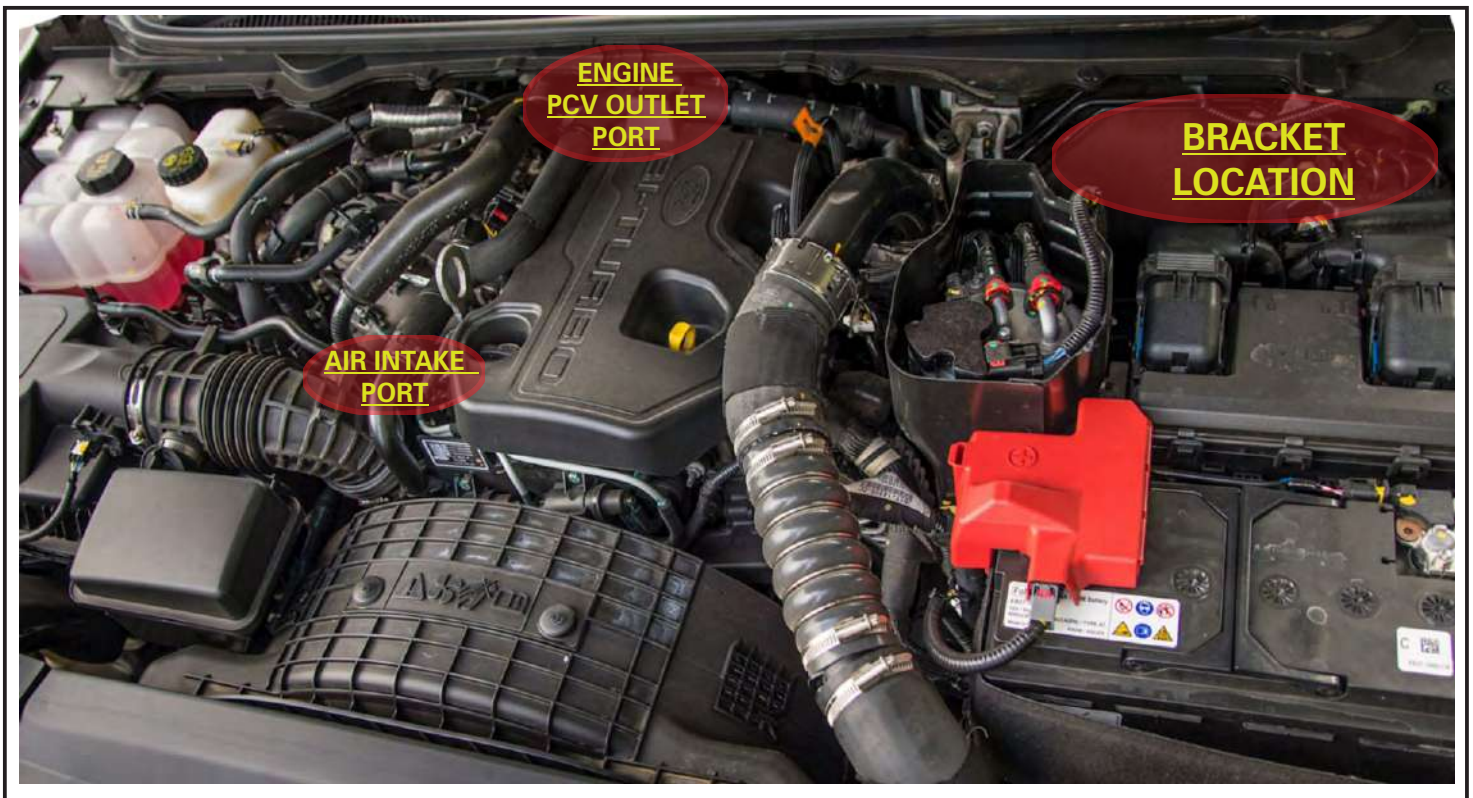


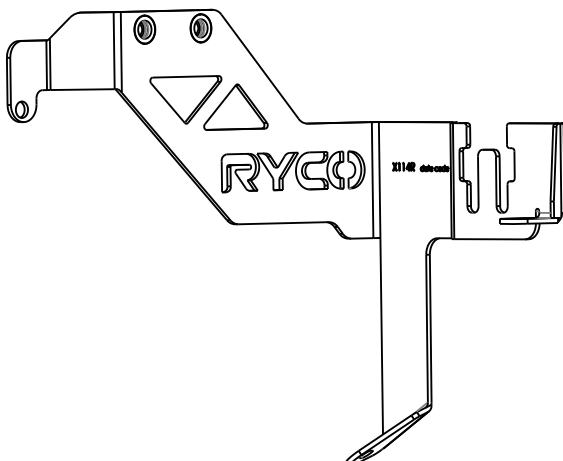
**X114R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS**

**FORD RANGER RAPTOR / EVEREST - See RYCO catalogue for specific application details.**

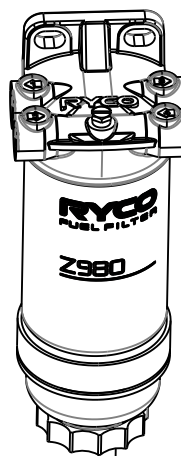
The Ryco X114R kit includes a mounting bracket specifically designed for the vehicle, and all components required to complete the installation of Ryco Z980K16 series fuel water separator and RCC351 series catchcan (both sold separately). It is recommended that the installation is conducted by a qualified mechanic following the procedures in this instruction sheet.



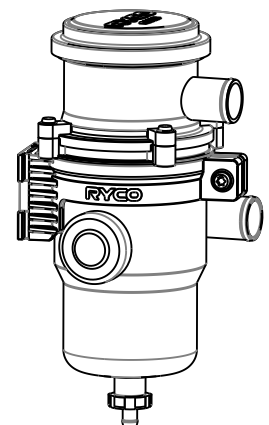
**SECTION 1**  
**METAL BRACKET**



**SECTION 2**  
**FUEL WATER SEPARATOR**

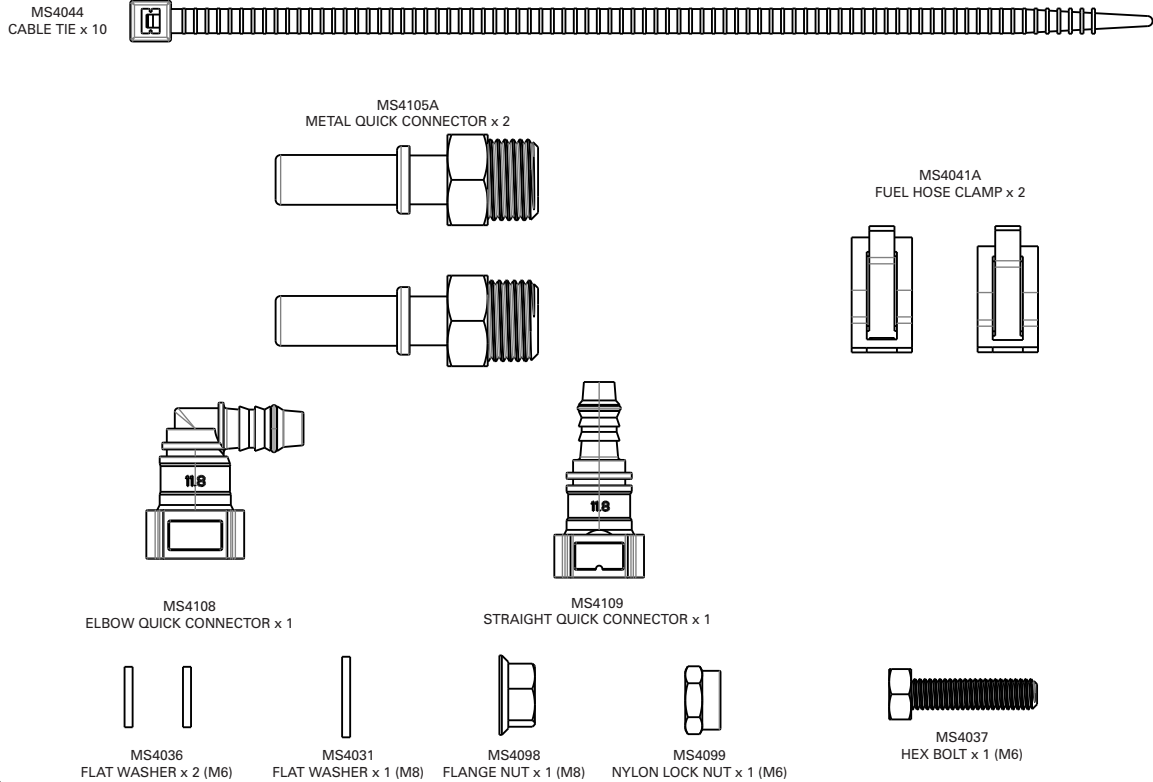


**SECTION 3**  
**CATCHCAN**

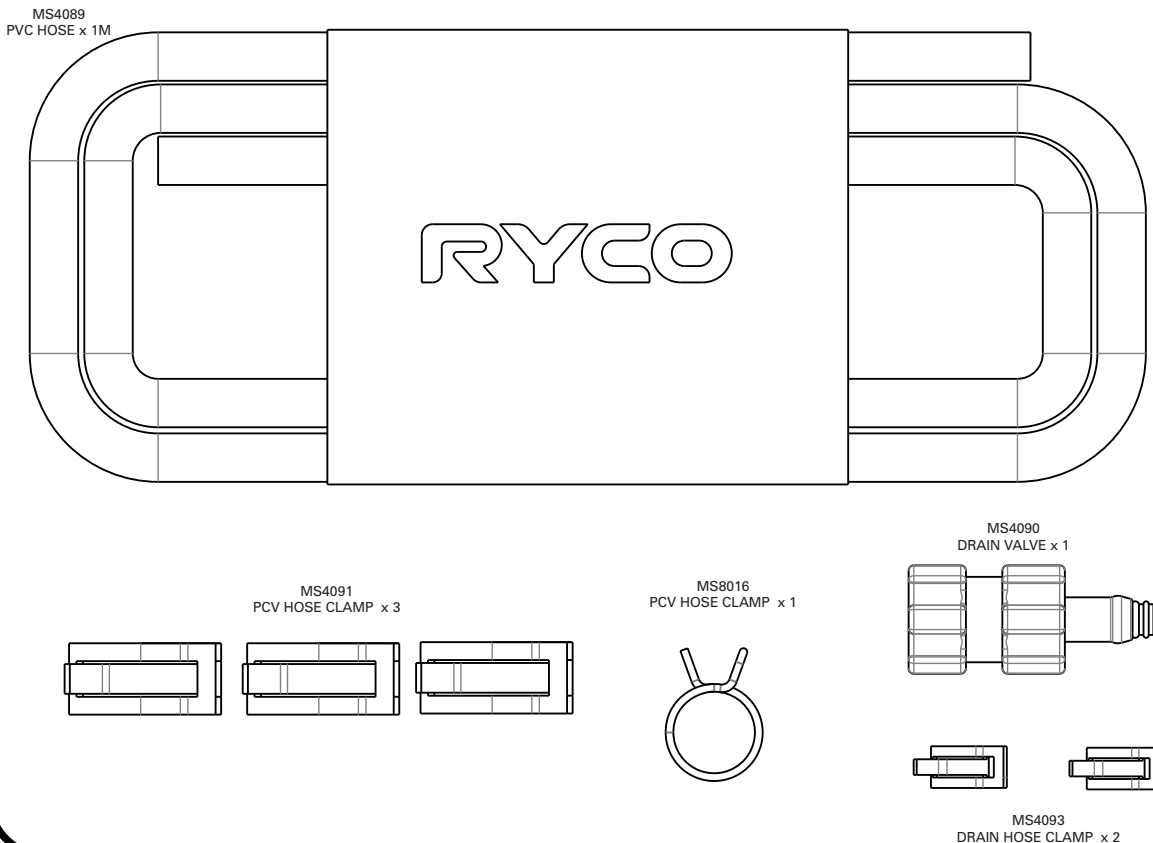


**COMPONENTS INCLUDED IN X114R KIT**

**X114R PARTS LIST - BRACKET / FUEL FILTER COMPONENTS BOX**



**X114R PARTS LIST - CRANKCASE VENT. FILTER COMPONENTS BOX**



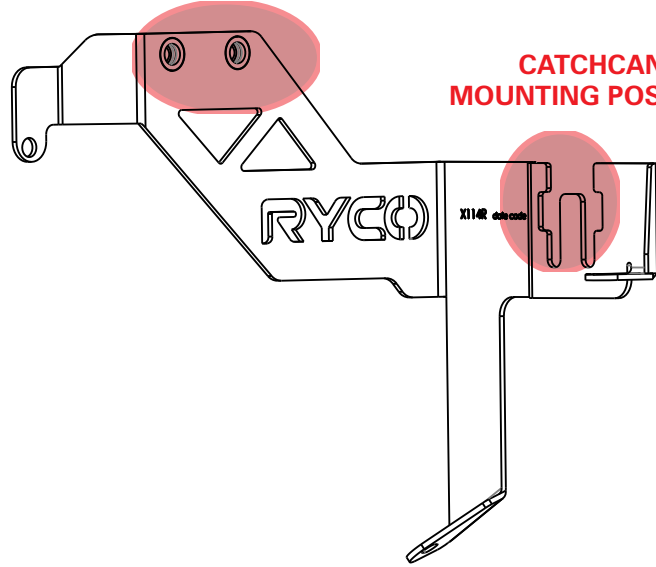
**COMPONENTS INCLUDED IN X114R KIT**

**PARTS LIST - BRACKET, FUEL FILTER & CATCHCAN COMPONENTS**

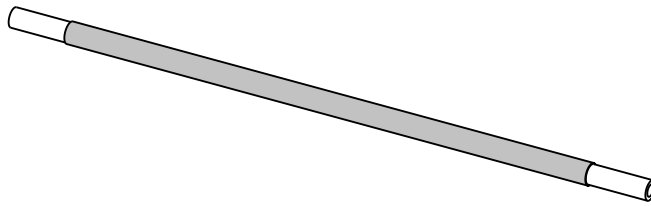
**FUEL WATER SEPARATOR  
MOUNTING POSITION**

**CATCHCAN  
MOUNTING POSITION**

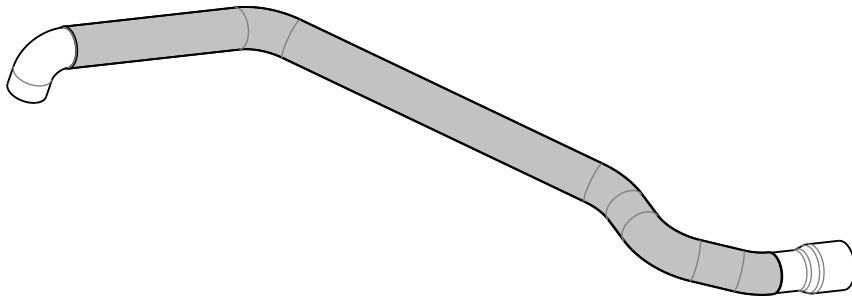
FB9803X  
MOUNTING BRACKET x 1



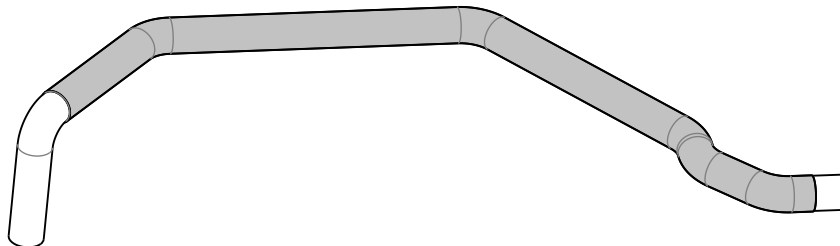
HF9803  
FUEL HOSE x 1  
(660mm)



MH9812A  
PCV HOSE x 1

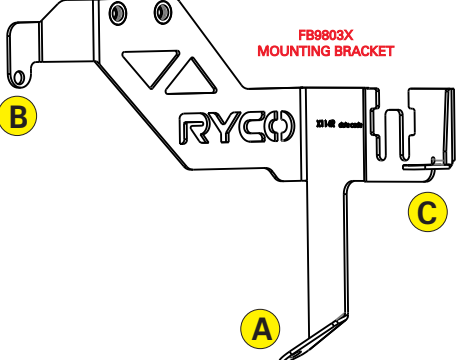

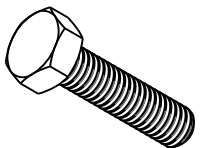




MH9812B  
PCV HOSE x 1



## X114R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS

### SECTION 1 METAL BRACKET FITMENT

PARTS REQUIRED		TOOLS & PPE'S REQUIRED	
 <p>FB9903X MOUNTING BRACKET</p>	<p>MS4036 WASHER x 2 (M6)</p> 	<p>MS4037 HEX BOLT (M6)</p> 	<p>* WORK GLOVES * RACHET SET</p>
	<p>MS4031 WASHER (M8)</p> 		
	<p>MS4099 NYLON LOCK NUT (M6)</p> 		

### WORK PROCEDURE

1. Remove the factory M6 nut on the fuse box from Point **C**.
2. Locate the stud on the thermal expansion (TX) valve Point **B**. Position the bracket in the engine bay as per Fig. 1, placing point **B** at the TX valve stud and Point **C** at the fuse box stud.
3. Loosely refit the factory M6 nut at Point **C** onto the fuse box stud, and the supplied M8 nut at Point **B** onto the TX valve stud. (Caution: Do not remove the factory nut holding the TX valve).
4. Note the position of the hole at Point **A**. From the front-left wheel house of the vehicle, install the supplied M6 bolt with washer upwards through the hole at Point **A**, and secure the bracket with the supplied M6 nylon lock nut and another M6 washer. (Caution: Note the bolt direction. Do not install the bolt so it protrudes into the wheel house).
5. Tighten all three (3) fasteners as per Fig. 2.

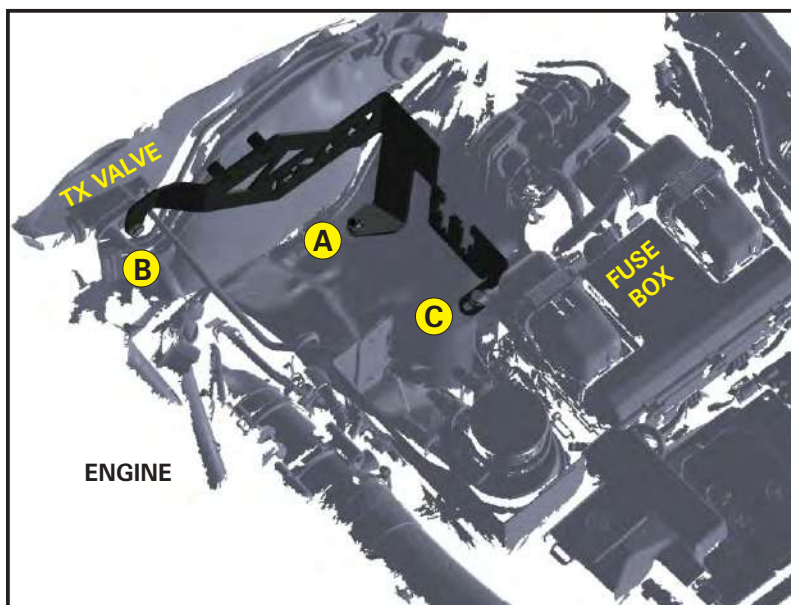


FIG. 1 BRACKET IN ENGINE BAY

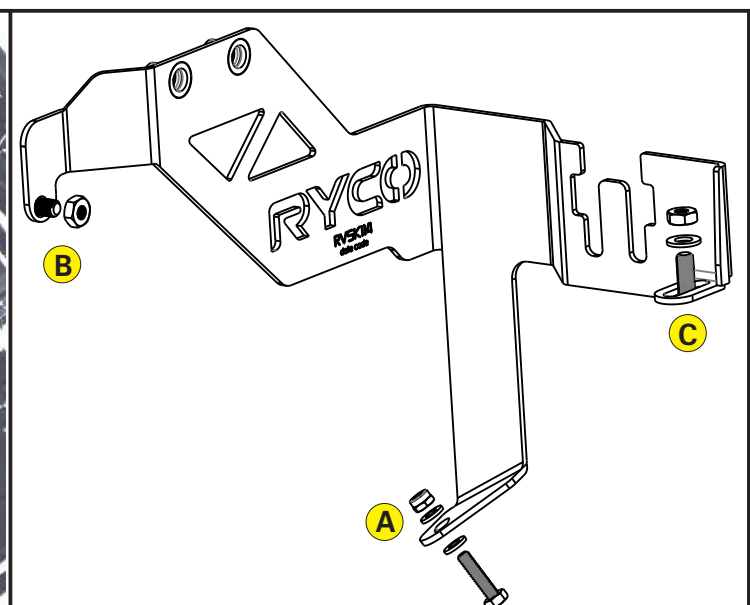

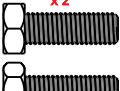

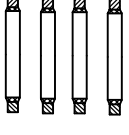
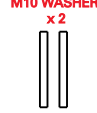
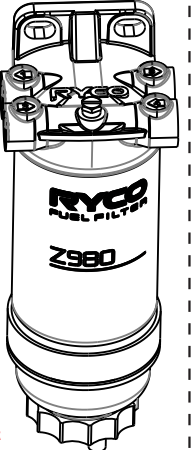
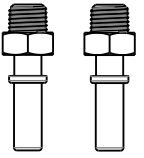


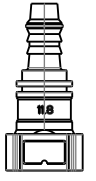
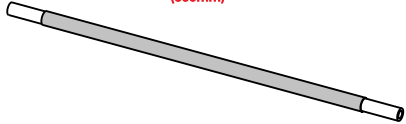


FIG. 2 BRACKET INSTALLATION

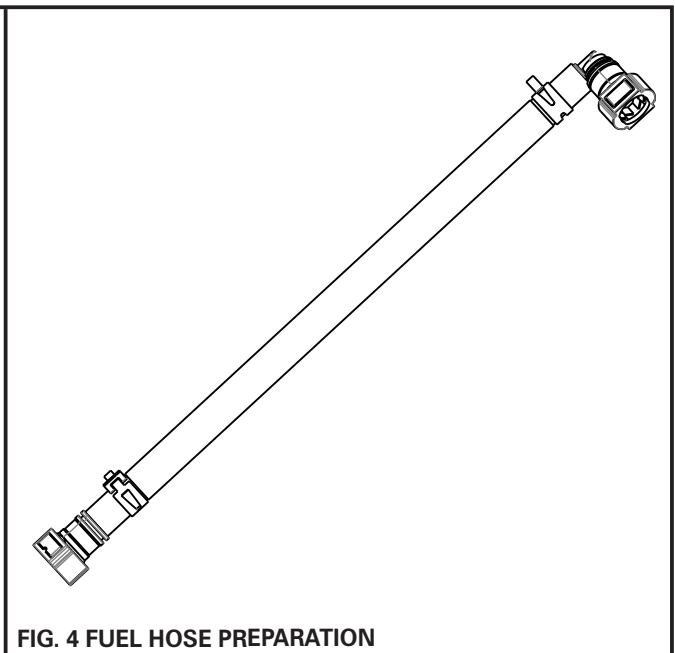
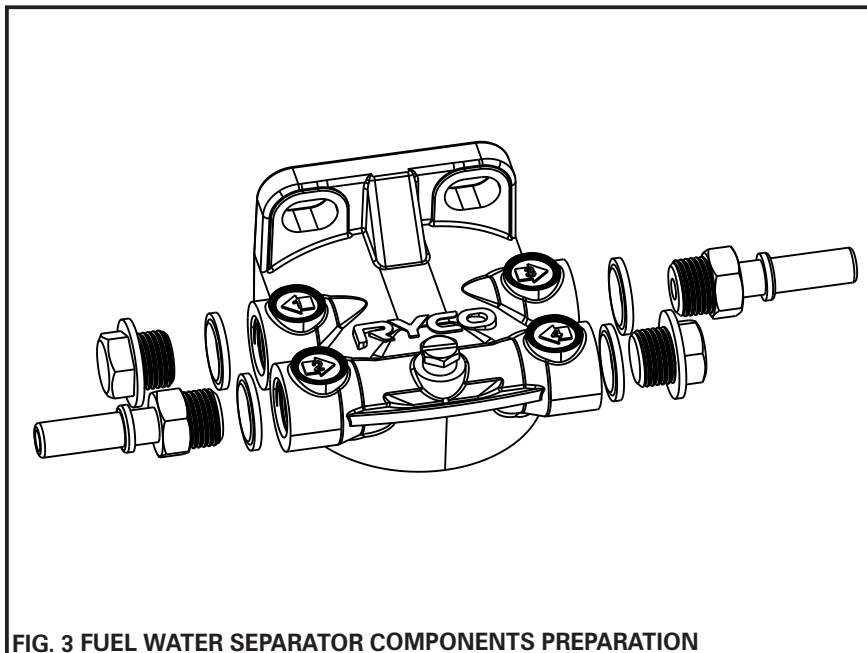
# X114R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS

## SECTION 2 FUEL WATER SEPARATOR INSTALLATION

PARTS REQUIRED		TOOLS & PPE'S REQUIRED
<p><b>M16 PLUG x 2</b></p>  <p><b>M10 BOLT x 2</b></p>  <p><b>M10 FLANGE NUT x 2</b></p>  <p><b>RUBBER BONDED WASHER x 4</b></p>  <p><b>M10 WASHER x 2</b></p>  <p><b>RYCO Z980K16 FUEL WATER SEPARATOR</b></p> 	<p><b>MS4105A METAL QUICK CONNECTOR x 2</b></p>  <p><b>MS4041A FUEL HOSE CLAMP x 2</b></p>  <p><b>MS4108 ELBOW QUICK CONNECTOR x 1</b></p>  <p><b>MS4109 STRAIGHT QUICK CONNECTOR x 1</b></p>  <p><b>HF9803 FUEL HOSE x 1 (660mm)</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. Install the Ryco fuel water separator head with metal quick connectors, blanking plugs and rubber bonded washers, as per Fig 3. Tighten blanking plugs and quick connectors.
2. Install the supplied elbow and straight connectors onto the supplied fuel hoses with supplied fuel hose clamps, as per Fig. 4. Do not tighten fuel hose clamps yet.



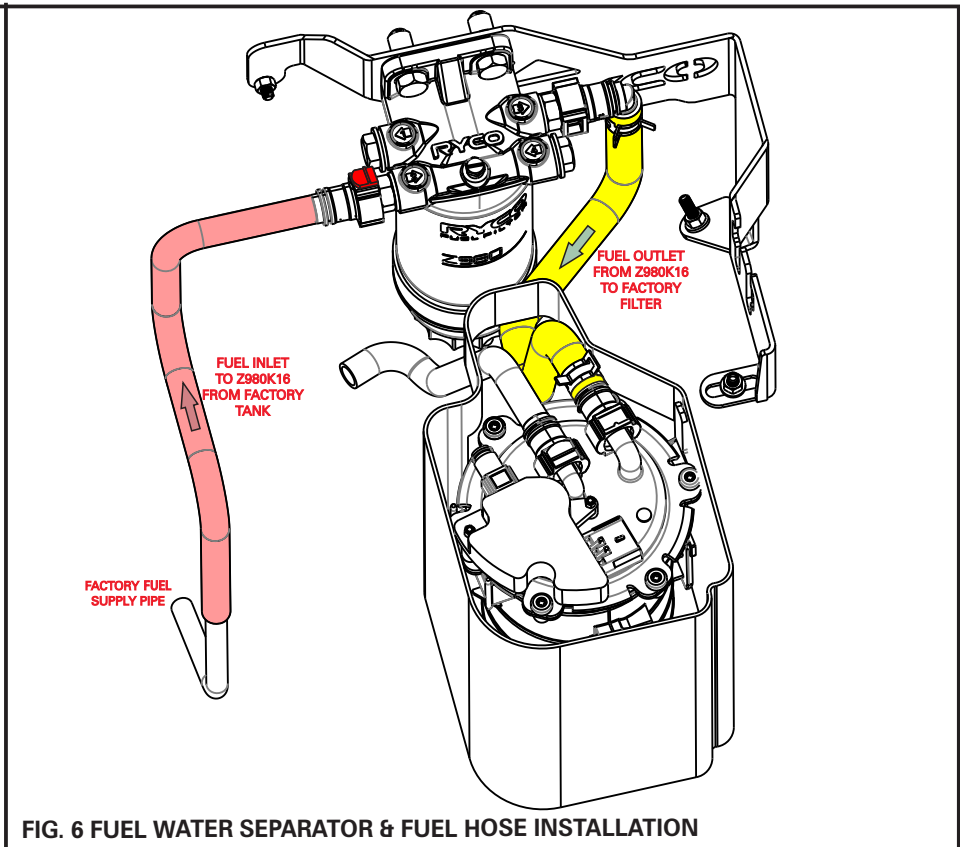
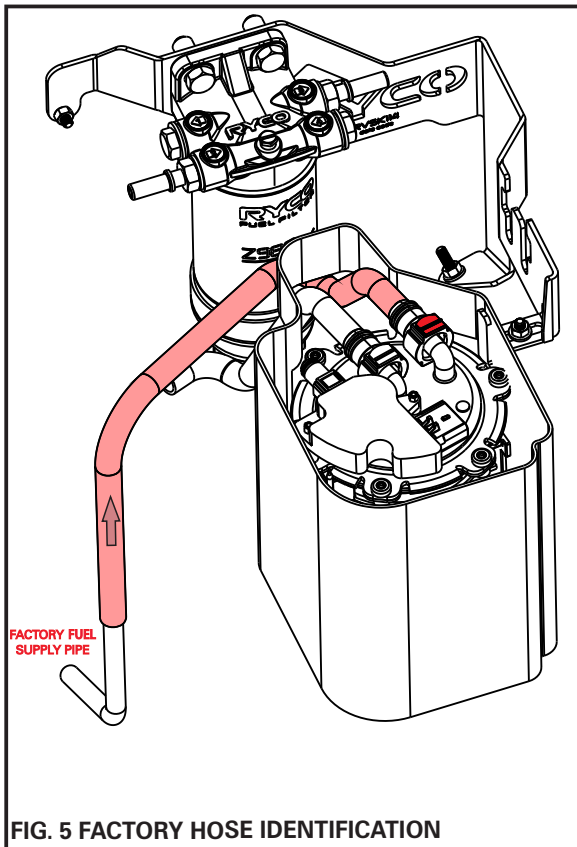


# X114R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS

## SECTION 2 FUEL WATER SEPARATOR INSTALLATION (CONTINUED)

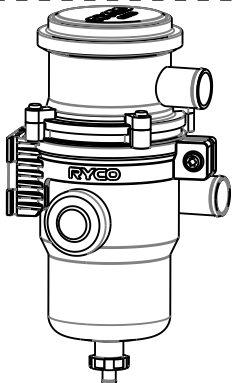
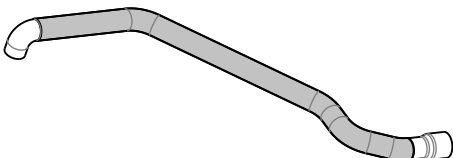
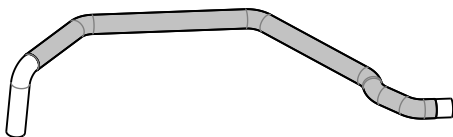


### WORK PROCEDURE (CONTINUED)

1. Mount Z980K16 assembly onto the metal bracket using the two (2) black M10 bolts supplied with the Z980K16.
2. Locate the factory fuel supply line by starting at the factory fuel filter. Locate the inlet straight red connector (see Fig. 5), pull up the locking tab, then press the release button and pull back to remove. Have a rag ready to capture any diesel that may spill out of the fuel line and the fuel filter.
3. The factory fuel supply line is a pre-formed nylon tube. Carefully thread it back, down and out from the factory fuel filter bracket. Position it on the engine side of the air conditioning pipe and plug it in to the inlet quick connect port on the Z980K16. Ensure the locking tab is engaged. Check the fuel pipe routing to ensure it's not kinked and re-position if necessary. (See Fig. 6)
4. Connect the supplied hose to the outlet port of the Z980K16 (coloured yellow in Fig. 6) by pushing the elbow connector onto the metal quick connector until you hear a "click".
5. Route the hose as shown in Fig. 6, up and through the factory fuel filter bracket. Position the straight connector next to the factory fuel filter inlet port.
6. Tighten all hose clamps.
7. Find an assistant to help prime the fuel system. Place a container under the unconnected straight connector. Prime the fuel system by turning the ignition key to "On / Run" position (do not start the Engine) until fuel comes out from the straight connector. Turn off the ignition and connect the elbow connector to the factory fuel filter inlet port by pushing it all the way on until you hear a "click". Start the engine and check for leaks in fuel lines and connectors.



# X114R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS

## SECTION 3 CATCHCAN INSTALLATION

PARTS REQUIRED		TOOLS & PPE'S REQUIRED
 <p>RCC351 CATCHCAN</p>	<p>MH9812A PCV HOSE x 1</p>  <p>MH9812B PCV HOSE x 1</p> 	<p>MS4091 PCV HOSE CLAMP x 3</p>  <p>MS8016 PCV HOSE CLAMP x 1</p> 
		<ul style="list-style-type: none"> <li>* WORK GLOVES</li> <li>* RACHET SET</li> <li>* HOSE CLAMP PLIERS</li> </ul>

## WORK PROCEDURE

1. Remove the engine cover.
2. Mount the catchcan onto the bracket by sliding the RCC351 nylon bracket onto the catchcan mounting position on the bracket, rotate it so it is facing directly toward the engine and tighten the plastic bracket retaining screw.
3. Remove factory PCV hose by lifting the locking collars and pulling upwards. The PCV hose is connected to the PCV valve located at the top of the engine at rear drivers side corner, and to the air intake towards the front of the engine bay as per Fig. 7 below.

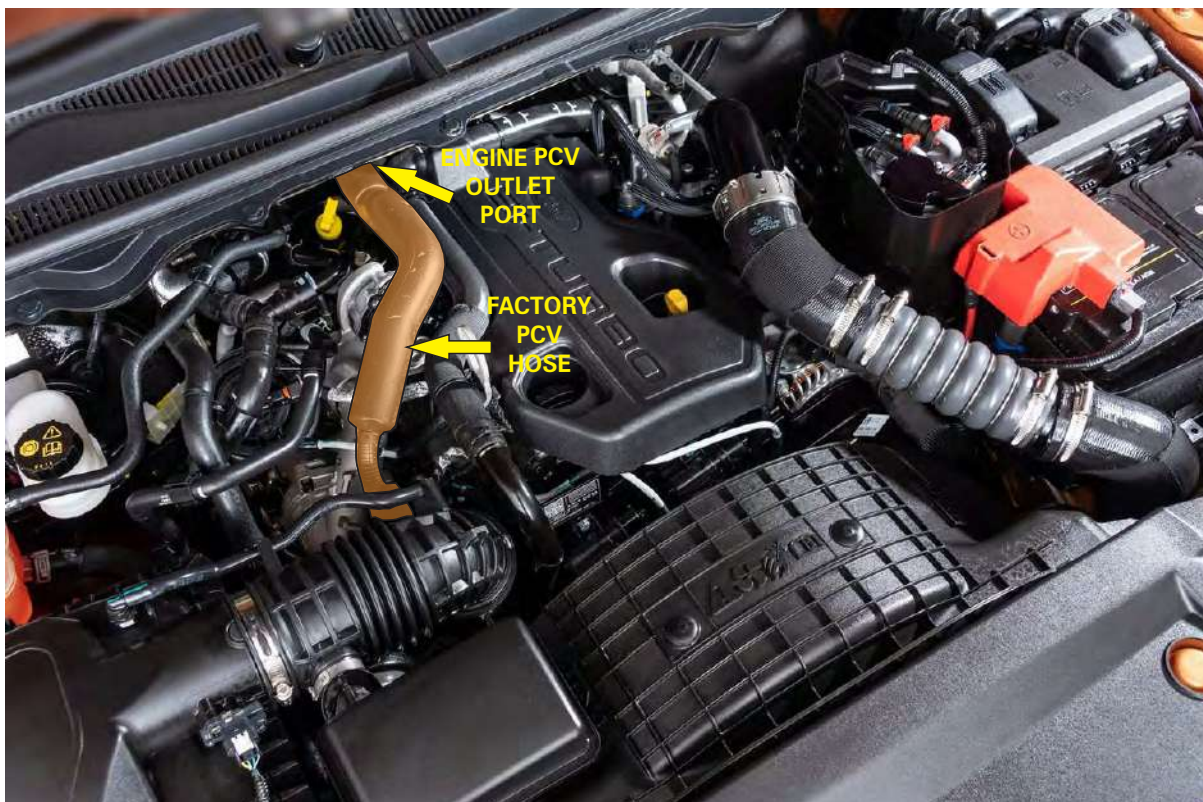


FIG. 7 FACTORY PCV HOSE

# X114R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS

## SECTION 3 CATCHCAN INSTALLATION (CONTINUED)

### WORK PROCEDURE (CONTINUED)

3. Connect the smaller end (19mm) of the MH9812A Ryco moulded hose (shown blue in Fig. 8) to the engine PCV valve outlet and secure with a supplied hose clamp. Feed the hose behind the engine, under the other engine pipes and around the AC pipes and connect the larger end (25mm) of the moulded hose to the lower port of the RCC351 with one of the large PCV hose clamps. Use Fig. 9 as a guide.

4. Feed MH9812B Ryco moulded hose (shown green in Fig. 8) along the top of the first hose ensuring it runs over the factory pipes including the AC pipes. Connect one end to the upper port of the RCC351, securing with a large PCV hose clamp. Connect the other in to the engine PCV air intake port and secure with a PCV hose clamp (Fig. 8).

5. Check both PCV hoses are not jammed or kinked by the surrounding engine parts.

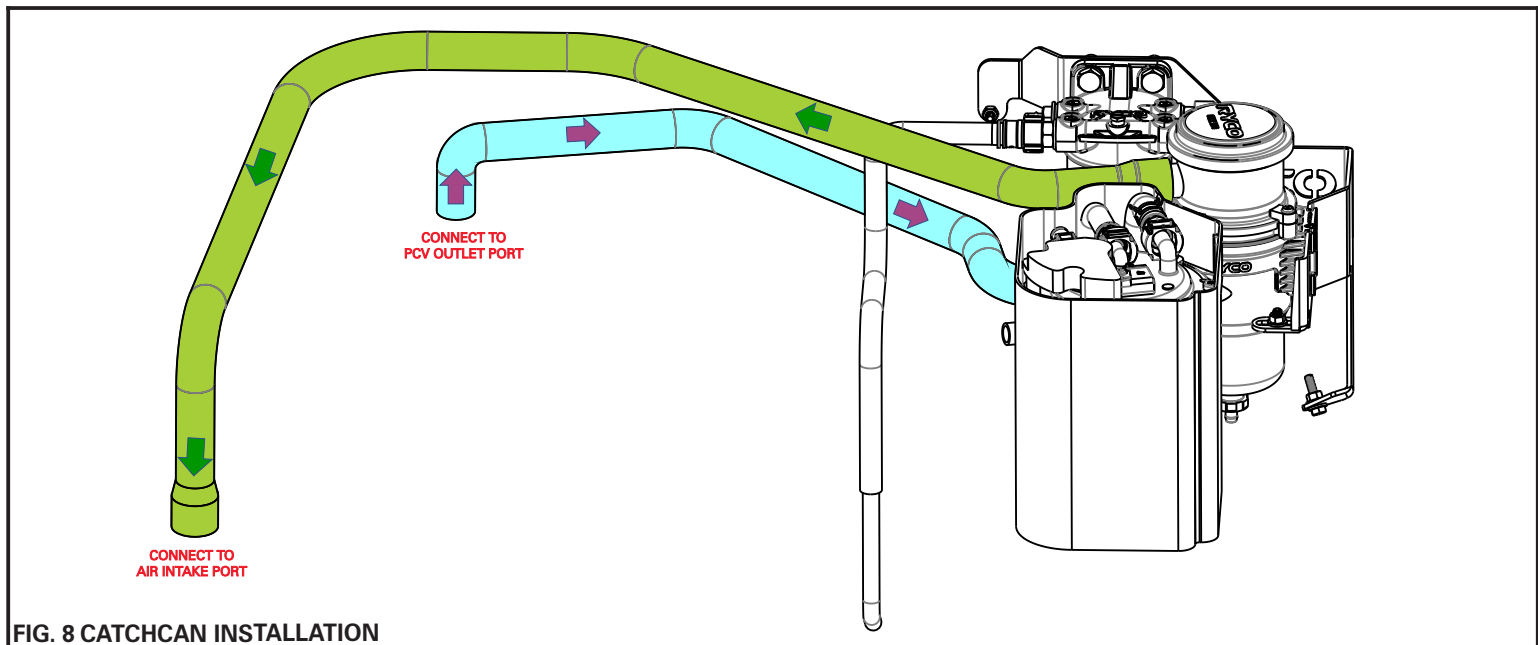


FIG. 8 CATCHCAN INSTALLATION



FIG. 9 CATCHCAN HOSES LAYOUT



## X114R FUEL WATER SEPARATOR / 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 loosen the drain plug on the unit and let the oil drain onto a pan or bottle.

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