

**TDI *TURBOTWIN*<sup>TM</sup>**

**AIR STARTERS FOR**

**ALL APPLICATIONS**



Anything Less Than a *TURBOTWIN* is a Compromise



TECH DEVELOPMENT

[www.tdi-turbotwin.com](http://www.tdi-turbotwin.com)

# TURBOTWIN™ TURBINE AIR STARTERS: Redefining Performance and Reliability in the World's Harshest Environments.

**W**e've engineered our starters to take on the dirtiest, messiest, most demanding places on earth. TurboTwins thrive in environments where the supply air is contaminated with water, pipe scale, rust or even H<sub>2</sub>S, or in places where frequent starting and long cranking cycles are the norm, and in places where engine starting system maintenance is at best an afterthought. TurboTwin starters thrive where lesser starters simply don't survive.

TurboTwin's solid performance in extreme environments has set the industry standard for reliability, but it's also unmatched for cost reduction, safety, and ease of installation.

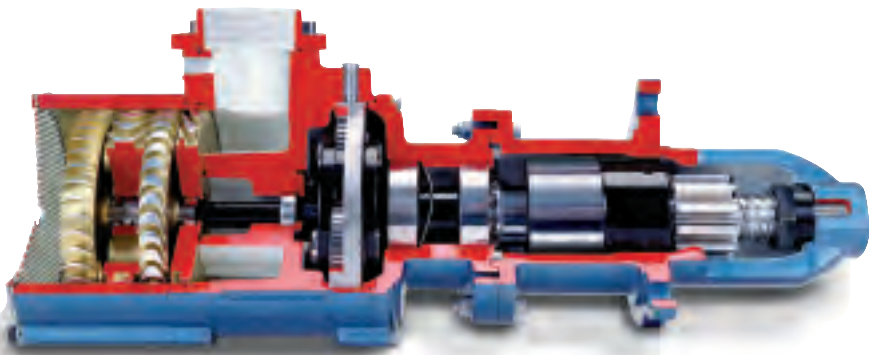
High tolerance to supply air contamination allows you to eliminate expensive fine-mesh or coalescing air filters. Air dryers for cleaning up the starting air, or high capacity gas scrubbers for the starting gas, can also be eliminated. Low pressure starting capability means you can eliminate the cost and physical space for multiple air receiver tanks. It also means you'll use less gas.

The performance doesn't stop there. TDI manufactures the lightest starters in the industry so shipping, handling, and installation by one person is a snap. Using TDI starting system accessories and controls, you can literally bolt on a TurboTwin upgrade in minutes. And after its installed, our turbine technology means your engine room stays cleaner, quieter, and safer. Now that's what we call performance!

## RELIABILITY

- TDI **TURBOTWIN** Motor Resists Damage by Air/Gas Contamination
- Never Needs Lubrication of the Supply Air/Gas, Eliminating the Oily, Messy Exhaust from Vane-Type Starters
- Aerodynamic Speed Control Prevents Starter Over-Speed or Gear Box Burn-Out, Even on Extended Crank Cycles
- Fugitive Starter Exhaust Emissions are Eliminated
- No Plastic Parts ... Robust Steel and Aluminum Alloy Construction Throughout
- Up to 25% More Power than Other Turbine Starters
- Grease-Packed Gears and Bearings on TurboTwin Models Eliminate Maintenance to Check or Refill Oil Systems
- Standard or Low-Pressure Models Provide Unmatched Power at Low Air Pressure Common in Gas Fields





*Contaminated air that clogs and shuts down lesser units passes right through TurboTwin's open air path design.*

## FIELD PROVEN

**Long Cranking Applications** – Gear box burnout was a common symptom for many starters in the oil and gas industry. TurboTwin was designed specifically to handle the long, hard cranking cycles common to oil and gas applications.

**Remote Installations** – Starters at remote pumping stations that require regular lubrication put an unnecessary strain on your time and resources. That's why TurboTwins are grease-packed for life, require no lubrication, and allow you to install it, and forget it.

**Cold Temperature Environments** – Cold weather can cause your control air line to freeze up – especially pre-engaged pinion models. TDI offers a wide range of inertia-engaged starters for extreme cold weather applications.

**Mining Environments** – The dirt, dust, mud, and contaminated air that mine haul trucks work in can wreak havoc on traditional vane-style starters. TurboTwin's large, open air path design allows most contaminants to pass right through – keeping your trucks out of the repair shop.

**Salt Water & Salt Air** – On the open seas, salt air, moisture, and corrosion can take a toll on lesser starters. TDI's TurboTwin design is tolerant to contamination – even pipe scale – making them the most reliable starters on the water.

**Lots of Cranks on Limited Air Supply** – Sometimes you have to be able to crank the starter multiple times on a limited amount of air. TurboTwin's legendary low pressure starting capability is unsurpassed in the industry making it ideal for emergency gensets, marine, fire pump, and other applications.

**Small Space/Small Footprint Requirements** – The tight confines of a ship, tight space of a mine haul truck, or any other confined space environment, often requires a starter that delivers a significant amount of power in a small footprint. TDI is known for delivering high power in small, light-weight packages.

**Downtime Critical Applications** – When you're operating a fleet of mine haul trucks, maintenance and repair downtime is your biggest enemy. TurboTwins are not only the longest lasting starter, but they eliminate lubrication, use less air, and do not stick and swell like traditional vane starters – all translating into less vehicle downtime.

## Keep Your Starters Operating at TDI Performance Standards by Using Genuine TurboTwin Parts and Certified TDI Remans.

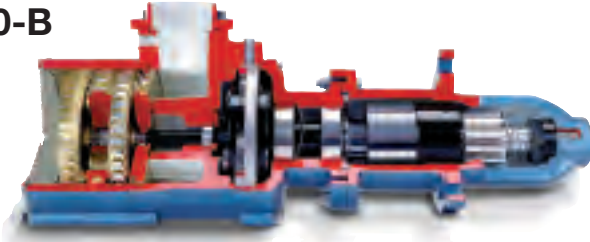


When it comes time to replace a TurboTwin part, or rebuild your starter, don't compromise with knock-off components. No one knows how to extend the life of your TurboTwin better than our people. Choose Genuine TurboTwin Parts and have your rebuild done by one of our authorized and certified distributors. Because there's too much riding on your engine start.



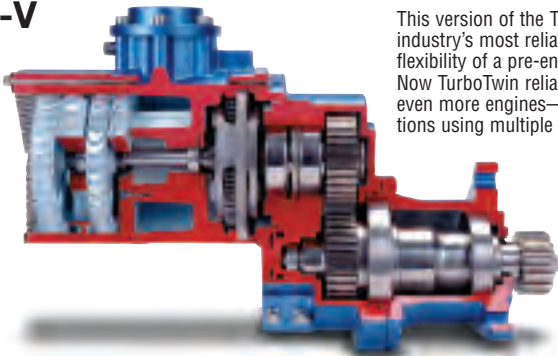
# TURBOTWIN™ AIR STARTERS

## T100-B



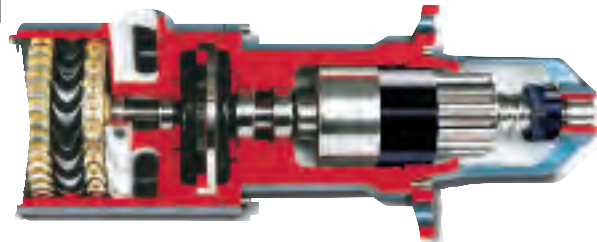
Aerodynamic speed control that prevents starter burn-out and an open-air path design that resists contaminants are just two of the features that make T100-B the most reliable starter for engines up to 300 liters.

## T100-V



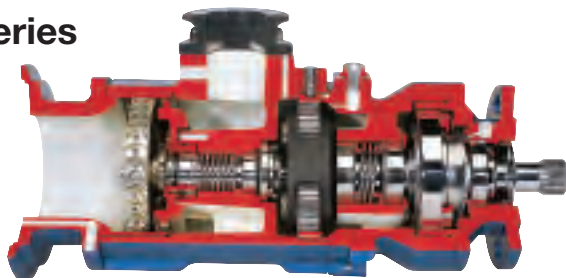
This version of the T100 delivers the industry's most reliable starting with the flexibility of a pre-engaged pinion gear. Now TurboTwin reliability is available for even more engines—including applications using multiple starters.

## T30-I



This lightweight compact turbine air starter delivers 25% more stall torque than other starters in its class. At just 29 lbs., low pressure starting is now an option for engines up to 20 liters.

## 56 Series



Designed specifically for starting gas turbine engines, these starters deliver excellent reliability in the most challenging environments and for thousands less than aeroderivative models.

  
TECH DEVELOPMENT  
[www.tdi-turbotwin.com](http://www.tdi-turbotwin.com)

6800 Poe Avenue, RO. Box 13557, Dayton, Ohio 45413-0557  
tel: 937-898-9600 • fax: 937-898-8431

Anything Less Than a **TURBOTWIN** is a Compromise

## DO YOU HAVE OUR STARTER CATALOGS?

1-937-898-9600



### Starters for Mining Applications

Catalog features a complete line of turbine starters for mine haul trucks, gen sets, and other mining vehicles.



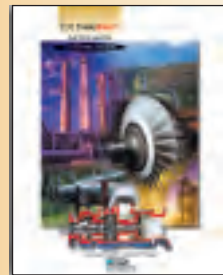
### Starters for Oil & Gas Applications

Complete selection of long-cranking turbine starters designed for the remote applications of the oil and gas industry.



### Starters for Marine Applications

Salt water and moisture-resistant starters for marine engines from 6-300 liters.



### Starters for Gas Turbine Engines

Aerospace quality and reliability are available on these starters specifically designed for industrial gas turbine engines.