



CUSTOMER: _____ **DATE:** _____

CONTACT: _____ **PHONE:** _____ **FAX:** _____

1) APPLICATION

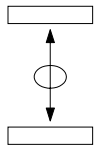
- INDOOR OUTDOOR MARINE ENVIRONMENT MOBILE EQUIPMENT OVERHEAD CRANE/HOISTING CRANE CHAIR
- PORTABLE EQUIPMENT FOOT PEDAL OTHER _____

2) CONTROLLER SIZE & DURABILITY

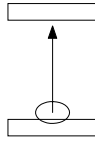
- MINIATURE: V10 H100 H7 V14 V20 S14 MEDIUM: V11 V8 D8
- SMALL: V5 VV5 S2 S21 S22 S23 S24 N6 LARGE: V3 V6 VV6 D64 DD64 K2

3) CONTROLLER FUNCTIONS

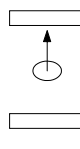
SINGLE AXIS (PICK 1 OF 3 ITEMS BELOW)



STANDARD BI-DIRECTIONAL

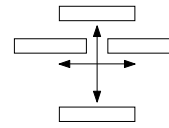


FULL TRAVEL UNI-DIRECTIONAL

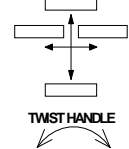


CENTER TO END UNI-DIRECTIONAL

DUAL AXIS



MULTI AXIS



TWIST HANDLE

4) SWITCH SPECIFICATIONS

LEFT HAND MOUNTING

- VOLTAGE _____ AC/DC CURRENT _____ AMPS.
 DIRECTION 1&2 DIRECTION 3&4
 NUMBER OF CONTACTS _____ NUMBER OF CONTACTS _____
 STEPLESS OR STEPS _____ STEPLESS OR STEPS _____
- SPRING RETURN SPRING RETURN
 - FRICTION BRAKE FRICTION BRAKE
 - POTENTIOMETER _____ POTENTIOMETER _____
 - ELECTRONICS ELECTRONICS

RIGHT HAND MOUNTING

- VOLTAGE _____ AC/DC CURRENT _____ AMPS.
 DIRECTION 5&6 DIRECTION 7&8
 NUMBER OF CONTACTS _____ NUMBER OF CONTACTS _____
 STEPLESS OR STEPS _____ STEPLESS OR STEPS _____
- SPRING RETURN SPRING RETURN
 - FRICTION BRAKE FRICTION BRAKE
 - POTENTIOMETER _____ POTENTIOMETER _____
 - ELECTRONICS ELECTRONICS

5) ELECTRONICS

A) VALVE SPECIFICATIONS

VALVE MANUFACTURE _____ MODEL NUMBER _____

SUPPLY VOLTS: _____ VDC COIL RESISTANCE: _____ OHMS THRESHOLD: _____ mA MAX. OUTPUT _____ mA

SINGLE COIL DUAL COIL FLOW CONTROL SWITCHES FOR DIRECTIONAL VALVES PWM FREQUENCY: _____ Hz

B) SIGNAL OUTPUTS

SUPPLY VOLTS: _____ VDC 4-20mA 0-20mA 0-10V -10V to +10V OTHER _____

C) OPTIONS FOR BOTH

SINGLE MAX. (A ADJ.) DUAL MAX. (A & B ADJ.) DUAL RANGE _____ mA RAMP TIME _____ SEC.

6) HANDLE TYPE

- STANDARD KNOB MECHANICAL INTERLOCK PUSHBUTTON DEADMAN PUSH DEADMAN PULL DEADMAN
- PALM HANDLE _____

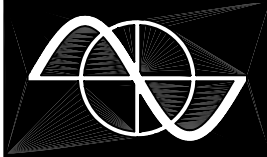
7) NAMEPLATE SPECIFICATIONS

- STANDARD NAMEPLATE _____ SPECIAL NAMEPLATE (ATTACH LAYOUT DRAWING OR SPECIFICATIONS)

8) ENCLOSURE

- GENERAL PURPOSE WEATHERPROOF CORROSIVE RESISTANT (PLASTIC) PORTABLE CONSOLES
- ENCLOSURE DIMENSIONS L= _____ W= _____ H= _____ TS1 TS2

9) NOTES



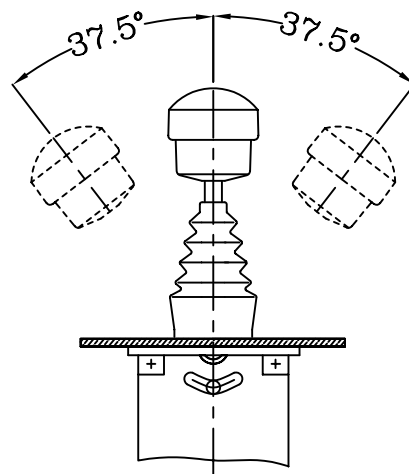
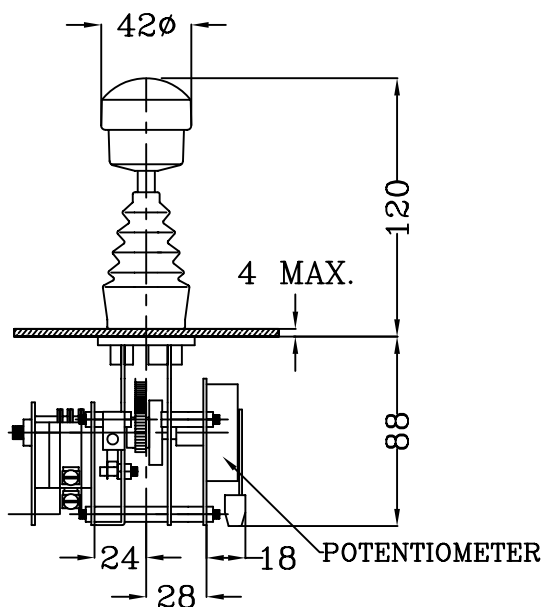
**SENETT
CONTROL
CO. LTD.**

S2 SINGLE AXIS MASTER SWITCH

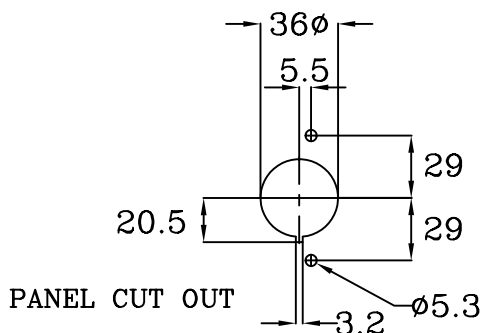
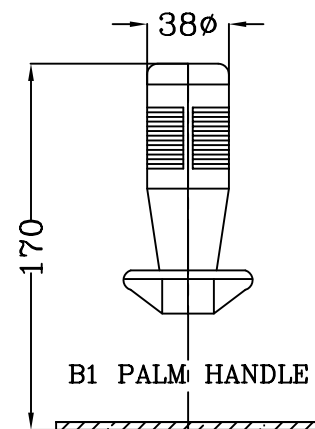
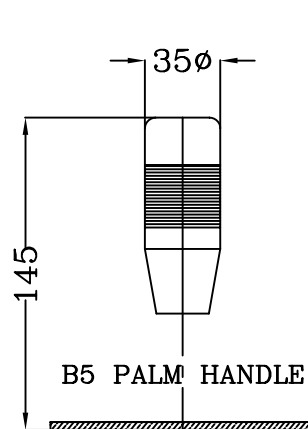
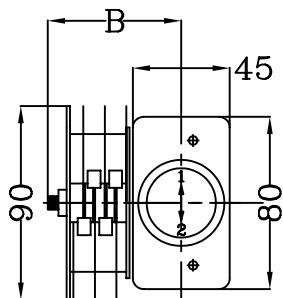
**VER.3
3.1.1**

THE S2 SINGLE AXIS MASTER SWITCH CAN BE USED FOR REMOTE CONTROL OF ELECTRO-HYDRAULIC PROPORTIONAL VALVES, VARIABLE SPEED DRIVES AND IS OF MODULAR DESIGN AND COMPACT SIZE. IT IS BUILT FOR 6 MILLION OPERATIONS. THE S2 SWITCH IS OIL, OZONE, UV AND SALT ATMOSPHERE (OCEAN CONDITION) RESISTANT. WITH UP TO 5-0-5 STEPS THE S2 IS OBTAINABLE WITH A VARIETY OF MICROSWITCHES AND POTENTIOMETERS. STANDARD CONTACT RATING 2A. 250V AC15 RES. S2 DEGREE OF PROTECTION FRONT: IP54

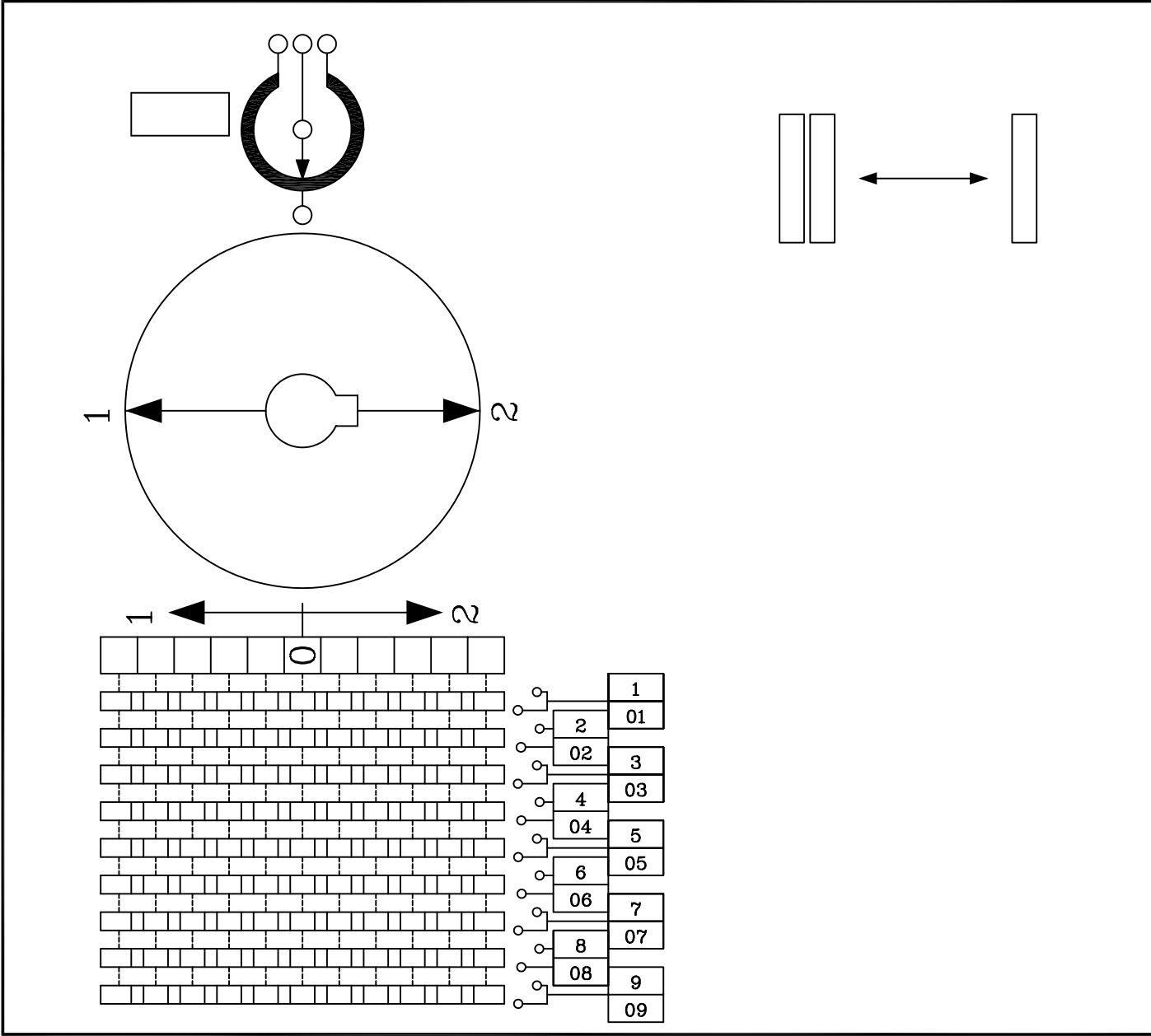
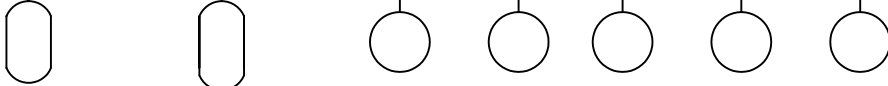
3A. 24V DC13



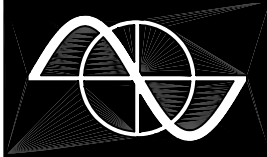
SIZE	# OF CONTACTS	B DIMENSION
02	3	62
03	5	72
04	7	83
05	9	93



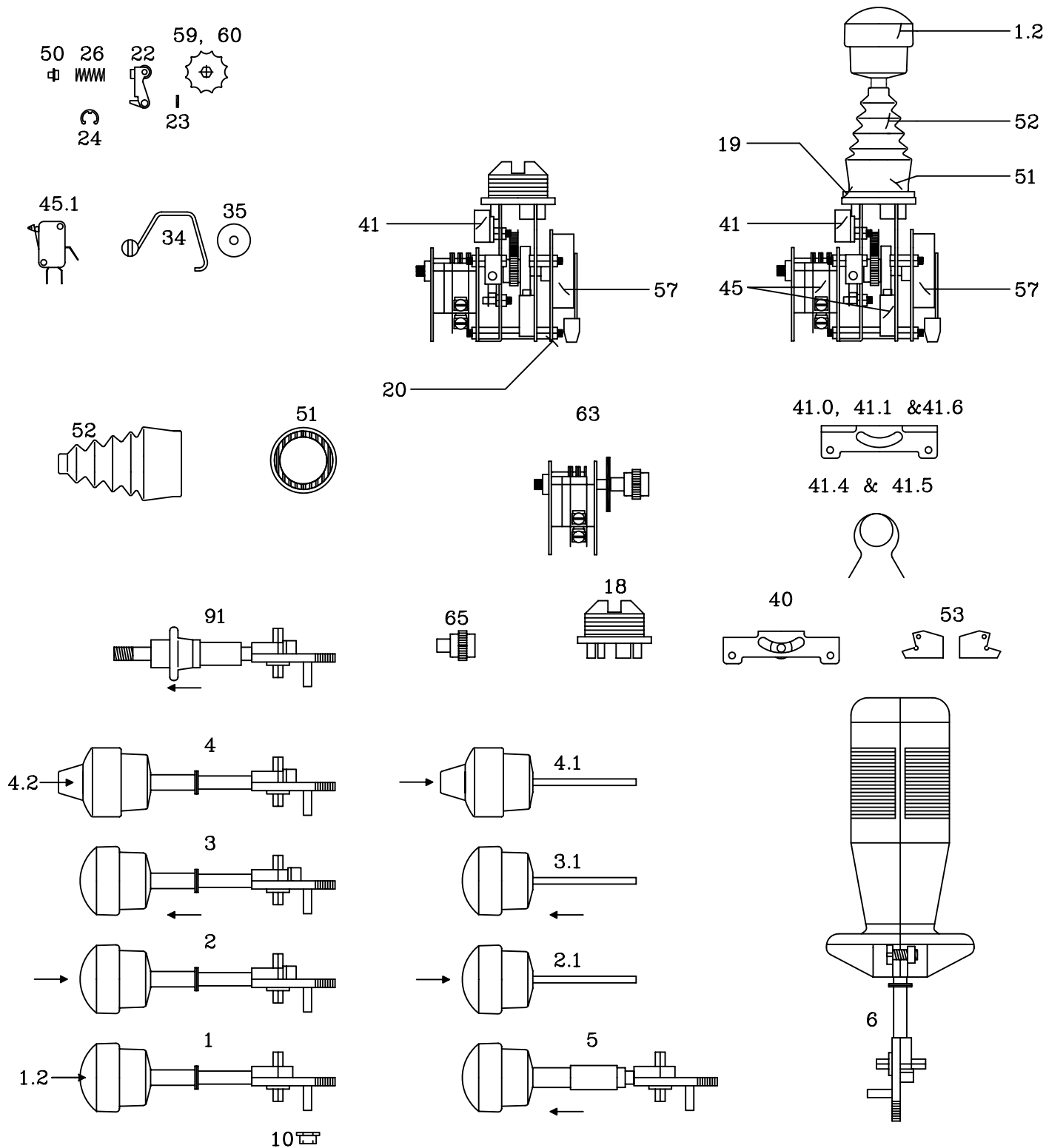
S2-MASTER SWITCH
S21-MASTER SWITCH
S22-MASTER SWITCH
S23-MASTER SWITCH HUB TYPE
S24-MASTER SWITCH
X-STANDARD HANDLE
T-DEAD MAN TO PRESS
P-DEAD MAN TO PULL
B-PUSH BUTTON IN HANDLE
M-MECH. INTERLOCK IN O POSS.
Q-T GRIP HANDLE (S23 ONLY)
SPECIAL HANDLE SEE SECT. 5
CONTACT ARR. DIR. 1-2
A-Z-FROM SHEET 20.2.1
O-SPECIAL CONTACT ARR.
X-IF NOT REQUIRED
Z-SPRING RETURN
F-BRAKE ADJUSTABLE
X-IF NOT REQUIRED
P-POTENTIOMETER SEE SECT. 6
p-POTENTIOMETER MOUNTING
X-IF NOT REQUIRED
1-M-STANDARD NAMEPLATE. SECT. 20.1
X-IF NOT REQUIRED
O-SPECIAL NAMEPLATE MARK IN CHART
G-GENERAL PURPOSE ENCL.
W-WEATHERPROOF ENCL.
O-OPEN TYPE SWITCH



GESSMANN S___ MASTER SWITCH		JOB #
DATE:	FROM:	
NAME:		

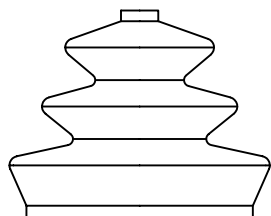
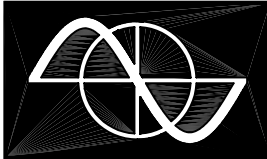


FOR FLANGE MOUNTING (S21) SEE SHEET 3.2.4
FOR METAL HUB (S23) SEE SHEET 3.4.4

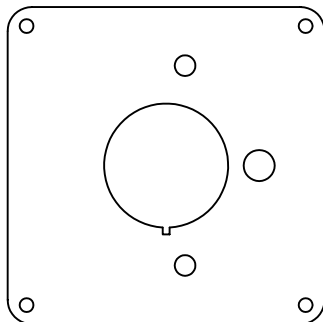




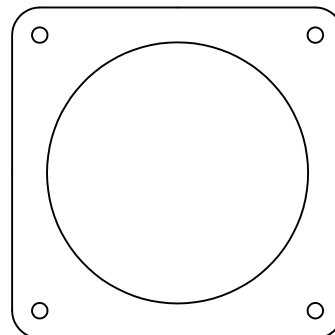
PART#	DESCRIPTION
1	STANDARD SHAFT ASSEMBLY
1.2	SOLID KNOB
2	STANDARD SHAFT ASSEMBLY FOR PUSH DEAD MAN 'T'
2.1	KNOB AND ROD FOR PUSH DEAD MAN 'T'
3	STANDARD SHAFT ASSEMBLY FOR PULL DEAD MAN 'P'
3.1	KNOB AND ROD FOR PULL DEAD MAN 'P'
4	STANDARD SHAFT ASSEMBLY FOR PUSH BUTTON DEAD MAN 'B'
4.1	KNOB AND ROD FOR PUSH BUTTON DEAD MAN 'B'
4.2	RUBBER CAP FOR PUSH BUTTON DEAD MAN
5	STANDARD SHAFT ASSEMBLY FOR MECHANICAL INTERLOCK 'M'
5.1	TOP KNOB, SPRING AND BOTTOM FOR MECHANICAL INTERLOCK 'M'
6	STANDARD SHAFT ASSEMBLY FOR B1T
6.1	B1T PALM HANDLE WITH ROD
10	PLASTIC BUSHING
18	CASTING
19	RUBBER GASKET
20	POTENTIOMETER MOUNTING PLATE
22	RATCHET ARM
23	ROLL PIN 2x10
24	'RETAINING CLIP
26	RATCHET SPRING STRONG
26.1	RATCHET SPRING NORMAL
34	DEAD MAN WIRE
35	ROUND SPACER
40	FRICTION BRAKE
41.0	RETURN SPRING COMPLETE
41.1	RETURN SPRING COMPLETE '0' POS. IN DIRECTION 2
41.2	TENSION SPRING STUD
41.4	TENSION SPRING OMEGA NORMAL
41.5	TENSION SPRING OMEGA STRONG
41.6	RETURN SPRING COMPLETE '0' POS. IN DIRECTION 1
45.1	MICROSWITCHES (166) AC c/w ROLLER (SCREW TERMINALS)
45.2	MICROSWITCHES c/w ROLLER (0.250 TABS)
50	RATCHET SPRING HOLDER
51	MOUNTING RING NUT
52	RUBBER BOOT
53.1	SWITCHING GATES 1-0-1
53.2	SWITCHING GATES 2-0-2
53.3	SWITCHING GATES 3-0-3
53.4	SWITCHING GATES 4-0-4
57	POTENTIOMETER SEE SECTION 6
59	RATCHET DISC 0 STEPS (SMOOTH)
60	'RATCHET DISC 5-0-5 STEPS
63.1	SWITCH CONTACT ASSY. FOR 3 CONTACTS WITH 5-0-5 RATCHET
63.2	SWITCH CONTACT ASSY. FOR 5 CONTACTS WITH 5-0-5 RATCHET
63.3	SWITCH CONTACT ASSY. FOR 7 CONTACTS WITH 5-0-5 RATCHET
63.4	SWITCH CONTACT ASSY. FOR 9 CONTACTS WITH 5-0-5 RATCHET
65	PLASTIC GEAR
91	STANDARD SHAFT ASSY. FOR B5 HANDLE WITH MECH. INTERLOCK 'M' SEE PAGE 5.5.1 FOR B5 OPTIONS



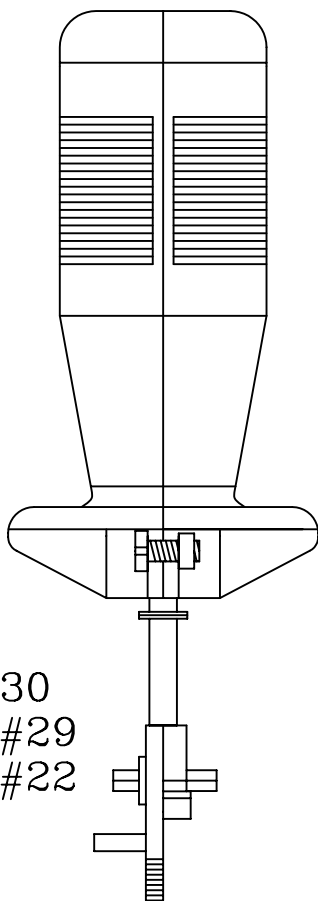
S2#28
S22#28
S24#25



S2#14
S22#15
S24#23



S2#25
S22#22
S24#24



S2#30
S22#29
S24#22



S2#87
S22#90
S24#68



S2#86
S22#91
S24#67

FOR THE REST OF THE
PARTS REFER TO SECTIONS
S2,S22 & S24
FOR PARTS.



S2	S22	S24	DESCRIPTION
30	29	22	SHAFT ASSEMBLY FOR B_
14	15	23	METAL FLANGE PLATE
25	22	24	PLASTIC FLANGE PLATE
28	28	25	RUBBER BOOT
86	91	67	OVAL HEAD SCREW M5x15
87	90	68	FLAT HEAD SCREW M5x12