

DuPont™ Vespel® Thrust Washer Adopted in 7-Speed AT for Rear Drive Vehicles

Application Profile: DuPont™ Vespel® SP-21D thrust washers



Vespel® SP-21D Thrust Washers

Application Description

Thinner, lighter Vespel® SP-21D thrust washers replace all-metal needle bearings in a new 7-speed AT for rear-drive vehicles

Vespel® thrust washers have been selected to replace larger and heavier metal thrust needle bearings positioned between the clutch casing and aluminum transmission housing.

Good mileage, compact design and fun to drive!

Occupying almost the same space as a 5-speed AT, JATCO Products' new 7-speed transmission creates an exciting driving experience for luxury-class, rear-drive vehicles. The AT's superior response time delivers both exciting acceleration and a quiet, leisurely experience depending on the driver's desire – while still improving fuel efficiency.

Benefits to Customer

Reduced size, weight and number of parts

Vespel® SP-21D thrust washers are thinner and lighter than comparable metal thrust needle bearings, helping to reduce the AT's overall size and weight. In addition, Vespel® SP-21D thrust washers can rotate directly against the aluminum housing, allowing a reduction in the number of parts and an easier assembly process.

Material Selected and Why

Superior resistance to heat and wear. Capability of direct contact with aluminum components

Vespel® thrust washers have demonstrated many years of superb reliability in transmission applications due to:

- The lack of melting point means the washer will not melt
- A high limiting PV value (an indicator of resistance to wear) which is superior to other engineering resins
- Low-wear rates when used directly against lubricated aluminum components, even in the presence of contamination or foreign matter in the oil
- Custom-designed oil grooves on the washer surface allow precise control of oil flow, further enhancing resistance to wear
- The ability to easily form an oil film on its surface which creates a very low coefficient of friction



Jatco

7-Speed Automatic Transmission
<http://www.jatco.co.jp>



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