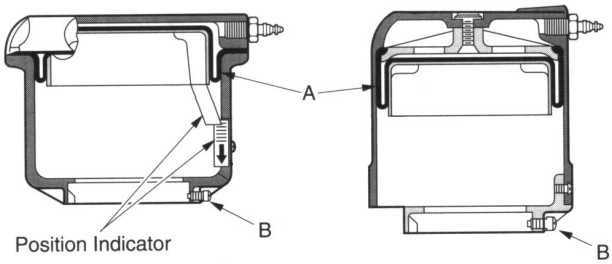
Controls Group
507 E. Michigan Street
P.O. Box 423
Milwaukee, WI 53208
Code No. LIT-1924230

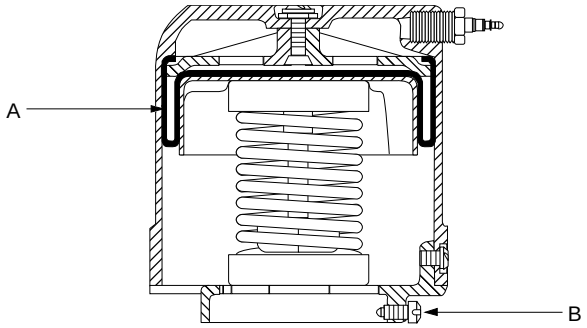
Valve Repair Parts

Replacement Diaphragms for V-3000 Actuators



Callout	Description	Code Number	Shipping Weight
A	Diaphragm for Exposed Actuator V-3000-1 only	**V-3000-600**	0.06 (0.03)
	Diaphragm for Enclosed Actuator V-3000-2 and V-3000-8003	**V-3000-601**	0.09 (0.04)
B	10-32 x 1/2 UNF-2A Set Screw	**V-3100-643**	.01 (.005)

Replacement Diaphragms for V-3000-8003 Actuators



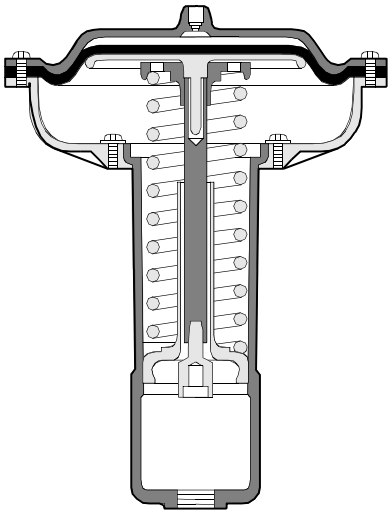
Callout	Description	Code Number	Shipping Weight
A	Diaphragm (V-3000-8003 only)	**V-3000-601**	0.09 lb (0.04 kg)
B	10-32 x 1/2 UNF-2A Set Screw	**V-3100-643**	0.01 lb (0.005 kg)

Replacement Diaphragms for V-400 and V-500 Series Pneumatic Actuators

Description	Code Number
Diaphragm for V-400 Series Valve Actuator	**V-4710-602**
Diaphragm for V-500 Series Valve Actuator	**V-4710-603**

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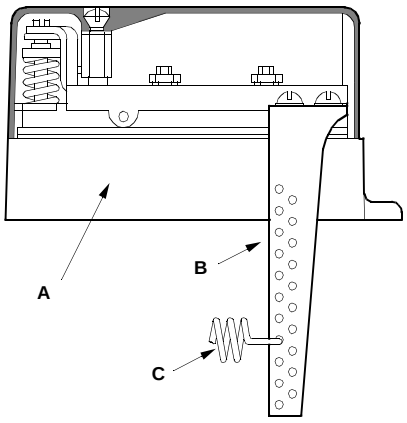
Replacement Actuators and Diaphragms for V-5252, V-5462, and V-5842 Valves



Code Number		Description				
Complete Actuator	Diaphragm Only					
		Actuator Complete: Includes Yoke and Spring Capsule (Assembled)				
		Actuator Size	Spring Range (psig)	Valve Size (in.)	Stroke (in.)	Valve Body Style *
V-5252-621	V-4710-602	4R	2 to 5	2-1/2, 3	3/4	N.O.
V-5252-622			9 to 13	2-1/2, 3	3/4	N.O.
V-5252-623	V-4710-603	5R	2 to 5	2-1/2, 3	3/4, 1-1/8	N.O.
V-5252-624			2 to 5	4	1-1/8	N.O.
V-5252-625			9 to 13	2-1/2, 3	3/4, 1-1/8	N.C./MX
V-5252-626			9 to 13	4	1-1/8	N.C.
V-5252-627	V-4710-604	8R	2 to 5	4, 5	1-1/8 & 1-3/8	N.O.
V-5252-628			2 to 5	6	1-1/2	N.O.
V-5252-629			9 to 13	4, 5	1-1/8 & 1-3/8	N.C./MX
V-5252-630			9 to 13	6	1-1/2	N.C./MX

* N.O. = Two-way normally open (V-5252-)
N.C. = Two-way normally closed (V-5462-)
MX = Three-way mixing (V-5842-).

Repair Parts For Use With V-9502 Pneumatic Valve Actuator Positioner



Code Number	Callout	Description
C-9506-1	A	Positioner Movement Complete Less Items “B” and “C”
D-9502-604	B	Operating Span Lever Arm Assembly
Refer to the *Valve Spring Kits* Table on Page 23	C	Springs

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Repair and Maintenance Parts for Use with Electric or Pneumatic VG7000 Series 1/2 Through 2 in. Valves

Spring Kits for VG7000 Series Valves

Actuator Style	Vavle Size in. (DN)	Spring Range psig (kPa)	Spring Kit Code Number
V-3000-8001 and V-3000-8003	1/2 or 3/4 (DN15 or DN20) (5/16 in. Stroke)	3 to 6 (21 to 42)	VG7000-1001**
		4 to 8 (28 to 56)	VG7000-1002**
		9 to 13 (63 to 91)	VG7000-1003**
V-3000-8001 and V-3000-8003	1 or 1-1/4 (DN25 or DN32) (1/2 in. Stroke)	3 to 6 (21 to 42)	VG7000-1004**
		4 to 8 (28 to 56)	VG7000-1005**
		9 to 13 (63 to 91)	VG7000-1006**
V-3000-8001 and V-3000-8003	1-1/2 or 2 (DN40 or DN50) (3/4 in. Stroke)	3 to 6 (21 to 42)	VG7000-1007**
		4 to 8 (28 to 56)	VG7000-1008**
		9 to 13 (63 to 91)	VG7000-1009**
V-3801-8001	1/2 or 3/4 (DN15 or DN20) (5/16 in. Stroke)	3 to 6 (21 to 42)	VG7000-1010**
		4 to 8 (28 to 56)	VG7000-1011**
		9 to 13 (63 to 91)	VG7000-1012**
V-3801-8001	1/2 or 3/4 (DN15 or DN20)	Kit with three springs: 3 to 6, 4 to 8, and 9 to 13 (Includes hardware to adapt to one valve only.)	VG7000-1015**
V-400	1/2 or 3/4 (DN15 or DN20)	Not Applicable	VG7000-1013 ***
V-400	1 through 2 (DN25 through DN50)	Not Applicable	VG7000-1014 ***
V-500	Not Available for Field Mounting		

* DN is the European designation for body size in metric untis "mm."

** The spring kit includes: upper spring seat, spring, stem extension, and stem locking screw (set screw).

*** Mounting adaptor only. Spring is in actuator.

Note: All spring/linkage kits are for use with valves with standard threaded stem design.

Maintenance Parts

Description	Code Number
Ring Pack Packing Kits for Brass Trim Valves:	
Single Pack for 1/4 in. Stem (1/2 or 3/4 in. Valve)	**VG7000-6001**
Single Pack for 3/8 in. Stem (1 through 2 in. Valve)	**VG7000-6002**
10 Pack for 1/4 in. Stem (1/2 or 3/4 in. Valve)	**VG7000-6003**
10 Pack for 3/8 in. Stem (1 through 2 in. Valve)	**VG7000-6004**
PTFE V-Ring Packing Kits for Stainless Steel Trim Valves:	
Single Pack for 1/4 in. Stem, SS Trim (1/2 or 3/4 in. Valve)	**VG7000-6011**
Single Pack for 3/8 in. Stem, SS Trim (1 through 2 in. Valve)	**VG7000-6012**

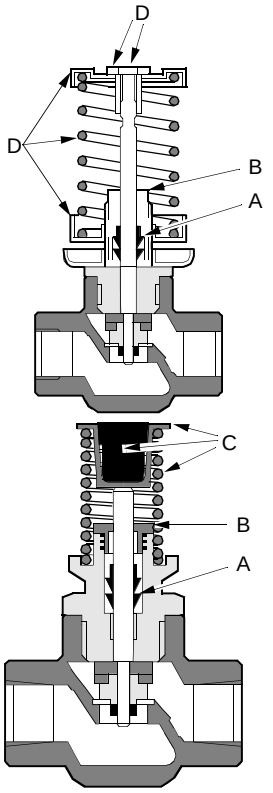
Linkage Kits for VG7000 Series Valves

Actuator Style	Vavle Size in. (DN)*	Spring Range psig (kPa)	Linkage Kit Code Number
M110	1/2 through 2 (DN15 through DN50)	Not Applicable	VG7000-M110
M120/M130	1/2 through 2 (DN15 through DN50)	Not Applicable	VG7000-M130
M140	1/2 through 2 (DN15 through DN50)	Not Applicable	VG7000-M140
M150	1/2 through 2 (DN15 through DN50)	Not Applicable	VG7000-M150
VA-715x	1/2 through 2 (DN15 through DN50)	Not Applicable	None Required
VA-720x	1 through 2 (DN25 through DN50)	Not Applicable	None Required
M9x16	1/2 through 2 (DN15 through DN50)	Not Applicable	M9000-500

* DN is the European designation for body size in metric untis "mm."

Note: All spring/linkage kits are for use with valves with standard threaded stem design.

Repair Parts For Use With Electric or Pneumatic VT Series Terminal Unit Valves 1/2 in., Two-Way and Three-Way



V-3000-1 or
V-3000-2
Field Mounting
(VTM-TN###-01#)

V-4000-1 or
V-3802-1
Field Mounting
(VTM-TN###-09#)

Code Number	Callout	Description
	A	Ring Pack Packing Kits:
V-9999-608		Single-Pack
V-9999-610		Ten-Pack (Contains Enough Material to Repack 10 Valves)
V-9999-630		Fifty-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)
V-9999-649	B	Packing Nut for all VT Styles

Spring Kits for VT Valves

Spring Kit	Callout	Spring Range	Actuator	Valve Size	Valve Body
V-9999-6001*	C	3-6	V-3802 or V-4000	1/2	VT Series
V-9999-6002*		4-8			
V-9999-6003*		9-13			
V-3752-6023**	D	3-6	V-3000		
V-4332-6001**		4-8			
V-3752-6022**		9-13			

* Kit Includes: Spring, Upper Spring Seat, Upper Spring Seat Retainer, Instruction.

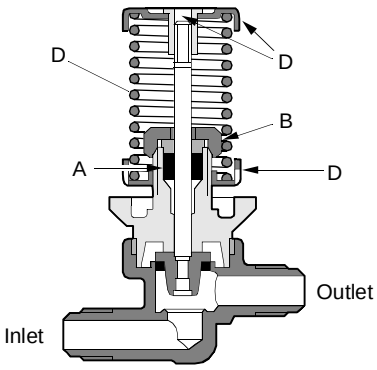
** Kit Includes: Spring, Upper and Lower Spring Seat, Stem Extension, Stem Lock Screw, Instructions

Tailpiece and Nut for VT Valves

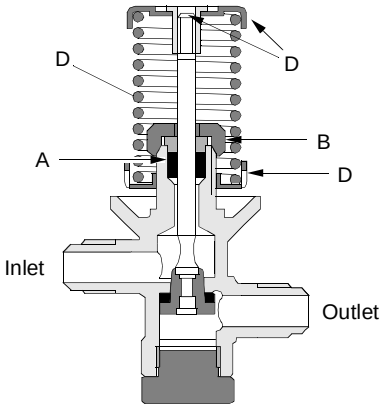
Code Number	Description	Size	Valve Size	Valve Body
V-9999-663	Tailpiece	3/8 inch tube	1/2 inch	VT Series
V-9999-664	Tailpiece	1/2 inch tube	1/2 inch	
V-9999-665	Tailpiece	3/4 inch tube	1/2 inch	
V-9999-666	Nut	3/8 and 1/2 inch tube	1/2 inch	
V-9999-667	Nut	3/4 inch tube	1/2 inch	

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

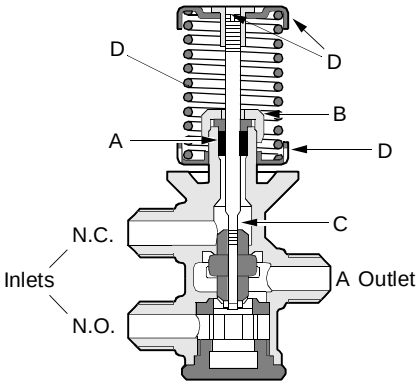
Repair Parts For 1/2 in. Flare Valves for Use With V-3766, V-3966, V-4332, VB-3766, VB-3966, VB-4332 AV-8050, AV-8051, and AV-8052 (Flare Valve Assemblies)



V-3766, Normally Open Push-down-to-close



V-3966, Normally Closed Push-down-to-open

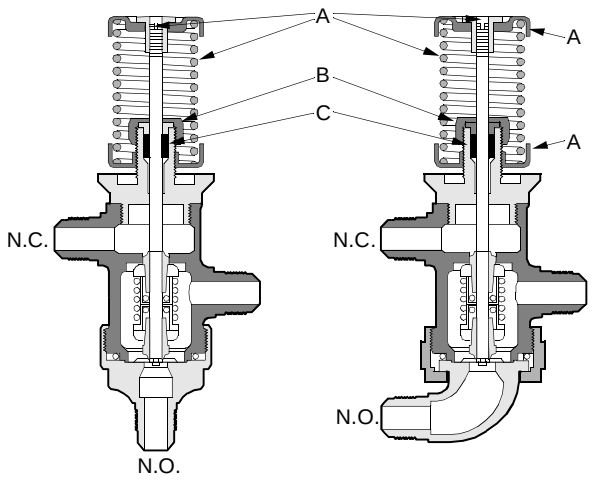


V-4332, 3-Way Mixing

Code Number	Callout	Description		
	A	**Ring Pack Packing Kits:**		
V-9999-608		Single-Pack		
V-9999-610		10-Pack (Contains Enough Material to Repack 10 Valves)		
V-9999-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)		
V-3752-646	B	**Gland Nut**		
	C	**Stem and Disc Assembly: Includes Valve Stem, Upper and Lower Modulating Plug, Lock Pins, Disc and Swivel, Packings, and Lower O-Ring**		
			Valve Size (in.)	Max Cv
V-4332-615			1/2 (V-4332, VB-4332)	1.2
V-4332-616			1/2 (V-4332, VB-4332)	2.0
	D	**Spring Kit: Spring, Upper and Lower Spring Seat, Stem Extension and Lock Screw, Instructions**		
			Valve Size (in.)	Range (PSIG)
V-3754-6009			1/2	9 to 13 (V-3966 only)
V-4332-6001			1/2	4 to 8 (V-4332 only)
V-3752-6022			1/2	9 to 13 (V-4332 only)
V-3754-6010			1/2	3 to 6 (V-3766 only)

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Repair Parts For Use With V-4334 5/8 in. Flare Valve



Code Number	Callout	Description			
			Range (psig)	Valve Size (in.)	Stroke (in.)
V-4332-6001	A	Springs:	4 to 8	5/8	0.313
V-3752-6022			9 to 13	5/8	0.313
V-3752-646	B	Gland Nut			
	C	Ring Pack Packing Kits:			
V-9999-608			Single-Pack		
V-9999-610			10-Pack (Contains Enough Material to Repack 10 Valves)		
V-9999-630			50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)		

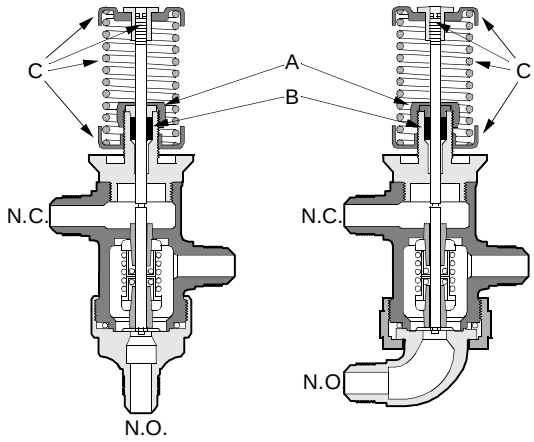
Recondition Kits *

Code Number	Valve Size	Cv
V-4334-6001	5/8 in.	4.7

* Recondition Kit Includes: Cage, O-ring, Plug, Stem, Bonnet, Packing, Packing Nut, Instructions

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Repair Parts For Use With V-4440 Water Valve 1/2 and 5/8 in. For 3- and 4-Pipe Systems



Code Number	Callout	Description	
V-3752-646	A	Gland Nut	
	B	Ring Pack Packing Kits:	
V-9999-608		Single-Pack	
V-9999-610		10-Pack (Contains Enough Materials to Repack 10 Valves)	
V-9999-630		50-Pack (Contains U-Cups and O-Rings Only to Repack 50 Valves)	
	C	Main Springs:	
		Range (psig)	Valve Size (in.)
V-4440-6001		6 to 9	1/2
V-4440-6002		4 to 12	1/2
V-4440-6001		6 to 9	5/8
V-4440-6002		4 to 12	5/8

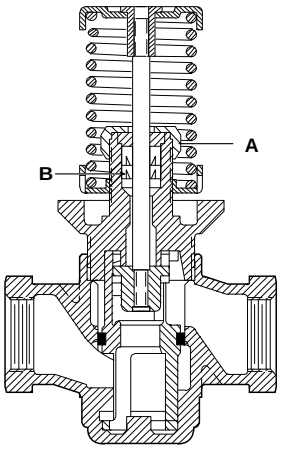
***** N.O. = Normally open
N.C. = Normally closed

Recondition Kits *

Code Number	Valve Size	Spring Range	Cv
V-4440-6003	1/2	4 to 12	1.4
V-4440-6004			2.4

* Recondition Kit Includes: Cage, O-ring, Plug, Stem, Bonnet, Packing, Packing Nut, Instructions

Repair Parts For Cage Trim Valve For Use With V-3754 with Actuator and VB-3754 without Actuator (Including 1/2 in.)



Code Number	Callout	Description	V-3754	VB-3754
V-3752-646	A	Gland Nut (Packing Nut)	X	X
	B	Ring Pack Packing Kits		
V-9999-608		Single Pack	X	X
V-9999-610		10-Pack (Contains Enough Materials to Repack 10 Valves)	X	X
V-9999-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)	X	X

Note: 1/2 inch valve assemblies discontinued in 1991.
VB valves used with AV-8050, AV-8051, AV-8052, AV-8090, AV-8091, and AV-8092 assemblies

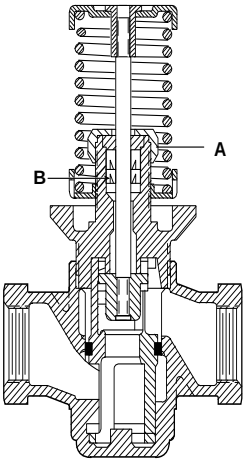
Springs are under compression. Removal of springs requires use of spring compression tool JC 5389.

Code Number	Valve Size	Actuator Size	Spring Range	Spring Kit *	Recondition Kits**
V-3754	1/2	V-3000	3-6	V-3754-6010	V-3754-6003 (C_V= 0.20), or V-3754-6004 (C_V= 0.40) or V-3754-6005 (C_V= 1.20), or V-3754-6006 (C_V= 2.20) or V-3754-6007 (C_V= 4.40)
			9-13	V-3754-6009	
	3/4		3-6	V-3754-6010	V-3754-6001 (C_V= 8.6)
			9-13	V-3754-6009	
	1		3-6	V-3754-6011	V-3754-6002 (C_V= 13.9)
			9-13	V-3754-6008	
	1-1/2		3-6	V-3754-6011	V-5254-6001 (C_V= 27.5)
			9-13	V-3754-6008	

* Spring Kit Includes: Upper & Lower Spring Plate, Spring, Stem Connector, Stem Lock Screw, Instructions
** Recondition Kit Includes: Cage, O-ring, Plug, Stem, Bonnet, Packing, Packing Nut, Instructions

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Repair Parts For Use With V-4324 with Actuator and VB-4324 without Actuator (Including 1/2 in.)



Code Number	Callout	Description	V-3754	VB-3754
V-3752-646	A	Gland Nut (Packing Nut)	X	X
	B	Ring Pack Packing Kits		
V-9999-608		Single Pack	X	X
V-9999-610		10-Pack (Contains Enough Material to Repack 10 Valves)	X	X
V-9999-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)	X	X

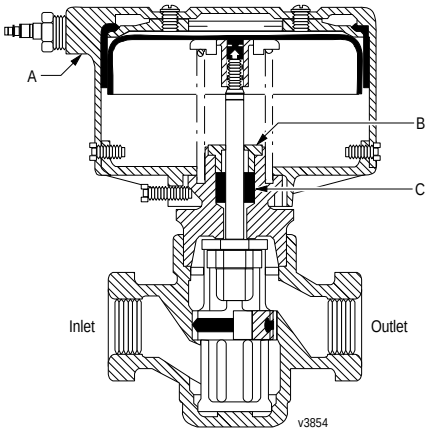
Note: 1/2 inch valve assemblies discontinued in 1991.
VB valves used with AV-8050, AV-8051, AV-8052, AV-8090, AV-8091, and AV-8092 assemblies

Springs are under compression. Removal of springs requires use of spring compression tool JC 5389.

Code Number	Valve Size	Actuator Size	Spring Range	Spring Kit *	Recondition Kits**
V-4324	1/2 in.	V-3000	4-8	V-3974-6008	V-4324-6003 (C_V= 1.20), or V-4324-6004 (C_V= 2.20), or V-4324-6005 (C_V= 4.40)
			9-13	V-3754-6009	
	3/4 in.		4-8	V-3974-6008	V-4324-6001 (C_V= 8.6)
			9-13	V-3754-6009	
	1 in.		4-8	V-3974-6009	V-4324-6002 (C_V= 13.9)
			9-13	V-3754-6008	
	1-1/2 in.		4-8	V-3974-6009	V-5844-6001 (C_V= 27.5)
			9-13	V-3754-6008	

* Spring Kit Includes: Upper & Lower Spring Plate, Spring, Stem Connector, Stem Lock Screw, Instructions
** Recondition Kit Includes: Cage, O-ring, Plug, Stem, Bonnet, Packing, Packing Nut, Instructions

Repair Parts For Use With V-3854 with Oval Top Actuator



Code Number	Callout	Description
V-3802-1	A	Oval Actuator
V-3800-660	B	Packing Nut
	C	Ring Pack Packing Kits
V-9999-608		Single Pack
V-9999-610		10-Pack (Contains Enough Material to Repack 10 Valves)
V-9999-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)

Note: Discontinued in 1991. See VT valves for full unit replacements.

Spring Kits

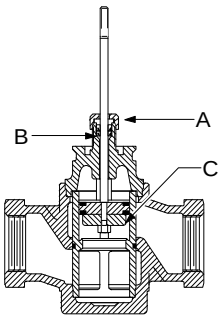
Code Number	Valve Size	Actuator Size	Spring Range	Spring Kit
V-3854	1/2 inch	V-3802	3-6	V-3754-6012
			9-13	V-3754-6013

Spring Kit Includes: Upper Spring Seat, Spring, Stem Extension, Lock Screw, Installation Instructions

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Repair Parts For Use With:V-5254, V-5464, and V-5844 with V-5252 Size 4R Actuators

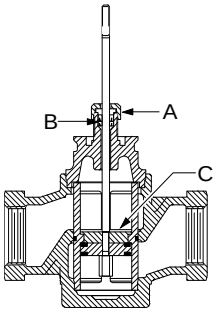
V-5254



Code Number	Callout	Description
V-3752-646	A	Packing Nut
	B	Ring Pack Packing Kits
V-9999-608		Single Pack
V-9999-610		10-Pack (Contains Enough Material to Repack 10 Valves)
V-5254-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)
V-5254-6001	C	Recondition Kit* 1-1/2 inch Valve, 4R Actuator
V-5254-6002		Recondition Kit* 2 inch Valve, 4R Actuator

* Kit Includes: Cage, Nut, Plug, Disc, O-ring, Stem, Bonnet, Packing, Packing Nut, Instructions

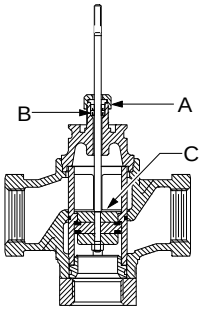
V-5464



Code Number	Callout	Description
V-3752-646	A	Packing Nut
	B	Ring Pack Packing Kits
V-9999-608		Single Pack
V-9999-610		10-Pack (Contains Enough Material to Repack 10 Valves)
V-9999-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)
V-5464-6001	C	Recondition Kit* 1-1/2 inch Valve, 4R Actuator
V-5464-6002		Recondition Kit* 2 inch Valve, 4R Actuator

* Kit Includes: Cage, Nut, Plug, Disc, O-Ring, Stem, Bonnet, Packing, Packing Nut, Instruction

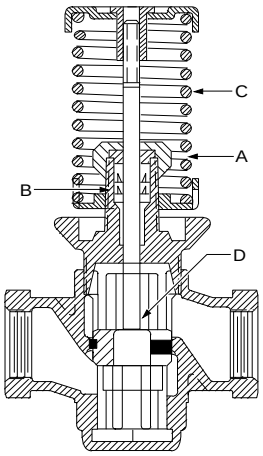
V-5844



Code Number	Callout	Description
V-3752-646	A	Packing Nut
	B	Ring Pack Packing Kits
V-9999-608		Single Pack
V-9999-610		10-Pack (Contains Enough Material to Repack 10 Valves)
V-9999-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)
V-5844-6001	C	Recondition Kit* 1-1/2 inch Valve, 4R Actuator
V-5844-6002		Recondition Kit* 2 inch Valve, 4R Actuator

* Kit Includes: Cage, Nut, Plug, Disc, O-ring, Stem, Bonnet, Packing, Packing Nut, Instruction

Repair Parts For Use With: V-3974 with Actuator and VB-3974 without Actuator (Including 1/2 in.)



Code Number	Callout	Description	V-3754	VB-3754
V-3752-646	A	Gland Nut (Packing Nut)	X	X
	B	Ring Pack Packing Kits		
V-9999-608		Single Pack	X	X
V-9999-610		10-Pack (Contains Enough Material to Repack 10 Valves)	X	X
V-9999-630		50-Pack (Contains U-Cups and O-Rings only to Repack 50 Valves)	X	X

Note: **1/2 inch valve assemblies discontinued in 1991.**
VB valves used with AV-8050, AV-8051, AV-8052, AV-8090, AV-8091, and AV-8092 assemblies

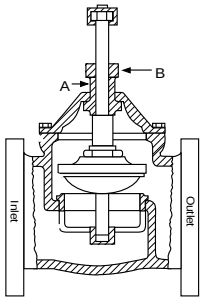
Springs are under compression. Removal of springs requires use of spring compression tool JC 5389.

Code Number	Valve Size	Actuator	Spring Range	Spring Kit	Recondition Kit
V-3974	1/2 & 3/4	V-3000	4-8	V-3974-6008	1/2 in: V-3974-6003 or -6004 or -6005 or-6006 or V-3974-6007 3/4 in: V-3974-6001
			9-13	V-3754-6009	
	1 & 1-1/2	V-3000	4-8	V-3974-6009	1 in: V-3974-6002 1-1/2 in: V-5464-6001
			9-13	V-3754-6008	
				C	D

Spring Kit Includes: Spring, Upper & Lower Spring Seat, Stem extension, Stem Lock Screw, Instructions
Recondition Kit: Cage, O-ring, Plug, Stem, Bonnet, Packing, Packing Nut, Instructions

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Repairs Parts For Iron Flanged Globe Valves, 2-1/2 Through 6 in. For Use With V-5252 and VB-3752

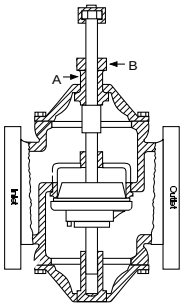


Code Number	Callout	Description		
	A	Packing Kit:		
		Valve Size (in.)	Actuator Size	Type of Packing
V-9999-613		2-1/2 through 4	(VB-3752)	EPDM Ring Pack
V-9999-613		2-1/2 through 4	4R and 5R	EPDM Ring Pack
V-5252-668		4 through 6	8R	EPDM Ring Pack
	B	Packing Nuts for:		
		Actuator Size	Valve Size	Stem Diameters
V-4510-6019		4R	2-1/2 through 3	3/8 in.
V-4510-6019		5R	2-1/2 through 4	3/8 in.
V-5252-609		8R	4 through 6	1/2 in.

Code Number	Valve Size	Actuator	Recondition Kits
V-5252	2-1/2	4R or 5R	V-5252-6001 5R or V-5252-6002 4R*
	3	4R or 5R	V-5252-6003 5R or V-5252-6004 4R*
	4	5R or 8R	V-5252-6005 5R or V-5252-6006 8R*
	5	8R	V-5252-6007*
	6	8R	V-5252-6008*

* Kit Includes: Stem, Packing Nut, Follower, Packing Box, Packing, Bonnet, Gasket, Swivel, Pins, Disc Holder, Screws, Disc Retainer, Disc, Spacer, Guide Rod, Swivel Nut, Packing Spacer, Packing Tools, Instructions

Repairs Parts For Iron Flanged Globe Valves, 2-1/2 Through 6 in. For Use With V-5462 and VB-3970



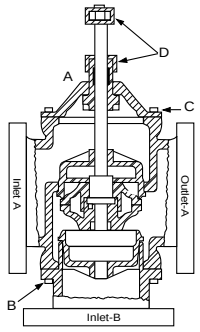
Code Number	Callout	Description		
	A	Packing Kit:		
		Valve Size (in.)	Actuator Size	Type of Packing
V-9999-613		2-1/2 through 4	(VB-3790)	EPDM Ring Pack
V-9999-613		2-1/2 through 4	5R	EPDM Ring Pack
V-5252-668		3 through 6	8R	EPDM Ring Pack
	B	Packing Nuts for:		
		Actuator Size	Valve Size	Stem Diameter
V-4510-6019		5R	2-1/2 through 4	3/8 in.
V-5252-609		8R	4 through 6	1/2 in.

Code Number	Valve Size	Actuator	Recondition Kits**
V-5462	2-1/2	5R	V-5462-6001*
	3	5R or 8R	V-5462-6002 5R or V-5462-6003 8R*
	4	5R or 8R	V-5462-6004 5R or V-5462-6005 8R*
	5	8R	V-5462-6006*
	6	8R	V-5462-6007*

* Kit Includes: Stem, Packing Nut, Follower, Packing Box, Packing, Bonnet, Gasket, Swivel, Pins, Disc Holder, Screws, Disc Retainer, Disc, Spacer, Packing Spacer, Swivel Nut, Spacer, Packing Tools, Instructions

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Repairs Parts For Iron Flanged Globe Valves, 2-1/2 Through 6 in. For Use With V-5842 and VB-4322



Code Number	Callout	Description		
	A	Packing Kit:		
		Valve Size (in.)	Actuator Size	Type of Packing
V-9999-613		2-1/2 through 4	(VB-4322)	EPDM Ring Pack
V-9999-613		2-1/2 and 3	5R	EPDM Ring Pack
V-5252-668		3 through 6	8R	EPDM Ring Pack
Purchase Locally Qty. Req'd Per Valve	B	Lower Cap Screws		
		Valve Size (in.)	Screw Size (in.)	
6		2-1/2	1 x 5/16 - 18	
6		3	1 x 3/8 - 16	
8		4	1-1/4 x 3/8 - 16	
8		5	1-1/4 x 1/2 - 13	
10		6	1-1/2 x 1/2 - 13	
Purchase Locally Qty. Req'd Per Valve	C	Upper Cap Screws		
		Valve Size (in.)	Screw Size (in.)	
6		2-1/2	3/4 x 5/16 - 18	
6 and 8		3 and 4	7/8 x 3/8 - 16	
8 and 10		5 and 6	1 x 1/2 - 13	
	D	Packing Nuts for:		
		Valve Size (in.)	Actuator Size	
V-5452-619		2-1/2 and 3	5R	
V-5462-620		4 through 6	8R	

Code Number	Valve Size	Actuator	Recondition Kits
V-5842	2-1/2	5R	V-5842-6001*
	3	5R or 8R	V-5842-6002 5R or V-5842-6003 8R*
	4	5R or 8R	V-5842-6004 (Elect) or V-5842-6005 8R*
	5	8R	V-5842-6006*
	6	8R	V-5842-6007*

* Kit Includes: Stem, Packing Nut, Follower, Packing Box, Packing, Bonnet, Gasket, Swivel, Pins, Disc Holder, Screws, Lower Plug, Upper Plug, Guide Rod, Packing Spacer, Packing Tools, Instructions

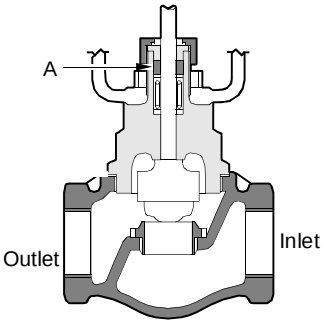
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Replacement Actuator Selection Chart For Use With V-5252, V-5462, and V-5842

Code Number	Stroke (in.)	Spring Range	Size	Minimum Effective Diaphragm Area (In. ^{2})	Body Size (in.)	Style
V-5252-621	3/4	2 - 5	4R	20	2-1/2	N.O.
V-5252-622		9 - 13			2-1/2	N.O.
V-5252-621	7/8	2 - 5	4R	20	3	N.O.
V-5252-622		9 - 13			3	N.O.
V-5252-623	3/4	2 - 5	5R	57	2-1/2	N.O.
V-5252-625		9 - 13			2-1/2	M.C. / MX
V-5252-623	7/8	2 - 5	5R	57	3	N.O.
V-5252-625		9 - 13			3	N.C. / MX
V-5252-629	7/8	9 - 13	8R	126	3	MX
V-5252-624	1-1/8	2 - 5	5R	57	4	N.O.
V-5252-626		9 - 13			4	N.C.
V-5252-627	1-1/8	2 - 5	8R	126	4	N.O.
V-5252-629		9 - 13			4	N.C. / MX
V-5252-627	1-3/8	2 - 5	8R	126	5	N.O.
V-5252-629		9 - 13			5	N.C. / MX
V-5252-628	1-1/2	2 - 5	8R	126	6	N.O.
V-5252-630		9 - 13			6	N.C. / MX

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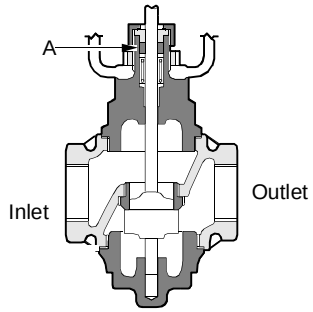
Repair Parts For Use With V-7216 Two-Way Normally Open Steam or Water Valve



Code Number	Callout	Description	
	A	Packing Kits	
		Valve Size (in.)	Stem Size
V-9999-608 *		1/2 and 3/4	1/4
V-5290-6840 **		1/2 through 1	1/4
V-9999-613 *		1-1/4 through 2	3/8
V-5290-6841 **			

* Low temperature use, less than or equal to 281° F (138 C°)
** High temperature use, greater than 281° F (138 C°)

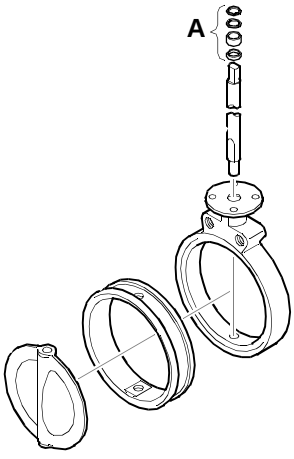
Repair Parts For Use With V-7416 Two-Way Normally Closed Steam or Water Valve



Code Number	Callout	Description	
	A	Packing Kits	
		Valve Size (in.)	Stem Size
V-9999-608 *		1/2 and 3/4	1/4
V-5290-6840 **		1/2 through 1	1/4
V-9999-613 *		1-1/4 through 2	3/8
V-5290-6841 **			

* Low temperature use, less than or equal to 281° F (138 C°)
** High temperature use, greater than 281° F (138 C°)

Repair Parts For VF Series Butterfly Valves 2 Through 20 in., Two-Way and Three-Way



Valve Size (in.)	Callout	Stem Seal, Bushing, and Retainer Kit
2	A	VF-025-604
2-1/2		VF-025-604
3		VF-025-604
4		VF-040-604
5		VF-060-604
6		VF-060-604
8		VF-080-604

Valve Size (in.)	Callout	Stem Seal, Bushing, and Retainer Kit
10	A	VF-120-604
12		VF-120-604
14		VF-140-604
16		VF-160-604
18		VF-200-604
20		VF-200-604

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VF Series Butterfly Valve Field Actuator Mounting Parts, D-3153, D-3244 Actuators

Piston Type Crank Arms for Two-Way Valves

Actuator Type	Actuator	Normally Closed	Normally Open
001	D-3153	VF-00X-601	VF-00X-602
002	D-3244	VF-00X-601	VF-00X-602
003	D-3246 single	VF-00X-601	VF-00X-602
005	D-3246 double	VF-00X-603	VF-00X-604

Piston Type Crank Arms for Three-Way Valves

Actuator Type	Actuator	Location	D		E		F		G	
			NC	NO	NO	NC	NC	NO	NO	NC
001	D-3153	Master	VF-00X-603	—	VF-00X-604	—	VF-00X-604	—	VF-00X-603	—
		Subordinate	—	VF-00X-608	—	VF-00X-607	—	VF-00X-607	—	VF-00X-608
002	D-3244	Master	VF-00X-603	—	VF-00X-604	—	VF-00X-604	—	VF-00X-603	—
		Subordinate	—	VF00X-608	—	VF-00X-607	—	VF-00X-607	—	VF-00X-608
003	D-3246 (Single)	Master	VF-00X-603	—	VF-00X-604	—	VF-00X-604	—	VF-00X-603	—
		Subordinate	—	VF-00X-606	—	VF-00X-605	—	VF-00X-605	—	VF-00X-606
005	D-3246 (Double)	Master	VF-00X-606	—	VF-00X-604	—	VF-00X-604	—	VF-00X-603	—
		Subordinate	—	VF-00X-606	—	VF-00X-605	—	VF-00X-605	—	VF-00X-606

Mounting Bracket for Two-Way Valve

Code Number	Actuator Type	Actuator
VF-001-601	001	D-3153
VF-002-601	002	D-3244
VF-003-601	003	D-3246 (Single)
VF-005-601	005	D-3246 (Double)

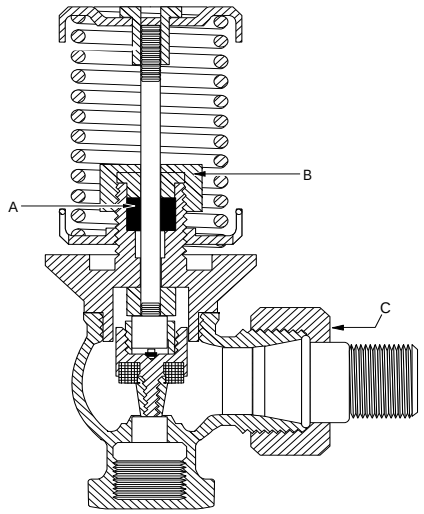
Sleeve Adaptor for Crankarm to Valve Stem of Piston Actuators

Code Number	Valve Size (in.)
D-3244-500	4
D-3246-600	5, 6
D-3246-800	8
None required	10

Clevis Kits for Field Repair or Installation of Piston Actuator

Actuator	Clevis
D-3153	D-3153-701
D-3244	D-3246-701
D-3246	D-3246-701
Three-Way Tandem Actuators	VF-3WAY-100

Repair Parts For Use With V-3752 Normally Open Valves 1/2 through 2 inch



Code Number	Callout	Description
V-9999-608	A	Packing Kit
V-3752-646	B	Packing Nut
	C	Union Nut and Male Tailpiece Assembly for Valves with Union Connections
		Valve Size (in.)
V-3752-636		1/2
V-3752-637		3/4
V-3752-638		1
V-3752-639		1-1/4
V-111-6026		1-1/2
V-111-6027		2

Note: The 1/2 through 2 inch size valves of this model were discontinued in 1979.

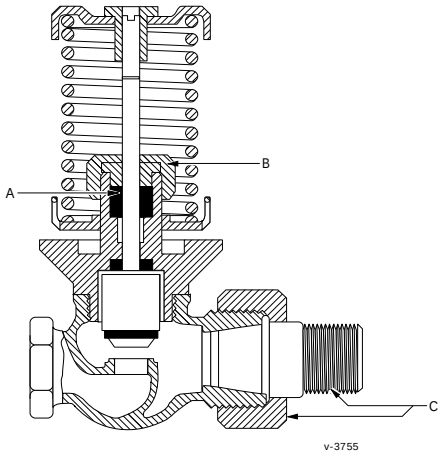
Code Number	Valve Size	Actuator Size	Spring Range	Spring Kit *	Recondition Kits **
V-3752	1/2 inch	V-3000	3-6	V-3752-6023	No kits available, replace valve.
			9-13	V-3752-6022	
	3/4 inch		3-6	V-3752-6023	V-3752-6016 (C_V = 3.7) or V-3752-6027 (C_V = 3.8)
			9-13	V-3752-6022	
	1 inch		3-6	V-3752-6024	V-3752-6017 (C_V = 7) or V-3752-6028 (C_V = 3.8)
			9-13	V-3752-6021	
	1-1/4 inch		3-6	V-3752-6024	V-3752-6018 (C_V = 12) or V-3752-6019 (C_V = 12)
			9-13	V-3752-6021	
	1-1/2 inch		3-6	V-3754-6010	V-3752-6020 (C_V = 20) or V-3752-6030 (C_V = 20)
			9-13	V-3754-6009	
	2 inch		3-6	V-3754-6010	V-3752-6034 (C_V = 35) or V-3752-6031 (C_V = 26)
			9-13	V-3754-6009	

* Spring Kit Includes: Spring, Upper & Lower Spring Seat, Stem extension, Stem Lock Screw, Instructions

** Recondition Kit Includes: O-ring, Swivel Nut, Washer, Disc, Disc holder, Contoured disc retainer, Pins, Swivel, Spacer, Stem, Bonnet, Packing, Packing Nut, Instructions

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Repair Parts For Use With V-3755 Normally Open Valves 1/2 through 2 inch



Code Number	Callout	Description
V-9999-608	A	Packing Kit
V-3752-646	B	Packing Nut
	C	Union Nut and Male Tailpiece Assembly for Valves with Union Connections
		Valve Size (in.)
V-3752-636		1/2
V-3752-637		3/4
V-3752-638		1
V-3752-639		1-1/4
V-111-6026		1-1/2
V-111-6027		2

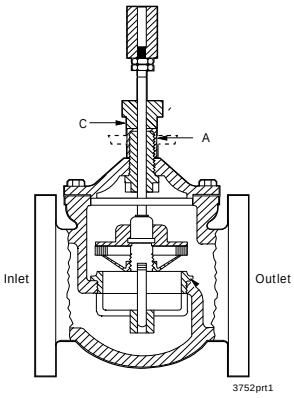
Note: This model discontinued in 1974.

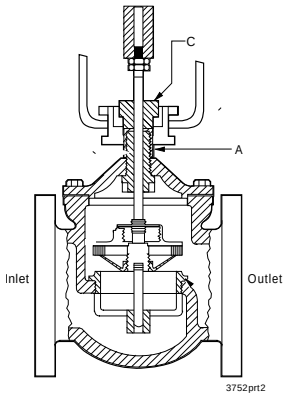
Code Number	Valve Size	Actuator Size	Spring Range	Spring Kit	Recondition Kits**
V-3755	1/2 inch	V-3000	3-6	V-3752-6023	No kits available, replace valve.
			9-13	V-3752-6022	
	3/4 inch		3-6	V-3752-6023	V-3755-6002 (C_V = 5.2) or V-3755-6007 (C_V = 9) or V-3755-6011 (C_V = 6) or V-3755-6017 (C_V = 9)
			9-13	V-3752-6022	
	1 inch		3-6	V-3752-6024	V-3755-6003 (C_V = 8.2) or V-3755-6008 (C_V = 17) or V-3755-6012 (C_V = 10) or V-3755-6018 (C_V = 17)
			9-13	V-3752-6021	
	1-1/4 inch		3-6	V-3752-6024	V-3755-6004 (C_V = 13) or V-3755-6009 (C_V = 24) or V-3755-6013 (C_V = 15) or V-3755-6019 (C_V = 25)
			9-13	V-3752-6021	
	1-1/2 inch		3-6	V-3754-6010	V-3755-6005 (C_V = 21) or V-3755-6014 (C_V = 23) or V-3755-6020 (C_V = 41)
			9-13	V-3754-6009	
	2 inch		3-6	V-3754-6010	V-3755-6015 (C_V = 35) or V-3755-6021 (C_V = 60)
			9-13	V-3754-6009	

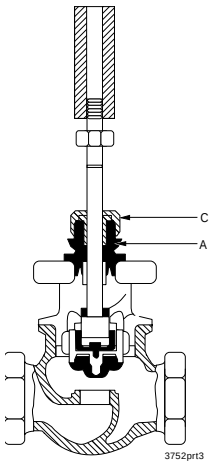
** Recondition Kit includes: O-ring, Swivel Nut, Washer, Disc Retainer, Disc, Disc Holder, Pins, Swivel, Stem, Bonnet, Packing Follower, Packing, Packing Nut, Packing Spacer

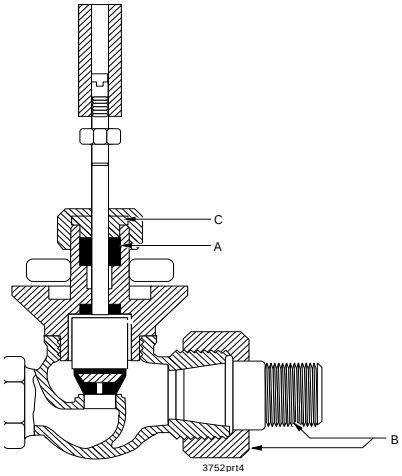
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Repair Parts for Use With VB-3752 Normally Open Steam and Water Valves





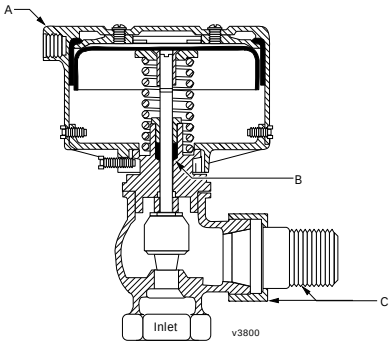




Code Number	Callout	Description		
	A	Packing for Use with both Water and Steam		
		Valve Size (in.)	Valve Shipping Date	Stem Diameter
V-9999-608		1/2 to 1-1/4	All	1/4 in.
V-9999-608		1-1/2 and 2	After 1-1-68	1/4 in.
V-5460-602		1-1/2 and 2	Before 1-1-68	5/16 in.
V-5460-602		2-1/2 to 4 (VA-3200)	All	5/16 in.
V-5280-602		2-1/2 to 8 (VA-3400)	All	1/2 in.
	B	Union Nut and Male Tailpiece Assembly for Valves with Union Connections:		
		Valve Size (in.)		
V-3752-636		1/2		
V-3752-637		3/4		
V-3752-638		1		
V-3752-639		1-1/4		
	C	Gland Nut		
		Valve Size (in.)	Actuator	Valve Shipping Date
V-3752-646		1/2 to 1-1/4	VA-3200 VA-5000	All
V-3752-646		1-1/2 & 2	VA-3200 VA-5000	After 1-1-68
V-4510-6019		1-1/2 & 2	VA-3200 VA-5000	Before 1-1-68
V-4510-6019		2-1/2-4	VA-3200	All
V-4510-6020		2-1/2-8	VA-3400	All

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

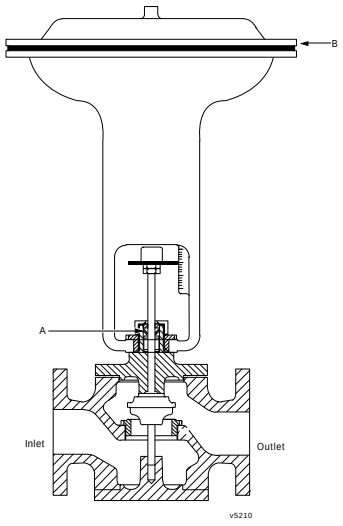
Repair Parts For Use With V-3800 Normally Open Valves 1/2 and 3/4 inch



Code Number	Callout	Description
V-3802-1	A	Oval Actuator Complete
V-9999-608	B	Packing Ring Pack
	C	Union Nut and Tailpiece Assembly for Valves with Union Connections
		Valve Size (in.)
V-3752-636		1/2
V-3752-637		3/4

Note: This model discontinued in 1978.

Repair Parts For Use With V-5210 High Pressure Normally Open Valve 2-1/2 Through 4 in. Cast Iron 250 lb ANSI Raised Flanges

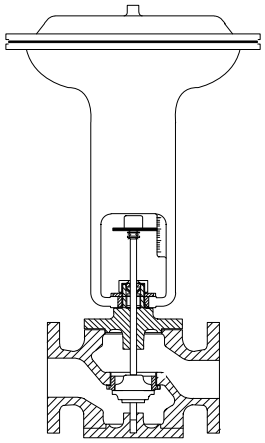


Code Number	Callout	Description	
	A	Packing Kits: Include	
V-5290-6842*		PTFE V-Rings for 2-1/2 through 4 in. Valves	
		Packing Kit	Steam Valves
V-4530-650**		V-3000 & 4R	
V-4530-626**		5R & 8R	
		Packing Kit	Water Valves
V-4322-620**		V-3000 & 4R	
V-5460-603**		5R & 8R	
	B	Diaphragms	
V-4710-602		4R	
V-4710-603		5R	
V-4710-604		8R	

* For valves shipped after June 1982.

** For valves shipped before June 1982.

Repair Parts For Use With V-5410 High Pressure Normally Closed Valves 2-1/2 Through 4 in. Cast Iron 250 Lb ASA Raised Flanges



Code Number	Callout	Description	
	A	Packing Kits: Include	
V-5290-6842*		PTFE V-Rings for 2-1/2 through 4 in. Valves	
		Packing Kit:	Steam Valves
V-4530-650**		V-3000, 4R	
V-4530-626**		5R, 8R	
		Packing Kit	Water Valves
V-9999-608**		V-3000, 4R	
V-5460-603**		5R, 8 R	
	B	Diaphragms	
V-4710-602		4R	
V-4710-603		5R	
V-4710-604		8R	

Note: Discontinued in 1993.

* For valves shipped after June 1982.

** For valves shipped before June 1982.

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Valve Spring Kits Sorted by Valve Code Number

Valve Body	Valve Size (in.)	Spring Range	Actuator	Spring Kit
V-3011	1 and 1-1/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-3011	1 and 1-1/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-3011	1-1/2 - 2	3 - 6	V-3000-1 or V-3000-2	V-3754-6010
V-3011	1-1/2 - 2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3011	1/2 and 3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-3011	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-3020	1 and 1-1/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-3020	1 and 1-1/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-3020	1-1/2 - 2	3 - 6	V-3000-1 or V-3000-2	V-3754-6010
V-3020	1-1/2 - 2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3020	1/2 and 3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-3020	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-3100	1/2 and 3/4	3 - 6	V-3802 or V-4000	V-3800-6002
V-3100	1/2 and 3/4	9 - 13	V-3802 or V-4000	V-3800-6003
V-3212	1 and 1-1/4	4 8	V-3000-1 or V-3000-2	V-4322-6001
V-3212	1 and 1-1/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-3212	1-1/2 - 2	4 - 8	V-3000-1 or V-3000-2	V-3974-6008
V-3212	1-1/2 - 2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3212	1/2 and 3/4	4 - 8	V-3000-1 or V-3000-2	V-4332-6001
V-3212	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-3752	1 and 1-1/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-3752	1 and 1-1/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-3752	1-1/2 - 2	3 - 6	V-3000-1 or V-3000-2	V-3753-6010
V-3752	1-1/2 - 2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3752	1/2 and 3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-3752	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-3754	1 and 1-1/2	3 - 6	V-3000-1 or V-3000-2	V-3754-6011
V-3754	1 and 1-1/2	9 - 13	V-3000-1 or V-3000-2	V-3754-6008
V-3754	1/2 and 3/4	3 - 6	V-3000-1 or V-3000-2	V-3754-6010
V-3754	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3755	1 and 1-1/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-3755	1 and 1-1/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-3755	1-1/2 - 2	3 - 6	V-3000-1 or V-3000-2	V-3754-6010
V-3755	1-1/2 - 2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3755	1/2 and 3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-3755	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-3766	1/2	3 - 6	V-3000-1 or V-3000-2	V-3754-6010
V-3800	1/2 and 3/4	3 - 6	V-3802 or V-4000	V-3800-6002
V-3800	1/2 and 3/4	9 - 13	V-3802 or V-4000	V-3800-6003
V-3854	1/2	3 - 6	V-3802 or V-4000	V-3754-6012
V-3854	1/2	9 - 13	V-3802 or V-4000	V-3754-6013
V-3964	1/2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3966	1/2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009

Valve Spring Kits Sorted by Valve Code Number (Continued)

Valve Body	Valve Size (in.)	Spring Range	Actuator	Spring Kit
V-3970	1 and 1-1/4	4 - 8	V-3000-1 or V-3000-2	V-4322-6001
V-3970	1 and 1-1/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-3970	1-1/2 - 2	4 - 8	V-3000-1 or V-3000-2	V-3974-6008
V-3970	1-1/2 - 2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-3970	1/2 and 3/4	4 - 8	V-3000-1 or V-3000-2	V-4332-6001
V-3970	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-3974	1 and 1-1/2	4 - 8	V-3000-1 or V-3000-2	V-3974-6009
V-3974	1 and 1-1/2	9 - 13	V-3000-1 or V-3000-2	V-3754-6008
V-3974	1/2 and 3/4	4 - 8	V-3000-1 or V-3000-2	V-3974-6008
V-3974	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-4322	1 and 1-1/4	4 - 8	V-300-1 or V-3000-2	V-4322-6001
V-4322	1 and 1-1/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-4322	1-1/2 - 2	4 - 8	V-3000-1 or V-3000-2	V-3974-6008
V-4322	1-1/2 - 2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-4322	1/2 and 3/4	4 - 8	V-3000-1 or V-3000-2	V-4332-6001
V-4322	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-4324	1 and 1-1/2	4 - 8	V-3000-1 or V-3000-2	V-3974-6009
V-4324	1 and 1-1/2	9 - 13	V-3000-1 or V-3000-2	V-3754-6008
V-4324	1/2 and 3/4	4 - 8	V-3000-1 or V-3000-2	V-3974-6008
V-4324	1/2 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3754-6009
V-4332	1/2	4 - 8	V-3000-1 or V-3000-2	V-4332-6001
V-4332	1/2	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-4333	1/2	4 - 8	V-3000-1 or V-3000-2	V-4332-6001
V-4333	1/2	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-4334	1/2	4 - 8	V-3000-1 or V-3000-2	V-4332-6001
V-4334	1/2	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-4440	1/2	4 - 12	V-3000-1 or V-3000-2	V-4440-6002
V-4440	5/8	4 - 12	V-3000-1 or V-3000-2	V-4440-6001
V-4440	1/2 and 5/8	6 - 9	V-3000-1 or V-3000-2	V-4440-6001
V-4510	1 and 1-1/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-4510	1-1/2 - 2	3 - 6	V-3000-1 or V-3000-2	V-3754-6010
V-4510	1/2 and 3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-5216	1/2	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-5216	3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-5230	1	3 - 7	V-3000-1 or V-3000-2	V-5230-6002
V-5230	1/2 and 3/4	3 - 7	V-3000-1 or V-3000-2	V-5230-6001
V-5250	1 and 1-1/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-5250	1-1/2 - 2	3 - 6	V-3000-1 or V-3000-2	V-3754-6010
V-5250	1/2 and 3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-5416	1/2	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-5416	3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
V-5430	1/2 and 3/4	9 - 14	V-3000-1 or V-3000-2	V-5430-6001
V-6139	1/2	9 - 13	V-3000-1 or V-3000-2	V-3754-6009

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Valve Spring Kits Sorted by Valve Code Number (Continued)

Valve Body	Valve Size (in.)	Spring Range	Actuator	Spring Kit
V-6143	3/8 and 3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-7216	1/2	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
V-7216	3/4	3 - 6	V-3000-1 or V-3000-2	V-3752-6024
V-7416	1/2	9 - 13	V-3000-1 or V-3000-2	V-3752-6022
V-7416	3/4	9 - 13	V-3000-1 or V-3000-2	V-3752-6021
VG7000	1/2 or 3/4	3 - 6	V-3000-8001 or V-3000-8003	VG7000-1001
VG7000	1/2 or 3/4	3 - 6	V-3801-8001	VG7000-1010
VG7000	1/2 or 3/4	4 - 8	V-3000-8001 or V-3000-8003	VG7000-1002
VG7000	1/2 or 3/4	4 - 8	V-3801-8001	VG7000-1011
VG7000	1/2 or 3/4	9 - 13	V-3000-8001 or V-3000-8003	VG7000-1003
VG7000	1/2 or 3/4	9 - 13	V-3801-8001	VG7000-1012
VG7000	1/2 or 3/4	Spring Kit with Three Springs: 3 - 6, 4 - 8, 9 - 13 (Includes hardware to adapt one valve only)	V-3801-8001	VG7000-1015
VG7000	1/2 or 3/4	Not Applicable	V-400	VG7000-1013
VG7000	1 or 1-1/4	3 - 6	V-3000-8001 or V-3000-8003	VG7000-1004
VG7000	1 or 1-1/4	4 - 8	V-3000-8001 or V-3000-8003	VG7000-1005
VG7000	1 or 1-1/4	9 - 13	V-3000-8001 or V-3000-8003	VG7000-1006
VG7000	1-1/2 or 2	3 - 6	V-3000-8001 or V-3000-8003	VG7000-1007
VG7000	1-1/2 or 2	4 - 8	V-3000-8001 or V-3000-8003	VG7000-1008
VG7000	1-1/2 or 2	9 - 13	V-3000-8001 or V-3000-8003	VG7000-1009
VG7000	1, 1-1/4, 1-1/2 or 2	Not Applicable	V-400	VG7000-1014
VT Series	1/2	3 - 6	V-3802 or V-4000	V-9999-6001
VT Series	1/2	4 - 8	V-3802 or V-4000	V-9999-6002
VT Series	1/2	9 - 13	V-3802 or V-4000	V-9999-6003
VT Series (all)	1/2	3 - 6	V-3000-1 or V-3000-2	V-3752-6023
VT Series (all)	1/2	4 - 8	V-3000-1 or V-3000-2	V-4332-6001
VT Series (all)	1/2	9 - 13	V-3000-1 or V-3000-2	V-3752-6022

Inner Valve Recondition Kits: 1/2 in. to 5/8 in.

Valve Body	Valve Size (in.)	Spring Range No.	Inner Valve Kit
V-3011	1/2	3 - 6 or 9 - 13	No kits available, replace valve.
V-3020	1/2	3 - 6 or 9 - 13	No kits available, replace valve.
V-3100	1/2	3 - 6 or 9 - 13	No kits available, replace valve.
V-3212	1/2	4 - 8 or 9 - 13	V-3970-6003 or V-3970-6004
V-3752	1/2	3 - 6 or 9 - 13	No kits available, replace valve.
V-3755	1/2	3 - 6 or 9 - 13	No kits available, replace valve.
V-3766	1/2	3 - 6	No kits available, replace valve.
V-3800	1/2	3 - 6, 9 - 13	No kits available, replace valve.
V-3854	1/2	3 - 6, 9 - 13	No kits available, replace valve.
V-3964	1/2	9 - 13	No kits available, replace valve.
V-3966	1/2	9 - 13	No kits available, replace valve.
V-3970	1/2	4 - 8	V-3970-6003 or V-3970-6004

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Inner Valve Recondition Kits: 1/2 in. to 5/8 in. (Continued)

Valve Body	Valve Size (in.)	Spring Range No.	Inner Valve Kit
V-3974	1/2	4 - 8 or 9 - 13	V-3974-6003, V-3974-6004, V-3974-6005, V-3974-6006 or V-3974-6007
V-4322	1/2	4 - 8 or 9 - 13	V-4322-6004
V-4332	1/2	4 - 8 or 9 - 13	No kits available, replace valve.
V-4333	1/2	4 - 8 or 9 - 13	No kits available, replace valve.
V-4334	5/8	4 - 8 or 9 - 13	No kits available, replace valve.
V-4440	1/2	4 - 12 or 6 - 9	V-4440-6003 or V-4440-6004
V-4440	5/8	4 - 12 or 6 - 9	No kits available, replace valve.
V-4510	1/2	3 - 6	No kits available, replace valve.
V-5216	1/2	3 - 6	No kits available, replace valve.
V-5230	1/2	3 - 7	No kits available, replace valve.
V-5416	1/2	9 - 13	No kits available, replace valve.
V-5430	1/2	9 - 14	No kits available, replace valve.
V-6139	1/2	9 - 13	No kits available, replace valve.
V-7216	1/2	3 - 6	No kits available, replace valve.
V-7416	1/2	9 - 13	No kits available, replace valve.
VT Series	1/2	3 - 6, 4 - 8 or 9 - 13	No kits available, replace valve

Inner Valve Recondition Kits: 3/4 in. to 2 in.

Valve Body	Valve Size (in.)	Spring Range No.	Inner Valve Kit
V-3752	3/4 UA	3 - 6 or 9-13	V-3752-6016 or V-3752-6027
V-3752	1 UA	3 - 6 or 9-13	V-3752-6017 or V-3752-6028
V-3752	1-1/4 UA	3 - 6 or 9-13	V-3752-6018 or
V-3752	1- 1/4 UG	3 - 6 or 9-13	V-3752-6019 or
V-3752	1-1/2 UA	3 - 6 or 9-13	V-3752-6020 or V-3752-6030
V-3752	2	3 - 6 or 9-13	V-3752-6034 or V-3752-6031
V-3800	3/4 UA	3 - 6	V-3800-6001
V-3754-1008	3/4	9 - 13	V-3754-6001
V-3754-1022	3/4	3 - 6	V-3754-6001
V-3754-1026	3/4	3 - 6	V-3754-6001
V-3754-4001	3/4	3 - 6	V-3754-6001
VB-3754-4	3/4		V-3754-6001
VB-3754-4014	3/4		V-3754-6001
V-3754-1010	1	9 - 13	V-3754-6002
V-3754-1023	1	3 - 6	V-3754-6002
V-3754-1027	1	3 - 6	V-3754-6002
V-3754-4002	1	3 - 6	V-3754-6002
VB-3754-5	1		V-3754-6002
VB-3754-8	1-1/4		V-3754-6002
V-3974-1004	3/4	9 - 13	V-3974-6001
V-3974-1010	3/4	9 - 13	V-3974-6001
V-3974-2004	3/4	9 - 13	V-3974-6001
V-3974-4001	3/4	9 - 13	V-3974-6001
VB-3974-4	3/4	9 - 13	V-3974-6001
			V-3974-6001
VB-3974-1005	1	9 - 13	V-3974-6002
V-3974-1011	1	9 - 13	V-3974-6002
V-3974-2005	1	9 - 13	V-3974-6002
V-3974-4002	1	9 - 13	V-3974-6002
V-4324-1005	3/4	4 - 8	V-4324-6001
V-4324-1006	3/4	9 - 13	V-4324-6001
V-4324-1013	3/4	9 - 13	V-4324-6001
V-4324-4001	3/4	4 - 8	V-4324-6001
V-4324-4003	3/4	9 - 13	V-4324-6001
V-4324-4014	3/4		V-4324-6001
VB-4324-4	3/4		V-4324-6001

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Inner Valve Recondition Kits: 3/4 in. to 2 in. (Continued)

Valve Body	Valve Size (in.)	Spring Range No.	Inner Valve Kit
V-4324-1007	1	4 - 8	V-4324-6002
V-4324-1008	1	9 - 13	V-4324-6002
V-4324-1014	1	9 - 13	V-4324-6002
V-4324-4002	1	4 - 8	V-4324-6002
V-4324-4004	1	9 - 13	V-4324-6002
VB-4324-5	1		V-4324-6002
VB-4324-8	1-1/4		V-4324-6002
V-3754-1028	1-1/2	3 - 6	V-5254-6001
V-3754-1029	1-1/2	9 - 13	V-5254-6001
V-3754-1030	1-1/2	3 - 6	V-5254-6001
VB-3754-6	1-1/2		V-5254-6001
V-5254-1	1-1/2	2 - 5	V-5254-6001
V-5254-11	1-1/2	2 - 5	V-5254-6001
V-5254-2	1-1/2	2 - 5	V-5254-6001
V-5254-3	1-1/2	9 - 13	V-5254-6001
VB-3754-7	2		V-5254-6002
V-5254-4	2	9 - 13	V-5254-6002
V-5254-5	2	2 - 5	V-5254-6002
V-5254-6	2	9 - 13	V-5254-6002
V-5254-12	2	2 - 5	V-5254-6002
V-3974-1012	1-1/2	9 - 13	V-5464-6001
V-3974-1013	1-1/2	9 - 13	V-5464-6001
VB-3974-6	1-1/2		V-5464-6001
V-5464-1	1-1/2	9 - 13	V-5464-6001
V-5464-11	1-1/2	9 - 13	V-5464-6001
V-5464-2	1-1/2	9 - 13	V-5464-6001
VB-3974-7	2		V-5464-6002
V-5464-3	2	9 - 13	V-5464-6002
V-5464-4	2	9 - 13	V-5464-6002
V-5464-12	2	9 - 13	V-5464-6002
V-4324-1015	1-1/2	4 - 8	V-5844-6001
V-4324-1016	1-1/2	9 - 13	V-5844-6001
V-4324-1017	1-1/2	9 - 13	V-5844-6001
VB-4324-6	1-1/2		V-5844-6001
V-5844-1	1-1/2	4 - 8	V-5844-6001
V-5844-2	1-1/2	9 - 13	V-5844-6001
V-5844-2	1-1/2	9 - 13	V-5844-6001
V-5844-11	1-1/2	9 - 13	V-5844-6001
VB-4324-7	2		V-5844-6002
V-5844-4	2	4 - 8	V-5844-6002
V-5844-5	2	9 - 13	V-5844-6002
V-5844-6	2	9 - 13	V-5844-6002
V-5844-12	2	9 - 13	V-5844-6002

Inner Valve Recondition Kits: 2-1/2 in. to 6 in.

Valve Body	Valve Size (in.)	Spring Range No.	Inner Valve Kit
VB-3752-19	2-1/2	2 - 5	V-5252-6001
V-5252-7	2-1/2	2 - 5	V-5252-6001
V-5252-8	2-1/2	2 - 5	V-5252-6001
V-5252-33	2-1/2		V-5252-6001
V-5252-32	2-1/2	2 - 5	V-5252-6002
V-5252-4	2-1/2	2 - 5	V-5252-6002
V-5252-5	2-1/2	2 - 5	V-5252-6002
V-5252-6	2-1/2	9 - 13	V-5252-6002
VB-3752-22	3		V-5252-6003
V-5252-12	3	2 - 5	V-5252-6003
V-5252-13	3	2 - 5	V-5252-6003
V-5252-35	3	2 - 5	V-5252-6003
V-5252-10	3	2 - 5	V-5252-6004
V-5252-11	3	9 - 13	V-5252-6004
V-5252-34	3	2 - 5	V-5252-6004
V-5252-9	3	2 - 5	V-5252-6004

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Inner Valve Recondition Kits: 2-1/2 in. to 6 in. (Continued)

Valve Body	Valve Size (in.)	Spring Range No.	Inner Valve Kit
VB-3752-25	4		V-5252-6005
V-5252-14	4	2 - 5	V-5252-6005
V-5252-36	4	2 - 5	V-5252-6005
V-5252-15	4	2 - 5	V-5252-6006
V-5252-16	4	2 - 5	V-5252-6006
V-5252-37	4	2 - 5	V-5252-6006
VB-3752-28	5		V-5252-6007
V-5252-17	5	2 - 5	V-5252-6007
V-5252-18	5	2 - 5	V-5252-6007
V-5252-38	5	2 - 5	V-5252-6007
VB-3752-31	6		V-5252-6008
V-5252-19	6	2 - 5	V-5252-6008
V-5252-39	6	2 - 5	V-5252-6008
VB-3970-11	2-1/2		V-5462-6001
V-5462-6	2-1/2	9 - 13	V-5462-6001
V-5462-7	2-1/2	9 - 13	V-5462-6001
V-5462-34	2-1/2	9 - 13	V-5462-6001
VB-3970-14	3		V-5462-6002
V-5462-8	3	9 - 13	V-5462-6002
V-5462-9	3	9 - 13	V-5462-6002
V-5462-35	3	9 - 13	V-5462-6002
V-5462-10	3	9 - 13	V-5462-6003
V-5462-36	3	9 - 13	V-5462-6003
VB-3970-17	4		V-5462-6004
V-5462-11	4	9 - 13	V-5462-6004
V-5462 -12	4	9 - 13	V-5462-6004
V-5462-37	4	9 - 13	V-5462-6004
V-5462-13	4	9 - 13	V-5462-6005
V-5462-14	4	9 - 13	V-5462-6005
V-5462-38	5	9 - 13	V-5462-6005
VB-3970-20	5		V-5462-6006
V-5462-15	5	9 - 13	V-5462-6006
V-5462-39	5	9 - 13	V-5462-6006
VB-3970-23	6		V-5462-6007
V-5462-17	6	9 - 13	V-5462-6007
V-5462-18	6	9 - 13	V-5462-6007
V-5462-40	6	9 - 13	V-5462-6007
VB-4322-9	2-1/2		V-5842-6001
V-5842-31	2-1/2	9 - 13	V-5842-6001
V-5842-8	2-1/2	9 - 13	V-5842-6001
VB-4322-11	3		V-5842-6002
V-5842-10	3	9 - 13	V-5842-6002
V-5842-32	3	9 - 13	V-5842-6002
V-5842-17	3	9 - 13	V-5842-6003
V-5842-18	3	9 - 13	V-5842-6003
V-5842-33	3	9 - 13	V-5842-6003
VB-4322-13	4		V-5842-6004
V-5842-11	4	9 - 13	V-5842-6005
V-5841-12	4	9 - 13	V-5842-6005
V-5842-34	4	9 - 13	V-5842-6005
VB-4322-19	5		V-5842-6006
V-5842-13	5	9 - 13	V-5842-6006
V-5421-14	5	9 - 13	V-5842-6006
V-5842-16	5	9 - 13	V-5842-6006
V-5842-35	5	9 - 13	V-5842-6006
VB-4322-18	6	9 - 13	V-5842-6007
V-5842-15	6	9 - 13	V-5842-6007
V-5842-36	6	9 - 13	V-5842-6007

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