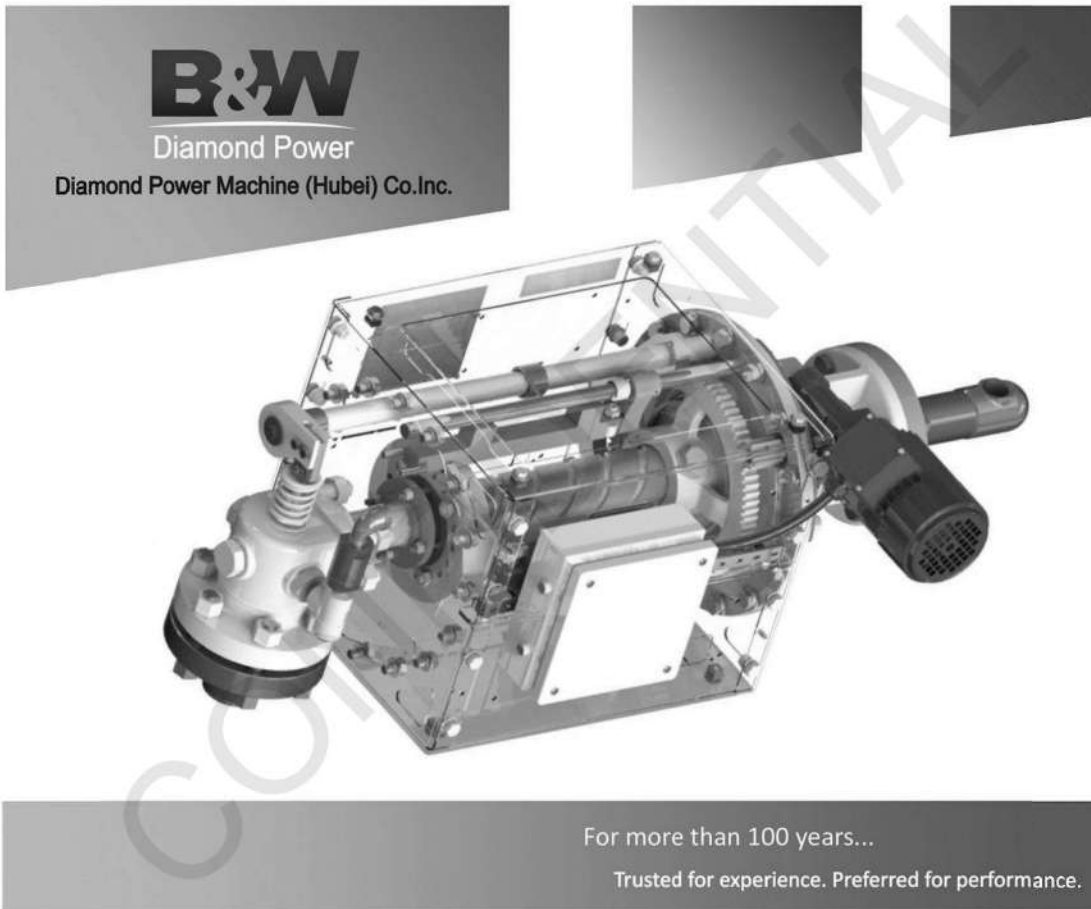


► IR-2H Furnace Wall Sootblower

Instruction Manual

Parts Identification Manual



For more than 100 years...
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证书号 Certificate No.:0010502130081G2M4209

IR-2H (DPMH-ENG)
Revision 2.0
August,2018

8 RECOMMENDED SPARES LIST

Diamond Power Sootblowers have a Guarantee as specified in the customer contract. Beyond this period and to cover any unforeseen problems due to system or component failures, it is advisable to maintain a small quantity of frequently used spares. This will reduce to a minimum, any downtime and will prove to be a cost effective way of maintaining the efficiency of the supplied units.

Table 8.1 Recommended spares List

PART NO.	DESCRIPTION
680801-13019	Dust seal
680801-06003	Drive Pin
Per order	Electric Motor
Per order	Gasket Companion Flange
Per order	Nozzle Extension Assembly IR2
680801-13009	Bearing, Oilite
680208-01049	Roll Pin
670400-03035	Bearing & Gland Assembly
680704-03000	Cam, 360° Blow
680801-05020a	Packing - graphoil
680801-13020	Neck Ring
680209-01040	Key
680208-01017	Spirol Pin
680801-03100	Torsion spring
680801-13021	Copper Washer
670300-00844a	Air relief valve
670400-03031	Guide Bar Assembly
670400-03032	Gearbox Assembly,
670400-03018	Valve Stem and Disc Arrg't
680705-00124	Flexible Valve Seat – Part of 680705-03004 valve body
680705-00127	Pressure Control Disc –Part of 680705-03004 valve body
680703-04004	Lock Pin Plug
680801-13021	Copper Washer
680801-06001	Valve Yoke
680701-00136	Valve Spring Retainer
680801-03005	Valve Spring
680801-01003	Packing Nut
680703-00134	Packing Washer
680801-13010	Valve Stem Packing
680703-07966	Valve Stem Guide
680206-12008	Valve Guide Washer
680208-01004	Spirol Pin
680801-03101	Torsion spring
670400-03036	Cam Follower
Per order	Limit Switch

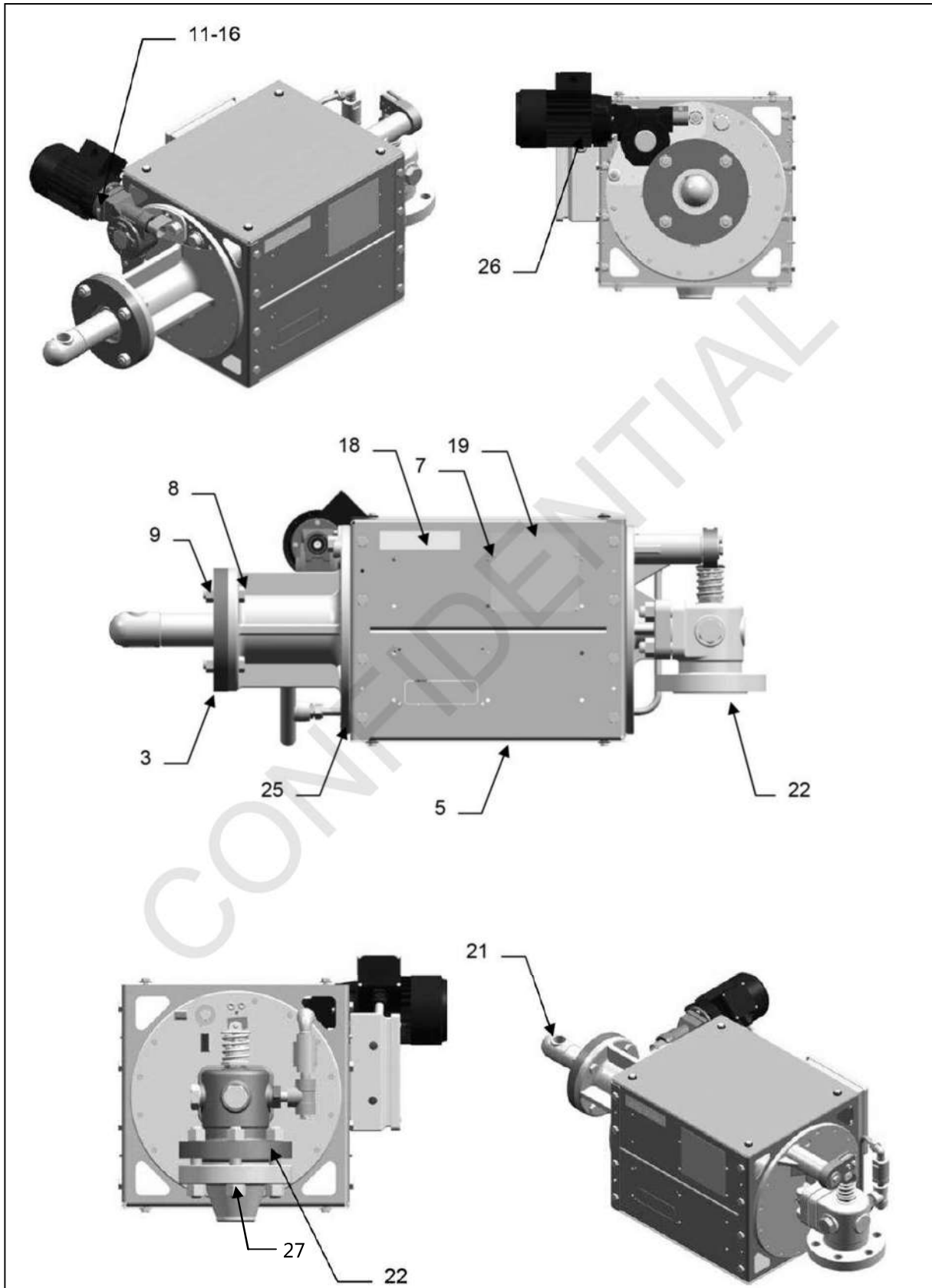
9 PARTS IDENTIFICATION MANUAL

IR-2H Engineered Parts list for 1806014/1806015 (N12035) Tanjung Jati Project				
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	718060-14901	Motor	1	
2	718060-14320	Nozzle Assembly	1	
3	670300-00851	Air Relief Valve, 20NB	1	
4	680704-00242A	Companion Flange	1	
5	670400-01045	Hardware, Companion Flange	1	

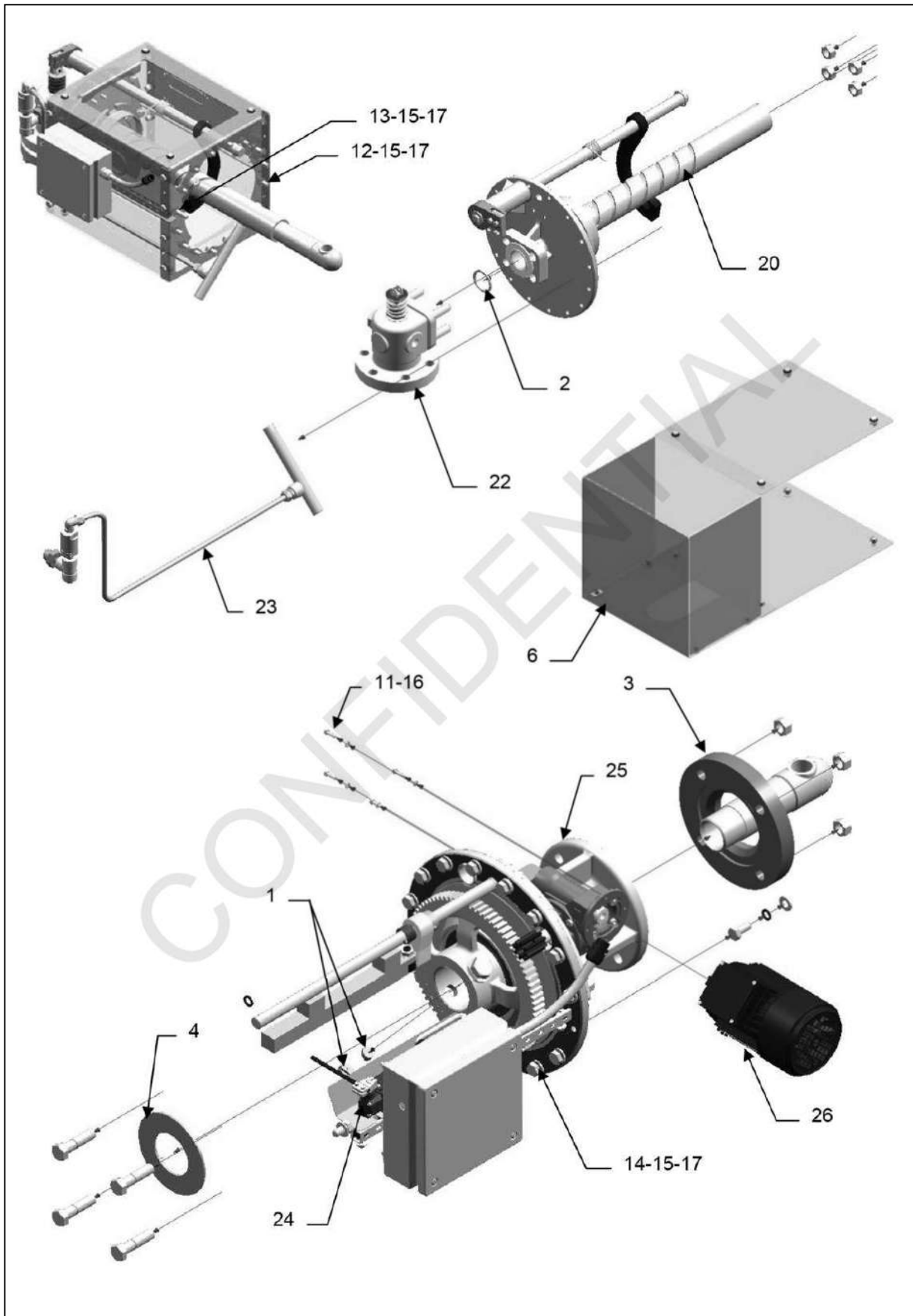
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9.1 IR-2H SOOTBLOWER MAIN ASSEMBLY



9.2 IR-2H SOOTBLOWER ASSEMBLY -EXPLODED VIEWS



IR-2H Parts Identification				
IR-2H Sootblower Main Assembly			399292-000A/B	
ITEM	PART NO	DESCRIPTION	QTY	REMARK
1	680801-06004	Drive Pin IR2	2	
2	680802-30102A	Gasket Flex IR2	1	
3	680701-03000	Flange, Wallbox, IR2	1	
4	680801-13019	Dust Seal IR2	1	
5	670400-03001	Box Body Assembly IR2	1	
6	670400-03002	Guard Assy IR2	1	
	670400-03003	Guard Assy IR2	1	Used on ARV installed on the poppet valve behind hole.
7	N/A	Pop Rivet,	4	
8	680201-07198	Hex. Hd. Bolt	4	
9	680202-11042	Hex. Nut	4	
10	N/A	Hex. Nut	4	
11	680201-07005	Hex. Hd. Screw	4	
12	680201-07105	Hex. Hd. Screw	21	
13	680201-07126	Hex. Hd. Screw	1	
14	680201-07111	Hex. Hd. Screw	10	
15	680206-05030	Washer, Form-A	35	
16	680206-02012	Lockwasher, Split Type	4	
17	680206-02036	Lockwasher, Form A	32	
18	681004-01119	Sticker - Hand Operation	1	
19	Per order	Nameplate	1	
20	670400-03004	Rear Cover Trigger Shaft & FT Assembly	1	
21	Per Order	Nozzle Extension Assembly IR2	1	Per order
22	670400-03013	Poppet Valve (600#)	1	
23	N/A	Air Purge Arrangement IR2 – Positive Pressure Only	1	
24	Per order	Limit Switch Assembly IR2	1	
25	670400-03027	Front Cover Bearing Gear & GB Assembly	1	
26	Per order	Electric Motor 63 Frame B14	1	
27	670400-01045	600# Companion Flange Hardware	1	

9.3 IR-2H REAR COVER, TIGGER SHAFT & FEED TUBE ASSEMBLY

IR-2H Rear Cover, Tigger Shaft & Feed Tube Assembly		670400-03004		
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	670500-03000	Feed tube assembly	1	
2	670400-03008	Trigger shaft assembly	1	
3	670400-03011	Rear cover bushing assembly	1	
4	670400-03012	Screw tube & packing assembly	1	

9.4 IR-2H REAR COVER BUSHING ASSEMBLY

IR-2H Rear Cover Bushing Assembly			670400-03011	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680705-03003A	Rear cover	1	
2	680208-01049	Roll pin	2	
3	680801-13009	Bearing, oilite	1	

9.5 IR-2H BEARING & GLAND ASSEMBLY

IR-2H Bearing & Gland Assembly			670400-03035A	
				
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680801-13025A	Gland	1	
2	680801-13026A	Bearing	1	

9.6 IR-2H SCREW TUBE & PACKING ASSEMBLY

IR-2H Screw Tube & Packing Assembly			670400-03011	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	670400-03035A	BEARING & GLAND ASSEMBLY	1	
2	680204-06001	STUD	4	
3	680202-11024	NUT	4	
4	N/A	DELETED	-	

ITEM	PART NO.	DESCRIPTION	QTY	REMARK
5	680201-07072	BOLT	4	
6	680206-02033	Lockwasher	4	
7	680202-11027	Hex nut	4	
8	680701-03007	Guide flange	1	
9	680704-03000	Cam, 360° blow	1	
10	N/A	Cam, 360° blow, service replace	1	
11	680801-05020	Packing - graphoil	1	
12	680801-13020A	Neck ring	1	
13	N/A	Deleted	1	
14	N/A	C'sink screw	1	
15-25	N/A	Deleted	*	
26	N/A	Screwtube & flange assembly – 6 holes	1	
27	680701-03007	Guide flange	1	
28-32	N/A	Deleted	1	

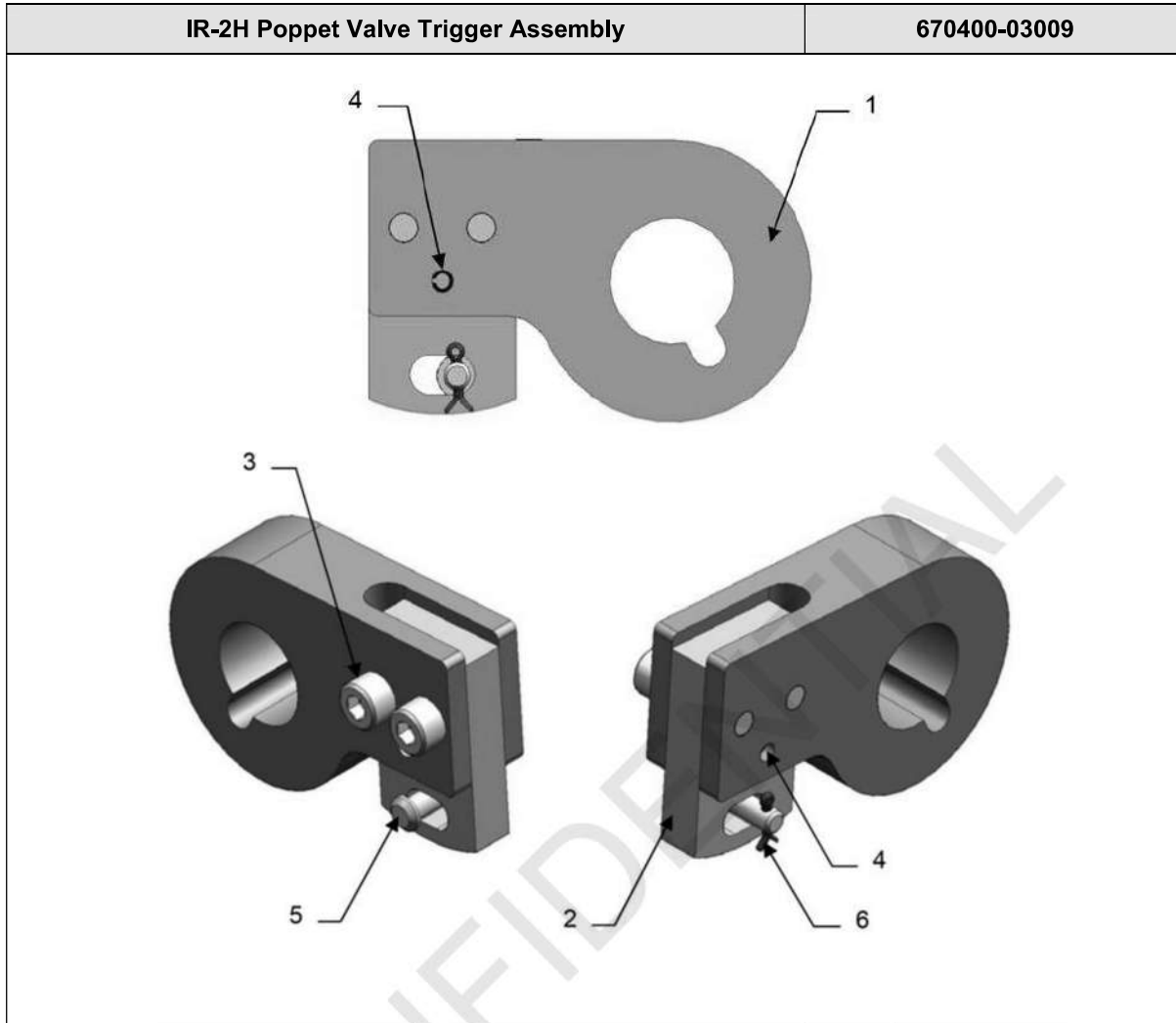
9.7 IR-2H TRIGGER SHAFT ASSEMBLY

IR-2H Trigger Shaft Assembly		670400-03008		
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680703-04000	Trigger shaft	1	
2	680209-01040	Key	2	
3	680801-13022	Trigger	1	
4	680703-04001	Washer	1	

ITEM	PART NO.	DESCRIPTION	QTY	REMARK
5	680801-13008A	Starlock fastener	1	
6	680208-01017	Spirol pin	1	
7	680801-03100A	Torsion pin	1	
8	670400-03009	Poppet valve trigger assembly	1	
9	680201-07063	Hex. Hd. Screw	1	
10	680203-09010	Hex. Soc. Hd. Cup point grub screw	1	

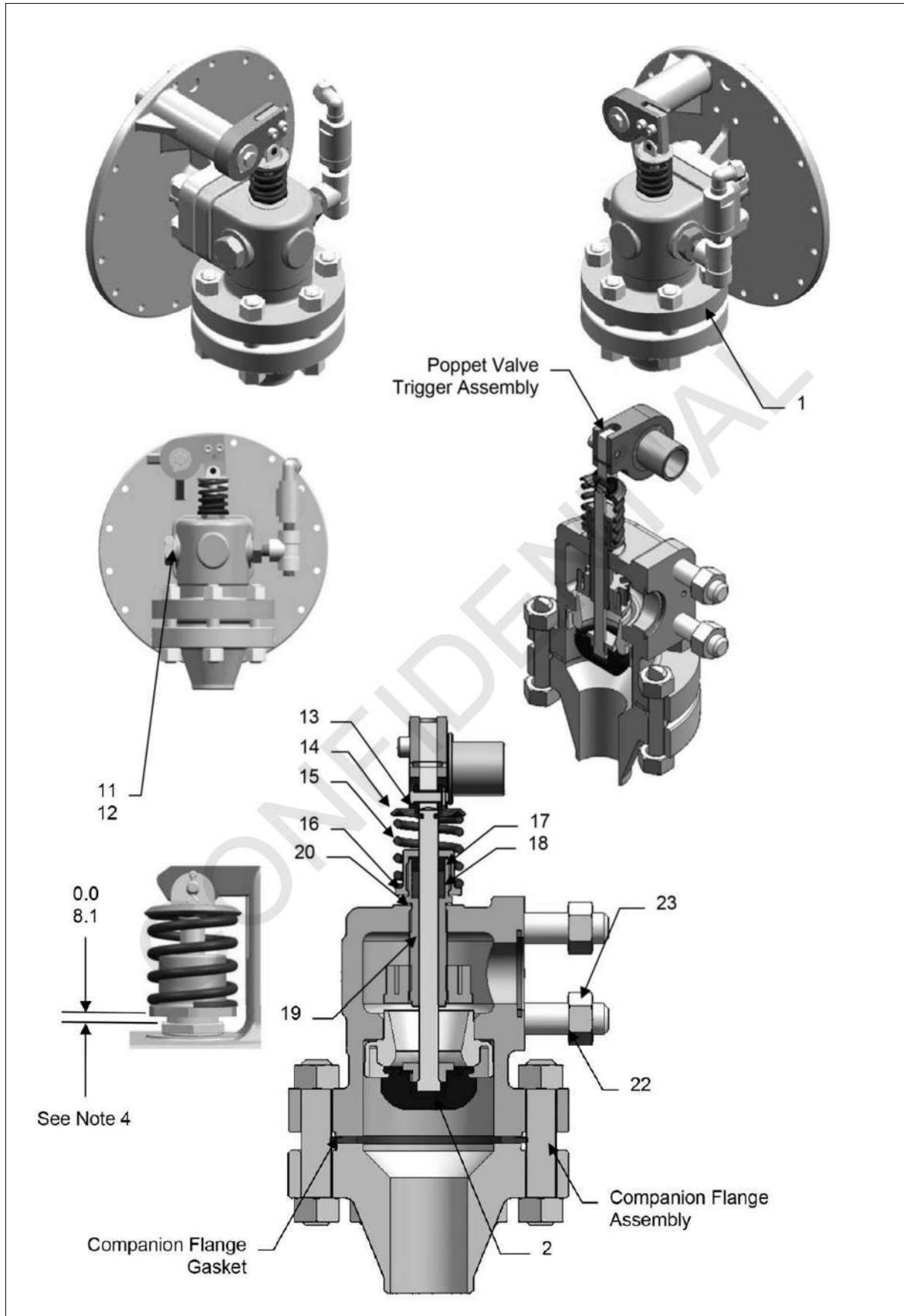
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9.8 IR-2H POPPET VALVE TRIGGER ASSEMBLY



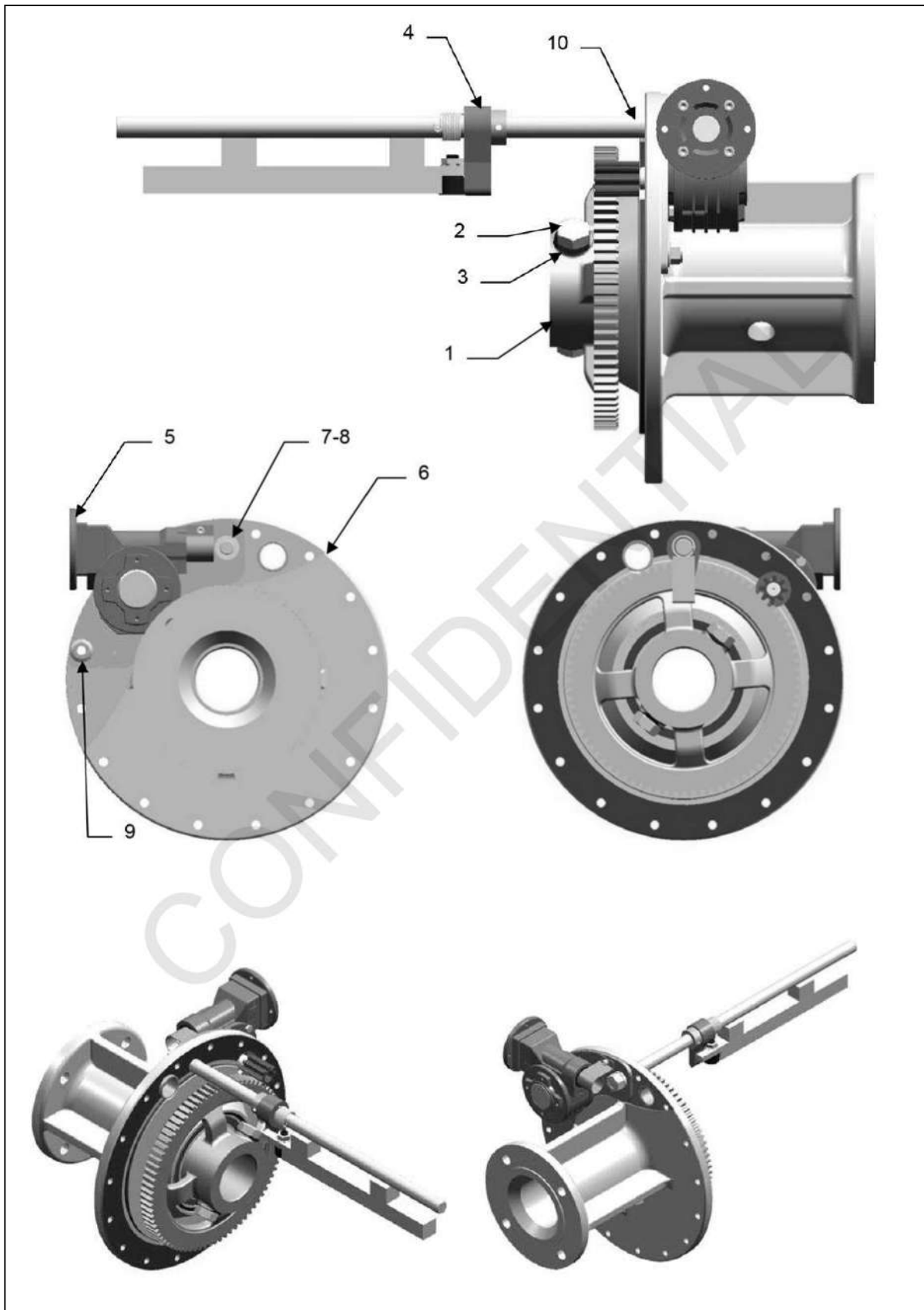
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680701-03009	Poppet valve trigger	1	
2	680701-03010	Thrust block	1	
3	680203-04051	Hex. Soc. Hd. Screw	2	
4	680208-01015	Roll pin	1	
5	680703-00141	Pin, poppet valve yoke	1	
6	680208-02001	Split cotter pin	1	

9.9 IR-2H POPPET VALVE ASSEMBLY



IR-2H Poppet Valve Assembly			670400-03013	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680705-03004	Valve body	1	
2	670200-00513	Valve stem & disc assy	1	
3-4	N/A	Deleted	-	
5	N/A	Trigger assy – (not ir2h)	1	
6	N/A	Valve yoke pin – (not ir2h)	1	
7	N/A	Cotter pin – (not ir2h)	1	
8	N/A	Trigger pin – (not ir2h)	1	
9	N/A	Cotter pin – (not ir2h)	1	
10	N/A	Deleted	-	
11	680703-04004	Lock pin plug	1	
12	680801-13021	Copper washer	2	
13	680801-06001	Valve yoke	1	
14	680701-00136	Valve spring retainer	1	
15	680801-03005	Valve spring	1	
16	680801-01003A	Packing nut	1	
17	680703-00134	Packing washer	1	
18	680801-13010	Valve stem packing	1	
19	680703-07966	Valve stem guide	1	
20	680206-12008	Valve stem washer	1	
21	681004-01122	Adjusting pressure tag (not shown)	1	
22	680202-17003	Nut, hex	4	No supplied with the poppet valve assembly.
23	680204-05004	Stud	4	
24	N/A	Adapter – (not ir2h)	1	
25	N/A	Locking washer – (not ir2h)	2	
26	680703-04008	Plug	1	

9.10 IR-2H FRONT COVER, BEARING, GEAR & GUIDE BAR ASSEMBLY & GEARBOX



IR-2H Front Cover, Bearing, Gear & Guide Bar Assembly & Gearbox			670400-03027	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	670400-03030	Gear + bearing assembly	1	
2	680703-04010	Screw-drive pin	2	
3	680703-04011	Washer drive pin	2	
4	670400-03031	Guide bar assembly	1	
5	670400-03032	Gearbox assembly	1	
6	670400-03034	Front cover bushing assembly	1	
7	680202-11042	Nut	1	
8	680206-02045	Lock washer	1	
9	680202-11033	Hex, prevailing torque flange nut	1	
10	680703-04015	Spacer, guide bar	1	

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9.11 IR-2H GUIDE BAR ASSEMBLY

IR-2H Guide bar Assembly		670400-03031		
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	670500-03007	Fabricated guide bar	1	
2	680703-04013	Collar	1	
3	680701-03005	Pawl	1	
4	680801-03101A	Torsion spring	1	
5	680208-01032	Roll pin	1	
6	680208-01004	Spirol pin	1	
7	670400-03036	Cam follower	1	
8	680206-01032	Washer	1	
9	680202-11033	Hex. Jam nut	1	

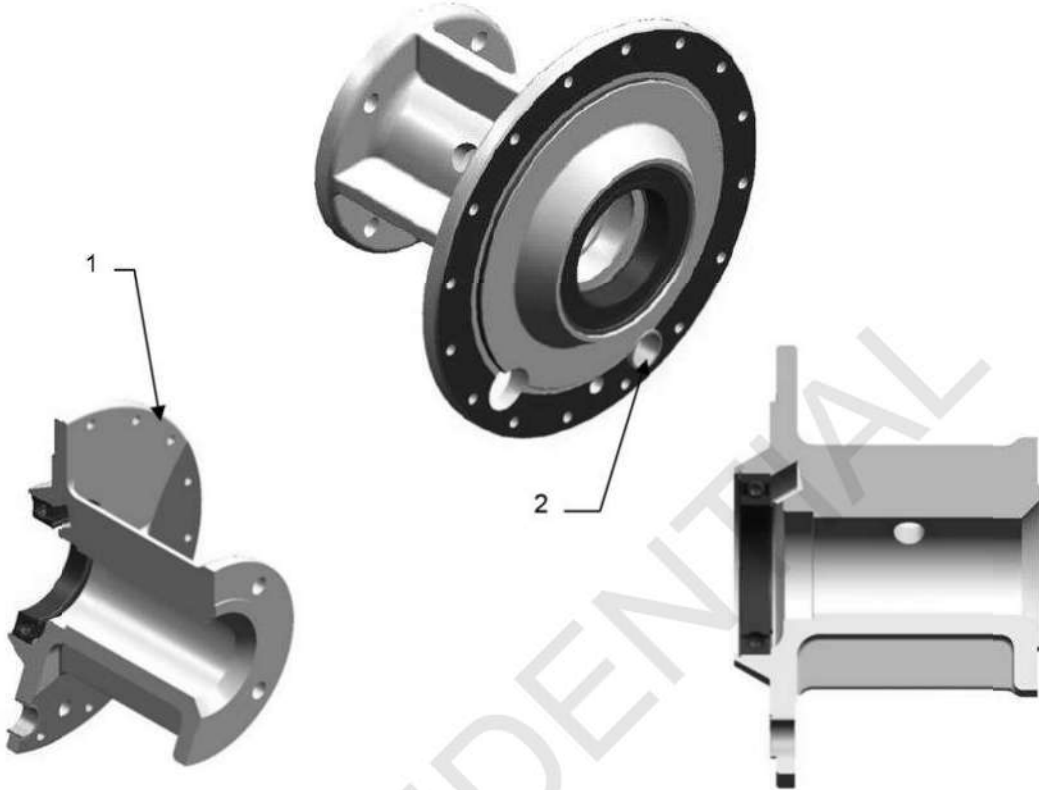
9.12 IR-2H GEAR & BEARING ASSEMBLY

IR-2H Gear & Bearing Assembly			670400-03030	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680705-03014A	Gear	1	
2	680211-01111	Bearing	1	
3	680207-01045	Retaining Ring	1	
4	680207-02042	Retaining Ring - Spirolox	1	

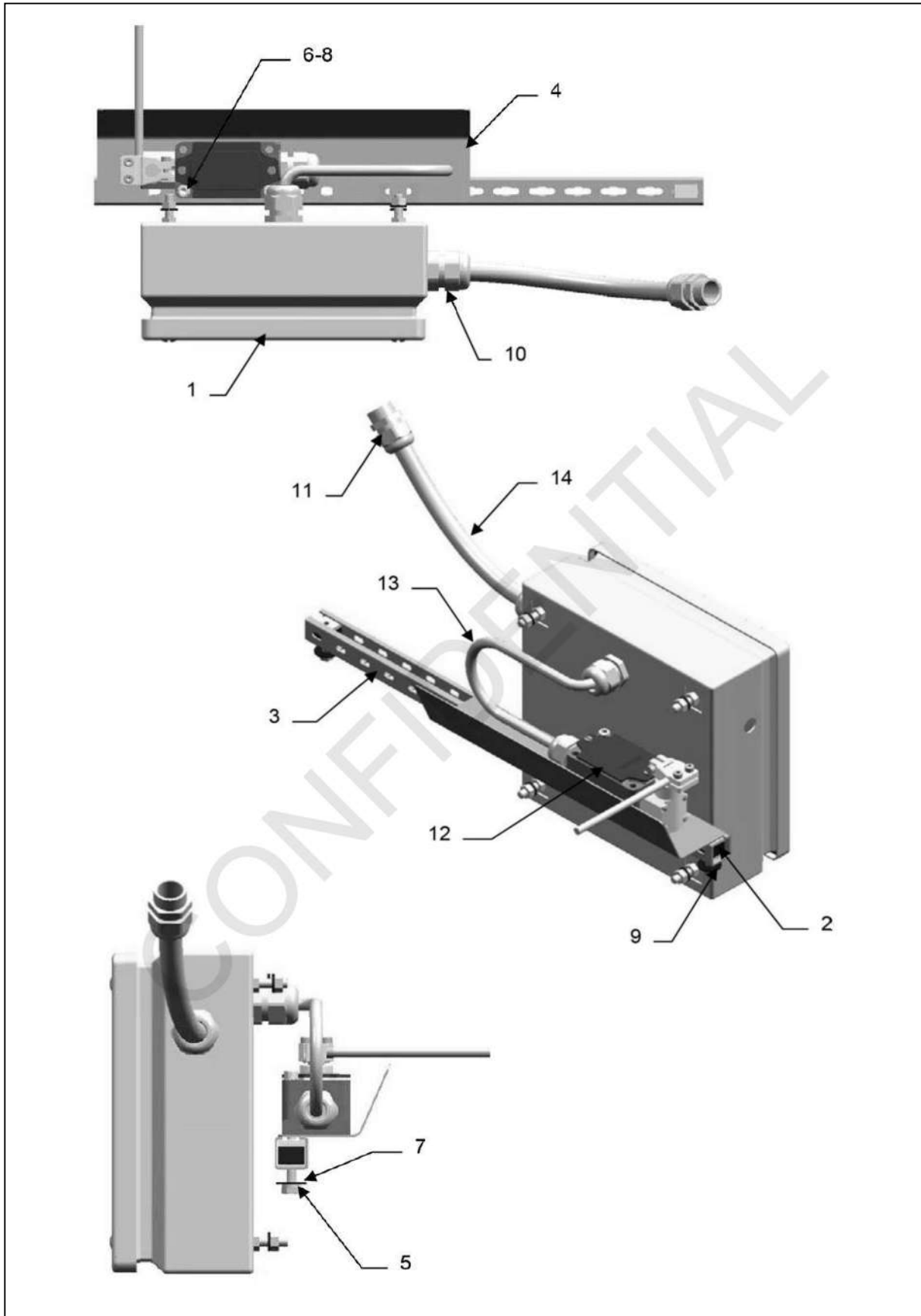
9.13 IR-2H GEARBOX ASSEMBLY

IR-2H Gearbox Assembly			670400-03032	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680801-13015	Gearbox	1	
2	Part Of Gearbox	Cover (Supplied with Gearbox)	-	
3	Part Of Gearbox	Washer (Supplied with Gearbox)	-	
4	N/A	Gearbox Mounting Plate (Not fitted to IR2H)	1	
5	680203-20025	Hex. Soc. Hd. Screw	4	
6	680801-13016	Guard, Square Shaft	1	
7	680203-04005	hex. Soc. Hd. Screw	1	
8	680206-02012	Lockwasher	1	
9	680703-04021	Pinion	1	
10	680208-01015	Roll Pin	1	
11	N/A	Pinion	1	
12	680701-03006	Gearbox Mounting Plate	1	

9.14 IR-2H FRONT COVER BUSHING ASSEMBLY

IR-2H Front Cover Bushing Assembly			670400-03030	
				
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680705-03011	Front Cover	1	
2	680801-13018	Bearing, Oilite	1	

9.15 IR-2H LIMIT SWITCH, TYPICAL ASSEMBLY



IR-2H Limit Switch, Typical Assembly			399302-0043	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	Per order	Terminal Box Assembly	1	
2	680801-13012	CP2020 Rail Twin Face Nut	4	
3	680801-13013	CP2020 Rail	1	
4	680801-13014	Heat Shield	1	
5	680203-04010	Hex. Soc. Hd. Screw	2	
6	680203-04018	Hex. Soc. Hd. Screw	2	
7	680206-05015	Washer	2	
8	680206-01031	Washer	2	
9	680206-02012	Lockwasher	2	
10	Per order	Cable Gland	1	
11	Per order	Pg13.5 Skintop Gland	3	
12	Per order	Limit Switch Assembly	1	
13	Per order	Limit Switch Cable	1	
14	Per order	Motor Cable	1	

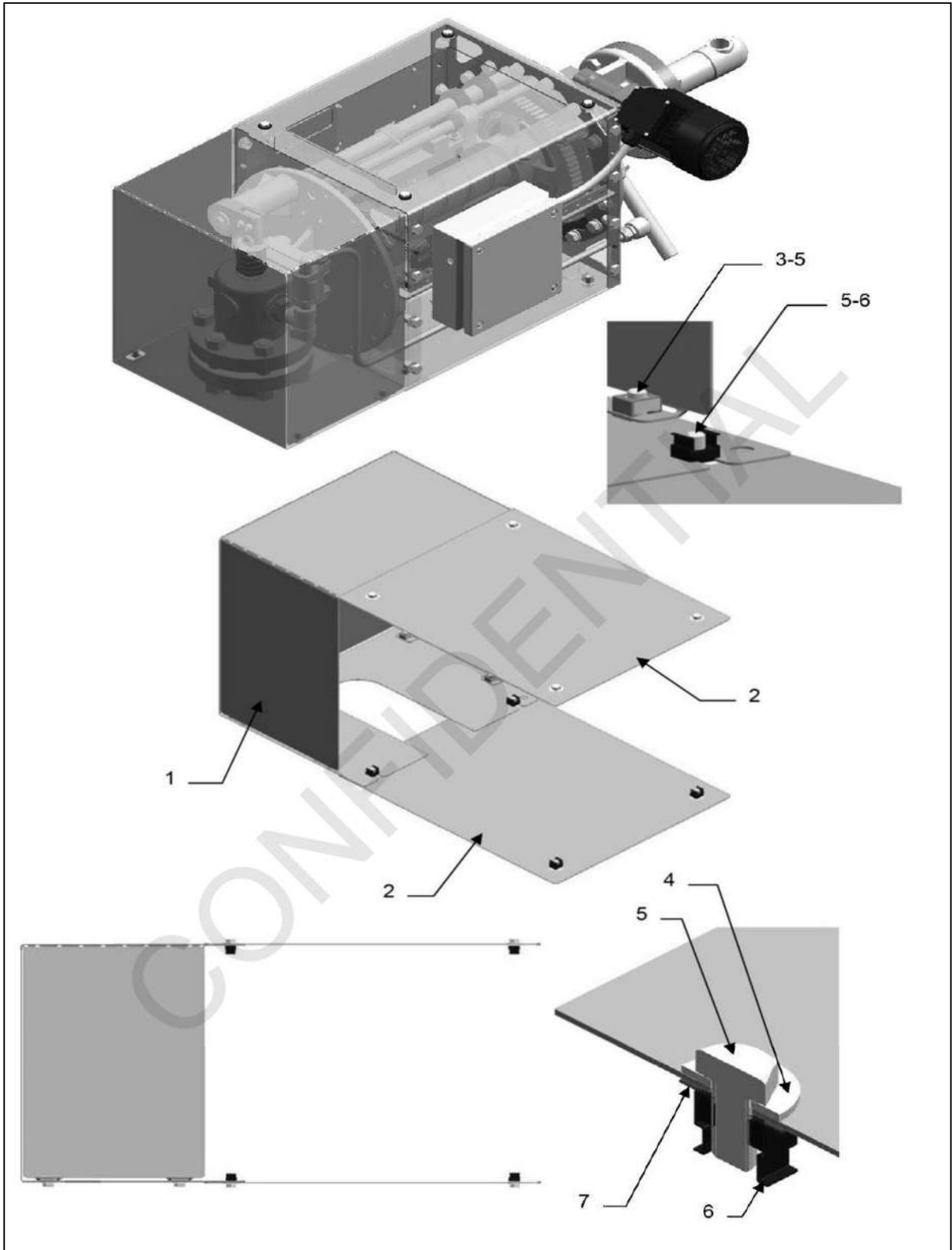
9.16 IR-2H AIR RELIEF VALVE ASSEMBLY

IR-2H Air Relief Valve Assembly			670400-03023A	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680801-13021	Washer, Copper	1	
2	680802-03303A	Adaptor	1	
	680802-03071A	Adaptor	1	For 20NB Air Relief Valve
3	680802-03002	Nipple, 3/8"	2	
	680802-03009A	Nipple, 3/8"	2	For 20NB Air Relief Valve
4	680801-04005	Plug, 3/8" NPT	1	
	680802-11011	Plug, 3/8" NPT	1	For 20NB Air Relief Valve
5	680802-05010	Equal Tee	1	
	680802-05013	Equal Tee	1	For 20NB Air Relief Valve
6	670300-00844A	Air Relief Valve	1	
	670300-00851	Air Relief Valve	1	For 20NB Air Relief Valve
7	680802-04025	Elbow, 1/2" OD Tube, R1/2	1	
	680802-04028	Elbow, 1/2" OD Tube, R1/2	1	For 20NB Air Relief Valve

9.17 IR-2H BOX BODY ASSEMBLY

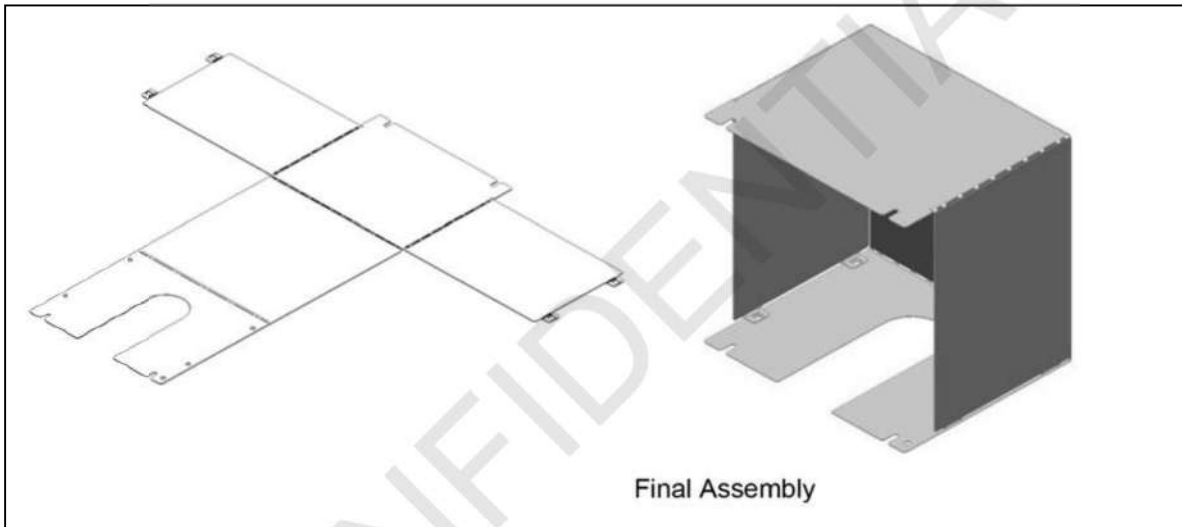
IR-2H Box Body Assembly			670400-03001	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680801-13001	Semi Shell Body	2	
2	680208-01024	Roll Pin	4	
3	680201-07063	Hex. Hd. Screw	16	
4	680202-11027	Nut	16	

9.18 IR-2H GUARD ASSEMBLY

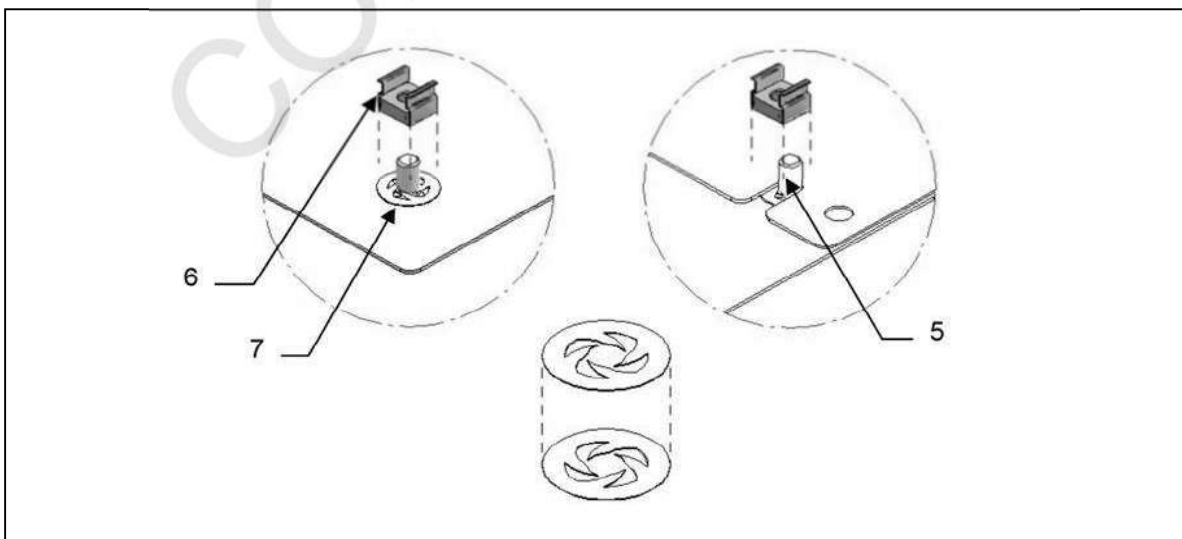


IR-2H Guard Assembly			670400-03002/670400-03003	
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680801-13002	Terminal Box Assembly	1	For 670400-03002
1	680801-13007	Cp2020 Rail Twin Face Nut	1	For 670400-03003
2	680801-13003	Cp2020 Rail	2	
3	680801-13004	Heat Shield	4	
4	680206-04005	Hex. Soc. Hd. Screw	12	
5	680201-07042	Hex. Soc. Hd. Screw	12	
6	680801-13005	Washer, Form-C	8	
7	680801-13006	Screw Retaining Washer	16	

The Guard is normally supplied 'Flat Pack' as sketch below and is formed on-site for final assembly.



Screw Retainers



9.19 IR-2H SPECIAL TOOLS

IR-2H Special Tools				
ITEM	PART NO.	DESCRIPTION	QTY	REMARK
1	680801-10006	Valve Spring Depressing Tool	1	Ref: 307025-1024
2	680801-01650	Valve Packing Nut Spanner	1	Ref: 312227-1129
3	LAP-KIT-40bar	Valve Lap kit	1	
3-1	680801-10019	Wobble Stick	1	
3-2	680705-01651	Roughing Lapping Disc	1	
3-3	680705-01650	Finishing Lapping Disc	1	
4	680801-10011	Hand Brace	1	
5	680801-09015	Pressure Gauge Assembly	1	Ref: 396970-010A