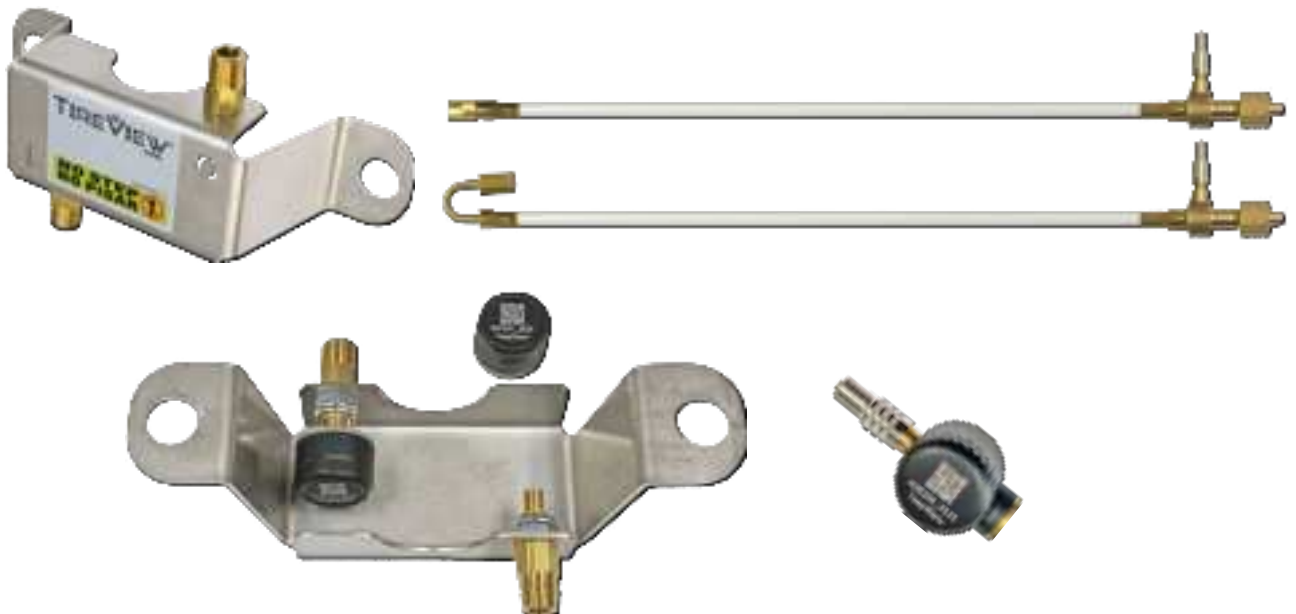


INSTALLATION MANUAL

TireView Flow-Thru Bracket, Hose and Sensor Installation & Servicing



Truck/Tractor Applications

V019-01 TVL Flow Thru Bracket
Install Video

<https://youtu.be/cxQAibolbPc>



www.psitireinflation.com/resources#tpms-resources



V019 06 Servicing Wheels with
Flow Thru Brackets Video

<https://youtu.be/Qs3AqKAp20A>




Flow-Thru Bracket, Hose and Sensor Installation

Truck/Tractor Applications

About this Manual

This manual provides installation and maintenance procedures for TireView® TPMS by P.S.I. Use the procedures in this manual to install the system on commercial vehicles.

Before You Begin

 **CAUTION:** DO NOT PERFORM UNAUTHORIZED MAINTENANCE OR REPAIR PROCEDURES, OR INSTALL NON-P.S.I.® COMPONENTS ON ANY P.S.I.® SYSTEM. THIS CAN VOID THE WARRANTY.

1. Read and understand all instructions and procedures before service to components begins.
2. Read and observe all Warning and Caution alert messages in this publication. They provide information that can prevent personal injury, damage to components, or both.
3. Follow the P.S.I. installation, maintenance, service, and troubleshooting guidelines.
4. Use special tools, when required, to avoid personal injury and damage to components.

Hazard Alert Messages and Torque Symbols

 **WARNING:**

A Warning alerts the technician to an instruction or procedure that must be followed to avoid personal injury and damage to components.

 **CAUTION:**

A Caution alerts the technician to an instruction or procedure that must be followed to avoid damage to components.

 **TORQUE REQUIRED:**

The torque symbol alerts the technician to tighten fasteners to a specified torque value.

Additional Information

Visit the Resource section at www.psitireinflation.com to access and request additional information.

Call P.S.I.® at 210.222.1926 (United States and Canada) or email info@psitireinflation.com or techsupport@psitireinflation.com.

Introduction

The P.S.I.® TireView® Tire Pressure Monitoring System (TPMS) is designed to monitor air pressure and temperature in the tire. It is only for added safety and not meant to replace regular tire maintenance and exercise of reasonable care when operating a motor vehicle.

The system cannot prevent accidents nor will P.S.I.® be responsible for damage or injury due to (a) improper use, (b) failure to follow the product manufacturer's instructions or to perform preventative maintenance, (c) unauthorized repair or modifications, (d) use of products beyond their useful life, or (e) external causes such as accidents, abuse, or other actions or events outside of P.S.I.® control.



Flow-Thru Bracket, Hose and Sensor Installation

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Record of Revisions

Revision Number	Revision Date	By
A	April 5, 2024	CS
B	May 1, 2024	CS
C	August 20, 2025	CS

Truck/Tractor Tire Hose Reference Chart by Vehicle Type*



Tire Size	Vehicle Type	Flow-thru Bracket Sub-Assy	Inside Hose		Outside Hose	
			OAL Length	Part #	OAL Length	Part #
16.0"	Ford E-Series	70611-00	13.0"	31373-13-CP	11.5"	31368-11.5-CP
19.5"	Ford Stripped Chassis	70610-00	13.0"	31367-13-CP	11.5"	31368-11.5-CP
19.5"	Freightliner	70607-00	12.5"	31373-12.5-CP	12.5"	31363-12.5-CP
19.5"	Hino Small Box	70608-00	14.5"	31373-14.5-CP	13.5	31363-00-CP
19.5"	Isuzu	70609-00	15.0"	31373-15-CP	12.0"	31363-12-CP
22.5"	Hino Large Box (L6)	70601-00	17.0"	31373-00-CP	13.5"	31363-00-CP

* Contact P.S.I. Support for additional configurations: setup@tireview.com



Flow-Thru Bracket, Hose and Sensor Installation

Truck/Tractor Applications

Introduction

This manual is intended to provide guidance when installing Flow-thru Bracket, Hose and Sensor accessories for the system on drive and trailer axles. Your configuration may vary due to type of equipment. Consult your support team for guidance.

Flow-thru Bracket, Hose and Sensor Components

PART DESCRIPTION	EXAMPLE
TireView Flow-Thru Bracket <ul style="list-style-type: none"> Mounts to wheel end utilizing existing drive wheel axle end cap nuts or trailer hub cap bolts. Applications vary by vehicle. Consult fitment guide for correct part number and manufacturer recommended torque settings for installation Cap sensors and hoses connect to flow-thru bracket by hand 	
Check Port (CP) Hose - INSIDE TIRE <ul style="list-style-type: none"> Inside Tire configuration Application lengths vary by vehicle. Consult fitment guide for correct part number and length 	
Check Port (CP) Hose - OUTSIDE TIRE <ul style="list-style-type: none"> Outside Tire configuration Application lengths vary by vehicle. Consult fitment guide for correct part number and length 	
TireView TPMS Cap Sensor* <ul style="list-style-type: none"> Secured to backside of Flow-Thru Brackets Inside and outside tire positions 	
TireView TPMS Flow-Thru Sensor* <ul style="list-style-type: none"> Used on front steer tires Dual seal valve cap allows air check or add without removing sensor 	

* NOTE: Sensors are not paired with receiver. See separate installation manual for pairing procedure.



Flow-Thru Bracket, Hose and Sensor Installation

Truck/Tractor Applications

Dual Tire Installation Procedures

1. On dual-wheel installations, ensure valve stems are clocked 180° from each other. If valve stems are clocked incorrectly, remove lug nuts, re-clock wheels, and reinstall lug nuts. See *Figure 1*.

T Torque lug nuts to factory specifications.

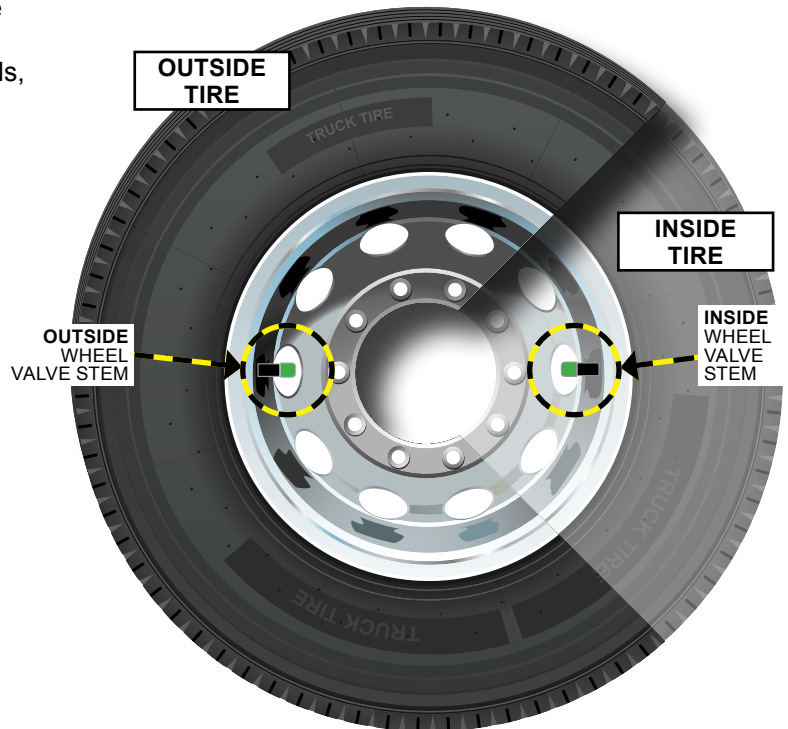


Figure 1: 180° Valve Stem Orientation.

NOTE: On wheels with 5-hole cutouts, valve stems cannot be exactly 180 degrees apart, but should be as close as possible. See *Figure 2*.

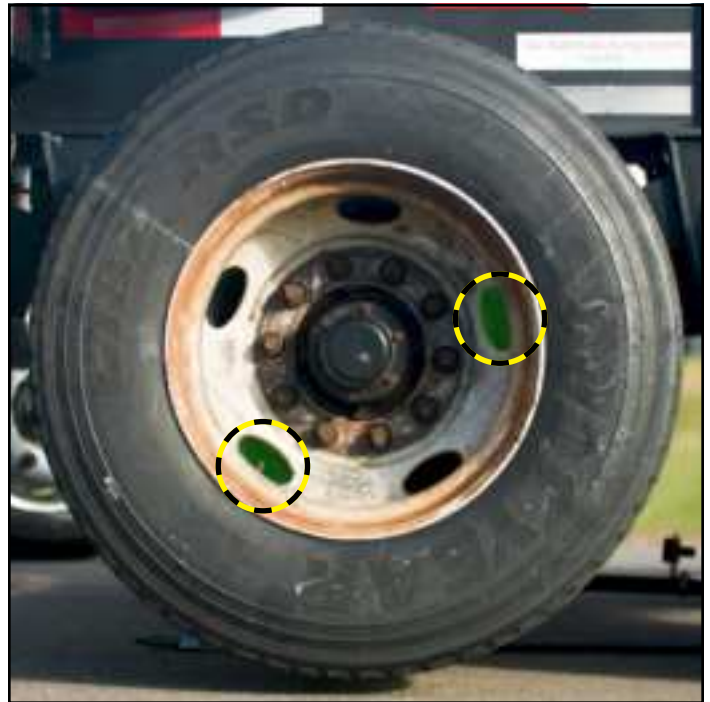


Figure 2: 5-hole wheel example.



Flow-Thru Bracket, Hose and Sensor Installation

Truck/Tractor Applications

2. Remove tire valve cap from drive tire. Ensure tire valve threads are clean and free of any debris. Connect straight hose to inside wheel valve stem. Connect hose with 180° bend union to outside wheel valve stem. Hand-tighten plus an additional 1/2 turn using a 7/16" wrench. See Figure 3.



CAUTION: Do not overtighten the hose connections. This could damage the hose seal and cause the tire to deflate. Damage to components can occur.



Figure 3: Connect hoses to inside and outside wheels.

3. After sensor programming, install valve cap sensors on fittings labeled "I" for inside and "O" for outside on the back side of the bracket. Hand-tighten the cap sensors until they bottom out, and then slightly twist the cap sensors to fully seat them. See Figure 4.

NOTE: Sensors can be installed on bracket before or after bracket is installed to vehicle.



CAUTION: Do not overtighten the sensor caps. Damage to the sensor cap and threads can occur.



Figure 4: Install cap sensors on Flow-Thru Brackets.



Flow-Thru Bracket, Hose and Sensor Installation Truck/Tractor Applications

4. Connect hose to bracket using knurled fitting, matching “I” to inside hose and “O” to outside hose. Leave knurled fittings slightly loose. See *Figure 5*.



CAUTION: The knurled ends on the CP hoses are to be hand-tightened only. Do not use tools to tighten. Damage to the knurled ends can occur.

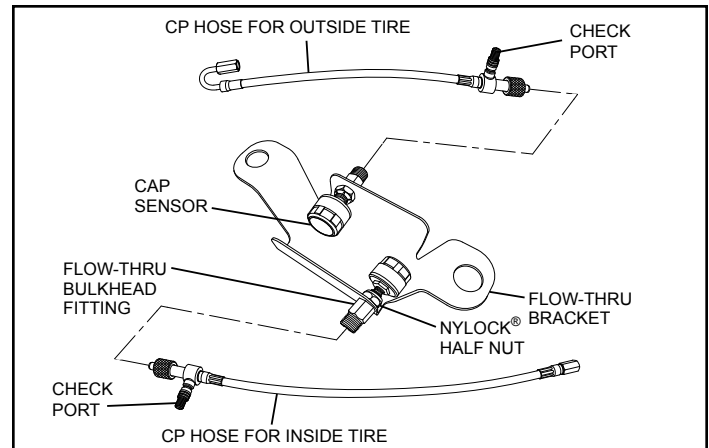


Figure 5: Connect hoses to bracket.

5. Hold bracket up to wheel end or hubcap to determine what mounting bolts will be used to ensure best fitment. Remove corresponding bolts or studs on wheel end or hubcap. See *Figure 6*.



CAUTION: Do not twist or kink the hoses during installation. Hoses should not contact wheel.



Figure 6: Determine bracket mount location.

6. Mount brackets to wheel ends:



WARNING: Refer to specific vehicle manufacturer torque specifications for drive axle cap nuts and hub cap bolts before installing.

- 6a. **Drive axles:** slide bracket over existing axle cap studs, and install provided Nylock half nuts onto studs. See *Figure 7*.



Torque drive axle cap nuts or bolts to manufacturers specifications.

- 6b. **Trailer axles:** align flow-thru bracket and reinstall hub cap bolts through bracket mounting holes and hub cap.



Torque hub cap bolts to hub cap manufacturer specifications (typically 12-16 ft-lbs.).

NOTE: Some vehicles may be equipped with chrome or other cosmetic hub cap wheel coverings. These wheel coverings must be removed and discarded to enable Flow-Thru Bracket installation. See *Figure 8*.



Figure 7: Install bracket to drive axle or trailer axle wheel end.



Figure 8: Cosmetic wheel coverings must be removed.

Flow-Thru Bracket, Hose and Sensor Installation

Truck/Tractor Applications

7. Finish hand-tightening knurled hose fittings into bracket. Verify hose is properly seated into the bulkhead by grabbing the check port and turning it back and forth, left to right. If hose turns freely inside bulkhead, continue to tighten the knurled fitting by hand until resistance is felt and hose stops rotating. See Figure 9.



CAUTION: The knurled ends on the hoses are to be hand-tightened only. Do not use tools to tighten. Damage to the knurled ends can occur.



Figure 9: Hand-tighten knurled hose fittings.

8. Note orientation of the Check Ports on the CP hoses. Check ports should face outward, pointing away from the wheel to enable air check and add air. See Figure 10.

NOTE: Do not force check ports to face outward if it causes the hose to rub on the wheel.

9. Verify double-seal valve caps are tight on check ports. Depress check port cap and listen for air escaping to verify pressure is getting to hose and sensors.



Figure 10: Correct orientation of check ports.

10. Spray all connection points between valve stem, hose, and sensors with soapy water to ensure no leaks. Tighten hose if necessary. See Figure 11.



Figure 11: Check for air leaks.



Flow-Thru Bracket, Hose and Sensor Installation

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Front Steer Tire Installation Procedure

1. Remove tire valve cap from front steer tire. Ensure tire valve threads are clean and free of any debris. See *Figure 12*.

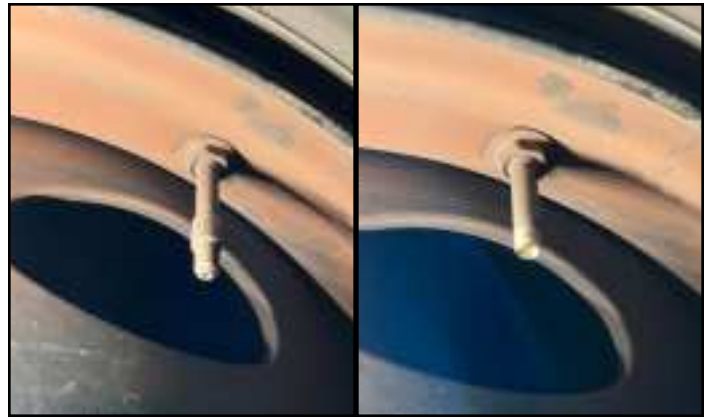


Figure 12: Prepare front tire valve for flow-thru sensor.

2. Install and hand-tighten the flow-thru sensor until it bottoms out, and then slightly twist the sensors to fully seat it. See *Figure 13*.



Figure 13: Front steer flow-thru sensor installed.



Flow-Thru Bracket, Hose and Sensor Installation

Truck/Tractor Applications

Servicing Wheel/Tire Assembly with Flow-Thru Brackets

1. Remove both knurled hose fittings to remove them from the bracket (dual wheel applications).
See Figure 14.

2. Unbolt the lug nuts and remove the wheel(s) from the vehicle. *See Figure 15.*



CAUTION: Do not allow wheel to drop onto or contact the bracket.

3. Remove the hose from the valve stem using a 7/16" wrench and set aside.

4. When wheel or tire maintenance is completed, reconnect hoses to valve stems per previous instructions in this manual, checking for leaks.
See Figure 16.

5. Reinstall the wheel over the hub & bracket, ensuring the inner wheel valve stem aligns with the "I" in the bracket and the outer wheel valve stem aligns with the "O". Reinstall the lug nuts and torque to manufacturers specifications. *See Figure 17.*



CAUTION: Do not allow wheel to drop onto or contact the bracket.

6. Insert the hose knurled fitting onto the bracket and hand tighten the inner and outer hose to the bracket marked "I" and "O". *See Figure 17.*
7. Ensure the double seal valve caps are tightened to the check ports, then depress the valve cap push rod to verify pressure is holding through the hoses and sensors. Finally, check all connections for leaks per previous instructions in this manual. *See Figure 17.*



Figure 14: Remove hose(s) from bracket.



Figure 15: Remove wheel(s).



Figure 16: Remove hose.



Figure 17: Reinstall over hub & bracket and reinstall hoses.



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