

DATE: April 1, 2009

NO: 198R3

SUPERSEDES: P.B. 198R2 dated July 14, 2006**TO: CENTRAL DISTRIBUTORS AND SERVICE DEALERS — WORLDWIDE****SUBJECT: POPPET VALVE AND POPPET VALVE SPRING KITS**

All Stanadyne electronic fuel injection pump models are now fitted with low friction fuel control components (Ref. S.B.'s 560 and 561). For servicing either pump model, individually graded (by size) poppet valves are packaged together with a poppet valve spring (P/N 36155). The poppet valve springs and various sizes of preload shims are available individually, but poppet valves are only available in a kit.

DS Pump Models

DS pump models were originally designed with a single angled poppet valve and valve seat. In 2005, after being proven effective in the DE pump models, a dual angled poppet valve and valve seat were introduced (Ref. S.B. 551R). Likewise, in response to further DE pump model developments, low friction fuel control components are also being introduced for use in DS pump models (Ref. S.B. 561). In addition to the individual poppet valve and spring kits, Stanadyne has released several new low friction fuel control component kits for re-fitting of earlier DS pump models. These kits include a poppet valve, a poppet valve spring, a hardened anti-rotation pin assembly (Ref. S.B. 514R) and a low friction DS armature assembly.

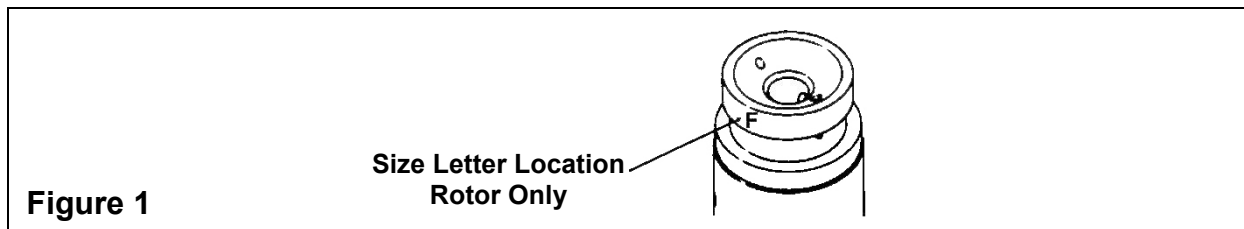
DE Pump Models

The dual angled valve geometry and the low friction fuel control component designs were introduced in the DE Pump models (Ref. S.B. 556). Since the DS and DE pump models share the same low friction components (with the exception of the armature assemblies), and the non-coated/standard fuel control components are no longer available, only eight poppet valve and spring kits are necessary for service use.

Note: Always refer to the individual pump specifications for the correct poppet valve and spring part numbers.

Poppet Valve Service

During the manufacture of DE and DS hydraulic rotor assemblies, the poppet valve bore is honed to accept one of eight different sized poppet valves. Each rotor is marked with the letter code identifying the poppet valve graded size (Figure 1). Since the tight tolerances between the poppet valve and the distributor rotor are critical to the operation of these pump types, the correct size of valve must be used during service replacement.



The chart below identifies the graded letter sizes and their corresponding part numbers as well as a reference to the complete low friction control upgrade kits for DS pump models.

IMPORTANT: *Poppet valves are not easily discernable from each other and have no means, other than the original packaging, to differentiate sizes. It is suggested that poppet valves remain in the original packaging until used.*

Grade Letter	DE & DS Poppet Valve and Spring Kit Part Number ²	DS Low Friction Fuel Control Upgrade Kit Part Number ³
A	36164	40210
B	36165	40211
C	36166	40212
D	36167	40213
E	36168	40214
F or Z ¹	36169	40215
G or X ¹	36170	40216
H	36171	40217

¹ These letter designations have been changed to prevent mis-identification due to letter similarities

² Poppet valves are packaged with a poppet valve spring, P/N 36155

³ Upgrade kits are for DS pump models only and contain: a poppet valve, poppet valve spring (P/N 36155), anti-rotation pin assembly (P/N 36146) and an armature assembly (P/N 39479)

IMPORTANT: *Current DS & DE poppet valves have slightly different seat geometries than the original DS poppet valves (manufactured prior to 2005). Do not use original/early DS poppet valves or Springs in any current DE/DS rotors.*

Service Parts Group
Product Support Department

Revision	Date	Change
1	06/04	Add DE and identification change information
2	07/06	Availability of poppet valve & spring kits
3	04/09	Update to low friction components for both DE & DS