



How safe is your boiler?

Our undercover investigation into central heating boiler engineers found some who left out vital checks, and one who hadn't a clue

Your boiler is the heart of your home. If it's not working, life is miserable; if it's not safe, the consequences can be deadly.

To check whether boiler engineers are providing the service you'd expect from professionals who hold your safety in their hands, we invited 10 engineers to service a boiler at a house we'd fitted with secret cameras.

For each visit, we introduced a minor fault that stopped the boiler working; this could have been fixed in minutes by tightening a part. We told the engineers there was a fault when they arrived. We also altered the pressure of the gas being used by the boiler so that it was at the wrong level, to see whether the engineers would check this.

Lying about checks

One engineer failed to turn up. This is how the others performed:

- one condemned our boiler and then disconnected the gas – even though it was perfectly safe
- two told us they had carried out checks which we knew they hadn't done
- five failed to check the boiler's gas pressure, which meant it was working at the wrong pressure
- one did a very good job
- two engineers didn't check whether our boiler needed cleaning. This is important, as a dirty boiler won't work efficiently
- all of the engineers managed to fix the fault we introduced to stop the boiler

1 engineer condemned a safe boiler

2 lied about checks they hadn't done

5 missed out key checks

OUR RESEARCH

Our survey of Which? online panel members showed that independent engineers carry out 81% of one-off boiler services, while British Gas carries out 7%. No other company is a major player. Our engineers reflect this – one was from British Gas and the rest were independents randomly selected from the Gas Safe Register. We also selected an engineer recommended on Which? Local. Nine engineers

turned up. When they arrived we told them the pilot light had gone out – this was caused by the fault we had introduced. Our boiler expert watched the services and repairs being carried out.



working, apart from the one who condemned it – he didn't get that far.

We reported the three worst to the safety watchdog. It deemed their actions negligent and launched an investigation – see 'Gas Safe Register', below.

What a good service includes

Engineers must carry out certain checks on all gas appliances, including checking ventilation, working pressure and the flue. They should also carry out other checks depending on the type and age of the boiler.

The boiler we used was a common balanced-flue model, where air for combustion of the gas is taken from outside rather than the room itself.

We were looking to see whether the engineers carried out seven checks: a visual inspection; a check of the pressure of the gas entering the boiler; the pressure the gas was used at, the ventilation; the flue; and whether the safety device worked (this blocks the gas flow if the pilot light goes out).

Our final test was to see if they checked whether the boiler needed cleaning.

Service contracts

You need to have your boiler serviced once a year, but is it worth taking out a service contract for this? Turn to p59 to find out why it may not save you money.

Many people do rely on a contract, so we've investigated member satisfaction with the contracts you've taken out.

Gas Safe Register

The watchdog responds to our investigation

We passed details of the three worst engineers to the Gas Safe Register, along with our overall findings. It's a legal requirement for all gas engineers to be registered with it. The Gas Safe Register said:

'The engineers observed were negligent in their application of gas safety

competence. They are now under further investigation by Gas Safe Register.

Failure to demonstrate competence to carry out gas work in accordance with gas safety regulations will result in suspension from the Gas Safe Register.'

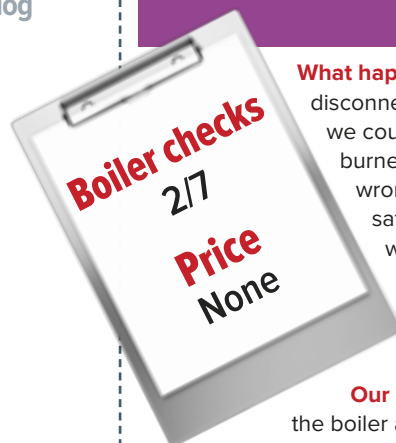


We reported the engineers we had concerns about to the safety watchdog

The worst engineers

Two of the engineers lied to us about the checks they'd done – and one wrongly said our boiler could pose a poisoning risk

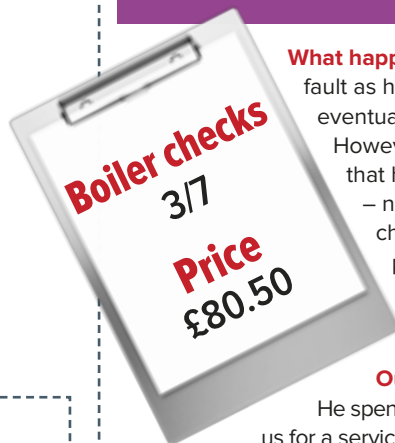
Engineer 1



What happened? This engineer condemned and disconnected our perfectly safe boiler, telling us that we couldn't use it. He said that the seals around the burner weren't good enough. This was completely wrong. Although the boiler was old it was perfectly safe. He didn't charge us for his visit, but had we not known otherwise we would have been faced with a bill for a new boiler plus installation costs. A Best Buy boiler could cost as much as £800 (see p52).

Our expert's view 'He was very poor. He condemned the boiler and said it could pose a carbon monoxide risk, but this was totally wrong.'

Engineer 2



What happened? This engineer took an hour to fix the fault as he tried to replace the part but failed. He did eventually fix it by putting the old part back in. However, he then gave us a service checklist saying that he'd checked the heat exchanger and burner – neither of which he'd done. He also didn't check the flue, working pressure or inlet pressure. Although he didn't claim that he had carried out these checks, he still described his work as a boiler service on the paperwork he gave us.

Our expert's view 'This was a poor service. He spent the whole time trying to fix the fault. He charged us for a service but he hadn't done several key checks.'

Engineer 3



What happened? He failed to check how much gas was being used by the boiler – but claimed that he had. He even wrote down a specific reading of 10 millibars on the checklist he gave us. But it was 4 millibars when he arrived and the same when he left. He also said that he'd checked the radiators, the expansion tank and the flue – none of which he'd done. He did however, give the boiler a clean.

Our expert's view 'Not only did he not check the working pressure or flue – both crucial checks – but he told us that he'd done them.'

Missed some checks

Five out of the nine engineers performed an incomplete service – either missing checks or forgetting about cleaning the boiler to ensure it was working efficiently

Engineer 4 – British Gas

What happened? Unlike the other engineers, our British Gas man used an electronic device to analyse the gases coming out of the flue. This device will indicate how well the boiler is working. The engineer also carried out a number of other checks. However, he failed to check the pressure of the gas being used by the boiler. Despite this, he wrote on the checklist he gave us that it was at the correct pressure. This wasn't correct – it was actually running at a low pressure, which meant that the boiler was working inefficiently. He also didn't check the pressure of gas entering the boiler.

Which? contacted British Gas. It said that safety was its 'highest priority' and engineers had ongoing training. **Our expert's view** 'This service was incomplete – he did check the flue gases but he didn't check the working pressure.'

Boiler checks
5/7
Price
£90

Engineer 6

What happened? He did check the inlet pressure, but although he checked the working pressure he didn't adjust it. As the pressure of the gas being used by the boiler was wrong, this left our boiler working inefficiently. **Our expert's view** 'A reasonable service, but, oddly, while he checked the working pressure he didn't adjust it to the right level.'

Boiler checks
6/7
Price
£85

Engineer 7

What happened? He carried out six of the seven checks and adjusted the working pressure, but he didn't check whether the boiler needed cleaning. He therefore missed off a whole section of the service. **Our expert's view** 'Pretty good – he carried out all the safety checks.'

Boiler checks
6/7
Price
£57

Engineer 5

What happened? He thoroughly cleaned the boiler but failed to check the pressure of the gas being used by the boiler (working pressure) or how much gas was coming into the boiler (inlet pressure). **Our expert's view** 'This service was incomplete as the engineer didn't check the working pressure.'

Boiler checks
5/7
Price
£75

Engineer 8

What happened? We found this engineer on the Which? Local website, which allows members to recommend traders they've used. He carried out six tests and checks and gave the boiler a thorough clean, but he didn't check the end of the flue. **Our expert's view** 'This would have been perfect if he'd checked the flue – but he didn't'

Boiler checks
6/7
Price
£97.75

The best engineer

Only one engineer carried out a thorough service

Engineer 9

What happened? Engineer 9 carried out all the safety checks and correctly adjusted the working pressure. He also ensured the boiler was clean. However, he charged us £120 for a 40-minute service, which was significantly more than any of the other engineers. **Our expert's view** 'A really good all-round service. I can't fault it.'

Boiler checks
7/7
Price
£120

Which.co.uk Boiler servicing

To see a boiler service in action, and to find out what you should expect from a competent engineer, watch our video at www.which.co.uk/boilerservice. Our video at www.which.co.uk/boilermaintenance shows you what you can do to keep your boiler in good condition.

SPECIAL OFFER

Develop Your Property is the definitive guide to home improvement. To order a copy for £9.99 including free p&p (normal price £10.99), call 01903 828557 and quote DYW0909. Offer closes 30 Sep 09.



Boiler contracts – are they worth it?

Our survey shows that most Which? members would not save money with a boiler servicing contract

We asked Which? members who didn't have a boiler contract how much they'd spent on boiler repairs in the past year. We compared these costs with the cheapest service contract that includes service and labour (£140, see table below) and factored in the average cost of a boiler service (£63).

■ Most people's boilers didn't need repairing. They'd therefore saved £77 a year

by not having a contract (based on a £63 service).

■ In some areas, the price of a service may be more than £63 – the average price of nine London services in our investigation, for instance, was £85. But if you paid that, you'd still be saving £55 on a contract if you didn't need a repair.

■ Those whose boilers needed minor repairs saved an average of £39 by not having a contract.

■ Only the 10% who needed major repairs would have saved money with a contract.

Peace of mind

Most people said they have a boiler contract for peace of mind rather than to save money. If you do want a contract, you're most likely to be satisfied with Worcester, which got a customer score of 71%. You can use this service only if you have a Worcester boiler. (See p52 for our boiler brand satisfaction survey.)

Members were least satisfied with Heateam and Homeserve service contracts – both had a customer score of 55%. And although around seven in ten members with a contract have chosen British Gas Homecare, the customer score was only 57%.

Customer scores were higher for independents carrying out one-off services and repairs than for any of the major companies.



A CATALOGUE OF ERRORS

Paul Attwell 59, company director, Oldham

Paul Attwell had a service contract with Eon, so when his boiler started malfunctioning, he called for an engineer. Little did he know it would take four engineers and multiple visits to resolve the problem.

On different occasions the engineers removed and replaced the thermistors, the pump, the three-way valve, the filters, the heat exchanger and finally the printed circuit board.

One engineer misconnected the pipework, which meant the boiler electrics and burglar

alarm controls got drenched. Paul had to pay another company £138 to fix the alarm.

Finally, one of Eon's senior engineers fixed the fault. Eon paid Paul £138 for the alarm and provided two months' free cover as an apology.

Eon said: 'We have apologised to Mr Attwell for the confusion... All our engineers are highly trained and Gas Safe registered. However... in this case a combination of errors in our process occurred. These have been investigated.'

BOILER CONTRACTS SATISFACTION

	CUSTOMER SCORE (%)	CHEAPEST ANNUAL CONTRACT (£) ^a
WORCESTER	71 (120)	148.44 ^b
SCOTTISH & SOUTHERN	63 (57)	150
DOMESTIC AND GENERAL	60 (113)	162
BRITISH GAS/SCOTTISH GAS (HOMECARE)	57 (1,916)	156 ^c
EON	56 (55)	140.88
BAXI/POTTERTON (HEATEAM)	55 (60)	179.88 ^d
HOMESERVE	55 (120)	191.76

Sample size in brackets ^a Including a service and labour and based on 12 monthly repayments ^b You must have a Worcester boiler. £195.88 in specific London and Scottish postcodes ^c Cost rises to £180 for customers in London. Prices for all customers are re-evaluated after the first year ^d Cost is £155.88 if boiler is still under warranty.

ONE-OFF REPAIRS AND SERVICES

	CUSTOMER SCORE REPAIRS (%)	CUSTOMER SCORE SERVICES (%)
INDEPENDENT ENGINEER/PLUMBER	77 (715)	80 (3,483)
WORCESTER	72 (37)	67 (45)
BRITISH GAS/SCOTTISH GAS (HOMECARE)	56 (55)	50 (301)

Our research

We surveyed 3,674 online panel members about boiler contracts, and boiler servicing and repairs in April and May 2009. The customer score is a combination of satisfaction and whether you'd recommend the service to a friend.