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**PRODUCT:** TM-80, TM-120

**DATE:** September 14, 2011

**SUBJECT:** Locking Joystick on Driller's Console

**SERIAL NUMBERS:** All TM-80 & TM-120 Torq-Matic Wrenches

**DISCUSSION:**

There is a potential for the wrench to be accidentally moved if the Driller's Console Joystick is bumped by personnel. A locking joystick is now available as a replacement that would mitigate this potential problem. The new joystick requires that the user pull-up on a sliding mechanism to engage joystick operations.

**RECOMMENDATION:**

Replace existing joystick (Figure 1) on the Driller's Console with the new locking joystick (Figure 2).



**Figure 1: Existing joystick**



**Figure 2: New locking joystick**

**Materials Needed:**

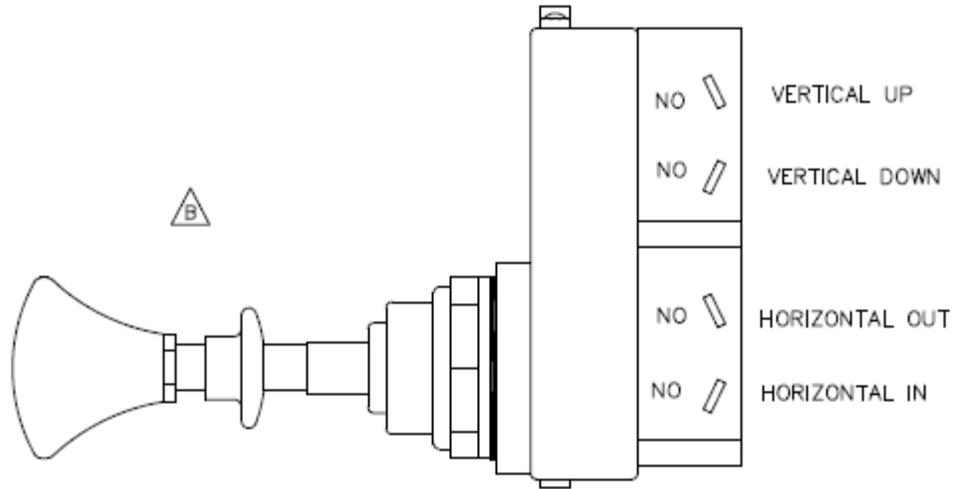
Part: AY15373 KIT, JOYSTICK, LOCKING, CONSOLE, TM

Consists of:

1.00 EA	E13916	JOYSTICK, 4POS, LOCKING, SPRING RETURN
2.00 EA	E12771	SAFETY BARRIER, ZENER
1.00 EA	DT18286	MOUNTING BRACKET, L-SHAPE, DIN RAIL
2.00 EA	E10955	END BRACKET, TS 35 RAIL, 9.5MM
30.00 EA	E16-2018-010	FERRULE, #16 AWG, 14mm, INS, RED
4.00 FT	E11209	CABLE, 5 C OVERALL SHIELD, 20AWG
2.00 FT	E11847	HEAT SHRINK, 1 IN. BLUE
5.00 EA	C10048	MOUNT, CABLE TIE, 4 WAY, 0.50X0.50
10.00 EA	E10498	CABLE TIE, 5.6 IN LG, 18 LB

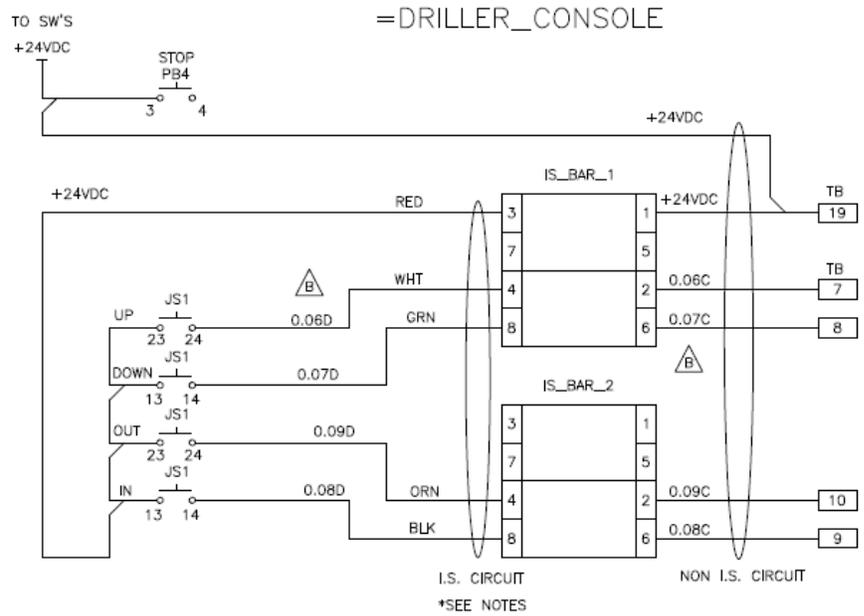
**Procedure:**

1. Perform Job safety analysis before commencing work. Ensure that proper PPE is worn. Adhere to local lockout/tagout procedures.
2. Remove existing joystick and wiring.
3. Orient joystick according to Figure 3 and install into console panel.



**Figure 3: Joystick orientation and configurations**

4. Wire joystick according to Figure 4.

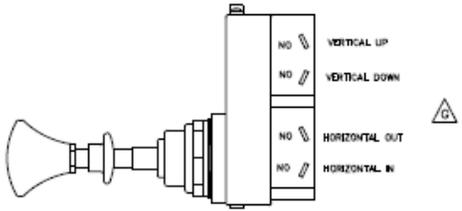
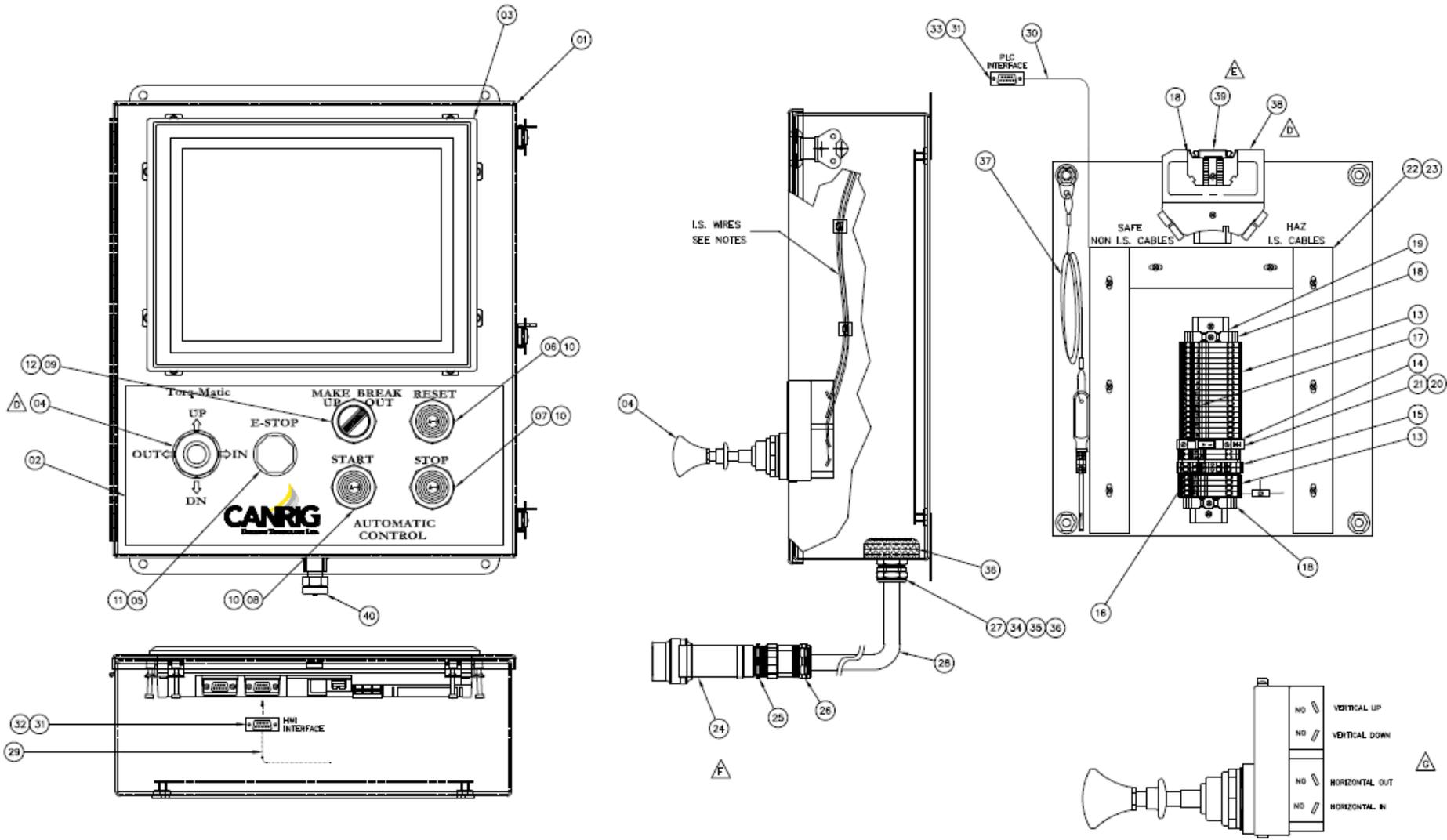


NOTES:

- 1) ALL I.S. WIRES MUST BE SEPERATE AND AT A MINIMUM DISTANCE OF 2" FROM NON I.S. WIRES
- 2) USE 18AWG WIRES WITH BLUE HEAT SHRINK OR BLUE CABLE FOR I.S. CIRCUITS

**Figure 4: Electrical wiring schematic for locking joystick**

5. Secure all Intrinsically Safe (IS) wires with 4-way adhesive backed cable tie mounts (C10048) according to notes in Figures 4 & 5.



- NOTES:**
1. REFER TO GEL10023 FOR WIRING DIAGRAMS OF JS.
  2. ATTACH I.S. WIRES TO SIDEWALL AND MUST BE MINIMUM OF 2" AWAY FROM NON I.S. WIRES.
  3. IDENTIFY I.S. WIRES WITH BLUE HEAT SHRINK OR USE BLUE CABLE.
  4. ITEM 45 NOT SHOWN.

No.	Y/M/D	BY	REVISION DESCRIPTION	CHKD.	APVD.
E	08/06/19	DHT	ADDED MTG BRACKET ITEM 39 AND BLUE CABLE	GRY	BQT
D	09/02/24	MJS	EDN# CN1245, CHANGED ITEM 4, ADDED ITEM 36	GRY	DHT
C	09/01/19	MJS	CHANGED TITLE BLOCK AND ENCLURE DESIGN	GRY	MXD
G	11/04/05	DHT	CORRECTED JS CONFIGURATIONS		
F	10/11/03	MJS	CHANGED ITEM# 24	GRY	BQT

TOLERANCE - UNLESS OTHERWISE SPECIFIED		FABRICATING IMPERIAL (IN)		FABRICATING METRIC (MM)	
REMOVE SHARP CORNERS AND BURRS		0 TO .24	± 1/16"	0 TO 610	± 0.5 mm
CASTING	± 1/16"	.24 TO .60	± 3/32"	610 TO 1525	± 0.8 mm
		.60 TO 1.25	± 1/8"	1525 TO 3048	± 1.0 mm
		1.25 TO 2.50	± 3/16"	3048 TO 7112	± 1.2 mm
		2.50 & OVER	± 1/4"	7112 & OVER	± 1.5 mm
◎ CONCENTRICITY	± .005 IN 5 INCHES				
— STRAIGHTNESS	± .005 IN 5 INCHES				
⊥ SQUARENESS	± .010 IN 5 INCHES				
PARALLELISM	± .010 IN 5 INCHES				
⊕ TRUE POSITION	± .005				
MACHINED SURFACES	± .005				
RADIUS UNLESS SHOWN	= 0.03 MAX.				
		DECIMAL	± .030"	DECIMAL	± 0.8 mm
			± .005"		± .13 mm
			± .002"		± .05 mm
		ANGULAR	MACHINING ± 1'	FABRICATION ± 2'	

DRAWN	LAG	08/05/13	THIRD ANGLE PROJECTION	SHEET SIZE
CHECKED	LAM	08/05/21		D
APPROVD	MJS	08/05/21		
MATERIAL				
EST. WEIGHT				
SCALE 1:2				
PROJECT TMB0/120				
AY50146 REV G				

J-BOX, DRILLERS, CONSOLE WRENCH

Figure 5

5. Complete lockout/tagout procedures and ensure that personnel are clear from the wrench.

6. Start the wrench and check joystick operation.

**INFORMATION:**

For further information contact:

*For a complete list of all bulletins go to [www.canrig.com](http://www.canrig.com)*

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