If you’re not “making hole” or “on-line” moving gas when you press that button, you’re losing money. Lots of money. That’s why selecting a reliable engine starter is so important.

The TurboTwin line of turbine air starters is the recognized leader in dependable starts for the oil and gas industry. They last longer. Require less maintenance. And are designed specifically to handle the unique challenges of remote starts.

Extended Crank Cycles
TurboTwin’s aerodynamic speed control invites you to “give it all you’ve got.” Don’t worry about gear box burnout. It handles your longest cranking cycles without problems.

No Plastic Parts
Our starters are all about quality. No plastic parts—only rugged steel and aluminum alloy components built to last.

No Lubrication Means
No Starter Maintenance,
No Messy Oily Discharge,
No Hazardous Fugitive Oil Mist
TurboTwins are grease-packed for life. No lubrication required and no need to schedule maintenance visits to remote locations.

Dirt, Sand, Water, Or Salty Air Won’t Contaminate TurboTwin
TurboTwin was designed specifically for ultimate reliability in the harsh environments of the oil and gas industry. No rubbing parts to stick or swell, and a unique open air path design with extremely large openings passes contaminants that lodge in lesser starter models.

Can Your Remote Sites Afford Less Than TurboTwin Reliability?
The lost time and money for attending to a faulty starter are enormous. With so much riding on each start, doesn’t it make sense to rely on the starter that lasts longer, requires less maintenance and is designed specifically for the long, extended cranking cycles of the oil and gas industry?
For the Oil & Gas Industry,
Anything Less Than a TurboTwin™ Starter is a Compromise.

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TurboTwin
T100 Series
Turbine Air Starters
Uncompromising Performance, Reliability, and Longevity for Large Engines Up to 300 Liters

Large engines doing big jobs cannot afford starting problems. This is why the TurboTwin T100 Series has been designed for ultimate reliability, durability, and long life. Long cranking cycles, contaminated air, and improper maintenance—a starter’s worst enemies—have almost no effect on the T100. That’s because the T100’s superior design effectively manages these problems. Here’s how:

Ready For The World’s Most Contaminated Air
The T100’s vaneless turbine motor has no rubbing vanes to stick, swell, or wear out—wet air or gas have no effect on internal parts. Contaminated air that clogs, damages, and shuts down lesser units passes through TurboTwin’s “open air path” design. Even sour natural gas is no match for the T100’s corrosion-resistant interior. Repairs are fast, simple, and at the very lowest cost.

Aerodynamic Speed Control Permits Longer Cranking… and No Burnout
Long crank cycles are a reality and can burn out the gearbox of lesser-grade starters. TurboTwin’s lower gear ratios reduce starter workload and allow cool running which prevents starter burnout.

No Compromise On Any TurboTwin Part
T100 uses only high-quality, high-strength steel and aluminum alloys machined to the industry’s tightest tolerances. There’s no cutting corners, and definitely no plastic parts as used in other turbine air starters.

Simplicity Means Reliability
Where suitable, TDI’s inertia-engaged models offer the greatest simplicity of design and superior reliability on the poorest quality air/gas supply. Repairs are fast, simple, and at the very lowest cost.

No Oil Means No Fugitive Emissions, Reduced Maintenance, And A Cleaner, More Reliable Starter
The T100 is grease-packed for life so there is no need for oil lubrication, no oily fugitive exhaust emissions, and no maintenance required.

T100’s Aerodynamic Vaneless Design
TurboTwin’s unique design allows the motor to run very cool for longer life.

More Power, Faster Starts.
TurboTwin produces up to 25% more horsepower and a superior turbine torque on a unit of air, and delivers faster cranking RPM for quick starts.

Ultra Low Pressure Starts
T100 can provide reliable starts at pressures as low as 30 psig, making it ideal for field gas compressor applications and compressor rental fleet operators.

Lightweight
At 43–50 lbs., T100 is not only lighter and more compact than other starters in its class, but installation can be a one-man operation.

Choose From Many T100 Models
T100 is offered in a variety of nozzle and pinion configurations to meet your exact application requirements. See the following specification pages to select the appropriate model.
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TurboTwin T100 Series Turbine Air Starters
Uncompromising Performance, Reliability, and Longevity for Large Engines Up to 300 Liters

Large engines doing big jobs cannot afford starting problems. This is why the TurboTwin T100 Series has been designed for ultimate reliability, durability, and long life. Long cranking cycles, contaminated air, and improper maintenance—a starter’s worst enemies—have almost no effect on the T100. That’s because the T100’s superior design effectively manages these problems. Here’s how:

Ready For The World’s Most Contaminated Air
The T100’s vaneless turbine motor has no rubbing vanes to stick, swell, or wear out—with air or gas have no effect on internal parts. Contaminated air that clogs, damages, and shuts down lesser units passes through TurboTwin’s “open air path” design. Even sour natural gas is no match for the T100’s corrosion-resistant interior. It all adds up to unmatched reliability—regardless of the conditions you operate in.

Aerodynamic Speed Control Permits Longer Cranking… and No Burnout
Long crank cycles are a reality and can burn out the gearbox of lesser-grade starters. TurboTwin’s lower gear ratios reduce starter workload and allow cool running which prevents starter burnout.

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Where suitable, TDI’s inertia-engaged models offer the greatest simplicity of design and superior reliability on the poorest quality air/gas supply. Repairs are fast, simple, and at the very lowest cost.

No Oil Means No Fugitive Emissions, Reduced Maintenance, And A Cleaner, More Reliable Starter
The T100 is grease-packed for life so there is no need for oil lubrication, no oily fugitive exhaust emissions, and no maintenance required.

The T100-V offers a Pre-Engaged Solution
The T100-V allows a flexible fit for applications requiring pre-engagement. With T100-V, you can get the legendary durability and reliability of TurboTwin, with pre-engagement.

Unparalleled aero dynamic elements manufacturing experience makes TurboTwin the leader in power and reliability.
This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine sizes on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

A multiple-starter application on a Clark TCV-12 lowered air consumption by 40% over competitive turbine starters originally applied.

The TurboTwin Model T100-V starter’s offset and overhung pinion design provides a “bolt-on fit” to most large-displacement industrial engines. It installs in minutes when replacing other turbine-type starters. (Shown here on a Cooper Superior Series 2408G Spark-Ignited Gas Engine.)

The Power of T100-V for a Variety of Small-Space, Pre-Engaged Applications

The TurboTwin Model T100-V’s grease-packed for life feature eliminates i nsert reduces maintenance, and delivers a significantly longer starting life.

Pressure check ports on both starter inlet and exhaust allow easy troubleshooting of compressed air/gas supply valves, filters, piping, and regulators. (Shown here TurboTwin Model T100-V and TurboValve.)

FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.
This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

A multiple-starter application on a Clark TCV-12 lowered air consumption by 40% over competitive turbine starters originally applied.
TDI Cat Spreads 3-22-11:(Q4)TDI Cat. Spreads_11_05_06  5/4/11  6:30 AM  Page 4

TDI turbine designs feature larger air channels to optimize starting power.

### SPECIFICATIONS

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<td><strong>Right hand/clockwise and Left hand/counter clockwise</strong></td>
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<td><strong>Power at 150 psig:</strong> 105 hp (76 kW) Cranking Power at 90 psig (6.2 BAR) Max.</td>
<td><strong>Lubrication:</strong> Grease-Packed For Life, None Required</td>
<td><strong>Mounting:</strong> SAE 3 Mounting Flange</td>
</tr>
<tr>
<td><strong>Model T112-D</strong></td>
<td><strong>Power at 150 psig:</strong> 84 hp (63 kW) Cranking Power at 150 psig (10.3 BAR) Max.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model T110-P</strong></td>
<td><strong>Power at 70 psig:</strong> 90 hp (67 kW) Cranking Power at 70 psig (4.9 BAR) Max.</td>
<td></td>
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<tr>
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<td></td>
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</tbody>
</table>

**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**

**T100-B/P’s grease-packed for life feature eliminates wear, reduces maintenance, and delivers a significantly longer starting life.**

**Power and Reliability for Engines up to 300 Liters and Larger.**

**The TDI TurboTwin Starter Model T100-B offers simplicity and a perfect fit, even within the tightest installations.**

**TDI Cat Spreads 3-22-11:(Q4)TDI Cat. Spreads_11_05_06  5/4/11  6:30 AM  Page 4**
TDI turbine designs feature larger air channels to optimize starting power.

**Specifications:**

**T100-B**

**T100-P**

**TurboTwin™**

**Engine Air Starters**

The Most Popular T100 Configurations

---

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

**Engine Displacement Chart For T100-B/D/P Series Air Starters**

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**TURBO TWIN™**

**Configurations**

**Engine Air**

**T100-B**

**T100-P**

---

**Dimensionsal Data**

For T100-B/D/P Series Air Starters

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**TDI TURBOTWIN**

Consult your TDI distributor and the TDI Selection Guide before choosing a TDI TURBOTWIN.

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**Model T109-P Performance Curve**

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**Model T110-P Performance Curve**

---

**For low-pressure version curve, see T112-D performance curve on page 10.**

---

**For low-pressure version curve, see T112-D performance curve on page 10.**

---

**SPECIFICATIONS**

- **Engines:** Starts Engines from 50 (3000 CID) up to 250 Liters (15,000 CID)
- **Rotation:** (Facing Pinion Orientation) Righthand/clockwise and Lefthand/counter clockwise
- **Design Configuration:** Inline; Inertia-Engaged
- **Air/Gas Supply:** Compressed Air or Natural Gas
- **Common Pinion Configuration:** 6/8 Pitch, 12 Tooth (2-inch pitch diameter pinion)
- **Lubrication:** Grease-Packed For Life, None Required
- **Mounting:** SAE 3 Mounting Flange
- **Horsepower:** (on Methane)
  - T109-P: 105 hp (76 kW) Cranking Power at 150 psig (10.3 BAR) Max.
  - T121-B: 105 hp (76 kW) Cranking Power at 90 psig (6.2 BAR) Max.
  - T109-P: 84 hp (63 kW) Cranking Power at 150 psig (10.3 BAR) Max.
- **Gear Ratio:** T112-B/T121-B: 7.6:1; T109-P: 9.0:1
- **Weight:** 48 lbs. (22 kg)
- **Operating Pressure Range:**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>NOZZLES</th>
<th>PSI</th>
<th>BAR</th>
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</thead>
<tbody>
<tr>
<td>T108-P</td>
<td>5</td>
<td>90 – 150</td>
<td>2 – 10.3</td>
</tr>
<tr>
<td>T112-B</td>
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<td>90 – 150</td>
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<tr>
<td>T121-B</td>
<td>16</td>
<td>90 – 90</td>
<td>2 – 6.5</td>
</tr>
</tbody>
</table>

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**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**

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TDI-100-B/P’s grease-packed for life feature eliminates wear, reduces maintenance, and delivers a significantly longer starting life.

---

For application in the 30–90 psig (2.1–6.2 BAR) range, consult your TDI distributor.

---

SEE TABLE ON PAGE 31 OR CONSULT LOCAL TDI DISTRIBUTOR.

---

Other custom models and configurations available. Consult your local TDI distributor.

---

T100-B dual starter mounted on a Worthington SL-10. Simple installation, power and reliability make the T100-B ideal for starting engines up to 300 liters.

---

Model T100-B outboard-mounted starter on a slow-speed spark-ignited engine.
Specifications:

T100-D

TURBOTHIN™

Engine Air Starters

Eliminate remote service trips with the reliability of T100-D.

Engine Displacement Chart
For T100-B/D/P Series Air Starters

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

SPECIFICATIONS

| Engines: | Starts Engines up to 250 Engines (15,000 CID) |
| Design Configuration: | In-Line, Inertia-Engaged |
| Common Pinion Configuration: | 6/8 Pitch, 12 Tooth (2 inch pitch diameter pinion) |
| Air/Gas Supply: | Compressed Air or Natural Gas |
| Lubrication: | Grease-Packed for Life, None Required |
| Gear Ratio: | 7.5:1 |
| Custom: | Other models and configurations available. Consult your local TDI distributor. |

Operating Pressure Range:

<table>
<thead>
<tr>
<th>MODEL</th>
<th>NOZZLES</th>
<th>PSI</th>
<th>BAR</th>
</tr>
</thead>
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<td>60-100</td>
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</tr>
<tr>
<td>T121-D</td>
<td>21</td>
<td>60-90</td>
<td>4.2-6.4</td>
</tr>
</tbody>
</table>

For applications in the 30-90 psig (2.1-6.2 BAR) range, consult your TDI distributor for best nozzle configuration.

FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.
Specifications:

**T100-D TURBO TWIN™ Engine Air Starters**

- **Eliminate remote service trips** with the reliability of T100-D.
- **T100-D’s grease-packed for life feature eliminates wear, reduces maintenance, and delivers a significantly longer starting life.**

**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**

**SPECSIFICATIONS**

| Engines: Starts Engines up to 250 Engines (15,000 CID) |
| Rotation: (Facing Pinion Orientation) Right-hand/clockwise and Left-hand/counter clockwise |
| Design Configuration: In-line; Inertia-Engaged |
| Common Pinion Configuration: 6/8 Pitch, 12 Tooth (2 inch pitch diameter pinion) |
| Air/Gas Supply: Compressed Air or Natural Gas |
| Mounting: SAE D-Style Flange |
| Lubrication: Grease-Packed For Life, None Required |
| Horsepower: (on Methane) T112-D: 105 hp (78 kW) Max. at 150 psig (10.3 BAR) T121-D: 105 hp (78 kW) Max. at 90 psig (6.2 BAR) |
| Gear Ratio: 7.5:1 |
| Weight: 70 lbs. (32 kg) |

**DIMENSIONAL DATA**

- **TDI TURBOTWIN T100-D Standard Mesh**
- **TDI TURBOTWIN T100-D Long Mesh**

**For applications in the 30–90 psig (2.1–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.**

**OPERATING PRESSURE RANGE:**

<table>
<thead>
<tr>
<th>MODEL</th>
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<th>PSI</th>
<th>BAR</th>
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<td>90 – 160</td>
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<tr>
<td>T121-D</td>
<td>21</td>
<td>90 – 90</td>
<td>6.2 – 6.2</td>
</tr>
</tbody>
</table>

**Specifications Note:**

- Engines: Starts Engines up to 250 Liter (15,000 CID) with the reliability of T100-D.
- Rotation: (Facing Pinion Orientation) Right-hand/clockwise and Left-hand/counter clockwise.
- Design Configuration: In-line; Inertia-Engaged.
- Air/Gas Supply: Compressed Air or Natural Gas.
- Mounting: SAE D-Style Flange.
- Lubrication: Grease-Packed For Life, None Required.
- Horsepower: (on Methane) T112-D: 105 hp (78 kW) Max. at 150 psig (10.3 BAR), T121-D: 105 hp (78 kW) Max. at 90 psig (6.2 BAR).
- Gear Ratio: 7.5:1.
- Weight: 70 lbs. (32 kg).

**OPERATING PRESSURE RANGE:**

<table>
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<td>T121-D</td>
<td>21</td>
<td>90 – 90</td>
<td>6.2 – 6.2</td>
</tr>
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</table>

**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**
Specifications:

T100-F TURBOTWIN™ Engine Air Starters

An Economical Configuration of T100 for Medium-Range Engines from 20–50 Liters

Engine Displacement Chart

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

DIMENSIONAL DATA

TDI TURBOTWIN
T106-F/T112-F

Rotation: (Facing Pinion Orientation)

Righthand/clockwise and Lefthand/counter clockwise

Air/Gas Supply:

Compressed Air or Natural Gas

Lubrication:

Grease-Packed For Life, None Required

Gear Ratio:

7.5:1

Custom: Other models and configurations available. Consult your local TDI distributor.

For applications in the 30–90 psig (2.1–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.

FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.

TDI's state-of-the-art manufacturing facility produces some of the world's most sophisticated turbine/compressor designs.

T100-F grease-packed for life feature eliminates wear, reduces maintenance, and delivers a significantly longer starting life.

T106-F installed on Caterpillar 3412 engine.

T106-F installed on Detroit Diesel 16V2000 engine.

The large channels of TDI turbine blades create an open air path that allows contaminants to pass through rather than get lodged in the starter and cause breakdowns.
**Specifications:**

**T100-F TurboTwin™ Engine Air Starters**

An Economical Configuration of T100 for Medium-Range Engines from 20–50 Liters

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

**Engine Displacement Chart**

For T100-F Series Air Starters

**SPECIFICATIONS**

**Engines:**

Starts Engines up to 50 Liters (3000 CID)

**Design Configuration:**

Inline; Inertia-Engaged

**Common Pinion:**

6/8 Pitch, 12 Tooth (2 inch pitch diameter pinion)

**Mounting:**

SAE 3 Flange, Standard

**Horsepower:**

54 hp (41 kW) Max. at 150 psig (10.3 BAR)

54 hp (41 kW) Max. at 90 psig (6.2 BAR)

**Weight:**

42 lbs. (19 kg)

**Rotation:**

(Facing Pinion Orientation)

Righthand/clockwise and Lefthand/counter clockwise

**Air/Gas Supply:**

Compressed Air or Natural Gas

**Lubrication:**

Grease-Packed For Life, None Required

**Gear Ratio:**

7.5:1

**Other models and configurations available. Consult your local TDI distributor.**

**Operating Pressure Range:**

For applications in the 30–90 psig (2.1–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.

**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**
The T50 Turbine Air Starter delivers 70 hp of cranking power for starting medium-size gas and diesel engines. At only 34 lbs. (15.4 kg) and 6 in. (152 mm) in diameter, its size-to-power ratio sets the industry standard. Refinements to the TurboTwin design have reduced noise levels below standards previously thought to be unattainable in air starters. It’s easily the quietest starter in its class. Additional design refinements have further reduced the number of contact parts which will yield even longer life and provide maintenance-free operation.

70 Hp At Only 34 lbs. It’s A Powerhouse!
T50 is truly a breakthrough design, delivering unparalleled power for engines up to 70 liters. That’s over 25% more torque and power than competitive models per unit volume of air—all in a lightweight, compact package.

The World’s Most Contaminated Air Has No Effect On T50
The T50’s turbine motor has no rubbing vanes to stick, swell, or wear out—dirty, wet air has no effect on internal parts. Contaminated air that clogs, damages, and shuts down other starters is flushed through TurboTwin’s open air path design.

The T50’s efficiency means you use less air and engines start quicker...even in bitter cold or sweltering heat.

No Compromise On Any TurboTwin Part
T50 uses only high-quality, high-strength steel and aluminum alloys machined to the industry’s tightest tolerances. There’s no cutting corners, and definitely no plastic parts as used in other turbine air starters.

Fewer Moving Parts Means Fewer Repairs
T50 features half the moving parts found on other turbine air starters. Its design yields greater reliability and minimizes part count. This means lower operating costs.

No Oil Means Easier EPA Compliance And A More Reliable Starter
The T50 gearbox is grease-packed for life; there is no need to add starter lubrication and there are no fugitive exhaust emissions. Cleaner operation means greater workplace safety.
The T50 Turbine Air Starter delivers 70 hp of cranking power for starting medium-size gas and diesel engines. At only 34 lbs. (15.4 kg) and 6 in. (152 mm) in diameter, its size-to-power ratio sets the industry standard. Refinements to the TurboTwin design have reduced noise levels below standards previously thought to be unattainable in air starters. It’s easily the quietest starter in its class. Additional design refinements have further reduced the number of contact parts which will yield even longer life and provide maintenance-free operation.

70 Hp At Only 34 lbs. It’s A Powerhouse!

T50 is truly a breakthrough design, delivering unparalleled power for engines up to 70 liters. That’s over 25% more torque and power than competitive models per unit volume of air—all in a lightweight, compact package.

The World’s Most Contaminated Air Has No Effect On T50

The T50’s turbine motor has no rubbing vanes to stick, swell, or wear out—dirty, wet air has no effect on internal parts. Contaminated air that clogs, damages, and shuts down other starters is flushed through TurboTwin’s open air path design.

The T50’s efficiency means you use less air and engines start quicker—even in bitter cold or sweltering heat.

No Compromise On Any TurboTwin Part

T50 uses only high-quality, high-strength steel and aluminum alloys machined to the industry’s tightest tolerances. There’s no cutting corners, and definitely no plastic parts as used in other turbine air starters.

Fewer Moving Parts Means Fewer Repairs

T50 features half the moving parts found on other turbine air starters. Its design yields greater reliability and minimizes part count. This means lower operating costs.

No Oil Means Easier EPA Compliance And A More Reliable Starter

The T50 gearbox is grease-packed for life; there is no need to add starter lubrication and there are no fugitive exhaust emissions. Cleaner operation means greater workplace safety.
Specifications:

**T50-P TurboTwin™**

Engine Air Starters

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

At 34 lbs. and 6” in diameter, the compact T50 delivers 40 hp of cranking power.

T50-P’s grease-packed for life feature reduces wear, eliminates starter maintenance, and delivers a significantly longer starter life.

For engine compatibility and starter replacement information, see Table on page 31 or consult your TDI distributor.

**Operating Pressure Range:**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>NOZZLES</th>
<th>PSI</th>
<th>BAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>T50-P/P</td>
<td>6</td>
<td>40</td>
<td>2.7</td>
</tr>
<tr>
<td>T510-P/P</td>
<td>10</td>
<td>40</td>
<td>2.7</td>
</tr>
<tr>
<td>T514-P/P</td>
<td>14</td>
<td>40</td>
<td>2.7</td>
</tr>
</tbody>
</table>

For applications in the 85–30 psig (6.0–2.1 BAR) range, consult your TDI distributor for best nozzle configuration.

**Engine Displacement Chart For T50 Series Air Starters**

**DIMENSIONAL DATA**

| TDI TurboTwin T50-P & T50-Y |

**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**

**Model T50 Performance Curve**

**Model T50-P Performance Curve**

**Engine Pressure Range:**

- **Standard:** 70 hp (53 kW) Max.
- **Low Pressure:** 49 hp (41 kW) Max.

**Model:**
- **Power:**
  - **(on Methane)**
  - **Standard:**
    - **70 hp (53 kW) Max.**
    - **at 120 psig (8.5 BAR)**
  - **Low Pressure:**
    - **49 hp (41 kW) Max.**
    - **at 100 psig (6.9 BAR)**

**Gear Ratio:**
- **11.2:1**

**Custom:**
- **Other models and configurations available.**
- **Consult your local TDI distributor.**

**Air Supply:**
- **Compressed Air or Natural Gas**

**Mounting:**
- **SAE 3**

**Oil Core (on Methane)**
- **Inlet Damage:**
  - **Pre-Engaged**
  - **Inline**

**For applications in the 60–90 psig (4.1–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.**

**At 34 lbs. and 6” in diameter, the compact T50 delivers 40 hp of cranking power.**

**At only 34 lbs., one-person installation is a reality.**
Specifications:

T50-P TurboTwin™ Engine Air Starters

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

At 34 lbs. and 6” in diameter, the compact T50 delivers 40 hp of cranking power.

T50-P’s grease-packed for life feature reduces wear, eliminates starter maintenance, and delivers a significantly longer starter life.

Consult your TDI distributor and the TDI Selection Guide before choosing a TDI TurboTwin starter for any application.

For applications in the 60–90 psig (4.1–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.
The T30 generates up to 25% more stall torque than other starters in its class. Its highly efficient twin-turbine motor design gives you more cranking power with less air for faster starts. The versatile T30 is available with inertia-engagement, pre-engagement, and now with a pre-engaged, over-hung pinion for European engines.

Lightweight.
At 29 lbs. (13.2 kg), T30 is lighter and more compact than other starters in its class.

The Longest Lasting, Most Reliable Engine Starter — Here’s Why:
The T30 Turbine is designed to thrive in the world’s dirtiest, messiest environments. Wet or contaminated air have no effect on the T30. There are no rubbing vanes to stick, swell, or wear out — which translates into longer lasting, more reliable starting, regardless of conditions.

No Mess. No Fugitive Emissions.
The vaneless design of the T30 is grease-packed for life, thereby eliminating fugitive starter exhaust emissions caused by messy, oily exhaust residues. Less mess, less maintenance, and a clean environment for your engine makes sense, doesn’t it?

Half the Moving Parts and No Fragile Plastic Parts.
Quality has been designed into the T30. We’ve minimized the moving parts (less than half the number on competitive models). Plastic rotating parts wear out quicker. We refuse to compromise by cutting corners on material, which is why all of our rotating parts are made of high-strength steel and aluminum alloys that deliver significantly longer life than other similar-size starting systems.

TDI’s TurboTwin™ design flourishes in contaminated air. The world’s harshest wet and dry environments have no effect on the T30’s reliable cranking power.

The versatile, pre-engaged overhung drive design was designed primarily for European engines (and the Cummins 5.9L Engine). T30-Y features metric and U.S. Standard pinions and a wide variety of mounting options.
The T30 generates up to 25% more stall torque than other starters in its class. Its highly efficient twin-turbine motor design gives you more cranking power with less air for faster starts. The versatile T30 is available with inertia-engagement, pre-engagement, and now with a pre-engaged, over-hung pinion for European engines.

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T30-P

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T30-Y

The versatile, pre-engaged over-hung drive design was designed primarily for European engines (and the Cummins 5.9L Engine). T30-Y features metric and U.S. Standard pinions and a wide variety of mounting options.

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At 29 lbs. (13.2 kg), T30 is lighter and more compact than other starters in its class.

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Specifications:

**T30-I**

**T30-P**

**T30-Y**

*TurboTwin™* Engine Air Starters

**Engine Displacement Chart**

For T30 Series Air Starters

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

**DIMENSIONAL DATA**

TDI TurboTwin T30-P & T30-I

**Starters and**

1,464

1,830 1,098

CID

366

732

T30-P & T30-I TDI

**DIMENSIONAL DATA**

Liters

12

18

24

30

6

**TURBO TWIN™ Engine Displacement Chart**

For T30 Series Air Starters before choosing a TDI TurboTwin Consult your TDI distributor and the TDI Selection Guide 2011.

**TORQUE**

102 75

136 100

170 125

102 75

136 100

34 25

68 50

0 0

(287.0)

11.3

(198.1)

7.8

**Spark-Ignited Diesel**

1/4 NPT “IN” Port (T30-P Only)

6 Nozzles, Methane Gas, 11.4:1 Ratio

1/4 NPT “OUT” Port (T30-P Only)

Pinion Speed (RPM / 100)

T30-P

(99.1)

3.9

1.8 (45.7)

Gear Face

(To ring gear face)

Pilot Dia.

SAE #3

**Weight:**

T30-I 32 lbs. (14.5 kg)

T30-P 29 lbs. (13.2 kg)

T30-Y 23 lbs. (10.5 kg)

**Horsepower:**

32 hp (24 kW)

Operating Pressure Range:

<table>
<thead>
<tr>
<th>MODEL</th>
<th>NOZZLES</th>
<th>PSI</th>
<th>BAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>T30-6</td>
<td>9 (for Small Engines)</td>
<td>160</td>
<td>10.8</td>
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<tr>
<td>T30-6</td>
<td>8 (Standard)</td>
<td>120</td>
<td>8.3</td>
</tr>
<tr>
<td>T312-I</td>
<td>Low Pressure</td>
<td>90</td>
<td>6.1</td>
</tr>
<tr>
<td>T30-P/Y</td>
<td>9 (for Small Engines)</td>
<td>160</td>
<td>10.8</td>
</tr>
<tr>
<td>T30-P/Y</td>
<td>8 (Standard)</td>
<td>160</td>
<td>10.8</td>
</tr>
<tr>
<td>T312-P/Y</td>
<td>Low Pressure</td>
<td>Consult TDI</td>
<td>Consult TDI</td>
</tr>
</tbody>
</table>

For applications in the 80–90 psig (5.6–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.

**Fitting:**

1/8 NPT Pressure Check

1/4 NPT Pressure Check

1/8 NPT Pressure Check

1/4 NPT Pressure Check

SAE 3 Flange

SAE 3 Flange (for P only)

SAE 1 Flange

SAE 1 Flange (for P only)

For applications in the 60–90 psig (4.1–6.2 BAR) range, consult your TDI distributor for specific capability.

**SPECIFICATIONS**

Engines: Starts Engines up to 20 Liters (1200 CID)

Design Configuration:

T30-I Inertia-Engaged

T30-P Pre-Engaged

T30-Y Pre-Engaged - Overhung

Air/Gas Supply:

Compressed Air or Natural Gas

Common Pinion Configurations:

6/8 Standard, 11 Tooth

8/10 Pitch, 12 Tooth

T30-Y 3 Mod, 9 Tooth

T30-Y 3 Mod, 11 Tooth

T30-Y 3.5 Mod, 11 Tooth

Mounting:

SAE 3 Flange

SAE 1 Flange (for P only)

Gear Ratio:

T30-I 11:4

T30-P/Y 9:1

Horsepower:

32 hp (24 kW)

Cranking Power at only 120 psig (8 BAR)

43 hp (32 kW) Max. @

150 psig (10.3 BAR)

Weight:

T30-I 29 lbs. (13.2 kg)

T30-P 32 lbs. (14.5 kg)

T30-Y 32 lbs. (14.5 kg)

Operating Pressure Range:

120 psig (8 BAR)

90 psig (6 BAR)

150 psig (10.3 BAR)

**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**

**In the Oil Field or at Sea, TurboTwin Delivers Unequaled Reliability**

Model T306-P on Luggar Marine Diesel Engine
Specifications:

T30-I
T30-P

**TurboTwin**

Engine Air Starters

### Specifications

#### TURBO TWIN™

<table>
<thead>
<tr>
<th>Model</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>T30-Y</td>
<td>1/4 NPT Pressure Check</td>
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<tr>
<td>T30-P</td>
<td>1/4 NPT Pressure Check</td>
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<tr>
<td>T30-I</td>
<td>1/4 NPT Pressure Check</td>
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#### Dimensions Data

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<td>T30-Y</td>
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<td>1,098</td>
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<tr>
<td>T30-P &amp; T30-I</td>
<td>366</td>
<td>732</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Model T306 Performance Curve

**TurboTwin**

- **Engine Displacement Chart** For T30 Series Air Starters
- **Model T306 Performance Curve**

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

### Specifications

#### Engines:

- Starts Engines up to 20 Liters (1200 CID)

#### Configuration:

- Inertia-Engaged
- Pre-Engaged
- Pre-Engaged - Overhung

#### Air/Gas Supply:

- Compressed Air or Natural Gas

#### Lubrication:

- Grease-Packed

#### Common Pinion Configurations:

- 6/8 Standard, 11 Tooth
- 8/10 Pitch, 12 Tooth
- T30-Y 3 Mod, 9 Tooth
- T30-Y 3 Mod, 11 Tooth
- T30-Y 3.5 Mod, 11 Tooth

#### Gear Ratio:

- 11:4
- 9:1

#### Horsepower (on Methane):

- 32 hp (24 kW) Max. @ 150 psig (10.3 BAR)
- 32 lbs. (14.5 kg)

#### Operating Pressure Range:

<table>
<thead>
<tr>
<th>Model</th>
<th>Nozzles</th>
<th>PSI</th>
<th>BAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>T30-I</td>
<td>9 (for Small Engines)</td>
<td>160</td>
<td>10.8</td>
</tr>
<tr>
<td>T30-P</td>
<td>6 (Standard)</td>
<td>120</td>
<td>8.3</td>
</tr>
<tr>
<td>T312-I</td>
<td>12 (Low Pressure)</td>
<td>90</td>
<td>6.1</td>
</tr>
<tr>
<td>T309-P</td>
<td>9 (Standard)</td>
<td>100</td>
<td>6.7</td>
</tr>
<tr>
<td>T312-P</td>
<td>12 (Low Pressure)</td>
<td>Consult TDI</td>
<td>Consult TDI</td>
</tr>
</tbody>
</table>

For applications in the 80–90 psig (5.5–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.

### FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.
Lots of Power in a Small Footprint

At just 121mm (4.75”) diameter and less than 275mm (11”) long, T25 delivers 22kW, (29hp) @ 6.2 Bar (90 psig) on a 12 nozzle package. T25 redefines robust starting and reliability for small space applications.

No More Vane Motor Problems

The superior reliability of turbine technology over vane motors has been proven over the last 30 years. T25 eliminates the sticking, swelling, rubbing, and clogged motor problems inherent to vane-type starters. Its rugged steel construction and no plastic parts make it the most reliable small starter on the water.

Ideal for Small Marine Engine Applications

T25 has already made a name for itself as an excellent fit for marine applications on a variety of engines around the world. T25 enables vessels with 6-16 Liter engines to take advantage of TDI’s TurboTwin technology.

Integrated Controls Make Converting to TurboTwin Technology Easy

The design of the T25 even eliminates any potential control or wiring issues at installation by including an integrated control package with the unit. T25 maintains a small footprint and is remarkably easy to install.

1 Hose, 2 Wires, 3 Bolts and T25 is Installed!

Users have been amazed at how easy it is to upgrade to TurboTwin. Installation is literally attaching one hose, connecting two wires, and screwing in three bolts.

One hose, two wires, and 3 bolts and T25 is installed.

Switching to T25 is an Easy and Fast Operation.

Integrated controls for easy installation.

See an actual T25 installation movie at www.tdi-turbotwin.com

TurboTwin Field-Proven Reliability

The TurboTwin brand has the distinction of having the most turbine air starters in the field, and the most turbine air starters operating in the world’s harshest and most demanding environments. There is a reason TurboTwin is the number one choice of system integrators, packagers, and aftermarket end users – “unparalleled starting reliability.”

725 with integrated relay valve makes starter installation a 2-3 minute operation.
Lots of Power in a Small Footprint
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One hose, two wires, and 3 bolts and T25 is installed.

See an actual T25 installation movie at www.tdi-turbotwin.com
Specifications:

T25 TurboTwin™
Engine Air Starters
Ideal for 6–16 Liter Marine Engines

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine sizes on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

Engine Displacement Chart
For T25 Series Air Starters

SPECIFICATIONS

- **Engines:** 6-16 Liter Displacement
  - MAN 2842, 2866
  - Scania D12 & D16
  - Volvo D16
  - MTU BR1600
- **Design Configuration:**
  - Pre-Engaged, Outboard supported Nose Cone
  - Common Pinion
  - MTU 8/10 Pd /12T (Special)
  - Std. 8/10 Pd / 12T 3 MOD: 9T
  - 3 MOD: 11T
- **Mounting:**
  - SAE #2 & 3
  - SAE #1
- **Horsepower:** (on Compressed Air)
  - 12 hp (9kW) @ 150 psig (3 Nozzle)
  - 24 hp (18kW) @ 2400 rpm (6 Nozzle)
  - 29 hp (22kW) @ 90 psig (6 BAR) @ 2300 rpm (12 Nozzle)
- **Operating Pressure Range:**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>NOZZLES</th>
<th>PSI</th>
<th>BAR</th>
</tr>
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<tbody>
<tr>
<td>T25</td>
<td>3</td>
<td>160</td>
<td>10.3</td>
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<tr>
<td>T25</td>
<td>12</td>
<td>80</td>
<td>4.1</td>
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</tbody>
</table>

FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.
Specifications:

**T25 TurboTwin™ Engine Air Starters**

Ideal for 6–16 Liter Marine Engines

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**Engine Displacement Chart**

For T25 Series Air Starters

**DIMENSIONAL DATA**

TDI TurboTwin T25

**Operating Pressure Range:**

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<th>MODEL</th>
<th>NOZZLES</th>
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<td>T25</td>
<td>9</td>
<td>160</td>
<td>10.8</td>
</tr>
<tr>
<td>T25</td>
<td>12</td>
<td>90</td>
<td>4.1</td>
</tr>
</tbody>
</table>

For applications in the 30–90 psig (2.1–6.2 BAR) range, consult your TDI distributor for best nozzle configuration.

**FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.**
A New Low – 15hp @ 20 psi.
When you need serious starting power at low pressure, nothing delivers more performance than the new TurboTwin T20. It’s the new low pressure starting champion.

Air Starters as Small as 6 Inches Long Delivering up to 18hp!
It’s 18hp in the palm of your hands. T20 is the ultimate combination of big power at low pressure in a durable, robust package. It’s high performance starting designed for reliability in the world’s harshest environments.

T20 was designed to handle the most challenging low pressure gas field applications.

Great for Low Pressure Gas Applications
Low pressure, dirty, or wet gas is no problem for the T20. The T20 sets the new standard for reliable performance in the world’s most challenging applications.

Easy Upgrade Replacement of Electric Starters.
TDI engineers did everything possible to help end users tired of electric and vane-type starters to upgrade to turbine technology. Compare specs, size, air requirements, footprints, and exhaust options. Improving reliability and performance is seamless with T20.

Efficient Exhaust Design with Many Configurations.
Exhaust configurations are available for the many applications customers might require.

TurboTwin Field-Proven Reliability
The TurboTwin Brand owns the distinction of having the most air/gas turbine starters in the field, and the most turbine air starters operating in the world’s harshest and most demanding environments. There is a reason TurboTwin is the number one choice of system integrators, packagers, and aftermarket end users – “unparalleled starting reliability.”

Ideal for Underground Mining Applications.
The all steel exterior construction of the T20 coupled with its small footprint and low pressure capability make it perfect for starting engines up to 9 liters displacement.

Motors ranging from as small as 6 inches long.
A New Low – 15hp @ 20 psi.
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Great for Low Pressure Gas Applications
Low pressure, dirty, or wet gas is no problem for the T20. The T20 sets the new standard for reliable performance in the world’s most challenging applications.

Easy Upgrade Replacement of Electric Starters.
TDI engineers did everything possible to help end users tired of electric and vane-type starters to upgrade to turbine technology. Compare specs, size, air requirements, footprints, and exhaust options. Improving reliability and performance is seamless with T20.

Efficient Exhaust Design with Many Configurations.
Exhaust configurations are available for the many applications customers might require.

TurboTwin Field-Proven Reliability
The TurboTwin Brand owns the distinction of having the most air/gas turbine starters in the field, and the most turbine air starters operating in the world’s harshest and most demanding environments. There is a reason TurboTwin is the number one choice of system integrators, packagers, and aftermarket end users – “unparalleled starting reliability.”

T20 with integrated controls for easy installation.

Motors ranging from as small as 6 inches long.

T20 Was Also Designed for Underground Mining Machines.
All steel exterior construction make it a perfect choice for underground mining applications.
Specifications:

T20 Turbine Air Starters

Ideal Solution for Low Pressure Gas Fields & Underground Mining

T20 Available in Many Configurations

T20 is a versatile air starter available in many configurations to meet your specific application requirements.

Contact the factory or visit the T20 page on our website at www.tdi-turbotwin.com

T20 on CAT G3306 compressor.

T20 installed on Deutz 1013 engine.

T20 installed on 3.9 Cummins engine.

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke, spark-ignited engine sizes on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

T20 Engine Displacement Chart For T20 Series Air Starters

Consult your TDI distributor and the TDI Selection Guide before choosing a TDI starter for any application.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Engines:</th>
<th>Weight:</th>
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<tbody>
<tr>
<td>6 Liters and Under</td>
<td>SAE #4 with Inlet</td>
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<tr>
<td>John Deere 4045</td>
<td>18 lbs (8.2 kg)</td>
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<tr>
<td>Cummins 5.9</td>
<td>SAE #3 with Relay</td>
</tr>
<tr>
<td>Caterpillar 3304 and 3306</td>
<td>Valve 22.5 lbs. (10.2 kg)</td>
</tr>
<tr>
<td>Ford 460</td>
<td>GM 454</td>
</tr>
<tr>
<td>Continental TM27</td>
<td>Continental TM27</td>
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<tr>
<th>Design Configuration:</th>
<th>Rotation:</th>
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<td>for Life, None Required</td>
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<td>SAE #4</td>
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<tr>
<td>SAE #1 Offset for Cummins 5.9 L engine (Contact TDI)</td>
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<tr>
<td>Ford 460 (special)</td>
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<th>Operating Pressure Range:</th>
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<td>6</td>
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<td>T20</td>
<td>12</td>
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For applications in the 15–30 psig (1–2.1 BAR) range, consult your TDI distributor for best nozzle configuration.

FOR ENGINE COMPATIBILITY AND STARTER REPLACEMENT INFORMATION, SEE TABLE ON PAGE 31 OR CONSULT YOUR TDI DISTRIBUTOR.
Specifications:

T20 Turbine Air Starters
Ideal Solution for Low Pressure Gas Fields & Underground Mining

T20 Available in Many Configurations
T20 is a versatile air starter available in many configurations to meet your specific application requirements. Contact the factory or visit the T20 page on our website at www.tdi-turbotwin.com

![T20 on CAT G3306 compressor.](image)

![T20 on Deutz 1013 engine.](image)

![T20 installed on 5.9 Cummins engine.](image)

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

![Engine Displacement Chart For T20 Series Air Starters](chart)

This selection chart shows basic starter capability by engine size. Note the chart shows four-stroke diesel engine size on the left and four-stroke, spark-ignited engine sizes on the right. Always consult TDI for application-specific capability.

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<tr>
<td>Std. 8/10 Pd / 10T</td>
<td>or Natural Gas</td>
</tr>
<tr>
<td>10 Pd / 10T</td>
<td></td>
</tr>
<tr>
<td>10 Pd / 11T</td>
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<table>
<thead>
<tr>
<th>Horsepower:</th>
<th>Lubrication:</th>
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<tr>
<td>(on Methane)</td>
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<td>15 hp (11kW) @ 150 psig (10.3 BAR) @ 3200 rpm (2 Nozzles)</td>
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<tr>
<td>17 hp (12.5kW) @ 60 psig (4.1 BAR) @ 2500 rpm (4 Nozzles)</td>
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</tr>
<tr>
<td>18 hp (13.2kW) @ 40 psig (2.8 BAR) @ 2500 rpm (6 Nozzles)</td>
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</tr>
<tr>
<td>16 hp (11kW) @ 20 psig (1.4 BAR) @ 2300 rpm (12 Nozzles)</td>
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<table>
<thead>
<tr>
<th>Operating Pressure Range:</th>
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<tr>
<td>T20</td>
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<tr>
<td>T20</td>
</tr>
</tbody>
</table>

For applications in the 15–30 psig (1–2.1 BAR) range, consult your TDI distributor for any application-specific capability.
TDI offers both types of control valves (manual push-button and electrically operated solenoid valves) to actuate the pilot-operated TDI TurboValve shown below.

### Control Valves

- **Control Valves**
- TDI offers both types of control valves (manual push-button and electrically operated solenoid valves) to actuate the pilot-operated TDI TurboValve shown below.

### TurboValve Air Control Relay Valves

- **TurboValve Air Control Relay Valves**
- Both manual and electrical pilot-operated TurboValves feature high flow capacity which reduces pressure drop through the valve, making it versatile for a wide range of applications. The electrical version features an integrated solenoid eliminating extra plumbing and fittings.

### Air Strainers

- **Air Strainers**
- This is an ideal attachment that helps assure long starter life by filtering contaminated air or gas.

### Exhaust Fittings for T30

- **Exhaust Fittings for T30**
- Muffler and exhaust fittings help manage air discharge on the T30 series air starters.

### Exhaust Fittings for T100

- **Exhaust Elbows for T100**
- These elbows channel air exhaust for T100 and T100-V starters.

### TurboTwin™ Air Starters Selection Guide

This selection guide will help you retrofit or select the appropriate TurboTwin Air Starter based on the engine you have. Engines are listed by size in liters and by make with the corresponding TurboTwin model number across from it. This chart does not list all compatible engines. For questions concerning other engines, please call the factory at 937-898-9600.

#### LITERS ENGINE MAKE/MODEL TDI PART NUMBER

<table>
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<th>LITERS</th>
<th>ENGINE MAKE/MODEL</th>
<th>TDI PART NUMBER</th>
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<tbody>
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<td>ARROW MPV21000</td>
<td>VRS200</td>
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<tr>
<td>3 - 20</td>
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<td>CATERPILLAR 877</td>
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Control Valves

TDI offers both types of control valves (manual push-button and electrically operated solenoid valves) to actuate the pilot-operated TDI TurboValve shown below.

TurboValve Air Control Relay Valves

Both manual and electrical pilot-operated TurboValves feature high flow capacity which reduces pressure drop through the valve, making it versatile for a wide range of applications. The electrical version features an integrated solenoid eliminating extra plumbing and fittings.

Exhaust Elbows for T100

These elbows channel exhaust for T100 and T100-V starters.

Air Strainers

This is an ideal attachment that helps assure long starter life by filtering contaminated air or gas.

Exhaust Fittings for T100

These fittings channel exhaust for T100 air starters.

VITRO TWIN™

Air Starters Selection Guide

This selection guide will help you retrofit or select the appropriate TurboTwin Air Starter based on the engine you have. Engines are listed by size in liters and by make with the corresponding TurboTwin model number across from it. This chart does not list all compatible engines. For questions concerning other engines, please call the factory at 937-898-9600.

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TDI offers a wide variety of valves, fittings, and accessories to help maximize the efficiency of your TurboTwin Starters. Featured here are some of the more popular items. For specific order numbers or additional accessory needs, contact your local distributor or visit our website at www.tdi-turbotwin.com.

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This selection information is to be used merely as a guideline. For complete details about a starter or an application, please contact your authorized distributor.
The Industry's Choice for Performance
Choosing TDI TurboTwin means you’ve selected the industry’s best performing and most reliable engine air starter. TurboTwin is the number one choice among system packagers and engine end users. No one has more turbine-powered air starters in the field. And no one has air starters that last as long.

Keep It Real with Genuine TurboTwin Parts
Precise tolerances, better materials and proprietary turbine technology are why TurboTwins are the world’s longest lasting, best performing air starters. When it comes time to remanufacture your TDI starter, or replace parts, don’t compromise. Keep it real with Genuine TurboTwin parts.

Certified TDI Remans
This label assures that your TDI unit was rebuilt by an Authorized Certified TDI Service Center, using the correct tolerances, procedures and Genuine TurboTwin parts. The Authorized TDI Reman repair process follows our factory manufacturing procedures when building the original starter. Look for the Authorized and Certified Reman SERVICE CENTER label to assure TDI performance, reliability, as well as continued warranty coverage.

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AIR STARTERS FOR
OIL & GAS ENGINES

Superior Performance and Reliability from Original Install Through Remanufacturing

Look for this label to assure quality TDI performance

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Built for Long Cranking Cycles and Long Term Reliability.

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