

1

00:00:00,000 --> 00:00:12,800

On this episode, burning down the house in a mythbusters bug bomb bonanza.

2

00:00:12,800 --> 00:00:19,360

Will this be the straw that breaks Jamie and Adam's backs?

3

00:00:19,360 --> 00:00:22,440

As they search for a needle in a haystack.

4

00:00:22,440 --> 00:00:23,520

My back is killing me.

5

00:00:23,520 --> 00:00:27,600

I am soaked to the bone.

6

00:00:27,800 --> 00:00:29,920

Strange voices in their heads.

7

00:00:29,920 --> 00:00:32,640

The build teams talking to plants.

8

00:00:32,640 --> 00:00:34,480

I hate you!

9

00:00:35,800 --> 00:00:38,240

Who are the mythbusters?

10

00:00:38,240 --> 00:00:39,640

Adam Savage.

11

00:00:39,640 --> 00:00:42,320

I reject the reality and substitute my own.

12

00:00:42,320 --> 00:00:43,760

And Jamie Heineman.

13

00:00:43,760 --> 00:00:45,960

I kinda like it in here, it's private.

14

00:00:45,960 --> 00:00:51,280

Between them, more than 30 years special effects experience.

15

00:00:51,280 --> 00:00:52,120

That was intense.

16

00:00:52,120 --> 00:00:55,960

They don't just tell the myths.

17

00:00:55,960 --> 00:00:57,960

They put them to the test.

18

00:01:07,880 --> 00:01:08,880

Bug bomb.

19

00:01:08,880 --> 00:01:12,480

This one's gonna help us fill out our explosion quota for this series, huh?

20

00:01:12,480 --> 00:01:17,360

The story is that a family in a 500 square foot house had a bug problem and decided to

21

00:01:17,360 --> 00:01:21,160

take care of it with those aerosol bug bombs.

22

00:01:21,160 --> 00:01:25,280

Unfortunately, they used 10 or 11 bug bombs.

23

00:01:25,280 --> 00:01:29,040

Each one could handle a 700 square foot house.

24

00:01:29,040 --> 00:01:33,960

So they went down the street to like wait out the bug-killing that they were doing.

25

00:01:33,960 --> 00:01:38,160

And they heard a boom and they came back to find their entire house had been blown to

26

00:01:38,160 --> 00:01:43,840

smithereens by the bug bombs igniting and setting fire to the house.

27

00:01:43,840 --> 00:01:50,680

This story is either the ultimate roaches revenge or a mythbusters flight of fancy.

28

00:01:50,680 --> 00:01:57,560

Every small house, enough foggers to fumigate a barn, a spark and...

29

00:01:57,560 --> 00:02:02,000

It seems bug bombs could be very well-named indeed.

30

00:02:02,000 --> 00:02:08,800

They'll get things started by cutting this myth down to size.

31

00:02:08,800 --> 00:02:14,400

We've set up this little plastic house as a miniature experiment to test the explosive

32

00:02:14,400 --> 00:02:20,640

qualities of bug bombs before we do it with a real house, a full-sized house.

33

00:02:20,640 --> 00:02:25,160

But what household appliance could spark an explosion?

34

00:02:25,160 --> 00:02:29,640

Adam is looking for a stove and a salesperson to baffle.

35

00:02:29,640 --> 00:02:32,000

Jorge is his man.

36

00:02:32,000 --> 00:02:35,960

Have you ever heard the myth of someone using too many of those bug foggers in their house?

37

00:02:35,960 --> 00:02:40,440

You know, they put out the gas to kill bugs and then their stove accidentally ignited it

38

00:02:40,440 --> 00:02:42,200

and blew the whole house up?

39

00:02:42,200 --> 00:02:44,960

Well, no, I never heard of that.

40

00:02:44,960 --> 00:02:47,400

Well, that's what we're going to do with your appliances.

41

00:02:47,400 --> 00:02:49,760

We're actually going to attempt to blow a house up.

42

00:02:49,880 --> 00:02:50,880

OK.

43

00:02:50,880 --> 00:02:54,280

Appliances for blowing up houses.

44

00:02:54,280 --> 00:02:55,880

That would be all four.

45

00:02:55,880 --> 00:02:59,400

This one has the electronic system.

46

00:02:59,400 --> 00:03:02,400

There's this part here and this one in the oven.

47

00:03:02,400 --> 00:03:05,160

So I think this is your baby here.

48

00:03:05,160 --> 00:03:06,680

That's perfect.

49

00:03:06,680 --> 00:03:12,160

Jorge has the easiest sale he'll ever make and a very interesting story to tell the

50

00:03:12,160 --> 00:03:13,920

relevant authorities.

51

00:03:13,920 --> 00:03:16,960

Adam has his oven and some work to do.

52

00:03:17,720 --> 00:03:21,160

I've never taken apart a stove like this before.

53

00:03:29,680 --> 00:03:32,360

So these are the actual sparkers, the things that go...

54

00:03:33,520 --> 00:03:38,240

The myth doesn't specify a stove sparker ignited the fogger gas.

55

00:03:38,240 --> 00:03:42,120

So the guys will test several possible household culprits.

56

00:03:42,200 --> 00:03:47,920

This is our igniter panel and I have four different types of ignition sources here.

57

00:03:47,920 --> 00:03:51,880

One is a lighter, which is like a pilot light.

58

00:03:51,880 --> 00:03:55,760

We have a standard wall plug-in sort of a device.

59

00:03:55,760 --> 00:03:59,440

This over here is a standard thermostat for your house.

60

00:03:59,440 --> 00:04:04,000

This one potentially could have a tiny spark created every time you move the lever.

61

00:04:04,000 --> 00:04:07,440

And lastly, we have a stove igniter.

62

00:04:07,440 --> 00:04:10,040

This just creates a continuous little spark.

63

00:04:11,040 --> 00:04:18,040

All the igniters will be wired back to a single control box so they can be set off remotely.

64

00:04:20,040 --> 00:04:24,040

That's probably wise given Adam is in charge of the electronics.

65

00:04:24,040 --> 00:04:26,040

OK, you ready for a jolt?

66

00:04:26,040 --> 00:04:27,040

Yeah.

67

00:04:27,040 --> 00:04:28,040

Here we go.

68

00:04:28,040 --> 00:04:31,040

So here comes the faulty wiring.

69

00:04:32,040 --> 00:04:34,040

Uh oh, that just...

70

00:04:34,040 --> 00:04:38,040

There's a short somewhere in the line because it just blew the thing.

71

00:04:38,040 --> 00:04:39,040

That would be bad.

72

00:04:41,040 --> 00:04:42,040

Let's see.

73

00:04:45,040 --> 00:04:46,040

Dammit.

74

00:04:48,040 --> 00:04:50,040

Why don't I make sure that everything else works?

75

00:04:50,040 --> 00:04:57,040

When in doubt, the mythbusters rely on the never fail combination of random tinkering and dumb luck.

76

00:04:57,040 --> 00:05:03,040

Alright, so I think my faulty wiring of the faulty wiring is no longer faulty so that it's correctly faulty.

77

00:05:04,040 --> 00:05:05,040

Ugh, let's see here.

78

00:05:11,040 --> 00:05:12,040

No short.

79

00:05:13,040 --> 00:05:14,040

Let's test the circuit.

80

00:05:19,040 --> 00:05:21,040

There we go, 125 volts.

81

00:05:22,040 --> 00:05:23,040

We're good.

82

00:05:24,040 --> 00:05:26,040

Time to take stock.

83

00:05:26,040 --> 00:05:27,040

Model house.

84

00:05:27,040 --> 00:05:28,040

Check.

85

00:05:28,040 --> 00:05:30,040

Potentially explosive bug bomb.

86

00:05:30,040 --> 00:05:31,040

Check.

87

00:05:31,040 --> 00:05:34,040

Various open flames and electrical sparks.

88

00:05:34,040 --> 00:05:35,040

Check.

89

00:05:35,040 --> 00:05:37,040

What could possibly go wrong?

90

00:05:37,040 --> 00:05:38,040

Highly flammable.

91

00:05:38,040 --> 00:05:39,040

Highly flammable.

92

00:05:39,040 --> 00:05:42,040

Turn off all ignition sources.

93

00:05:42,040 --> 00:05:44,040

Open flames.

94

00:05:44,040 --> 00:05:45,040

Pilot lights.

95

00:05:45,040 --> 00:05:47,040

Running electrical appliances.

96

00:05:47,040 --> 00:05:49,040

Thermostats.

97

00:05:49,040 --> 00:05:50,040

Wow.

98

00:05:51,040 --> 00:05:53,040

This is a bug bomb bomb.

99

00:05:53,040 --> 00:05:54,040

Yeah.

100

00:05:54,040 --> 00:05:57,040

Yet again, we're blowing things up in front of my shop.

101

00:05:57,040 --> 00:06:04,040

And not only that, but there are noxious chemicals involved, which will probably leave a residue over the whole block.

102

00:06:04,040 --> 00:06:08,040

And I guess it's okay.

103

00:06:08,040 --> 00:06:09,040

I'm getting used to it.

104

00:06:09,040 --> 00:06:10,040

So are the neighbors.

105

00:06:12,040 --> 00:06:13,040

There you go.

106

00:06:13,040 --> 00:06:14,040

Put it in.

107

00:06:15,040 --> 00:06:17,040

And so it's bombs away.

108

00:06:17,040 --> 00:06:23,040

A fogger is designed for an area 3,000 times bigger than this box.

109

00:06:23,040 --> 00:06:29,040

They have no idea if it's explosive or how big that explosion might be.

110

00:06:29,040 --> 00:06:31,040

Okay, not getting anything from the stove igniter.

111

00:06:31,040 --> 00:06:32,040

That sound?

112

00:06:32,040 --> 00:06:33,040

That means it's working.

113

00:06:33,040 --> 00:06:34,040

Okay.

114

00:06:34,040 --> 00:06:35,040

All right, thermostat.

115

00:06:37,040 --> 00:06:39,040

Okay, thermostat's working.

116

00:06:39,040 --> 00:06:40,040

Switching.

117

00:06:40,040 --> 00:06:41,040

Nothing.

118

00:06:41,040 --> 00:06:42,040

What a shocker.

119

00:06:42,040 --> 00:06:43,040

Okay.

120

00:06:43,040 --> 00:06:44,040

Faulty wiring.

121

00:06:46,040 --> 00:06:47,040

Hey!

122

00:06:50,040 --> 00:06:55,040

Not only is the fogger spray explosive, but Adam's rig worked.

123

00:06:55,040 --> 00:06:56,040

Ready?

124

00:06:57,040 --> 00:07:00,040

It's a red letter day and worth an encore.

125

00:07:00,040 --> 00:07:02,040

Faulty wiring in three, two, one.

126

00:07:03,040 --> 00:07:04,040

That was fantastic.

127

00:07:04,040 --> 00:07:07,040

I had no idea it would work like that.

128

00:07:07,040 --> 00:07:19,040

Oh, that was a rousing success.

129

00:07:19,040 --> 00:07:25,040

It turns out the propellant in many aerosols has a petroleum or propane base and burns

130

00:07:25,040 --> 00:07:27,040

in the right conditions.

131

00:07:28,040 --> 00:07:34,040

The Mythbusters Demolition Service is open for business.

132

00:07:34,040 --> 00:07:37,040

So we get to go to full scale now?

133

00:07:37,040 --> 00:07:39,040

Now we go to full scale.

134

00:07:39,040 --> 00:07:44,040

We need to gather up our ignition sources, the appliance timer, the thermostat, the

135

00:07:44,040 --> 00:07:50,040

stove sparker, the open flame or pilot light, and then we need someone who's going to let

136

00:07:50,040 --> 00:07:51,040

us blow up their house.

137

00:07:58,040 --> 00:08:01,040

I hate you, you pathetic little plants.

138

00:08:01,040 --> 00:08:05,040

The Mythbusters build team has something to say.

139

00:08:05,040 --> 00:08:06,040

I don't like you.

140

00:08:06,040 --> 00:08:09,040

I think you look fat in that green horrible shell.

141

00:08:09,040 --> 00:08:14,040

Is this the end of a beautiful friendship or the start of something else?

142

00:08:14,040 --> 00:08:18,040

I love you, love you, love you, love you, sweet, adorable peat.

143

00:08:28,040 --> 00:08:31,040

Okay, so what are we working on now?

144

00:08:31,040 --> 00:08:34,040

Our next myth is talking the plants.

145

00:08:34,040 --> 00:08:39,040

Now there's a lot of people out there that think your plants will grow better if you

146

00:08:39,040 --> 00:08:40,040

talk to them.

147

00:08:40,040 --> 00:08:42,040

What if you hate plants and you're really mean to them?

148

00:08:42,040 --> 00:08:44,040

We can try that too.

149

00:08:44,040 --> 00:08:46,040

You know what I'd like to try is music.

150

00:08:46,040 --> 00:08:49,040

They say classical music makes your plants grow better, but we should mix it up.

151

00:08:49,040 --> 00:08:52,040

I'll get some heavy metal and classical and see which one works better.

152

00:08:52,040 --> 00:08:54,040

Sounds good to me.

153

00:08:58,040 --> 00:09:00,040

Sweet talking plants.

154

00:09:00,040 --> 00:09:06,040

Normally the domain of eccentric old ladies with lots of cats, but anything for science.

155

00:09:06,040 --> 00:09:09,040

So we're doing a little experiment.

156

00:09:09,040 --> 00:09:14,040

We're getting some plants and seeing if they respond well if we talk nice or we talk mean

157

00:09:14,040 --> 00:09:15,040

to them.

158

00:09:15,040 --> 00:09:17,040

Have you ever heard of anything like this working?

159

00:09:17,040 --> 00:09:19,040

I think it's an old wives tale personally.

160

00:09:19,040 --> 00:09:21,040

So you don't talk to your plants then?

161

00:09:21,040 --> 00:09:23,040

I don't talk to my plants, no.

162

00:09:23,040 --> 00:09:26,040

So do you want to actually start from seed or little seedlings?

163

00:09:26,040 --> 00:09:28,040

We'd like to start with scratch.

164

00:09:28,040 --> 00:09:34,040

He might not believe the myth, but he's happy to sell them bush peas and plenty of other

165

00:09:34,040 --> 00:09:35,040

stuff besides.

166

00:09:35,040 --> 00:09:38,040

Do you have 70 of one kind of pot?

167

00:09:38,040 --> 00:09:40,040

I think talking to plants works.

168

00:09:40,040 --> 00:09:46,040

I mean, you know, I communicate with my plants in some way, I think, by thinking to them

169

00:09:46,040 --> 00:09:48,040

and I have the best garden on the block.

170

00:09:48,040 --> 00:09:53,040

I think the idea of talking to your plants is some foolish hippie crystal gripping nonsense

171

00:09:53,040 --> 00:09:56,040

and it absolutely has no effect on your plants.

172

00:09:59,040 --> 00:10:06,040

Armed with pots, fertilizer and peas to feed an army, the build team moves to phase two.

173

00:10:06,040 --> 00:10:11,040

They're going to build seven self-contained greenhouses.

174

00:10:13,040 --> 00:10:15,040

A control will have silence.

175

00:10:15,040 --> 00:10:20,040

One will have 24-hour heavy metal music, another classical.

176

00:10:20,040 --> 00:10:25,040

Two will be fed sweet talk and the last two will get abuse.

177

00:10:27,040 --> 00:10:36,040

They'll set up on Janie's roof, which it turns out would be equally suited as a location

178

00:10:36,040 --> 00:10:38,040

for wind tunnel testing.

179

00:10:38,040 --> 00:10:41,040

It seems like we've made big giant box kites.

180

00:10:41,040 --> 00:10:46,040

These things are pretty flimsy and it's very windy up here, so we're going to have to figure

181

00:10:46,040 --> 00:10:49,040

out a way to keep these from basically blowing away.

182

00:10:49,040 --> 00:10:51,040

Let's go see what happens.

183

00:10:56,040 --> 00:10:58,040

Adam can use it as a giant parachute.

184

00:11:06,040 --> 00:11:09,040

What they need is more weight and strength.

185

00:11:09,040 --> 00:11:12,040

Tori's solution? Plexiglass sides.

186

00:11:12,040 --> 00:11:14,040

I think these are going to hold up.

187

00:11:14,040 --> 00:11:19,040

Once they're all together, I think they will, but that's going to be the challenge.

188

00:11:23,040 --> 00:11:32,040

Soon enough, a little greenhouse village has grown up and no amount of huffing and puffing from Janie will blow it down.

189

00:11:32,040 --> 00:11:37,040

Putting all these greenhouses up here on the roof, I think I'm going to get checked out by the police

190

00:11:37,040 --> 00:11:40,040

for growing pot or something up here, you know?

191

00:11:40,040 --> 00:11:43,040

It's like, what are you doing? It looks kind of suspicious.

192

00:11:44,040 --> 00:11:48,040

There'll be 10 pots per house, one pea per pot.

193

00:11:48,040 --> 00:11:55,040

It's like a little nasty thing that makes me sick.

194

00:11:55,040 --> 00:11:58,040

It'll be shrivel and die.

195

00:11:58,040 --> 00:12:05,040

To prevent immediate shrivel death, they've rigged a battery-powered automatic watering system,

196

00:12:05,040 --> 00:12:08,040

overhead misters, and drips in the pots.

197

00:12:08,040 --> 00:12:12,040

Every day at the same time, each pot gets the exact amount of water.

198

00:12:12,040 --> 00:12:19,040

As far as possible, conditions will be identical for all the plants, except of course, the soundtrack.

199

00:12:19,040 --> 00:12:22,040

Speaking of normal, clear voice.

200

00:12:22,040 --> 00:12:25,040

Okay, this next one goes out to my friend, Greasy.

201

00:12:25,040 --> 00:12:31,040

I hope your roots rotten hell. The only thing you're good for is giving people gas.

202

00:12:31,040 --> 00:12:33,040

You suck, freshman!

203

00:12:33,040 --> 00:12:35,040

How's that?

204

00:12:35,040 --> 00:12:39,040

Beautiful round green peas.

205

00:12:39,040 --> 00:12:44,040

You nasty little awful green pea that's ruined every burrito I've ever had.

206

00:12:44,040 --> 00:12:48,040

Each monologue will be played constantly throughout the experiment.

207

00:12:48,040 --> 00:12:55,040

If the build team stayed all that time, the carbon dioxide from their breath might affect the

outcome.

208

00:12:55,040 --> 00:12:58,040

Dumbass peas.

209

00:12:58,040 --> 00:13:02,040

But Tori needs something with a little more polish.

210

00:13:02,040 --> 00:13:05,040

Do you have hardcore to the bone death metal?

211

00:13:05,040 --> 00:13:07,040

Do we ever?

212

00:13:10,040 --> 00:13:12,040

Yeah, this is good.

213

00:13:22,040 --> 00:13:24,040

I think it's gonna work.

214

00:13:24,040 --> 00:13:26,040

Cool.

215

00:13:26,040 --> 00:13:29,040

Now the classical section.

216

00:13:29,040 --> 00:13:31,040

Not a big selection.

217

00:13:32,040 --> 00:13:40,040

Everything's ready. The greenhouses are built, the peas are in their pots and watered, the CDs are playing.

218

00:13:47,040 --> 00:13:50,040

My timing is off. It's been a while since I've conducted.

219

00:13:50,040 --> 00:13:54,040

This myth now lies in nature's gentle hands.

220

00:13:55,040 --> 00:14:04,040

Keep a clean house and watch my reward. Chasing out to disgusting cockroaches.

221

00:14:04,040 --> 00:14:11,040

Ever since the invention of television and maybe even before, bugs have been a real nuisance.

222

00:14:11,040 --> 00:14:21,040

Luckily for all concerned, those clever folks in white coats keep inventing neat-o-ways to bring a bug-free smile to your dial.

223

00:14:21,040 --> 00:14:23,040

We're sending them to a motel.

224

00:14:23,040 --> 00:14:29,040

And now the mythbusters have come up with their own extermination plan.

225

00:14:31,040 --> 00:14:38,040

They're testing the myth that a family blew up their house after overfilling it with bug foggers.

226

00:14:38,040 --> 00:14:40,040

This is perfect.

227

00:14:40,040 --> 00:14:43,040

So they need a house to send into orbit.

228

00:14:43,040 --> 00:14:48,040

And luckily enough, NASA has this one due for demolition anyway.

229

00:14:48,040 --> 00:14:50,040

But it needs some work first.

230

00:14:53,040 --> 00:15:00,040

Here on Mythbusters Makeover, we're turning this lovely California bungalow into a disaster zone.

231

00:15:01,040 --> 00:15:05,040

The house in the myth was tiny, just 500 square feet.

232

00:15:05,040 --> 00:15:09,040

This place isn't big, but it's bigger than that.

233

00:15:09,040 --> 00:15:11,040

That's almost 200. This is 250.

234

00:15:11,040 --> 00:15:16,040

With basically up to this hallway is almost exactly 500 square feet.

235

00:15:16,040 --> 00:15:21,040

We'll get like 5, probably 550 if we block off all the other rooms in the hallway.

236

00:15:21,040 --> 00:15:22,040

Works for me.

237

00:15:24,040 --> 00:15:30,040

They'll seal off several rooms so the remaining space in the house is exactly 500 square feet.

238

00:15:30,040 --> 00:15:32,040

Bye-bye bathroom.

239

00:15:32,040 --> 00:15:35,040

The flammable carpets have to come out.

240

00:15:35,040 --> 00:15:40,040

And they need a way to ventilate the house in case the bug spray doesn't burn up.

241

00:15:40,040 --> 00:15:44,040

Something really complicated, like say opening a door.

242

00:15:44,040 --> 00:15:47,040

We don't need no friggin' flap.

243

00:15:47,040 --> 00:15:49,040

This is how Jamie finds his way back home.

244

00:15:49,040 --> 00:15:54,040

He seems like he's really smart, but he gets lost if he's more than 50 feet away from any one of us.

245

00:15:57,040 --> 00:16:00,040

So they've got their house and ventilation.

246

00:16:00,040 --> 00:16:02,040

Now, the sparky bits.

247

00:16:02,040 --> 00:16:06,040

Formerly, these two plugs were actually our faulty wiring test rig.

248

00:16:06,040 --> 00:16:10,040

What we did was we put a rocket igniter in there and wrapped some mattresses around it.

249

00:16:10,040 --> 00:16:13,040

So in case our open flame pilot light doesn't work,

250

00:16:13,040 --> 00:16:19,040

we have two emergency backup super-duper fail-safe foolproof ignition systems.

251

00:16:26,040 --> 00:16:29,040

They figure 200 feet should be far enough away.

252

00:16:29,040 --> 00:16:32,040

So that's where they'll fire the igniters from.

253

00:16:32,040 --> 00:16:36,040

And now it's time to drop a bomb or 12.

254

00:16:36,040 --> 00:16:37,040

Just fine.

255

00:16:44,040 --> 00:16:45,040

Whoa!

256

00:16:47,040 --> 00:16:49,040

It's all bold in this thing.

257

00:16:51,040 --> 00:16:53,040

He becomes much more expressive.

258

00:16:53,040 --> 00:16:55,040

Now he's like, oh.

259

00:16:55,040 --> 00:16:56,040

Let's go do this.

260

00:16:56,040 --> 00:16:57,040

Okay.

261

00:16:57,040 --> 00:16:59,040

There's going to be two in the hallway here.

262

00:16:59,040 --> 00:17:04,040

The plan is to set off 12 bug bombs inside the house, the same as the myth,

263

00:17:04,040 --> 00:17:08,040

and more than 10 times the manufacturer's recommended amount.

264

00:17:08,040 --> 00:17:14,040

Then they'll fire up each of the ignition systems until they get a blast.

265

00:17:14,040 --> 00:17:18,040

I put our chances right around 90%.

266

00:17:18,040 --> 00:17:20,040

I mean, there's always something that can go wrong,

267

00:17:20,040 --> 00:17:25,040

but we've got fail-safe and foolproof ignition systems times three or four.

268

00:17:25,040 --> 00:17:30,040

Plus, we've got, by my last count, like seven or eight fire departments helping us out.

269

00:17:30,040 --> 00:17:32,040

And I think we've done our homework.

270

00:17:32,040 --> 00:17:34,040

I've put us right around 90%.

271

00:17:34,040 --> 00:17:35,040

You ready?

272

00:17:35,040 --> 00:17:36,040

I'm ready.

273

00:17:36,040 --> 00:17:37,040

And you go.

274

00:17:37,040 --> 00:17:39,040

And yell loud and clear if you need help.

275

00:17:39,040 --> 00:17:40,040

Okay.

276

00:17:40,040 --> 00:17:41,040

That's what I'm here for.

277

00:17:46,040 --> 00:17:47,040

I think I'm done.

278

00:17:47,040 --> 00:17:48,040

Go ahead.

279

00:17:48,040 --> 00:17:49,040

Let me out.

280

00:17:52,040 --> 00:17:55,040

The air is turning thick and toxic.

281

00:17:55,040 --> 00:17:58,040

Even with gas masks, they need to get out fast.

282

00:17:58,040 --> 00:18:00,040

Okay, we're about to close the house up over.

283

00:18:07,040 --> 00:18:08,040

Okay, the house is closed up.

284

00:18:08,040 --> 00:18:09,040

We're moving away.

285

00:18:11,040 --> 00:18:12,040

Starting the timer.

286

00:18:12,040 --> 00:18:14,040

Stop and bring the clothes to go.

287

00:18:14,040 --> 00:18:17,040

Okay, everybody behind the barricades.

288

00:18:18,040 --> 00:18:19,040

Lighting stove igniter.

289

00:18:26,040 --> 00:18:27,040

Nothing.

290

00:18:28,040 --> 00:18:30,040

Something's not right.

291

00:18:31,040 --> 00:18:32,040

Nothing.

292

00:18:32,040 --> 00:18:34,040

Hey, it would help if I was plugged in.

293

00:18:34,040 --> 00:18:36,040

Ignition's hot.

294

00:18:36,040 --> 00:18:38,040

Lighting stove igniter.

295

00:18:39,040 --> 00:18:40,040

Can you see it here?

296

00:18:40,040 --> 00:18:41,040

Yes, lighting.

297

00:18:43,040 --> 00:18:44,040

No ignition.

298

00:18:44,040 --> 00:18:47,040

I mean, we got as much of a flame as we could get.

299

00:18:48,040 --> 00:18:49,040

Interesting.

300

00:18:49,040 --> 00:18:51,040

Do you want to open the door?

301

00:18:51,040 --> 00:18:52,040

Yep.

302

00:18:54,040 --> 00:18:59,040

As the air clears, the mythbusters are well mystified.

303

00:18:59,040 --> 00:19:03,040

After all, they've blown this stuff up just fine back in the workshop.

304

00:19:03,040 --> 00:19:07,040

Blowing up a house with bug bombs is maybe not quite as easy as we thought.

305

00:19:07,040 --> 00:19:11,040

So we're going to have to persuade it to blow up.

306

00:19:12,040 --> 00:19:18,040

To do that, they'll try a bigger, longer burning flame and more bug bombs.

307

00:19:20,040 --> 00:19:23,040

Far, far more than is recommended on the label.

308

00:19:23,040 --> 00:19:26,040

Far more than is safe or sane.

309

00:19:34,040 --> 00:19:36,040

Man, that was dense.

310

00:19:39,040 --> 00:19:44,040

As the house fills with fogger and the team takes its position behind the blast screen,

311

00:19:44,040 --> 00:19:48,040

it's worth taking a brief diversion to San Diego, California.

312

00:19:49,040 --> 00:19:51,040

It's the blast turned around the neighborhood.

313

00:19:51,040 --> 00:19:54,040

Roach bombs that did much more than just kill a few bugs.

314

00:19:54,040 --> 00:19:57,040

They knocked this home off its foundation.

315

00:19:57,040 --> 00:19:59,040

This house could have ignited the myth.

316

00:20:00,040 --> 00:20:04,040

It was blown apart in the same circumstances the guys are recreating.

317

00:20:04,040 --> 00:20:08,040

Too many bug bombs and an ignition source.

318

00:20:08,040 --> 00:20:10,040

In this case, a wall heater.

319

00:20:10,040 --> 00:20:11,040

More isn't better.

320

00:20:11,040 --> 00:20:13,040

Just pay attention to the directions.

321

00:20:13,040 --> 00:20:18,040

That would have been good advice for Jamie and Adam as they prepare to press the button.

322

00:20:18,040 --> 00:20:21,040

But, well, it's too late now.

323

00:20:21,040 --> 00:20:22,040

Okay, you ready?

324

00:20:22,040 --> 00:20:23,040

I'm making the ignition.

325

00:20:23,040 --> 00:20:26,040

Okay, places everybody make sure you're out of range.

326

00:20:26,040 --> 00:20:28,040

Okay, and when you're ready.

327

00:20:28,040 --> 00:20:30,040

Faulty wiring here it comes.

328

00:20:33,040 --> 00:20:34,040

It's lit.

329

00:20:34,040 --> 00:20:35,040

It lit good.

330

00:20:45,040 --> 00:20:47,040

It totally emptied the whole house out.

331

00:20:47,040 --> 00:20:49,040

We got something.

332

00:20:51,040 --> 00:20:55,040

The bug bomb myth is emphatically proved.

333

00:20:55,040 --> 00:20:58,040

It was foggy and then all of a sudden it was very clear.

334

00:20:58,040 --> 00:21:00,040

Hey, the smoke detector works.

335

00:21:02,040 --> 00:21:03,040

Wow, look at that.

336

00:21:04,040 --> 00:21:06,040

Popped the back door right off.

337

00:21:07,040 --> 00:21:09,040

All the air just came out like a whoosh.

338

00:21:09,040 --> 00:21:11,040

I wanted broken glass.

339

00:21:11,040 --> 00:21:13,040

Oh, we got a fire in here.

340

00:21:13,040 --> 00:21:14,040

We do.

341

00:21:14,040 --> 00:21:16,040

There's smoke in there.

342

00:21:26,040 --> 00:21:27,040

Did he put it out?

343

00:21:27,040 --> 00:21:28,040

You know, he got it.

344

00:21:35,040 --> 00:21:36,040

No roaches.

345

00:21:36,040 --> 00:21:37,040

Go figure.

346

00:21:37,040 --> 00:21:39,040

But you could never be too sure.

347

00:21:41,040 --> 00:21:44,040

Jamie and Adam have all these foggers left over.

348

00:21:46,040 --> 00:21:47,040

One more.

349

00:21:47,040 --> 00:21:49,040

This is Mythbusters after all.

350

00:21:55,040 --> 00:22:02,040

Oh, man, that is rank.

351

00:22:02,040 --> 00:22:05,040

Big boom, big boom, big boom.

352

00:22:05,040 --> 00:22:11,040

In five, four, three, two, one.

353

00:22:12,040 --> 00:22:15,040

That's what I wanted to hear.

354

00:22:16,040 --> 00:22:18,040

That's all we're talking about.

355

00:22:19,040 --> 00:22:20,040

Wow.

356

00:22:21,040 --> 00:22:23,040

Did we blow out a window?

357

00:22:23,040 --> 00:22:24,040

Yeah.

358

00:22:24,040 --> 00:22:25,040

It's on.

359

00:22:25,040 --> 00:22:26,040

Wait, what?

360

00:22:26,040 --> 00:22:27,040

It's on.

361

00:22:27,040 --> 00:22:28,040

It's on.

362

00:22:28,040 --> 00:22:29,040

I don't know.

363

00:22:29,040 --> 00:22:30,040

Oh, man.

364

00:22:30,040 --> 00:22:31,040

I'm not the one who was there.

365

00:22:31,040 --> 00:22:32,040

I was there.

366

00:22:32,040 --> 00:22:33,040

I don't know.

367

00:22:33,040 --> 00:22:35,040

I don't know.

368

00:22:35,040 --> 00:22:36,040

I don't know.

369

00:22:36,040 --> 00:22:37,040

It's on.

370

00:22:38,040 --> 00:22:39,040

It's on.

371

00:22:39,040 --> 00:22:40,040

It's on.

372

00:22:40,040 --> 00:22:42,040

Yeah. Woo!

373

00:22:50,040 --> 00:22:56,040

Over at the Environmental Protection Agency, they could have saved the mythbusters quite a bit of trouble.

374

00:22:56,040 --> 00:23:02,040

That's no myth. It occurs in California at least once or twice per year.

375

00:23:02,040 --> 00:23:09,040

They overload the number of these foggers in their dwelling to the point where it fills up

376

00:23:09,040 --> 00:23:13,040

and then they forget to shut off their pilot light or other ignition source

377

00:23:13,040 --> 00:23:18,040

and blow out windows or even to some extent can blow up and destroy the entire structure.

378

00:23:20,040 --> 00:23:27,040

So always read the label and don't try this at home if you still want to have a home to go to.

379

00:23:28,040 --> 00:23:31,040

Alright, what do you think guys? Is it busted, plausible or confirmed?

380

00:23:31,040 --> 00:23:34,040

It's definitely confirmed. I mean, we blew the doors out.

381

00:23:34,040 --> 00:23:40,040

You know, we had a little fussing around with the ignition source, but it's true. It'll happen.

382

00:23:40,040 --> 00:23:45,040

Bug bombs plus ignition source equals boom, no doubt confirmed.

383

00:23:45,040 --> 00:24:03,040

Only reason I planted you guys was so I'd have someone to abuse on Mondays.

384

00:24:03,040 --> 00:24:07,040

Things are just peachy keen in greenhouse world.

385

00:24:07,040 --> 00:24:12,040

You suck! Carval ugly little gross disgusting peas! I hate you!

386

00:24:13,040 --> 00:24:18,040

It's been a week since the peas were planted and it's time for a headcount.

387

00:24:18,040 --> 00:24:23,040

I have five sprouts in my nasty... oh wait, six! There's one there too.

388

00:24:23,040 --> 00:24:26,040

Okay, I'm gonna go check the nice and see how many I have over there.

389

00:24:29,040 --> 00:24:33,040

Five. Nice has the same amount as nasty.

390

00:24:33,040 --> 00:24:36,040

Peas are just busting out all over.

391

00:24:36,040 --> 00:24:39,040

Wow, six sprouts in the nice greenhouse.

392

00:24:40,040 --> 00:24:43,040

We started them a week ago, that's pretty good.

393

00:24:43,040 --> 00:24:46,040

See how the nasty one's doing.

394

00:24:49,040 --> 00:24:54,040

Not a whole lot going on in the house of nasty. Only three sprouts.

395

00:24:54,040 --> 00:24:56,040

Nasty.

396

00:24:56,040 --> 00:24:59,040

Hmm, maybe we're onto something here.

397

00:24:59,040 --> 00:25:03,040

Seven sprouts have risen to the sweet sounds of classical music.

398

00:25:03,040 --> 00:25:06,040

And over in the house of rock.

399

00:25:06,040 --> 00:25:10,040

One, two, three, four, five, six, seven.

400

00:25:10,040 --> 00:25:15,040

Seven. It's neck and neck between classical and metal.

401

00:25:15,040 --> 00:25:20,040

However, the metal seems to be popping up a little bit more.

402

00:25:20,040 --> 00:25:25,040

While the plants seem to be coping, the build team is shaping as a fine study

403

00:25:25,040 --> 00:25:28,040

in the effects of extreme audio.

404

00:25:28,040 --> 00:25:32,040

We've been up here for hours and I just want to stab my eye out with a rusty spoon.

405

00:25:32,040 --> 00:25:40,040

Life is good. Sitting here, playing with my plants, listening to classical music.

406

00:25:40,040 --> 00:25:44,040

I mean, I am a blessed man.

407

00:25:44,040 --> 00:25:48,040

I think that you're very unpopular as far as vegetable goes.

408

00:25:48,040 --> 00:25:54,040

Answering this myth will take 60 days. It's sounding like a prison sentence.

409

00:25:55,040 --> 00:26:01,040

The Mythbusters are busting out all country.

410

00:26:01,040 --> 00:26:03,040

This is a big bail of hay.

411

00:26:03,040 --> 00:26:07,040

But why are these city boys down on the farm?

412

00:26:07,040 --> 00:26:12,040

The answer is like finding a needle in a...

413

00:26:19,040 --> 00:26:22,040

Jamie, I think it's time to go.

414

00:26:22,040 --> 00:26:27,040

Jamie, I think it's time that we go for a new kind of myth, a new kind of experiment.

415

00:26:27,040 --> 00:26:33,040

I think we should start investigating old adages and homilies to see if they're in fact still relevant.

416

00:26:33,040 --> 00:26:36,040

You mean like the needle in the haystack.

417

00:26:36,040 --> 00:26:42,040

Exactly. Can we use modern technology to render that phrase meaningless?

418

00:26:42,040 --> 00:26:46,040

Well, that works for me. That means the first stop is a hay store.

419

00:26:46,040 --> 00:26:49,040

Otherwise known as a farm.

420

00:26:53,040 --> 00:26:56,040

The Hay Store

421

00:26:59,040 --> 00:27:03,040

Barrett's Hay Farm, just outside Sacramento.

422

00:27:03,040 --> 00:27:06,040

Have you ever found a needle in the hay?

423

00:27:06,040 --> 00:27:09,040

No, I can't say that I have. I've never found one.

424

00:27:09,040 --> 00:27:13,040

And Mike hasn't been short on needle-finding opportunities.

425

00:27:13,040 --> 00:27:18,040

Barrett's makes more than 2 million bales a year.

426

00:27:18,040 --> 00:27:24,040

Both hay, which is what animals eat, and straw, which is generally what they sleep on.

427

00:27:24,040 --> 00:27:32,040

It's funny because if you asked me to pick out what I would think of as your traditional movie type hay, I would point to the straw.

428

00:27:32,040 --> 00:27:34,040

Not to this stuff.

429

00:27:34,040 --> 00:27:36,040

Traditional movie hay?

430

00:27:36,040 --> 00:27:41,040

Yeah, you know, like the people are always getting stuck in a hay bale or rolling in the hay or whatever they do in the movies.

431

00:27:41,040 --> 00:27:43,040

That's what I would think of as hay.

432

00:27:43,040 --> 00:27:46,040

Having a roll in the hay with your girlfriend.

433

00:27:46,040 --> 00:27:48,040

Yeah, don't get all red-faced.

434

00:27:48,040 --> 00:27:56,040

To make their very own movie type hay stack, they'll load up with 20 bales of Mike's finest.

435

00:27:56,040 --> 00:28:03,040

No, I don't enjoy loading hay at all. Actually, it turns out this is one of those things that I didn't have to explore.

436

00:28:05,040 --> 00:28:10,040

So they have their hay now. Where can they find a needle?

437

00:28:10,040 --> 00:28:13,040

Ah, this might be the place.

438

00:28:13,040 --> 00:28:15,040

Hi, are you Kathy?

439

00:28:15,040 --> 00:28:19,040

Needle expert Kathy gets straight to the point.

440

00:28:19,040 --> 00:28:21,040

Well, the real question is what kind of needles?

441

00:28:21,040 --> 00:28:29,040

Because needles for many, many generations were made out of bone, which would make them definitely much harder to find with modern technology.

442

00:28:29,040 --> 00:28:34,040

Okay, so what we like is, I guess, two of the bone ones, unfortunately.

443

00:28:34,040 --> 00:28:40,040

They also take a bunch of metal needles, and the mythbusters are ready for action.

444

00:28:41,040 --> 00:28:44,040

Alright, well, we've got ten bales of hay apiece.

445

00:28:44,040 --> 00:28:53,040

We've got four needles, one of bone, three of steel, and the producer wants us to have another one of those competitions.

446

00:28:53,040 --> 00:28:59,040

I mean, this one's going to be really tough, because normally I just think like a metal detector or a magnet to find most of the needles.

447

00:28:59,040 --> 00:29:01,040

But the bone one really throws it off.

448

00:29:01,040 --> 00:29:05,040

We've got to come up with a machine that can separate out a non-metallic needle as well.

449

00:29:06,040 --> 00:29:08,040

So it's a competition.

450

00:29:08,040 --> 00:29:14,040

They'll split the hay into two stacks, hide the needles, and see whose machine finds them first.

451

00:29:14,040 --> 00:29:15,040

What?

452

00:29:22,040 --> 00:29:23,040

Love you.

453

00:29:25,040 --> 00:29:26,040

You suck.

454

00:29:26,040 --> 00:29:27,040

Suck.

455

00:29:27,040 --> 00:29:28,040

Suck.

456

00:29:28,040 --> 00:29:29,040

Come on, little peas.

457

00:29:29,040 --> 00:29:30,040

Push it up.

458

00:29:30,040 --> 00:29:32,040

I love you, love you, love you, love you, love you.

459

00:29:36,040 --> 00:29:43,040

So, Christine, we're about to build a needle-finding device.

460

00:29:43,040 --> 00:29:49,040

Normally, Jamie keeps his design simple, but all that fresh air has gone to his head.

461

00:29:49,040 --> 00:29:56,040

We're going to take a leaf blower, and we're going to suck hay up at the other side into a long horizontal peter.

462

00:29:56,040 --> 00:30:02,040

We're going to have that to feed into a metal pipe, feed into a metal 55-gallon, myron.

463

00:30:02,040 --> 00:30:04,040

A picture might help.

464

00:30:04,040 --> 00:30:09,040

Hay will be blown through a long rotating tube with slots cut in it for the needles to fall through,

465

00:30:09,040 --> 00:30:13,040

and a magnet to catch them at the end if they make it that far.

466

00:30:13,040 --> 00:30:20,040

As a fail-safe, the hay will then be channeled into a furnace and burnt, leaving only needles.

467

00:30:20,040 --> 00:30:26,040

This mechanical approach will work where no electronic means would possibly work.

468

00:30:26,040 --> 00:30:33,040

I mean, how could you possibly sort out a bone needle from the middle of a haystack?

469

00:30:34,040 --> 00:30:37,040

That question's troubling Adam, too.

470

00:30:37,040 --> 00:30:39,040

Plan A is a sifting table.

471

00:30:39,040 --> 00:30:43,040

Shake the hay through and use a metal detector to find the needles.

472

00:30:45,040 --> 00:30:47,040

Ha, ha, ha, there we go.

473

00:30:48,040 --> 00:30:51,040

So, needle fell through on first try.

474

00:30:51,040 --> 00:30:56,040

Now the problem is, how would one get a bone needle out of here?

475

00:30:56,040 --> 00:30:57,040

Ha, ha.

476

00:30:57,040 --> 00:31:00,040

Not with a metal detector, that's for sure.

477

00:31:00,040 --> 00:31:02,040

Time for Plan B.

478

00:31:02,040 --> 00:31:08,040

I'm going to build a new machine that will sift instead of using, like, grating holes like this,

479

00:31:08,040 --> 00:31:13,040

but actually use water to separate, agitate the hay and separate out hopefully the needles,

480

00:31:13,040 --> 00:31:16,040

and then I pick them out at the bottom of a sluice.

481

00:31:21,040 --> 00:31:22,040

And then I get this needle.

482

00:31:22,040 --> 00:31:24,040

Water and gravity.

483

00:31:24,040 --> 00:31:28,040

Adam hopes he's onto a lethal needle-finding combination.

484

00:31:29,040 --> 00:31:31,040

So the hay floats quite nicely.

485

00:31:31,040 --> 00:31:34,040

Let's see what it takes to agitate it.

486

00:31:38,040 --> 00:31:40,040

Alright, I'm going to look underneath.

487

00:31:44,040 --> 00:31:48,040

Let's see if I can see this needle.

488

00:31:49,040 --> 00:31:51,040

Is that my needle?

489

00:31:51,040 --> 00:31:53,040

Oh, that is it.

490

00:31:53,040 --> 00:31:54,040

There we go.

491

00:31:54,040 --> 00:32:04,040

This is actually the only method I've looked at so far that will also net me the bone needle when all is said and done.

492

00:32:05,040 --> 00:32:09,040

And so the needle finder 2000 is born.

493

00:32:09,040 --> 00:32:17,040

A shallow tank, three agitators, hay goes in, sludge comes out, and hopefully needles are left behind.

494

00:32:18,040 --> 00:32:42,040

Once again, the Mythbusters ingenuity is on the line.

495

00:32:42,040 --> 00:32:48,040

Will Adam's paddle-wheeled water sorting needle finder 2000 do the job?

496

00:32:48,040 --> 00:32:50,040

Oh, she's going to blow captain!

497

00:32:50,040 --> 00:32:54,040

I can't give it up much longer!

498

00:32:54,040 --> 00:33:00,040

Or will Jamie's high rotation tube with needle slots win the day?

499

00:33:02,040 --> 00:33:06,040

The only way to find out is to put them to the test.

500

00:33:13,040 --> 00:33:20,040

Our plant diary says it's been 27 days.

501

00:33:20,040 --> 00:33:22,040

Ooh, here we are, dead of summer.

502

00:33:22,040 --> 00:33:24,040

And we're like halfway there.

503

00:33:24,040 --> 00:33:29,040

At Greenhouse Central, only the control house has had silence.

504

00:33:29,040 --> 00:33:39,040

For the rest, four weeks of constant rotation CDs and cajoling to test if plants grow better if they're talked to.

505

00:33:39,040 --> 00:33:43,040

We need to grow real big. We got the state fair coming up in about a month.

506

00:33:43,040 --> 00:33:46,040

You guys look like champs, alright?

507

00:33:46,040 --> 00:33:48,040

Yeah! Come on, baby!

508

00:33:48,040 --> 00:33:50,040

Yeah, go!

509

00:33:50,040 --> 00:33:51,040

Come on!

510

00:33:51,040 --> 00:33:54,040

Yeah! Go, go, go!

511

00:33:54,040 --> 00:33:56,040

Oh, yeah!

512

00:33:56,040 --> 00:33:58,040

Woo!

513

00:33:58,040 --> 00:34:00,040

That's going to be good for them.

514

00:34:00,040 --> 00:34:05,040

That will really inspire these guys to grow a little bit better.

515

00:34:05,040 --> 00:34:07,040

Oh my gosh.

516

00:34:08,040 --> 00:34:13,040

Strangely enough, halfway through the experiment, trends are emerging.

517

00:34:13,040 --> 00:34:21,040

My sweet words must have an enormous effect on my plants because these plants are growing much better than my nasty plants.

518

00:34:21,040 --> 00:34:23,040

This guy here is huge!

519

00:34:23,040 --> 00:34:25,040

It's got little arms reaching out, grabbing on.

520

00:34:25,040 --> 00:34:29,040

So far, Talking Nice is actually working and I hate to say it.

521

00:34:29,040 --> 00:34:31,040

Scotty might be proving me wrong.

522

00:34:31,040 --> 00:34:35,040

Talking nicely to plants, making them grow better.

523

00:34:35,040 --> 00:34:38,040

Is Carrie losing her mind?

524

00:34:38,040 --> 00:34:42,040

Oh! Lovely morning to all you peas.

525

00:34:42,040 --> 00:34:45,040

Look at all the nice little peas growing in there.

526

00:34:45,040 --> 00:34:47,040

Oh, I love you peas.

527

00:34:50,040 --> 00:34:52,040

I'm worried about all of us.

528

00:34:52,040 --> 00:34:55,040

They know. They know how I feel.

529

00:34:55,040 --> 00:34:58,040

I think we need some psychological evaluation.

530

00:34:58,040 --> 00:35:04,040

I'm going to rip you out of your pots and turn you into pulp on the ground.

531

00:35:04,040 --> 00:35:06,040

Got it?

532

00:35:06,040 --> 00:35:09,040

Clearly, they need some time off this rooftop.

533

00:35:09,040 --> 00:35:13,040

They'll leave the watering system to babysit their plants.

534

00:35:16,040 --> 00:35:17,040

They're doing pretty well.

535

00:35:17,040 --> 00:35:20,040

The plants are doing very well today, Tori.

536

00:35:22,040 --> 00:35:24,040

Hi, Tori. What plants do you think are doing better?

537

00:35:24,040 --> 00:35:25,040

How are you guys?

538

00:35:25,040 --> 00:35:29,040

I think that having metal plants are better because there's so much anger in this world.

539

00:35:29,040 --> 00:35:32,040

It really helps to listen to that kind of stuff and you can get it all out.

540

00:35:32,040 --> 00:35:33,040

It's okay.

541

00:35:33,040 --> 00:35:34,040

Oh, I can see what you mean.

542

00:35:34,040 --> 00:35:38,040

That classical music really kind of makes the hairs on my neck stand out.

543

00:35:38,040 --> 00:35:40,040

Let's get out of the sun.

544

00:35:55,040 --> 00:36:05,040

This is going to be the biggest hail-bay-hell thing of hay you've ever seen.

545

00:36:05,040 --> 00:36:06,040

Let's roll it up.

546

00:36:06,040 --> 00:36:12,040

Jamie figures the easiest way to find a needle in a haystack is to make the haystack go away.

547

00:36:12,040 --> 00:36:17,040

His machine is designed to separate out the needles and burn the rest.

548

00:36:17,040 --> 00:36:20,040

Adam is using water.

549

00:36:20,040 --> 00:36:24,040

Hay floats and needles sink, he hopes.

550

00:36:24,040 --> 00:36:30,040

Adam's rig is actually fairly clever, I think, and it may well handle a better volume than what mine does.

551

00:36:30,040 --> 00:36:33,040

I think mine might be a little bit more thorough.

552

00:36:33,040 --> 00:36:36,040

This Mythbusters team is going to win this one handily.

553

00:36:36,040 --> 00:36:39,040

We'll be like sipping remoses on the baits of Jamie.

554

00:36:39,040 --> 00:36:42,040

They'll be like, oh, I still have the two needles to find.

555

00:36:44,040 --> 00:36:50,040

As the needles are buried by researcher Collette, it's clear the boys will need help.

556

00:36:51,040 --> 00:36:53,040

Tori and Carrie will team up with Adam.

557

00:36:53,040 --> 00:36:56,040

Christine and Scotty are with Jamie.

558

00:36:56,040 --> 00:36:57,040

All right, you guys.

559

00:36:57,040 --> 00:36:58,040

Ready?

560

00:36:58,040 --> 00:37:00,040

The clock is ticking.

561

00:37:00,040 --> 00:37:02,040

Go!

562

00:37:10,040 --> 00:37:15,040

Adam's team feeds the hay along the water trough and out the other side,

563

00:37:15,040 --> 00:37:18,040

hoping the needles sink to the bottom on the way through.

564

00:37:18,040 --> 00:37:20,040

I'm not sure about this.

565

00:37:20,040 --> 00:37:27,040

Jamie's hay is blown down the twisting tube, allowing the needles to separate and fall out slots.

566

00:37:27,040 --> 00:37:34,040

At the far end, it's transferred to a furnace, which should burn everything but metal and bone.

567

00:37:34,040 --> 00:37:36,040

Have you seen his machine working?

568

00:37:36,040 --> 00:37:38,040

It's like Dante's inferno over there.

569

00:37:38,040 --> 00:37:43,040

The fire department is on hand, just in case, which seems to be a good idea.

570

00:37:43,040 --> 00:37:45,040

All right, beat it.

571

00:37:45,040 --> 00:37:47,040

Go for it.

572

00:37:49,040 --> 00:37:51,040

Working great.

573

00:37:51,040 --> 00:37:56,040

Adam's going to have about, like, 50,000 pounds of wet hay to get rid of at the end of this story,

574

00:37:56,040 --> 00:37:59,040

and I'm not going to have anything.

575

00:38:00,040 --> 00:38:04,040

In fact, Adam might not have very much wet hay at all.

576

00:38:04,040 --> 00:38:06,040

He's running out of water.

577

00:38:10,040 --> 00:38:15,040

I don't know what the problem is, but I hear a lot of beating on something with a hammer,

578

00:38:15,040 --> 00:38:18,040

and Adam's kind of looking pale.

579

00:38:19,040 --> 00:38:26,040

I had to take a wheel off so I can manually kind of at least let some of the water back in.

580

00:38:27,040 --> 00:38:31,040

As is their way, the fire department saves the day.

581

00:38:31,040 --> 00:38:36,040

Cheating? Would I consider this cheating? Absolutely not.

582

00:38:37,040 --> 00:38:43,040

And while Tory's coming to the rescue, he's also thought up a modification.

583

00:38:43,040 --> 00:38:49,040

This is adding some magnets to the front end of our feed trough.

584

00:38:49,040 --> 00:38:52,040

These are super, super strong neodymium magnets.

585

00:38:52,040 --> 00:38:58,040

And see if we can't pick the needle out at the very beginning.

586

00:38:58,040 --> 00:39:01,040

Yes, you just had your finger on it, right?

587

00:39:01,040 --> 00:39:04,040

Good idea. Jamie thought of it ages ago.

588

00:39:04,040 --> 00:39:06,040

That's the little one.

589

00:39:06,040 --> 00:39:09,040

Woo! All right.

590

00:39:09,040 --> 00:39:12,040

Oh, man. They found one.

591

00:39:12,040 --> 00:39:15,040

It made it through the slots.

592

00:39:15,040 --> 00:39:18,040

You found one? Just one?

593

00:39:20,040 --> 00:39:22,040

Let's keep going. Let's keep going. We gotta go.

594

00:39:22,040 --> 00:39:28,040

I was starting to think that they didn't put needles in the stack, and they were just trying to screw with us or something.

595

00:39:28,040 --> 00:39:30,040

Well, now you know.

596

00:39:31,040 --> 00:39:35,040

That little needle took more than four hours to find.

597

00:39:35,040 --> 00:39:40,040

Turns out, that's how long it takes to find a needle in a haystack.

598

00:39:40,040 --> 00:39:42,040

Hey! Hey!

599

00:39:42,040 --> 00:39:44,040

Yeah!

600

00:39:44,040 --> 00:39:50,040

That is one found needle in your face.

601

00:39:50,040 --> 00:39:52,040

It was on Tory's super magnet.

602

00:39:52,040 --> 00:39:54,040

Wait, wait, wait, wait. Hold up.

603

00:39:56,040 --> 00:39:58,040

Found another one.

604

00:39:58,040 --> 00:39:59,040

Yeah!

605

00:39:59,040 --> 00:40:01,040

Oh, that's... Wow. Where'd you find it?

606

00:40:01,040 --> 00:40:04,040

I saw it going down. It got on the magnet.

607

00:40:04,040 --> 00:40:06,040

The magnets.

608

00:40:06,040 --> 00:40:07,040

The magnets stopped it.

609

00:40:07,040 --> 00:40:11,040

Yeah, okay. I spent two days building this, and he put down a magnet strip and...

610

00:40:11,040 --> 00:40:13,040

All right.

611

00:40:13,040 --> 00:40:19,040

Now that both teams know their machines work, finding the needles should be just a matter of time.

612

00:40:19,040 --> 00:40:23,040

But it's a lot more time than Adam expected.

613

00:40:23,040 --> 00:40:25,040

I can see the cut now.

614

00:40:25,040 --> 00:40:27,040

Hey, we'll be drinking mimosas in an hour or two.

615

00:40:27,040 --> 00:40:29,040

We'll be like sipping mimosas on the beach.

616

00:40:29,040 --> 00:40:32,040

Cut to six hours later.

617

00:40:32,040 --> 00:40:34,040

Adam's team is still going at it.

618

00:40:34,040 --> 00:40:36,040

They found two needles.

619

00:40:36,040 --> 00:40:38,040

They found two needles.

620

00:40:38,040 --> 00:40:42,040

But still have the smallest needle and the bone needle to go.

621

00:40:42,040 --> 00:40:46,040

But still have the smallest needle and the bone needle to go.

622

00:40:46,040 --> 00:40:50,040

Things are no better in Janney's camp.

623

00:40:50,040 --> 00:40:53,040

Oh, and the sun will be going down soon.

624

00:40:53,040 --> 00:40:55,040

You know what sucks the most?

625

00:40:55,040 --> 00:40:58,040

I keep getting little slivers of hay underneath my fingernails.

626

00:40:58,040 --> 00:41:00,040

That kills.

627

00:41:00,040 --> 00:41:02,040

I don't want to lose my fingers.

628

00:41:02,040 --> 00:41:04,040

That kills.

629

00:41:04,040 --> 00:41:06,040

I don't want to lose to those guys.

630

00:41:06,040 --> 00:41:10,040

I like to win, so I'm just trying to block out the pain.

631

00:41:10,040 --> 00:41:14,040

Only one thing will soothe Tori's suffering.

632

00:41:14,040 --> 00:41:16,040

Found the last...

633

00:41:16,040 --> 00:41:18,040

Found the last metal needle.

634

00:41:18,040 --> 00:41:20,040

Yeah! Oh, yeah!

635

00:41:20,040 --> 00:41:26,040

All right, so all we have to do is process this last bit of the pile

636

00:41:26,040 --> 00:41:28,040

and then look for the bone needle.

637

00:41:28,040 --> 00:41:31,040

But we are three for three in metal needles.

638

00:41:31,040 --> 00:41:34,040

Put that on the victory cushion.

639

00:41:34,040 --> 00:41:37,040

Oh, yeah!

640

00:41:37,040 --> 00:41:39,040

Three needles!

641

00:41:39,040 --> 00:41:41,040

All three metals!

642

00:41:41,040 --> 00:41:43,040

All the metals!

643

00:41:43,040 --> 00:41:46,040

Obviously something's working for them.

644

00:41:46,040 --> 00:41:49,040

We only found one and they found three.

645

00:41:49,040 --> 00:41:54,040

Suddenly, the needle finder 2000 is looking like a winner.

646

00:41:54,040 --> 00:41:57,040

But with victory just a bone needle away,

647

00:41:57,040 --> 00:42:00,040

Adam admits a potentially fatal flaw.

648

00:42:00,040 --> 00:42:03,040

I never got around to checking to see if bone floats.

649

00:42:03,040 --> 00:42:05,040

I know it's kind of a critical oversight,

650

00:42:05,040 --> 00:42:08,040

but it turns out to be the kind of one I'm capable of.

651

00:42:08,040 --> 00:42:11,040

And here's some more bad news.

652

00:42:11,040 --> 00:42:17,040

Oh, there you go.

653

00:42:17,040 --> 00:42:19,040

Jamie's catching up.

654

00:42:19,040 --> 00:42:22,040

That one was found in the good old fashioned, honest way.

655

00:42:22,040 --> 00:42:24,040

It didn't even get to go through the machine.

656

00:42:24,040 --> 00:42:27,040

It was just sitting right there on the top of the pile.

657

00:42:27,040 --> 00:42:29,040

How many do they have?

658

00:42:29,040 --> 00:42:34,040

Two needles.

659

00:42:34,040 --> 00:42:39,040

This race is going down to the wire.

660

00:42:39,040 --> 00:42:41,040

The light's almost gone,

661

00:42:41,040 --> 00:42:48,040

but Adam's finished the last of his haystack.

662

00:42:48,040 --> 00:42:52,040

All right, time to hand check for bone needles.

663

00:42:59,040 --> 00:43:09,040

Bone needles!

664

00:43:09,040 --> 00:43:12,040

Woo!

665

00:43:12,040 --> 00:43:15,040

You know what? My hat goes off to them.

666

00:43:15,040 --> 00:43:17,040

Let me out.

667

00:43:17,040 --> 00:43:19,040

Oh, give me some sugar.

668

00:43:19,040 --> 00:43:20,040

Oh, my hands are hurt.

669

00:43:20,040 --> 00:43:22,040

That is one bone needle.

670

00:43:22,040 --> 00:43:24,040

We have found all four needles.

671

00:43:24,040 --> 00:43:28,040

Stick it in there.

672

00:43:28,040 --> 00:43:31,040

Ladies and gentlemen, we have a winner.

673

00:43:31,040 --> 00:43:32,040

Good job!

674

00:43:32,040 --> 00:43:34,040

Nice work, honey.

675

00:43:34,040 --> 00:43:36,040

Let's wrap up and go home.

676

00:43:36,040 --> 00:43:38,040

Adam beat his parents' square.

677

00:43:38,040 --> 00:43:40,040

It's about time he beat me in one of these contests,

678

00:43:40,040 --> 00:43:43,040

so I'm actually happy for him.

679

00:43:43,040 --> 00:43:45,040

I don't ever want to do that again.

680

00:43:45,040 --> 00:43:46,040

My back is killing me.

681

00:43:46,040 --> 00:43:48,040

I am soaked to the bone.

682

00:43:48,040 --> 00:43:50,040

I don't even want to think about the brown wash

683

00:43:50,040 --> 00:43:52,040

that comes off me in the shower tonight.

684

00:43:52,040 --> 00:43:55,040

It was a total nightmare to find a needle in a haystack.

685

00:43:56,040 --> 00:44:02,040

MUSIC

686

00:44:02,040 --> 00:44:05,040

MUSIC

687

00:44:05,040 --> 00:44:06,040

MUSIC

688

00:44:09,040 --> 00:44:13,040

MUSIC

689

00:44:13,040 --> 00:44:14,040

Hello.

690

00:44:14,040 --> 00:44:16,040

Have you seen what happened to these?

691

00:44:16,040 --> 00:44:17,040

What happened?

692

00:44:17,040 --> 00:44:19,040

They did nothing.

693

00:44:19,040 --> 00:44:21,040

What does that mean?

694

00:44:21,040 --> 00:44:23,040

They look like albinos.

695

00:44:23,040 --> 00:44:27,840

yellow. So let's check the other ones. Maybe it's just the sweetness is

696

00:44:27,840 --> 00:44:33,880

wilting them. They know that you hate them. See? These ones are awful. They're

697

00:44:33,880 --> 00:44:39,600

yellow and they're dying. After nearly two months, the Talking to Plants

698

00:44:39,600 --> 00:44:43,800

experiment has a major problem. I'm gonna go check the watering system and see if

699

00:44:43,800 --> 00:44:50,840

maybe the timers are off or what's going on. It looks pretty dry doesn't it? The

700

00:44:50,840 --> 00:44:57,080

build team hasn't been up here for a week. A long, hot week. Now, faced with

701

00:44:57,080 --> 00:45:02,160

withered dying plants, they wish they had. One of these timers isn't working.

702

00:45:02,160 --> 00:45:08,800

Really? So it's not getting any water? I'm gonna check the moisture and this one

703

00:45:08,800 --> 00:45:15,640

looks pretty moist on the top. But it's dry down there. Well, I guess they don't

704

00:45:15,640 --> 00:45:21,600

grow on kind words alone. The problem is is the timer that was letting the

705

00:45:21,600 --> 00:45:25,080

plants get water, the one that was actually feeding into the pots, the

706

00:45:25,080 --> 00:45:28,600

battery died. I just think the Talking Plants are committing suicide because

707

00:45:28,600 --> 00:45:33,160

they're listening. Do I love you? Love you. Love you. All the freaking day. The only

708

00:45:33,160 --> 00:45:38,440

upside, every greenhouse was affected in exactly the same way. So although the

709

00:45:38,440 --> 00:45:43,520

plants aren't a picture of health, the experiment is still valid and now the

710

00:45:43,560 --> 00:45:47,240

build team will reap what it's sown. I think to come up with our conclusion,

711

00:45:47,240 --> 00:45:51,880

what we need to do is pull the plants out of the pots, completely wash the soil

712

00:45:51,880 --> 00:45:57,240

off of the roots and weigh the plant mass in each greenhouse. And that should

713

00:45:57,240 --> 00:46:04,920

give us a pretty good result. Hi, Jamie. Hi, Carrie. What's going on up here? You're

714

00:46:04,920 --> 00:46:11,840

looking like a groundhog. I'm here too. Hi. Hi. Groundhog too. As is traditional at

715

00:46:11,880 --> 00:46:16,040

harvest time, all the neighbors gather around to lend a hand. Here's the first

716

00:46:16,040 --> 00:46:21,960

nice house. Little cute peas. Sweet, wonderful tiny. I really wanted to hear

717

00:46:21,960 --> 00:46:26,000

Jamie do this one. I really wanted to hear, you are the most beautiful plant I've

718

00:46:26,000 --> 00:46:37,840

ever seen. I love you. So you're nice here and then you're nasty here. You called the

719

00:46:37,840 --> 00:46:45,200

plant a freshman. I was running out of material. Now for the hard data. Does

720

00:46:45,200 --> 00:46:51,120

talking to plants help them grow? So this is the classical music classical music.

721

00:46:51,320 --> 00:46:57,440

Turns out not as well as playing them music. Wow. Dude, those look like very

722

00:46:57,440 --> 00:47:00,120

healthy. What their boss. Oh, you're this.

723

00:47:00,960 --> 00:47:08,280

Number seven, the metal house was the best performer of all. How many people?

724

00:47:08,280 --> 00:47:14,240

But in both music houses, the plants were healthier, taller and had the biggest

725

00:47:14,240 --> 00:47:20,680

peas. My God, metal is huge. These plants are enormous compared to everything

726

00:47:20,680 --> 00:47:27,880

else. I think heavy metal rolls. I think heavy metal. 16 inches. Talking nice or

727

00:47:27,920 --> 00:47:33,240

nasty made no difference. Two pods. Two shriveled pea pods. Number eight.

728

00:47:33,240 --> 00:47:38,440

Carrie's nice house did better than her nasty one, but the opposite was true for

729

00:47:38,440 --> 00:47:48,280

Scotty. 30 grams. 30 grams on number eight. And the solid control house was the

730

00:47:48,280 --> 00:47:54,600

worst performer of all. Say nine grams. Nine grams. Number six. So I went through

731

00:47:54,640 --> 00:47:58,960

all the data of what your plants did and by and large, actually hands down,

732

00:47:58,960 --> 00:48:03,840

talking and music did better than the control. That was larger biomass, larger

733

00:48:03,840 --> 00:48:08,720

yield, bigger pea pods. So what do we think? Is it busted, plausible or

734

00:48:08,720 --> 00:48:14,000

confirmed? Well, this team did really good on this job, but the sample's not

735

00:48:14,000 --> 00:48:17,800

quite big enough to say confirmed. However, I'm really impressed. It is

736

00:48:17,800 --> 00:48:22,560

totally plausible. Wow. Interestingly, although talking helps, it doesn't

737

00:48:22,600 --> 00:48:25,720

matter what you actually say to your plants. That's what our data says. It

738

00:48:25,720 --> 00:48:29,160

says you could curse at it. You could be kind to it. The plant doesn't know the

739

00:48:29,160 --> 00:48:34,160

difference, but music for a bumper crop, let there be rock.

740

00:48:42,360 --> 00:48:44,680

Tori and I are going to try a pair of the death metal peas here.

741

00:48:44,680 --> 00:48:56,680

Yeah, mine was too. They taste quite good. Oh, God. The ones that music was

742

00:48:56,680 --> 00:48:58,960

played to just taste fantastically.