

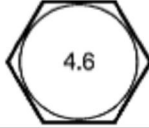
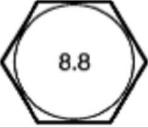
PART 14-03 Front Suspension

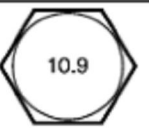

UPPER SUSPENSION ARM

Installation

1. Position the upper suspension arm to the frame and install the two bolts from the outside, into the arm.
2. Install the retaining nuts on the two bolts and torque to 58 ft-lb.
3. Install the upper ball joint to the upper suspension arm.
4. Remove the support wire from the brake caliper and install the brake caliper on the brake rotor (see Group 12, Part 10).
5. Install the tire and wheel.
6. Lower the car to the ground.
7. Check the caster, camber, and toe-in.

Torque-Tension Relationship for Metric Fasteners

Nominal Dia. (mm)	Pitch	 Class 4.6				 Class 8.8			
		Clamp Load (lbs)	Tightening Torque			Clamp Load (lbs)	Tightening Torque		
			Lubricated (ft-lbs)	Zinc Plated (ft-lbs)	Plain&Dry (ft-lbs)		Lubricated (ft-lbs)	Zinc Plated (ft-lbs)	Plain&Dry (ft-lbs)
12	1.75	3197	18.9	21.4	25.2	8240	48.7	55.1	64.9

Nominal Dia. (mm)	Pitch	 Class 10.9				 Class 12.9			
		Clamp Load (lbs)	Tightening Torque			Clamp Load (lbs)	Tightening Torque		
			Lubricated (ft-lbs)	Zinc Plated (ft-lbs)	Plain&Dry (ft-lbs)		Lubricated (ft-lbs)	As-Received (ft-lbs)	Plain&Dry (ft-lbs)
12	1.75	11792	69.6	78.9	92.8	13781	81.4	92.2	108.5

The torque values can only be achieved if nut (or tapped hole) has a proof load greater than or equal to the bolt's minimum ultimate tensile strength.

Clamp loads estimated as 75% of proof load for specified bolts.

Torque values listed in foot-pounds.

Torque values calculated from formula $T = KDF$ where;

$K=0.15$ for "lubricated" condition,

$K=0.17$ for zinc plated and dry condition (or as-received for the 12.9),

$K=0.20$ for plain and dry condition