

Oteco Inc. Houston, Texas
2" Reset Relief Valve Maintenance
Issued: BH Date: 2/11/08

Manual: **OS-130256 Rev.A**
Revision Date: 2/11/08
Approved: WU Date: 2/11/08

OTECO INC.
2" RESET RELIEF VALVE SOUR GAS
2" FIG.1502 MALE INLET &
2" FIG.1502 FEMALE OUTLET
INSTALLATION & MAINTENANCE
MANUAL
PART NO. 130256

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1.0 PERIODIC MAINTENANCE

WEEKLY

1. Unseat valve by striking release button at rear of valve. Release pressure in system to 0 PSI and reset valve with reset lever.

6 MONTHS

1. Lubrication-Remove 1/8 plastic pipe plug located behind right load spring on bottom of bonnet. Pump grease through grease fitting until new grease comes out of 7/16 hole. Replace 1/8 plastic pipe plug.
2. Replace seals as required.

13 MONTHS

1. Lubrication-Clean bonnet assembly and repack with new grease.
2. Replace parts and seals as required

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2.0 SPARE PARTS LIST

SEALS FOR 6 MONTHS NORMAL OPERATION

QUANTITY	DESCRIPTION	PART NO.
1	Cushion Ring	142130
1	Outer Seal	142180
1	Sub Gasket	142150
	(3 above parts, Oteco repair kit <u>143223</u>)	
1	Seal Union Ring	302062

REPAIR PARTS FOR 12 MONTHS NORMAL OPERATION

QUANTITY	DESCRIPTION	PART NO.
2	Cushion Ring	142130
2	Outer Seal	142180
2	Sub Gasket	142150
	(3 above parts, Oteco repair kit <u>143223</u> , Qty.2)	
1	Seal Retainer	142170
1	Seal Union Ring	301921
1	Top Crank Pin	142200
2	Link Pins	142403
2	Bearing f/Upper Link and Piston	142423
2	Bearing f/Bonnet	142424
2	Bearing f/Crank	142422
1	Bearing f/Bonnet Cover	142425
5	Spiral Pin 1/8 X 5/8	142432
1	Spiral Pin 1/4 X 1-1/2	142435
1	Spiral Pin 5/16 X 1-3/8	142434
2	Seal Union Ring	302062

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2.0 SPARE PARTS LIST (continued)

REPAIR PARTS FOR MAJOR REBUILD

QUANTITY	DESCRIPTION	PART NO.
1	Cushion Ring	142130
1	Outer Seal	142180
1	Piston/Bearing Assy.	142110
1	Stem Bushing	142140
1	Sub Gasket	142150
1	Outer Retainer	142170
	(6 above parts, Oteco major repair kit <u>143218</u>)	
1	Top Crank Pin	142200
2	Link Pins	142403
2	Bearing f/Bonnet	142424
2	Bearing f/Crank	142422
1	Bearing f/Bonnet Cover	142425
5	Spiral Pin 1/8 X 5/8	142432
1	Spiral Pin 1/4 X 1-1/2	142435
1	Spiral Pin 5/16 X 1-3/8	142434
1	Seal Union Ring	302062

3.0 REPLACEMENT OF SEALS: Ref. Drawings 20820 and 20821

DISASSEMBLY

1. Remove pressure from relief valve.
2. Remove valve from piping system and grip in vice.
3. Remove (4) cap screws (item 7). Lift piston and bonnet assembly away from body (item 37).
4. Unscrew sub (item 46) from body (item 37). Remove seal retainer (item 43), gasket (item 44), outer seal (item 45) and union seal (item 47) from body.
5. Thoroughly clean body, sub and parts. CAUTION: If grit blast is used, protect threads and seal surfaces from erosion.
6. Inspect all parts for wear or damage. Replace with new parts as needed.

3.0 REPLACEMENT OF SEALS: (continued)

ASSEMBLY

1. Apply a light coat of grease to items 43, 44, 45 and 47.
2. Install seal retainer (item 43), seal (item 45) , sub gasket (item 44) and union seal (item 47) into body (item 37).
3. Install body sub (item 46) into body (item 37). Tighten body sub to 400 ft-lbs. torque.
4. Apply a light coat of grease to small diameter of piston (item 42) extending from bonnet assembly. Install cushion ring (item 41) onto piston (item 42).
5. Install bonnet assembly onto body assembly. Use screwdriver to start entry of cushion ring into body.
6. Install (4) socket head screws (item 7). Tighten to 50 ft.-lbs. Torque.
7. Pressure test valve for correct operation before installing into system. Precautions should be taken to protect personnel while testing.

4.0 REPAIR OF BONNET ASSEMBLY: Ref. Drawings 20820 and 20821

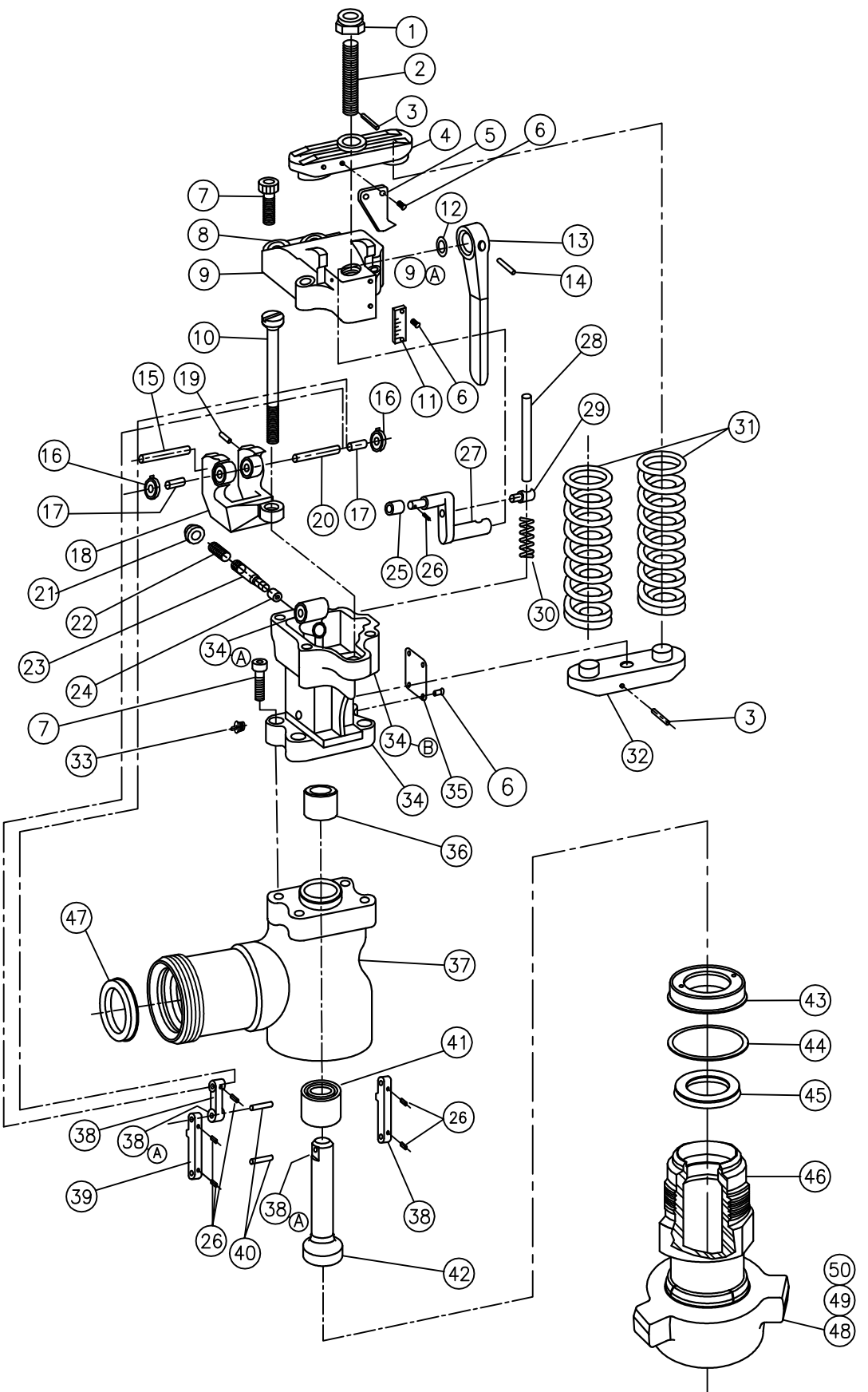
DISASSEMBLY

1. Remove pressure from relief valve.
2. Remove valve from piping system and grip in vise.
3. Remove adjusting nut (item 1) and upper spring retainer (item 4).
4. Remove load springs (item 31).
5. Remove (4) socket head cap screws (item 7) from bonnet (item 34).
6. Remove bonnet cover assembly (item 9).
7. Remove (4) socket head cap screws (item 7) from body (item 37) and lift bonnet assembly from body.
8. Remove old grease from bonnet assembly and bonnet cover assembly. Clean with solvent.
9. Inspect and replace worn parts as needed.

4.0 REPAIR OF BONNET ASSEMBLY (Continued)

ASSEMBLY:

1. Apply a light coat of grease to small diameter of piston (item 42) extending from bonnet assembly. Install cushion ring (item 41) onto piston (item 42).
2. Install bonnet assembly onto body assembly. Use screwdriver to start entry of cushion ring into body.
3. Install (4) socket head screw (item 7). Tighten to 50 Ft-lbs. torque.
4. Repack upper part of bonnet assembly (item 34) with Lubriplate Lo – Temp grease, or equivalent. Approximately 16 oz. is required.
5. Install bonnet cover assembly (item 9) onto bonnet assembly (item 34) using (4) socket head cap screws. Tighten to 50 ft-lbs. torque.
6. Install (2) load springs (item 31).
7. Install upper spring retainer (item 4).
8. Install adjusting nut (item 1). Tighten nut to obtain desired relief pressure as indicated by pressure relief scale.
9. Pressure test valve for correct operation before installing into system. Precautions should be taken to protect personnel while testing.



NOTE: SEE DRAWING 20766 FOR ITEM
PART NUMBERS.



OTECO INC.
HOUSTON, TEXAS

OTECO 2" RESET RELIEF VALVE
2" FIG 1502 MALE INLET &
2" FIG 1502 FEMALE OUTLET

DATE: 1/24/07

PART NO.
130256

SCALE: NONE

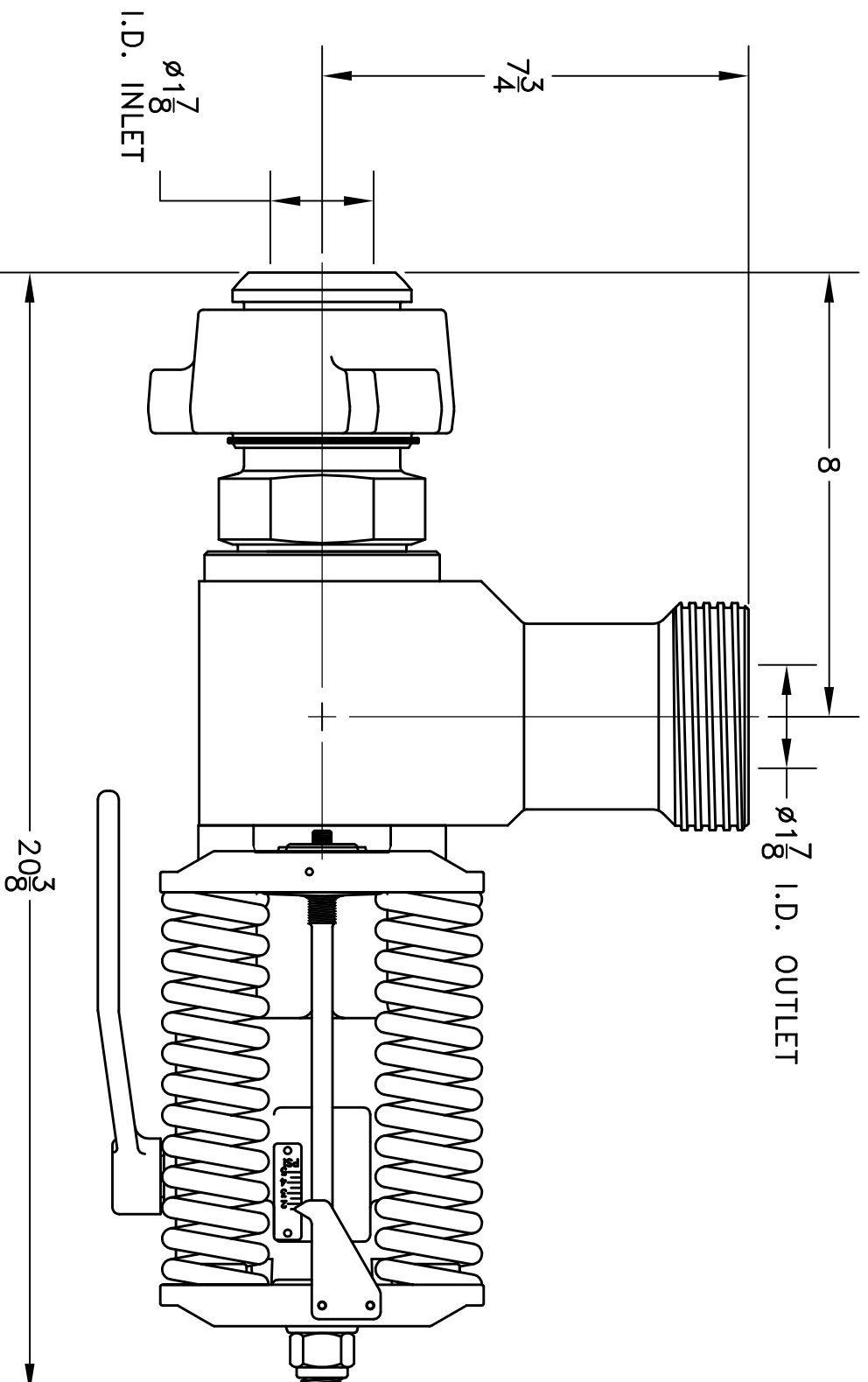
DRAWN: HK

DRAWING NO.
A 20765

CHK'D: HK

REV.
A

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OTECO INC.
HOUSTON, TEXAS

2"—5000 PSI RRV
2" FIG 1502 MALE INLET
2" FIG 1502 FEMALE OUTLET

DATE: 1/22/07	PART NO.	REV.
SCALE: NONE	1 30256	A
DRAWN: HK	DRAWING NO.	
CHK'D: HK	A-20763	

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