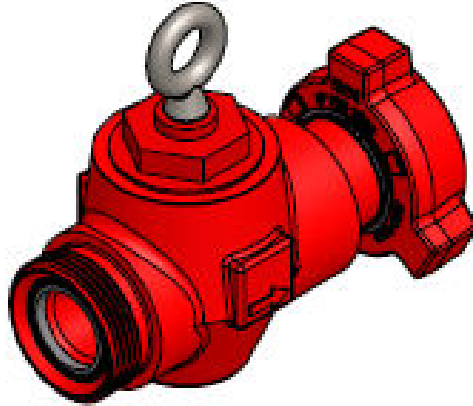


# Red Deer Ironworks



## 3" Top Entry Swing Check Valve Maintenance Manual

Parts covered: SC31502TESTD & SC31502TERSTD



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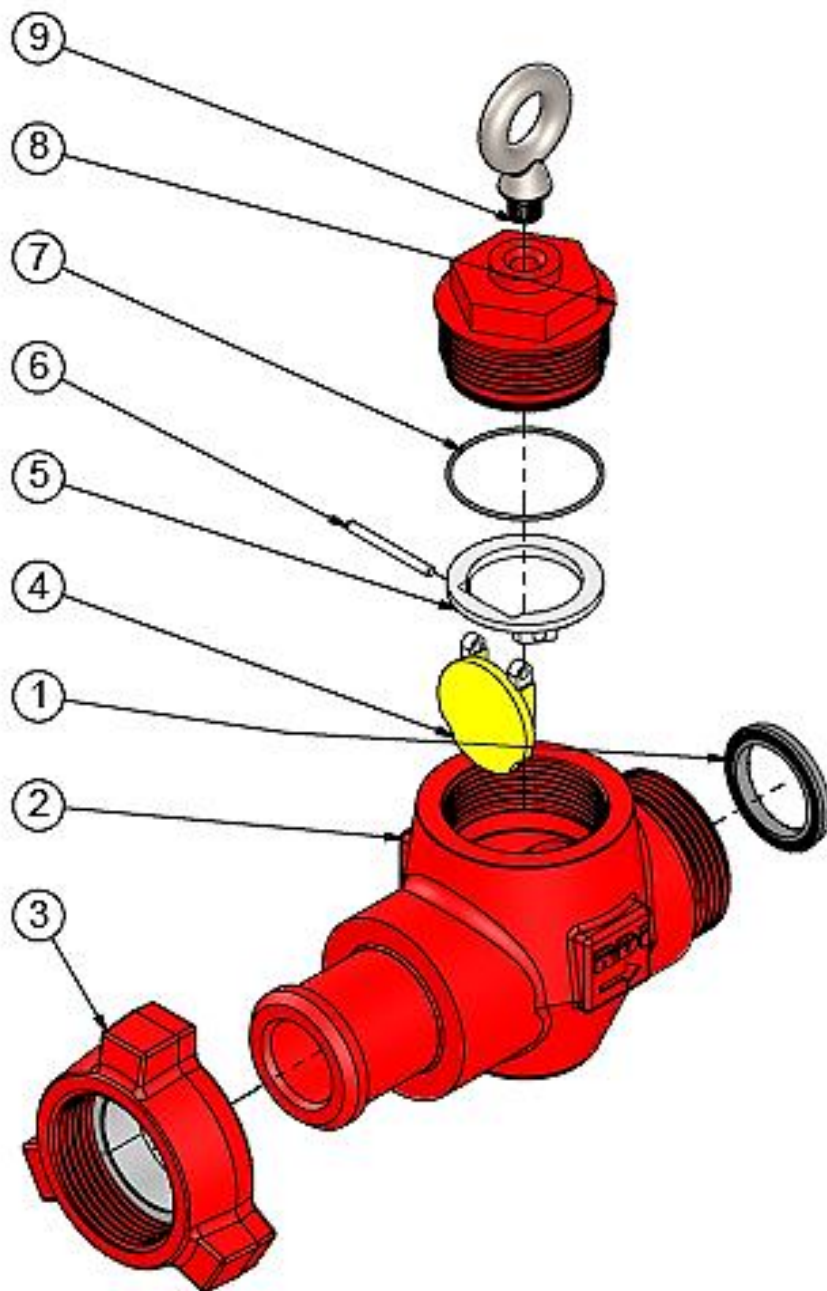
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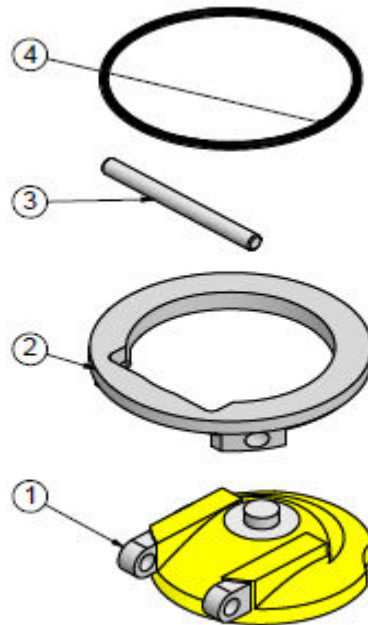
## Exploded View - 3" 1502 Top Entry Swing Check Valve Reverse Flow Standard Service



## Parts Listing - 3" 1502 Top Entry Swing Check Valve and Reverse Flow Standard Service

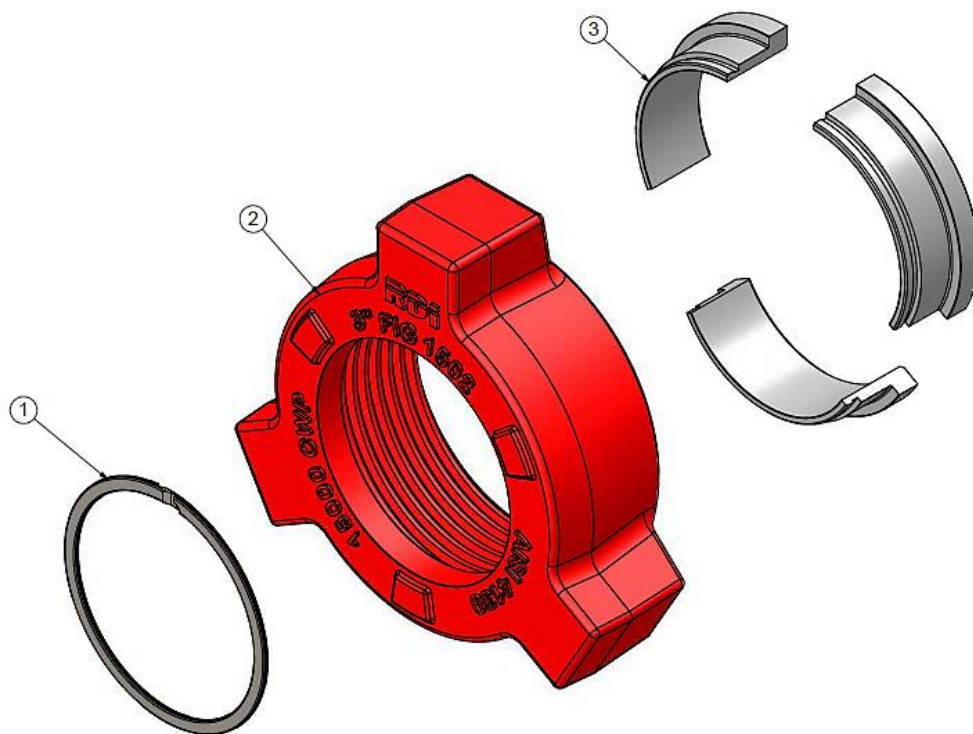
ITEM #	QTY	DESCRIPTION	Part # Standard Flow	PART # Reverse Flow
1	1	Union Seal - 3in	SEAL3STD	SEAL3STD
2	1	Swing Check Valve	SC31502TESTD	SC31502TERSTD
3	1	Wingnut Kit - 3in FIG 1502	WNKIT31502STD	WNKIT31502STD
4	1	Coated Clapper	SCTE3CLAPFIN	SCTE3CLAPFIN
5	1	3in Clapper Hanger	SCTE3HANGER	SCTE3HANGER
6	1	Cold Finish Round Bar - 5/16 X 3-1/2	SCTE3PIN	SCTE3PIN
7	1	O-Ring 246	OR-V75-246	OR-V75-246
8	1	3in Cap	SCTE3CAPSTD	SCTE3CAPSTD
9	1	Eyebolt - 1-8 UNC -2B X 1.00	SH-029	SH-029

## Repair Kit Parts Listing - 3" 1502 Top Entry Swing Check Valve Standard Service



ITEM #	QTY	DESCRIPTION	PART # SCRK315MAJ
1	1	Coated Clapper	SCTE3CLAPFIN
2	1	3in Clapper Hanger	SCTE3HANGER
3	1	Cold Finish Round Bar – 5/16 x 3-1/2	SCTE3PIN
4	1	O-Ring 246	OR-V75-246

## Wingnut Kit Parts Listing - 3" 1502 Standard Service



ITEM #	QTY	DESCRIPTION	PART #
		<b>Wingnut Kit</b>	<b>WNKIT31502STD</b>
3.1	1	Spiral Retaining Ring	SNAPRINGWST450
3.2	1	Wingnut	WN315DETSTD
3.3	1	Segment Set (3)	SEG31502 REV.8 or Newer

## Assembly Procedure

It is important that the workstation is clean and free of any contaminants such as metal shavings, dirt, etc. Do not sand or de-burr any items while at the assembly workstation.

**Note:** RDI-6430 (assembly grease), RDI-2015 (performance grease) and Nikal (anti-seize compound) are used in this procedure. Use of grease other than that listed in this manual is not recommended as it may adversely affect the performance and functionality of the Plug Valve.

1. Clean and inspect all parts for any damage (i.e. dents, scratches, sharp edges and burrs), particularly on the sealing areas and threads prior to assembly.



2. Install the **Union Seal (#1)** into the groove in the female end of the **Swing Check Valve (SCV) Body (#2)**.



3. Install the **Spiral Snap-Ring (#3.1)** onto the male end of the **SCV Body**.

Refer to page 6 for **Wingnut Kit Parts Listing**



4. Slide the **Wingnut (#3.2)** onto the male end up to the **Spiral Snap Ring**. Place the **Segments Set (3) (#3.3)** around the male end and pull the **Wingnut** over the **Segments** to hold them in place.



5. Pry the **Spiral Snap-Ring** around into the groove of the **Segments** to secure the **Wingnut**.



Mount the **SCV Body** to a bench receiver.



6. **Grease Dowel Pin (#6)** and the pin holes of the **Coated Clapper (#4)** and **Clapper Hanger (#5)**.



7. Align the pin holes of the **Clapper** and **Clapper Hanger** then insert the **Dowel Pin** as shown.

Note: Flat surface of the **Clapper** facing up.



8. **Grease** the corresponding sealing surface of the **Clapper** inside the **SCV Body**.



9. Place the **Hanger-Clapper Assembly** into the **SCV Body** - flat sealing surface of the **Clapper** against the flat sealing surface inside the **SCV Body**.

Note: The placement of the **Hanger-Clapper Assembly** corresponds to the flow orientation of the **SCV Body**.



10. Ensure that the **Hanger-Clapper Assembly** sits evenly on the internal ledge of the **SCV Body**.



11. **Grease** O-Ring (#7) then install it onto the groove of the **Cap** (#8).



12. Apply **anti-seize compound** on the threads of the **Cap** and to the corresponding threads of the **SCV Body**.



13. Install the **Cap** to the **SCV Body**. Tighten **clockwise** until snug.



14. Apply **anti-seize compound** on the threads of the **Eyebolt (#9)**. Install and tighten the **Eyebolt** until snug.



## Tear-Down Procedure

Refer to the steps in the Assembly Procedure to tear-down the Plug Valve. Thoroughly degrease and clean all parts that are disassembled. Check for any damage, replace as necessary.

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