

Engine Oil Consumption Inspection and Repair Guidelines – Dealer Best Practice

December 11, 2023

Document Main Topics	Date
<ul style="list-style-type: none"> Launch of Engine Oil Consumption Inspection and Repair Guidelines (TSB #23-EM-008H) Launch of Combustion Chamber Cleaning Procedure (TSB #23-EM-007H) 	12/11/2023

IMPORTANT: TSB 23-EM-007H (or latest version) is a companion TSB that covers the combustion chamber cleaning procedure once it is determined needed by **TSB 23-EM-008H** (or latest version). The latest combustion chamber cleaning procedure is currently applicable to 4-cylinder engines. There will be an enhancement to include V6 and V8 engines in the future.

Description

This Dealer Best Practice covers updated Engine Oil Consumption Inspection and Repair Guidelines for all Hyundai models and model year vehicles equipped with gasoline engines. **TSB 23-EM-008H** (or latest version) provides the inspection procedure to diagnose and repair vehicles with concerns of engine oil consumption, including methods to resolve symptoms caused by carbon deposits within the engine. All internal combustion engines consume engine oil as normal part of the operation during the combustion process, depending on driving conditions and driving habits and mileage. Hyundai recommends regular oil changes according to factory maintenance schedules and checking engine oil levels periodically using the dipstick.

This Dealer Best Practice also covers Combustion Chamber Cleaning, a service procedure which may be required on certain vehicles based on the conditions outlined **TSB 23-EM-008H** (or latest version), and for which is remedied using the service procedure for Combustion Chamber Cleaning as outlined in **TSB 23-EM-007H** (or latest version).

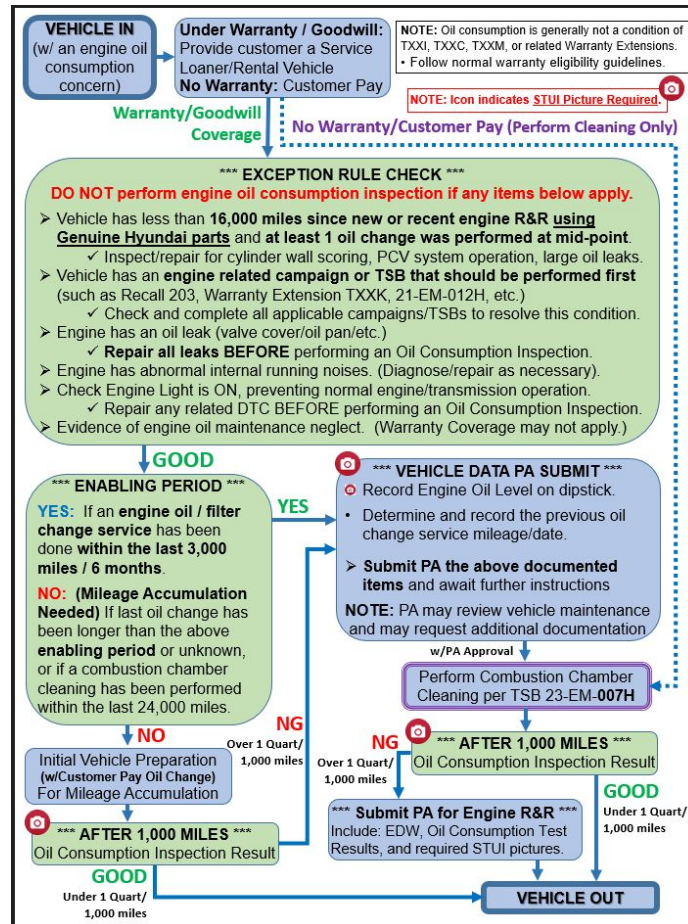
Affected Vehicles

- TSB 23-EM-008H** (or latest version) for **Engine Oil Consumption Inspection & Repair Guidelines**: All Hyundai models/model year vehicles equipped with gasoline engines.
- TSB 23-EM-007H** (or latest version) for **Combustion Chamber Cleaning Procedure**: All Hyundai models/model year vehicles equipped with 4-cylinder gasoline engines.

Repair Process/Information

- Recommended Level of Technician Certification:** [Expert Level](#) or higher
- Please refer to **TSB 23-EM-008H** (or latest version) for complete Oil Consumption Inspection process guidelines and requirements.
- If the Engine Combustion Chamber Cleaning is required, please refer to **TSB 23-EM-007H** (or latest version).
 - Please note that **TSB 23-EM-007H** currently does not apply to vehicles equipped with V6/V8 engines
- Please ensure the flowchart is followed and follow the appropriate path(s) accordingly
- For vehicles covered under warranty/goodwill, ensure all items of the 'Exception Rule Check' portion are checked prior to performing the engine oil consumption inspection.
- IMPORTANT: Please note that Prior Approval (PA) is only required in two instances (under warranty/goodwill):**
 - 1) Prior to performing the Engine Combustion Chamber Cleaning

- 2) If Engine replacement is required
Please note that **PA is not required under customer pay** for either engine combustion chamber cleaning or for engine replacement.



Recommended Alternative Transportation

A Service Rental Vehicle (SRC) should be provided to customers if necessary. In addition, a SRC may be required based on the repair procedure duration and any other additional work on the vehicle that may need to be addressed during customer’s visit. If a SRC is not available, other options such as a 3rd Party Rental or Rideshare may be provided.



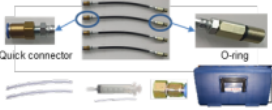
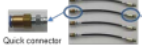




It is recommended for the dealer to have the parts (cleaning fluid, cleaning kit, evacuation tool) on-hand prior to customer arrival if customer has made an appointment ahead of time to minimize customer inconvenience.

Warranty Information

- Please refer to **TSB 23-EM-008H** (or latest version) for the specific inspection operation codes, and engine replacement op codes, if applicable.
- Use of the cleaning fluid can be claimed under the corresponding operation codes; please see TSB 23-EM-007H for specific quantities needed for combustion chamber cleaning
- **Photos:** Please refer to **TSB 23-EM-008H** and **TSB 23-EM-007H** (or latest versions) for sample photos and additional details regarding specific digital documentation requirements.

Parts Information

- Applicable Parts and/or Parts Kits MAY BE REQUIRED if the inspection results determine that an engine replacement is necessary. Please refer to **TSB 23-EM-008H** (or latest version) for complete details.
- Special Service Tools and Cleaning Fluids ARE REQUIRED to perform the Combustion Chamber Cleaning service procedure. Please refer to **TSB 23-EM-007H** (or latest version) for complete details.

PART NAME	PART NUMBER / DESCRIPTION		NOTES
CLEANING FLUID			** Use either product ** P/N 00232-19115 (4 bottles per order) Use (1) 800cc bottle of KD Engine Combustion Chamber Cleaner ECF-1 per vehicle or P/N 00232-19109 (12 x 100cc bottles per order) Use (8) 100cc bottles of HK Technology Engine Cleaning Fluid per vehicle
	00232-19115 Engine Combustion Chamber Cleaner ECF-1	00232-19109 HK Technology Engine Cleaning Fluid	
CLEANING KIT	 KQ234-C6100FFF		CLEANING KIT Set (All components)
CLEANING KIT (Individual components)	KQ234-C6101FFF		Adaptor 4EA
	KQ234-C6102FFF		Hose 2EA
	KQ234-C6103FFF		Syringe & Hose 2EA
	KQ234-C6104FFF		Pressurization Adaptor 1EA
	KQ234-C6105FFF		KIT case 1EA
EVACUATION TOOL (Air-powered)	Commercially Available		To be used to apply vacuum to the crankcase during the pre-soak steps and to evacuate the cleaning fluid afterwards.

Sample Customer Talk Tracks

“If we find that an above normal engine oil consumption condition exists on your vehicle, it may require a cleaning of the engine combustion chambers due to a buildup of carbon deposits within the engine. This inspection, and related combustion chamber cleaning may be required. We would also like to offer you alternate transportation while this service is performed.”

“As a matter of information or perspective, all internal combustion engines consume engine oil as normal part of the operation during the combustion process, depending on driving conditions and driving habits and mileage. And, of course, Hyundai recommends regular oil changes according to factory maintenance schedules and checking engine oil levels periodically using the dipstick.”

Best Practice Checklist



Reservation: Did you check WebDCS for additional campaigns or recalls?

- Yes
- No** – Please ensure all open campaign(s)/recall(s) are identified and completed by the dealership. Always check the Vehicle Information Screen in WebDCS for open campaigns and recalls and advise the customer on time requirements.



Readiness: Are parts in stock to complete this service?

- Yes
- No** – It is highly recommended to have parts on-hand when customer arrives to the dealership, especially if customer has made appointment beforehand and to minimize dealership traffic. Order parts and obtain an estimated time of arrival (ETA) as soon as possible.

Other Key Items:

- Complete all applicable training, check your reservation capacity settings (you can set separate capacities for every recall/campaign), confirm email addresses for campaign appointments, and that you have all necessary tools, campaign parts and shop equipment as needed.
- Be prepared to put customers in an SRC or alternative transportation, if needed.



Reception: Did you explain to the customer the expected repair time based on the repair?

- Yes
- No** – Customer should be given an estimated time of when his/her vehicle is completed so the customer can plan the rest of their day away from the dealership.

Other Key Items:

- Check vehicle service records and review the maintenance history.
 - For applicable warranty repair eligibility, confirm that the vehicle has received proper engine oil/filter change maintenance services within the intervals recommended by the applicable Owner's Manual (not applicable if service is to be performed under customer pay).
- Poor engine maintenance may cause insufficient or depleted engine oil, deteriorating its lubricating and cooling function. As a result, main engine parts can be damaged such as:
 - Excessive deposit of carbons
 - Oil sludge, and/or
 - Abnormal wear on engine parts



Repair: Did you provide the customer with an eMPI?

- Yes
- No**



Does the Technician meet the recommended training requirements (Expert level or above) to complete this service procedure?

- Yes
- No** – Please ensure a technician with an Expert level (or higher) completes this repair.

Were the appropriate picture(s) taken based on the inspection and/or repair need as outlined in **TSB 23-EM-028H** (or latest version) and, if Combustion Chamber Cleaning service was performed, **TSB 23-EM-007H** (or latest version)?

- Yes
- No** – Please ensure the appropriate picture(s) are taken for the dealership to be paid. See **TSB 23-EM-008H and 23-EM-007H** (or latest versions) for specific requirements as related to digital documentation required.

Other Key Items:

- Review the service procedure overview before starting repairs.
- Prior Approval is not required for the Initial Vehicle Preparation for Mileage Accumulation (in cases



where “Enabling Period” is NO).

- Prior Approval is required prior to performing Combustion Chamber Cleaning Procedure which is outlined in TSB 23-EM-007H (or latest version) (Prior Approval NOT required for Combustion Chamber Cleaning under Customer Pay)
- **NOTE: TSB 23-EM-007H** (or latest version) does not apply to vehicles equipped with V6 or V8 engines (until further notice).
 - **NOTE:** For V6 or V8 engines only – If inspection results indicate oil consumption is potentially above specification, perform top cylinder cleaning using commercially available industry standard methods including an engine oil/filter change service afterwards. Alternative cleaning products used for V6/V8 cleaning may be entered in the sublet field.



Return: Did you get the customer’s signature on all warranty lines in addition to the final RO?

- Yes
- No

Other key items: Review all completed campaigns/recalls and repairs (if other services were performed) to answer any customer questions. Also, schedule the customer’s next service.



Reconnect: Follow up for customer satisfaction.



Customer FAQs

Q1: What concern does this TSB cover?

A1: This field action provides the inspection procedure to diagnose and repair vehicles with concerns of engine oil consumption, including methods to resolve symptoms caused by carbon deposits within the engine. All internal combustion engines consume engine oil as normal part of the operation during the combustion process, depending on driving conditions and driving habits and mileage. Hyundai recommends regular oil changes according to factory maintenance schedules and checking engine oil levels periodically using the dipstick.

Q2: What are the affected vehicles?

A2: Certain Hyundai vehicles equipped with gasoline engines:

- Per **TSB #23-EM-008H** (or latest version): All Hyundai models/model year vehicles equipped with gasoline engines.
- Per **TSB #23-EM-007H** (or latest version): All Hyundai models/model year vehicles equipped with 4-cylinder gasoline engines.

Q3: What will be done during service at the dealer?

A3: Certain Hyundai vehicles equipped with gasoline engines will undergo an Oil Consumption Inspection process/procedure to diagnose and repair vehicles with concerns of engine oil consumption, including methods to resolve symptoms caused by carbon deposits within the engine. Further, certain Hyundai vehicles equipped with gasoline engines will also undergo a Combustion Chamber Cleaning, a service procedure which may be required on certain vehicles based on the conditions outlined TSB #23-EM-008H (or latest version), and for which is remedied using the service procedure for Combustion Chamber Cleaning as outlined in TSB #23-EM-007H (or latest version). **IMPORTANT:** Prior Approval is required prior to performing the Combustion Chamber Cleaning service.

Contact Reference

Please see the following for commonly referred to contacts on the next page. Thank you for your prompt attention to this important matter and continued commitment to Hyundai customers.

Key Contact Information		
Dealer Support	Contact Information	Description
Parts	HyundaiPartsHotline@MobisUSA.com 1-800-545-4515	Parts ordering hotline
Techline	1-800-325-6604	Vehicle Technical Support for Hyundai Dealer Technicians
Warranty HELPREPLine	1-877-446-2922	Warranty Claim questions for Hyundai Dealers
Warranty Prior Approval (PA) Center	PA@hmausa.com	Warranty Prior Approval (PA) Center for Hyundai Dealers
Xtime Technical Support	Support@xtime.com 1-866-984-6355	Assistance with Car Care Scheduling: <ul style="list-style-type: none"> Appointment / Shop Capacity Management / Campaign Integration / Operation Codes
AutoLoop Technical Support	Support@autoloop.com 1-877-850-2010	Assistance with Car Care Scheduling: <ul style="list-style-type: none"> Appointment / Shop Capacity Management / Campaign Integration / Operation Codes
CDK Technical Support	https://serviceconnect.support.cdk.com/	Assistance with Car Care Scheduling: <ul style="list-style-type: none"> Appointment / Shop Capacity Management / Campaign Integration / Operation Codes
Customer Support	Contact Information	Description
Hyundai Customer Care Center (Recall/Campaign Questions)	1-855-671-3059	Customer questions or concerns related to <u>recall or service campaigns</u>
Hyundai Recall /Campaign Website	www.hyundaiusa.com/recall	Updated information related to the specific recall or service campaign
Hyundai Customer Care Center (General Questions)	1-800-633-5151	Customers general questions, <u>non-campaign related</u>
Hyundai Roadside Assistance	1-800-243-7766	Hyundai Roadside Assistance
Key Reference Information		
Name	Source	
Campaign Central	Consolidated repository of recall and service campaign dealer best practices. Located on the service tab homepage in www.HyundaiDealer.com	
Car Care Scheduling (Xtime) - Tutorials	www.HyundaiDealer.com > Service > Dealer Resources > Documents Library > Car Care Scheduling	
Car Care Scheduling (Xtime) - Recall Appointment Notification	<ol style="list-style-type: none"> 1. Log into Xtime 2. Under the menu at the top left, select 'CONFIGURE' 3. Under the dealership tab, click "EMAIL COMMUNICATION" 4. Slide the toggle to "ADVANCED" 5. Populate as many e-mails as desired in the "PARTS DESK EMAIL FIELD" 	
Parts – Campaign Parts Management (CPM) Procedure	As applicable; www.HyundaiDealer.com > Parts > Documents Library > Campaign Parts Management	
Service Rental Car (SRC) Program	SRC Documentation: www.HyundaiDealer.com > Service tab > Documents Library > Service Rental Car TSD: www.HyundaiDealer.com > Service tab > SRC Fleet Mgmt Software Insurance: www.HyundaiDealer.com > Service tab > SRC Insurance	
Technical Service Bulletin (TSB)	www.HyundaiDealer.com > Service tab > Hyundai Tech Info	
Uncompleted Campaign VIN Listing	A listing of vehicles is located on WEBDCS > SERVICE tab > select UNCOMPLETED CAMPAIGN VIN LISTING – Dealer Stock (New, SRC, CPO, etc.) and Retailed.	
Recall Campaign Website	www.hyundaiusa.com/recall	
NHTSA Website	www.safercar.gov	



Appendix

History	Date
<ul style="list-style-type: none">• Launch of Engine Oil Consumption Inspection and Repair Guidelines (TSB 23-EM-008H)• Launch of Combustion Chamber Cleaning Procedure (TSB 23-EM-007H)	12/11/2023
<ul style="list-style-type: none">• Launch of Engine Oil Consumption Inspection and Repair Guidelines (TSB 21-EM-003H)	03/10/2021