

## RVSK103 FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS

TOYOTA LAND CRUISER PRADO KDJ - See RYCO catalogue for specific application details.

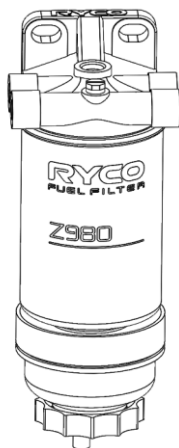
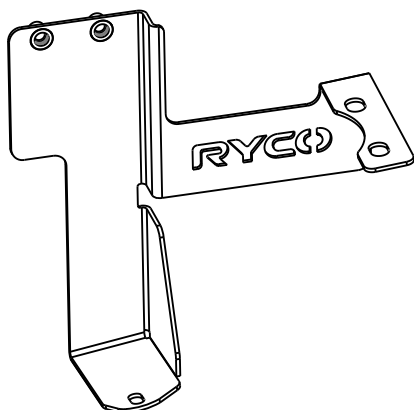
The Ryco RVSK103 kit includes mounting bracket specifically designed for the vehicle, and all components required to complete the installation of Ryco Z980K series fuel water separator and RCC351 series catchcan (both sold separately). It is recommended that the installation is conducted by a qualified mechanic following the procedures in this instruction sheet.



### SECTION 1

FUEL FILTER METAL BRACKET  
(INCLUDED IN RVSK103)

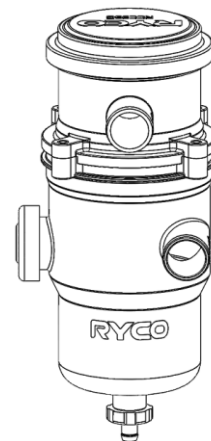
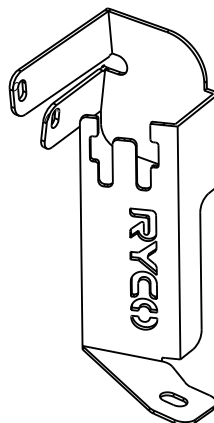
FUEL WATER SEPARATOR  
(SOLD SEPARATELY)



### SECTION 2

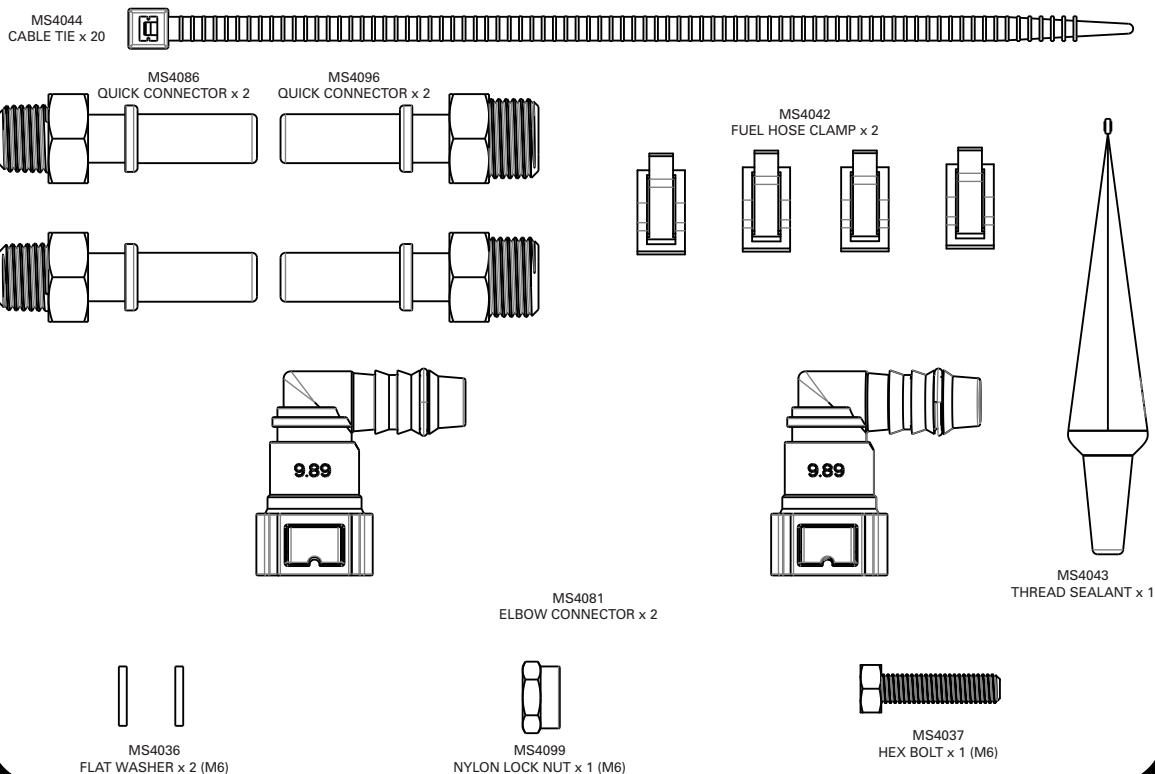
CATCH CAN METAL BRACKET  
(INCLUDED IN RVSK103)

CATCHCAN  
(SOLD SEPARATELY)

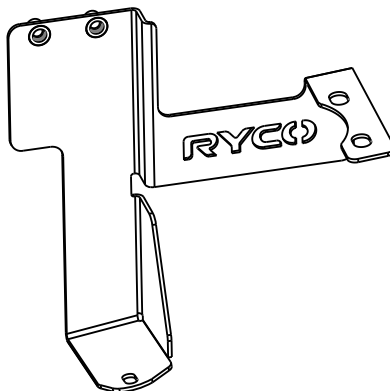


**COMPONENTS INCLUDED IN RVSK103 KIT  
(NOT SOLD SEPARATELY)**

**RVSK103-PARTS LIST - FUEL FILTER BRACKET & COMPONENTS BOX**



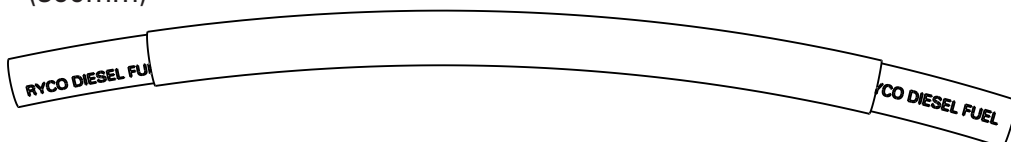
**FB9804FX**  
**FUEL FILTER METAL BRACKET x 1**



**HF9804A**  
**FUEL HOSE x 1**  
**(210mm)**



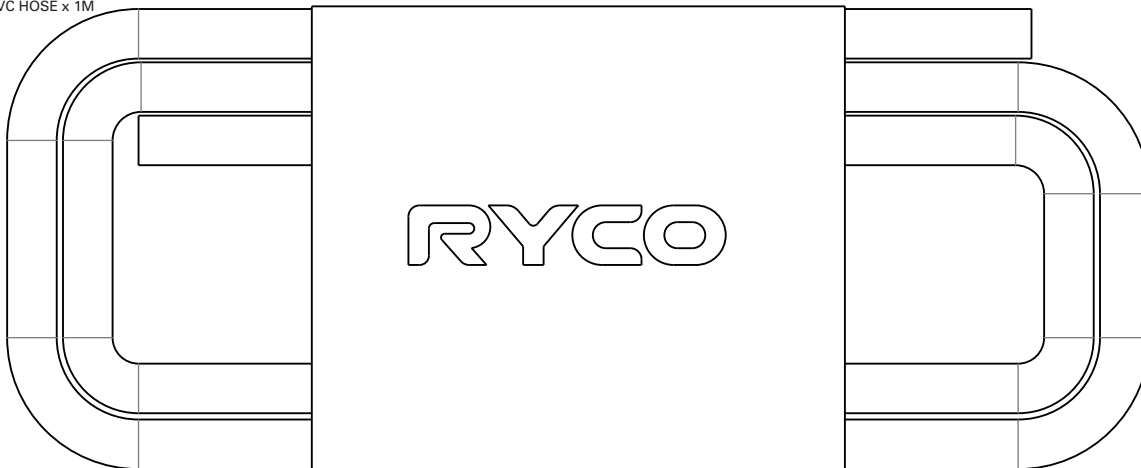
**HF9804B**  
**FUEL HOSE x 1**  
**(360mm)**



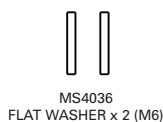
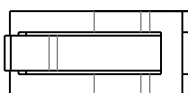
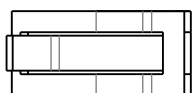
**COMPONENTS INCLUDED IN RVSK103 KIT  
(NOT SOLD SEPARATELY)**

**RVSK103-PARTS LIST - CATCHCAN BRACKET & COMPONENTS BOX**

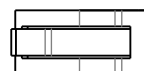
MS4089  
PVC HOSE x 1M



MS4091  
PCV HOSE CLAMP x 2



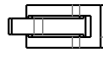
MS4092  
PCV HOSE CLAMP x 2



MS4037  
HEX BOLT x 2 (M6)



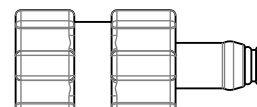
MS4093  
DRAIN HOSE CLAMP x 2



MS4031  
FLAT WASHER x 1 (M8)

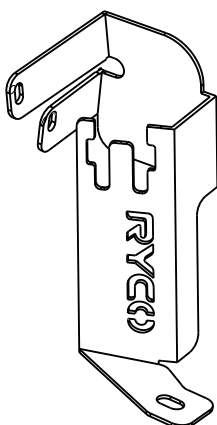


MS4099A  
NYLON LOCK NUT x 1 (M8)

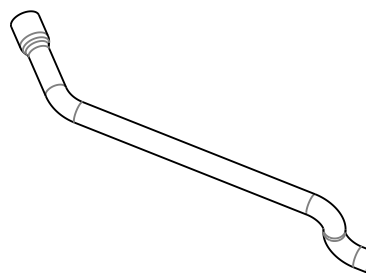


MS4090  
DRAIN VALVE x 1

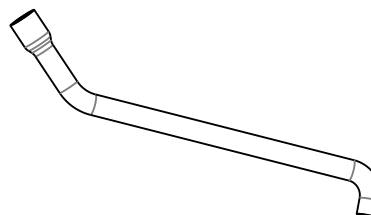
**FB9804FX**  
CATCH CAN METAL BRACKET x 1



**MH9804X PCV HOSE x 1**

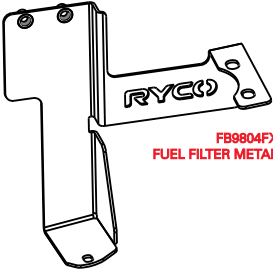
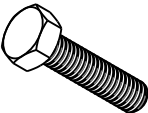




**MH9804Y PCV HOSE x 1**



## RVSK103 FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

### SECTION 1A FUEL FILTER BRACKET FITMENT

PARTS REQUIRED	TOOLS & PPE'S REQUIRED
 <p>FB9804FX FUEL FILTER METAL BRACKET</p>  <p>MS4037 HEX BOLT x 1 (M6)</p>  <p>MS4036 WASHER x 2 (M6)</p>  <p>MS4099 NYLON LOCK NUT x 1 (M6)</p>	<p>* WORK GLOVES * RACHET SET</p>

### WORK PROCEDURE

1. Remove the two nuts (A) securing the factory filter to the vehicle. Lift the factory filter off the studs and fit Ryco fuel filter metal bracket in the same position as the factory fuel filter. Place the factory filter over the Ryco bracket and loosley re-fit the nuts previously removed.
2. Use 1x 6mm bolt, nut and washers (B) to secure the bottom section of the Ryco bracket through the mud guard. Note the direction of the bolt in Fig. 1. Insert the bolt from inside the guard so it points up in to the engine bay and loosely fit the nut.
3. Tighten all the fasteners. The bracket should feel secure.

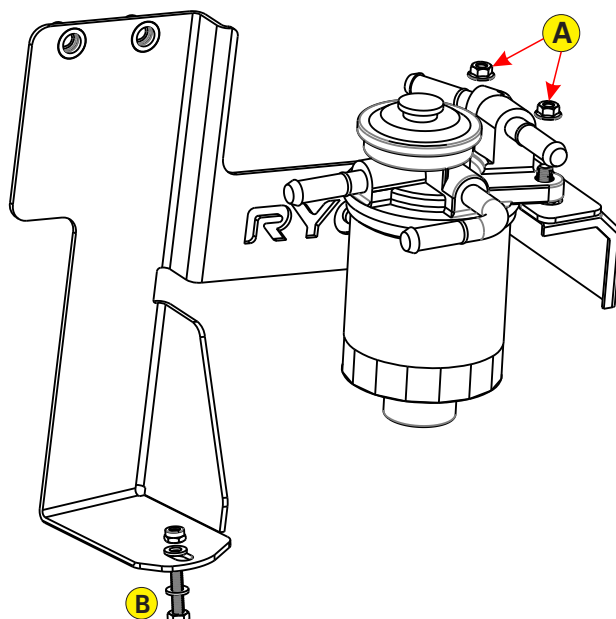
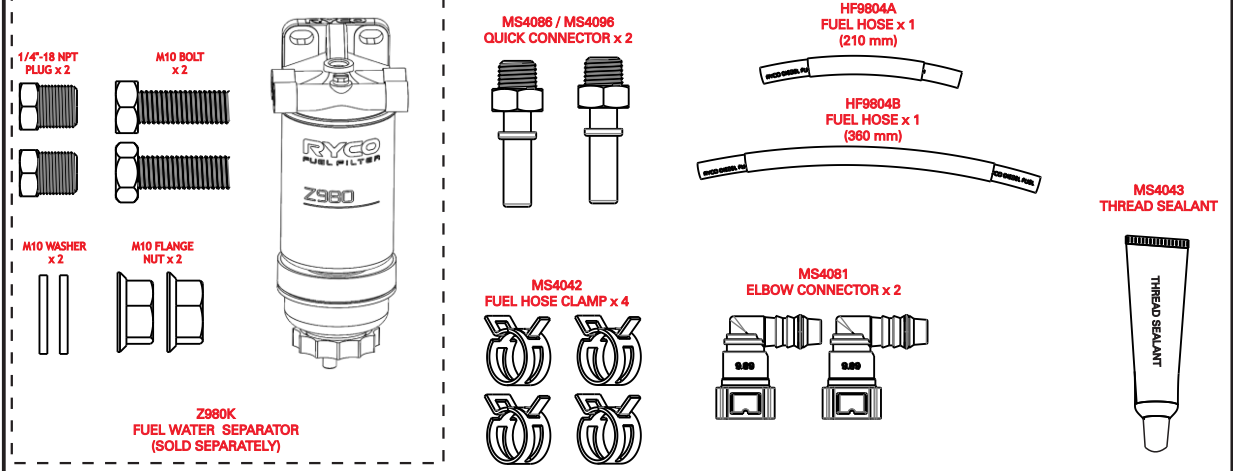


FIG. 1 BRACKET INSTALLATION

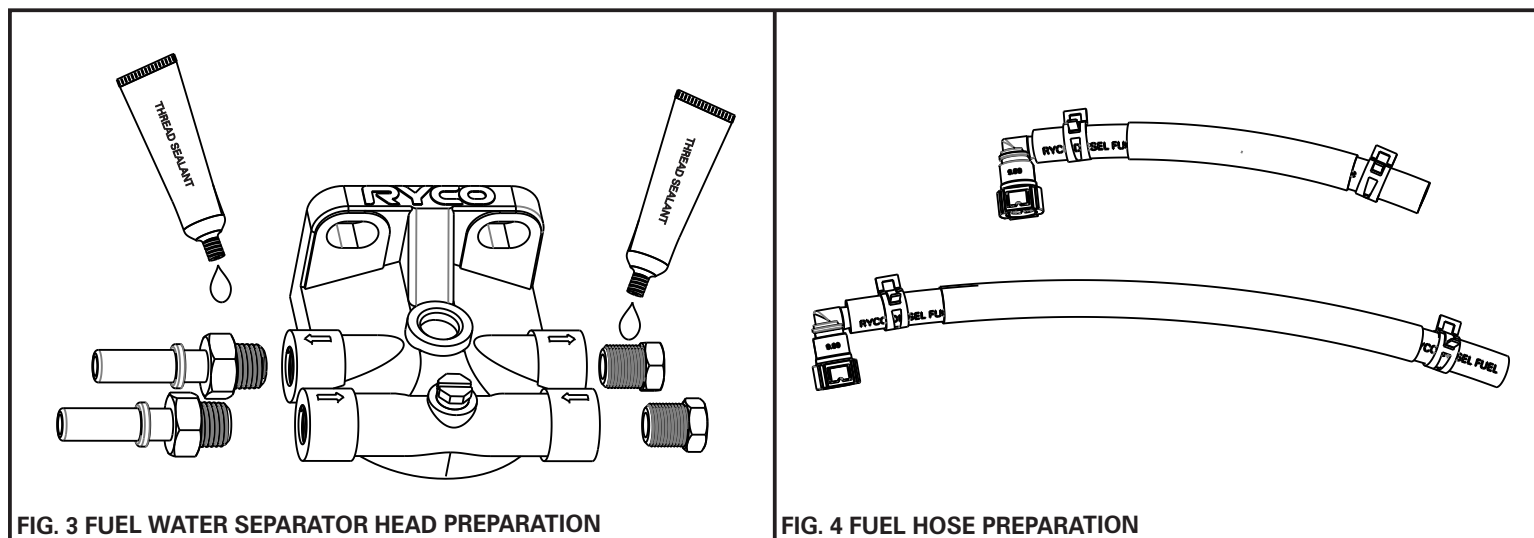
## RVSK103 FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

### SECTION 1B FUEL WATER SEPARATOR INSTALLATION

PARTS REQUIRED	TOOLS & PPE'S REQUIRED
	<p><b>TOOLS &amp; PPE'S REQUIRED</b></p> <ul style="list-style-type: none"> <li>* WORK GLOVES</li> <li>* RACHET SET</li> <li>* HOSE CLAMP PLIERS</li> <li>* RAGS</li> </ul>

### WORK PROCEDURE

1. Select the supplied quick connectors that fit the Ryco fuel water separator head.
2. Locate the blanking plugs supplied with the fuel water separator.
3. Apply the supplied thread sealant to the thread of the blanking plugs and the quick connectors. Install them as per Fig. 3, ensuring they are tight. It's recommended that you hold the filter head in a vice while tightening.
4. Install one of the supplied elbow connector onto one end of supplied fuel hoses and install two (2) supplied fuel hose clamps onto both ends of fuel hoses, as per Fig. 4. Do not tighten fuel hose clamps yet.



## RVSK103 FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

### SECTION 1B FUEL WATER SEPARATOR INSTALLATION (CONTINUED)

#### WORK PROCEDURE (CONTINUED)

5. Locate the factory fuel supply hose (coloured blue in Fig. 5) at the factory fuel filter. Loosen the factory fuel hose clamp and disconnect the fuel supply hose from the factory filter.  
Have a rag ready to capture any diesel that may spill out of the fuel line and the fuel filter.
6. Trace the other end of the fuel supply hose and disconnect it from the metal factory fuel supply pipe, as per Fig. 5. Remove the factory fuel supply hose from the vehicle and store for safe keeping. Have a rag ready to capture any diesel that may spill out of the fuel lines.
7. Mount the Z980K fuel filter assembly onto the Ryco metal bracket using the two (2) black M10 bolts and washers supplied with the Z980K as shown in Fig. 6.
8. Connect HF9804A supplied fuel hoses (the shorter hose) to the inlet port of the Z980K (coloured red in Fig. 6) by pushing the elbow connector onto the metal quick connector until you hear a "click", and connect the other end of the hose to the factory fuel supply pipe. Tighten both ends with the hose clamps. See Fig. 6 for routing.
9. Connect the second hose HF9804B to the outlet port of the Z980K (coloured yellow in Fig. 6) by pushing the elbow connector onto the metal quick connector until you hear a "click", and connect the end of the fuel hose to the factory fuel filter inlet port and secure with a hose clamp.
10. Ensure all hose clamps are secure.
11. Locate the priming button on top of the factory fuel filter. Prime the fuel system by pumping the button repeatedly until you feel it go hard and become difficult to press any further. The priming process could take approximately 5 - 10 minutes.

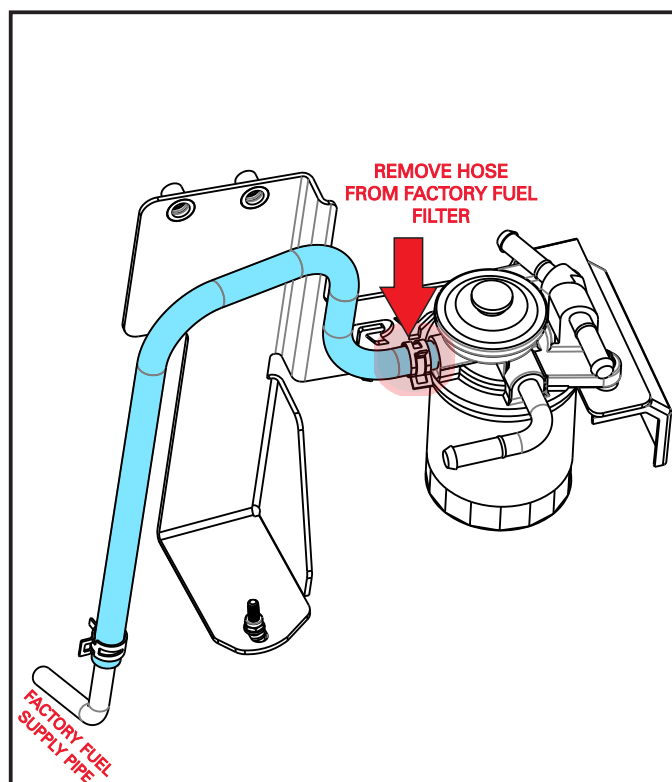


FIG. 5 FACTORY HOSE IDENTIFICATION

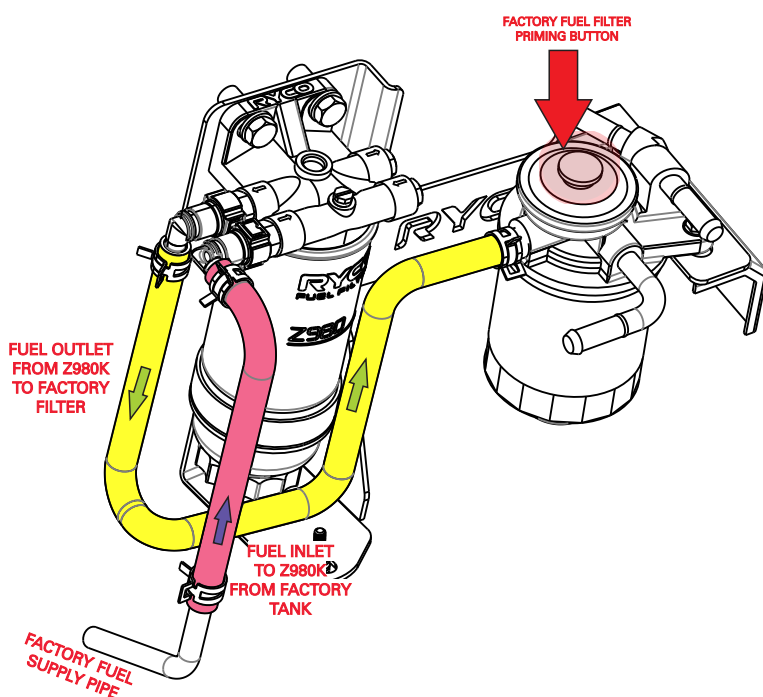
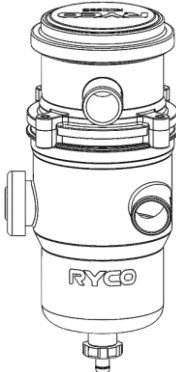


FIG. 6 FUEL WATER SEPARATOR INSTALLATION



## RVSK103 CATCHCAN FITMENT INSTRUCTIONS

### SECTION 2a CATCHCAN BRACKET INSTALLATION

PARTS REQUIRED	TOOLS & PPE'S REQUIRED
 <p>RCC351 CATCHCAN (SOLD SEPARATELY)</p> <p>MH9804X PCV HOSE x 1</p> <p>MH9804Y PCV HOSE x 1</p> <p>FB9804FC CATCH CAN METAL BRACKET x 1</p> <p>MS4099A NYLON LOCK NUT x 1 (M8)</p> <p>MS4037 HEX BOLT x 2 (M6)</p> <p>MS4036 FLAT WASHER x 2 (M6)</p> <p>MS4031 FLAT WASHER x 1 (M8)</p> <p>MS4091 PCV HOSE CLAMP x 2</p> <p>MS4092 PCV HOSE CLAMP x 2</p>	<p>* WORK GLOVES</p> <p>* RACHET SET</p> <p>* HOSE CLAMP PLIERS</p>

### WORK PROCEDURE (1/2)

1. Remove the plastic engine cover.
2. Referring to FIG. 7A Locate Stud A in drivers side rear corner of the engine bay.
3. Referring to FIG. 7B, Drop FB9804CX catchcan bracket into engine bay locating engine bay Stud A into Catchcan Bracket slot A.

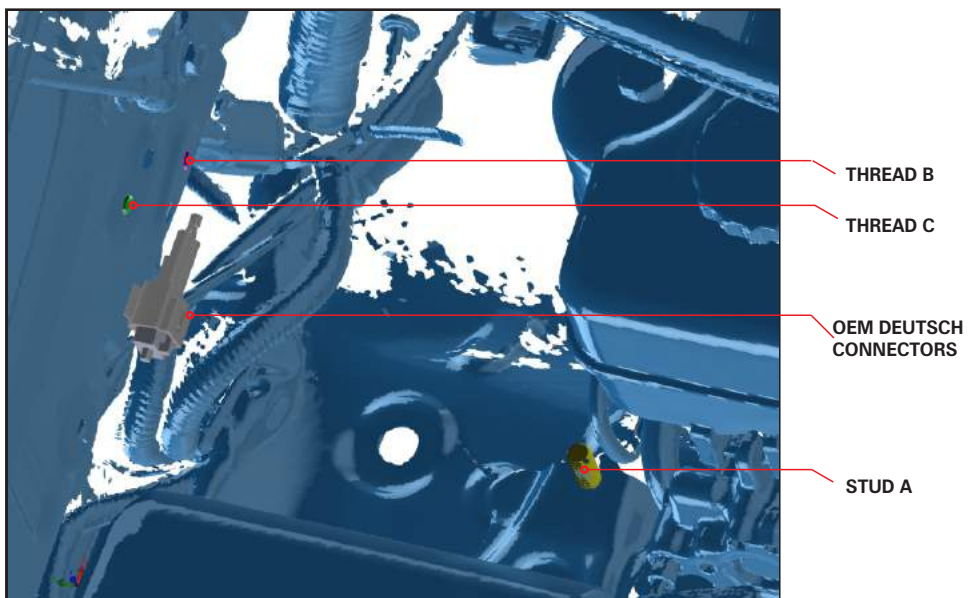


FIG. 7A CATCHCAN BRACKET INSTALLATION AREA

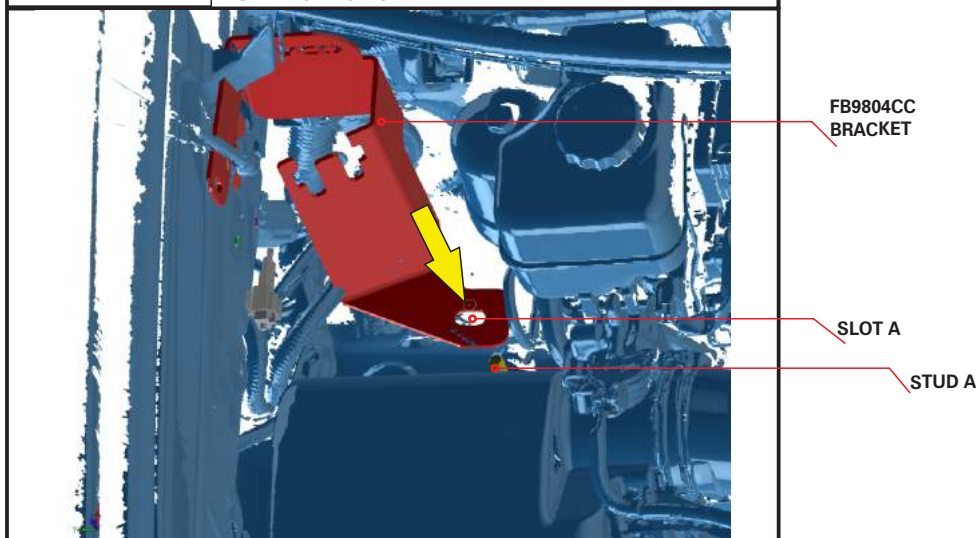


FIG. 7B CATCHCAN BRACKET INSTALLATION

## RVSK103 CATCHCAN FITMENT INSTRUCTIONS

### SECTION 2a CATCHCAN BRACKET INSTALLATION

#### WORK PROCEDURE (2/2)

4. Install supplied MS4031 M8 Washer onto Engine bay Stud A, then screw on supplied MS4099A M8 lock nut onto Stud A.

Refer to FIG.8A

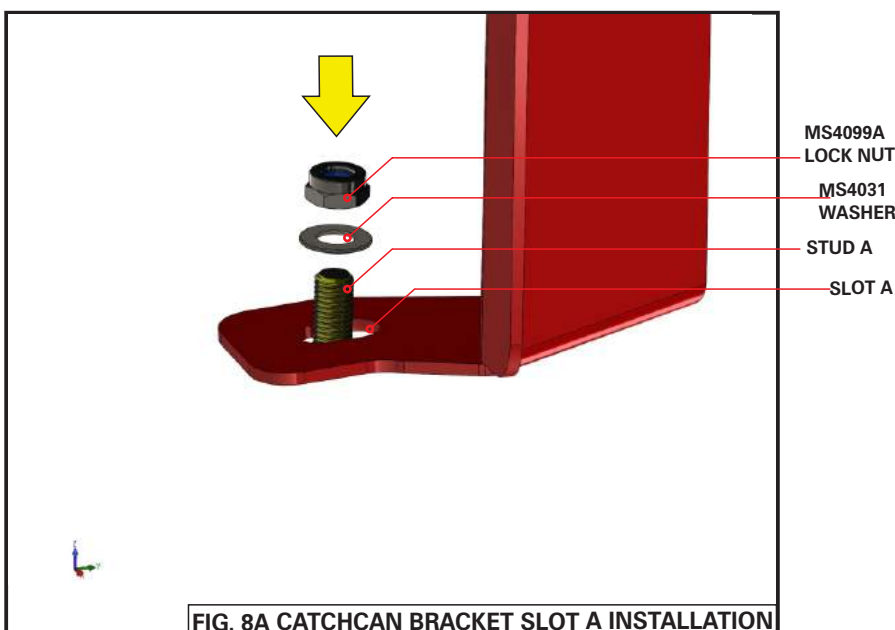


FIG. 8A CATCHCAN BRACKET SLOT A INSTALLATION

4. Insert supplied 2 x MS4037 M6 bolts through supplied 2 x MS4036 M6 washers, proceed to then screw each of these bolts, through Slot B & C, into Thread B & C.

Refer to FIG.8B

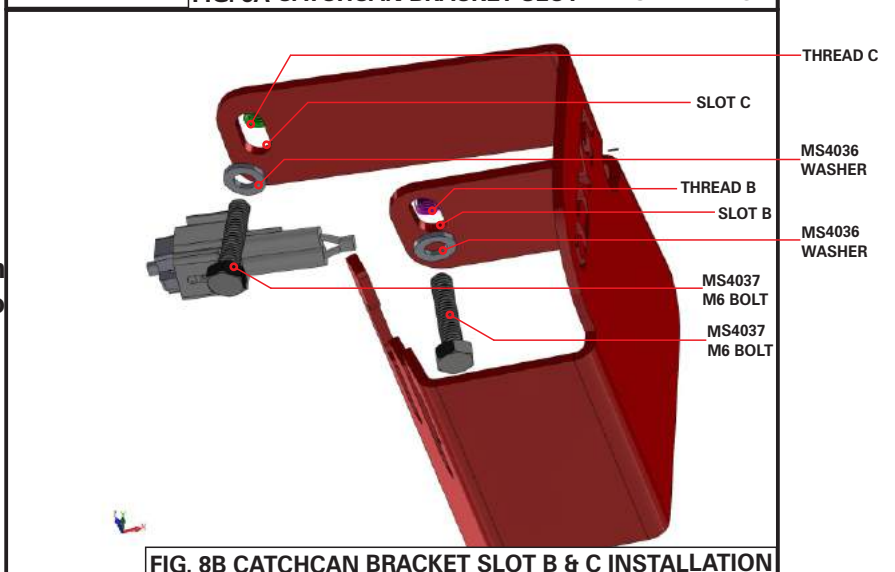


FIG. 8B CATCHCAN BRACKET SLOT B & C INSTALLATION

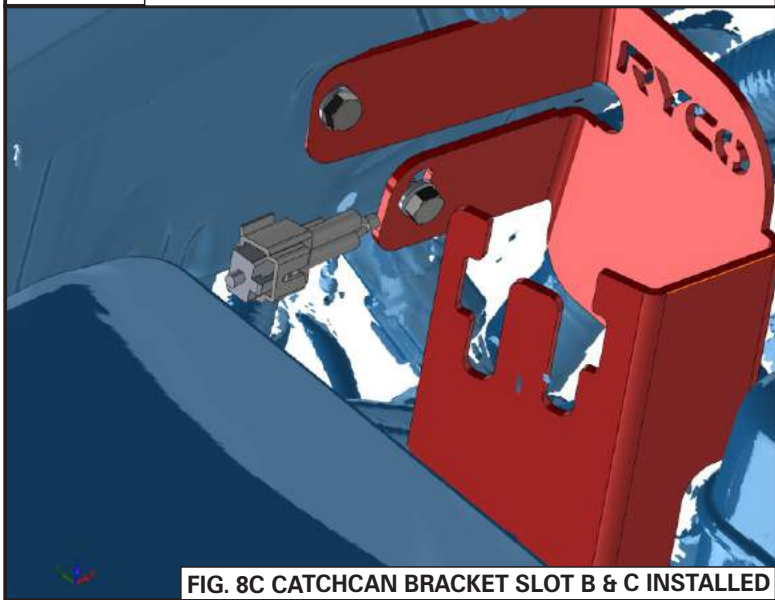


FIG. 8C CATCHCAN BRACKET SLOT B & C INSTALLED



## RVSK103 CATCHCAN FITMENT INSTRUCTIONS

### SECTION 2b CATCHCAN INSTALLATION

#### WORK PROCEDURE (1/2)

1. Install RYCO Catchcan by inserting Nylon bracket slot into slot cut out on FB9804CX bracket, as shown in FIG.9A & 9B.



FIG. 9A CATCHCAN INSTALLATION



FIG. 9B CATCHCAN INSTALLED

2. Unclip OEM hose clamp located on OEM PCV hose in engine PCV port location. Proceed to remove OEM PCV hose from engine PCV port, then remove OEM hose clamp from this end of OEM PCV hose.



FIG. 10 OEM PCV HOSE LOCATION

# RVSK103 CATCHCAN FITMENT INSTRUCTIONS

## SECTION 2b CATCHCAN INSTALLATION

### WORK PROCEDURE (2/2)

3. Starting with the MH9804X PCV hose (coloured blue in Fig. 11C), install the small end on to the Engine PCV Port & tighten with the MS4092 hose clamp as shown in Fig. 11
4. Install the other end of the MH9804X PCV hose on to the lower, inlet port, of the RCC351 Catchcan and tighten with the MS4091 hose clamp.
5. Install the larger end of the MH9804Y hose (coloured yellow in Fig. 11C) on to the upper, outlet port, of the RCC351 Catchcan and tighten with a MS4091 hose clamp. Install the other end of the MH9804Y PCV hose on to the Air Intake PCV port, then tighten with a MS4092 hose clamp.



FIG. 11C RYCO PCV HOSE INSTALLED

## **RVSK103 CATCHCAN FITMENT INSTRUCTIONS**

### **DRAIN HOSE INSTALLATION PROCEDURE (OPTIONAL)**

1. To install the drain hose, remove the drain plug from the bottom of RCC351, take out the rubber seal from the plug and refit. Insert the drain hose and secure it with the supplied spring clamp. Insert the hose drain tap to the other end and use the zip ties to secure the hose. To drain, pull back the red section until all oil has drained out.
2. If it has been fitted without using the drain hose supplied, simply slide out the unit from its bracket and remove the drain plug on the unit and let the oil drain onto a pan or bottle.