

### Details of the session

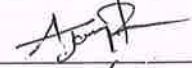

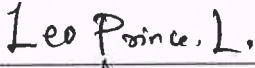
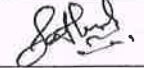
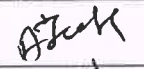
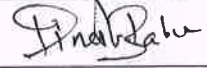

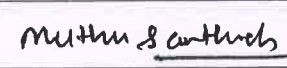
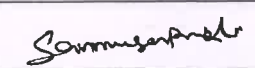
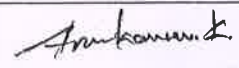
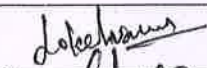
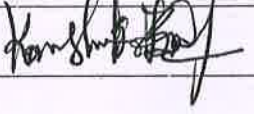
Date: 12.07.2022


Time: 10.00 AM to 5.00 PM

Venue: Ford Research Laboratory (C- Block Ground Floor)

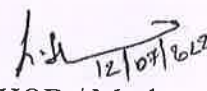
Resource Person: Mr. Shiek Dawood, Ford India Pvt. Ltd., Chennai.


Student Name List

S.No	Reg. No	Name of the Student	Signature
1	922119114001	AJAY K	
2	922119114008	BARATH S	
3	922119114018	LEO PRINCE L	
4	922119114037	SATHISH .A	
5	922119114301	AJEEETH G	
6	922119114302	DINESH BABU S	
7	922120114008	JAIKUMAR PANDIAN J	
8	922120114017	MUTHU SANTHOSH M.S	
9	922120114026	SANMUGAPANDI M	
10	922120114303	ARUN KANNAN K	
11	922120114314	LOKESH VARMA D	
12	922120114313	KOWSHIK BALAJI S	

  
Faculty In-charge 12/7/2022  
M. PRABAKARAN



  
HOD / Mech

  
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POCO  
SHOT ON POCO X2



POCO  
SHOT ON POCO X2



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2021



## Engine data

En gin e	Po we r (PS )	CO 2 (g/k m)	Fuel consumption l/100 km (mpg) ØØ			Performance Ø		
			Urba n	Ext ra Urb an	Combi ned	Max speed kph (mph)	0-100 kph 0-62 mph (sec)	50-100 kph 31-62 mph (sec)*
1.0-litre EcoBoost (5-speed manual)	125	125	6.6 (42.8)	4.7 (60.1)	5.4 (52.3)	180 (112)	12.7	12.8

1.0-litre EcoBoost (125PS)		
Type		Inline three cylinder turbo petrol direct fuel injection and Ti-VCT, transverse
Displacement	cm <sup>3</sup>	999
Bore	mm	71.9
Stroke	mm	82.0
Compression ratio		10.0:1
Max power	PS (kW)	125 (92)
	at rpm	6000
Max torque	Nm	170
	at rpm	1400-4000
Valve gear		DOHC with 4 valves per cylinder, twin independent variable cam timing
Cylinders		3 in line
Cylinder head		Cast aluminium
Cylinder block		Cast iron
Camshaft drive		Low friction Belt-in-Oil with



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		dynamic tensioner
Crankshaft		Cast iron, 6 counterweights, 4 main bearings
Engine management		Bosch MED17 with CAN-Bus and individual cylinder knock control. FGEC Software
Fuel injection		High pressure direct fuel injection with 6 hole Injectors
Emission level		Euro Stage 6
Turbocharger		Continental low inertia Turbo
Lubrication system		Electronically controlled variable displacement oil pump for improved fuel Economy
System capacity with filter	litres	4.1
Cooling system		Split cooling system with 2 thermostats
System capacity incl heater	litres	5.5
Transmission		Durashift 5-speed (iB5) Manual
Gear ratios		
		5th 0.756 4th 0.951 3rd 1.281 2nd 1.926 1st 3.583 Reverse 3.615 Final Drive 4.25



*Handwritten signature in green ink.*

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Ex.no-1:

## SWING GATE- TRIM BOARD

Aim:

To disassemble and assemble the SWING GATE- TRIM BOARD of Ford EcoSport

Components of Swing Gate:

Swing gate latch, Rear wiper, spare wheel, gas damper, CHM light, Tail light.

Apparatus required:

3/2 bit, extension, Ratchet

Precaution:

Keep your body position away from edges of swing gate.

Place and identify the screw locations (Do not miss any spare).

While re assembling the part, the last step of disassemble should be done for assembling as first step.

Procedure:

Step 1: Identify the two screw on the bottom side of trim board on swing gate, with the help of 3/2 bit un screw.

Step 2: Remove the trim board manually using hands by pulling the trim board towards to you. (medium manual energy should be applied)

Step3: Now assemble the trim board properly matching holes in swing gate. Then manually press the trim board with medium energy.

Step 4: Now lock the screw with the help of 3/2 bit.

Result:

Yes, you have successfully disassembled and assembled the Trim board. Trim board is used to hide the electrical wiring and components for wiper, latch lock and tail lights.



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Ex.no-2:

## SWING GATE - SPARE WHEEL

Aim:

To remove and to replace SPARE WHEEL from Ford EcoSport

Components:

17 inch alloy wheel

Tools:

17mm wheel nut remove special tool

Precaution :

Lock the swing gate while removing the spare wheel.

Place and identify the screw locations (Do not miss any spare). Unscrew or tighten the screw evenly in opposite direction.

While re assembling the part, the last step of disassemble should be done for assembling as first step.

While replacing the spare wheel air inlet valve should be positioned upward.

Procedure:

Step1: First unlock the Lock found bottom side Spare wheel cover and then remove the spare wheel cover.

Step 2: Using spanner remove the RTL nuts , while removing the nuts unscrew equally on opposite direction. Now place the wheel alloy facing upward under the car.

Step 3: Now un screw (just below middle) the Other side of spare wheel cover and remove it.

Step 4: Now unscrew with the help of 14 inch socket using torque wrench evenly on onside of bracket, Now find another screw behind the trim board of sing gate using deep socket remove it.

Step 5: hence the bracket is removed, now fix it following the steps in reverse order.

Result:

Spare wheel setup is completely removed and assembled. Spare wheel is placed rear of swing gate for more boot space and act as Bumper for Suv vehicle.



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Ex.no:3

## SWING GATE – WIPER MOTOR

Aim:

To Remove rear wiper motor of Ford Ecosport

Components:

Wiper Blades.

Precaution:

Place and identify the screw locations  
(Do not miss any spare).

Before re assembly the wiper run the wiper motor and off at initial position, check for the marking. While screwing the wiper blade place the blade on black colour dot on the rear glass marking and then screw it.

Aratus required:

Ratchet

Procedure:

Step 1: Remove the plastic lock of the rear wiper blades and now un screw the 13mm nuts.

Step 2: Then behind Trim board find wiper motor and now unscrew 8 mm nut, Equally on three positions

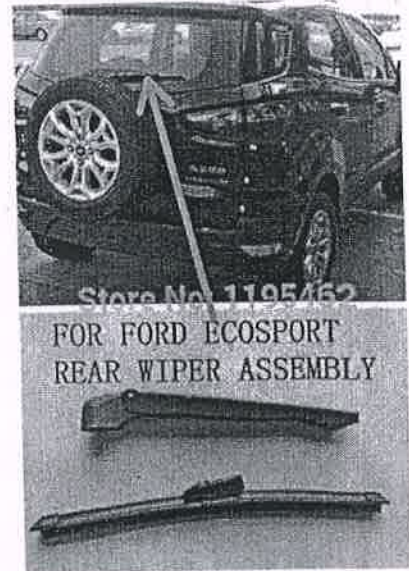
Step 3: now remove the electrical coupler by pressing the lock in the coupler.

Step 4: re assembly follow reversing the steps

Step 5: after reassembly now check the rear wipers working.

Result:

Rear wiper blade and motor are disassembled and fixed. Rear wiper are used remove mist and clear view due cold and raining climate.



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Ex.no:4

## SWING GATE – TAIL LAMP

Aim :

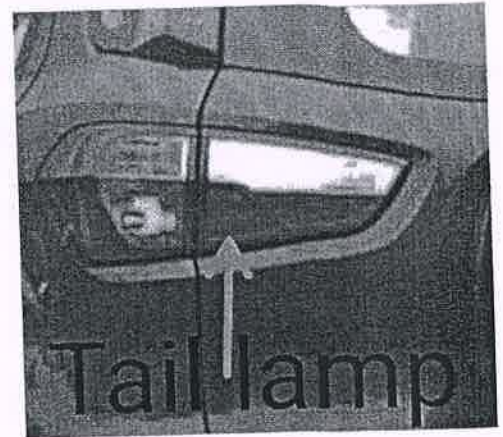
To remove tail lights of Ford EcoSport.

Components:

Turn lights , Break lights

Precaution:

Place and identify the screw locations (Do not miss any spare).



Procedure:

Step1: Under right hand side of boot rear to tail light you can find a small projection for opening , inside you can find a stem using one rupee coin like materials unscrew it.

Step 2: Now unscrew near left side of right tail lights on two positions.

Step 3: Then disconnect the electrical couplings.

Step 4: Now remove the tail light by adjusting the v corner of the tail light and remove it.

Step 5: For left tail light there will be two stem rear to the tail light now unscrew it.

Step 6: now disconnect the electrical couplings

Step 7: now remove the tail light by adjusting the v corner of the tail light and remove it

Step 8: reassemble follows reverse procedure.

Step 9: Now check the electrical light components.

Result:

Tail lights are removed and replaced. Tail lights are used to indicate to make vehicle stop or turn.



  
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