

# ATS BILLET FLEX PLATES

Installation Manual v1.2:

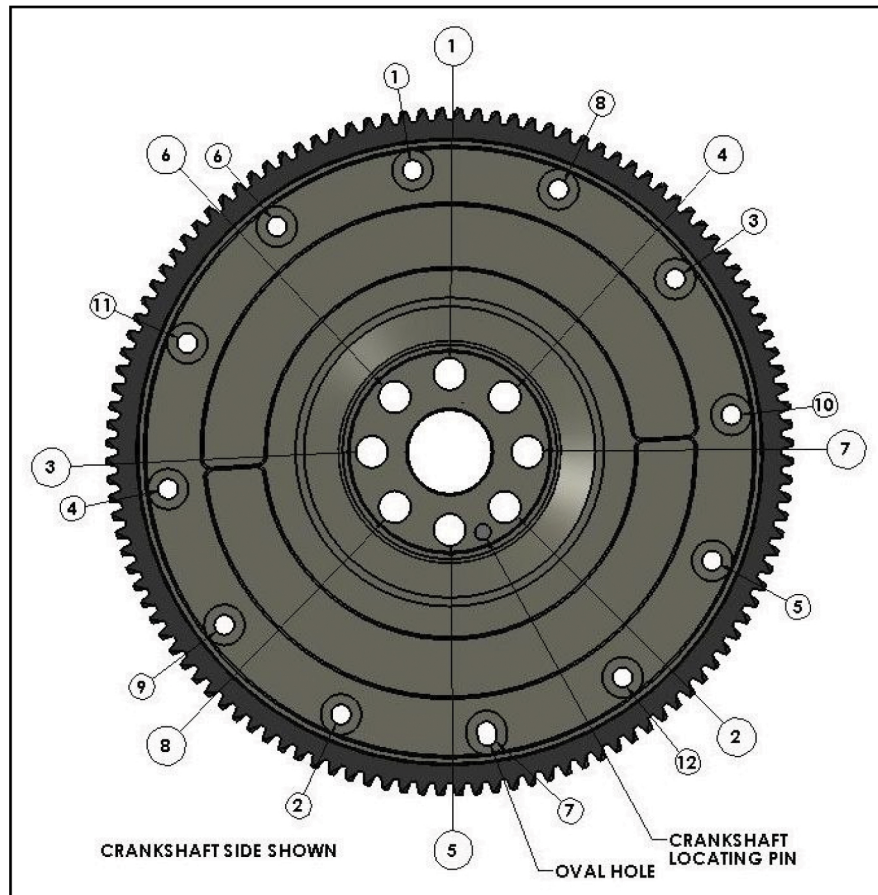
**ATS Billet Flex Plate - Allison LCT1000 Automatic Transmission  
2001-current GM 6.6L Duramax  
PN: 305-900-4248**

** PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION.**

Use the picture below for the proper sequence when tightening all bolts to ensure even torque. *Please note that this is a multiple-step torque process!* You must be sure to complete each step before moving on to the next, without skipping or combining any steps (*Figure 1*).

## FLEXPLATE TO CRANKSHAFT

Use the illustration below to complete the torque procedure.



**Figure 1- Torque Sequence**

1. Tighten all crankshaft bolts to **58 ft.-lbs** in proper sequence (*Figure 1*).

**Note:** *Be sure to install alignment pin between new Flexplate and crankshaft hub to insure proper alignment.*

2. Tighten all crankshaft bolts an additional **60 degrees** in sequence.
3. After completing step 2, again tighten all crankshaft bolts **another 60 degrees** (*once again using sequence in Figure 1*).

**NOTE:** *Do not combine steps 2 and 3 by tightening each bolt 120 degrees in a single step! Doing so may cause damage to your truck! ATS Diesel Performance is not liable for damages resulting from improper installation!*

4. Using a torque wrench confirm that the torque at this point is **at least 266 ft.- lbs.** If any bolts are loose, tighten them all, in proper order to **266 ft.- lbs.**

5. Start the vehicle and let it idle until normal operating temperature is reached.

**NOTE:** *While vehicle is warming up, sit in the cab and make sure you have smooth operation with no abnormal vibrations or noise at various RPM's. If there is abnormal vibration it indicates the alignment pin was not utilized during installation and allowed the flexplate to be indexed incorrectly. If Flexplate is not indexed correctly it must be removed and reinstalled with alignment pin before attaching torque converter.*

6. Once running temperature is reached and you have confirmed smooth operation, shut off engine.

### **Torque Converter to Flexplate**

If you have an ATS Diesel Performance 5-Star™ Torque Converter, you will use all 12 of the holes in the flexplate's outer perimeter (using the 12 bolts that were included with the torque converter). For all other torque converters, you will only use 6 bolts, inserting one in every other hole of the Flexplate. (*Figure 1 and use torque sequence 1-5-9-3-7-11 for 6-bolt torque converters*)

**Note:** To further ease installation of torque converter you may rotate crankshaft until oval hole in Flexplate is visible through starter access cavity. Using the oval hole in Flex Plate as a starting point may ease Torque Converter bolt installation (*Figure 1*).

7. Apply a small amount of thread-locker to each torque converter bolt and start all bolts by hand. Thread each into the torque converter until they are all finger tight.
8. Using a torque wrench, tighten each bolt to **44 ft.-lbs.** using torque sequence as shown. (*Figure 1*).
9. Verify the final torque by tightening each bolt to **44 ft.-lbs.** still using torque sequence pattern (*Figure 1*).

## **Have Any Questions?**

Thank you for purchasing the ATS Billet Flexplate for you GM Truck! Please check our website at <http://www.atsdiesel.com> for technical support and other performance products such as the 5-Star™ torque converter, ATS High Performance Valve Body and ATS High Performance Transmission along with our full line of power enhancers. Please call or e-mail our Technical Service Department, 8:00am to 5:30pm Mountain Standard Time, Monday through Friday.

### **Contact Information**

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