

## X104R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS

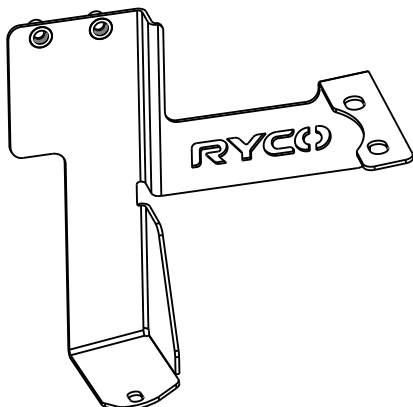
TOYOTA LAND CRUISER PRADO GDJ - See RYCO catalogue for specific application details.

The Ryco X104R kit includes mounting brackets specifically designed for the vehicle, and all components required to complete the installation of Ryco Z980K16 series fuel water separator and RCC351 series catchcan. 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

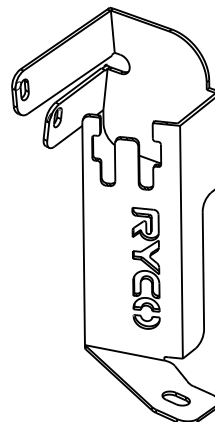


FUEL WATER  
SEPARATOR

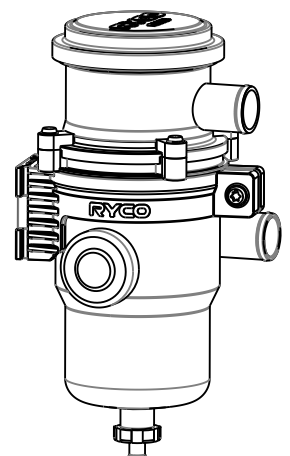


### SECTION 2

CATCH CAN  
METAL BRACKET




CATCHCAN



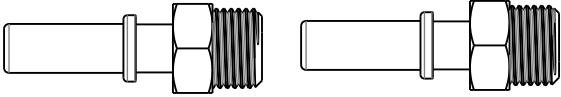
**COMPONENTS INCLUDED IN X104R KIT**

**X104R PARTS LIST - FUEL FILTER BRACKET & COMPONENTS BOX**

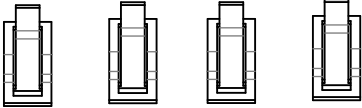
MS4044  
CABLE TIE x 20




MS4096A  
QUICK CONNECTOR x 2



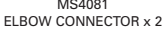
MS4042  
FUEL HOSE CLAMP x 4




9.89




MS4081  
ELBOW CONNECTOR x 2




MS4036  
FLAT WASHER x 2 (M6)



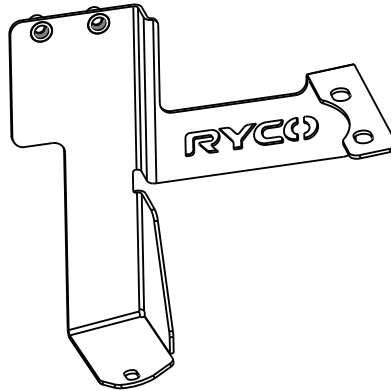
MS4099  
NYLON LOCK NUT x 1 (M6)



MS4037  
HEX BOLT x 1 (M6)



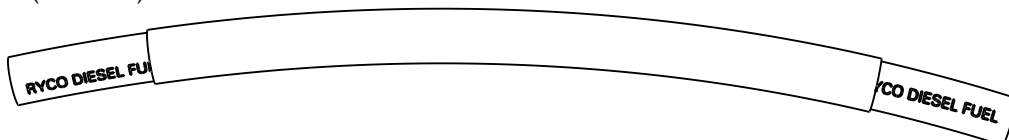
FB9804FC  
FUEL FILTER METAL BRACKET x 1



HF9804A  
FUEL HOSE x 1  
(210mm)



HF9804B  
FUEL HOSE x 1  
(360mm)



COMPONENTS INCLUDED IN X104R KIT

**X104R PARTS LIST - CATCHCAN BRACKET & COMPONENTS BOX**

MS4089  
PVC HOSE x 1M

MS4091  
PCV HOSE CLAMP x 2

MS4092  
PCV HOSE CLAMP x 1

MS4100  
HOSE JOINER x 1

MS4036  
FLAT WASHER x 2 (M6)

MS4094  
PCV HOSE CLAMP x 2

MS4037  
HEX BOLT x 2 (M6)

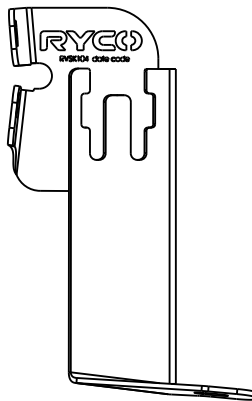
MS4093  
DRAIN HOSE CLAMP x 2

MS4031  
FLAT WASHER x 1 (M8)

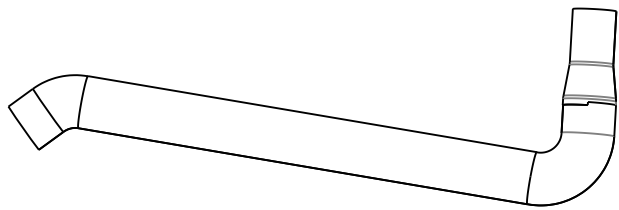
MS4099A  
NYLON LOCK NUT x 1 (M8)

MS4090  
DRAIN VALVE x 1

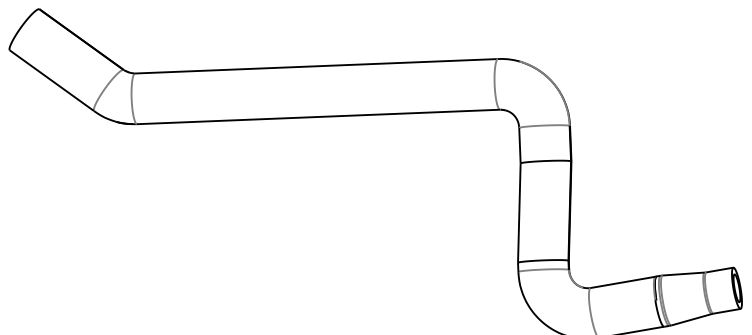
FB9804CC  
CATCH CAN METAL BRACKET x 1



MH9804A PCV HOSE x 1

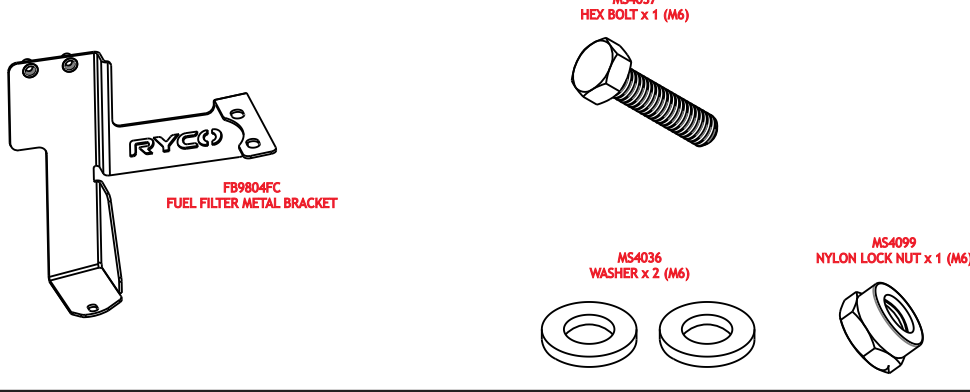


MH9804B PCV HOSE x 1



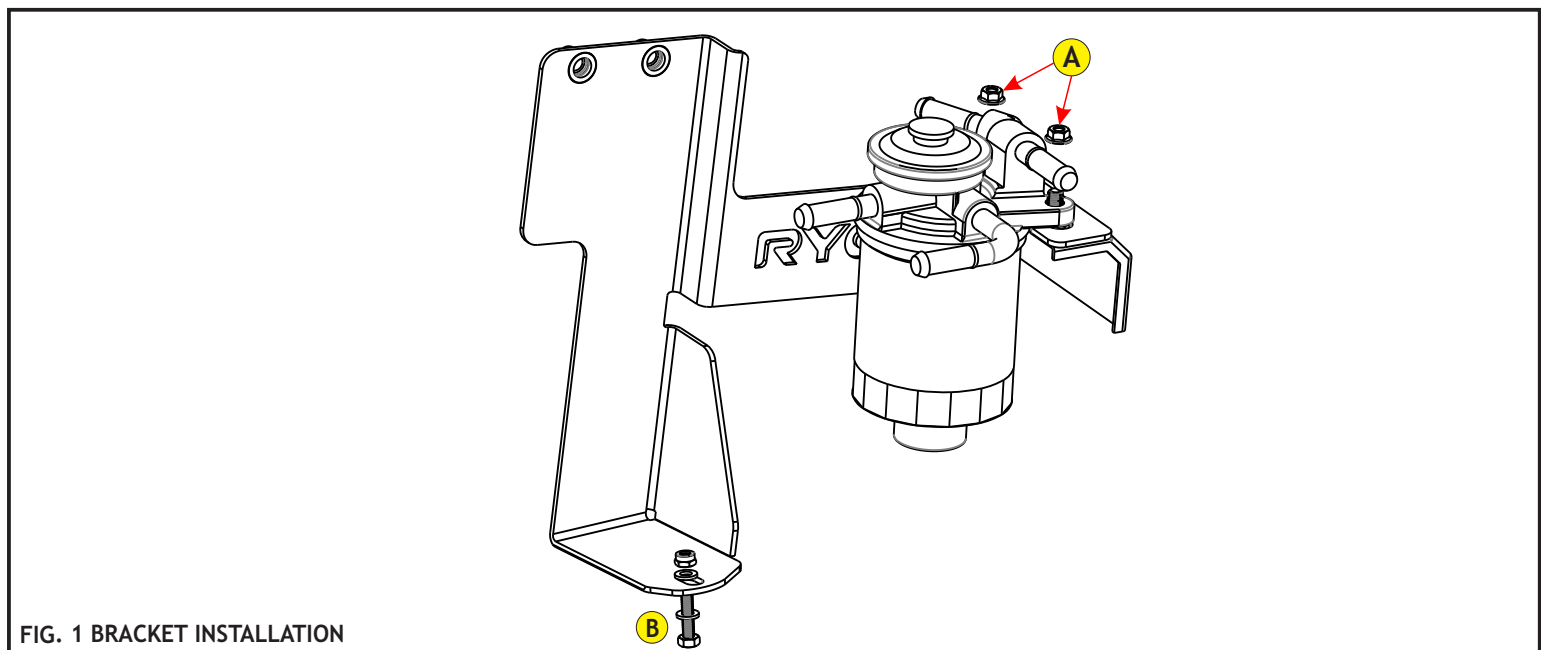
# X104R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

## SECTION 1A FUEL FILTER BRACKET FITMENT

PARTS REQUIRED	TOOLS & PPE'S REQUIRED
 <p>FB9804FC 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 (marked A in Fig. 1) securing the factory filter to the vehicle. Lift the factory filter and fit Ryco fuel filter metal bracket in the same position as the factory fuel filter. Place the factory filter housing on top of the Ryco fuel filter bracket and slightly tighten the nuts previously removed.
2. Use the supplied 6mm bolt, nut and washers to secure the bottom section of the Ryco bracket through the hole in the vehicles front passenger side wheel house.  
 Note: Install the factory bolt at point B in Fig. 1 in the orientation shown. The bolt should be installed from the wheel house up in to the engine bay so the bolt does not protrude down under the vehicle.
3. Tighten all fasteners.



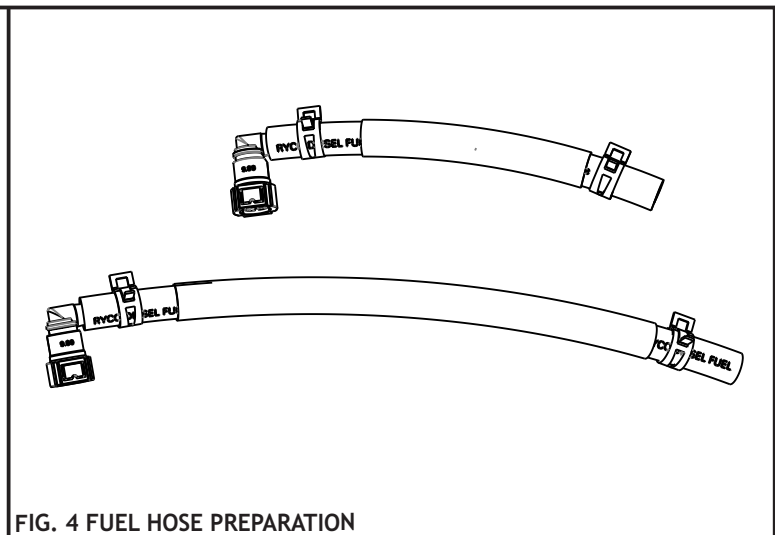
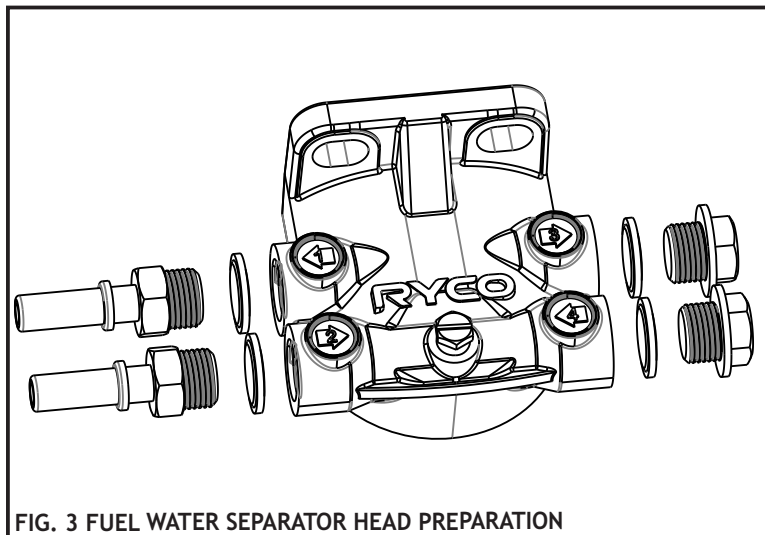
### X104R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

#### SECTION 1B FUEL WATER SEPARATOR INSTALLATION

PARTS REQUIRED		TOOLS & PPE'S REQUIRED	
<p>M16 PLUG x 2</p> <p>M10 BOLT x 2</p> <p>RUBBER BONDED WASHER x 4</p> <p>M10 FLANGE NUT x 2</p> <p>M10 WASHER x 2</p> <p>RYCO Z980K16 FUEL WATER SEPARATOR</p>	<p>MS4096A QUICK CONNECTOR x 2</p> <p>MS4042 FUEL HOSE CLAMP x 4</p>	<p>HF9804A FUEL HOSE x 1 (210 mm)</p> <p>HF9804B FUEL HOSE x 1 (360 mm)</p> <p>MS4081 ELBOW CONNECTOR x 2</p>	<p>* WORK GLOVES</p> <p>* RACHET SET</p> <p>* HOSE CLAMP PLIERS</p> <p>* RAGS</p>

#### 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. Install the Ryco fuel water separator head with metal quick connectors, blanking plugs and rubber bonded washers, as per Fig 3. Tighten blanking plugs(on Port 3 & 4) and quick connectors (on Port 1 & 2).
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.

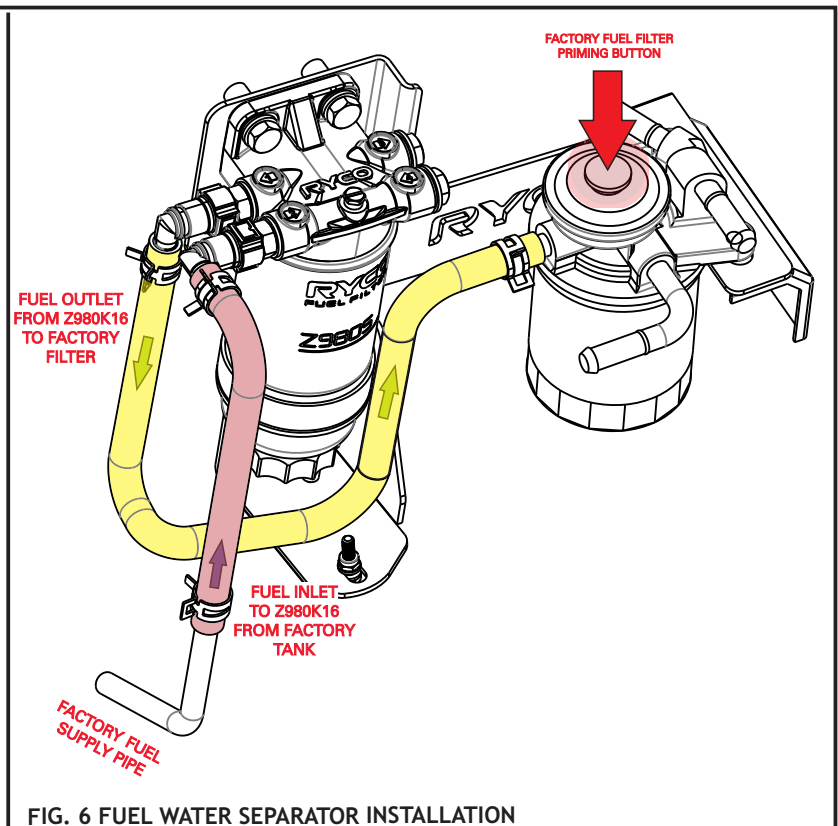
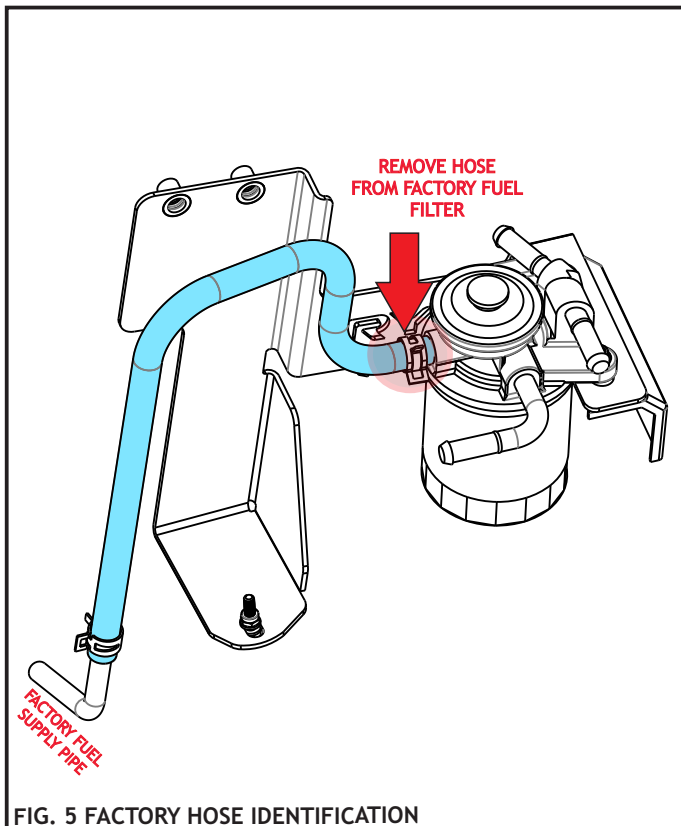


## X104R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

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

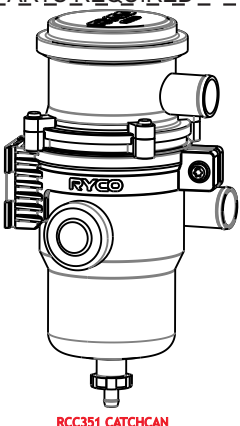
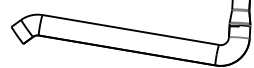


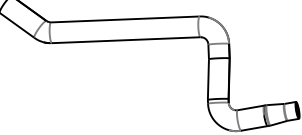


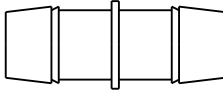
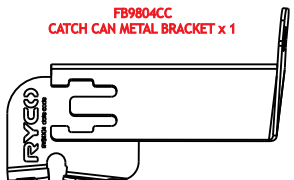



#### WORK PROCEDURE (CONTINUED)

5. Locate the factory fuel inlet hose (coloured blue in Fig. 5) at the factory fuel filter. Loosen the factory fuel hose clamp and disconnect the fuel supply line 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 line and disconnect it from the metal factory fuel supply pipe, as per Fig. 5. Remove the factory fuel supply line 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 Z980K16 fuel filter assembly onto the metal bracket as per Fig. 6 using the two (2) black M10 bolts and washers supplied with the Z980K16.
8. Connect the open end of the shorter supplied fuel hose (HF9804A coloured red in Fig. 6) to the factory fuel supply pipe and secure with a hose clamp. Connect the elbow connector to the inlet port of the Z980K16 by pushing the elbow connector onto the metal quick connector until you hear a “click”. See Fig. 6 for hose routing.
9. Connect the longer hose (HF9804B coloured yellow in Fig. 6) to the outlet port of the Z980K16 by pushing the elbow connector on to the metal quick connector until you hear a “click”, and connect the open end of the fuel hose to the factory fuel filter inlet port and secure with a hose clamp.
10. 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.
11. Start the engine and check for fuel leaks.



### X104R CATCHCAN FITMENT INSTRUCTIONS

#### SECTION 2a CATCHCAN BRACKET INSTALLATION

PARTS REQUIRED			TOOLS & PPE'S REQUIRED			
 <p>RCC351 CATCHCAN</p>	<p>MH9804A PCV HOSE x 1</p> 	<p>MS4099A NYLON LOCK NUT x 1 (M8)</p> 	<p>MS4037 HEX BOLT x 2 (M6)</p> 	<p><b>* WORK GLOVES</b>  <b>* RACHET SET</b>  <b>* HOSE CLAMP PLIERS</b></p>		
	<p>MH9804B PCV HOSE x 1</p> 	<p>MS4036 FLAT WASHER x 2 (M6)</p> 	<p>MS4031 FLAT WASHER x 1 (M8)</p> 			<p>MS4100 HOSE JOINER x 1</p> 
	<p>FB9804CC CATCH CAN METAL BRACKET x 1</p> 	<p>MS4091 PCV HOSE CLAMP x 2</p> 	<p>MS4092 PCV HOSE CLAMP x 1</p> 			<p>MS4094 PCV HOSE CLAMP x 2</p> 

#### WORK PROCEDURE (1/2)

1. Remove the plastic engine cover.
2. Starting at the driver's side rear corner of the engine bay, locate Stud A in as shown in Fig. 7a.
3. Position the supplied FB9804CC catchcan bracket into engine bay as shown in Fig. 7b with stud A in slot A.

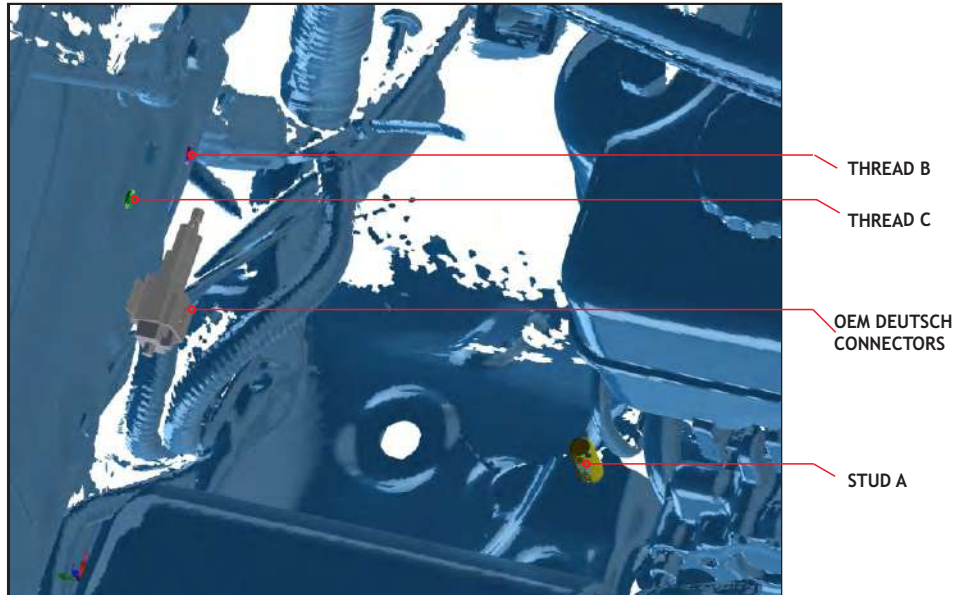


FIG. 7A CATCHCAN BRACKET INSTALLATION AREA

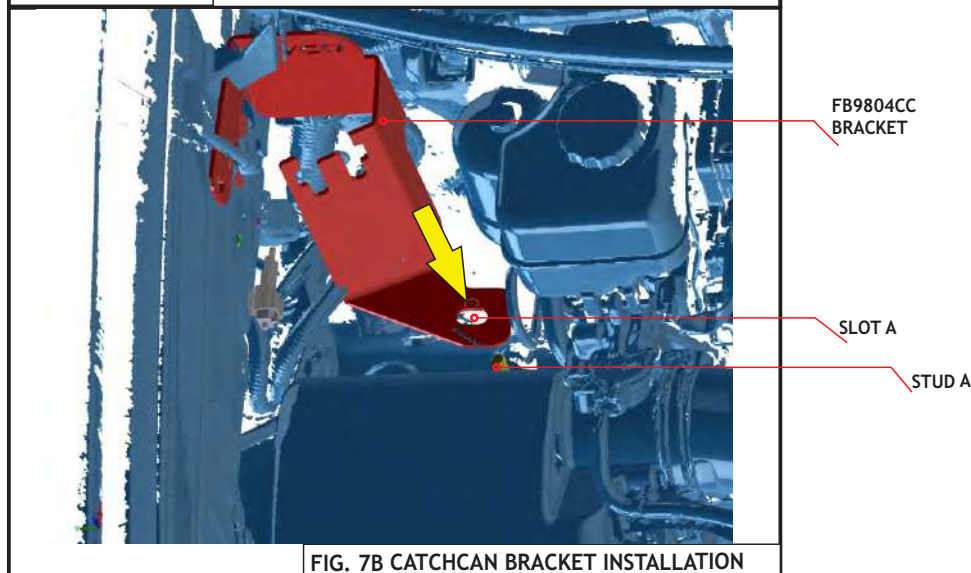


FIG. 7B CATCHCAN BRACKET INSTALLATION

# X104R 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*

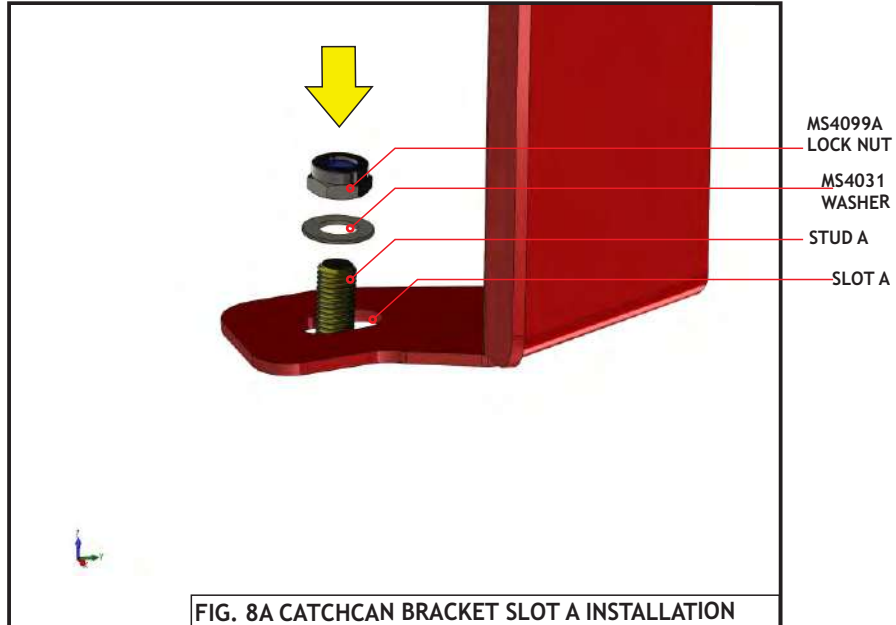


FIG. 8A CATCHCAN BRACKET SLOT A INSTALLATION

4. Align Slot B & C on the bracket with the threaded holes on the side of the engine bay. Install the supplied 2 x MS4037 M6 bolts with supplied 2 x MS4036 M6 washers.  
*Refer to FIG.8B & 8C.*

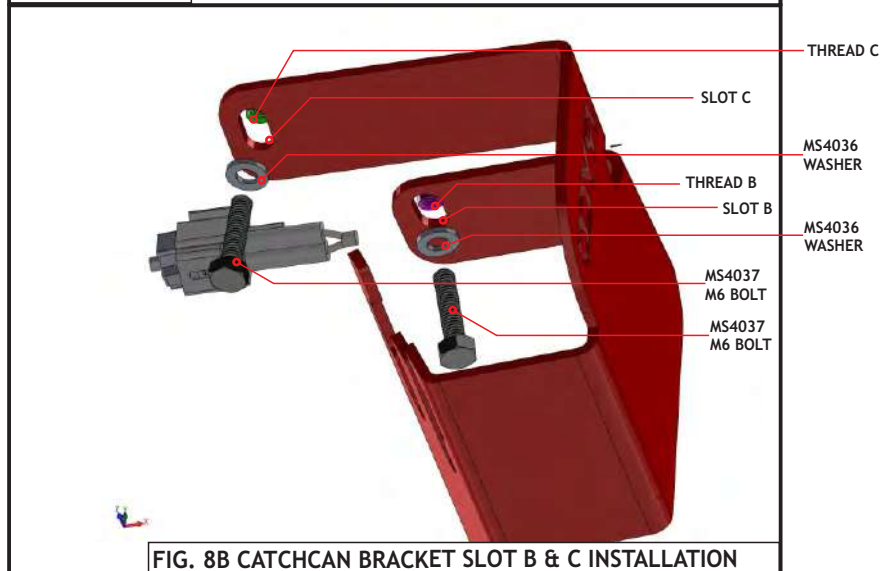


FIG. 8B CATCHCAN BRACKET SLOT B & C INSTALLATION

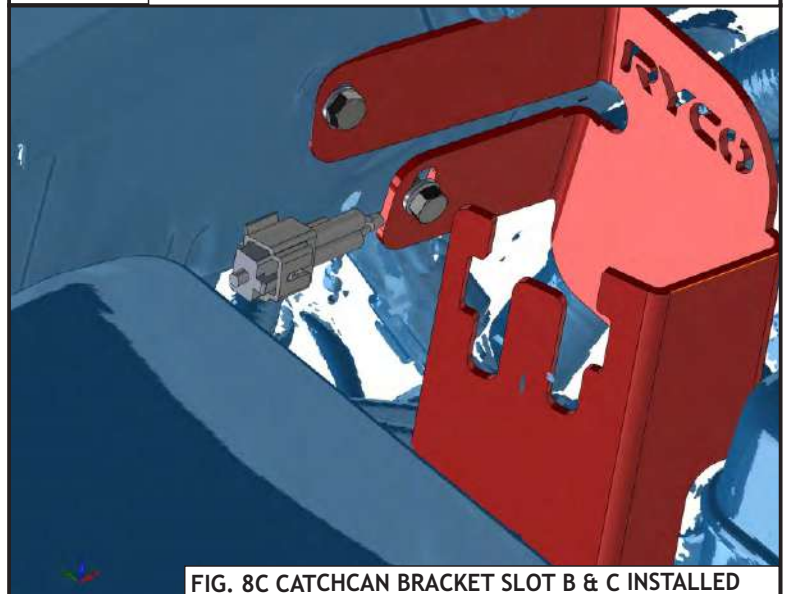


FIG. 8C CATCHCAN BRACKET SLOT B & C INSTALLED

# X104R CATCHCAN FITMENT INSTRUCTIONS

## SECTION 2b CATCHCAN INSTALLATION

### WORK PROCEDURE (1/2)

1. Install the RYCO RCC351 Catchcan by inserting the plastic bracket into the slot on the FB9804CC metal bracket, as shown in FIG.9A & 9B. Rotate the RCC351 slightly in its plastic bracket so that the ports clear the airbox and point toward the engine PCV port.



FIG. 9A CATCHCAN INSTALLATION



FIG. 9B CATCHCAN INSTALLED

2. Loosen the OEM hose clamp located on the OEM PCV hose (coloured red in Fig. 10) at the engine PCV port location. Remove the OEM PCV hose from the engine PCV port, then remove the OEM hose clamp from this end of OEM PCV hose.

OEM PCV HOSE



FIG. 10 OEM PCV HOSE LOCATION

# X104R CATCHCAN FITMENT INSTRUCTIONS

## SECTION 2b CATCHCAN INSTALLATION

### WORK PROCEDURE (2/2)

- Starting with the longer supplied MH9804B PCV hose, install the small end on to the Engine PCV Port & tighten with a supplied MS4094 hose clamp as shown in Fig. 11A & 11C.
- Install the other end of the MH9804B PCV hose on to the lower, inlet port, of the RCC351 Catchcan and tighten with an MS4091 hose clamp as shown in Fig. 11A & 11C.
- Install the larger end of the shorter supplied MH9804A PCV hose on to the upper, outlet port, of the RCC351 Catchcan and tighten with a MS4091 hose clamp. Install the other end of the MH9804A PCV hose on to the supplied MS4100 PCV hose joiner, tightening with a MS4094 PCV hose clamp. Insert other end of MS4100 PCV hose joiner into the open end of the OEM PCV hose and tighten with a supplied MS4092 hose clamp as shown in Fig. 11B.

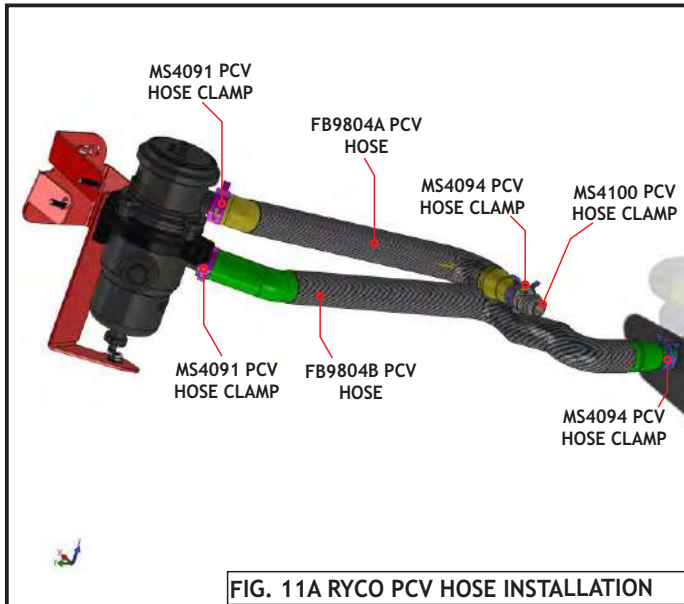


FIG. 11A RYCO PCV HOSE INSTALLATION

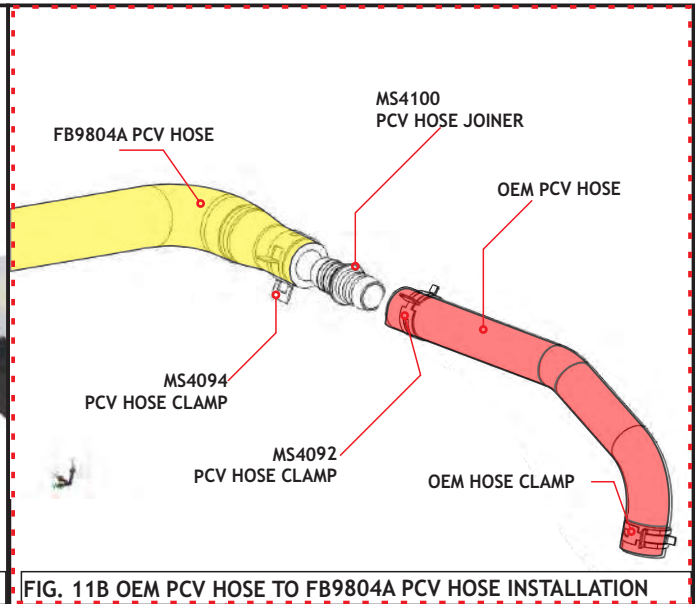


FIG. 11B OEM PCV HOSE TO FB9804A PCV HOSE INSTALLATION

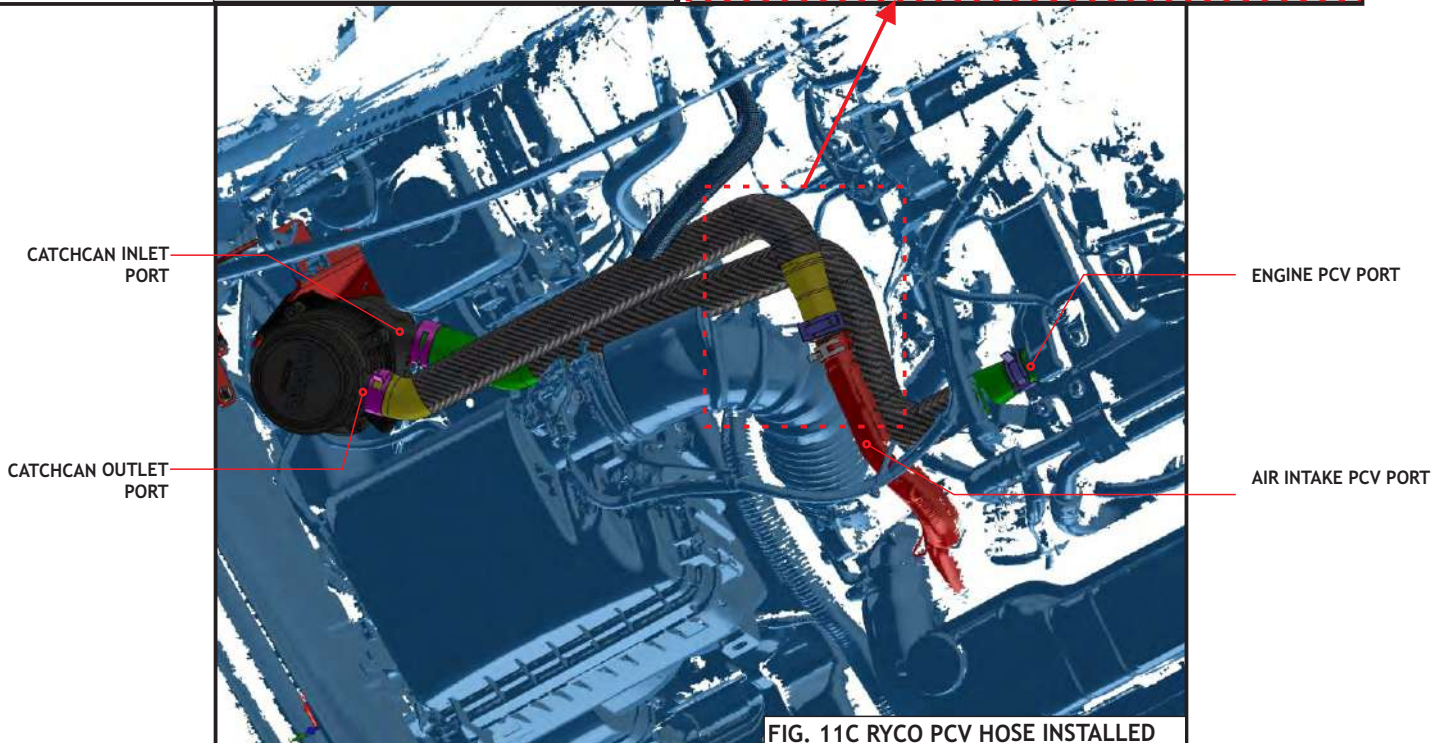


FIG. 11C RYCO PCV HOSE INSTALLED

## X104R 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.

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