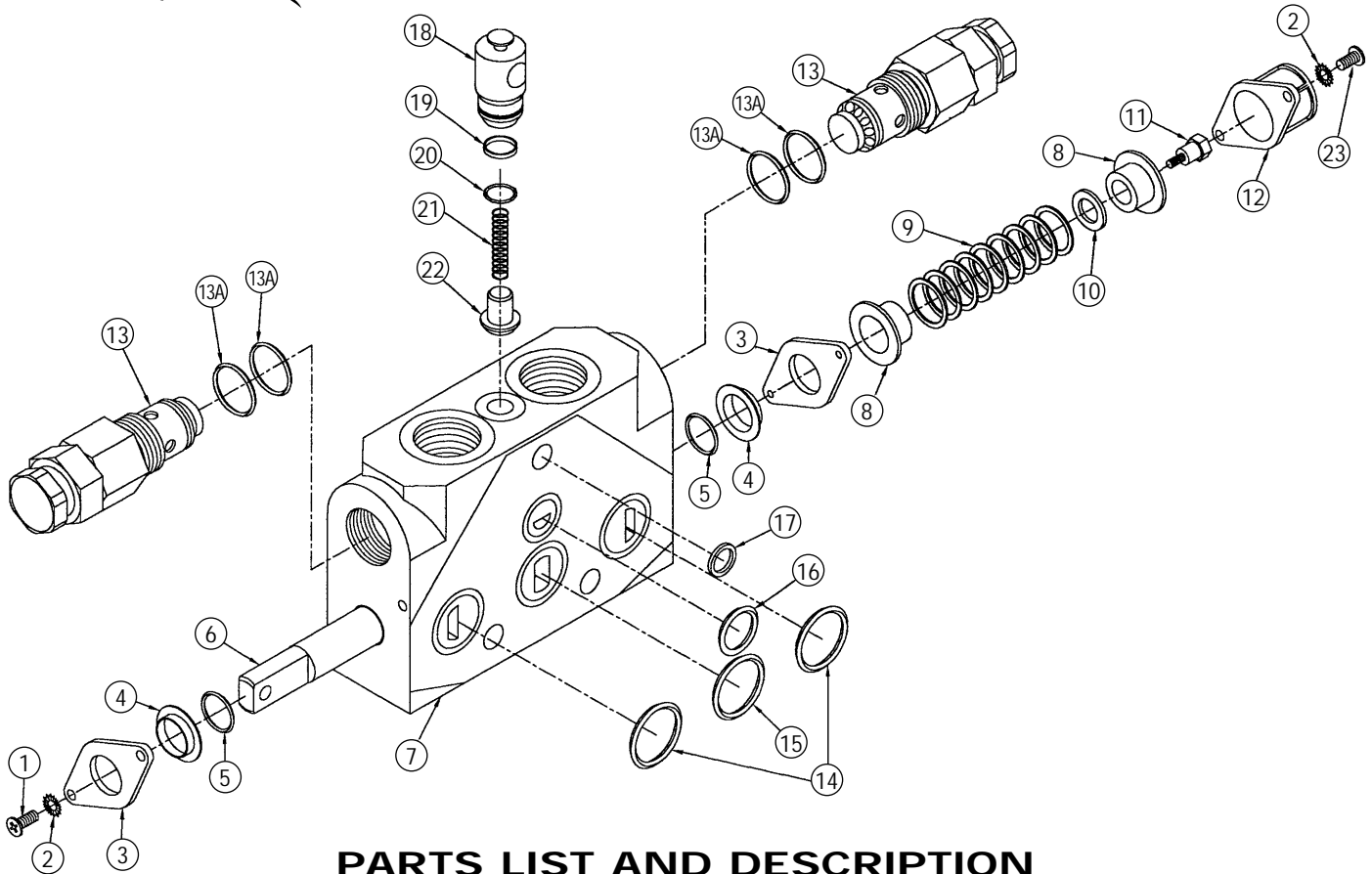




31V SERIES

DIRECTIONAL CONTROL VALVES

SERVICE PARTS LIST



PARTS LIST AND DESCRIPTION

ITEM	QTY	PART NUMBER	DESCRIPTION
WORK SECTION ASSEMBLY			
1	2	31V-0505-157	Seal Retainer Screws
2	4	31V-0505-459	Screw Lockwashers
3	2	31V-0506-377	Seal Retainer
4	2	31V-0506-385	Spool Wiper
5	2	31V-0506-384	Spools O-ring (P,D,C)
	2	31V-0500-891	F Spool O-ring
6	-	N/A	Spool
7	-	N/A	Work Section Housing
12	1	31V-0510-430	Backcap (P,D,C)
		31V-0500-434	F Spool Backcap
23	2	31V-0500-722	Backcap Screws
CHECK VALVE ASSEMBLY			31V-9109-001
18	1	31V-0306-301	Guide
19	1	31V-0506-324	Backup
20	1	31V-0500-060	O-ring
21	1	31V-0506-413	Spring
22	1	31V-0306-414	Poppet
SEAL KITS			
N/S	N/A	31V-9149-006	Deluxe Spool Seal Kit (STD)
N/S	N/A	31V-9149-008	Spool Seal Kit
N/S	N/A	31V-9149-017	Relief Valve Seal Kit
N/S	N/A	31V-9149-025	Deluxe Spool Seal Kit (F spool) Sec. Stack Seal Kit (Items 14-17)

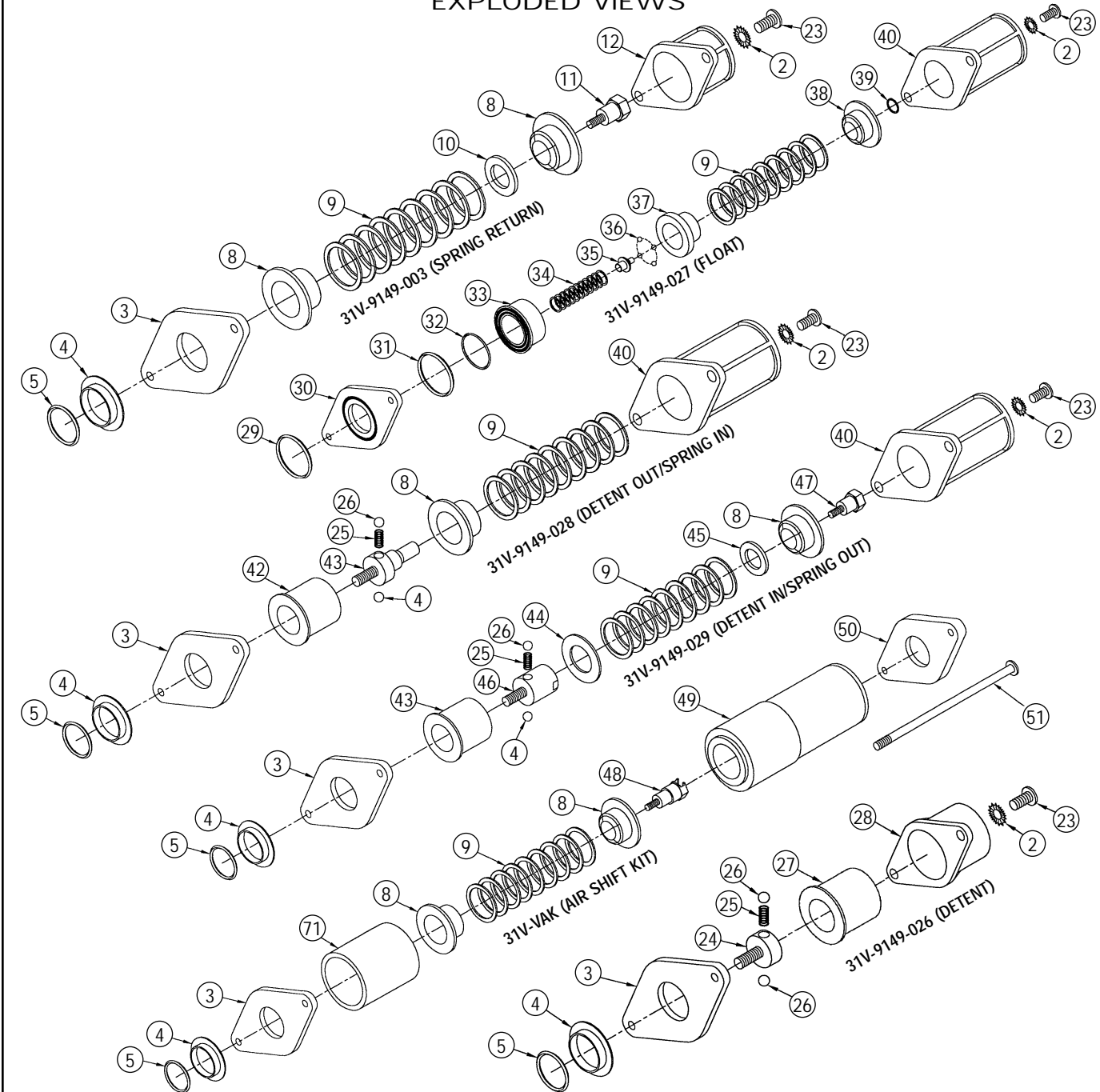
ITEM	QTY	PART NUMBER	DESCRIPTION
HPCO ASSEMBLY WITH O-RING			
63	1	31V-HPCO-S	SAE
63	1	31V-HPCO-P	Pipe
RELIEF VALVE SEALS			
13A	2	31V-0500-397	RV O-ring inner
13A	1	31V-0500-427	RV O-ring outer
N/S	1	31V-0507-466	RV O-ring inner (screw adj)
N/S	1	31V-0505-091	RV O-ring piston
SECTION SEAL O-RINGS			
14	2	31V-0500-893	Lower O-ring
15	1	31V-0501-206	Middle O-ring
16	1	31V-0501-131	Top O-rings
17	1	31V-0509-655	Shim
PLUGS			
N/S		HHBP-10	SAE 10
N/S		HHBP-12	SAE 12
N/S		HHPP-12	3/4 NPT
N/S		HHPP-8	1/2 NPT
STUD KIT ASSEMBLY			
N/S	3	31V-0300-09(1-6)	Stud (1-6 Sections)
N/S	6	31V-0500-152	Stud Nut
N/S	3	31V-0500-275	Stud Lockwasher
N/S	3	31V-0500-694	Stud Starwasher

MISCELLANEOUS KITS

ITEM	QTY	PART NUMBER	DESCRIPTION
BACKCAP KITS			
	1	31V-9149-003	Spring Centered (code 1)
	1	31V-9149-026	Detented (code 2)
	1	31V-9149-027	Float (code 3)
	1	31V-9149-028	Detented Out/Spring In (code 5)
	1	31V-9149-029	Detented In/Spring Out (code 6)
	1	31V-VAK	Air Shift Cylinder Kit (code 7)

ITEM	QTY	PART NUMBER	DESCRIPTION
VERTICAL HANDLE KIT			
	1	31V-HVK-10	10" Vertical Handle Kit
STUD KITS			
	1	31V-STD-1	Single Spool (4.44" long)
	1	31V-STD-2	Two Spool (6.06" long)
	1	31V-STD-3	Three Spool (7.69" long)
	1	31V-STD-4	Four Spool (9.31" long)
	1	31V-STD-5	Five Spool (10.94" long)
	1	31V-STD-6	Six Spool (12.56" long)

BACKCAP KITS SUBASSEMBLY EXPLODED VIEWS



BACKCAP KITS SUBASSEMBLY

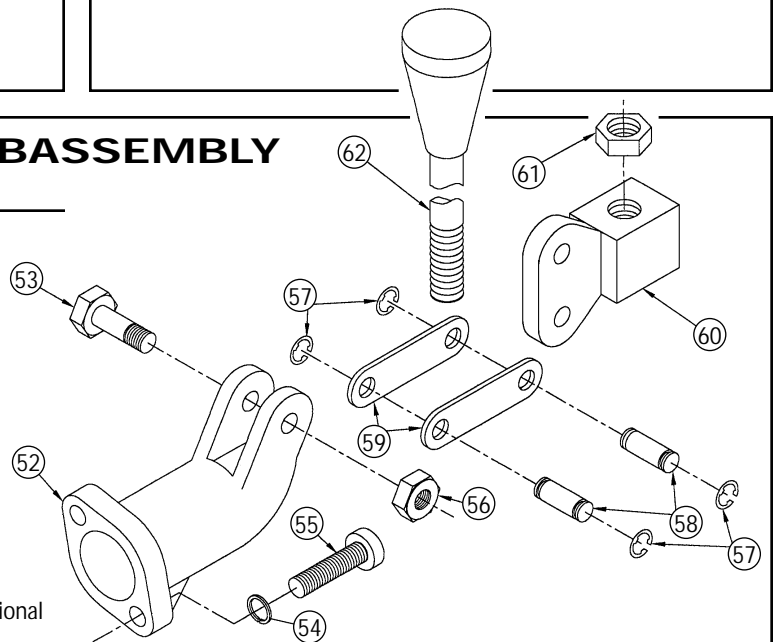
REFERENCE EXPLODED VIEWS ON PREVIOUS PAGE

ITEM	QTY	PART NUMBER	DESCRIPTION
31V-9149-003 (SPRING RETURN) (CODE 1)			
2	2	31V-0505-459	Lockwasher
3	1	31V-0506-377	Seal Retainer
4	1	31V-0506-385	Spool Wiper
5	1	31V-0506-384	Spools O-ring (P,D,C)
8	2	31V-0500-037	Spring Seat
9	1	31V-0500-038	Spring
10	1	31V-0500-039	Spacer
11	1	31V-0300-040	Shoulder Bolt
12	1	31V-0510-430	Backcap
23	2	31V-0500-722	Screw
31V-9149-026 (DETENT) (CODE 2)			
2	2	31V-0505-459	Lockwasher
3	1	31V-0506-377	Seal Retainer
4	1	31V-0506-385	Spool Wiper
5	1	31V-0506-384	Spools O-ring (P,D,C)
23	2	31V-0500-722	Screw
24	1	31V-0500-049	Detent Carrier
25	1	31V-0500-047	Spring
26	2	31V-0500-048	Ball (1/4")
27	1	31V-0500-050	Detent Sleeve
28	1	31V-0510-430	Backcap
31V-9149-027 (FLOAT) (CODE 3)			
2	2	31V-0505-459	Lockwasher
		31V-0306-169	
3	1	31V-0506-377	Seal Retainer
4	1	31V-0506-385	Spool Wiper
5	1	31V-0500-891	F Spool O-ring
9	1	31V-0500-038	Spring (large)
30	1	31V-0506-881	Seal Retainer
31	1	31V-0500-891	Cap Seal
32	1	31V-0500-893	O-ring
33	1	31V-0306-879	Detent Sleeve
34	1	31V-0506-168	Spring (small)
35	1	31V-0306-887	Locking Pin
36	4	31V-0500-164	Ball (7/32")
37	1	31V-0306-882	Spring Seat (Inner)
38	1	31V-0306-793	Spring Seat (Outer)
39	1	31V-0500-163	Circlip
40	1	31V-0500-434	Backcap

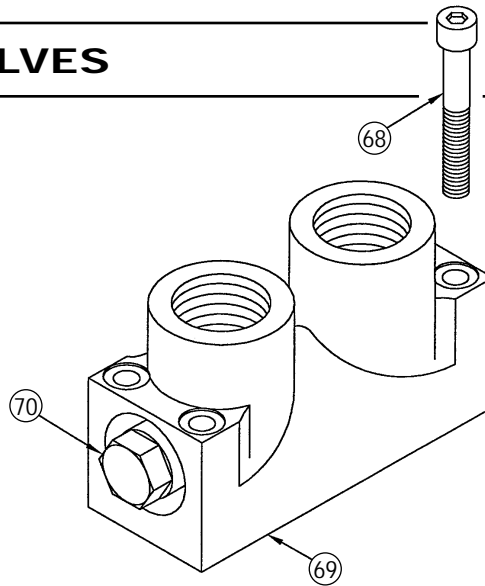
ITEM	QTY	PART NUMBER	DESCRIPTION
31V-9149-028 (DETENT OUT/SPRING IN) (CODE 5)			
3	1	31V-0506-377	Seal Retainer
4	1	31V-0506-385	Spool Wiper
5	1	31V-0506-384	Spools O-ring (P,D,C)
8	1	31V-0500-037	Spring Seat
9	1	31V-0500-038	Spring (large)
25	1	31V-0500-047	Spring (small)
26	2	31V-0500-048	Ball
40	1	31V-0500-434	Backcap
42	1	31V-0306-328	Detent Sleeve
43	1	31V-0306-327	Detent Carrier
31V-9149-029 (DETENT IN/SPRING OUT) (CODE 6)			
3	1	31V-0506-377	Seal Retainer
4	1	31V-0506-385	Spool Wiper
5	1	31V-0506-384	Spools O-ring (P,D,C)
8	1	31V-0500-037	Spring Seat
9	1	31V-0500-038	Spring (large)
25	1	31V-0500-047	Spring (small)
26	1	31V-0500-048	Ball
40	1	31V-0500-434	Backcap
43	1	31V-0305-587	Detent Sleeve
44	1	31V-0305-589	Spacer-disc
45	2	31V-0500-039	Shim
46	1	31V-0305-883	Detent Carrier
47	1	31V-0300-040	Shoulder Bolt
31V-VAK (AIR SHIFT KIT) (CODE 7)			
3	1	31V-0506-377	Seal Retainer
4	1	31V-0506-385	Spool Wiper
5	1	31V-0506-384	Spools O-ring (P,D,C)
8	2	31V-0500-037	Spring Seat
9	1	31V-0500-038	Return Spring
48	1	31V-0309-504	Stripper Bolt
49	1	31V-9000-014	Cylinder Subassembly
50	1	31V-0510-027	Retainer Plate
51	2	31V-1425-230	Assembly Bolt
71	1		Sleeve
N/S	1	31V-1453-031	Jam Nut

VERTICAL HANDLE KIT SUBASSEMBLY

ITEM	QTY	PART NUMBER	DESCRIPTION
31V-HVK-10 (HORIZONTAL OPTIONAL)			
52	1	31V-0510-448	Handle Bracket
53	1	31V-0905-570	Bolt
54	2	31V-0500-298	Washer
55	2	31V-0509-210	Bracket Screws
56	1	31V-0506-065	Nut
57	4	31V-0507-402	Circlip
58	2	31V-0308-065	Pivot-pin
59	2	31V-0307-398	Pin Link
60	1	31V-0307-499	Pivot Block (vertical)
N/S		31V-0307-500	Pivot Block (horizontal)
61	1	31V-0506-983	Jam Nut
62	1	31V-9100-033	Handle 10"
N/S	1	31V-1873-236	Boot (vertical/Horiz) Optional
N/S	1	31V-1873-197	Boot (joystick) Optional

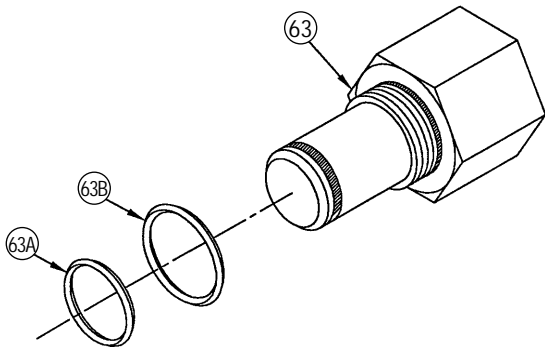


LOCK VALVES



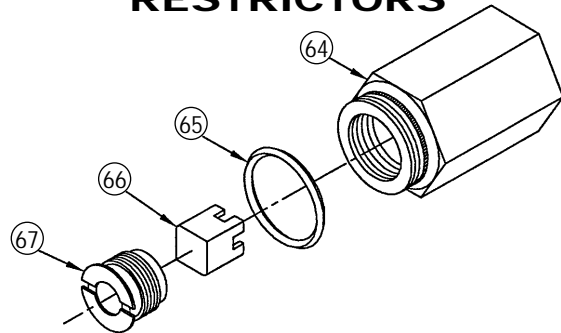
ITEM	QTY	PART NUMBER	DESCRIPTION
31V-9000-006 (D.A. ASSEMBLY)			
68	4	31V-0500-146	Mounting Bolts
69	1	31V-0301-355	Block
70	2	31V-9000-005	Cartridge
70	1	31V-0300-744	Shuttle Spool
31V-9000-011 (S.A. ASSEMBLY [1/2 OF D.A.-DEADHEAD])			
68	4	31V-0500-146	Mounting Bolts
69	1	31V-0301-355	Block
70	1	31V-9000-005	Cartridge
70	1	31V-0300-745	Shuttle Spool
N/S	1	31V-9000-013	Plug
N/S	1	31V-9000-012	True S.A. Lock Valve Assembly

POWER BEYOND



ITEM	QTY	PART NUMBER	DESCRIPTION
63	1	31V-0309-790	HPCO Sleeve (pipe)
N/S	1	31V-0309-766	HPCO Sleeve (SAE)
63A	1	31V-0500-397	HPCO O-ring (inner)
63B	1	31V-0500-427	HPCO O-ring (outer)

RESTRICTORS



ITEM	QTY	PART NUMBER	DESCRIPTION
64,65,66,67	1	31V-9000-003	Assembly (in/out)
64,65,67	1	31V-9000-004	Assembly Fixed (SF)
64	1	31V-0309-081	Body (-10)
65	1	31V-0500-397	O-ring (inner)
67	1	31V-0309-083	Plug (in/out)
67	1	31V-0309-167	Plug (SF)
66	1	31V-0309-082	Restrictor (in/out)

CARTRIDGES - RELIEFS / ANTI-CAV

QTY	PART NUMBER	DESCRIPTION
N/A	31V-0500-057	RV Shims – 67 psi (.003 in.)
N/A	31V-0500-122	RV Shims – 444 psi (.020 in.)
N/A	31V-0500-039	RV Shims – 1421 psi (.064 in.)
N/A	31V-9000-001	Blanking Plug
N/A	31V-9001-001	Screw Adj. RV/Anti-Cav (500-1450)
N/A	31V-9001-002	Anti-Cav
N/A	31V-9001-003	Screw Adj RV Assy. (500-1450; 1000 preset)
N/A	31V-9001-005	Tamper Proof RV Assy (500-1450)

QTY	PART NUMBER	DESCRIPTION
N/A	31V-9001-007	Shim Adj. RV (500-1450)
N/A	31V-9001-016	Screw Adj RV Assy. (200-1000; 400 preset)
N/A	31V-9001-465	RV Spring (1500-4000)
N/A	31V-9001-466	RV Spring (500-1450)
N/A	31V-9002-001	Screw Adj. Anti-Cav (1500-4000)
N/A	31V-9002-003	Screw Adj. RV Assy. (1500-4000; 1800 preset)
N/A	31V-9002-005	Tamper Proof RV Assy (1500-4000)
N/A	31V-9002-007	Shim Adj. RV (1500-4000)



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