

DA20



 **Diamond**
AIRCRAFT





Discover the joy of flying.

Sporty. Sleek. Exciting yet surprisingly affordable. A lot of words have been used to describe the Diamond DA20 over the years. And no wonder – it's really hard to sum up all of the DA20's attributes in one word.

The DA20 was created to be a really fun, two-place airplane that offers outstanding performance and economy for people who just want to take to the sky. From the first time you strap in, you'll know that it's met all those goals and more. The large bubble canopy treats you and your passenger to an unobstructed view of the sky. It's like flying a modern open-cockpit airplane without the noise and wind. That's why more than 1,000 customers have selected the DA20 as their plane of choice.

A great introduction to the freedom of flight.

Sports Car of the Sky

High performance demands. Rigorous analysis of operations and maintenance. A knowledge of well-handling machines. When the United States Air Force looks at purchasing an airplane, the standards are very high – and the DA20 met them. Out of 12 aircraft invited to a fly-off to select the plane in which Air Force cadets would earn their wings, the DA20 was the clear winner with every bid submitted by training organizations using the DA20 as their plane of choice. Today, Doss Aviation provides introductory training to all aspiring Air Force pilots, ROTC and full-time, using a fleet of 45 Diamond DA20s.

Why did the DA20 win the Air Force's business? Unequaled performance, for one. With a sea-level climb rate of 1,000 fpm, a cruise of 138 kts at only 5.5 gph, and a take-off distance of only 1,600 feet over a 50-foot obstacle, the DA20's performance outshines the competition. So does its handling: spin certified, with a slow 44 kts stall speed, benign stall handling, and a demonstrated 20 kts crosswind component, the DA20 is up for a lot of fun in the sky.

The DA20 has a sports car-like feel: from the fighter-like canopy, to two bucket seats, from the center-stick and engine controls in the center console, to the push-pull rod controls which provide unparalleled handling, the DA20 lifts up your spirits every time you take to the air.



"We are extremely pleased that we chose the DA20 for our contract to train U.S. Air Force pilot and combat systems officer candidates. The Air Force is very impressed with the DA20's superb safety features, wonderful handling characteristics and outstanding fuel economy. Our mechanics love the durability, reliability and ease in maintaining this aircraft...major components are easily accessible and the engine is simple to maintain. The DA20 has exceeded our expectations!"

Kenneth Smith, President, Doss Aviation

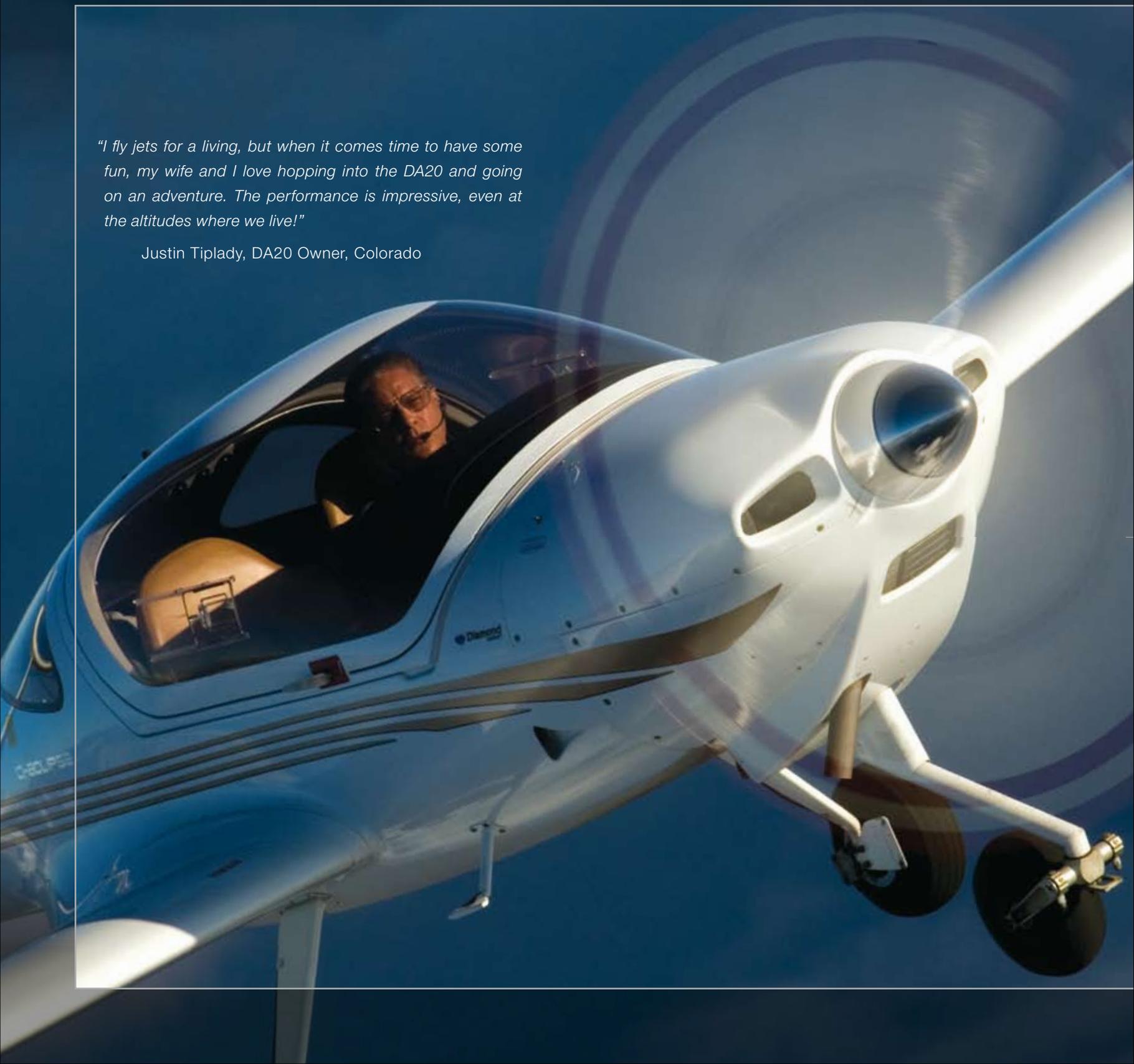


"I have owned seven aircraft from four different companies, and the DA20 is the most fun to fly of all. It has great visibility, and with the center stick, rather than a yoke, it is just much more natural to fly. My DA20 fits how I fly now – mostly for pleasure, mostly by myself. It's also a very capable plane. I flew it from Toronto to Florida twice, and it gets me there with just two fuel stops. I liked the airplane at first sight. But I bought it first and foremost because I love how it flies. Economics were somewhat important and safety was also a factor, but I felt like you couldn't help but buy it once you had a chance to experience it in flight."

Gerhard Betsch, DA20 Owner, Toronto, Canada

"I fly jets for a living, but when it comes time to have some fun, my wife and I love hopping into the DA20 and going on an adventure. The performance is impressive, even at the altitudes where we live!"

Justin Tiplady, DA20 Owner, Colorado



Unparalleled Economics

The industry's most fuel-efficient certified aircraft, the DA20 burns only 5.5 gph at a brisk 138 kts cruise speed – that's an amazing 28 miles per gallon, better than most cars going at less than half that speed. In a training setting, the fuel burn is even less – an average of 4.7 gph is typical over many hours of operation. But fuel efficiency is only the start: simple systems and robust composite design keep maintenance costs low – and with only two seats and its industry-leading safety record, the DA20 has one of the lowest insurance costs in the industry.



Multi-Mission Machine

From beginners to seasoned professionals, the DA20 will quickly win over your heart and sensibilities. Customize the versatile DA20 to meet your needs: choose the basic VFR cockpit or upgrade to a fully capable and cost-effective glass cockpit, which makes the DA20 suitable for technologically-advanced IFR training; add versatility with the baggage extension; upgrade the stylish DA20's look even further by adding the premium leather interior and sleek wheel pants for nose and main gear.

The DA20 offers you the best ownership experience in the industry, thanks to Diamond's outstanding customer support and network of authorized service centers – and the optional Premium Care maintenance program makes your flying costs very predictable by covering all scheduled maintenance for two years and 250 hours. Whoever thought looking after an airplane would be as fun as flying one?

"For my DA20s on leaseback, the economics are really quite good. The DA20 burns only 5 gph – vs. 8-10 in other trainers; a 100 hour on the Diamond takes about 10 hours – vs. 16 hours on the traditional aluminum plane I owned. A lot of things I had to fix on that plane don't even exist on the DA20 – and because it is a composite plane, you don't have to worry about corrosion, and it takes more abuse on a flight line without showing the wear. As far as the students are concerned – it is simply the easiest plane to learn how to fly – period."

Chris Strahan, eight-time Diamond Owner, Missouri

A Flight Training Star

With its unparalleled performance, comfort, safety and efficiency, it's no wonder the Diamond DA20 is quickly becoming the trainer of choice in North America. Colleges, universities and flight training academies rely on the Diamond DA20 as their introductory trainer. More than 70 DA20s were placed in university, college and academy flight training programs in North America in the past two years alone, not to mention many more in local flight schools. The DA20 fleet worldwide has logged over two million flight hours, a testament to its lasting appeal.

With our involvement in training, we understand that great airplanes drive the success of great flight schools. Constructed out of durable composites, the DA20 is easy to maintain and can take abuse on a flight line without showing wear and tear, especially when compared to aluminum aircraft. With the optional glass cockpit, you now have the ability to train your students in a modern, technologically advanced aircraft – at a price point that will please them and allow you to prosper. There's no better way to introduce students to the wonders of flight than with an airplane that's sporty, sleek, reliable, economical and most importantly – a Diamond.



"We started our Diamond experience with a DA40 – and the demand was so great that we quickly added one, and then another DA20. We found many students moving to the DA20 after one flight – either stepping up from a Cessna 152, to get much more of the 'fun factor' for not much more money, or changing over from a Cessna 172, to get better performance and a modern plane, at a significantly lower cost. Our leaseback owners are excited, too – they love that both of our planes exceed their financial expectations, and that they get the bonus of many hours of fun flying in their own plane, too."

Skip Goss, owner, Skill Aviation, Waukegan, Illinois





The Lowest Cost Certified Glass Cockpit, Period.



Modern design. Superb performance. Astonishing economy. Attributes that describe the DA20 airplane now also describe its cockpit: available with optional Aspen Avionics Evolution Flight Displays, the DA20 has grown up to be the lowest-cost, certified glass-cockpit training aircraft.

Now, flight schools and students no longer have to choose between offering economical training on older aircraft with traditional gauges or LSAs with less built-in strength and safety – or stepping up in cost and complexity to larger-scale, more expensive avionics platforms. The DA20 with Aspen Avionics bridges the gap: its acquisition cost is tens of thousands below the competition – and its operating costs, at 5 gph, are comparable to an LSA. Plus, with an empty weight near the max gross weight limit of light sport aircraft, the certified DA20 is a very robust airplane designed for high utilization flight training, without compromises in durability or safety.

With two cockpit choices – the affordable Aspen EFD1000 Pilot Primary Flight Display (PFD), and the advanced EFD1000 Pro PFD – you can tailor your DA20 to your training and flying needs. Your investment will also be ready to receive future upgrades, when they become available: we have designed the flush-mounting for the PFD to also seamlessly fit the EFD1000 Multi-Function Display (MFD), and built in wiring provisions to enable easy retrofit with the Aspen MFD for a full glass-cockpit solution, once certified (expected in mid-2009.)

The DA20 with Aspen is your way to give your students all the skills they need to successfully operate modern aircraft – at a fraction of the cost, and with all the excitement that comes from flying the most sporty, certified two-seat trainer on the market.

“The DA20-C1 Eclipse is first and foremost a thinking man's airplane. It's a comfortable ride for two, performance numbers are generally excellent for the horsepower, fuel burn is modest and the composite structure suggests minimum maintenance. On top of all that, the Eclipse is a fun ride that should endear both current and future pilots to the Diamond line and make stepping up to the larger, more powerful Diamonds irresistible.

Bill Cox, *Plane & Pilot Magazine*



S.A.T. VR-10
112E
02:39

CAUTION
GROUND
OPERATION.
DO NOT ENGAGE
ENGINE WHEN
PROPELLER
IS STOPPED.
SERIOUS ENGINE
DAMAGE MAY
RESULT.

No Smoking!



FUEL PRIME
OFF FOR NORMAL FLIGHT

Maneuvering speed V_A 108kts

TRIM
NOSE UP
NEUTRAL
NOSE DOWN

This airplane is certified as a very light aircraft approved for dual motorized glider. Conditions only in training conditions. All motorized conditions except for intentional spinning which is permitted with back UP only are prohibited. See Flight Manual for other limitations.

GPS limited for VFR only

ALPDT
MPC
SPU
PULSE
LANDING
TAXI
POSITION
STROBE
MAP
LOWES

FUEL
PULL
OFF

50
40
30
20
10
0
50
40
30
20
10
0

"At Maylan Flight Academy, we are using the DA20 as the cornerstone of its professional pilot training program. The DA20 is the perfect airplane for our program. At a fuel burn of less than 5 gph and very simple, cost effective maintenance, its economics are better than any other new training plane on the market,"

Norm Lamothe, General Manager,
Maylan Flight Academy Ltd.



Aspen Avionics EFD1000 Pilot PFD:
Low cost, high function

The Aspen EFD1000 Pilot PFD offers you all the key functions of a PFD, in a compact, easy-to-use package. It displays basic attitude, airspeed and altitude tapes, shows GPS flight plan maps on a slaved DG, and even comes with an altitude alerter. It integrates seamlessly with the Garmin 430 GPS in the DA20 cockpit. Its crisp, ultra-bright LED display gives you great visibility, even in direct sunlight – and it is easy to operate, with intuitive menus and flexible hot keys, which also help a pilot get the skills needed to transition to other glass cockpits, like the Garmin G1000, as they continue their piloting careers.

The EFD1000 PFD replaces the directional gyro, nav indicator and turn coordinator in the DA20 panel. Its solid-state technology, along with a built-in back-up GPS and emergency battery provide you with all the capability you need to successfully conduct IFR training flights within a technologically advanced aircraft (TAA) training curriculum.

Aspen Avionics EFD1000 Pro PFD:
Advanced IFR training technology

Discerning pilots will appreciate the full range of capabilities and enhanced situation awareness offered by the advanced avionics available with the EFD1000 Pro PFD.

The Pro PFD adds more capability – from an interface to the DA20's STEC 30 autopilot, to an EHSI with dual bearing pointers and GPS Steering capability: this unit can do it all, and is an excellent way of training students to enable them to easily transition to other advanced glass cockpits.



Pilot PFD



Pro PFD



EFD 1000 MFD

Upgrade pathways to secure your investment

We know that you buy an aircraft for the long-haul – and with the Aspen cockpit and the smart installation, your DA20 has room to grow. Pre-wired and configured with a flush mount, it can accommodate the Aspen EFD1000 MFD once it becomes certified (expected in mid-2009.)

The MFD will provide situational awareness usually only available at a much higher price point. It not only includes a full-color, sectional-like moving map, but also has a built-in terrain awareness database, and displays traffic

from the GTX330 transponder. Once available, the MFD will replace the mechanical backup attitude, airspeed and altitude indicators – and, with its duplicate ADAHRS, allows the DA20 to do away with all vacuum systems. A nice, clean, modern cockpit – with fewer moving parts to maintain: what's not to love?

Whether you are looking to get the best in your personal sports car in the sky, or have set your eyes towards cost-effective, advanced, and fun training – the Aspen glass cockpit will make your DA20 a capable and fun plane for either mission.



Specifications:

Engine	TCM IO-240-B3B
Horsepower	125 hp
Propeller	Sensenich 2-blade fixed pitch
Airworthiness category	Utility, spin certified
Length	23 ft 6 in
Height	7 ft 2 in
Wing span	35 ft 8 in
Maximum takeoff weight	1,764 lbs
Useful load	600 lbs*
Fuel capacity, usable	24.0 gal
Fuel	AVGAS 100LL
Takeoff distance, ground roll	1,280 ft
Takeoff distance, 50-foot obstacle	1,640 ft
Landing distance, ground roll	661 ft
Landing distance, 50-foot obstacle	1,360 ft
Rate of climb, sea level	1,000 ft/min
Maximum demo operating altitude	13,120 ft
Cruise speed at 75%	138 ktas/5.5 gal/hr
Stall speed, full flaps	45 kcas
Maximum demonstrated crosswind	20 kts
Range, 30 minute reserve	547 nm

*Dependent on configuration

Optional equipment:

- Aspen Avionics Evolution Pilot PFD
- Aspen Avionics Evolution Pro PFD with built-in EHSI
- Garmin GNC 420 GPS/COM (not available with GNS 530)
- Garmin AT SL40 VHF COM
- Garmin GNS 530 GPS/COM/NAV with glideslope receiver (exchange from GNS 430)
- Autopilot STEC30 with altitude hold (requires Aspen Avionics Evolution Pro PFD)
 - GPSS (requires Autopilot STEC30)
- Garmin GTX 330 Mode S transponder with Traffic Information System (exchange from GTX 327)
- External power unit, receptacle
- Engine pre-heater system
- Premium interior with integrated folding head rests (tan leather)
- Baggage extension
- Wheel fairing on nose and main gear
- Premium Care maintenance program

Standard equipment:

- Garmin GNS 430 GPS/COM/NAV with glideslope receiver
- Garmin GI 106A VOR/LOC/GPS/GS indicator
- Garmin GTX 327 transponder with blind altitude encoder
- Garmin GMA 340 audio panel/voice activated intercom and marker beacon receiver
- Integral instrument lighting
- Electroluminescent panel flood light
- Extended glare shield
- Engraved aluminum throttle quadrant cover plates
- Inertial reel harnesses
- Sheepskin seats
- Premium carpet
- Pop-out vent windows
- Rear windows
- Winter kit (cowling inlet and outlet blocks)

Aircraft shown in all marketing materials, websites or brochures, may contain non-standard features, optional equipment or equipment not yet certified by a given authority, and which, if available, may be subject to additional cost. Actual weight and balance information will vary depending on options installed on aircraft. Only aircraft specific weight and balance data alone should be consulted for flight planning. Aircraft specifications, weights, equipment lists, color choices, model references and other representations made verbally or appearing on websites, in brochures or other marketing materials are for general information purposes and do not constitute an inducement to enter into, or form any part of, an agreement for the purchase and sale of aircraft. Only statements and representations set out in actual contracts entered into with Diamond Aircraft or its authorized distributors may be relied upon. Prices and specifications are subject to change without notice at any time prior to delivery.

Join the Diamond family.

Each member of our Diamond distribution network is a pilot committed to aviation. They're as excited about Diamond airplanes as we are, and they're eager to share their years of aviation experience with you. Locally owned and operated, Diamond distributors know your market and work with you as you research your first or next plane to buy. They don't look at aircraft ownership as one-size-fits-all. They take the time to listen to your goals and concerns, and determine the different missions you'll fly. Because they're able to offer a full line of planes, they can help you to select the best aircraft, or progression of aircraft, that's right for you, and help you trade up when the time comes. Most Diamond distributors also offer their own service facilities, and you can also find maintenance assistance from our network of independent Diamond Authorized Service Centers.

Contact us today at 1-888-465-7011

Or find your local Diamond distributor online at www.diamondaircraft.com