

1

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

Please, don't try anything that you're about to see us do at home. Ever.

2

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

Then is the pen mightier than the grenade?

3

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

That's what we do on Mythbusters. We blow c*** up.

4

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

The guys ask could a cue design ballpoint blow you in half?

5

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

And finally, Carrie Grant and Tori take on Goldfinger's right hand man on job.

6

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

I hear the heads fall off at the drop of a hat.

7

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

Can you really decapitate with a hat?

8

00:00:56,000 --> 00:00:57,000

I like it.

9

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

Who are the Mythbusters?

10

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

Adam Savage.

11

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

I am the villain, bad and von savage.

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

And Jamie Heinemann.

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

Must.

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00:01:08,000 --> 00:01:12,000

Between them more than 30 years of special effects experience.

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00:01:12,000 --> 00:01:14,000

Rise, my son.

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00:01:14,000 --> 00:01:16,000

Joining them, Grant Imahara.

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00:01:16,000 --> 00:01:19,000

Weapon of choices across both.

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00:01:19,000 --> 00:01:20,000

Tori Bellegi.

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00:01:20,000 --> 00:01:21,000

It's getting dangerous now.

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00:01:21,000 --> 00:01:23,000

And that's how we like it.

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00:01:23,000 --> 00:01:24,000

And Carrie Byron.

22

00:01:24,000 --> 00:01:26,000

That is messed up.

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00:01:26,000 --> 00:01:28,000

They don't just tell the myths.

24

00:01:28,000 --> 00:01:30,000

Wow, I can feel the pressure.

25

00:01:30,000 --> 00:01:32,000

They put them to the test.

26

00:01:52,000 --> 00:01:54,000

Is this really necessary?

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00:01:54,000 --> 00:01:56,000

Yeah, pretty much.

28

00:01:56,000 --> 00:01:59,000

We got so much response from the first Bond special dude.

29

00:01:59,000 --> 00:02:02,000

We've got to do a number two and it's got to have a big opening.

30

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

Okay, well what's on the docket?

31

00:02:04,000 --> 00:02:09,000

Well, I come in, you're tied up, you're struggling, I taunt you, I gloat over you, I fight the gun at you.

32

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

And then I'm going to ask you about one of your new secret weapons.

33

00:02:12,000 --> 00:02:17,000

I'm going to show you one of my new secret weapons and I think we even have a super henchman to test.

34

00:02:17,000 --> 00:02:19,000

Well, untie me and let's get to work.

35

00:02:19,000 --> 00:02:20,000

Alright.

36

00:02:20,000 --> 00:02:26,000

When Bond Savage is right, the first Bond special set off an avalanche of mail.

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00:02:26,000 --> 00:02:35,000

So Heinemann, James Heinemann, is back with three more myths to put under the Mythbusters microscope.

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00:02:35,000 --> 00:02:36,000

Let's do it.

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00:02:43,000 --> 00:02:45,000

I've got one for you.

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00:02:45,000 --> 00:02:47,000

Heads me with it, big man.

41

00:02:48,000 --> 00:02:49,000

What do you see?

42

00:02:49,000 --> 00:02:53,000

An ordinary imperialist ballpoint.

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00:02:53,000 --> 00:02:59,000

Well, that's what you might think, but actually this was made for me by Q.

44

00:02:59,000 --> 00:03:05,000

And that turns it into an explosive device capable of blowing a person to smithereens.

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00:03:05,000 --> 00:03:07,000

Very nice.

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00:03:09,000 --> 00:03:13,000

We're talking about the Bond saving gadget from GoldenEye.

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00:03:13,000 --> 00:03:20,000

Yet another of Q's ingenious inventions, it's a class four grenade concealed as a pen.

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00:03:20,000 --> 00:03:28,000

In Q Branch Lab, we see it blow a dummy clean in half, but is the writing on the wall for the Bond ballpoint.

49

00:03:29,000 --> 00:03:32,000

You guys get so talkative after the second martini, James.

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00:03:32,000 --> 00:03:33,000

What is your plan?

51

00:03:33,000 --> 00:03:34,000

Tell me.

52

00:03:34,000 --> 00:03:42,000

Well, the first thing we need to do is precisely calculate the interior volume of this pen and then shovel the explosives we can possibly fit in there and blow it up.

53

00:03:42,000 --> 00:03:44,000

We'll see what kind of damage it does.

54

00:03:44,000 --> 00:03:46,000

Excellent plan.

55

00:03:46,000 --> 00:03:53,000

So first up, Jamie calculates the volume of the Bond ballpoint by packing it with diamond dust.

56

00:03:53,000 --> 00:03:57,000

Like it holds about three cc's.

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00:03:57,000 --> 00:04:01,000

That's three cubic centimeters, less than a teaspoon of sugar.

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00:04:01,000 --> 00:04:08,000

And while Jamie and Adam will be using some sweet explosives, can so little really do the job.

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00:04:08,000 --> 00:04:12,000

So three cc's of explosives would be what fits in this pen.

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00:04:12,000 --> 00:04:16,000

Now what we have to find out is whether it's enough to do what it did in the Bond film.

61

00:04:17,000 --> 00:04:23,000

So like Bond in a tank through the streets of St. Petersburg, let's plow straight on.

62

00:04:23,000 --> 00:04:29,000

At the Alameda County Bomb Range, the tumbleweeds are tumbling and the mythbusters are dressed to kill.

63

00:04:29,000 --> 00:04:31,000

All right, I'm feeling a little under dressed.

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00:04:31,000 --> 00:04:32,000

You didn't get the memo?

65

00:04:32,000 --> 00:04:33,000

I didn't get the memo.

66

00:04:33,000 --> 00:04:35,000

We're doing James Bond myths this morning.

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00:04:35,000 --> 00:04:37,000

We're exploding pens.

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00:04:38,000 --> 00:04:39,000

You ready?

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00:04:39,000 --> 00:04:40,000

We're ready.

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00:04:40,000 --> 00:04:41,000

Let's go do it.

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00:04:42,000 --> 00:04:51,000

Always at the ready to blow something up are retired FBI agent Frank Doyle and Sergeant J.D. Nelson from the Alameda County Sheriff's Department.

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00:04:51,000 --> 00:04:54,000

And to wet your appetites, here's a look at their CV.

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00:04:57,000 --> 00:04:59,000

Nice work, fellas.

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00:04:59,000 --> 00:05:03,000

And today, Adam's got their first assignment penciled in.

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00:05:03,000 --> 00:05:10,000

The question for us is if you pack this pen full of high explosives, will that be enough to blow the whole top off this dummy?

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00:05:10,000 --> 00:05:12,000

Now we're going to use the nastiest stuff we can get.

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00:05:12,000 --> 00:05:17,000

So that means that we're only limited by the quantity we can fit in here.

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00:05:17,000 --> 00:05:23,000

Exactly what kind of explosives J.D. and Frank are using is highly classified information.

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00:05:23,000 --> 00:05:28,000

But what Adam and Jamie can tell you is what they think it'll do.

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00:05:28,000 --> 00:05:30,000

All right, prediction time.

81

00:05:30,000 --> 00:05:31,000

What do you think?

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00:05:31,000 --> 00:05:35,000

I think it's going to take a chunk out of the dummy about the size of a grapefruit.

83

00:05:35,000 --> 00:05:39,000

I think you're probably exactly right. That's exactly what I was thinking.

84

00:05:39,000 --> 00:05:41,000

I don't think it's going to blow the whole top off.

85

00:05:41,000 --> 00:05:43,000

Only one way to find out.

86

00:05:43,000 --> 00:05:44,000

All right, I'm going to go place it.

87

00:05:44,000 --> 00:05:45,000

Okay.

88

00:05:46,000 --> 00:05:51,000

Just like in GoldenEye, the pen grenade will be fired from the top pocket of the dummy.

89

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

James, allow me to demonstrate this new pen grenade in three, two, one.

90

00:05:57,000 --> 00:06:03,000

That did exactly what it showed in the movie.

91

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

It did it precisely.

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00:06:05,000 --> 00:06:07,000

Let's go ahead and inspect the damage, James.

93

00:06:07,000 --> 00:06:10,000

The guys are confident of a confirmation.

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00:06:10,000 --> 00:06:15,000

But on closer inspection, the pen bomb was nothing to write home about.

95

00:06:15,000 --> 00:06:20,000

Now from down at the bunker, the first small pens worth of explosives looked just like the movie.

96

00:06:20,000 --> 00:06:24,000

We saw a boom and then we saw no top half to our dummy.

97

00:06:24,000 --> 00:06:26,000

But that's not in fact quite what happened.

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00:06:26,000 --> 00:06:29,000

It ended up doing exactly what Jamie predicted it would,

99

00:06:29,000 --> 00:06:32,000

which is punching about a grapefruit-sized hole in the chest.

100

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

And that made the chest fail and fall off.

101

00:06:35,000 --> 00:06:39,000

So while Jamie and Adam used the exact same size pen as Bond,

102

00:06:39,000 --> 00:06:43,000

chock full of high explosives, the results not even close.

103

00:06:43,000 --> 00:06:49,000

There's just not enough firepower to completely blast the top half of the dummy away.

104

00:06:49,000 --> 00:06:50,000

Now where do we go?

105

00:06:50,000 --> 00:06:52,000

To a bigger pen, of course.

106

00:06:52,000 --> 00:06:53,000

Okay.

107

00:06:53,000 --> 00:06:57,000

In this case, the pen is absolutely mightier than the sword.

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00:07:10,000 --> 00:07:15,000

Okay, you guys, our next myth is not about Bond, but about a Bond villain.

109

00:07:15,000 --> 00:07:16,000

Who, Dr. No?

110

00:07:16,000 --> 00:07:17,000

No.

111

00:07:17,000 --> 00:07:18,000

Blofeldt?

112

00:07:18,000 --> 00:07:19,000

No.

113

00:07:19,000 --> 00:07:20,000

Goldfinger?

114

00:07:20,000 --> 00:07:21,000

Close.

115

00:07:21,000 --> 00:07:22,000

It's Goldfinger's henchman, odd job.

116

00:07:22,000 --> 00:07:23,000

Ah, the do with the hat.

117

00:07:23,000 --> 00:07:24,000

That's right.

118

00:07:24,000 --> 00:07:25,000

Odd job.

119

00:07:25,000 --> 00:07:28,000

Who has a hat that looks regular, but when he throws it,

120

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

it becomes a deadly projectile capable of cutting through steel, through people,

121

00:07:32,000 --> 00:07:36,000

and in the most famous scene, it decapitates a statue.

122

00:07:36,000 --> 00:07:37,000

Yeah.

123

00:07:37,000 --> 00:07:38,000

Awesome.

124

00:07:40,000 --> 00:07:44,000

He's surely one of the all-time baddest Bond henchmen.

125

00:07:44,000 --> 00:07:48,000

Who could forget Goldfinger's corpulent Korean man-servant

126

00:07:48,000 --> 00:07:51,000

armed with the horrifying headgear?

127

00:07:51,000 --> 00:07:56,000

In the movie, Odd Job's bowler hat is sharp enough to slice the head off a statue,

128

00:07:56,000 --> 00:08:00,000

but is this wearable weapon simply film world fantasy?

129

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

So I think we should concentrate on the statue scene.

130

00:08:02,000 --> 00:08:04,000

It's the most well-known, the real talking point.

131

00:08:04,000 --> 00:08:05,000

I totally agree.

132

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

So we need to get some statues.

133

00:08:07,000 --> 00:08:09,000

Then we're going to need some hats that we can reinforce.

134

00:08:09,000 --> 00:08:13,000

You know, Adam knows a guy who makes exact replicas of the odd job hat.

135

00:08:13,000 --> 00:08:14,000

Razor disc and all.

136

00:08:14,000 --> 00:08:15,000

I'm going to call an order for you.

137

00:08:15,000 --> 00:08:16,000

Perfect.

138

00:08:16,000 --> 00:08:19,000

All we need to do now is throw the hats at the statues and see what happens.

139

00:08:19,000 --> 00:08:20,000

All right.

140

00:08:21,000 --> 00:08:27,000

So before we go head to head with the myth, Carrie and Tori go statue shopping.

141

00:08:27,000 --> 00:08:29,000

That guy makes me jealous.

142

00:08:29,000 --> 00:08:35,000

And seeing as it's impossible to tell exactly what the Goldfinger figurine was made out of,

143

00:08:35,000 --> 00:08:37,000

Tori puts in an order for two.

144

00:08:37,000 --> 00:08:42,000

One made of soft plaster, the other from the much tougher concrete.

145

00:08:42,000 --> 00:08:43,000

We have a problem though.

146

00:08:43,000 --> 00:08:46,000

When they make these statues, they put reinforcement in them.

147

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

They actually have rebar going right through the neck.

148

00:08:48,000 --> 00:08:51,000

Now we know from the movie, they didn't use any reinforcement.

149

00:08:51,000 --> 00:08:55,000

So we've come here to Ace of Estuary factory where they're going to pour a custom statue

150

00:08:55,000 --> 00:08:57,000

without any reinforcement at all.

151

00:08:57,000 --> 00:09:00,000

Model maker Tori is obviously excited.

152

00:09:00,000 --> 00:09:01,000

Us?

153

00:09:01,000 --> 00:09:04,000

Well, it's a bit like watching concrete set.

154

00:09:04,000 --> 00:09:11,000

So let's head back to M7 where Carrie's unpacking the odd job hats from henchmen accessories.

155

00:09:11,000 --> 00:09:17,000

The replica hats that I got in the mail came with an aluminum ring that fits at the bottom

156

00:09:17,000 --> 00:09:19,000

for the cutting.

157

00:09:19,000 --> 00:09:23,000

Now I don't have a lot of confidence in the aluminum because it's pretty soft and bendy.

158

00:09:23,000 --> 00:09:25,000

So I want to make some steel ones.

159

00:09:25,000 --> 00:09:28,000

I want to make one with a really sharp edge and one with a really blunt edge

160

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

and see if maybe we can get some results with those.

161

00:09:31,000 --> 00:09:35,000

So Carrie gets to work cutting out two steel hat brings.

162

00:09:35,000 --> 00:09:40,000

One that's heavy, blunt and bludgeoning, and a lighter one with a razor sharp edge.

163

00:09:40,000 --> 00:09:46,000

Meanwhile, Grant has pulled out an old friend, the sword-swinging ninja robot.

164

00:09:46,000 --> 00:09:48,000

The timing was perfect.

165

00:09:48,000 --> 00:09:53,000

Who could also smash hammers and knock one out of the park.

166

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

But now it's got an odd job to do, standing in for odd job.

167

00:09:58,000 --> 00:10:02,000

So I've built this mechanism, which is a pneumatic clamp.

168

00:10:02,000 --> 00:10:06,000

In order to stabilize it to keep it from flopping around like this,

169

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

I've got a little platform here that we lay our hat on.

170

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

So that this robot will hold onto the hat, fling it around, and then release it exactly when we want it to go.

171

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

Sounds like he knows what he's doing.

172

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

I'm making it up as I go along.

173

00:10:24,000 --> 00:10:28,000

Coming up, hats fly and heads roll.

174

00:10:28,000 --> 00:10:30,000

Oh my god!

175

00:10:30,000 --> 00:10:34,000

And Adam and Jamie take a bite out of Jaws' steel teeth.

176

00:10:34,000 --> 00:10:36,000

It made me!

177

00:10:40,000 --> 00:10:48,000

Music

178

00:10:48,000 --> 00:10:52,000

Before Adam and Jamie go back and supersize their exploding pen,

179

00:10:52,000 --> 00:10:55,000

they've got a steely-jawed henchman to deal with.

180

00:10:55,000 --> 00:10:56,000

What do we got?

181

00:10:56,000 --> 00:11:00,000

Well, you know that no Bond film would be complete without an evil henchman,

182

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

and we're about to test the evilest, the most vilest of all the Bond henchmen, arguably.

183

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

This guy is so badass, they put him in not one, but two Bond films.

184

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

You've got to be talking about Jaws.

185

00:11:13,000 --> 00:11:17,000

Exactly, and what the fans want to know, what everyone wants to know is,

186

00:11:17,000 --> 00:11:23,000

could Old Metal Mouth really have done all those incredible things he does in the movies with his metal teeth?

187

00:11:23,000 --> 00:11:26,000

Like biting through the cable of a cable car?

188

00:11:26,000 --> 00:11:29,000

It's like you're psychic. Exactly that one.

189

00:11:31,000 --> 00:11:33,000

Let's set the scene in our Bond storyboard.

190

00:11:33,000 --> 00:11:40,000

In the movie Moonraker, 007 and his Buxom Babe are traveling down a cable car in Rio.

191

00:11:40,000 --> 00:11:44,000

Using his metallic mouth, Jaws bites through the steel cable,

192

00:11:44,000 --> 00:11:48,000

stopping the cable car, and leaving Bond and his lady hanging.

193

00:11:48,000 --> 00:11:53,000

The question is, is there even a nibble of truth in this movie moment?

194

00:11:53,000 --> 00:11:55,000

I'm ready. How are we going to do this?

195

00:11:55,000 --> 00:12:01,000

Alright, well to me it looks like what Jaws is wearing in his mouth is actually like dentures,

196

00:12:01,000 --> 00:12:05,000

and I think that's where we should start. I'll make a pair of metal hardened dentures,

197

00:12:05,000 --> 00:12:07,000

and we'll start biting stuff for them.

198

00:12:08,000 --> 00:12:16,000

So like an orthodontist on the Spectre payroll, Adam sinks his teeth into making a set of super hardened steel Jaws.

199

00:12:16,000 --> 00:12:20,000

These are the component parts of my one half of my super Jaws.

200

00:12:20,000 --> 00:12:23,000

This is made positive on the model that you'd wear them like dentures.

201

00:12:23,000 --> 00:12:27,000

It'd be super strong steel, so now I'm going to start welding it together.

202

00:12:28,000 --> 00:12:32,000

So how about some cool welding shots?

203

00:12:32,000 --> 00:12:36,000

Then some hot, quench-hardening shots.

204

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

And finally, a disturbing shot.

205

00:12:43,000 --> 00:12:46,000

Of course, Adam won't actually be chomping the cable himself,

206

00:12:46,000 --> 00:12:50,000

so he fits the metal nashers into an accurate replica skull.

207

00:12:50,000 --> 00:12:55,000

So what I've got here is a human skull and log in terms of the breaking strength.

208

00:12:55,000 --> 00:13:02,000

I've got steel jaws which are made to exactly the specifications that I can parse from looking at the movie.

209

00:13:02,000 --> 00:13:04,000

They look pretty much identical to me.

210

00:13:04,000 --> 00:13:07,000

Personally, I don't think they're going to make it through that cable.

211

00:13:08,000 --> 00:13:14,000

After examining the movie, Adam is using exactly the same one inch braided steel rope.

212

00:13:14,000 --> 00:13:18,000

Now you can see why he has his doubts this will work.

213

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

There's only one way to find out.

214

00:13:20,000 --> 00:13:24,000

Open wide and take a bite at the average human bite strength.

215

00:13:24,000 --> 00:13:27,000

170 pounds per square inch.

216

00:13:27,000 --> 00:13:30,000

170 pounds.

217

00:13:30,000 --> 00:13:33,000

Yeah, that's not doing nothing to the cable, man.

218

00:13:33,000 --> 00:13:36,000

It's not even moving it. It's not denting it. It's not...

219

00:13:36,000 --> 00:13:38,000

It's nothing.

220

00:13:38,000 --> 00:13:40,000

Yeah, nada.

221

00:13:40,000 --> 00:13:43,000

The myth hanging on by the skin of its teeth,

222

00:13:43,000 --> 00:13:49,000

but even upping the pressure to a superhuman 250 pounds leaves no mark.

223

00:13:49,000 --> 00:13:53,000

Nothing. There is not a mark or a speck on this cable.

224

00:13:53,000 --> 00:13:55,000

We did nothing to it.

225

00:13:55,000 --> 00:13:56,000

Nope.

226

00:13:56,000 --> 00:13:59,000

The fact is that these teeth are blunt. That's what they show in the movie.

227

00:13:59,000 --> 00:14:01,000

That's what we've built.

228

00:14:01,000 --> 00:14:04,000

You don't use a blunt tool to cut steel.

229

00:14:04,000 --> 00:14:06,000

It's not going to happen.

230

00:14:06,000 --> 00:14:08,000

Why do you think we should go with this?

231

00:14:08,000 --> 00:14:10,000

I feel like any more weight we're going to crush the skull.

232

00:14:10,000 --> 00:14:13,000

Well, look, these things are beautifully made.

233

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

They're exactly what we saw in the movie, but they have square edges.

234

00:14:16,000 --> 00:14:19,000

They're designed for crushing, not for cutting.

235

00:14:19,000 --> 00:14:22,000

Right, and this is basically braided solid steel.

236

00:14:22,000 --> 00:14:24,000

Are you going to crush this until it fails?

237

00:14:24,000 --> 00:14:28,000

No. I mean, if I were designing a jaw for some big dude to cut cables,

238

00:14:28,000 --> 00:14:30,000

I'd give him a steel jaw.

239

00:14:30,000 --> 00:14:34,000

I'd put steel teeth that were hardened and sharpened,

240

00:14:34,000 --> 00:14:37,000

and then maybe we'd have a chance for cutting the cable.

241

00:14:37,000 --> 00:14:38,000

Well, you want to do that?

242

00:14:38,000 --> 00:14:39,000

I'd love to.

243

00:14:39,000 --> 00:14:40,000

All right.

244

00:14:40,000 --> 00:14:44,000

Jamie's got a license to weld, and he's going to use it.

245

00:14:44,000 --> 00:14:47,000

Meanwhile, Adam's not finished with his dentures.

246

00:14:47,000 --> 00:14:49,000

Well, while Jamie builds his rig,

247

00:14:49,000 --> 00:14:52,000

I'd like to prove to you that I don't think my denture teeth

248

00:14:52,000 --> 00:14:54,000

have what it takes to cut through this cable.

249

00:14:54,000 --> 00:14:56,000

I'm going to hit my rig with a sledgehammer,

250

00:14:56,000 --> 00:14:59,000

which is easily 10 times the force we had on it before.

251

00:14:59,000 --> 00:15:00,000

You ready?

252

00:15:05,000 --> 00:15:07,000

Ha ha ha ha ha ha!

253

00:15:07,000 --> 00:15:09,000

Wait, there's the cable.

254

00:15:09,000 --> 00:15:11,000

Not a mark on them.

255

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

And the skull, she has seen better days.

256

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

Adam's hammered home the point.

257

00:15:17,000 --> 00:15:19,000

Even under extreme bite force,

258

00:15:19,000 --> 00:15:22,000

the jaws-like dentures couldn't cut the cable,

259

00:15:22,000 --> 00:15:25,000

and the pressure would bust Jaws' jaw bone.

260

00:15:25,000 --> 00:15:28,000

It's clear there's a lot more structure needed

261

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

to even get close to cutting a cable with a human mouth.

262

00:15:39,000 --> 00:15:40,000

Here's a heads up.

263

00:15:40,000 --> 00:15:43,000

If Bon Batty Odd job is on your tail,

264

00:15:43,000 --> 00:15:45,000

keep your head down,

265

00:15:45,000 --> 00:15:47,000

we just might lose it.

266

00:15:47,000 --> 00:15:49,000

But Carrie Grant and Tori want to know

267

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

if knocking a statue's block off is actually possible.

268

00:15:53,000 --> 00:15:55,000

While they wait for their custom made models,

269

00:15:55,000 --> 00:15:59,000

Tori has made a substitute statue out of lightweight foam.

270

00:15:59,000 --> 00:16:02,000

And Carrie has prepared two Odd Job hats

271

00:16:02,000 --> 00:16:05,000

with deadly steel brims.

272

00:16:05,000 --> 00:16:10,000

One with a blunt edge to be head by bludgeoning the other.

273

00:16:10,000 --> 00:16:12,000

Razor sharp.

274

00:16:12,000 --> 00:16:14,000

Voila, I'm done with my Odd Job.

275

00:16:15,000 --> 00:16:18,000

Meanwhile, Grant is rigging his sword-swinging robot

276

00:16:18,000 --> 00:16:20,000

to fling fedoras.

277

00:16:23,000 --> 00:16:24,000

Cool!

278

00:16:24,000 --> 00:16:27,000

But before he fine-tunes its aim and throwing speed,

279

00:16:27,000 --> 00:16:31,000

the guys want to get a reference for a human-powered throw.

280

00:16:31,000 --> 00:16:32,000

Cue the humans.

281

00:16:32,000 --> 00:16:35,000

It's Calibrate Grant's killer hat-throwing robot.

282

00:16:35,000 --> 00:16:37,000

We've set up a little test.

283

00:16:37,000 --> 00:16:40,000

I have my Odd Job steel-rimmed hats.

284

00:16:40,000 --> 00:16:42,000

We've set up this scale here.

285

00:16:42,000 --> 00:16:46,000

We have a target which is Tori's lovely statue that he's created.

286

00:16:46,000 --> 00:16:48,000

And it's all going to be filmed on high speed

287

00:16:48,000 --> 00:16:50,000

so that we can make our calculations.

288

00:16:50,000 --> 00:16:53,000

With everything set up and ready to go,

289

00:16:53,000 --> 00:16:57,000

Tori allows us a glimpse through the window of his soul.

290

00:16:57,000 --> 00:17:01,000

So I finish my statue and I like to call her,

291

00:17:01,000 --> 00:17:03,000

hey there, lonely girl.

292

00:17:03,000 --> 00:17:06,000

But I kind of look at her too long because she makes me cry.

293

00:17:06,000 --> 00:17:10,000

So now we're going to try to chop her head off.

294

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

At first, I'm going to knock it a block off is Odd Job Carry.

295

00:17:14,000 --> 00:17:15,000

Odd Job throwing test.

296

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

Make us proud, Carrie.

297

00:17:20,000 --> 00:17:25,000

The high speed captures the lethal grace of a bon-batty in action.

298

00:17:25,000 --> 00:17:29,000

But remember, this test is all about calibrating a throwing speed.

299

00:17:29,000 --> 00:17:32,000

So next is Odd Job Grant.

300

00:17:34,000 --> 00:17:37,000

Followed by just plain old Odd Tori.

301

00:17:37,000 --> 00:17:42,000

Yeah! Good shot! Good shot!

302

00:17:42,000 --> 00:17:45,000

Knock the head right off.

303

00:17:45,000 --> 00:17:47,000

Cool, let's go look at the high speed,

304

00:17:47,000 --> 00:17:49,000

calculate all the velocities and see what you need to set your robot at.

305

00:17:49,000 --> 00:17:50,000

Alright, yeah.

306

00:17:50,000 --> 00:17:53,000

Back inside, Carrie crunches the numbers.

307

00:17:53,000 --> 00:17:55,000

And not only was Tori accurate,

308

00:17:55,000 --> 00:17:59,000

his was the fastest throw at 46 feet per second.

309

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

Okay, great.

310

00:18:02,000 --> 00:18:08,000

So what we're going to do now is calibrate the robot to what we can throw as humans.

311

00:18:08,000 --> 00:18:12,000

We'll set up a metal rimmed hat, put it right in the clamp there,

312

00:18:12,000 --> 00:18:15,000

and start filming it with high speed to see how fast it's throwing.

313

00:18:15,000 --> 00:18:17,000

Okay, pulling the safeties.

314

00:18:17,000 --> 00:18:21,000

Alright, this is blunt steel hats.

315

00:18:21,000 --> 00:18:26,000

Calibration test in three, two, one.

316

00:18:27,000 --> 00:18:30,000

That's a pretty good throw. Thanks.

317

00:18:30,000 --> 00:18:37,000

Yep, Odd Job's robotic alter ego successfully throws the bowler in a smooth and deadly action.

318

00:18:37,000 --> 00:18:40,000

But is it throwing the bowler fast enough?

319

00:18:40,000 --> 00:18:44,000

Right now the robot is throwing at 54.7 feet per second,

320

00:18:44,000 --> 00:18:47,000

which is just a bit more than Tori.

321

00:18:47,000 --> 00:18:50,000

And we are justifying this by saying that, you know,

322

00:18:50,000 --> 00:18:54,000

Tori's a pretty fit, pretty athletic guy.

323

00:18:54,000 --> 00:18:57,000

But, you know, Odd Job, he's a professional henchman.

324

00:18:57,000 --> 00:19:02,000

I mean, you got to figure he's in a little bit better shape than, you know, your average guy.

325

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

So he's going to be throwing a little bit faster.

326

00:19:05,000 --> 00:19:09,000

So all they need are the statues. How about these?

327

00:19:09,000 --> 00:19:14,000

Hey, careful with those statues. I hear the heads fall off at the drop of a hat.

328

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

There are two statues from the statue store Tori and Carrie visited.

329

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

One made of plaster.

330

00:19:20,000 --> 00:19:22,000

Hey, how you guys doing?

331

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

One made of concrete.

332

00:19:24,000 --> 00:19:27,000

Grant, the statue's got a crack in it.

333

00:19:27,000 --> 00:19:31,000

At a third, bought online is solid marble.

334

00:19:31,000 --> 00:19:34,000

And being from the internet, she's naked.

335

00:19:34,000 --> 00:19:37,000

So Carrie covers her up.

336

00:19:37,000 --> 00:19:43,000

Carrie, I'm a little concerned that you're not going to have enough time to finish the challenge.

337

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

Do you maybe want to rethink that top?

338

00:19:48,000 --> 00:19:51,000

Oh well, designers, make it work.

339

00:19:52,000 --> 00:19:54,000

All right, so our statues have arrived.

340

00:19:54,000 --> 00:19:59,000

We have plaster, concrete, and our bonded marble, and none of them have reinforcement.

341

00:19:59,000 --> 00:20:02,000

Now what we're going to start doing is firing metal-rimmed hats at them

342

00:20:02,000 --> 00:20:05,000

and see if any of these heads will break off.

343

00:20:05,000 --> 00:20:09,000

Next on the Mythbusters James Bond Special.

344

00:20:09,000 --> 00:20:11,000

Oh, now you've done it. It's tasting real metal.

345

00:20:11,000 --> 00:20:14,000

Janie's steel jaws get nasty.

346

00:20:21,000 --> 00:20:31,000

In this episode of Mythbusters, the false teeth are flying.

347

00:20:31,000 --> 00:20:36,000

Jamie and Adam have taken a bite out of the moon raker movie scene

348

00:20:36,000 --> 00:20:40,000

where arch-villain jaws gnaws through an aerial tramway cable.

349

00:20:40,000 --> 00:20:45,000

But predictably, this myth was more than Adam's steel dentures could chew.

350

00:20:45,000 --> 00:20:47,000

Let's not do nothing to the cable, man.

351

00:20:47,000 --> 00:20:54,000

So we've ramped up to the ridiculous, and Jamie's bitten the bullet to create a superhuman set of fangs.

352

00:20:54,000 --> 00:20:59,000

These are my jaws, and they're pretty beefy, but not much for cutting.

353

00:20:59,000 --> 00:21:06,000

So I'm going to start with this strap and attach it around the face of the jaw and cut the teeth out a bit.

354

00:21:06,000 --> 00:21:09,000

And then I'm going to go through with a hard-facing welder,

355

00:21:09,000 --> 00:21:14,000

and that means that I can put some metal on top of the teeth that are really hard

356

00:21:14,000 --> 00:21:18,000

and I can get a good, sharp, hard-cutting surface on them.

357

00:21:18,000 --> 00:21:25,000

Nobody's exactly sure of jaws' facial anatomy, so while Adam's test presumed steel teeth but a human jaw,

358

00:21:25,000 --> 00:21:30,000

Jamie's ramped up to steel jaw and steel teeth.

359

00:21:30,000 --> 00:21:32,000

Killer teeth.

360

00:21:32,000 --> 00:21:38,000

Hopefully these bad boys will give us some kind of chance of biting through the cable.

361

00:21:38,000 --> 00:21:41,000

What do you think?

362

00:21:41,000 --> 00:21:43,000

Those are nasty!

363

00:21:43,000 --> 00:21:45,000

They're hardened.

364

00:21:45,000 --> 00:21:47,000

How'd you harden them?

365

00:21:47,000 --> 00:21:50,000

I welded some hard-facing on them.

366

00:21:50,000 --> 00:21:52,000

That is stunning!

367

00:21:52,000 --> 00:21:53,000

Wow!

368

00:21:53,000 --> 00:21:57,000

And I have these. Just as a little test.

369

00:21:57,000 --> 00:21:59,000

All right, there you go.

370

00:21:59,000 --> 00:22:02,000

Vegetarians should look away now.

371

00:22:02,000 --> 00:22:09,000

It's a veritable slaughterhouse salad, but the grocery massacre doesn't stop there.

372

00:22:09,000 --> 00:22:14,000

Oh, now we've done it. It's tasting real metal.

373

00:22:14,000 --> 00:22:17,000

Look at you!

374

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

Jamie's finished slicing and dicing his vegetable victims,

375

00:22:22,000 --> 00:22:26,000

but his jaws still have to mouth off against the one-inch steel cable.

376

00:22:26,000 --> 00:22:30,000

We're going to take 170 pounds, which is the human bite strength,

377

00:22:30,000 --> 00:22:32,000

and we're going to put it on top of these jaws,

378

00:22:32,000 --> 00:22:35,000

see whether they'll bite through the one-inch cable.

379

00:22:35,000 --> 00:22:37,000

Personally, I don't think so.

380

00:22:37,000 --> 00:22:39,000

That's 170.

381

00:22:42,000 --> 00:22:43,000

Nothing.

382

00:22:43,000 --> 00:22:48,000

Yeah, it's a lot of force.

383

00:22:48,000 --> 00:22:49,000

It's got a hold of it.

384

00:22:49,000 --> 00:22:52,000

But it's definitely not biting through the cable.

385

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

It looks like this myth is about to bite the dust,

386

00:22:55,000 --> 00:23:00,000

but remember, jaws was a giant who could have had superhuman bite strength.

387

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

I'm not ready to call it.

388

00:23:02,000 --> 00:23:04,000

We have one more tool that I'd like to apply to this,

389

00:23:04,000 --> 00:23:07,000

which is Jamie's 10-ton hydraulic press,

390

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

with 20,000 pounds of pressure on these jaws.

391

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

If they don't bite through this cable,

392

00:23:12,000 --> 00:23:15,000

nothing in the shape of a jaw will bite through this cable.

393

00:23:16,000 --> 00:23:19,000

All right, so this is Jamie's super-stealed teeth

394

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

with the real cable, 20,000 pounds of pressure.

395

00:23:24,000 --> 00:23:25,000

Okay.

396

00:23:25,000 --> 00:23:26,000

Ready when you are.

397

00:23:30,000 --> 00:23:32,000

Your teeth are doing some damage.

398

00:23:32,000 --> 00:23:34,000

Dude, that is wrong.

399

00:23:38,000 --> 00:23:39,000

I'm bending this.

400

00:23:39,000 --> 00:23:40,000

Oh, is it?

401

00:23:40,000 --> 00:23:42,000

Yeah, I bent that.

402

00:23:42,000 --> 00:23:44,000

It's pretty well maxed out, though.

403

00:23:44,000 --> 00:23:46,000

That's 20,000 pounds of pressure,

404

00:23:46,000 --> 00:23:48,000

and it still ain't through that cable.

405

00:23:49,000 --> 00:23:53,000

Look, we use so much force on this that it bent my hydraulic press.

406

00:23:53,000 --> 00:23:55,000

It still didn't cut the cable.

407

00:23:55,000 --> 00:23:58,000

The idea that a human with some kind of metal teeth

408

00:23:58,000 --> 00:24:01,000

could bite a cable like this,

409

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

it's just not happening. It's busted.

410

00:24:05,000 --> 00:24:06,000

Jamie's called it,

411

00:24:06,000 --> 00:24:10,000

but let's get a conclusion straight from the source's mouth.

412

00:24:10,000 --> 00:24:12,000

So, Jamie, what do you think?

413

00:24:12,000 --> 00:24:15,000

Could a man with metal teeth under any circumstances

414

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

ever bite through a metal cable, or is it busted?

415

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

Busted.

416

00:24:21,000 --> 00:24:22,000

I agree.

417

00:24:22,000 --> 00:24:23,000

Busted.

418

00:24:23,000 --> 00:24:25,000

Which was no surprise,

419

00:24:25,000 --> 00:24:29,000

but this bite-sized myth has one more course to come.

420

00:24:30,000 --> 00:24:31,000

After the break.

421

00:24:31,000 --> 00:24:33,000

Here comes my henchman now,

422

00:24:33,000 --> 00:24:36,000

and I will see my revenge.

423

00:24:36,000 --> 00:24:41,000

Meet Klaus, the evilest cable-snapping sidekick ever.

424

00:24:51,000 --> 00:24:55,000

Despite building the nastiest steel nashers ever,

425

00:24:55,000 --> 00:24:58,000

Adam and Jamie still couldn't bite through a cable car cable.

426

00:24:58,000 --> 00:25:00,000

Leaving just one conclusion.

427

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

Busted.

428

00:25:02,000 --> 00:25:03,000

Yeah, I agree.

429

00:25:03,000 --> 00:25:07,000

I mean, even these things wouldn't cut the cable.

430

00:25:07,000 --> 00:25:11,000

So, it's busted, but what are we going to do for a finale?

431

00:25:11,000 --> 00:25:13,000

Yeah, I've been thinking about that, and I've got an idea.

432

00:25:13,000 --> 00:25:16,000

Hold on a second. Let me get into character.

433

00:25:19,000 --> 00:25:23,000

James, James, I have the plan.

434

00:25:23,000 --> 00:25:27,000

We will turn you to the dark side and make you into a bond.

435

00:25:27,000 --> 00:25:28,000

The henchman.

436

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

Veal it.

437

00:25:29,000 --> 00:25:32,000

We'll give you the power to slice that cable yourself.

438

00:25:32,000 --> 00:25:34,000

And I can use anything I want.

439

00:25:34,000 --> 00:25:36,000

Anything you desire.

440

00:25:36,000 --> 00:25:38,000

I might just have a little something at my sleep.

441

00:25:38,000 --> 00:25:40,000

That's the spirit.

442

00:25:41,000 --> 00:25:44,000

Yep, but it's worth doing. It's worth overdoing.

443

00:25:44,000 --> 00:25:50,000

I need to cut some cable, so I got the biggest, baddest thing I could find.

444

00:25:50,000 --> 00:25:54,000

Heinemann, James Heinemann, has been turned by the Baron,

445

00:25:54,000 --> 00:25:58,000

and his task is to do in reality what Jaws couldn't,

446

00:25:58,000 --> 00:26:01,000

and that's actually cut the cable car cable.

447

00:26:01,000 --> 00:26:02,000

This is awesome.

448

00:26:02,000 --> 00:26:06,000

Normally used by rescue services to cut open wreck cars,

449

00:26:06,000 --> 00:26:11,000

the problem evil henchman Jamie faces is wielding it with one hand.

450

00:26:11,000 --> 00:26:15,000

It's really heavy. It's like 70 pounds or something in that neighborhood,

451

00:26:15,000 --> 00:26:21,000

and so I can't really hold that out at the end of my arm and go snip, snip, snip.

452

00:26:21,000 --> 00:26:26,000

So if I want to be the evil villain with this nasty thing, I need a little help.

453

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

I built it right here.

454

00:26:28,000 --> 00:26:30,000

It's spring loaded this whole thing.

455

00:26:30,000 --> 00:26:34,000

This is kind of like a counterweight to help hold up the weight of the cutter,

456

00:26:34,000 --> 00:26:37,000

except instead of a counterweight, we're using springs,

457

00:26:37,000 --> 00:26:39,000

and they were doing a great job.

458

00:26:43,000 --> 00:26:44,000

I like it.

459

00:26:45,000 --> 00:26:49,000

With the rig ready, it's time for the misbusters to hit the harbor.

460

00:26:49,000 --> 00:26:55,000

This is perfect. This is an ideal kind of villainous bond finale location.

461

00:26:55,000 --> 00:26:57,000

Okay. Well, let's do it.

462

00:26:58,000 --> 00:27:02,000

So the boys go to work, and with a few smart edits,

463

00:27:02,000 --> 00:27:09,000

they appear to suspend a makeshift cable car with myth accurate bond and babe on board in no time at all.

464

00:27:09,000 --> 00:27:13,000

This is a simple setup really, simple but deadly.

465

00:27:13,000 --> 00:27:16,000

We've got the cable. It's anchored.

466

00:27:16,000 --> 00:27:21,000

We have the cable attached to the trolley above.

467

00:27:21,000 --> 00:27:24,000

It's about 25 feet in the air right now.

468

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

We're going to cut the cable and the trolley is going to drop.

469

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

It's a massive setup, worthy only of the baddest henchmen in mythbusters history.

470

00:27:34,000 --> 00:27:36,000

Cue claws.

471

00:27:36,000 --> 00:27:38,000

Meenu Thanadja.

472

00:27:38,000 --> 00:27:41,000

More ferocious than jaws.

473

00:27:41,000 --> 00:27:43,000

Taller than knick-knack.

474

00:27:43,000 --> 00:27:45,000

And creepier than tee heed.

475

00:27:45,000 --> 00:27:48,000

He's the mutant son of Terminator.

476

00:27:48,000 --> 00:27:51,000

Meet Friday the 13th's Jason.

477

00:27:51,000 --> 00:27:56,000

Here comes my henchmen now and I will see fire of end.

478

00:27:56,000 --> 00:27:57,000

Come.

479

00:27:57,000 --> 00:28:00,000

Cut the cable. Cut that cable.

480

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

Slice that cable.

481

00:28:03,000 --> 00:28:13,000

Ha ha ha ha ha ha ha.

482

00:28:13,000 --> 00:28:16,000

Woo!

483

00:28:16,000 --> 00:28:18,000

Nicely done claw.

484

00:28:18,000 --> 00:28:20,000

It took henchmen Jamie.

485

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

This thing's great.

486

00:28:21,000 --> 00:28:22,000

That's really fun.

487

00:28:22,000 --> 00:28:28,000

Near seconds to send bond, an obligatory babe crashing to their ends.

488

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

I don't know about henchmen but I like this machine.

489

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

In one hand mayhem, destruction, cut cables, whatever you want.

490

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

I like it.

491

00:28:48,000 --> 00:28:50,000

So you took to be in a henchmen pretty well.

492

00:28:50,000 --> 00:28:51,000

Yeah.

493

00:28:51,000 --> 00:28:52,000

Like you liked it.

494

00:28:52,000 --> 00:28:54,000

Yeah but I imagine the pace terrible.

495

00:28:54,000 --> 00:28:55,000

Yeah probably.

496

00:28:55,000 --> 00:28:57,000

The hours suck.

497

00:28:59,000 --> 00:29:01,000

Still to come.

498

00:29:01,000 --> 00:29:04,000

A statue that's a pain in the neck.

499

00:29:04,000 --> 00:29:05,000

Wait a minute.

500

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

It's hollow.

501

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

And.

502

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

When in doubt.

503

00:29:09,000 --> 00:29:10,000

Use more explosives.

504

00:29:21,000 --> 00:29:26,000

Any spy worth his salt comes equipped with some guileful gadgets.

505

00:29:26,000 --> 00:29:30,000

Some are sneaky and some, well, not so much.

506

00:29:30,000 --> 00:29:35,000

Bringing with him concealed among groceries a portable radio transmitter.

507

00:29:35,000 --> 00:29:40,000

But courtesy of Q, James Bond is the master of the undercover contraption.

508

00:29:40,000 --> 00:29:45,000

And in the movie GoldenEye, we see his pocket pen blow a dummy clean in hand.

509

00:29:45,000 --> 00:29:49,000

But could a ballpoint sized bomb really be this deadly?

510

00:29:49,000 --> 00:29:55,000

Well the mythbusters packed an ordinary pen with the most extreme explosives they could get their hands on.

511

00:29:56,000 --> 00:29:57,000

But.

512

00:29:57,000 --> 00:30:01,000

Okay it didn't blow the whole top of the dummy off of the waist.

513

00:30:01,000 --> 00:30:05,000

So the celluloid story is busted and Adam's drawn up a new plan.

514

00:30:05,000 --> 00:30:12,000

All right well that right there that you just saw was the circumstances replicating the actual facts of the myth.

515

00:30:12,000 --> 00:30:16,000

Now it's time to try and get the results.

516

00:30:16,000 --> 00:30:19,000

A little bit more explosive fits into this thing.

517

00:30:19,000 --> 00:30:20,000

See where I'm going with that?

518

00:30:20,000 --> 00:30:22,000

Bigger boom.

519

00:30:22,000 --> 00:30:23,000

Yep.

520

00:30:23,000 --> 00:30:24,000

This is where you're going Adam.

521

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

A bigger pen means more explosives and a bigger kaboom.

522

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

And we're talking much bigger.

523

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

This pen's not exactly the most subtle weapon, but this just might be what it takes to recreate the

Bond bang.

524

00:30:37,000 --> 00:30:40,000

This pen is substantially larger than the other one.

525

00:30:40,000 --> 00:30:46,000

In fact, I would say this is the better part of a stick of dynamite worth of explosives going in here.

526

00:30:46,000 --> 00:30:50,000

Try six times more explosives than the regular pen.

527

00:30:50,000 --> 00:30:53,000

This should really make a mark.

528

00:30:53,000 --> 00:30:55,000

Here's the new pen.

529

00:30:57,000 --> 00:30:59,000

Put that in his pocket.

530

00:31:01,000 --> 00:31:02,000

Okay.

531

00:31:02,000 --> 00:31:04,000

Have fun buddy.

532

00:31:04,000 --> 00:31:11,000

While the Bomb boys get the bigger pen charged up, there's enough time for the cameraman to take an arty shot.

533

00:31:11,000 --> 00:31:13,000

And Jamie to make a prediction.

534

00:31:13,000 --> 00:31:16,000

This time I wouldn't be at all surprised to see the whole dummy go away.

535

00:31:17,000 --> 00:31:23,000

Keep in mind to replicate the movie moment at least the top half of the dummy needs to disappear.

536

00:31:23,000 --> 00:31:28,000

With the pen poised in the pocket, Adam puts out the Mythbuster Yodel.

537

00:31:28,000 --> 00:31:33,000

Fire in the hole.

538

00:31:33,000 --> 00:31:37,000

Okay Adam, now you're just really taking the barbershop thing too far.

539

00:31:37,000 --> 00:31:40,000

Just press the detonation button will ya?

540

00:31:40,000 --> 00:31:45,000

Larger pen in three, two, one.

541

00:31:49,000 --> 00:31:50,000

Yup.

542

00:31:50,000 --> 00:31:52,000

That seemed to do the job.

543

00:31:52,000 --> 00:31:54,000

Let's go check it out.

544

00:31:54,000 --> 00:31:58,000

Did our agents of destruction learn nothing last time?

545

00:31:58,000 --> 00:32:00,000

Repeat after me.

546

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

Check the carnage before calling it.

547

00:32:02,000 --> 00:32:07,000

While the size of the blast and the noise were almost identical to Q's commotion,

548

00:32:07,000 --> 00:32:11,000

and at first it appeared our phone fiend had been blown to smithereens,

549

00:32:11,000 --> 00:32:14,000

Jamie and Adam still aren't satisfied.

550

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

That last blast was pretty energetic.

551

00:32:16,000 --> 00:32:22,000

It was more so than the first one and it took off his shoulders, his head, his arms, all that kind of stuff.

552

00:32:22,000 --> 00:32:26,000

But it's still not quite enough.

553

00:32:27,000 --> 00:32:32,000

Well, that did a much better job than the smaller amount, but it still didn't do enough.

554

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

And you know there is JD's axiom.

555

00:32:34,000 --> 00:32:36,000

When in doubt?

556

00:32:36,000 --> 00:32:38,000

Use more explosives.

557

00:33:06,000 --> 00:33:08,000

Thrower of all time.

558

00:33:08,000 --> 00:33:11,000

A flying hat decapitates a statue.

559

00:33:11,000 --> 00:33:17,000

And Carrie Grant and Tori have been aiming to find out if this is fact or film fantasy

560

00:33:17,000 --> 00:33:20,000

by flinging a few fedoras of their own.

561

00:33:20,000 --> 00:33:22,000

So Carrie, take us through it.

562

00:33:22,000 --> 00:33:23,000

Okay, so here's the setup.

563

00:33:23,000 --> 00:33:27,000

We've got Grant's killer hat-throwing robot ready to throw to speed a little bit faster than Tori.

564

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

That is our starting point.

565

00:33:29,000 --> 00:33:32,000

We have three statues, marble, cement and plaster.

566

00:33:32,000 --> 00:33:34,000

Started with marble because that's what you'd expect to be in a garden.

567

00:33:34,000 --> 00:33:36,000

First we're going to start with a blunt edged hat.

568

00:33:36,000 --> 00:33:40,000

And if that can't decapitate the statues, we're going to move on to the one with the razor sharp edge.

569

00:33:40,000 --> 00:33:45,000

The guys are setting the bar high with the solid bonded marble statue they bought online.

570

00:33:45,000 --> 00:33:46,000

Perfect.

571

00:33:46,000 --> 00:33:50,000

And with the statue in what the team guesstimate is the right position.

572

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

Yeah.

573

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

Like that.

574

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

Right at the next.

575

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

Grant powers up the robot.

576

00:33:55,000 --> 00:33:56,000

Pressurizing the shoulder.

577

00:33:56,000 --> 00:34:01,000

Removes the safety pins and retreats quickly behind the ballistic shield.

578

00:34:01,000 --> 00:34:03,000

Rock and roll.

579

00:34:03,000 --> 00:34:06,000

So the bot is hot and the guys are ready.

580

00:34:06,000 --> 00:34:11,000

First test, marble statue against steel blunt edged odd job hat.

581

00:34:11,000 --> 00:34:14,000

In three, two, one.

582

00:34:16,000 --> 00:34:17,000

Swing the miss.

583

00:34:17,000 --> 00:34:23,000

We could probably lower her a little bit and scoot her about six feet to the right.

584

00:34:23,000 --> 00:34:24,000

Cool.

585

00:34:24,000 --> 00:34:25,000

Maybe three feet.

586

00:34:25,000 --> 00:34:26,000

But we were close.

587

00:34:26,000 --> 00:34:27,000

We were close.

588

00:34:27,000 --> 00:34:31,000

With the robot bolted to the floor, the simple solution is to move the target.

589

00:34:31,000 --> 00:34:33,000

Take that head off.

590

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

And this time.

591

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

Three, two, one.

592

00:34:41,000 --> 00:34:42,000

Nice.

593

00:34:42,000 --> 00:34:43,000

The shoulder.

594

00:34:43,000 --> 00:34:44,000

Ouch.

595

00:34:44,000 --> 00:34:49,000

They take a chip off her shoulder, which is promising.

596

00:34:49,000 --> 00:34:54,000

After all, the marble is the toughest of the three statues and the hat as a blunt edge.

597

00:34:54,000 --> 00:34:57,000

We hit it right on the shoulder, took a big chunk out.

598

00:34:57,000 --> 00:34:59,000

Maybe if we hit her on the neck, might take the head off.

599

00:34:59,000 --> 00:35:00,000

We're going to try it again.

600

00:35:00,000 --> 00:35:04,000

Confident they've got the statue in the robot sights, they reset.

601

00:35:04,000 --> 00:35:07,000

In three, two, one.

602

00:35:07,000 --> 00:35:10,000

Yeah!

603

00:35:10,000 --> 00:35:11,000

Yeah!

604

00:35:11,000 --> 00:35:12,000

Yeah!

605

00:35:12,000 --> 00:35:13,000

Yeah!

606

00:35:13,000 --> 00:35:14,000

Yeah!

607

00:35:14,000 --> 00:35:15,000

Yeah!

608

00:35:15,000 --> 00:35:16,000

Good burn!

609

00:35:16,000 --> 00:35:17,000

Good burn!

610

00:35:17,000 --> 00:35:20,000

What you see in the movies is true!

611

00:35:20,000 --> 00:35:22,000

Yeah!

612

00:35:22,000 --> 00:35:25,000

Maybe not, guys.

613

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

Looking at the high-speed shot, the head seems to snap off from the impact.

614

00:35:30,000 --> 00:35:34,000

And when they inspect the scene of the statue carnage, they find out why.

615

00:35:34,000 --> 00:35:36,000

Look at this!

616

00:35:36,000 --> 00:35:39,000

Wait a minute.

617

00:35:39,000 --> 00:35:40,000

It's hollow.

618

00:35:40,000 --> 00:35:45,000

You know, the one in the movie should have been solid, fortunately.

619

00:35:45,000 --> 00:35:52,000

So we can't call this one confirmed yet, but we still have at least a cement statue that we know is solid,

620

00:35:52,000 --> 00:35:55,000

that we can throw the hat at, maybe we can knock that head off.

621

00:35:55,000 --> 00:35:56,000

Dang it!

622

00:35:56,000 --> 00:35:59,000

Alright, I'll get the concrete statue.

623

00:35:59,000 --> 00:36:00,000

Alright, I reset.

624

00:36:00,000 --> 00:36:05,000

Next, Adam and Jamie supersize their ballpoint boom.

625

00:36:05,000 --> 00:36:07,000

The Planet Tandy Size Pet.

626

00:36:07,000 --> 00:36:08,000

Are you ready?

627

00:36:08,000 --> 00:36:14,000

And Carrie Granton-Tory chip away at Odd Jobs Killer Hat.

628

00:36:14,000 --> 00:36:16,000

Dr. Raynier!

629

00:36:23,000 --> 00:36:29,000

On the Odd Job Myth, Carrie Granton-Tory have just had a premature conformation.

630

00:36:32,000 --> 00:36:37,000

But it was a hollow victory, so they have to pick their heads up and move on.

631

00:36:37,000 --> 00:36:41,000

I'm a little upset right now because we just thought we confirmed this myth.

632

00:36:41,000 --> 00:36:47,000

We threw the hat at the marble statue, the head came off, the statue was supposed to be solid

marble.

633

00:36:47,000 --> 00:36:50,000

It turns out it's hollow.

634

00:36:50,000 --> 00:36:56,000

So we have to move on to the concrete one because that's closest to a solid marble statue as we're going to get.

635

00:36:56,000 --> 00:37:00,000

So the concrete statue is next on the head chopping block.

636

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

It's not quite as tough as solid marble, but a decapitation here and the myth will definitely be confirmed.

637

00:37:07,000 --> 00:37:09,000

But, it's knocked this head off!

638

00:37:09,000 --> 00:37:18,000

After several direct hits, what becomes clear is this lady won't be losing her head anytime soon.

639

00:37:18,000 --> 00:37:27,000

Remember, the heavy blunt-edged hat is being thrown at professional henchmen velocity without any sign of a clean head slice,

640

00:37:27,000 --> 00:37:32,000

which leaves one course of action. It's time to sharpen up their act.

641

00:37:32,000 --> 00:37:36,000

So we've had several direct hits with the blunt hat, but no success.

642

00:37:36,000 --> 00:37:42,000

So we are moving on to the sharpened edge. Hopefully we get a decapitation.

643

00:37:42,000 --> 00:37:44,000

Alright Grant, you ready?

644

00:37:44,000 --> 00:37:46,000

Ready. Carrie, you ready?

645

00:37:46,000 --> 00:37:47,000

Yep. Let's get it on.

646

00:37:47,000 --> 00:37:50,000

Steel razor sharp edge killer hat.

647

00:37:50,000 --> 00:37:55,000

Concrete statue in three, two, one.

648

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

Right in the ear!

649

00:38:01,000 --> 00:38:03,000

Chopped it right in the ear!

650

00:38:17,000 --> 00:38:22,000

Our concrete statue may be chipped and gouged, but she's still standing.

651

00:38:22,000 --> 00:38:27,000

Okay, we've hit this thing several times with a blunt and a sharp steel-edged hat.

652

00:38:27,000 --> 00:38:30,000

This is concrete. It's not as strong as marble.

653

00:38:30,000 --> 00:38:34,000

I say we have a conclusion here. This is definitely busted.

654

00:38:34,000 --> 00:38:36,000

Absolutely busted. We couldn't knock the head off.

655

00:38:36,000 --> 00:38:40,000

Busted, but bloodthirsty Byron wants to be heading.

656

00:38:40,000 --> 00:38:44,000

I want to see the head get knocked off and we still have a plaster statue.

657

00:38:44,000 --> 00:38:48,000

I say we all line up and start throwing hats at that plaster statue.

658

00:38:48,000 --> 00:38:49,000

You think you can do it by hand?

659

00:38:49,000 --> 00:38:51,000

Heck yeah, let's do it!

660

00:38:51,000 --> 00:38:56,000

The plaster statue is so soft, it should only take one solid hit to decapitate.

661

00:38:56,000 --> 00:38:59,000

So Tori lets Carrie go first.

662

00:38:59,000 --> 00:39:00,000

She's not gonna hit it.

663

00:39:05,000 --> 00:39:07,000

Tori should have learned by now.

664

00:39:10,000 --> 00:39:12,000

Don't upset the Byron.

665

00:39:12,000 --> 00:39:13,000

Not to block off.

666

00:39:13,000 --> 00:39:14,000

Yes, you did.

667

00:39:14,000 --> 00:39:19,000

But let's face it, there's not gonna be a plaster statue outdoors at any time.

668

00:39:19,000 --> 00:39:21,000

This thing would dissolve to nothing in a week.

669

00:39:21,000 --> 00:39:23,000

So this one is still busted.

670

00:39:23,000 --> 00:39:24,000

Still busted.

671

00:39:24,000 --> 00:39:27,000

But I got to feel like a Goldfinger henchman. That was good.

672

00:39:27,000 --> 00:39:28,000

Yeah, good work.

673

00:39:28,000 --> 00:39:31,000

Usually I'm on the side of good, not evil, so it's different.

674

00:39:31,000 --> 00:39:33,000

Sure, whatever you say.

675

00:39:42,000 --> 00:39:47,000

The writing's well and truly on the wall for 007's GoldenEye Pen Grenade.

676

00:39:47,000 --> 00:39:52,000

Even when packed with the most high grade explosives we could get our hands on,

677

00:39:52,000 --> 00:39:57,000

the pen size bomb couldn't cause a bond worthy blast.

678

00:39:57,000 --> 00:39:58,000

This one's busted.

679

00:39:58,000 --> 00:40:01,000

I agree. We were only able to fit three CCs into that pen,

680

00:40:01,000 --> 00:40:04,000

and that wasn't enough to do what we saw in the movie.

681

00:40:04,000 --> 00:40:07,000

The neck size up wasn't much better. I wasn't satisfied at all.

682

00:40:07,000 --> 00:40:11,000

Now I think I may have found exactly what we need to get a nice big boom,

683

00:40:11,000 --> 00:40:13,000

get us a finale that gets us out of this myth,

684

00:40:13,000 --> 00:40:16,000

and it's still roughly callable a pen.

685

00:40:16,000 --> 00:40:18,000

Sweet. Let's get back out there.

686

00:40:18,000 --> 00:40:19,000

Okay.

687

00:40:20,000 --> 00:40:26,000

Guys, I have a sneaking suspicion that the baddies might think something's up with this pen.

688

00:40:26,000 --> 00:40:31,000

Admittedly, this is somewhat of a stretch, but that's what we do on Mythbusters.

689

00:40:31,000 --> 00:40:36,000

We blow **** up, and this is gonna blow him up. I guarantee it.

690

00:40:37,000 --> 00:40:41,000

Where explosives are concerned, size most definitely counts.

691

00:40:41,000 --> 00:40:47,000

And with the experiment ramped up to the ridiculous, Adam has a simple and joyful prediction.

692

00:40:47,000 --> 00:40:51,000

Sorry to say it, buddy. I predict total annihilation.

693

00:40:51,000 --> 00:40:55,000

Not only do I predict it, I want it, and I'm gonna enjoy it.

694

00:40:56,000 --> 00:40:58,000

Are you ready for this, James?

695

00:40:58,000 --> 00:40:59,000

Hi.

696

00:40:59,000 --> 00:41:05,000

The gigantic pen, the enormous pen, the planetary size pen.

697

00:41:05,000 --> 00:41:09,000

Are you ready? In three, two, one.

698

00:41:13,000 --> 00:41:15,000

That'll teach him.

699

00:41:16,000 --> 00:41:18,000

That was a good one.

700

00:41:19,000 --> 00:41:22,000

This is one lesson that dummy won't forget in a hurry.

701

00:41:22,000 --> 00:41:25,000

Well, that's what we came to see.

702

00:41:29,000 --> 00:41:31,000

The blue's pants clean off.

703

00:41:31,000 --> 00:41:33,000

Ha ha ha ha ha.

704

00:41:34,000 --> 00:41:39,000

Yep, not only was he deep-panted, he was all out destroyed.

705

00:41:41,000 --> 00:41:49,000

Our goal was to see if we could blow off the entire upper torso of the dummy with a pen size piece of explosive.

706

00:41:49,000 --> 00:41:54,000

Now, we had to go with something maybe 50 times this size to actually accomplish that,

707

00:41:54,000 --> 00:42:00,000

but nevertheless, if you're a secret agent and you filled something like this with high explosive,

708

00:42:00,000 --> 00:42:01,000

it would be lethal.

709

00:42:01,000 --> 00:42:04,000

A normal sized pen grenade could be a killer,

710

00:42:04,000 --> 00:42:09,000

but remember, the Bond movie moments saw it blow a humanoid in half,

711

00:42:09,000 --> 00:42:16,000

so it's time for Jamie and Adam to mix their metaphors and sign on the dotted line to draw a conclusion.

712

00:42:16,000 --> 00:42:18,000

Well, I think we can call this one.

713

00:42:18,000 --> 00:42:19,000

What?

714

00:42:19,000 --> 00:42:25,000

Busted. There ain't no way that a small pen full of high explosives is gonna blow the top half of your body off.

715

00:42:25,000 --> 00:42:26,000

Look at what it took us to do.

716

00:42:26,000 --> 00:42:28,000

But it could kill ya.

717

00:42:28,000 --> 00:42:29,000

No doubt.

718

00:42:29,000 --> 00:42:30,000

Okay, busted.

719

00:42:32,000 --> 00:42:33,000

I like this foam.

720

00:42:34,000 --> 00:42:38,000

It's not very blast-proof, but maybe I could make some furniture for my house out of it.

721

00:42:38,000 --> 00:42:39,000

What do you think?

722

00:42:39,000 --> 00:42:41,000

Ah, yeah, it might be nice to come over for dinner.

723

00:42:47,000 --> 00:42:49,000

What are you doing to me?

724

00:42:49,000 --> 00:42:53,000

Bond special's over, and you talk funny. I'm out of here.

725

00:42:53,000 --> 00:42:56,000

You think you can get rid of me that easily?

726

00:42:56,000 --> 00:42:58,000

We're not done!

727

00:42:59,000 --> 00:43:02,000

James, hire the man!

728

00:43:13,000 --> 00:43:16,000

Guess what? We've got another viewer special coming up.

729

00:43:16,000 --> 00:43:22,000

So if you've got an idea for a myth you'd like to see us test, log on to Discovery.com slash MythBusters and post it.

730

00:43:22,000 --> 00:43:25,000

We want to hear what you've got to say, and it just might make it on the air.