

---

# Al Burtoni



# DIRECT

---

## To 600 HP and Beyond!!

by Dennis Dzura



### Personally Speaking

So much has happened in the last few months – the new showroom, the new cars, the 6.0 Jota® engine development, the events, the 40<sup>th</sup> Anniversary of Lamborghini, and many more. We'll bring you up to date on all the latest in this issue. Read on .

Whether it is buying or selling, refurbishing, servicing, a complete restoration, or offering the mechanical enhancements that truly brings out the best in your machine, we want to be your first—and only—call.

How may we be of service for you?

*Al Burtoni*



What would you do with a brand new 2001 Lamborghini Diablo 6.0??

If you are Al Burtoni you'd view it as a pretty good development platform.

With a factory 6.0 engine base line of about 530 HP, Burtoni's experience with the 5.7 Liter 577 HP Jota®, hinted at more than 600 HP from the 6.0 Jota®.

Before turning a wrench, however Al Burtoni and his staff at V-12 Engineering comprehensively reviewed the electronic map of the engine management system to gauge how much margin they would really be dealing with.

The known response of the 5.7 liter Jota®, to ABD cam shaft design, led Al to produce an even more push to the limit design for more power envelope. The new prototype cam profile, when subjected to computer simulation, proved to exceed good engineering practice for

valve train reliability. A second iteration, however achieved the desired timing, acceleration and lift. "Smoothing" of the acceleration curve coupled with the addition of titanium retainers and followers (saving 28 grams per valve) maintained the increased performance, while eliminating the ill-effects of valve-train stress.

Hours on the flow bench with the heads and manifold, painstakingly modifying the cross sectional shape and area a tiny bit at a time, resulted in a measurable improvement of between 9 and 11% in overall flow rate.

Partially responsible for the improvement in flow was the "multi angle" valve job which, as a bonus, maintained sealing over both temperature and RPM.

When the Jota® 6.0 engine was finished and the throttle bodies and plenums, developed for the 5.7l. Jota® engine, were installed,

*(continued on page2)*

---

Al Burtoni Direct - Summer / Autumn 2003

Tel.# 408-847-8732 Fax.# 408-847-3738 email: [Burtoni@garlic.com](mailto:Burtoni@garlic.com)  
[www.alburtoni.com](http://www.alburtoni.com) or [www.lamborghiniDiablo.com](http://www.lamborghiniDiablo.com)



# To 600 HP and Beyond

(Continued from page 1)

the 6.0, was ready to experience the grim, no nonsense reality of the dynamometer.



Al - happy with his accomplishment.

On July 12, 2003 the following performance envelope was obtained:

Test Number: 18  
 Date (M/D/Y): 12July03 Time (H:M:S): 15:00:50 Operator: Al Burtoni  
 Engine description: Jota 6.0 prototype  
 Test description: Dyno proving, no catalysts

**Standard Corrected Data**

Test: 250 RPM Step Test  
 Vapor Pressure: .50  
 Engine Type: 4-Cycle Spark

⊙ RPM	CBT lb-Ft	CBHp	FHp
5250	486.6	486.4	86.7
5500	508.4	532.4	94.7
5750	505.5	553.4	103.1
6000	492.1	562.2	112.4
6250	483.4	575.3	122.2
6500	476.9	590.2	132.3
6750	463.5	595.7	143.2
7000	450.0	599.8	155.4
7250	436.7	602.8	168.1

After much time on the dyno tuning and trying many different components, only then, Al Burtoni and his crew at V12

Engineering® were prepared to apply their talents to the exhaust side of the equation.

Several different manifold configurations were tried before arriving, on July 24, 2003 at 4:02 PM at the following envelope:

Test Number: 55  
 Date (M/D/Y): 24July03 Time (H:M:S): 04:02:19 Operator: Al Burtoni  
 Engine description: Jota Prototype 6.0  
 Test description: Dyno proving small headers/ VAC PUMP D06vx ~~MSD TIMPS~~

**Standard Corrected Data**

Test: 250 RPM Step Test  
 Vapor Pressure: .62  
 Engine Type: 4-Cycle Spark

⊙ RPM	CBT lb-Ft	CBHp	FHp
5250	476.3	476.1	86.7
5500	499.7	523.3	94.7
5750	501.3	548.8	103.1
6000	497.2	568.0	112.4
6250	501.0	596.2	122.2
6500	492.4	609.4	132.3
6750	479.5	616.3	143.2
7000	474.6	632.6	155.4
7250	461.2	636.7	168.1

These results surely best the million dollar McLaren F1 with 627HP and 479 lb/ft torque.



The 6.0 – 636.7 HP Jota® engine on the dyno

Who knows how many horses Al Burtoni and V-12

Engineering can awaken in the, next project??



Steve – happy accomplice to Al at Al Burtoni's Milano Imports and V-12 Engineering®



Al's grandson, Joey Burtoni, getting some early training from the master



Al's 2001 Diablo 6.0 Jota® ready for road test after installation of the upgraded and tested engine



# OUR SERVICE DEPARTMENTS

*Lamborghini Sales and Service Since 1968*

**Our mechanical service** department has been busy. Besides the development of the 6.0 Jota® engine we designed a more affordable **Jota® Jr.** set up for the Diablos. For under \$25K (less than 1/3 rd price of its big brother Jota® package and 1year / 12,000 miles guarantee) the performance is awesome. The drivability is excellent and reliability remains outstanding.



1994 Diablo VT equipped with Jota® Jr

The Jota® Jr. performance package develops additional 62 HP. We installed several of these packages on customers cars. All our clients that had this system installed have had no complaints just huge grins on their faces. *(See the parts pages of this newsletter for additional info on this package.)*

**Steve**, the shop foreman, had so many requests from Murcielago owners for performance parts that Al purchase this 2003 Murcielago for R & D. The development begins September, 2003. Al says that by February, 2004 we should



New Murcielago for developing Jota® power goodies

have a performance package ready for sale. So far we have the ABD Exhaust system for the Murcielago. ABD Performance packages for Countach 2 and 4 valve, Diablo 5.7 and Diablo 6.0 engines are available. Our major ABD performance packages increase horsepower by 100 plus. We have engine dyno sheets to prove it. **No B.S. here!**

**Resurrecting**, from a pile of parts, a 1984 Countach has been quite a project. The missing and now made of unobtainium, little parts kept our machinist busy on occasion with unusual requests. Adding special touches such as ABD camshafts, 11:1 compression ABD pistons, special ABD wrist pins



The car – 1984 Countach all apart



The boxes of parts for the 1984 Countach

and ABD piston rings made this project fun. Wonder what we can get out of this one on the dyno? Stay tuned!!!

We still, more often than we would like, come across some work performed by authorized Lamborghini mechanics (I use the term loosely) that leaves us wondering, where did they learn their trade? This roadster came to us with recurring transmission problems. The car was repaired not once but twice by the same facility and the problem still persisted and had gotten worse. So finally the owner had enough and brought the car to us.

No wonder the transmission had problems.



*Continued on next page>*

Al Burtoni Direct - Summer / Autumn 2003

Tel.# 408-847-8732 Fax.# 408-847-3738 email: [Burtoni@garlic.com](mailto:Burtoni@garlic.com)

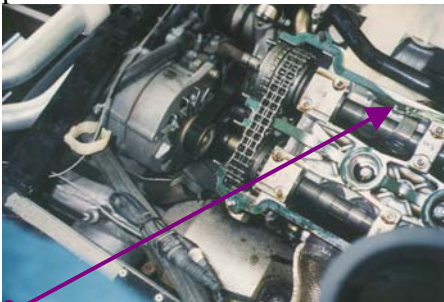
[www.alburtoni.com](http://www.alburtoni.com) or [www.lamborghiniDiablo.com](http://www.lamborghiniDiablo.com)



# OUR SERVICE DEPARTMENTS

*Lamborghini Sales and Service Since 1968*

We found parts installed backwards! and some pieces missing. (Imagine doing the job twice and still getting it wrong!!!) Have no fear Al Burtoni and crew to the rescue. We rebuilt the transmission and added a few of our special touches to the tranny and the beautiful Momo Roadster is back on the road roaring with delight again. The owner has now driven 9,000 miles with out one problem.



Leaky cam cover gaskets a common sight.

**Leaky** cam cover gaskets that were installed incorrectly 3 weeks before by an authorized Lamborghini mechanic. We see a lot of these. Also head gaskets leaking out of the front oil passage for the variable valve timing

**Many** of our clients have been listening to our preaching and have been getting the major service work done early in their car's life. We can not stress enough how important this early service is to your car and your pocket book. It allows us to perform a thorough inspection of all the mechanical systems on

your vehicle. We then supply you with a report of our recommendations in order of their importance. Our inspection focuses on safety and prevention of future problems. We can prevent most future problems

which may occur and certainly eliminate those that we find during the major service.

We guarantee all our work 12 months or 12,000 miles and don't have these ridiculous problems.



## Bigger Is Not Always Better! and Size Does Matter!

Bigger is not always better! Size does matter! That is why our exhaust leads the pack. Most mechanics and enthusiasts want big exhaust pipes. Their thinking is - bigger pipe - less back pressure - unrestricted flow = more power. They could not be more wrong. In fact the speed of the exhaust gas is the most important factor in this equation.

I was very fortunate to have a friend named Jim Feuling. Jim was an inventor and held in excess of 100 U.S. patents. Jim and I spent many weekends over the past 20 years discussing ideas for the development of new products. Upon my return home I would test them on my engine dyno. I would then make some modifications for the different V12 engines we were working on using the basic formulas Jim conceived. Every idea that was developed into a product was a plus. Jim came up with an exhaust formula and personally installed it on one of my

computers. Jim's formula never failed to make extra power on any of the engines I worked on. Exhaust speed is the most important criteria! I have tested as many as 5 different manufactures exhaust systems on an engine on the dynamometer and the results were always the same. Our system, built using Jim's proprietary formula produced more power and torque then any of the others.

Jim, you will always be #1, buddy. It was a great pleasure and honor to know and be your friend. Rest in peace my friend.

**In memory of Jim Feuling  
March 11,1945-December 6,2002**



Jim Feuling, in October of 1990 at Bonneville Salt Flats, with Al's Race 5.2 liter QV Countach which he drove to the record speed of 201.793 MPH

Al Burtoni Direct - Summer / Autumn 2003

Tel.# 408-847-8732 Fax.# 408-847-3738 email: [Burtoni@garlic.com](mailto:Burtoni@garlic.com)

[www.alburtoni.com](http://www.alburtoni.com) or [www.lamborghiniDiablo.com](http://www.lamborghiniDiablo.com)



# OUR SERVICE DEPARTMENTS

*Lamborghini Sales and Service Since 1968*

**Our body shop** has been just as busy as the mechanical shop. Here are some photos of the many projects.



**LM002 after an accident with much work already done, believe it or not.**



**The finished product came out fantastic considering the extend of the damage this vehicle suffered**



**Very sad looking 1999 Diablo Roadster in for some serious body work.**



**1986 Countach in the paint booth already shiny and showing promise**



**Finished and gleaming with pride Steve's baby was ready to roar again**

Restoration of a 350 GT, finishing the LM002, completion of a downdraft carbureted Countach Quattrovalvole, and a myriad of other small and big projects for clients and our own cars – we have been busy. Besides all these projects we are constantly upgrading the facility to make our work better and more efficient and the car back to you as fast as possible.



**Give us a call  
Let us make your baby shine  
cosmetically and mechanically**



**Special wheels and paint**



**Custom paint work**



**Custom alcantara interior**



**Custom repair of old rusted components**

Al Burtoni Direct - Summer / Autumn 2003

Tel.# 408-847-8732 Fax.# 408-847-3738 email: [Burtoni@garlic.com](mailto:Burtoni@garlic.com)  
[www.alburtoni.com](http://www.alburtoni.com) or [www.lamborghiniDiablo.com](http://www.lamborghiniDiablo.com)



# OUR SALES DEPARTMENT

*Lamborghini Sales and Service since 1968*



Freshly done – black and yellow checker board tile on the floor, trimmed with carpeting,



photos, drawings, sculptures and of course beautiful cars all around.



**1998 Diablo SV Monterey Edition**  
blue scuro exterior – tan interior  
with blue piping interior



**2003 Murcielago**  
arrancio atlas exterior black with  
orange stitching interior



**2001 Diablo 6.0 Jota®**  
arrancio atlas exterior – black with  
orange stitching interior



**1998 Diablo SV**  
titanium exterior - gray with black  
piping interior



**2001 Diablo 6.0**  
metallic emerald green exterior  
parchment with green piping interior



**1999 Diablo Roadster**  
blue scuro exterior – parchment with  
blue piping interior



**1997 Diablo Roadster**  
Lipstick red with snowcorn interior



**2001 Diablo 6.0**  
black exterior – black interior



**1999 Diablo SV**  
yellow exterior – black with yellow  
piping interior



**1994 Diablo SE**  
red exterior – snowcorn with red  
piping interior

Al Burtoni Direct - Summer / Autumn 2003

Tel.# 408-847-8732 Fax.# 408-847-3738 email: [Burtoni@garlic.com](mailto:Burtoni@garlic.com)  
[www.alburtoni.com](http://www.alburtoni.com) or [www.lamborghiniDiablo.com](http://www.lamborghiniDiablo.com)



Al Burtoni's

V-12

ENGINEERING®

The ABD lets you know that the product was designed, developed and tested in-house by Al Burtoni and staff to assure top quality and performance.

## Lamborghini Sales and Service since 1968

### ABD Carbon Fiber Clutch Assemblies

Totally re-engineered clutch assemblies: increased clamp load, carbon fiber disc with bond plates. All components are precision machined, balanced and indexed! and carry 12 month, 12,000 mile warranty

Available for:

- 1974 – 1982 Countach 4000S
- 1983 – 1985 Countach 5000S
- 1986 – 1990 Countach QV
- 1991 – 1994 Diablos
- 1995 – 1999 Diablos
- 2001 Diablo 6.0
- 2002 – 2003 Murcielago



### ABD Sport Exhaust systems

Our sport exhaust is computer designed using a proprietary program. Makes great 12 cylinder sound and increases horsepower from 24 to 30 HP depending on the condition of your engine. Like all our products carries 12 month, 12,000 mile warranty. We have tried systems offered by our competitors and our system outperforms them all!

Available for:

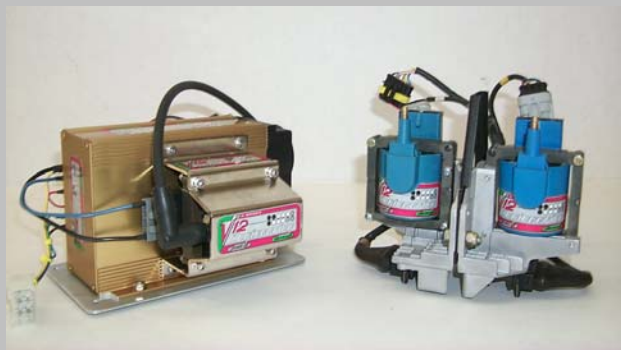
- 1991 – 1995 Diablo
- 1996 – 1999 Diablo Roadster
- 1998 – 1999 Diablo SV
- 2001 Diablo 6.0
- 2002 – 2003 Murcielago



### ABD Coil Package And ABD High Energy Ignition

High energy ignition available for:  
1984 – 1990 Countach  
1988 – 1990 LM002

Coil package available for:  
1991 – 1995 Diablos



### ABD Jota® Jr.

This package gives you the added performance (62HP more), incredible drivability and Al Burtoni's Milano Imports and V-12 Engineering famous reliability.



ABD Ignition Coils



ABD Jota® Jr. Cam shafts



ABD Jota® Jr. Throttle bodies



ABD Jota® Exhaust System

V12 Engineering® Gilroy, CA. 95020 Tel. 408-779-4026 Fax 408-779-4026

Visit our websites: [www.alburtoni.com](http://www.alburtoni.com) and [www.v12eng.com](http://www.v12eng.com)

email: [Burtoni@garlic.com](mailto:Burtoni@garlic.com)



# Only trust your Lamborghini to the Best.

- ✓ We have serviced more Lamborghinis than anybody in the USA.
- ✓ There has never been a Lamborghini problem we couldn't correct.
- ✓ Problem Lamborghinis a specialty, not a headache.
- ✓ Factory & Al Burtoni trained technicians.
- ✓ All work is guaranteed – 12 months / 12,000 miles
- ✓ 14 dedicated people to Lamborghini who eat and sleep it.
- ✓ Free enclosed transportation to our facility on major work.
- ✓ Many updated problem parts re-designed and manufactured by Al Burtoni, all with warranty.
- ✓ We do not apprenticeship on your Lamborghini, we learn on our own new models!
- ✓ We will inspect your Lamborghini and suggest what type of service it needs: you'll be sent an estimate with parts and labor breakdown; you'll sign for which services you want before we commence repairs.
- ✓ In house body and paint department. Collision repair guaranteed. If you can see any tell tail signs where the collision was we will do it for FREE.
- ✓ We work with all Insurance companies and take the hassle out for you; ensuring you receive a 100% no fault repair for your pride and joy.
- ✓ All our performance parts make horsepower "Dyno Proven"
- ✓ Completed in-house machine shop, fabrication shop and Dyno facility
- ✓ We can furnish letters of recommendation of customers with same model Lamborghini as yours, just ask us.
- ✓ We possess all factory service and repair tools of all models since 1964, including many specialty tools that have been designed, engineered and manufactured in house.
- ✓ If our major service doesn't improve performance, it's FREE, but more importantly; it significantly increases drivability and smoothness for everyday city and traffic conditions.
- ✓ Our service facility goes that extra mile (always has and always will) to insure the highest of quality repairs and vehicle maintenance possible; we guarantee it!
- ✓ In-house Parts Department for our service customers.
- ✓ To perform a comprehensive service on a Lamborghini early only insures many trouble-free miles and enjoyable times.
- ✓ All the above is possible because of Al Burtoni's engineering background and 35 years of hands on Lamborghini experience

**Al Burtoni Direct**  
**Gilroy, CA 95020**

Address Corrections Requested

Bulk Rate  
U.S. Postage  
**PAID**  
Morgan Hill, CA  
Permit No. 172

