

1

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

I

2

00:01:00,320 --> 00:01:02,320

You

3

00:01:02,320 --> 00:01:06,500

All right, Jamie, you ready?

4

00:01:06,500 --> 00:01:07,500

For what?

5

00:01:07,500 --> 00:01:31,040

I'm going to paint you a word picture.

6

00:01:31,280 --> 00:01:33,040

Okay, let me get in my space.

7

00:01:37,600 --> 00:01:38,360

Go.

8

00:01:38,360 --> 00:01:40,480

Okay, it's Sunday morning.

9

00:01:40,480 --> 00:01:41,560

The grass is high.

10

00:01:41,560 --> 00:01:42,880

It's time to mow the lawn.

11

00:01:42,880 --> 00:01:44,400

So you pull the lawnmower out of the garage.

12

00:01:44,400 --> 00:01:46,360

You start it up and you start pushing around your lawn.

13

00:01:46,360 --> 00:01:48,920

That's spelling cut grass coming up through your nose.

14

00:01:48,920 --> 00:01:50,200

It's great.

15

00:01:50,200 --> 00:01:51,080

So you're almost done.

16

00:01:51,080 --> 00:01:52,400

You're close to the driveway where

17

00:01:52,400 --> 00:01:54,320

there's some rocks on the lawn and your lawnmower

18

00:01:54,320 --> 00:01:58,720

goes over one of those rocks, kicks it across the street,

19

00:01:58,720 --> 00:02:00,240

kills somebody.

20

00:02:00,280 --> 00:02:01,120

Kill somebody.

21

00:02:01,120 --> 00:02:03,080

But it doesn't actually have to kill somebody.

22

00:02:03,080 --> 00:02:05,400

The idea is that a rock kick by a lawnmower

23

00:02:05,400 --> 00:02:10,280

can have an equivalent amount of force as a bullet

24

00:02:10,280 --> 00:02:13,120

delivered from a .357 pistol.

25

00:02:13,120 --> 00:02:15,800

Leafle lawnmowers.

26

00:02:15,800 --> 00:02:16,600

I like it.

27

00:02:16,600 --> 00:02:17,280

What else we got?

28

00:02:17,280 --> 00:02:19,320

Well, continuing in the theme of accidental ammo,

29

00:02:19,320 --> 00:02:22,240

we have a construction site myth called Glass Geotine.

30

00:02:22,240 --> 00:02:23,600

Goes a little like this.

31

00:02:23,600 --> 00:02:25,000

Paint a glass in a building.

32

00:02:25,000 --> 00:02:26,040

Guy walking down the street.

33

00:02:26,040 --> 00:02:28,240

Paint a glass comes loose.

34

00:02:28,240 --> 00:02:29,480

Shing.

35

00:02:29,480 --> 00:02:32,800

Well, that sounds like a pain in the glass.

36

00:02:32,800 --> 00:02:33,280

Exactly.

37

00:02:39,280 --> 00:02:41,800

If we're going to be testing whether a rock effectively

38

00:02:41,800 --> 00:02:47,760

becomes a bullet when it gets hit by a lawnmower blade,

39

00:02:47,760 --> 00:02:50,040

we need to be someplace like this.

40

00:02:50,040 --> 00:02:52,880

We've actually been filming in this very location

41

00:02:52,880 --> 00:02:53,920

for 10 years.

42

00:02:53,920 --> 00:02:56,360

Down there is the range in which Jamie and I first

43

00:02:56,360 --> 00:02:59,120

got trained to fire sniper rifles.

44

00:02:59,160 --> 00:03:04,440

And this is where we made hands out of chicken parts high five

45

00:03:04,440 --> 00:03:06,640

and cut them to ribbons with the off-guessing

46

00:03:06,640 --> 00:03:08,920

from a magnum revolver.

47

00:03:08,920 --> 00:03:12,120

Today, we are using one of their more remote ranges.

48

00:03:12,120 --> 00:03:14,120

All right, here we go.

49

00:03:14,120 --> 00:03:18,440

Remote because in an episode devoted to accidental ammo.

50

00:03:18,440 --> 00:03:20,840

What are we doing with all this plywood?

51

00:03:20,840 --> 00:03:21,600

You'll find out.

52

00:03:21,600 --> 00:03:24,720

The mythbusters are bringing some ballistic bedrock

53

00:03:24,720 --> 00:03:27,640

to their soon-to-be-made backyard.

54

00:03:27,840 --> 00:03:29,280

What if one sheet of plywood's the other?

55

00:03:32,960 --> 00:03:33,760

We're screwed.

56

00:03:36,400 --> 00:03:38,160

Yes, we could do this test on a real lawn.

57

00:03:38,160 --> 00:03:41,840

But remember, this isn't about whether lawn mowers cut grass.

58

00:03:41,840 --> 00:03:42,800

We know this.

59

00:03:42,800 --> 00:03:44,760

This is about what happens to rocks

60

00:03:44,760 --> 00:03:47,360

when they interact with lawn mowers.

61

00:03:47,360 --> 00:03:49,560

I walked in my own path.

62

00:03:49,560 --> 00:03:53,360

So we've created our lawn laboratory here

63

00:03:53,360 --> 00:03:56,560

in order to remove variables and to clearly see what

64

00:03:56,560 --> 00:03:57,680

happens to those rocks.

65

00:04:01,440 --> 00:04:04,400

Our experimental design today is pretty straightforward.

66

00:04:04,400 --> 00:04:07,120

We are going to lay down these rocks.

67

00:04:07,120 --> 00:04:10,360

Now it's starting to sink into me what we're about to do.

68

00:04:10,360 --> 00:04:13,760

Turn on this gas-powered motor and run it over them.

69

00:04:13,760 --> 00:04:17,040

What we want to witness is what happens in the reaction

70

00:04:17,040 --> 00:04:20,360

between the stones and the blade of the lawn mower.

71

00:04:20,360 --> 00:04:21,840

This is going to be a horror show.

72

00:04:27,560 --> 00:04:29,960

Our blue figures are painted onto styrofoam.

73

00:04:29,960 --> 00:04:33,560

And so if any rocks come out of the mower with any force,

74

00:04:33,560 --> 00:04:36,240

this foam is soft enough that it should easily show it.

75

00:04:42,280 --> 00:04:46,480

The mowers when James was a kid didn't even have wheels.

76

00:04:46,480 --> 00:04:48,000

They had a really interesting name.

77

00:04:48,000 --> 00:04:49,240

They were called, what was it?

78

00:04:49,240 --> 00:04:50,240

Oh, goats.

79

00:04:50,240 --> 00:04:52,240

Ah!

80

00:04:52,240 --> 00:04:54,840

OK, let's see if this thing starts up.

81

00:04:54,840 --> 00:04:58,360

Modern metal mowers have debris deflection more than covered

82

00:04:58,360 --> 00:05:00,120

with this spring-loaded safety flap.

83

00:05:06,360 --> 00:05:07,320

Nothing came out.

84

00:05:07,320 --> 00:05:09,280

We got to pull that door.

85

00:05:09,280 --> 00:05:10,920

But Adam and Jamie want to know what

86

00:05:10,920 --> 00:05:13,920

happens in the worst case scenario.

87

00:05:13,920 --> 00:05:16,120

Seems like the safety features work beautifully.

88

00:05:16,120 --> 00:05:18,480

But as you know on Mythbusters, that's never stopped us.

89

00:05:18,480 --> 00:05:20,400

The first order of business, remove this little door

90

00:05:20,400 --> 00:05:21,520

with a word danger on it.

91

00:05:21,960 --> 00:05:25,520

There we go.

92

00:05:25,520 --> 00:05:27,960

Safety feature removed.

93

00:05:27,960 --> 00:05:30,440

With the mower now poorly maintained,

94

00:05:30,440 --> 00:05:32,120

the opening on the right-hand side

95

00:05:32,120 --> 00:05:34,680

means any debris propelled by the blades

96

00:05:34,680 --> 00:05:37,640

will hit the styrofoam targets.

97

00:05:37,640 --> 00:05:42,040

Adam, standing behind the mower, should be safe.

98

00:05:42,040 --> 00:05:43,120

What's going to happen?

99

00:05:43,120 --> 00:05:44,040

Free!

100

00:05:44,040 --> 00:05:46,120

Well, one thing's for certain.

101

00:05:46,120 --> 00:05:47,080

Two!

102

00:05:47,080 --> 00:05:48,960

Unless you're wearing hockey armor.

103

00:05:48,960 --> 00:05:50,040

One!

104

00:05:50,040 --> 00:05:52,280

You don't want to stand in front of the opening to that mower.

105

00:06:12,760 --> 00:06:14,000

I don't want to do this anymore.

106

00:06:14,000 --> 00:06:16,520

This is terrifying.

107

00:06:16,520 --> 00:06:17,280

I start out.

108

00:06:17,280 --> 00:06:18,280

I start the mower.

109

00:06:18,280 --> 00:06:21,160

And I get into a rhythm.

110

00:06:21,160 --> 00:06:23,360

It's the most terrifying rhythm I've ever been in.

111

00:06:26,360 --> 00:06:30,040

I actually ended up turning my entire body away

112

00:06:30,040 --> 00:06:33,800

from this rain, this shower, this firestorm

113

00:06:33,800 --> 00:06:34,960

of little tiny bubbles.

114

00:06:34,960 --> 00:06:37,800

One even flew up in the air and landed on my hat.

115

00:06:40,960 --> 00:06:43,680

And I can't even picture the physics required

116

00:06:43,680 --> 00:06:45,240

for that to occur.

117

00:06:45,240 --> 00:06:47,320

Good lord!

118

00:06:47,360 --> 00:06:51,280

I ran out of steam, and that is fine with me.

119

00:06:51,280 --> 00:06:54,120

Here, I'm no expert with cameras, but that's bad.

120

00:06:54,120 --> 00:06:54,560

Am I right?

121

00:06:54,560 --> 00:06:55,360

That's bad.

122

00:06:55,360 --> 00:07:00,720

I don't ever want to be behind a mower doing that again.

123

00:07:00,720 --> 00:07:04,360

While Adam was behind the mower out of the line of fire.

124

00:07:04,360 --> 00:07:06,320

I'm really sorry about that.

125

00:07:06,320 --> 00:07:08,080

I apologize here.

126

00:07:08,080 --> 00:07:09,120

I'll put that right there.

127

00:07:09,120 --> 00:07:12,240

A veritable firestorm of stones and ricochets

128

00:07:12,240 --> 00:07:13,840

meant no one was safe.

129

00:07:13,840 --> 00:07:14,480

Come here.

130

00:07:14,480 --> 00:07:16,360

Oh my gosh.

131

00:07:16,400 --> 00:07:18,040

Hit, hit, hit.

132

00:07:18,040 --> 00:07:20,040

With the foam on Looker's pepper.

133

00:07:20,040 --> 00:07:21,480

That went all the way through.

134

00:07:21,480 --> 00:07:22,480

Wow.

135

00:07:22,480 --> 00:07:24,840

The myth that a lawn mower can fling rocks

136

00:07:24,840 --> 00:07:28,840

at bullet-like force is clearly on the right track.

137

00:07:28,840 --> 00:07:30,320

It threw this.

138

00:07:30,320 --> 00:07:35,640

This, that's heavy with enough force

139

00:07:35,640 --> 00:07:37,280

to embed itself in this.

140

00:07:37,280 --> 00:07:43,320

I mean, I know that it's foam, but this is, I'm amazed.

141

00:07:43,680 --> 00:07:48,320

So there's evidence the ballistic fallout is significant,

142

00:07:48,320 --> 00:07:56,040

but the Heinemann can't resist ramping it up.

143

00:07:56,040 --> 00:08:00,720

This thing here is what you call a premium domestic lawn mower.

144

00:08:00,720 --> 00:08:04,960

It's a ride on and it's made to mow lawns fast.

145

00:08:04,960 --> 00:08:06,160

It's fun.

146

00:08:06,160 --> 00:08:07,400

That's beautiful.

147

00:08:07,400 --> 00:08:10,880

Ha, ha, ha, ha.

148

00:08:11,000 --> 00:08:13,880

With an engine four times more powerful.

149

00:08:13,880 --> 00:08:15,280

Jamie, are you ready?

150

00:08:15,280 --> 00:08:16,880

I'm ready.

151

00:08:16,880 --> 00:08:20,680

How much more havoc will Jamie wreak?

152

00:08:20,680 --> 00:08:28,640

Three, two, one, go.

153

00:08:31,640 --> 00:08:35,640

Oh, no.

154

00:08:36,400 --> 00:08:39,400

Oh, no.

155

00:08:47,400 --> 00:08:49,400

I brought in the riding lawn mower

156

00:08:49,400 --> 00:08:51,400

and picked up where Adam left off.

157

00:08:51,400 --> 00:08:54,400

Oh, oh, my God.

158

00:08:54,400 --> 00:08:58,400

Stop, stop.

159

00:08:58,400 --> 00:09:03,400

As you can see, there are no rocks left where I mow.

160

00:09:04,160 --> 00:09:07,160

That mower moved them successfully off to the side

161

00:09:07,160 --> 00:09:09,160

with vigor.

162

00:09:09,160 --> 00:09:11,160

Ha, ha, ha.

163

00:09:11,160 --> 00:09:13,160

How'd I do?

164

00:09:17,160 --> 00:09:19,160

Um...

165

00:09:22,160 --> 00:09:25,160

You know, I don't really care.

166

00:09:25,160 --> 00:09:28,160

You might want to think twice before inviting a nuthbuster

167

00:09:28,160 --> 00:09:30,160

to mow your lawn.

168

00:09:30,160 --> 00:09:32,160

I'm just saying.

169

00:09:32,920 --> 00:09:34,920

I think we have had fun so far.

170

00:09:34,920 --> 00:09:36,920

But it is important to remember that this entire story

171

00:09:36,920 --> 00:09:39,920

is about the interaction between a spinning lawn mower blade

172

00:09:39,920 --> 00:09:41,920

and a rock.

173

00:09:41,920 --> 00:09:43,920

How fast does it leave and with how much energy?

174

00:09:43,920 --> 00:09:45,920

Now, were those rocks leaving the lawn mower

175

00:09:45,920 --> 00:09:47,920

at the speed of a bullet

176

00:09:47,920 --> 00:09:49,920

or with the same amount of energy?

177

00:09:49,920 --> 00:09:51,920

That we don't yet know.

178

00:09:51,920 --> 00:09:53,920

I think what we've got to do is take some of this equipment

179

00:09:53,920 --> 00:09:55,920

back into the shop, remove even more variables,

180

00:09:55,920 --> 00:09:57,920

and hone in to find out

181

00:09:57,920 --> 00:09:59,920

if they really are kicking those rocks

182

00:09:59,920 --> 00:10:01,920

with the energy of a three, five, two, seven.

183

00:10:01,920 --> 00:10:03,680

More mayhem is set to continue.

184

00:10:03,680 --> 00:10:05,680

Everybody okay?

185

00:10:05,680 --> 00:10:07,680

But coming up next...

186

00:10:07,680 --> 00:10:09,680

The accidental ammo armor-geddon...

187

00:10:09,680 --> 00:10:11,680

Two, one...

188

00:10:11,680 --> 00:10:13,680

...hits dangerous new heights.

189

00:10:13,680 --> 00:10:15,680

Baaah!

190

00:10:15,680 --> 00:10:17,680

MUSIC

191

00:10:17,680 --> 00:10:19,680

BAM!

192

00:10:19,680 --> 00:10:23,680

I did not expect that level of carnage from our lawn mower.

193

00:10:23,680 --> 00:10:25,680

Yeah, we might be onto something with that.

194

00:10:25,680 --> 00:10:27,680

True, but a lot is going to rest on exactly how fast

195

00:10:27,680 --> 00:10:29,680

those rocks are actually going.

196

00:10:29,680 --> 00:10:31,680

But before we get to that,

197

00:10:31,680 --> 00:10:33,440

what's it, we crank up the gore on another story?

198

00:10:33,440 --> 00:10:35,440

You're talking about glass guillotine.

199

00:10:35,440 --> 00:10:37,440

Yes, the myth is that if a pane of glass

200

00:10:37,440 --> 00:10:39,440

falls out of an office building

201

00:10:39,440 --> 00:10:41,440

and you're unlucky enough for it to find you in the street,

202

00:10:41,440 --> 00:10:43,440

it will shing!

203

00:10:43,440 --> 00:10:45,440

Cleave you right in twain.

204

00:10:45,440 --> 00:10:47,440

Well, I don't know about that, but whatever happens,

205

00:10:47,440 --> 00:10:49,440

it ain't going to be pretty.

206

00:10:49,440 --> 00:10:51,440

No.

207

00:10:51,440 --> 00:10:53,440

MUSIC

208

00:10:55,440 --> 00:10:57,440

For us to do our glass guillotine experiment,

209

00:10:57,440 --> 00:10:59,440

we need something to cut.

210

00:10:59,440 --> 00:11:01,440

Something that ideally would be like a human.

211

00:11:01,440 --> 00:11:03,440

And, well, I asked for some volunteers from the shop crew,

212

00:11:03,440 --> 00:11:05,440

but nobody stepped up.

213

00:11:05,440 --> 00:11:07,440

So I'm going to have to make my own,

214

00:11:07,440 --> 00:11:09,440

and to do that, I'm going to melt down a clear,

215

00:11:09,440 --> 00:11:11,440

flesh-like material

216

00:11:11,440 --> 00:11:13,440

and pour it into this human-sized torso mold.

217

00:11:13,440 --> 00:11:15,440

Yep, for anatomical accuracy.

218

00:11:15,440 --> 00:11:17,440

MUSIC

219

00:11:17,440 --> 00:11:19,440

Jamie's using a creepy mix of realistic materials.

220

00:11:19,440 --> 00:11:21,440

See the way that tears?

221

00:11:21,440 --> 00:11:23,440

It's like a real thing.

222

00:11:23,440 --> 00:11:25,440

It's like a real thing.

223

00:11:25,440 --> 00:11:27,440

It's like a real thing.

224

00:11:27,440 --> 00:11:29,440

See the way that tears?

225

00:11:29,440 --> 00:11:31,440

This is a polyethylene material,

226

00:11:31,440 --> 00:11:33,440

and it actually rips.

227

00:11:33,440 --> 00:11:35,440

Just like flesh will rip.

228

00:11:35,440 --> 00:11:37,440

So I'm going to use this as a filler material

229

00:11:37,440 --> 00:11:39,440

so that when our plastic dummy gets impacted,

230

00:11:39,440 --> 00:11:41,440

it actually cleaves

231

00:11:41,440 --> 00:11:43,440

if it's going to, like, flesh.

232

00:11:43,440 --> 00:11:45,440

MUSIC

233

00:11:45,440 --> 00:11:47,440

Getting a human-like texture

234

00:11:47,440 --> 00:11:49,440

for their torso is critical.

235

00:11:49,440 --> 00:11:51,440

There we go.

236

00:11:51,440 --> 00:11:53,440

Adding bags of blood?

237

00:11:53,440 --> 00:11:55,440

Not so much.

238

00:11:55,440 --> 00:11:57,440

These bags are made for what's known as sous vide.

239

00:11:57,440 --> 00:11:59,440

It's a method of cooking,

240

00:11:59,440 --> 00:12:01,440

and it means that the plastic's able

241

00:12:01,440 --> 00:12:03,440

to withstand a fair amount of heat,

242

00:12:03,440 --> 00:12:05,440

and this will provide a container for the blood,

243

00:12:05,440 --> 00:12:07,440

which, when we float this

244

00:12:07,440 --> 00:12:09,440

or hang it inside our mold,

245

00:12:09,440 --> 00:12:11,440

hopefully, if it gets hit with our

246

00:12:11,440 --> 00:12:13,440

class guillotine, it'll bleed.

247

00:12:13,440 --> 00:12:15,440

MUSIC

248

00:12:15,440 --> 00:12:17,440

With the gratuitously gory innards placed,

249

00:12:17,440 --> 00:12:19,440

the pouring of the now super-heated gel

250

00:12:19,440 --> 00:12:21,440

commences.

251

00:12:21,440 --> 00:12:23,440

The plastic is now ready to be used

252

00:12:23,440 --> 00:12:25,440

when the super-heated gel commences.

253

00:12:25,440 --> 00:12:27,440

MUSIC

254

00:12:27,440 --> 00:12:29,440

It's funny to go back through

255

00:12:29,440 --> 00:12:31,440

our whole entire history

256

00:12:31,440 --> 00:12:33,440

of human-analog production.

257

00:12:33,440 --> 00:12:35,440

There we go.

258

00:12:35,440 --> 00:12:37,440

We started off so primitively,

259

00:12:37,440 --> 00:12:39,440

just filling molds like this with dessert gelatin.

260

00:12:39,440 --> 00:12:41,440

All the way up to, you know, last year,

261

00:12:41,440 --> 00:12:43,440

we made a human analog

262

00:12:43,440 --> 00:12:45,440

that would actually get hypothermia

263

00:12:45,440 --> 00:12:47,440

while you watch.

264

00:12:47,440 --> 00:12:49,440

It's all looking good. It's nice and clear.

265

00:12:49,440 --> 00:12:51,440

In this case, for our glass guillotine,

266

00:12:51,440 --> 00:12:53,440

this one bleeds.

267

00:12:53,440 --> 00:12:55,440

And in 12 hours when it cools,

268

00:12:55,440 --> 00:12:57,440

we're going to try it out.

269

00:12:57,440 --> 00:12:59,440

It's a beautiful start.

270

00:12:59,440 --> 00:13:01,440

Oh, it's beautiful.

271

00:13:01,440 --> 00:13:03,440

But their bubble is soon burst.

272

00:13:03,440 --> 00:13:05,440

That right there, that's a breach

273

00:13:05,440 --> 00:13:07,440

of one of our blood bags inside

274

00:13:07,440 --> 00:13:09,440

our human analog here.

275

00:13:09,440 --> 00:13:11,440

It doesn't look like they've all breached,

276

00:13:11,440 --> 00:13:13,440

but if one has, well,

277

00:13:13,440 --> 00:13:15,440

there's only one of two reasons,

278

00:13:15,440 --> 00:13:17,440

either because the bag was improperly constructed

279

00:13:17,440 --> 00:13:19,440

or because they're all going to breach.

280

00:13:19,440 --> 00:13:21,440

And that's the end of the story.

281

00:13:21,440 --> 00:13:23,440

So, we're going to go back to the

282

00:13:23,440 --> 00:13:25,440

final product.

283

00:13:25,440 --> 00:13:27,440

I have no idea.

284

00:13:27,440 --> 00:13:29,440

We just got to wait till this cools

285

00:13:29,440 --> 00:13:31,440

and see what we get.

286

00:13:31,440 --> 00:13:33,440

This is how

287

00:13:33,440 --> 00:13:35,440

Jamie was born.

288

00:13:35,440 --> 00:13:37,440

Ta-da!

289

00:13:37,440 --> 00:13:39,440

Hey!

290

00:13:39,440 --> 00:13:41,440

Oh, he looks a lot better

291

00:13:41,440 --> 00:13:43,440

than I was afraid he'd look.

292

00:13:43,440 --> 00:13:45,440

Yeah.

293

00:13:45,440 --> 00:13:47,440

Wow.

294

00:13:47,440 --> 00:13:49,440

This looks pretty usable.

295

00:13:49,440 --> 00:13:51,440

Nice!

296

00:13:51,440 --> 00:13:53,440

This is the first of our castings,

297

00:13:53,440 --> 00:13:55,440

and frankly, we were worried that we had ruined it.

298

00:13:55,440 --> 00:13:57,440

But while it's not perfect,

299

00:13:57,440 --> 00:13:59,440

hey, sorry,

300

00:13:59,440 --> 00:14:01,440

it's usable and it'll serve for one of our tests.

301

00:14:01,440 --> 00:14:03,440

Ha!

302

00:14:03,440 --> 00:14:05,440

Ha!

303

00:14:05,440 --> 00:14:07,440

Clearly, if we're going to be experimenting

304

00:14:07,440 --> 00:14:09,440

with glass falling from great heights,

305

00:14:09,440 --> 00:14:11,440

we're going to need glass

306

00:14:11,440 --> 00:14:13,440

and we're going to need great heights.

307

00:14:13,440 --> 00:14:15,440

Too low.

308

00:14:15,440 --> 00:14:17,440

Easy.

309

00:14:17,440 --> 00:14:19,440

Great heights, not so much.

310

00:14:19,440 --> 00:14:21,440

A little bit better.

311

00:14:21,440 --> 00:14:23,440

Not a lot of people want to let you drop stuff

312

00:14:23,440 --> 00:14:25,440

off of their buildings unless you come to a building

313

00:14:25,440 --> 00:14:27,440

like this.

314

00:14:27,440 --> 00:14:29,440

Almost.

315

00:14:29,440 --> 00:14:31,440

This is the Santa Rosa Fire Department's

316

00:14:31,440 --> 00:14:33,440

fire training tower.

317

00:14:33,440 --> 00:14:35,440

That's more like it.

318

00:14:35,440 --> 00:14:37,440

Today, I hate heights.

319

00:14:37,440 --> 00:14:39,440

We're going to be dropping large panes of glass

320

00:14:39,440 --> 00:14:41,440

onto

321

00:14:41,440 --> 00:14:43,440

unwilling ballistics, gel and test subjects.

322

00:14:43,440 --> 00:14:45,440

So, we've got a 4 foot

323

00:14:45,440 --> 00:14:47,440

by 6 foot piece of 3

324

00:14:47,440 --> 00:14:49,440

eighths inch thick glass

325

00:14:49,440 --> 00:14:51,440

like what they would have on top of a high-rise.

326

00:14:51,440 --> 00:14:53,440

Not many people know this, but Mimes actually

327

00:14:53,440 --> 00:14:55,440

practice behind an actual pane of glass.

328

00:14:55,440 --> 00:14:57,440

And I'm going to hoist it to 75 feet.

329

00:14:57,440 --> 00:14:59,440

Good.

330

00:14:59,440 --> 00:15:01,440

Where Adam and I are going to drop it.

331

00:15:01,440 --> 00:15:03,440

Looking good.

332

00:15:03,440 --> 00:15:05,440

Now, when you're visualizing a pane of glass falling

333

00:15:05,440 --> 00:15:07,440

and slicing through someone like a guillotine

334

00:15:07,440 --> 00:15:09,440

or a sword, you're probably thinking of something

335

00:15:09,440 --> 00:15:11,440

that looks a little like this.

336

00:15:11,440 --> 00:15:13,440

But

337

00:15:13,440 --> 00:15:15,440

you also probably were watching us

338

00:15:15,440 --> 00:15:17,440

move around our pane of glass and thinking,

339

00:15:17,440 --> 00:15:19,440

wait a minute, that glass doesn't look sharp.

340

00:15:19,440 --> 00:15:21,440

It looks like it's got a kind of a square edge.

341

00:15:21,440 --> 00:15:23,440

Kind of like that. That's because the glass

342

00:15:23,440 --> 00:15:25,440

in an office building is called tempered glass.

343

00:15:25,440 --> 00:15:27,440

It's made to be very hard and it also doesn't

344

00:15:27,440 --> 00:15:29,440

break into shards. It actually breaks

345

00:15:29,440 --> 00:15:31,440

into many, many thousands of little tiny chunks.

346

00:15:31,440 --> 00:15:33,440

Kind of like this.

347

00:15:33,440 --> 00:15:35,440

It didn't break.

348

00:15:35,440 --> 00:15:37,440

Let me say this again.

349

00:15:37,440 --> 00:15:39,440

It breaks into many little pieces like this.

350

00:15:41,440 --> 00:15:43,440

And it's like this.

351

00:15:43,440 --> 00:15:45,440

There you go.

352

00:15:45,440 --> 00:15:47,440

So it's more akin to actually hitting

353

00:15:47,440 --> 00:15:49,440

the melon with the back of my blade rather than

354

00:15:49,440 --> 00:15:51,440

the front, like this.

355

00:15:53,440 --> 00:15:55,440

Now, is that what's going to happen to

356

00:15:55,440 --> 00:15:57,440

our guy when our glass falls on him?

357

00:15:57,440 --> 00:15:59,440

Frankly, I have no idea. I'm just as curious as you are.

358

00:15:59,440 --> 00:16:01,440

All right.

359

00:16:01,440 --> 00:16:03,440

Nobody underneath this.

360

00:16:03,440 --> 00:16:05,440

Jamie, I will meet you up at the top.

361

00:16:07,440 --> 00:16:09,440

Here we go.

362

00:16:11,440 --> 00:16:13,440

I hate heights.

363

00:16:13,440 --> 00:16:15,440

I know nothing's going to happen to me

364

00:16:15,440 --> 00:16:17,440

when I'm in these things.

365

00:16:17,440 --> 00:16:19,440

Man, this is scary.

366

00:16:19,440 --> 00:16:21,440

But I've always been that way.

367

00:16:21,440 --> 00:16:23,440

I just hate heights so intensely.

368

00:16:23,440 --> 00:16:25,440

It's just awful.

369

00:16:27,440 --> 00:16:29,440

Yeah, that's it.

370

00:16:29,440 --> 00:16:31,440

Jamie, this is working beautifully.

371

00:16:31,440 --> 00:16:33,440

Ha ha ha.

372

00:16:33,440 --> 00:16:35,440

Oh.

373

00:16:41,440 --> 00:16:43,440

I can't help but feel like we're about to enact

374

00:16:43,440 --> 00:16:45,440

a scene in a movie called

375

00:16:45,440 --> 00:16:47,440

Clumsy Window Movers.

376

00:16:47,440 --> 00:16:49,440

Ha ha ha.

377

00:16:49,440 --> 00:16:51,440

For clarity, it is worth restating

378

00:16:51,440 --> 00:16:53,440

that what we are looking for from the glass

379

00:16:53,440 --> 00:16:55,440

here is not whether or not it kills him.

380

00:16:55,440 --> 00:16:57,440

Okay, now,

381

00:16:57,440 --> 00:16:59,440

I figure we hoisted over our heads.

382

00:16:59,440 --> 00:17:01,440

Yeah, although that would be the end result

383

00:17:01,440 --> 00:17:03,440

no matter what, if it hit him.

384

00:17:03,440 --> 00:17:05,440

Okay.

385

00:17:05,440 --> 00:17:07,440

Oh my God.

386

00:17:07,440 --> 00:17:09,440

It's that it would clump.

387

00:17:09,440 --> 00:17:11,440

Oh my God.

388

00:17:11,440 --> 00:17:13,440

It's that it would cleave him in two

389

00:17:13,440 --> 00:17:15,440

like my sword did with the melon.

390

00:17:15,440 --> 00:17:17,440

Sheen.

391

00:17:17,440 --> 00:17:19,440

Three, two, one.

392

00:17:23,440 --> 00:17:25,440

Oh.

393

00:17:25,440 --> 00:17:27,440

It's getting a little turn right at the very end.

394

00:17:27,440 --> 00:17:29,440

It looked like it was going to be perfect

395

00:17:29,440 --> 00:17:31,440

and at the very end at Fishtail.

396

00:17:31,440 --> 00:17:33,440

Oh my gosh.

397

00:17:33,440 --> 00:17:35,440

It was so close

398

00:17:35,440 --> 00:17:37,440

for like the first couple of seconds

399

00:17:37,440 --> 00:17:39,440

it seemed to be falling perfectly

400

00:17:39,440 --> 00:17:41,440

like a knife towards him.

401

00:17:41,440 --> 00:17:43,440

I'm like, oh my God, it's going to hit him.

402

00:17:43,440 --> 00:17:45,440

It's going to hit him.

403

00:17:45,440 --> 00:17:47,440

And then what feels like just before it got to our dude

404

00:17:47,440 --> 00:17:49,440

and went like this

405

00:17:49,440 --> 00:17:51,440

and hit the ground perfectly flat

406

00:17:51,440 --> 00:17:53,440

and spread in every direction.

407

00:17:53,440 --> 00:17:55,440

Oh my goodness.

408

00:17:55,440 --> 00:17:57,440

Ha ha ha ha.

409

00:17:57,440 --> 00:17:59,440

It looks worse down here than it did up there.

410

00:17:59,440 --> 00:18:01,440

Oh my God, it's so pretty.

411

00:18:01,440 --> 00:18:03,440

When I was like 10,

412

00:18:03,440 --> 00:18:05,440

I would have taken these home and protected them

413

00:18:05,440 --> 00:18:07,440

and pretended they were diamonds

414

00:18:07,440 --> 00:18:09,440

and pretended I had treasure.

415

00:18:09,440 --> 00:18:11,440

I would have sold them to the neighborhood kids

416

00:18:11,440 --> 00:18:13,440

and made a profit.

417

00:18:13,440 --> 00:18:15,440

It's clear that this test was a fling

418

00:18:15,440 --> 00:18:17,440

and a miss.

419

00:18:17,440 --> 00:18:19,440

To stand a chance of a direct hit split,

420

00:18:19,440 --> 00:18:21,440

they're going to need a plan B.

421

00:18:21,440 --> 00:18:23,440

What do you think?

422

00:18:23,440 --> 00:18:25,440

Should we head back to the shop and make a system

423

00:18:25,440 --> 00:18:27,440

for guiding the glass?

424

00:18:27,440 --> 00:18:29,440

Yeah, I've got some ideas.

425

00:18:29,440 --> 00:18:31,440

Me too.

426

00:18:35,440 --> 00:18:37,440

Lurking innocently in your garden shed,

427

00:18:37,440 --> 00:18:39,440

a lethal accident is waiting to happen.

428

00:18:39,440 --> 00:18:41,440

Or is it?

429

00:18:41,440 --> 00:18:43,440

Oh, oh, oh.

430

00:18:43,440 --> 00:18:45,440

We have been trying to determine

431

00:18:45,440 --> 00:18:47,440

whether a lawnmower can fling rocks

432

00:18:47,440 --> 00:18:49,440

with the same amount of energy as a bullet.

433

00:18:49,440 --> 00:18:51,440

What we'd like to do is measure the speed

434

00:18:51,440 --> 00:18:53,440

at which the rocks are leaving the lawnmower

435

00:18:53,440 --> 00:18:55,440

and then see how that compares

436

00:18:55,440 --> 00:18:57,440

to the speed of an actual bullet.

437

00:18:57,440 --> 00:18:59,440

Before comparing actual bullets

438

00:18:59,440 --> 00:19:01,440

to the speed of a bullet,

439

00:19:01,440 --> 00:19:03,440

we're going to have to make a system

440

00:19:03,440 --> 00:19:05,440

for measuring the speed of a bullet.

441

00:19:05,440 --> 00:19:07,440

Before comparing actual bullets,

442

00:19:07,440 --> 00:19:09,440

they're measuring the mower.

443

00:19:09,440 --> 00:19:11,440

Why am I taking the motor off?

444

00:19:11,440 --> 00:19:13,440

Well, for us to test it in the shop,

445

00:19:13,440 --> 00:19:15,440

we need to look closely at it

446

00:19:15,440 --> 00:19:17,440

and run it for a while.

447

00:19:17,440 --> 00:19:19,440

And so instead of having this noisy,

448

00:19:19,440 --> 00:19:21,440

smelly, gasoline engine

449

00:19:21,440 --> 00:19:23,440

going in here, we're just going to swap it out

450

00:19:23,440 --> 00:19:25,440

with an electric motor nice and clean and quiet.

451

00:19:25,440 --> 00:19:27,440

This thing's stuck.

452

00:19:27,440 --> 00:19:29,440

This thing's stuck.

453

00:19:29,440 --> 00:19:31,440

This thing's stuck.

454

00:19:31,440 --> 00:19:33,440

And we got it.

455

00:19:33,440 --> 00:19:35,440

Ugh!

456

00:19:35,440 --> 00:19:37,440

The way this motor is wound,

457

00:19:37,440 --> 00:19:39,440

it's going to give us 100 rpm

458

00:19:39,440 --> 00:19:41,440

for every bolt that it sees.

459

00:19:41,440 --> 00:19:43,440

And so given that the gas engine

460

00:19:43,440 --> 00:19:45,440

ran at 3600 rpm,

461

00:19:45,440 --> 00:19:47,440

we need to feed this 36 volts

462

00:19:47,440 --> 00:19:49,440

to see the same rpm.

463

00:19:49,440 --> 00:19:51,440

But the thing is, if we give it that

464

00:19:51,440 --> 00:19:53,440

voltage all at once,

465

00:19:53,440 --> 00:19:55,440

it's going to spin that blade up

466

00:19:55,440 --> 00:19:57,440

to full rpm in like a minute

467

00:19:57,440 --> 00:19:59,440

and then we're going to have to

468

00:19:59,440 --> 00:20:01,440

give it to full rpm

469

00:20:01,440 --> 00:20:03,440

in like a millisecond.

470

00:20:03,440 --> 00:20:05,440

You just build a lawn mower

471

00:20:05,440 --> 00:20:07,440

that I want to be behind a blast shield

472

00:20:07,440 --> 00:20:09,440

in order to start.

473

00:20:09,440 --> 00:20:11,440

And that's scary.

474

00:20:11,440 --> 00:20:13,440

It might end up putting the blade

475

00:20:13,440 --> 00:20:15,440

in the wall or in me or something

476

00:20:15,440 --> 00:20:17,440

because something's going to break.

477

00:20:17,440 --> 00:20:19,440

So I've got to figure out a way

478

00:20:19,440 --> 00:20:21,440

of doing it a little more gently.

479

00:20:21,440 --> 00:20:23,440

To gently deliver that power,

480

00:20:23,440 --> 00:20:25,440

once again, Jamie uses equipment

481

00:20:25,440 --> 00:20:27,440

in ways for which it was never intended.

482

00:20:27,440 --> 00:20:29,440

He's hooked up a DC power

483

00:20:29,440 --> 00:20:31,440

welding machine to a lawn mower.

484

00:20:31,440 --> 00:20:33,440

I love it when things actually

485

00:20:33,440 --> 00:20:35,440

work the way you hope.

486

00:20:35,440 --> 00:20:37,440

It is somehow

487

00:20:37,440 --> 00:20:39,440

a little counter-intuitive to run

488

00:20:39,440 --> 00:20:41,440

a motor off of a welder, but

489

00:20:41,440 --> 00:20:43,440

DC power is DC power.

490

00:20:43,440 --> 00:20:45,440

That's amazing. Alright, let's get it up on a stand.

491

00:20:49,440 --> 00:20:51,440

We need to be able to deliver the rock

492

00:20:51,440 --> 00:20:53,440

to the spinning blade

493

00:20:53,440 --> 00:20:55,440

in a way that we can actually see what's going on.

494

00:20:55,440 --> 00:20:57,440

Now it's looking like something.

495

00:20:57,440 --> 00:20:59,440

But Adam and I have come up with a way

496

00:20:59,440 --> 00:21:01,440

of doing it, which involves

497

00:21:01,440 --> 00:21:03,440

putting the whole mower up on top

498

00:21:03,440 --> 00:21:05,440

of a sheet of clear acrylic

499

00:21:05,440 --> 00:21:07,440

and then we can see from underneath.

500

00:21:07,440 --> 00:21:09,440

Yet another

501

00:21:09,440 --> 00:21:11,440

in a long line of pristine surfaces

502

00:21:11,440 --> 00:21:13,440

soon to be destroyed and sullied

503

00:21:13,440 --> 00:21:15,440

in our hunt for the truth.

504

00:21:15,440 --> 00:21:17,440

And we'll simply

505

00:21:17,440 --> 00:21:19,440

raise the mower,

506

00:21:19,440 --> 00:21:21,440

get the mower up to speed, and then

507

00:21:21,440 --> 00:21:23,440

lower it down onto the rock.

508

00:21:23,440 --> 00:21:25,440

So how are we going to keep this stuff from

509

00:21:25,440 --> 00:21:27,440

going all over the shop?

510

00:21:27,440 --> 00:21:29,440

Well, we cut away the whole side here, so we wanted to go there.

511

00:21:29,440 --> 00:21:31,440

So I thought we'd put some upright

512

00:21:31,440 --> 00:21:33,440

plywood here to protect the walls.

513

00:21:33,440 --> 00:21:35,440

We already know that a lawn mower can hurl

514

00:21:35,440 --> 00:21:37,440

a rock at a fairly good speed.

515

00:21:37,440 --> 00:21:39,440

But we don't know what that speed

516

00:21:39,440 --> 00:21:41,440

is.

517

00:21:41,440 --> 00:21:43,440

Cool. Alright. That's position one.

518

00:21:43,440 --> 00:21:45,440

Medium-sized rock. So we're going to power

519

00:21:45,440 --> 00:21:47,440

up this lawn mower to its full speed.

520

00:21:47,440 --> 00:21:49,440

We're going to feed rocks into it,

521

00:21:49,440 --> 00:21:51,440

watch them on our high-speed camera, and

522

00:21:51,440 --> 00:21:53,440

measure exactly how fast they leave.

523

00:21:53,440 --> 00:21:55,440

You ready? I'm ready.

524

00:21:55,440 --> 00:21:57,440

Let's do this.

525

00:21:59,440 --> 00:22:01,440

18,

526

00:22:01,440 --> 00:22:03,440

25,

527

00:22:03,440 --> 00:22:05,440

32,

528

00:22:05,440 --> 00:22:07,440

Ha!

529

00:22:07,440 --> 00:22:09,440

F***!

530

00:22:09,440 --> 00:22:11,440

34,

531

00:22:11,440 --> 00:22:13,440

speed.

532

00:22:13,440 --> 00:22:15,440

Alright. Here we go.

533

00:22:15,440 --> 00:22:17,440

Dropping a lawn mower onto a rock.

534

00:22:17,440 --> 00:22:19,440

Three, two, one.

535

00:22:21,440 --> 00:22:23,440

Cut it!

536

00:22:23,440 --> 00:22:25,440

Blink, and it's gone.

537

00:22:25,440 --> 00:22:27,440

Because when the mower is lowered,

538

00:22:27,440 --> 00:22:29,440

the blade instantly

539

00:22:29,440 --> 00:22:31,440

slices the stone into chunks.

540

00:22:31,440 --> 00:22:33,440

Oh, wow.

541

00:22:33,440 --> 00:22:35,440

It just absolutely decimated that piece.

542

00:22:35,440 --> 00:22:37,440

Question is,

543

00:22:37,440 --> 00:22:39,440

were any of the fragments moving

544

00:22:39,440 --> 00:22:41,440

at a bullet-like velocity?

545

00:22:41,440 --> 00:22:43,440

The fastest chunk was going 250 feet

546

00:22:43,440 --> 00:22:45,440

per second, and that's actually pretty

547

00:22:45,440 --> 00:22:47,440

significant for a chunk of rock about

548

00:22:47,440 --> 00:22:49,440

one inch long and a half inch wide.

549

00:22:49,440 --> 00:22:51,440

But we're going to keep running this,

550

00:22:51,440 --> 00:22:53,440

see if we can't find even faster debris.

551

00:22:53,440 --> 00:22:57,440

250 feet per second is a good start.

552

00:22:57,440 --> 00:22:59,440

Okay, sir. We got a whole pile going in.

553

00:22:59,440 --> 00:23:01,440

But this time, they're giving their mower

554

00:23:01,440 --> 00:23:03,440

more to aim for.

555

00:23:03,440 --> 00:23:05,440

Start her up.

556

00:23:05,440 --> 00:23:07,440

What could possibly go wrong?

557

00:23:07,440 --> 00:23:09,440

Speed.

558

00:23:09,440 --> 00:23:11,440

Dropping big pile of rocks.

559

00:23:11,440 --> 00:23:13,440

Cover your eyes.

560

00:23:13,440 --> 00:23:15,440

Three, two, one.

561

00:23:19,440 --> 00:23:21,440

Cut it!

562

00:23:21,440 --> 00:23:23,440

Everybody okay?

563

00:23:23,440 --> 00:23:25,440

Chunk.

564

00:23:27,440 --> 00:23:29,440

Chunk made it out.

565

00:23:29,440 --> 00:23:31,440

I hope we got the shot because that was

566

00:23:31,440 --> 00:23:33,440

the sound of the blade coming off of the motor.

567

00:23:33,440 --> 00:23:35,440

Oh, really?

568

00:23:35,440 --> 00:23:37,440

Yeah.

569

00:23:37,440 --> 00:23:39,440

While Jamie inspects the carnage,

570

00:23:39,440 --> 00:23:41,440

Wow.

571

00:23:41,440 --> 00:23:43,440

We cracked our acrylic bottom.

572

00:23:43,440 --> 00:23:45,440

Adam, ignoring the mess he's made.

573

00:23:45,440 --> 00:23:47,440

Here's the blade.

574

00:23:47,440 --> 00:23:49,440

queues up the high speed.

575

00:23:49,440 --> 00:23:51,440

Wow, dude.

576

00:23:51,440 --> 00:23:53,440

We got the hit that I was hoping to get.

577

00:23:55,440 --> 00:23:57,440

Watch the leading edge of the blade here.

578

00:23:57,440 --> 00:23:59,440

Boom.

579

00:23:59,440 --> 00:24:01,440

That piece. 400 feet per second.

580

00:24:01,440 --> 00:24:03,440

272 miles per hour.

581

00:24:03,440 --> 00:24:05,440

Well,

582

00:24:05,440 --> 00:24:07,440

I feel like we're in some very dangerous territory.

583

00:24:07,440 --> 00:24:09,440

Dangerous for sure.

584

00:24:09,440 --> 00:24:11,440

But the crucial question is,

585

00:24:11,440 --> 00:24:13,440

how does it compare to the speed of a bullet?

586

00:24:17,440 --> 00:24:19,440

Well, Jamie,

587

00:24:19,440 --> 00:24:21,440

with high speed camera in tow,

588

00:24:21,440 --> 00:24:23,440

fired up at the gun range.

589

00:24:25,440 --> 00:24:27,440

Define now.

590

00:24:27,440 --> 00:24:29,440

Three, two, one.

591

00:24:29,440 --> 00:24:31,440

The slowest bullet we measured

592

00:24:31,440 --> 00:24:33,440

went at 1,000 feet per second.

593

00:24:33,440 --> 00:24:35,440

The 357,

594

00:24:35,440 --> 00:24:37,440

which was much faster,

595

00:24:37,440 --> 00:24:39,440

went at 1,400 feet per second.

596

00:24:39,440 --> 00:24:41,440

Now, the fastest rock

597

00:24:41,440 --> 00:24:43,440

we got off of our lawnmower

598

00:24:43,440 --> 00:24:45,440

went 400 feet per second,

599

00:24:45,440 --> 00:24:47,440

which is

600

00:24:47,440 --> 00:24:49,440

nowhere close.

601

00:24:49,440 --> 00:24:51,440

But it's not busted right there.

602

00:24:51,440 --> 00:24:53,440

No, no, no, no.

603

00:24:53,440 --> 00:24:55,440

Because while this rock is bigger and slower than this bullet,

604

00:24:55,440 --> 00:24:57,440

it's heavier.

605

00:24:57,440 --> 00:24:59,440

What I'm wondering now is,

606

00:24:59,440 --> 00:25:01,440

is there a rig I can build

607

00:25:01,440 --> 00:25:03,440

that can compare the amount of energy

608

00:25:03,440 --> 00:25:05,440

the bullet brings to the equation

609

00:25:05,440 --> 00:25:07,440

and compare it to the amount of energy the rock brings?

610

00:25:07,440 --> 00:25:09,440

I think I can.

611

00:25:09,440 --> 00:25:11,440

Three, two, one.

612

00:25:11,440 --> 00:25:13,440

While Adam cogitates

613

00:25:13,440 --> 00:25:15,440

the ball,

614

00:25:15,440 --> 00:25:17,440

he's thinking outside the box

615

00:25:17,440 --> 00:25:19,440

for Glass Guillotine.

616

00:25:19,440 --> 00:25:21,440

Clearly, dropping glass off the building

617

00:25:21,440 --> 00:25:23,440

isn't going to be a repeatable way

618

00:25:23,440 --> 00:25:25,440

for us to test this story.

619

00:25:25,440 --> 00:25:27,440

Oh!

620

00:25:27,440 --> 00:25:29,440

So we're going to need to come up with a mechanism

621

00:25:29,440 --> 00:25:31,440

for reliably making the glass hit exactly where we want.

622

00:25:31,440 --> 00:25:33,440

And I have an idea, except in order to

623

00:25:33,440 --> 00:25:35,440

talk about it, I'm going to build a little model

624

00:25:35,440 --> 00:25:37,440

of the fire training tower.

625

00:25:37,440 --> 00:25:39,440

And instead of an exotic material,

626

00:25:39,440 --> 00:25:41,440

I love making corners match up.

627

00:25:41,440 --> 00:25:43,440

So we just got in the mail.

628

00:25:43,440 --> 00:25:45,440

Ta-da!

629

00:25:45,440 --> 00:25:47,440

I know it doesn't look like much, but check this out.

630

00:25:47,440 --> 00:25:49,440

This coat hanger will be a welded steel rack

631

00:25:49,440 --> 00:25:51,440

which we sit on the lip of the building.

632

00:25:51,440 --> 00:25:53,440

You are clear!

633

00:25:53,440 --> 00:25:55,440

These red pieces of parachute cord

634

00:25:55,440 --> 00:25:57,440

are guide wires which we mount to the ground.

635

00:25:57,440 --> 00:25:59,440

Awesome!

636

00:25:59,440 --> 00:26:01,440

The glass has riders on it

637

00:26:01,440 --> 00:26:03,440

that keep it aligned with the guide wires.

638

00:26:03,440 --> 00:26:05,440

They say the glass is tempered, but is it

639

00:26:05,440 --> 00:26:07,440

bad tempered?

640

00:26:07,440 --> 00:26:09,440

We bring it up with a winch.

641

00:26:09,440 --> 00:26:11,440

Go ahead and winch up the glass.

642

00:26:11,440 --> 00:26:13,440

Oh, here she comes.

643

00:26:17,440 --> 00:26:19,440

Drop it from the top and

644

00:26:19,440 --> 00:26:21,440

wheeeee!

645

00:26:21,440 --> 00:26:23,440

It hits our test subject square

646

00:26:23,440 --> 00:26:25,440

where we want him to

647

00:26:25,440 --> 00:26:27,440

and slices him right in the half.

648

00:26:27,440 --> 00:26:29,440

We're not. That's what we're going to find out.

649

00:26:31,440 --> 00:26:33,440

And with Adam's model design rigged,

650

00:26:33,440 --> 00:26:35,440

the glass is poised to come crashing down

651

00:26:35,440 --> 00:26:37,440

in controlled fashion.

652

00:26:39,440 --> 00:26:41,440

It is really just about to happen.

653

00:26:41,440 --> 00:26:43,440

I can't wait to see this.

654

00:26:43,440 --> 00:26:45,440

It's time to find out

655

00:26:45,440 --> 00:26:47,440

if our unsuspecting bystander

656

00:26:47,440 --> 00:26:49,440

will be neatly split in two.

657

00:26:51,440 --> 00:26:55,440

In three, two, one.

658

00:26:57,440 --> 00:26:59,440

Here it comes.

659

00:26:59,440 --> 00:27:01,440

BAM!

660

00:27:01,440 --> 00:27:03,440

That was perfect!

661

00:27:05,440 --> 00:27:07,440

Dude, that was beautiful!

662

00:27:07,440 --> 00:27:09,440

They're still in one piece.

663

00:27:09,440 --> 00:27:11,440

It looks like he's still in one piece.

664

00:27:11,440 --> 00:27:13,440

Of course, there's blood everywhere.

665

00:27:19,440 --> 00:27:21,440

Well, every one of our methodologies worked beautifully.

666

00:27:21,440 --> 00:27:23,440

The glass dropped, it hit our dude

667

00:27:23,440 --> 00:27:25,440

exactly where we wanted it to,

668

00:27:25,440 --> 00:27:27,440

and it did not leave him in twain.

669

00:27:27,440 --> 00:27:29,440

No, it merely

670

00:27:29,440 --> 00:27:31,440

beat the living crap out of him.

671

00:27:31,440 --> 00:27:33,440

But there's still only one dude.

672

00:27:33,440 --> 00:27:35,440

There's not two half dudes.

673

00:27:35,440 --> 00:27:37,440

I've got to try something out.

674

00:27:39,440 --> 00:27:41,440

Yep, this slasher story

675

00:27:41,440 --> 00:27:43,440

It's going to be a hard show.

676

00:27:43,440 --> 00:27:45,440

is about to get real edgy.

677

00:27:47,440 --> 00:27:49,440

Oh!

678

00:27:57,440 --> 00:27:59,440

Could a one in a million high-rise slip

679

00:27:59,440 --> 00:28:01,440

ever really slice you in half?

680

00:28:03,440 --> 00:28:05,440

Not according to the evidence so far.

681

00:28:05,440 --> 00:28:07,440

And you might be watching thinking,

682

00:28:07,440 --> 00:28:09,440

of course it didn't you, idiots.

683

00:28:09,440 --> 00:28:11,440

That tempered glass you dropped had this big square edge on it.

684

00:28:11,440 --> 00:28:13,440

But that's the thing with tempered glass.

685

00:28:13,440 --> 00:28:15,440

It doesn't break and have sharp edges.

686

00:28:15,440 --> 00:28:17,440

For that, you've got to move

687

00:28:17,440 --> 00:28:19,440

to plate glass.

688

00:28:19,440 --> 00:28:21,440

Now, they don't use plate glass in office buildings

689

00:28:21,440 --> 00:28:23,440

specifically for this reason,

690

00:28:23,440 --> 00:28:25,440

but for due diligence,

691

00:28:25,440 --> 00:28:27,440

we've got a piece of plate glass here.

692

00:28:27,440 --> 00:28:29,440

And we're going to break this

693

00:28:29,440 --> 00:28:31,440

so that we get a nice, clean,

694

00:28:31,440 --> 00:28:33,440

broken edge of plate glass.

695

00:28:35,440 --> 00:28:37,440

All right.

696

00:28:37,440 --> 00:28:39,440

And we're going to drop that on the next

697

00:28:39,440 --> 00:28:41,440

unsuspecting bystander we pulled out of our mold.

698

00:28:41,440 --> 00:28:43,440

Okay, I'm going to move them in.

699

00:28:43,440 --> 00:28:45,440

Yep.

700

00:28:45,440 --> 00:28:47,440

Our next victim doesn't have blood bags.

701

00:28:47,440 --> 00:28:49,440

That is right down the center.

702

00:28:49,440 --> 00:28:51,440

Not quite as much fun, but a little bit more

703

00:28:51,440 --> 00:28:53,440

consistent as far as the physics.

704

00:28:53,440 --> 00:28:55,440

Go ahead and raise him in three.

705

00:28:55,440 --> 00:28:57,440

Two, one, go.

706

00:28:57,440 --> 00:28:59,440

While it's on its way up,

707

00:28:59,440 --> 00:29:01,440

I feel confident that I think

708

00:29:01,440 --> 00:29:03,440

that that is going to slice our dude in half.

709

00:29:03,440 --> 00:29:05,440

The edges of that glass, they're really sharp.

710

00:29:05,440 --> 00:29:07,440

It's going to be a harsh up.

711

00:29:07,440 --> 00:29:09,440

All right.

712

00:29:09,440 --> 00:29:11,440

Go ahead and count it down and let it go.

713

00:29:11,440 --> 00:29:13,440

And three.

714

00:29:13,440 --> 00:29:15,440

Two.

715

00:29:15,440 --> 00:29:17,440

One.

716

00:29:17,440 --> 00:29:19,440

Here it comes.

717

00:29:19,440 --> 00:29:21,440

It's good. It's good.

718

00:29:21,440 --> 00:29:23,440

It's good.

719

00:29:23,440 --> 00:29:25,440

Here it comes.

720

00:29:25,440 --> 00:29:27,440

It's good. It's good.

721

00:29:35,440 --> 00:29:37,440

That was beautiful.

722

00:29:37,440 --> 00:29:39,440

I mean, I don't know how well it worked, but it looked great.

723

00:29:49,440 --> 00:29:51,440

Dude, that would be

724

00:29:51,440 --> 00:29:53,440

amazing.

725

00:29:53,440 --> 00:29:55,440

I'm gonna tell you about the

726

00:29:55,440 --> 00:29:57,440

most amazing thing I've ever seen.

727

00:29:57,440 --> 00:29:59,440

I've seen this scene in a movie

728

00:29:59,440 --> 00:30:01,440

where I've been cleaved as I've

729

00:30:01,440 --> 00:30:03,440

been saying all episode long,

730

00:30:03,440 --> 00:30:05,440

in twain.

731

00:30:05,440 --> 00:30:07,440

Not exactly a bull's-eye to the brain,

732

00:30:07,440 --> 00:30:09,440

but in twain he truly is.

733

00:30:09,440 --> 00:30:11,440

I couldn't see

734

00:30:11,440 --> 00:30:13,440

that chunk fly off of him from

735

00:30:13,440 --> 00:30:15,440

where I was standing.

736

00:30:15,440 --> 00:30:17,440

It just looked like unfettered destruction.

737

00:30:17,440 --> 00:30:19,440

But dude, that is,

738

00:30:19,440 --> 00:30:21,640

so that people don't get cut.

739

00:30:21,640 --> 00:30:23,640

And the result is appropriate to that.

740

00:30:23,640 --> 00:30:26,480

Our guy would have had his skull crushed

741

00:30:26,480 --> 00:30:28,120

with a lot of bones broken,

742

00:30:28,120 --> 00:30:30,920

but he wouldn't have been cleaved in half.

743

00:30:30,920 --> 00:30:33,920

The other one we dropped a piece of plate glass on

744

00:30:33,920 --> 00:30:36,220

that had a broken edge that was very sharp.

745

00:30:36,220 --> 00:30:40,120

And as a result, he got cut cleanly in half.

746

00:30:40,120 --> 00:30:42,220

The end result is the same.

747

00:30:42,220 --> 00:30:44,600

You would have died.

748

00:30:44,600 --> 00:30:45,940

Take your pick.

749

00:30:45,940 --> 00:30:48,700

Can glass falling from a high rise cut you in two?

750

00:30:48,720 --> 00:30:52,500

This is an interesting one because it's kind of a yes or no situation.

751

00:30:52,500 --> 00:30:55,200

If it's the glass they make high rises from,

752

00:30:55,200 --> 00:30:57,600

then no, it's not going to cut you in two.

753

00:30:57,600 --> 00:31:00,000

It's going to kill you, but it's not going to leave you in two parts.

754

00:31:00,000 --> 00:31:01,700

But if it's the wrong kind of glass,

755

00:31:01,700 --> 00:31:06,100

then absolutely it can leave you in two big chunks.

756

00:31:06,100 --> 00:31:10,500

So right kind is busted, but wrong kind is plausible.

757

00:31:10,500 --> 00:31:11,700

Bless a plausible.

758

00:31:11,700 --> 00:31:13,100

All right, I'll buy that.

759

00:31:13,100 --> 00:31:14,300

All right, let's get out of here.

760

00:31:14,300 --> 00:31:26,500

Back on the trail of the stone cold killer.

761

00:31:26,500 --> 00:31:31,100

Adam and Jamie have proven a rock from a mower

762

00:31:31,100 --> 00:31:33,500

does not travel as fast as a bullet,

763

00:31:33,500 --> 00:31:37,000

but speed is not the only vicious vector.

764

00:31:37,000 --> 00:31:39,800

So we are looking to compare the amount of energy

765

00:31:39,800 --> 00:31:41,500

generated from an impact with a bullet

766

00:31:41,700 --> 00:31:44,600

with the energy generated from the impact with a rock.

767

00:31:45,500 --> 00:31:49,400

So imagine that this hammer can swing like a pendulum.

768

00:31:49,400 --> 00:31:52,400

Then let's take a gun and shoot the face of this hammer.

769

00:31:52,400 --> 00:31:53,400

What's going to happen?

770

00:31:53,400 --> 00:31:55,100

It's an indicator of how much energy

771

00:31:55,100 --> 00:31:56,900

the bullet brings to the equation.

772

00:31:56,900 --> 00:31:59,700

Now, if I fire a stone at the same hammer

773

00:31:59,700 --> 00:32:01,800

at this speed it would be kicked by a lawnmower

774

00:32:01,800 --> 00:32:04,200

and the hammer moves the same amount.

775

00:32:04,200 --> 00:32:07,600

Well, then we could conclude that the amount of energy

776

00:32:07,600 --> 00:32:09,700

being brought to the equation by the bullet

777

00:32:09,700 --> 00:32:12,000

is the same as the stone.

778

00:32:12,000 --> 00:32:14,500

That's the theory anyway.

779

00:32:14,500 --> 00:32:15,600

Let's see if it works.

780

00:32:15,600 --> 00:32:17,700

Yep, the heavy stone may have been moving

781

00:32:17,700 --> 00:32:19,500

more slowly than the lighter bullet.

782

00:32:22,300 --> 00:32:23,700

That's beautiful.

783

00:32:23,700 --> 00:32:26,000

But this pendulum rig will illustrate

784

00:32:26,000 --> 00:32:27,900

and compare the energy of each.

785

00:32:29,800 --> 00:32:32,500

Its acrylic impact pad will efficiently transfer

786

00:32:32,500 --> 00:32:34,900

the energy of the bullet to the pendulum

787

00:32:34,900 --> 00:32:37,000

and can be replaced for each test.

788

00:32:38,000 --> 00:32:40,000

Well, that looks nifty.

789

00:32:40,000 --> 00:32:41,800

With the rig ready to swing,

790

00:32:41,800 --> 00:32:44,400

the first test will be to measure the bullet's impact.

791

00:32:44,400 --> 00:32:45,400

Okay.

792

00:32:45,400 --> 00:32:47,800

And for that, it's back down to the gun range.

793

00:32:50,800 --> 00:32:51,800

Gun is hot.

794

00:32:52,800 --> 00:32:55,800

Alright, 357 on your mark.

795

00:32:55,800 --> 00:32:57,600

Okay, here we go.

796

00:32:57,600 --> 00:32:59,600

Hopefully this doesn't wreck the rig.

797

00:32:59,600 --> 00:33:02,800

And three, two, one.

798

00:33:02,800 --> 00:33:03,800

Good.

799

00:33:05,800 --> 00:33:08,800

The pendulum peaked at 60 degrees,

800

00:33:08,800 --> 00:33:10,800

but working on the basis that...

801

00:33:10,800 --> 00:33:12,800

If it ain't repeatable, it ain't science.

802

00:33:12,800 --> 00:33:14,800

The guys go again.

803

00:33:15,800 --> 00:33:18,800

In, three, two, one.

804

00:33:21,800 --> 00:33:22,800

Nice.

805

00:33:22,800 --> 00:33:24,800

That looked pretty consistent.

806

00:33:25,800 --> 00:33:28,800

We did our two tests with 357 and they were consistent.

807

00:33:28,800 --> 00:33:30,800

They were about 60 degrees.

808

00:33:30,800 --> 00:33:33,800

So we've got the data we need to move on to stones

809

00:33:33,800 --> 00:33:34,800

out of the lawnmower.

810

00:33:38,800 --> 00:33:41,800

But if you thought that means no more guns,

811

00:33:42,800 --> 00:33:44,800

then think again.

812

00:33:52,800 --> 00:33:53,800

Wow.

813

00:33:54,800 --> 00:33:57,800

Because stones from the lawnmower are hard to aim,

814

00:33:57,800 --> 00:34:01,800

because Adam's pendulum target is very small.

815

00:34:01,800 --> 00:34:03,800

We're going to take the lawnmower out of the equation

816

00:34:03,800 --> 00:34:06,800

and use a pneumatic launcher instead.

817

00:34:07,800 --> 00:34:09,800

I'm going to first check to see that it's shooting the rocket

818

00:34:09,800 --> 00:34:10,800

at the correct speed.

819

00:34:10,800 --> 00:34:11,800

406.

820

00:34:11,800 --> 00:34:12,800

Seriously?

821

00:34:13,800 --> 00:34:14,800

Awesome.

822

00:34:14,800 --> 00:34:16,800

Let's bring it in and shoot this thing.

823

00:34:16,800 --> 00:34:18,800

And then we're going to bring in Adam's energy rig,

824

00:34:18,800 --> 00:34:21,800

hit it with a rock shot at 400 feet per second,

825

00:34:21,800 --> 00:34:23,800

and see how far a pendulum goes.

826

00:34:24,800 --> 00:34:25,800

This is it.

827

00:34:25,800 --> 00:34:26,800

Good to go.

828

00:34:26,800 --> 00:34:27,800

And his safety's off.

829

00:34:27,800 --> 00:34:30,800

Will a stone the same mass and velocity

830

00:34:30,800 --> 00:34:34,800

firing in three as the fastest speed test stone

831

00:34:35,800 --> 00:34:38,800

match the energy of the lighter lethal bullet?

832

00:34:39,800 --> 00:34:40,800

One.

833

00:34:45,800 --> 00:34:47,800

Dude, we got to see the video,

834

00:34:47,800 --> 00:34:50,800

but I swear that went past 60 degrees.

835

00:34:52,800 --> 00:34:54,800

With the crucial shot queued up,

836

00:34:54,800 --> 00:34:56,800

did the rock hit the right angle?

837

00:34:56,800 --> 00:34:58,800

See how high it actually went.

838

00:34:59,800 --> 00:35:00,800

Wait.

839

00:35:00,800 --> 00:35:01,800

Oh my gosh.

840

00:35:01,800 --> 00:35:02,800

Dude!

841

00:35:02,800 --> 00:35:03,800

Dude!

842

00:35:03,800 --> 00:35:05,800

It went above the 357.

843

00:35:05,800 --> 00:35:08,800

That's 66 degrees.

844

00:35:10,800 --> 00:35:13,800

That is more energy from the rock.

845

00:35:13,800 --> 00:35:14,800

I'm sorry I'm yelling,

846

00:35:14,800 --> 00:35:16,800

but I totally didn't expect this result.

847

00:35:16,800 --> 00:35:18,800

That is more energy from the rock

848

00:35:18,800 --> 00:35:20,800

than from a bullet from a 357.

849

00:35:20,800 --> 00:35:22,800

That is amazing.

850

00:35:23,800 --> 00:35:24,800

Shocking.

851

00:35:25,800 --> 00:35:26,800

Totally awesome.

852

00:35:27,800 --> 00:35:30,800

I have been expressing my doubts about confirming this story.

853

00:35:30,800 --> 00:35:32,800

Since the beginning,

854

00:35:32,800 --> 00:35:34,800

I just never thought the rock was going to have

855

00:35:34,800 --> 00:35:37,800

anywhere close to the amount of energy of a 357 bullet,

856

00:35:37,800 --> 00:35:40,800

and yet it exceeded it.

857

00:35:40,800 --> 00:35:43,800

That, I knew lawnmowers were scary.

858

00:35:43,800 --> 00:35:45,800

I just didn't know how scary.

859

00:35:45,800 --> 00:35:47,800

So with everything that we tested,

860

00:35:47,800 --> 00:35:49,800

I think we have definitively proven,

861

00:35:49,800 --> 00:35:50,800

and frankly I'm astonished by this,

862

00:35:50,800 --> 00:35:53,800

but that a rock thrown from a lawnmower

863

00:35:53,800 --> 00:35:55,800

can possibly have as much or more power

864

00:35:55,800 --> 00:35:57,800

than a bullet from a 357.

865

00:35:58,800 --> 00:36:01,800

I'm astonished, but this one's confirmed.

866

00:36:01,800 --> 00:36:03,800

Yeah, I was surprised too.

867

00:36:03,800 --> 00:36:05,800

But you know that gave me an idea.

868

00:36:05,800 --> 00:36:06,800

What?

869

00:36:07,800 --> 00:36:11,800

I want to make the lawnmower from hell.

870

00:36:13,800 --> 00:36:15,800

You do that, I'm going to go home and hide.

871

00:36:20,800 --> 00:36:21,800

Yeah!

872

00:36:28,800 --> 00:36:32,800

With typical enthusiasm for engineering extremes,

873

00:36:33,800 --> 00:36:37,800

the Heinemann's going all out to turn a dream domestic mower

874

00:36:37,800 --> 00:36:40,800

into a deadly weaponized nightmare.

875

00:36:41,800 --> 00:36:43,800

And the key to his hellish vision...

876

00:36:43,800 --> 00:36:44,800

That's going to be sweet.

877

00:36:44,800 --> 00:36:47,800

...is to load up with a whole load more power.

878

00:36:47,800 --> 00:36:50,800

Oh my god, that's one big battery.

879

00:36:50,800 --> 00:36:54,800

What this is, is a bank of about 90 volts

880

00:36:54,800 --> 00:36:56,800

at about 1800 amps.

881

00:36:56,800 --> 00:36:59,800

That means that shorting some of these

882

00:36:59,800 --> 00:37:03,800

would pretty much be like setting off a stick of dynamite.

883

00:37:08,800 --> 00:37:11,800

What are we doing back here at the Chabot gun range?

884

00:37:11,800 --> 00:37:13,800

Well, remember that we have absolutely determined

885

00:37:13,800 --> 00:37:15,800

that a lawnmower can curl a rock

886

00:37:15,800 --> 00:37:20,800

with the same amount or greater force than a bullet from a .357.

887

00:37:20,800 --> 00:37:23,800

That means that a lawnmower can be weaponized,

888

00:37:23,800 --> 00:37:25,800

and that fact...

889

00:37:25,800 --> 00:37:28,800

Well, let's just say that fact was too tempting for Jamie.

890

00:37:28,800 --> 00:37:31,800

When it comes to terrifying engineering

891

00:37:31,800 --> 00:37:33,800

and gratuitous ramping up,

892

00:37:33,800 --> 00:37:36,800

the Heinemann has history.

893

00:37:36,800 --> 00:37:38,800

I call him my little pop gun.

894

00:37:38,800 --> 00:37:40,800

When he decides to go over the top,

895

00:37:40,800 --> 00:37:43,800

it's a good idea to duck, cover,

896

00:37:43,800 --> 00:37:47,800

and wear a heart out at a safe distance.

897

00:37:59,800 --> 00:38:02,800

Introducing the lawnmower from hell.

898

00:38:02,800 --> 00:38:05,800

You've got 200 horsepower of electric car motors,

899

00:38:05,800 --> 00:38:09,800

1800 amps of lithium batteries.

900

00:38:09,800 --> 00:38:13,800

They'll be spinning a 50-pound tool steel blade

901

00:38:13,800 --> 00:38:17,800

at upwards of 5,000 RPM.

902

00:38:17,800 --> 00:38:19,800

Put it all together,

903

00:38:19,800 --> 00:38:21,800

and you really don't want to try this at home.

904

00:38:25,800 --> 00:38:28,800

First up, we're going to get the beast here a little taste.

905

00:38:28,800 --> 00:38:30,800

Just a little taste.

906

00:38:30,800 --> 00:38:32,800

It's a bucket of blue water.

907

00:38:32,800 --> 00:38:34,800

Go for it!

908

00:38:40,800 --> 00:38:45,800

Oh, I've barely been so happy to be behind the bulletproof shields.

909

00:38:50,800 --> 00:38:52,800

He's approaching six feet.

910

00:38:52,800 --> 00:38:54,800

Four feet.

911

00:38:54,800 --> 00:38:56,800

Two feet, it goes!

912

00:38:56,800 --> 00:38:58,800

Boom!

913

00:38:58,800 --> 00:39:01,800

Ha-ha-ha-ha-ha-ha-ha-ha!

914

00:39:10,800 --> 00:39:13,800

Dude, that was beautiful.

915

00:39:13,800 --> 00:39:16,800

Tell you what, why don't you take this thing around the corner?

916

00:39:16,800 --> 00:39:19,800

I'll set up a really fun course for you to implement

917

00:39:19,800 --> 00:39:21,800

as much destruction as possible.

918

00:39:21,800 --> 00:39:23,800

I'll let you know when we're ready for you.

919

00:39:23,800 --> 00:39:25,800

Okay.

920

00:39:25,800 --> 00:39:27,800

So how do you put a ridiculously souped-up

921

00:39:27,800 --> 00:39:30,800

and almost definitely dangerous lawnmower through its paces?

922

00:39:30,800 --> 00:39:33,800

I decided on a broad range of material.

923

00:39:33,800 --> 00:39:35,800

Now we're getting serious.

924

00:39:35,800 --> 00:39:38,800

I wanted some small, hard things to do,

925

00:39:38,800 --> 00:39:41,800

small, hard things to get that bullet-like carnage,

926

00:39:41,800 --> 00:39:43,800

like a brat house lawn.

927

00:39:43,800 --> 00:39:47,800

And I wanted some big things to get some awesome high-speed camera carnage.

928

00:39:47,800 --> 00:39:51,800

I call this section the pallet cleanser.

929

00:39:51,800 --> 00:39:53,800

My prediction?

930

00:39:53,800 --> 00:39:55,800

Gotta have some willing victims.

931

00:39:55,800 --> 00:39:57,800

Frankly, I just hope no one gets hurt.

932

00:39:57,800 --> 00:40:00,800

Last one, like some sort of kumbaya dance circle.

933

00:40:00,800 --> 00:40:04,800

In fact, it's a circle de los muertos!

934

00:40:08,800 --> 00:40:10,800

Here it comes.

935

00:40:15,800 --> 00:40:18,800

I'll bet Jamie's just a little bit nervous right now.

936

00:40:18,800 --> 00:40:20,800

Oh, yeah!

937

00:40:20,800 --> 00:40:22,800

Watermelons are first on the menu!

938

00:40:22,800 --> 00:40:24,800

Holy crap!

939

00:40:24,800 --> 00:40:26,800

Something went flying!

940

00:40:26,800 --> 00:40:29,800

I think we had a total failure of the rig there.

941

00:40:29,800 --> 00:40:31,800

I think we had a total failure of the rig there.

942

00:40:31,800 --> 00:40:33,800

I think we had a total failure of the rig there.

943

00:40:33,800 --> 00:40:35,800

I think we had a total failure of the rig there.

944

00:40:35,800 --> 00:40:38,800

I think we had a total failure of the rig there.

945

00:40:39,800 --> 00:40:41,800

What just happened?

946

00:40:43,800 --> 00:40:45,800

What happened was scary as hell.

947

00:40:45,800 --> 00:40:47,800

The axle broke.

948

00:40:50,800 --> 00:40:51,800

Oh, yeah.

949

00:40:51,800 --> 00:40:53,800

Oh, dude, the axle sheared.

950

00:40:54,800 --> 00:40:56,800

Look at this.

951

00:40:58,800 --> 00:41:00,800

Oh, it went... oh, my gosh.

952

00:41:05,800 --> 00:41:07,800

Oh, there's your problem.

953

00:41:07,800 --> 00:41:09,800

Yeah.

954

00:41:09,800 --> 00:41:11,800

Oh, shoot.

955

00:41:11,800 --> 00:41:14,800

Well, that's the end of today's fun.

956

00:41:14,800 --> 00:41:17,800

Well, you know, I intended to go over the top

957

00:41:17,800 --> 00:41:19,800

with my lawnmower from hell.

958

00:41:19,800 --> 00:41:23,800

And I guess I did.

959

00:41:23,800 --> 00:41:25,800

Maybe a little too much, though.

960

00:41:25,800 --> 00:41:27,800

Maybe a little too much, though.

961

00:41:27,800 --> 00:41:29,800

Maybe a little too much, though.

962

00:41:29,800 --> 00:41:31,800

Maybe a little too much, though.

963

00:41:31,800 --> 00:41:33,800

Maybe a little too much, though.

964

00:41:33,800 --> 00:41:35,800

Maybe a little too much, though.

965

00:41:35,800 --> 00:41:38,800

Like we always say, failure is always an option.

966

00:41:43,800 --> 00:41:45,800

And, you know, this is the perfect example

967

00:41:45,800 --> 00:41:49,800

that you can learn as much from a failed test as a successful one.

968

00:41:49,800 --> 00:41:51,800

What we learned in this test is,

969

00:41:51,800 --> 00:41:54,800

well, that Jamie has built something far too dangerous

970

00:41:54,800 --> 00:41:56,800

to turn on again.

971

00:41:56,800 --> 00:41:58,800

He is literally sitting on a drivable,

972

00:41:58,800 --> 00:42:02,800

cutting, whirling, slicing blender of death.

973

00:42:04,800 --> 00:42:07,800

Well, we could put another blade on it, to be sure,

974

00:42:07,800 --> 00:42:09,800

but we're going to bow out for right now.

975

00:42:09,800 --> 00:42:12,800

At least until Jamie can figure out how to make this thing safe.

976

00:42:12,800 --> 00:42:14,800

Then we will be back.

977

00:42:14,800 --> 00:42:16,800

Yeah!