

Details of the session

Date: 18.12.2019

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	922116114001	ABDUL RAHMAN S	Abdul Rahman S
2	922116114006	AMAR JOTHI B	Amar Jothi B
3	922116114014	GOBINATH V	V. Gobinath
4	922116114015	GOKUL M	Gokul M
5	922116114022	HARI VIGNESH G	Hari Vignesh G
6	922116114028	JOTHIMURUGAN K	Jothimurugan K
7	922116114032	KARTHICKEYAN A P	Karthickeyan A P
8	922116114034	KARUNAKARAN R	Karunakaran R
9	922116114036	KAVIARASU K	Kaviarasu K
10	922116114046	MUTHURAJA S	Muthuraja S
11	922116114055	PRAKASH B	Prakash B
12	922116114061	RAMKUMAR M	Ramkumar M

M. P. [Signature] 18/12/2019
Faculty In-charge

[M. PRABHAKARAN]



[Signature] 18/12/2019
HOD / Mech

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal

SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002



Dr.D.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal

SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Paian Road, Dindigul 624 002

EX. NO:1 REMOVAL OF HEAD LAMP



AIM:

To remove the front faced head lamp from the Ford ecosport.

TOOLS REQUIRED:

T30 mm bit, screw driver.

PROCEDURE:

At first open the bonnet of the car.

Then remove the push clip on the both side that was placed near to the head lamp.

By using screw driver we can remove that bumper push clip.

Then remove the two holding screw of the head lamp.

Then remove the push clip plug that supplies power to the whole head lamp.

After that remove the retainer clip that holding the whole wiring setup of the head lamp.

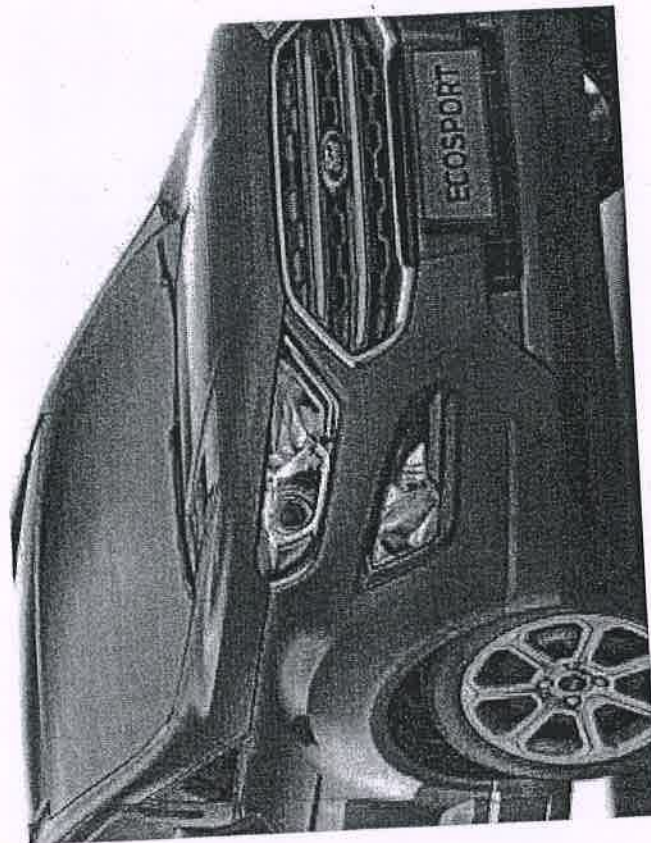
Then gently hold the hands over the head lamp and pull upwards. Due to this process the head lamp will remove from its projection.

Do this process in reverse process to place the head lamp at the correct position.

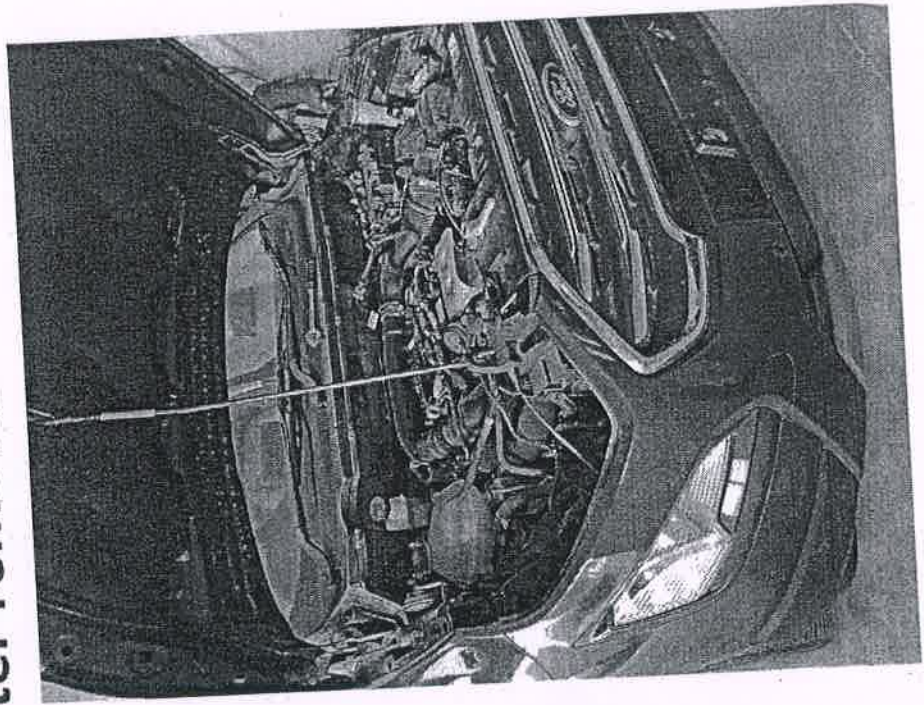
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Head lamp removal

Before removal of head lamp



After removal of head lamp



Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

R.R.

EX. NO:2 REMOVAL OF AIR CLEANER BOX



AIM:

To remove the air cleaner and clean the air cleaner box.

TOOLS REQUIRED:

Screw driver.

PROCEDURE:

At first open the car's bonnet.

Then remove the mach sensor socket by push clip.

After that loose the clamp screw that holding the air intake hose and air filter outlet.

Gradually loose the clamp screw by using screw driver.

Then separate the air intake hose and air filter outlet.

After remove the air filter intake pipe just above the bumper.

Gently remove the air filter box from the system.

Then open the air filter box and clean with compressed air (or) pressurized air.

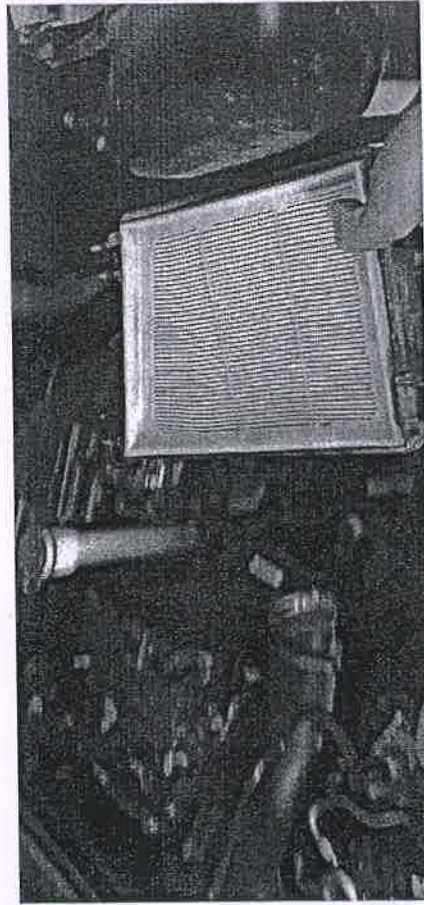
Do this process in reverse process to place the air filter box in correct position.

Handwritten signature

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (MOS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

Air intake box

Inside the Air intake box



Air intake box in system



Dr.D.Senthil Kumar

Dr.D.SENTHIL KUMARAN, **B.E., Ph.D.,**
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (R)
Palani Road, Dindigul - 624 002.

EX. NO:3 REMOVAL OF FOG LAMP & INDICATOR IN BUMPER

AIM:

To remove the fog lamp and indicator of the Ford Ecosport Titanium.

TOOLS REQUIRED:

Small screw driver, T30mm Bit socket.

PROCEDURE:

- At first try to insert a small screw driver's top edge at the top corner of the plastic casing that placed around the indicator and fog lamp setup.
- Then pull the plastic casing around the indicator and fog lamp setup.
- After removal of plastic casing , remove the T30mm screw that placed at the bottom of the indicator and fog lamp setup.
- Then place the screw driver in the rubber bush placing that was in the back side of the indicator.
- Pull the screw driver to remove the metal ball projection from the rubber bush.
- Then gradually remove the indicator and fog lamp from the projection.
- Do this process in reversely to fix the indicator and fog lamp setup in correct position.



Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Indicator and fog lamp setup.

Before removal



After removal



Handwritten signature in green ink.

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (RUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Ex. NO: 4 Fixing and removal of Toe screw

Aim:

To fix and remove the toe screw in the ford eco sport car.

Tools Required:

Screw driver

Procedure:

These simple processes are mostly similar for all cars.


At first remove the small cap in the left side of the car by using screw driver.

That was pleased hear to the indicator and fog lamp setup.

After opening those we the toe screw and screw the toe screw inside the opened projection and tighten the required amount.

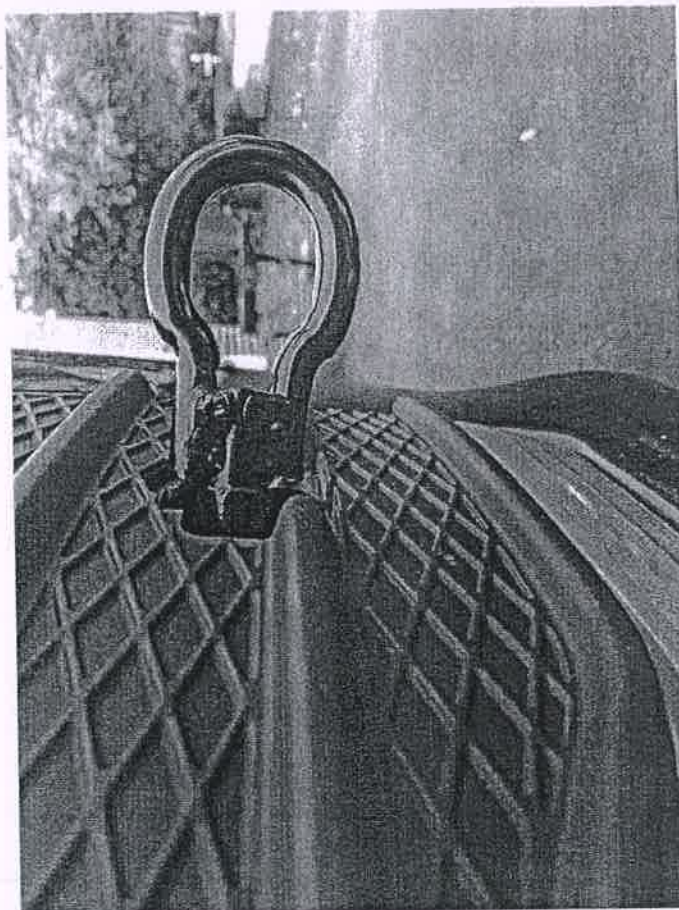
Do these process n reverses way to remove the Toe screw from the car and place that in the dedicated place.



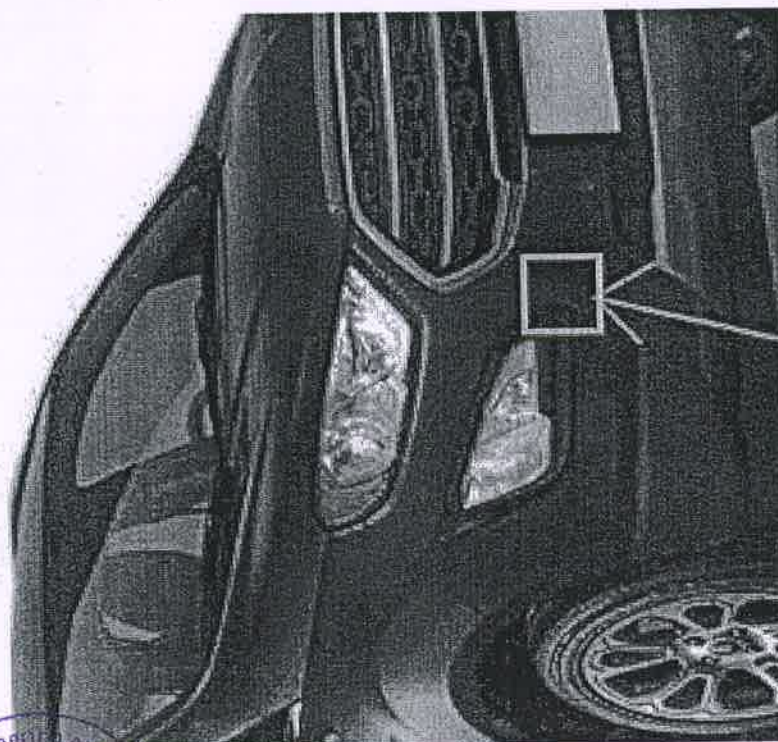

Dr. D. SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

Toe screw fitting

With toe screw



Without toe screw



Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (RUG)
Principal

SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002

2221

Ex. No:5 Door check arm removing

Aim:

To remove the check arm from the door.

Tools Required:

T10 mm socket, T30mm socket,

Procedure:

The main function of the check air is used to move the door step by step and used to stay the door at particular position without oscillation.

At first open the door and check the front ends side of the door.

There is 2 bolts were placed. Remove those bolts and remove the holding screw of the check arm.

Gradually pull the check arm from the setup and remove it.

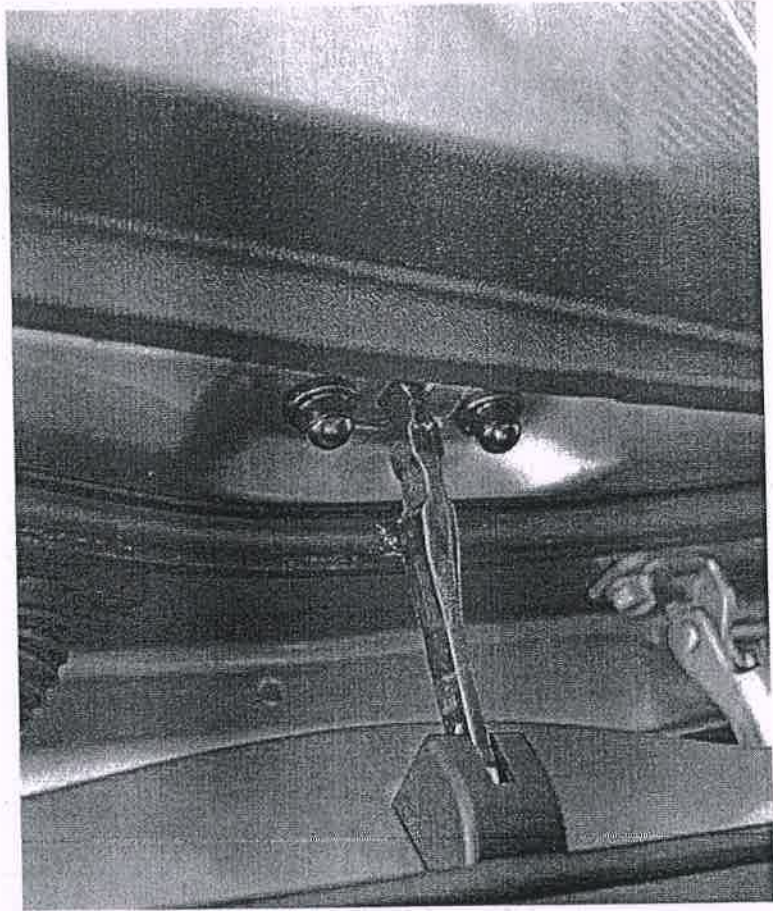
Do this process reversely to fix the check at the correct position.



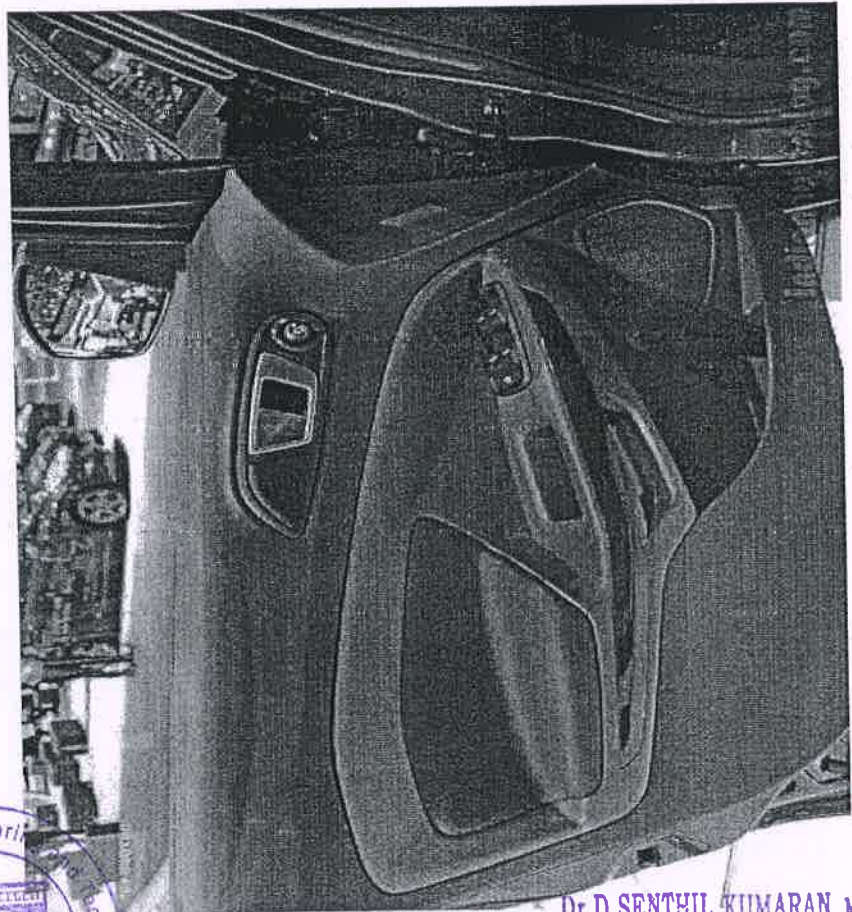
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (MUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani, Road Dindigul - 624 002

Door Check Arm

Door check arm



Side door



Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Paiani Road, Dindigul - 624 002

Ex. No:6 Removal of wheels

Aim:

To remove the wheels of the Ford Eco Sport and fix it.

Tools Required:

Lifting Jack, 20mm T-spanner

Procedure:

Place lifting Jack at the projection given to place the jack.

By rotating the jack at clock wise to lift the jack.

After lifting the car at particular height loosen the bolts of the wheels. Then continue the lifting process.

After the full lifting of car body remove the bolts from the wheel.

Then pull the tyre to the side and the wheel below the car.

Do this process in reverse to fix the wheel at the correct position.



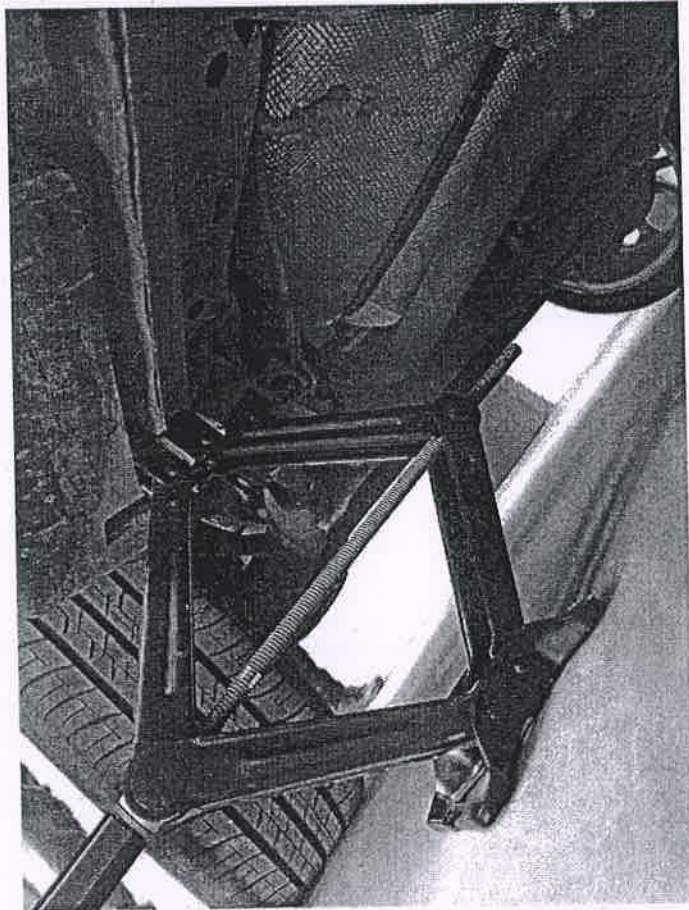
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundi
Palani Road, Dindigul - 624 002

Wheels removal

Loosening the bolts



Loaded Jack



Handwritten signature in green ink.

Dr. D. SENTHIL KUMARAN, M.B., Ph.D.
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalpet
Palani Road, Dindigul