MAS003841 BOL 23-15

Diagnostic Sheet
FROM: Maserati TSO
TO: Maserati Network

Maserati
PERSONAL SERVICE LAB
MASTERS OF CARE

"Tonneau Open" warning while driving

Please read and review this bulletin first before starting the procedure.
Contact the Technical Support Helpdesk if you have any questions.

DATE: DECEMBER 15 2023

NOTE: This Diagnostic Sheet requires a BOL to be opened.

Models: **MC20 Cielo RHT (ALL MY)**

Concern: Retractable roof warning on cluster (IPC)

ECU errors: DTCs may or may not be stored.

SECTION: From section 09.80-1 up to 09.89-1

09.80 - 1 ELECTRICAL CAPOTE: LININGS
RETRACTABLE HARD TOP (RHT)
09.81 - 1 ELECTRICAL CAPOTE: COVERS
RETRACTABLE HARD TOP (RHT)
09.82 - 1 ELECTRICAL CAPOTE: TOP HOUSING
RETRACTABLE HARD TOP (RHT)
09.84 - 1 ELECTRICAL CAPOTE: CLOSINGS AND MICROSWITCHES
RETRACTABLE HARD TOP (RHT)
09.85 - 1 ELECTRICAL CAPOTE: MOVEMENT PARTS
RETRACTABLE HARD TOP (RHT)
09.87 - 1 ELECTRICAL CAPOTE: FLAPS
RETRACTABLE HARD TOP (RHT)
09.89 - 1 ELECTRICAL CAPOTE: ELECTRONIC CONTROL
RETRACTABLE HARD TOP (RHT)

ACTION: Perform the inspection indicated in this Diagnostic Sheet open a BOL as "Support Request" and attach, and report all the information collected throughout all the checks. (Including the first initial scan of the vehicle and pictures of the retractable roof)

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Diagnostic Checklist

1. Perform a complete scan report in the conditions in which the vehicle first arrived at the workshop, without trying to move the roof and without clearing DTCs.

2. After saving scan to PDF. Check roof opening/closing functionality multiple times (Opening and Closing completely 2 times or more)

3. Perform a test of the tonneau cover to verify the customer's concern.

   3a. Check the warning on the IPC and attach a photo to the BOL.

   3b. Perform a recording (live data acquisition) of the following PTCM parameters in a complete open/close cycle with a sampling time of 200 ms

   - HS40_Tonneau_Latched_RH_Hall

   - HS41_Tonneau_Latched_LH_Hall

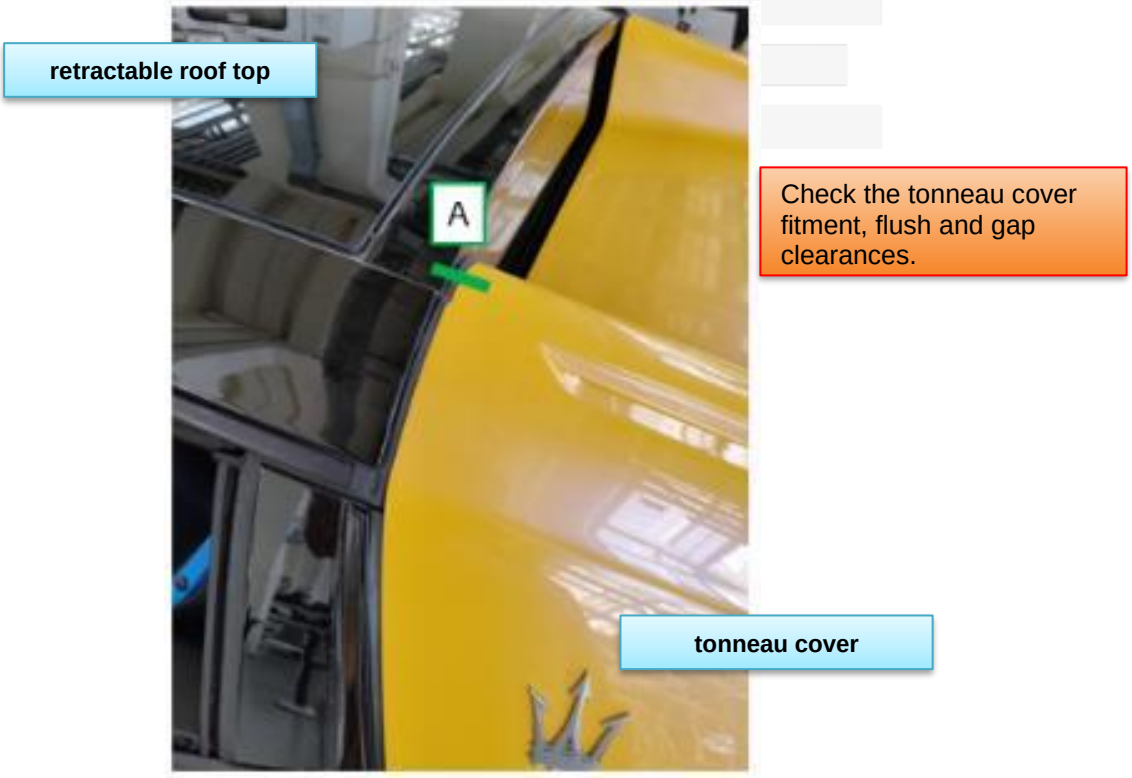
NOTE: When the tonneau is closed (regardless of whether the top is in the coupé (closed) or cabrio (open) position) the status of parameters HS40 and HS41 is “ACTIVE”

IMPORTANT: Report in BOL the moments in which the opening and closing cycle begins and ends

4. If a retractable roof warning appears and HS40 and HS41 show an anomalous state while running, proceed to the next steps below.

External tonneau closure characterization (both left and right)

1. Measure clearances and profiles of the tonneau cover vs the retractable rooftop at point A (as shown in the photo below)



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2. Measure clearances and profiles of the tonneau vs B-pillar trim and rear fenders at points 1-2-3-4 (as shown in the photo below)



fitment, flush, and gap clearances

Tonneau closure characterization vs hooks (both left and right)

1. Measurement of the distance between the two green lines in the example below (from the point where the impression of the centering pin ends to the groove of the seat), i.e.:

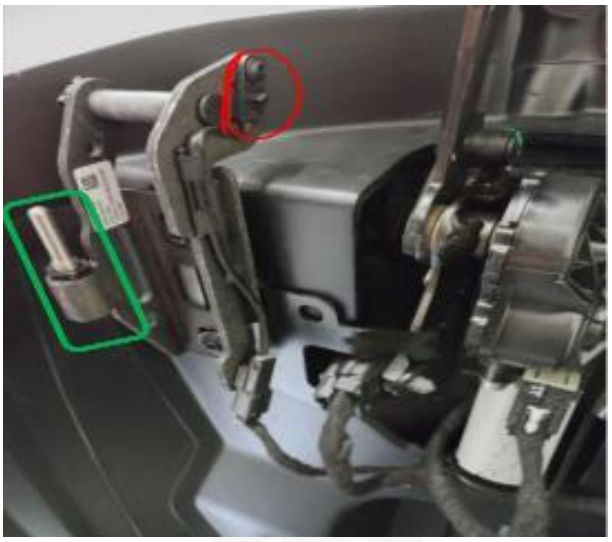


Centering device on which to evaluate the footprint

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2. Apply talcum powder or equivalent to the tonneau cover receiving side pin.



Powder check impression on centering device

3. Perform a complete closing/opening cycle.

4. Check the impression left on the centering device (with photo) and measure the indicated height



Centering device on which to evaluate the footprint

5. Photo example of the strikers on the tonneau cover



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6. Photo example of centering area/retention hook on open tonneau hood bases

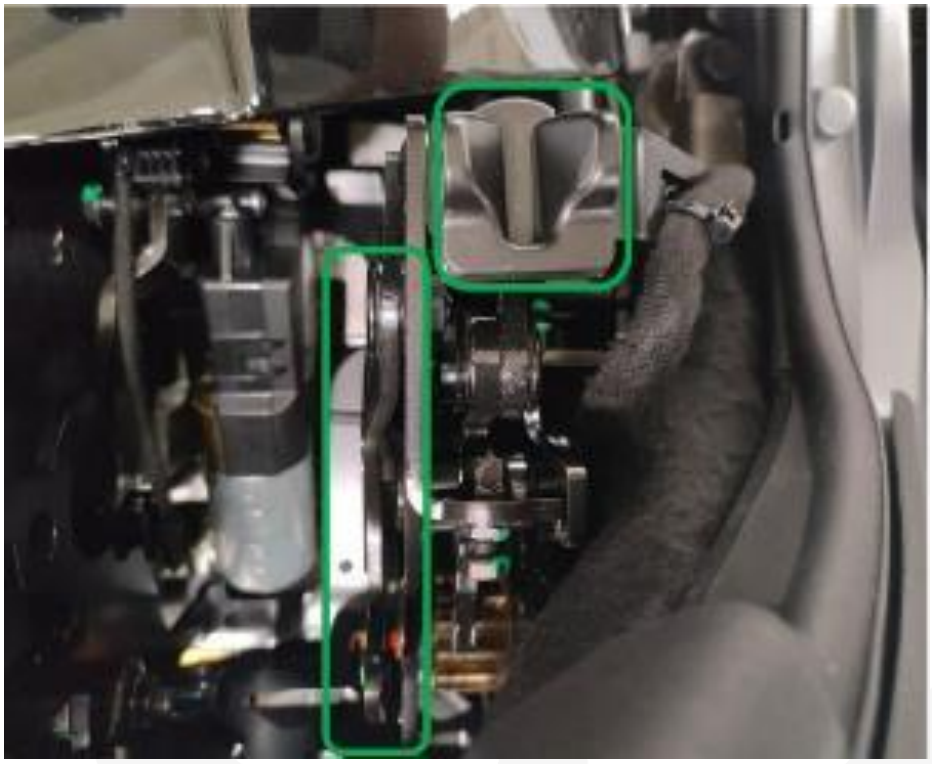
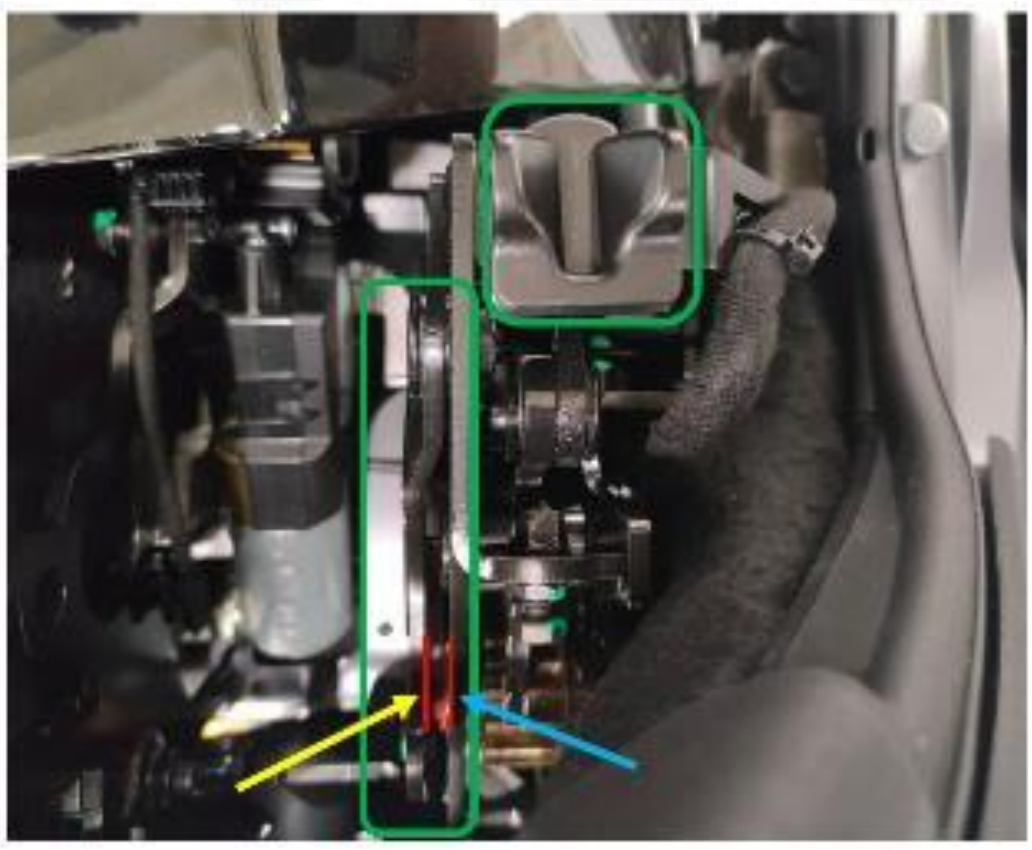


Photo of receipt retaining hooks (on hood bases, with the tonneau open) so that you can see the components in green

7. With the tonneau cover open, measure the distance between the hook (yellow arrow) and the bracket on which it is hinged (blue arrow) as indicated in the photo below.

NOTE: measurement to be performed on both sides (right/left)



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