



# Training Job Aid

## Replacement of AAM, keys

54-03

M-Class Models, model year 1998 - 1999

Use the following information as a guideline for replacing the All-Activity-Module (AAM) and adding spare keys for all Model Year 1998 and 1999 M-Class models. Although this information is taken from the WIS, the job aid will not be updated on a regular basis. Therefore, it is not intended as a substitute for the WIS.

### Guidelines for Assuring Compatibility between AAM, ME, and Immobilizer

Due to the different AAM software versions encountered in the field, special attention must be given to assure compatibility between AAM, ME and Immobilizer.

The new level All-Activity-Module was introduced into production as of VIN A 057920, and the new Immobilizer as of VIN A 057949. Use the following information as a guide for checking part numbers and compatibility between old and new level components.

### AAM/Immobilizer Compatibility Table

Country Version	Old Level AAM Part #	New Level AAM Part #
USA, Canada, Mexico	163 545 20 32	163 545 37 32 or 47 32
ECE, RoW	163 545 06 32	163 545 36 32 or 46 32
Japan	163 545 05 32	163 545 38 32 or 45 32
B, NL, LUX, GB	163 545 29 32	163 545 39 32
Immobilizer part number	163 545 39 32	163 545 40 32

- ⌋ The new level immobilizer cannot be used in conjunction with the old level AAM. The combination of old and new may work initially; however, problems will be encountered at temperatures below 32° F.
- ⌋ The old level immobilizer will function with the new level AAM, but should be reserved for use with old level AAM's.
- ⌋ If no old level immobilizer is available, both units have to be replaced and a new VIN-specific master key ordered.
- ⌋ When replacing AAM and complete lock set, additionally order the engine management control unit.

### Replacing the AAM

- ┆ Every replacement of All-Activity-Module requires that a new VIN-specific master key also be ordered (163 760 27 06).
- ┆ All customer keys must be present to properly install and test the replacement AAM.
- ┆ The original reserve key (key #1) must be destroyed after the replacement AAM has been installed and function tested. The ordered key is given to the customer.

### AAM Replacement Procedure

1. Use the above guidelines (and table) to determine if AAM version is compatible with Immobilizer level.
2. Read-in data from old AAM and transfer it to the new part.
3. Using the supplied master key, program codes for all eight keys to the AAM through the "learn transponders" menu in Star Diagnosis.
  - ┆ After transponder codes are learned, the master key will retain only the #1 key transponder code and becomes a reserve key.
4. Learn all RF transmitters to the AAM using the "Learn RF" menu.
  - ┆ Do not use this function to relearn RF transmitter key already in use if synchronization has been lost.
5. Check correct function of all transponders and RF keys.
6. Assure for proper version coding of the AAM. See Job Aid 54-01.
7. Check all vehicle functions controlled by the AAM.
  - ┆ Until transponders are locked, the AAM and master key can be left in its original status through the "Create single use master key again" menu in Star Diagnosis.
8. Lock transponder codes.
  - ┆ This procedure permanently locks the AAM control unit to vehicle and keys. If this step is omitted, the AAM will lock automatically after 30 engine starts.

### Replacing/Resynchronizing Vehicle Key

- ┆ All vehicles are delivered with reserve key #1 and RF transmitter keys #2 and #3.
- ┆ Spare keys #4 through #8 can be ordered as a flat key or RF transmitter.
- ┆ No two keys can have the same number.
- ┆ Each new RF transmitter key must be individually learned by the AAM with the Star Diagnosis the first time they are put into service.
- ┆ Learning is achieved through the "Learn RF key" menu.
  - Follow On-Screen directions.
  - Learning is time limited to 10 seconds, but can be repeated until proper learning is achieved.
- ┆ Synchronization of a transmitter already in use is done without Star Diagnosis.

### Resynchronizing the Vehicle Key Procedure

To resynchronize a RF key, do as follows:

1. Insert RF key into ignition and turn to position 2.
2. Remove key and hold down lock button while pushing unlock button five times.
3. Release all buttons, then push either lock or unlock button.
  - ┆ Procedure must be completed within 10 seconds.