

SPORLAN

FIELD ASSEMBLY INSTRUCTIONS

for TYPE - 0

Thermostatic Expansion Valve Internal Parts Kits

Each kit consists of one each of the following: push-rod assembly, piston assembly, bottom cap assembly, spring guide, seal cap (Models with 33 element include a gasket), pushrod gauge (Form 38), and forms SD-14 and SD-101 instruction sheets.

REFRIGERANT Valve Nominal Capacity (Tons)			Internal Parts Kit	Pushrod Gauge No.
12 134a 401A 409A	22 407A 407C	402A 404A 408A 502 507		
6	10	6	KP19-0060	8A
9	15	9	KP19-0090	8A
12	20	12	KP19-0120	8A
16	30	21	KP19-0160	8B
23	40	30	KP20-0230	3A
32	55	35	KP20-0320	3A
40	70	45	KP20-0400	3A

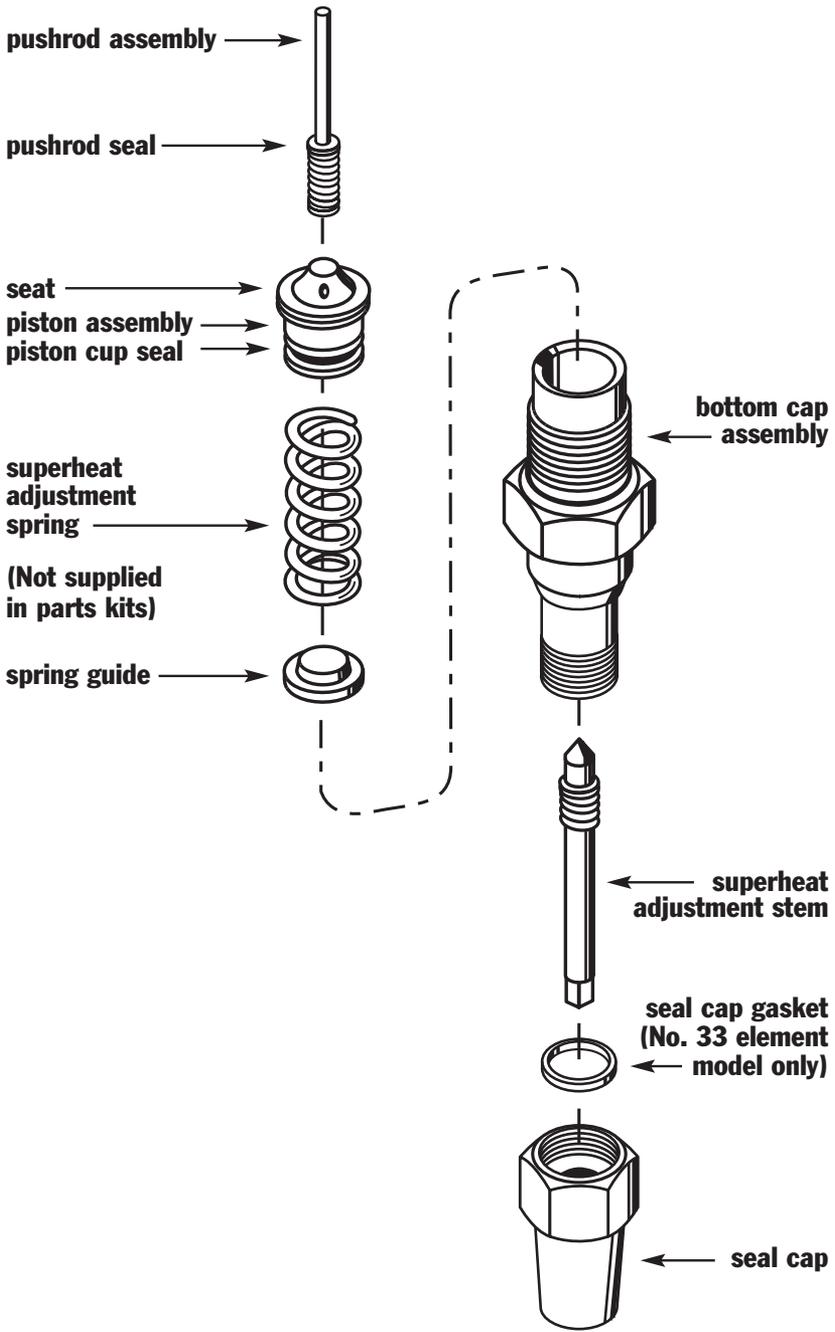
Special care must be taken when handling the internal parts since the synthetic seat and seals can be damaged if abused. They must remain clean.

Since the piston assembly is supplied installed in the bottom cap assembly (without spring), care must be taken in removing the piston to install the spring and in re-installing it. Be sure the piston's cup seal (see drawing) is cupped downward and oiled when installing the piston.

REPLACEMENT PROCEDURE

1. Remove the valve's seal cap and relieve force on the superheat spring by turning the adjustment stem counter-clockwise until the stem threads reach the packing (don't force the stem past this point). Count and record the number of turns in the blank space in Step No. 8. NOTE: The term "counter-clockwise" is based on looking at the adjusting stem from the bottom of the valve.
2. Before disassembling the TEV, be sure the refrigerant pressure in the system has been reduced to a safe level (0 psig).
3. Using proper wrenches on the wrench flats provided on the valve parts, remove the element and the bottom cap and all internal parts.
4. Remove the seal cap from the new bottom cap. Turn the superheat adjustment stem counter-clockwise until the stem threads reach the packing.
5. Place several drops of refrigerant grade oil on the pushrod hole in the valve body, the pushrod, and pushrod seal, and the piston's seat. Carefully insert the pushrod assembly into the valve body. Next, install the bottom cap assembly (piston, spring, spring guide, and bottom cap). Tighten finger-tight only until pushrod height has been checked.
6. The pushrod must be cut to the exact length according to the instructions given on the pushrod gauge. CAUTION: Remove pushrod assembly from body when cutting pushrod to prevent chips from getting into valve.
7. Replace and tighten thermostatic element. Tighten the bottom cap.
8. Turn the superheat adjustment stem _____ revolutions clockwise. (Revolutions to be determined from step No. 1.)

NOTE: Tight shut-off can only be assured if foreign material is prevented from entering the valve. Therefore, we strongly recommend that a full size *Catch-All*® *Filter-Drier* be installed in the liquid line whenever a new valve is installed or after the internal parts have been replaced.



Use pushrod gauge number from table on page 1.



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