MONZATECH

INTELLIGENT ENGINE COOLING

! ATTENTION !

NEVER TURN ON THE PUMP WITHOUT COOLANT!

THE MECHANICAL SEAL INSIDE THE PUMP

MUST WORK LUBRICATED

Intelligent Engine Cooling

STEP 1

FAIRINGS REMOVAL

SEAT REMOVAL

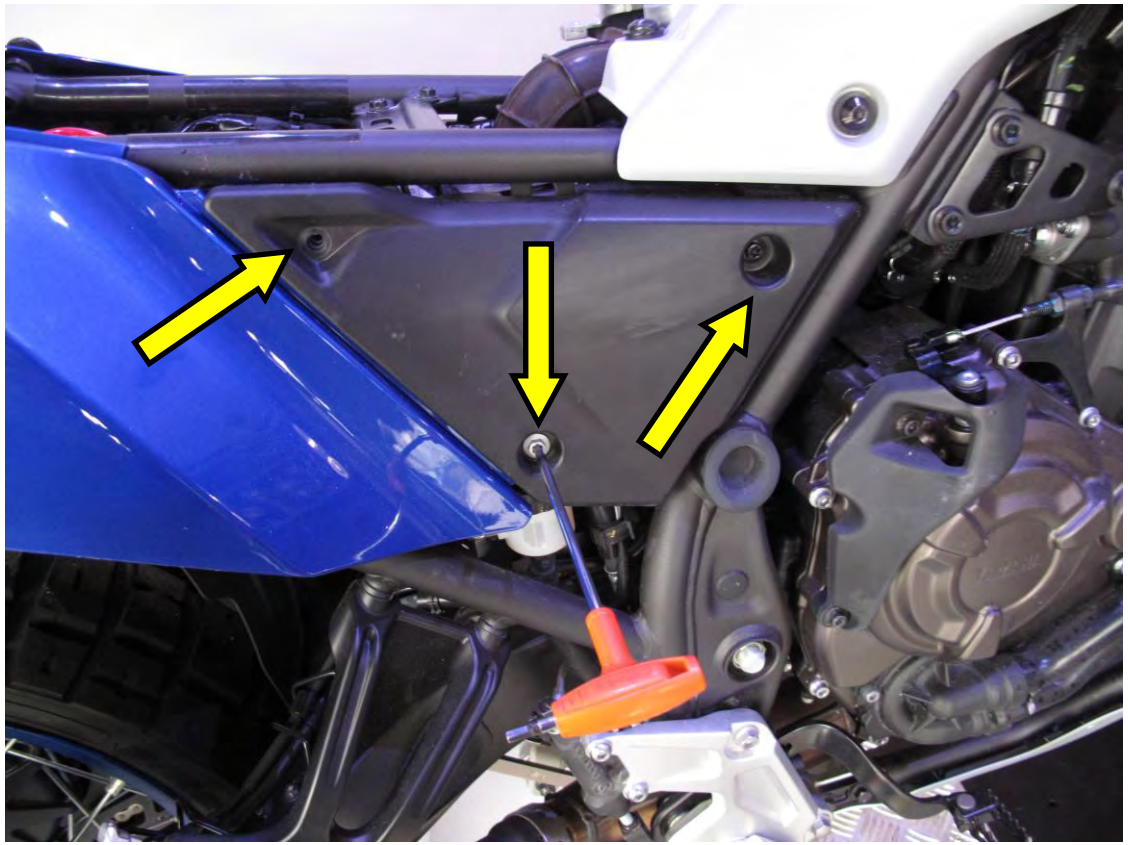
Intelligent Engine Cooling

- USING THE BIKE KEY, REMOVE THE PASSENGER SEAT
- REMOVE THE SCREW SHOWN IN FIGURE AND REMOVE THE SEAT

SIDE PANEL #1 REMOVAL

Intelligent Engine Cooling

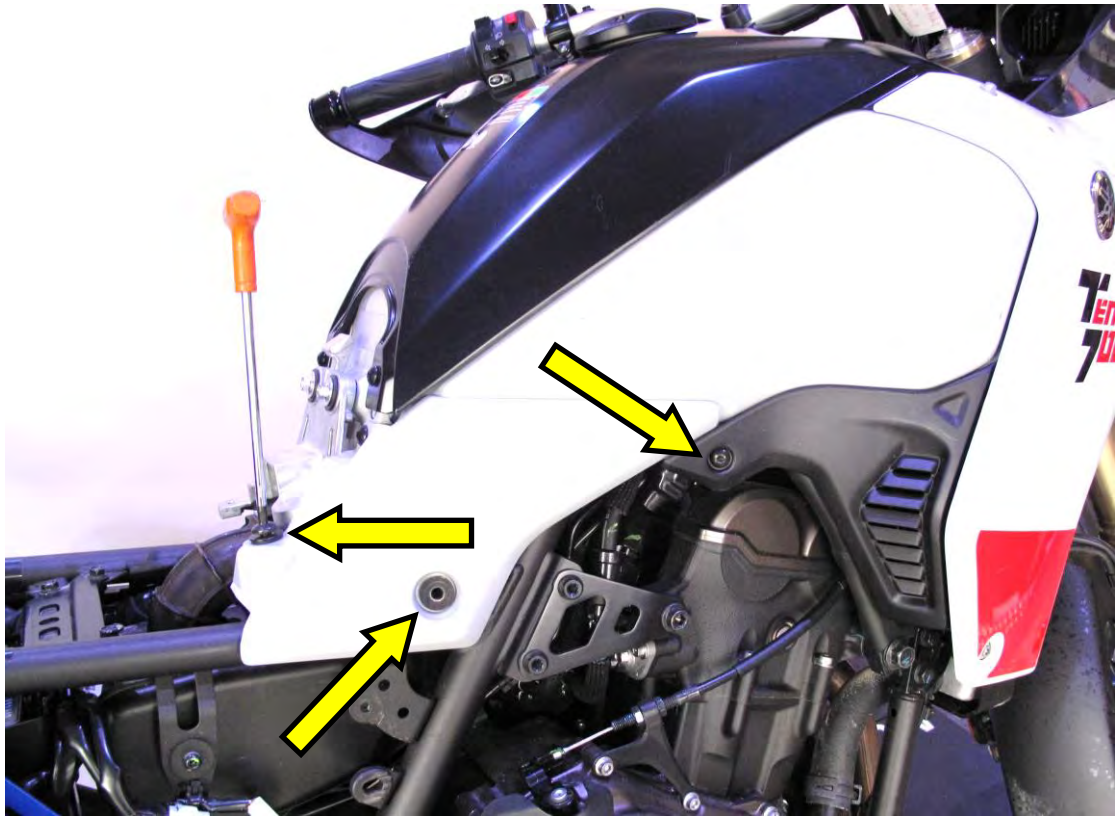
- REMOVE THE SCREWS SHOWN IN FIGURE AND REMOVE THE SIDE PANEL



SIDE PANEL #2 REMOVAL

Intelligent Engine Cooling

- REMOVE THE SCREWS SHOWN IN FIGURE AND THE SIDE PANEL

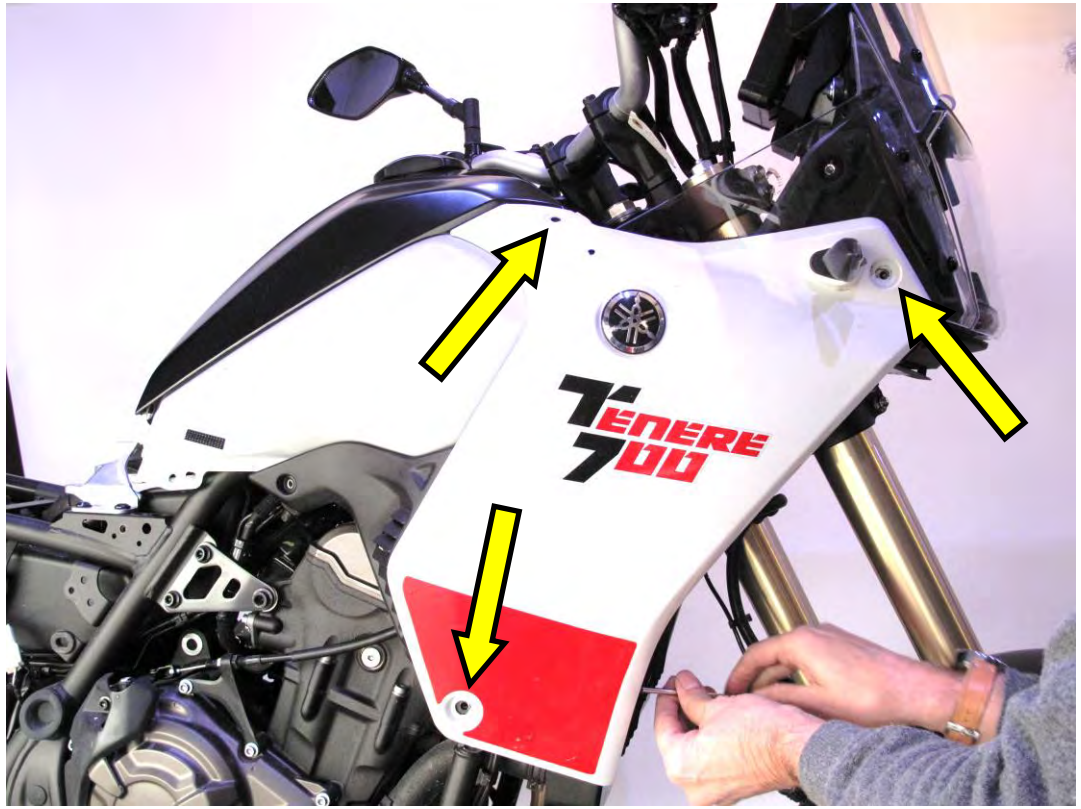


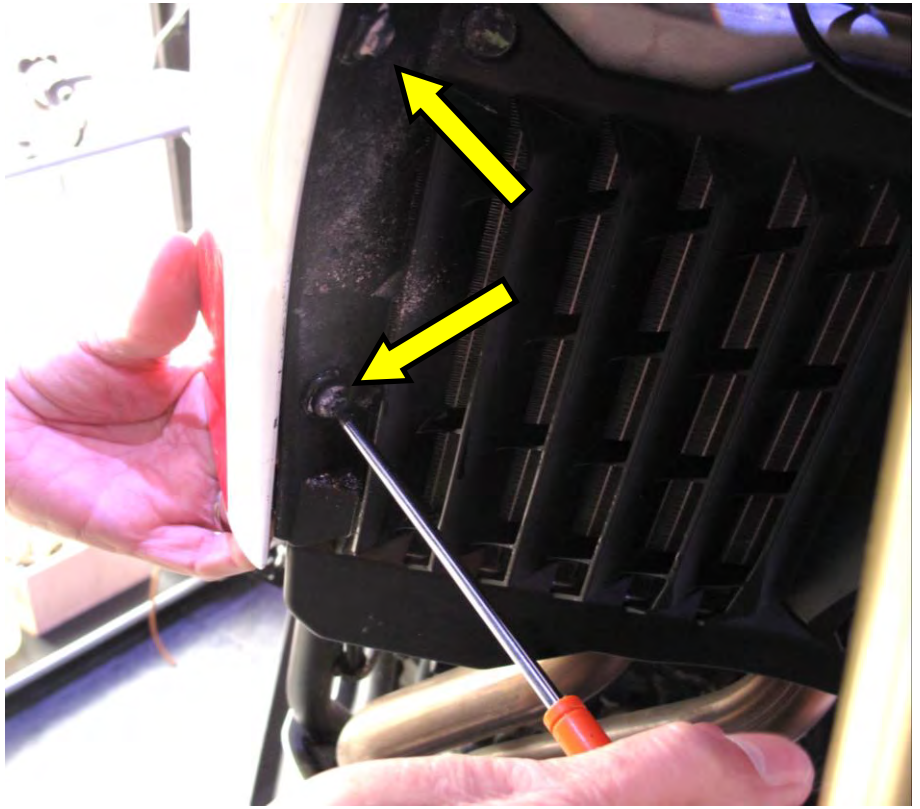
PATENTED MT PATENTED

FAIRING REMOVAL

Intelligent Engine Cooling

- REMOVE THE SCREW SHOWN IN FIGURE



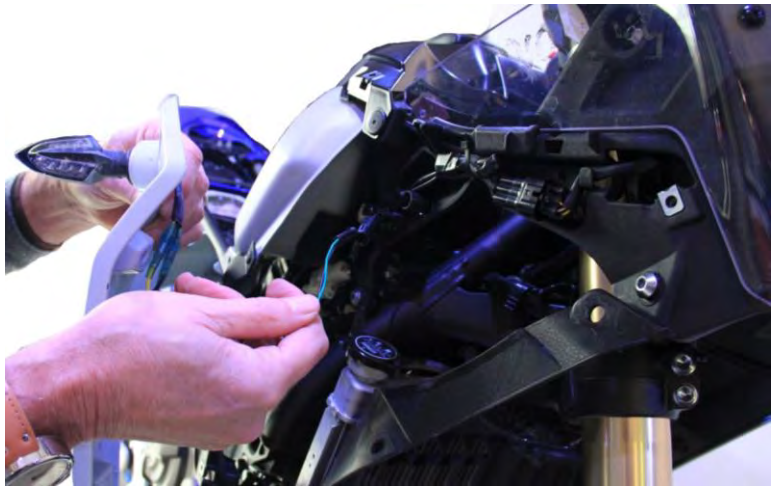


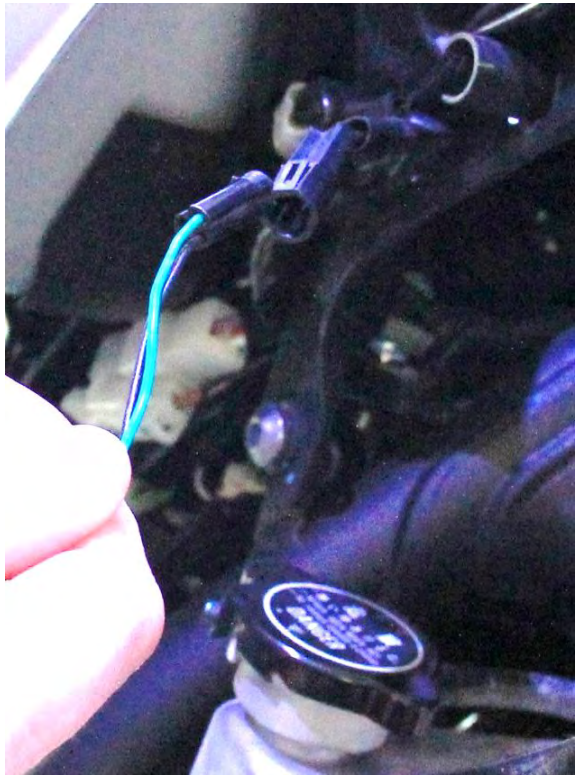
PATENTED MT PATENTED

FAIRING REMOVAL

Intelligent Engine Cooling

- PAY ATTENTION REMOVING THE FAIRING TO NOT DAMAGE THE INDICATOR'S WIRE





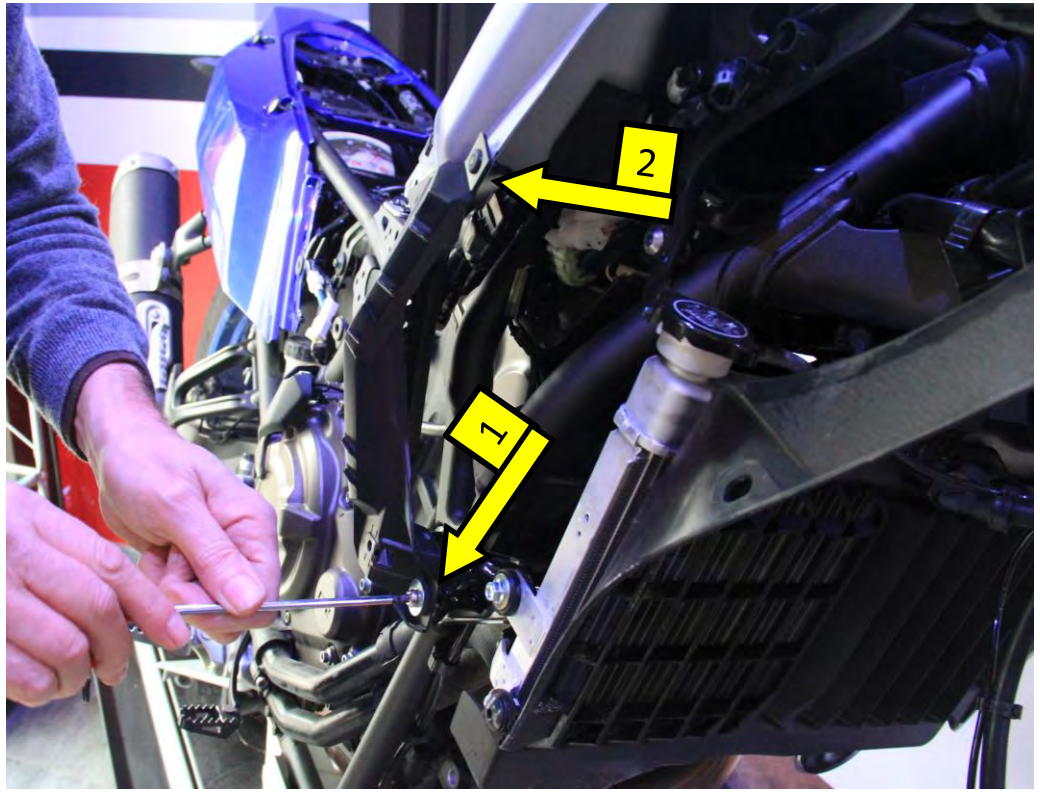
- TEAR OUT THE INDICATOR'S CONNECTOR

PATENTED MT PATENTED

MAINFOLD REMOVAL

Intelligent Engine Cooling

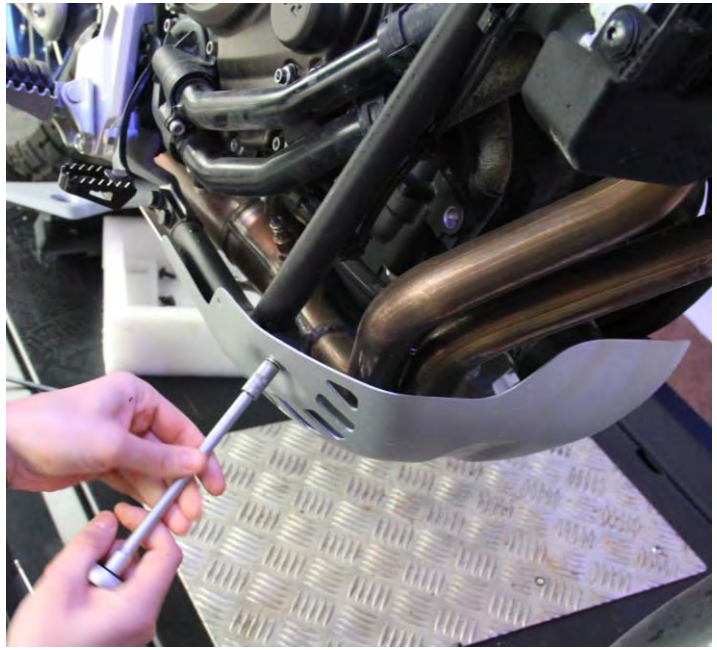
- REMOVE THE SCREW SHOWN IN FIGURE (1)
- TO REMOVE THE QUICK RELEASE SCREW SHOWN IN FIGURE (2), APPLY A LITTLE PRESSURE ON IT

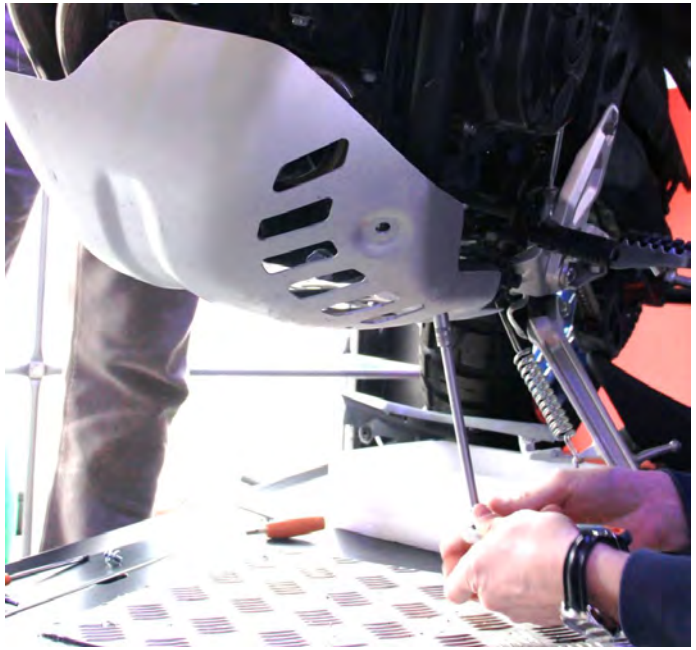


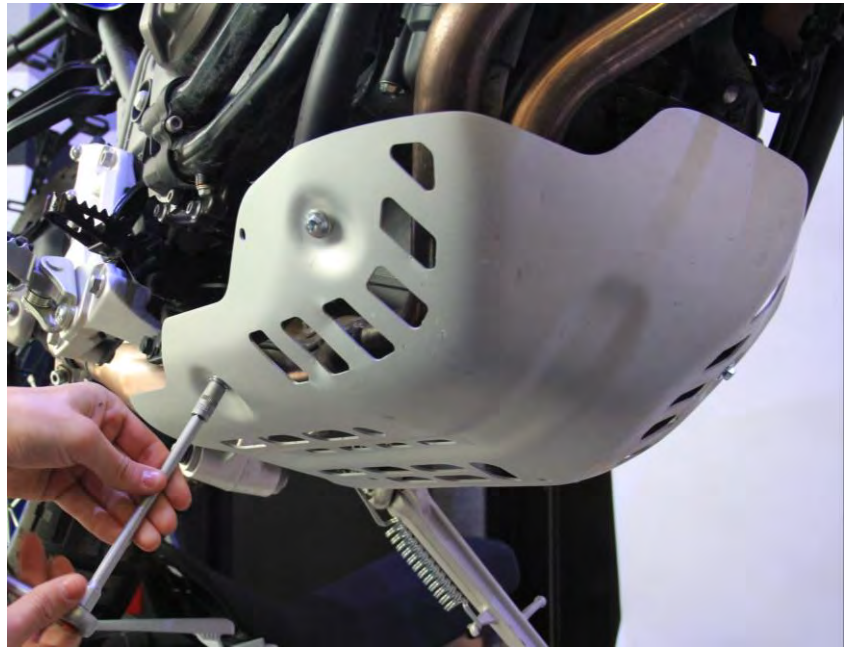
SUMPGUARD REMOVAL

Intelligent Engine Cooling

- REMOVE THE SCREW OF THE SUMPGUARD AS SHOWN IN FIGURE





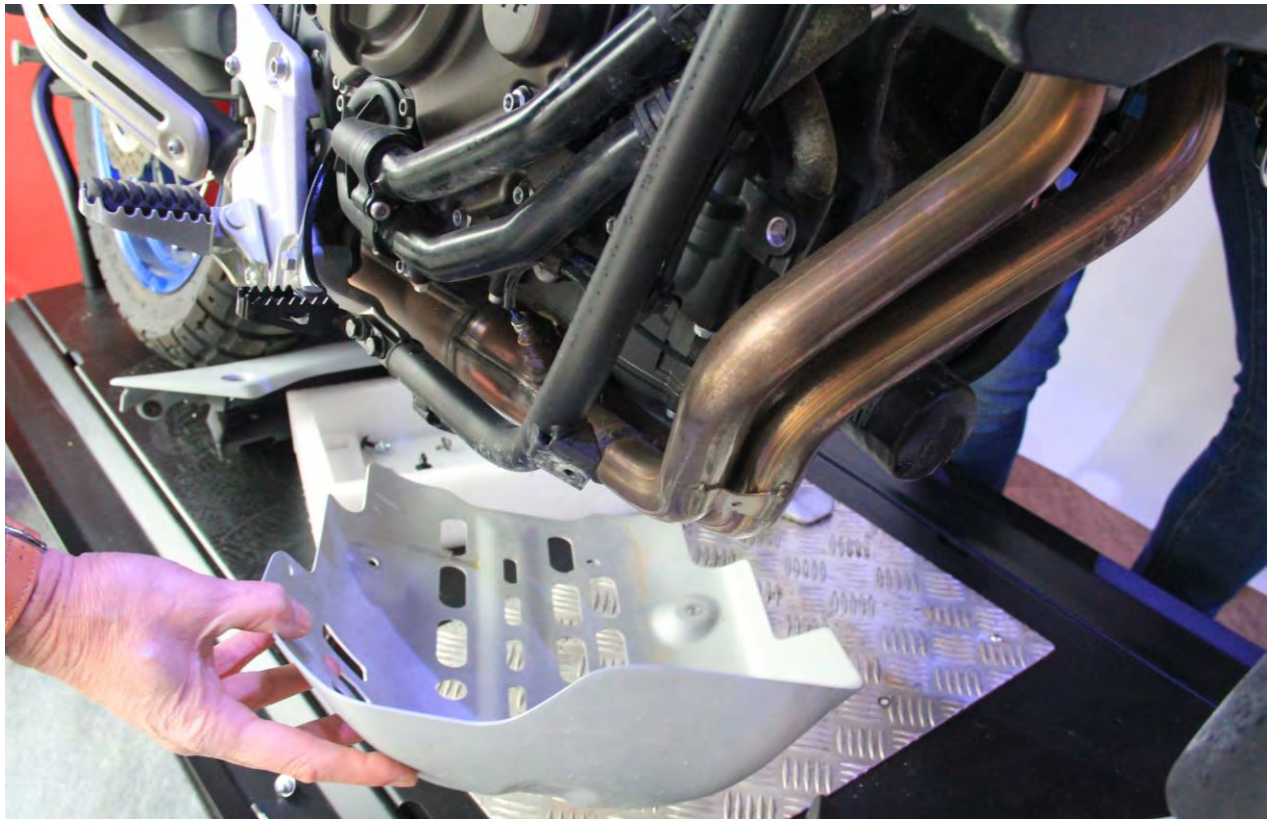


PATENTED MT PATENTED

SUMPGUARD REMOVAL

Intelligent Engine Cooling

- SUPPORT THE SUMPGUARD REMOVING THE LAST SCREW TO AVOID HIGH BENDING



Intelligent Engine Cooling

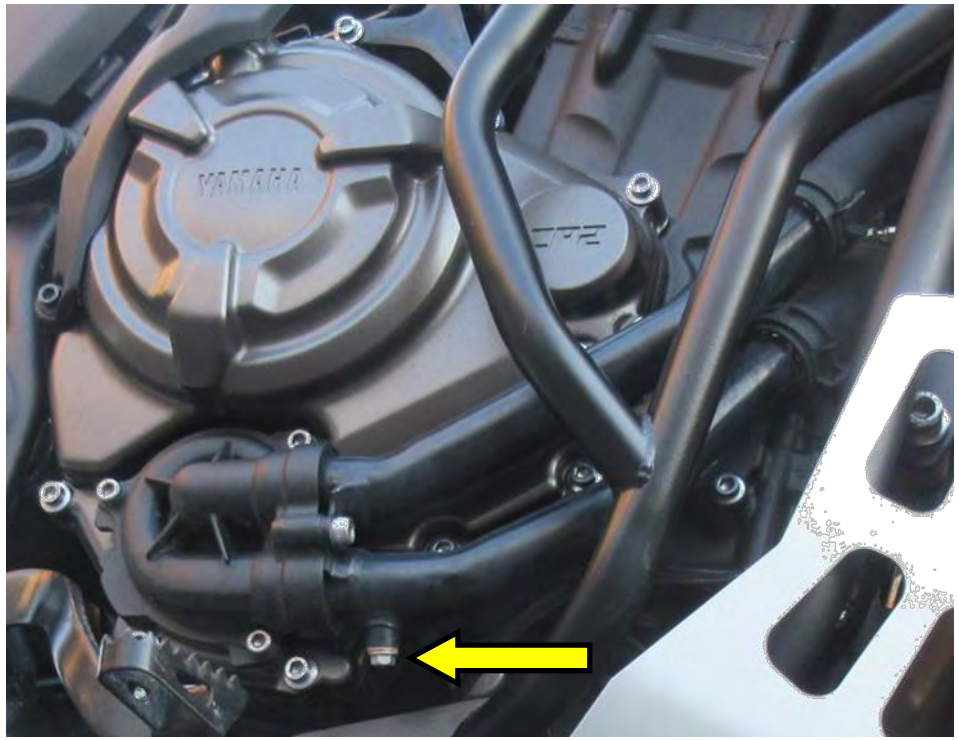
STEP 2

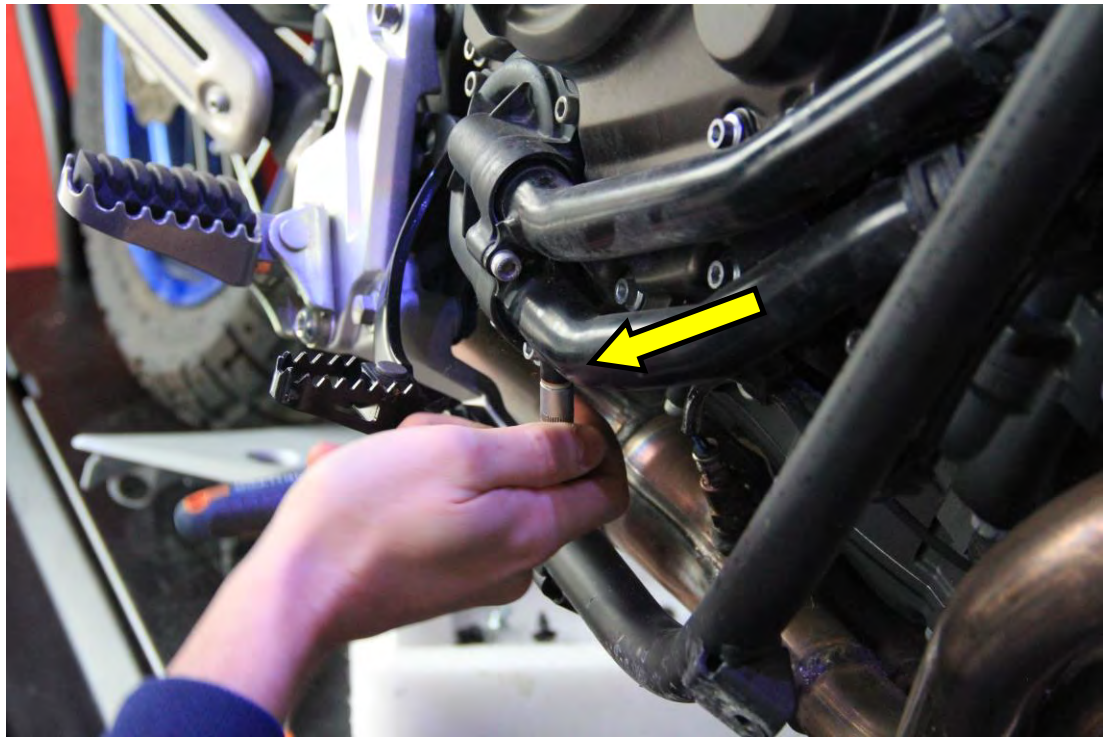
ORIGINAL COOLING CIRCUIT'S REMOVAL

UNLOAD COOLING CIRCUIT

Intelligent Engine Cooling

- REMOVE THE BLEED SCREW SHOWN IN FIGURE AND LET FLOW OUT THE FIRST PART OF COOLANT



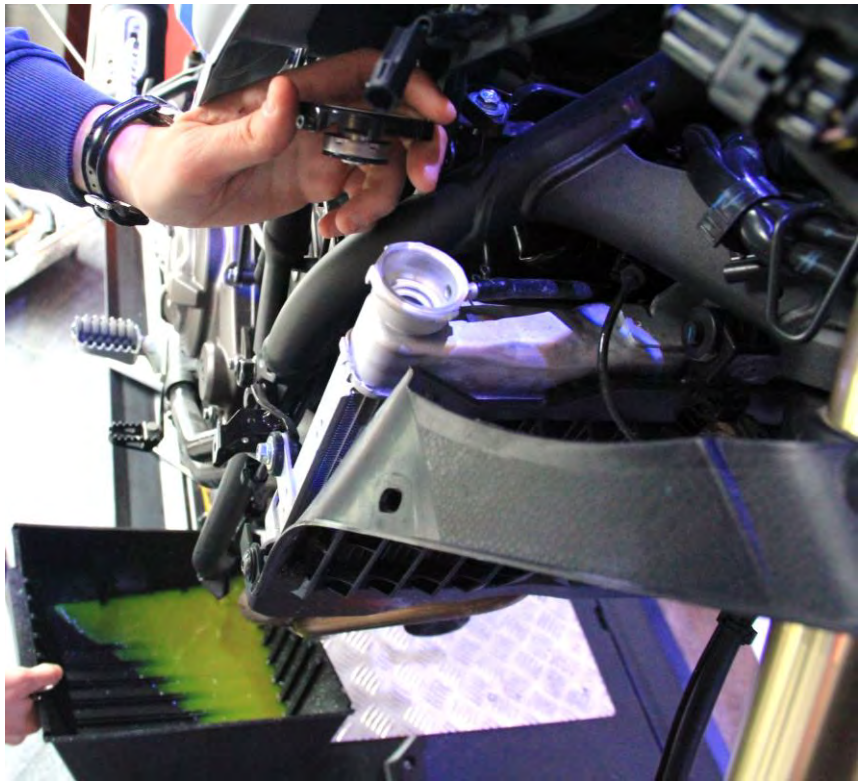


PATENTED MT PATENTED

UNLOAD COOLING CIRCUIT

Intelligent Engine Cooling

- LOOSEN THE SAFETY SCREW OF THE RADIATOR CAP

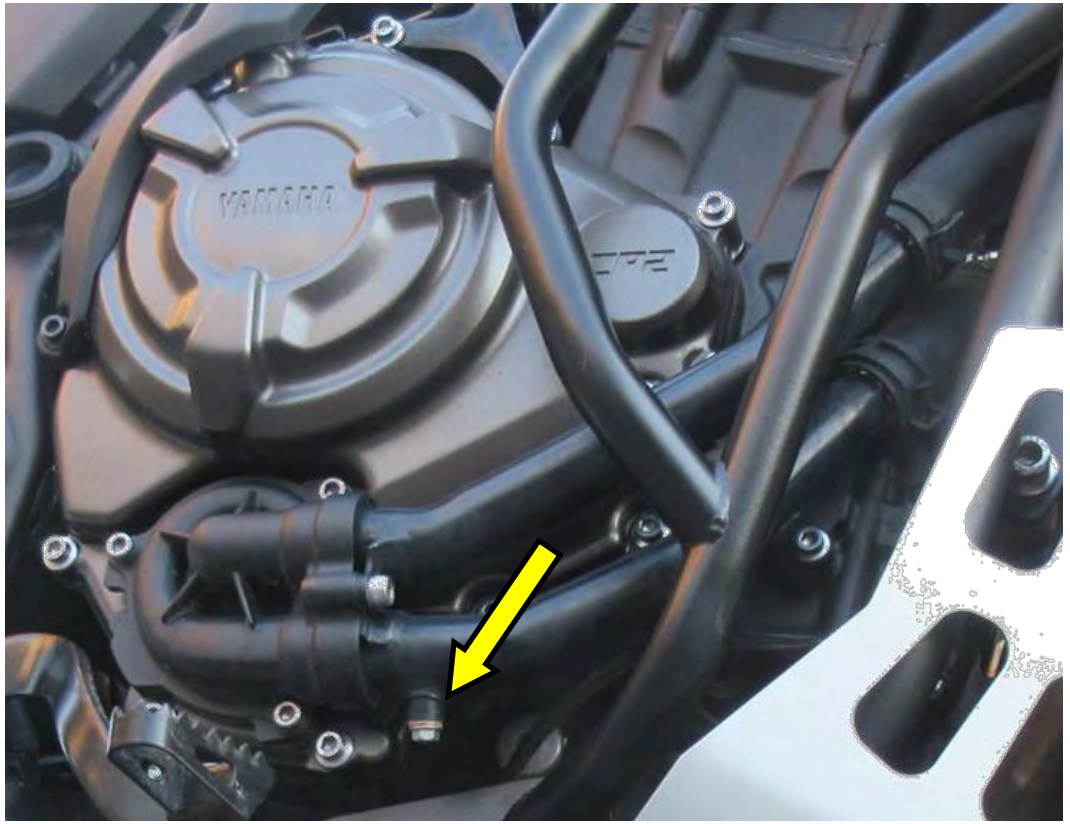


- OPEN THE RADIATOR CAP AND EMPTY THE CIRCUIT

UNLOAD COOLING CIRCUIT

Intelligent Engine Cooling

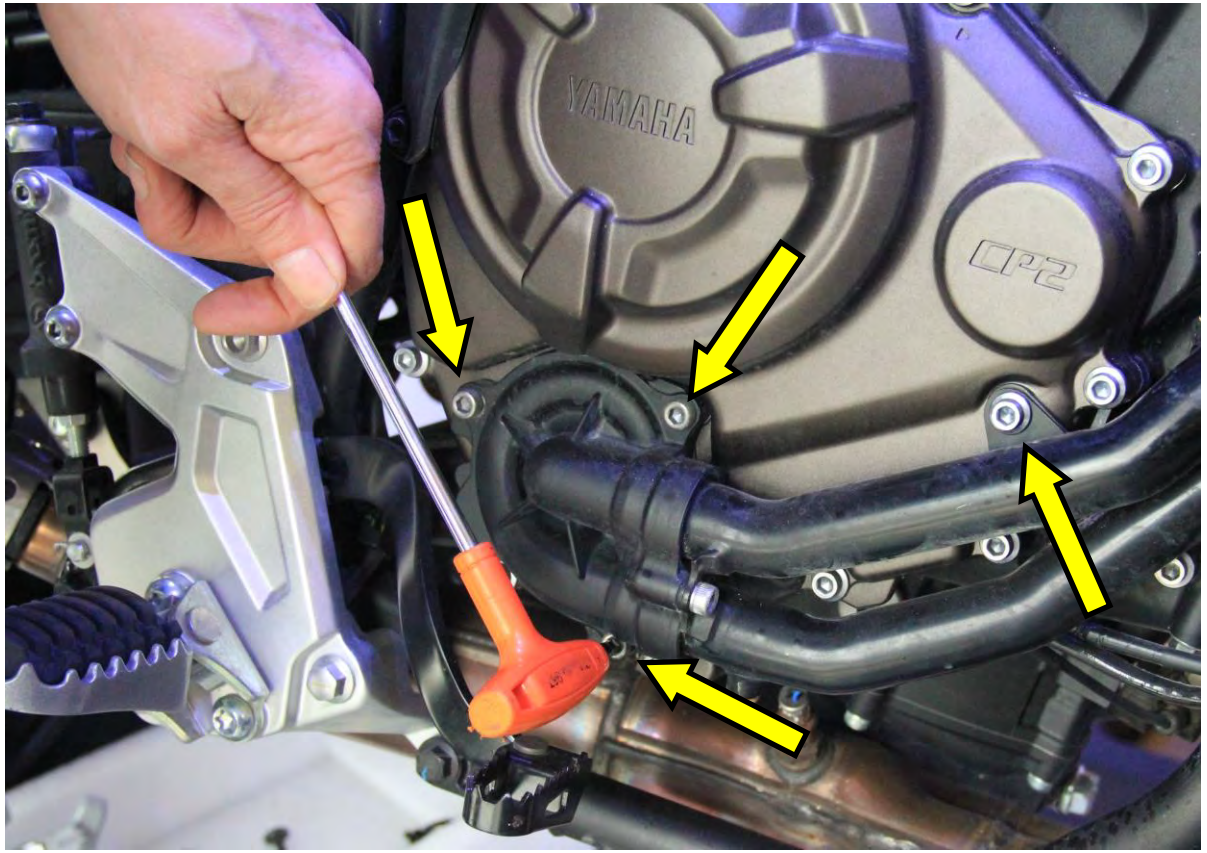
- PUT BACK THE BLEED SCREW AND TIGHT IT



PUMP COVER REMOVAL

Intelligent Engine Cooling

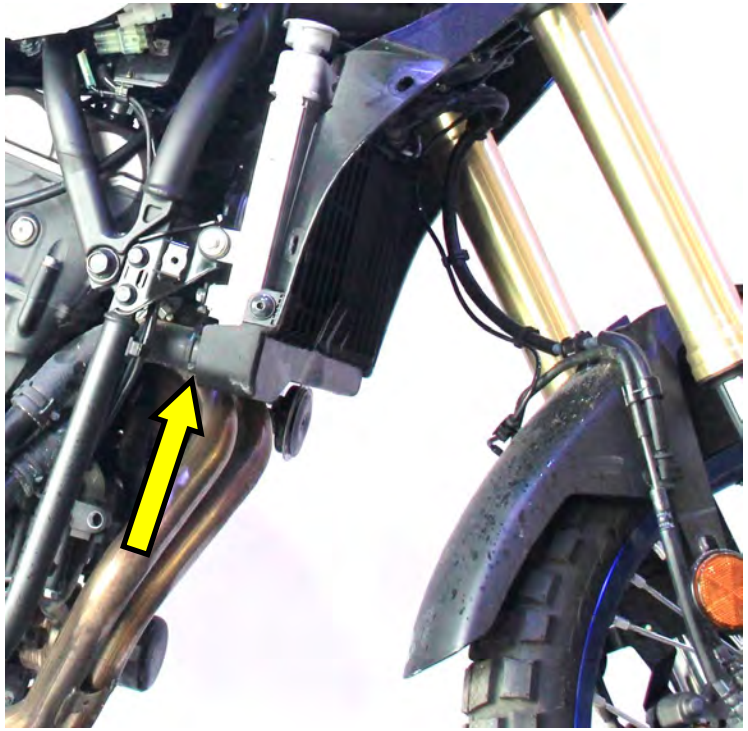
- REMOVE THE SCREWS SHOWN IN FIGURE

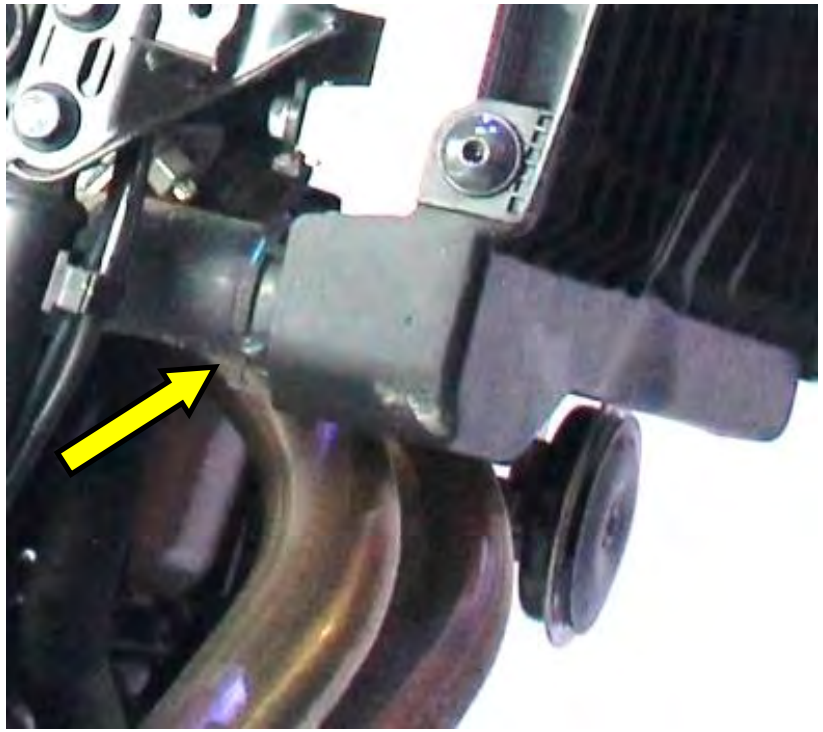


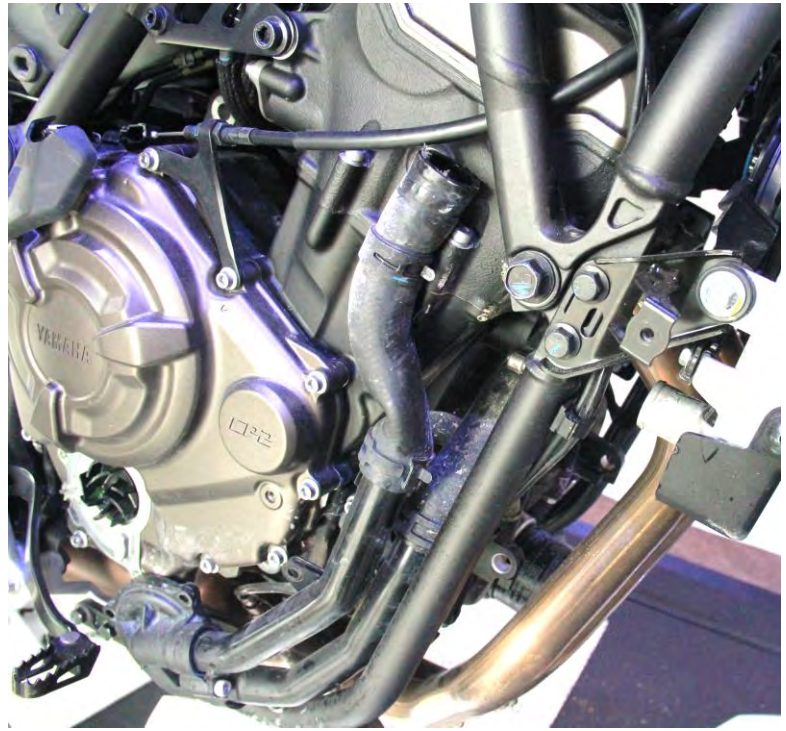
HOSES REMOVAL

Intelligent Engine Cooling

- REMOVE THE METAL CLAMP SHOWN IN FIGURE







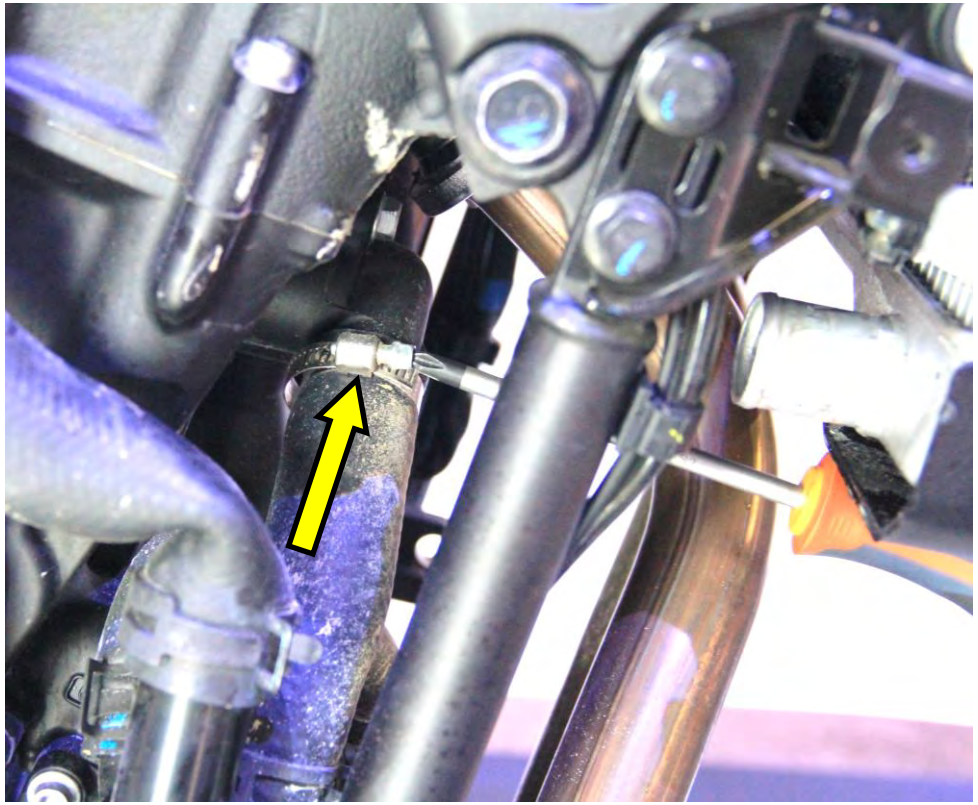
- REMOVE THE RUBBER HOSE FROM THE RADIATOR

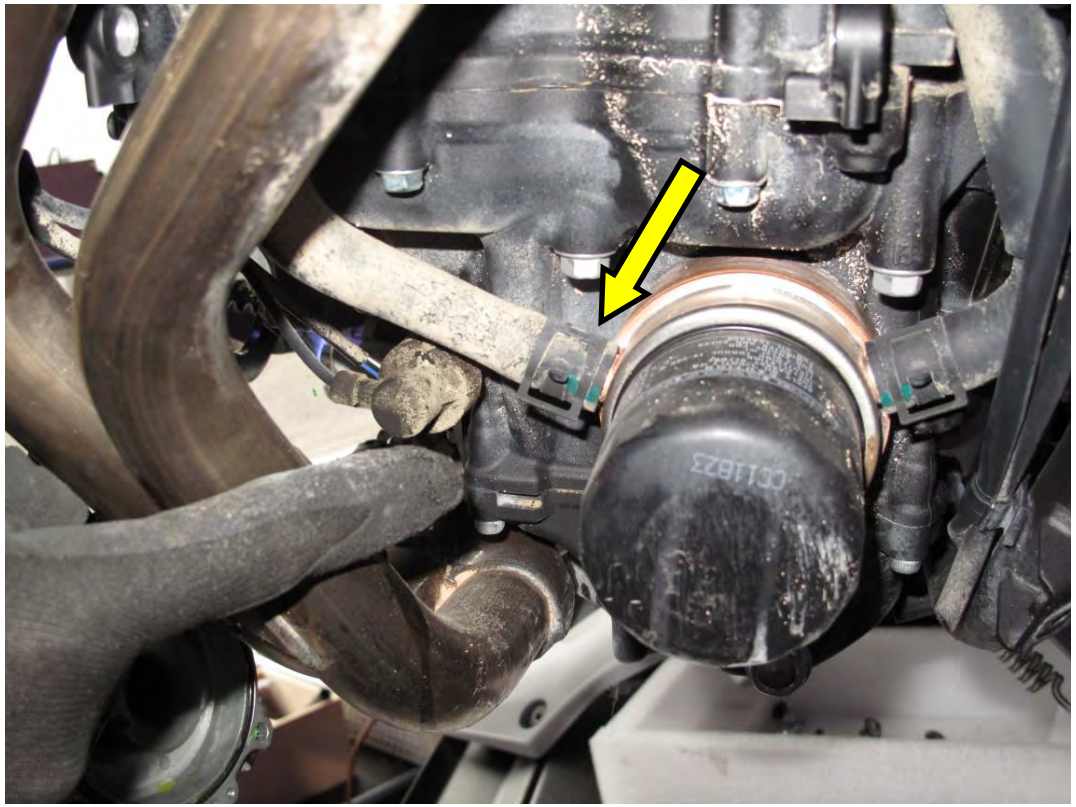
PATENTED MT PATENTED

HOSES REMOVAL

Intelligent Engine Cooling

- REMOVE THE METAL CLAMPS SHOWN IN FIGURE AND THE RUBBER HOSES





PATENTED MT PATENTED

MECHANICAL PUMP REMOVAL

Intelligent Engine Cooling

!DISCLAIMER!

GIVEN THAT THE HYDRAULIC SEAL OF THE ORIGINAL PUMP MUST NOT RUN WITHOUT WATER,
IT STRONGLY SUGGESTED TO PROCEED WITH THE STEPS EXPLAINED BELOW USING THE ACCESSORIES SUPPLIED IN THE KIT, SAVING IT FOR A POSSIBLE RESTORATION OF THE ORIGINAL COOLING CIRCUIT.

MECHANICAL PUMP REMOVAL

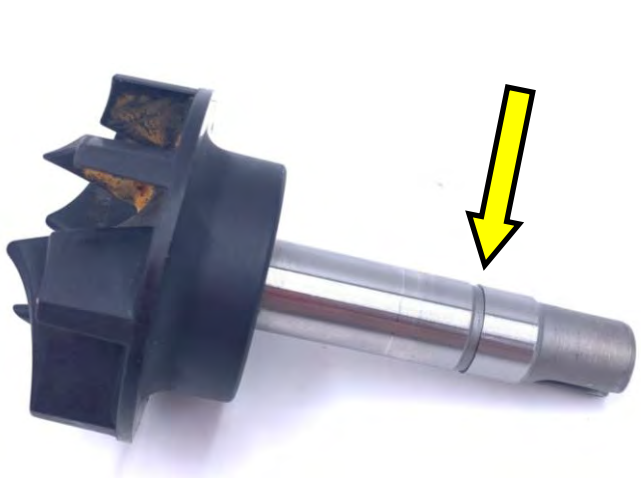
Intelligent Engine Cooling

- FOLLOWING THE BIKE'S WORKSHOP MANUAL, REMOVE THE CARTER SHOWN IN FIGURE

MECHANICAL PUMP REMOVAL

Intelligent Engine Cooling

- REMOVE THE SEEGER RING FROM THE SEAT SHOWN ON THE MECHANICAL PUMP. REMOVE THE PUMP FROM THE CARTER.

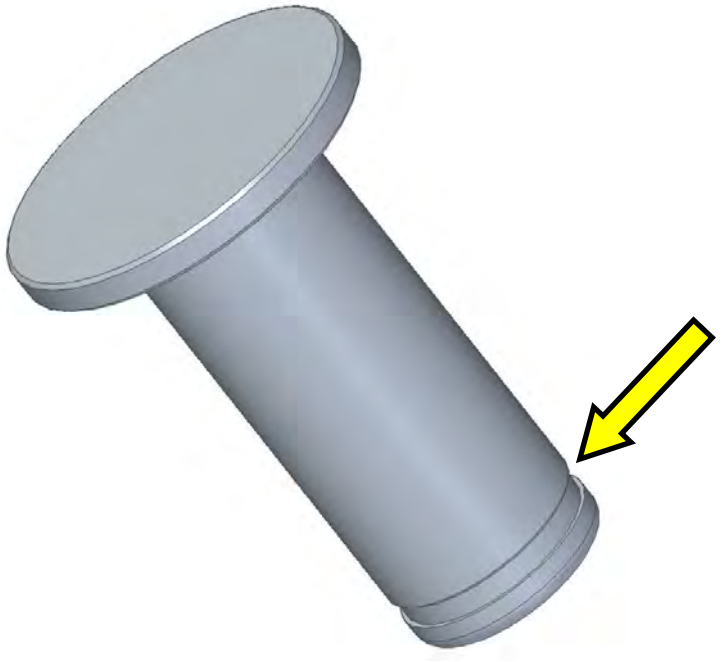


PATENTED MT PATENTED

MECHANICAL PUMP REMOVAL

Intelligent Engine Cooling

- PUT THE ALUMINUM CUP SUPPLIED IN THE PLACE OF MECHANICAL PUMP.
- PRESS ON PLANE (1) AND PUT THE SEEGER IN THE SEAT CREATED ON THE CUP.



- REASSEMBLE THE CARTER FOLLOWING THE WORKSHOP MANUAL.

Intelligent Engine Cooling

STEP 3

MONZA TECH'S COOLING SYSTEM ASSEMBLY

CNC COVER POSITIONING

Intelligent Engine Cooling

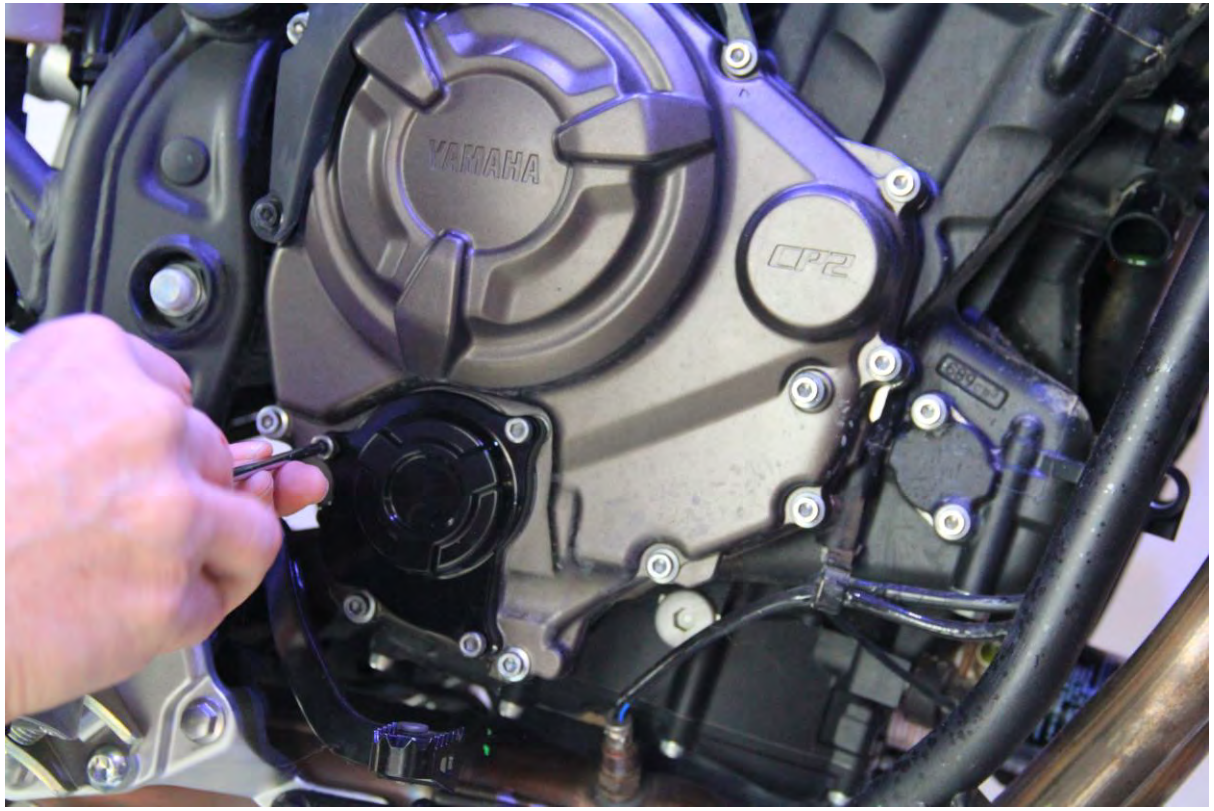
- REMOVE THE O-RING FROM THE ORIGINAL PUMP'S COVER

- PUT THE O-RING IN THE GROOVE OF CNC COVER

CNC COVER POSITIONING

Intelligent Engine Cooling

- PUT THE ***MONZA****TECH'S* CNC COVER AS SHOWN IN FIGURE AND TIGHT IT WITH THE SCREW REMOVED BEFORE



MONZATECH'S WATER PUMP POSITIONING

Intelligent Engine Cooling

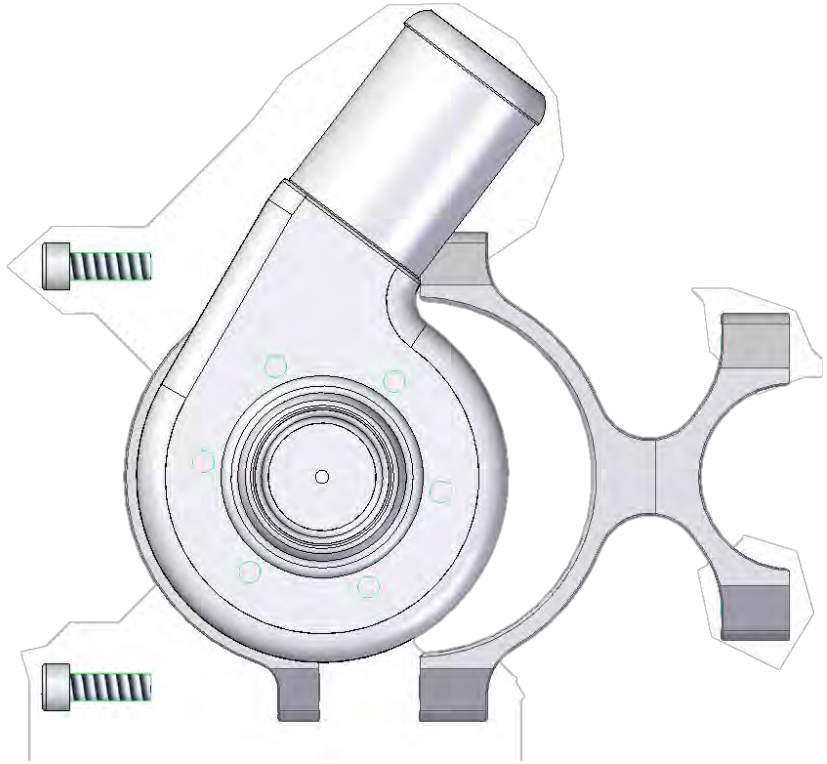
- FIX THE ALUMINUM BRACKET AS SHOWN IN FIGURE

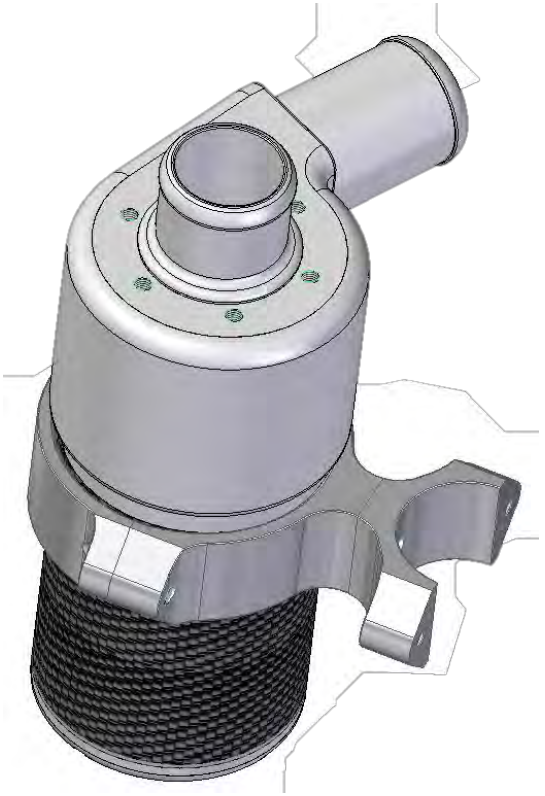
- WE SUGGEST TO PUT A BIT OF LOCTITE 243/270 ON THE SCREW

MONZATECH'S WATER PUMP POSITIONING

Intelligent Engine Cooling

- USING THE SCREW SUPPLIED IN THE KIT, FIX THE BRACKET AS SHOWN IN FIGURE



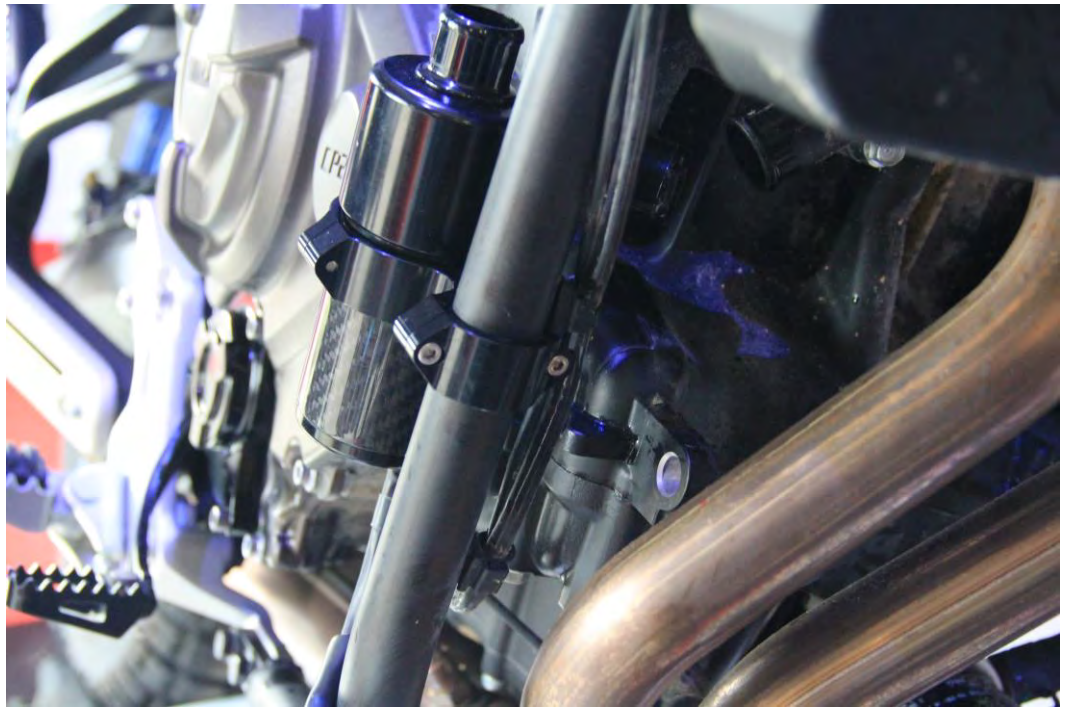


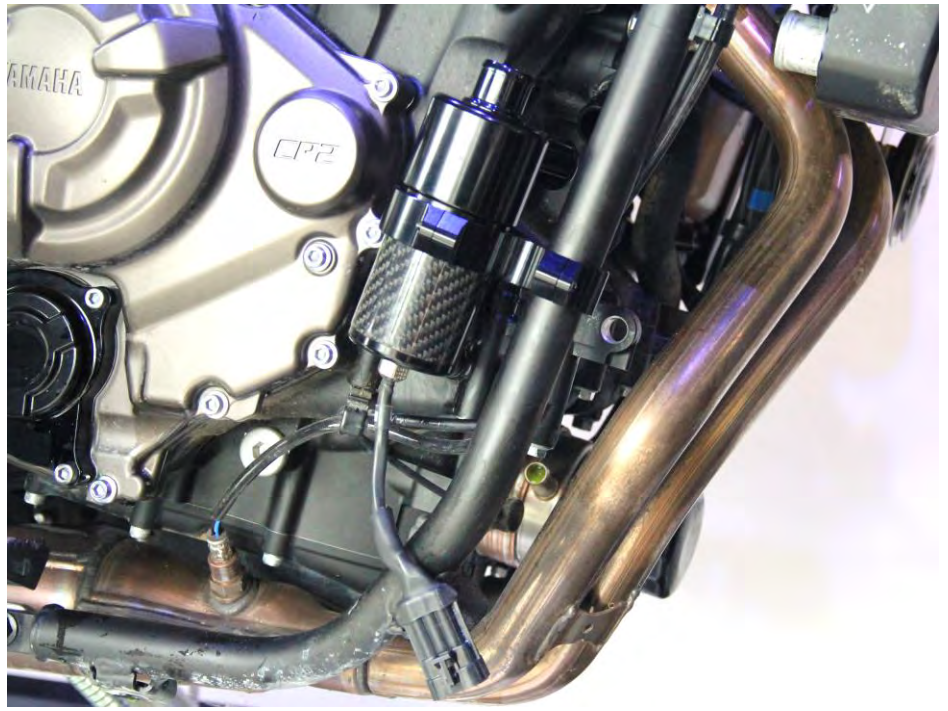
PATENTED MT PATENTED

MONZATECH'S WATER PUMP POSITIONING

Intelligent Engine Cooling

- USING THE LAST BRACKET AND SCREWS, FIX THE PUMP TO THE FRAME UNDER THE PLASTIC WIRE CLIP AS SHOWN IN FIGURE

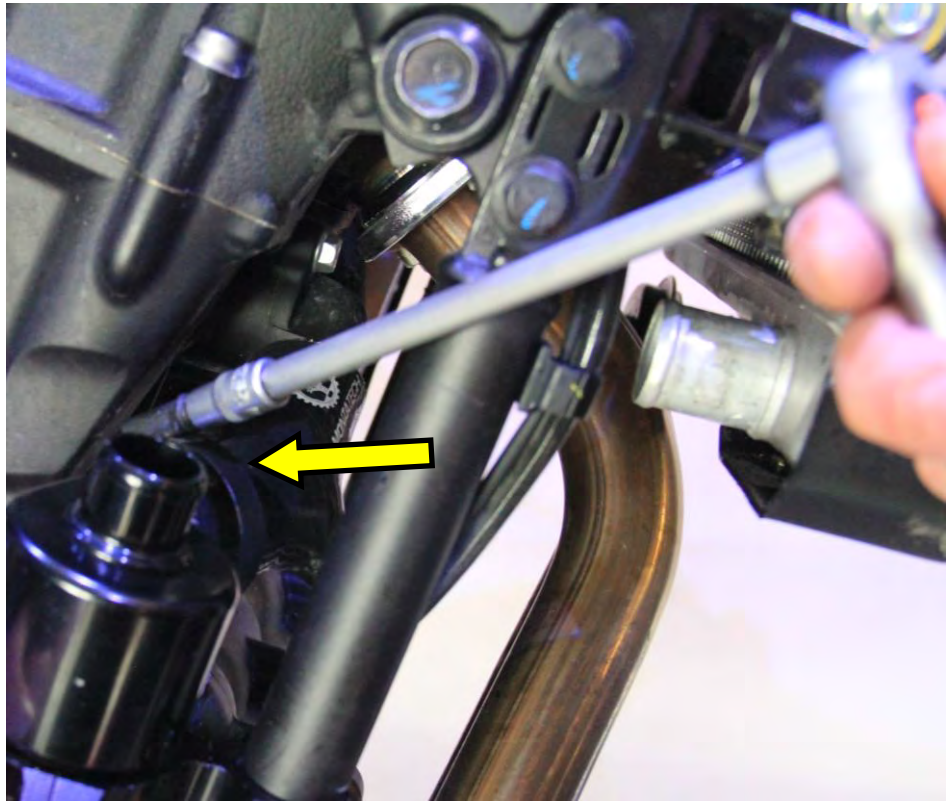




MONZATECH'S HOSES PLACEMENT

Intelligent Engine Cooling

- PUT THE OUTLET HOSE AS SHOWN IN FIGURE AND TIGHT THE BLACK METAL CLAMP SUPPLIED IN THE KIT



PATENTED MT PATENTED

MONZATECH'S HOSES PLACEMENT

Intelligent Engine Cooling

- PUT THE INLET HOSE AND TIGHT THE BLACK METAL CLAMP SUPPLIED IN THE KIT AS SHOWN IN THE FOLLOWING PICTURES

MONZATECH'S HOSES PLACEMENT

Intelligent Engine Cooling

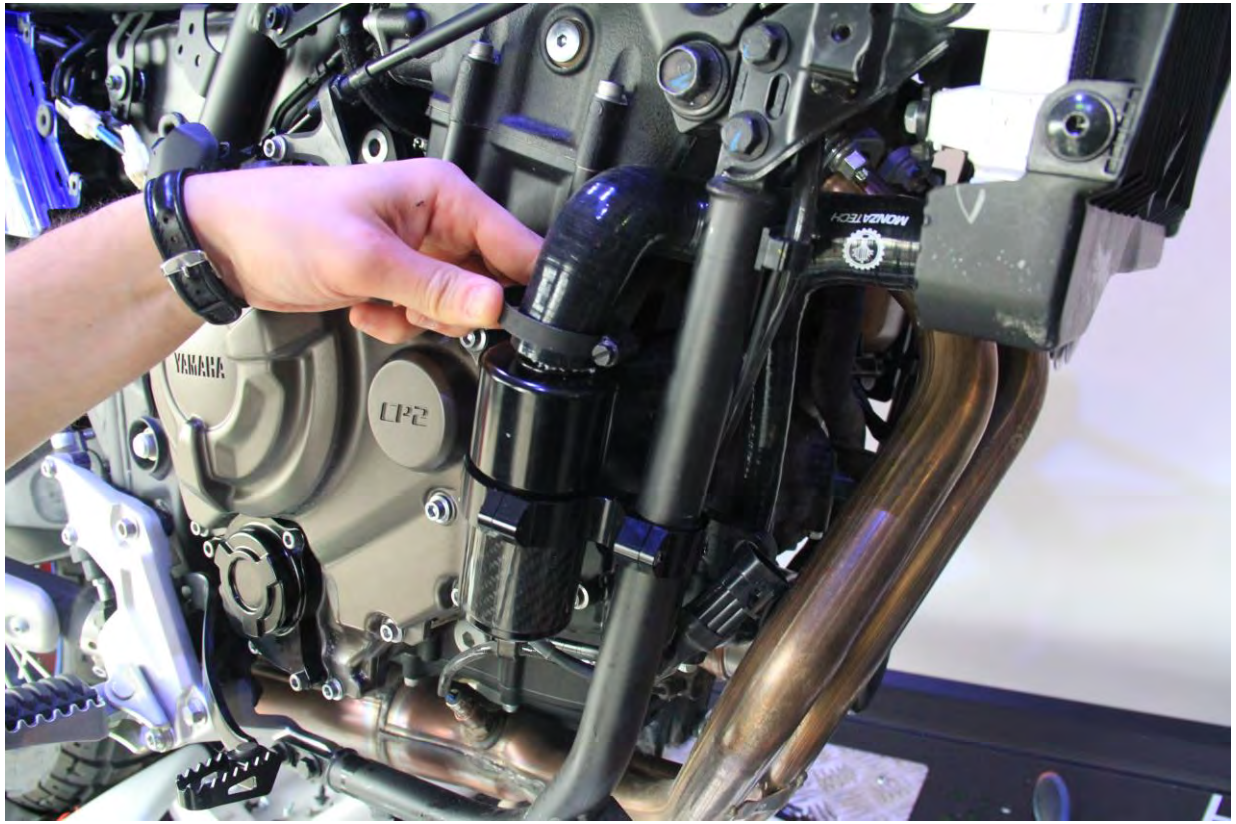
- WE SUGGEST TO PUT THE METAL CLAMP AS SHOWN IN FIGURE TO MAKE EASIER THE TIGHTENING

PATENTED MT PATENTED

MONZATECH'S HOSES PLACEMENT

Intelligent Engine Cooling

- WE SUGGEST TO PUT THE METAL CLAMP AS SHOWN IN FIGURE TO MAKE EASIER THE TIGHTENING



PATENTED MT PATENTED

MONZATECH'S HOSES PLACEMENT

Intelligent Engine Cooling

- WE SUGGEST TO PUT THE METAL CLAMP AS SHOWN IN FIGURE TO MAKE EASIER THE TIGHTENING

PATENTED MT PATENTED

LOAD COOLING CIRCUIT

Intelligent Engine Cooling

- THE COOLING SYSTEM IS NOW COMPLETE AND CLOSED
- BEFORE GO ON LOADING THE SYSTEM WITH COOLANT, MAKE SURE TO HAVE TIGHTEN **ALL** METAL CLAMPS AND BRACKET'S SCREW
- POUR THE COOLANT INTO THE RADIATOR
- WE RECOMMEND TO SQUEEZ A FEW TIMES THE SILICONE HOSE TO LET AIR TO ESCAPE

  ATTENTION: PLEASE REPEAT THIS STEP UNTILL THE COOLANT'S LEVEL INSIDE THE RADIATOR STAY COSTANT
- FULL THE RADIATOR
- CLOSE THE RADIATOR'S CAP AND TIGHT THE SAFETY SCREW

PATENTED MT PATENTED

! ATTENTION !

NEVER TURN ON THE PUMP WITHOUT COOLANT!

THE MECHANICAL SEAL INSIDE THE PUMP ***MUST WORK LUBRICATED***.

Intelligent Engine Cooling

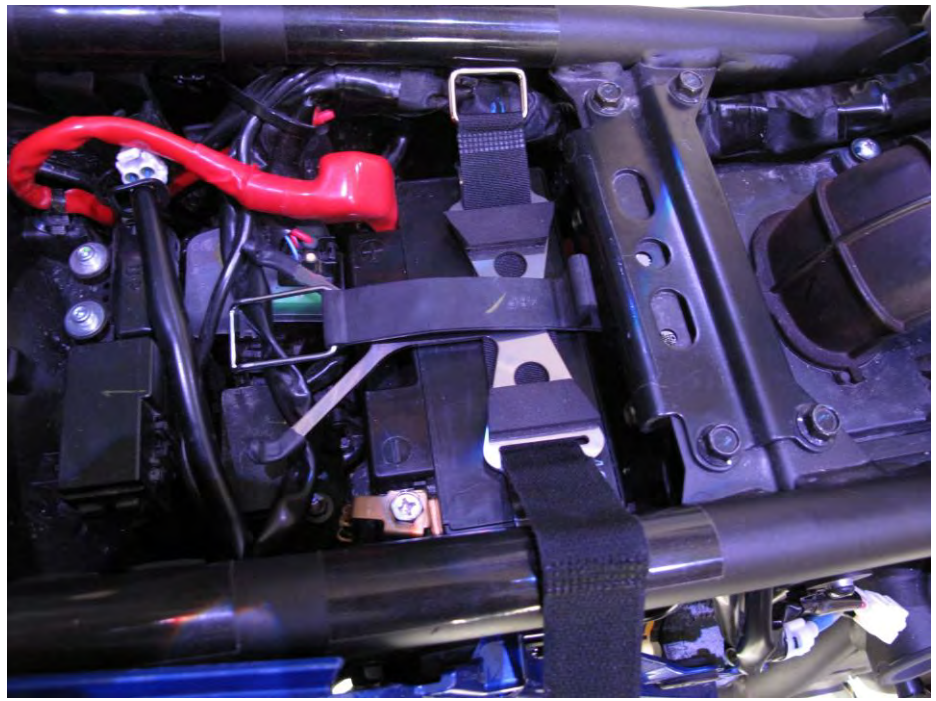
STEP 4

MONZA TECH'S ECU ASSEMBLY

BRACKET PLACEMENT

Intelligent Engine Cooling

- RELEASE THE RUBBER BAND THAT HOLDS THE BATTERY
- PLACE THE BRACKET AS SHOWN IN FIGURE

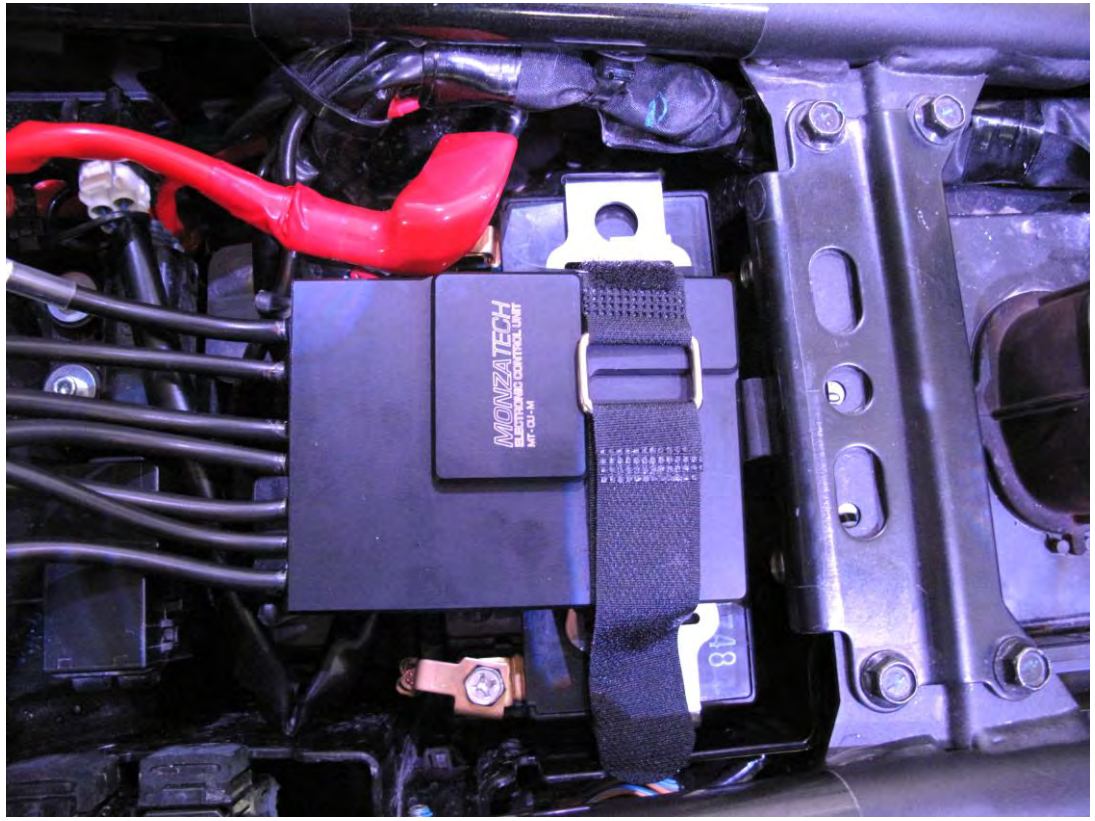


- HANG UP THE RUBBER BAND

MONZATECH'S ECU PLACEMENT

Intelligent Engine Cooling

- PLACE THE ECU AS SHOWN IN FIGURE AND TIGHT THE STRAP TO FIX IT

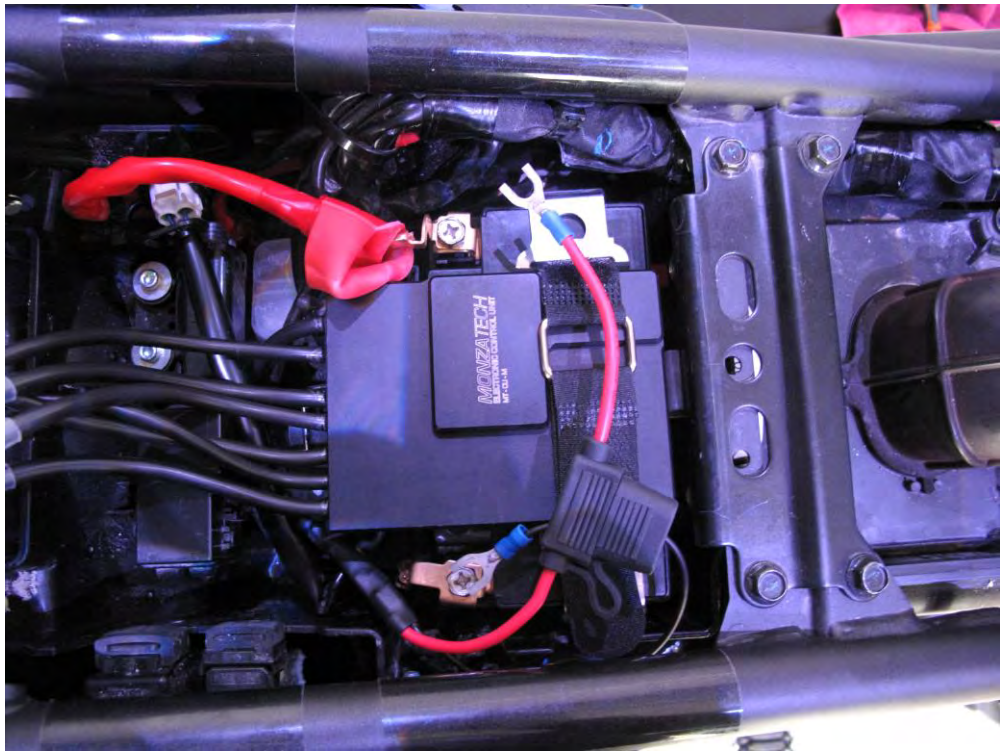


PATENTED MT PATENTED

BATTERY WIRE

Intelligent Engine Cooling

- CONNECT TO TE BATTERY'S POSITIVE POLE THE RED WIRE OF THE LABELED ***BATT*** WIRE
- CONNECT TO TE BATTERY'S NEGATIVE POLE THE BLACK WIRE OF THE LABELED ***BATT*** WIRE

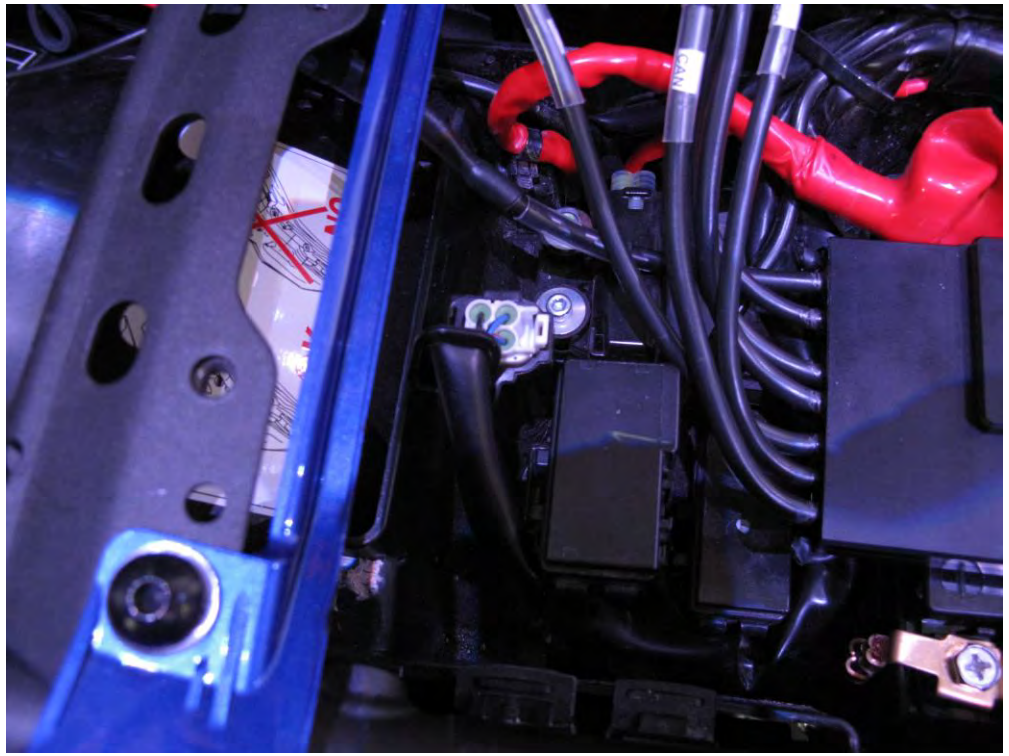


PATENTED MT PATENTED

CAN WIRE

Intelligent Engine Cooling

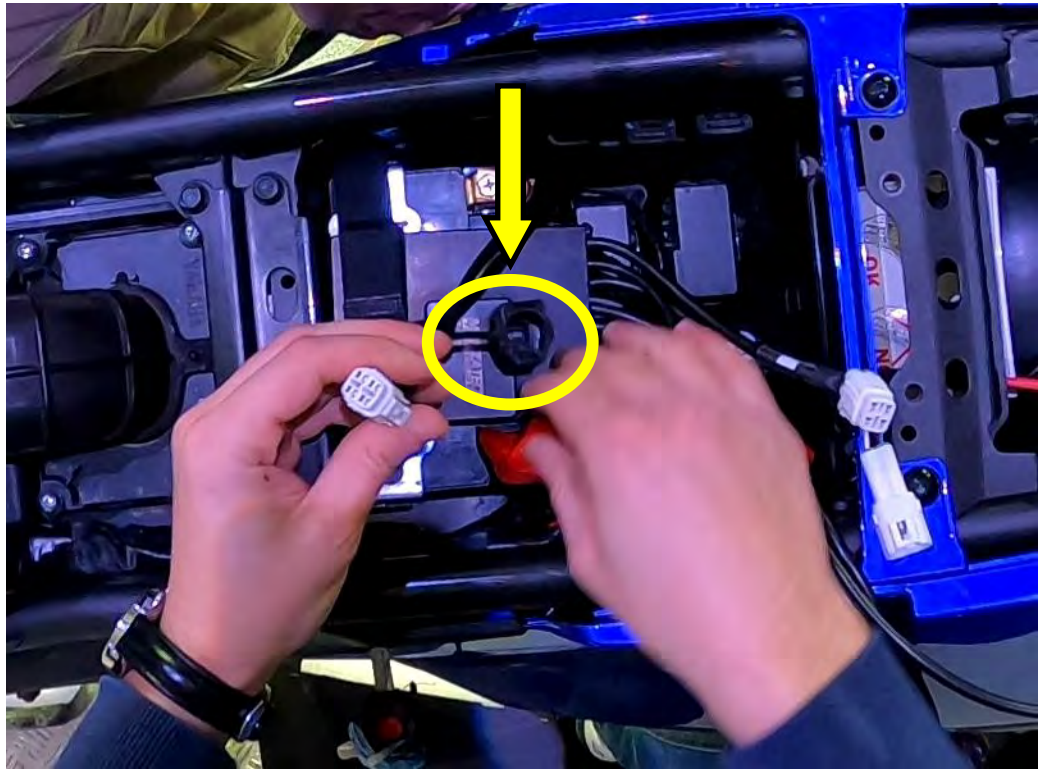
- REMOVE THE DIAGNOSTIC WIRE FROM ITS SEAT

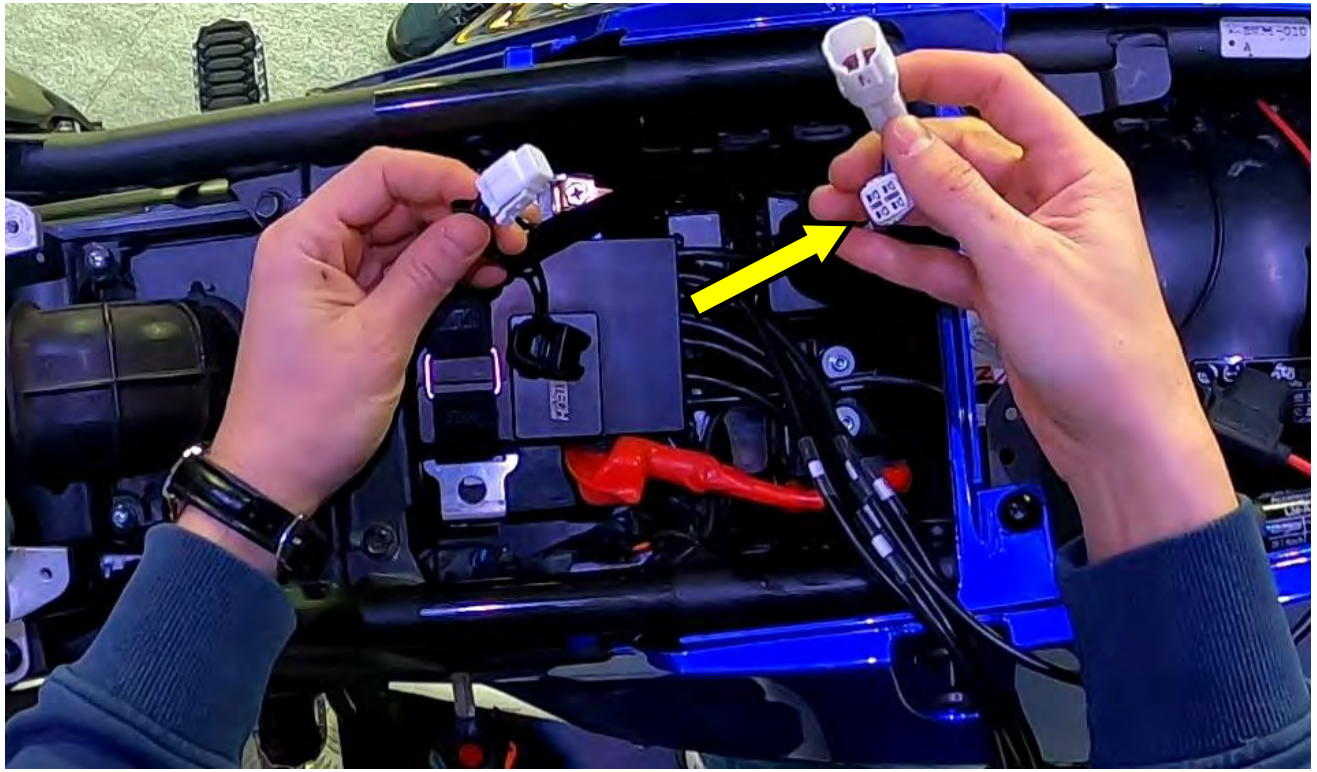


CAN WIRE

Intelligent Engine Cooling

- REMOVE THE RUBBER CAP FROM THE ORIGNAL WIRE AND PLACE IT ON THE SAME CONNECTOR OF THE ***MONZA****TECH'S* WIRE AS SHOWN IN FIGURE

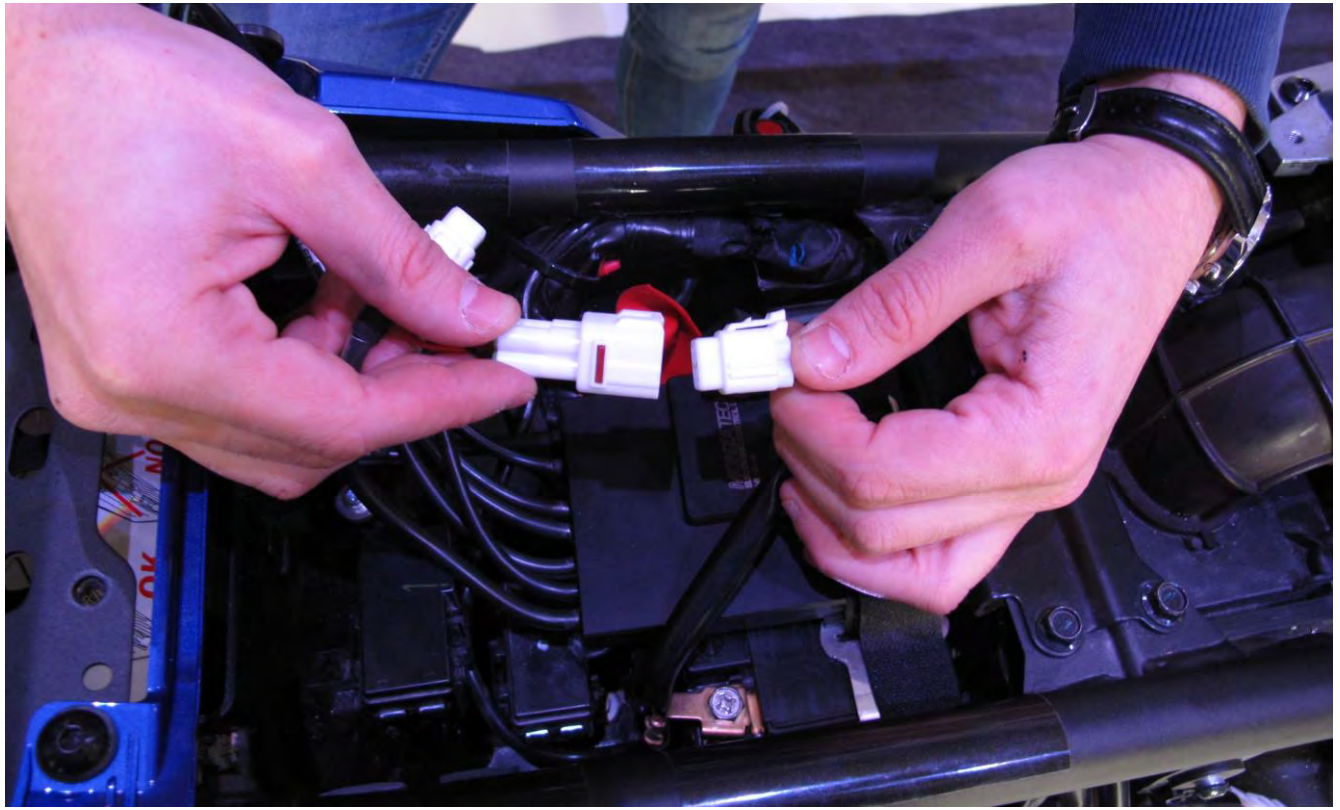




CAN WIRE

Intelligent Engine Cooling

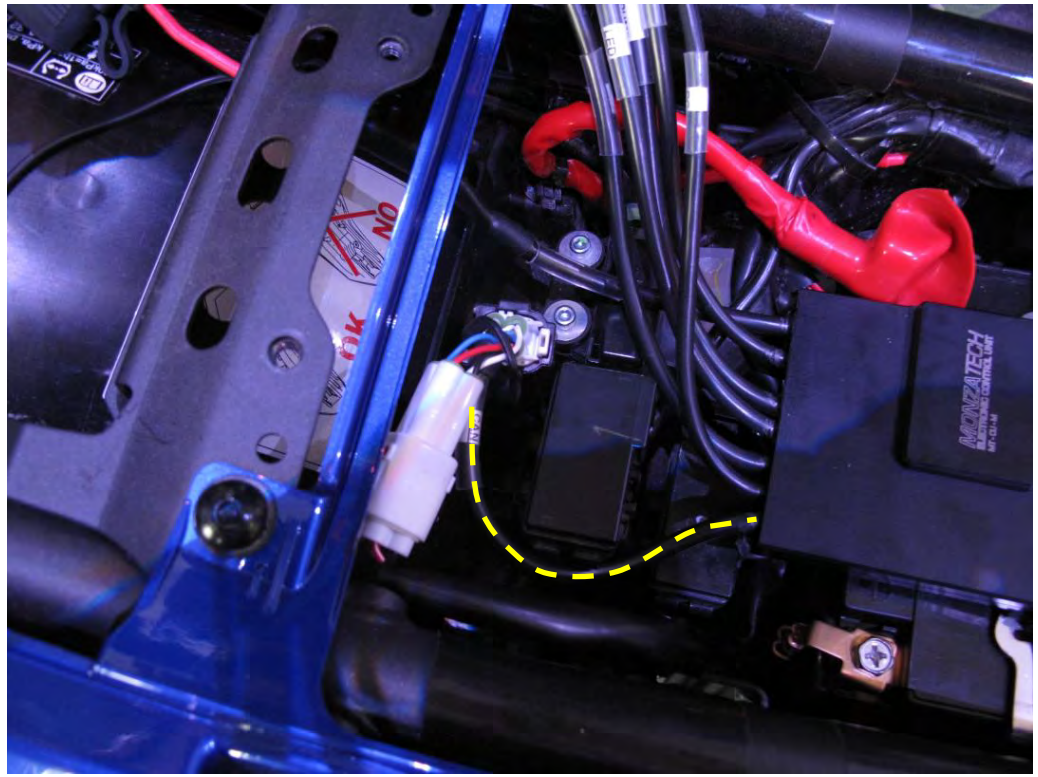
- CONNECT THE ORIGINAL CONNECTOR TO THE ***MONZA****TECH'S* ONE AS SHOWN IN FIGURE



CAN WIRE

Intelligent Engine Cooling

- PUT BACK THE CONNECTOR WITH THE RUBBER CAP IN ITS SEAT AND PUT THE WIRE ON THE RIGHT OF FUSE BOX AS SHOWN IN FIGURE



PATENTED MT PATENTED

CAN WIRE

Intelligent Engine Cooling

- THIS WIRE LET THE **IEC – INTELLIGENT ENGINE COOLING** SYSTEM CONNECTING TO THE BIKE'S ELECTRONIC CONTROL UNIT (ECU).

  THE **IEC** SYSTEM READ TEMPERATURE'S COOLANT DATA VIA CAN-BUS AND USING A SENSOR INCLUDED INTO THE PUMP

  MONZA*TEC'S* ECU PROCESS THE TEMPERATURE'S COOLANT DATA ACQUIRED BOTH ENTERING AND EXITING THE ENGINE, CONTROL BOTH THE PUMP AND FAN TO INCREASE OR DECREASE THE COOLANT AND AIR FLOW TO GUARANTEE THE OPTIMUM TEMPERATURE OF THE ENGINE USAGE.

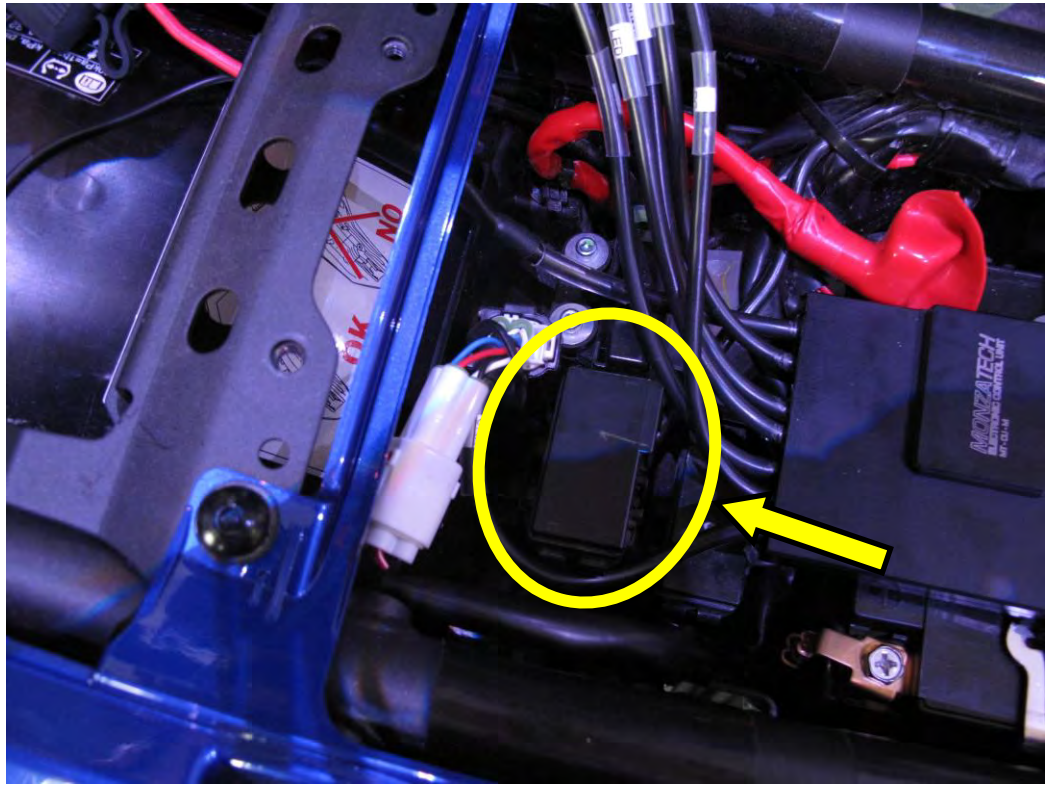
- ***CAN*** CONNECTOR IS SPLIT TO KEEP THE SAME FUNCTIONALITY OF THE ORIGINAL CONNECTOR BOTH FOR THE DIAGNOSTIC AND FOR THE BATTERY CHARGE KEEPER, IF IT HAS THIS FEATURE

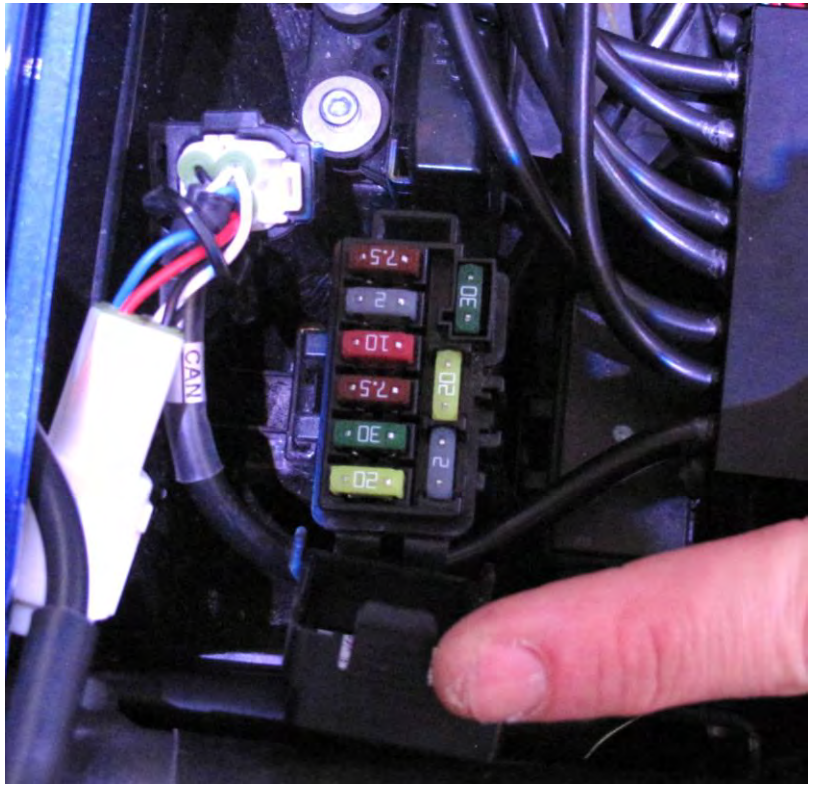
PATENTED MT PATENTED

KEY WIRE

Intelligent Engine Cooling

- OPEN THE FUSE BOX SHOWN IN FIGURE



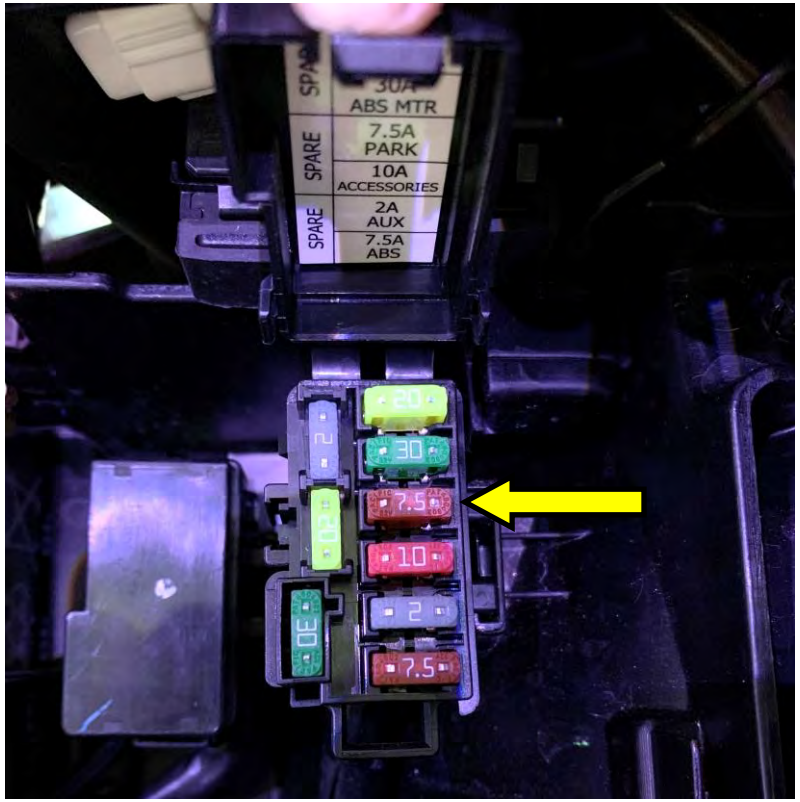


PATENTED MT PATENTED

KEY WIRE

Intelligent Engine Cooling

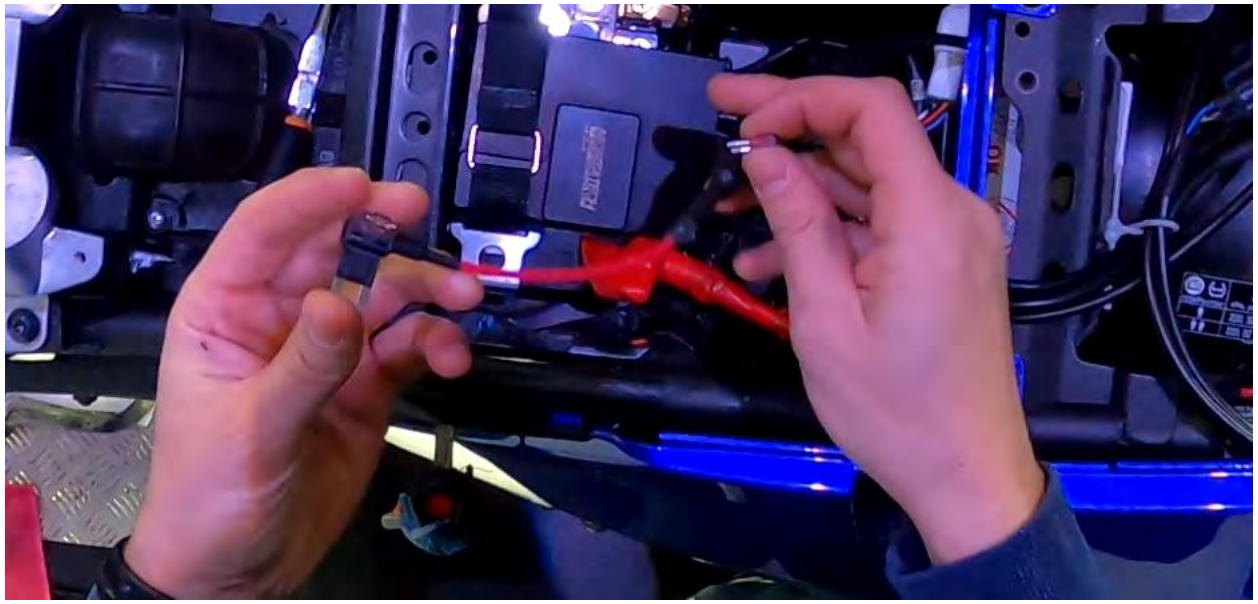
- REMOVE THE 7,5 A FUSE POINTED IN FIGURE

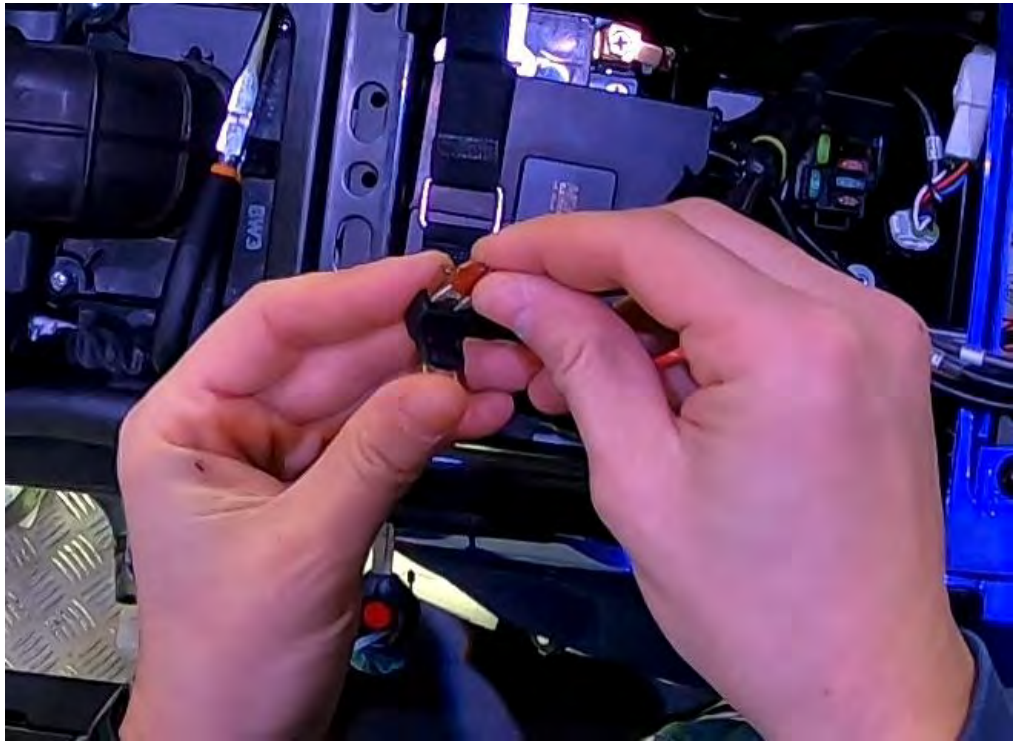


KEY WIRE

Intelligent Engine Cooling

- PUT THE FUSE JUST REMOVED INTO THE TAP FUSE CONNECTED TO THE LABELED ***KEY*** WIRE AS SHOWN IN FIGURE



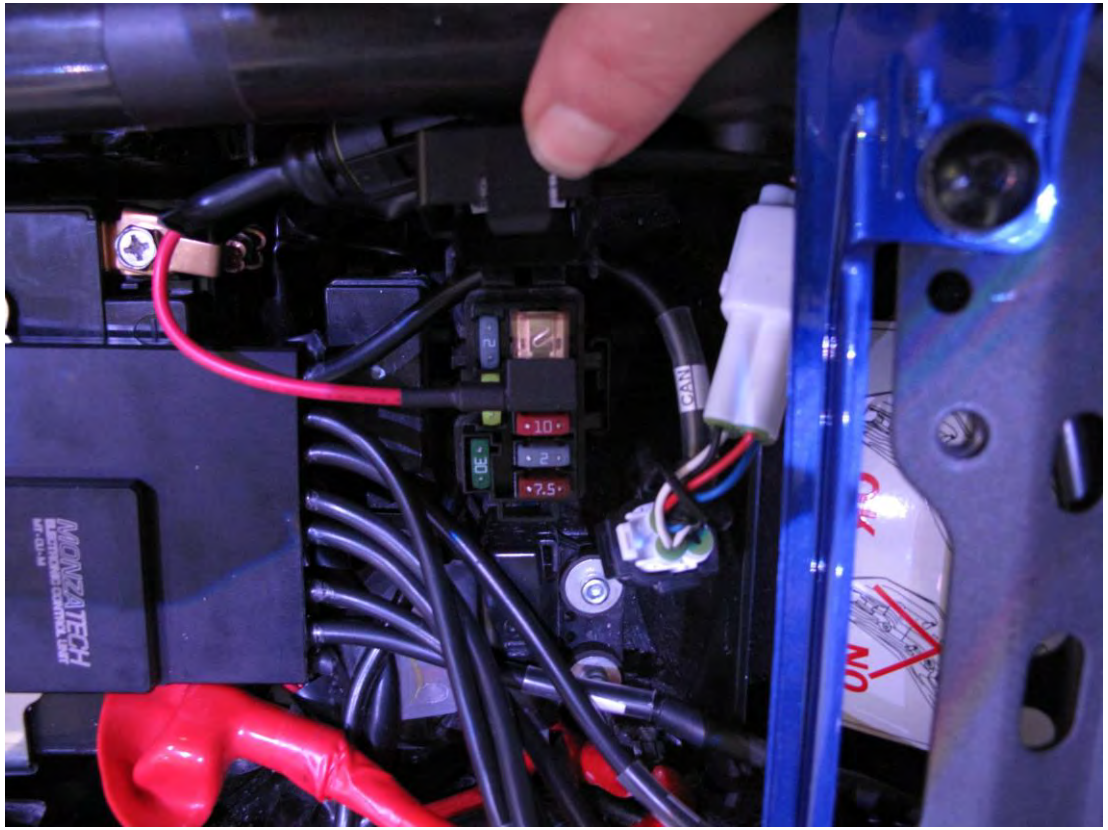


PATENTED MT PATENTED

KEY WIRE

Intelligent Engine Cooling

- AS SHOWN IN FIGURE, PUT THE ***MONZA****TECH'S* TAP FUSE INTO THE SLOT LEFT FREE BEFORE

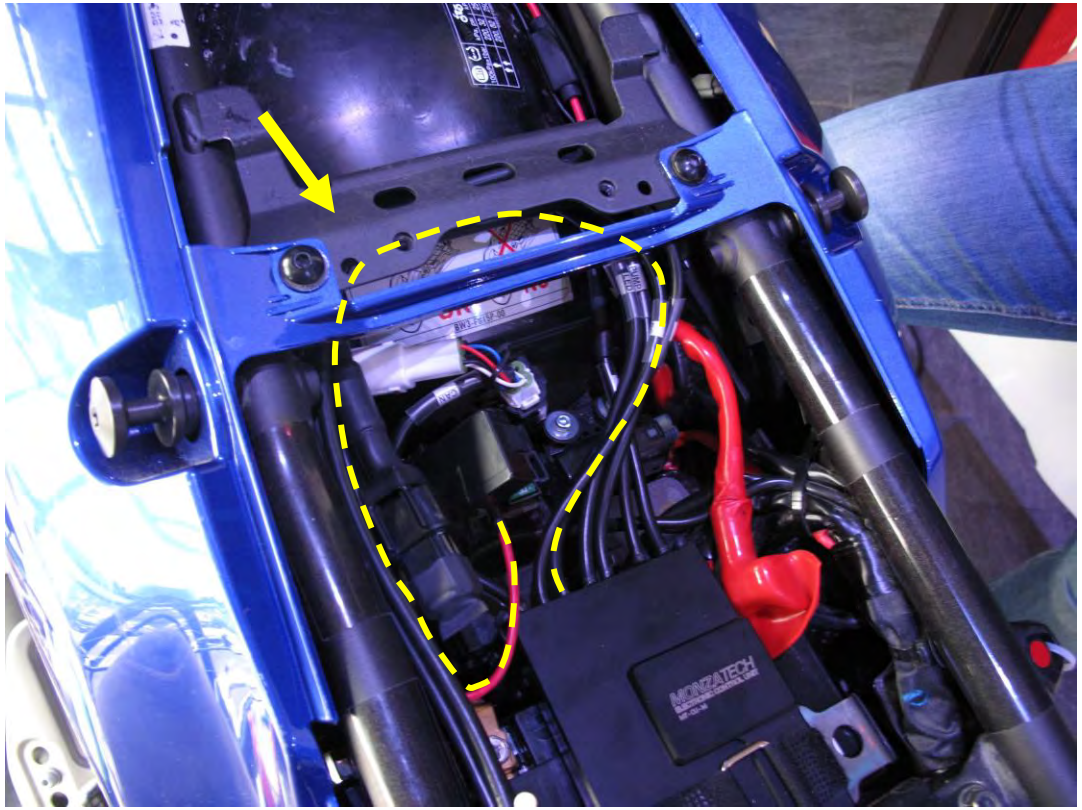


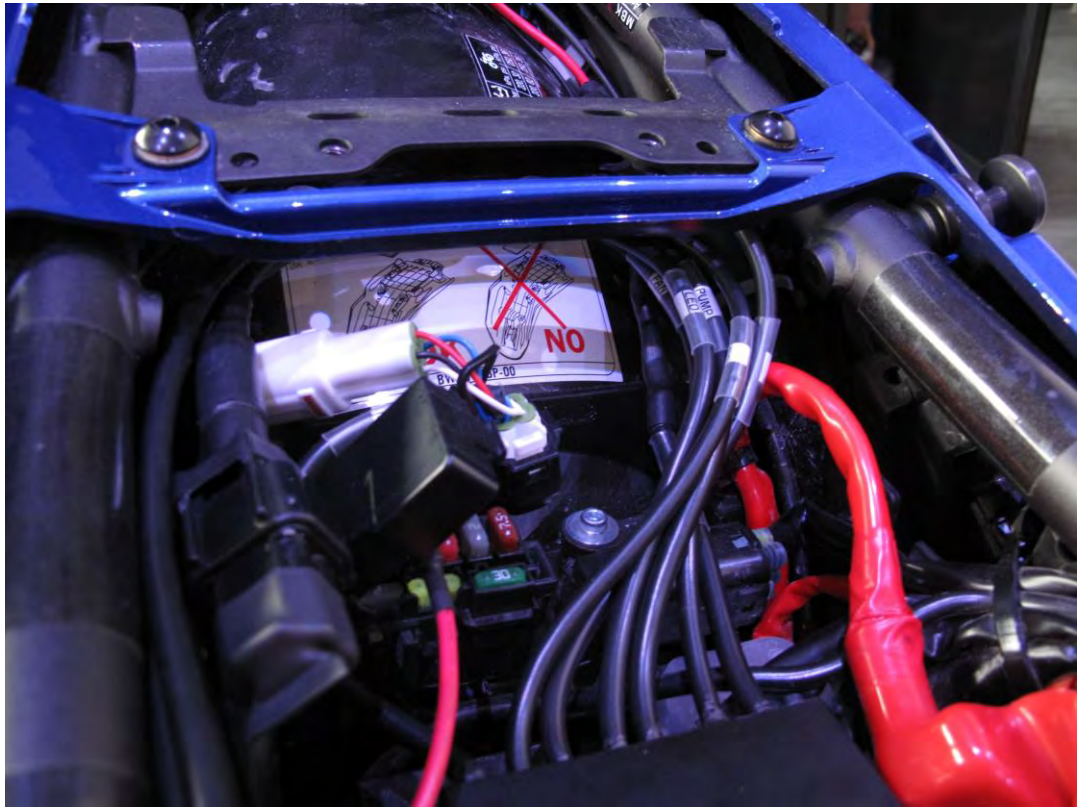
PATENTED MT PATENTED

KEY WIRE

Intelligent Engine Cooling

- PASS THE ***KEY*** WIRE (AND ALL THE OTHER WIRES) INTO THE FRAME REINFORCEMENT SHOWN IN FIGURE



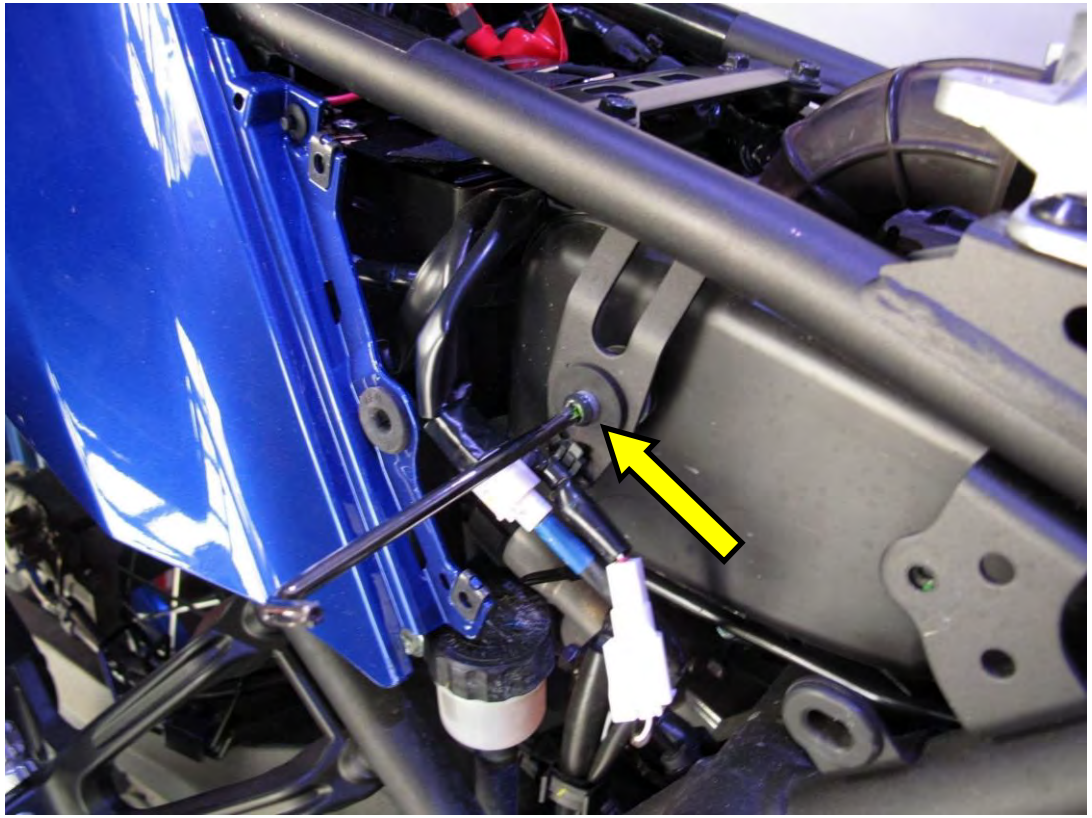


PATENTED MT PATENTED

PUMP WIRE

Intelligent Engine Cooling

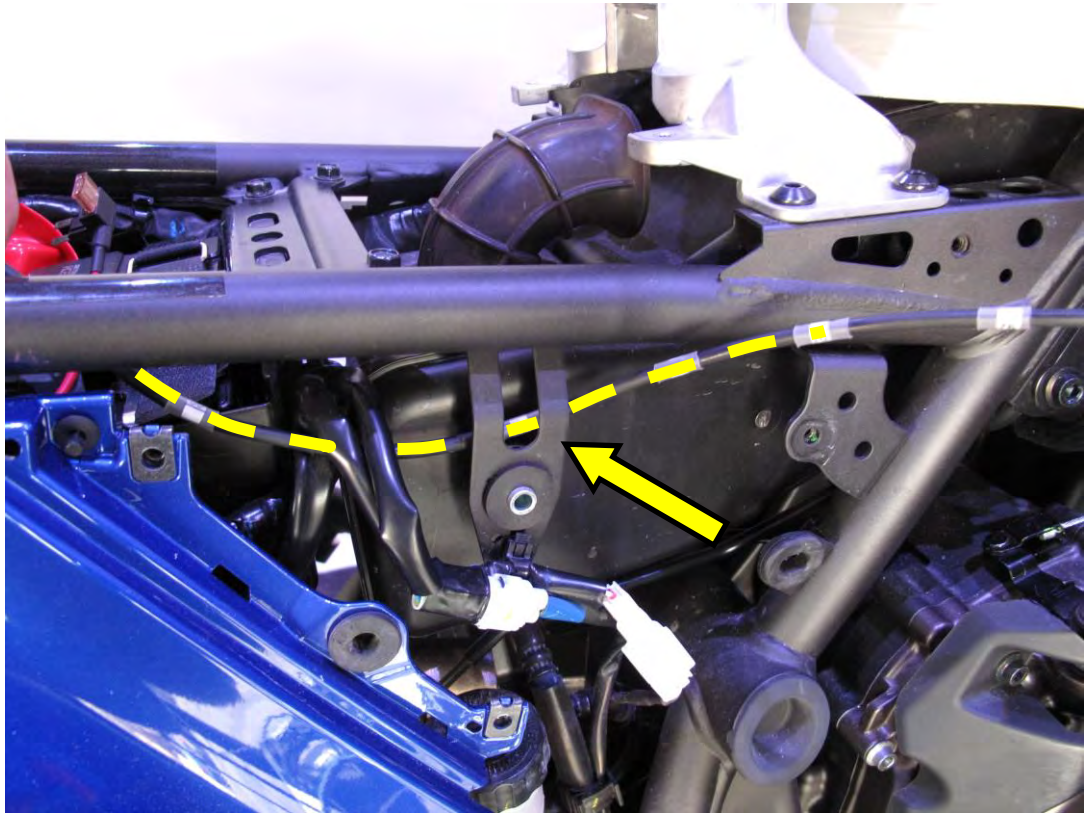
- REMOVE THE SCREW POINTED IN FIGURE

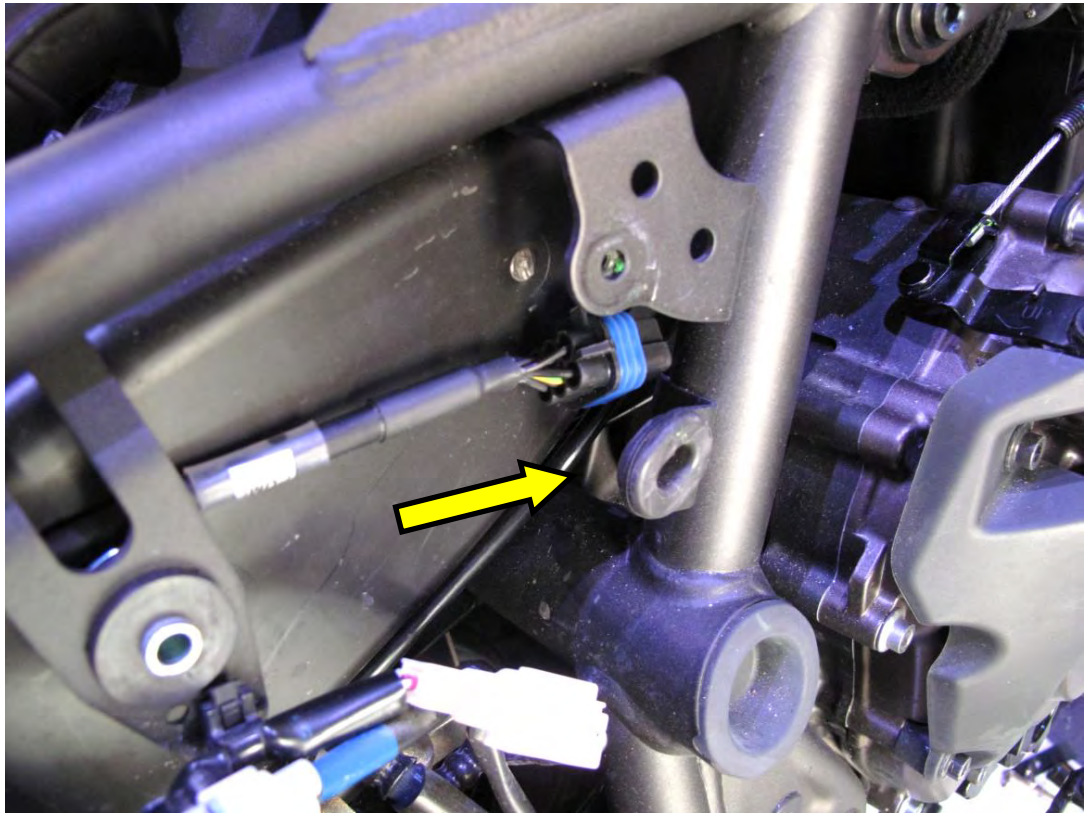


PUMP WIRE

Intelligent Engine Cooling

- PASS THE ***PUMP*** WIRE BEHIND THE POINTED BRACKET AND BETWEEN FRAME AND AIR BOX AS SHOWN IN FIGURE



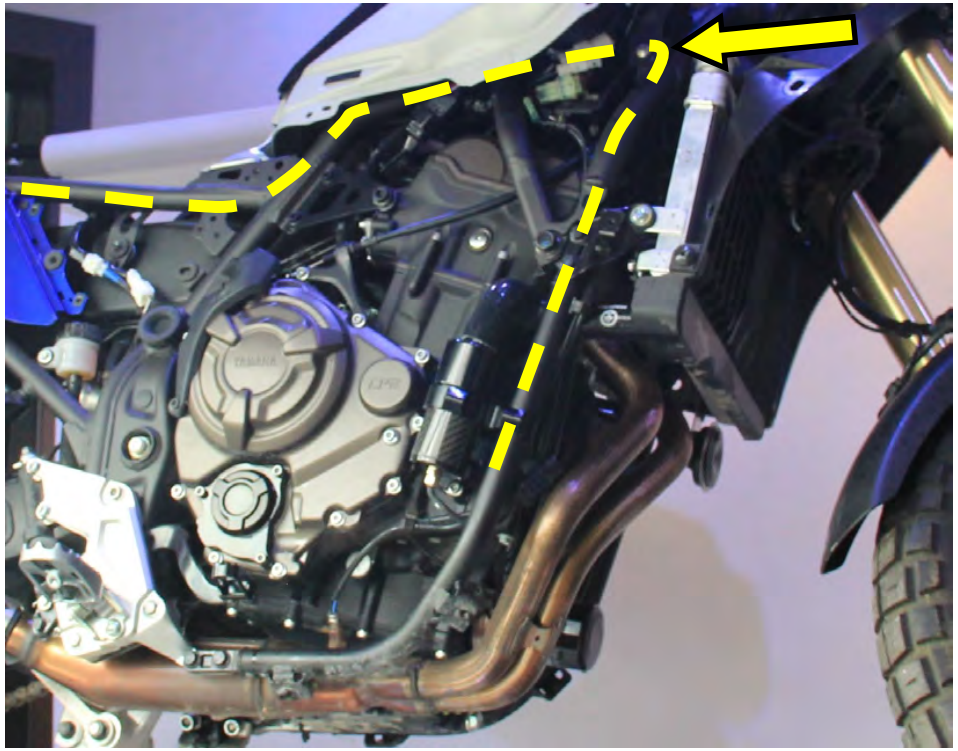


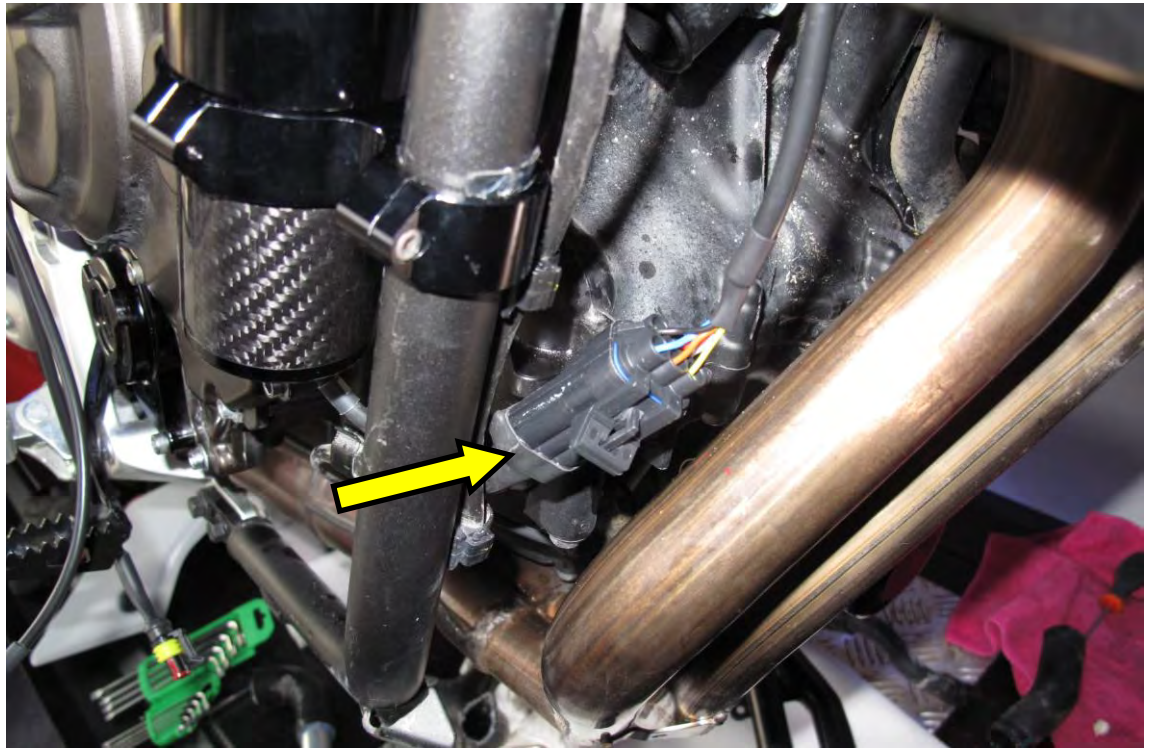
PATENTED MT PATENTED

PUMP WIRE

Intelligent Engine Cooling

- FOLLOW THE FRAME WITH THE ***PUMP*** WIRE AS SHOWN IN FIGURE AND CONNECT IT TO THE PUMP'S CONNECTOR





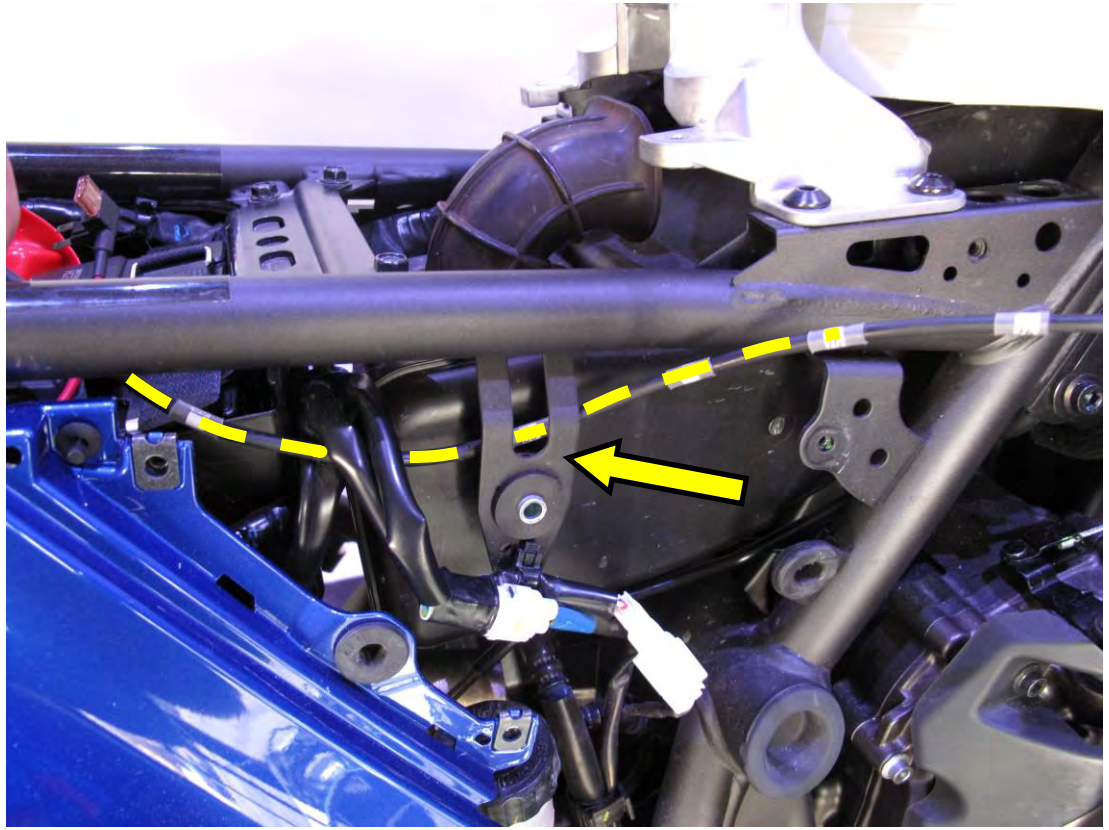
- USING TIE, FIX THE WIRE TO THE FRAME TILL THE POINT SHOWN IN THE FIRST PICTURE

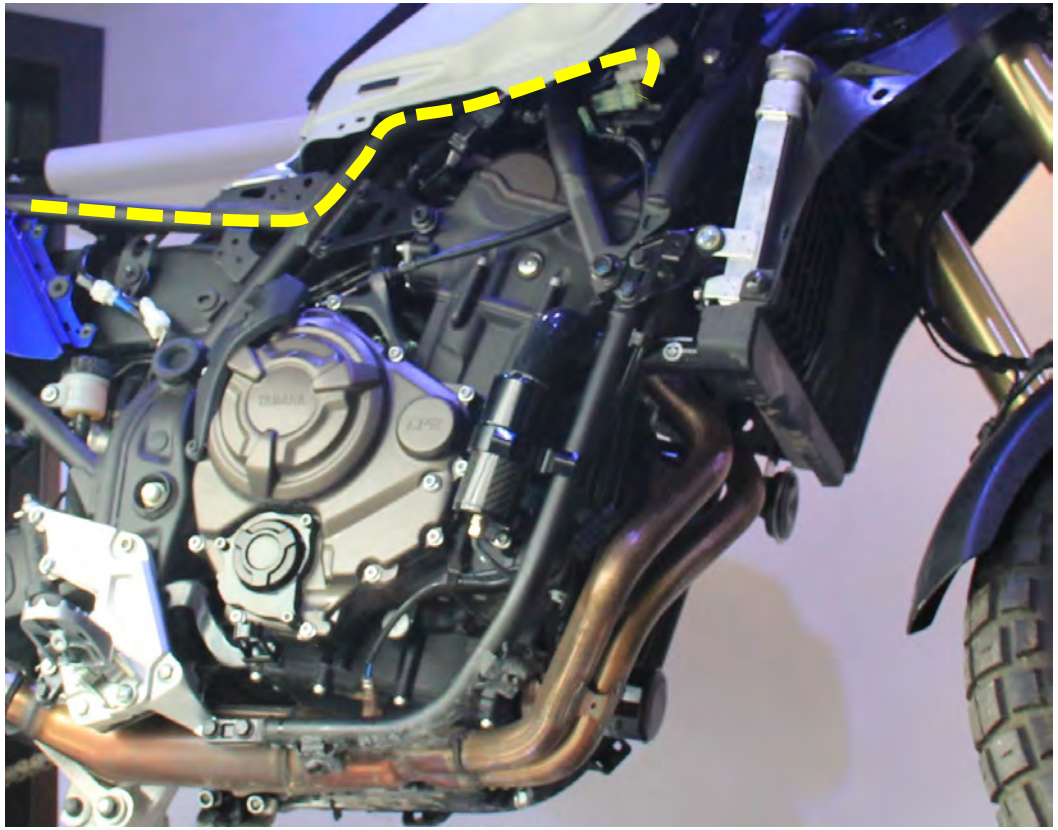
PATENTED MT PATENTED

FAN WIRE

Intelligent Engine Cooling

- PASS ***FAN*** WIRE LIKE THE ***PUMP*** ONE

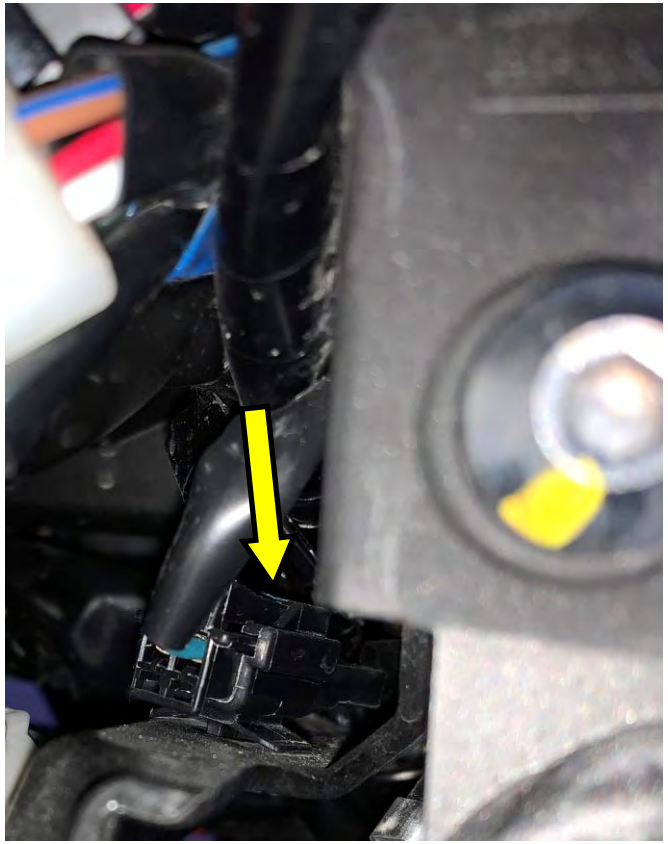


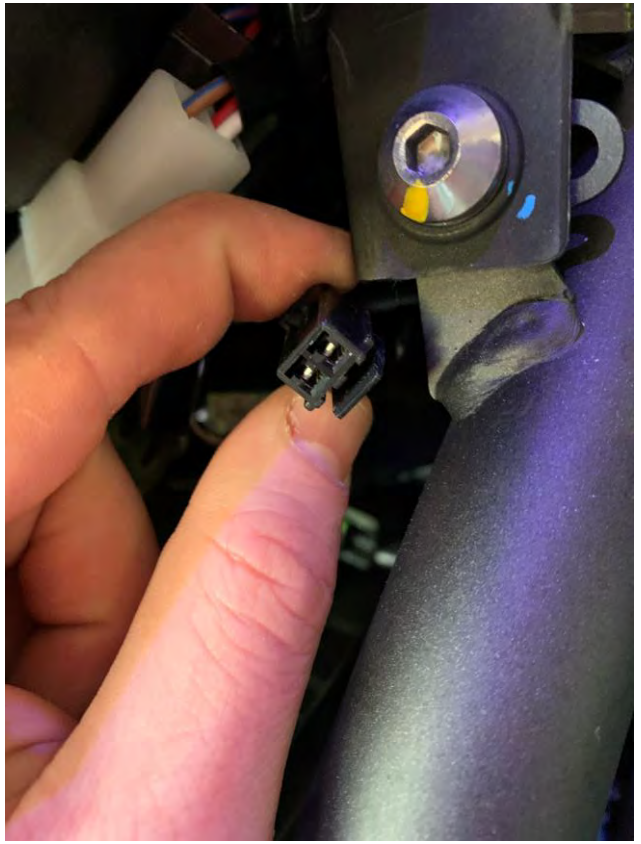


FAN WIRE

Intelligent Engine Cooling

- UNPLUG THE FAN'S CONNECTOR SHOWN IN FIGURE

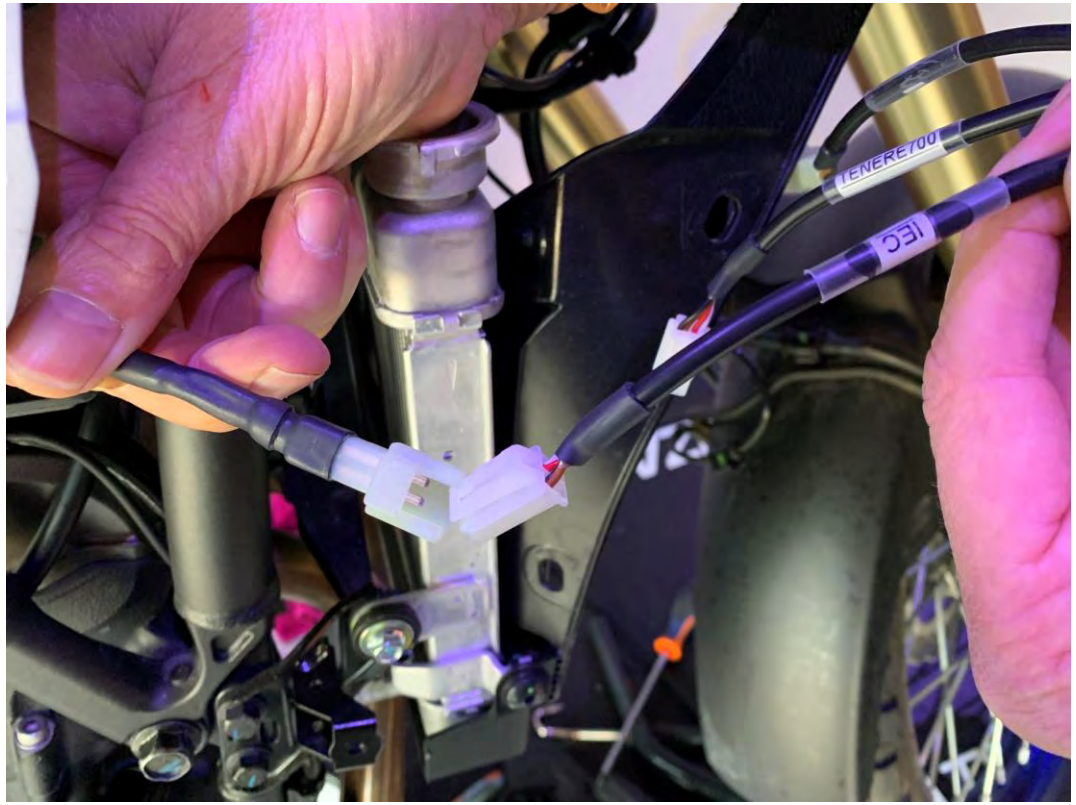




FAN WIRE

Intelligent Engine Cooling

- PLUG IN THE ***IEC*** WIRE OF THE RELÈ TO THE LABELED ***FAN*** WIRE OF ***MONZA****TECH'S* ECU AS SHOWN IN FIGURE



PATENTED MT PATENTED

FAN WIRE

Intelligent Engine Cooling

- PLUG THE ***FAN*** WIRE OF THE RELÈ TO THE WIRE EXITING FROM THE FAN'S BIKE AS SHOWN IN FIGURE

PATENTED MT PATENTED

FAN WIRE

Intelligent Engine Cooling

- CONNECT THE LABELED ***TÉNÉRÉ700*** WIRE OF THE RELÈ TO THE ORIGINAL IGNITION FAN'S WIRE (ONLY CONNECTOR LEFT FREE)

PATENTED MT PATENTED

FAN WIRE

Intelligent Engine Cooling

- FIX THE RELÈ WITH A TIE USING THE HOLE ON ITS BRACKET AS SHOWN IN FIGURE

PATENTED MT PATENTED

LED WIRE

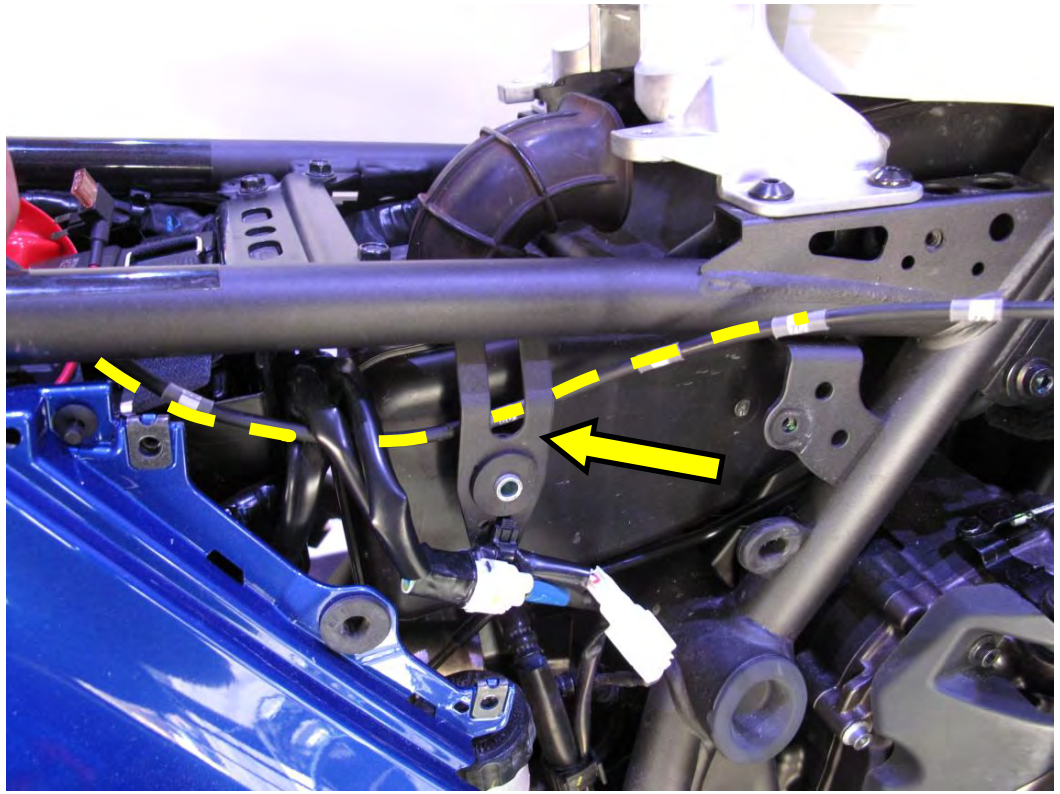
Intelligent Engine Cooling

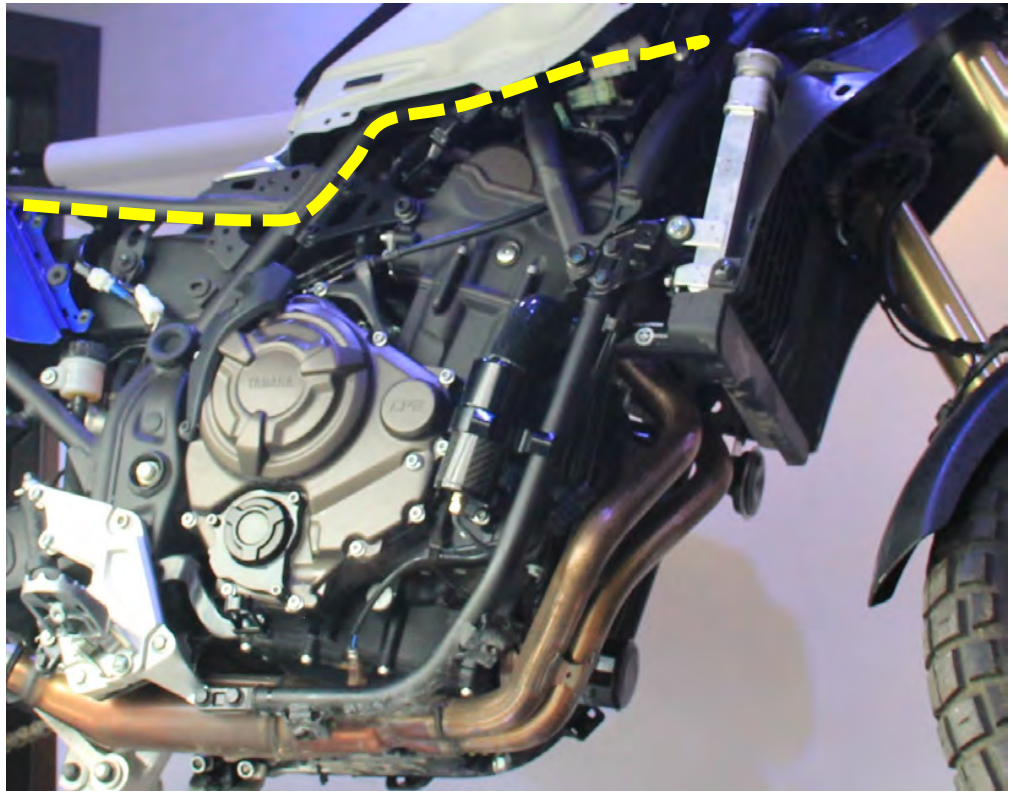
- UNPLUG THE PART SHOWN IN FIGURE TO AVOID DAMAGES

LED WIRE

Intelligent Engine Cooling

- PASS ***LED*** WIRE LIKE THE ***PUMP*** ONE



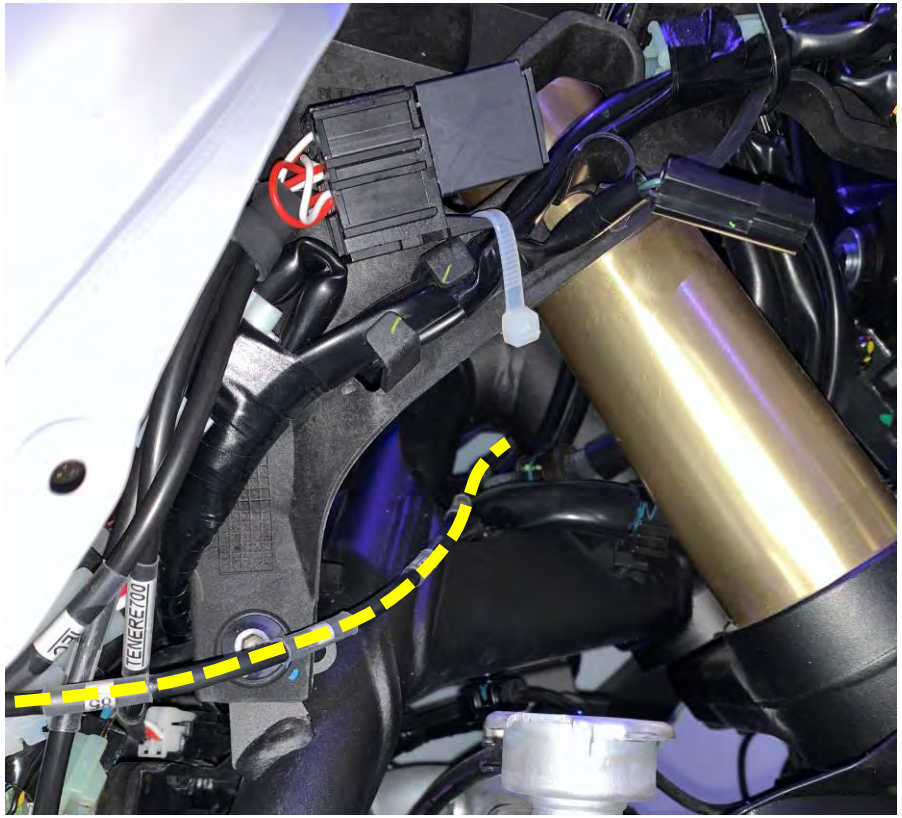


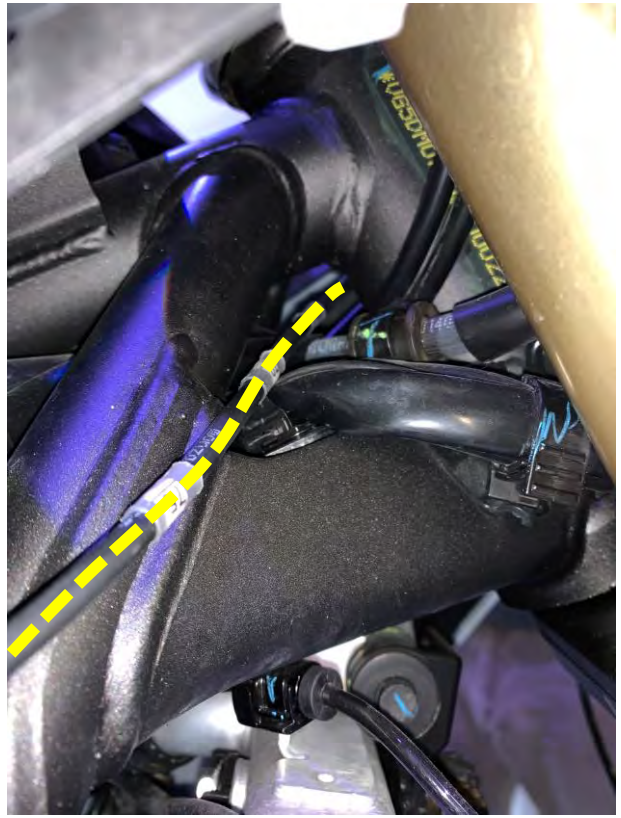
PATENTED MT PATENTED

LED WIRE

Intelligent Engine Cooling

- PASS THE LABELED ***LED*** WIRE THROUGH THE FRAME AS SHOWN IN FIGURE





PATENTED MT PATENTED

LED WIRE

Intelligent Engine Cooling

- PLUG IN BACK THE PART REMOVED BEFORE

PATENTED MT PATENTED

LED WIRE

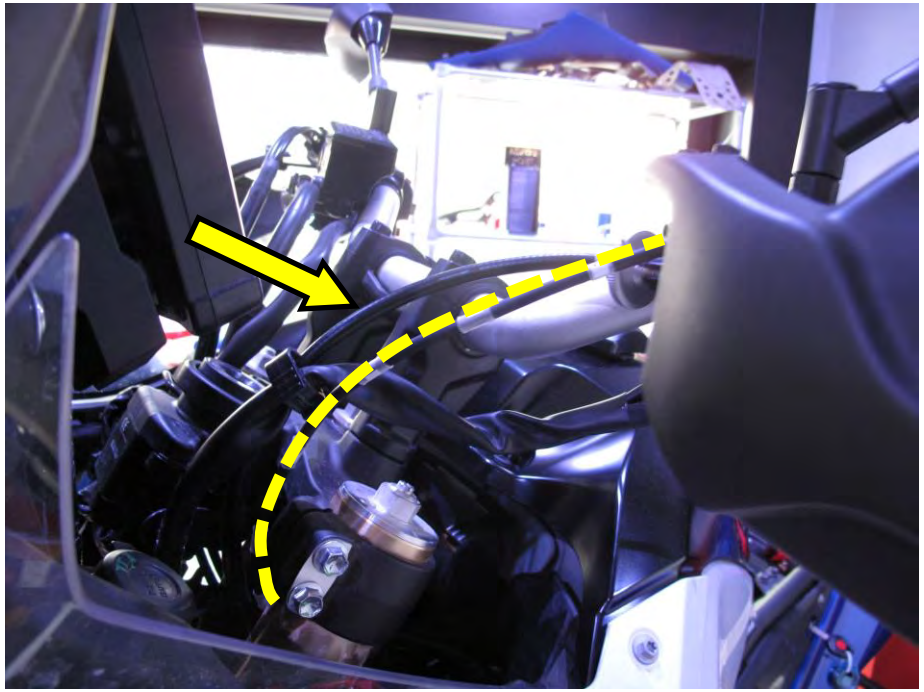
Intelligent Engine Cooling

- FIX THE LED'S BRACKET TO THE HANDLEBAR SO THAT THE LIGHT COULD BE EASILY SEEN FROM THE BIKER

LED WIRE

Intelligent Engine Cooling

- USING TIE, FIX THE ***LED*** WIRE TO THE CLUTCH ONE AS SHOWN IN FIGURE



LED WIRE

Intelligent Engine Cooling

- DIAGNOSTIC:
  - GREEN: SYSTEM WORKS FINE
  - RED: WARNING!

IN CASE OF MALFUNCTION OF THE **IEC – INTELLIGENT ENGINE COOLING** SYSTEM, THE COOLING SYSTEM OF THE BIKE COMES BACK TO WORK AS THE ORIGINAL ONE EX FACTORY.

ASSEMBLY ALL THE FAIRINGS

Intelligent Engine Cooling

PATENTED MT PATENTED

Intelligent Engine Cooling

STEP 5

ENJOY YOUR RIDE!

MONZATECH

THE NEW WAY OF COOLING