

NOTES:

REFERENCE: ANY NOTE THAT REFERS TO SW1, SEE DIP SWITCH CONFIGURATION CHART FOR REFERENCE. ALL NOTES REFER TO NORMAL OPERATION. SW1-6 IN THE DOWN POSITION.

- 1) INPUT POWER: SM-1010 AND SM-1020
INPUT POWER TO TB-1 (1 & 2) IS 24Vdc (AS SHOWN)
INPUT POWER TO TB-1 (1 & 2) IS 24Vdc (AS SHOWN)
- 2) COMMAND: AN INCREASING COMMAND SIGNAL WILL CAUSE "CW" ROTATION OF THE OUTPUT SHAFT WHEN SW1-6 IS SELECTED AND IN THE DOWN POSITION (SEE DIP SWITCH CONFIGURATION CHART).

COMMAND SIGNAL MAY BE EITHER VOLTAGE OR CURRENT COMMAND THIS IS SELECTED BY SW1-4 IN THE UP OR DOWN POSITION. IF A VOLTAGE COMMAND IS SELECTED USE SW1-5 TO SELECTED COMMAND RANGE. IF A CURRENT COMMAND IS SELECTED ONE OF THE FOLLOWING FOR COMMAND RANGE SW1-1, SW1-2, OR SW1-3.

- 3) SET POINTS: SET THE COMMAND TO HIGH COMMAND SETTING AND ADJUST THE HI SET POINT POT TO OBTAIN THE DESIRED "CW" POSITION. NOW SET THE COMMAND SIGNAL TO THE LOW COMMAND SETTING AND ADJUST THE LO SET POINT POT TO OBTAIN THE DESIRED "CCW" POSITION. SET POINTS ARE LOCATED ON LOWER P.C. BOARD. SOME INTERACTION MAY OCCUR SO IT MAY BE NECESSARY TO REPEAT THESE STEPS.

- 4) LIMIT SWITCHES: SET THE COMMAND TO THE LOW COMMAND SIGNAL AND ADJUST LS1 TO JUST TRIP AT THE LOW SET POINT. SET THE COMMAND TO THE HIGH COMMAND SIGNAL AND ADJUST LS2 TO JUST TRIP AT THE HI SET POINT.

TWO ISOLATED LIMIT SWITCHES (LS3, AND LS4) ARE AVAILABLE FOR CUSTOMER USE. THESE TWO LIMIT SWITCHES ARE INDEPENDENTLY SET OF ONE ANOTHER AND CAN BE SET TO TRIP ON OR OFF ANYWHERE WITHIN THE ACTUATORS RANGE BY ADJUSTING TRIM POTS FOR LS3 AND LS4 ON UPPER P.C. BOARD.

NOTE: LIMIT SWITCHES NOT TO EXCEED 36Vdc OR 15ma MAX.

- 5) AUTO/MANUAL: AUTO/MANUAL OPERATION IS SELECTED BY SW1-7 IN EITHER THE UP OR DOWN POSITION. AUTO IS SELECTED WHEN A COMMAND SIGNAL IS DESIRED TO BE USED FOR CONTROL OF THE ACTUATOR. MANUAL OPERATION CAN BE SELECTED FOR LOCAL CONTROL. THIS IS DONE BY SELECTING SW1-7 IN THE UP POSITION. SW1-8 DOWN AND JUMPER TB2-1 TO TB2-3 FOR "CW" ROTATION OF THE OUTPUT SHAFT AND FOR "CCW" ROTATION JUMPER TB2-2 TO TB2-3.

- 6) SPEED/TORQUE: AVAILABLE TORQUE IS DEPENDENT ON SPEED CALIBRATION.

- 7) DEADBAND: THE DEADBAND POT LOCATED ON THE LOWER P.C. BOARD IS USED TO CONTROL THE "SENSITIVITY" OF THE OPERATING SERVO LOOP. CLOCKWISE ROTATION OF THE DEADBAND POT WILL DECREASE SENSITIVITY OF THE LOOP.

- 8) TRANSMITTER: THE 4 AND 20mA SET POINT POTS ARE LOCATED ON THE LOWER P.C. BOARD OPPOSITE SIDE OF THE HI AND LO SET POINTS. INPUT POWER TO TB3-9 AND 10 REQUIRES AN EXTERNAL DC POWER SUPPLY IN THE RANGE OF 12Vdc (MIN) TO 36Vdc (MAX) AND A LOAD CONNECTED IN SERIES WITH ONE LEAD FROM THE POWER SUPPLY AS SHOWN.

$$\frac{\text{POWER SUPPLY VOLTAGE} - 8Vdc}{0.020A \text{ MAX.}} = \text{LOAD RESISTANCE}$$

TRANSMITTER WILL PRODUCE AN INCREASING SIGNAL FOR "CW" ROTATION. TRIM THE 4mA SET POINT POT OUT AT THE "CCW" END OF ACTUATOR ROTATION. TRIM THE 20mA SET POINT POT OUT AT THE "CW" END OF ACTUATOR ROTATION.

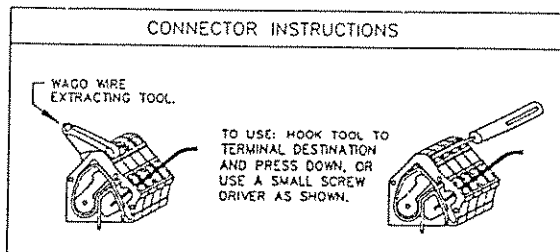
- 9) GROUND: GROUND IS IDENTIFIED BY A GREEN SCREW ON HOUSING OF ACTUATOR.
- 10) REVERSE OPERATION: FOR REVERSE OPERATION SELECT SW1-6 IN THE UP POSITION. THIS SELECTION WILL REVERSE THE COMMAND AND TRANSMITTER SIGNALS SO THAT THE LOW COMMAND AND TRANSMITTER SIGNAL IS NOW THE "CW" POSITION AND THE HIGH IS THE "CCW" POSITION.
- 11) REFERENCE: SEE IM-0588 FOR FURTHER INFORMATION ON THE SM-1000 OPERATION.

DIP SWITCH CONFIGURATIONS SW1		
SWITCH	SWITCH POS	FUNCTION
1	DOWN	4 TO 20mA COMMAND SIGNAL
2	DOWN	4 TO 12mA COMMAND SIGNAL
3	DOWN	12 TO 20mA COMMAND SIGNAL
4	UP	CURRENT COMMAND SIGNAL
	DOWN	VOLTAGE COMMAND SIGNAL
5	UP	0-10Vdc COMMAND SIGNAL
	DOWN	0-5Vdc COMMAND SIGNAL
6	UP	REVERSE ACTING
	DOWN	NORMAL ROTATION
7	DOWN	AUTO OPERATION
	UP	MANUAL OPERATION
8	UP	L.O.S. PARK IN PLACE
	DOWN	L.O.S. GO TO LO SET

SEE REF A

AS VIEWED FROM FRONT

NOTE: DIP SWITCH LOCATED ON LOWER P.C. BOARD UNDER TRANSFORMER. A: SELECT ONLY ONE IF CURRENT COMMAND IS SELECTED.



		TOLERANCES UNLESS OTHERWISE SPECIFIED XX & 02 ANGULAR & 1"			DO NOT SCALE		TITLE - WIRING DIAGRAM
SCALE -	NONE	PROD DEC -	PROD DEC -	JORDAN CONTROLS INC.		FOR -	
B	ADDED 24Vdc OPTION	APM 8/18/93	AP MILLER	APM 7/30/93	REL	SM-1000 24Vdc / 24Vdc	
A	INITIAL RELEASE	APM 7/30/93	DATE -	DATE -	DATE -	WITH LIMIT SWITCHES WIRED IN	
REV 1	DESCRIPTION	DATE	DATE	DATE	DATE	95 C 033183	