

Turbocharger Instruction Manual for HD Turbos

Please feel free to consult Forced Performance at 972-984-1800, in addition to your professional technician during the installation of your HD or FP turbocharger. This guide is meant to be used as a point of reference only. Nothing in this guide will replace the experience and capability of a trained professional.

Installation and Use

1. Before beginning the installation, read this manual.
2. Check the turbocharger. If you find any obvious damage, whether it be from shipping or manufacturing, STOP. Return the turbocharger to its packaging and contact Forced Performance to arrange a service or replacement.
3. Good quality engine oil is the key to turbocharger longevity. It is recommended to run the highest viscosity oil that your climate will allow. Avoid 0W or 5W oils.
4. If you intend to run greater than 20 psi of boost pressure on the 400 (HD8088, FP400, S400) series turbocharger, we recommend using a -6 oil feed line to ensure you have sufficient oil volume and pressure. *Note: A good rule of thumb is to always have 20 psi more oil pressure than boost pressure.
5. After installation, be sure to double check all connections leading into and out of the turbocharger. oil feed and drain line leaks can lead to damage to the turbocharger as well as being a fire hazard. Additionally, double check all charge air and exhaust couplings for leaks.
6. Upon first starting the engine, keep in mind it may take time for oil to reach the turbocharger. Do not rev the engine during this period.
7. Avoid hot shutdowns. Remember to let your engine idle and turbo cool prior to shutting off the engine.

Maintenance

1. Periodically inspect all connections with engine. Both oil and air leaks will cause the lifespan of the turbocharger to be shortened and performance to be reduced.
2. Ensure the turbocharger oil drain line is not restricted, and if using a non-metallic oil drain, ensure that the interior of the drain hose is not delaminating. These conditions could lead to oil backing up in the bearing housing of the turbocharger which could reduce the lifespan of the turbo and lead to significant smoking out of the exhaust.
3. Check the air filter often, according to manufacturer's recommended interval. A clogged air filter will significantly increase the wheel speed of the turbocharger, leading to a shortened lifespan and reduced performance as well as oil consumption.
4. Replace the engine oil and engine oil filter according to manufacturer's recommended interval and frequently check engine oil level.
5. Inspect the free play of the shaft for evidence of blades rubbing the housings. If the blades are rubbing the housings, the bearing wear is out of spec and turbocharger will need service.
6. Service or repair must be performed by Forced Performance, otherwise any warranty will be void. A non-professional is not capable of servicing this turbocharger.