

1

00:00:00,000 --> 00:00:02,860

speed mode

2

00:00:03,200 --> 00:00:06,040

be careful

3

00:00:10,020 --> 00:00:12,220

here we go

4

00:00:18,200 --> 00:00:20,200

stop

5

00:00:25,440 --> 00:00:27,200

release

6

00:00:27,200 --> 00:00:28,240

release

7

00:00:28,240 --> 00:00:29,880

run

8

00:00:59,880 --> 00:01:29,800

So, Jimmy, you know how we like to use tools and materials for purposes

9

00:01:29,800 --> 00:01:32,600

they were never intended for, right? Like transforming them.

10

00:01:32,600 --> 00:01:34,680

It's like second nature for us.

11

00:01:34,680 --> 00:01:38,600

Well, now we have an entire episode devoted to transformers.

12

00:01:38,600 --> 00:01:40,600

Well, that's cool. Like what?

13

00:01:40,600 --> 00:01:45,440

Well, we got one about a guy who supposedly took some five-gallon water cooler jugs and

14

00:01:45,440 --> 00:01:50,160

converted a bicycle into a fully amphibious commute vehicle.

15

00:01:50,160 --> 00:01:52,000

Sounds dubious, but fun.

16

00:01:52,000 --> 00:01:57,120

But first up, we've got an amazing story about a Frenchman stranded in the African desert

17

00:01:57,120 --> 00:01:58,680

in his little French car.

18

00:01:58,680 --> 00:02:00,200

This is the Citroën du Chavaux.

19

00:02:00,200 --> 00:02:02,320

Except two of the wheels are busted.

20

00:02:02,320 --> 00:02:09,240

He uses the remaining two wheels and rebuilds this car into a motorcycle that he uses to

21

00:02:09,240 --> 00:02:11,280

ride back to civilization with.

22

00:02:11,280 --> 00:02:14,840

I think we should get ourselves a 2CV and try it ourselves.

23

00:02:14,840 --> 00:02:15,840

Absolutely.

24

00:02:15,840 --> 00:02:20,840

It's a tall tale of French transformation.

25

00:02:20,840 --> 00:02:26,800

Supposedly, using nothing but hand tools and hope, a working motorcycle was made from

26

00:02:26,800 --> 00:02:32,320

a broken down car.

27

00:02:32,320 --> 00:02:37,640

But before any mechanical metamorphosis, the guys must start out by meeting the motor car

28

00:02:37,640 --> 00:02:40,640

from the myth, a 67 Citroën.

29

00:02:40,640 --> 00:02:41,640

All right.

30

00:02:41,640 --> 00:02:42,640

Picking up some speed here.

31

00:02:42,640 --> 00:02:43,640

Oh, yeah, man.

32

00:02:43,640 --> 00:02:44,640

Whoa.

33

00:02:44,640 --> 00:02:57,960

Now, this is the actual car we are going to be turning or trying to turn into a motorcycle.

34

00:02:57,960 --> 00:02:58,960

This car feels insane.

35

00:02:58,960 --> 00:03:05,760

It was originally conceived up by a Frenchman named Pierre-Joux-Longé in 1935, but went

36

00:03:05,760 --> 00:03:07,760

into production in 1948.

37

00:03:07,760 --> 00:03:09,760

Come on, give me all your power.

38

00:03:09,760 --> 00:03:14,760

Between then and 1990, they made over 3.2 million of them.

39

00:03:14,760 --> 00:03:18,760

And it's 425 CCN and it puts out the blistering 12-horsepower.

40

00:03:18,760 --> 00:03:29,160

Ladies and gentlemen, may I present to you the Citroën addition.

41

00:03:29,160 --> 00:03:30,160

Nice dubs, homie.

42

00:03:30,160 --> 00:03:34,160

Isn't it beautiful?

43

00:03:34,160 --> 00:03:40,120

It's clearly not fast or furious, but for this motorcycle from car conundrum.

44

00:03:40,120 --> 00:03:41,120

Let's inspect.

45

00:03:41,120 --> 00:03:44,960

Let's see what's going on under the hood here.

46

00:03:44,960 --> 00:03:48,440

It'll be the car's adaptability that's key.

47

00:03:48,440 --> 00:03:51,520

Where's the engine?

48

00:03:51,520 --> 00:03:58,000

I have to say, if ever there was a car for turning into a motorcycle, it is this baby

49

00:03:58,000 --> 00:03:59,080

right here.

50

00:03:59,080 --> 00:04:01,640

And once you look under the hood, you can see why.

51

00:04:01,640 --> 00:04:03,800

There's very little there.

52

00:04:03,800 --> 00:04:07,920

I'm genuinely excited about getting our hands dirty in this thing and seeing what we can

53

00:04:07,920 --> 00:04:08,920

make happen.

54

00:04:08,920 --> 00:04:12,920

So what are you thinking?

55

00:04:12,920 --> 00:04:16,560

Well, we've run it through its paces and we know what it looks like mechanically.

56

00:04:16,560 --> 00:04:20,160

I can't think of anything else except for taking this out, stranding ourselves and seeing

57

00:04:20,160 --> 00:04:22,760

if we can turn it into a motorcycle.

58

00:04:22,760 --> 00:04:23,760

All right then.

59

00:04:23,760 --> 00:04:24,760

Road trip.

60

00:04:24,760 --> 00:04:25,760

All right.

61

00:04:25,760 --> 00:04:26,760

Here we go.

62

00:04:26,760 --> 00:04:27,760

Off to Africa.

63

00:04:27,760 --> 00:04:48,760

The Frenchman in the myth got stranded in Morocco.

64

00:04:48,760 --> 00:04:49,760

Oh man.

65

00:04:49,760 --> 00:04:53,760

I think that's vultures circling overhead.

66

00:04:53,760 --> 00:05:00,520

Adam and Jamie's Saharan substitute is a little closer to home.

67

00:05:00,520 --> 00:05:01,520

Nice little workspace.

68

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

Blood.

69

00:05:02,520 --> 00:05:03,520

Desolate.

70

00:05:03,520 --> 00:05:04,520

Perfect.

71

00:05:04,520 --> 00:05:12,480

Prior to this experiment, all we know is that it's cute and it's pretty basic.

72

00:05:12,480 --> 00:05:18,240

But like any normal car, it also has four wheels and an engine under the hood and the front.

73

00:05:18,240 --> 00:05:22,960

And somehow we're going to have to reconfigure it to where we just use two of those wheels

74

00:05:23,040 --> 00:05:28,240

and all the necessary components to be able to power it and steer it in such a way that

75

00:05:28,240 --> 00:05:30,960

we can drive it motorcycle fashion.

76

00:05:30,960 --> 00:05:32,640

I'm going to go grab the tool kit.

77

00:05:32,640 --> 00:05:33,640

Okay.

78

00:05:33,640 --> 00:05:39,720

In the myth, the guy is stranded with nothing but a 2CV and a bunch of standard hand tools.

79

00:05:39,720 --> 00:05:40,720

All right, sir.

80

00:05:40,720 --> 00:05:45,720

We've got a jack.

81

00:05:45,720 --> 00:05:46,720

Hack saw.

82

00:05:46,720 --> 00:05:49,840

And we are going to be replicating exactly that.

83

00:05:49,840 --> 00:05:50,840

Screwdrivers.

84

00:05:50,840 --> 00:05:51,840

C-Wrenches.

85

00:05:51,840 --> 00:05:56,280

Perhaps the very first thing we're going to be testing is can you even take this car

86

00:05:56,280 --> 00:06:00,480

apart with this simplicity?

87

00:06:00,480 --> 00:06:06,000

Having so few tools would seem like a hindrance, but with this car, maybe not.

88

00:06:06,000 --> 00:06:08,920

How's this held on there?

89

00:06:08,920 --> 00:06:09,920

Oh.

90

00:06:09,920 --> 00:06:10,920

Ha.

91

00:06:10,920 --> 00:06:11,920

Ha.

92

00:06:11,920 --> 00:06:12,920

Ha.

93

00:06:12,920 --> 00:06:13,920

Ha.

94

00:06:13,920 --> 00:06:14,920

Well, that's a nice start.

95

00:06:14,920 --> 00:06:18,600

If the whole car is like that, then we're on free.

96

00:06:18,600 --> 00:06:20,760

Once the hood's literally been slid off.

97

00:06:20,880 --> 00:06:24,040

Adam, it looks like all this stuff comes off that way.

98

00:06:24,040 --> 00:06:25,040

No way.

99

00:06:25,040 --> 00:06:27,520

It's soon joined by the doors.

100

00:06:27,520 --> 00:06:30,640

Who built this thing?

101

00:06:30,640 --> 00:06:33,240

Next, come the seats.

102

00:06:33,240 --> 00:06:35,960

Now we've got a place to sit and have some munch.

103

00:06:35,960 --> 00:06:39,280

Also without any tools being touched at all.

104

00:06:39,280 --> 00:06:40,760

Wow.

105

00:06:40,760 --> 00:06:44,240

And while a few parts do need a helping hand.

106

00:06:44,240 --> 00:06:46,040

I've already got the bumper half off.

107

00:06:46,040 --> 00:06:48,040

Ho, ho, ho.

108

00:06:48,040 --> 00:06:49,040

Ha, ha.

109

00:06:49,040 --> 00:06:50,040

Oh, there we go.

110

00:06:50,040 --> 00:06:53,320

Now, honestly, it's a case of unlock and unload.

111

00:06:53,320 --> 00:06:58,520

I've never worked on a vehicle anything close to this.

112

00:06:58,520 --> 00:07:00,400

This is so basic.

113

00:07:00,400 --> 00:07:02,320

It's actually quite wonderful.

114

00:07:02,320 --> 00:07:04,120

Taking just 60 minutes.

115

00:07:04,120 --> 00:07:05,560

Nice.

116

00:07:05,560 --> 00:07:07,920

It is an encouraging start.

117

00:07:07,920 --> 00:07:12,000

But stripping back the car was never going to be the tough task.

118

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

Okay.

119

00:07:13,000 --> 00:07:14,000

All right.

120

00:07:14,000 --> 00:07:15,000

Ha, ha, ha.

121

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

Ha.

122

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

Yeah.

123

00:07:17,000 --> 00:07:20,280

That's what I'm talking about.

124

00:07:20,280 --> 00:07:24,520

That belongs to transforming what's left into a motorcycle.

125

00:07:24,520 --> 00:07:28,960

Now we rocketed through removing all the stuff that we didn't need.

126

00:07:28,960 --> 00:07:34,520

But at this point, taking it the rest of the way, actually removing two of the wheels and

127

00:07:34,520 --> 00:07:38,120

making it into something like a motorcycle.

128

00:07:38,120 --> 00:07:40,760

I don't have a clue how we're going to do it.

129

00:07:40,760 --> 00:07:43,240

Without doubt, there's a lot to do.

130

00:07:43,240 --> 00:08:03,640

So let's cut to the other chase.

131

00:08:03,640 --> 00:08:06,080

So tell me about this amphibious bicycle.

132

00:08:06,080 --> 00:08:10,640

Well, according to the pictures we've got, and we have a bunch of them, all it takes

133

00:08:10,640 --> 00:08:16,840

is eight of these guys and a simple steel structure to turn a bicycle into effectively

134

00:08:16,840 --> 00:08:18,560

a paddle wheeled boat.

135

00:08:18,560 --> 00:08:22,040

So you want to replicate what you see in those photos and see if it works.

136

00:08:22,040 --> 00:08:24,360

That is exactly what I want to do.

137

00:08:24,360 --> 00:08:27,120

Cool.

138

00:08:27,120 --> 00:08:33,520

Crossing one of these with one of these may seem a little far out.

139

00:08:33,520 --> 00:08:38,160

Yet in the far east, that's supposedly what this invention has done.

140

00:08:38,160 --> 00:08:46,400

Unless it's a case of Photoshop fakery.

141

00:08:46,400 --> 00:08:48,640

So there's a lot of steps to this process.

142

00:08:48,640 --> 00:08:53,600

The first and foremost being that there will be paddles on this back wheel that allow it

143

00:08:53,600 --> 00:08:54,600

to propel forward.

144

00:08:54,600 --> 00:08:59,840

But the paddles require a fair bit of rejiggering of the frame of this bike in order to accommodate

145

00:08:59,840 --> 00:09:02,600

the effectively wider back wheel.

146

00:09:03,600 --> 00:09:07,440

With the paddle wheel five inches fuller than its regular counterpart.

147

00:09:07,440 --> 00:09:10,880

Alright, here comes the part that'll make you cringe.

148

00:09:10,880 --> 00:09:15,680

Adam first removes the rear of the frame.

149

00:09:15,680 --> 00:09:21,640

Before welding a wider version in its place, using exactly the same bracing as in the photos.

150

00:09:21,640 --> 00:09:24,680

It's not pretty, but it'll do.

151

00:09:24,680 --> 00:09:27,960

Next, Adam reinvents the wheel.

152

00:09:27,960 --> 00:09:36,200

As he secures the 12 aluminum paddles, but that was riveting directly to the spokes.

153

00:09:36,200 --> 00:09:37,200

Come on.

154

00:09:37,200 --> 00:09:38,200

Come on.

155

00:09:38,200 --> 00:09:39,200

Last bit.

156

00:09:39,200 --> 00:09:40,200

Last bit.

157

00:09:40,200 --> 00:09:41,200

Let's all cooperate.

158

00:09:41,200 --> 00:09:42,200

Got it.

159

00:09:42,200 --> 00:09:43,200

Yeah.

160

00:09:43,200 --> 00:09:51,480

And when the new drive wheel fits like a glove.

161

00:09:51,480 --> 00:09:53,920

It's totally working.

162

00:09:53,920 --> 00:09:55,400

It's time to get buoyant.

163

00:09:55,840 --> 00:10:01,000

Now the way this bike achieves its amphibious nature is with these five gallon drinking

164

00:10:01,000 --> 00:10:03,720

water jugs, which I have to mount to the steel frame of the bicycle.

165

00:10:03,720 --> 00:10:06,160

And I'm going to do it with these pieces of strap steel.

166

00:10:06,160 --> 00:10:15,120

I'm about to roll them in a machine called a roll.

167

00:10:15,120 --> 00:10:17,760

Despite adding a large amount of steel.

168

00:10:17,760 --> 00:10:18,760

Beautiful.

169

00:10:18,760 --> 00:10:22,360

For both the straps and the bottle jug frame.

170

00:10:22,360 --> 00:10:23,360

Oh my gosh.

171

00:10:23,360 --> 00:10:25,360

This is a heavy bike now.

172

00:10:25,360 --> 00:10:28,200

Oh my God.

173

00:10:28,200 --> 00:10:35,080

The bike should stay afloat because each jug can support 40 pounds.

174

00:10:35,080 --> 00:10:36,960

And with eight jugs in total.

175

00:10:36,960 --> 00:10:41,280

This is the part of any project where I get genuinely kind of excited and thrilled.

176

00:10:41,280 --> 00:10:46,480

The overall buoyancy should be plenty enough to support rider and rig.

177

00:10:46,480 --> 00:10:48,480

There it is.

178

00:10:48,480 --> 00:10:51,560

Ladies and gentlemen, the ugliest bike in all of creation.

179

00:10:51,560 --> 00:10:57,280

Now it should have some nuts that lock these in the upright position so you can ride around.

180

00:10:57,280 --> 00:11:04,960

Then when you get to the water, you simply blow them down and you're ready to ride on

181

00:11:04,960 --> 00:11:06,680

the water.

182

00:11:06,680 --> 00:11:12,960

This might just be an amphibious bicycle.

183

00:11:12,960 --> 00:11:18,080

It may be a dead ringer for the photos, but down at the pool.

184

00:11:18,080 --> 00:11:22,560

So what kind of job do you imagine that's an appropriate outfit for?

185

00:11:22,560 --> 00:11:27,720

Will it be sink or swim?

186

00:11:27,720 --> 00:11:40,040

Six thousand miles from Morocco.

187

00:11:40,040 --> 00:11:43,680

I think I was supposed to turn off earlier.

188

00:11:43,680 --> 00:11:51,000

But Adam and Jamie's motorbike from motor car has started well.

189

00:11:51,000 --> 00:11:53,000

I love it.

190

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

Now you love this suspension.

191

00:11:55,000 --> 00:12:00,280

But as deconstruction turns to construction, the guy's progress stalls.

192

00:12:00,280 --> 00:12:03,120

The challenge is fairly significant.

193

00:12:03,120 --> 00:12:06,960

We've got this heavy thing, an engine, which weighs hundreds of pounds.

194

00:12:06,960 --> 00:12:11,760

And it's meant to drive two wheels that are way off center to the engine.

195

00:12:11,760 --> 00:12:14,760

But on a motorcycle, the engine needs to be in the center of gravity.

196

00:12:14,760 --> 00:12:19,080

So we have to figure out some way to get the engine as close to center as possible while

197

00:12:19,080 --> 00:12:22,720

still driving a wheel so we have power.

198

00:12:22,720 --> 00:12:27,280

And how that's going to work, I have no idea.

199

00:12:27,280 --> 00:12:28,960

There's two key conundrums.

200

00:12:28,960 --> 00:12:35,520

How to provide power to a central drive wheel and how to do that without moving the engine.

201

00:12:35,520 --> 00:12:39,280

So sir, I guess it's time to start talking about how we're going to get this thing balanced

202

00:12:39,320 --> 00:12:42,280

on a single line.

203

00:12:42,280 --> 00:12:44,360

I know.

204

00:12:44,360 --> 00:12:50,400

I'd love to leave the engine where it's at and have like a wheel there and a wheel here.

205

00:12:50,400 --> 00:12:52,440

What do you have any thoughts?

206

00:12:52,440 --> 00:12:54,600

Yeah, I do actually.

207

00:12:54,600 --> 00:12:56,560

These things here are the output shafts.

208

00:12:56,560 --> 00:12:57,560

Right.

209

00:12:57,560 --> 00:13:08,080

So if that was simply placed right on a wheel, just having that braid on the wheel, it could

210

00:13:09,000 --> 00:13:10,000

drive the wheel.

211

00:13:10,000 --> 00:13:12,280

Oh, dude, you know what I realized?

212

00:13:12,280 --> 00:13:16,120

I'd rather have the engine in the rear of the bike so we're not trying to move the whole

213

00:13:16,120 --> 00:13:17,120

engine.

214

00:13:17,120 --> 00:13:21,080

And that actually works with the abrasion technique because it means the engine's running in the

215

00:13:21,080 --> 00:13:23,040

opposite direction than the wheel.

216

00:13:23,040 --> 00:13:26,320

So we can go in first gear and go that way.

217

00:13:26,320 --> 00:13:31,440

Well, where a little while ago we had no freaking idea what we're going to do now, at least

218

00:13:31,440 --> 00:13:37,480

we have a plan of attack towards investigating a possible solution that feels like somewhere.

219

00:13:37,880 --> 00:13:41,040

We've got our car frame with the engine at the front and the two wheels on each side.

220

00:13:41,040 --> 00:13:45,160

We're going to start by discarding two of those wheels and reattaching the other two

221

00:13:45,160 --> 00:13:48,120

as close to the center line as possible.

222

00:13:48,120 --> 00:13:51,720

The wheel under the engine will be the drive wheel and we're basically going to shove it

223

00:13:51,720 --> 00:13:56,680

right up against the engine's output shaft so when the shaft spins, the wheel will also

224

00:13:56,680 --> 00:13:57,680

turn.

225

00:13:57,680 --> 00:14:01,360

Now, the wheel will actually be turning in the opposite direction of the output shaft

226

00:14:01,360 --> 00:14:04,280

which means that the thrust vector is reversed.

227

00:14:04,280 --> 00:14:09,000

In other words, the back of the car is going to become the front of the bike.

228

00:14:09,000 --> 00:14:12,000

At least that's the theory.

229

00:14:12,000 --> 00:14:13,000

Ready?

230

00:14:13,000 --> 00:14:14,240

Three, two, one.

231

00:14:14,240 --> 00:14:16,760

It's a plan that is undoubtedly complex.

232

00:14:16,760 --> 00:14:17,760

Nice.

233

00:14:17,760 --> 00:14:19,160

Excellent.

234

00:14:19,160 --> 00:14:21,680

But without access to power tools.

235

00:14:21,680 --> 00:14:22,680

Ready?

236

00:14:22,680 --> 00:14:23,680

Uh huh.

237

00:14:23,680 --> 00:14:24,680

Okay.

238

00:14:24,680 --> 00:14:25,680

Okay.

239

00:14:25,680 --> 00:14:28,600

Having the engine stay put is imperative.

240

00:14:28,600 --> 00:14:29,600

All right.

241

00:14:29,600 --> 00:14:32,920

Want me to get this thing up and in?

242

00:14:32,920 --> 00:14:36,280

I guess now's as good of a time as any.

243

00:14:36,280 --> 00:14:39,760

And after three hours of non-trivial teamwork.

244

00:14:39,760 --> 00:14:40,760

Okay.

245

00:14:40,760 --> 00:14:44,000

Three, two, one.

246

00:14:44,000 --> 00:14:47,160

The design is starting to take shape.

247

00:14:47,160 --> 00:14:48,160

There we go.

248

00:14:48,160 --> 00:14:49,160

Okay.

249

00:14:49,160 --> 00:14:50,160

Down.

250

00:14:50,160 --> 00:14:52,160

There we are.

251

00:14:52,160 --> 00:14:53,160

Ah, bingo.

252

00:14:53,160 --> 00:14:54,160

Bingo.

253

00:14:54,160 --> 00:14:56,160

Now we can finally explain what we've been talking about this whole time and you can

254

00:14:56,160 --> 00:14:57,160

see it in action.

255

00:14:57,160 --> 00:15:00,720

We've taken one of the swing arms from the back of the car and put it on the front which

256

00:15:00,720 --> 00:15:03,560

is the new back of the car.

257

00:15:03,560 --> 00:15:04,720

Bear with me.

258

00:15:04,720 --> 00:15:08,960

That swing arm brings the tire underneath the frame where it is pressing into this, one

259

00:15:08,960 --> 00:15:11,160

of the output shafts from the engine.

260

00:15:11,160 --> 00:15:15,680

Now that output shaft goes in this direction because this was the former front of the car

261

00:15:15,680 --> 00:15:20,720

but it drives the wheel in that direction because this is the new rear of the car.

262

00:15:20,720 --> 00:15:26,240

And the groove lines up beautifully with this ridge on the output shaft.

263

00:15:26,240 --> 00:15:28,640

Will this make the bike run?

264

00:15:28,640 --> 00:15:35,560

I'm not willing to save this yet but I'm hopeful.

265

00:15:35,560 --> 00:15:39,880

With the untested drivetrain in place, the guys move forward, literally.

266

00:15:39,880 --> 00:15:42,520

Oh, baby, don't fail me now.

267

00:15:42,520 --> 00:15:44,000

Here we go.

268

00:15:44,000 --> 00:15:47,080

Adams hacking through the car's rear wheel swing arm.

269

00:15:47,080 --> 00:15:48,080

Oh, my God.

270

00:15:48,080 --> 00:15:51,000

This is like breaking out of jail.

271

00:15:51,000 --> 00:15:54,360

So that it'll hook securely onto the front of the frame.

272

00:15:54,360 --> 00:15:59,040

Oh, my gosh.

273

00:15:59,040 --> 00:16:03,520

Starting to look like a motorcycle.

274

00:16:03,520 --> 00:16:04,520

Adams right.

275

00:16:04,520 --> 00:16:11,000

What was once a sassy Citroen is being transformed into a mad max motorcycle.

276

00:16:11,000 --> 00:16:15,520

So we've managed to line things up without having to unmount the engine.

277

00:16:15,520 --> 00:16:20,120

We've got the front wheel up here and we've got our suspension system.

278

00:16:20,120 --> 00:16:27,000

All we have to do now is hook up the steering and then see how it balances and if we can

279

00:16:27,000 --> 00:16:29,200

control it.

280

00:16:29,200 --> 00:16:34,560

I want to break in here and also point out that in order to control, that's the gear shifter,

281

00:16:34,560 --> 00:16:36,920

that's the clutch, that's the brake.

282

00:16:36,920 --> 00:16:41,720

One of us, I believe, will have to be sitting facing the rear of the motorcycle in order

283

00:16:41,720 --> 00:16:46,600

to maintain the controls while the other is calling out what they need.

284

00:16:46,600 --> 00:16:52,680

Which is kind of how it normally works with us anyway.

285

00:16:52,680 --> 00:16:59,240

With one transformation coming together, how's their water bike working out?

286

00:16:59,240 --> 00:17:04,400

We're here at the Brisbane community pool to test out Adams' amphibious bike.

287

00:17:04,400 --> 00:17:06,800

It should be done by about now.

288

00:17:06,800 --> 00:17:09,280

Here I come.

289

00:17:09,280 --> 00:17:13,240

Oh, my goodness.

290

00:17:13,240 --> 00:17:16,400

Yeah, isn't it pretty?

291

00:17:16,400 --> 00:17:19,920

We've done a very careful job of replicating what we saw in the photos.

292

00:17:19,920 --> 00:17:25,080

But the thing is that he's a good 50 pounds heavier than the woman we saw floating on

293

00:17:25,080 --> 00:17:26,440

that bike in the water.

294

00:17:26,440 --> 00:17:29,280

I step into this bathroom in ordinary Myth Buster.

295

00:17:29,280 --> 00:17:35,600

And so what that means in terms of how deep the paddles on the wheel go and balance issues,

296

00:17:35,600 --> 00:17:39,880

just because she floated on it doesn't mean that he's going to be able to.

297

00:17:39,880 --> 00:17:44,960

I come out super amphibious vehicle commuter Myth Buster.

298

00:17:44,960 --> 00:17:50,600

So just to recap, if what is claimed in the pictures is true, this thing ought to be able

299

00:17:50,600 --> 00:17:56,600

to float, hold me up, move me forward on the paddles and be able to steer all while keeping

300

00:17:56,600 --> 00:17:58,120

me relatively dry.

301

00:17:58,120 --> 00:17:59,120

Yeah.

302

00:17:59,120 --> 00:18:00,120

All right.

303

00:18:00,120 --> 00:18:01,120

Good luck with that.

304

00:18:01,120 --> 00:18:05,440

Here goes nothing.

305

00:18:05,440 --> 00:18:09,640

Amphibious bike in three, two, one, go.

306

00:18:09,640 --> 00:18:12,160

Okay, it's holding me up.

307

00:18:12,160 --> 00:18:15,160

Okay, here we go.

308

00:18:15,160 --> 00:18:16,160

Wow.

309

00:18:16,160 --> 00:18:18,160

Hey, that's not bad.

310

00:18:18,160 --> 00:18:19,160

Okay, steering.

311

00:18:19,160 --> 00:18:20,160

Starting to steer.

312

00:18:20,160 --> 00:18:24,000

Hey, steering's not bad.

313

00:18:24,000 --> 00:18:27,880

Apart from some soggy shoes, it's a decent enough start.

314

00:18:27,880 --> 00:18:28,880

But then...

315

00:18:28,880 --> 00:18:29,880

Uh-oh.

316

00:18:29,880 --> 00:18:30,880

Uh-oh.

317

00:18:30,880 --> 00:18:38,400

Now I've got a little chain problem, which I've got to fix on the bike.

318

00:18:38,400 --> 00:18:39,400

Uh-oh.

319

00:18:39,400 --> 00:18:40,400

Okay.

320

00:18:40,400 --> 00:18:43,760

Ho, ho, ho, ho.

321

00:18:43,760 --> 00:18:50,920

Fixing this chain slip in situ is no mean feat, but Adam bends over backwards.

322

00:18:50,920 --> 00:18:51,920

Yep.

323

00:18:51,920 --> 00:18:52,920

Okay.

324

00:18:52,920 --> 00:18:57,920

And soon he's riding high.

325

00:18:57,920 --> 00:19:02,920

Hey, this is great.

326

00:19:02,920 --> 00:19:08,640

Dude, I'm on an amphibious bike.

327

00:19:08,640 --> 00:19:10,760

Yeah, I'm going to go in a circle.

328

00:19:10,760 --> 00:19:11,760

Here we go.

329

00:19:11,760 --> 00:19:16,800

Not exactly a tight circle, but pretty reasonable.

330

00:19:16,800 --> 00:19:19,200

That seems like it's working really well.

331

00:19:19,200 --> 00:19:24,720

Remarkably, the bike's not only buoyant, it's also got good speed and steering.

332

00:19:24,720 --> 00:19:28,160

I'm ready for my first day on the job.

333

00:19:28,160 --> 00:19:29,160

At least so far.

334

00:19:29,160 --> 00:19:38,200

I let my attention lapse for a second and go right over.

335

00:19:38,200 --> 00:19:44,200

Adam's off.

336

00:19:44,200 --> 00:19:48,200

And watch more with him being unable to remount.

337

00:19:48,200 --> 00:19:49,200

Yes!

338

00:19:49,200 --> 00:19:50,200

Yes!

339

00:19:50,200 --> 00:19:52,200

Ah, shoot!

340

00:19:52,200 --> 00:19:54,600

He's effectively down for the count.

341

00:19:54,600 --> 00:19:56,000

Okay, admit defeat.

342

00:19:56,000 --> 00:19:58,440

I can't get back on this thing.

343

00:19:58,440 --> 00:20:02,000

We found its fatal flaw.

344

00:20:02,000 --> 00:20:06,320

This thing works surprisingly well, especially given that it's actually just improvised.

345

00:20:06,320 --> 00:20:07,840

It could use some improvements, though.

346

00:20:07,840 --> 00:20:12,240

I would say, first off, it'd be nice if you could use it without getting wet, because

347

00:20:12,240 --> 00:20:16,360

if it's a commuter sort of thing, you don't want to have to change your clothes.

348

00:20:16,360 --> 00:20:21,000

The pontoons aren't exactly streamlined, and if they were, you'd be able to go faster

349

00:20:21,000 --> 00:20:22,920

with less effort.

350

00:20:22,920 --> 00:20:27,640

And then, last but not least, I would say steering also could be improved.

351

00:20:27,640 --> 00:20:31,080

Well, that went beautifully until I took my attention off it.

352

00:20:31,080 --> 00:20:34,080

Then I went over and never saw getting back on.

353

00:20:34,080 --> 00:20:37,280

But all in all, it worked surprisingly well.

354

00:20:37,560 --> 00:20:39,120

You know, it does give me an idea.

355

00:20:39,120 --> 00:20:40,120

What's that?

356

00:20:40,120 --> 00:20:42,160

I think I can go one better.

357

00:20:42,160 --> 00:20:44,160

By all means.

358

00:20:49,040 --> 00:20:53,560

Adam and Jamie's 2CV is undergoing a mechanical metamorphosis.

359

00:20:53,560 --> 00:20:57,560

It's starting to look like a motorcycle.

360

00:20:57,560 --> 00:21:02,040

And their next hack is the steering.

361

00:21:02,040 --> 00:21:06,040

We were thinking that we were going to have to use a tiller to steer this, which is basically

362

00:21:06,080 --> 00:21:08,440

just a long stick.

363

00:21:08,440 --> 00:21:10,440

But those are real awkward.

364

00:21:10,440 --> 00:21:11,440

Yeah!

365

00:21:11,440 --> 00:21:12,440

Ah!

366

00:21:12,440 --> 00:21:13,440

Ah!

367

00:21:13,440 --> 00:21:18,000

Oh, it's satisfying.

368

00:21:18,000 --> 00:21:24,680

And since it has an existing steering system, I think I may just be able to jury rig it

369

00:21:24,680 --> 00:21:29,640

to work, even though now it's on the backside of the car.

370

00:21:30,240 --> 00:21:38,240

A steering wheel on a bike may be a little unusual, but necessity is the mother of invention.

371

00:21:38,240 --> 00:21:39,240

Okay.

372

00:21:39,240 --> 00:21:42,240

Let's see here.

373

00:21:42,240 --> 00:21:43,240

Jamie.

374

00:21:43,240 --> 00:21:45,240

That works great.

375

00:21:45,240 --> 00:21:50,240

It turns to the right better than it turns to the left.

376

00:21:50,240 --> 00:21:55,240

Well, so we'll just only make right hand turns.

377

00:21:55,240 --> 00:22:00,240

Next, the guys check the engine controls.

378

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

Clutch, brake.

379

00:22:02,240 --> 00:22:05,240

Okay, so the clutch works.

380

00:22:05,240 --> 00:22:06,240

Brake works.

381

00:22:06,240 --> 00:22:09,240

Before crossing their fingers and firing her up.

382

00:22:20,240 --> 00:22:21,240

Yeah!

383

00:22:21,240 --> 00:22:24,240

That is badass right there.

384

00:22:24,240 --> 00:22:28,240

With the engine turning over, Jamie literally wires in the throttle.

385

00:22:28,240 --> 00:22:34,240

It's a little crude, but my throttle is this piece of bailing wire.

386

00:22:34,240 --> 00:22:40,240

If I put a little trip in it like so, we accelerate.

387

00:22:40,240 --> 00:22:44,240

If I straighten it back out, it slows down.

388

00:22:48,240 --> 00:22:52,240

And with that, their motorcycle is all set.

389

00:22:52,240 --> 00:22:59,240

It's got two wheels, a unique drive system, gears, brakes, steering, and suspension.

390

00:22:59,240 --> 00:23:03,240

The only issue is that it takes two people to operate it.

391

00:23:03,240 --> 00:23:09,240

A driver to control steering and throttle and a passenger for clutch and brakes.

392

00:23:09,240 --> 00:23:13,240

So, will it work?

393

00:23:13,240 --> 00:23:15,240

I'm going to start it up.

394

00:23:15,240 --> 00:23:17,240

Okay.

395

00:23:17,240 --> 00:23:19,240

Come on, baby.

396

00:23:22,240 --> 00:23:29,240

For run one, Jamie will drive, but Adam will first jog alongside, changing gear as needed.

397

00:23:29,240 --> 00:23:30,240

All right.

398

00:23:30,240 --> 00:23:31,240

Clutch in.

399

00:23:31,240 --> 00:23:33,240

First gear.

400

00:23:39,240 --> 00:23:41,240

Yeah!

401

00:23:43,240 --> 00:23:45,240

Yeah, baby!

402

00:23:45,240 --> 00:23:47,240

Yeah!

403

00:23:47,240 --> 00:23:50,240

That's a motorcycle!

404

00:23:50,240 --> 00:23:52,240

Okay!

405

00:23:54,240 --> 00:23:56,240

Ignition's out.

406

00:23:56,240 --> 00:23:58,240

That was pretty cool!

407

00:24:00,240 --> 00:24:06,240

Incredibly, their motorcycle did move, even if 30 feet wasn't very far.

408

00:24:09,240 --> 00:24:13,240

Can Jamie better that benchmark in test two?

409

00:24:13,240 --> 00:24:14,240

There we go.

410

00:24:14,240 --> 00:24:15,240

Clutch in.

411

00:24:15,240 --> 00:24:16,240

Okay.

412

00:24:16,240 --> 00:24:18,240

First gear.

413

00:24:18,240 --> 00:24:21,240

Three, two...

414

00:24:23,240 --> 00:24:25,240

Like last time.

415

00:24:26,240 --> 00:24:27,240

Yeah!

416

00:24:27,240 --> 00:24:28,240

Yeah!

417

00:24:28,240 --> 00:24:30,240

That's a motorcycle!

418

00:24:30,240 --> 00:24:31,240

Whoa!

419

00:24:31,240 --> 00:24:35,240

Jamie is in control, but just barely.

420

00:24:37,240 --> 00:24:39,240

Stop it!

421

00:24:39,240 --> 00:24:41,240

Stop!

422

00:24:41,240 --> 00:24:42,240

Brakes worked!

423

00:24:42,240 --> 00:24:44,240

Hey, I used the brakes!

424

00:24:44,240 --> 00:24:47,240

You were helping support it, though.

425

00:24:47,240 --> 00:24:49,240

Oh, yeah, I was helping support it, man.

426

00:24:49,240 --> 00:24:50,240

Otherwise...

427

00:24:50,240 --> 00:24:52,240

I'd do anything at this point.

428

00:24:54,240 --> 00:24:57,240

So the good news is that we've got steering.

429

00:24:57,240 --> 00:25:03,240

We have suspension, and we have an effective way of getting power to the wheels.

430

00:25:03,240 --> 00:25:05,240

Stop it!

431

00:25:05,240 --> 00:25:06,240

Stop!

432

00:25:06,240 --> 00:25:15,240

The bad news is that you have to ride this side-settle, combined with the fact that you've got this massively heavy weight up high,

433

00:25:15,240 --> 00:25:21,240

and you're trying to balance it off to the side, it's effectively impossible to ride.

434

00:25:22,240 --> 00:25:23,240

It's frustrating.

435

00:25:23,240 --> 00:25:24,240

It is!

436

00:25:24,240 --> 00:25:25,240

Because it's so beautiful!

437

00:25:25,240 --> 00:25:26,240

I know!

438

00:25:26,240 --> 00:25:29,240

This is the most beautiful thing we have ever made!

439

00:25:31,240 --> 00:25:36,240

Look, this little powder puff here is beautiful, and it's post-apocalyptic times five,

440

00:25:36,240 --> 00:25:40,240

but what it's not is a viable motorcycle.

441

00:25:40,240 --> 00:25:47,240

This is not the device that's going to get you 20 kilometers from the middle of nowhere and into civilization.

442

00:25:49,240 --> 00:25:54,240

Yep, to get out of dodge, they're going to need a plan B.

443

00:25:57,240 --> 00:25:58,240

At the pool.

444

00:25:58,240 --> 00:25:59,240

Dude!

445

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

I'm on an amphibious bike!

446

00:26:02,240 --> 00:26:07,240

The guys have proved this water bottle bicycle is no Photoshop fake.

447

00:26:07,240 --> 00:26:08,240

This is great!

448

00:26:09,240 --> 00:26:16,240

But with clear room for improvement, Jamie wants to see if he can go one better.

449

00:26:17,240 --> 00:26:22,240

I'm going to be using the exact same frame that Adam used on his amphibious bicycle.

450

00:26:22,240 --> 00:26:23,240

Time to get to work.

451

00:26:25,240 --> 00:26:31,240

With a clean slate, can Jamie scratch build a water bike where failure is not an option?

452

00:26:31,240 --> 00:26:32,240

There we go.

453

00:26:33,240 --> 00:26:37,240

To find out, he's starting like Adam with the drive system.

454

00:26:37,240 --> 00:26:38,240

It'll work.

455

00:26:38,240 --> 00:26:42,240

But instead of 12 paddles, he's adding 20.

456

00:26:44,240 --> 00:26:45,240

Love that tool.

457

00:26:45,240 --> 00:26:47,240

For more power and more control.

458

00:26:48,240 --> 00:26:50,240

Let's see how this looks.

459

00:26:51,240 --> 00:26:53,240

Oh, it's perfect.

460

00:26:53,240 --> 00:26:54,240

It's perfect.

461

00:26:57,240 --> 00:27:04,240

For buoyancy, he's ditching the simplicity of the water jugs and going for some high-tech hydroform.

462

00:27:04,240 --> 00:27:09,240

We take a piece of sheet metal and clamp it between two massive plates of steel.

463

00:27:10,240 --> 00:27:17,240

We've cut out an almond-shaped hole in the top plate and attached our pressure washer pump to a small hole in bottom plate.

464

00:27:17,240 --> 00:27:19,240

Now here's the fun part.

465

00:27:19,240 --> 00:27:27,240

All we do is start the pump and the water pressure pushes the sheet metal out the almond-shaped hole, inflating it just like a balloon.

466

00:27:28,240 --> 00:27:29,240

Ha! It's perfect.

467

00:27:30,240 --> 00:27:36,240

Jamie hydroforms eight half-holes, which are cut to size.

468

00:27:36,240 --> 00:27:37,240

That's one.

469

00:27:37,240 --> 00:27:39,240

Before being paired together.

470

00:27:41,240 --> 00:27:45,240

The four resulting pontoons are not only super streamlined.

471

00:27:45,240 --> 00:27:46,240

That's it.

472

00:27:46,240 --> 00:27:49,240

They should be super buoyant.

473

00:27:52,240 --> 00:27:56,240

There are a number of key differences between this bike and the one that Adam built based on the photos.

474

00:27:56,240 --> 00:28:06,240

Now the first and most obvious one is that the pontoons are tuna-shaped because they should move through the water with less effort as well as provide me with better steering.

475

00:28:06,240 --> 00:28:11,240

Now secondly, I've made the back pontoons able to telescope out.

476

00:28:11,240 --> 00:28:12,240

Oh, yeah.

477

00:28:14,240 --> 00:28:15,240

It's perfect.

478

00:28:15,240 --> 00:28:19,240

I'm hoping that the extra foot or two that I've put on these will keep me more stable.

479

00:28:19,240 --> 00:28:20,240

Looks about right.

480

00:28:20,240 --> 00:28:24,240

And then of course, last but not least, I think it looks way cooler.

481

00:28:28,240 --> 00:28:34,240

Indeed, but to see if it works, Adam's up the ante with a head-to-head race.

482

00:28:34,240 --> 00:28:39,240

Jamie and I now intend to test our amphibious commuter bikes fully.

483

00:28:39,240 --> 00:28:41,240

That means land and sea.

484

00:28:41,240 --> 00:28:48,240

And we've come here to beautiful Horseshoe Lake in Fremont, California because it provides all the terrains pretty much any bicycle commuter is going to encounter.

485

00:28:48,240 --> 00:28:50,240

We've got a little bit of pavement.

486

00:28:50,240 --> 00:28:56,240

We've got some dirt roads and right down there behind me, a beautiful placid lake to ride our bikes upon.

487

00:28:56,240 --> 00:29:01,240

But first up, Jamie's going to test this bike and make sure it actually floats.

488

00:29:04,240 --> 00:29:07,240

Jamie positions his front pontoons in the pond.

489

00:29:07,240 --> 00:29:08,240

That's one set.

490

00:29:08,240 --> 00:29:12,240

Before spreading out the rear ones for extra stability.

491

00:29:15,240 --> 00:29:19,240

Then there's one last piece of mechanical modification.

492

00:29:19,240 --> 00:29:24,240

An electric crankshaft that lowers the paddle wheel into the water.

493

00:29:26,240 --> 00:29:27,240

Check that out.

494

00:29:29,240 --> 00:29:31,240

And before you know it, he's away.

495

00:29:31,240 --> 00:29:32,240

It's working.

496

00:29:32,240 --> 00:29:36,240

It's working exactly as it was designed.

497

00:29:36,240 --> 00:29:41,240

Both forwards and backwards, Jamie's design is looking good.

498

00:29:41,240 --> 00:29:42,240

Almost too good.

499

00:29:42,240 --> 00:29:46,240

One thing I'm wondering though is it looks like one pontoon is sinking.

500

00:29:46,240 --> 00:29:48,240

Maybe a leak.

501

00:29:53,240 --> 00:29:58,240

If the goal was to improve on Adam's design, it's hardly mission accomplished.

502

00:29:58,240 --> 00:30:04,240

But with a competition coming up, Jamie's not going to abandon ship.

503

00:30:16,240 --> 00:30:23,240

The story goes that an ingenious engineer turned a motor car into a motorcycle to escape death in the desert.

504

00:30:24,240 --> 00:30:28,240

But Adam and Jamie's design,

505

00:30:28,240 --> 00:30:33,240

Gained closer to causing death,

506

00:30:33,240 --> 00:30:35,240

Then preventing it.

507

00:30:35,240 --> 00:30:37,240

But all is not lost.

508

00:30:39,240 --> 00:30:46,240

Because back at the shop, the guys of unearthed a series of photos that supposedly show the real deal.

509

00:30:46,240 --> 00:30:48,240

Oh, that's fascinating.

510

00:30:48,240 --> 00:30:53,240

Back at the start of this episode, Jamie and I decided to build our motorcycle without reference to these photos.

511

00:30:53,240 --> 00:30:56,240

And we did that partly because people say these are fake.

512

00:30:56,240 --> 00:30:58,240

Oh, same drive system.

513

00:30:58,240 --> 00:31:03,240

But given that our bike didn't work, we're now going to rebuild it to these specs.

514

00:31:03,240 --> 00:31:07,240

The engine must be reversed.

515

00:31:07,240 --> 00:31:11,240

What's interesting is that the engine is not a single engine.

516

00:31:11,240 --> 00:31:14,240

The engine must be reversed.

517

00:31:14,240 --> 00:31:19,240

What's interesting is that both of our design approaches, while incredibly similar,

518

00:31:19,240 --> 00:31:22,240

For instance, we use the exact same drive system,

519

00:31:22,240 --> 00:31:28,240

They differ in two distinct ways that may give his design a better chance of working than ours.

520

00:31:28,240 --> 00:31:30,240

All right, graphics, help me out.

521

00:31:30,240 --> 00:31:32,240

So this is our bike.

522

00:31:32,240 --> 00:31:35,240

Note the rack and pinion steering and the engine high up on the back.

523

00:31:35,240 --> 00:31:39,240

It's these that made our bike hard to balance.

524

00:31:39,240 --> 00:31:44,240

The French guy not only replaced the steering wheel with a tiller system that ought to give better control,

525

00:31:44,240 --> 00:31:49,240

But he also lifted the engine up, spun it around and placed it in the middle,

526

00:31:49,240 --> 00:31:53,240

Giving the bike a much more easy to handle center of gravity.

527

00:31:53,240 --> 00:31:56,240

But there's a problem when you flip the engine to 180 degrees,

528

00:31:56,240 --> 00:32:00,240

And that is the only gear you can make the bike move forward with is reverse.

529

00:32:00,240 --> 00:32:06,240

And I don't know if the reverse gear can actually make this thing move fast enough to be stable.

530

00:32:09,240 --> 00:32:12,240

To find out, it's time to turn transformers.

531

00:32:12,240 --> 00:32:14,240

One last time.

532

00:32:14,240 --> 00:32:16,240

We don't need this anymore.

533

00:32:16,240 --> 00:32:21,240

Only now, they're not only following the Frenchman's photos,

534

00:32:21,240 --> 00:32:25,240

They're also using power tools to power through.

535

00:32:25,240 --> 00:32:31,240

We've already proven that we can put together something like this using only those simple tools that the guy had.

536

00:32:31,240 --> 00:32:35,240

So this time we're gonna use whatever we have handy here in the shop,

537

00:32:35,240 --> 00:32:38,240

And that'll just make it go quicker.

538

00:32:39,240 --> 00:32:41,240

That would have taken a while with the hacksaw.

539

00:32:41,240 --> 00:32:44,240

Yeah, like a day or two.

540

00:32:44,240 --> 00:32:47,240

With a hole cut for the rear wheel,

541

00:32:47,240 --> 00:32:50,240

The guys next centralize the engine.

542

00:32:50,240 --> 00:32:53,240

That looks about right. We can lock it down about there.

543

00:32:53,240 --> 00:32:57,240

And when Jamie adds a steering system that seems stable,

544

00:32:57,240 --> 00:32:59,240

Oh my god.

545

00:32:59,240 --> 00:33:00,240

Is it significant?

546

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

Oh yeah, no problem.

547

00:33:04,240 --> 00:33:06,240

The guys are confident.

548

00:33:06,240 --> 00:33:07,240

I love that.

549

00:33:07,240 --> 00:33:10,240

But before this bike hits the road,

550

00:33:10,240 --> 00:33:14,240

Two others are gonna have a river race off.

551

00:33:14,240 --> 00:33:16,240

This is a tale of two bicycles.

552

00:33:16,240 --> 00:33:20,240

One is one whose design we found online and replicated it.

553

00:33:20,240 --> 00:33:23,240

It worked on the water far better than we thought it would.

554

00:33:23,240 --> 00:33:28,240

Thus, we'd like to run it through a full set of amphibious computer vehicle paces.

555

00:33:28,240 --> 00:33:32,240

At the same time, that design gave Jamie some ideas

556

00:33:32,240 --> 00:33:34,240

And he thought he could improve upon the original.

557

00:33:34,240 --> 00:33:36,240

Thus, he's completed a bike.

558

00:33:36,240 --> 00:33:42,240

We're gonna run through the same paces to see if he has in fact succeeded at that task.

559

00:33:42,240 --> 00:33:46,240

Jamie's proof of concept started well.

560

00:33:46,240 --> 00:33:51,240

But ended badly.

561

00:33:51,240 --> 00:33:53,240

But a quick leak fix later,

562

00:33:53,240 --> 00:33:59,240

And Jamie's all set for a duck pond drag race.

563

00:33:59,240 --> 00:34:01,240

All right.

564

00:34:01,240 --> 00:34:02,240

You ready?

565

00:34:02,240 --> 00:34:03,240

Yeah.

566

00:34:03,240 --> 00:34:05,240

Amphibious conversion.

567

00:34:05,240 --> 00:34:07,240

Implement.

568

00:34:07,240 --> 00:34:11,240

The rules are simple.

569

00:34:11,240 --> 00:34:14,240

The guys must transform their bikes into water mode.

570

00:34:14,240 --> 00:34:16,240

Okay, where's number one pen?

571

00:34:16,240 --> 00:34:18,240

There we go.

572

00:34:20,240 --> 00:34:23,240

Before pedaling to a buoy and back.

573

00:34:23,240 --> 00:34:24,240

Here we go.

574

00:34:24,240 --> 00:34:26,240

And we're off.

575

00:34:26,240 --> 00:34:30,240

First back to the beach boasts the best design.

576

00:34:30,240 --> 00:34:32,240

Leaving Heinemann in the dust.

577

00:34:34,240 --> 00:34:40,240

I am happy to say that I handily beat Jamie in the conversion to amphibious mode.

578

00:34:40,240 --> 00:34:42,240

I'm way ahead.

579

00:34:42,240 --> 00:34:48,240

I was in the water a good probably 60 seconds before he was and pedaling furiously.

580

00:34:48,240 --> 00:34:51,240

As furiously as I could towards our buoy.

581

00:34:51,240 --> 00:34:54,240

And I thought that I was going to be able to keep up that lead.

582

00:34:54,240 --> 00:34:57,240

I would say funny things when I'm getting tired.

583

00:34:57,240 --> 00:35:01,240

But sadly, I was totally mistaken because once Jamie started pedaling,

584

00:35:01,240 --> 00:35:06,240

it was really clear that his bike was so much more hydrodynamic than mine.

585

00:35:08,240 --> 00:35:10,240

He's catching up.

586

00:35:11,240 --> 00:35:12,240

Come on.

587

00:35:12,240 --> 00:35:13,240

Come on.

588

00:35:13,240 --> 00:35:15,240

We got to get some more power.

589

00:35:15,240 --> 00:35:20,240

Jamie is so much faster in the water that he quickly overtook me.

590

00:35:22,240 --> 00:35:26,240

Now I started pedaling harder, but I was in danger of skipping my chain.

591

00:35:26,240 --> 00:35:29,240

And if I did, that was a guaranteed loss.

592

00:35:29,240 --> 00:35:31,240

I thought this was mine.

593

00:35:32,240 --> 00:35:33,240

Come on.

594

00:35:33,240 --> 00:35:35,240

Maybe I'll catch you upwind Jamie.

595

00:35:35,240 --> 00:35:36,240

Yes.

596

00:35:36,240 --> 00:35:37,240

Here we go.

597

00:35:37,240 --> 00:35:40,240

So I had to stay slow and steady.

598

00:35:40,240 --> 00:35:45,240

Unfortunately, that didn't keep me a consistent distance behind Jamie.

599

00:35:45,240 --> 00:35:47,240

Good luck there little buddy.

600

00:35:48,240 --> 00:35:50,240

He kept on outpacing me.

601

00:35:50,240 --> 00:35:52,240

Look, I can actually see a wake.

602

00:35:52,240 --> 00:35:53,240

He's leaving a wake.

603

00:35:53,240 --> 00:35:58,240

And ended up reaching the shore a good probably three or four minutes before I did.

604

00:35:58,240 --> 00:35:59,240

Ding.

605

00:35:59,240 --> 00:36:01,240

And a lot less winded.

606

00:36:01,240 --> 00:36:03,240

Worked like a champ.

607

00:36:03,240 --> 00:36:04,240

His bike what?

608

00:36:04,240 --> 00:36:05,240

Handling.

609

00:36:08,240 --> 00:36:09,240

Come on.

610

00:36:09,240 --> 00:36:18,240

I'm glad this turned out the way that it did because these shapes, even though they did take more work, were far more streamlined and it was quite easy to move it through the water.

611

00:36:18,240 --> 00:36:23,240

The amount of effort due to the size of the paddles was lower.

612

00:36:23,240 --> 00:36:26,240

It meant that I could pedal a little quicker.

613

00:36:26,240 --> 00:36:30,240

It did sling a little more water up my butt, but I'll settle for that.

614

00:36:30,240 --> 00:36:33,240

All in all, I'm pretty happy with how it behaved.

615

00:36:36,240 --> 00:36:40,240

Well, I am impressed with the design we pulled up the internet.

616

00:36:40,240 --> 00:36:42,240

I'd say it's confirmed.

617

00:36:42,240 --> 00:36:46,240

Yeah, I'd say as well this one worked better, but the concept is sound.

618

00:36:46,240 --> 00:36:47,240

Absolutely.

619

00:36:47,240 --> 00:36:48,240

All right.

620

00:36:48,240 --> 00:36:50,240

If you don't mind, I'm going to walk back to the car.

621

00:36:50,240 --> 00:36:51,240

Okay, I'll race you.

622

00:36:51,240 --> 00:36:52,240

Okay.

623

00:36:53,240 --> 00:36:57,240

So one tale of transformation is triumphant.

624

00:37:00,240 --> 00:37:04,240

Will their motorcycle from motor car make it two for two?

625

00:37:10,240 --> 00:37:15,240

You know, over the years, Jamie and I have gotten the chance to ride on some pre-unconventional vehicles.

626

00:37:15,240 --> 00:37:18,240

We've sailed in a boat made solely of duct tape.

627

00:37:18,240 --> 00:37:19,240

Yeehaw!

628

00:37:20,240 --> 00:37:24,240

Driven a sports car mounted backwards on its frame.

629

00:37:24,240 --> 00:37:27,240

Driven a truck with square wheels.

630

00:37:29,240 --> 00:37:32,240

Heck, we've even taken a ride in the mouth of a great white shark.

631

00:37:34,240 --> 00:37:38,240

How is this little puppy going to compare to that litany of amazing vehicles?

632

00:37:38,240 --> 00:37:40,240

Well, we're going to find out very soon.

633

00:37:41,240 --> 00:37:47,240

Jamie and I have been investigating a very cool story about a Frenchman who turned his car into a motorcycle to get him back to civilization.

634

00:37:47,240 --> 00:37:50,240

Now, Jamie and I turned our car into a motorcycle.

635

00:37:50,240 --> 00:37:52,240

That is badass right there.

636

00:37:52,240 --> 00:37:56,240

Except that, well, we couldn't drive it.

637

00:37:56,240 --> 00:37:57,240

Stop it!

638

00:37:57,240 --> 00:37:58,240

Stop!

639

00:37:58,240 --> 00:38:02,240

So we've gone back to our motorcycle.

640

00:38:02,240 --> 00:38:04,240

We've gone back to our motorcycle.

641

00:38:04,240 --> 00:38:06,240

We've gone back to our motorcycle.

642

00:38:06,240 --> 00:38:07,240

Stop!

643

00:38:08,240 --> 00:38:12,240

So we've gone back to our motorcycle, reconfigured it to the Frenchman's specs,

644

00:38:12,240 --> 00:38:19,240

and now we've come back where this all began at the Alameda runway to see just how drivable this motorcycle might be.

645

00:38:23,240 --> 00:38:28,240

After a double transformation, their Mad Max motorcycle is on the final straight.

646

00:38:29,240 --> 00:38:31,240

But will it be their ticket to ride?

647

00:38:32,240 --> 00:38:33,240

Jamie's up first.

648

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

The bike now feels much, much better, but it's either going to work or it isn't.

649

00:38:38,240 --> 00:38:41,240

Hopefully I can bail out without breaking my legs on it.

650

00:38:42,240 --> 00:38:45,240

With stable steering and a lower center of gravity...

651

00:38:45,240 --> 00:38:46,240

Come on, baby!

652

00:38:49,240 --> 00:38:50,240

Yeah!

653

00:38:50,240 --> 00:38:51,240

Yeah!

654

00:38:52,240 --> 00:38:54,240

This bike should be better balanced.

655

00:38:54,240 --> 00:38:55,240

You feeling good?

656

00:38:56,240 --> 00:38:57,240

No!

657

00:38:57,240 --> 00:39:03,240

But with reverse gear, as its only option, will it go fast enough for a smooth ride?

658

00:39:04,240 --> 00:39:05,240

Here we go!

659

00:39:05,240 --> 00:39:07,240

Three, two, one!

660

00:39:08,240 --> 00:39:09,240

F***!

661

00:39:13,240 --> 00:39:14,240

Ha ha ha!

662

00:39:14,240 --> 00:39:15,240

Woo!

663

00:39:16,240 --> 00:39:17,240

Come on, come on!

664

00:39:25,240 --> 00:39:26,240

Dude!

665

00:39:27,240 --> 00:39:29,240

Well, it was sort of going.

666

00:39:29,240 --> 00:39:30,240

That was going!

667

00:39:30,240 --> 00:39:32,240

But I gotta say, that was...

668

00:39:33,240 --> 00:39:39,240

That was actually a pretty good RPM and it was barely enough to keep it upright.

669

00:39:39,240 --> 00:39:44,240

Well, if that was your only way back to civilization, I would choose this over nothing.

670

00:39:44,240 --> 00:39:46,240

I'm not so sure.

671

00:39:46,240 --> 00:39:53,240

Despite the unstable start, Jamie did travel a hundred feet, twice as far as his previous best.

672

00:39:53,240 --> 00:39:59,240

But with reverse gear providing little in the way of thrust, balance was still a beast.

673

00:40:05,240 --> 00:40:07,240

So it's Adam's final chance.

674

00:40:08,240 --> 00:40:11,240

With the RPM cranked to the very max...

675

00:40:11,240 --> 00:40:13,240

This thing is terrifying!

676

00:40:14,240 --> 00:40:16,240

...will he escape to victory?

677

00:40:16,240 --> 00:40:18,240

Three, two, one!

678

00:40:23,240 --> 00:40:24,240

Ha ha ha!

679

00:40:43,240 --> 00:40:44,240

Wow!

680

00:40:47,240 --> 00:40:50,240

I have ridden a lot of vehicles in my life.

681

00:40:50,240 --> 00:40:54,240

This is hands down the scariest thing I've ever strapped.

682

00:40:54,240 --> 00:40:56,240

Look at it this way.

683

00:40:56,240 --> 00:41:00,240

I'm able to jump free as evidenced by the film we just got.

684

00:41:00,240 --> 00:41:06,240

But if I didn't jump free, if I got any part of me caught under this 600 pounds of steel,

685

00:41:06,240 --> 00:41:09,240

I would be seriously, seriously damaged.

686

00:41:10,240 --> 00:41:12,240

That's the definition of scary.

687

00:41:12,240 --> 00:41:15,240

With a total journey of just 150 feet...

688

00:41:16,240 --> 00:41:19,240

It's not good news for the myth.

689

00:41:19,240 --> 00:41:21,240

This one is so close.

690

00:41:21,240 --> 00:41:24,240

It's right on the knife edge between busted and plausible.

691

00:41:24,240 --> 00:41:26,240

But let's look at some of the parameters.

692

00:41:28,240 --> 00:41:34,240

Every two wheeled vehicle needs a certain amount of forward speed in order to stay at balance.

693

00:41:34,240 --> 00:41:39,240

And this thing, which can only run in reverse gear, remember, because of the way it's mechanically driven.

694

00:41:39,240 --> 00:41:43,240

At full throttle is going at about jogging speed,

695

00:41:43,240 --> 00:41:47,240

which in our tests is just not enough to keep it upright reliably.

696

00:41:49,240 --> 00:41:53,240

Look, Adam and I, between the two of us, we can pretty well drive anything that moves.

697

00:41:53,240 --> 00:42:01,240

But even in a perfectly flat surface like this, in ideal conditions, this thing is undriveable.

698

00:42:05,240 --> 00:42:10,240

Man, I went back and forth on whether this thing was going to be plausible about six different times during that story.

699

00:42:10,240 --> 00:42:13,240

But I think we agree where it ends up.

700

00:42:13,240 --> 00:42:14,240

Yeah, it's busted.

701

00:42:14,240 --> 00:42:15,240

It's totally busted.

702

00:42:15,240 --> 00:42:17,240

Well, see you back at the shop.

703

00:42:17,240 --> 00:42:18,240

Alright.