

Component Procedures: Timing Chain Guide

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Component Procedures: Timing Chain Guide

Parts and Labor (itype_189)

Parts

Qualifier	Part #	Name	Price	Note
Chain Guide > Primary Chain	12597417	20 - Chain Guide	32.82	
Chain Guide > Secondary Chai?	12623514	20 - Chain Guide	28.35	
Chain Guide > Secondary Chai?	12623513	20 - Chain Guide	32.23	
Chain Guide > Secondary Chai?	12600462	20 - Chain Guide	28.91	
Chain Guide > Secondary Chai?	12600461	20 - Chain Guide	28.92	

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Replace	One Or All	B	7.7	0.0

Secondary Timing Chain Guide Replacement - Left Side (Article 12202)

Removal Procedure

- Remove the engine front cover . Refer to Engine Front Cover Replacement .
- Remove the left side secondary camshaft drive chain tensioner, shoe, and guide. Refer to Camshaft Timing Chain Components Removal .
- Clean and inspect all of the camshaft timing drive components. Refer to Camshaft Timing Drive Components Cleaning and Inspection . Replace components as necessary.

Installation Procedure

- Install the left side secondary camshaft drive chain shoe, guide, and tensioner. Refer to Camshaft Timing Chain Components Installation .
- Install the engine front cover. Refer to Engine Front Cover Replacement .

Secondary Timing Chain Guide Replacement - Right Side (Article 12203)

Removal Procedure

- Remove the engine front cover . Refer to Engine Front Cover Replacement .
- Remove the right side secondary camshaft drive chain tensioner, shoe, and guide. Refer to Camshaft Timing Chain Components Removal .
- Clean and inspect all of the camshaft timing drive components. Refer to Camshaft Timing Drive Components Cleaning and Inspection . Replace components as necessary.

Installation Procedure

- Install the right side secondary camshaft drive chain shoe, guide, and tensioner. Refer to Camshaft Timing Chain Components Installation .
- Install the engine front cover. Refer to Engine Front Cover Replacement .

Primary Timing Chain Guide Replacement - Lower (Article 12196)

Removal Procedure

- Remove the primary camshaft drive chain tensioner . Refer to Primary Camshaft Intermediate Drive Chain Tensioner Replacement .
- Remove the primary camshaft drive chain lower guide bolts. Click for full-size image
- Remove the primary camshaft drive chain lower guide.

Installation Procedure

- Position the primary camshaft drive chain lower guide to the oil pump . Click for full-size image
- Install the primary camshaft drive chain lower guide bolts and tighten to 23 Nm (17 lb ft) .
- Install the primary camshaft drive chain tensioner. Refer to Primary Camshaft Intermediate Drive Chain Tensioner Replacement .

Primary Timing Chain Guide Replacement - Upper (Article 12197)

Removal Procedure

- Remove the engine front cover . Refer to Engine Front Cover Replacement . Click for full-size image
- Remove the primary camshaft drive chain tensioner . Refer to Camshaft Timing Chain Components Removal .
- Remove the primary upper camshaft drive chain guide. Refer to Camshaft Timing Chain Components Removal .

Installation Procedure

- Install the primary upper camshaft drive chain guide. Refer to Camshaft Timing Chain Components Installation . [Click for full-size image](#)
- Install the primary camshaft drive chain tensioner. Refer to Camshaft Timing Chain Components Installation .
- Install the engine front cover. Refer to Engine Front Cover Replacement .