

# REPAIR TOOLS



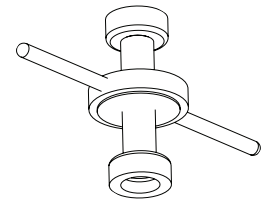
**KIMRAY**  
INC.®

# HIGH PRESSURE CONTROL VALVES

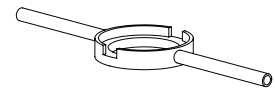


## STEM-GUIDED, NON-BALANCED

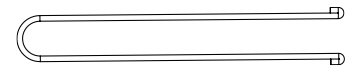
Valve Connection Size	Seat and Cage Removal Tool	Seat Removal Tool	Diaphragm Nut Wrench
1"	3032	615	476DNW
2"	3033	614	4356DNW



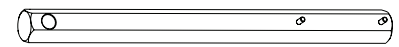
Seat and Cage Removal Tool



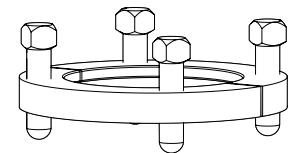
Diaphragm Nut Wrench



Seat Removal Tool



Seat Installation Tool 2" & 3"



Upper Cage Puller Tool

## CAGE-GUIDED, BALANCED

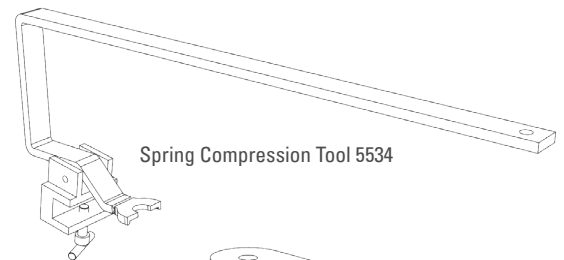
Valve Connection Size	Seat Installation Tool	Upper Cage Puller	Diaphragm Nut Wrench
2"	6670	5296	4356DNW
3"	6826	5297	4965DNW
4"	5561	5298	4965DNW
6"	5561	6402	5344DNW
8"	5561	6651	5344DNW
10"	5561	6651	5344DNW

# THREE-WAY VALVES



## LOW PRESSURE NON-BALANCED

		1" Valve Connection	2" Valve Connection	3" Valve Connection
<b>Diaphragm Balanced 3-way</b>	Diaphragm Nut Removal Tool	N/A	1471SNW	N/A
	Spring Compression Tool	N/A	5534	N/A



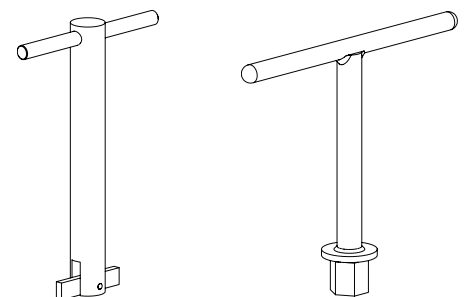
Spring Compression Tool 5534

<b>Piston Balanced 3-way</b>	Diaphragm Nut Removal Tool	N/A	1471SNW	1859SNW
	Spring Compression Tool	N/A	5534	5535
	Upper Seat Wrench	N/A	2276SW	N/A



Diaphragm Nut Removal Tool 1471SNW

<b>High Pressure 3-way</b>	Lower Seat Wrench	2130SW	N/A	N/A
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Upper Seat Wrench 2276SW Lower Seat Wrench 2130SW

<b>Splitter Valve</b>	No Special Tools Needed			
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# LOW PRESSURE CONTROL VALVES



## LOW PRESSURE, NON-BALANCED

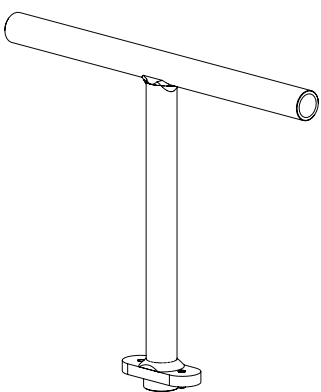
		1/2" Trim	1" Trim
1" Valve Connection	Seat Removal Tool	1349SW	Not Needed
	Stem Guide	6431	1851

		1" Trim, Ductile Body	1" Trim, Steel Body	2" Trim
2" Valve Connection	Seat Removal Tool	706HTSW	706SW	6945SW
	Stem Guide	1852		1852

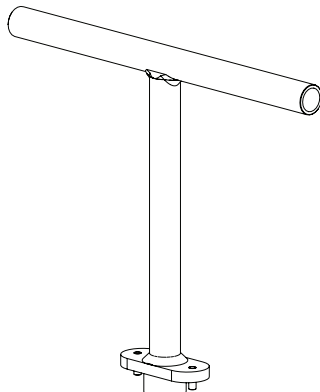
		1-5/8" Trim, Ductile Body	1-5/8" Trim, Steel Body	3" Trim
3" Valve Connection	Seat Removal Tool	1219HTSW	1219SW	6946SW
	Stem Guide	1853		1853

		2" Trim, Ductile Body	2" Trim, Steel Body	4" Trim
4" Valve Connection	Seat Removal Tool	1220HTSW	1220SW	6947SW
	Stem Guide	1854		1854

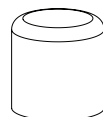
		3" Trim, Ductile Body	3" Trim, Steel Body	6" Trim
6" Valve Connection	Seat Removal Tool	1221HTSW	1221SW	6948SW
	Stem Guide	1855		1855



Seat Removal Tool 706HTSW



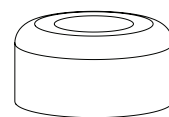
Seat Removal Tool 1219HTSW



Stem Guide 1852



Stem Guide 1853



Stem Guide 1854

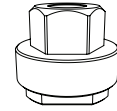


Stem Guide 1855

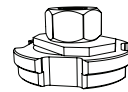
# LEVER OPERATED LIQUID DUMP VALVES



	Diaphragm Balanced	Piston Balanced	Piston Balanced Throttling
Valve Connection Size	No Special Tool Required	No Special Tool Required	Seat Removal Tool
2"	N/A	N/A	6945SW
2" with 1" Reduced Trim	N/A	N/A	7701SW for CXA5 6945SW for CAZ5
3"	N/A	N/A	6946SW
4"	N/A	N/A	
6"	N/A		



Seat Removal Tool 6945SW



Seat Removal Tool 6946SW

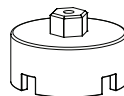
# WEIGHT OPERATED DUMP VALVES



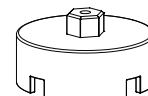
	2" Valve Connectionw	3" Valve Connection	4" Valve Connection	6" Valve Connection
Seat Wrench	384SW	385SW	386SW	1771SW



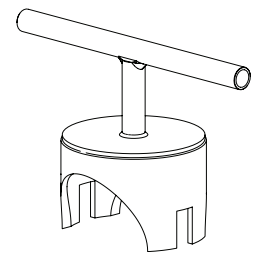
Seat Wrench 384SW



Seat Wrench 385SW



Seat Wrench 386SW



Seat Wrench 1771SW

# PNEUMATICALLY OPERATED LIQUID DUMP VALVES

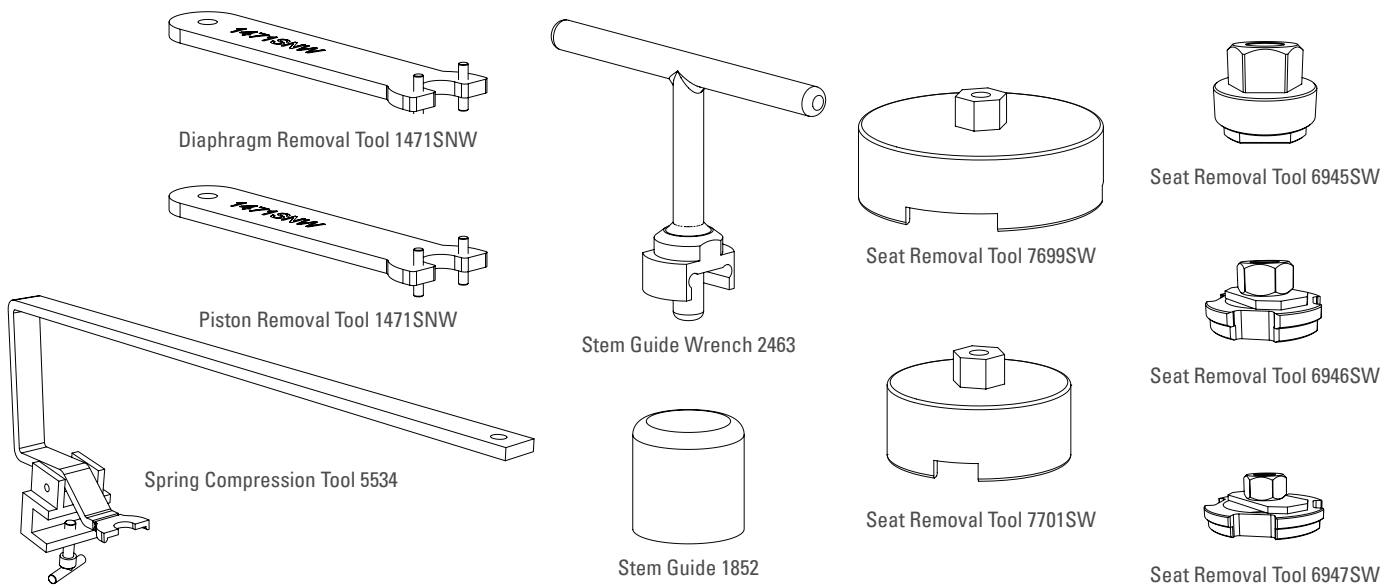


		2" Valve Connection	3" Valve Connection	4" Valve Connection	6" Valve Connection
<b>Diaphragm Balanced</b>	Diaphragm Nut Removal Tool	1471SNW	1472SNW	Not Needed	706HTSW
	Spring Compression Tool	5534	5535	5535	6447
	Stem Guide Wrench	2463SW	2464SW	2464SW	N/A
	Stem Guide (O-Ring Protector)	1852	1853	1854	1855

<b>Piston Balanced</b>	Piston Removal Tool	1471SNW	1859SNW	1859SNW	
	Spring Compression Tool	5534	5535	5535	
	Stem Guide Wrench	2463	2464	2464	
	Stem Guide (O-Ring Protector)	1852	1853	1854	

<b>Piston Balanced Throttling</b>	Seat Removal Tool	6945SW	6946SW	6947SW	
	Spring Compression Tool	5534	5535	5535	
	Stem Guide Wrench	N/A	N/A	N/A	
	Stem Guide (O-Ring Protector)	1852	1853	1854	

<b>LPHV</b>	Seat Removal Tool	7701SW	7699SW		
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# REGULATORS



## PNEUMATIC

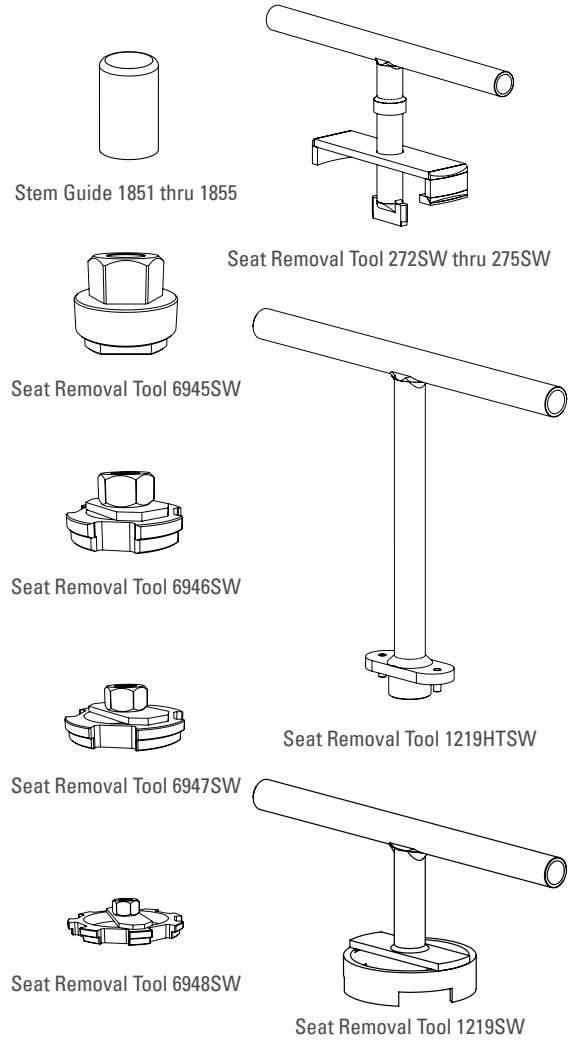
		1/2" Trim	1" Trim
1" Valve Connection	Seat Removal Tool	1349SW	
	Stem Guide	1851	

		1" Trim	2" Trim
2" Valve Connection	Seat Removal Tool	Not Needed	6945SW or 272SW
	Stem Guide	1852	

		1-5/8" Trim	3" Trim
3" Valve Connection	Seat Removal Tool	Ductile - 1219SW Steel - 1219HTSW	6946SW or 273SW
	Stem Guide	1853	

		2" Trim	4" Trim
4" Valve Connection	Seat Removal Tool	Ductile - 1220SW Steel - 1220HTSW	6947SW or 274SW
	Stem Guide	1854	

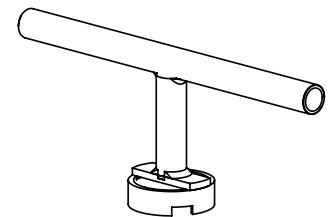
		3" Trim	6" Trim
6" Valve Connection	Seat Removal Tool	Ductile - 1221SW Steel - 1221HTSW	6948SW or 275SW
	Stem Guide	1855	



## SPRING-LOADED BACK PRESSURE

		1" Trim, Ductile Body	1" Trim, Steel Body	2" Trim
2" Valve Connection	Seat Removal Tool	706SW	4060SW	6945SW
	Stem Guide	1852		

		1-5/8" Trim, Ductile Body	1-5/8" Trim, Steel Body	3" Trim
3" Valve Connection	Seat Removal Tool	1219HTSW	N/A	6946SW
	Stem Guide	1853		



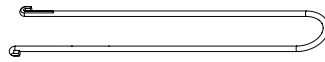
Seat Removal Tool 706SW

# GLYCOL PUMPS



## ENERGY EXCHANGE

	Suction Seat Removal Tool	Seal Retainer Tool	Suction Seat Insertion Tool
<b>1720 PV</b>	615	4456	1542
<b>2020 SC</b>	615	4456	1542
<b>4020 PV</b>	615	4456	1542
<b>5020 SC</b>	614	4457	1543
<b>9020 PV</b>	614	4457	1543
<b>10020 SC</b>	614	4458	1544
<b>21020 PV</b>	614	4458	1544
<b>20020 SC</b>	614	4459	1545
<b>45020 PV</b>	614	4459	1545



Suction Seat Removal Tool 615



Seal Retainer Tool 4456



Suction Seat Insertion Tool 1542



# WHO WE ARE

Kimray designs and manufactures oil and gas control products. Based on more than 65 years of pioneering product development, we provide products and services that are reliable, smart and inventive. We generate meaningful solutions by staying curious and engaging in customers' needs. Our product ideas are fueled by a deep desire to make a difference that is both personal and unique to the customer.

We have made it our life's work to provide products and services that are positively impactful. Through the years, this pursuit has built strong relationships. Our customers have known that buying from Kimray is about much more than the product. The relationships between Kimray representatives and our customers extend from before the sale through the life of the product. Those relationships, along with quality Kimray products, are the result of a company striving for excellence for our customers, our company and our community.

Visit [Kimray.com](http://Kimray.com) to learn more about our company and the products we create.

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