



# Vintage Triumph Register Maintenance Handbook

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## The TriumphStag.net TechNote Series: Replacing your Brake and Clutch Lines on Federal Specification Stags (and other Triumphs)

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*TriumphStag.net owner and administrator*

Lately my mailbox and the various email lists have been inundated with questions about replacement copper brake line kits being supplied out of the UK by various suppliers.

Soft copper lines are illegal in many states, as they do not meet Federal Department of Transportation requirements for burst strength OR material type. Your brake lines by Federal Department of Transportation regulations need to be steel as originally installed on your Federal Specification Stag. This also applies to other Triumph models. Hard nickel copper alloy may be legal in your state provided they are DOT approved. For a proper solution, the TriumphStag.net recommends you use **pre-bent** systems in either standard DOT specification steel or stainless steel.

The pre-bent lines come ready to install. All I needed to do was uncoil one loop right out of the shipping box and snap the lines into the OE clips. Every brake tube is supplied from the master cylinder out to the connection with the rubber hose point.

Stainless Steel lines take a bit more care to install at the brass fitting ends to assure a proper seal. Simply make sure that the flare ends have no burrs, and that the brass fitting seats are not galled. Then, tighten them to a very snug fit. If you get a bit of brake fluid ooze, give the flare nut an additional 1/8 turn.

You can obtain a complete **pre-bent** set of brake lines for your Stag, or for any Triumph model from:

**Classic Tube**, a division of  
Classic & Performance Specialties  
80 Rotech Drive  
Lancaster, New York 14086 USA

<http://www.classictube.com/>  
(716) 759-1800  
(716) 759-1014 fax  
(800) 882-3711  
**Attention:** Dave

Glenn Merrell and other North American Triumph Stag and Triumph owners have fitted these **DOT approved** steel pre-bent lines in both mild steel and Stainless Steel to our Stags and Triumphs finding them to be proper fitting and of very high quality. Steel lines are \$179 for the set; Stainless steel lines are \$199 for the set. When you compare this price with the cost of shipping from the UK, you will find it is an excellent value!

Brake hoses also need to be OE Federal DOT specification. You can purchase DOT specification brake hoses for your Triumphs from **Ted Schumacher** at **TSI Automotive** in Pandora Ohio:

**TS Imported Automotive**  
**108 South Jefferson St.**  
**Pandora, Ohio, USA 45877**

Ph. 800/543-6648 (USA/Canada only)  
Ph. 419/384-3022 - tech./general information  
FAX 419/384-3272 - 24 hrs

<http://www.tsimportedautomotive.com/>

e-mail: [tedtsimx@bright.net](mailto:tedtsimx@bright.net)

One problem with the OE clutch line is that over time, the red poly tube becomes soft, and some hydraulic pressure force is lost as the poly tube expands when the clutch pedal is depressed. As such I have had Classic Tube fabricate replacement clutch lines for the Triumph Stag in all stainless steel ends with stainless braid high pressure hose for \$79.99 which are much more durable then OE and easier to fit.

Brake and clutch fluid? Well I use the DOT 5 Silicone fluid (or "fluif" for readers of the Triumph Email list) on a completely brand new rebuilt system. In my personal car, with more than 70K miles of Colorado mountain driving, I have observed absolutely no issues or different pedal feel, and after a recent disassembly of a rear brake assembly, we found zero moisture accumulation at the low spots!

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