NOTES:
1. DESIGNED FOR 12V SYSTEM, SINGLE MOTOR, DYNAMIC AND NON-DYNAMIC PARK.
   TO BE USED WITH PERMANENT MAGNET MOTOR, NEGATIVE GROUND ONLY.
2. PUSH TO WASH FUNCTION RESULTS IN 2 TO 3 Wipes AFTER RELEASE OF PUSH SWITCH.
3. 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 PROOF.
   WASHER CIRCUIT 3 AMPS, PUSH SWITCH 20,000 CYCLES MINIMUM.
4. MICROPROCESSOR CONTROLLED, SOLID-STATE RELAY, CURRENT LIMIT SENSE CIRCUIT, REVERSE POLARITY PROTECTED.
5. CONFORMS TO SAE J545.
6. GENERAL HEAVY DUTY TRUCK ELECTRICAL ENVIRONMENT.
7. STEADY-STATE ELECTRICAL CHARACTERISTICS.
8. TRANSIENT, NOISE AND ELECTROSTATIC CHARACTERISTICS.
9. ENVIRONMENTAL EXTREMES BY LOCATION.
10. INTERIOR-FOREWARD.
11. ALL DIMENSIONS ARE REFERENCE ONLY UNLESS NOTED OTHERWISE.
12. COLE HERSEE PART NUMBER, REVOLUTION, & DATE CODE STAMPED IN WHITE.
NOTES:
1. DESIGNED FOR 12V SYSTEM, SINGLE MOTOR, DYNAMIC AND NON-DYNAMIC PARK.
   TO BE USED WITH PERMANENT MAGNET MOTOR, NEGATIVE GROUND ONLY.
2. PUSH TO WASH FUNCTION RESULTS IN 2 TO 3 WIPES AFTER RELEASE OF PUSH SWITCH.
3. 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.
   WASHER CIRCUIT 3 AMPS, PUSH SWITCH 20,000 CYCLES MINIMUM.
4. MICROPROCESSOR CONTROLLED, SOLID-STATE RELAY, CURRENT LIMIT SENSE CIRCUIT, REVERSE POLARITY PROTECTED.
5. CONFORMS TO SAE J1068.
   4.11 GENERAL HEAVY DUTY TRUCK ELECTRICAL ENVIRONMENT.
   4.11.1 STEADY-STATE ELECTRICAL CHARACTERISTICS.
   4.11.2 TRANSIENT, NOISE AND ELECTROSTATIC CHARACTERISTICS.
6. ENVIRONMENTAL EXTREMES BY LOCATION.
   5.2 INTERIOR-FORWARD.
7. ALL STEEL PARTS PLATED.
8. 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 (OV)
BLUE | MOTOR PARK

COLE HERSEE CO.
20 Old Colony Ave., South Boston, MA, 02127
Phone: 617-258-2100  Website: colehersee.com

WINDSHIELD WIPER CONTROLLER,
UNIVERSAL, 12V

Drawing NO. 75600-04

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

Scale: 1:1

Drawn by: JCS
Date: 1/9/07
Responsibility: JCS

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SWITCH CONNECTIONS

<table>
<thead>
<tr>
<th>COLOR</th>
<th>WIRE SIZE</th>
<th>CONNECT WIRE TO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>YELLOW</td>
<td>20 GA</td>
<td>MOTOR LOW SPEED TERMINAL</td>
</tr>
<tr>
<td>WHITE</td>
<td>16 GA</td>
<td>MOTOR HIGH SPEED TERMINAL</td>
</tr>
<tr>
<td>GREEN</td>
<td>24 GA</td>
<td>MOTOR PARK TERMINAL</td>
</tr>
<tr>
<td>BLACK</td>
<td>0.0055 (0.14 MM)</td>
<td>GROUND (B+ terminal connection must be made)</td>
</tr>
<tr>
<td>BROWN</td>
<td>0.0043 (0.11 MM)</td>
<td>WASHER PUMP (B+ TERMINAL)</td>
</tr>
<tr>
<td>RED</td>
<td>2.0 MM</td>
<td>B+ (these two wires must be connected together)</td>
</tr>
<tr>
<td>RED</td>
<td>0.044 (0.11 GA)</td>
<td>HIGH</td>
</tr>
<tr>
<td></td>
<td>8.71</td>
<td>LOW SPEED</td>
</tr>
</tbody>
</table>

CIRCUITRY

LONG DELAY
20°
80° INTERMITTENT DELAY
20°
SHORT DELAY
20°
LOW SPEED
20°
HIGH SPEED
140° TOTAL TRAVEL

SHAFT
RETAINING RING
HEX NUT, 7/16 - 28
LOCK WASHER
CASE
WIRE LEADS
COVER

OFF PARK

8.58 8.71

11.43 46.48 127.00

4.75 7.32

55.42 5.89

NOTES:
1. PUSH TO WASH, WASHER & WIPER CIRCUIT ACTIVATED (No WIRES AFTER WASHER CIRCUIT IS DEACTIVATED).
2. ALL STEEL PARTS PLATED.
3. ALL DIMENSIONS ARE REF. ONLY.
4. 12 VOLTS D.C.
5. SEPARATE B+ AND GROUND CONNECTIONS MUST BE MADE TO THE WIPER MOTOR.

CONFIDENTIAL PROPERTY OF COLE HERSEE

DATE DRAWN: 3/18/87
DATE BLUEPRINT: 3/23/87
Issued: 2/5/87

MATERIAL: ECN 2488
TOLERANCES: DECIMAL = METRIC =
WINDSHIELD WIPER & WASHER SWITCH PM MOTOR

DO NOT SCALE
CIRCUITY

80° INTERMITTENT DELAY

80° TOTAL TRAVEL

140° TOTAL TRAVEL

HIGH SPEED

LOW SPEED

SHORT DELAY

LONG DELAY

OFF

OFF

PUSH TO WASH

NOTE 2

NOTE 2

NOTE 2

NOTES:
1. DESIGNED FOR 12V SYSTEM, DUAL MOTOR. MUST BE USED WITH NON-DYNAMIC PARK MOTORS ONLY.
2. PUSH TO WASH FUNCTION RESULTS IN 3 WIPES AFTER RELEASE OF PUSH SWITCH.
3. RATING VOLTAGE OPERATING RANGE: 9VDC TO 16VDC
4. ROTARY SWITCH ACTUATION: 20,000 CYCLES MINIMUM.
5. MOTOR BRAKE: 10 AMPs PER MOTOR CONTINUOUS, START-UP STALL/Locked-Motor 20 AMPs. SHORT-CIRCUIT PROOF.
6. MICROPROCESSOR CONTROLLED, SOLID-STATE RELAY, CURRENT LIMIT SENSE CIRCUIT, REVERSE POLARITY PROTECTED.
7. CONFORMS TO SAE J4455

4.1 APPLICATIONS:
A. GENERAL HEAVY DUTY TRUCK ELECTRICAL ENVIRONMENT.
B. STEADY-STATE ELECTRICAL CHARACTERISTICS.
C. TRANSIENT, NOISE AND ELECTROSTATIC CHARACTERISTICS.

INTERMITTENT DELAYS:
1. All dimensions are reference only unless noted otherwise.
2. Connector, DELPHI 1-10 PIN, PART: 2965497 (QTY 1)
3. TERMINALS, DELPHI 1-10 PIN, PART: 2965497 (QTY 1)

NOTE 2:
1. Unit requires two separate wire connections to motor park signals. This may require re-wiring of vehicle harness. Do not connect park wires together.
2. Wrap plastic bag around switch purple wire, fold and staple as shown.
NOTES:
1. DESIGNED FOR 12V SYSTEM, DUAL MOTOR. MUST BE USED WITH NON-DYNAMIC PARK MOTORS ONLY.
2. PUSH TO WASH FUNCTION RESULTS IN 3 WIPES AFTER RELEASE OF PUSH SWITCH.
3. RATING VOLTAGE OPERATING RANGE SRCV TO 6VDC ROTAry SWITCH ACTUATION 20,000 CYCLES MINIMUM.
   MOTOR DRIVE: 10 AMPS PER MOTOR CONTINUOUS. START-UP/STALL/LOCKED-ROTOR 30 AMPS. SHORT-CIRCUIT PROOFED.
4. MICROPROCESSOR CONTROLLED, SOLID-STATE RELAY. CURRENT LIMIT SENSE CIRCUIT, REVERSE POLARITY PROTECTED.
5. COMFORMS TO SAE J1453.
6. GENERAL PURPOSE TRUCK ELECTRICAL ENVIRONMENT.
7. STEADY-STATE ELECTRICAL CHARACTERISTICS.
8. TRANSIENT, NOISE AND ELECTROSTATIC CHARACTERISTICS.
9. INTERMITTENT DUTY CYCLE.
10. UNITS ARE REFERENCE ONLY, UNLESS NOTED OTHERWISE.
11. UNITS REQUIRE TWO SEPARATE WIRE CONNECTIONS TO MOTOR PARK SIGNALS.
12. THIS UNIT REQUIRES RE-WIRING VEHICLE HARNESS. DO NOT CONNECT PARK WIRING TOGETHER.
13. NOTE THAT 1-PIN CONNECTOR (PURPLE WIRE) IS FOR PARK MOTOR B.
14. WRAP PLASTIC BAG AROUND SWITCH PURPLE WIRE. FOLD AND STAPLE AS SHOWN.