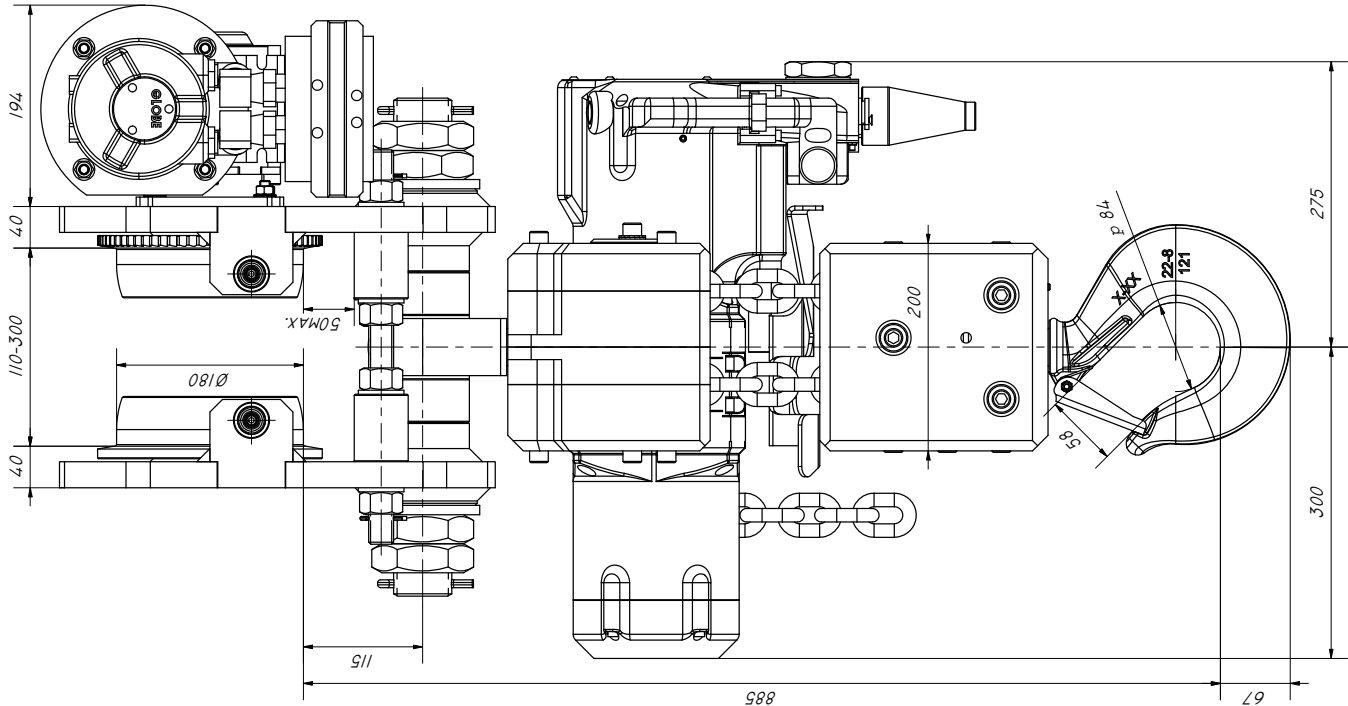
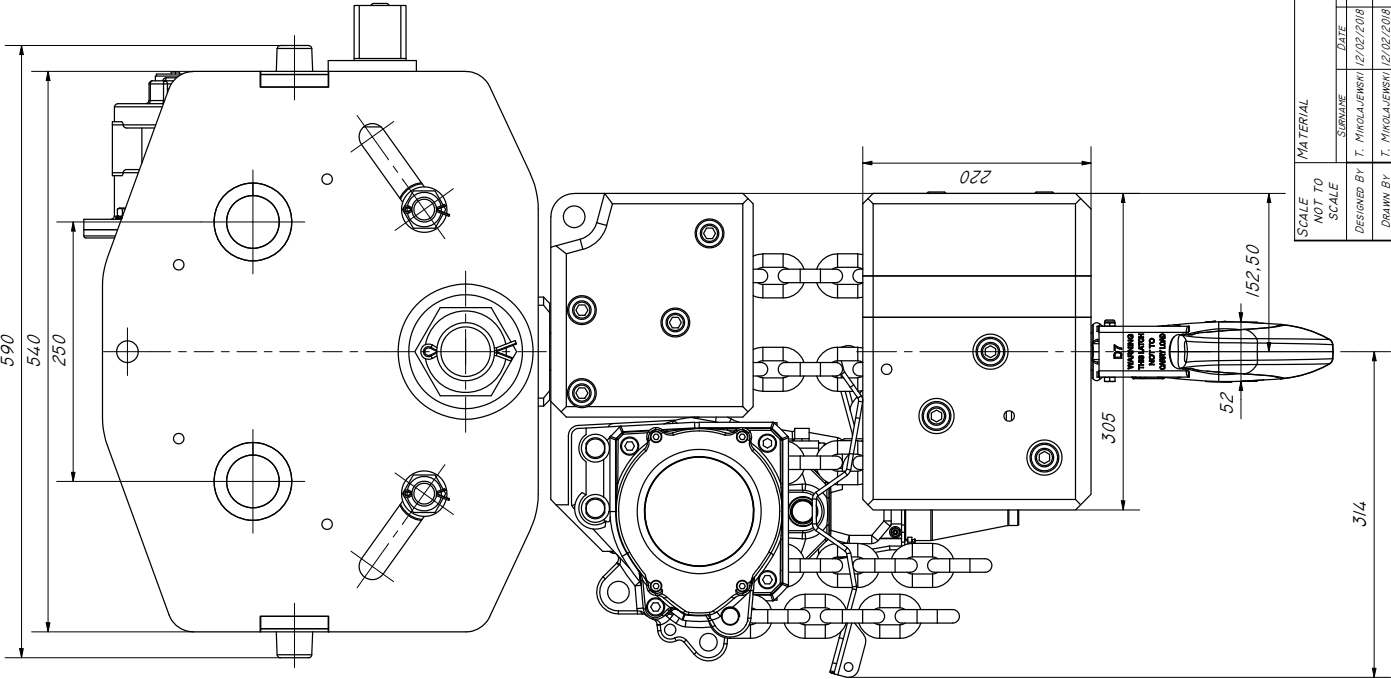
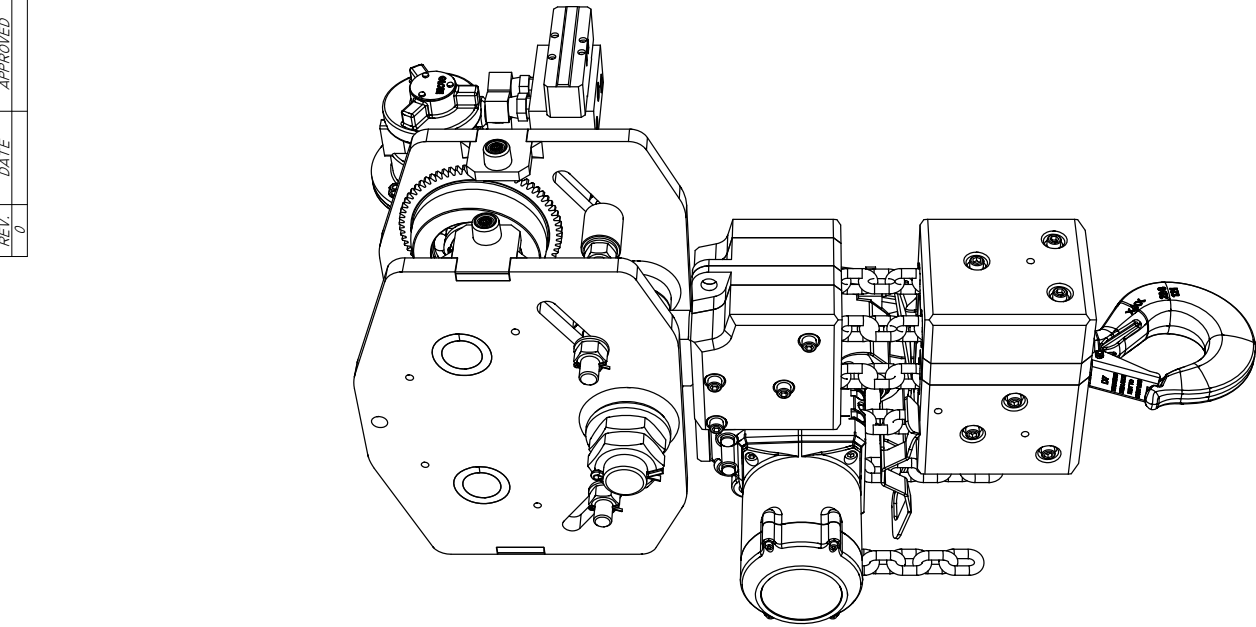


REVISION HISTORY		
REV.	DATE	APPROVED
0		



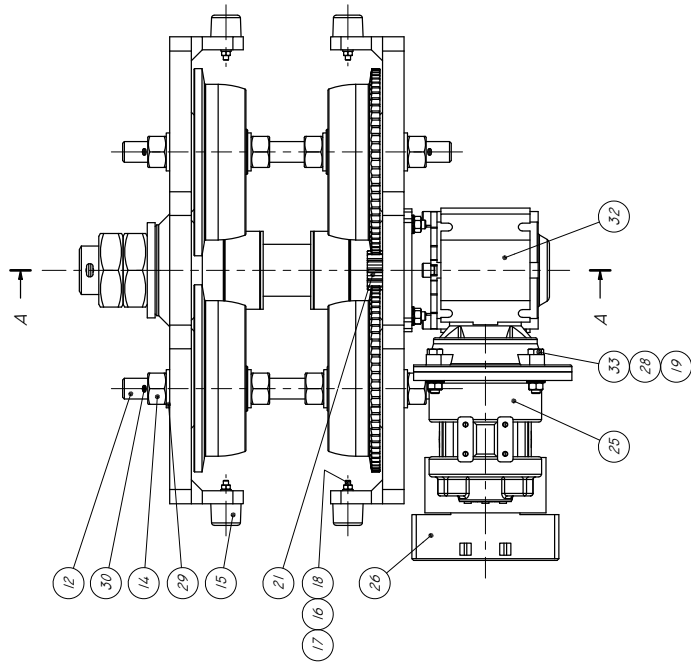
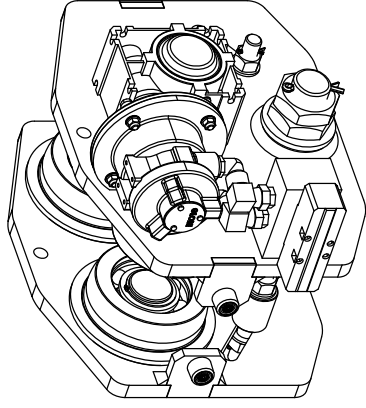
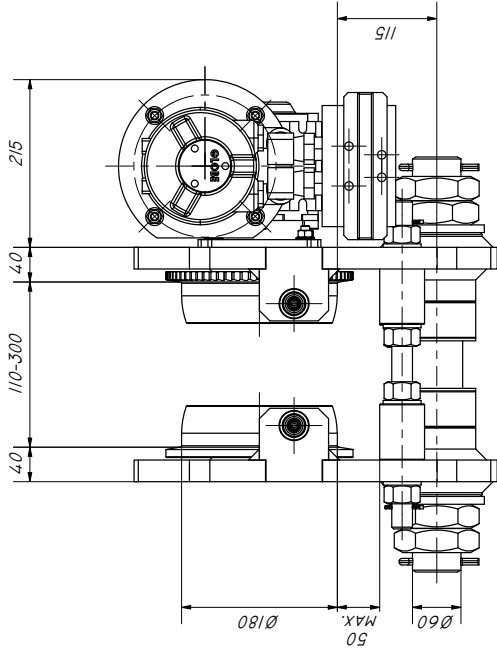
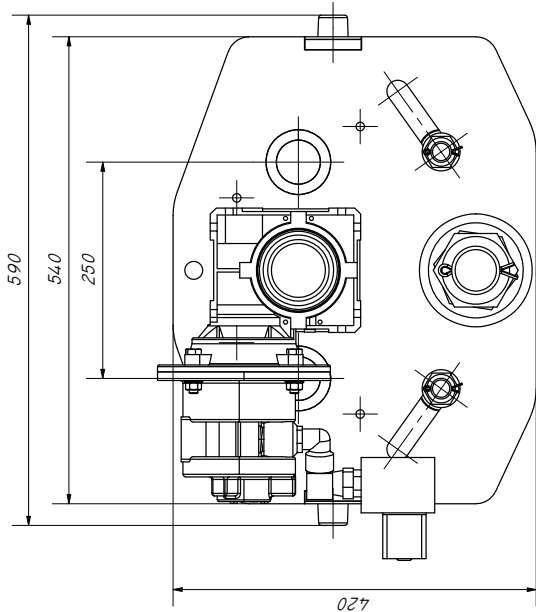
SCALE		MATERIAL		TITLE OF PART		PART NUMBER	
NOT TO SCALE	SCALE	SIGNATURE	DATE	SIGNATURE	DATE	DRG	1504-25
DESIGNED BY	T. MIKOLAJEWSKI		12/02/2018		12/02/2018		
DRAWN BY	T. MIKOLAJEWSKI		12/02/2018		12/02/2018		
CHECKED BY							
APPROVED BY	B. AITKEN						
SHEET SIZE		TITLE OF PROJECT		REVISION WEIGHT		REPLACES DRAWING	
A3		TMH15000/5-AT155		0		-	



UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN MILLIMETERS

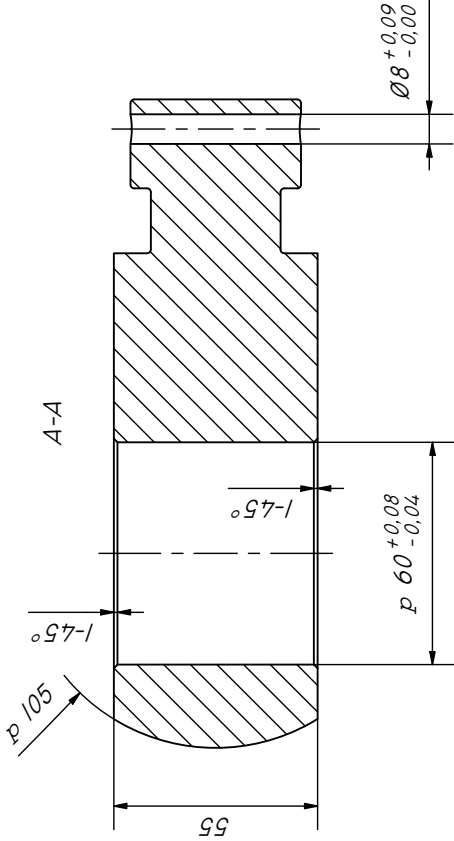
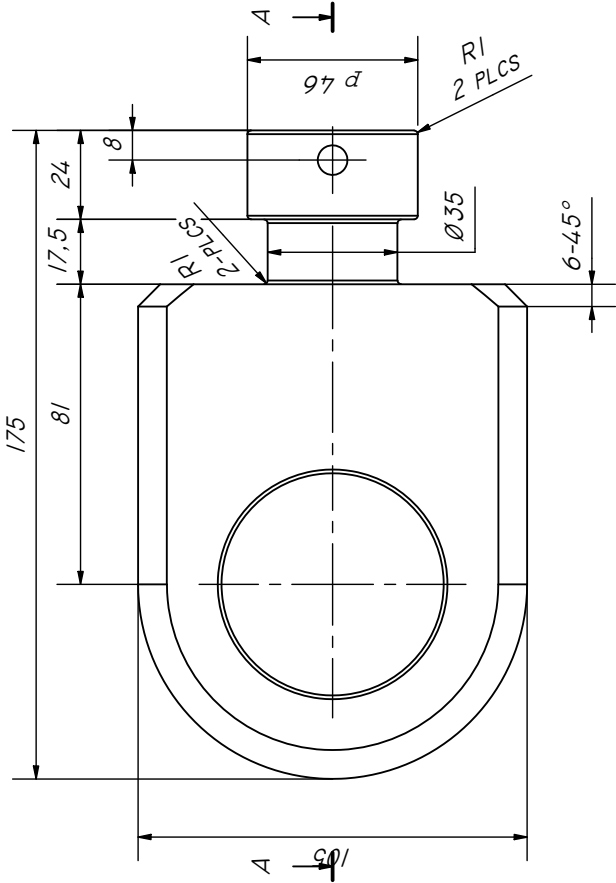
TOLERANCES
FRACTIONAL
UP TO 30
OVER 30 UP TO 60
OVER 60 UP TO 120
OVER 120 UP TO 250
OVER 250
ANGULAR ± 0.5°
SURFACE ROUGHNESS Ra 1.6
IF IN DOUBT ASK

REVISION HISTORY		
REV.	DATE	APPROVED
0		



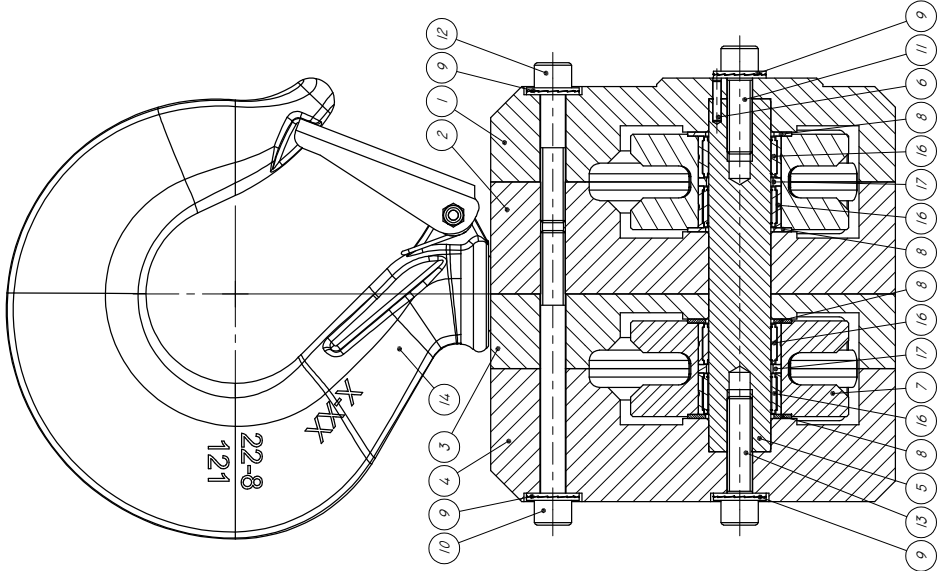
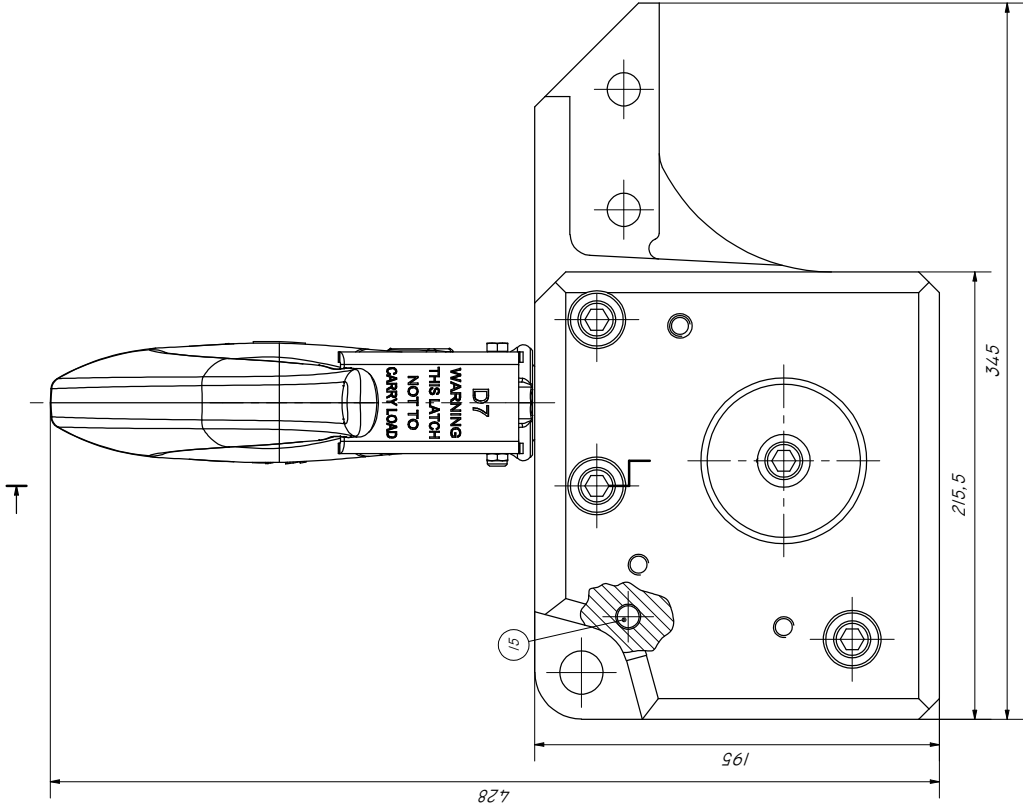
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	DRG 1504-15	LOAD BAR (RANGE 1 - FLANGE 100-100MM)
2	1	DRG 1504-02	MOTOR PLATE
3	1	DRG 1504-03	SIDE PLATE
4	2	DRG 1504-12	BEAR WHEEL
5	2	DRG 1504-12	BEAR WHEEL
6	2	DIN 435 SKF - SKF 6313-22	DEEP GROOVE BALL BEARINGS SINGLE ROW WITH TWO Z SHIELDS SKF
7	4	DIN 172 - 65 X 2,5	SPRING RETAINING RING
8	4	DIN 171 - 65 X 2,5	SPRING RETAINING RING
9	4	ISO 4035 - M6	HEX NUT
10	2	DRG 1504-09	SPACER
11	2	DRG 1504-10	SPACER WASHER
12	2	DRG 1504-13	TIE ROD
13	4	DRG 1504-14	ANTI TIP ROLLER
14	8	ISO 4032 - M24	HEX NUT
15	4	BUFFER	HEX NUT
16	4	ISO 4032 - M6	HEX NUT
17	4	DIN 125 - A 6,4	WASHER
18	4	DIN 912 - M6 X 4,5	CYLINDER HEAD CAP SCREW
19	8	ISO 4032 - M10	HEX NUT
20	4	DIN 913 - M10 X 4,0	HEXAGON SOCKET SET SCREW
21	1	DRG 1504-22	PINION SHAFT (FOR GEARBOX NORD)
22	1	DIN 6885 - A 8 X 7 X 90	PARALLEL KEY
23	1	DIN 9021 - 10,5	WASHER
24	1	DIN 912 - M10 X 3,0	CYLINDER HEAD CAP SCREW
25	1	PILOT VALVE AND SILENCERS	AIR MOTOR GLOBE VSGC
26	1	ISO 1234 - 8 X 7,1	SPLIT PIN
27	2	ISO 1234 - 8 X 7,1	M10 NORDLOCK WASHER LARGE DIAMETER GLUED PAIR
28	8	NL 10SP	WASHER
29	8	DIN 128 - A 25	SPLIT PIN
30	4	ISO 1234 - 4 X 3,2	WASHER
31	2	DIN 128 - A 60	WASHER
32	1	SKIS163FH-IEC (RATIO 40:1)	NORD SKIS163FH-IEC (40:1)
33	4	ISO 4018 - M10 X 4,5	HEX-HEAD BOLT
SCALE MATERIAL			
1:6			
TITLE OF PART			
15TE AIR TROLLEY (A115S)			
PART NUMBER			
DRG 1504D-01			
DESIGNED BY			
TOMAZ			
DATE			
19/01/2018			
DRAWN BY			
E. CRIGTON			
DATE			
29/01/2018			
CHECKED BY			
B. ATTEM			
DATE			
29/01/2018			
APPROVED BY			
B. ATTEM			
DATE			
29/01/2018			
SHEET SIZE			
A3			
TITLE OF PROJECT			
15TE HOIST AND TROLLEY			
PROFILE NUMBER			
N/A			
REPLACES DRAWING			
N/A			
REVISION WEIGHT			
0			
DATE			
29/01/2018			
TOLERANCES			
ALL DIMENSIONS ARE IN MILLIMETERS			
IF IN DOUBT ASK			

REVISION HISTORY		
REV.	DATE	APPROVED
0	12/02/2018	W. MORRISON

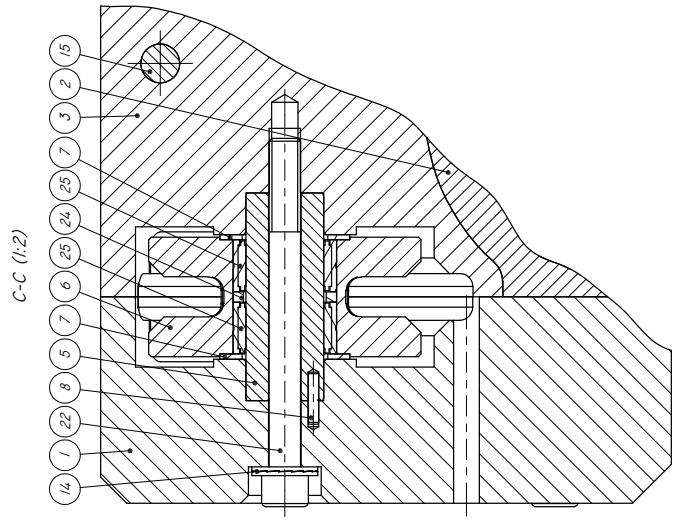


SCALE	MATERIAL	ENI6	TITLE OF PART	PART NUMBER
1:2	DESIGNED BY T. MIKOLAJEWSKI	DATE 12/02/2018	15T TOP EYE	DRG 1504-24
	DRAWN BY E. CRICHTON	DATE 12/02/2018		1 / 1
	CHECKED BY B. AITKEN			
	APPROVED BY			
SHEET SIZE A4	TITLE OF PROJECT TMH15000/5-AT15S		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MILLIMETERS	
	SIGNATURE		TOLERANCES	
	DATE		LINEAR	
	DATE		ANGULAR	
	DATE		SURFACE ROUGHNESS	
	DATE		IF IN DOUBT ASK	

REVISION HISTORY		
REV.	DATE	APPROVED
I	26/06/2018	T. MIKOŁAJEWSKI



PARTS LIST				
ITEM QTY	PART NUMBER	DESCRIPTION	REV.	
1	DRG 1571-03	TOP BLOCK - PLATE I	1	
2	DRG 1571-04	TOP BLOCK - PLATE II	0	
3	DRG 1571-05	TOP BLOCK - PLATE III	0	
4	DRG 1571-06	TOP BLOCK - PLATE IV	0	
5	DRG 1571-11	WHEEL SHAFT	1	
6	ISO 2338 - 4 x 8 x 20	PARALLEL PIN	1	
7	TMH 3000 PM-01	POCKET WHEEL (13X36 CHAIN) - INNER BEARING	1	
8	TMH 3000 SR-01	SPACER RING	1	
9	NL12SP	M12 NORDLOCK WASHER LARGE DIAMETER GLUED PAIR	1	
10	3	DIN 912 - M12 x L75 x 130	1	
11	1	DIN 912 - M12 x 40	1	
12	3	DIN 912 - M12 x 65	1	
13	1	DIN 912 - M12 x 50	1	
14	1	DRG 1571-14	HOOK	0
15	4	L1770-12 0150	PARALLEL PIN	1
16	4	NK30-20-TV-XL	NEEDLE ROLLER BEARING	1
17	2	TMH 3000 BS-01	BEARING SPACER	0
SCALE		PART NUMBER		
1:2,5		DRG 1571-01		
TITLE OF PART		DATE		
TOP BLOCK		09/01/2018		
TITLE OF PROJECT		REVISION WEIGHT		
15TE / 5F AIR HOIST		1 64,3 KG		
TITLE OF PROJECT		REPLACES DRAWING		
15TE / 5F AIR HOIST		-		
TITLE OF PROJECT		PROTYPE NUMBER		
15TE / 5F AIR HOIST		-		
TITLE OF PROJECT		ANGULAR ± 0,5°		
15TE / 5F AIR HOIST		SURFACE ROUGHNESS $\sqrt{R}$		
15TE / 5F AIR HOIST		IF IN DOUBT ASK		



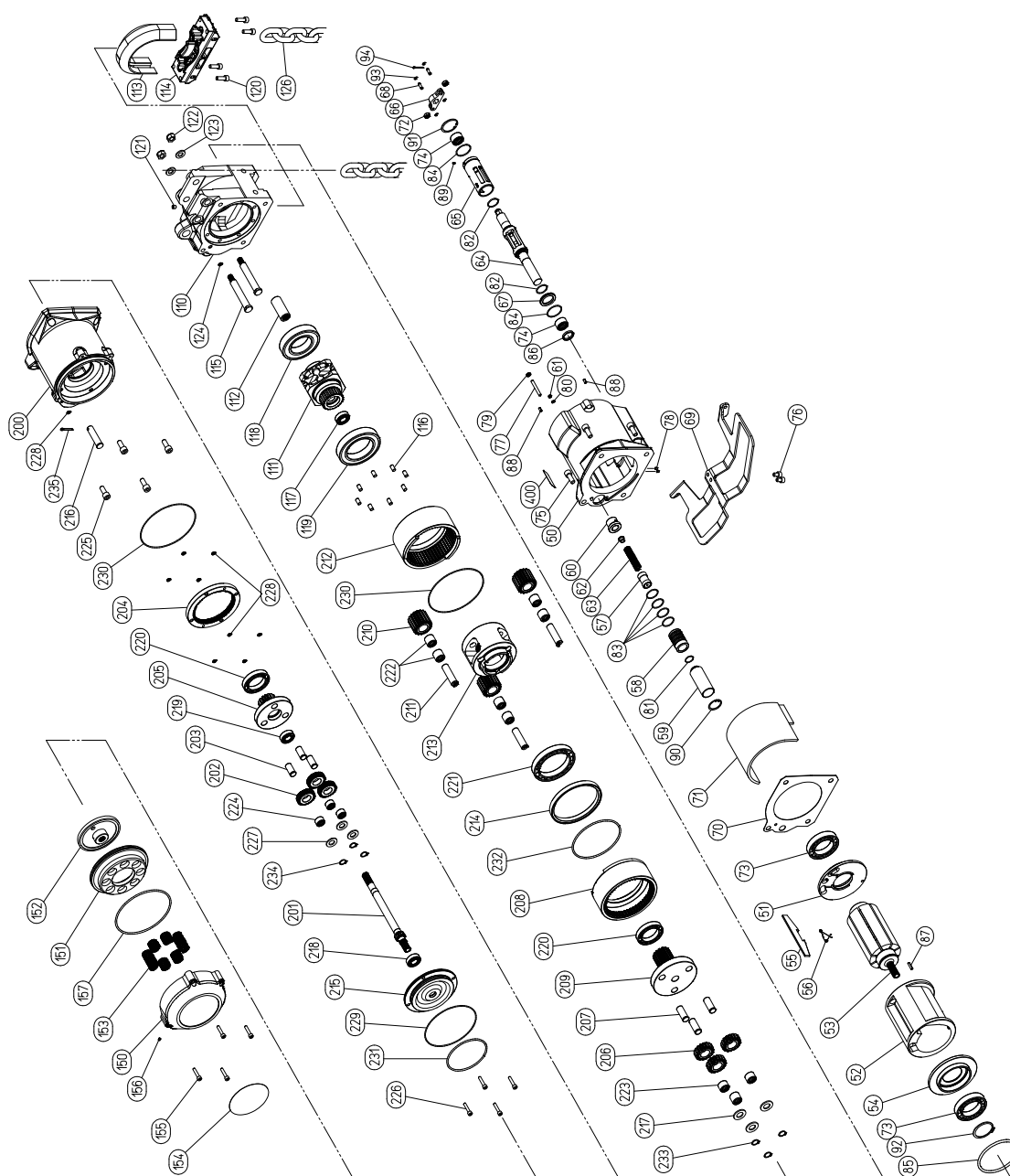
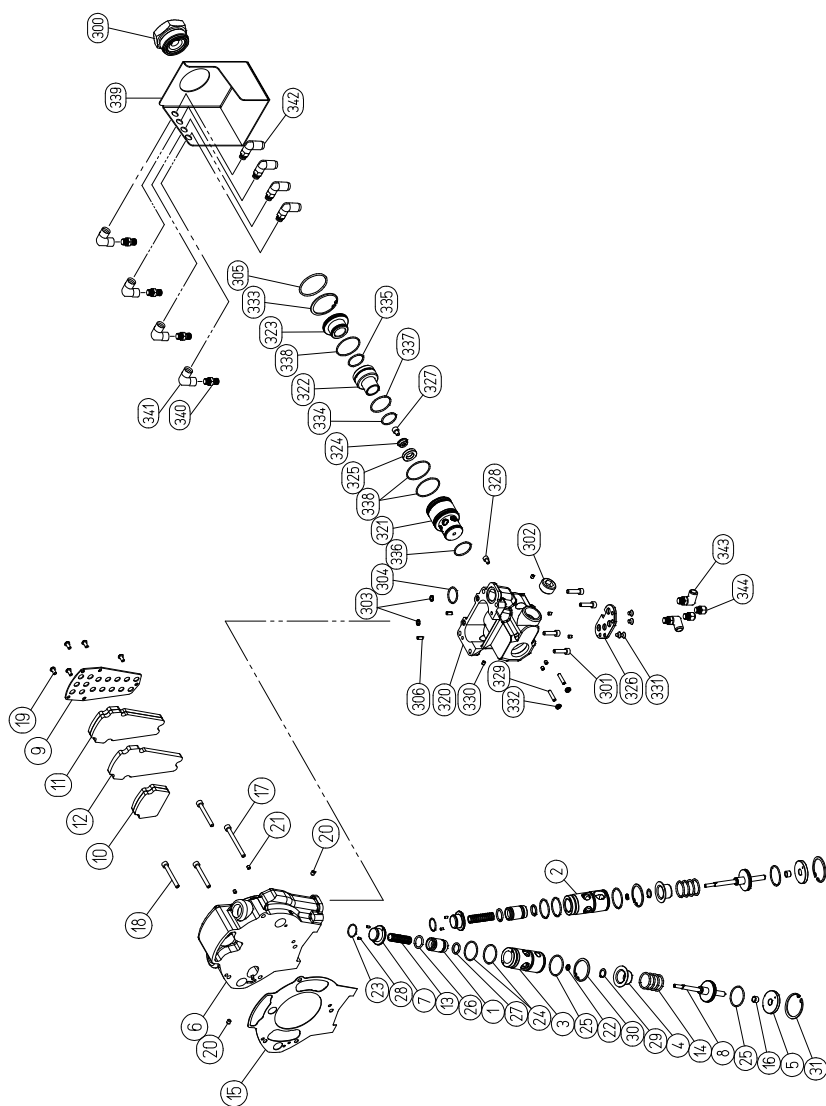


Fig. No.	Part Number	Part Name	Parts Per Hoist
050	425806790	MOTOR CASE	1
051	425806180	REAR PLATE	1
052	425806160	CYLINDER	1
053	425806150	ROTOR	1
054	425806170	FRONT PLATE	1
055	137102033	VANE	8
056	130802235	LIFT SPRING	8
057	425806J40	LIMIT SPOOL	1
058	425806J30	LIMIT SPOOL BUSHING	1
059	425806J50	LIMIT RETAINER F	1
060	425806J60	LIMIT RETAINER B	1
061	425806J70	LIMIT PLUG	1
062	426301Z50	SPRING SEAT	1
063	130802226	SPRING 13X67X2	1
064	425806460	LIMIT SHAFT	1
065	425806A40	LIMIT SHAFT BUSHING	1
066	425806140	LIMIT LEVER	1
067	425806J90	LIMIT WASHER	1
068	425806120	ROLLER SHAFT	2
069	DRG1566-09	CHAIN LEVER	1
070	136102172	MOTOR GASKET	1
071	425806K0B	SILENCER M CP	1
072	130103005	BEARING 605ZZ	2
073	130104011	BEARING 6010	2
074	130132116	NEEDLE BEARING TA2215Z	2
075	131710025	HEX SOCKET HEAD CAP SCREW M10X25	4
076	131708012	HEX SOCKET HEAD CAP SCREW M8X12	2
077	132306050	HEX SOCKET SET SCREW M6X50	1
078	132105005	HEX SOCKET SET SCREW M5X5	2
079	134403106	HEX NUT M6	1
080	131103003	O-RING S-5	1
081	131103016	O-RING S-20	1
082	131103021	O-RING S-26	2
083	131103022	O-RING S-28	4
084	131103029	O-RING S-36	2
085	131101068	O-RING P-100	1
086	131246003	DUST SEAL OS22294	1
087	130605020	SPRING PIN 5X20	1
088	130605010	SPRING PIN 5X10	2
089	130603005	SPRING PIN 3X5	1
090	130301032	RETAINING RING H-32	1
091	130301040	RETAINING RING H-40	1
092	130302050	RETAINING RING S-50	1
093	130303004	RETAINING RING E-4	4
094	130702125	SPLIT PIN 2.5X25	1
110	425806A00	CENTRE HOUSING	1
111	425806A50	LOAD SHEAVE	1
112	425806200	COUPLING	1
113	425806350	CHAIN GUIDE	1
114	425806360	CHAIN SEPARATOR	1
115	425806220	HANGER PIN	2

Fig. No.	Part Number	Part Name	Parts Per Hoist
116	426325340	DOWEL PIN	8
117	130104004	BEARING 6003	1
118	130109012	BEARING 6211ZZ	1
119	130109015	BEARING 6014ZZ	1
120	131708025	HEX SOCKET HEAD CAP SCREW M8X25	4
121	132108008	HEX SOCKET SET SCREW M8X8	1
122	134501012	U NUT M12	2
123	131307012	WASHER M12	2
124	131103005	O-RING S-7	1
126	AHC13/RT/RUD	LINK CHAIN 13mm	HOL
150	425806410	BRAKE COVER	1
151	425806400	BRAKE PISTON	1
152	425806430	BRAKE DISK	1
153	130802229	SPRING 20.5X21.9X2.9	8
154		NAME PLATE	1
155	131706040	HEX SOCKET HEAD CAP SCREW M6X40	4
156	132105005	HEX SOCKET SET SCREW M5X5	1
157	131117255	O-RING AS568-255	1
200	425806310	GEAR CASE	1
201	425806A60	FIRST PINION	1
202	425806A70	FIRST STAR GEAR	3
203	425806A80	FIRST PIN	3
204	425806E10	FIRST RING GEAR	1
205	425806E20	SECOND PINION	1
206	425806E30	SECOND STAR GEAR	3
207	425806E40	SECOND PIN	3
208	425806E50	SECOND RING GEAR	1
209	425806K20	THIRD PINION	1
210	425806K30	THIRD STAR GEAR	3
211	425806K40	THIRD PIN	3
212	425806K50	THIRD RING GEAR	1
213	425806240	CAGE	1
214	425806230	SPACER	1
215	425806900	BRAKE PLATE	1
216	425806K60	CHAIN SET PIN	1
217	425806K70	SECOND THRUST WASHER	3
218	130106004	BEARING 6003ZZ	1
219	130104004	BEARING 6003	1
220	130113009	BEARING 6909	2
221	130113016	BEARING 6916	1
222	130131621	NEEDLE BEARING TA1620Z	6
223	130131617	NEEDLE BEARING TA1616Z	3
224	130131513	NEEDLE BEARING TA1512Z	3
225	131710025	HEX SOCKET HEAD CAP SCREW M10X25	4
226	131706030	HEX SOCKET HEAD CAP SCREW M6X30	4
227	131307014	WASHER M14	3
228	131103005	O-RING S-7	9
229	131103063	O-RING S-135	1
230	131103065	O-RING S-145	2
231	131117242	O-RING AS568-242	1
232	131117249	O-RING AS568-249	1

Hoist Body - TMH-15000/5-AT15S

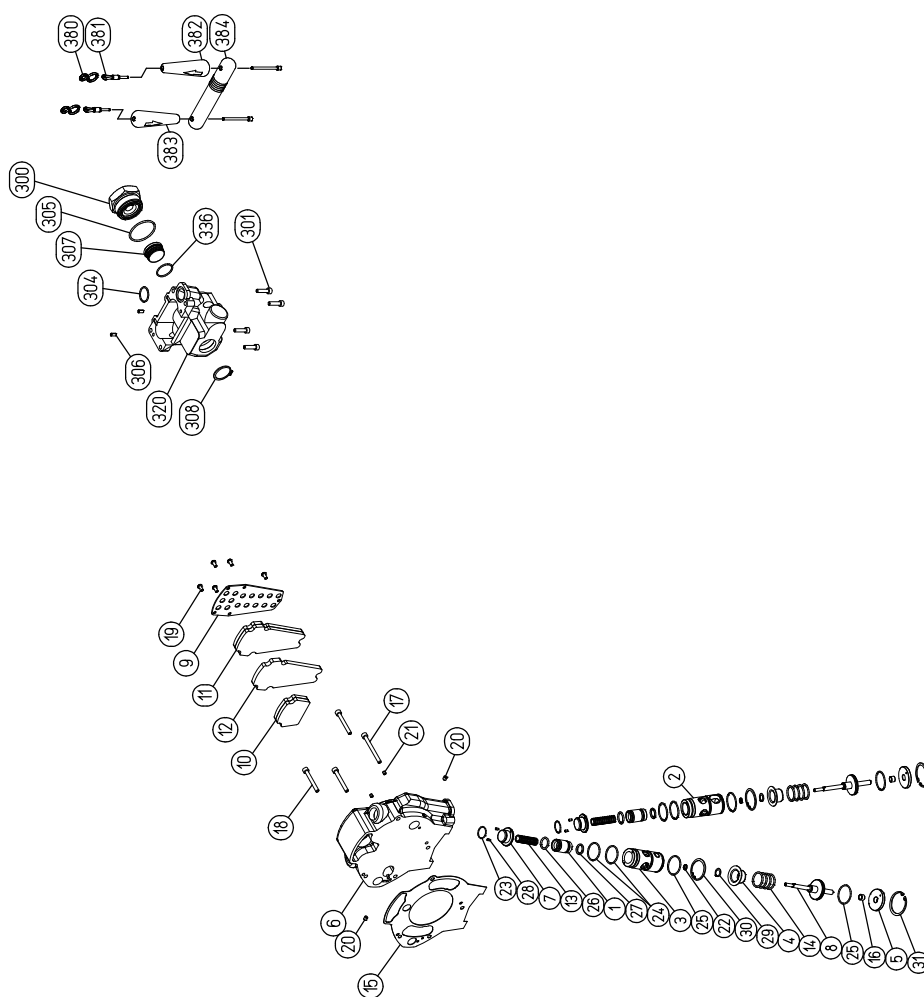
Fig. No.	Part Number	Part Name	Parts Per Hoist
233	130302016	RETAINING RING S-16	3
234	130302015	RETAINING RING S-15	3
235	130704025	SPLIT PIN 4X25	1



Pendant Body - TMH-15000/5-AT15S

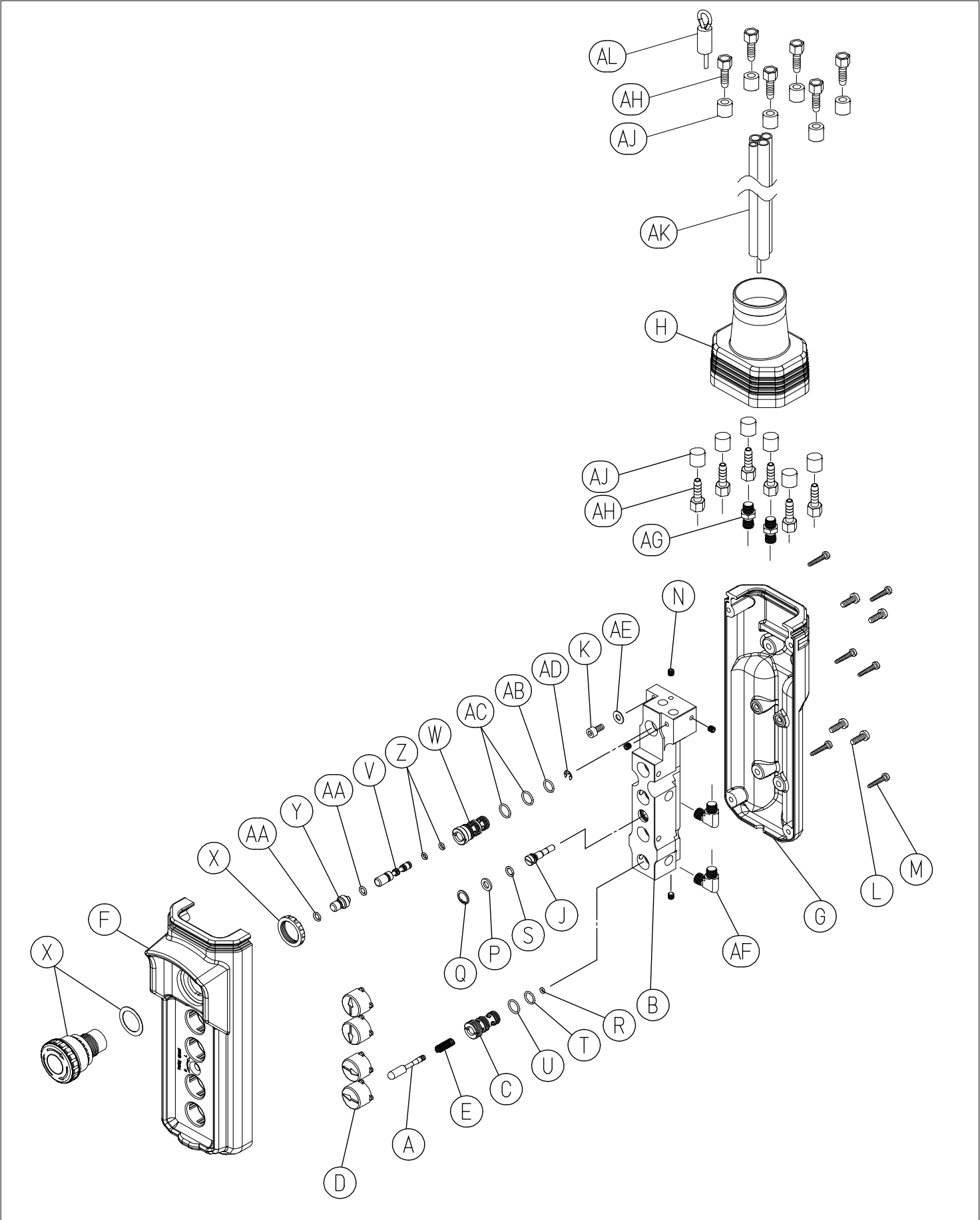
Fig. No.	Part Number	Part Name	Parts Per Hoist
001	425806J80	THROTTLE VALVE	2
002	425806E90	VALVE BUSHING (U)	1
003	425806F00	VALVE BUSHING (D)	1
004	425806C70	SPRING SEAT	2
005	425806A20	VALVE CAP	2
006	425806060	VALVE BODY	1
007	425806A30	BUSH CAP	2
008	425806C60	PISTON	2
009	425806810	EXHAUST PLATE	1
010	137402055	SILENCER (SS)	2
011	137402056	SILENCER (SL)	2
012	137402057	SILENCER (F)	1
013	130802227	SPRING 11.4X46X1.4	2
014	130802228	SPRING 26X32.3X2.6	2
015	136102171	VALVE GASKET	1
016	130216001	BEARING K5B0807	2
017	131706065	HEX SOCKET HEAD CAP SCREW M6X65	1
018	131706050	HEX SOCKET HEAD CAP SCREW M6X50	3
019	131905010	HEX SOCKET BUTTON SCREW M5X10	5
020	132106006	HEX SOCKET SET SCREW M6X6	2
021	132105005	HEX SOCKET SET SCREW M5X5	2
022	131103005	O-RING S-7	2
023	131103016	O-RING S-20	2
024	131103024	O-RING S-30	4
025	131103026	O-RING S-32	4
026	131117115	O-RING AS568-115	2
027	131118113	O-RING AS568-113 (HS90)	2
028	130603005	SPRING PIN 3X5	4
029	130302012	RETAINING RING S-12	2
030	130301036	RETAINING RING H-36	2
031	130301040	RETAINING RING H-40	2
300	425806G6B	INLET BUSHING CP	1
301	131706025	HEX SOCKET HEAD CAP SCREW M6X25	4
302	134902011	HEX SOCKET HEAD PLUG PT3/4	1
303	131103005	O-RING S-7	2
304	131103020	O-RING S-25	1
305	131117134	O-RING AS568-134	1
306	130605010	SPRING PIN 5X10	2
320	425806470	UNDER COVER	1
321	425806G70	MAIN CUT BUSHING	1
322	425806G80	MAIN CUT VALVE	1
323	425806G90	MAIN CUT CAP	1
324	425806H00	MAIN CUT HOLDER	1
325	136102173	MAIN CUT SEAT	1
326	137402060	PILOT SILENCER	1
327	131706308	HEX SOCKET HEAD CAP SCREW M6X8	1
328	131705008	HEX SOCKET HEAD CAP SCREW M5X8	1
329	132105022	HEX SOCKET SET SCREW M5X22	2
330	132105005	HEX SOCKET SET SCREW M5X5	6
331	132905206	CROSS-RECESSED HEAD SCREW M5X6	4
332	134403205	HEX NUT M5	2

Fig. No.	Part Number	Part Name	Parts Per Hoist
333	130301047	RETAINING RING H-47	1
334	131103020	O-RING S-25	1
335	131103021	O-RING S-26	1
336	131103023	O-RING S-29	1
337	131103028	O-RING S-35	1
338	131117030	O-RING AS568-030	3
339	DRG/TMH3000-PB-01	PENDANT BRACKET	1
340	P071/1	1/8 BSP HEX NIPPLE C/W 60° CONE	4
341	P050	1/8 BSP FEMALE ELBOW	4
342	304P	1/8 BSP MALE TO 6MM PUSH FIT ELBOW	4
343	304P	1/8 BSP MALE TO 6MM PUSH FIT ELBOW	2
344	P087	1/8 BSP TO 6MM PUSH FIT	2



Cord Body - TMH-15000/5-AT15S

Fig. No.	Part Number	Part Name	Parts Per Hoist
001	425806J80	THROTTLE VALVE	2
002	425806E90	VALVE BUSHING (U)	1
003	425806F00	VALVE BUSHING (D)	1
004	425806C70	SPRING SEAT	2
005	425806A20	VALVE CAP	2
006	425806060	VALVE BODY	1
007	425806A30	BUSH CAP	2
008	425806C60	PISTON	2
009	425806810	EXHAUST PLATE	1
010	137402055	SILENCER (SS)	2
011	137402056	SILENCER (SL)	2
012	137402057	SILENCER (F)	1
013	130802227	SPRING 11.4X46X1.4	2
014	130802228	SPRING 26X32.3X2.6	2
015	136102171	VALVE GASKET	1
016	130216001	BEARING K5B0807	2
017	131706065	HEX SOCKET HEAD CAP SCREW M6X65	1
018	131706050	HEX SOCKET HEAD CAP SCREW M6X50	3
019	131905010	HEX SOCKET BUTTON SCREW M5X10	5
020	132106006	HEX SOCKET SET SCREW M6X6	2
021	132105005	HEX SOCKET SET SCREW M5X5	2
022	131103005	O-RING S-7	2
023	131103016	O-RING S-20	2
024	131103024	O-RING S-30	4
025	131103026	O-RING S-32	4
026	131117115	O-RING AS568-115	2
027	131118113	O-RING AS568-113 (HS90)	2
028	130603005	SPRING PIN 3X5	4
029	130302012	RETAINING RING S-12	2
030	130301036	RETAINING RING H-36	2
031	130301040	RETAINING RING H-40	2
300	425806G6B	INLET BUSHING CP	1
301	131706025	HEX SOCKET HEAD CAP SCREW M6X25	4
304	131103020	O-RING S-25	1
305	131117134	O-RING AS568-134	1
306	130605010	SPRING PIN 5X10	2
307	425807K90	PLUG	1
308	130302032	RETAINING PLUG S-32	1
320	425808470	UNDER COVER	1
336	131103023	O-RING S-29	1
380	130802081	S-TYPE WIRE	2
381	138001015	CHANGE CORD 1.5M	2
382	136602625	GRIP (W)	1
383	136602626	GRIP (R)	1
384	136602627	HANDLE	1



Pendant - VRD-4R

Fig. No.	Part Number	Part Name	Parts Per Hoist
A	420218VB0	THROTTLE VALVE	4
B	420235VR0	VALVE BODY	1
C	420218VF0	BUSHING	4
D	420235X40	BUTTON	4
E	130802036	SPRING 6X18X0.32	4
F	420235W50	FRONT CASE	1
G	420235W60	REAR CASE	1
H	136608256	BOOT	1
J	420235VM0	ADJUST SCREW	1
K	131705310	HEX SOCKET HEAD CAP SCREW M5X10	1
L	132404114	PHILLIPS HEAD MACHINE SCREW M5X14	4
M	132904221	SELF TAPPING SCREW 4X20	6
N	132105305	HEX SOCKET HEAD CAP SCREW M5X5	4
P	131309206	WASHER M6	1
Q	130301912	RETAINING RING H-12	1
R	131109001	O-RING S-3 (HS90°)	4
S	131103005	O-RING S-7	1
T	131103008	O-RING S-10	4
U	131103009	O-RING S-11.2	4
V	420224V61	EMERGENCY VALVE	1
W	420228V50	EMERGENCY BUSHING	1
X	136690503	EMERGENCY SWITCH	1
Y	420228W00	PUSH ROD	1
Z	131103002	O-RING S-4	2
AA	131103004	O-RING S-6	2
AB	131103008	O-RING S-10	1
AC	131103009	O-RING S-11.2	2
AD	130303204	RETAINING RING E-4	1
AE	131307105	WASHER M5	1
AF	P128	1/8 BSP COMPACT ELBOW C/W 60° CONE	4
AG	P071/1	1/8 BSP NIPPLE C/W 60° CONE	2
AH	P016/1	1/8 BSP TO 1/4 HOSETAIL SWIVEL	12
AJ	P002/1	1/4 HOSE FERRULE	12
AL		STRAINER WIRE	1
AK	1/4-HOSE	1/4 ANTI STATIC RUBBER HOSE	6