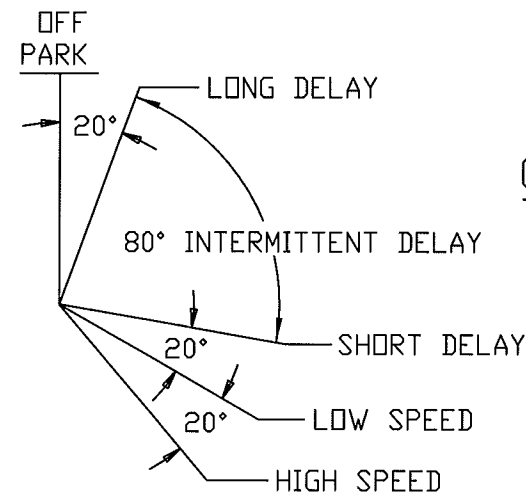
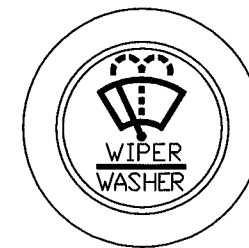
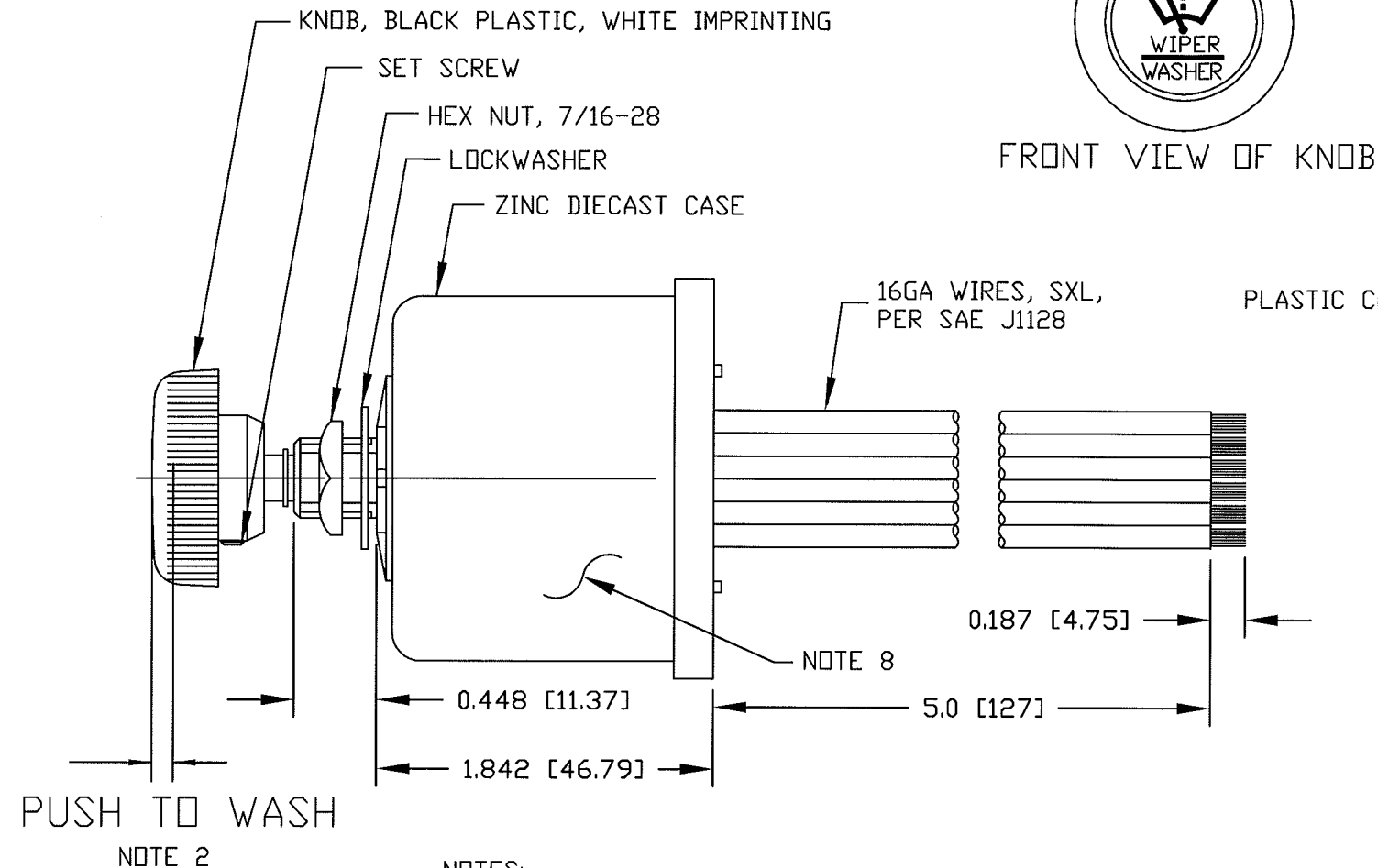
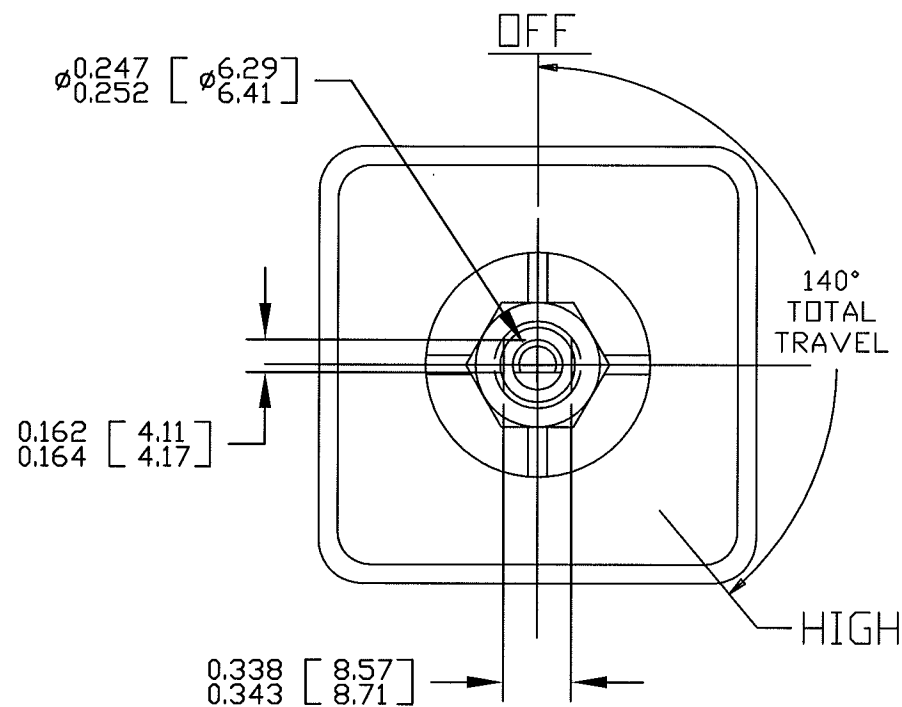


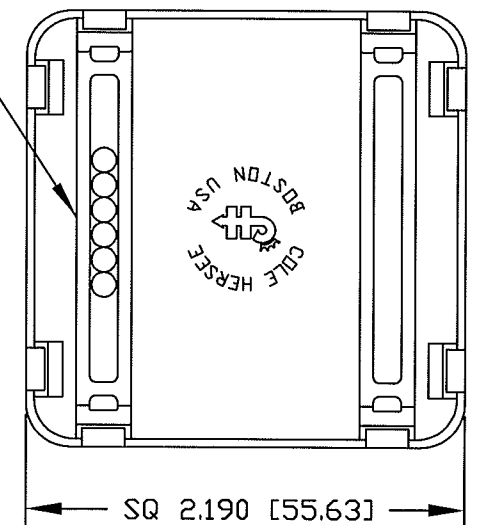


CIRCUITRY



FRONT VIEW OF KNOB

Revision Control Record			
Rev.	Description of Change	ECN No.	Date
L	CHANGE BOM	09588	01/15/10
M	CHANGE NOTE 3	13054	02/07/13



NOTES:

- DESIGNED FOR 12V SYSTEM, SINGLE MOTOR, DYNAMIC AND NON-DYNAMIC PARK. TO BE USED WITH PERMANENT MAGNET MOTOR, NEGATIVE GROUND ONLY.
- PUSH TO WASH FUNCTION: RESULTS IN 2 TO 3 WIPES AFTER RELEASE OF PUSH SWITCH.
- RATING: VOLTAGE OPERATING RANGE 9VDC TO 16VDC
ROTARY SWITCH ACTUATION 20,000 CYCLES MINIMUM.
MOTOR DRIVE: 15 AMPS CONTINUOUS. START-UP/STALL/LOCKED-ROTOR 50 AMPS. SHORT-CIRCUIT PROTECTED^(M)
WASHER CIRCUIT 3 AMPS, PUSH SWITCH 20,000 CYCLES MINIMUM.
- MICROPROCESSOR CONTROLLED, SOLID-STATE RELAY, CURRENT LIMIT SENSE CIRCUIT, REVERSE POLARITY PROTECTED
- CONFORMS TO SAE J1455:
4.11 GENERAL HEAVY DUTY TRUCK ELECTRICAL ENVIRONMENT.
4.11.1 STEADY-STATE ELECTRICAL CHARACTERISTICS.
4.11.2 TRANSIENT, NOISE AND ELECTROSTATIC CHARACTERISTICS.
- ENVIRONMENTAL EXTREMES BY LOCATION.
5.2 INTERIOR-FORWARD.
- ALL STEEL PARTS PLATED
- ALL DIMENSIONS ARE REFERENCE ONLY UNLESS NOTED OTHERWISE.
- COLE HERSEE PART NUMBER, REVISION, & DATE CODE MARKED AT RANDOM ON CASE.

COLOR	FUNCTION
WHITE	MOTOR HIGH SPEED
YELLOW	MOTOR LOW SPEED
RED	VBB (+12V)
BROWN	WASHER PUMP
BLACK	GROUND (0V)
BLUE	MOTOR PARK

Tolerances Unless otherwise specifically noted, the following are default tolerances: * 2-place Decimal Dimensions +/- .02" * 3-place Decimal Dimensions +/- .005" * Angular Dimensions +/- 1.0 Deg. * Metric: Refer to equivalent English Dimension Tolerance >>> NOTE: All tolerances are Non-Cumulative. <<<	
Dimensional Units All dimensions are expressed in inches except those shown in brackets (xxx) are expressed in millimeters	
"REF." or an Asterisk (*) = Non-Toleranced Reference Dimension, shown for clarification purposes only.	
Used On or Ref.: EX28241	Scale: 1:1

PROPRIETARY INFORMATION This Engineering Drawing, and the information contained herein, is proprietary to Cole Hersee Company and may not be disclosed, re-produced, or in any other way transferred or communicated to any other party without the express written consent of an authorized representative of Cole Hersee Company.	
DESIGN CONTROL It is the responsibility of the individual using / referencing this drawing to assure that the noted design revision level agrees with the revision level of the Controlled Document (Master Drawing). This is a NON-CONTROLLED DOCUMENT unless otherwise specifically noted.	
DO NOT SCALE - Dimensional variation may occur during printing / reproduction.	
Drawn By: JCS	Date Drawn: 1/9/07

Special Characteristics:	
☒ CC	Critical Characteristic, relating to Safety and/or Regulatory Compliance
☒ X	Significant Characteristic relating to Process Control (SPC)
☒ KC	Control Dimension relating to Form - Fit - Function as defined by Cole Hersee Company and/or the Customer
(Note that the identification of any Characteristics as being "Special" does not alter the requirement that ALL specified dimensions & tolerances must be met.)	
Responsible Engineer: JCS	Pg. 1

Cole Hersee Co. 20 Old Colony Ave., South Boston, MA, 02127 Phn: 617-268-2100 Web: www.colehersee.com	
Description: WINDSHIELD WIPER CONTROLLER, UNIVERSAL, 12V	
Drawing / Part No.: 75600-04	Current Rev.: M