



## Technical Information Bulletin

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### 14-027



### Section

Frame - 14

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### Subject

Common Frame Fasteners Torque Specifications

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### Release Date

9/25/2020

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### Condition

Beginning in January 2020, all M10, M12, M16, and M20 frame fasteners will be the same depending on the plant. Torque specifications for these fasteners are different from previous fasteners.

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### Chassis Affected

All Kenworth and Peterbilt chassis. Refer to the 11th digit of the VIN and the chart below for plant implementation dates.

Table 1 Production Implementation Dates

Plant location	11th digit of VIN	Start date
St Therese	M	01/06/2020
Renton	R	07/06/2020
Denton	D	07/06/2020
Chillicothe	J	09/14/2020
Mexicali	F	11/09/2020

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### Action

#### Information Only

Refer to the information below for part numbers and torque specifications for the new fasteners.

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### Parts


Parts are available from PACCAR Parts.

Part Number	Description
W34-1163-XXX	M10 bolt. Available in many lengths from 15 mm to 275 mm. XXX= length of the bolt. 15 mm bolt=015, 275 mm bolt=275.
W34-1159-XXX	M12 bolt. Available in many lengths from 20 mm to 290 mm. XXX= length of the bolt. 20 mm bolt=020, 290 mm bolt=290.
W34-1160-XXX	M16 bolt. Available in many lengths from 30 mm to 300 mm. XXX= length of the bolt. 30mm bolt=030, 300 mm bolt=275.
W34-1161-XXX	M20 bolt. Available in many lengths from 40 mm to 300 mm. XXX= length of the bolt. 40 mm bolt=040, 300 mm bolt=300.
W20-1028-XXX	Nut, hex, locking, metric. XXX = size. 010=10 mm.
W34-1162-XXX	Washer, Metric, Hard. XXX=size. 010=10 mm.


## Procedure

**PACCAR introduced new frame fasteners that are now common to all Kenworth and Peterbilt chassis.**




**CAUTION**

Using old style nuts, bolts, or washers with new Common Frame fasteners will result in incorrect torque values and clamp loads. This could cause a frame failure. Old style fastener sets and new Common Frame fastener sets may be separately installed in the same frame, but the sets cannot be mixed together. DO NOT use old style fasteners on Common Fasteners and vice versa. Failure to comply may result in equipment or property damage.


**NOTE**

The new finish also affects torque values. Refer to the Torque Specification chart.

## Characteristics of the Common Frame Fasteners

- New finish is more resistant to salt spray, has better paint adhesion, and is [RoHS](#) compliant.
- **Do not lubricate these fasteners.**
- Bolts and washers can be reused, but nuts can only be reused once. If in doubt, install new nuts.
- If a bolt must be replaced, then nuts and bolts must be replaced in pairs.
- Fasteners must be torqued from the nut to achieve correct clamp load.
- Old style bolts and the new Common Fasteners may be difficult to distinguish. If in doubt, replace the nut and bolt with new parts.
- Old style nuts use a nylon locking feature. The new style Common Fastener nuts use a metal locking feature.
- Bolts that were paired with a nylon locking feature cannot be used with the metal lock nuts.
- Bolts paired with a metal lock nut cannot use a nut with a nylon locking feature.

## Torque specifications for Common Frame Fasteners

**CAUTION**

Incorrectly-tightened fasteners may break or fail to achieve the correct clamp load. Use a torque wrench for final tightening of these fasteners. An impact gun may over-torque or break fasteners due to the coating on the bolt threads. When torqueing, the nut must rotate slightly before achieving the torque value. If the nut does not rotate, the fastener is over-torqued and must be replaced. Failure to comply may result in equipment or property damage.

**CAUTION**

Incorrect clamp loads may cause unexpected frame movement or failure. The intended clamp load may not be achieved if the nut is held and torque is applied to the bolt. To achieve correct clamp loads, the frame fasteners must be torqued with the nut. Failure to comply may result in equipment or property damage.

Diameter	Recommended Torque Value
M10	29-41 lbs-ft (39.4-55.6 N·m)
M12	51-69 lbs-ft (69.1-93.5 N·m)
M16	125-165 lbs-ft (169.5-223.7 N·m)
M20	230-300 lbs-ft (311.8-406.8 N·m)

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## Service Bulletin

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**14-027**

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### Section

14 - Frame

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### Description

PACCAR offers common frame fasteners on all Peterbilt and Kenworth vehicles. These common fasteners have different torque specifications than previous fasteners.

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### Release Date

9/29/2020

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### Introduction

#### Introduction

In 2020, Peterbilt and Kenworth began using the same M10, M12, M16, and M20 frame fasteners on all vehicles. Torque specifications for these fasteners are different from previous fasteners.

Refer to the 11<sup>th</sup> digit of the VIN and the chart below for vehicle manufacturing plant implementation dates.

Table 1 Production Implementation Dates

Plant location	11 <sup>th</sup> digit of VIN	Start date
St Therese	M	01/06/2020
Chillicothe	J	09/14/2020
Denton	D	07/06/2020
Renton	R	07/06/2020
Mexicali	F	11/09/2020

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### Resolution

#### Information Only

Refer to the information below for part numbers and torque specifications for the new fasteners.

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### Warranty

Warranty does not apply, this is information only.

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### Parts

Parts are available from PACCAR Parts.

Part Number	Description
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## **Procedure**

**PACCAR introduced new frame fasteners that are now common to all Peterbilt and Kenworth chassis.**



### **CAUTION**

Using old style nuts, bolts, or washers with new Common Frame fasteners will result in incorrect torque values and clamp loads. This could cause a frame failure. Old style fastener sets and new Common Frame fastener sets may be separately installed in the same frame, but the sets cannot be mixed together. DO NOT use old style fasteners on Common Fasteners and vice versa. Failure to comply may result in equipment or property damage.




### **NOTE**


The new finish also affects torque values. Refer to the Torque Specification chart.

### Characteristics of the Common Frame Fasteners

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### Torque specifications for Common Frame Fasteners

 <b>CAUTION</b>
<p>Incorrectly-tightened fasteners may break or fail to achieve the correct clamp load. Use a torque wrench for final tightening of these fasteners. An impact gun may over-torque or break fasteners due to the coating on the bolt threads. When torqueing, the nut must rotate slightly before achieving the torque value. If the nut does not rotate, the fastener is over-torqued and must be replaced. Failure to comply may result in equipment or property damage.</p>

 <b>CAUTION</b>
<p>Incorrect clamp loads may cause unexpected frame movement or failure. The intended clamp load may not be achieved if the nut is held and torque is applied to the bolt. To achieve correct clamp loads, the frame fasteners must be torqued with the nut. Failure to comply may result in equipment or property damage.</p>

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