

NoiseKiller

PROFESSIONAL NOISE REDUCTION TECHNOLOGY



Soundproofing an X-TYPE

Acoustic experts Noisekiller can reduce unwanted vibrations, road and engine noise in your car

WORDS AND PHOTOGRAPHY
ROB HAWKINS

YOU COULD be forgiven for thinking that an executive car such as a modern day Jaguar shouldn't need any soundproofing, assuming it to be packed with materials to ensure the ride quality is as quiet as possible.

Sadly, when we started to strip down the X-TYPE 2.0D Sport shown in our photographs, we found hardly any soundproofing material in the boot and only a thin cover on the underside of the bonnet. Plus, the thin steel skin for the spare wheel well would be better suited in a steel pan band. And don't get me started on the paintwork on the underside of the bonnet, which only covers the front area. All of these cost-cutting exercises, sound specialists such as Noisekiller remain in a job, because fitting soundproofing material can make a massive improvement towards

reducing unwanted road and engine noise as well as vibrations.

Noisekiller uses three types of soundproofing material. One type is a non-adhesive sound barrier, a thick mat that is fitted to the floors of the cabin, boot and underneath the back seat. A thinner, self-adhesive, barrier mat is adhered onto the sides of the boot, under the spare wheel, around the arches and inside the doors to reduce vibrations and absorb engine and road noise. The underside of the bonnet can be covered in a self-adhesive product called Vibrasorb, which absorbs engine noise and vibrations. As well as these materials, Noisekiller fits engine blankets if required, which reduce noise coming from the top of the engine.

We follow an X-TYPE 2.0 diesel Sport as it goes through the process of soundproofing. We have limited the number of parts that need to be removed to reduce the time required to fit the soundproofing, so some aspects of the work may be a little fiddly to complete.

DOING IT YOURSELF

Difficulty ★★☆☆

Time required: 6 hours

On your own? Yes

TOOLS:

- Crosshead screwdrivers
- Decorator's roller
- Panel wipe and clean cloths
- Trim tools

COSTS AND CONTACTS:

Noisekiller
0161 652 7080
www.noisekiller.co.uk
DIY soundproofing kits from £200
incl VAT (plus p&p)
Fitting charge: from £100 at
Noisekiller's workshop/£180 mobile

*Readers wishing to carry out any of the tasks outlined in technical or step-by-step features should ensure they have the necessary skills and equipment to do so safely. Kelsey Media accept no responsibility for any injury or damage incurred in the process of following one of these features

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MODERN WORKSHOP

CABIN AND CARPETS



We're going to fit sound barrier underneath the carpets, but want to see if this can be done without fully removing the seats and detaching any electrics. First, we remove the plastic trim and the sills.



The front seats in our X-TYPE are secured with 10mm bolts. We have a manual slider for fore and aft movement, so we move the seat fully back so that we can remove the two front-most 10mm bolts that are threaded into the floor.



Next, we move the front seats fully forward to reveal the rear-most seat mounts. There are two 10mm bolts in view on the outer mount, but there's a plastic cover over the other two, secured with a crosshead screw.



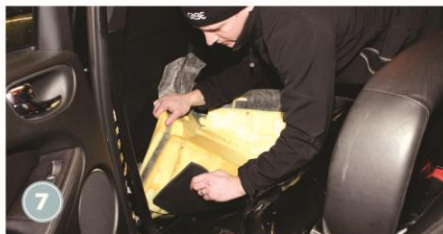
After removing the plastic cover, we can now see the last two 10mm bolts and undo them. The seat is now loose, but we do not remove it otherwise we would need to first detach its electrics.



Instead, with the seat tilted into the rear footwell, there's room to squeeze a thick, pre-cut piece of sound barrier under the front carpet and into the front footwell. Space is tight and the carpet is strong.



The rear of the carpet can be lifted up if the seat base is released. It's located at the front corners by two metal hoops in plastic locating points in the bodywork. Here, Grant Bithell, one of the proprietors, manages to pull them free.



The front seat is moved forwards and there's room to slide another pre-cut piece of sound barrier under the carpet and into the rear footwell. The pieces of sound barrier are smaller than the front pieces and there's lots of room.



A pre-cut piece of sound barrier is placed under the rear seat to absorb unwanted noise from the road and the fuel tank. The rear base is refitted and the interior reassembled.

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MODERN WORKSHOP

IN THE BOOT



1. The spare wheel and the carpet over it are easily removed. Next, use a selection of plastic trim tools to release some locating plugs to allow you to remove the remaining trim and carpeting.



2. The spare wheel well has two drain holes with rubber grommets, which reveal a little surface corrosion on our X-TYPE when removed. They are both wet, so we dry them out and clean off the rust before proceeding.



3. NoiseKiller has soundproofed several Jaguars, so has the templates to pre-cut the material required. As we are at the workshop, the templates are used to double check where the material should be fitted.



4. The pre-cut pieces of adhesive barrier mat are trial-fitted inside the boot to check they are the correct size. After peeling off the backing paper stick them in position and press down firmly using a decorator's roller.



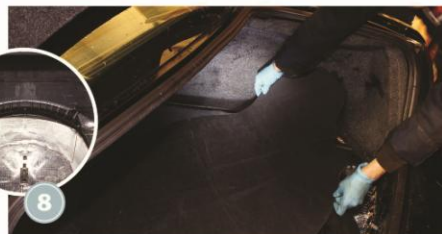
5. The spare wheel well needs to be substantially soundproofed as this area is effectively a steel drum and can transmit lots of road and exhaust noise. A single piece of the barrier mat is used in the base and a few pieces around the walls.



6. There's space to squeeze a couple of patches of adhesive barrier mat on the insides of the rear quarter panels. This area can vibrate and transmit sound, but it is deadened once soundproofed.



7. After the adhesive barrier mat has been fitted, the original trim, carpeting and spare wheel can be refitted. Finally, a thick layer of sound barrier is put underneath the main boot carpet, over the spare wheel.



8. Paul, there are 8 pics for the boot, but only 7 captions? thanks

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MODERN WORKSHOP

UNDER THE BONNET



The underside of the bonnet has a thin cover that needs to be removed to fit extra soundproofing material. It is secured with several fiddly plastic plugs.



NoiseKiller checks the templates it has in stock are the correct ones for soundproofing our X-TYPE as there can be differences between models and, in some cases, years. It's best to check first.



Before sticking soundproofing material to the underside of the bonnet, the metal surface needs to be cleaned to remove any dirt or oil that might reduce the adhesion. Panel wipe or white spirit is suitable.



NoiseKiller fits three pieces of adhesive Vibrasorb to the underside of our X-TYPE's bonnet, firmly pressing it onto the metalwork using a small decorator's roller, before refitting the original under-bonnet cover.

INSIDE THE DOORS



Three pieces of adhesive barrier mat are required to cover the insides of the doors. Starting with a rear door, undo two crosshead screws – one in the middle of the door (hidden by a small plastic cover) and one along the bottom.



Grant at NoiseKiller says they have found the best way to remove the rear door cards (which are secured with several plastic plugs) is to lever them off using a couple of plastic trim tools. The plastic plugs can sometimes break off, but spares are available from Jaguar stockists.



While the rear door card has been released, it should not be removed from the car just yet because the cable for the door-release first needs to be detached, followed by an electrical plug for the electric window.



After peeling back the waterproof material (missing from the door shown here), there's room inside the rear door to manoeuvre and fit three pieces of adhesive barrier mat to the door's outer skin.



Once all three pieces have been fitted, the small decorator's roller can be squeezed into position to firmly roll over them and make sure they are adhered securely. Finally, the door card can be refitted.



The front door cards are secured by the same means as the rear doors, with two screws along the bottom and one in the centre (hidden by a cover). The waterproof foam needs to be carefully peeled off to get inside the door.