

JADE™ Inlet

How to Break the GC Septum Habit Forever

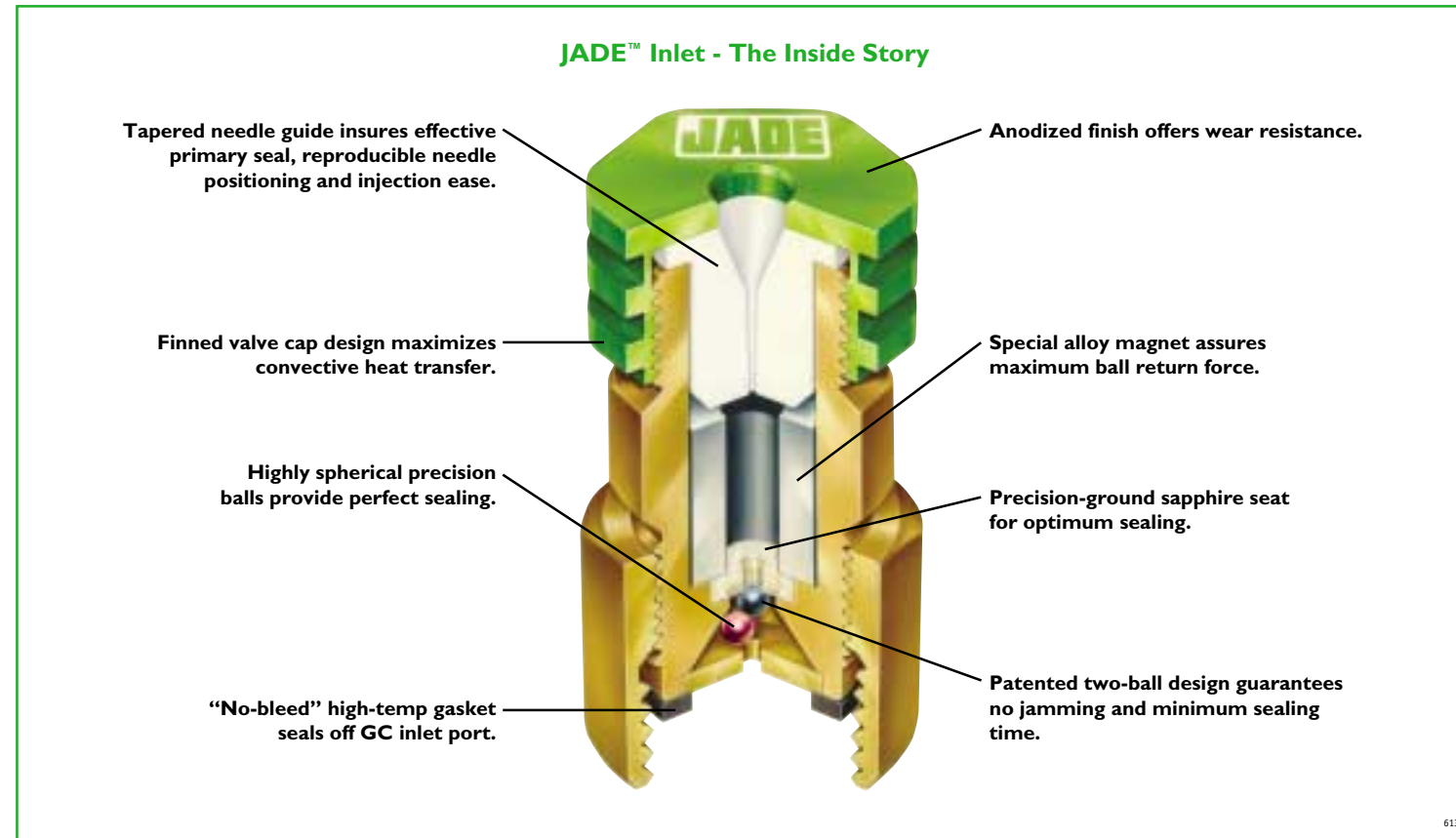


JUST SAY NO – No bleed, no leakage, no column degradation, no septum replacement when you use the septumless JADE™ Inlet

Here's Why You Should Say "No" to Septa and "Yes" to the JADE™ Inlet:

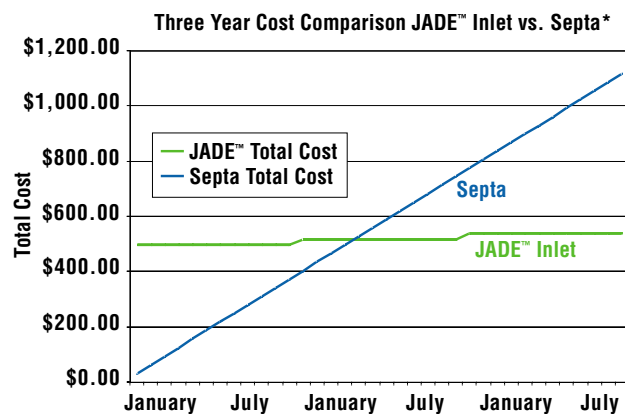
- **Elegantly Simple** – A "mechanical septum" that replaces your current silicone septa. No solenoids, power supplies or elaborate injection schemes. Inject samples just like you would with a septum, but with much less effort.
- **Easy to Use** – Insertion force is much less than that of a septum. Fewer bent needles and less frustration.
- **No Bleed** – There is no septum and nothing in contact with the inlet flow that will bleed.
- **Extended Lifetime** – The JADE™ Inlet will last the life of your gas chromatograph*.
- **No GC Modification Needed** – After the inlet is cleaned of old septa particles, installation takes only a minute.
- **Cost Effective and Reliable** – There is no septum, so no coring. No changing a septum at the end of the day. No lost analyses. Overnight and weekend autosampler runs become routine.
- **High Temperature Operation** – Inlet temperatures to 400°C can be used with no bleed or degradation.
- **Autosampler Compatible** – The JADE™ Inlet is compatible with many autosamplers (see ordering information).
- **GC Compatibility** – The JADE™ Inlet is now compatible with more than 28 different GC inlet systems.

*Needle guide requires annual replacement.



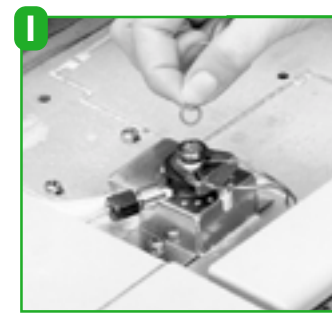
The JADE™ Inlet – Actually Saves Time and Money

Daily replacement of the septum is the standard procedure for many labs. The combined cost of septum and labor, along with the inconvenience of shutting down your instrument, can be significant. The following graph shows the cost savings realized by using the JADE™ Inlet versus conventional septa.

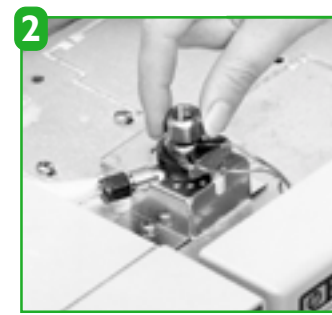


*Septa cost based on daily replacement of \$0.75/septum and 2 minutes labor at \$0.40/minute. JADE™ Inlet cost based on initial purchase price and installation plus annual needle guide replacement and labor. Prices in U.S. dollars.

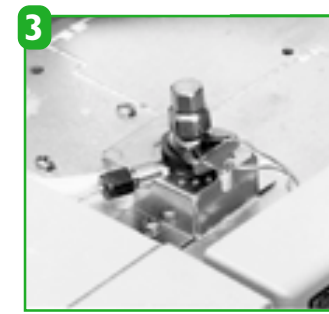
Installing a JADE™ Inlet*



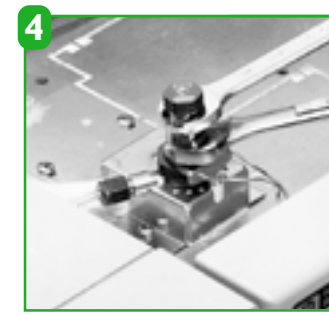
After removing the septum nut and septum, clean out old septum particles. A polyimide gasket (included) is placed in the septum well.



The adaptor nut is threaded onto the injection port finger-tight.



A bake-out step is recommended to remove residual septum materials from the injection port. The brass bake-out plug (included) is installed on the adaptor nut for this step. The bake-out plug is removed when this step is complete.



The JADE™ Inlet body is threaded into the adaptor nut finger-tight. With the appropriate wrench in place on the adaptor nut, tighten the JADE™ Inlet body 1/4 to 1/2 turn using a 1/2" wrench. The completely assembled JADE™ Inlet is now ready for worry-free operation.

*NOTE: The instructions are for installation on a Agilent/Hewlett-Packard injection port. Installation may vary slightly for other instruments.

The JADE™ Inlet – Simplicity in Action

The JADE™ Inlet works like a miniature airlock. First, the syringe needle passes through a needle guide forming an annular seal. Next, the needle guide encounters the ball-and-seat valve, unseats the ball and enters the injection port. When the needle is removed from the ball valve, a powerful return magnet pulls the ball back onto the seat, sealing the injection port.

The elegantly simple ball-and-seat valve is the system's most technologically complex component. For the utmost in reliability, it uses sophisticated materials and close tolerances found in the most advanced instrumentation.

A Rugged, Reliable Solution for Autosampling

Septum-based inlets are the weak link in autosampling applications. Septa simply cannot withstand the constant wear-and-tear of autosampling and often fail after relatively few injections.

The JADE™ Inlet's long lifetime, heat resistance and low-maintenance design make it the obvious solution for autosampling. After the JADE™ Inlet is installed, there's minimal need for operator attention, enabling chromatographers to focus on more important tasks instead of monitoring septum failure.

Ultimately, the JADE™ Inlet serves as a vital link in implementing online GC applications where system longevity, reliability, and low maintenance are absolute requirements.

The Most Sensible Injection Port Solution

With the JADE™ Inlet, there are no septum leaks, failures, particles in the inlet, or bleed onto the column. GC column lifetime is lengthened, and the frustration of reanalyzing samples because of septum leakage or bleed is eliminated.

Best of all, the JADE™ Inlet lets you break the septum-replacement habit. The JADE™ Inlet's typical maintenance interval is once every several thousand injections, which is the needle guide's usual lifetime. Guide replacement only takes 30 seconds, without cooling down the GC or interrupting the carrier gas flow. During guide replacement, the ball valve effectively seals the column.

Each JADE™ Inlet Kit Includes:

- JADE™ Inlet Injector (Complete with Needle Guide)
- Adaptor for GC Inlet with Gasket(s)
- Extra Needle Guide
- Spare Gasket for Adaptor
- Two 10µL Syringes for Sample Injection
- "BAKE-OUT" Plug for Cleaning Inlet before Installation
- Complete Instructions

JADE™ Inlet Injection Kits

FOR GC:	NEEDLE OD:		PRICE
	0.47MM PART NO.	0.63MM PART NO.	
Carlo-Erba (Except TRACE 2000)	9750	9752	
Chrompack	9774	9788	
Dani (All Models)	9754	9756	
Finnigan (9610/9611 Series)	9751	9753	
Fisons (Series 8000)	9033	9178	
Gow-Mac (All Models)	9774	9788	
Hewlett-Packard/Agilent			
5830/5840	9774	9788	
5880/5890/6890 Split/Splitless	9764	9778	
5880/5890/6890 Packed	9762	9776	
5710/5790 Packed	9774	9788	
5700 Capillary	9764	9778	
5993 GC/MS	9764	9778	
5890 Purged/Packed	9909	9683	
Cool/On-Cool. (0.53mm ID)	9755	—	
Hewlett-Packard/Agilent Autosamplers*			
7673A&B Split/Splitless	—	9925	
7673A&B Packed	—	9927	
7673A&B Purged/Packed	—	9198	
HNU Systems (3000 Series)	9774	9788	
Konik (HRGC 3000C)	9774	9788	
Perkin Elmer*			
2000/8300/8700/8500	9774	9788	
Sigma Series			
Shimadzu			
8/9/14A and 15A Packed	9738	9732	
14A and 15A Split/Splitless	9736	9730	
17A Split/Splitless	7268	8014	
Siemens			
Temp. Programmed Injector	9735	9737	
SRI (Split & Packed)	8858	8860	
ThermoQuest GCQ	7189	7196	
ThermoQuest Trace GC	7258	7260	

JADE™ Inlet Injection Kits (cont'd)

FOR GC:	NEEDLE OD:		PRICE
	0.47MM PART NO.	0.63MM PART NO.	
Tracor/Tremetrics			
540/570 Series	9739	9747	
560/565 Series	8950	8984	
9000 Series	9959	9962	
Varian**			
1040 Packed	9748	9734	
1075/1077/1078/1079 Split/Splitless	9768	9786	
1075/1077/1078/1079 S/S with Trigger	9193	9195	
1085	9197	9199	
1093/1094 SPI Injector with trigger	9689	9699	
1400/2400/2700 Series	9921	9923	
3400/3700 Capillary, 1cm Septum	9768	9786	
3400/3700 Capillary, 8mm Septum	9748	9734	
3300 Capillary	9768	9786	
Universal			
7/16" x 20 Swagelok® Thread	9774	9788	
Econo Kit†	—	9750S	

*JADE™ Inlet incompatible with HP 6890 autosamplers and Perkin Elmer autosampler.

**JADE™ Inlets are compatible with Varian Star autosamplers, but may be incompatible with other Varian models.

†Includes valve body, green cap and 0.63mm needle guide. Adaptor nut not included.

JADE™ Inlet Refurbishment

DESCRIPTION	PART NO.	PRICE
JADE™ Inlet Refurbishment	RF01	

JADE™ Inlet Needle Guides

DESCRIPTION	NEEDLE OD:		PRICE
	0.47MM PART NO.	0.63MM PART NO.	
Replacement Needle Guides			
Regular, Up to 350°C	9790	9794	
Hi-Temp, 250°C - 400°C	9792	9797	



Your Online Technical Resource for Chromatography



The trademarks referred to herein are the property of their respective owners.

Alltech

Alltech Corporate Headquarters:
2051 Waukegan Road • Deerfield, IL 60015
Phone: 847-948-8600 • Fax: 847-948-0477
Email: alltech@alltechemail.com
Web Site: <http://www.alltechWEB.com>

Your Local Distributor is:

© Copyright 2001 Alltech Associates, Inc.

Alltech reserves the right to change prices and/or specifications without prior notification.

Use of Our Products: Alltech Associates, Inc., supplies chromatographic equipment reagents and accessories for non-medical laboratory use only. This means our products: ... may **NOT** be used as drugs, ...may **NOT** be used as cosmetics, ...may **NOT** be used as medical devices or as in vitro diagnostic devices.



Recycled Paper — part of the Alltech commitment to protect our valuable natural resources

© Copyright 2001 Alltech Associates, Inc.

Contact your Alltech office or distributor for current or local prices.