

**X113R FUEL WATER SEPARATOR / CATCHCAN FITMENT INSTRUCTIONS**

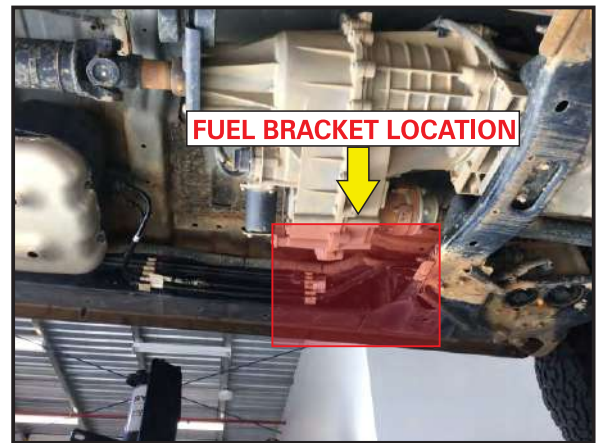
**HOLDEN COLORADO RG - See RYCO catalogue for specific application details.**

The Ryco X113R kit includes mounting brackets specifically designed for the vehicle, and all components required to complete the installation of Ryco Z980SK16 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.

**ENGINE BAY**



**UNDER BODY  
(PASSENGER SIDE)**

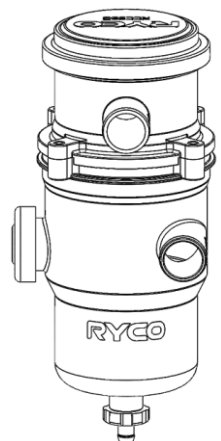
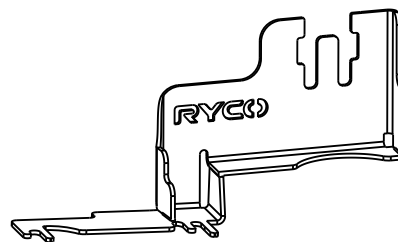
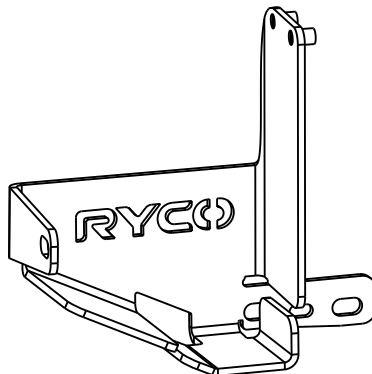
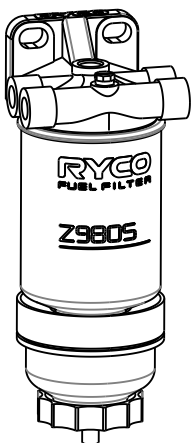


**SECTION 1  
FUEL WATER SEPARATOR**

**SECTION 2  
FUEL MOUNTING BRACKET**

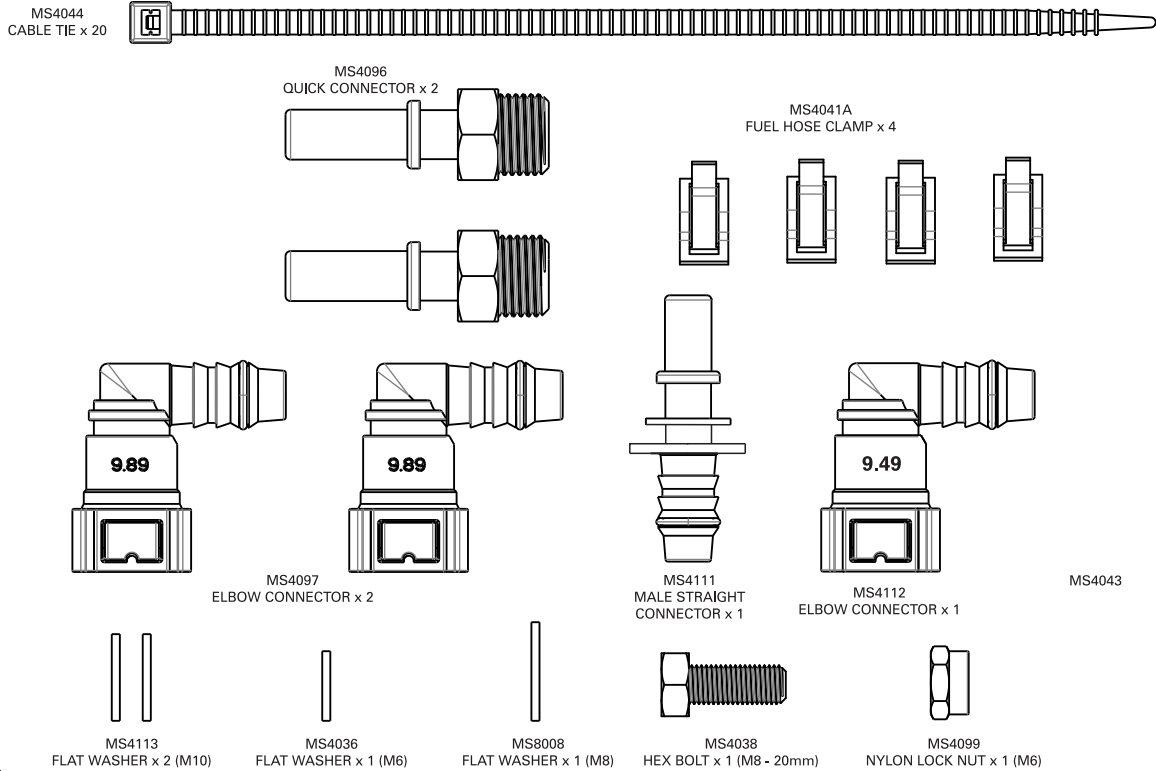
**SECTION 3  
CATCHCAN MOUNTING BRACKET**

**SECTION 4  
CATCHCAN**

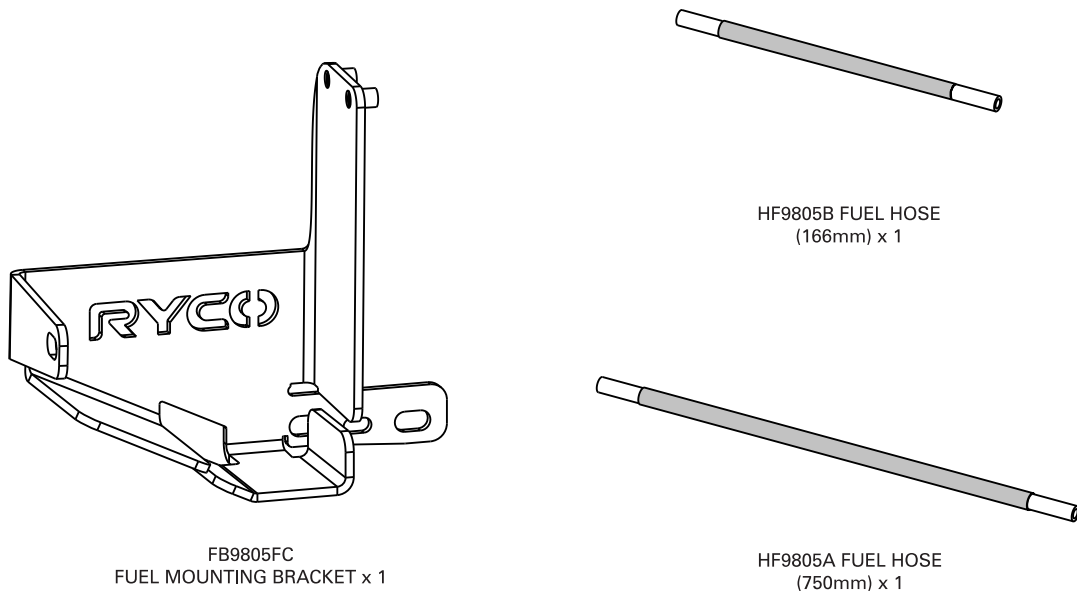


**COMPONENTS INCLUDED IN X113R KIT**  
**(Components not sold SEPARATELY)**

**X113R PARTS LIST - FUEL FILTER BRACKET & COMPONENTS BOX**

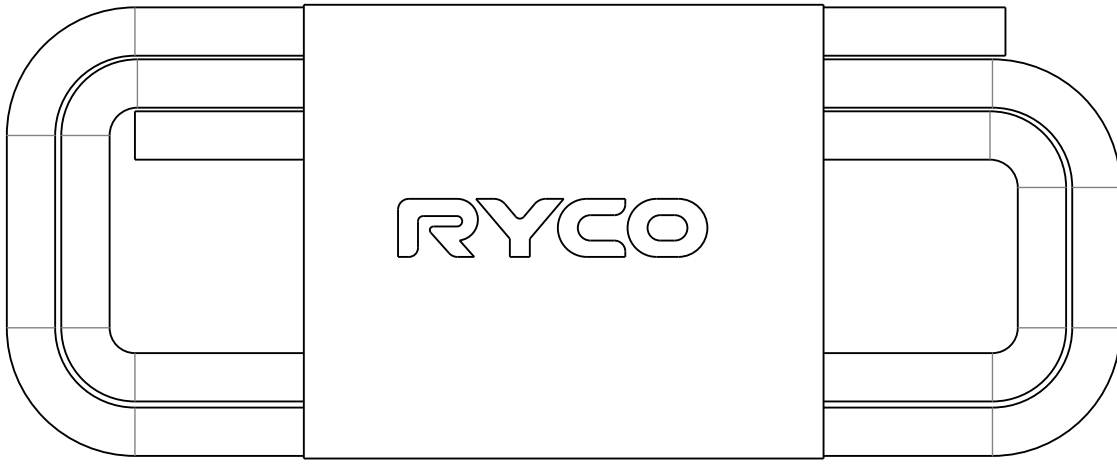


**PARTS LIST - PACKAGED IN CARTON**

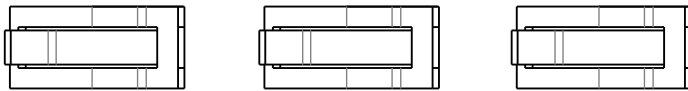


**COMPONENTS INCLUDED IN X113R KIT  
(Components not sold SEPARATELY)**

**X113R PARTS LIST - CATCHCAN BRACKET & COMPONENTS BOX**



MS4091  
PCV HOSE CLAMP x 3



MS4089  
PVC HOSE x 1M

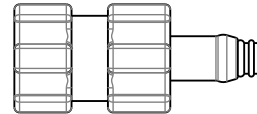
MS4094  
PCV HOSE CLAMP x 1



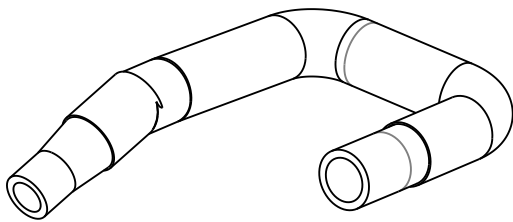
MS4093  
DRAIN HOSE CLAMP x 2



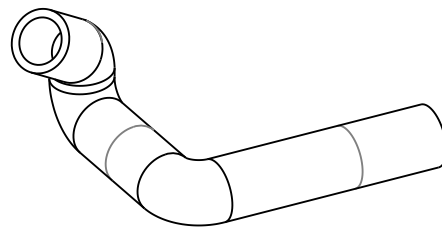
MS4090  
DRAIN VALVE x 1



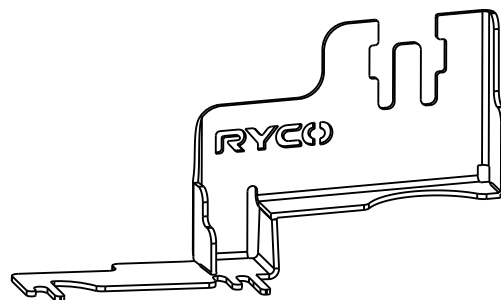
**PARTS LIST - PACKAGED IN CARTON**



MH9805A  
PCV HOSE x 1



MH9805B  
PCV HOSE x 1



FB9805CC  
CATCHCAN MOUNTING BRACKET x 1

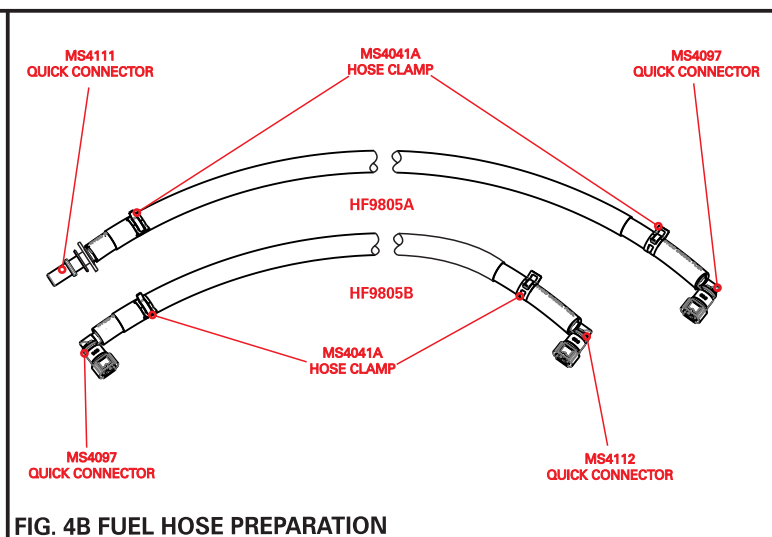
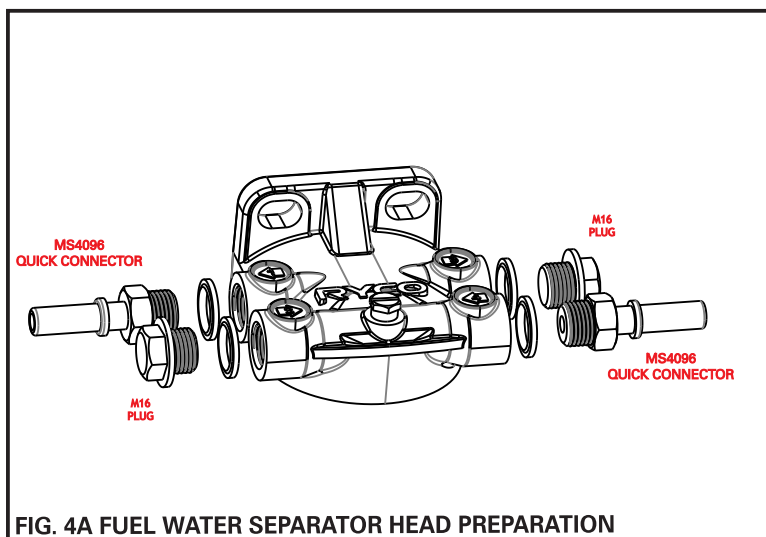
## X113R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

### SECTION 1 FUEL WATER SEPARATOR SETUP

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 2</b></p> <p><b>M10 WASHER x 2</b></p> <p><b>RYCO Z980SK16 FUEL WATER SEPARATOR</b></p>	<p><b>MS4096 QUICK CONNECTOR x 2</b></p> <p><b>MS4041A FUEL HOSE CLAMP x 4</b></p> <p><b>MS4097 ELBOW CONNECTOR x 2</b></p> <p><b>MS4111 ELBOW CONNECTOR x 1</b></p> <p><b>MS4112 ELBOW CONNECTOR x 1</b></p>	<p><b>HF9805A FUEL HOSE x 1 (750mm)</b></p> <p><b>HF9805B FUEL HOSE x 1 (166mm)</b></p>	<p><b>* WORK GLOVES</b></p> <p><b>* RACHET SET</b></p> <p><b>* HOSE CLAMP PLIERS</b></p>

### WORK PROCEDURE (1/3)

1. Select the supplied male quick connectors (MS4096) that fit your Ryco fuel water separator head.
2. Locate the blanking plugs supplied with your Ryco fuel water separator.
3. Install the Ryco fuel water separator head with metal quick connectors, blanking plugs and rubber bonded washers as shown in Fig.3. Tighten blanking plugs(on Port 2 & 3) and quick connectors (on Port 1 & 4).
4. Install the following components to HF9805A and HF9805B as shown in Fig 4B:
  - Four (4) supplied MS4041A fuel hose clamps.
  - Two (2) supplied MS4097 elbow connectors.
  - One (1) supplied MS4112 elbow connector.
  - One (1) supplied MS4111 straight connector.
 Once all components are installed, secure the quick connect fittings with the MS4041A hose clamps.



## X113R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

### SECTION 2 FUEL MOUNTING BRACKET, FILTER AND FUEL HOSE FITMENT (1/4)

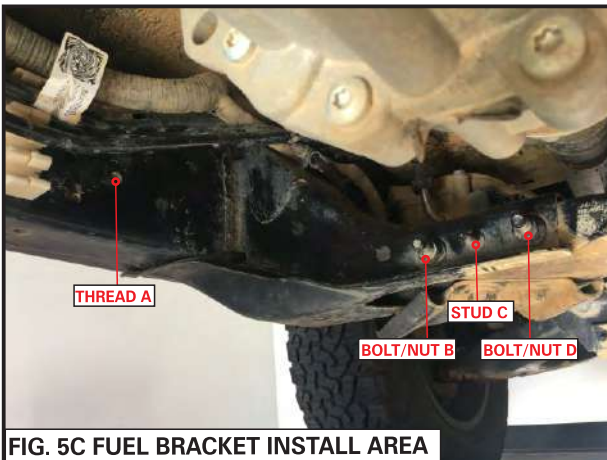
PARTS REQUIRED		COMPONENTS SETUP FROM STEP 1:		TOOLS & PPE'S REQUIRED
<p><b>FB9805FC</b> FUEL MOUNTING BRACKET</p>	<p><b>MS4099</b> NYLON LOCK NUT x 1 (M6)</p>	<p><b>MS4038</b> HEX BOLT x 1 (M8 - 20mm)</p>	<p><b>HF9805A</b></p>	<ul style="list-style-type: none"> <li>* WORK GLOVES</li> <li>* SOCKET SET</li> <li>* RATCHET SET</li> <li>* OPEN SPANNER</li> <li>* RAGS</li> </ul>
	<p><b>MS4113</b> FLAT WASHER x 2 (M10)</p>	<p><b>MS4036</b> FLAT WASHER x 1 (M6)</p>	<p><b>HF9805B</b></p>	
	<p><b>MS8008</b> FLAT WASHER x 1 (M8)</p>	<p><b>Z980SK16</b></p>	<p><b>M10 BOLT</b> x 2</p>	
			<p><b>M10 WASHER</b> x 2</p>	



#### WORK PROCEDURE

1. Remove the OEM fuel supply hose (highlighted green in Fig.5A & 5B) by pushing in the quick connector tabs at each end to release them.

**MAKE SURE TO HAVE RAGS READY AS FUEL IN THE FUEL LINE WILL LEAK OUT.**



2. Remove nuts B and D shown in FIG.5C. Make sure to keep these nuts aside for use later. Refer to FIG.5D on removal suggestion, using open spanner on one side and ratchet on the other.

# X113R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

## SECTION 1 FUEL MOUNTING BRACKET FITMENT (2/4)

3. Using the M10 Bolts and Washers supplied in the Ryco Z980SK16 fuel water separator kit, attach the Z980SK16 to the FB9805FC bracket as shown in FIG. 6A.



FIG. 6A Z980SK16 INSTALLATION

4. Locate FB9805FC bracket to vehicle as shown in FIG. 6B

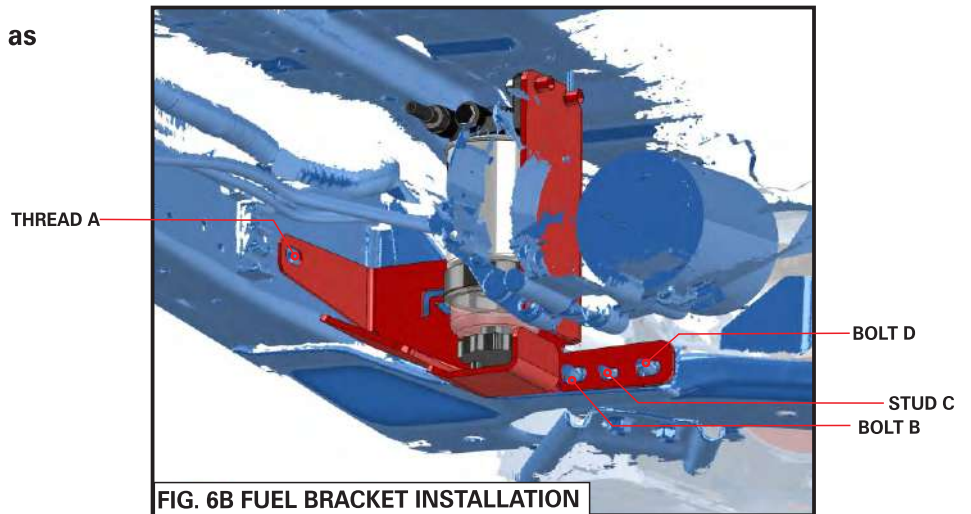


FIG. 6B FUEL BRACKET INSTALLATION

5. Install the following components to FB9805FC bracket as shown in FIG. 6C

- \*MS4099 x 1
- \*MS4038 x 1
- \*MS4113 x 2
- \*MS4036 x 1
- \*MS8008 x 1
- \*OEM NUTS x 2 (The nuts removed in Step 2)

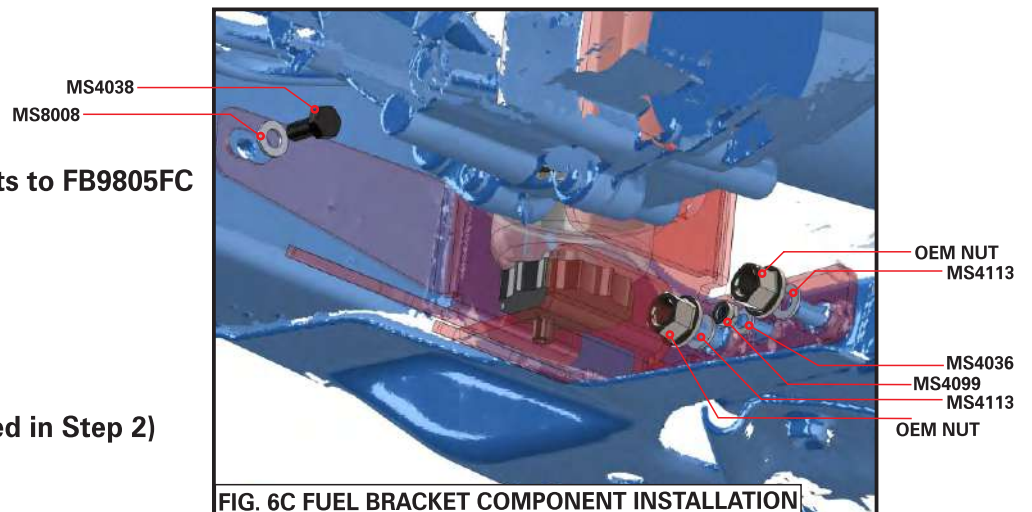
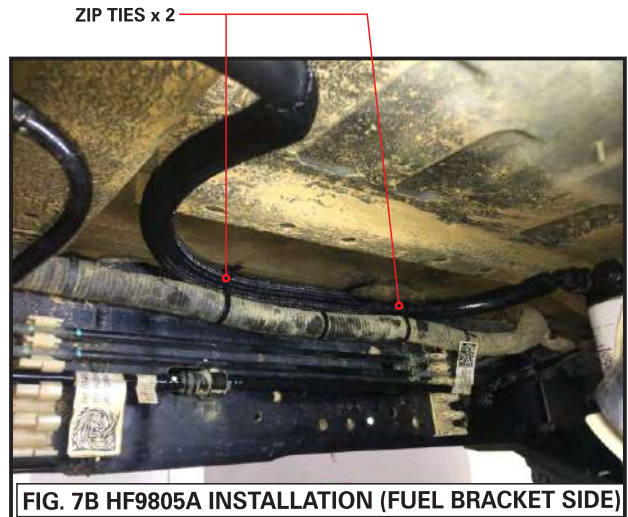


FIG. 6C FUEL BRACKET COMPONENT INSTALLATION

# X113R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

## SECTION 1 FUEL MOUNTING BRACKET FITMENT (3/4)



6. Install HF9805A fuel hose by connecting MS4111 straight connector side into the fuel tank outlet connector, then proceed to connect MS4097 elbow connector side into the Z980SK16 inlet port. Refer to FIG 7A and 7B. Ensure you press both fittings on firmly until you hear a 'click'. FIG 7B shows suggested locations for zip ties to hold HF9805A fuel hose.



7. Install HF9805B fuel hose by connecting the MS4097 elbow connector to the Z980SK16 outlet port, then proceed to connect the MS4112 elbow connector to the OEM filter housing inlet. Press them on firly until you hear a 'click'. Refer to FIG 7C.

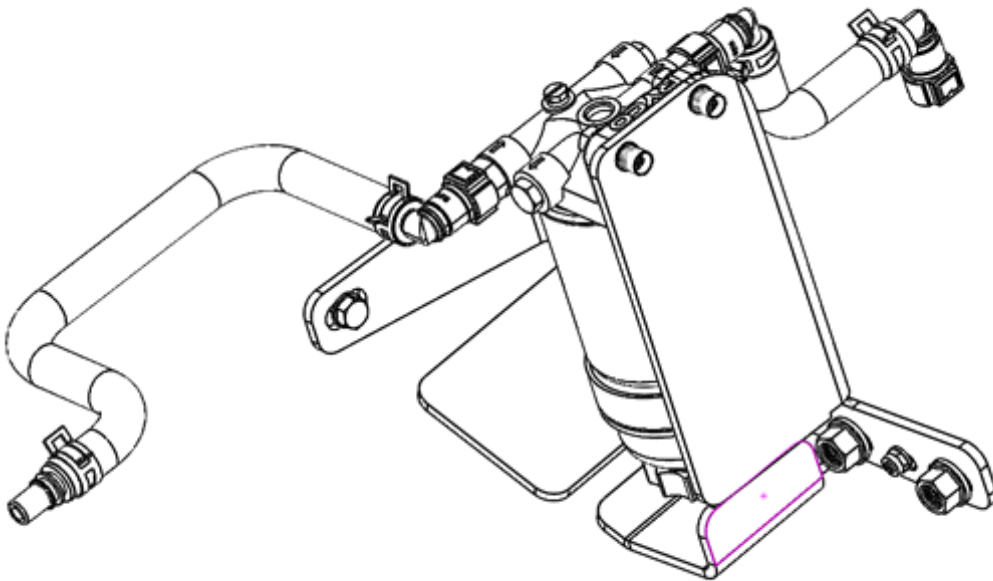
## X113R FUEL WATER SEPARATOR FITMENT INSTRUCTIONS

### SECTION 1 FUEL MOUNTING BRACKET FITMENT

(4/4)


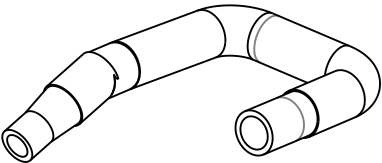
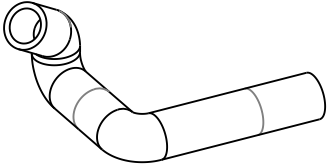


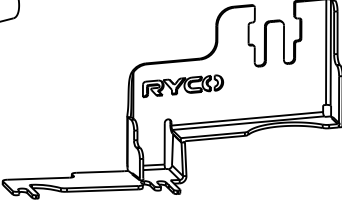
**WARNING:** The fuel system **MUST BE PRIMED** prior to starting the engine.  
**DO NOT OPEN THE BLEED SCREW ON THE RYCO Z980SK16, keep closed.**

8. To prime fuel system turn ignition key into ON/RUN position for a few seconds, then turn ignition key into OFF position. Repeat this step 3 times to ensure prime.
9. Turn ignition key to START position. If engine does not turn on, or is running sluggish, repeat step 8.
10. With the engine running, inspect the Z980SK16, fuel fittings and fuel hoses for any leaks.



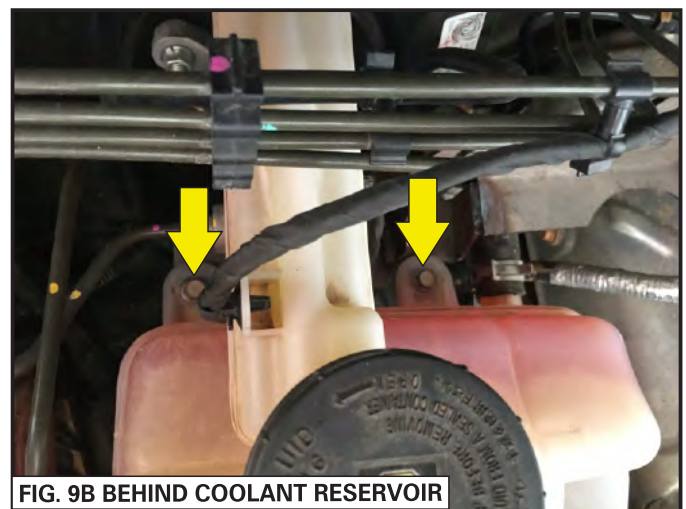
# X113R CATCHCAN FITMENT INSTRUCTIONS

## SECTION 3 CATCHCAN INSTALLATION (1 / 4)

PARTS REQUIRED		TOOLS & PPE'S REQUIRED	
 <p>RCC351 CATCHCAN (SOLD SEPARATELY)</p>	<p>MH9805A PCV HOSE x 1</p> 	<p>MH9805B PCV HOSE x 1</p> 	<ul style="list-style-type: none"> <li>* WORK GLOVES</li> <li>* RACHET SET</li> <li>* HOSE CLAMP PLIERS</li> </ul>
	<p>MS4091 PCV HOSE CLAMP x 3</p> 	<p>MS4094 PCV HOSE CLAMP x 1</p> 	 <p>FB9805CC CATCHCAN MOUNTING BRACKET x 1</p>

### WORK PROCEDURE

1. Remove the engine cover.  
Loosen the coolant overflow bottle bracket bolts shown in FIG. 9B.  
The FB9805CC bracket (3mm) will sit between the coolant reservoir and the OEM coolant overflow bracket.



# X113R CATCHCAN FITMENT INSTRUCTIONS

## SECTION 3 CATCHCAN INSTALLATION (2/4)

### WORK PROCEDURE

2. Locate FB9805CC bracket as shown in FIG. 10A. Slide FB9805CC mounting tabs under the coolant overflow reservoir mounts as shown in FIG 10B and 10C as far as they'll go.

3. Tighten the OEM bolts. Make sure to not over tighten.

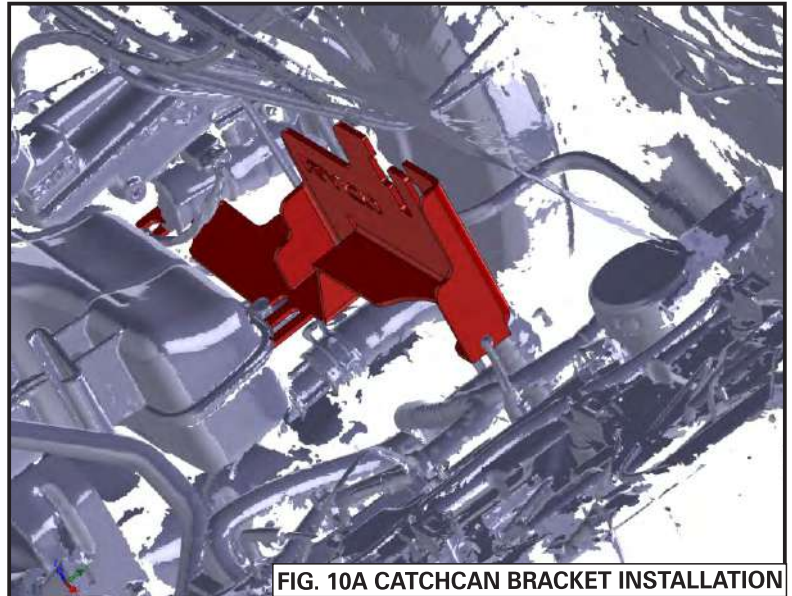


FIG. 10A CATCHCAN BRACKET INSTALLATION

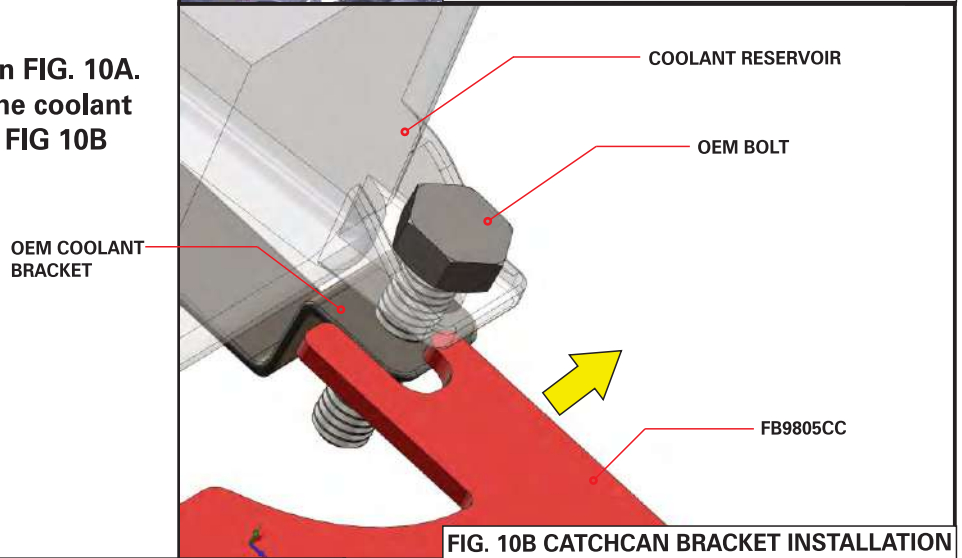


FIG. 10B CATCHCAN BRACKET INSTALLATION

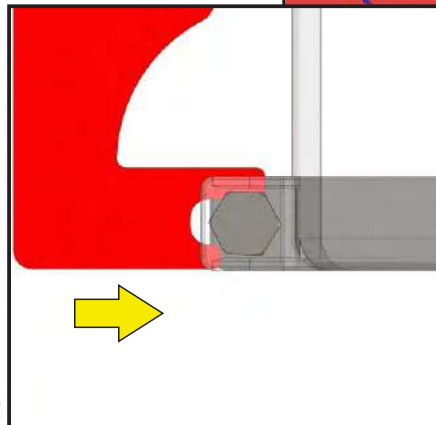


FIG. 10C CATCHCAN BRACKET INSTALLATION



FIG. 10D CATCHCAN BRACKET INSTALLED

# X113R CATCHCAN FITMENT INSTRUCTIONS

## SECTION 3 CATCHCAN INSTALLATION (3/4)

### WORK PROCEDURE

4. Slot RCC351 into FB9805CC bracket as shown in FIG. 11A. The ports of the RCC351 should be facing toward the front of the vehicle.

5. Starting with the MH9805A PCV hose, install the small diameter end on to the Engine PCV Port & tighten with the MS4094 hose clamp as shown in Fig. 11B.

6. Install the other end of the MH9805A PCV hose on to the lower, inlet port, of the RCC351 Catchcan and tighten with the MS4091 hose clamp as shown in Fig. 11B.

7. Install the larger diameter end of the MH9805B hose on to the upper, outlet port, of the RCC351 Catchcan and tighten with a MS4091 hose clamp. Install the other end of the MH9805B PCV hose on to the Air Intake PCV port and tighten with a MS4091 hose clamp as shown in Fig. 11B.

8. Carefully re-fit the engine cover and make sure the PCV hoses are free of kinks.

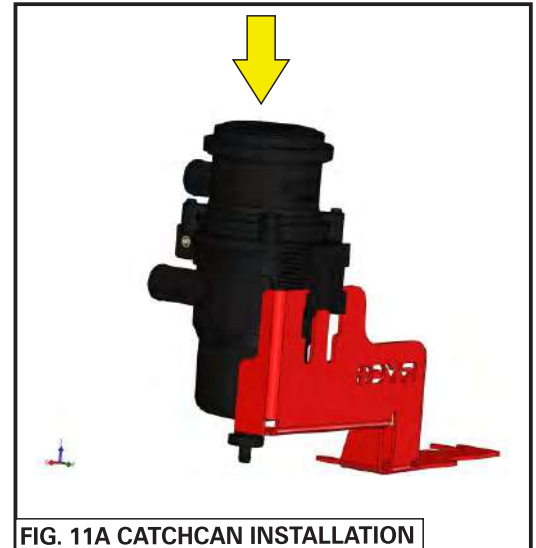


FIG. 11A CATCHCAN INSTALLATION

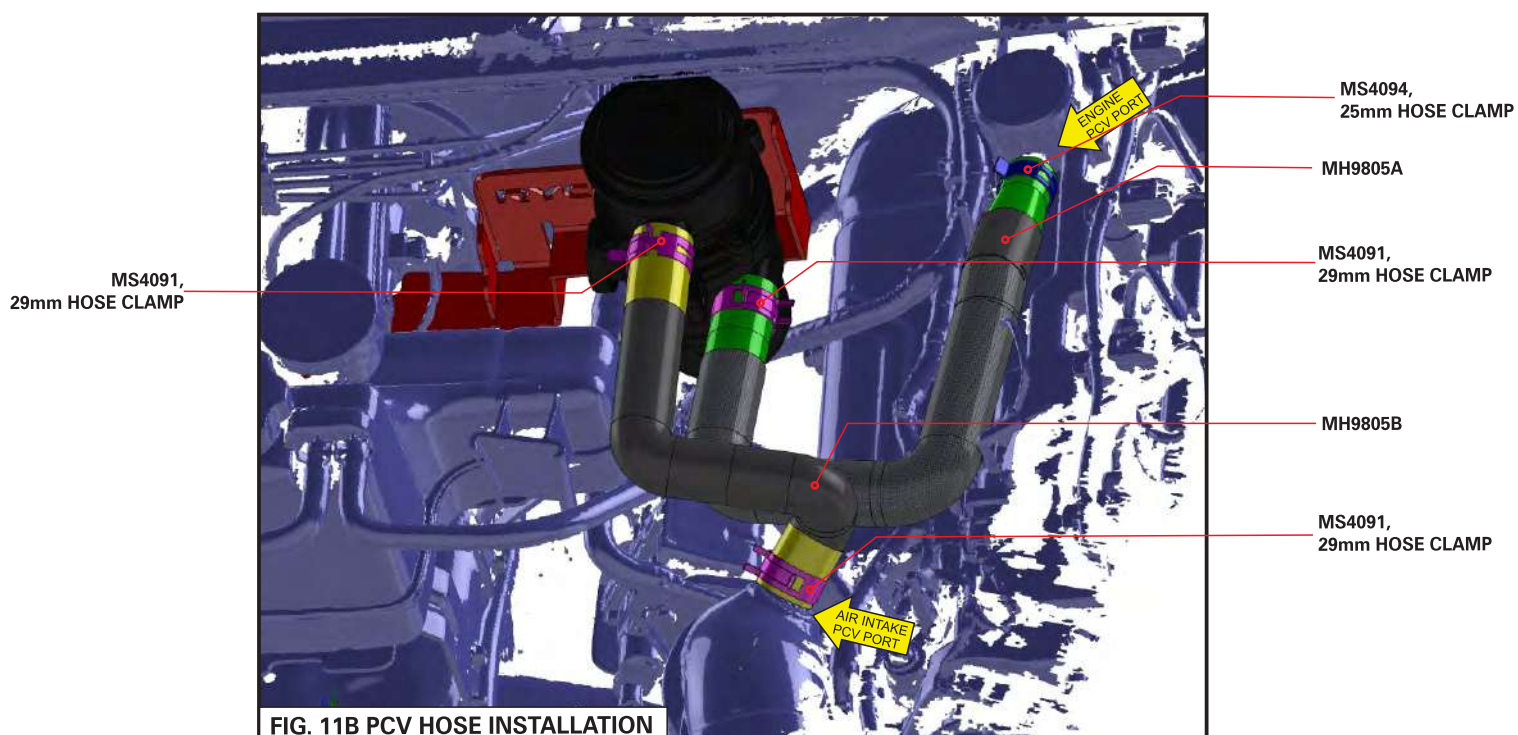


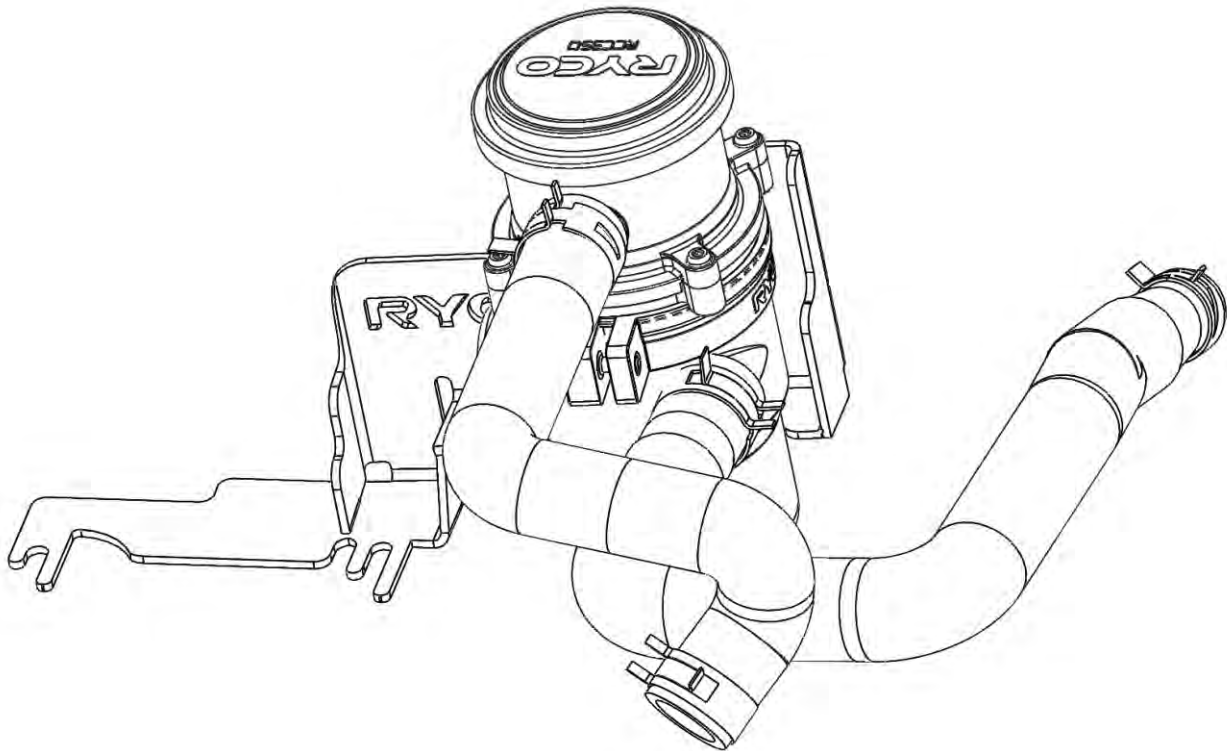
FIG. 11B PCV HOSE INSTALLATION

## X113R CATCHCAN FITMENT INSTRUCTIONS

### SECTION 4 CATCHCAN INSTALLATION (4/4)

#### 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.



**AUSTRALIA**  
RYCO Group Pty Ltd  
29 Taras Avenue, Altona North  
Victoria 3025 Australia.  
[www.rycofilters.com.au](http://www.rycofilters.com.au)

**NEW ZEALAND**  
RYCO Group - A division of GUD (NZ) Holdings Limited  
19 Bell Avenue, Otahuhu,  
Auckland, 1060 New Zealand.  
[www.ryco.co.nz](http://www.ryco.co.nz)

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