



## INSTALL MANUALS AT www.bddiesel.com



# BD DODGE CUMMINS PERFORMANCE EXHAUST MANIFOLD

### **Installation Instructions**

Application List				
1998-1995 1996-1998 (Except California)	12V	1045948		
1998½-2002	24V	1045947		

#### Please read all instructions before installation

The 1045947 is a stock replacement for Cummins # 3946036. The 1045948 should not be used on vehicles that utilize an EGR system.

2/23/2022

## KIT CONTENTS:

Please check to make sure that you have all the parts listed in this kit **before** you start the disassembly of your truck.

DODGE 1994-1998 12V Performance Manifold (BD# 1045948)					
	1405948		FT- 11509452	1405986	1462441
			O Paris		
12V Manifold		Washer; M10 SS	Bolt; M10x45mm	Nut; M10	
	Qty: 1		Qty: 4	Qty: 2	Qty: 4
1462430	1405936	FT-11113082		FT-11116075	
Stud; M10 x 30mm	Spacer; 12v Coolant	Bolt; M8x95mm		Bolt; M10x 60mm	
Qty: 2	Qty: 1	Qty: 1		Qty	: 10
1401556	1200208	1405981		1405937	
Washer; M8	Plug; 1/8" NPT	Bolt; M10x 35mm		Spacer; Manifold	
Qty: 1	Qty: 2	Qty: 2		Qty: 10	

DODGE 1998½-2002 24V Performance Manifold (BD# 1045947)					
1405947		FT- 11509452	1405986	1462441	
			S Annual Control		
12V Manifold		SS Washers	45mm Bolt	Nut	
Qty: 1		Qty: 4	Qty: 2	Qty: 4	
1462430	1200208	1405981			
Stud; M10 x 30mm	Plug; 1/8" NPT	Bolt; M10x 35mm			
Qty: 2	Qty: 2	Qty: 2			
1405938	1900014	FT-11116243			
Bracket; Coolant	Nut; M8 Flange	Bolt; M8 Flange			
Qty: 1	Qty: 1	Qty: 2			

#### **Options**

<u>Description</u>	Part #
12V Exhaust Manifold Gasket Set	1045981
24V Exhaust Manifold Gasket Set	1045986

#### Removal

Remove the intake air hose from the front of the turbo and disconnect the coolant line brackets from the stock manifold.

Now disconnect the turbo from the stock manifold by removing the 4 15mm nuts. *Note that you do not need to remove the turbo from the engine compartment.* 

Once the turbo is disconnected from the manifold, remove the manifold by removing all the bolts using a 13mm socket.

Once the manifold is removed, clean the head and turbo flange surfaces of any debris.

Remove the two studs from the turbo exhaust housing and discard.

Remove the two studs from the stock manifold and install them into the same hole location of the performance manifold.

#### Installation

1045948 comes with 10 new manifold flange bolts and spacers which will replace the OEM spacers and bolts. Be careful not to mix the new bolts/ spacers with the OEM hardware.

## INSTALL 6 NEW GASKETS IN BETWEEN THE HEAD AND THE MANIFOLD. THE RIDGE ON THE GASKETS CAN FACE EITHER THE HEAD OR MANIFOLD.

Install the new performance manifold utilizing the factory bolts and spacers. You will need to use the two 10x35mm long stainless Allen bolts and washers for the two top mounting holes of the center section of the manifold. **Torque bolts to 35 ft/lbs**.

You may have to adjust the manifold to head alignment. Bolt the manifold center piece to the head, then use a plastic mallet to align the end/outside manifold pieces.

## INSTALL A NEW GASKET IN BETWEEN THE TURBO AND THE MANIFOLD. THE RIDGE ON THE GASKET CAN FACE EITHER THE MANIFOLD OR TURBO.

Place the turbocharger onto the performance manifold, the two studs should be inserted in the turbocharger flange. Use the supplied 14mm nuts.

Use the remaining two 10 x 45mm Stainless Allen head bolts and washers to secure the turbocharger to the manifold. **Tighten to 32 ft/lbs**.

### Important! Improper turbo flange torque can lead to exhaust leak and gasket failure.

After installation is complete, re-install the coolant line brackets. Early model 24V trucks will need to use the coolant bracket 1405938 and the supplied M8 bolts/nut to secure the coolant tube in place. Re-install intake air hose and other components removed.

#### RE-TORQUE ALL BOLTS AFTER AT LEAST ONE HEAT CYCLE