

# **INTERNATIONAL DIRECTORY OF 3 ½" (89 mm) Gauge, North-American-Prototype Live Steam Locomotives**

## **Part 4: Geared & upright locos**

Issue 26-01,  
06 February 2026

Please send corrections to:  
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angrapa50(at)gmail(dot)com

We currently have **29** entries in this file, 734 total.

## 0-4-0T

040T.Thumb.Friend

Date entry created: 23 December 2017

Plans or castings from: Lester Friend of Friend Models, freelance

Lettering: none

Scale: 1:16

Owner: unknown

Contact: Much more information and castings on the Friends webpage.

Builder: This is the original Friend's Tom Thumb from 1941.

Year completed: ca. 1941

Year acquired by present owner: unknown

History, comments:

The Friends website writes: "Coal fired, vertical boiler. A two-cylinder marine-style engine powers a crankshaft: power to both axles is via gear reduction and a chain drive. Strong enough to pull one adult on a level track. Ideal first-time steamer on which to learn your machining skills." Photo is from this webpage.

Drawings can be found in the 2013-14 issues of Live Steam and Outdoor Railroading.



0-4-0T

040T.Thumb.Friend

Date entry created: 11 April 2018

Plans or castings from: Friend Models, freelance

Lettering: none

Scale: unclear

Owner: unknown, located in Oregon

Contact: Try the US eBay, the user ID is "knotcrap".

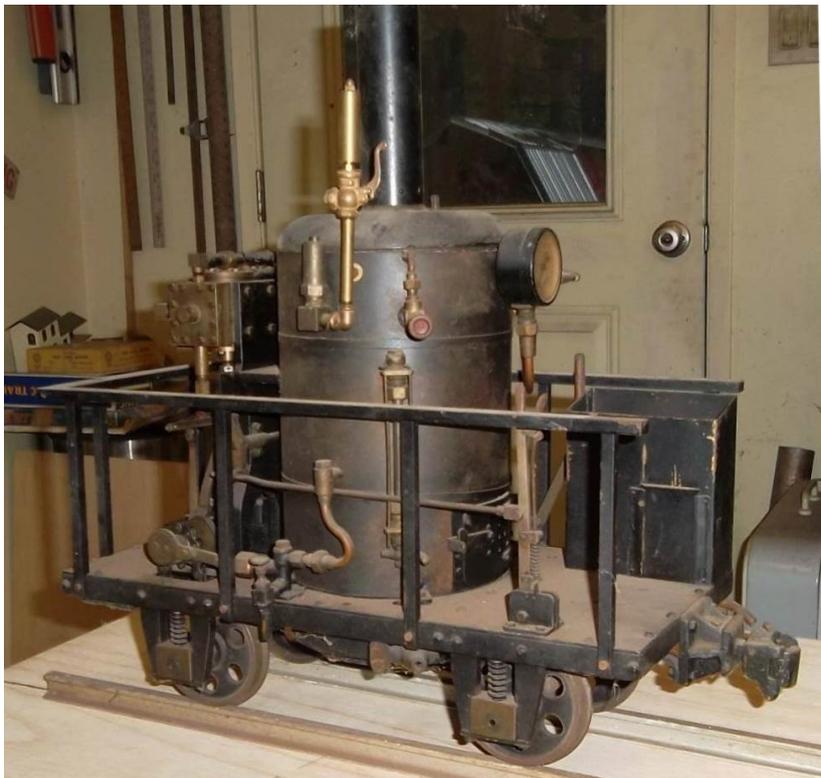
Builder: unknown

Year completed: according to the seller, maybe as early as 1960

Year acquired by present owner: offered for sale on the US eBay in March 2018

History, comments:

Coal-fired, has axle and hand pump. Photo is from eBay.



0-4-0T

040T.Thumb.Hildebrandt

Date entry created: 23 December 2017

Plans or castings from: Lester Friend of Friend Models, freelance

Lettering: none

Scale: 1:16

Owner: unknown

Contact: More information and castings on the Friends webpage

Builder: Bill Hildebrandt

Year completed: unknown

Year acquired by present owner: unknown

History, comments:

This photo on Facebook is probably from the 1960's. Despite the roof, this indeed does appear to be a Friends model. The outside connecting rod appears to be unique.



0-4-0T

040T.Thumb.unknown

Date entry created: 23 January 2025

Plans or castings from: Lester Friend of Friend Models

Lettering: none

Scale: unclear

Owner: Dylan Roming of Philadelphia

Contact: dylancromig(at)gmail(dot)com

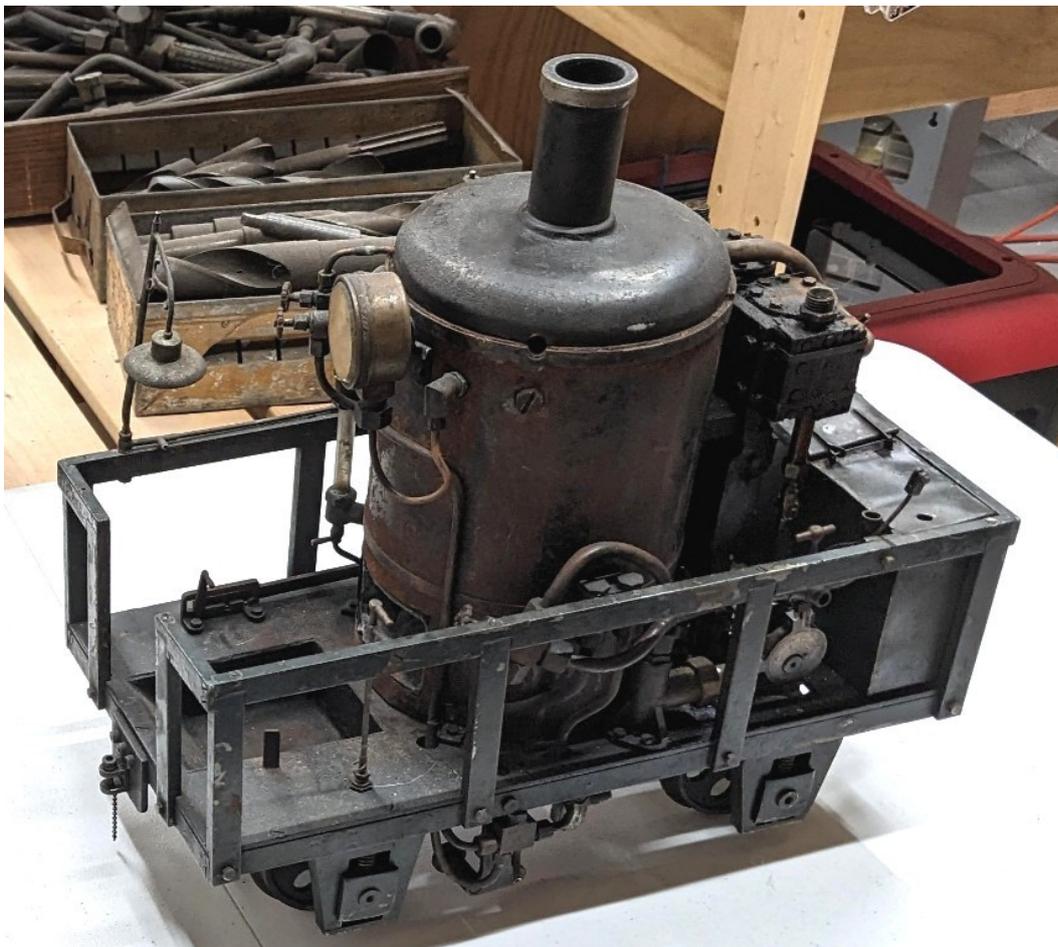
Builder: unknown

Year completed: probably in the 1950's

Year acquired by present owner: 2024

History, comments:

Dylan, an engineering student at Drexil University in Philly, wrote the author on 13 Oct. 2024 and sent him the photo below. He noted that the engine "had been sitting in someone's house for many years". He plans to do a full restoration of the loco.



0-4-0T

040T.Thumb.unknown

Date entry created: 23 December 2017, last revised 2 August 2018

Plans or castings from: freelance

Lettering: none

Scale: unclear

Owner: unknown

Contact: Try John Alexander Stewart, Ottawa ON, via Chaski Live Steam forum. His name there is „snCF141r“.

Builder: unnamed, from Racine WI

Year completed: unknown

Year acquired by present owner: 2017

History, comments:

Offered for sale on the DLS website in Nov. 2017. The loco was obviously then purchased and restored, here she is at the New Jersey LS' Spring 2018 meet posted on the Chaski Live Steam forum on 5 June 2018. The "poster" was apparently John Alexander Stewart. The classified had stated that she was coal-fired and could pump water when running the engine and standing still (so there are steam locos that really can "idle"),



## 0-6-0T

060T.upright.Balmer

Date entry created: 23 Dec. 2017, last revised 27 November 2022

Plans and castings from: freelance

Lettering: JEB Sugar #76

Scale: 1:16

Owner: Chuck Balmer of Urbana OH, member of Cincinnati Cinder Sniffers

Contact: Son Jim Balmer is on Facebook.

Builder: Chuck Balmer of Balmer Locomotive Works. Chuck is building his 5<sup>th</sup> steamer (beside diesels) and has bought at least four more. All are 1:16 – assuming this one also is.

Year completed: 1976, I would guess

History, comments:

Jim Balmer wrote on Facebook on 24 Nov. 2017 that this is a plantation-style engine with a Stuart Twin Launch engine. There are two shots of it at the Northeastern Ohio LS meet in October 1976, published in the "Live Steam" issue of 7-77.



## Two-Truck Climax

2tr-Clim.Kozo.Cushing

Date entry created or revised: 23 November 2015

Plans or castings from: probably Kozo Climax

Lettering: none

Scale: 1:16

Owner: Dick Cushing

Contact: Bob Hornsby in Texas should know more: "bobhornsbye6(at)gmail(dot)com"

Builder: Dick Cushing, member of North East LS

Year completed: since 1989, when Koto published the book

History, comments:

Photo supplied by Bob Hornsby.



Two-Truck Climax

2tr-Clim.Kozo.Hume

Date entry created or revised: 20 September 2015

Plans or castings from: Kozo Climax

Lettering: Hume Industries #3

Scale: 1:16

Owner: Ed Hume, Austin TX

Contact: Chaski Live Steam forum

Builder: Ed Hume

Year completed: after 1989 (that's when Kozo's book was published)

History, comments:

Ed Hume is an ardent follower of Kozo Hiraoka's work. He has built at least all three of the geared locomotives as well as the Pennsy A3! Is that re-gauged LGB-track under the loco? (I like scale track.) Photo from Internet.



2tr-Clim.Kozo.Kozo

Date entry created or revised: 27 September 2015

Plans or castings from: Kozo Climax

Lettering: Hiraoka Lumber Co. #3

Scale: 1:16

Owner: Kozo Hiraoka of Tokyo, Japan

Contact: Try the Kozo Hiraoka support group under the "Discover Live Steam" forums

Builder: Kozo Hiraoka

Year completed: approx. 1988 (Kozo's book was published in 1989)

History, comments:

This is obviously Kozo's initial model built for the book.



Two-Truck Climax

2tr-Clim.Kozo.Shaw

Date entry created: 17 May 2016

Plans or castings from: Kozo Climax

Lettering: Victoria Lumber & Mfg. Co. #7

Scale: 1:16

Owner: Norm Shaw of Victoria BC

Contact: normshaw(at)shaw(dot)ca

Builder: Norm Shaw

Year completed: July 1999

History, comments:

Beautiful work. Here's another one with what must be Kadee or Accucraft couplers.



Bottom photo taken at Victoria, 27 Sept. 2015.



Two-Truck Climax

2tr-Clim.Kozo.unknown

Date entry created: 23 November 2022

Plans or castings from: Kozo Climax

Lettering: none

Scale: 1:16

Owner: unknown, probably in UK

Contact: Try the "Station Road Steam" webpage.

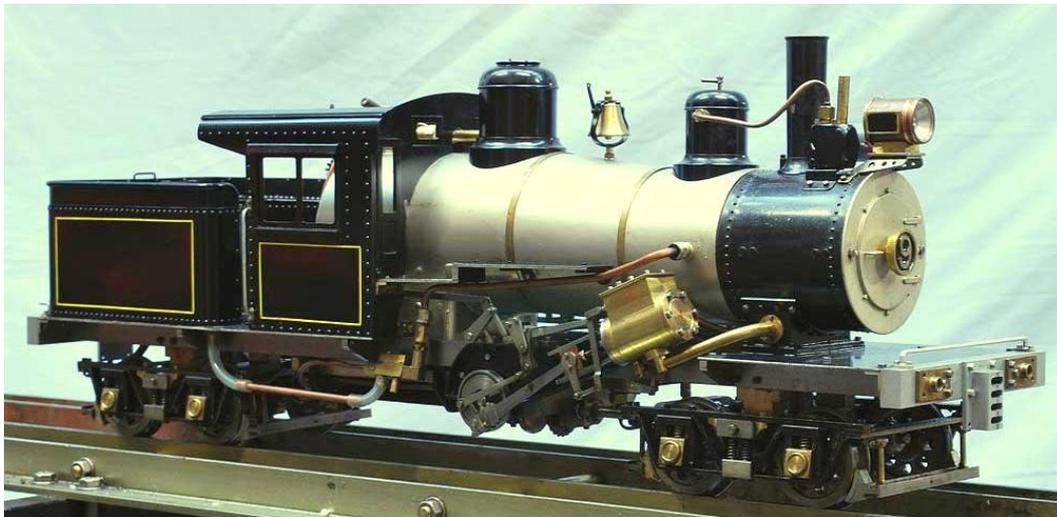
Builder: unknown

Year completed: perhaps around 2000

History, comments:

Photo is from the UK's "Station Road Steam" archives, listed as sold by them in April 2010.

Had previously barely been used.



## Two-Truck Heisler

2tr-Heis.Kozo.Hume

Date entry created or revised: 20 September 2015

Plans or castings from: Kozo Heisler

Lettering: Hume Industries #9

Scale: 1:16

Owner: Ed Hume, Austin TX

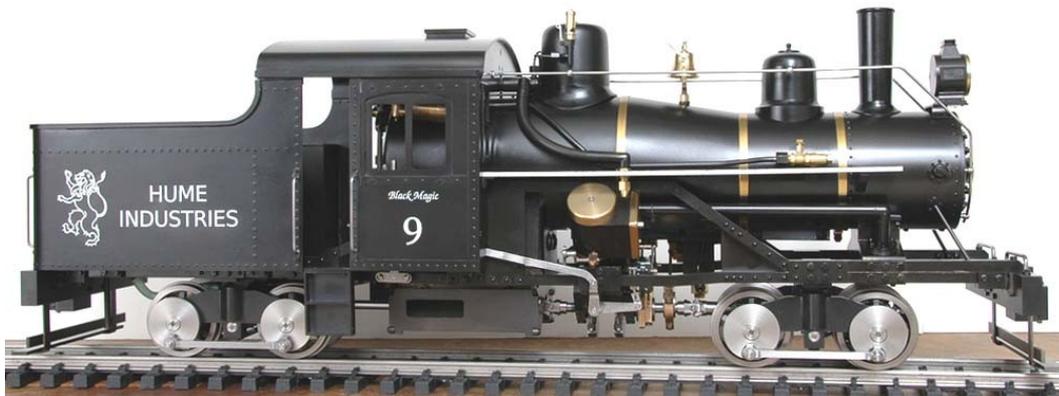
Contact: Chaski Live Steam forum

Builder: Ed Hume

Year completed: after 1986 (that's when Kozo's book was published)

History, comments:

Ed Hume is an ardent follower of Kozo Hiraoka's work. He has built at least all three of the geared locomotives as well as the Pennsy A3! Even Ed's lettering is a work of art.



Two-Truck Heisler

2tr-Heis.Kozo.Kozo

Date entry created or revised: 27 September 2015

Plans or castings from: Kozo Heisler

Lettering: Hiraoka Lumber Co. #5

Scale: 1:16

Owner: Kozo Hiraoka of Tokyo, Japan

Contact: Try the Kozo Hiraoka support group under the "Discover Live Steam" forums

Builder: Kozo Hiraoka

Year completed: approx. 1985 (Kozo's book was published in 1986)

History, comments:

This is Kozo's initial model built for the book.



Two-Truck Heisler

2tr-Heis.Kozo.Maschewitz

Date page created: 24 April 2020

Plans or castings from: apparently from Kozo's Heisler

Lettering: West Side Lumber #3

Scale: Actually 1:16, but the owner says his line is 1:8 for 30"-gauge prototype

Owner: Eric Maschewitz of Foster City CA

Contact: See "Squirrel Mountain Railroad and Mine" on Facebook or "CuriOdyssey.com"

Builder: unknown

Year completed: perhaps 2018

Year acquired by present owner: unknown

History, comments:

Maschewitz says the layout at his home is modelled after Disneyland's 30"-gauge "Big Thunder Mountain" roller-coaster ride. He also has a museum at San Mateo CA. The owner also has at least one more steamer on 3.5"-gauge: see „040T.Krauss.Maschewitz“. His two sites mentioned above are highly-detailed and -creative. In this photo you see a line with outside third-rail!



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created: 11 December 2020

Plans or castings from: Kozo Heisler

Lettering: none

Scale: 1:16

Owner: Graham Liddy from Ireland and the "Dublin Society of Model and Experimental Engineers"

Contact: Graham is on Facebook.

Builder: unknown

Year completed: after 1986 (that's when Kozo's book was published)

History, comments:

Heisler didn't run for years and is being repaired by Liddy. Photo is from his short video on Facebook, 22 Sept. 2020.



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created or revised: 23 November 2015

Plans or castings from: Kozo Heisler

Lettering: R & S Lumber Co. #2

Scale: 1:16

Owner: unknown

Contact: try Mike Massee at "mm(at)mikemassee(dot)com"

Builder: unknown

Year completed: after 1986 (that's when Kozo's book was published)

History, comments:

Photo taken at Los Angeles LS, 25 May 2013 and copyrighted by Mike Massee



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created: 24 May 2020, updated 30 January 2025

Plans or castings from: Kozo Heisler

Lettering: Walden Ridge Lumber Co. #3

Scale: 1:16

Owner: Offered for sale on "Discover Live Steam" in April 2020 and again at the end of 2024.

Loco now located in Ellicott City MD.

Contact: The DLS classifieds are on the Internet.

Builder: unknown

Year completed: after 1986 (that's when Kozo's book was published)

History, comments:

Photo is from "Discover Live Steam".



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created: 01 October 2017

Plans or castings from: Kozo Heisler

Lettering: East Coast Railway Co. Ltd. #5

Scale: 1:16

Owner: seller located in Hazlebrook/ NSW, Australia

Contact: I would try the Australia live steam clubs via the Internet.

Builder: unknown

Year completed: after 1986 (that's when Kozo's book was published)

History, comments:

Offered for sale on Facebook on 6 Sept. 2017. For what it's worth: The asking price was \$4,500. Has injector, and axle pump plus a fresh four-year boiler ticket.



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created: 23 December 2017

Plans or castings from: Kozo Heisler

Lettering: #33

Scale: 1:16

Owner: offered for sale by the builder's children on British eBay, Nov. 2017

Contact: UK eBay

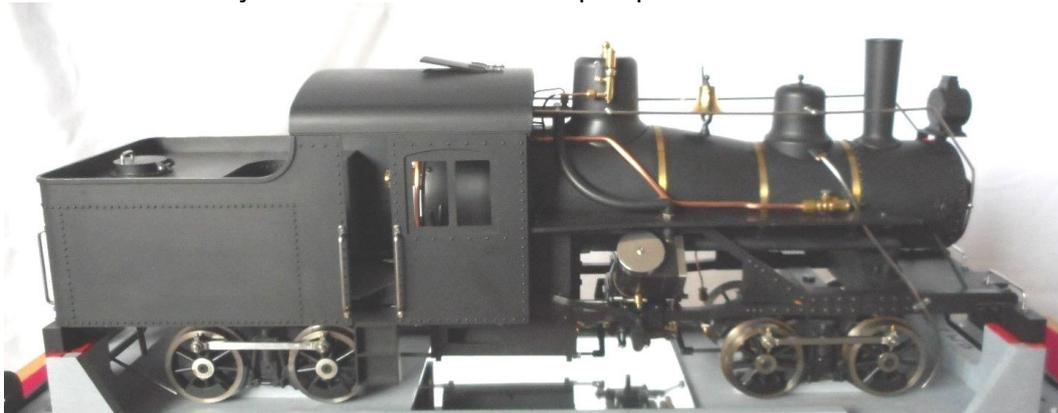
Builder: deceased builder in UK

Year completed: after 1986 (that's when Kozo's book was published)

History, comments:

The builder's offspring wrote on eBay: "The only factory made parts are the rivets and ball bearings which given more time we're sure he would have made these, too. All his other models won prizes in the annual Model Engineers exhibition, but he was unable to enter this lovely loco before he sadly passed away."

"It runs on coal or wood. It was last steamed 20 years ago before his passing and has since sat in its display case. It's fitted with an axle-driven water pump and has a hand pump for when stationary. It has an axle-driven oil pump for lubrication.



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created: 12 October 2018

Plans or castings from: Kozo Heisler

Lettering: #40

Scale: 1:16

Owner: Offered for sale by "beltranracingdeals26" on eBay USA in Sept. 2018. Loco located in Whittier CA.

Contact: eBay USA

Builder: unknown

Year completed: after 1986 (that's when Kozo's book was published)

History, comments:

Photo used on eBay.



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created: 21 December 2019

Plans or castings from: Kozo Heisler

Lettering: none as of 2019

Scale: 1:16

Owner: Offered for sale by "ewightmans2i2u" on eBay USA in Aug. 2019. Loco located in Arcada CA.

Contact: eBay USA

Builder: unknown

Year completed: built approx. 2014-19

History, comments:

Ad states that the loco is 95% complete.



Two-Truck Heisler

2tr-Heis.Kozo.unknown

Date entry created: 17 December 2021

Plans or castings from: Kozo Heisler

Lettering: none as of 2021

Scale: 1:16

Owner: Unknown. Advertised on the "Station Road Steam" website in UK in Jan. 2016.

Contact: Try the "Station Road Steam" website in UK.

Builder: unknown, a dentist in the UK

Year completed: perhaps around 2010

Year acquired by present owner: unsold as of 12-2021

History, comments:

Station Road Steam states they are selling the engine now for a second time. Is nearly complete, probably never run.



## Two-Truck Shay

2tr-Shay.Kozo.Kozo

Date entry created: 11 December 2020

Plans or castings from: Kozo original Shay

Lettering: San Pedro Lumber Co. #1

Scale: 1:16

Owner: Unknown. Sold by the dealer "Berrybrooks Steam and Classics" of Exeter/UK in 2020

Contact: "www.berrybrooksteam.co.uk"

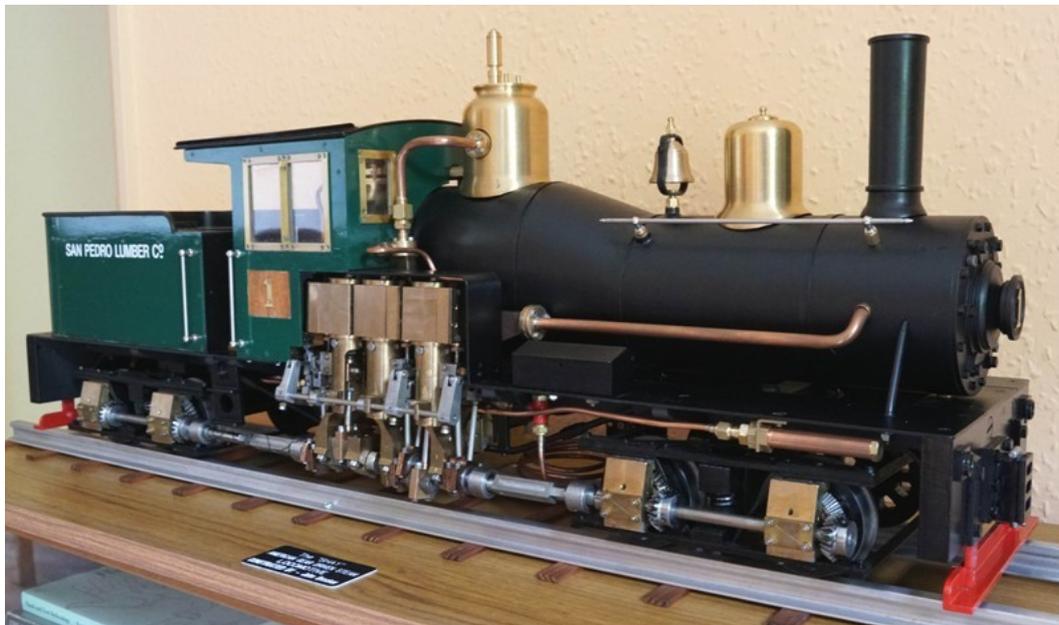
Builder: John Brooker in the UK

Year completed: 2001

Year acquired by present owner: 2020

History, comments:

Dealer says loco never operated, but could do so.



## Two-Truck Shay

2tr-Shay.Kozo.Kozo

Date entry created or revised: 10 April 2016

Plans or castings from: Kozo original Shay

Lettering: Hiraoka Lumber Co. #1

Scale: 1:16

Owner: Kozo Hiraoka of Tokyo, Japan

Contact: Try the Kozo Hiraoka support group under the "Discover Live Steam" forums

Builder: Kozo Hiraoka (born 1937 in Hiroshima)

Year completed: approx. 1981 (Kozo's book was published in 1982.)

### History, comments:

I believe this is the first geared locomotive Kozo built and also described in a book. This photo is used in advertising.



## Two-Truck Shay

2tr-Shay.Kozo.Stewart

Date entry created: 12 January 2017, last revised 25 December 2017

Plans or castings from: Kozo original Shay

Lettering: none as of 12-17

Scale: 1:16

Owner: John Alexander Stewart, Ottawa ON

Contact: Chaski Live Steam forum

Builder: Alex Stewart

Year completed: 2017

### History, comments:

Loco published on the 3/4" live steam Facebook page, 13 Dec. 2017. Alex then wrote: "Decals on order, painting is almost done. Injector cones need making, other than that, machining is finished."

He had written in an initial entry on this page on 30 Nov. 2016: "This is Kozo's first design with some adaptations: "hydrostatic" lubricator, and on the fireman's side, an injector. The lubricator goes on the running board in front of the engine, disguised as an air tank."



Two-Truck Shay

2tr-Shay.Kozo.unknown

Date entry created: 2 August 2018, last revised 16 Sept. 2018

Plans or castings from: Kozo original Shay

Lettering: Oregon Lumber Co. #2

Scale: 1:16

Owner: Offered for sale on the "www.antiqusteam.com" webpage in UK.

Contact: See the above webpage

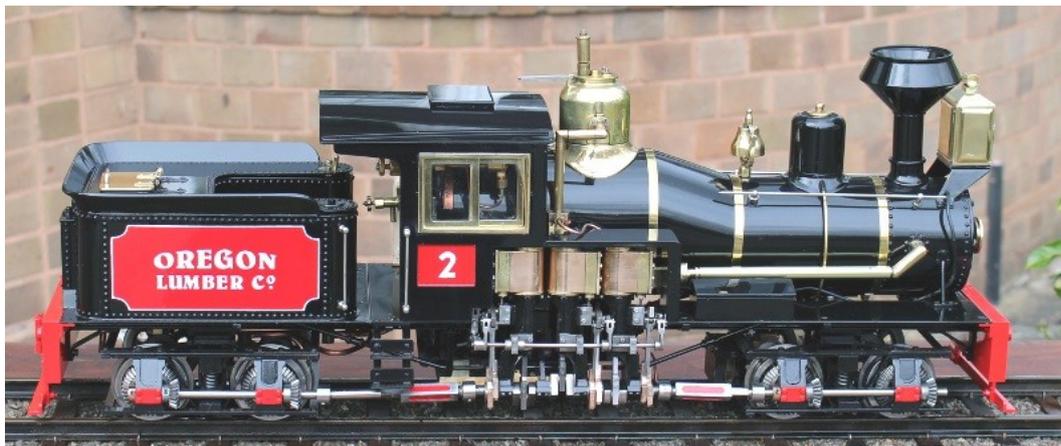
Builder: unknown

Year completed: before 1993 (Kozo's book was published in 1982)

Year acquired by present owner: unknown

History, comments:

Offered for sale at least June-September 2018. Item located in Birmingham UK. The builder is not named. Had gotten a "Certificate of Merit" at a modelling competition in 1993. Not run recently, but has a current boiler certificate. Has injector and tender handpump.



Two-Truck Shay

2tr-Shay.Kozo.unknown

Date entry created: 17 May 2020

Plans or castings from: Kozo original Shay

Lettering: San Pedro Lumber Lumber Co. #1

Scale: 1:16

Owner: Oliver Berrybrook of southwestern England

Contact: ollie(at)berrybrook(dot)co(dot)UK

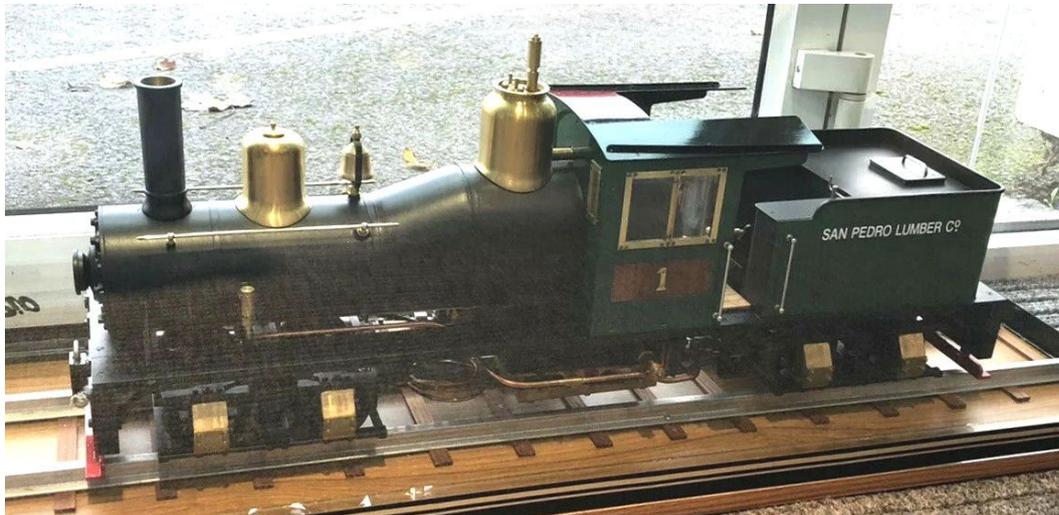
Builder: unknown

Year completed: unknown (Kozo's book was published in 1982)

Year acquired by present owner: unknown

History, comments:

Offered for sale by Berrybrook on UK-eBay as of 16 December 2019.



## Three-Truck Shay

3tr-Shay.Kozo.Barker

Date entry created: 09 October 2015, last revised 16 May 2017

Plans or castings from: Kozo New Shay

Lettering: none on photo

Scale: 1:16

Owner: Dave Barker, Bow NH. Belongs to Waushakum LS, Holliston MA.

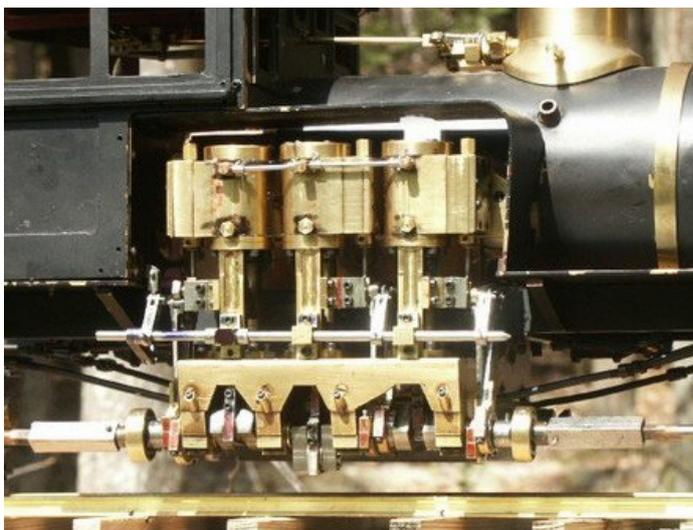
Contact: „bowwowdd(at)twc(dot)com

Builder: Dave Barker

Year completed: Begun 2009, completed 2016

History, comments:

Run on air in 2015. Dave notes in comments on Facebook that Kozo's book on the New Shay is in metric.



## Three-Truck Shay

3tr-Shay.Kozo.Hume

Date entry created or revised: 20 September 2015

Plans or castings from: Kozo New Shay

Lettering: Hume Industries #7

Scale: 1:16

Owner: Ed Hume, Austin TX

Contact: Chaski Live Steam forum

Builder: Ed Hume

Year completed: after 2007 (that's when Kozo's book was published)

History, comments:

This one may be Ed Hume's newest creation, since the New Shay was Kozo's last book before the Rio Grande 2-8-2. Note the small couplers: They must be from Kadee or Accucraft.

