

# LocoGear

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## **Technical Bulletin - 13**

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**Drawings Known to be Available at the Allen County Historical Society and the California State Railroad Museum**

for the

### **Pacific Coast Shay**

#### **Class 3-PC-13**

*Shop Number 3320, Construction Order Number 478 (#2)  
 built for stock 4/19/1928*

*This Shay operated by the following companies:*

**Mayo Lumber Company #4, 1928-1943**

**Lake Logging Company #5, 1943-1946**

**Western Forest Industries #5, 1946-1964**

**Railway Appliance Research Ltd. #114, 1964-1970**

**Cass Scenic Railroad #2, 1970-Present**

The Lima Locomotive Works built twenty four **Pacific Coast Shays** between 1927 and 1940. The S/N 3320 has been chosen as a representative of these elite Shays because of two factors. First, it is a surviving Shay. It is presently in active service on the Cass Scenic Railroad. Second, it is the only Shay to have been equipped during various stages of its life to burn wood, oil, and coal as fuels.

For those live steam model builders wanting to build any of the other **Pacific Coast**

**Shays**, most of the Lima prototype drawings listed in this **LocoGear Technical Bulletin** and all of the **Pacific Coast Shay** castings available from **LocoGear** can be used to build a successful live steam model.

Fortunately for the live steam model builder, many of the original drawings used to build the S/N 3320 were saved from destruction and are available from either the California State Railroad Museum (CSRM) or the Allen County Historical Society (ACHS). Although

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## Contact Information for ACHS and CSRM

Allen County Historical Society  
620 West Market Street  
Lima, OH 45801  
(419) 222-9426

California State Railroad Museum Library  
111 I Street  
Sacramento, CA 95814  
(916) 323-8073

the combined drawing collections of both museums pertaining to **S/N 3320** are incomplete, nearly all of the major drawings are available.

The CSRM Library's collection includes over 60,000 original drawings for many of the locomotives built by the Lima Locomotive Works, not just the Shays. The CSRM Library reading room is open to the public Tuesday through Saturday from 1:00 to 5:00 p.m. The CSRM Library also has an extensive collection of books, manuscripts, photographs and papers pertaining to all aspects of railroad history. The CSRM Library's collections do not circulate.

The ACHS also has an extensive collection of Lima Locomotive Works related materials including drawings and builder photos. Their drawing collection includes those formerly available from George Kadelak, and portions of the P.E. Percy collection from Jim Mengals.

To order copies of drawings from either museum, you should first contact them and obtain their drawing order form and discuss their fees. For those drawings held by CSRM, the file storage number if known is indicated in this listing and will aid when ordering the drawings from CSRM.

On the following pages are listed 373 drawings for **S/N 3320** that are known to be available from each museum. However, it is not necessary to obtain every drawing listed here to build a live steam model of **S/N 3320**. On page 3 is a list of drawings recommended to be a basic set to build a live steam model of **S/N 3320**. A number of drawings with scale dimensions are also available from **LocoGear** and are listed in the *LocoGear Technical Bulletin - 07*.

The Lima Locomotive Works built the **S/N 3320** for stock in 1928 along with three other Pacific Coast Shays under the same Construction Order Number 478. Nearly all of the drawings are identical for these three Pacific Coast Shays. The **S/N 3320** was the second Shay built in that order.

The other two Shays were **S/N 3319** and **S/N 3322**.

The **S/N 3320** was built for stock and then sold to the Mayo Lumber Company of Paldi, BC and operated by them as #4 until February, 1943. It was then sold to the Lake Logging Company located at Cowichan Lake, BC and operated by them as #5 until December 1946. It was then sold to Western Forest Industries at Honeymoon Bay, BC where it continued as #5 until January 1964. At that time Railway Appliance Research Ltd. of North Vancouver, BC acquired it and leased out to Vancouver Wharves, Ltd. Where it was operated as #114 until October 2, 1970 when it was sold to the Cass Scenic Railroad at Cass, WV where it was changed to #2. The **S/N 3320** is still operational at Cass.

The **S/N 3319** was built for stock by Lima on May 5, 1928 and then sold to the Cascade Timber Company in Selleck, Washington where it was operated as #109. On October 6, 1941 it was sold to the St. Paul & Tacoma Lumber Company in Ohop, Washington where it operated as #12. It was later sold to Bloedel, Stewart & Welch Ltd. in Franklin River, BC and renumbered #29. Canadian Forest Products of Englewood, BC then owned it and initially kept its #29, but later changed it to #118. It Scrapped in March, 1961.

The **S/N 3322** was built for the Polson Logging Company in Hoquiam, Washington on October 1, 1928 and operated as #91. Polson was later sold to Rayonier Inc., which retained the #91 until 1958 when it sold it to the Feather River Railway of Feather Falls, California, for parts. It never operated for the Feather River Railway as the boiler was condemned by the State of California when it arrived. It was soon scrapped.

## ***Recommended Basic Set of Drawings***

Under construction at this time.

DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
3413	Tire #13				7/9/01	9 x 12	ACHS/CSRSM	4 2.2
4157	Stack, Diamond 16in				3/12/02	18 x 24	ACHS	
5471	Reverse Lever Shaft Stand				1/16/12	18 x 24	ACHS/CSRSM	4 2.4
7203	Cyl. Head Casing			Several	2/19/35	18 x 24	ACHS/CSRSM	4 2.5
7514	Piston Rod			652-A-5172	No Date		CSRSM	4 2.5
7721	Valve Stem Packing Stuffing Box Gland				4/5/06		CSRSM	4 2.5
7758	Piston Rod Stuffing Box Studs		Old Card		10/16/13	18 x 24	ACHS/CSRSM	4 2.7
7759	Spring Washers		Old Card	Several	1/7/15	18 x 24	ACHS/CSRSM	4 2.5
8006	Valve Stem Keys				7/28/49	18 x 24	ACHS/CSRSM	4 2.5
8340	Tumbling Shaft Coupling				11/12/12		CSRSM	4 2.5
8509	Eccentric Blade Bolts				1/10/07	18 x 24	ACHS	
8511	Link Saddle Bolts				1/11/07	18 x 24	ACHS	
8512	Link Block Pin				10/16/07		CSRSM	4 2.5
8513	Link Hanger Pins		Old Card	Several	3/24/15	18 x 24	ACHS	
8824	Gear Keys		Old Card		10/25/29	18 x 24	ACHS/CSRSM	4 2.5
8956	Connecting Rod Wedge Bolts				1/17/31	6 x 8	ACHS/CSRSM	4 2.5
8957	Connecting Rod Wedge (Top)				2/5/09	6 x 6	ACHS/CSRSM	4 2.5
8959	Connecting Rod Wedge (Bottom)				2/2/29		CSRSM	4 2.5
8964	Connecting Rod Key				2/8/09	6 x 6	ACHS	
8976	Connecting Rods				3/20/14		CSRSM	4 2.5
9060	Horn Coupling Key				10/26/15		CSRSM	4 3.1
10003	Generator Bracket Pyle Electric Headlight				8/13/06	12 x 18	ACHS	
10010	Hand Rail Brackets				11/6/11	9 x 12	ACHS	
10153	King Bolts				12/16/14	9 x 12	ACHS	53-10
11301	Hose Brackets				8/29/04	12 x 18	ACHS	
11305	Syphon Pipe Flange				2/28/10	9 x 12	ACHS	
11329	Syphon Hose Nipple				8/31/15	9 x 12	ACHS	
11464	Steam Gauge Nipple				12/14/11	9 x 12	ACHS	
11632	Boiler Tube Setting				12/2/14	18 x 24	ACHS	
11721	Crown Bolt		Old Card			9 x 12	ACHS	
11745	Radial Stay Bolt 1.125in.		Old Card		12/22/14	9 x 12	ACHS	
12227	Flue Sand Box				1/27/13	9 x 12	ACHS/CSRSM	4 3.3
12511	Bell				6/27/12		CSRSM	4 3.3
12512	Bell Yoke				7/9/12		CSRSM	4 3.3
12726	Fire Door Oil 16x20 Opening		Old Card		5/24/16	18 x 24	ACHS/CSRSM	4 3.3
13002	Smoke Box Brace Pins				12/21/14	9 x 12	ACHS/CSRSM	4 3.4

DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
13003	Smoke Box Brace Washer				12/21/14		CSRM	4 3.4
13007	Frame Smoke Box Brace Pad				7/22/29		CSRM	4 3.4
15142	Hose Strainer Body & Cap 4in Syphon				8/29/06	12 x 18	ACHS/CSRM	4 3.5 82-24/25
15704	Counterbalance Weight & Yoke				5/4/14		CSRM	5 1.1 74-632/633
15728	Counter Balance & Strap					12 x 18	ACHS	
15729	Counter Balance & Yoke					12 x 18	ACHS	
103-A-5045	Oil Pan	103-A-5035		103-A-5048	6/7/27	18 x 24	ACHS	
103-AB-5046	Ash Pan Coal & Wood Fuel	103-B-5022			7/21/28	18 x 24	ACHS	
112-A-5015	Axle				8/28/19	12 x 18	ACHS	
122-A-5003	Bell Frame For 100 Lbs. Bell	12544	12544		1/28/21	12 x 18	ACHS	
122-A-5005	Bell 100 Lbs.	12535			3/2/21	12 x 18	ACHS	
122-A-5006	Bell Tongue For 100 Lbs. Bell	12535			3/2/21	12 x 18	ACHS	
139-AE-5011	Boiler 50.125 E.W.T.					26 x 65	ACHS	
143-A-5037	Mud Ring	143-A-5007			6/14/27	18 x 24	ACHS	14-248
182-A-5015	Bottom Bracket Bearing Wedge		8706s3		1/10/20	12 x 18	ACHS	
182-AB-5106	Air Gauge Bracket				10/14/25	12 x 18	ACHS	
182-AC-5075	Steam Bracket Brace		8733		3/22/21	12 x 18	ACHS	
182-AD-5029	Bottom Bracket Caps		8717s6		1/13/21	12 x 18	ACHS	18-32
182-AE-5041	Bottom Bracket Bearing (Bottom)		Several		1/25/21	12 x 18	ACHS	18-66
182-AF-5036	Bottom Bracket Bearing (Top)		Several		1/25/21	12 x 18	ACHS	18-67
187-A-5012	Bottom Bracket				5/9/29		CSRM	1 1.2 18-475
187-AB-5015	Bottom Bracket	187-A-5012			3/12/31	24 x 42	ACHS	
202-A-5097	Brake Cylinder Head					12 x 18	ACHS	
202-A-5163	Brake Beam Fulcrum		9801s8		4/10/22	12 x 18	ACHS	20-87
202-AB-5169	Brake Push Rod	D-4868	202-A-5123		5/16/22	12 x 18	ACHS	
202-AH-5021	Air Pump Bracket		Old Card		1/18/24	12 x 18	ACHS	20-614
203-AF-5008	Brake Head	9868	9868		2/22/21	18 x 24	ACHS	
212-A-5002	Push Pole Pocket		10339		1/10/21	12 x 18	ACHS	21-7
213-A-5057	End Timber Arrgt. Tender	213-A-5018			7/28/27	18 x 24	ACHS	
223-AB-5036	Cab (Steel Side)		Old Card	223-A-5037	12/21/27	18 x 24	ACHS	
282-A-5030	Cylinder Cock Rod				8/9/27	12 x 18	ACHS	
302-A-5058	Crosshead Pin	Several	7812s6		6/15/25	12 x 18	ACHS	
313-A-5011	Cylinder Frame Support				7/13/27	18 x 24	CSRM	1 1.4 31-259
314-AB-5014	Cylinder Frame	313-A-5001			5/2/27	24 x 30	ACHS	31-258
314-AB-5015	Cylinder 13x15 (Piston Valve)		Old Card		6/4/27	24 x 30	ACHS	31-260
322-A-5052	Cylinder Head		7201s6		4/6/22	12 x 18	ACHS	
322-A-5062	Steam Chest Head Top				5/6/27	12 x 18	ACHS	32-528

DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
322-A-5063	Steam Chest Head Bottom				5/6/27	12 x 18	ACHS	32-529
322-A-5064	Piston Valve Bushing				5/9/27	12 x 18	ACHS	32-533
322-A-5065	Steam Chest Casing				7/13/27	12 x 18	ACHS	
360-D-51	Method Of Constructing Dome Casing					9 x 12	ACHS	
363-A-5017	Dome Casing				7/10/28	18 x 24	CSRM	1 1.5
372-A-5063	Drawhead				8/1/24	12 x 18	ACHS	
372-A-5073	Coupler Knuckle				11/16/25	12 x 18	ACHS	
372-A-5083	Safety Bar Pin & Key				7/4/27	12 x 18	ACHS	
372-AR-5000	Coupler Knuckle					12 x 18	ACHS	
373-AD-5003	Coupler		5631		12/3/18	18 x 24	ACHS	
373-AN-5007	Draft Gear Frame (Front)		Old Card		10/21/33	18 x 24	ACHS/CSRM	1 1.5 37-320
373-B-5007	Draft Gear Frame (Front)				10/31/23	18 x 24	CSRM	1 1.5 37-321
373-A-5024	Draft Gear Frame (Rear)				7/15/27	18 x 24	CSRM	1 1.5 37-405/406
392-A-5029	Eccentric Strap				4/21/21	12 x 18	CSRM	1 1.5 39-34/35
392-AB-5084	Eccentric Rod				4/20/21	12 x 18	CSRM	1 1.5
392-A-5097	Eccentric				7/13/27	12 x 18	CSRM	1 1.5 39-393/394/396
393-AM-5000	Eccentric Blade Pin	8510			4/5/22	18 x 24	ACHS	
420-AD-5003	Erecting Elevation Engine & Tender				7/24/27	26 x 84	ACHS/CSRM	101 9.3
420-D-1	Pressure Plate Frame					9 x 12	ACHS	
420-D-449	Test Plate Lima Locomotive Works Inc.					9 x 12	ACHS	
437-AC-5001	Sections Front & Backhead				8/26/27	24 x 42	ACHS	
442-A-5096	Exhaust Drop Pipe	442-A-5030			6/18/27	12 x 18	ACHS	44-693
442-A-5098	Exhaust Flange				7/18/27	12 x 18	ACHS	44-697
442-AB-5095	Exhaust Pipe Elbow				6/20/27	12 x 18	ACHS	44-694
442-AB-5097	Exhaust Pipe Elbow				6/20/27	12 x 18	ACHS	44-694
442-AK-5061	Exhaust Nozzles		A-12809		2/7/21	12 x 18	ACHS	44-636
443-AB-5002	Exhaust Pipe Arrgt.				6/22/27	18 x 24	ACHS	44-695/696
453-A-5008	Fire Door Reflector					18 x 24	ACHS	45-135
453-A-5018	Fire Brick Arrgt.	453-A-5010-11		453-A-5021	8/2/27	18 x 24	ACHS	
482-A-5149	Furnace Bearer Plate				9/9/22	12 x 18	ACHS	
482-AB-5098	Boiler Saddle		10612		2/3/21	12 x 18	ACHS	48-90-91
482-AB-5133	Boiler Bearer Rear				11/15/21	12 x 18	ACHS	48-662
482-AB-5134	Boiler Bearer Fill Block				11/15/21	12 x 18	ACHS	48-663
482-AB-5198	Frame Spreader Brace				8/22/27	12 x 18	ACHS	48-712
482-AJ-5088	Center Palte		9638s4		12/20/20	12 x 18	ACHS	48-684
483-A-5059	Boiler Support Front	483-A-5044			5/25/27	18 x 24	ACHS	48-664

DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
483-A-5060	Frame End Casting (Engine)				7/12/27	18 x 24	ACHS	
488-AB-5054	Eng. Frame Layout Girder Also Used For 70-3 Shays	487-A-5051			1/11/28	26 x 60	ACHS/CSRM	102 3.3
513-A-5012	Grate Arrgt.	513-A-5005			7/23/28	18 x 24	ACHS	
522-A-5141	Grate Side Rail		11820		7/21/28	12 x 18	ACHS	52-1882/1883
522-AB-5041	Grate Bar		11873s3		2/2/21	12 x 18	ACHS	52-1884
532-A-8	Cab Step on Truck				5/28/18		CSRM	53-158
532-A-5083	Cab Step & Brace (Left)	523-A-5062			7/29/27	12 x 18	ACHS	
532-AB-5064	Cab Handle	523-A-5062			11/27/23	12 x 18	ACHS	
532-AC-5076	Cab Step & Brace (Right)				9/3/25	12 x 18	ACHS	
532-AD-5084	Cab Handle				12/15/27	12 x 18	ACHS	
532-AJ-5034	Hand Rail Post & Details		11420		1/19/21	12 x 18	ACHS	53-3/4/5
532-AJ-5071	Cab Handle	523-A-5062			3/4/25	12 x 18	ACHS	
542-A-5019	Headlight Bracket	5353s11			7/29/27	12 x 18	ACHS	
542-A-5021	Patent Plate (Shay)	542-A-5017		542-A-5023	9/6/27	12 x 18	ACHS	54-532
542-A-82	Builders Plate (Diamond)				10/5/20	12 x 18	ACHS/CSRM	1 2.5
542-FW-398	Ext. Handle Name Plate				9/11/26	12 x 18	CSRM	1 2.5
542-AB-5009	Number Plate 16in.		A-12972s2		8/15/21	12 x 18	ACHS	54-6
542-AD-5020	Valve Handles Name Plate in Cab	542-A-398			7/29/27	12 x 18	ACHS	54-514
553-A-5001	Feed Hose Connection 2 1/2 inch Hose		3820		1/21/21	18 x 24	ACHS	55-68/69/70
572-A-46	Jacket Clip				6/7/23	12 x 18	ACHS/CSRM	57-28
572-A-6	Plug Casing				9/18/18	12 x 18	ACHS/CSRM	57-4
572-B-80	Pressure Plate Frame				3/4/27	12 x 18	CSRM	57-60
572-AB-5004	Jacket Eye Bolt				3/2/20	12 x 18	ACHS	
572-AB-5012	Cylinder Hood				4/10/28	12 x 18	ACHS	
582-A-5015	Link Plates & Blocks		8116		1/13/21	12 x 18	ACHS	
582-A-5025	Link Hanger		8122s5		2/25/21	12 x 18	ACHS	
583-A-5001	Link				1/10/21	18 x 24	CSRM	58-7
592-A-5004	Oil Can Shelf		11422		2/14/21	12 x 18	ACHS	59-120
592-A-5006	Bottom Bracket Oil Cup		Several		2/7/21	12 x 18	ACHS	59-48/49
592-A-5007	Grease Cup		7154		3/18/21	12 x 18	ACHS	59-50/51/52
592-A-5032	Manzel Pump Support				5/25/28	12 x 18	ACHS	
592-AD-5025	Connecting Rod Grease Plug				1/15/23	12 x 18	ACHS	
592-AD-5030	Oil Pump Connection & Pin				1/11/26	12 x 18	ACHS	
592-AD-5031	Lubricator Bracket				3/28/28	12 x 18	ACHS	
602-A-5045	Quadrant Bracket	602-A-5002			7/25/27	12 x 18	ACHS	
602-A-5046	Damper Regulator Handle	602-A-5013			7/27/28	12 x 18	ACHS	60-18

DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
602-A-5047	Damper Regulator Quadrant	602-A-5019			8/27/28	12 x 18	ACHS	
602-A-5048	Damper Regulator Latch	602-A-5015			7/27/28	12 x 18	ACHS	
602-A-5049	Oil & Damper Regulator Arrg't.	602-A-5026	Old Card		7/29/27	12 x 18	ACHS	
602-A-5051	Oil Regulator Shaft Bracket				6/5/28	12 x 18	ACHS	
602-A-5054	Oil Burner 3in.				12/16/31	12 x 18	ACHS	
602-A-5056	Pipe Clamp				1/14/42	12 x 18	ACHS	
602-A-5057	Lever Connection				4/6/42	12 x 18	ACHS	
602-AB-5052	Oil Regulator Shaft Hanger				6/21/29	12 x 18	ACHS	
602-AD-5050	Oil Cock Shaft	Several			12/14/27	12 x 18	ACHS	
602-AE-5053	Oil Burner Turret		C-11881		7/2/29	12 x 18	ACHS	
603-A-5032	Oil Burner Arrg't.	603-A-5028			7/5/27	18 x 24	ACHS/CSRM	2 1.5
603-B-5031	Oil Heater				6/27/27	18 x 24	CSRM	2 1.5
632-A-5009	Air Pump Exhaust Drain Oil Burning Locos				5/1/28	12 x 18	ACHS	
632-AB-5004	Blower Elbow		187		1/14/21	12 x 18	ACHS	63-6
632-AB-5007	Steam Gauge Union Fitting	632-A-5005			3/5/23	12 x 18	ACHS	
632-AC-5005	Cylinder Oil Pipe Fitting		7138		11/3/21	12 x 18	ACHS	
640-A-5003	Piping Arrg't Engine & Tender					36 x 105	ACHS	
642-A-5003	Super Heater Damper Cylinder Piping Arrg't	642-A-28			2/23/26	12 x 18	ACHS	
652-A-5057	Packing Stuffing Box		7767		2/17/21	12 x 18	ACHS	65-260
652-A-5172	Piston Rod					12 x 18	ACHS	
652-A-5177	Piston Valve Bull Ring 6in					12 x 18	ACHS	
652-A-5178	Piston Valve Spider 6in					12 x 18	ACHS	
652-A-5179	Piston Valve Spacer 6in					12 x 18	ACHS	
652-AB-5000	Piston Head	7518			6/3/18	12 x 18	ACHS	65-247
652-AB-5063	Stuffing Box Cap		Several		2/19/21	12 x 18	ACHS	65-84
652-AB-5089	Packing Swab Cup		7735s6&8		2/28/21	12 x 18	ACHS	65-30
652-AC-5070	Piston Head 6in.		7521			12 x 18	ACHS	
652-AV-5154	Packing Rings		Several		11/14/23	12 x 18	ACHS	
653-K-5000	Piston Packing Rings				No Date	18 x 24	CSRM	2 1.5
662-AD-5007	Washout Plugs 1.5in.		A-11431		3/21/21	12 x 18	ACHS	66-7
662-AD-5010	Plugs	662-A-5007	11417 Old Cd		12/3/29	12 x 18	ACHS	66-267
662-AL-5000	Fusible Plugs		11449		1/14/19	12 x 18	ACHS	66-116
682-D-173	Reverse Lever Handle				No Date	12 x 18	CSRM	2 1.4
682-AB-5039	Reverse Lever Details		3294		10/18/23	12 x 18	ACHS	
682-AC-5043	Quadrant Plate				7/16/27	12 x 18	ACHS	
682-AF-5042	Reverse Lever Shaft		682-A-5006&9		6/23/25	12 x 18	ACHS	
683-A-5012	Reverse Lever Arrg't.	683-A-50??			7/15/27	18 x 24	ACHS/CSRM	2 1.5



DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
692-A-5056	Universal Ball Coupling		8340			12 x 18	ACHS	69-58
692-AB-5028	Thumbling Shaft Box		8212		5/26/21	18 x 24	ACHS	
692-AB-5029	Tumbling Shaft Box Cap		Several		5/26/21	12 x 18	ACHS	69-9
692-AD-5052	Tumbling Shaft		692-A-5019		6/22/25	12 x 18	ACHS	
712-A-5020	Running Board Bracket				7/30/27	12 x 18	ACHS	
712-A-5022	Running Board Bracket	712-A-5034			8/23/27	12 x 18	ACHS	
712-A-5024	Running Board Bracket				9/16/27	12 x 18	ACHS	
712-A-5055	Running Board Bracket	712-A-5022			12/15/27	12 x 18	ACHS	
712-AB-5021	Running Board Bracket	713-D-5017			8/6/27	12 x 18	ACHS	
712-AB-5023	Running Board Bracket				8/25/27	12 x 18	ACHS	
717-A-5029	Running Board Filler Plate Tender				7/28/27		CSRM	2 3.3
717-A-5031	Running Board Engine				10/12/27		CSRM	2 3.3
722-AC-5059	Connecting Rod Brass (Crosshead End)		8927s15		1/31/21	12 x 18	ACHS	72-29
722-AF-5072	Connecting Rod Brass		8977s1		1/25/21	12 x 18	ACHS	72-73
732-A-5002	Air Sander				2/4/19	12 x 18	ACHS	73-93
732-A-5022	Sand Box Valve		Several		2/11/21	12 x 18	ACHS	73-4
732-A-5024	Back Sand Box Top & Lid		12249		2/14/21	12 x 18	ACHS	73-314
732-A-5025	Back Sand Box Base Air Only		12207		3/1/21	12 x 18	ACHS	73-5
732-A-5027	Sand Box Rod Handle		12208		3/2/21	12 x 18	ACHS	73-6
732-A-5033	Sand Funnel & Scoop		11863		10/4/22	12 x 18	ACHS	
732-AB-5004	Sand Box Lever	194	194		1/20/20	12 x 18	ACHS	73-20
732-AH-5032	Back Sand Box (Rear)		732-A-5013		9/26/22	12 x 18	ACHS	
733-A-5002	Sand Box Base				10/16/19	18 x 24	CSRM	2 3.1
733-AD-5013	Sand Box Base (Front)					18 x 24	ACHS	
733-AK-5000	Sand Box (Front)				9/8/20	18 x 24	ACHS/CSRM	2 3.1
742-A-5389	Coupling Ring Grease Plug					12 x 18	ACHS	
742-AB-5001	Line Shaft Coupling				7/5/18	12 x 18	ACHS/CSRM	2 2.4
742-AB-5002	Horn Coupling				7/5/18	12 x 18	ACHS/CSRM	2 2.4
742-AB-5038	Coupling Ring Oil Cellar (16 Inch)				3/18/19	12 x 18	ACHS	
742-AC-5034	Coupling Ring Oil Cellar (14 Inch)				3/10/19	12 x 18	ACHS	
742-AC-5310	Square Shaft Sleeve (5 Inch)		4978		7/2/24	12 x 18	ACHS	74-641
742-AC-5344	Pinon #28	742-A-5015			7/15/27	12 x 18	ACHS	74-893
742-AD-5267	Crankshaft Coupling					12 x 18	ACHS	
742-AE-5039	Coupling Ring Bushing (16 Inch)	4907			3/8/19	12 x 18	ACHS	74-508
742-AH-5084	Line Shaft Bearing Plate				9/16/19	12 x 18	ACHS	

DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
742-AJ-5092	Line Shaft Collar				10/29/19	12 x 18	ACHS	74-776
742-AK-5110	Square Shaft Sleeve (4 inch)		Several		12/31/19	12 x 18	ACHS	74-315
742-AL-5003	Square Shaft(5 inch)				7/20/18	12 x 18	ACHS/CSRM 2 2.4	
742-AM-5097	Line Shaft Bearing		Old Card		12/12/19	12 x 18	ACHS	74-786
742-AN-5273	Line Shaft Coupling					12 x 18	ACHS	
742-AU-5254	Gear Rim Stud		Several		4/10/22	12 x 18	ACHS	
742-AY-5035	Coupling Ring Bushing (14 Inch)	4836			3/11/19	12 x 18	ACHS/CSRM 2 2.4	74-19
742-AY-5147	Line Shaft Washer		742-AV-5050		11/10/20	12 x 18	ACHS	74-142
742-AZ-5250	Square Shaft (4 inch)				3/15/22	12 x 18	ACHS	
743-A-5011	Coupling Ring				2/17/20	18 x 24	CSRM	2 3.1
743-A-5077	Gear Rim #28	Several			7/15/27	18 x 24	ACHS	74-892
743-A-5078	Line Shaft	743-A-5069			7/19/28	18 x 24	ACHS/CSRM 2 3.1	
743-AD-5010	Coupling Rings (# 14 & # 15)		Several		4/4/24	18 x 24	ACHS	74-16/17
745-A-5000	Crankshaft #82				6/18/18	12 x 42	ACHS	
752-A-79	Superheater Deflector Handle				1/15/24	12 x 18	CSRM	2 2.4
752-A-5044	Cinder Pocket Lid		A-12600		1/27/20	12 x 18	ACHS	75-53
752-A-5050	Stack Base Ring 16in		12667		2/1/21	12 x 18	ACHS	75-60
752-A-5054	Cleaning Hole Flange		12911		3/24/21	12 x 18	ACHS	75-61
752-A-5055	Cleaning Hole Cover		12911		3/23/21	12 x 18	ACHS	75-66
752-A-5079	Smoke Box Front Details		A-12952		12/1/23	12 x 18	ACHS	75-25/26/455
752-A-5090	Smoke Stack Cone 16in. R&H		12665		12/16/25	12 x 18	ACHS	75-87
752-A-5101	Smoke Box Liner Bracket		752-A-5004			12 x 18	ACHS	
752-AC-5023	Stack Cast Iron Taper (12 inch)		12660 s2		12/20/20	12 x 18	ACHS	75-28
752-AC-5047	Smoke Box Brace Pad		13014		1/31/21	12 x 18	ACHS	75-10
752-AD-5051	Cinder Pocket		12631		5/27/21	12 x 18	ACHS	75-55
752-AF-5075	Smoke Stack Saddle		12668		11/2/22	12 x 18	ACHS	75-67
753-A-5037	Smoke Stack				7/21/28	18 x 24	CSRM	2 3.2
762-A-5010	Truck Bolster Spring				10/26/27	12 x 18	ACHS	
762-AD-5003	Truck Bolster Spring				7/13/21	12 x 18	ACHS	
782-A-5011	Safety Valve Turret Flange				9/21/27	12 x 18	ACHS	78-361
782-A-5012	Safety Valve Turret Casing				9/30/27	12 x 18	ACHS	
782-A-5013	Safety Valve Elbow	782-A-5008			12/20/27	12 x 18	ACHS	78-252-C
782-AB-5005	Steam Turret Details		A-11422		1/29/21	12 x 18	ACHS	78-3/4 27-14
782-AB-5008	Safety Valve & Whistle Elbow				2/15/24	12 x 18	ACHS	
792-A-5015	Steam Pipe Elbow				12/23/19	12 x 18	ACHS	
792-A-5029	Steam Pipe Joint Ring	Several			7/23/20	12 x 18	ACHS	
792-A-5061	Steam Pipe Elbow				6/7/27	12 x 18	ACHS	79-901
792-A-5062	Steam Pipe Elbow				6/7/27	12 x 18	ACHS	79-900
792-A-5064	Steam Pipe Elbow	792-A-5015			9/21/27	12 x 18	ACHS	79-909

DRAWING NUMBER	DESCRIPTION	REFERENCE	SUPERCEDES	SUPERCEDED BY	DATE	SIZE	Location	Pattern Number
792-A-5065	Steam Pipe Flange	Several			9/21/27	12 x 18	ACHS	
792-AB-5009	Steam Pipe Slip Joint	B-12169			7/2/19	12 x 18	ACHS	79-552
792-AC-5008	Steam Pipe Casing		Old Card		7/10/22	12 x 18	ACHS	
792-AC-5019	Steam Pipe				4/12/20	12 x 18	ACHS	
792-AC-5063	Steam Pipe Elbow				6/7/27	12 x 18	ACHS	79-901
792-AY-5042	Steam Pipe Joint Ring				3/28/21	12 x 18	ACHS	79-662
792-AY-5053	Steam Pipe Joint Ring	792-A-5029			10/4/22	12 x 18	ACHS	
793-A-5008	Slip Joint				6/22/27	18 x 24	CSRM	2 3.2
812-A-44	Tube Clamp				4/6/21	12 x 18	ACHS	
812-A-47	Tube Bands				4/7/21	12 x 18	ACHS	
812-A-49	Pipe Support				4/7/21	12 x 18	ACHS	
812-AB-51	Superheater Deflector Clamp				4/11/21	12 x 18	CSRM	3 1.1
812-A-5003	Header	L.S.Co.Prt.			7/24/19	12 x 18	ACHS	
812-AK-5012	Header Support		A-12968		10/6/22	12 x 18	ACHS	
813-B-5011	Smoke Box Arrangement				3/11/26	18 x 24	CSRM	3 1.3
822-A-5000	Syphon (4 Inch)	11331			9/7/18	12 x 18	ACHS	82-30/83
822-AB-5033	Syphon Bracket	822-A-5030			12/28/27	12 x 18	ACHS	
822-AF-5029	Oil Tank Valve		A-15163		10/20/26	12 x 18	ACHS	82-53
823-A-5006	Water Tank Valve				4/7/21	18 x 24	CSRM	82- 14/15/16/17/18/1 9/20/21/22/23
832-A-5000	Fuel Bunk Rack	A-19154			10/30/22	12 x 18	ACHS	
833-D-5007	Fule Bunker				10/1/27	18 x 24	CSRM	3 1.3
852-A-5001	Frame Center Plate	852-A-4			7/14/27	12 x 18	ACHS	85-109
853-A-5005	Frame End Casting				7/20/27	18 x 24	CSRM	85-110
857-A-5003	Frame Side Bearings				7/26/27		CSRM	3 1.5
882-A-5019	Oil Heater Pipe Bushing				10/17/25	12 x 18	ACHS	
882-AF-5018	Tank Funnel & Details		5091		9/23/25	12 x 18	ACHS	
882-AN-5020	Tank Ladder		A-15102		2/20/26	12 x 18	ACHS	
883-AH-5047	Oil Tank (1200 Gallon)	Several			5/2/23	18 x 24	ACHS/CSRM	3 1.4
883-AP-5017	Water Tank (Box)	A-15174	Old Card		9/30/25	18 x 24	ACHS	
912-A-5011	Dry Pipe Elbow				7/2/19	12 x 18	ACHS	91-370
912-A-5012	Dry Pipe Ring				7/3/19	12 x 18	ACHS	91-371
912-A-5058	Throttle Bell Crank		B-12143		10/7/21	12 x 18	ACHS	
912-A-5064	Dry Pipe Support				6/24/22	12 x 18	ACHS	
912-A-5079	Throttle Valve		Several		6/4/24	12 x 18	ACHS	91-7
912-A-5088	Throttle Stuffing Box & Gland		3839		7/17/25	12 x 18	ACHS	91-152
912-AB-5050	Throttle Stuffing Box & Gland		12144s2		1/22/21	12 x 18	ACHS	91-14/15
912-AC-5013	Throttle Case	B-12174			7/11/19	12 x 18	ACHS	91-476-A

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912-AC-5015	Dry Pipe				7/12/19	12 x 18	ACHS	
912-AP-5052	Throttle Stem		B-12181		2/15/21	12 x 18	ACHS	
913-AF-5018	Throttle Lever		12135		2/15/21	18 x 24	ACHS	
914-A-5014	Throttle Pipe Support				7/19/27		CSRM	3 3.2
923-A-5000	Wrecking Frogs (Inside)				6/27/21	18 x 24	CSRM	3 2.5
923-A-5001	Wrecking Frogs (Outside)				6/27/21	18 x 24	CSRM	3 2.5
923-A-5004	Tool Equipment				3/4/29	18 x 24	CSRM	3 2.5
923-A-5007	Tool Box				1/4/28	18 x 24	CSRM	3 2.5
923-A-5105	Truck Box Cap Right				12/11/19	12 x 18	ACHS	93-615
923-A-5107	Trk. Bolster End Separator				12/12/19	12 x 18	ACHS	93-616
923-A-5260	Gear Cover Bracket Guide				1/25/21	12 x 18	ACHS	
923-A-5370	Cross Tie Bar Bottom		970714		6/24/21	12 x 18	ACHS	
923-A-5559	Thrust Plate Wedge	932-A-5530			8/1/29	12 x 18	ACHS	
923-A-5619	Equalizer	932-C-5203			3/16/31	12 x 18	ACHS	
923-AB-5147	Trk. Inside Box	9334s1			4/14/20	12 x 18	ACHS	93-290
923-AB-5250	Truck Side Bearing Base	5509			1/11/21	12 x 18	ACHS	93-6
923-AB-5320	Trk. Pedestal Cap		Several		3/13/21	12 x 18	ACHS	93-342
923-AB-5433	Trk Gear Cover (Cast Steel Trk.)		Old Card		2/21/23	12 x 18	ACHS	
923-AB-5434	Trk Gear Cover (Cast Steel Trk.)		Old Card		2/20/23	12 x 18	ACHS	
923-AB-5480	Trk. Inside Box Cap		9338g1		4/15/26	12 x 18	ACHS	93-98
923-AC-5187	Tie Bar Bottom Left				6/26/20	12 x 18	ACHS	
923-AD-5128	Cross Tie Bar Top		Old Card		2/23/20	12 x 18	ACHS	
923-AD-5186	Tie Bar Bottom Right	932-E-5106			6/25/20	12 x 18	ACHS	
923-AD-5408	Gear Cover Bracket				3/9/22	12 x 18	ACHS	
923-AE-5415	Truck Center Plate		Several		4/1/27	12 x 18	ACHS	93-133
923-AF-5150	Cross Tie Bar Top		932-A-5000		4/20/20	12 x 18	ACHS	93-612
923-AH-5446	Trk. Inside Box Shims (Cast Steel)				8/23/23	12 x 18	ACHS	
923-AJ-5079	Truck Journal Brass		Several		12/19/25	12 x 18	ACHS	93-121
923-AJ-5276	Cross Tie Bar		Several		2/12/21	12 x 18	ACHS	
923-AL-5481	Thrust Plate		Several		4/30/26	12 x 18	ACHS	93-138
923-AM-5404	Truck Side Bearing Block				3/8/22	12 x 18	ACHS	93-135
923-AW-5178	Trk. Safety Chain		Old Card		12/12/24	12 x 18	ACHS	
933-AB-5035	Truck Pedstal Left (Cast Steel)		Old Card		9/2/25	18 x 24	ACHS/CSRM	3 2.5
933-AC-5033	Truck Frame Right (Cast Steel)		Old Card		12/6/19	18 x 24	ACHS	93-608
933-AC-5034	Truck Frame Left (Cast Steel)		Old Card		12/6/19	18 x 24	ACHS	93-609
933-AF-5036	Truck Box Right (Cast Steel)				8/22/22	18 x 24	ACHS	93-615
933-AH-5037	Truck Bolster				4/11/24	18 x 24	ACHS	
938-AD-5002	Truck Plan (Cast Steel)		Old Card		7/28/27	25 x 59	ACHS/CSRM	103 6.2

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942-A-5033	Valve Stem Crosshead Guide & Plate		8007s2		2/1/21	12 x 18	ACHS	94-11
942-AB-5043	Valve Stem Crosshead		8000s4		2/11/21	12 x 18	ACHS	94-4
942-AB-5087	Piston Valve Stem				7/21/27	12 x 18	ACHS/CSRM 3 2.3	
943-A-5004	Piston Valve				3/23/27	18 x 24	CSRM 3 2.5	
953-A-Y-5019	Driving Wheel Center		9932		1/13/21	18 x 24	ACHS	95-358
962-A-5010	Whistle Lever		A-11428		3/21/21	12 x 18	ACHS	
962-A-5021	Whistle Elbow	962-B-91			7/6/28	12 x 18	ACHS	96-206
A-9548	Truck Bolster Spring Centers	333			4/1/15		ACHS/CSRM	93-53
A-10415	Draw Gear Frame Separator				8/1/12		CSRM 4 3.2	37-92
A-10454	Draw Gear Yoke Followers				11/24/13		CSRM 4 3.2	
A-10457	Draw Gear Pin & Sliding Bar				7/14/14		CSRM 4 3.2	37-94/95
A-10471	Draw Gear Friction Plate				4/19/15		CSRM 4 3.2	37-89
A-11149	Whistle Details				6/4/14	9 x 12	ACHS	
A-11406	Hand Rail Columns		Old Card		3/11/15	9 x 12	ACHS	53-8
A-11424	Ball Joint Rings	11400			11/14/16	9 x 12	ACHS	
A-11426	Arr'g't. Of Everlasting Blow Off Cock	11493			1/14/17	9 x 12	ACHS	
A-11848	Grate Dead Plates				3/11/10	18 x 24	ACHS	52-322/323
A-12964	Smoke Box Front				9/8/16		CSRM 4 3.3	
A-12969	Number Plate Stud				1/17/16		CSRM 4 3.3	
A-15130	Tank Measuring Rod Details				9/30/12		CSRM 5 1.1	82-132/133
A-15136	Tank Measuring Rod				1/27/13		CSRM 5 1.1	
A-15139	Tank Lug				8/14/29	12 x 18	ACHS/CSRM 5 1.1	
A-15147	Tank Valve Stems				12/15/13	9 x 12	ACHS/CSRM 5 1.1	
A-15156	Wood Fuel Rack				11/29/13	9 x 12	ACHS/CSRM 5 1.1	
A-15171	Tank Valve Stuffing Box Details				1/11/15		CSRM 5 1.1	82-58/59/60
A-15194	Fule Bunker Rack				No Date		CSRM 5 1.1	
A-16118	Frame Tender					18 x 24	ACHS	
B-11138	Name Plate				2/13/17	9 x 12	ACHS	54-4
B-15108	Oil Tank Funnel Details				8/21/16		CSRM 5 1.2	
B-15113	Tank Valve Lever				3/19/17		CSRM 5 1.2	
B-15115	Tank Valve Stem				5/3/17		CSRM 5 1.2	
C-11881	Oil Burning Turret		602-A-5023		10/30/12	12 x 18	ACHS	60-3
D-3106	Standard Boiler Seams					18 x 24	ACHS	
D-3108	Boiler Standards					12 x 18	ACHS	
D-3109	Standard Allowances					12 x 18	ACHS	
D-3110	Standard Method Of Ordering Boiler Steel					12 x 18	ACHS	

