LEXUS LUXURY MEETS ARISTO VVTI TWIN TURBO POWER

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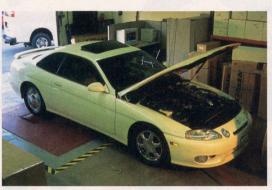
Chuck Tobey has been happy rolling his 1997 Lexus SC300, but the allure of the Supra's potent 2JZ-GTE engine was too strong.

Chuck put his own spin on the situation by electing to drop in a 1998-and-up JDM Aristo twin-turbo engine with Variable Valve Timing with Intelligence (VVTi). The swap included the VVTi automatic gearbox as well. SP Engineering was put in charge of the transformation.

The big hurdle was getting the "digital" VVTi ECU to interface with the "analog" non-VVTi SC300. The SC lineup went VVTi in the 1998 model year, which would have eliminated the two main hurdles SP Engineering faced.

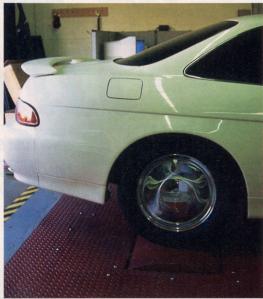
The totally stock powerplant was a drop-in installation using the VVTi engine mounts. The tranny was also an R&R proposition, with the only mod being a custom driveshaft to join the VVTi tranny to the original-issue SC300 rear end.

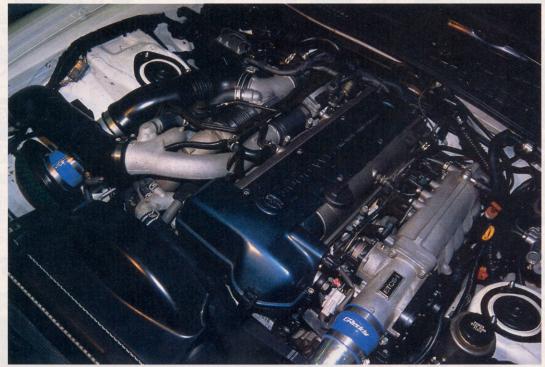
The swap utilized the VVTi harness and ECU, and this combo got the car up and running. The challenge was getting the tach and speedometer to work. The signal the ECU sends to the tach could not be properly interpreted and displayed.



After trying a number of diversionary tactics, SP's Rex Kieu found the answer—MSD's new Tach Adaptor, which converted the data to a square wave signal and put

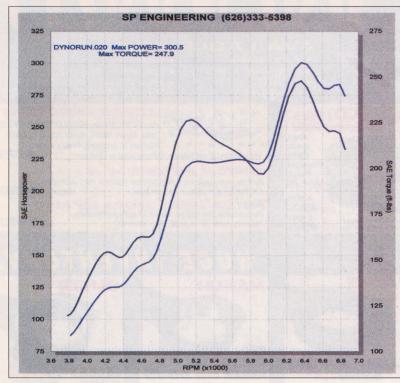
the tach back on the job. For the speedometer, Split Second came to the rescue by custom-building a signal converter that takes the 16-pulse speed data from the ECU and





THE VVTI 2JZ-GTE ENGINE WAS STANDARD ISSUE IN JDM ARISTOS BUILT FROM 1998 AND UP, AS WELL AS JDM SUPRAS. THE ENGINE/TRANNY INSTALL WAS A PURE DROP-IN AFFAIR WITH THE ONLY MOD BEING A SHORTER DRIVESHAFT.

JDM POWER SWAP



ON SP ENGINEERING'S DYNOJET, THE ALL-STOCK VVTI ARISTO ENGINE PUT 300.4 HP AND 247.9 LB-FT OF TORQUE TO THE GROUND. THAT'S A MONUMENTAL JUMP FROM THE STOCK VERSION'S 182 WHP.

converts it to the four-pulse data the speedometer needs to accurately display the Lexus' speed.

And speedy it is. That speedometer needle is arcing across the gauge face quicker than it has ever moved.

Chuck has healthy twinturbo thrust at the end of his right foot and he uses it. Set at 1.1 bar of boost pressure, the all-stock JDM Aristo engine

put 300.5 hp and 247.9 lb-ft of torque to the ground. Best of all, the VVTi automatic shifts much more crisply than a Supra with a slushbox, and the car has met and exceeded Chuck's expectations.

This puts a decidedly JDM twist on the "all-American" 2JZ-GTE/SC300 swap—and this powerful combination delivers the goods when the hammer drops.

