A540E

PART NUMBERS 89031-01K, 89031-02K & 89031-03K

Boost Valve & Sleeve Kits

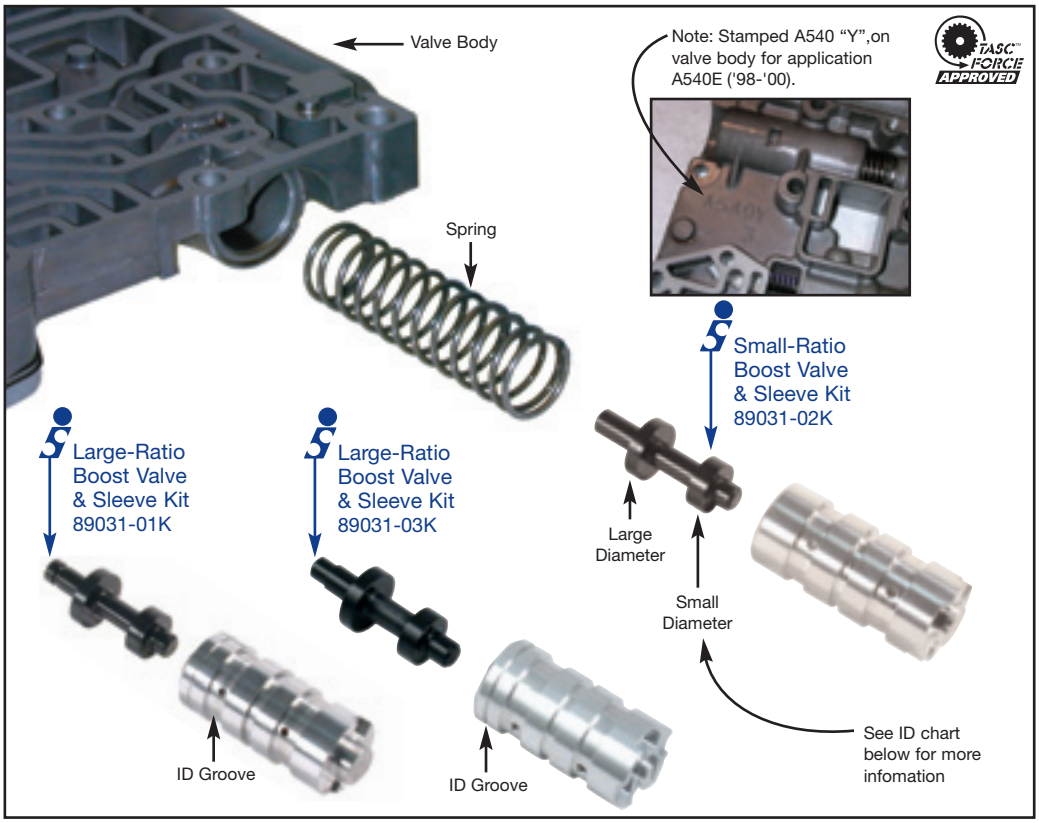
89031-02K A540E
1 Small-Ratio Boost Sleeve
1 Small-Ratio Boost Valve

89031-01K A540E
1 Large-Ratio Boost Sleeve
1 Large-Ratio Boost Valve

NEW PRODUCT
89031-03K A540E '98-'00
1 Large-Ratio Boost Sleeve
1 Large-Ratio Boost Valve

Note: Stamped "A540Y" on valve body for application A540E ('98-'00).

Note: These applications are meant as a guide only. Be sure to measure original valve and compare dimensions before purchasing.



Installation Instructions:

1. **Note:** The original boost sleeve design has multiple quadrants on its outboard end. The surfaces are stepped to create different height options. Take note of which surface is used by the retaining pin to correctly index and locate the sleeve (see photo on next page).
2. Remove the OEM retaining pin, sleeve, valve and spring.
3. Verify that the replacement sleeve will match the OEM valve and boost sleeve ratio by measuring the small and large valve spool diameters on the OEM valve and the overall sleeve length. **See identification chart**.
4. Inspect the valve body bore for any debris and clean if necessary.
5. Determine which slot on the Sonnax boost sleeve will match the original locating surface as noted earlier. Sleeves can be stood up side-by-side on a flat surface and rotated until the original sleeve locating surface and the replacement sleeve slot heights line up.
6. Install the OEM spring and boost valve and the Sonnax replacement boost sleeve into the valve body. Index the sleeve so the selected slot is properly positioned and install the retaining pin.

IDENTIFICATION CHART

PART NO.	SMALL DIA.	LARGE DIA.	RATIO	GROOVE	SLEEVE LENGTH
89031-02K	.482"	.565"	Small	No	1.77"
89031-01K	.482"	.583"	Large	Yes	1.81"
89031-03K	.478"	.580"	Large	Yes	1.57"

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Select the slot that matches the height of the land noted in step 1.

Note: The depth of the boost sleeve's position in the bore is established by the retainer resting against either a land (on the OEM sleeve) or a slot (on the Sonnax sleeve). Changing the sleeve's position in the bore will have the following effects:

Tall OEM Land or Shallow Sonnax Slot = Higher Pressure

Short OEM Land or Deep Sonnax Slot = Lower Pressure