

- Installation Manual -

965 010 A Oil Catch Type Separator Type



CUSCO USA Inc. 16631 Gemini Lane Huntington Beach, CA 92647

Tel: (714) 907 - 0033 Fax: (714) 369 - 8142 info@cuscousainc.com www.cuscousainc.com



Thank you for purchasing CUSCO products. Please make certain that this instruction manual and the vehicle's factory service manual is fully read and acknowledged prior to installation. When transferring usage of the product, please make sure the instruction manual is given to the new owner with the product, or to anyone operating the vehicle. When this product or the vehicle equipped with this product is given/let borrow to others, please hand this manual to the person who receive the product or vehicle.



Wear protective eyewear and gloves.



Please read this first

Attention

A potential possibility of malfunction and (or) breakage can result to the product and (or) to the vehicle if this indication is ignored, if

- This instruction manual includes the usage and installation. Read this manual thoroughly before operating. Please keep this instruction in the vehicle at all times.
- This product is for off-road or competition use only. By reading this warning the customer acknowledges that Cusco products are not permitted for use on public highways.
- This product includes all components listed in this instruction manual. If there are any missing or damaged parts, please contact an authorized CUSCO retailer.
- Always disconnect the battery before beginning any type of work on the vehicle.
- CUSCO cannot be responsible for any loss or damage to the product or the vehicle, when used in combination with other product(s) and (or) unauthorized tamperment to this product.
- CUSCO cannot be responsible for any injury or damage caused to the individual or third party as well as malfunction of the vehicle, products and (or) accessories.
- This product and accessories can be changed without prior notice due to production and manufacturing reasons.
- CUSCO cannot be responsible for any factory OEM parts lost during temporary removal process when performing installation.
- Some components such as car audio and clock can lose memory when the battery is disconnected while installating. After completion of the installation process, recover the setting refering to each instruction manual. CUSCO cannot be responsible for lost settings.
- Perform periodical inspection. The durability of this product can vary depending the surrounding conditions and usage.
- CUSCO cannot be responsible for any voided factory warranty due to installation of this product.
- Acknowledge that the installation of CUSCO products will alter vehicle control characteristics. Operate vehicle with extreme caution after product installation.
- Always install products according to the automobile manufacturer factory service manual unless otherwise specified in this installation manual.

⚠ Danger

An immediate possibility of serious injury and (or) even death can be assumed to the individual and (or) to the third party if this indication is ignored and wrongful usage and (or) operation is performed.

- Any service to the car with removal of the parts should be performed by trained professionals at a properly equipped workshop.
- Resting, sleeping in the car, or working in the car or in the car or in the closed garage can cause carbon monoxide poisoning, which can be fatal. Must turn the engine off and keep the area well ventilated
- Always place wheel chock to prevent the vehicle from moving.
- Be careful with wiring when making connections directly in relationship with driving equipment, such as engine, steering, brake, and air-bag.
- Always make sure that the wiring is done properly. Take extra caution when dealing with positive and negative polarity. Make sure that the wires are insulated and there are no loose wires. If any wiring is performed in error, it may cause a fire on this product and/or the vehicle. Please disconnect the battery terminal wires before beginning the installation process. In case if it is not possible to shut off the power supply, it is your own responsibility to protect yourself from any injury as well as avoid electric shock and/or short circuit which can cause damage to the product and/or the vehicle.
- Use and install Cusco products only as directed by the manufacturer. Do not modify product to fit unspecified application. Misuse of product may lead to serious injury or death.

An potential possibility of serious injury and (or) even death can be assumed to the individual and (or) to the third party if this indication is ignored and wrongful usage and (or) operation is operformed.

- Exhaust manifold, radiator, and engine can be very hot. Please provide sufficient cool down time before starting any installs.
- Exhaust manifold, radiator, engine can be extremely hot while the vehicle is running immediately prior to vehicle usage. There is high possibility of injury when coming in contact with such components.
- Keep clear from infants, small children, and animals. Keep small parts away to avoid accidents. (prevent the parts from being swallowed/inhaled)
- Exhaust pipe can be very hot. Wear proper protective clothing when working in or around this area.
- Avoid installing any product in areas that can interfere with vision of the front windshield, driving equipments, and/ or air-bag system and other safety features.
- Take caution when installing this product near electric wires, water hoses, and air hoses. and avoid inflicting and damages to them. Damaging the electric wires, water hoses, and air hoses can cause shot circuit and/or critical engine damage.

<u>_/</u> Caution

An potential possibility of serious injury and (or) even death can be assumed to the individual and (or) to the third party if this indication is ignored and wrongful usage and (or) operation is operformed.

- Dropping and/or applying the excessive force to this product before or during installation can cause damage, resulting in malfunction of the product.
- This product is designed to be used in 12V power vehicles only. Do not install this product in different voltage supplied vehicle.
- Make sure to insulate the unused connector and wirings to avoid short circuiting.
- Always use the supplied hardware.
- Installiation of components on the passenger side or center section can interfere with safety standards. Please check within local regulations before installing.
- Use a soft cloth to clean the product gently. Using cleaners or abrasive agents can damage the product.

Notes

/\ Warning

- Installation by non-professionals and unauthorized shops voids product warranty.
- Always focus on driving first, and never on the gauge displays. This may cause vehicle accidents and can even result in death.
- Perform product setting adjustment and other operation when the vehicle is parked at safe place.
- Do not disassemble or apply any modifications to this product. Such alterations can cause vehicle accidents or product damage. This also voids the product warranty.
- If any problem is found (wet/odor/smoke/erratic movement etc.), stop using the product IMMEDIATELY and contact your local retailer. Prolonged usage with such symptom can lead to accident or vehicle damage.
- CUSCO cannot be responsible for any damages while using this product, or any damages caused by this product usage.



[Part Number]	965 010 A	
[Application]	Toyota 86 / Scion FR-S [ZN6] Subaru BRZ [ZC6]	
[Product]	Cusco Oil Catch Tank Kit	
[Description]	Separator Type Oil Catch Tank	
[Contents]	Oil Catch Tank Bracket Hose Clamp (90mm) Teflon Hose (15mm x 1meter) Hose Clamp (15mm) Straight Joint Adapter (15mm) L-Joint Adapter (15mm) Zip Tie	x1 x2 x1 x6 x1 x1 x2

There are two basic methods of installing the Cusco Oil Catch tank to your engine.

Method 1.) Atmospherically vented layout (typical) Method 2.) In-line placement with existing PCV

Conventionally, all Cusco Oil Catch Tanks are installed so that the clean air is vented into the atmosphere. If any drops in engine idle speed is experienced with the atmosphereic vent layout (Method 1); please reinstall the oil catch can with the In-line layout (Method 2).

Method 2 will require separate purchase of the Cusco Hose Kit of 00B 009 A09 (9mm hose) or 00B 009 A15 (15mm hose). The Method 2 installation is also included in this installation manual.



Preparation: Refer to Figure 1.

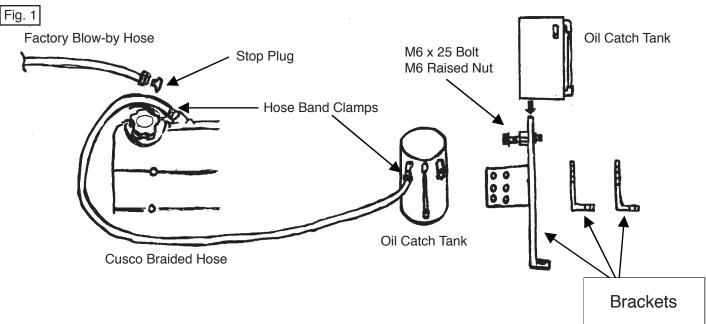
[Method 1 Installation: Vent to atmosphere]

1.) Locate an open area inside the engine bay to mount the oil catch tank.

⚠ Do not place oil catch tank near rotating objects such as fan belts and heated components such as the exhaust area.

- 2.) Install main bracket onto oil catch tank by using the included M6 x 25 bolt and M6 raised nut and temporarily bolt down the oil catch tank inside the engine bay using the remainder of the brackets. Once the location has been decided, hand torque the nut/bolt using a wrench.
- 3.) Remove one end of the factory blow-by hose from engine valve cover.
- 4.) Cap off the opening of this hose by using the included stop plug and tuck the hose away to a secure area where it will not conflict with any normal engine operation.
- 5.) Install the included braided hose to the valve cover opening and secure it with the hose band clamp. Make sure there is enough slack when cutting the braided hose to the desired length.
- 6.) Install the other open end of the braided hose to the oil catch tank and secure it with the hose band clanp.
- 7.) Use the included zip ties to secure the hose away from making contact with any moving components.

Basic Oil Catch Tank Diagram [Method 1: Vent to Atmosphere]





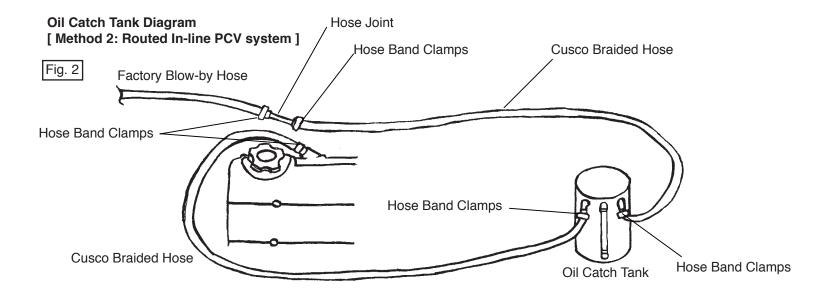
Preparation: Refer to Figure 2

[Method 2 Installation: Oil Catch tank Routed In-line with PCV]

1.) Locate an open area inside the engine bay to mount the oil catch tank.

Do not place oil catch tank near rotating objects such as fan belts and heated components such as the exhaust area.

- 2.) Install main bracket onto oil catch tank by using the included M6 x 25 bolt and M6 raised nut and temporarily bolt down the oil catch tank inside the engine bay using the remainder of the brackets. Once the location has been decided, hand torque the nut/bolt.
- 3.) Remove one end of the factory blow-by hose from engine valve cover.
- 4.) Insert the included hose joint to the open end of this factory hose to the Cusco braided oil line. Use 2 of the included hose band clamps to secure the joint. Make sure there is enough slack when cutting the braided hose to the desired length.
- 5.) Insert the open end of the braided hose to the oil catch tank opening and secure it with the hose band clamp.
- 6.) Install the remaining hose from the other open valve of the oil catch ctank to the valve cover opening. Secure both ends with the hose band clanp.
- 7.) Use the included zip ties to secure the hose away from making contact with any moving components and away from heated components such as exhaust manifolds.



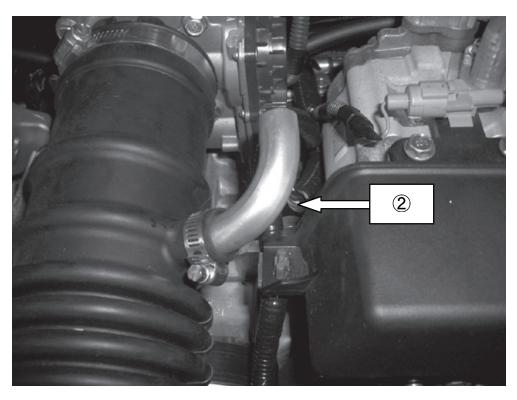


[Procedure]

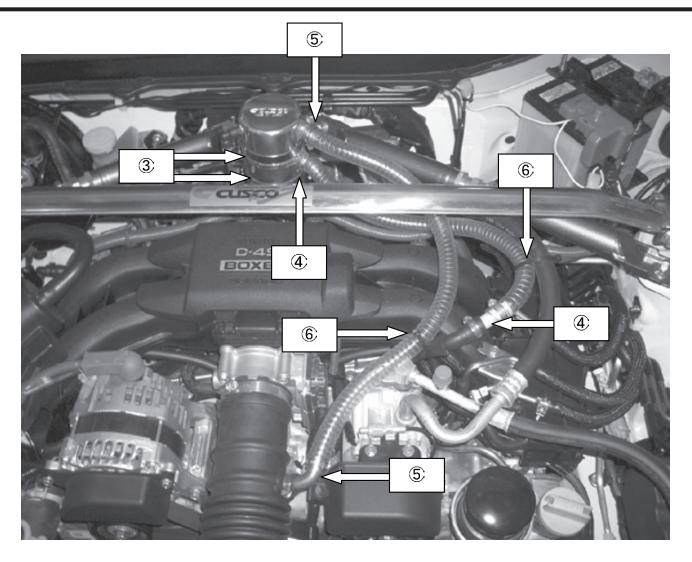
1.) Remove the two nuts located on the firewall of the vehicle then install the bracket as pictured below with the factory triangle brace still in the same position.



2.) Remove the blowby hose from the intake hose and attach the included L-Joint like pictured below. Secure with hose clamp.







- 3.) Mount the oil catch tank on the bracket by using the two 90mm hose clamps thats included in the kit.
- 4.) Install the straight adapter joint to the remaining hose on the engine from step 2 with the teflon hose and clamp it down. Direct this hose to the lower neck of the oil catch tank and clamp it down.

/! WARNING Careful not to cut the teflon hose too short. Give it enough length so it can be routed with ease.

- 5.) Install the teflon hose to the L-Joint from step 2 and clamp it down. Connect the other end of this teflon hose to the upper neck of the oil catch tank.
- 6.) Secure the teflon hoses to various surrounding hoses with the zip ties that are included with this kit.



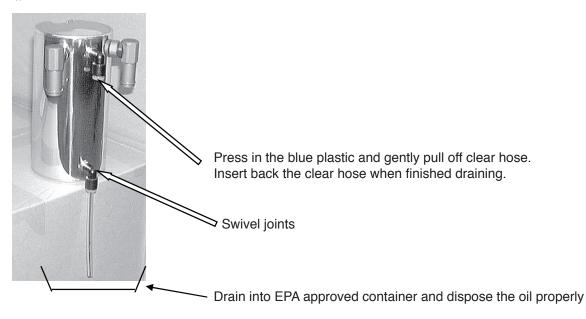
/ Following Installation

Check for the following points before starting the engine.

- 1.) Make sure no tools or components have been left inside the engine bay area.
- 2.) The transmission is in neutral gear for manual, and in the Park position for automatic.
- 3.) The vehicle is not on a lift, jacks, or jack stands. All 4 wheels must be on the ground.

- Re-torque all nuts and bolts periodically after driving the vehicle.
- Stop vehicle operation when any abnormal noise or characteristic appears. Pull over vehicle to a safe area and have a professional inspect the cause of the problem.
- Do not reuse any damaged product. Always replace with a new unit.
- Check local laws and race regulations before installing ptroduct. This product is made for off-road use only.
- Do not use this product in sub freezing conditions. Fluids inside the braided hose may become frozen, preventing proper operation of this product.
- Periodically retorque all nuts and bolts after vehicle use.

Draining the Oil Catch Tank



**Periodically check and retighten any nuts and bolts that were involved with this installation after operating the vehicle.