

1

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

On this episode of myth busters usually you fill pot holes. I'm digging them. What are you gonna do?

2

00:00:07,360 --> 00:00:16,000

Adam and Jamie get punctures on purpose. I have always wanted to do that as they test mythical ways of fixing a flat

3

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

I thought with the flat of the wilds

4

00:00:18,760 --> 00:00:20,760

Grasping its straw from mother nature

5

00:00:22,800 --> 00:00:24,800

To the urban sprawl

6

00:00:26,400 --> 00:00:29,680

Can you really improvise your way out of a jam?

7

00:00:30,000 --> 00:00:32,760

That's dire manhole cover wheel go

8

00:00:34,440 --> 00:00:38,640

Meanwhile carry grantentory real in a fishy fable

9

00:00:40,720 --> 00:00:46,320

As they test this viral video if you catch a fast enough fish

10

00:00:49,480 --> 00:00:52,160

Can it ever set your reel a free

11

00:00:52,160 --> 00:01:00,400

You are the myth busters

12

00:01:01,400 --> 00:01:04,200

Adam Savage three two one

13

00:01:05,120 --> 00:01:07,120

And Jamie Heidemann

14

00:01:07,240 --> 00:01:13,120

We're just gonna have to crash it to find out between them more than 30 years of special effects experience

15

00:01:13,720 --> 00:01:15,320

joining them

16

00:01:15,320 --> 00:01:17,320

Tori Bellegi time to go die

17

00:01:18,200 --> 00:01:22,320

Grant imahara 44 Magnum Bay and Carrie Byron

18

00:01:23,400 --> 00:01:25,400

They don't just tell them it's

19

00:01:26,040 --> 00:01:28,040

They put them to death

20

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

All right, Jamie, I'm gonna paint you a picture

21

00:01:40,720 --> 00:01:43,720

You've driven out to the middle of nowhere to go backwards camping

22

00:01:43,720 --> 00:01:48,080

You've hiked out into the wilderness and at the end of the weekend you hike back to your car to find oh

23

00:01:48,200 --> 00:01:54,200

You got a flat tire. What do you do? I put on the spare? You don't have a spare. I call a tow truck

24

00:01:54,200 --> 00:01:59,520

Nope, no cell phone reception. I walk out. Nope walking is not an option

25

00:01:59,520 --> 00:02:05,920

You have to somehow make that flat tire into a workable wheel. What do you do? I?

26

00:02:06,880 --> 00:02:08,280

Improvise

27

00:02:08,280 --> 00:02:14,640

Exactly that's what this story is about improvised solutions to making a flat tire into a workable wheel in the wilderness

28

00:02:16,680 --> 00:02:20,160

Under normal circumstances fixing a flat is simple

29

00:02:21,040 --> 00:02:24,320

Unpack the jack prepare the spare and you're good to go

30

00:02:27,120 --> 00:02:33,040

But if you're in the middle of nowhere and the spare is not there can you improvise your way out

31

00:02:33,240 --> 00:02:36,040

Can mother nature really come to the rescue?

32

00:02:36,640 --> 00:02:38,880

Or will this myth hit the hay?

33

00:02:40,720 --> 00:02:42,240

So what's the plan well

34

00:02:42,240 --> 00:02:46,920

We got a whole bunch of suggestions from the fans site for things people claim to have tried that got them out of jams

35

00:02:46,920 --> 00:02:49,960

I think we should choose the three best to test well

36

00:02:49,960 --> 00:02:55,120

What say we go to the great outdoors and set up a course then a course that would include all the different

37

00:02:55,160 --> 00:02:59,160

Obstacles one might encounter trying to get themselves out of a jam exactly

38

00:03:01,240 --> 00:03:05,600

So to put this tire trilogy to the test the team heads for the hills

39

00:03:06,040 --> 00:03:08,040

I

40

00:03:08,400 --> 00:03:12,900

In order to run our tire fixes through their paces we've chosen a course in this off-road facility

41

00:03:12,900 --> 00:03:18,680

That'll give us the widest range of standard road hazards you might encounter in just this kind of setting

42

00:03:18,680 --> 00:03:22,520

And that setting isn't the only thing they've settled on

43

00:03:23,280 --> 00:03:28,120

This is our test car. It is an average ordinary everyday sedan and that's the point

44

00:03:28,160 --> 00:03:35,480

This story is about an ordinary car out for an ordinary drive when things go sour and an extraordinary solution is required

45

00:03:36,800 --> 00:03:41,240

With the car sorted at a two-mile lap lined up things are looking good

46

00:03:42,760 --> 00:03:46,020

So all they need now is to acquire a flat tire I

47

00:03:48,960 --> 00:03:50,960

Have always wanted to do that

48

00:03:55,240 --> 00:04:01,320

Here's the drill you're out of nature miles from the road with a flat tire and no spare pop quiz hot shot

49

00:04:01,320 --> 00:04:05,800

What you do what you do is improvise and so that's what we're gonna do

50

00:04:05,800 --> 00:04:11,720

We're gonna make our equivalent of a run flat tire out of stuff at hand like vegetation or

51

00:04:13,400 --> 00:04:14,600

Straw

52

00:04:14,600 --> 00:04:19,880

Yep, you heard right fan fix number one involves first removing the wheel

53

00:04:20,760 --> 00:04:26,520

I just happen to have a lovely garage jack then stuffing the cut open tire with straw

54

00:04:27,320 --> 00:04:29,000

That's what I'm thinking well

55

00:04:29,000 --> 00:04:34,040

Let's just see how far we get with that before delivering a collection of bad puns

56

00:04:34,040 --> 00:04:39,040

I thought with a flat in the wilds we'd be grasping at straws, but this is giving me high hopes

57

00:04:39,440 --> 00:04:45,760

Well, hey if it works with Mark Twain turning in his grave the guys reattach the wheel

58

00:04:46,840 --> 00:04:52,600

Hey, that's not bad before stuffing in more straw until the tire is literally fit to burst

59

00:04:53,040 --> 00:04:55,040

Well, that's the last straw

60

00:04:55,160 --> 00:04:59,280

Now it's time for our straw filled tire test. How do I think it's gonna go?

61

00:04:59,720 --> 00:05:07,160

Well, I'm positive that having straw in this tire is gonna be better than if we just had a normal flat tire

62

00:05:07,760 --> 00:05:13,480

How long it actually lasts and whether the straw stays in there is the only worry that I have and

63

00:05:13,840 --> 00:05:16,120

The only way to find that out is to test it

64

00:05:18,320 --> 00:05:20,320

Sensibly Jamie starts slow

65

00:05:20,800 --> 00:05:22,800

How does it feel?

66

00:05:23,040 --> 00:05:26,960

It feels a little spongy, but it seems like it's working

67

00:05:27,120 --> 00:05:32,400

But once they survived the speed bump it bottomed out there and the pothole

68

00:05:34,440 --> 00:05:39,320

Yeah, that one time too totally. He's confident enough to speed up

69

00:05:41,040 --> 00:05:46,580

And by the time he's halfway round you might say he's making hay while the sun shines

70

00:05:47,580 --> 00:05:51,980

Definitely a very reasonable escape plan so far let's go uphill

71

00:05:52,740 --> 00:05:56,980

Amazingly the straw tire stands up to whatever stands in its way

72

00:05:57,980 --> 00:06:02,620

Problem you make it home at least until Jamie tries to end with a bang

73

00:06:06,060 --> 00:06:08,060

Very very well done

74

00:06:10,780 --> 00:06:13,500

Whoa, it looks a little different

75

00:06:14,220 --> 00:06:15,500

I

76

00:06:15,500 --> 00:06:20,460

Had high hopes for the hay and my hopes were not misplaced it performed

77

00:06:21,260 --> 00:06:26,020

Fantastically it went through the obstacle course pretty much without a hitch feel it deteriorating

78

00:06:26,580 --> 00:06:33,620

My feeling is you're using this to get out of a jam okay in this case would absolutely get you out of this jam

79

00:06:39,180 --> 00:06:42,860

Well as a fix I'm calling hay plausible yeah

80

00:06:43,540 --> 00:06:51,060

Only a short-term one though agreed. What's next? Well, I think nature may have some more surprises in store for us

81

00:06:57,260 --> 00:06:59,260

Next up something fish

82

00:07:00,980 --> 00:07:05,540

All right, so this next myth is an old fishing myth and it's not about the big one that got away

83

00:07:05,540 --> 00:07:09,340

This one is about flaming reels okay flaming reels you're gonna have to give me more than that

84

00:07:09,340 --> 00:07:14,380

All right knows any fisherman knows once the fish is on the line all it wants to do is get away

85

00:07:14,380 --> 00:07:18,340

All right meaning it takes off in the opposite direction exactly as it's taking off

86

00:07:18,340 --> 00:07:20,660

It's pulling a lot of line off that reel okay

87

00:07:20,660 --> 00:07:23,140

I see where you're going with this if the line's coming off fast enough

88

00:07:23,140 --> 00:07:28,220

It generates friction which creates heat and if you generate enough heat it could burst in the flame hence the name

89

00:07:28,460 --> 00:07:32,540

Flaming reels and that's the myth can a fish cause a reel to catch on fire

90

00:07:33,060 --> 00:07:37,380

And it's a myth that's perfectly portrayed in this viral video

91

00:07:38,060 --> 00:07:43,620

When the hooked fish flees the friction on the spool causes the reel to first smoke and

92

00:07:44,700 --> 00:07:46,700

Then catch fire

93

00:07:47,260 --> 00:07:49,260

But is this really real

94

00:07:51,060 --> 00:07:54,660

All right, so I gotta say right off the bat the physics of this myth add up

95

00:07:54,660 --> 00:08:00,940

I mean a spinning reel will experience friction and that will generate heat but to generate enough heat to actually combust

96

00:08:00,940 --> 00:08:06,060

We're talking about a pretty big fish. Well, we do have big fish in our bay. I mean we have sturgeon

97

00:08:06,100 --> 00:08:09,340

We have shark maybe we charter a boat and see if we get lucky

98

00:08:09,500 --> 00:08:14,980

Yeah, who knows we could catch a giant monster fish that would fight the line and confirm the myth

99

00:08:14,980 --> 00:08:18,900

All right, let's hit the high seas. Don't forget to pack your seasick pills. Oh, I won't

100

00:08:19,660 --> 00:08:21,660

your alarm clock

101

00:08:21,700 --> 00:08:23,900

Because this is a myth that starts early

102

00:08:24,540 --> 00:08:27,780

That's ready to catch fish. This is our boat. You bet

103

00:08:28,700 --> 00:08:30,980

Put the flaming reel myth to the test

104

00:08:30,980 --> 00:08:35,620

We got up at the crack of dawn and strolled down fish remorseless to get onto this boat

105

00:08:36,180 --> 00:08:42,020

Wacky-jacky the saltiest sailor I have ever met is gonna take us out sport fishing so that we can see if we can catch a reel on fire

106

00:08:42,860 --> 00:08:48,020

Now this whole myth is to see whether or not you can create enough friction on your reel

107

00:08:48,220 --> 00:08:53,620

Then it gets so hot that it actually bursts into flames and that's why we're out here on the bay

108

00:08:53,860 --> 00:08:55,860

See if we can catch a big fish

109

00:08:56,140 --> 00:09:00,540

Make that happen a strong fast fish like a sturgeon

110

00:09:00,580 --> 00:09:04,500

Or a shark could easily create friction to heat up the reel

111

00:09:06,660 --> 00:09:09,500

But will it be enough to set it on fire?

112

00:09:16,460 --> 00:09:19,700

Well so far nothing's taking the bait to find out

113

00:09:21,060 --> 00:09:23,060

It's fishing always this much fun

114

00:09:24,260 --> 00:09:29,060

After eight hours without a single bite the team decides to head on home

115

00:09:30,780 --> 00:09:36,500

If we can't catch any fish, I don't know. I mean we've been out here all day and all we have to show for is bait

116

00:09:36,660 --> 00:09:39,660

Yeah, apparently we are terrible fishermen

117

00:09:39,660 --> 00:09:44,180

So you want to go back to the shop and figure out a way to do this without actually fishing? That sounds like a great idea

118

00:09:45,060 --> 00:09:47,860

Later Tori catches the one that got away

119

00:09:52,060 --> 00:09:57,740

But next will there be tire fix trouble James, baby carriage had wheels just like this

120

00:10:01,060 --> 00:10:11,860

Since it's creation thousands of years ago the wheel has never really been improved

121

00:10:15,300 --> 00:10:21,540

Until now as Adam and Jamie reinvented testing mythical methods for fixing a flat

122

00:10:22,740 --> 00:10:25,820

And with hey a success what's next?

123

00:10:26,620 --> 00:10:30,460

Next up we're branching out to other solutions for a flat tire

124

00:10:30,660 --> 00:10:34,940

Yep, next up is surely a clutching at straws type solution

125

00:10:35,740 --> 00:10:38,340

Or her I will try not to hurt you

126

00:10:40,220 --> 00:10:46,180

That's a lovely little ski there a branch forced under and then tied to the flat tire

127

00:10:48,420 --> 00:10:52,100

It's not pretty but fads have said that this really works

128

00:10:53,060 --> 00:10:58,300

If you want to move something heavy across the ground you got a couple of basic choices really you can do it with a

129

00:10:58,300 --> 00:11:03,380

Wheel or you can do it with a sled and what we've got here is a makeshift sled

130

00:11:03,620 --> 00:11:07,060

Built out of a tree branch and some rope it ought to work

131

00:11:07,740 --> 00:11:09,740

at least for a while

132

00:11:10,220 --> 00:11:14,460

But will it last for a full lap of their course go?

133

00:11:14,660 --> 00:11:16,660

Oh

134

00:11:19,500 --> 00:11:23,100

Well to say it's a slow start would be an understatement

135

00:11:25,980 --> 00:11:31,700

Eventually Jamie does get a grip yes, yes, but they're certainly not out of the woods yet

136

00:11:33,540 --> 00:11:35,540

There we go

137

00:11:36,540 --> 00:11:38,540

Oh

138

00:11:41,500 --> 00:11:45,580

After slipping and sliding their way through the first 200 yards of their lap

139

00:11:48,980 --> 00:11:52,420

They meet the first major obstacle the speed bump

140

00:11:54,860 --> 00:11:58,340

Which causes their car to come to a standstill

141

00:11:58,460 --> 00:12:00,460

Oh

142

00:12:04,500 --> 00:12:08,500

There's your problem it came out oh I came out yeah

143

00:12:08,740 --> 00:12:15,300

It abraded through all of the tie ropes up there close to the wheel that was pretty interesting though going down the road sideways

144

00:12:18,140 --> 00:12:25,260

This track here pretty much tells the whole story you can see the log still in place and then it hits this bump

145

00:12:25,260 --> 00:12:32,220

It sort of digs in gets yanked out of place and from here on in it's pretty much just momentum

146

00:12:32,620 --> 00:12:38,500

With the branch busted literally and metaphorically it's on to the final forest fix

147

00:12:40,540 --> 00:12:42,540

You may see a couple of logs here

148

00:12:42,540 --> 00:12:48,940

I see a tire once Jamie's got the good wood his next job is to make it as circular as he can

149

00:12:50,940 --> 00:12:52,940

It's pretty round to me

150

00:12:53,500 --> 00:12:54,660

I

151

00:12:54,660 --> 00:13:00,540

Before the guys jump cut their way through the rest of their final improvisation technique wow

152

00:13:01,460 --> 00:13:07,460

That is without a doubt the ugliest tire change I've ever seen if you saw somebody doing this on the side of the road

153

00:13:07,580 --> 00:13:12,540

You'd be like can I help you in any way? No, I think I just leave quickly

154

00:13:13,220 --> 00:13:20,980

Will it work? I don't think I'd want to go very fast on this particular wheel, but it seems like it's pretty solid I

155

00:13:21,580 --> 00:13:26,060

Think it's gonna be the best one yet. Well, there's only one way to find out

156

00:13:31,740 --> 00:13:33,620

Working good

157

00:13:33,620 --> 00:13:40,900

Remember it's only the wheel that they've tinkered with the suspension brakes and steering are all completely untouched

158

00:13:42,140 --> 00:13:46,980

Okay, here we go speed bump so will the log help or hinder

159

00:13:51,020 --> 00:13:53,020

I did fine

160

00:13:53,900 --> 00:14:01,260

It's certainly a case of so far so good, but how will the pot holes fair? I'm nervous about the pot holes

161

00:14:05,020 --> 00:14:10,380

Not a problem not a problem with both the pot holes and the puddles pass

162

00:14:14,620 --> 00:14:18,180

It's not long before the myth busters come full circle

163

00:14:21,620 --> 00:14:23,620

Beautiful

164

00:14:23,940 --> 00:14:30,420

Well with our first prototype fully tested the myth busters tire company is ready to open its doors for business

165

00:14:30,540 --> 00:14:38,100

This little baby worked magnificently on our course was in fact the best of all impromptu solutions that he have yet to try

166

00:14:39,140 --> 00:14:44,020

So log wheel totally confirmed. Yep. Let's go. All right

167

00:14:44,460 --> 00:14:49,420

As the guys head on home the fixing a flat myth is far from finished

168

00:14:51,820 --> 00:14:57,100

Later Adam and Jamie hit the town for more fabled fixes

169

00:14:58,020 --> 00:15:05,540

Check out your dubs homie, but next we're at maximum speed the guys focus on the friction factors

170

00:15:15,100 --> 00:15:19,180

Can a super fast fish ever set a fishing reel ablaze

171

00:15:21,020 --> 00:15:23,540

Well, not if the myth busters or anything to go by

172

00:15:24,220 --> 00:15:26,220

It's fishing always this much fun

173

00:15:27,020 --> 00:15:28,860

So based on our fishing trip

174

00:15:28,860 --> 00:15:33,220

I think the only realistic way to actually test this myth is if we build a fake fish

175

00:15:33,420 --> 00:15:37,220

Well, this is just about a spinning reel creating enough heat to catch on fire

176

00:15:37,220 --> 00:15:43,300

I mean, we don't technically need a real fish. I mean, we just need a fish substitute that'll pull the line off quick enough

177

00:15:43,540 --> 00:15:49,300

Okay, how about this we get a go-kart if we're gonna give this a good chance to work and we should use something really fast

178

00:15:49,300 --> 00:15:51,700

You know the sailfish goes about 70 miles an hour

179

00:15:51,700 --> 00:15:57,180

It's the fastest fish and a go-kart could totally handle that speed. All right. I'm all in except for one exception

180

00:15:57,180 --> 00:16:01,140

If we're going straight to the extreme scenario, why don't we load our other bases too?

181

00:16:01,220 --> 00:16:07,300

Let's find the best real line combination that'll generate the most amount of heat and we use that for our go-kart test

182

00:16:07,500 --> 00:16:11,740

Agreed. So looks like we're starting out with some bench tests in the shop. Awesome

183

00:16:11,860 --> 00:16:19,620

So with real fish proving too unreliable the myth busters are going to build their own

184

00:16:21,740 --> 00:16:24,980

But first they're focusing on the friction factors

185

00:16:25,780 --> 00:16:33,340

We're gonna start out by testing the line now for this experiment the reel the washers and the lube will all remain the same

186

00:16:33,420 --> 00:16:38,060

The only thing is gonna change is the line and the lines that we're gonna be testing are monofilament

187

00:16:38,420 --> 00:16:41,860

Dacron steel cable and braided solid spectrum

188

00:16:42,860 --> 00:16:47,740

Whichever line generates the highest heat is the one they'll use for their full-scale test

189

00:16:48,820 --> 00:16:52,420

So this machine will be simulating the fish at the end of the line

190

00:16:52,420 --> 00:16:56,480

I'll bring it up to speed using the foot pedal and guide it on to the reel

191

00:16:56,660 --> 00:17:02,200

Then Tori will apply drag and Kerry will see how much temperature we actually get all right

192

00:17:02,200 --> 00:17:07,300

Let's begin with the 80 pound monofilament test. Okay, right hold on. We're missing one thing

193

00:17:08,540 --> 00:17:14,020

Just in case this myth is true. We just gotta be prepared. All right, let's do it

194

00:17:14,620 --> 00:17:16,620

With the safety said

195

00:17:16,620 --> 00:17:20,500

The guys pulled a 400 yards of line at 20 miles an hour

196

00:17:21,300 --> 00:17:27,460

All right, we're at maximum speed before Tori engages the drag a kind of braking system

197

00:17:27,660 --> 00:17:29,660

All right go into full drag

198

00:17:30,140 --> 00:17:32,620

Which will take the friction up to the max

199

00:17:33,700 --> 00:17:34,820

Stop

200

00:17:34,820 --> 00:17:37,700

Okay, we're at the end of our line. All right, what do you got Byron?

201

00:17:38,540 --> 00:17:43,060

Look at that things glowing looks like we are maxing out at a hundred and five degrees

202

00:17:43,980 --> 00:17:47,320

So the good news is that the friction did heat up the reel

203

00:17:47,460 --> 00:17:51,100

But the bad news is it's nowhere near enough for a flame

204

00:17:52,140 --> 00:17:54,140

Can Dacron do any better?

205

00:17:55,060 --> 00:17:58,860

Crank her up to maximum drag here we go

206

00:17:59,460 --> 00:18:04,100

We're back you can see the heat as it spools look at that well in a word

207

00:18:04,620 --> 00:18:11,240

No, because neither it we peaked at 112 nor the next fine line the steel

208

00:18:11,700 --> 00:18:15,740

All right thrown into drag are close to setting the world on fire

209

00:18:16,780 --> 00:18:19,700

118 degrees which doesn't bode well

210

00:18:21,620 --> 00:18:27,940

The final fishing line is 500 yards of spectra full speed we are in full drag

211

00:18:28,460 --> 00:18:34,740

Having a very narrow diameter means more line can fit on the reel which should mean more heat I

212

00:18:35,260 --> 00:18:37,500

Don't see any smoke. Everything will fire

213

00:18:38,180 --> 00:18:40,860

Stop that's the end of the line. What do you got?

214

00:18:41,700 --> 00:18:45,340

158 degrees. I think we have a winner. That's pretty hot

215

00:18:46,460 --> 00:18:48,460

Peking at an impressive

216

00:18:48,500 --> 00:18:52,060

158 it's this last line that will be their weapon of choice

217

00:18:52,260 --> 00:18:56,140

But the lines not the only thing in this lineup

218

00:18:56,860 --> 00:19:02,260

Now the time real that we've been using so far is a modern lever drag what we're moving on to is

219

00:19:02,820 --> 00:19:09,340

An older type of real called a star drag now the reason we think that this might burst into flames is this

220

00:19:10,100 --> 00:19:13,140

The drag all of the plates and washers are

221

00:19:13,780 --> 00:19:18,100

Encapsulated in this tiny metal cylinder so there's no heat sink to draw the heat away

222

00:19:18,100 --> 00:19:21,940

It's gonna build up inside of here, and we just might see some flames

223

00:19:22,820 --> 00:19:26,940

That's the theory winder up a theory that their first new reel

224

00:19:30,060 --> 00:19:33,780

A star drag four odd rapidly proves in practice

225

00:19:39,100 --> 00:19:41,100

The star drag is

226

00:19:41,660 --> 00:19:43,660

Oh

227

00:19:46,540 --> 00:19:53,060

It's a good start in this real ordeal, but can the four odds big brother beat that benchmark

228

00:19:57,580 --> 00:20:00,080

Get the net ready we got a big one

229

00:20:00,460 --> 00:20:07,500

At just 20 miles an hour the star drag rapidly reaches 180 degrees before this happens

230

00:20:11,100 --> 00:20:13,100

My god

231

00:20:14,100 --> 00:20:16,100

Wow

232

00:20:17,300 --> 00:20:19,300

Hey get the first single sure ready

233

00:20:26,260 --> 00:20:28,260

You guys we got this up to

234

00:20:28,900 --> 00:20:30,980

245 degrees

235

00:20:30,980 --> 00:20:34,780

So we've completed a real comparison and this is the winner

236

00:20:35,300 --> 00:20:41,620

Limiting factor though in our tests was the amount of speed that we could get pulling the line off and the amount of line

237

00:20:41,620 --> 00:20:48,060

We had now what we've got to do is find some way to get more line off this spool a lot faster

238

00:20:48,700 --> 00:20:51,220

And to do that take one Marlin

239

00:20:52,300 --> 00:20:54,300

Mounted on a go-kart

240

00:20:56,260 --> 00:21:00,020

And head out to Alameda all right first mate you ready for your fishing trip

241

00:21:00,020 --> 00:21:03,780

This could be the best trip ever for extreme fishing

242

00:21:04,340 --> 00:21:09,020

Mythbusters style coming up on mythbusters. We answer the question if you ended up with one of these

243

00:21:09,780 --> 00:21:12,860

Could you replace it with one of these?

244

00:21:20,220 --> 00:21:24,060

In fixin a flat Adam and Jamie just hit pay-doh

245

00:21:26,180 --> 00:21:28,180

And that's got them thinking

246

00:21:28,940 --> 00:21:32,100

Dude, I don't think we're done fixing flats. What do you have in mind?

247

00:21:32,100 --> 00:21:36,580

I would like to redo this test, but in an urban environment gone

248

00:21:36,740 --> 00:21:41,580

Well, imagine you're in a city and you've got a flat tire calling mechanic is totally not an option

249

00:21:41,660 --> 00:21:48,140

But around you you've got all the things you might find in a city metal glass and wood and you've got to use those to

250

00:21:48,380 --> 00:21:52,860

Improvise a working wheel. I like it. Let's set it up. Okay

251

00:21:53,740 --> 00:21:55,740

Well at a rainy runway

252

00:21:56,500 --> 00:21:58,500

It's time to find out

253

00:22:00,700 --> 00:22:07,480

Look at that our backwood solution lasted all the way to the city well now it's time for some urban solutions

254

00:22:08,140 --> 00:22:09,280

Absolutely

255

00:22:09,280 --> 00:22:15,500

While you may see a lovely view of San Francisco behind me through the fog an empty runway and a hundred or so cones

256

00:22:15,540 --> 00:22:22,220

I see an urban obstacle course in potential Adam and Jamie will each focus on their own urban fix

257

00:22:22,620 --> 00:22:27,900

But first they need to conjure up a city skate crash course

258

00:22:28,940 --> 00:22:33,700

And with everything said the urban fixin can commence starting with Jamie

259

00:22:35,700 --> 00:22:39,940

Technically there's nothing stopping you from rolling on a flat tire other than sooner or later

260

00:22:39,940 --> 00:22:42,540

You're gonna cut through it and you'll end up on the steel rim

261

00:22:43,100 --> 00:22:46,780

So I figure let's just try rolling on the steel rim

262

00:22:46,980 --> 00:22:52,980

It's a typically simple solution from the highlander that begins with him removing their log jam

263

00:22:55,860 --> 00:22:57,860

Well that worked pretty well

264

00:22:57,980 --> 00:23:05,700

Sort of and ends with him first wrenching a tire from its rim and then attaching that rim to the wheelbase

265

00:23:07,260 --> 00:23:09,380

Job done in theory

266

00:23:10,540 --> 00:23:12,780

As far as writing in a steel rim is concerned

267

00:23:12,780 --> 00:23:16,660

We've got a couple of things to be concerned about and the first is balance

268

00:23:16,900 --> 00:23:22,580

This steel rim is a lot smaller than a normal tire and so it makes the car kind of lopsided

269

00:23:23,020 --> 00:23:24,900

the other thing is that

270

00:23:24,900 --> 00:23:30,140

The steel is not going to grip the road as well as a rubber tire wheel and so we've got traction issues

271

00:23:30,580 --> 00:23:34,220

Whether either of these things turn out to be a problem as far as handling

272

00:23:34,620 --> 00:23:36,820

That's what we're gonna run the course to find out

273

00:23:38,140 --> 00:23:42,060

Steel rim no tire in three two

274

00:23:42,780 --> 00:23:44,780

one

275

00:23:45,660 --> 00:23:51,020

As per JV's prediction the terrible traction makes for a slow start

276

00:23:54,740 --> 00:23:57,060

Which means reaching the required speed

277

00:24:00,180 --> 00:24:05,940

Before breaking ahead of the wall is seriously challenging

278

00:24:06,940 --> 00:24:08,940

Stop

279

00:24:10,660 --> 00:24:11,900

Nice

280

00:24:11,900 --> 00:24:14,900

All right, right turn but having not hit the wall

281

00:24:16,860 --> 00:24:19,260

Jamie's great towards the slalom

282

00:24:25,620 --> 00:24:30,260

Where despite trying to stay on track he soon gets into a spin

283

00:24:36,260 --> 00:24:38,260

Oh

284

00:24:41,060 --> 00:24:45,340

But after a quick recovery all that's left is the parallel part

285

00:24:48,180 --> 00:24:51,420

Where slow and steady you probably my grandmother

286

00:24:53,140 --> 00:24:56,100

What's Jamie's rim back on the road to success

287

00:24:59,820 --> 00:25:02,700

Handling on the steel rim turned out to be not half bad

288

00:25:03,060 --> 00:25:07,420

You just can't accelerate very fast, but I reckon you can go a fair distance on it

289

00:25:07,780 --> 00:25:12,380

Well somewhere there's probably a law against leaving massive scratches in the road

290

00:25:12,620 --> 00:25:19,220

But as far as getting yourself out of a jam, I'm thinking that the steel rim worked pretty great. I totally go with it

291

00:25:20,020 --> 00:25:26,180

With Jamie's rim firing on nearly all cylinders can Adams mythical fix do any better

292

00:25:28,580 --> 00:25:32,360

It's round it's metal I think it's perfect

293

00:25:33,500 --> 00:25:37,380

Without a mechanic to call or a genuine spare to prepare

294

00:25:38,500 --> 00:25:40,340

freakin heavy

295

00:25:40,340 --> 00:25:44,260

Adams adamant that this manhole is the perfect wheel

296

00:25:44,580 --> 00:25:49,060

Standin look at that. Well that size matches. I have a good feeling about the manhole cover

297

00:25:50,180 --> 00:25:57,740

Being almost identical in size to a real wheel all Adam has to do is cut out some boat holes and then bolt it on

298

00:25:57,940 --> 00:26:02,620

But will it be better than Jamie's rim?

299

00:26:05,300 --> 00:26:09,740

That's tight check out your dog told me what do you think of that?

300

00:26:09,740 --> 00:26:13,900

I like it the manhole cover seems like it's a perfect fit

301

00:26:13,900 --> 00:26:18,140

But the problem is it's only an inch wide therefore it's not going to get traction

302

00:26:18,140 --> 00:26:21,180

the other thing is that it's made out of cast iron and

303

00:26:21,740 --> 00:26:23,900

That is inherently kind of brittle

304

00:26:23,900 --> 00:26:29,380

So if this puppy hits some kind of a rock or a serious bump, we've got a big problem

305

00:26:30,380 --> 00:26:36,660

You ready? I'm ready. Oh right. Here we go cast iron manhole cover wheel in

306

00:26:37,980 --> 00:26:39,980

two one go

307

00:26:43,100 --> 00:26:45,500

Despite a fire and brimstone start

308

00:26:45,820 --> 00:26:47,820

Oh, yeah

309

00:26:50,620 --> 00:26:57,340

It's clear that this time the traction is actually less tragic as Adam gets up to speed

310

00:26:58,740 --> 00:27:00,740

And back

311

00:27:01,860 --> 00:27:03,860

With relative ease

312

00:27:07,700 --> 00:27:12,220

Because the manhole is such a good-sized fit the cars balance is much better

313

00:27:13,180 --> 00:27:19,660

That actually corners fairly well making its handling much less of a handful

314

00:27:23,180 --> 00:27:25,980

And when Adam messes up the parallel park

315

00:27:27,220 --> 00:27:31,300

What was that you said about my parallel parking it's operator error

316

00:27:34,060 --> 00:27:40,920

Rather than a manhole mishap and we're done check out this wheel

317

00:27:42,940 --> 00:27:44,940

It's perfect

318

00:27:45,260 --> 00:27:48,540

I abused the crap out of that thing and there's not a thing wrong with it

319

00:27:48,540 --> 00:27:51,180

I am really impressed with the manhole cover

320

00:27:51,180 --> 00:27:59,100

I expected the one place I'd have a problem work with traction and the fact that it's cast iron that it might actually crack when I was

321

00:27:59,700 --> 00:28:01,700

Skidding to the side like in this lull

322

00:28:02,540 --> 00:28:08,460

Traction was a problem, but this thing held up to the most abuse I could throw it into the slalom and came back

323

00:28:08,780 --> 00:28:10,100

I

324

00:28:10,100 --> 00:28:15,780

Like the manhole cover it's got style. You know work great. I'd say it's plausible plausible it is and you know what?

325

00:28:15,780 --> 00:28:18,020

It's given me some ideas. All right

326

00:28:19,900 --> 00:28:25,500

Next on flaming reel the world's fastest fish he drives like a maniac

327

00:28:28,900 --> 00:28:35,380

Known as the cheetah of the sea the sailfish has been clocked at an impressive 68 miles an hour

328

00:28:36,220 --> 00:28:41,300

And it's speeds like that that may be able to do this

329

00:28:43,700 --> 00:28:47,460

Well at Alameda the mythbusters are set to find out

330

00:28:51,780 --> 00:28:53,940

Now it's time to ramp this myth up

331

00:28:53,940 --> 00:28:58,060

We were not able to get the speeds that we were looking for in our small-scale test

332

00:28:59,300 --> 00:29:02,020

Wow and get the first single sure ready

333

00:29:02,300 --> 00:29:09,060

So we have a much faster fish capable of going up to 68 miles an hour and we have a much longer run

334

00:29:10,500 --> 00:29:12,500

With the same top speed

335

00:29:13,180 --> 00:29:19,340

And mass as a record-breaking sailfish Kerry's car is the perfect fish replacement

336

00:29:21,460 --> 00:29:23,460

She drives like a maniac

337

00:29:25,020 --> 00:29:27,580

That means it's time to go fishing

338

00:29:28,580 --> 00:29:34,860

So Kerry is hooked she's gonna take off down the runway going 68 miles an hour at that point

339

00:29:34,860 --> 00:29:37,300

I'm gonna start adding drag to the reel

340

00:29:37,300 --> 00:29:42,940

I don't know if this thing's gonna catch on fire, but this fish is going three times as fast as we did in the shop

341

00:29:42,940 --> 00:29:44,940

This thing's doubling in a smoke

342

00:29:45,020 --> 00:29:47,900

But upping the speed is not the only change

343

00:29:48,460 --> 00:29:50,460

All right, Kerry your hook. Are you ready?

344

00:29:51,260 --> 00:29:53,860

Because they're also doubling the length of the line

345

00:29:54,780 --> 00:29:56,780

Go for it Kerry

346

00:29:57,140 --> 00:30:00,060

Will this be the perfect storm they need?

347

00:30:17,340 --> 00:30:21,060

We're gonna go 130 degrees start is fueling oil

348

00:30:23,860 --> 00:30:25,860

180

349

00:30:26,860 --> 00:30:28,860

Over 200

350

00:30:33,220 --> 00:30:36,900

Kerry sailing at 70 the temperature is sorry

351

00:30:47,740 --> 00:30:50,800

The real smoking like a chimney man, that's

352

00:30:51,720 --> 00:30:52,920

530 degrees

353

00:30:52,920 --> 00:30:59,240

But despite her best efforts Kerry reaches the end of the line before the smoke turns to fire

354

00:30:59,400 --> 00:31:04,200

So next up we're gonna add more lube now. This is not as crazy as scenarios you might think

355

00:31:04,240 --> 00:31:07,280

Let's look at the components of the reel the spindle is steel

356

00:31:07,280 --> 00:31:13,400

There are brass gears inside the washers asbestos all these things have a fairly high ignition temperature

357

00:31:13,800 --> 00:31:20,460

However the lube that goes inside try get it all in there has a fairly low ignition temperature

358

00:31:20,460 --> 00:31:28,180

200 400 degrees Fahrenheit. I think this really increases our chances of getting ignition particularly if we add a lot of it

359

00:31:28,940 --> 00:31:34,460

So with a significant amount of lubrication, that's gonna be a slippery deck of your boat, isn't it?

360

00:31:34,460 --> 00:31:37,540

It really is now or never for this myth

361

00:31:51,380 --> 00:31:53,380

From all over right now

362

00:31:58,980 --> 00:32:01,940

Like last time the temperature of the real rockets

363

00:32:03,300 --> 00:32:07,140

That is the most out of smoke we have seen on this reel

364

00:32:07,260 --> 00:32:15,580

But even with Tori spraying oil directly onto the hottest part by the time Kerry's motored her mile. There's still no ignition

365

00:32:16,140 --> 00:32:23,140

Well, we got a lot of smoke, but still no fire no fire no fire at all

366

00:32:23,140 --> 00:32:30,060

And that was with a long line the best reel and a lot of lube and the fastest fish we could find

367

00:32:30,060 --> 00:32:32,940

But you know what this myth is totally busted

368

00:32:35,260 --> 00:32:41,680

We use the star drag reel which generated the most heat we let line run out for over a mile at

369

00:32:42,160 --> 00:32:44,160

68 miles per hour

370

00:32:45,400 --> 00:32:51,060

Lube on the wheel if this isn't gonna cause some sort of flame this myth is busted

371

00:32:51,400 --> 00:32:53,880

Kerry's right even with the deck moted

372

00:32:56,240 --> 00:33:01,300

There was still no sign of a simmer it's busted without doubt it's

373

00:33:01,880 --> 00:33:08,280

Busted but as the saying goes there's plenty more fish in the sea. Maybe there's an even faster fish

374

00:33:08,280 --> 00:33:15,320

Maybe there's a monster fish. Maybe there's some fish out there that is beyond what we know and

375

00:33:15,920 --> 00:33:21,880

That is what we're going to do next find a really really really fast

376

00:33:28,800 --> 00:33:34,440

We'll come back now all this episode we have been looking at innovative ways to replace one of your tires

377

00:33:34,680 --> 00:33:40,520

If yours goes flat or missing and we've tried some backward fixes those worked out pretty good

378

00:33:42,520 --> 00:33:45,080

Try to single manhole cover as a replacement for a tire

379

00:33:45,280 --> 00:33:51,060

We try to straight rim as a replacement and they work pretty good, but we're not gonna leave it there

380

00:33:51,060 --> 00:33:54,520

No, actually Jamie is interested in what it's like to drive in a car of all four rims

381

00:33:54,920 --> 00:34:00,400

I'm interested in what it's like to drive in a car that has all four tires replaced by a manhole cover

382

00:34:00,400 --> 00:34:06,360

So get ready for the race off. You've heard of shirts versus skins now. It's time for the whole covers versus the rims

383

00:34:07,320 --> 00:34:09,320

In the one-wheel deal

384

00:34:11,160 --> 00:34:14,560

There was little to separate their two urban fixes

385

00:34:17,120 --> 00:34:19,780

So now Jamie in his original car

386

00:34:21,120 --> 00:34:24,560

An atom in a car of his own design

387

00:34:24,840 --> 00:34:26,840

It's done

388

00:34:27,000 --> 00:34:35,080

Are going head-to-head in a four-wheel fix finale the goal to see whose urban solution is superior

389

00:34:35,960 --> 00:34:38,400

Shall we change these puppies out? Yeah

390

00:34:39,760 --> 00:34:44,040

You like my paint job, you know how I love a good flame pattern

391

00:34:45,880 --> 00:34:49,120

The plan is simple. I'm gonna put four steel rims on my car

392

00:34:49,800 --> 00:34:53,800

Adam's gonna put four manhole covers on his car and we're gonna race

393

00:34:54,600 --> 00:34:56,440

We'll just see who dies better

394

00:34:56,440 --> 00:35:04,080

With a winner takes all course featuring slalom's barriers and bunting. Oh, that's a proper speedway

395

00:35:04,640 --> 00:35:06,080

Adam's confident

396

00:35:06,080 --> 00:35:12,080

This contest is pretty simple the low rider versus the knife

397

00:35:12,960 --> 00:35:16,280

Nice into the night. I think the outcome is gonna be pretty simple, too

398

00:35:16,280 --> 00:35:20,980

I think I in the flaming car. I'm gonna smoke the Hoosier

399

00:35:21,180 --> 00:35:23,180

But Jamie's the man with a plan

400

00:35:23,780 --> 00:35:28,460

Just like with rubber tires these steel wheels will lose traction if they break free

401

00:35:28,500 --> 00:35:34,620

So the key to success here is gonna be for me to ride the accelerator so that I don't lose traction

402

00:35:34,660 --> 00:35:36,660

But I actually do get up speed

403

00:35:37,420 --> 00:35:40,980

Jamie's right. This track race is all about traction

404

00:35:43,260 --> 00:35:50,220

Okay, rims versus manhole covers whoever has more will take the title in three

405

00:35:51,900 --> 00:35:53,900

one

406

00:35:59,060 --> 00:36:01,060

And right from the word go

407

00:36:03,580 --> 00:36:05,580

Jamie takes a commanding lead

408

00:36:06,900 --> 00:36:11,180

Yeah, baby while Adam has just a fraction of the trash

409

00:36:13,900 --> 00:36:19,100

And although Jamie doesn't have enough control to steer clear of the crash barrier

410

00:36:20,980 --> 00:36:24,060

He is beating Adam hands down

411

00:36:28,540 --> 00:36:33,840

Well that didn't go at all like I expected not only did I get no traction and couldn't get up to speed

412

00:36:34,180 --> 00:36:39,180

Once I did I had very little control correined right into the water pyramid

413

00:36:41,180 --> 00:36:43,180

And on the slalom

414

00:36:43,180 --> 00:36:49,380

I'm spinning 360 720s. I have absolutely no traction with these manhole covers

415

00:36:51,980 --> 00:36:53,980

As I'm doing this I'm watching Jamie

416

00:36:54,860 --> 00:37:02,740

Screenly like the turtle from that cartoon slow and steady making his way unnervingly around all of the slalom cones

417

00:37:02,740 --> 00:37:05,660

And then he goes through the finish line and

418

00:37:05,980 --> 00:37:08,460

Insusively turns around and waits for me

419

00:37:12,580 --> 00:37:14,460

Watches me

420

00:37:14,460 --> 00:37:17,460

and slowly make my way all the way to the finish line

421

00:37:18,420 --> 00:37:20,420

19 seconds later

422

00:37:20,980 --> 00:37:26,580

Adam said he was gonna smoke me, but I don't think so I actually whooped it

423

00:37:26,580 --> 00:37:30,980

I also was really surprised because I thought he had more traction than I did

424

00:37:31,500 --> 00:37:34,020

Turns out he didn't ain't that the truth

425

00:37:34,700 --> 00:37:39,540

The manholes impeded by their narrow nature were next to useless

426

00:37:40,820 --> 00:37:43,900

The rims win what did we learn well?

427

00:37:43,900 --> 00:37:48,460

I think throughout this whole episode we've learned that a plant tire does not necessarily

428

00:37:49,180 --> 00:37:55,980

Pretty much every last thing we try work to some degree albeit slow just goes to show a little ingenuity

429

00:37:55,980 --> 00:37:58,580

I'll take you a long way it sure will let's get out of here

430

00:38:02,980 --> 00:38:06,420

All right, this myth is busted we went 70 miles an hour the

431

00:38:06,940 --> 00:38:13,300

Fish can go for over a mile and all we got was smoke and that was giving it the best possible chances of it working

432

00:38:13,300 --> 00:38:17,900

But I'm still curious can you set a reel on fire by just spinning it fast enough?

433

00:38:17,900 --> 00:38:21,760

I think it's time we replicate the results well, you know what that means

434

00:38:21,860 --> 00:38:27,820

We need something that goes faster than any fish ever recorded. We need a super fish

435

00:38:29,180 --> 00:38:31,180

So back at the runway

436

00:38:32,020 --> 00:38:36,260

It's time for myth busters extreme fishing take two

437

00:38:36,260 --> 00:38:40,140

So it's my favorite time of the myth where we replicate the results. We got our boat

438

00:38:40,140 --> 00:38:44,660

We got a reel we got our line and we got a really big fast fish

439

00:38:48,500 --> 00:38:54,580

My friends that represents this motorcycle side car professional racing rig

440

00:38:55,220 --> 00:38:57,020

otherwise known as

441

00:38:57,020 --> 00:38:58,700

sharkis maximus

442

00:38:58,700 --> 00:39:01,380

With a top speed of 200 miles an hour

443

00:39:02,020 --> 00:39:06,540

This road racing sidecar piloted by pro driver Mike Jones

444

00:39:07,140 --> 00:39:11,380

And his counter balancing assistant is the real deal

445

00:39:12,060 --> 00:39:16,100

But up in the speed of the fish isn't the only switcher room

446

00:39:17,100 --> 00:39:21,900

So far we have exhausted everything and we have not been able to get a reel to catch on fire

447

00:39:21,900 --> 00:39:25,580

So we decided to switch to a more flammable lubricant

448

00:39:26,060 --> 00:39:30,280

Engine starting fluid now this proved to be the most effective back at the shop

449

00:39:30,300 --> 00:39:34,580

It is basically ether. It's very flammable has a low ignition temperature

450

00:39:34,580 --> 00:39:37,420

The only problem is it makes you dizzy and it evaporates quickly

451

00:39:37,660 --> 00:39:41,020

But we're gonna see how this does on our fishing reel and with that

452

00:39:41,380 --> 00:39:42,900

All right, you're all hooked up

453

00:39:42,900 --> 00:39:49,920

It's time for this finale to shape up or ship out ready to go fishing I'm ready

454

00:40:12,900 --> 00:40:17,580

Oh my god, oh my god, 700 degrees

455

00:40:22,780 --> 00:40:27,980

How much we got up to 700 degrees red hot we broke the line

456

00:40:30,540 --> 00:40:37,380

Despite the daring duo hitting a hundred and forty miles an hour the reel hitting 700 degrees and

457

00:40:37,780 --> 00:40:42,660

Tori adding close to a cup of ether. There was still no ignition

458

00:40:42,900 --> 00:40:45,140

Which leaves just one thing left to try

459

00:40:47,660 --> 00:40:52,420

More speed and for that Carrie is taking no chances

460

00:40:53,700 --> 00:40:59,420

Carrie don't you think that's a little overkill? Oh my god, that is very hilarious

461

00:41:00,460 --> 00:41:06,380

Okay, I'll spray the starter fluid. Let's get our reel on it three two one

462

00:41:07,020 --> 00:41:13,520

Both racer Mike and his mate and the temperature of the reel

463

00:41:29,900 --> 00:41:32,860

The shark speeding at 180 miles an hour

464

00:41:33,660 --> 00:41:37,580

But when the temperature passes 700

465

00:41:39,660 --> 00:41:43,580

This is ridiculous the line melts but doesn't ignite

466

00:41:43,860 --> 00:41:45,620

There is no way this myth is true

467

00:41:45,620 --> 00:41:50,700

But we need to see this thing catch on fire without doubt they got the hottest reel possible

468

00:41:50,700 --> 00:41:56,500

But that heat within the reel was still not enough to ignite their fuel on the line

469

00:41:56,740 --> 00:42:00,980

So as a last resort Tori adds one final ingredient a

470

00:42:01,620 --> 00:42:03,620

1200 degree flame and

471

00:42:05,780 --> 00:42:08,940

Finally no I haven't waiting to see a flaming reel

472

00:42:13,300 --> 00:42:22,140

Finally there's fire in the hole but only thanks to a naked flame burning 500 degrees hotter than anything their fish could create

473

00:42:24,100 --> 00:42:29,140

It wasn't until we introduced an open flame to the reel did we ever see a flaming reel?

474

00:42:29,140 --> 00:42:36,680

This one is busted on every level in fact you might say it's busted hook line and

475

00:42:37,220 --> 00:42:43,220

Sinker what I have to say we've tested this one thoroughly. Yeah, I was a great fishing trip. Should we set sail for home?

476

00:42:43,220 --> 00:42:45,020

Yeah, let's go

477

00:42:45,020 --> 00:42:47,020

Even motorboat and son of a gun you

478

00:42:47,660 --> 00:42:49,660

Old sailor you

479

00:42:53,220 --> 00:42:55,220

Think we're out of gas