



	<p>Skill Module Number: 3</p> <p>Subject: Exterior Lights</p>
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Objective:

At the completion of this module you will be able to explain the lighting function of the 2002 M-Class.

Vehicle and tools required:

- 2002 M-Class with bi-xenon
- SDS / DAS / WIS

Required material:

- 163 ETM
- 163 Model Year Book for 2002
- M-Class lighting handout

Instructions:

1. Follow the instructions and answer the questions.
2. Ask your instructor if assistance is needed.
3. Stop at instructor checkpoints for sign-off.

1. Using wiring diagram, class handout, WIS or intro book, what is the main control unit for the exterior light operation? _____
2. Is light switch (S4) hard wired to the AAM (N10) for light operations? _____
3. Does the EAM (N10/1) control any exterior lights? _____ If so, which one? _____

4. What other control unit besides the ones mentioned in questions 2 & 3 is used for exterior light operation?

5. Which control unit(s) monitor the wipers in order to turn the lights on when in auto position? _____
6. If you had a problem with no CAN-C communication to the EAM would the low beams come on? _____ If so, why? _____
7. If you had the same problem as in question 6, would the parking lights also be on? _____ Why or why not? _____

8. What if the AAM was missing the CAN-C signal with the S4 in the off position, would the parking lights be on? _____ Why or why not? _____

9. With the same problem as in question 8, but this time the S4 is in the auto position, would the parking lights be on? _____ Why or why not? _____

10. If you had no power to your low beams on a 2002 ML, where would you check next? _____

11. Using SDS can you activate the low beams from EAM? _____
12. Is there any version coding issues for the exterior lights in EAM? _____ If so, what? _____
13. Using SDS can you activate exterior lights from the AAM? _____ If so, which ones? _____
14. If you replaced a windshield with a rain sensor (B38), there is an adaptation that must be done. Go to AAM using *DAS*, what adaptation must be made? _____

15. In the AAM there is a list of version coding. Which ones do you think affect the exterior lighting? **(Do not try or change any Version coding! Look only!)**
- ⇒ _____
- ⇒ _____
- ⇒ _____
- ⇒ _____
- ⇒ _____
16. Where is the headlight range control unit (HRA) located on an M-Class? _____

17. Does the M-Class have level sensors for the HRA like a 210? _____ If so, where are they located? _____
18. In the HRA control unit are there any actual values for A51 & A52? _____
19. In the HRA control unit, under “Actuation”, can you move the light beam up or down? _____

