










Setting Beryl’s BT2000 Wireless Opacity Meter to CARB’s July, 2019 New Opacity Standard

1. Power on the BT2000 Meter; Press  “ON-OFF” button to power up the meter and to start from the 1st Main menu.
2. Press “F1”  “SAEJ 1667”; to enter J1667 TEST PROCEDURE.
3. Press “F4”  “MAX XX%”; to enter SET MAX TEST AVERAGE.
4. Press “F3”  “INC ONES”; until correct Ones digit is displayed.
5. Press “F2”  “INC TENS”; until correct Tens digit is displayed.
6. Press “F5”  “EXIT”; go to MAIN MENU 1 OF 3
7. Press “F1”  “SAEJ 1667”; to enter J1667 TEST PROCEDURE.
8. Verify that the correct Max Opacity Limit is Set.

New Opacity Standard (Starting July 1, 2019)

The new opacity standard goes into effect July 1, 2019. Vehicles subject to these programs must meet the opacity thresholds shown in the table below.

Engine Model Year (MY)	Opacity Limit
2007 MY or subsequent MY	5%
1997-2006 MY, Non-retrofitted	20%
1991-1996 MY, Non-retrofitted	30%
Pre-1991 MY, Non-retrofitted	40%
Engines equipped with a Level 3 Verified Diesel Emissions Control System (VDECS)	5%
Engines equipped iwht a Level 2 VDECS	20%
Two-engine crane is powered by an off-road engine without a diesel particulate filter (DPF)	40%



New Opacity Standard Starting July 1,2019

Engine Model Year (MY)	DPF		
	VDECS 3	VDECS 2	None
Present ↑ 2007	5%	5%	5%
2006 ↑ 1997	5%	20%	20%
1996 ↑ 1991	5%	20%	30%
1990 ↓ Older	5%	20%	40%
Two Engine Crane powered by off-road engine			40%

Disclaimer: Always re-verify your actual Maximum Opacity Limit before testing your vehicle.



New Opacity Standard Starting July 1,2019

SIZE A	FSCM NO	DWG NO info on new opacity_01.vsd	REV B
SCALE 1:1		SHEET 2 OF 2	