| California Environmental Protection Agency<br>**Air Resources Board** | **MORIDGE MANUFACTURING, INC.** | **EXECUTIVE ORDER U-L-050-0007-1**<br>New Off-Road Large Spark-Ignition Equipment |
|---|---|---|

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-14-012;

**IT IS ORDERED AND RESOLVED:** That the following equipment produced by the manufacturer is certified as described below. Production equipment shall be in all material respects the same as those for which certification is granted.

**ENGINE DESCRIPTION**

| MANUFACTURER | ENGINE FAMILY (E.O. NUMBER) | ENGINE SIZE (cc) | FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas) |
|---|---|---|---|
| BRIGGS & STRATTON CORPORATION | DBSXB.9932VB (U-L-023-0040)<br>EBSXB.9932VB (U-L-023-0044)<br>EBSXB.8102VW (U-L-023-0043) | 896, 993<br>810 | Gasoline |
| KUBOTA CORPORATION | CKBXB.9622HB (U-L-016-0046)<br>DKBXB.9622HB (U-L-016-0055)<br>EKBXB.9622HF (U-L-016-0071) | 962 | Gasoline |

S.A. = See Attachment; TBC = To Be Certified

**EQUIPMENT DESCRIPTION**

| MODEL YEAR | EVAPORATIVE FAMILY | NOMINAL FUEL TANK SIZE (liters) | EQUIPMENT APPLICATION |
|---|---|---|---|
| 2014 | CC45EL | 43.37 | Riding Mower, Commercial Turf, Leaf Blower/Vacuum |

| EMISSION CONTROL SYSTEMS (ECS) | ENGINE and/or EQUIPMENT MODEL |
|---|---|
| Canister/Co-Extruded | See Attachment |

A. **ECS TYPE** (Venting Control Type/Tank Barrier Type): 1. **Venting Control Type and Code**:- Canister=C Sealed Tank=S Other=O 2. **Tank Barrier Type and Code**:- Metal=M Treated HDPE or PE=P Co-extruded=C Selar=L Nylon=N Acetal=A Other=O B. **EVAPORATIVE FAMILY 2-Letter CODE** (Venting Control Codes =C, S, O); (Tank Barrier Codes = M, P, C, L, N, A, O). **Note**: Always list venting control type or code first before tank barrier type or code. Do not use abbreviations for ECS types.

The following are the evaporative emission standards (Title 13, California Code of Regulations, Section 2433(b)(4)(B), as applicable), and certification levels in grams per day (g/day) or grams per square meter per day ($g/m^2$/day) or grams per liter (g/l) for this evaporative family or the component Executive Order, as applicable. The running loss emissions control has been demonstrated by the manufacturer.

| *=not applicable | DESIGN BASED | | | | | |
|---|---|---|---|---|---|---|
| FUEL HOSE PERMEATION ($g/m^2$/day) | | FUEL TANK PERMEATION ($g/m^2$/day) | | CARBON CANISTER BUTANE WORKING CAPACITY (grams HC/liter) | |
| STANDARD | CERTIFICATION LEVEL OR EXECUTIVE ORDER | STANDARD | CERTIFICATION LEVEL OR EXECUTIVE ORDER | STANDARD | CERTIFICATION LEVEL OR EXECUTIVE ORDER |
| 15 | G-05-018 | 1.5 | * | 1.4 | Q-09-021 |

**BE IT FURTHER RESOLVED:** That for the listed engines for the aforementioned model-year, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(d) (certification and test procedures), 13 CCR Section 2759 (labeling) and 13 CCR Sections 2760 and 2764 (emission control system warranty).

Equipment certified under this Executive Order must conform to all applicable California emission regulations.

**This Executive Order is only granted to the engine family and model-year listed above. Equipment in this family that is produced for any other model-year is not covered by this Executive Order.**

This Executive Order hereby supersedes Executive Order U-L-050-0007 dated November 26, 2013.

Executed at El Monte, California on this 18th day of February 2014.

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

Attachment (page 1 of 2)

# Large Off-Road Evaporative Certification Database Form
# (Supplementary Information)

U-L-050-0007-1

**MODEL SUMMARY**

| S1. Worst Case (Check One) | S2. Engine or Equipment Model | S3. Sales Codes (check all appropriate) | | | S4. Engine Class ≤ 1 L (Yes or No) | S5. Fuel System (FI or CARB) | S6. Fuel Tank Vol. (Liters) | | S7. Fuel Tank Internal Surface Area ($m^2$) | S8. Fuel Line Type | S9. Nominal Fuel Line Length[(1)] (mm) | S10. Fuel Line Inside Diameter (mm) | S11. Exhaust Family | S12. Fuel Tank Executive Order | S13. Fuel Line Executive Order | S14. Carbon Canister or Other Venting Control Executive Order |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CA Only | 49-State | 50-State | | | Total | Nominal | | | | | | | | |
| | 226V/48 | X | X | | Yes | CARB | 47.55 | 43.37 | .75 | Multi-Layer | 690 | 635 | EBSXS.8102VW | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 226V/52 | X | X | | Yes | CARB | 47.55 | 43.37 | .75 | Multi-Layer | 690 | 6.35 | EBSXS.8102VW | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 226V/61 | X | X | | Yes | CARB | 47.55 | 43.37 | .75 | Multi-Layer | 690 | 6.35 | EBSXS.8102VW | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 329/52 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 665 | 7.94 | CKBXB.9622HB DKBXB.9622HB EKBXB.9622HF | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 329/61 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 665 | 7.94 | CKBXB.9622HB DKBXB.9622HB EKBXB.9622HF | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 329/72 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 665 | 7.94 | CKBXB.9622HB DKBXB.9622HB EKBXB.9622HF | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 329B/52 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 560 | 6.35 | DBSXB.9932VB EBSXB.9932VB | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 329B/61 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 560 | 6.35 | DBSXB.9932VB EBSXB.9932VB | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 329B/72 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 560 | 6.35 | DBSXB.9932VB EBSXB.9932VB | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 335B/61 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 560 | 6.35 | DBSXB.9932VB EBSXB.9932VB | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| | 335B/72 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 560 | 6.35 | DBSXB.9932VB EBSXB.9932VB | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |

Attachment (page 2 of 2)

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 432/61 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 665 | 7.94 | CKBXB.9622HB<br>DKBXB.9622HB<br>EKBXB.9622HF | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |
| X | 432/72 | X | X | | Yes | CARB | 47.55 | 43.37 | .7486 | Multi-Layer | 665 | 7.94 | CKBXB.9622HB<br>DKBXB.9622HB<br>EKBXB.9622HF | Co-Extruded | G-05-018 | Q-09-021 (Qty. of 2) |

(1) The nominal fuel line lengths can be grouped into increment of ± 3 inches (76 mm)