### **TURBOCHARGER KITS & RELATED PARTS** Highlights



More than 140 New, No-Core and Remanufactured Turbocharger Kits for Gas, Diesel, Domestic and Import applications



Turbocharger Kits include everything needed for a complete, efficient repair



Drop Ship Program available on the entire Turbo line



What's in your box?™







When OE Fails . . . Trust Standard<sup>®</sup>

### Growing Market

In an effort to improve fuel economy, reduce emissions, and improve performance, vehicle manufacturers have added turbocharged vehicles to their lineups at a rapid rate.

### Did you know

Ford introduced their first turbocharged EcoBoost engine in 2010. They now produce 9 different turbocharged EcoBoost engines for their vehicle lineup and many vehicles are equipped with two turbochargers.

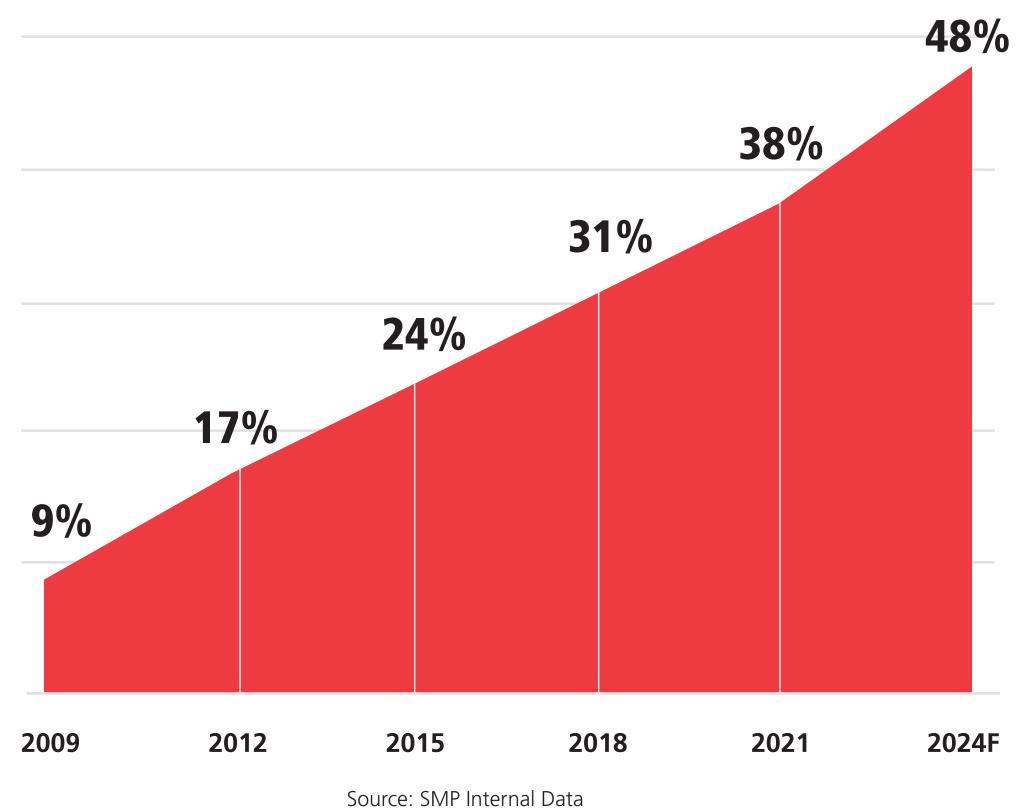
50%
40%
30%
20%
10%
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### **Service Opportunities:**

An additional 28 million vehicles with turbochargers will enter the Aftermarket "Sweet Spot" in the next 5 years, during which their turbochargers and related parts may need to be serviced or replaced.



### **New Vehicles Equipped with Turbochargers**





## Sales **Opportunities**

The GM 1.4L Ecotec engines may develop an oil leak around the PCV valve and plugs on the front engine cover. (GM Service Bulletins PIP5197/PIO957).

The loss of oil can starve the turbocharger of lubrication, causing the turbocharger to fail prematurely.

#### **Standard<sup>®</sup> Pro Training Tip**

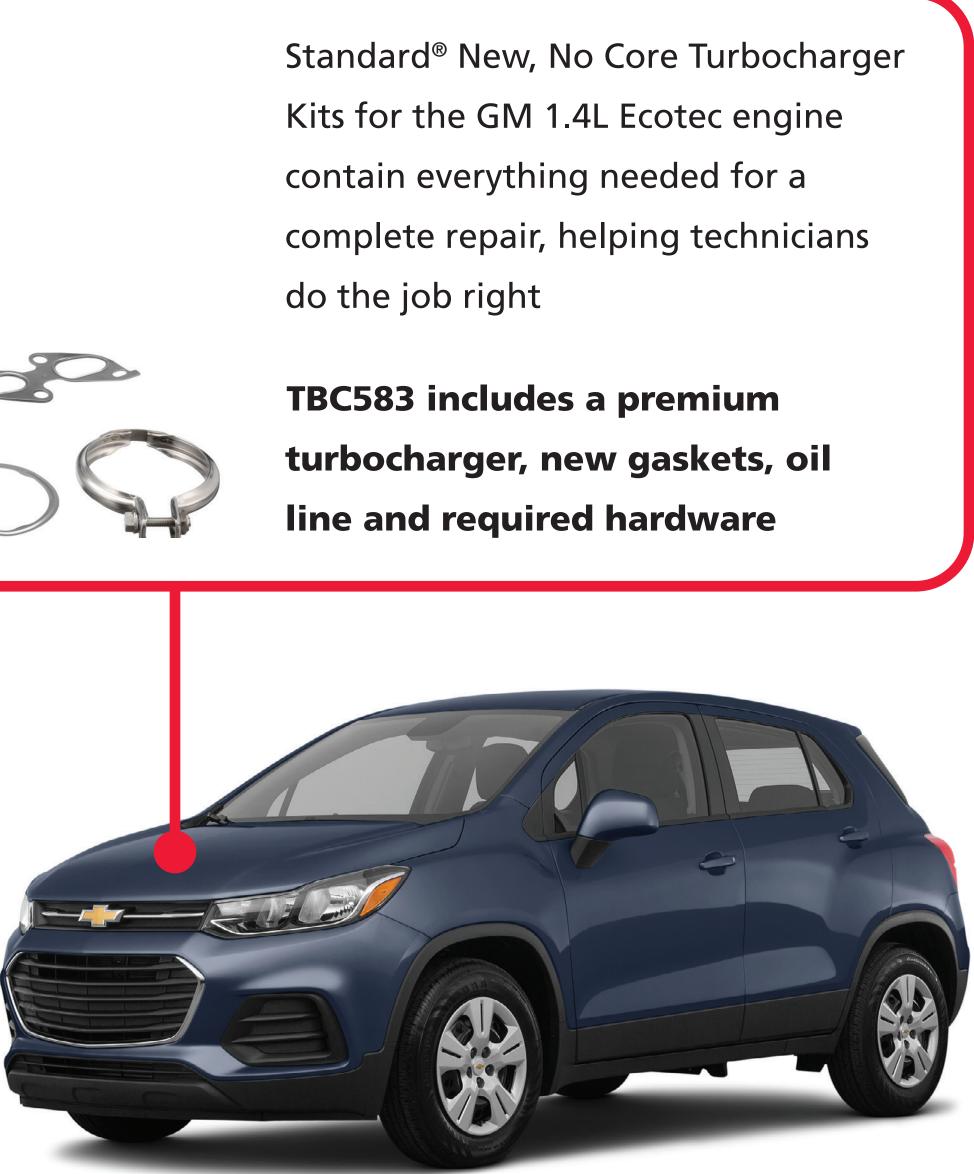
Before installing a replacement turbo on a GM 1.4L, carefully check for any oil leaks. It is likely the original turbo failed due to a lack of lubrication.



**TBC583** 

Buick Encore (2018-13) Chevrolet Trax (2018-13) Chevrolet Cruze (2016-11) **Chevrolet Sonic (2019-12)** 

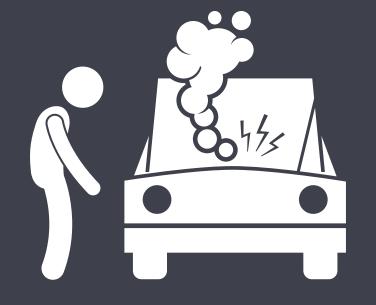




#### **GM 1.4L Ecotec Engines**



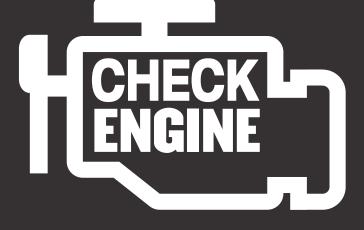
### Impact on Engine Systems



When a turbocharger fails, the motorist will likely experience a lack of power and reduced fuel mileage — The engine may also begin to operate at higher temperatures



**Turbocharger Kits** 



A turbo failure can send oil and metal debris through the intake — The entire intake system, including the intercooler, should be thoroughly inspected



Turbos usually don't fail on their own — The primary causes of turbo failure are contamination and lack of oil



### What's New

New, No-Core Turbocharger Kits are one of the fastest growing categories in the industry. Standard<sup>®</sup> is committed to regularly introducing new Turbocharger Kits.

For the most recent applications, check the online catalog at StandardBrand.com.



**TBC715** Ford Mustang (2020-15) **VIO: 213K** 





**Turbocharger Kits** 

**TBC679** Ford / Lincoln Trucks & SUVs (2020-18) **VIO: 847K** 

**TBC714 Ford Vans** (2019-15) **VIO: 26K** 









## What's New

### **RELATED PARTS**

From sensors and actuators to coolant and oil lines, regularly introducing related parts for the turbocharger system is a staple of Standard's complete Turbo Program.

For the most recent applications, check the online catalog at StandardBrand.com.



### Turbocharger **Coolant Line**

**TIH114** 

BMW Cars & SUVs (2019-13) **VIO: 76K** 



Turbocharger **Gasket Set** 

### **TGS13**

Ford Explorer (2019-13) VIO: 1.4M



**Turbocharger Kits** 





### **TIH53**

Ford SUVs (2019-13) VIO: 1.5M



### **Turbocharger Speed** Sensor

### TSS2

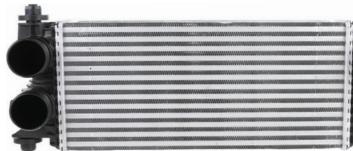
**RAM Trucks (2020-14) VIO: 830K** 



Turbocharger Wastegate Solenoid

### TBA5

GM Cars and Trucks (2021-2020) **VIO: 106K** 



### **Charge Air Cooler**

### **CAC24**

Ford Trucks & SUVs (2021-16) **VIO: 1.4M** 





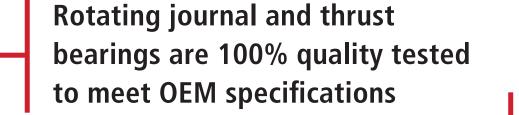
### Standard® Quality

Turbochargers operate at temperatures in excess of 1700°F with the turbine spinning up to 200,000 RPM. Using quality components to manufacture a premium replacement is critical to optimal turbocharger performance.





**Turbocharger Kits** 



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All Standard<sup>®</sup> Turbochargers are designed and tested to match OEM quality and performance across the entire RPM range

Premium cast housing for superior durability



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# Testing and Warranty

In the lab and on-vehicle, all Standard<sup>®</sup> Turbochargers go through a rigorous testing regimen that includes hot gas stand and burst test validation to ensure structural integrity, durability and performance. In fact, Standard<sup>®</sup> Turbochargers are 100% end-of-line tested through the full RPM range.

That's why all Standard® Turbocharger Kits come with a 3-year / 36,000-mile limited warranty.



**100%** End-of-Line Testing



**Turbocharger Kits** 

### **3/36** 3-Year / 36,000-Mile Limited Warranty

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 Image: StandardTurbos.com



# **Top Movers: Turbocharger Kits**





**Turbocharger Kits** 

### **Related** Parts

In addition to the highest quality replacement Turbos, Standard<sup>®</sup> offers a full line of components to repair the turbocharger system including the actuators, solenoids and sensors technicians are looking for.



### **Turbo Actuators**

**Direct OE replacement for Ford and GM diesel trucks** 



#### **Turbo Wastegate Solenoids**

Regulates the amount of boost on turbocharged engines

Coverage for GM, Ford, Chrysler, Hyundai and Kia through 2021



**Turbocharger Program** 









#### **MAP Sensors**

Measures turbo manifold pressure to the ECM, calculates air density and required fuel delivery for optimum combustion

45 SKUs with coverage through 2023



### **Turbo Bypass Valves**

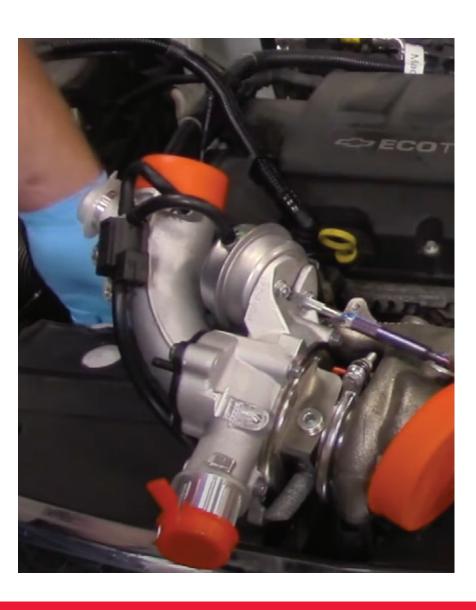
**Includes an upgraded internal spring** to help the turbo spool up faster, and maintain constant boost pressure

Import and domestic coverage through 2022



### **Turbo Speed Sensors**

**Provides the ECM with a speed** reading which helps prevent excessive turbo RPM that can cause turbo and/or engine damage









### **Related** Parts

The Standard<sup>®</sup> Turbo Program includes all related components to do the job right: coolant lines, oil lines, drain tubes, gasket sets and charge air coolers.

### **Standard<sup>®</sup> Pro Training Tip**

Be sure to inspect the oil lines when installing a new replacement turbo. Cooked oil build-up can clog the lines and is a common cause of turbo failure.



### **Turbo Coolant Lines**

**Exact OEM fitment engineered to** provide cooling on turbochargers

Growing category with coverage through 2022



### **Turbo Gasket Sets**

Standard's Turbos come complete with gaskets, but sometimes, the tech only needs gaskets

\* where required



**Turbocharger Program** 



### **Turbo Oil Drain Tubes**

**Upgraded**, **zinc-coated steel resists** corrosion. Includes a new gasket\*

**Coverage through 2022** 



### Water to Air Coolers

**Cools the air using heat transfer** between water and intake air before it enters the intake manifold.

**Coverage for GM, Ford and Chrysler** through 2021



### **Turbo Oil Lines**

Helps keep the turbo lubricated as designed for a longer service life. Includes new gaskets\*

25 SKUs with coverage through 2022



### **Air to Air Coolers**

**Cools the air using heat transfer** between ambient air and intake air before it enters the intake manifold







### Packaging with a Purpose

The most complete Turbo Program includes complete support. That's why Standard<sup>®</sup> provides illustrated installation instructions and on-thebox alert labels for every New, No-Core Turbo Kit, to help technicians perform a successful install.

#### Standard<sup>®</sup> Step-by-Step Turbocharger Removal and Installation Instructions



Retirer le couvercle en plastique situé sur le dessus du compa iment moteur et détacher le faisceau électrique des supports. Retire la cubierta de plástico del compartimiento del motor y desconecte de su montaje el arnés de cableado. Ponga a un lad el arnés de cableado para facilitar el acceso



Remove turbocharger intake tube Retirer le tube d'admission du turbocompress Desconecte la tubería de entrada del turbocompreso



3. Disconnect charge air cooler inlet pipe. Débrancher le tuyau d'admission du refroidisseur d'air de suralimentation Desconecte la tubería de entrada del interenfriado



electrical connector. Débrancher le connecteur électrique de la soupape de mmande hydraulique à aube fixe à incidence variable du urbocompresseur. Desconecte el conector eléctrico de la válvula de control hidráulico de las paletas variables del turbocon



**Detailed installation videos available** on StandardBrand's YouTube channel



**Turbocharger Program** 





Remove and discard the fastener and the wire retainer Retirer et jeter la pièce de fixation et la bride de retenue Desinstale y deseche el sujetador y el retén del cable.

5. Remove fasteners connecting the oil supply line to the turbo

Retirer les pièces qui fixent la canalisation d'huile au

Jeter le joint d'étanchéité. RÉUTILISER les pièces de fixation.

Desinstale los sujetadores que conectan la línea de suministro

de aceite al turbocompresor. • Deseche la empaquetadura. VUELVA A UTILIZAR los sujetadorer

iscard gasket. REUSE fastener



Remove Marman clamp from the turbocharger turbine outle Retirer la bride de serrage Marman de l'orifice de sortie de la turbine du turbocompresseu Desinstale la abrazadera de apriete de tornillo del tubo de salida de la turbina del turbocompresor.



9. Remove Marman clamp from the turbo Retirer la bride de serrage Marman de l'orifice d'entrée de la turbine du turbocompresse



Desserrer le collier de serrage qui unit le tuyau d'entrée des gaz d'échappement au refroidisseur du système RGE Afloje la abrazadera que conecta la tubería de entrada de

- 4. Install & properly position turbocharger inlet Marman clamp. Installer et positionner correctement la bride de serrage Marman sur l'orifice d'entrée du turbocompresseur. Instale y coloque correctamente la abrazadera de apriete d tornillo de la tubería de ingreso del turbocompresor.
- 5 . Install exhaust inlet pipe-to-EGR cooler clamp. Installer le collier de serrage qui unit le tuyau d'admission de gaz d'échappement à la tubulure d'échappement. Instale la abrazadera que conecta la tubería de entrada del escape al el enfriador EGR.



6. Install LH and RH exhaust inlet pipe-to-exhaust manifold nuts. Alternate tighten the bolts on each side of the engine to draw inlet pipes equally to each exhaust manifold flange. Note: Gap between pipe flange and exhaust manifold should be even for both exhaust connections on the engine.

Installer les écrous qui unissent le tuyau d'admission des gaz d'échappement à la tubulure d'échappement, du côté gauche et du côté droit du moteur. Serrer les boulons alternativement de chaque côté du moteur afin de caler les tuyaux d'admission uniformément sur la bride de chacune des tubulures d'échappement. Note : L'espace libre entre la bride de tuyau et la tubulure d'échappement doit être exactement le même pour les deux raccordements de tuyaux d'échappement sur le moleur.

Instale las tuercas del lado izquierdo y lado derecho d mitiple que conecta la tubería de entrada al escape. Apriete alternadamente los pernos en cada lado del motor de manera que las tuberías de entrada se asienten de manera pareja en cada brida del múltiple del escape. Nota: El espacio entre la brida de la tubería y el múltiple del escape debe ser igual en ambas conexiones del escape del motor.



Install turbocharger exhaust Marman clamp Installer la bride de serrage Marman de l'échappement ( Instale la abrazadera de apriete de tornillo en el escape de

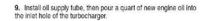


8. Install wire retainer & fastener. Reconnect the turbocharger variable vane hydraulic control valve connector.

brancher le connecteur électrique de la soupape de mmande hydraulique à aube fixe à incidence variable du Instale el retén del cable y el sujetador. Vuelva a conectar e onector de la válvula de control hidráulico de las paletas ariables del turbocompresor.

Installer la pièce de fixation et la pièce de retenue métallique





Installer la canalisation d'huile, puis verser 946 ml d'huile noteur fraîche dans l'orifice de remplissage d'huile du turbocompresseur

Instale la tubería de suministro de aceite, luego vierta un uarto de galón de aceite nuevo de motor por el aguje ntrada del turbocompresor



10. Position oil supply line with new gasket, then install original Positionner correctement la canalisation d'huile sur le u joint d'étanchéité, puis installer les pièces de fixation

Coloque la línea de suministro de aceite con una empaquetadura nueva, luego instale los sujetadores originales



11. Install inlet & outlet air hoses to the turbocharger compress Installer les tuyaux flexibles de prise d'air et de sortie d'air sur compresseur du turbocompresseur.

Instale las mangueras de aire de entrada y salida al

**ALERT: PROPER DIAGNOSIS IS REQUIRED BEFORE REPLACING THE TURBO** Failure to properly diagnose the root cause can lead to a repeat problem and void the warranty

**ALERTE:** UN DIAGNOSTIC PRÉCIS DOIT ÊTRE POSÉ **AVANT DE PROCÉDER AU REMPLACEMENT** DU TURBOCOMPRESSEUR

Tout défaut de poser un diagnostic précis de la cause peut entraîner la répétition du problème et invalider la garantie

**ALERTA:** ANTES DE REEMPLAZAR EL TURBOCOMPRESOR DEBE HACER UN DIAGNÓSTICO APROPIADO Si no hace el diagnóstico apropiado, la causa del fallo puede producir un problema repetido y anular la garantía









Desinstale la abrazadera de apriete de tornillo del tubo de entrada de la turbina del turbocompresor.



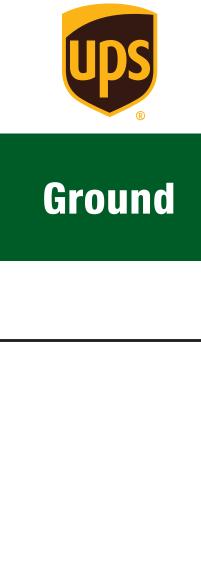
escape al enfriador de EGR

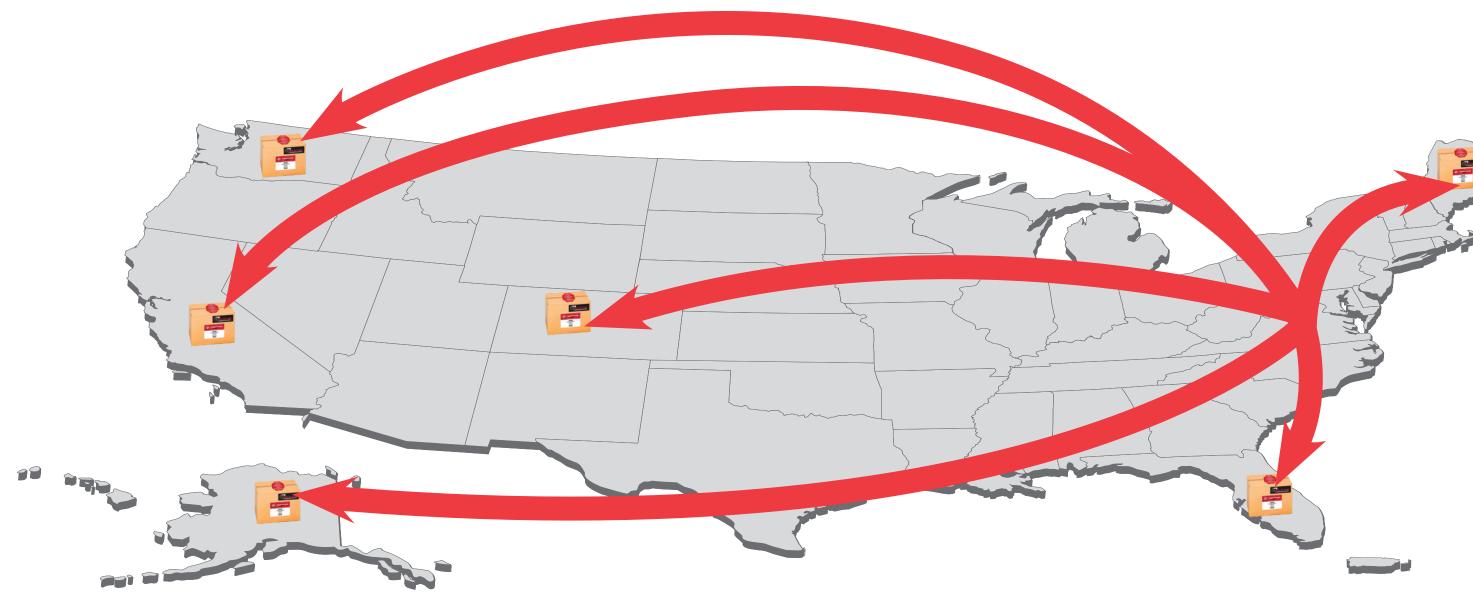


## Drop-Ship Program

To help our customers manage their valuable shelf space, Standard<sup>®</sup> offers a comprehensive drop-ship program to get the right Turbo Kit to the right place at the right time.

The Standard<sup>®</sup> Turbo Drop-Ship Program covers New, No-Core and Reman turbo kits for all 50 U.S. states and Puerto Rico, and supports all ordering methods. Standard<sup>®</sup> Turbocharger Kits ship from our Virginia Distribution Center.







**Turbocharger Program** 

48 Contiguous States		Alaska, Hawaii and Puerto Ri		
	UDS ®	UDS ®	UDS ®	UPS ®
	2nd Day Air®	Next Day Air®	Regular (5-7 days)	Next Day Ai

Check the Standard<sup>®</sup> Turbocharger Program flyer for the latest pricing





## **Standard**<sup>®</sup> **Pro Training Tech Tip**

Standard<sup>®</sup> Pro Trainers have installed hundreds of turbos and trained thousands of technicians. Here's what they say to look out for during a turbo install.



Air ductwork must be sealed and perfectly clean



**Turbocharger Program** 



**Ensure there is proper** lubrication and cooling at the turbo — Bleed fresh engine oil through the new turbo before starting the engine



### Standard® Professional Training

### Award-Winning In-Person, Live Virtual, and Online Learning

Standard<sup>®</sup> Pro Training delivers accredited classes that educate technicians in the latest automotive repair technologies, and techs can earn CEU credits.

An extension of Standard<sup>®</sup> training, our extensive YouTube video library has over 500 technical and installation videos.





**Available Classes** 

**6.7 Powerstroke Tips** 

**Duramax Diesel Updates** 

Ford EcoBoost

6.7 Cummins Tips and Tricks

**Forced Air Induction Technologies** 





**Turbocharger Program** 



**Available Classes** 

**6.7 Powerstroke Diesel Problems** and Solutions **Duramax Diagnosis and Service Ford EcoBoost** 

**Cummins Diagnostics and Repairs** 



For information on replacing turbochargers and components, search "Turbo" on the **StandardBrand** YouTube channel

StandardBrandTraining.com

