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① When printing, select pages 4-10 to print  
only the Process Sheet/Certification  
Checklist.

## General Information

TOPIC	INFORMATION	
Cautions	<ul style="list-style-type: none"><li>⚠ <b>Service Interruption:</b> If at any time service cannot be completed due to a service failure or interrupted service, topside and bottomside technicians must immediately go to second checks and close the pit covers.</li><li>⚠ <b>Hot Fluids and Engine Parts:</b> Take caution with hot fluids (oil, dripping washer fluid, coolant, power steering fluid, etc.) such as oil, and hot engine parts (exhaust pipes, engine block, etc.)</li><li>⚠ <b>Frame Oil:</b> Always wipe up frame oil! Frame oil could cause the guest to think the drain plug or filter is leaking, loose, or cause a burning smell if left on the engine components.</li></ul>	
Pit Safety	<ul style="list-style-type: none"><li>⚠ The pit opening must be covered completely either by the vehicle or the pit cover. There must be no opening either in front of, or behind the vehicle.</li><li>⚠ Clean up any oil spills immediately and notify manager on duty.</li><li>⚠ NEVER sling the pit cover open or closed.</li></ul>	
Call Outs	<ul style="list-style-type: none"><li>💬 All callouts should be loud and clear for other technicians to hear – without startling guests.<ul style="list-style-type: none"><li>• Respond to topside callouts appropriately.</li></ul></li></ul>	
Oil Filter Removal/Install Tools	<p>Oil filter removal and install must be completed by using the appropriate tool based on the location of the oil filter.</p> <ul style="list-style-type: none"><li>• Tool options include:<ul style="list-style-type: none"><li>○ Cup/claw, extension, and 18" ratchet</li><li>○ Band Wrench</li><li>○ Filter Pliers</li></ul></li></ul>	
Defining Clear	<p>Stand off the catwalk as the vehicle enters the bay. Wait for topside technician to call out “Clear for guest, Bay #!”</p> <p>💬 If you are currently on the catwalk respond “Stand by!”</p>	<p>When a topside technician or CSR calls out, “Clear for <u>zoom</u>, Bay #!”, or when adding oil, you must:</p> <ul style="list-style-type: none"><li>• Stand to the back of the bay.</li></ul> <p>💬 Respond with “Clear, Bay #!” (Do Not respond until you are clear.)</p>

TOPIC	INFORMATION
Double Check Callout	<p><b>Technicians Process/Action:</b> If the technician has questions, concerns, or needs assistance they will:</p> <ul style="list-style-type: none"> <li>➡ <b>Tech CALL OUT: "Double Check, Bay #!"</b></li> <li>• <b>MOD Response:</b> The MOD will call back with "Double Check, Bay #!" and go to the technician to offer assistance.</li> </ul> <p><b>Manager on Duty (MOD) Process/Action:</b> If the vehicle requires special procedures the MOD will:</p> <ul style="list-style-type: none"> <li>➡ <b>MOD CALL OUT: "Double Check, Bay #!"</b></li> <li>• <b>Tech Response:</b> The technician will call back with "Double Check, Bay #!" and wait for further instruction to be given.</li> </ul>
Service Guidelines	<ul style="list-style-type: none"> <li>• <b>Hood:</b> The hood must remain up while ANY service is being performed on the vehicle (tire rotation, differentials etc.). After ALL services are complete perform second checks and secure the hood.</li> <li>• <b>Skid Plate:</b> <ul style="list-style-type: none"> <li>○ If the vehicle has a skid plate, it may be necessary to tell the CSR to inform the guest that the service may take a bit longer due to the skid plate.</li> <li>○ If the vehicle has a skid plate it MUST be removed to prevent frame oil from occurring. The only acceptable exception to this rule is if the skid plate has a "trap door" that allows direct access to the oil filter.</li> <li>○ If fasteners are missing from the skid plate and you have a matching fastener in inventory, simply use that to secure the skid plate.</li> <li>○ If you do not have a fastener in inventory, as a last resort you may use a zip tie to secure the skid plate. You may ONLY do this after informing the guest that this is necessary. Be sure to trim the tail from the zip tie once secure. DO NOT use zip ties on metal skid plates.</li> <li>○ It is never an option to leave the skid plate unsecured.</li> <li>○ Place ALL fasteners in a container so they don't get lost.</li> </ul> </li> <li>• <b>Vehicle Issues:</b> ALWAYS inform the CSR of any leaks, damages, or missing parts, etc. This allows the CSR to properly record this information on the guest's invoice.</li> <li>• <b>Frame Oil:</b> NEVER leave frame oil on a guest's vehicle or puddled up on their skid plate.</li> <li>• <b>Subaru:</b> It is easy to mistake the transmission drain plug for the oil drain plug. If you are unsure which plug is the oil drain plug, utilize the double check callout. Confusing the two drain plugs may result in damage to the vehicle.</li> </ul>
Speed Tips	<p>The pace at which you move during an oil change has a dramatic effect on our success.</p> <ul style="list-style-type: none"> <li>⌚ When you move faster, services are completed faster, therefore emptying our bays and freeing up space for more oil changes.</li> <li>⌚ When guests see you working with a sense of urgency, they are more pleased with our service and convinced that you are doing all you can to help them back to their busy day.</li> <li>⌚ NEVER compromise safety for the sake of speed.</li> <li>⌚ If you are struggling on a step (e.g., removing a skid plate) asking for help if you do not understand or cannot perform the step will ensure the service is completed in a timely manner.</li> </ul>

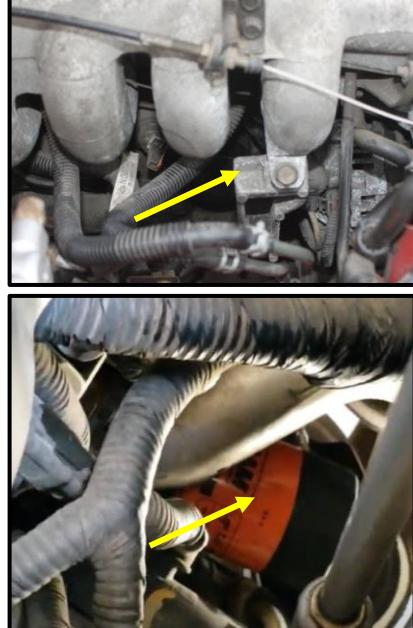
TOPIC	INFORMATION
<b>Secondary Duties</b>	<p>Secondary responsibilities are what you are supposed to do when you finish the service in front of you or find yourself with a free moment during the service and you are waiting on someone to finish their task before you can move on. Bottomside secondary responsibilities fall into these categories:</p> <ul style="list-style-type: none"><li>• Assist with the topside process through fluids in SuperPro order. Always inform the topside technician if any fluids were added before heading downstairs to begin bottomside duties.</li><li>• Keep the bay clean and organized with tools in their proper places.</li><li>• Stock the bay with filters.</li></ul>

CATEGORY	STEP			
Tools & Equipment	<b>Tools</b> <ul style="list-style-type: none"> <li>• 18" Ratchet</li> <li>• Torque Wrench</li> <li>• Filter Cups and Claws</li> <li>• Band Wrench</li> <li>• Filter Pliers</li> <li>• Sockets</li> <li>• DEWALT</li> <li>• WypAlls</li> <li>• Oil Deflector</li> </ul>	<b>Equipment</b> <ul style="list-style-type: none"> <li>• Grease Gun</li> <li>• Bottomside Lifts</li> <li>• Red Rolling Drain Pan</li> <li>• Waste Containers</li> </ul> <p>① Some tools and equipment may vary by Franchise system.</p>		
Courtesy	If the vehicle is in for a courtesy check or extra service only: topside technician will inform you by calling out "No bottomside, Bay #!"			
<b>Required PPE:</b> <input checked="" type="checkbox"/> Safety glasses <input checked="" type="checkbox"/> Safety gloves <input type="checkbox"/> Burn gloves <input checked="" type="checkbox"/> Bump cap				
<p>⚠ You must remove your bump cap before going upstairs to assist with topside filter removals and installations.</p> <p>⚠ Prior to stepping on the catwalk, put on your safety glasses, safety gloves and bump cap.</p> <p>⚠ For some drain plug and oil filter removals and installations, it is recommended to wear burn gloves to service any filter or plug that poses a greater risk of coming in contact with hot engine parts, sharp objects, or hot fluids. Examples include, but are not limited to, reaching into tight spaces and awkward body positions necessary to complete the service.</p> <p>⚠ Burn gloves are required to be worn until Vamily member has been fully bottomside certified.</p> <p>① PPE noted is required for company locations. Franchise locations should consult their franchisee for requirements.</p>				
<b>VCLASS:</b> <input type="checkbox"/> Smile <input type="checkbox"/> Open Doors <input type="checkbox"/> Happy to Help <input type="checkbox"/> Group Goodbye <input type="checkbox"/> SCM/MOD Introduction (If you are the SCM/MOD introduce yourself before the service presentation).				
Guiding the Guest into the Bay	1	Stand off the catwalk as the vehicle enters the bay. Wait for topside technician to call out "Clear for guest, Bay #!"  If you are currently on the catwalk respond "Stand by!"		
Verify Filters in Stock	2	If bottomside monitors are NOT applicable. <ul style="list-style-type: none"> <li>When the CSR calls out the oil filter # and air filter #, verify the oil filter is in stock and respond with:   <b>CALL OUT: "(Oil Filter #) (Air Filter #), Bay #!"</b> </li> <li>When the CSR calls out the drain plug torque specification, respond with:   <b>CALL OUT: "(#) foot pounds, Bay #!"</b> </li> </ul>		
Inspecting Under the Vehicle	3	Wait for the topside technician to call out "Showtime, Bay #!" BEFORE stepping onto the catwalk. <ul style="list-style-type: none"> <li>Listen for the topside technician to call out <i>Evac, Bay #!</i> to indicate if the vehicle is eligible for oil evac.</li> </ul>		
	4	<p><b>Verify/obtain the correct oil filter, air filter number, and if evac eligible</b> by reviewing the bottomside monitor.</p> <p> If bottomside monitors/cameras are not present the filter verification should have happened in step 2.</p> <p> If the oil filter is NOT in stock, notify the manager on duty immediately.</p> <p> Not executing this correctly could potentially cause a costly claim.</p>		

## Bottomside Process Sheet/Certification Checklist

March 2024

CATEGORY	STEP
	<p>5 Unlatch and pull back the pit cover.</p> <p>✖ If the topside technician calls out “Double check, Bay #!”, <b>CALL OUT: “Double check, Bay#!”</b> and await further instructions before beginning work on the vehicle.</p>
	<p>6 Place the air filter behind the driver side tire for CSR.</p> <p>✖ <b>Weather:</b> If inclement weather is present such as rain or snow, partner with topside technician for placement.</p> <p>✖ <b>Low Profile Vehicles:</b> If there is not enough space for the filter to be placed behind the driver tire, partner with topside technician for placement.</p>
Skid Plate (if applicable)	<p>7 If the vehicle is equipped with a skid plate:</p> <p>💬 <b>CALL OUT: “Skid plate, Bay #!”</b> to inform the CSR that the process will take a bit longer.</p>
Inspecting Under the Vehicle	<p>8 Inspect the following on the underside of the vehicle:</p> <ul style="list-style-type: none"> <li>Check for damage and dents to the oil pan.</li> <li>Check for leaks around the oil plug, oil filter or anywhere under the vehicle.</li> <li>Check for damaged skid plates.</li> <li>Check for missing skid plate fasteners.</li> </ul> <p>⚠ If something is wrong, notify the topside technician immediately. So, they can properly record it on the guest’s invoice.</p>
	<p>9 Remove skid plate (if applicable) and place on top of the pit nets or bottomside lift.</p> <p>✖ If the skid plate will not fit above the pit nets, place it on the catwalk where it will not pose a trip hazard.</p>
Lubricate Fittings/Prepare for Hot Oil	<p>10 Working from the driver’s side to the passenger’s side, lubricate all the components on the chassis/driveline (if applicable).</p> <p><b>To lubricate a fitting:</b></p> <ol style="list-style-type: none"> <li>Wipe the fitting clean.</li> <li>Push the grease gun tip straight onto the fitting.</li> <li>Hold the tip firmly in place and squeeze the trigger.</li> <li>Be careful not to damage the seals by overfilling.</li> <li>Wipe off any excess grease from the fitting after greasing.</li> </ol> <p>11 Use a WypAll or towel to properly prevent any frame oil.</p>  <p>⚠ Never leave motor oil on the frame of the vehicle or skid plate. Wipe up all frame oil to prevent the guest from returning with concern their vehicle could have a possible leak.</p> <p>💲 Not executing this correctly could potentially cause a costly claim.</p>

CATEGORY	STEP				
	<p>12 Slide the rolling drain pan into the position to catch the draining oil.</p> <p>✗ <i>Use the oil deflector if needed.</i></p> <p>⚠ NEVER leave the rolling drain pan in front of the catwalk stairs to prevent any potential injuries.</p>				
Standard Oil Change	<p>📋 If the vehicle is oil evac eligible, reference the oil evac procedure.</p> <p>✗ Depending on ease of service, removing the oil drain plug or filter may vary.</p>				
Remove/Inspect Drain Plug	<p>13 Remove the oil drain plug using the 18" ratchet.</p> <p>⚠ NEVER pull a wrench towards your face – ALWAYS push away.</p> <table border="1"> <tr> <td>If the drain plug/gasket are in good condition:</td> <td>If the drain plug/gasket needs replaced, make the appropriate callout:</td> </tr> <tr> <td> <p>💬 CALL OUT: "Drain plug and gasket checked, Bay #!"</p> </td> <td> <p>💬 CALL OUT:</p> <ul style="list-style-type: none"> <li>• "Replace drain plug, Bay #!"</li> <li>• "Replace gasket, Bay #!"</li> <li>• "Replace drain plug and gasket, Bay #!"</li> </ul> <p>📋 Inform the CSR or topside technician if one or both need replacement.</p> </td> </tr> </table>	If the drain plug/gasket are in good condition:	If the drain plug/gasket needs replaced, make the appropriate callout:	<p>💬 CALL OUT: "Drain plug and gasket checked, Bay #!"</p>	<p>💬 CALL OUT:</p> <ul style="list-style-type: none"> <li>• "Replace drain plug, Bay #!"</li> <li>• "Replace gasket, Bay #!"</li> <li>• "Replace drain plug and gasket, Bay #!"</li> </ul> <p>📋 Inform the CSR or topside technician if one or both need replacement.</p>
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<p>💬 CALL OUT: "Drain plug and gasket checked, Bay #!"</p>	<p>💬 CALL OUT:</p> <ul style="list-style-type: none"> <li>• "Replace drain plug, Bay #!"</li> <li>• "Replace gasket, Bay #!"</li> <li>• "Replace drain plug and gasket, Bay #!"</li> </ul> <p>📋 Inform the CSR or topside technician if one or both need replacement.</p>				
Remove/Inspect the Oil Filter	<p>14 Loosen the oil filter using the appropriate tool based on the location of the oil filter.</p> <ul style="list-style-type: none"> <li>• Tool options include:           <ul style="list-style-type: none"> <li>○ Cup/claw, extension, and 18" ratchet.</li> <li>○ Band Wrench</li> <li>○ Filter Pliers</li> </ul> </li> </ul> <p>✗ If the band wrench must be used, apply the band wrench as close to the filter base as possible and turned away from the starter.</p> <p>✗ If you have to go topside to remove/install a topside filter it is recommended to wear safety gloves to service any filter that causes you to reach under, around, or through any major engine components.</p> <p>⚠ NEVER attempt to take a filter off by hand.</p> 				
	<p>15 Remove the oil filter and old gasket.</p> <ul style="list-style-type: none"> <li>• Check the filter to make sure the gasket is in place.</li> <li>• Turn the oil filter upside down on the drain pan so it drains.</li> </ul> <p>⚠ Use WypAll or towel to handle hot oil filters.</p> <p>⚠ Be careful that the wrench does NOT touch the starter wires – it could cause sparking or short out the wires, damaging the vehicle's electrical system.</p>				

CATEGORY	STEP
	<p>16 Lubricate the gasket on the new filter:</p> <ul style="list-style-type: none"> <li>• ALWAYS use NEW oil to lubricate the gasket.</li> <li>• Inspect the gasket for damage or dirt.</li> <li>• Lubricate gasket with ONLY your finger.</li> <li>• Ensure the gasket is seated properly in the filter.</li> </ul> <p><i>✗ Check to make sure that the old gasket is not hanging or stuck to the stud.</i></p> <p><i>✗ Be careful not to drag any dirt or debris onto the base plate.</i></p>
Oil Filter Verification	<p>17 Verify oil filter.</p> <p><b>Service Centers with cameras/monitors:</b> Visually verify the (Oil Filter #) by reviewing the bottomside monitor application and point the oil filter at the bottomside camera for verification.</p> <p> <b>Not executing this correctly could potentially cause a costly claim.</b></p> <p><b>Service Centers without cameras/monitors:</b></p> <ul style="list-style-type: none"> <li>• Hold the filter up so the topside technician can see it and request a visual check.</li> </ul> <p> <b>CALL OUT: "(Oil Filter #) check, Bay #!"</b></p> <ul style="list-style-type: none"> <li>• Wait for topside technician to visually check the filter and respond back with "<i>(Oil Filter#) checked, Bay #!</i>" Once the visual check with the topside technician is complete, the filter should be installed immediately.</li> </ul>
	<p>18 Check for a double gasket by running your finger from the oil filter stud to the outside of the base plate.</p> <p><i>✗ Check that the oil filter stud isn't loose.</i></p> <p> <b>Not executing this correctly could potentially cause a costly claim.</b></p>
Install New Filter	<p>19 Install the new oil filter using the appropriate tool based on location of the oil filter:</p> <p> <b>CALL OUT: "(Oil Filter #) going on, Bay #!"</b></p> <ul style="list-style-type: none"> <li>• After the gasket contacts the base plate, use the appropriate tool to tighten 1 full turn.</li> <li>• <b>DO NOT over-tighten.</b></li> <li>• <b>DO NOT under-tighten.</b></li> <li>• Follow procedures for canister type filters. <ul style="list-style-type: none"> <li>○ Replace gasket or O-ring every time so they don't crack.</li> <li>○ Always check to make sure the gasket or O-ring is properly sealed.</li> </ul> </li> </ul> <p> <b>Not executing this correctly could potentially cause a costly claim.</b></p>
	<p>20 Once oil filter is tight:</p> <p> <b>CALL OUT: "(Oil Filter #) tight, Bay #"</b></p>
	<p>21 Use a WypAll or towel to wipe off excess frame oil from the filter, engine, oil pan, and frame.</p>

CATEGORY	STEP			
Install Drain Plug	22 Install the drain plug by hand, and immediately tighten with the torque wrench to the proper torque. <ul style="list-style-type: none"> <li>● <b>DO NOT</b> finger-tighten.</li> <li>● <b>DO NOT</b> over-tighten.</li> <li>● Use caution not to cross thread.</li> </ul> <p><b>⚠</b> Over-tightening a drain plug could strip the drain plug or pan, crack the gasket, or cause leaks.</p> <p><b>\$</b> Not executing this correctly could potentially cause a costly claim.</p>			
	23 Move to the back of the catwalk and stand clear, then: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">For Standard Oil Change:</td> <td style="width: 50%;">For Oil Evac Vehicle:</td> </tr> <tr> <td><b>💬 CALL OUT:</b> "Drain plug tight, ready for oil, Bay #!"</td> <td><b>💬 CALL OUT:</b> "Ready for oil, Bay #!"</td> </tr> </table>	For Standard Oil Change:	For Oil Evac Vehicle:	<b>💬 CALL OUT:</b> "Drain plug tight, ready for oil, Bay #!"
For Standard Oil Change:	For Oil Evac Vehicle:			
<b>💬 CALL OUT:</b> "Drain plug tight, ready for oil, Bay #!"	<b>💬 CALL OUT:</b> "Ready for oil, Bay #!"			
24 If all bottomside tasks are complete. Help the topside position with completion of topside tasks.				
Conduct Second Checks	<p><b>25 Standard Oil Change:</b>  Conduct the second checks.</p> <p><b>✗ DO NOT conduct the second checks unless the topside technician observes you performing the following:</b></p> <ul style="list-style-type: none"> <li>● Check the oil filter with wrench.</li> <li><b>💬 CALL OUT:</b> "(Oil Filter #) tight!"</li> <li><b>💬 If topside filter CALL OUT:</b> "Topside (Oil Filter #) tight!"</li> <li>● Check the drain plug with wrench.</li> <li><b>💬 CALL OUT:</b> "Drain plug tight, (#) foot pounds!"</li> <li><b>✗ Before putting the torque wrench away, reset it to 0-ft pounds.</b></li> <li><b>💬 CALL OUT:</b> "No frame oil!"</li> <li><b>💬 CALL OUT:</b> "(#) fittings lubed!"</li> <li><b>✗ The frame oil callout is to confirm that frame oil has been thoroughly cleaned before the vehicle leaves the bay. Frame oil is not acceptable on any vehicle. Confirming no frame oil is present will prevent claims.</b></li> </ul> <p><b>\$</b> Not executing this correctly could potentially cause a costly claim.</p> <p><b>Oil Evac:</b>  Conduct the second checks.</p> <p><b>✗ DO NOT conduct the second checks unless the topside technician observes you performing the following:</b></p> <ul style="list-style-type: none"> <li>● Check the oil filter with wrench.</li> <li><b>💬 CALL OUT:</b> "(Oil filter #) tight!" "Evac Complete!"</li> <li><b>💬 If topside filter CALL OUT:</b> "Topside (Oil Filter #) tight!"</li> <li><b>💬 CALL OUT:</b> "No frame oil!"</li> <li><b>💬 CALL OUT:</b> "(#) fittings lubed!"</li> </ul> <p><b>⚠</b> During the second party check, do not further tighten plugs. This could cause them to strip.</p>			
	<p><b>26 Show the topside technician the old filter and gasket.</b></p> <p><b>⚠</b> Make sure all tools are put away appropriately and not left on the rolling drain pan.</p> <p><b>\$</b> Not executing this correctly could potentially cause a costly claim.</p>			

CATEGORY	STEP
<b>Check for Leaks and Prepare for Departure</b>	27 Move to the back of the catwalk, stand clear, and wait for the topside technician to call out "Clear for zoom, Bay #!" then respond with: <b>CALL OUT: "Clear, Bay #!"</b>
	28 Wait for the topside technician to call out "Oil Pressure, Bay #!" then count aloud three seconds (one, two, three) or five seconds (one, two, three, four, five) for canister filters and return to the front of the catwalk.
	29 Without standing directly under the oil filter, check for leaks around the oil filter and the drain plug. <b>CALL OUT: "Good to go, Bay #!"</b> ⚠ If leaks are present, DO NOT proceed to wiping any frame oil up until after the vehicle is turned off.
<b>Attach Skid Plate (if applicable)</b>	30 Replace the skid plate using the proper procedure. <b>CALL OUT: "Skid plate check, Bay #!"</b> ✖ <i>DO NOT conduct the second checks unless the topside technician observes you.</i>
	31 Gently tug on the skid plate, ensuring all fasteners are attached properly and the skid plate is secured. ✖ <i>It is YOUR responsibility to ensure the skid plate is fully secured before making this next call out. If needed, ask for assistance securing the skid plate.</i> <b>CALL OUT: "Skid plate secure, Bay #!"</b>
<b>Secure Pit Cover</b>	32 Return the pit cover to the fully closed position.
	33 Once you are completely off the catwalk and stairs: <b>CALL OUT: "Pit cover closed, Bay #!"</b>

**For Certification**

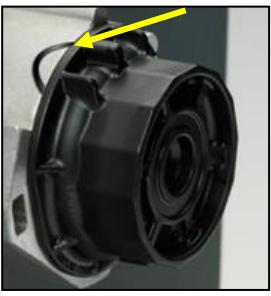
✓ / ✗	Verify the following through observation, demonstration, and discussion.
<b>Pit Safety</b>	
	Can explain the importance of why the pit cover can only be open four feet when moving product down and cleaning.
	Does not stand directly in front of the latch when securing or un-securing the pit cover.
	After changing oil, moves the drain pan away from the stairs.
<b>House Keeping</b>	
	Is careful of sharp edges when cleaning.
	Ensures no liquids are stored above eye level.
<b>Floors</b>	
	Kept clean, dry, and free from clutter. Cleaned up spills immediately.
	Kept clutter from pathways.
<b>PPE</b>	
	Correctly wears and can explain what PPE must be worn to perform bottomside tasks and services.
	Can explain what PPE must be worn when cleaning bottomside.

✓ / ✗	Verify the following through observation, demonstration, and discussion.
	Properly cares for and cleans their bottomside PPE.
<b>Removing/Installing drain plugs and Oil Filters</b>	
	Can explain proper use of tools and does not pull tools towards the face.
	Can explain what tool to use if additional force or leverage is needed.
	Properly positions body to remove and install the drain plug/oil filter.
	Does not hang tools on the drain plug or oil filter.
	Does not stand directly under a filter while removing it.
	Uses WypAll or towel to remove old filters.
	Does not drop old oil filters on the drain pan.
	Does not force a plug or filter; knows when to ask for help and callout "Double Check, Bay #!"
	Uses caution when around moving/hot engine parts.

Canister Filter Removal/Install Procedure (Bottomside Filter)

- ✖ After the old filter is removed from the vehicle, it must be placed topside. Only a certified employee positioned topside may remove and install the o-ring and filter into the filter cup. This ensures that the filter cup is kept as clean as possible.

CATEGORY	STEP
Canister Filter Removal/Install	<b>Required PPE:</b> <input checked="" type="checkbox"/> Safety glasses <input checked="" type="checkbox"/> Safety gloves <input type="checkbox"/> Burn gloves <input checked="" type="checkbox"/> Bump cap <b>⚠</b> For some topside filter removals and installs it is recommended to wear burn gloves to service any filter that causes you to reach under, around, or through any major engine components.
	1 Remove the filter cup using the correct tool. <b>✖ Refer to specific installation instructions for the filter you are installing.</b> <ul style="list-style-type: none"> <li>• <b>US Locations:</b> VPoint&gt; VIOC tab&gt; Canister Filter Instruction Button/Icon, or by calling the help desk at 1-855-VIOC-HLP.</li> <li>• <b>Canada Locations:</b> Call the help desk at 1-888-GCOC-HLP.</li> </ul>
	2 Place the filter cup topside to have the O-ring and filter replaced.
	3 Ensure the inside of the filter housing is free of debris. <b>✖ If pieces of the old filter are present, CALL OUT: "Double check, Bay #!"</b> <b>⚠</b> Even a small amount of dirt can cause a canister filter to leak. 
	4 Wait for the topside technician to hand the rebuilt filter back down to you.
	5 Hand-tighten the filter cup into the filter housing without touching the O-ring area or threads. <b>💬 CALL OUT: "(Oil Filter) going on, Bay #!"</b> <b>⚠</b> DO NOT cross-thread the filter. <b>⚠</b> Use caution so the gasket does not roll out of the groove while installing the filter.
	6 Set the torque wrench to the proper torque.
	7 Use the proper filter tool and the torque wrench to tighten the filter to the recommended torque. <b>⚠</b> Do not over-tighten the filter. <b>💬 CALL OUT: "(Oil Filter #) tight, Bay #!"</b> 

CATEGORY	STEP	
	8	Inspect the filter area to ensure the gasket did not get pinched.
		  <p>Good Gasket      Pinched Gasket</p>
	9	Thoroughly clean the filter cap with WypAll or towel surrounding filter housing.
	10	<p>Once the vehicle is zoomed and revved, inspect the canister oil filter with a flashlight without touching the vehicle.</p> <ul style="list-style-type: none"> <li>⌚ If the canister filter is located topside, the topside technician should inspect the filter for leaks following the zoom.</li> <li>💬 After inspection with flashlight and no signs of leaks, CALL OUT: “Good to go, Bay #!”</li> <li>⚠️ This is required for both topside and bottomside canister oil filters. If you see a leak, immediately shut the vehicle off BEFORE wiping or touching the canister.</li> </ul>
	11	<p>After the zoom, wipe the area between the filter cap and the housing with a clean, dry WypAll or towel to check for oil.</p> <ul style="list-style-type: none"> <li>• If there is oil on the towel, remove the filter and re-install a new filter following the proper procedure.</li> </ul> 

### Bottomside Tools

CATEGORY	STEP
Torque Wrench (Manual torque ratchet)	<p><b>Equipment Maintenance and Usage</b></p> <p><math>\frac{3}{8}</math>" – drive ratchet which can be manually set to apply a specific torque, usually between 10 and 80-ft lbs.</p> <ul style="list-style-type: none"><li>After setting the proper torque engage the lock nut/locking sleeve.</li><li>Store the torque wrench with the torque set to ZERO.<ul style="list-style-type: none"><li>Storing a torque wrench with the torque set causes premature wear and makes the torque wrench less accurate.</li></ul></li><li>DO NOT throw, roll, drop, or toss a torque wrench.</li><li>DO NOT use a torque wrench to remove ANY fastener.</li><li>DO NOT continue to apply torque to a fastener after the torque wrench ‘clicks.’</li></ul>

### Transmission and Oil Drain Plug Diagram



Cam – Lock Drain Plug

Plastic cam-locking oil drain plugs are becoming more popular. Take extra precaution when inspecting these plugs and gaskets for damage or wear.

CATEGORY	STEP									
Update category	<b>Examples of Cam – Lock Drain Plugs</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 33%;"><b>Ford</b></td> <td style="text-align: center; width: 33%;"><b>GM</b></td> <td style="text-align: center; width: 33%;"><b>Audi &amp; VM</b></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	<b>Ford</b>	<b>GM</b>	<b>Audi &amp; VM</b>						
<b>Ford</b>	<b>GM</b>	<b>Audi &amp; VM</b>								
										
										
	<b>Cam – Lock Drain Plug Kit</b>									
										
1	<p>If the vehicle is equipped with a cam-lock/plastic drain plug utilize the cam-lock drain plug tool kit with the appropriate adapter for removal and installation.</p> 									
2	<p>Take precaution when inspecting these plugs and gaskets for damage or wear (<i>Clips broken, threads stripped, or gasket torn</i>).</p> <ul style="list-style-type: none"> <li>☞ If you are unsure of the damage, wear, or install/removal process then utilize the “Double Check” callout and notify your MOD.</li> <li>⚠ Over torquing plugs can cause failure or could cause the drain plug side clips to break off.</li> </ul>									
3	<p>Verify proper install/removal process for cam-lock drain plug from Chek-Chart located in the Tech Info screen from the CSR.</p> <ul style="list-style-type: none"> <li>✖ When reinstalling the drain plug pay close attention to feel the <u>catch/click</u> with the plug locking into the oil pan.</li> </ul>									

**Maintain Bottomside Service Area**

CATEGORY	STEP
	1 Make sure the bottomside service area is kept clean, neat, and well organized.
	2 Wipe up spills immediately.
	3 Empty trash barrels as often as possible during the day. Wipe them down regularly to eliminate oil streaks and runs.
	4 Wipe down and replace tools immediately after each use.
	5 Drain all used oil filters and dispose of properly.
	6 Sweep and clean the floor, as necessary. Keep the floor free of oil and other safety hazards.
	7 Spot-clean the walls, as necessary.
	8 Inspect catwalk regularly.
	9 Inspect, empty, and maintain catch systems.
	10 Wipe down rolling drain pans regularly.
	11 Stock bottomside products as needed.
	12 Drain rolling pans.
	13 Keep floor drains/screens clean and free of debris.
	14 Check tool and equipment condition for potential safety problems.
	15 Clean and re-grease pit cover rails as needed.
	16 Clean and maintain bump caps, safety glasses, burn gloves, and safety gloves. Ask your manager for replacements, if necessary.