

INSTALLATION OF R-290 TIRE PRESSURE MONITORING SENSOR KIT 2011-2016 FORD F-250/350 ALL SRW MODELS

INSTALLATION SAFETY PRECAUTIONS

If any installation problems are encountered, please call G&B Specialties for technical assistance before continuing with the installation process.



- Failure to heed to any of the following warnings could result in severe bodily injury and/or equipment damage.
- Read and understand this manual completely before attempting installation of the equipment.
- Installation instructions provided below only address the Rafna railgear equipment. Applicable railway company procedures and policies must be adhered to.
- The road wheels and tires must be installed before the railgear is installed to obtain correct height measurements.
- Do not hit the wheel adapter with any hard objects as this could dent the adapter and cause vibrations when driving. If the adapters do not easily slide onto the hubs, lightly sand the hub and the inside of the adapter.
- Before performing any work under the vehicle or railgear, ensure the engine is turned off and the parking brake is set.
- With the installation of the vehicle road wheels and tires, it is recommended to recalibrate the vehicle's speedometer.

INSTALLATION OF TIRE PRESSURE MONITORING SENSOR

The following procedure details the installation of the tire pressure sensor on the 19.5" steel wheels provided with the RAFNA Railgear equipment. The hardware required for this installation for one sensor and one wheel is listed in Table 1.

Table 1: Tire Pressure Monitoring Sensor Installation kit

Part Number	Description	Qty
S-201502	19.5" x 6.75" Wheel 5.60" Offset	Ref
R-10110	OEM Tire Pressure Monitoring Sensor	Ref
R-21080	Valve Stem Adapter	1
R-10037	TPS Sticker	1
R-10056	Nut	1
R-10057	Adapter Grommet	1
R-10058	Washer	1
R-10059	Washer	1

Tire Pressure Monitoring Sensor (TPMS)

The OEM TPMS Sensors will be reused but not the OEM valve stems as they are a snap-in style that will not mount to the steel wheels supplied with RAFNA Wheel Modification Kit. A screw-on type valve stem that is secured to the steel wheel with a nut on the outside of the wheel is required and is supplied with this kit and is to be used with the OEM TPMS Sensor.

Installation of Tire Pressure Monitoring Sensor (TPMS)

1. Remove the OEM sensor assembly from the OEM wheel.
2. Remove the OEM valve stem from the OEM TPMS sensor, by removing the screw securing the valve stem to the sensor, as shown. The valve stem and screw will not be reused.
3. Remove the nut and rubber grommet from the valve stem adapter supplied with this kit, as shown. The nut and rubber grommet will not be reused.
4. Assemble the valve stem adapter to the OEM sensor as shown, using the screw supplied with the valve stem adapter. It is recommended that the screw be secured with a small amount of loctite and torqued to 12 in-lbs.
5. Assemble the backer washer and adapter grommet to the valve stem adapter as shown.

6. Attach the TPMS sensor to the 19.5" steel wheel, as shown, using the supplied washer and hex nut. The valve stem hex nut should be torqued to 24-30 in. lbs. This is to maintain the proper operation of the sensor and to maintain an air tight seal with the wheel.
7. It is recommended that the speedometer for the vehicle be recalibrated for the 19.5" wheels and tires.

Spare Tire

The OEM spare tire does not contain a tire pressure sensor. An extra OEM sensor will be shipped with this kit. The same installation process should be followed as in the previous section.

Tire Inflation

The recommended tire inflation is 85psi.

This is only a recommended inflation pressure. The proper tire pressure should be determined by the operator of the vehicle, depending on vehicle load and operating conditions.

Programming the TPMS

It will be necessary to reprogram the vehicles computer to read the new sensor.

Contact you local FORD dealer for the correct procedure on reprogramming the TPMS or refer to the vehicle's OEM manual for programming instructions.

Tire Rotation

When performing a tire rotation as part of the vehicle standard maintenance schedule, it will be necessary to re-set the TPMS so that the vehicles computer knows the location of the moved sensors.

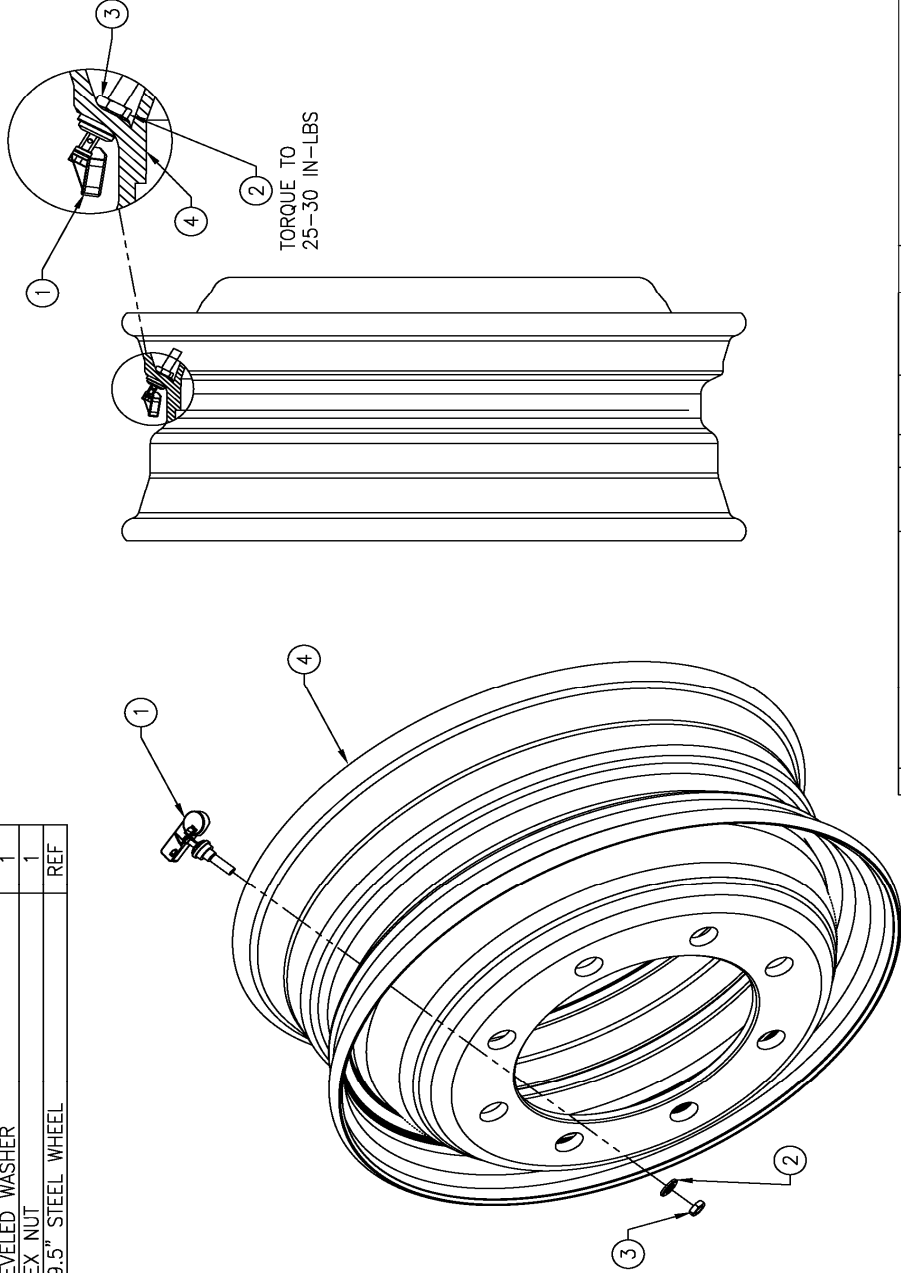
ITEM	PART No.	DESCRIPTION OF ITEM(PART)	QTY.
1	R-21080	VALVE STEM ADAPTER	1
2	R-10059	BACKER WASHER	1
3	R-10057	ADAPTER GROMMET	1
4	—	OEM TPMS	REF
5	—	SCREW (SUPPLIED WITH ITEM #1)	REF

REV	DESCRIPTION OF CHANGES	DATE	BY	APPRVD	ECN #	APPROVED
A	REVISION A RELEASED	10/20/10	AMM	JMP		DRAWN
B	UPDATED BORDER	05/12/21	SMH	JMP		CHECKED
						APPROVED

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DESIGN - ENGINEERING - MANUFACTURING		2011-2016 FORD F250/F350 TPMS INSTALLATION KIT	
SHEET DRAWING NUMBER	DATE DRAWN	PART NUMBER	REVISION
3	10/20/10	K-R29FDTPS05	B

ALL WELDS TO CONFORM TO AWS D1.1

ITEM	PART No.	DESCRIPTION OF ITEM(PART)	QTY.
1	-	MODIFIED SENSOR ASSEMBLY	-
2	R-10058	BEVELED WASHER	1
3	R-10056	HEX NUT	1
4	S-201502	19.5" STEEL WHEEL	REF



TORQUE TO
25-30 IN-LBS

REV	DESCRIPTION OF CHANGES	DATE	BY	APPRVD	ECN #	APPROVED
A	REVISION A RELEASED	10/20/10	JAWL	JMP		
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2011-2016 FORD
F250/F350 TRMS
INSTALLATION KIT

REVISED DRAWING NUMBER: 10/20/10
PART NUMBER: K-R29FDTPS05
REVISION: B