

1

00:00:00,000 --> 00:00:03,000

Don't try what you're about to see at home.

2

00:00:30,000 --> 00:00:33,000

Hammer out a farmyard fashion disaster.

3

00:00:33,000 --> 00:00:36,000

Can we order some exploding pants?

4

00:00:36,000 --> 00:00:41,000

Can corrosive chemicals really cause trousers to turn torpedo?

5

00:00:41,000 --> 00:00:43,000

Three, two, one!

6

00:00:46,000 --> 00:00:48,000

You are the Mythbusters.

7

00:00:48,000 --> 00:00:50,000

Adam Savage.

8

00:00:50,000 --> 00:00:52,000

Anthroil over my head, man.

9

00:00:52,000 --> 00:00:53,000

And Jamie Heineman.

10

00:00:53,000 --> 00:00:55,000

Gets me all worked up, just looking at it.

11

00:00:56,000 --> 00:01:01,000

Between them, more than 30 years special effects experience.

12

00:01:01,000 --> 00:01:02,000

That was heavy.

13

00:01:02,000 --> 00:01:04,000

Joining them, Grant Imahara.

14

00:01:04,000 --> 00:01:06,000

Go get him, boy.

15

00:01:06,000 --> 00:01:07,000

Tori Belichi.

16

00:01:07,000 --> 00:01:08,000

Whoa!

17

00:01:08,000 --> 00:01:10,000

And Carrie Byron.

18

00:01:10,000 --> 00:01:11,000

That was crazy!

19

00:01:11,000 --> 00:01:13,000

They don't just tell the Myths.

20

00:01:13,000 --> 00:01:17,000

They put them to the test.

21

00:01:17,000 --> 00:01:27,000

First up, a myth from the very underside of the world.

22

00:01:27,000 --> 00:01:31,000

From the country that gave us the backdrop to the Lord of the Rings

23

00:01:31,000 --> 00:01:35,000

comes another explosive epic that would strike fear

24

00:01:35,000 --> 00:01:38,000

into even the most hardened Hobbit.

25

00:01:38,000 --> 00:01:41,000

The myth of the exploding trousers.

26

00:01:48,000 --> 00:01:49,000

Alright, this is a funny one.

27

00:01:49,000 --> 00:01:53,000

In 1931, in New Zealand, a sudden and deadly epidemic hit the country.

28

00:01:53,000 --> 00:01:55,000

Farmers' pants started exploding.

29

00:01:55,000 --> 00:01:57,000

Haha, you're kidding!

30

00:01:57,000 --> 00:01:58,000

Totally serious.

31

00:01:58,000 --> 00:02:01,000

They started exploding on the wash lines in front of fires

32

00:02:01,000 --> 00:02:03,000

and sometimes on the farmers themselves.

33

00:02:03,000 --> 00:02:06,000

We all know that there can be explosive chemicals on farms

34

00:02:06,000 --> 00:02:09,000

and it seems that the Kiwi farmers started using a new chemical

35

00:02:09,000 --> 00:02:12,000

which, once it stained their clothes, it could explode.

36

00:02:12,000 --> 00:02:14,000

This is too perfect for us.

37

00:02:14,000 --> 00:02:16,000

You guys aren't making this up.

38

00:02:16,000 --> 00:02:20,000

It brings new meaning to the term fashion disaster.

39

00:02:20,000 --> 00:02:24,000

The first victim survived when his trousers allegedly blew up

40

00:02:24,000 --> 00:02:28,000

in front of the fire, but others weren't so lucky.

41

00:02:28,000 --> 00:02:31,000

Well, I guess in order to make sure that these stories aren't exaggerated,

42

00:02:31,000 --> 00:02:35,000

your job is to get some farm-garden explosives and some pants.

43

00:02:35,000 --> 00:02:37,000

The pants are going to be the easy part, getting the explosives.

44

00:02:37,000 --> 00:02:39,000

That's going to be a little bit more difficult.

45

00:02:39,000 --> 00:02:41,000

Well, I've been doing a little bit of research

46

00:02:41,000 --> 00:02:44,000

and it seems like there could be four culprits to this.

47

00:02:44,000 --> 00:02:48,000

One, it could be made from gunpowder, or it could be made from herbicide,

48

00:02:48,000 --> 00:02:52,000

it could be made from fertilizer, or possibly even some acids.

49

00:02:52,000 --> 00:02:55,000

So your job is to get these together, mix them with some pants,

50

00:02:55,000 --> 00:02:57,000

and see which one goes boom?

51

00:02:57,000 --> 00:02:58,000

It's not really going to be that easy.

52

00:02:58,000 --> 00:03:00,000

We have two major issues to deal with.

53

00:03:00,000 --> 00:03:02,000

First of all, I'd like to start in the small scale

54

00:03:02,000 --> 00:03:05,000

because it's possible none of them work and then we're busted right there.

55

00:03:05,000 --> 00:03:08,000

Secondly, I'm pretty sure making explosives is illegal,

56

00:03:08,000 --> 00:03:10,000

so we're going to have to get the FBI involved.

57

00:03:10,000 --> 00:03:13,000

And we're also going to have to shoot this in a way that audiences can't copy us.

58

00:03:13,000 --> 00:03:17,000

Because let's face it, we don't want people going around making exploding pants.

59

00:03:17,000 --> 00:03:19,000

So that's the plan.

60

00:03:19,000 --> 00:03:23,000

The team is going to get hold of four common 1930s farm yard chemicals,

61

00:03:23,000 --> 00:03:30,000

add some secret ingredients, and see which, if any, can make trouser torpedoes.

62

00:03:30,000 --> 00:03:34,000

So, first things first, the hot pants.

63

00:03:34,000 --> 00:03:38,000

I have procured some 100% cotton overalls,

64

00:03:38,000 --> 00:03:41,000

and I'm cutting some swatches out of it that are going to be three by three squares

65

00:03:41,000 --> 00:03:44,000

so that we can do a few small scale experiments.

66

00:03:44,000 --> 00:03:47,000

To help reveal the killer culprit,

67

00:03:47,000 --> 00:03:51,000

the team is going to start the atomic trouser testing in miniature,

68

00:03:51,000 --> 00:03:56,000

where they're going to be helped by former FBI agent Frank Doyle.

69

00:03:56,000 --> 00:04:00,000

As Adam and Jamie know, Frank is a handy friend to have.

70

00:04:00,000 --> 00:04:06,000

These are .223 caliber tracer rounds.

71

00:04:06,000 --> 00:04:12,000

After all, it was Frank who helped shoot up a gas tank.

72

00:04:12,000 --> 00:04:14,000

Today are...

73

00:04:14,000 --> 00:04:18,000

This time, he's here to give up booms for beginners class.

74

00:04:18,000 --> 00:04:22,000

Just like the flight attendants tell you when you're flying on an airplane,

75

00:04:22,000 --> 00:04:25,000

safety is number one, so we want to do everything very safely.

76

00:04:25,000 --> 00:04:28,000

Frank's safety brief is crucial,

77

00:04:28,000 --> 00:04:33,000

because making farm yard explosions can be very, very dangerous.

78

00:04:33,000 --> 00:04:34,000

Any questions?

79

00:04:34,000 --> 00:04:38,000

I have one question. Did MythBusters have an FBI file?

80

00:04:38,000 --> 00:04:42,000

Oh, I don't know. That sounds like an administrative question.

81

00:04:42,000 --> 00:04:44,000

So it's classified, is that what you're saying?

82

00:04:44,000 --> 00:04:50,000

It's classified, just like the wretched recipes that the team is about to make.

83

00:04:50,000 --> 00:04:52,000

Starting with Grant.

84

00:04:52,000 --> 00:04:55,000

Okay, are you ready, Frank?

85

00:04:55,000 --> 00:04:56,000

Let's do it.

86

00:04:56,000 --> 00:05:00,000

Grant's farm ingredient is a 1930s fertilizer,

87

00:05:00,000 --> 00:05:05,000

but the rest of the concoction is a MythBusters secret.

88

00:05:05,000 --> 00:05:09,000

Start with drops, you'll need very little.

89

00:05:09,000 --> 00:05:15,000

It's a delicate operation, because one false move could spell disaster.

90

00:05:15,000 --> 00:05:18,000

Frank, this is like the world's most dangerous cooking show.

91

00:05:18,000 --> 00:05:24,000

With exploding tracer culprit one all cooked up, it's on to Carrie's number two.

92

00:05:24,000 --> 00:05:25,000

Okay.

93

00:05:25,000 --> 00:05:29,000

Black powder is something you would definitely find on a farm,

94

00:05:29,000 --> 00:05:34,000

and I'm not sure that everybody in New Zealand could be spreading this on their clothes

95

00:05:34,000 --> 00:05:38,000

enough to create quite a panic, but it is something explosive.

96

00:05:38,000 --> 00:05:41,000

But because black powder won't cling on clothes,

97

00:05:41,000 --> 00:05:45,000

Carrie's turning it into a sticky liquid sludge.

98

00:05:45,000 --> 00:05:46,000

It's looking good.

99

00:05:46,000 --> 00:05:49,000

Okay, that's it for the black powder laundry.

100

00:05:49,000 --> 00:05:51,000

So it's time for Tori.

101

00:05:51,000 --> 00:05:56,000

What I have right now is a herbicide, and they used it in New Zealand where this myth came from.

102

00:05:56,000 --> 00:05:58,000

This could be potentially explosive.

103

00:05:58,000 --> 00:06:03,000

Tori's herbicide is another culprit in this clothing conundrum.

104

00:06:03,000 --> 00:06:06,000

Frank, why are you standing so far away?

105

00:06:06,000 --> 00:06:08,000

Because I want to continue to live.

106

00:06:08,000 --> 00:06:12,000

So then the next question is why am I standing so close?

107

00:06:12,000 --> 00:06:18,000

With this third suspect close to finishing, it's back to Carrie for the final rancid recipe.

108

00:06:18,000 --> 00:06:20,000

Gun cotton.

109

00:06:20,000 --> 00:06:23,000

We know for a fact that when we make the nitrocellulose,

110

00:06:23,000 --> 00:06:27,000

it's actually going to change the properties of this cotton

111

00:06:27,000 --> 00:06:30,000

and make it into something totally different, which is definitely explosive.

112

00:06:30,000 --> 00:06:32,000

So we've done this before.

113

00:06:32,000 --> 00:06:35,000

We made gun cotton in the Confederate rocket story.

114

00:06:35,000 --> 00:06:38,000

So I'm somewhat of an expert.

115

00:06:38,000 --> 00:06:41,000

Don't be tricked by its cuddly appearance.

116

00:06:41,000 --> 00:06:46,000

It was Carrie's cotton wool that gave the Confederate rocket its initial thrust.

117

00:06:50,000 --> 00:06:54,000

And just like before, making it is pretty hazardous.

118

00:06:54,000 --> 00:06:57,000

Let's see how that smoke comes off. That doesn't look so good.

119

00:06:57,000 --> 00:07:00,000

Yeah, this stuff is nasty.

120

00:07:00,000 --> 00:07:06,000

Because Carrie is so confident that this will have explosive results in the small-scale testing,

121

00:07:06,000 --> 00:07:12,000

she's also going to prepare a full pair of gun cotton pants for when the team ramps things up.

122

00:07:12,000 --> 00:07:17,000

So are we ready for our giant fallout cloud of badness?

123

00:07:18,000 --> 00:07:20,000

Under Frank's careful supervision,

124

00:07:20,000 --> 00:07:26,000

Carrie starts mixing alarmingly large amounts of the hazardous ingredients.

125

00:07:28,000 --> 00:07:32,000

Okay, we are going to wait five minutes.

126

00:07:32,000 --> 00:07:37,000

But almost immediately, the reaction starts the spiral out of control.

127

00:07:37,000 --> 00:07:41,000

The pants plume out more smoke than a Baltimore bingo hall,

128

00:07:41,000 --> 00:07:43,000

and then they start dissolving.

129

00:07:43,000 --> 00:07:47,000

That's one minute so far. Four minutes to go.

130

00:07:47,000 --> 00:07:49,000

Is there going to be any chance left?

131

00:07:49,000 --> 00:07:52,000

It's all gone a bit pear-shaped.

132

00:07:52,000 --> 00:07:54,000

Oh, parking the car!

133

00:07:55,000 --> 00:07:59,000

So Carrie and Tori follow the Mythbusters mantra.

134

00:07:59,000 --> 00:08:02,000

If anyone knows what to do, it's Jamie.

135

00:08:02,000 --> 00:08:05,000

Wow, this stuff is nasty.

136

00:08:05,000 --> 00:08:07,000

Fire in the hole!

137

00:08:07,000 --> 00:08:10,000

Later, Busters bloomers go ballistic.

138

00:08:11,000 --> 00:08:15,000

But next up, it's the Mythbusters mechanics.

139

00:08:15,000 --> 00:08:18,000

Super efficient carburetor mind.

140

00:08:29,000 --> 00:08:31,000

So what do we got?

141

00:08:31,000 --> 00:08:34,000

Well, this one is the great gas conspiracy,

142

00:08:34,000 --> 00:08:38,000

and it is that the automakers and the fuel suppliers are in collusion with each other

143

00:08:38,000 --> 00:08:42,000

to keep us dependent on expensive gasoline and inefficient cars.

144

00:08:42,000 --> 00:08:46,000

And there is a host of devices out there that are supposed to help you beat them

145

00:08:46,000 --> 00:08:48,000

and stick it to the man.

146

00:08:48,000 --> 00:08:50,000

That'd be great.

147

00:08:50,000 --> 00:08:53,000

So we're going to blow the lid off this thing.

148

00:08:55,000 --> 00:08:59,000

Conspiracy theorists say oil companies and car makers share the profits

149

00:08:59,000 --> 00:09:03,000

gained by deliberately keeping cars inefficient.

150

00:09:03,000 --> 00:09:07,000

But there are a whole host of devices that can supposedly cut your fuel

151

00:09:07,000 --> 00:09:09,000

consumption dramatically.

152

00:09:09,000 --> 00:09:14,000

And the Magnetic Mythbusters are going to put these to the test.

153

00:09:14,000 --> 00:09:16,000

What's the plan?

154

00:09:16,000 --> 00:09:18,000

Well, you know, some of these devices work on carbureted cars,

155

00:09:18,000 --> 00:09:20,000

and some of them work on fuel-injected cars.

156

00:09:20,000 --> 00:09:22,000

Sounds like we should get one of each type.

157

00:09:22,000 --> 00:09:24,000

Absolutely.

158

00:09:24,000 --> 00:09:28,000

And you know, the other thing is, I say we do this under super controlled lab conditions.

159

00:09:28,000 --> 00:09:31,000

Well, they have those things, I think they're called dynamometers.

160

00:09:31,000 --> 00:09:34,000

Oh, the thing they put the cars on while they're testing their stationary?

161

00:09:34,000 --> 00:09:39,000

And we should also put the gasoline in an exterior vessel that we can track

162

00:09:39,000 --> 00:09:42,000

and we can visually see how much we're consuming.

163

00:09:42,000 --> 00:09:46,000

I don't think anyone will have any ability to complain about our methodology here.

164

00:09:46,000 --> 00:09:49,000

They will.

165

00:09:50,000 --> 00:09:53,000

First things first, the cars.

166

00:09:53,000 --> 00:09:58,000

Car 1 is a mid-90s fuel-injected run-of-the-mill run-around.

167

00:09:58,000 --> 00:10:03,000

But carburetor car 2 is something altogether more retro.

168

00:10:04,000 --> 00:10:06,000

This is a nice car.

169

00:10:06,000 --> 00:10:08,000

Yeah, it's your style, isn't it?

170

00:10:08,000 --> 00:10:11,000

I love it.

171

00:10:11,000 --> 00:10:14,000

Drives like a cushion dream.

172

00:10:14,000 --> 00:10:17,000

Look at that.

173

00:10:17,000 --> 00:10:20,000

Seems like it's in good shape. It's real clean.

174

00:10:20,000 --> 00:10:22,000

This is a road trip car.

175

00:10:22,000 --> 00:10:24,000

We're going to Vegas in it when we're all done.

176

00:10:24,000 --> 00:10:26,000

Me and Taney.

177

00:10:27,000 --> 00:10:31,000

With both cars up and running, the Mythbusters next turn mechanics.

178

00:10:31,000 --> 00:10:34,000

But with that much success...

179

00:10:34,000 --> 00:10:37,000

What is this? That's what I also don't know.

180

00:10:37,000 --> 00:10:41,000

They're trying to work out which of the many tubes is the fuel line

181

00:10:41,000 --> 00:10:44,000

that connects the gas tank to the engine.

182

00:10:44,000 --> 00:10:46,000

This hose right here.

183

00:10:46,000 --> 00:10:48,000

That's fuel.

184

00:10:48,000 --> 00:10:50,000

That's fuel and I'm going to try and turn the engine over.

185

00:10:50,000 --> 00:10:53,000

Okay, and I should see fuel squared out of that all over the hot engine, yeah?

186

00:10:53,000 --> 00:10:55,000

Yeah.

187

00:10:57,000 --> 00:10:59,000

Yup, no, stop, stop.

188

00:10:59,000 --> 00:11:01,000

Bingo. With the fuel line sussed,

189

00:11:01,000 --> 00:11:04,000

Jamie disconnects it from the gas tank

190

00:11:04,000 --> 00:11:07,000

and attaches it to an acrylic gas holding cylinder,

191

00:11:07,000 --> 00:11:11,000

which will let them see precisely how much fuel the cars consume.

192

00:11:14,000 --> 00:11:18,000

And that means they're ready for those mythical money saving devices.

193

00:11:20,000 --> 00:11:22,000

And where can those be found?

194

00:11:22,000 --> 00:11:24,000

Why, the internet, of course.

195

00:11:24,000 --> 00:11:26,000

What I have so far,

196

00:11:26,000 --> 00:11:28,000

is fuel line magnets

197

00:11:28,000 --> 00:11:33,000

and a carburetor that is purported to give you 300 miles per gallon.

198

00:11:33,000 --> 00:11:36,000

I've also gotten plans for a homemade fuel cell

199

00:11:36,000 --> 00:11:40,000

that you can build that converts water into hydrogen gas

200

00:11:40,000 --> 00:11:42,000

that you can use to run your car.

201

00:11:42,000 --> 00:11:46,000

Grant's hydrogen fuel cell is all about electrolysis.

202

00:11:46,000 --> 00:11:49,000

When you apply a voltage to electrodes in water,

203

00:11:49,000 --> 00:11:53,000

the H₂O molecules split into hydrogen and oxygen.

204

00:11:53,000 --> 00:11:57,000

This internet patent can allegedly generate so much hydrogen

205

00:11:57,000 --> 00:12:00,000

that you can run a car with it.

206

00:12:00,000 --> 00:12:06,000

Adam's going to build the electrolysis device as detailed in the internet plans.

207

00:12:06,000 --> 00:12:11,000

That right there is the business end of the end of the oil monopoly, man.

208

00:12:11,000 --> 00:12:14,000

While Grant is concentrating on the power,

209

00:12:14,000 --> 00:12:19,000

it's the current through the electrodes that should cause hydrogen to be released.

210

00:12:20,000 --> 00:12:25,000

This should be a square wave, and right now it's kind of a nasty side too.

211

00:12:25,000 --> 00:12:28,000

After an hour of ferocity fiddling,

212

00:12:28,000 --> 00:12:31,000

Adam's fuel cell is connected to Grant's power circuit,

213

00:12:31,000 --> 00:12:33,000

and everything's ready for a test.

214

00:12:36,000 --> 00:12:40,000

Dude, I see bubbles. Check it out.

215

00:12:40,000 --> 00:12:43,000

Yeah, it is bubbling.

216

00:12:43,000 --> 00:12:47,000

It's working. Hydrogen is bursting forth.

217

00:12:47,000 --> 00:12:51,000

But will these tiny bubbles be enough to fuel a car?

218

00:12:51,000 --> 00:12:55,000

This was what I first thought was going to be the label.

219

00:12:55,000 --> 00:12:58,000

And then I thought, I can say that's simpler.

220

00:12:58,000 --> 00:13:03,000

And I came up with sticking it to the man.

221

00:13:07,000 --> 00:13:12,000

1930s farms were seriously dangerous places.

222

00:13:12,000 --> 00:13:17,000

There was the giant machinery and the unpredictable animals.

223

00:13:17,000 --> 00:13:21,000

But were there also exploding trousers?

224

00:13:21,000 --> 00:13:25,000

Or was it more a case of lyre lyre pants on fire?

225

00:13:28,000 --> 00:13:31,000

To put this blast of a myth to the test,

226

00:13:31,000 --> 00:13:35,000

the team has carefully made four potential farm yard howitzers

227

00:13:35,000 --> 00:13:39,000

to see if any could cause trousers to turn torpedo.

228

00:13:39,000 --> 00:13:42,000

So that just leaves the detonation systems.

229

00:13:42,000 --> 00:13:45,000

Alright, so in order to blow these pants up,

230

00:13:45,000 --> 00:13:48,000

we need to find out certain systems of ignition.

231

00:13:48,000 --> 00:13:50,000

Why don't we just go through the scenarios of the myth,

232

00:13:50,000 --> 00:13:52,000

the different ways that they possibly could ignite.

233

00:13:52,000 --> 00:13:56,000

Like say, you light a cigarette, spark falls onto your pants, they blow up.

234

00:13:56,000 --> 00:14:00,000

We could do friction, because apparently these were blowing up as people were walking.

235

00:14:00,000 --> 00:14:03,000

One of the most famous stories was when it was dragging from the fire, right?

236

00:14:03,000 --> 00:14:05,000

So maybe something, a radiant heat source, a heater.

237

00:14:05,000 --> 00:14:08,000

And impact, if you sat down really hard,

238

00:14:08,000 --> 00:14:11,000

they might burst into flames.

239

00:14:11,000 --> 00:14:14,000

To try to expose the exploding trouser culprit,

240

00:14:14,000 --> 00:14:17,000

the team is going to subject each of the volatile vagrants

241

00:14:17,000 --> 00:14:20,000

to each of the four detonation systems.

242

00:14:20,000 --> 00:14:27,000

The recipe that blasts off most often will then be wrapped up for the big scale test.

243

00:14:27,000 --> 00:14:33,000

And for round one, it carries unusual open flame ignition system.

244

00:14:33,000 --> 00:14:36,000

I picked the cigarette instead of just dropping a match,

245

00:14:36,000 --> 00:14:39,000

specifically for the reason I wanted to create a realistic scenario

246

00:14:39,000 --> 00:14:46,000

as to why these pants might come in contact with something such as a cigarette to make them explode.

247

00:14:46,000 --> 00:14:52,000

She's hoping that the falling ash will be hot enough to ignite the fabric below.

248

00:14:52,000 --> 00:14:56,000

And first up, it'll be landing on Grant's fertilizer-treated trousers.

249

00:14:56,000 --> 00:14:58,000

All right, step back.

250

00:14:58,000 --> 00:15:00,000

Smoke faster.

251

00:15:00,000 --> 00:15:06,000

Carries smoking as fast as a school kid in a washroom, but gets nowhere fast.

252

00:15:06,000 --> 00:15:12,000

So for take two, it's out with the cigarette and in with the match.

253

00:15:12,000 --> 00:15:15,000

But the results are a little disappointing.

254

00:15:15,000 --> 00:15:19,000

I would not exactly call that an energetic ignition.

255

00:15:19,000 --> 00:15:24,000

So fertilizer plus flame is infertile.

256

00:15:24,000 --> 00:15:27,000

Next up, the black powder.

257

00:15:28,000 --> 00:15:32,000

But remember, the black powder was mixed with water.

258

00:15:32,000 --> 00:15:34,000

I thought this was going to be a little more exciting.

259

00:15:34,000 --> 00:15:36,000

I thought we were going to get a little blast out of this one.

260

00:15:36,000 --> 00:15:38,000

Yeah, it's like threatening to blow up.

261

00:15:38,000 --> 00:15:40,000

Oh, come on.

262

00:15:40,000 --> 00:15:46,000

I think if I were the farmer, I would still have time to get my pants off and run before it caused any problem.

263

00:15:46,000 --> 00:15:48,000

All right, so we're rolling out gunpowder.

264

00:15:48,000 --> 00:15:49,000

I would rule it out.

265

00:15:49,000 --> 00:15:53,000

All right, next let's do my favorite, my specialty, good and cutting.

266

00:15:53,000 --> 00:15:57,000

I know for a fact that this is going to be somewhat explosive.

267

00:15:57,000 --> 00:15:59,000

So just in case maybe put on your ear protection.

268

00:15:59,000 --> 00:16:01,000

Okay.

269

00:16:01,000 --> 00:16:03,000

So far it's zero for two.

270

00:16:03,000 --> 00:16:06,000

Can Carrie's gun cotton do any better?

271

00:16:06,000 --> 00:16:09,000

This is your specialty.

272

00:16:09,000 --> 00:16:11,000

This stuff's supposed to be gun cotton.

273

00:16:11,000 --> 00:16:13,000

Should I take off my ear protection now?

274

00:16:13,000 --> 00:16:14,000

Yeah.

275

00:16:14,000 --> 00:16:17,000

It's another flame failure.

276

00:16:17,000 --> 00:16:20,000

That just leaves the weed killer concoction.

277

00:16:20,000 --> 00:16:23,000

Can this herbie go bananas?

278

00:16:23,000 --> 00:16:25,000

All right.

279

00:16:25,000 --> 00:16:27,000

Wow.

280

00:16:27,000 --> 00:16:29,000

That is awesome.

281

00:16:29,000 --> 00:16:31,000

That is graduating to the next level.

282

00:16:31,000 --> 00:16:34,000

Could you imagine walking down the street and this happening in your pants?

283

00:16:34,000 --> 00:16:36,000

That would suck.

284

00:16:36,000 --> 00:16:42,000

So the herbicide is winning so far, but how will they all respond to the next ignition test?

285

00:16:42,000 --> 00:16:44,000

Radiant heat.

286

00:16:44,000 --> 00:16:46,000

We've got our powerful light.

287

00:16:46,000 --> 00:16:51,000

Right now, I've got a probe right at the top and we're at a little bit over 300 degrees.

288

00:16:51,000 --> 00:16:56,000

It's just like a farmer drying his trousers in front of a fire.

289

00:16:56,000 --> 00:17:00,000

And just like the last test, not a lot happens.

290

00:17:00,000 --> 00:17:02,000

The fertilizer doesn't fizzle.

291

00:17:02,000 --> 00:17:05,000

The gun cotton doesn't go off.

292

00:17:05,000 --> 00:17:08,000

There's some sparkles from the black powder.

293

00:17:08,000 --> 00:17:10,000

Nice.

294

00:17:10,000 --> 00:17:14,000

But then once again the herbicide takes the cake.

295

00:17:16,000 --> 00:17:19,000

Oh no!

296

00:17:19,000 --> 00:17:27,000

The weed killer burns with a massive amount of energy and is easily the emerging culprit for this explosive myth.

297

00:17:27,000 --> 00:17:31,000

Still to come, the ultimate fashion disaster.

298

00:17:31,000 --> 00:17:34,000

Somebody ordered some exploding pants.

299

00:17:34,000 --> 00:17:35,000

But next.

300

00:17:35,000 --> 00:17:41,000

Coming up on MythBusters, is it 300 miles to the gallon or 300 gallons to the mile?

301

00:17:47,000 --> 00:17:54,000

Every week, a couple of geeks from San Francisco face a challenge.

302

00:17:54,000 --> 00:18:02,000

For this week's challenge, the MythBusters have turned mechanics as they put miracle cures for gas guzzlers to the test.

303

00:18:02,000 --> 00:18:05,000

I guess we just put it like that.

304

00:18:05,000 --> 00:18:08,000

Adams built a hydrogen fuel cell.

305

00:18:08,000 --> 00:18:10,000

I see bubbles.

306

00:18:11,000 --> 00:18:16,000

And the team has got hold of the internet's best-selling gas-saving devices.

307

00:18:16,000 --> 00:18:19,000

Super efficient carburetor mixing.

308

00:18:19,000 --> 00:18:24,000

So now they're all set to head to the dynamometer test facility.

309

00:18:24,000 --> 00:18:31,000

For a point of comparison, using a set amount of fuel, they'll calculate the miles per gallon of each car.

310

00:18:31,000 --> 00:18:34,000

First at 35 miles an hour.

311

00:18:34,000 --> 00:18:37,000

17 miles per gallon.

312

00:18:37,000 --> 00:18:39,000

Okay.

313

00:18:39,000 --> 00:18:43,000

And then at a highway average, 55 miles an hour.

314

00:18:43,000 --> 00:18:47,000

That is a lot more fuel efficient than its main gear at 55.

315

00:18:47,000 --> 00:18:51,000

We're getting 25 and a half miles per gallon.

316

00:18:51,000 --> 00:18:58,000

With the baselines for the carburetor car cached, bring on the first miracle cure, the magnets.

317

00:18:58,000 --> 00:19:02,000

Okay, so it says to put it as close as we can to the carburetor.

318

00:19:02,000 --> 00:19:05,000

Okay, magnet test. Here we go.

319

00:19:06,000 --> 00:19:10,000

According to the box, the magnets work on the principles of hydrodynamics

320

00:19:10,000 --> 00:19:15,000

and align the fuel molecules in such a way that they burn better.

321

00:19:15,000 --> 00:19:18,000

What does that mean?

322

00:19:18,000 --> 00:19:24,000

We asked our graphics guy to explain it, but he didn't understand it either.

323

00:19:24,000 --> 00:19:31,000

So it's a mystery how they work, but have they had any effect at 55 miles an hour?

324

00:19:32,000 --> 00:19:36,000

The baseline reading at 55 is 25.66.

325

00:19:36,000 --> 00:19:39,000

I come out with 25.55.

326

00:19:39,000 --> 00:19:40,000

Okay.

327

00:19:40,000 --> 00:19:41,000

No change.

328

00:19:41,000 --> 00:19:43,000

No change at 55.

329

00:19:43,000 --> 00:19:46,000

And at 35, it's the same story.

330

00:19:46,000 --> 00:19:48,000

What does that tell us?

331

00:19:48,000 --> 00:19:53,000

It busts this whole magnet fuel, electromagnetics thing wide open, man.

332

00:19:53,000 --> 00:19:55,000

It's crap.

333

00:19:55,000 --> 00:19:59,000

It's strike one for the gas conspiracy theory.

334

00:19:59,000 --> 00:20:03,000

So the next test is acetone mixed with gasoline.

335

00:20:03,000 --> 00:20:07,000

What we have to do is put about a 500 to one ratio in here,

336

00:20:07,000 --> 00:20:13,000

which amounts to two milliliters of acetone in with the gasoline.

337

00:20:13,000 --> 00:20:18,000

The idea is that the acetone somehow makes the gas burn more completely,

338

00:20:18,000 --> 00:20:21,000

but does it work at 35 miles an hour?

339

00:20:21,000 --> 00:20:28,000

Well, it uses fuel a little faster, which gives us miles per gallon of 16.65 with acetone

340

00:20:28,000 --> 00:20:32,000

as opposed to 17.03 without acetone.

341

00:20:32,000 --> 00:20:39,000

So acetone makes the car less efficient, a result confirmed with the 55 mile an hour test.

342

00:20:39,000 --> 00:20:42,000

Next up, the miracle carburetor.

343

00:20:42,000 --> 00:20:45,000

I'm going to get behind the wheel.

344

00:20:45,000 --> 00:20:51,000

This latest device can supposedly increase mileage to 300 miles per gallon,

345

00:20:51,000 --> 00:20:56,000

but atoms out of gas even before he's reached the baseline level.

346

00:20:57,000 --> 00:21:00,000

17.69 miles to the gallon.

347

00:21:00,000 --> 00:21:04,000

It's a lot less than 25 and a half miles to the gallon.

348

00:21:04,000 --> 00:21:11,000

I don't see any potential for 100 or 200 or 300 miles per gallon out of this thing.

349

00:21:11,000 --> 00:21:12,000

Darn.

350

00:21:16,000 --> 00:21:20,000

Farm yard chemicals can be downright dangerous.

351

00:21:20,000 --> 00:21:24,000

They can hinder your health in a whole host of ways.

352

00:21:24,000 --> 00:21:28,000

But can any of them ever make your trousers explode?

353

00:21:28,000 --> 00:21:34,000

To find out, the team is putting four potential farm yard fizzlers to the test.

354

00:21:34,000 --> 00:21:41,000

So far, the herbicide is winning, but there are still two detonation devices left.

355

00:21:41,000 --> 00:21:48,000

Starting with Tori's friction maker, which supposedly imitates the way farmers walk.

356

00:21:48,000 --> 00:21:53,000

Despite the farmer breaking the world's sprint record, there's no immediate ignition.

357

00:21:53,000 --> 00:21:56,000

He's not done walking.

358

00:21:56,000 --> 00:21:58,000

There he is.

359

00:21:58,000 --> 00:22:04,000

After a marathon run, none of the samples, not even the herbicide, smoke at all.

360

00:22:04,000 --> 00:22:09,000

Which leaves one final detonation device.

361

00:22:09,000 --> 00:22:12,000

It's hammer time.

362

00:22:12,000 --> 00:22:16,000

So this is cotton with black powder.

363

00:22:16,000 --> 00:22:19,000

In three, two, one.

364

00:22:19,000 --> 00:22:24,000

Well, it hit it.

365

00:22:24,000 --> 00:22:31,000

It was right on the money, but with the black powder, there's no trouser detonation.

366

00:22:31,000 --> 00:22:34,000

I think that rolls that out pretty fast.

367

00:22:34,000 --> 00:22:38,000

So the team tries again with the fertilizer.

368

00:22:38,000 --> 00:22:40,000

But get the same result.

369

00:22:40,000 --> 00:22:44,000

Then it carries specialty, the gun cotton.

370

00:22:44,000 --> 00:22:46,000

Not a pee.

371

00:22:46,000 --> 00:22:50,000

Last up, the current leader, the herbicide.

372

00:22:50,000 --> 00:22:52,000

Get mashed in.

373

00:22:52,000 --> 00:22:55,000

Three, two, one.

374

00:22:55,000 --> 00:22:59,000

Holy Mack!

375

00:22:59,000 --> 00:23:01,000

That was sweet.

376

00:23:01,000 --> 00:23:03,000

Oh, fire!

377

00:23:03,000 --> 00:23:05,000

Where?

378

00:23:05,000 --> 00:23:07,000

Just up. You know we can see it.

379

00:23:07,000 --> 00:23:10,000

I think we have our exploding pants.

380

00:23:10,000 --> 00:23:12,000

I say, great.

381

00:23:12,000 --> 00:23:17,000

With the herbicide, it's a case of now you see it, now you don't.

382

00:23:17,000 --> 00:23:21,000

This is my favorite stuff.

383

00:23:21,000 --> 00:23:25,000

Tori's herbicide really can make trousers explode.

384

00:23:25,000 --> 00:23:31,000

And what's more, in 1930s New Zealand, this stuff was abundant.

385

00:23:34,000 --> 00:23:37,000

So I've been doing a little bit of background research on this myth.

386

00:23:37,000 --> 00:23:41,000

And I found out that New Zealand farmers were using our classified weed killer.

387

00:23:41,000 --> 00:23:46,000

But in the 1930s, the amount they were using totally skyrocketed.

388

00:23:46,000 --> 00:23:47,000

Why is that?

389

00:23:47,000 --> 00:23:51,000

In the 1920s, it seems that ragwort was accidentally introduced into the ecosystem.

390

00:23:51,000 --> 00:23:56,000

Oh, ragwort's that super aggressive weed. It overtakes crops. It's toxic to livestock.

391

00:23:56,000 --> 00:23:58,000

I think it's a problem even today.

392

00:23:58,000 --> 00:24:02,000

Exactly. And you know that's why they wanted to get rid of it as fast as possible.

393

00:24:02,000 --> 00:24:04,000

And of course, what was the miracle cure in that era?

394

00:24:04,000 --> 00:24:07,000

Oh, our classified chemical.

395

00:24:07,000 --> 00:24:09,000

All right, let's move on to the full scale.

396

00:24:09,000 --> 00:24:11,000

Yeah!

397

00:24:11,000 --> 00:24:14,000

Later, Buster dons his hot pants.

398

00:24:14,000 --> 00:24:16,000

Fire in the hole!

399

00:24:16,000 --> 00:24:21,000

But next, there's more Fire in the Hole with Adam and Jamie.

400

00:24:28,000 --> 00:24:30,000

Remember, don't try this at home.

401

00:24:30,000 --> 00:24:33,000

We've got years of experience that keeps us safe.

402

00:24:44,000 --> 00:24:48,000

Every year, Americans spend billions of dollars fueling their cars.

403

00:24:48,000 --> 00:24:55,000

To try to claw some of that back, the mythbusters are putting miracle gas cures to the test.

404

00:24:55,000 --> 00:25:01,000

Faster pickup, getaway, more miles per gallon than you ever dreamed were possible.

405

00:25:01,000 --> 00:25:07,000

But they're not doing well. Their carburetor car scored zero for three.

406

00:25:07,000 --> 00:25:09,000

Nothing improved its mileage.

407

00:25:09,000 --> 00:25:13,000

So they swapped to the more modern fuel-injected car.

408

00:25:13,000 --> 00:25:18,000

Some of the mythical cures will supposedly work better on a more modern car.

409

00:25:19,000 --> 00:25:22,000

But unfortunately, neither the magnets...

410

00:25:22,000 --> 00:25:25,000

This is such total, of course.

411

00:25:26,000 --> 00:25:30,000

Nor the acetone mixture increased mileage at all.

412

00:25:30,000 --> 00:25:35,000

It's not like it magically changes lead into gold or something like that.

413

00:25:35,000 --> 00:25:38,000

You know, it's an o-brainer.

414

00:25:38,000 --> 00:25:43,000

All the magical cures so far have failed to improve fuel efficiency,

415

00:25:43,000 --> 00:25:46,000

and some have even made it worse.

416

00:25:46,000 --> 00:25:49,000

But is anyone really that surprised?

417

00:25:49,000 --> 00:25:52,000

Look, the EPA takes claims of fuel efficiency very seriously

418

00:25:52,000 --> 00:25:55,000

and has tested over 100 devices for their improvements.

419

00:25:55,000 --> 00:26:01,000

Yeah, out of 104 that they tested, only about 7 showed any improvement at all,

420

00:26:01,000 --> 00:26:03,000

and it was only up to about 6%.

421

00:26:03,000 --> 00:26:07,000

Well, your mood can affect your driving a hell of a lot more than 6%.

422

00:26:07,000 --> 00:26:12,000

Yeah, studies have shown that you can reduce your mileage by up to around 33%

423

00:26:12,000 --> 00:26:15,000

by aggressive driving due to, you know, bad mood.

424

00:26:15,000 --> 00:26:17,000

Do you actually have moods?

425

00:26:17,000 --> 00:26:18,000

No.

426

00:26:19,000 --> 00:26:23,000

Back at the dyno, the cars have been swapped around for one final test,

427

00:26:23,000 --> 00:26:26,000

the PS to resist ons.

428

00:26:26,000 --> 00:26:28,000

This is the one that I've been waiting for.

429

00:26:28,000 --> 00:26:32,000

This is the water car hydrating fuel cell.

430

00:26:32,000 --> 00:26:40,000

And this is the one that, if it works, is making this one of the most legendary hours of television ever broadcast.

431

00:26:41,000 --> 00:26:47,000

They're about to see if they can run a car on flammable hydrogen gas produced by electrolysis.

432

00:26:49,000 --> 00:26:54,000

This is the instructions on the patent that you bolt the output of the fuel cell

433

00:26:54,000 --> 00:26:57,000

right to the throat of your carburetor.

434

00:26:57,000 --> 00:27:02,000

There will be no gasoline, just hydrogen fed straight into the carburetor.

435

00:27:02,000 --> 00:27:04,000

But will the car even start?

436

00:27:06,000 --> 00:27:08,000

We'll make it history.

437

00:27:14,000 --> 00:27:15,000

Oh, oh my God!

438

00:27:15,000 --> 00:27:17,000

Oh my God is right.

439

00:27:17,000 --> 00:27:19,000

The car is working.

440

00:27:19,000 --> 00:27:23,000

But sadly, it's not because of the hydrogen.

441

00:27:23,000 --> 00:27:27,000

I think that was a little bit of residual fuel in the system. What do you think?

442

00:27:27,000 --> 00:27:29,000

I think that's the case.

443

00:27:29,000 --> 00:27:33,000

It wasn't a miracle. Just some leftover gasoline in the engine.

444

00:27:33,000 --> 00:27:36,000

I'm going to turn it over again. Let's give it another shot.

445

00:27:41,000 --> 00:27:42,000

Come on!

446

00:27:42,000 --> 00:27:43,000

Come on!

447

00:27:46,000 --> 00:27:47,000

My God!

448

00:27:47,000 --> 00:27:49,000

It doesn't work.

449

00:27:49,000 --> 00:27:52,000

I can't believe it doesn't work. I found it on the internet, man.

450

00:27:52,000 --> 00:27:56,000

The electrodes are just not giving off enough gas.

451

00:27:56,000 --> 00:28:00,000

But to test whether a car could even run on hydrogen in the first place,

452

00:28:00,000 --> 00:28:04,000

the boys are going to hose some directly into the carburetor.

453

00:28:04,000 --> 00:28:05,000

Ready?

454

00:28:05,000 --> 00:28:06,000

Yeah, okay.

455

00:28:06,000 --> 00:28:07,000

Okay, here we go.

456

00:28:08,000 --> 00:28:09,000

Okay.

457

00:28:12,000 --> 00:28:13,000

Okay.

458

00:28:15,000 --> 00:28:17,000

That's the coolest thing ever.

459

00:28:17,000 --> 00:28:20,000

I guess you could, if you had a lot of hydrogen,

460

00:28:20,000 --> 00:28:23,000

run your engine completely without any other modifications.

461

00:28:23,000 --> 00:28:24,000

Let's do it again.

462

00:28:25,000 --> 00:28:29,000

You know there's going to be trouble when it's all going so well.

463

00:28:29,000 --> 00:28:33,000

Whoops! Okay, that's enough of that test.

464

00:28:33,000 --> 00:28:38,000

With a rather nasty backfire, it's time to back out.

465

00:28:38,000 --> 00:28:40,000

I think it's best if we just let it go.

466

00:28:47,000 --> 00:28:49,000

In the myth of exploding trousers,

467

00:28:49,000 --> 00:28:52,000

the boys are going to be the first to go to the car.

468

00:28:52,000 --> 00:28:55,000

They're going to be the first to go to the car.

469

00:28:56,000 --> 00:28:59,000

In the myth of exploding trousers,

470

00:28:59,000 --> 00:29:03,000

the herbicide has been ID'd as the pan protagonist.

471

00:29:03,000 --> 00:29:05,000

Okay, well I'm impressed.

472

00:29:05,000 --> 00:29:06,000

That was pretty amazing.

473

00:29:06,000 --> 00:29:07,000

Yeah, well it was very cool.

474

00:29:07,000 --> 00:29:09,000

Well, now you know what we have to do.

475

00:29:09,000 --> 00:29:11,000

We have to bump this up to full scale.

476

00:29:11,000 --> 00:29:14,000

So I'm going to take a pair of pants and just saturate the heck out of them,

477

00:29:14,000 --> 00:29:15,000

see if they explode.

478

00:29:15,000 --> 00:29:19,000

Maybe just as a point of comparison, you know, just for fun,

479

00:29:19,000 --> 00:29:21,000

we could get a hold of a few real explosives.

480

00:29:21,000 --> 00:29:24,000

Well, I'm sure Frank is going to help us out with that.

481

00:29:24,000 --> 00:29:28,000

I just want to see some really big exploding trousers.

482

00:29:28,000 --> 00:29:32,000

At last, using the results of the small scale test,

483

00:29:32,000 --> 00:29:35,000

it's finally time to ramp this myth up.

484

00:29:35,000 --> 00:29:39,000

If it's worth doing, it's worth overdoing, right?

485

00:29:39,000 --> 00:29:43,000

With the overalls fully functional, it's time to hit the road

486

00:29:43,000 --> 00:29:47,000

and see if Buster will fly by the seat of his pants.

487

00:29:47,000 --> 00:29:50,000

We're here at Alameda Sheriff's Facility.

488

00:29:50,000 --> 00:29:54,000

And this is where Buster is going to put on his exploding pants.

489

00:29:54,000 --> 00:29:55,000

Frank Doyle's here.

490

00:29:55,000 --> 00:29:56,000

The bomb squad's here.

491

00:29:56,000 --> 00:29:58,000

The paramedics are here.

492

00:29:58,000 --> 00:30:00,000

We're going to blow something up.

493

00:30:00,000 --> 00:30:03,000

Well, it seems that everyone is here, so let's get started.

494

00:30:03,000 --> 00:30:06,000

Somebody order some exploding pants.

495

00:30:06,000 --> 00:30:09,000

With the pants prepped,

496

00:30:09,000 --> 00:30:14,000

step forward our naked volunteer farmer, Buster.

497

00:30:14,000 --> 00:30:17,000

Buster, you don't want to do this?

498

00:30:17,000 --> 00:30:19,000

Well, that's too bad.

499

00:30:19,000 --> 00:30:22,000

We're going to blow your pants off.

500

00:30:22,000 --> 00:30:25,000

Once Buster is dressed to kill,

501

00:30:25,000 --> 00:30:28,000

all that remains is the detonation system.

502

00:30:28,000 --> 00:30:32,000

The remote triggering system that the FBI is going to be using on our pants

503

00:30:32,000 --> 00:30:37,000

is probably closer to the impact triggering system that we had in our small scale test.

504

00:30:37,000 --> 00:30:41,000

With the igniter wired up and the final touches in place,

505

00:30:41,000 --> 00:30:44,000

it's time for a Huckleberry Dinn.

506

00:30:44,000 --> 00:30:46,000

Fire in the hole!

507

00:30:46,000 --> 00:30:48,000

Fire in the hole!

508

00:30:48,000 --> 00:30:51,000

Three, two, one!

509

00:30:51,000 --> 00:30:53,000

Oh!

510

00:30:53,000 --> 00:30:58,000

That's awesome.

511

00:30:58,000 --> 00:31:00,000

It burned completely off.

512

00:31:00,000 --> 00:31:04,000

It totally just burned from head and from wherever it blew up,

513

00:31:04,000 --> 00:31:07,000

his crotch, and it just totally burned off.

514

00:31:07,000 --> 00:31:10,000

Now that's what I call hot pants.

515

00:31:10,000 --> 00:31:13,000

The fact that his hat's still here shows how hot and fast this burned.

516

00:31:13,000 --> 00:31:15,000

It didn't even make it up to the hat.

517

00:31:15,000 --> 00:31:18,000

It just disintegrated really quickly.

518

00:31:18,000 --> 00:31:21,000

But this myth isn't about disintegrating trousers.

519

00:31:21,000 --> 00:31:23,000

It's about exploding ones.

520

00:31:23,000 --> 00:31:25,000

So the gang is going to try again,

521

00:31:25,000 --> 00:31:30,000

this time with a pocket load more of the herbicide hodgepodge.

522

00:31:30,000 --> 00:31:32,000

Good luck, buddy.

523

00:31:32,000 --> 00:31:34,000

Nice knowing you.

524

00:31:34,000 --> 00:31:36,000

Fire in the hole!

525

00:31:36,000 --> 00:31:38,000

Fire in the hole!

526

00:31:38,000 --> 00:31:42,000

Three, two, one!

527

00:31:43,000 --> 00:31:45,000

Oh!

528

00:31:45,000 --> 00:31:47,000

That was great.

529

00:31:47,000 --> 00:31:49,000

That obviously burned up twice as fast as that last one.

530

00:31:49,000 --> 00:31:51,000

And it's much bigger.

531

00:31:51,000 --> 00:31:53,000

A bigger reaction.

532

00:31:53,000 --> 00:31:54,000

That was cool.

533

00:31:54,000 --> 00:31:57,000

The pockets of pesticides sure got Buster fired up.

534

00:31:57,000 --> 00:31:59,000

But was he fired up enough?

535

00:31:59,000 --> 00:32:01,000

Here's my question, though.

536

00:32:01,000 --> 00:32:03,000

We call this myth exploding trousers.

537

00:32:03,000 --> 00:32:05,000

They didn't really explode.

538

00:32:05,000 --> 00:32:07,000

No, I mean they were just burning rapidly.

539

00:32:07,000 --> 00:32:09,000

I have a feeling though, if you were wearing those pants

540

00:32:09,000 --> 00:32:12,000

and they burned that fast, you would definitely claim explosion.

541

00:32:12,000 --> 00:32:14,000

You need compression to have an explosion.

542

00:32:14,000 --> 00:32:16,000

You are so hard to please.

543

00:32:16,000 --> 00:32:18,000

But I mean if your pants burst into flames like this,

544

00:32:18,000 --> 00:32:20,000

how would you explain it to somebody?

545

00:32:20,000 --> 00:32:22,000

Semantics. It's an explosion.

546

00:32:22,000 --> 00:32:24,000

My pants blew up.

547

00:32:24,000 --> 00:32:26,000

That's what I'd say.

548

00:32:26,000 --> 00:32:28,000

I'm with Carrie and Tori on this one.

549

00:32:28,000 --> 00:32:31,000

It may not technically be an explosion,

550

00:32:31,000 --> 00:32:34,000

but did 1930's farmers really know the terminology?

551

00:32:34,000 --> 00:32:37,000

This is Myth Confirmed.

552

00:32:37,000 --> 00:32:41,000

The only remaining question is, would Buster have survived?

553

00:32:41,000 --> 00:32:44,000

So as medical professionals, what do you think of the damage?

554

00:32:44,000 --> 00:32:47,000

If he just had pants on, it would have burned up all the pants.

555

00:32:47,000 --> 00:32:49,000

Maybe he'd have a couple of burns up here in the chest area,

556

00:32:49,000 --> 00:32:51,000

but it wouldn't have gone any further.

557

00:32:51,000 --> 00:32:52,000

So you're saying he lived?

558

00:32:52,000 --> 00:32:53,000

Yeah, he would have lived.

559

00:32:53,000 --> 00:32:55,000

He would have just maybe had some scarring from the burns,

560

00:32:55,000 --> 00:32:57,000

but a person could survive from it.

561

00:32:57,000 --> 00:32:59,000

You lived!

562

00:32:59,000 --> 00:33:05,000

Like a phoenix from the flames, Buster smolders to fight another day.

563

00:33:05,000 --> 00:33:07,000

But maybe not for long.

564

00:33:07,000 --> 00:33:09,000

Buster, you're not over yet.

565

00:33:09,000 --> 00:33:11,000

On the other side of the break.

566

00:33:11,000 --> 00:33:16,000

That right there, it's the end of the gas conspiracy.

567

00:33:16,000 --> 00:33:20,000

Adam and Jamie hit the road with some greasy lightning.

568

00:33:20,000 --> 00:33:23,000

But if we don't meet again, I love you.

569

00:33:31,000 --> 00:33:33,000

Well, there's your problem.

570

00:33:33,000 --> 00:33:37,000

In the great gas conspiracy, skid marks aside,

571

00:33:37,000 --> 00:33:41,000

Adam and Jamie have tested all of their mythical mileage boosters.

572

00:33:41,000 --> 00:33:43,000

This is such total force.

573

00:33:43,000 --> 00:33:45,000

And the results are in.

574

00:33:45,000 --> 00:33:47,000

Alright, so our dynamometer tests.

575

00:33:47,000 --> 00:33:50,000

How did we do with the magnets?

576

00:33:50,000 --> 00:33:51,000

Bubkus.

577

00:33:51,000 --> 00:33:52,000

Acetone?

578

00:33:52,000 --> 00:33:53,000

Bubkus.

579

00:33:53,000 --> 00:33:55,000

The hydrogen fuel cell?

580

00:33:55,000 --> 00:33:56,000

Less than Bubkus.

581

00:33:56,000 --> 00:33:59,000

And the, oh, the miracle carburetor.

582

00:33:59,000 --> 00:34:01,000

Even less than Bubkus.

583

00:34:01,000 --> 00:34:06,000

I think we still need some more exploration into ways to break yourself free

584

00:34:06,000 --> 00:34:09,000

of the man's death grip on your wallet.

585

00:34:09,000 --> 00:34:15,000

Well, if the ultimate goal is to actually defeat this monopoly of fossil fuels,

586

00:34:15,000 --> 00:34:17,000

there is a way to do that.

587

00:34:17,000 --> 00:34:19,000

And maybe we can try it out.

588

00:34:19,000 --> 00:34:23,000

And where does this mystery solution live?

589

00:34:23,000 --> 00:34:27,000

I need some french fries and all the fry oil you can lay on me.

590

00:34:27,000 --> 00:34:29,000

Why the burger bar, of course.

591

00:34:29,000 --> 00:34:34,000

That right there, it's the end of the gas conspiracy.

592

00:34:34,000 --> 00:34:35,000

Maybe.

593

00:34:35,000 --> 00:34:41,000

It's used cooking oil, the gunk that gets left at the bottom of deep fat fryers.

594

00:34:41,000 --> 00:34:45,000

And believe it or not, this may be the next big thing.

595

00:34:45,000 --> 00:34:47,000

I think that's it.

596

00:34:47,000 --> 00:34:51,000

And back at the shop, it's refinery time.

597

00:34:51,000 --> 00:34:58,000

Apparently all that's needed to convert this fatty fry oil into fuel is filter it.

598

00:34:59,000 --> 00:35:00,000

That's it.

599

00:35:00,000 --> 00:35:04,000

This is obviously something that you do overnight.

600

00:35:04,000 --> 00:35:09,000

It's a time consuming process, but given that it could result in free fuel,

601

00:35:09,000 --> 00:35:11,000

it's more than worth it.

602

00:35:11,000 --> 00:35:14,000

There we go. That's the leader.

603

00:35:14,000 --> 00:35:19,000

And to put it to the test, they're going to drive a circuit around Alameda in a diesel car,

604

00:35:19,000 --> 00:35:23,000

which has their viewable fuel tank attached.

605

00:35:23,000 --> 00:35:24,000

I like this dammy.

606

00:35:24,000 --> 00:35:27,000

I think this is a nice solid arrangement.

607

00:35:27,000 --> 00:35:28,000

Not going to move.

608

00:35:28,000 --> 00:35:30,000

I'm going to just tape that down.

609

00:35:30,000 --> 00:35:32,000

Well, as long as you're happy, Adam.

610

00:35:32,000 --> 00:35:33,000

Thank you, David.

611

00:35:33,000 --> 00:35:37,000

And with everyone happy, it's time to get started.

612

00:35:37,000 --> 00:35:41,000

We've been hearing that people are running their cars completely without any modifications

613

00:35:41,000 --> 00:35:44,000

on used vegetable oil like this.

614

00:35:44,000 --> 00:35:47,000

But before experimenting with beefed up burger juice,

615

00:35:47,000 --> 00:35:52,000

they first need to test regular diesel to find the car's normal fuel consumption.

616

00:35:52,000 --> 00:35:53,000

Hold on.

617

00:35:53,000 --> 00:35:56,000

You're pretty much exactly at a leader, so give it a tiny bit more.

618

00:35:56,000 --> 00:35:58,000

That's perfect.

619

00:35:58,000 --> 00:35:59,000

Exactly right.

620

00:35:59,000 --> 00:36:00,000

Okay.

621

00:36:00,000 --> 00:36:01,000

Diesel.

622

00:36:01,000 --> 00:36:02,000

First run.

623

00:36:02,000 --> 00:36:03,000

All right.

624

00:36:03,000 --> 00:36:04,000

Ready.

625

00:36:04,000 --> 00:36:05,000

Go.

626

00:36:05,000 --> 00:36:14,000

The course is 2.9 miles long and has been designed so that they can maintain a steady 35 miles

627

00:36:14,000 --> 00:36:16,000

an hour all the way around.

628

00:36:16,000 --> 00:36:21,000

They're going to drive lap after lap until they've used one leader of each fuel.

629

00:36:21,000 --> 00:36:22,000

That's it.

630

00:36:22,000 --> 00:36:24,000

We are out of fuel.

631

00:36:24,000 --> 00:36:29,000

What was the mileage on that?

632

00:36:29,000 --> 00:36:30,000

8.8.

633

00:36:30,000 --> 00:36:31,000

8.8.

634

00:36:31,000 --> 00:36:32,000

Okay.

635

00:36:32,000 --> 00:36:34,000

15 minutes and 15 seconds.

636

00:36:34,000 --> 00:36:38,000

33 and a third miles to the gallon on straight diesel.

637

00:36:38,000 --> 00:36:43,000

With the baseline sussed, next up is the used cooking oil.

638

00:36:43,000 --> 00:36:45,000

Look at that.

639

00:36:45,000 --> 00:36:47,000

Pure power.

640

00:36:47,000 --> 00:36:52,000

Pure power it may be, but will the car even start?

641

00:36:52,000 --> 00:36:53,000

Got you.

642

00:36:53,000 --> 00:36:54,000

Shake it.

643

00:36:54,000 --> 00:36:56,000

The engine is purring perfectly.

644

00:36:56,000 --> 00:37:00,000

If we don't meet again, I love you.

645

00:37:00,000 --> 00:37:02,000

They're off.

646

00:37:02,000 --> 00:37:06,000

Remember, this is unmodified French fry oil.

647

00:37:06,000 --> 00:37:10,000

The gunk that restaurants up and down the country chalk out.

648

00:37:10,000 --> 00:37:13,000

The flames can be running just fine.

649

00:37:13,000 --> 00:37:19,000

They do the laps and get an MPG of 30, which for something that didn't cost a dime is pretty

650

00:37:19,000 --> 00:37:21,000

darn impressive.

651

00:37:21,000 --> 00:37:27,000

Number one, I'm surprised and impressed that the car runs on just straight filtered used

652

00:37:27,000 --> 00:37:28,000

kitchen oil.

653

00:37:28,000 --> 00:37:34,000

But number two, the fuel efficiency, it's only 10% less than regular diesel fuel.

654

00:37:34,000 --> 00:37:36,000

Yeah, that's cool.

655

00:37:36,000 --> 00:37:39,000

The other thing is we didn't make any modifications to this car.

656

00:37:39,000 --> 00:37:43,000

That means anybody who had a diesel car could just pour the stuff straight into the gas tank

657

00:37:43,000 --> 00:37:45,000

and it would run fine.

658

00:37:45,000 --> 00:37:47,000

Yeah, baby.

659

00:37:48,000 --> 00:37:50,000

So what do you think?

660

00:37:50,000 --> 00:37:54,000

Do you think the oil companies and the automakers are colluding to screw us?

661

00:37:54,000 --> 00:37:59,000

Well, not a single one of the devices we tested did anything at all with sole exception of

662

00:37:59,000 --> 00:38:01,000

used cooking oil.

663

00:38:01,000 --> 00:38:05,000

Right, but that didn't make your engine any more efficient and that's only helps because

664

00:38:05,000 --> 00:38:06,000

it's currently free.

665

00:38:06,000 --> 00:38:09,000

As soon as that becomes a real economy, they're going to charge you for that like anything

666

00:38:09,000 --> 00:38:10,000

else.

667

00:38:10,000 --> 00:38:14,000

Yeah, and considering the thermal efficiencies of these types of engines, you're simply

668

00:38:14,000 --> 00:38:17,000

not going to get these ultra high mileage out of those.

669

00:38:17,000 --> 00:38:23,000

If there was a way to make your engine super crazy efficient, we would know about it.

670

00:38:23,000 --> 00:38:24,000

It's busted.

671

00:38:24,000 --> 00:38:25,000

Busted.

672

00:38:30,000 --> 00:38:33,000

Coming right up, Buster flies by the seat of his pass.

673

00:38:33,000 --> 00:38:35,000

Three, two, one.

674

00:38:45,000 --> 00:38:54,000

Back with the farmer's fable, it's myth confirmed.

675

00:38:54,000 --> 00:39:00,000

Farm yard chemicals can turn and cycle, but given that this myth is called exploding

676

00:39:00,000 --> 00:39:03,000

trousers, we can't leave it at that.

677

00:39:03,000 --> 00:39:09,000

Myth busters, we always like to ramp it up to replicate the circumstances.

678

00:39:09,000 --> 00:39:11,000

So you want to ramp up the results?

679

00:39:11,000 --> 00:39:14,000

You want to see a pair of pants explode?

680

00:39:14,000 --> 00:39:19,000

Buster did burn baby burn, but for this crew, that ain't enough.

681

00:39:19,000 --> 00:39:23,000

They want a real explosion, not a flash in the pan.

682

00:39:23,000 --> 00:39:28,000

Q Explosives expert Frank Doyle and his magic silver.

683

00:39:28,000 --> 00:39:35,000

This is a high velocity explosive that we're using here, a specialty explosive, and it's

684

00:39:35,000 --> 00:39:42,000

much faster in detonating velocity than anything that we've used in previous episodes.

685

00:39:42,000 --> 00:39:46,000

So we expect Buster to get a pretty interesting ride.

686

00:39:46,000 --> 00:39:48,000

This is serious stuff.

687

00:39:48,000 --> 00:39:55,000

Exploding with a velocity of 21,000 feet per second, this could be Buster's last goodbye.

688

00:39:55,000 --> 00:40:00,000

In the vicinity of five minutes, his pants should be in New York.

689

00:40:01,000 --> 00:40:07,000

I think Madison Square Garden or Times Square or someplace like that.

690

00:40:07,000 --> 00:40:14,000

With the last wires in check, this boom promises to be one of the biggest in myth busters history.

691

00:40:14,000 --> 00:40:16,000

So hold on to your pants.

692

00:40:16,000 --> 00:40:19,000

Fire in the hole! Fire in the hole!

693

00:40:19,000 --> 00:40:23,000

Three, two, one.

694

00:40:26,000 --> 00:40:27,000

Uh oh.

695

00:40:27,000 --> 00:40:29,000

I turned it on.

696

00:40:30,000 --> 00:40:33,000

Well, that's a problem, isn't it?

697

00:40:33,000 --> 00:40:39,000

Right about now, Buster should have been somewhere over Texas, but it seems he's missed his flight.

698

00:40:39,000 --> 00:40:42,000

Fire in the hole! Fire in the hole!

699

00:40:42,000 --> 00:40:44,000

Let's try that again.

700

00:40:45,000 --> 00:40:47,000

This is it, the main event.

701

00:40:47,000 --> 00:40:49,000

Two, one.

702

00:40:50,000 --> 00:40:52,000

Oh no.

703

00:40:52,000 --> 00:40:54,000

A little quieter than I thought.

704

00:40:54,000 --> 00:40:58,000

So generally if there's a live bomb and the trigger doesn't work, that's bad, huh?

705

00:40:58,000 --> 00:41:00,000

That's not good.

706

00:41:00,000 --> 00:41:05,000

With some ultra-dangerous explosives, this is the worst-case scenario.

707

00:41:05,000 --> 00:41:09,000

But at least we have the best in the business to sort it out.

708

00:41:09,000 --> 00:41:12,000

Well, we had a Murphy's Law glitch.

709

00:41:12,000 --> 00:41:19,000

And apparently there was a minor break in the firing line.

710

00:41:19,000 --> 00:41:25,000

And that's being corrected, and we're gonna move full speed ahead and go to plan B.

711

00:41:28,000 --> 00:41:32,000

Three, two, one.

712

00:41:35,000 --> 00:41:38,000

Yeah! That's what I'm talking about.

713

00:41:38,000 --> 00:41:40,000

Those are exploding pants.

714

00:41:40,000 --> 00:41:42,000

Buster's not there anymore.

715

00:41:42,000 --> 00:41:46,000

That's 10 milliseconds to blow him up in three hours to find the pieces.

716

00:41:46,000 --> 00:41:47,000

That was cool.

717

00:41:47,000 --> 00:41:48,000

Hop in the hole.

718

00:41:50,000 --> 00:41:56,000

Smoldering buster parts all spanking over the field.

719

00:41:56,000 --> 00:41:58,000

There's a space!

720

00:41:58,000 --> 00:42:00,000

That's a hat.

721

00:42:00,000 --> 00:42:02,000

Frank, what'd you do to buster?

722

00:42:02,000 --> 00:42:05,000

Friends and family of buster should look away now.

723

00:42:05,000 --> 00:42:07,000

Bottom.

724

00:42:07,000 --> 00:42:11,000

Okay, I got leg and knee. That's good.

725

00:42:11,000 --> 00:42:13,000

I got a face, there's a thigh.

726

00:42:13,000 --> 00:42:14,000

There's a chest and a head.

727

00:42:14,000 --> 00:42:18,000

Even the great Humpty Dumpty was never this scrambled.

728

00:42:18,000 --> 00:42:19,000

What do you got?

729

00:42:19,000 --> 00:42:21,000

I got a hand.

730

00:42:21,000 --> 00:42:23,000

That's all that's left of his pants.

731

00:42:23,000 --> 00:42:26,000

But I guess all Humpty did was fall off a wall,

732

00:42:26,000 --> 00:42:31,000

whereas buster just got blown to smithereens by the bomb squad.

733

00:42:31,000 --> 00:42:34,000

I am not disappointed with these exploding pants.

734

00:42:34,000 --> 00:42:37,000

That was one of the finer explosions I've ever seen in my life.

735

00:42:37,000 --> 00:42:43,000

And when watching the high speed, you can actually watch body parts go off into the hills somewhere.

736

00:42:43,000 --> 00:42:47,000

Where I don't know, but I'm sure they're out there.

737

00:42:49,000 --> 00:42:54,000

Well, after that blast, as Frank said, busters on his way to New York.

738

00:42:54,000 --> 00:42:58,000

Now that's what I call flying by the seat of your pants.

739

00:42:58,000 --> 00:43:00,000

How did you guys go?

740

00:43:00,000 --> 00:43:02,000

Dude, it was sick.

741

00:43:02,000 --> 00:43:04,000

I think this might be my new favorite myth.

742

00:43:04,000 --> 00:43:06,000

We actually had exploding pants.

743

00:43:06,000 --> 00:43:10,000

But you know what though, the herbicide-treated pants were still really dangerous

744

00:43:10,000 --> 00:43:14,000

and we know that that chemical was common in New Zealand at the time.

745

00:43:14,000 --> 00:43:19,000

And I mean, if I was telling the story and I had a flash ignition in my pants, I would call an explosion.

746

00:43:19,000 --> 00:43:24,000

So you've got a little history and some exploding pants, you can call this one confirmed.

747

00:43:24,000 --> 00:43:27,000

I sure hope this never happens in my pants.

748

00:43:27,000 --> 00:43:29,000

Let's all pray it doesn't.