procedures exactly as stated below.</p>	<p><b>⚠ WARNING</b></p> <p>Do not operate the machine if any guards or covers are missing or inadequately secured. Personnel could be seriously injured or machine damage may occur.</p>

# Caterpillar®

## Installation Instructions - Accessory Kit

### Front Bumper/Wheel and Tire Kit

(p/n 590-3239)



■ **NOTE:** Read these Installation Instructions thoroughly before beginning the installation process. Retain these Installation Instructions for future reference.

Kit includes:		
QTY	DESCRIPTION	
4	Machine Screw (M8 x 20 mm)	
2	Plastic Cap	
16	Wheel Nut	
4	Carriage Bolt (M8 x 20 mm)	
4	Spacer	
2	Front Wheel Assembly	
2	Rear Wheel Assembly	
4	Cap Screw (M8 x 60 mm)	
8	Flange Nut (M8)	
1	Front Bumper	
1	Right-Side Bumper Bracket	
1	Left-Side Bumper Bracket	

### Installing Wheel Assemblies

Front tire inflation pressure should be 82.7 kPa (12 psi) cold. Rear tire inflation pressure should be 97 kPa (14 psi) cold. Rear tire inflation pressure with cargo should be 110 kPa (16 psi) cold.

### REMOVING

1. Secure the vehicle on a support stand to elevate the wheels.

### ⚠ WARNING

**Make sure the vehicle is solidly supported on the support stand to avoid injury.**

2. Remove the nuts securing the wheels; then remove the wheels.

### INSTALLING

1. Install each Wheel Assembly on its hub and secure using new Wheel Nuts.
2. Using a crisscross pattern, tighten the wheel nuts in 20 ft-lb (27.2 N-m) increments to a final torque of 100 ft-lb (136 N-m).

### CHECKING/INFLATING

1. Using an air pressure gauge, measure the air pressure in each tire. Adjust the air pressure as necessary to meet the recommended inflation pressure.
2. Inspect the tires for damage, wear, or punctures.

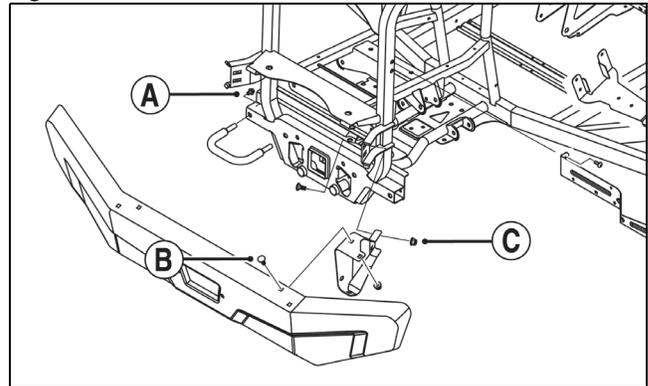
### Installing Front Bumper

### REMOVING

1. Remove the four cap screws (A) securing the tow hooks to the frame. Remove both hooks. See Fig. 1.
2. Remove the carriage bolts and nuts (B) securing the existing front bumper to the left- and right-side mounting brackets. See Fig. 1.

3. Remove the four cap screws and nuts (C) securing the left- and right-side mounting brackets to the frame. Remove the brackets. See Fig. 1.

Fig. 1

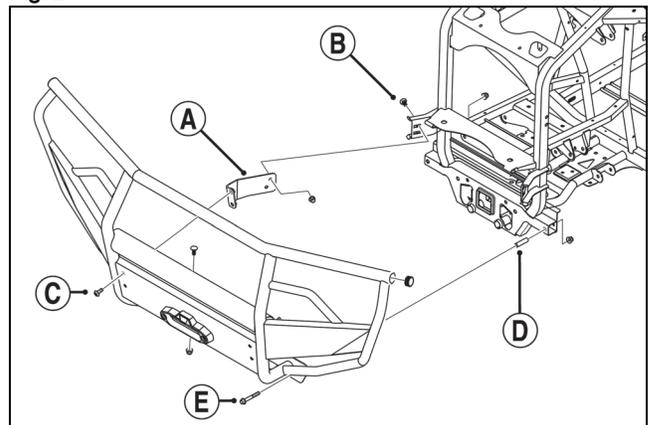


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### INSTALLING

1. Position Left- and Right-Side Bumper Brackets (A) with the frame mounting locations. Loosely secure using four Carriage Bolts (M8 x 20 mm) and four M8 Flange Nuts (B). See Fig. 2.
2. Position Front Bumper with the bumper brackets and loosely secure using four Machine Screws (M8 x 20 mm) (C). See Fig. 2.
3. Position the four Spacers (D) in the frame where the tow hooks were installed; then loosely secure the bottom of the front bumper to the frame using four Cap Screws (M8 x 60 mm) (E) and four M8 flange nuts. See Fig. 2.

Fig. 2



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4. Tighten all hardware securely.