INSTRUCTIONS for

F-12-703-F
June, 1998

V-54 SHUTOFF VALVE & CHECK VALVES

V-54/Check Valve Combination	Part No.	Gas Service	Check Valve Outlet Connection	Cap &-Chain Assembly (Accessory)
V-54/CV- 1	998185**	Oxygen	CGA-024 (“C” -size) (male)	951506
V-54/CV- 2	998186	Fuel Gas	CGA-025 (“C” -size) (male)	951507
V-54/CV- 3	998315**	Oxygen	CGA-022 (“B” -size) (male)	86W40
V-54/CV- 4	998317	Fuel Gas	CGA-023 (“B” -size) (male)	86W41
V-54/CV- 5	998187	*	1/2-in NPT (male)	—
V-54/CV- 6	998443	Inert Gas	CGA-034 (“C” -size) (female)	—
V-54/CV- 7	998228	Inert Gas	CGA-032 (“B” -size) (female)	—

*Any common non-corrosive, non-toxic industrial gas, (See note 2 below).
**Supplied with check valve assembled and sealed to Shutoff valve. All others are supplied unassembled.

1. **Operating pressure must NOT exceed 200 psig (1380 kPa).**
2. All V-54 valves and check valves are cleaned for oxygen service before shipment. **If they are used for oxygen service, do NOT use oil or grease since they ignite easily and burn violently under pressure in the presence of oxygen.** If pipe adaptors are necessary, be sure they are thoroughly degreased.
3. The V-54 valve/check valve combinations, when installed on oxygen and fuel gas station outlets, will comply with the latest NFPA—51 and OSHA requirements. Note that the check valves are not designed for stopping flashbacks. Check valves only prevent backflow of one gas from mixing in the pipeline with the other. Only hydraulic back-pressure valves should be used for flashback protection.
4. Apply a single turn of 3/8-in. or 1/2-in. wide Teflon tape on all male pipe threads before making pipe connections. Tighten all connections firmly with a wrench.
5. After installing V-54/check valve, make sure the V-54 valve is closed (turn handle clockwise) before turning on the main gas supply.
6. Before attaching station regulator to valve outlet, “crack” the valves lightly for an instant to blow any dust or dirt that may have collected on the outlet. **Never crack a fuel gas valve near sparks, flames, or any possible source of ignition.** Be sure to follow all instructions packed with your station regulator.
7. Check the installation for leakage using Leak Test solution (998771) or any other solution suitable for oxygen service. If leakage is detected, release pressure and correct.
8. Periodically test the check valve for leakage using the reverse flow procedure. Replace check valve or parts shown on the reverse side of this sheet if there is leakage.

Be sure this information reaches the operator.
You can get extra copies through your supplier.

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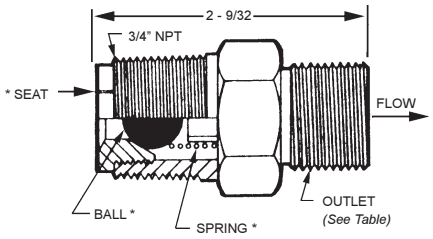
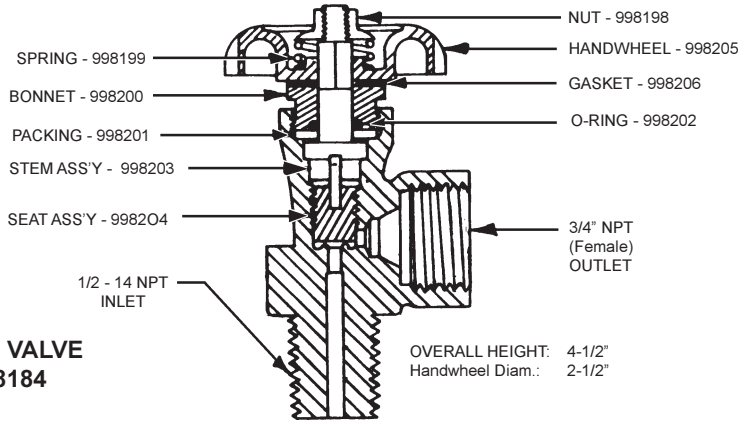


*Supplied with CV Repair Kit - 18360.

Check Valve	Part No.	Outlet Connection
CV- 1	639677	CGA-024 (7/8—14 RH male)
CV- 2	639710	CGA-025 (7/8—14 LH male)
CV- 3	639706	CGA-022 (9/16—18 RH male)
CV- 4	639711	CGA-023 (9/16—18 LH male)
CV- 5	639717	1/2—14NPT (male)
CV- 6	639719	CGA-034 (7/8—14 RH female)
CV- 7	639720	CGA-032 (5/8—18 RH female)

CHECK VALVE
(See Table)



V-54 SHUTOFF VALVE
Part No. 998184

CAPACITY DATA: V-54 & V-54/CHECK VALVE

Pressure Drop (psi)	Nitrogen* Flow Rate (cfh) at Inlet Pressure of:					
	5 psig	10 psig	15 psig	50 psig	100psig	200 psig
			V-54 Shutoff Valve Only			
1	195	225	275	385	530	700
2	290	325	365	535	755	985
3	350	400	435	690	885	1220
5	—	490	545	825	1100	1485
10	—	—	730	1125	1535	2055
			V-54/Check Valve Combination			
1	45	60	70	100	165	185
2	135	160	180	230	305	390
3	215	240	250	320	455	590
5	—	340	365	465	640	815
10	—	—	565	720	970	1440

*For other gases, multiply the given nitrogen flow rate by the following correction factors

Acetylene	1.03	Hydrogen	3.68
Air	0.97	Methane or Natural Gas	1.31
Argon	0.83	Oxygen	0.92
Carbon dioxide	0.79	Propane	0.79
Helium	2.61		

NOTE: Piped or distributed acetylene pressure should never exceed 15 psig.

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