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

Direct Ship / NAPA Express Programs available on the entire turbo line



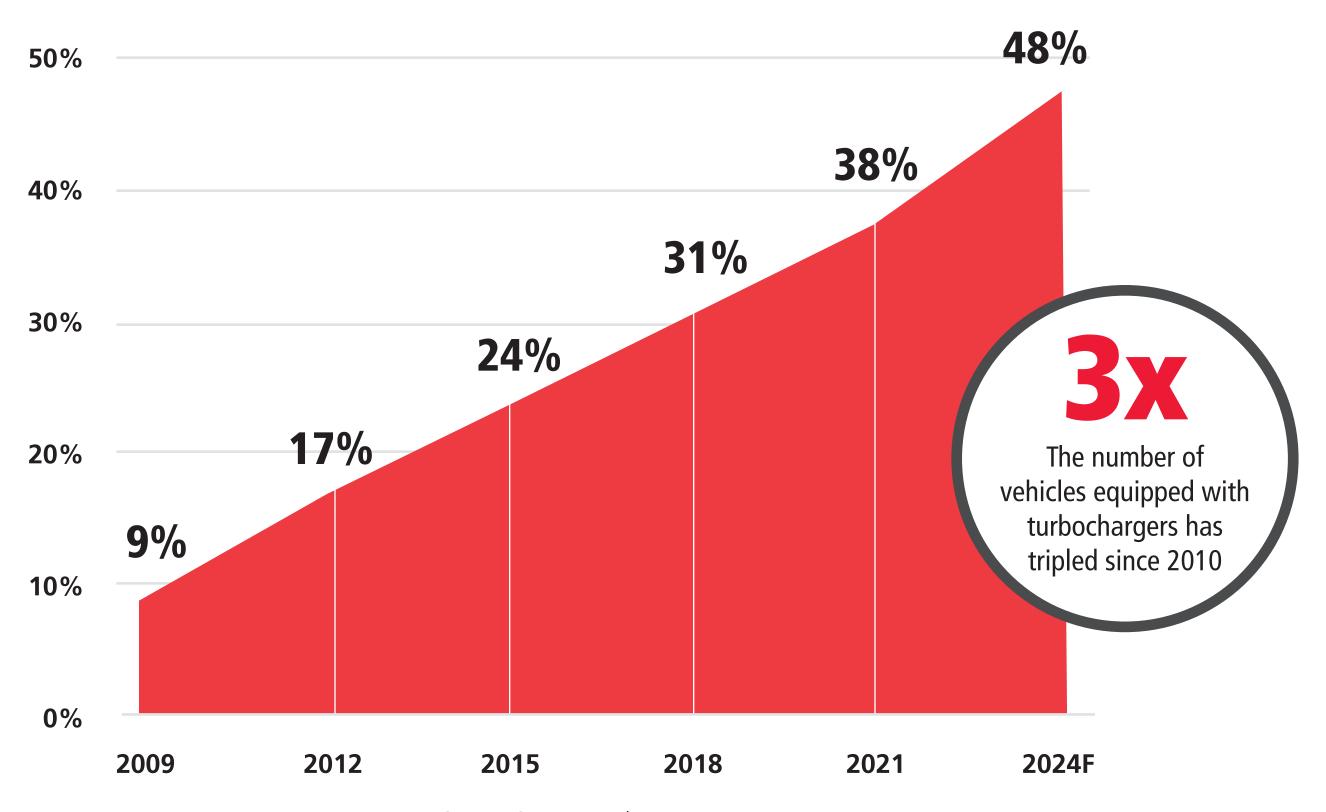
What's in your box?



Growing Market

In an effort to increase fuel efficiency, maintain vehicle performance and reduce emissions, vehicle manufacturers have added turbocharged engines to their lineups at a significant rate.

Vehicles Equipped with Turbochargers



Source: SMP Internal Data

Did You Know

In 2008, the popular Ford F-150 offered 3 engines

– none had a turbocharger. In 2018, Ford offered 3

different EcoBoost turbocharged engines for the F-150



2018 Ford F-150 EcoBoost

NAPA® ECHLIN® TURBOCHARGER KITS

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.

NAPA® Echlin® 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 lack of lubrication.



NAPA® Echlin® New, No Core
Turbocharger Kits for the GM 1.4L
Ecotec engine contain everything
needed for a complete repair, helping
techs do the job right

2-551021 includes premium turbocharger, new gaskets, oil line and required hardware



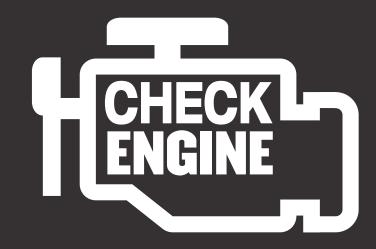
GM 1.4L Ecotec Engines

Buick Encore (2018-13) Chevrolet Trax (2018-13) **Chevrolet Cruze (2015-11) Chevrolet Sonic (2015-12)**

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



Driving with a failed turbocharger can quickly cause damage to both engine and emission components



Turbos usually don't

fail on their own — the

primary causes of turbo

failure are contamination

and lack of oil

NAPA® ECHLIN® NEW, NO CORE **TURBOCHARGER KITS**

What's New

Turbochargers are one of the fastest growing categories in the industry — NAPA® Echlin® is committed to regularly introducing new turbocharger kits.

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



2-551099 **Ford Mustang** (2020-15)VIO: 210K

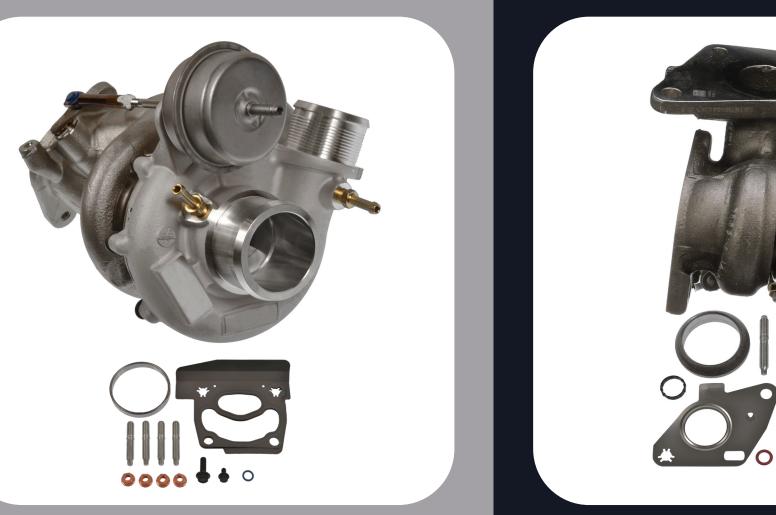




2-551089 Ford F-150 2.7L (2017-15) VIO: 385K



TRB833N **Ford Super Duty** (2019-15)VIO: 800K







NAPA® ECHLIN® TURBO RELATED PARTS

What's New

From sensors and actuators to coolant and oil lines, regularly introducing related parts for the turbocharger system is a staple of NAPA® Echlin's complete turbo program.

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



Turbocharger Coolant Line

2-56068

Ford Super Duty (2014-11) VIO: 425K



Turbocharger Actuator

TBS111

GM 6.6L (2010-04) VIO: 550K



Turbocharger Oil Line

2-56067

Ford Super Duty (2016-11) VIO: 810K



Turbocharger Wastegate Solenoid

2-16900

Ford F-150 (2019-17) VIO: 740K



Turbocharger Speed Sensor

TBS302

Ram 2500 & 35000 (2020-14) VIO: 775K



Turbocharger Oil Line

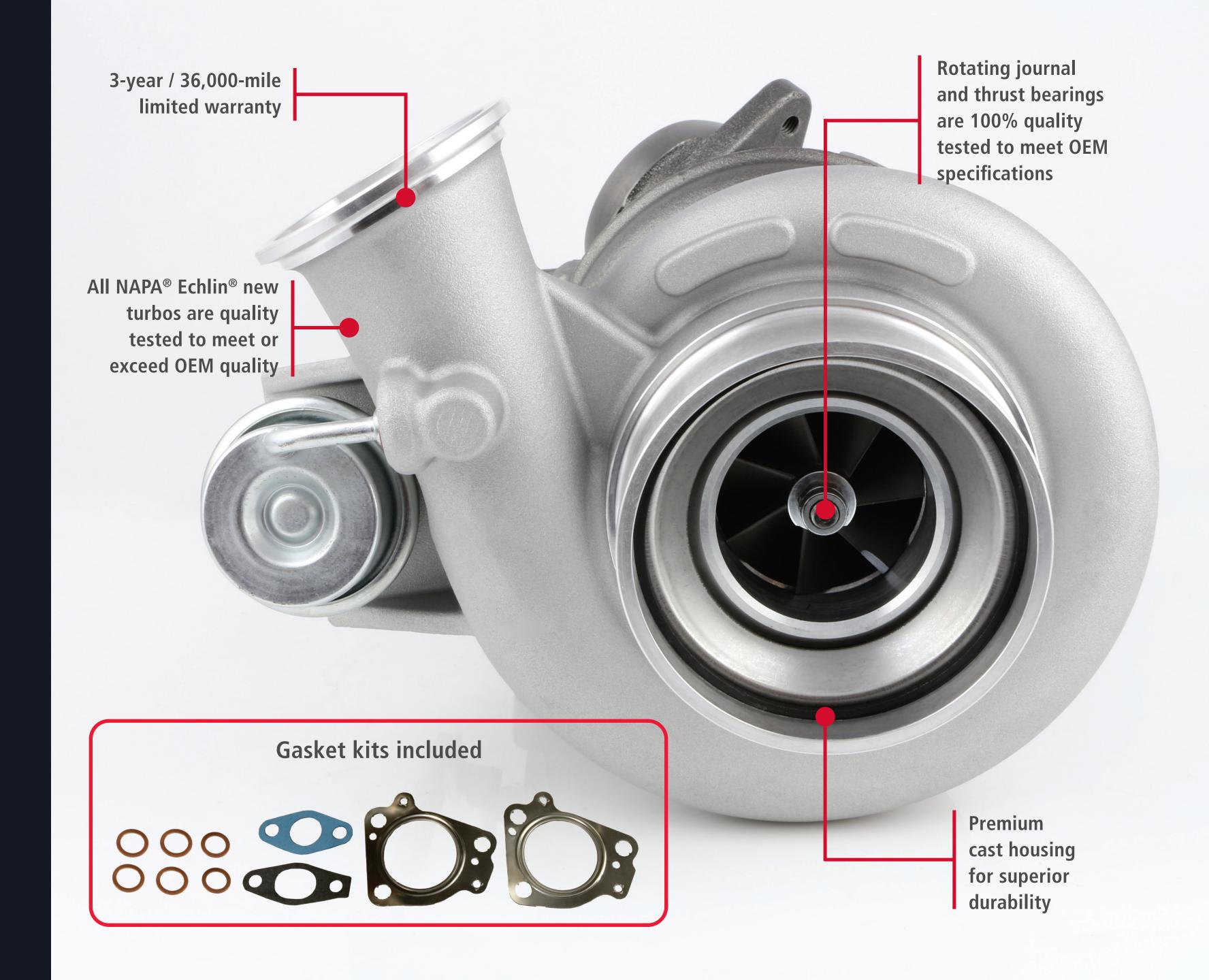
2-56040

Ford 2.0L (2018-12) VIO: 1.6 Million

NEW, NO CORE TURBOCHARGER KITS

NAPA® Echlin® 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.



NAPA® ECHLIN® TURBOCHARGERS

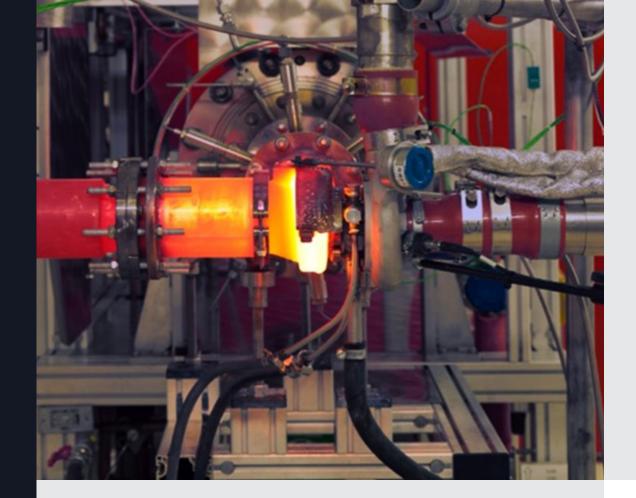
Testing and Warranty

In the lab and on-vehicle, all NAPA®
Echlin® 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, NAPA® Echlin®
turbochargers are 100% end-of-line
tested through the full RPM range.

That's why all NAPA® Echlin®

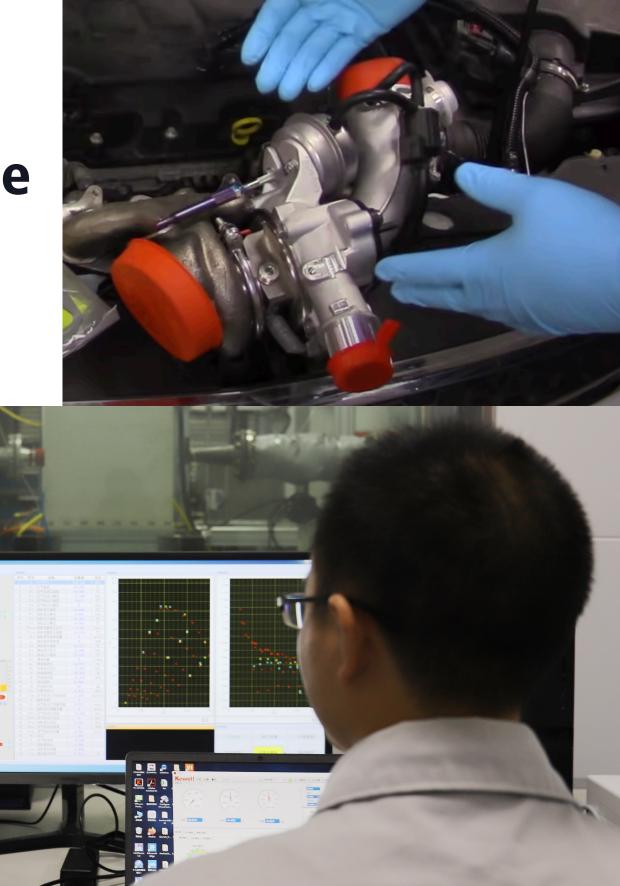
Turbocharger Kits come with a 3-year /

36,000-mile limited warranty.



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

100% End-of-Line Testing



NAPA® ECHLIN® NEW, NO CORE TURBO KITS

Top Movers



GASOLINE



2-551021 Chevy / Buick Cars (2018-11)



2-551036

Hyundai / Kia Cars & SUVs (2016-11)



2-551037

Hyundai / Kia Cars & SUVs (2020-15)



2-55089 Subaru Impreza (2007-02)



2-551094 Ford F-150 (2012-11)



DIESEL



TRB225NX
Ford Trucks
(2010-05)



TRB801N
Mercedes-Benz Light Duty
(2019-09)



TRB215N Ford Trucks (2003-99)



TRB800N Dodge, Jeep, Mercedes-Benz (2009-07)



TRB230N Ford Trucks (2010-04)

NAPA® ECHLIN® TURBOCHARGER

Related Parts

In addition to the highest quality replacement turbos, NAPA® Echlin® 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



Turbo Boost Sensors

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

45 SKUs with coverage through 2021



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 Boost Solenoids

Regulates the amount of boost on turbocharged engines

Expanding coverage for import and domestic applications



Turbo Speed Sensors

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

NAPA® ECHLIN® TURBOCHARGER

Related Parts

The NAPA® Echlin® Turbo Program includes all related components to do the job right: coolant lines, oil lines, drain tubes, gasket sets and charge air coolers.

NAPA® Echlin® 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 2021



Turbo Oil Drain Tubes

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

Coverage through 2022



Turbo Oil Lines

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

25 SKUs with coverage through 2021



Turbo Gasket Sets

NAPA® Echlin's turbos come complete with gaskets, but sometimes, the tech only needs gaskets

* where required



Charge Air Coolers

Cools the air before it enters the intake for improved performance. Available for Ford Trucks

Coverage for GM, Ford and Chrysler through 2021



Turbo Hoses

Allow quicker airflow to the turbo, which helps provide efficient power and response to the engine

Growing category with coverage through 2019

NAPA® ECHLIN® **TURBOCHARGER PROGRAM**

Packaging witha Purpose

The most complete turbo program includes complete support. That's why NAPA® Echlin® provides illustrated installation instructions and on-thebox alert labels for every New, No Core Turbo Kit, to help technicians perform a successful install.

NAPA® ECHLIN® Step-by-Step Turbocharger Removal and Installation Instructions



1. Remove plastic cover on top of engine bay and detach wire harness from mounts. Move the wiring harness out of the way to

Retirer le couvercle en plastique situé sur le dessus du compart 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 lado



Retirer le tube d'admission du turbocompresseur. Desconecte la tubería de entrada del turbocompreso



3. Disconnect charge air cooler inlet pipe. Débrancher le tuyau d'admission du refroidisseur d'air de



4. Disconnect turbocharger variable vane hydraulic control valve electrical connector. commande hydraulique à aube fixe à incidence variable du

Desconecte el conector eléctrico de la válvula de control



. Remove fasteners connecting the oil supply line to the turbo. Discard gasket, REUSE fasteners. 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



Remove fastener on the flange of oil supply line connected Discard O-ring & fastener.

Retirer la pièce de fixation située sur la bride de la Jeter le joint torique et la pièce de fixation. Desinstale el sujetador en la brida de la línea de suministro



7. 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.

Remove Marman clamp from the turbocharger turbine outle Retirer la bride de serrage Marman de l'orifice de sortie de la turbine du turbocompr salida de la turbina del turbocompre



Retirer la bride de serrage Marman de l'orifice d'entrée de la Desinstale la abrazadera de apriete de tornillo del tubo de



10. Loosen the exhaust inlet pipe-to-EGR cooler clamp 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 del

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 de tornillo de la tubería de ingreso del turbocompreso

5. Install exhaust inlet pipe-to-EGR cooler clamp. Installer le collier de serrage qui unit le tuyau d'admission des 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

Note : L'espace libre entre la bride de tuyau et la tubulure rdements de tuyaux d'échappement sur le moteur

múltiple 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 de escape debe ser igual en ambas cone del motor.

Instale las tuercas del lado izquierdo y lado derecho del



Installer la bride de serrage Marman de l'échappement du Instale la abrazadera de apriete de tornillo en el escape del



nmande hydraulique à aube fixe à incidence variable du

conector de la válvula de control hidráulico de las paletas





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

ALERT:

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









8. Install wire retainer & fastener. Reconnect the turbocharger

Installer la pièce de fixation et la pièce de retenue métallique

Instale el retén del cable y el sujetador. Vuelva a conectar el



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

Instale las mangueras de aire de entrada y salida al

9. Install oil supply tube, then pour a quart of new engine oil into

nstaller la canalisation d'huile, puis verser 946 ml d'huile

Instale la tubería de suministro de aceite, luego vierta un cuarto de galón de aceite nuevo de motor por el agujero de

10. Position oil supply line with new gasket, then install original

nouveau joint d'étanchéité, puis installer les pièces de fixation

Coloque la línea de suministro de aceite con una

moteur fraîche dans l'orifice de remplissage d'huile du

the inlet hole of the turbocharge

NAPA® Echlin® Tech Tip

Napa® Echlin® 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 intake
ductwork must
be sealed and
perfectly clean



Insure there is proper

Iubrication and cooling at

the turbo — bleed fresh

engine oil through the

new turbo before starting

the engine



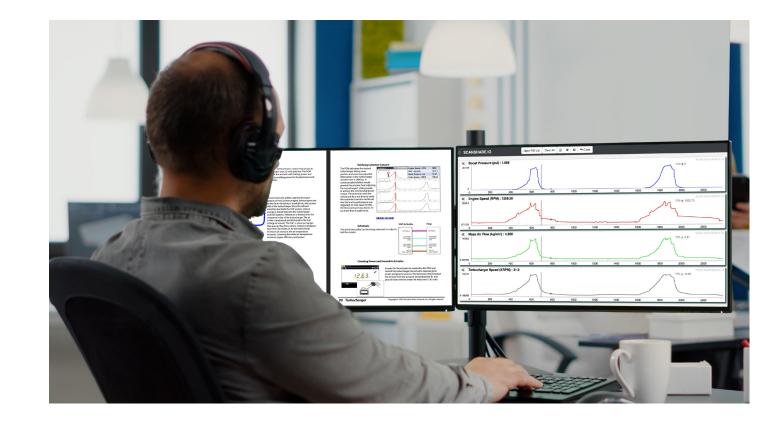
Install a new air filter
along with an oil
change and replace all
applicable breathers

NAPA® Echlin® Training

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

NAPA® Echlin® Training delivers accredited classes that educate technicians in the latest automotive repair technologies, and techs can earn CEU credits.

An extension of NAPA® Echlin® training, our extensive ADA-compliant YouTube professional video library features more than 500 installation and product videos.





NAPA® Echlin® offers an annual subscription to Pro Training On-Demand. This subscription grants access to more than 200 English, and over 50 Spanish 1-hour courses – and the NAPA® Echlin® on-demand library continues to grow. Topics range from fundamentals to advanced concepts, and include HVAC, diesel, hybrid, ignition, injection, electrical and communication diagnosis.





Whether in-person at your location or virtually via computer, all NAPA® Echlin® Training classes feature a live instructor and are fully interactive as students work through real-life scenarios. Virtual class "workbooks" include on-demand links to video content and student configurable scan data.