LOCOMOTIVE DIAGRAMS S.P.& S.RY.

By:- Paul T. Hobbs © 2011

A compiled, all-time diagram book, containing Spokane, Portland & Seattle Railway Steam, Electric and Diesel locomotive diagrams, during the period 1908 - 1970.



Spokane, Portland & Seattle Locomotives

By Paul T. Hobbs

The Spokane, Portland and Seattle Railway and its subsidiaries operated a small but unusual fleet of locomotives. The steam fleet included a significant number of hand-me-down engines from both parent companies, Great Northern Railway and Northern Pacific Railway. Usually receiving similar locomotives from each parent, the SP&S had a disproportionally high number of models among its fleet. Great Northern locomotives had characteristic Belpaire fire boxes and New York air pumps; Northern Pacific favored radial fireboxes and Westinghouse pumps. Another source of locomotives was the fleets acquired with the Columbia River & Northern Railway – two well-used 4-4-0s; and the Astoria & Columbia River Railroad – nine of 0-6-0, 4-4-0, 4-6-0 and 2-8-0 wheel arrangements. Indeed the entire group of 4-4-0s were acquired with merged railroads.

In his report of April 20, 1908 to Francis B. Clarke, President of the SP&S, the General Superintendent noted the locomotives on the railway and their service. At the time the line between Lyle and Vancouver was still under construction.

NP 749 and 706	Trains 1 and 2 – Lyle to Pasco
GN 539 and 561	Local freights
SP&S 3	between Avery and Granddalles removing sand drifts
NP 516	between Stevenson and Cascades hauling riprap
SP&S 2	Wind Mountain Pit loading riprap
NP 737	between Stevenson and Cascades, bridge work
GN 304	between Stevenson and Camas picking up contractors'
	material
GN 563	ballasting Cliffs yard
NP 531	loading steel and hauling gravel for Cliffs yard
SP&S 1	Avery Pit loading gravel
NP 594	loading gravel at Vancouver yard
NP 497	unloading gravel at Vancouver yard
NP 790	on Goldendale Branch mixed train
GN 512	tied up as Cliffs account broken flange on pony trucks.

The railroad operated in the earliest decade, 1908 – 1920, with a fleet of relatively small locomotives. The business was not particularly large, and the track profile was easy enough that worthwhile trains could be run. Budget requests for 1910 included 7 Pacifics, 10 Consolidations, and 3 switchers, none of which made the parent managements' cut! Similar wish-lists were denied in following years.

There was significant local passenger business. The number of train sets, many of them locals of but 2 cars, in use in 1916 likely required at least 14 locomotives per day. The Portland to Spokane trains may have needed a locomotive change enroute, adding to the requirements.

The railroad owned 4-6-0s and 4-4-2s for passenger service, 2-6-2s for fast freight, 2-8-0s as drag freight power, along with samplings of 4-4-0s and 2-6-0s, plus husky 0-6-0s in switching service at major yards. The two 2-6-0s were owned successively to operate passenger and mixed trains on the light track of the Goldendale Branch.

Subsidiary Oregon Electric had a number of electric motors for freight service. From 1941 they built five large 4-truck units out of salvaged equipment from retired passenger cars, which helped during the high traffic period of World War II – only to be retired soon after, along with the overhead.

In the mid 1920s the growing logging traffic from the forests West of Portland and along the Oregon Electric required additional locomotives. Elderly 2-8-0s came from the parent lines, along with modern 2-8-2s, classes that had been serving GN and NP for more than a decade. The 2-8-2s took over mainline freight tasks, allowing the existing manifest freight 2-8-0s to be reassigned to the branch lines. Following the Great Northern's example, several 4-6-0s were rebuilt from 1927 into powerful 4-6-2s to haul the increasingly heavy passenger trains.

An equipment survey of May 8, 1933, a Depression year, showed that many locomotives were in storage, some serviceable, others not.

The A Classes with 4 in service switching Portland and Vancouver.

The D Classes – D-1 and D-5 were stored unserviceable, the D-5 recommended for dismantling. Five in other sub-classes were in service, mostly on Astoria line passenger trains.

The M-2 was in switching service at St. Helens. Eight of the N classes, six being N-2, were in freight service. Three of the F-1 were in service on Vancouver – Wishram – Oregon Trunk. Four of the O Classes were in mainline freight. Three each of the C-1 and H-1 were in Main Line passenger service.

In all the 142 steam locomotives included 76 from Great Northern (6 rebuilt later to different wheel arrangement and road numbers); 50 from Northern Pacific, some being the largest and most modern on the road. The GN and NP had very different locomotive policies. The GN bought its last new steam power in 1930, rebuilding in their own shops many obsolete engines into powerful later classes. The NP bought large modern steam power from the builders through 1944, including locomotives for the SP&S roster.

The Diesel era started during World War II with a number of Baldwin and Alco Switchers. In 1945 the transition to dieselization of road power commenced with six RS-1 road-switchers. Four were delivered to the Oregon Electric as replacement for the electric locomotives. This allowed the overhead and electrification facilities to be retired. The dominant locomotive was American Locomotive Company's products, where many others purchased Electro-Motive. The SP&S owned 143 Diesels, of 20 models, by three builders.

It is interesting to review parent line budget comparisons for SP&S in the years 1926 to 1930. The entire equipment budget, locomotives, cars, buses, was just 17% of the total. Tracks, bridges and ballast were much larger expenses of the business.

ADVANCES IN TECHNOLOGY

The steam locomotive was a well proven machine which had evolved steadily for 80-years before the SP&S was opened in 1908. Trailing trucks on the newest designs provided for larger fireboxes and improved steaming qualities. The latest

power featured superheaters, which further raised the temperature and dried saturated steam from the boiler. The hotter steam required good lubrication of the valves, which also had to withstand higher pressures. The superheater made ever larger locomotives practical. The feedwater heater, warming the water before it was injected into the boiler, further led to the Super Power era of the late 1920s. The next development was the Timken Roller Bearing. It was extremely rugged and reliable, with much reduced friction.

The pinnacle of steam on the SP&S was the three 4-8-4s and eight 4-6-6-4s. These few examples of Super Power allowed the retirement of many older locomotives, with power to spare.

The SP&S' first diesels of 1940, like other roads a few years before them, were switchers. They quickly demonstrated their efficiency. After World War II a succession of orders followed requisitions detailing the savings to be made and operational improvements to be achieved with the purchases recommended. Freight operations were dieselized East of Vancouver, and passenger trains except Trains 3-4. The last holdouts of steam were the logging lines West of Portland. By the time of the last diesel orders, replacing steam, there was little discussion of the merits of the acquisitions. Delivery of the F-7As 803 - 806 in June 1953 completed dieselization of the passenger trains, and RS-3s 79 – 82 allowed the last steam freight power to be sidelined.

Several steam locomotives were held in operational reserve at the request of the Government. The last of them were scrapped in 1960.

It wasn't just the locomotives that brought efficiencies. Entire elements of infrastructure were no longer required. Water towers and their pumps were retired. Routine servicing was much simpler for the Diesel, eliminating much overnight shop work, and the jobs of night watchmen and hostlers, particularly at outlying stations. The Diesel could be switched off until it was next required.

The more powerful second generation of diesels arrived in 1964 with the ALCO Century 424, also introducing the broad-band paint scheme, followed by C-425s, C-636s and C-415s through 1969.

OTHER LOCOMOTIVES ON SP&S

Parent lines were a regular source of temporary additional power requirements. Some locomotives, like in 1924, stayed long enough to be purchased outright.

When the Great Northern's Klamath Division was completed from Bend to Bieber in 1931, along with the Western Pacific's Northern Extension from Keddie to Bieber, the GN needed SP&S to bring cars from Spokane to Bend. Augmenting SP&S power on the Oregon Trunk were GN owned 2-8-2s and Mallets.

Soon after the Z-6 4-6-6-4's were delivered, two of them, 903 and 904, were sold to GN as 4000 and 4001. This was to provide equalization power for the Great Northern traffic to Bend. Occasionally they might operate on GN lines out of Spokane, but their usual service was with their compatriots on the SP&S. The 904 was repurchased in 1946, the 903 when the equalization agreement was terminated in 1950.

On the 3rd District, between Pasco and Spokane, the Northern Pacific routinely operated their own freight trains Eastward over the easier grades of the SP&S line.

The Oregon Trunk line was shared with the Union Pacific's Deschutes Railway. Over time the parallel tracks were consolidated into one line operated jointly by both companies. The UP ran passenger trains on daytime schedules with 4-6-0s until they were replaced by buses in 1931. Freight trains originating at The Dalles were powered by 2-8-0s and 2-8-2s. When the Diesel arrived the UP operated a succession of GP units – to this day.

Logging companies used SP&S track from time to time between their woods lines and sawmills.

LOCOMOTIVE FACILITIES

The SP&S's major shop facility was at Vancouver. Initially it was capable of servicing and light repairs, heavy work being handled at Northern Pacific's South Tacoma Shops, or Great Northern's Hillyard Shops in Spokane. The facility was upgraded in stages to handle Class repairs. At times locomotives were sent to parent line facilities when capacity was strained. Complete Diesel shops were installed in the 1940s.

The Oregon Electric had shops in Portland. The electric locomotives and interurban cars were maintained there.

Fuel was available at Astoria, Albany, Portland, Vancouver, Lyle, Wishram, Metolius, Bend, Pasco, Washtucna (coal – for NP), Lamont (coal and oil), Spokane. Fuel oil was distributed to outlying terminals from the Shell facility at Linnton in company owned tank cars. Twenty new tank cars distributed Diesel from the late 1940s. In 1945 the old coal dock, built in 1908, at Lamont was replaced with a second-hand from GN, Ogle 250-ton capacity coal chute.

Water was provided at 50 locations, averaging 15 to 25 miles apart.

Turntables were situated at most terminals, except Seaside where a wye allowed the entire passenger train to be turned. Occasionally the table needed replacement as longer locomotives were assigned. An 85 ft. powered turntable, second-hand from Great Northern, was installed at Astoria in 1927 to replace a 65 ft. Armstrong model. When the 4-8-4s were introduced in 1938 they were swapped out at Vancouver and Pacifics used into Portland until the turntable there was replaced with a longer unit.

When the Nehalem Boom was constructed at Rafton in the early 1920s an engine house was installed. Unfortunately the company could not persuade any crews to live locally. So, the locomotives deadheaded out from Portland to start their work day hauling empty log cars back into the woods.

TENDERS

Many railroads use separate number systems for their tenders. Both GN and NP used specific class numbers for their tenders, with road number the same as original assigned locomotive. The SP&S used the same number for its tenders as the original locomotive, without separate class numbers. The railroad swapped tenders among the locomotives as the assignment capacity warranted. Some tenders had their capacity increased by lengthening the body.

As older locomotives were retired their tenders were frequently assigned as water and fuel cars for outfit service. Sometimes the tank was placed on a flat car and the balance of the tender scrapped.

There were several programs that increased tender capacities. The object was to reduce the number of water stops, and potential break-in-twos, on long trains.

The 1923 budget called for three 10,000 gallon six-wheel truck tenders to operate behind Mikado type locomotives on the third district [Pasco to Spokane], to replace existing 8,000 gallon tanks. Like many items wished for, it was eliminated.

The rebuilt 100 series 4-6-0s were returned from 1927 as 620 series H-1 Pacifics with large tenders.

In 1929 the 454, 455, 456 and 457 tenders were increased from 8000 gallons to 10,000 gallons.

The SP&S bought six 8000 gallon tenders in January 1930 to replace small and worn out existing tenders on their N-1 class 2-8-0s. It is curious that this class was just 3 locomotives.

It seems that tenders were designed to provide for three fills of water to one fill of fuel oil.

WORLD WAR II

Assignments of some of the locomotives in February and March 1942 is provided in day-sheets by the fuel filler crews at Vancouver, from the collection of Skip Caswell. The daily shifts left interesting notes to each other, one concerned about another's toothache – until the offending molar was removed. Locomotive departures and their trains are compiled from nearly 2-months of sheets.

Train 2 departed with the 700 and 702 on alternate days. Train 1 was taken to Portland daily by the 625. Train 3 was usually powered by the 603, 605, 608 in rotation, with an occasional trip by Pacific 621. Train 275 was usually powered by a Mikado (500 series), sometimes Pacific (620 series), even a Prairie (450 series), occasionally the 701.

Train 273 was either a Pacific or Prairie, sometimes Mikado.

A train called Extra East rated a variety, even to a 900, occasionally a GN locomotive. Sometimes two locomotives are listed. Whether that was a double-headed train or two departures is unknown.

The fuel rack routinely serviced two GN Mikados off freight trains from Seattle.

The fuel crew recorded the movements of the tank cars, most days 2 cars, SP&S and occasionally GN, were emptied on the "hill".

World War II brought a tremendous increase in traffic. New Diesel switchers and a large group of second-hand parent 2-8-2s, of classes already on the system, added much needed power. With numerous experienced employees away in the military – some with railway operating and construction battalions, there were many new hires. Several accidents were attributed to the traffic volume and inexperienced employees.

At the peak of the war movements Trains 1-2 usually ran in 2 sections, the Pasco section with cars for Northern Pacific's North Coast Limited, the other section continuing to Spokane with cars for the Great Northern Empire Builder.

When ordered in July 1943 the 2 Z-8 locomotives were expected to replace 4 Mikados on the 3rd District. Business had increased 50% since the war started. The 2-8-2s were to be reassigned on the 1st District.

In 1944 and 1945 many of the N-2 2-8-0s were rebuilt with superheaters and piston valves, giving them 30% greater tonnage capabilities, while offering 35% decrease in fuel consumption. This allowed fewer trains to carry the logging business off the United Railways, Albany and the Santiam branch to Rafton, and freight on the Astoria line. The N-2 was the most powerful of the 2-8-0 fleet, while light enough to operate over certain bridges.

A review of the freight traffic from 1940 through 1944 showed SP&S freight train miles had grown from 697,258 in 1940 to 1,216,990 in 1944; locomotive miles from 1,129,839 to 2,030,661; car miles from 38,687,051 to 71,547,404. Proportionally similar results were reported for Oregon Trunk and Oregon Electric.

By the end of the war deferred maintenance had left a fleet of worn out locomotives and physical plant in need of urgent rehabilitation.

THE CONVERSION TO DIESEL POWER

The SP&S ordered their first Diesel Switchers in 1940. The recently launched FT was about to demonstrate its mainline freight capabilities. Reviews of operations in 1942 showed that the Alco and Baldwin switchers cost 50% less per mile to operate against their steam cousins. All the switchers had been purchased to add capacity as war manufacturing increased.

At the end of World War II the company embarked on a phased introduction of road power. For a short time branch freights were operated by S-2 and NW-2 units, where they likely were deemed underpowered. With arrival of larger RS units they were reassigned to yard service. Generally FAs were ordered for mainline freights and RS units for locals and branch lines.

The Reason for expenditures in AFEs quoted below also mention steam power that the Diesels are to replace, indicating usage of that power in the 1940s.

AFE 7629 dated July 5, 1945 "Increased number of cars through yards, account of war effort, require additional switching power. Heavy traffic because of extensive operations in Pacific war theatre is progressively increasing. There has been steady increase in cars handled in the Portland, Vancouver and Wishram yards as follows: May, 1940 64,678 cars, May 1941 88,483, May 1942 108,974, May 1943 118,974, May 1944 120,325, May 1945 145,670." The locomotives were VO-1000 33 and 34.

AFE 8210 dated March 16, 1948 "The purchase of two Diesel-electric 6000 HP locomotives for use between Vancouver, Wash. and Bend, Oregon, supplementing the use of large steam power, will eliminate helper service between South Junction and Metolius, 25 miles, and enable us to maintain better operating schedules. Enginehouse facilities at Wishram are inadequate for proper and economical maintenance of Mallet type locomotives now in service on the O.T. Ry. No housing facilities are available for roundhouse forces, making it impossible to secure experienced mechanics for that terminal. It is the intention to run the Dieselelectric power and the heavy steam power through between Vancouver and Bend in both directions, and eliminate excessive financial investment to modernize Wishram roundhouse facilities and to provide necessary housing for employes. The annual return on investment covering the purchase of two DE 6000 HP locomotives is estimated at 18.37%, which includes credit for retirement of three Mikado Class O-1 locomotives, decrease in fuel cost and locomotive maintenance; elimination of engine watchman and operation of lunch room at Metolius." The locomotives were FA-1 856 and 858 A-B-B-A.

In the study leading to the above purchase the Mallets referred to were SP&S Z-6 and Z-8 plus Great Northern R-1 2-8-8-2's 2031, 2033, 2035 and 2038. Thirty Mikados were also in this service, 20 SP&S and 10 GN. Average main line freight trains per day:

First District	6.7 trains with average 69 cars
Second District	4.8 trains with average 78 cars
Third District	4.5 trains with average 64 cars
Oregon Trunk	4.4 trains with average 61 cars

AFE 8211 dated March 23, 1948 "This locomotive will be used to handle trains 1 and 2 between Portland and Spokane, thereby releasing two 1500-HP Dieselelectric locomotives now operated as a double unit on these trains. This will enable us to use these 1500-HP D.E. locomotives to handle trains 5 and 6 between Portland and Pasco, releasing two class H-1 steam locomotives now handling these trains. The annual return on the investment will be 26.2 percent." The locomotive was E-7A 750.

AFE 8212 dated March 23, 1948 "It is proposed to use this locomotive to handle trains 21 and 22, on the Astoria line, between Portland and Seaside, which will enable us to retire one Class C-1 Atlantic type steam locomotive built in 1909, now handling these trains between Portland and Astoria, and also release Class D-2 locomotive No. 150, built in 1911, which now handles trains 21 and 22 between Astoria and Seaside. This will result in annual return on investment of approximately 12 percent." This was F-3A 802.

AFE 8245 dated May 19, 1948 "This 6000-HP Diesel-electric locomotive is to be used in conjunction with the two covered by A.F.E. 8210, and will be operated between Vancouver and Spokane and/or Vancouver and Bend to eliminate overflow extra train on the main line between Vancouver and Pasco, or to avoid the use of steam double headers on the Oregon Trunk between Wishram and Bend. The annual operating saving is estimated at \$101,619, and the annual return on the investment at 12.19 percent. Two Class O-1 Mikado type steam engines requiring expensive general repairs, will be retired." The locomotive was FA1 860 A-B-B-A.

AFE 8344 dated February 7, 1949 "Three 1,500 H.P. Diesel-Electric road switching locomotives displacing steam locomotives will provide diesel power for all mixed and local freight trains on the Oregon Trunk, for six local freight train trips per week on the S.P.& S. First District and for one eight-hour shift per week in Bend Yard. The average percentage utilization for each locomotive on this schedule will be 75, and four old steam locomotives (two Mikado – Class O and two Pacific – Class H-6) can be retired. Savings in cost of fuel and locomotive maintenance are estimated at \$98,174 per year and annual return on investment at 17.98%." The locomotives were RS-2s 60 – 62.

AFE 8520 dated March 17, 1950 "By supplemental agreement dated December 14, 1949, effective January 1, 1950, the equalization of motor power, under contract dated December 31, 1927, between the Great Northern Railway Company, Spokane, Portland & Seattle Railway Company and Oregon Trunk Railway, was abandoned. The Spokane, Portland & Seattle Railway is to furnish all power subsequent to that date. In order to accomplish this service, it is necessary to purchase additional locomotives." All were former Great Northern – becoming SP&S FA-1s 862 and 864 A-B-B-A, O-4 2-8-2's 550 and 551 plus Z-6 GN 4000, renumbered to its original SP&S 903.

AFE 8571 dated April 5, 1950 "The use of this locomotive on the Oregon Trunk to the extent of about 60,000 miles per year will displace class "Z" steam engine to that extent and will eliminate 22,000 miles of steam helper miles. On the main line, between Vancouver and Pasco, it is expected to use this engine to the extent of 30,000 miles per year in place of class "O" steam engines, resulting in more expedited performance with a net annual operating savings of \$51,522, which will produce an annual return of 8.1%." The locomotive was FA-1 866 A-B-B-A.

AFE 8617 dated July 28, 1950 "This locomotive, in conjunction with six such engines now in use, will effect 100% dieselization of through freight operation on the Oregon Trunk and eliminates practically all Class O Mikado steam engines from through freight service on the S.P.& S. Main lines. Estimated return on investment is 8.04%." The locomotive was FA-2 number 868 – A-B-B-A.

AFE 8652 dated November 28, 1950 "Traffic has increased considerably, due to handling defense material, both to industries having war contracts and in hauling munitions. Additional equipment is needed to expedite the movement of this material." The locomotives were RS-3s 65 - 68.

AFE 8733 dated April 27, 1951 "Traffic has increased considerably and will continue increasing during the present emergency [Korean War]. Additional power is necessary to expedite the delivery of export material to the armed forces, for movement of cars to industries having defense contracts and for speeding delivery

of cars between terminal yards with the least possible delay." The locomotives were RS-3s 69 and 70 and SW-9 43 - 45.

AFE 8832 dated October 1, 1951 "It is anticipated that the eight additional 1600 H.P. road switching locomotives with multiple controls will completely dieselize normal operation on the O.E. Ry., O.T. Ry. (except for U.P. operation), Goldendale Branch, Astoria Line and Vernonia Branch. With the elimination of steam power thirteen locomotive water tanks can be retired, making an annual saving of \$17,850 in depreciation, maintenance, wages, purchase of water and electricity for pumping. There will also be a saving of \$108,000 for general repairs to six N-2 locomotives, which would normally be done in 1952." These locomotives were RS-3s 71 - 78.

In January 1954 the Motive Power Department responded to a request for proposal for complete dieselization. At the time 20 active steam locomotives were in service. The 8 Z's were averaging 1,665 miles per month; the 3 E's had averaged 1,410 miles per month in passenger extra and freight between Vancouver and Pasco. The 3 N-2 and 6 O-3 were mostly out of service, excepting that three O-3 were in occasional local service between Wishram and Pasco and Spokane. All were scheduled for major repairs within 4-years.

The proposal was for purchases of 4 1600 H.P. units per year in 1955 through 1958 (3 in 1958), and installation of multiple-unit controls on 7 existing units (60 - 62, 65 - 68) in 1955.

The net saving by using an all-diesel roster was estimated at \$242,434.00.

That process was accelerated with the 1955 purchase of nine RS-3s, 90 - 98 and 1956 delivery of 6 GP-9s, 150 - 155, 4 with steam heat.

As the new power joined the roster, steam power was rapidly retired, citing the expense of Class 3 repairs and replacement fireboxes.

AFE 9974 dated June 9, 1959 "To supplement present power with additional locomotives under plan as developed jointly by operating and mechanical

department representatives of the parent lines and S.P.& S. toward eventual retirement of S.P.& S. Baldwin locomotives 30 - 34." The RS-3 locomotives were Great Northern 231 and 232 and became SP&S 83 and 84.

AFE S12-63 dated February 14, 1963 "Supplement our present locomotive fleet to enable assignment of two locomotives to the Yardley-Scribner shuttle service." The locomotives were RS-2s 63 and 64, purchased from Great Northern, their 200 and 201. They had a short career on SP&S, soon traded in on new power.

PASSENGER SERVICE

Passenger steam locomotives were generally distinguished by their large drivers for speed and 4-wheel lead trucks for smooth passage through curves at speed. All SP&S Passenger locomotives had 4-wheel lead trucks. Most also were equipped with steam-heat to supply the train.

Some mixed trains, like the Goldendale Branch and the Keasey Branch, used freight locomotives. Passenger cars on these trains were equipped with Baker heaters.

Providing electricity to light passenger cars involved a number of generating sources. Batteries on the cars required charging on the cars at the end of every trip. Mainline trains, for many years used a head-end power system with generators in the baggage cars. Trains on the Astoria line received power from 7.5 KW generators installed on locomotives 152, 162, 157 and 158 [the latter 2 recently released from service on the OT] in 1929. In time axle generators were installed on cars to recharge batteries, a method used by Pullman from the beginning of its electrically lit cars.

The high-point of steam passenger power was the E-1 4-8-4 delivered in 1938. The three were used on premier trains 1-2 between Portland and Spokane and ably handled the large consists. (The trains were renumbered 3-4 on February 23, 1947, when a new Empire Builder connection, as 1-2, was initiated with the new streamlined GN train). The displaced Pacifics in turn allowed retirement of smaller and older power on other trains.

In the Diesel era all the F-3A, F-7A, E-7A locomotives were delivered with steamheat equipment. When new boilers, with greater capacity, were installed in the 3 F-3As, the smaller units were installed in RS-2s 60 - 62 and the locomotives assigned at Wishram and Pasco as protection against enroute steam heat failures on the regular power. The GP-9s 150 - 153 were delivered with steam-heat in 1956. They provided power for the numerous excursions the SP&S was famed for, and additional horsepower on seasonally long scheduled consists.

The 800AA F-3As took over operation of Trains 1-2, the Empire Builder connection, late in 1947 from the temporarily assigned Pacifics 623 and 626. Delivery of E-7A and F-3A 802 in 1948 allowed the E to take over trains 1-2, and the round-trip train to Seaside and trains 5-6 to Pasco to be dieselized, with one locomotive for each of the 3 consists. The Astoria line train was discontinued on January 15, 1952. The 4 F-7As 803 - 806 of 1953 completed Dieselization of the remaining passenger trains 3-4, operating alongside 1-2, 5-6 on the main line. Trains 5-6 were discontinued on September 30, 1959.

The Oregon Trunk, once with RPO, coach, sleeper service, in later years featured overnight mixed trains, a combine, sometimes with a coach, trailing the freight cars. This oddity continued through the Burlington Northern merger until Amtrak started in May 1971. The train was popular with hunters, fishermen and canoeists – many of them company employees.

ACCIDENTS

The SP&S experienced its share of accidents. There were several incidents of locomotives hitting rock slides or soft track and ending up on their sides down a slope, or in a river. Remarkably, while there were the sad deaths of crew, the locomotives were usually rescued, repaired and returned to service. No Diesels, nor Electrics were retired by accidents and only three Steam locomotives – the 51 was damaged, then dismantled, while in weed burner service, in a collision at T8 (Milepost 8 on the Oregon Trunk) on June 12, 1916; the 452 was derailed in August 1944 at the drawbridge at mile 98.4 on the Astoria line and soon dismantled; the 509 from a collision at Kloan, Oregon on September 29, 1945. It is

interesting to note that Kloan is just 3.6 miles further along the OT from the 1916 collision.

SECOND GENERATION DIESELS

From 1964 the railway implemented a program of annual locomotive replacements. Many of the diesels were reaching their economic life of 20-years for road units and 25-years for switchers. Delivery of the 7 C-424s introduced the broadband paint scheme. In 1965 and 1966 eight C-425s each year. Six C-636s, the company's first C-C trucked locomotives arrived in the 1967 budget. In 1968 four more C-636s and two C-415s. The 1969 order called for two C-636s and four more C-415s. ALCO could not confirm a delivery date. The SP&S then called for quotes from General Electric and EMD. GE offered their U-23B, and EMD quoted on the GP-38 and GP-39. The company chose the GP-38, for delivery in December 1969 (delivered to BN as their first new locomotives in February 1970). A favorable trade on F-3A 800 clinched the deal for EMD as they could remanufacture the unit. The year 1969 ended the unit-for-unit replacement of earlier years, choosing to replace horsepower. This allowed retirement of more units than were purchased.

SELECTED TIMELINE - INCLUDING CHANGES AND EXPERIMENTS

March 30, 1908 - 4-4-0s 50 and 51 acquired with purchase of Columbia River & Northern Railway.

February 24, 1911 – 9 locomotives (1 x 0-6-0, 4 x 4-4-0, 3 x 4-6-0, 1 x 2-8-0) acquired with purchase of Astoria & Columbia River Railroad.

In 1913 the 53, 54, 153, 154, 155 were equipped with steam-heat for service on the Astoria Line. The 200 was equipped with steam-heat for service on the Goldendale branch.

N-2 2-8-0 360 was converted to burn pulverized coal as an experiment in 1916. The results were evaluated in 1917. The 360 reconverted to burn oil at the time the 9 locomotives were converted to coal.

In 1920 the railroad converted several locomotives from oil burning to coal. They were the 101, 104, 106, 109, 452, 454, 455, 459, 464. No doubt they all operated East of the forests. The locomotives seem to have been quietly returned to oil fuel on shop orders.

May 1940 - First Diesels, 30 - 31, delivered from Baldwin.

The boosters were removed from the 4-4-2s in 1944. The N-2 2-8-0s were rebuilt in 1944, 45, 46 with superheaters and piston valves.

The first Empire Builder connection, Train 2, departing Portland on February 23, 1947 was crewed by engineer William Provost, conductor Ray Ryan and dining car steward Arthur Sawyer as reported in the Oregon Journal of the next day.

Heaters were installed in Diesel locomotives in 1951.

In December 1951 34 Diesel locomotives were renumbered to give each unit a distinct number – eliminating the A, B suffixes, and providing for grouping units in 10 4500-HP sets, and 4 booster units for the Oregon Trunk. On December 31, 1951 the Oregon Electric RS-1s 52 – 55 were sold to SP&S with the same numbers.

In 1952 the 22 switch engines were equipped with radio. Another AFE (Authority for Expenditure) allowed 20 road locomotives and 24 cabooses to be equipped the same year.

Also in 1952 the RS-2s 60 - 62 received 800 gallon fuel tanks to allow a round-trip to Seaside; plus the friction-bearings on the axles were replaced with roller-bearings. Then in 1953 the steam-heat boilers in the F-3As were replaced with larger units (as delivered in the F-7s). The smaller heaters were installed in the 60 - 62.

Sunday, May 20, 1956 "Farewell to Steam Excursion" behind 700 from Portland to Wishram and return. Engineer J.T. Craine (he was fireman on the 700's first run in 1938); Head Brakeman Jimmy May; Flagman Wayne Richards; Trainmaster Bill

Garrett; Master Mechanic L.Z. Daniels; Fireman Bob Mercer; Conductor H.L. Waldorf.

23 road switchers (RS-2s, RS-3s, GP-9s) were equipped with flashing lights, completed in 1963.

June 1964 - First of second-generation Diesels delivered - C-424 300 - 306

Item 50 of the 1965 Budget provided for fuel fillers on 109 Diesels to be standardized on the Houston Automatic Fueling devices, and 12 fueling stations, to be compatible with parent lines and CB&Q.

THE DIAGRAMS

The diagrams included here represent most of the locomotives owned by the SP&S. Of the steam classes only the 4-4-0s are missing – excepting a single locomotive, the 50. It has to represent a rather disparate group of engines. For some classes there were several diagrams available of minor difference. One diagram, featuring members of that class, serves to describe them all. Mostly the differences are in certain weights, capacities, appliances like air pumps, or tender style. The 2-6-2s, the largest single class of steam locomotives at 17 members, had the greatest variety, a couple with boosters, a few with steam heat for passenger service, most with neither. The 36 2-8-0s in 7 classes were the most numerous family of a single wheel arrangement.

This presentation is 61 diagrams selected from several sources. Many of the diesels and some steam are from an original diagram book dated 1953 in the author's collection. Later diesel diagrams were from a publication by the Pacific Railway Preservation Association. The missing C-424 diagram was provided by Ed Sutorik. All the electric diagrams came from a 1940s book from the collection of Ed Austin. Early steam diagrams were provided by both Ed Austin and Skip Caswell. The Caswell collection was generally easier to use, partly because parts of the Austin diagrams could not be read. While many of the steam diagrams are undated the book must have been from the early 1930s. Original diagrams were of three styles over time. Most were printed on pages 9 9/16" wide x 4 ¼" high. For some large locomotives (4-8-4, 4-6-6-4, FA-1 A-B-B-A) the page was longer and folded in on the book. The scanned result has been scaled to 8.5" x 11" - the FA printed on 2 pages. The earliest diagram style is represented with the 50 and the 200. The 50 diagram is scaled from the wider original. The 200 diagram has been split, the locomotive scaled up and the text part moved onto otherwise blank space. The last style was the 2nd generation diesels, where the lettering is drawn with stencils instead of the previous elegant hand writing.

Each diagram was scanned at 600 dpi in full color. Many of the diesel diagrams were a reasonably straight-forward restoration (mostly removing unwanted marks and reinforcing faint lines) from the scanned image. Similarly the electrics were inverted from the high-contrast blueprint and readily completed. Early steam diagrams were another matter. The images from both resources had little contrast between the diagram and the background. This meant each character and line had to be "extracted" from its surroundings, a project of many hours per diagram. The polygon tool in Corel PhotoPaint got an extreme workout.

The diagrams here are something of a companion to the eight handsome photo books by Ed Austin, published by the Spokane, Portland & Seattle Railway Historical Society. Each of the books features specific wheel arrangements of locomotives.

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An indication of the utilization of locomotives is the accompanying assignment list for September 30, 1954 – soon after total dieselization.

The particular interest is the assignments of the switchers.

The nearest from the steam era was an equipment review in 1933.

The Tonnage rating table was copied from the Special Instructions of 1937, with notes for newer power from later issues which used formats specific to each of the operating districts, rather than a general-purpose table.

A grade table from an employee timetable serves in lieu of the usual map.

The service profile provides a visual of when locomotives operated together.

RESEARCH RESOURCES

Two repositories of SP&S history provided materials referenced in this narrative.

The President's Subject files and other headquarters departments of both the Northern Pacific and Great Northern are held at the Minnesota History Center, St. Paul, Minnesota. Both contain corporate records for the SP&S.

The Pacific Northwest Chapter, National Railway Historical Society, library at Portland Union Station, Oregon, contains SP&S Motive Power Department files from Vancouver, and a number of records from the main offices in Portland.

Many of the files are similar, particularly the Authority for Expenditure (AFE) documents, but the discussion and reports at each level are different.

PUBLISHED BOOKS

Several books feature images of SP&S locomotives. Some are part of historical narratives, others are photo journals. In addition the quarterly magazine of the Spokane, Portland & Seattle Railway Historical Society "Northwest's Own Railway" has featured locomotives in a number of articles.

North Bank Road

The Spokane, Portland & Seattle Railway John T. Gaertner Washington State University Press, Pullman, Washington 1990

Spokane, Portland & Seattle Railway in Color

Diesels of the Northwest's Own Railway Ed Austin Morning Sun Books Inc., Scotch Plains, New Jersey 2007

Spokane, Portland & Seattle Color Guide to Freight and Passenger Equipment

Ed Austin Morning Sun Books Inc., Scotch Plains, New Jersey 1998

Spokane Portland and Seattle Railway

The Northwest's Own Railway Charles and Dorothy Wood Superior Publishing Company, Seattle, Washington 1974

Spokane Portland and Seattle Railway Color Pictorial Todd Schwenk Four Ways West Publications, La Mirada, California 1998

That Reminds Me of Another Story Stories of the SP&S Railway Kenny Prager (SP&S Engineer) Laurel Prager, Portland, Oregon 1999 The Northwest's Own Railway Volume One - The Main LineSpokane, Portland & Seattle Railway and its SubsidiariesWalter R. GrandeGrande Press, Portland, Oregon 1992

The Northwest's Own Railway Volume Two - The SubsidiariesSpokane, Portland & Seattle Railway and its SubsidiariesWalter R. GrandeGrande Press, Portland, Oregon 1997

The Spokane Portland & Seattle Railway Ed Austin & Tom Dill Pacific Fast Mail, Edmonds, Washington 1996

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Other SP&S titles by Paul T. Hobbs

Spokane, Portland & Seattle Railway Cabooses, A History Great Northern Pacific Publications, Bonners Ferry, Idaho 1996

Freight Equipment, Spokane, Portland & Seattle Railway All-time Equipment Diagram book. Distributed in North America by Vintage Ads – North America, Vancouver, Washington 2004

Passenger Car Diagrams, S. P. & S. Ry. All-time Equipment Diagram book. Distributed in North America by Vintage Ads – North America, Vancouver, Washington 2007

Caboose Diagrams, S. P. & S. Ry. All-time Equipment Diagram book. Distributed in North America by Vintage Ads – North America, Vancouver, Washington 2009

Ruling	A-1	A-3	D-2	D-3	D-4	D-6	D-7	M-2	N-4, N-5	N-6, F-1	N-2, N-7	N-1, N-3	0-1, 0-3	0-2	C-1	H-1	GCWR	Z-6, Z-8	E-1
Grade	1-5	7-8	150-151	152	153-155	159	160-162	201	300-304	325-326	355-365	350-352	500-507	525	600-609	620-624	1	900-905	700-702
				157, 158					315	450-466	333-339	370	530-534					910-911	
Level	6897	7302	6477	6463	6076	5711	7793	4459	8328	8900	9975	6738	15000	12700	6623	9725	6016	23061	
.1%	4347	4722	4170	4165	3811	3544	4898	2876	5362	5740	6396	4353	10000	8225	4258	6265	3885		
.2%	3197	3473	3054	3054	2800	2598	3599	2111	3928	4211	4743	3200	8000	6049	3110	4591	2853	10750	8000
.3%	2519	2741	2396	2398	2203	2304	2834	1639	3112	3309	3796	2519	5800	4766	2538	3603	2247		
.4%	2072	2252	1962	1968	1810	1672	2312	1362	2558	2715	3007	2071	4770	3928	1990	2952	1838	7500	4500
.5%	1755	1907	1654	1659	1530	1411	1971	1151	2164	2293	2602	1752	4040	3319	1674	2490	1555		
.6%	1518	1650	1424	1431	1322	1216	1704	993	1871	1978	2251	1514	3500	2870	1438	2146	1356		
.7%	1334	1464	1247	1253	1161	1066	1497	871	1643	1729	1979	1320	3070	2524	1256	1879	1185		
.8%	1188	1292	1105	1112	1032	945	1332	744	1462	1540	1762	1184	2730	2247	1110	1666	1054		
.9%	1069	1163	989	997	927	847	1197	694	1314	1381	1585	1064	2460	2022	990	1492	947		
1.0%	970	1055	893	900	840	766	1085	628	1191	1250	1438	965	2230	1838	907	1348	858	7000	
1.1%	886	964	812	821	766	697	990	572	1087	1138	1314	880	2037	1675	809	1226	783		
1.2%	815	887	742	751	703	638	909	519	999	1046	1208	809	1872	1539	738	1121	719	3250	
1.3%	752	820	682	691	649	586	839	483	921	960	1116	747	1729	1420	676	1031	663		
1.4%	698	760	621	638	601	539	778	446	854	888	1035	692	1604	1319	622	952	614		
1.5%	650	708	583	592	559	503	724	415	795	824	964	644	1493	1228	754	882	572	2400	
1.6%	608	662	542	551	522	468	676	387	742	768	901	601	1395	1148	532	821	533		
1.7%	570	621	505	514	488	436	633	362	695	718	845	563	1308	1077	491	765	499		
1.8%	536	584	472	481	458	408	595	339	652	672	794	529	1229	1012	462	748	469		
1.9%	504	550	442	451	431	381	560	319	615	631	748	498	1158	953	429	671	441		
2.0%	477	520	414	428	406	360	530	300	580	594	707	470	1093	900	401	630	416		
2.1%	451	492	389	399	384	328	499	283	548	559	669	408	1034	852	378	592	393		
2.2%	428	469	367	377	363	308	475	267	519	528	634	387	976	808	352	559	372		

Tonnage Ratings of Locomotives - compiled from Special Instructions No. 1 dated Sunday, November 21, 1937

Formats for later Special Instructions rated tonnage by locomotive class per track segment, not necessarily noting the ruling grades.

The E-1 tonnage ratings were added from Special Instructions 12 dated January 18, 1953.

1600 Horse Power Diesels had tonnage ratings half way between the 2-8-0 and 2-8-2.

Switch engines had similar tonnage ratings to the A series steam switchers.

Engine	Service location	Engine	Service location	Engine	Service location
10	St Helens Yard	65	Vancouver-Bend and Goldendale	212	Freight Service - ML-OT
11	Portland Yard	66	Vancouver-Bend and Goldendale	213	Freight Service - ML-OT
20	Vancouver Yard	67	Work Train - Oregon Trunk	750	Trains 3-4
21	Vancouver Yard	68	Vancouver Yard	800	Trains 3-4
22	Willbridge Transfer - Portland Yard	69	Nos. 230-231 325-326	801	Trains 3-4
23	Eugene Yard	70	Nos. 230-231 325-326	802	Trains 5-6
24	O.E. Yard and 12th Street	71	Nos. 230-231 325-326	803	Trains 1-2
25	Vancouver Yard	72	Nos. 230-231 325-326	804	Trains 3-4
26	Wishram Yard	73	Nos. 230-231 325-326	805	Trains 1-2
27	Willbridge Transfer	74	Seaside Local	806	Trains 5-6
28	Salem Yard	75	Nos. 230-231 325-326	850	Freight Service - ML-OT
30	Portland Yard	76	Nos. 230-231 325-326	851	Freight Service - ML-OT
31	Portland Yard	77	Nos. 230-231 325-326	852	Freight Service - ML-OT
32	Portland Yard	78	Nos. 230-231 325-326	853	Freight Service - ML-OT
33	Linnton Transfer	79	Freight Service - ML-OT	854	Freight Service - ML-OT
34	Portland Yard	80	Vancouver-Bend and Goldendale	855	Vancouver Shop
40	Vancouver Yard	81	Nos. 230-231 325-326	856	Freight Service - ML-OT
41	Vancouver Yard	82	Vancouver-Bend and Goldendale	857	Freight Service - ML-OT
42	Vancouver Yard	200	Freight Service - ML-OT	858	Freight Service - ML-OT
43	Washougal Turn	201	Freight Service - ML-OT	859	Freight Service - ML-OT
44	Vancouver Yard	202	Freight Service - ML-OT	860	Freight Service - ML-OT
45	Vancouver Yard	203	Freight Service - ML-OT	861	Freight Service - ML-OT
50	Willbridge Transfer	204	Freight Service - ML-OT	862	Freight Service - ML-OT
51	Albany Yard	205	Freight Service - ML-OT	862	Freight Service - ML-OT
52	Sweet Home and Lebanon Turn	206	Freight Service - ML-OT	864	Freight Service - ML-OT
53	Forest Grove Turn and Astoria Local	207	Freight Service - ML-OT	865	Freight Service - ML-OT
54	Sweet Home Yard	208	Freight Service - ML-OT	866	Freight Service - ML-OT
55	Astoria Yard	209	Freight Service - ML-OT	867	Freight Service - ML-OT
60	Vancouver Yard	210	Freight Service - ML-OT	868	Freight Service - ML-OT
61	Pasco-Snake River Switcher	211	Freight Service - ML-OT	869	Freight Service - ML-OT
62	Wishram Yard				

SPOKANE, PORTLAND & SEATTLE RAILWAY LOCOMOTIVE ASSIGNMENTS AT SEPTEMBER 30, 1954





SERIES	Builder + Year	Wheel and Class	Acquired From	Disposed To	09	10	15	20	25	30	35	40	45	50	55	60	65	70
· · · · ·	Steam																	
1 - 5	Manchester 12/07	0-6-0 A-1	New	Dismantled	5	5	5	5	5	5	5	5	5	4				
6	Baldwin 6/87	0-6-0 A-2	A&CR 1	ST H T & D			1	1	1	1								
7 - 8	Schenectady 1/14	0-6-0 A-3	New	Dismantled			2	2	2	2	2	2	2	2				
50	Schenectady 3/89	4-4-0 L-1	CR&N 2	Retired	1	1	1	1	1									
51	Hinkley 12/81	4-4-0 L-2	CR&N 1	Wrecked	1	1	1											
52	Cooke 9/86	4-4-0 L-3	A&CR 4	Sold			1											
53 - 54	Rogers 11/83	4-4-0 L-4	A&CR 6-7	Sold/Dismantled			2	2										
55	Schenectady 12/97	4-4-0 L-5	A&CR 8	Dismantled			1	1	1	1								
56	Baldwin 10/83	4-4-0 L-5	S&IE 4	Sold			1											
100 - 109	Baldwin 8/10	4-6-0 D-1	GN	Rebuilt/Dismantled		10	10	10	10	4	4							
150 - 151	Baldwin 4/11	4-6-0 D-2	New	Dismantled			2	2	2	2	2	2	2	1				
152	Schenectady 2/98	4-6-0 D-3	NP 258	Dismantled			1	1	1	1	1							
153 - 155	Cooke 1/98	4-6-0 D-4	A&CR 16-18	Dismantled			3	3	3	3	3	2	2					
156	Baldwin 3/04	4-6-0 D-5	S&IE 2	Dismantled			1	1	1	1	1							
157 - 158	Schenectady 2/98	4-6-0 D-3	NP 251, 259	Dismantled			2	2	2	2	2	1						
159	Rogers 7/02	4-6-0 D-6	P&E 3	Dismantled			1	1	1	1	1	1						
160 - 162	Baldwin 7/10	4-6-0 D-7	GN 1074-6	Dismantled					3	3	3	3						
200	Baldwin 10/88	2-6-0 M-1	NP 552	Dismantled		1	1	1	1									
201	Brooks 8/93	2-6-0 M-2	GN 420	Dismantled					1	1	1	1						
300 - 305	Baldwin 9/88 +	2-8-0 N-4	NP	Sold/Dismantled					6	6	6	3	2					
315	Baldwin 10/88	2-8-0 N-5	NP 79	Dismantled					1	1	1							
325 - 329	Schenectady 7/01 +	2-8-0 N-6	NP	Dismantled					5	5	5	5	5					
335 - 339	Schenectady 5/03	2-8-0 N-7	NP	Dismantled					5	5	5	5	5					
350 - 352	Brooks 6/92 +	2-8-0 N-1	GN	Sold/Dismantled	3	3	3	3	3	3	3	3	3					
355 - 369	Baldwin/Rogers 8/05 +	2-8-0 N-2	GN	Dismantled	10	10	10	10	11	11	11	14	15	15				
370	Pittsburg 8/04	2-8-0 N-3	A&CR 19	Dismantled			1	1	1	1	1	1						
450 - 466	Baldwin 8/06 +	2-6-2 F-1	GN	Dismantled	15	15	15	15	17	17	17	12	12					
500 - 512	Baldwin 1/13 +	2-8-2 O-1	GN	Dismantled					3	8	8	8	13	4				
525	Schenectady 2/10	2-8-2 O-2	NP 1698	Dismantled					1	1	1	1	1					
530 - 539	Brooks 3/13 +	2-8-2 O-3	NP	Dismantled						5	5	5	10	10	3			
550 - 551	Baldwin 10/20	2-8-2 O-4	GN	Dismantled										2				
600 - 609	Baldwin 2/09 +	4-4-2 C-1	New	Dismantled	10	10	10	10	10	10	10	6	3					
620 - 626	GN 12/27 +	4-6-2 H-1	SP&S rebuilt GN/GN	Dismantled						6	6	6	6	6				
700 - 702	Baldwin 7/38	4-8-4 E-1	New	Donated/Dismantled								3	3	3	3			
900 - 905	Schenectady 10/37	4-6-6-4 Z-6	New	Dismantled								4	4	5	6	6		
910 - 911	Schenectady 9/44	4-6-6-4 Z-8	New	Dismantled									2	2	2	2		
GCWR 1	Schenectady 12/90	4-6-0 GCWR	CM 47	Dismantled				1	1	1	1	1						
GCWR 2	Schenectady 12/87	4-6-0 GCWR	CM 28	Dismantled				1	1	1								

SERVICE PROFILE - - SPOKANE, PORTLAND AND SEATTLE RAILWAY LOCOMOTIVES 1908 - 1970

SERIES	Builder + Year	Wheel and Class	Acquired From	Disposed To	09	10	15	20	25	30	35	40	45	50	55	60	65 70
	Diesel																
10 - 11	ALCo-GE 10/41	B-B S-1	New	Sold/BN									2	2	2	2	1 1
20 - 28	ALCo-GE 9/40 +	B-B S-2	New	BN								2	9	9	9	9	99
30 - 34	Baldwin 5/40 +	B-B VO-1000	New	Traded in								2	5	5	5	5	
40 - 42	GM-EMD 1/48	B-B NW-2	New	BN										3	3	3	3 3
43 - 45	GM-EMD 10/51	B-B SW-9	New	BN											3	3	3 3
50 - 55	ALCo-GE 5/45 +	B-B RS-1	New	Sold									6	6	6	6	6
60 - 64	ALCo-GE 6-47 +	B-B RS-2	New/GN	Traded in/BN										3	3	3	5 3
65 - 98	ALCo-GE 12/50 +	B-B RS-3	New/GN	BN										4	28	30	30 30
100 - 101	ALCO Prod 11/68	B-B C-415	New	BN													2
150 - 155	GM-EMD 6/56	B-B GP-9	New	BN												6	66
200 - 211	ALCo-GE 5/48 +	B-B FB-1	New	Traded in										12	12	12	12
212 - 213	ALCo-GE 12/50	B-B FB-2	New	Traded in										2	2	2	2
300 - 306	ALCO Prod 6/64	B-B C-424	New	BN													77
310 - 327	ALCO Prod 6/65 +	B-B C-425	New	BN													8 16
330 - 343	ALCO Prod 12/67 +	C-C C-636	New	BN													10
750	GM-EMD 7/48	A1A-A1A E-7A	New	BN										1	1	1	1 1
800 - 802	GM-EMD 4/47 +	B-B F-3A	New	Traded in/BN										3	3	3	3 3
803 - 806	GM-EMD 1/53 +	B-B F-7A	New	BN											4	4	4 4
850 - 867	ALCo-GE 5/48 +	B-B FA-1	New	Traded in/BN										18	18	18	18 10
868 - 869	ALCo-GE 12/50	B-B FA-2	New	Traded in/BN										2	2	2	2 1
OE	Electric																
1 - 4	ALCO-GE 8/07 +	B-B OE 600 HP	New	Sold		4	4	4	4	4	4	4	4				
5-6	ALCO-GE 10/12	B-B OE 600 HP	New	OE 25, 26 1914													
10	GE 11/14	B-B OE	WVS 10	Wrecked								1	1				
15	Baldwin 10/07	B-B OE 440HP	United Railways Co 15	Sold YVT 299			1	1									
21 - 24	ALCO-GE 6/12	B-B OE 600 HP	New	Sold			4	4	4	4	4	4	4				
25 - 26	ALCO-GE 10/12	B-B OE 600 HP	OE 5,6	Sold			2	2	2	2	2	2	2				
50	OE 1/41	В-В-В-В 1080 НР	New from salvage	Sold									1				
51	OE 10/41	B-B-B-B 1080 HP	New from salvage	Sold									1				
60 - 62	OE 3/42 +	B-B-B-B 900 HP	New from salvage	Sold									3				
				Totals >>>	45	60	86	85	110	118	115	109	133 1	24	115 1	17	20 109

Former Owners:

A&CR Astoria and Columbia River CM Colorado Midland

CR&N Columbia River & Northern

GN Great Northern Railway

NP Northern Pacific Railway

P&E Pacific & Eastern Railway

S&IE Spokane & Inland Empire

WVS Willamette Valley Southern

YVT Yakima Valley Traction



GALES CREEK & WILSON RIVER RAILROAD 4-6-0 LOCOMOTIVE, undated DIAGRAM Scanned from copy from President's Subject Files, Northern Pacific Railway, Minnesota Historical Society, St. Paul, Minnesota. Restored by Paul T. Hobbs, June 17, 2009

(And representing GC&WR 2 – slightly smaller and older) Ordered on Schenectady Locomotive Works Schenectady Serial Numbers

- 1 3263 as Colorado Midland 47, delivered December 1890; to GCWR 1919
- 2 2421 as Colorado Midland 29, delivered December 1887; to GCWR 1919

Dispositions:

- 1 Locomotive Dismantled at Vancouver October 1944 Boiler installed at Wishram roundhouse Tender to X-47 November 1944
- 2 Locomotive Dismantled May 1932 Tender to X-40 May 1932

Usual Service: GC&WR Later at Astoria, Oregon; Goldendale Branch



EHB 4-16-26

SPOKANE, PORTLAND & SEATTLE RAILWAY A-1 0-6-0 LOCOMOTIVE, April 1926 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, November 15, 2010

Ordered on America Locomotive (Manchester) by Northern Pacific for SP&S. ALCo Serial Numbers:

- 1 44740 delivered December 1907
- 2 44741 delivered December 1907
- 3 44742 delivered December 1907
- 4 44743 delivered December 1907
- 5 44744 delivered December 1907

Dispositions:

- 1 Dismantled April 1951
- 2 Sold to City of Prineville 7 in July 1946
- **3** Dismantled January 1952
- 4 Dismantled April 1951
- 5 Dismantled January 1952

Usual Service: Switching at Portland, Willbridge, Vancouver



SPOKANE, PORTLAND & SEATTLE RAILWAY A-2 0-6-0 LOCOMOTIVE, undated DIAGRAM Scanned from copy from President's Subject Files, Northern Pacific Railway, Minnesota Historical Society, St. Paul, Minnesota. Restored by Paul T. Hobbs, April 30, 2009 **Disposition:**

6 Sold to St. Helens Dock & Terminal Company AFE 3580 (6-927) August 18, 1921 Believed destroyed by boiler explosion, scrapped.

Usual Service: Switching at small yards

Built new June 1887 by Baldwin Locomotive Works; Serial #8617 Northern Pacific 386 Renumbered NP 988 Sold to Astoria & Columbia River Railroad #1 Acquired with purchase of Astoria & Columbia River Railroad March 3, 1911 Renumbered SP&S 6



SPOKANE, PORTLAND & SEATTLE RAILWAY A-3 0-6-0 LOCOMOTIVE, undated DIAGRAM Scanned from copy from Ed Austin. Restored by Paul T. Hobbs, April 28, 2009 **Dispositions:**

7 Locomotive and Tender Dismantled June 30, 1952

8 Locomotive and Tender Dismantled February 27, 1952

Usual Service: Switching at Portland, Willbridge, Vancouver

Purchased on AFE 805 (6-131) for \$34,036.52 Ordered on American Locomotive Company, Schenectady, January 1914 ALCo Serial Numbers: 7 54403

8 54404

Delivered March 28, 1914

L-1 4-4-0 LOCOMOTIVE, November 1932 DIAGRAM Scanned from copy from Minnesota History Center. Restored by Paul T. Hobbs, October 11, 2010

(This diagram must represent all 7 of the 4-4-0s on the SP&S roster. They were by no means identical)

L-1

- 50 Schenectady 2785 as UP623 delivered March 1889 to F. M. Hicks Locomotive and Car Company, Chicago, Illinois 1902 to Columbia River & Northern 51 in 1902; to SP&S March 1908
- L-2
- 51 Hinkley 1469 as Oregon Railway & Navigation 23 delivered December 1881 to several numbers; to Seattle Mill & Shingle after 1897 to Columbia River & Northern 50 in 1902; to SP&S March 1908

L-3

52 Cooke 1731 for Corvallis & Eastern, delivered September 1886 to Astoria & Columbia River 4; to SP&S February 1911

L-4

- 53 Rogers 3410 as Oregon Pacific 3, delivered November 1883 to Astoria & Columbia River 6; to SP&S February 1911
- 54 Rogers 3411 as Oregon Pacific 2, delivered November 1883 to Astoria & Columbia River 7; to SP&S February 1911
- L-5
- 55 Schenectady 4644 as Astoria & Columbia River 8, delivered December 1897; to SP&S February 1911

L-6

 56 Baldwin 6972 as Spokane & Inland Empire 4, delivered October 1883; to SP&S December 4, 1915.
Not known to have served on SP&S. Sold same day.

CYLINDERS STEAM PRESSURE, WEIGHT ON DRIVERS, OF ENGINE, " TENDER, EMPTY " , TENDER, EMPTY " , LOADED, TOTAL WEIGHT OF -ENGINE AND TENDER, CAPACITY OF TENDER, OIL " , WATER, RATIO, HEATING SURFACE TO GRATI ", " "	1814.22614. 140 LBS, 64000 + 100000 + 68000 + 2552 GALS 3000 GALS E, 82.2 188	DIAMETER OF TUBES, $2 - \text{INCH}^{1}$ LENGTH OF TUBES, $12\text{FT} S_{4}^{3}$ NUMBER OF TUBES, 202 HEATING SURFACE OF TUBES 1269 . SQ.F TOTAL HEATING SURFACE, 179 . GRATE AREA, 179 . LENGTH OF FIRE BOX, 72 INCHS WIDTH OF FIRE BOX, 72 INCHS WIDTH OF FIRE BOX, $34^{1}/2$. HEIGHT, FRONT, GO , BAGK, G3 JOURNALS, DRIVE'S, DIA7 $\frac{1}{2}$ INALGTH 9 IN , JENGINE TRUCK, $5\frac{1}{4}$ IO	5 T.
-TO CYLINDER VOLUME RATIO OF ADHESION TRACTIVE POWER, 85% BOILER PER-LD, PRESSURE,	188 3.95 16.168	JOURNALS, DRIVE'S, DIA7ZIN LGTH 9 H ;ENGINE TRUCK, 5Z K - 10 · ;TENDER	•

Dispositions:

- 50 Locomotive Retired August 1928 Tender to X-20 November 1929
- 51 Wrecked June 1916
- 52 Sold to E. Turney October 1919
- 53 Sold to Warren Construction Company May 1920
- 54 Locomotive and Tender Dismantled May 1924 Boiler used to make Weedburner X-27
- 55 Locomotive and Tender Dismantled July 1930
- 56 Sold to Brooks-Scanlan 1 December 4, 1915

Usual Service: Passenger

The 53 and 54 were owned as follows:

Built for Willamette Valley & Coast Rail Road Company

- Railroad sold at foreclosure April 13, 1895 to
- Oregon Central & Eastern Railroad Company

Locomotives to A&CR 1896

Railroad sold to Corvallis & Eastern Railroad Company January 25, 1898

Data from Encyclopedia of Western Railroad History, Volume III [1995] by Donald B. Robertson

SPOKANE, PORTLAND & SEATTLE RAILWAY D-1s 4-6-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, January 8, 2011

Ordered on Baldwin Locomotive Works, Philadelphia by Great Northern Baldwin Serial Numbers:

- 100 35055 delivered as GN 1043 August 1910, to SP&S August 1910
- 101 35056 delivered as GN 1044 August 1910, to SP&S August 1910
- 102 35057 delivered as GN 1045 August 1910, to SP&S August 1910
- 103 35058 delivered as GN 1046 August 1910, to SP&S August 1910
- 104 35059 delivered as GN 1047 August 1910, to SP&S August 1910
- 105 35096 delivered as GN 1048 August 1910, to SP&S August 1910
- 106 35097 delivered as GN 1049 August 1910, to SP&S August 1910
- 107 35098 delivered as GN 1050 August 1910, to SP&S August 1910
- 108 35099 delivered as GN 1051 August 1910, to SP&S August 1910
- 109 35100 delivered as GN 1052 August 1910, to SP&S August 1910

Dispositions:

- 100 Locomotive Dismantled April 1937 Tender Dismantled July 1953
- 101 Locomotive Dismantled April 1937 Tender Dismantled September 1953
- 102 Rebuilt to 622 by GN Hillyard December 1928
- 103 Rebuilt to 620 by GN Hillyard December 1927
- 104 Rebuilt to 624 by GN Hillyard April 1930
- 105 Rebuilt to 623 by GN Hillyard December 1928
- 106 Locomotive Dismantled April 1937 Tender Dismantled October 1953
- 107 Rebuilt to 621 by GN Hillyard December 1927
- 108 Locomotive Dismantled April 1937 Tender Dismantled March 1953
- 109 Rebuilt to 625 by GN Hillyard April 1930

Usual Service: Passenger

10-10-18

(14)

SPOKANE, PORTLAND & SEATTLE RAILWAY D-2s 4-6-0 LOCOMOTIVE, October 10, 1918 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, October 13, 2010

Ordered on Baldwin Locomotive Works Baldwin Serial Numbers: 150 36480 151 36481 Delivered April 1911 **Dispositions:**

- 150 Locomotive Dismantled June 5, 1950
- 150 Tender to X-68 December 31, 1950
- 151 Locomotive Dismantled February 28, 1948
- 151 Tender to X-116 January 19, 1948

Usual Service: Passenger

R54. 11-19-32

SPOKANE, PORTLAND & SEATTLE RAILWAY D-3 4-6-0 LOCOMOTIVE, November 1932 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, March 12, 2011

Schenectady Locomotive Works by Northern Pacific.

Schenectady Serial Numbers:

- 152 4710 as NP 258 delivered February 1898; to SP&S December 1911
- 157 4703 as NP 251 delivered February 1898; to OT December 1911
- 158 4709 as NP 259 delivered February 1898; to OT December 1911

157 and 158 were owned by Oregon Trunk, believed to have always been lettered SP&S

Dispositions:

- 152 Locomotive Dismantled August 1939 Tender to X-94 August 1946
- 157 Locomotive Dismantled March 1941 Tender Dismantled April 1938
- 158 Locomotive Dismantled April 1938 Tender Dismantled November 1945

SPOKANE, PORTLAND & SEATTLE RAILWAY D-4 4-6-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, February 26, 2011

Ordered on Cooke Locomotive and Machine Works, Paterson, New Jersey by Astoria & Columbia River

Cooke Serial Numbers:

- 153 2375 as A&CR 16 delivered January 1898; to SP&S 1911
- 154 2376 as A&CR 17 delivered January 1898; to SP&S 1911
- 155 2377 as A&CR 18 delivered January 1898; to SP&S 1911

Dispositions:

- 153 Locomotive Dismantled November 1945 Tender Dismantled June 1940
- 154 Locomotive Dismantled July 1946 Tender Dismantled April 1937
- 155 Locomotive Dismantled April 1937 Tender to X-42 September 1937

Usual Service: Passenger

10-12-18 REV. 5-10-26

SPOKANE, PORTLAND & SEATTLE RAILWAY D-5 4-6-0 LOCOMOTIVE, May 1926 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, March 2, 2011

Ordered on Baldwin Locomotive Works, Philadelphia by Spokane & Inland Empire

Baldwin Serial Number:15623931 as S&IE 2 delivered March 1904; to SP&S December 1911

Disposition: 156 Locomotive and Tender Dismantled April 1937

Usual Service: Passenger

Locomotive owned by Oregon Trunk Railway Lettered SP&S.

OWNED BY S. P. & S. BUILT BY ROGERS LOCO CO 1902 PURCHASED FROM P.& E.RY		I LOCOMOTIVE 159 CLASS. D- 6
$3'7'' + 5'7'' + 5'7'' + 10'7'_{-10''} + 5'7'' + 10'7'_{-10''} + 5'7'' + 10'7'_{-10''} + 5'7'' + 10'7'_{-10''} + 5'7''_{-10'''} + 5'7''_{-10'''} + 5'7''_{-10'''} + 5'7''_{-10'''} + 5'7''_{-$		HEADLIGHT PYLE NAT
	- 63-3"	~
CYLINDERS19 x 26CAPY FUEL OIL3500 GAL5HAVALVESSLIDE"WATER6000""VALVE GEARSTEPHENSONGRATE AREA INTO HEAT. SURF.66.0STEAM PRESS.180 LBSCYL. VOLUME"248.0WT ON ORIVERS120,000 LBSFACTOR OF ADHESION5.25SL"ENG. TRUCK32,000"T.P. PER LB. OF BOILER PRESS127GR"TRAILER""120,000 LBSFACTOR OF ADHESION5.25SL""ENGINE WORKG ORDER 152,000""T.P. PER LB. OF BOILER PRESS127GR""TRAILER""UBES DIAM2INCHFI""ENGINE WORKG ORDER 152,000""LENGTH14'-3*8FI""TODADED125,650""NUMBER260I""LOADED125,650"TP.85% WORK. PRESS.22,860SU"ENG & TENDER277,650"SUSUSU	AT. SURF. EVAP. TUBES- 19440 STEAM " ARCH " REVERS " FIRE BOX 169.0 INJEC " TOTAL 21130 AIR PU PERHEAT. SURF JOURNA ATE AREA 32.0 SQ FT " WIDTH 41'4" " WIDTH 41'4" " HEIGHT-FRONT " BACK PERHEATER TYPE	HEAT YES SE GEAR MANUAL TOR - MP N Y NO 5 ALS DRIVERS MAIN 9 X 12 "OTHERS 9 X 12 ENG TRUCK 6 X 12 TRAILER " TENDER 5% X 10

SPOKANE, PORTLAND & SEATTLE RAILWAY D-6 4-6-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, March 5, 2011

Ordered on Rogers Locomotive & Machine Works, Paterson, New Jersey by Great Northern.

Disposition:

159 Locomotive Dismantled April 1941 Tender Dismantled August 1939

by Great Northern.

Rogers Serial Number:

Carta C

159 5772 as GN 938 delivered July 1902 Sold to Pacific & Eastern #3 March 1910 To SP&S December 1912

Usual Service: Passenger

SPOKANE, PORTLAND & SEATTLE RAILWAY D-7s 4-6-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, March 8, 2011

Ordered on Baldwin Locomotive Works, Philadelphia by Great Northern.

(and representing 161)

Baldwin Serial Numbers:

- 160 34899 as GN 1074 delivered July 1910; to SP&S November 1925
- 161 34900 as GN 1075 delivered July 1910; to SP&S November 1925
- 162 34901 as GN 1076 delivered July 1910; to SP&S November 1925

Dispositions:

- 160 Locomotive and Tender Dismantled December 1944
- 161 Locomotive Dismantled December 1944 Tender Dismantled June 1948
- 162 Locomotive Dismantled December 1944 Tender to X-44 July 1937

Usual Service: Passenger on Astoria Line

SPOKANE, PORTLAND & SEATTLE RAILWAY M-1 2-6-0 LOCOMOTIVE, June 1911 DIAGRAM Scanned from copy from the Northern Pacific Files at Minnesota History Center. Restored by Paul T. Hobbs, November 23, 2010 **Disposition:**

200 Locomotive Dismantled November 1928 Tender to X-16 March 1929

Ordered on Baldwin Locomotive Works, Philadelphia, Pennsylvania by Northern Pacific. Baldwin Serial Number: 200 9546 delivered as NP 552 October 1888; to SP&S 1909

Usual Service: Goldendale Branch mixed

SPOKANE, PORTLAND & SEATTLE RAILWAY M-2 2-6-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, November 22, 2010

Disposition:

201 Locomotive Dismantled December 1944 Tender to X-45 March 1944

Ordered on Brooks Locomotive Works, Dunkirk, New York by Great Northern. Brooks Serial Number: U

201 2371 delivered as GN 420 August 1893; to SP&S November 1925

Usual Service: Goldendale Branch mixed

SPOKANE, PORTLAND & SEATTLE RAILWAY N-4 2-8-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell.

Restored by Paul T. Hobbs, January 17, 2011

(and representing 303 – 305)

K

14

Ordered on Baldwin Locomotive Works, Philadelphia by Northern Pacific Baldwin Serial Numbers:

- 300 11949 as NP 52 delivered May 1891; to SP&S November 1925
- 301 10445 as NP 59 delivered November 1889; to SP&S November 1925
- 302 11948 as NP 69 delivered May 1891; to SP&S November 1925
- 303 9506 as NP 71 delivered September 1888; to SP&S November 1925
- 304 9507 as NP 72 delivered September 1888; to SP&S November 1925
- 305 9515 as NP 74 delivered September 1888; to SP&S November 1925

Dispositions:

- 300 Locomotive Dismantled April 1937 Tender Dismantled April 1937
- 301 Locomotive Sold to Pacific States Lumber Co. July 1939 Tender Dismantled April 1937
- 302 Locomotive Dismantled December 1942 Tender to X-43 September 1937
- 303 Locomotive Dismantled November 1945 Tender Sold to Pacific States Lumber Co. July 1939
- 304 Locomotive Dismantled June 1945 Tender Dismantled April 1937
- 305 Locomotive Dismantled April 1937 Tender to X-41 October 1946

Usual Service: Road Freight

SPOKANE, PORTLAND & SEATTLE RAILWAY N-5 2-8-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, January 25, 2011 **Dispositions:**

315 Locomotive Dismantled April 1937 Tender Dismantled April 1937

Ordered on Baldwin Locomotive Works, Philadelphia by Northern Pacific Baldwin Serial Numbers:

315 9524 as NP 79 delivered October 1888; to SP&S November 1925

Usual Service: Road Freight

SPOKANE, PORTLAND & SEATTLE RAILWAY

N-6 2-8-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, January 29, 2011

(and representing 326 - 329)

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Ordered on American Locomotive Company, Schenectady and Richmond by Northern Pacific Schenectady Serial Numbers:

- 325 5886 as NP 1255 delivered July 1901; to SP&S November 1925
- 326 5891 as NP 1260 delivered August 1901; to SP&S November 1925
- 327 5882 as NP 1251 delivered July 1901; to SP&S December 1936
- 328 5892 as NP 1261 delivered August 1901; to SP&S December 1936 Richmond Serial Number:
- 329 25826 as NP 1273 delivered July 1902; to SP&S December 1936

Dispositions:

- 325 Locomotive Dismantled July 1946 Tender Dismantled August 1939
- 326 Locomotive Dismantled September 1945 Tender Dismantled April 1937
- 327 Locomotive Dismantled March 1949 Tender body placed on 20039 as Water Car August 1946
- 328 Locomotive Dismantled March 1949 Tender Dismantled October 1945
- 329 Locomotive Dismantled April 1948 Tender Dismantled February 1947

Usual Service: Road Freight


SPOKANE, PORTLAND & SEATTLE RAILWAY

N-7 2-8-0 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, February 5, 2011

(and representing 337 and 339)

1

Ordered on American Locomotive Company, Schenectady by Northern Pacific Schenectady Serial Numbers:

- 335 27350 as NP 1283 delivered May 1903; to SP&S November 1925
- 336 27355 as NP 1288 delivered May 1903; to SP&S November 1925
- 337 27358 as NP 1291 delivered May 1903; to SP&S November 1925
- 338 27351 as NP 1284 delivered May 1903; to SP&S November 1925
- 339 27353 as NP 1286 delivered May 1903; to SP&S November 1925

Dispositions:

- 335 Locomotive Dismantled July 1946 Tender Dismantled April 1937
- 336 Locomotive Dismantled October 1945 Tender Dismantled April 1937
- 337 Locomotive Dismantled July 1946 Tender to X-43 April 1946
- 338 Locomotive Dismantled October 1945 Tender to X-42 March 1936
- 339 Locomotive Dismantled December 1946 Tender to X-90 January 1947



SPOKANE, PORTLAND & SEATTLE RAILWAY N-1s 2-8-0 LOCOMOTIVE, October 1918 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, February 10, 2011

F

Ordered on Brooks Locomotive Works, Dunkirk, New York by Great Northern Brooks Serial Numbers:

- 350 2107 as GN 464 delivered June 1892; to SP&S April 1908
- 351 2116 as GN 473 delivered July 1892; to SP&S March 1908
- 352 2154 as GN 495 delivered August 1892; to SP&S March 1908

Dispositions:

- 350 Locomotive Sold to Great Northern 545 April 1945 Tender Dismantled April 1937
- 351 Locomotive Dismantled September 1947 Tender Dismantled April 1937
- 352 Locomotive Sold to Great Northern 546 April 1945 Tender Dismantled April 1937



· 10-8-18.

SPOKANE, PORTLAND & SEATTLE RAILWAY N-2 2-8-0 LOCOMOTIVE, October 1918 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, February 17, 2011 (and representing 366 – 369) Ordered on Baldwin Locomotive Works, Philadelphia by Great Northern 2 locomotives from Rogers Locomotive and Machine Works, Paterson, New Jersev **Baldwin [Rogers] Serial Numbers:** 355 32392 as GN 1256 delivered December 1907; to SP&S 1909 356 32464 as GN 1260 delivered December 1907; to SP&S 1909 357 32478 as GN 1261 delivered December 1907; to SP&S 1909 358 32425 as GN 1258 delivered December 1907; to SP&S 1909 359 32426 as GN 1259 delivered December 1907; to SP&S 1909 360 32413 as GN 1257 delivered December 1907; to SP&S 1909 361 32479 as GN 1262 delivered December 1907; to SP&S 1909 362 32391 as GN 1255 delivered December 1907; to SP&S 1909 363 32519 as GN 1264 delivered December 1907; to SP&S 1909 364 32485 as GN 1263 delivered December 1907; to SP&S 1909 365 [38887] as GN 1208 delivered August 1905; to SP&S November 1925 32191 as GN 1228 delivered November 1907; to SP&S December 1936 366 32243 as GN 1240 delivered November 1907; to SP&S December 1936 367 32362 as GN 1253 delivered November 1907; to SP&S December 1936 368 [6040] as GN 1182 delivered October 1903; to SP&S September 1945 369

Dispo	sitions: Locomotiv	ve .	Tender
355	Dismantled December	1952	Dismantled June 1954
356	Dismantled June 1954		To X-63 November 1948
357	Dismantled January 1	952	Dismantled August 1939
358	Dismantled March 19	53	To X-71 March 1952
359	Dismantled June 1952		Dismantled September 1945
360	Dismantled April 1953	3	To X-45 November 1946
361	Dismantled Septembe	r 1952	Dismantled June 1948
362	Dismantled April 1953	3	To X-88 November 1939
363	Dismantled April 1952	2	Dismantled June 1948
364	Dismantled December	1952	Dismantled June 1948
365	Dismantled March 19	52	To Dismantled April 1937
366	Dismantled April 1953	3	Retired June 1940
367	Dismantled May 1954		To X-95 August 1946
368	Dismantled July 1954		To Dismantled December 1952
369	Dismantled May 1950		To X-69 November 1950

Usual Service: Road Freight

Most locomotives rebuilt with Superheaters 1944 and 1945.



81-51-01

SPOKANE, PORTLAND & SEATTLE RAILWAY N-3 2-8-0 LOCOMOTIVE, October 1918 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, February 22, 2011 Disposition: 370 Locomotive Dismantled June 1940 Tender Dismantled April 1937

Ordered on Pittsburgh Locomotive and Car Works by Astoria & Columbia River

Pittsburgh Serial Number:37029459 as A&CR 19 delivered August 1904; to SP&S 1911



SPOKANE, PORTLAND & SEATTLE RAILWAY F-1 2-6-2 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, December 3, 2010

(And representing 452 – 466)

Ordered on Baldwin Locomotive Works, Philadelphia, Pennsylvania by Great Northern.

Usual Service: Freight and Passenger

Baldwin Serial Numbers: [delivered as] 450 30134; GN 1555 February 1907; to SP&S 1908

-

- 451 30201; GN 1565 February 1907; to SP&S 1908
 452 30333; GN 1575 March 1907; to SP&S 1908
- 453 30335; GN 1577 March 1907; to SP&S 1908
- 454 30396; GN 1581 March 1907; to SP&S 1908
- 455 30440; GN 1583 March 1907; to SP&S 1908
- 456 30502; GN 1587 April 1907; to SP&S 1908
- 457 30568; GN 1593 April 1907; to SP&S 1908
- 458 30999; GN 1638 June 1907; to SP&S August 1908
- 459 30672; GN 1603 April 1907; to SP&S August 1908
- 460 30527; GN 1589 April 1907; to SP&S 1908
- 461 30580; GN 1595 April 1907; to SP&S 1908
- 462 30601; GN 1597 April 1907; to SP&S 1908
- 463 30656; GN 1600 April 1907; to SP&S November 1908
- 464 30657; GN 1601 April 1907; to SP&S November 1908
- 465 30202; GN 1566 February 1907; to SP&S November 1925
- 466 28851; GN 1549 August 1906; to SP&S November 1925

- Dispositions: Locomotive
- 450 Dismantled April 1937
- 451 Dismantled June 1948
- 452 Dismantled November 1944
- 453 Dismantled March 1949
- 454 Dismantled August 1939
- 455 Dismantled September 1945
- 456 Dismantled March 1949
- 457 Dismantled March 1937
- 458 Dismantled June 1945
- 459 Dismantled April 1937
- 460 Dismantled April 1937
- 461 Dismantled May 1948
- 462 Dismantled August 1939
- 463 Dismantled April 1937
- 464 Dismantled April 1937
- 465 Dismantled March 1949
- 466 Dismantled May 1948
- Tender to X-64 November 1948 **Dismantled December 1952 Dismantled November 1944 Dismantled March 1949 Dismantled December 1953 Dismantled February 1954 Dismantled September 1945 Dismantled January 1952** to X-92 August 1946 **Dismantled April 1946 Dismantled March 1949 Dismantled September 1952 Dismantled June 1950** to X-72 April 1952 **Dismantled March 1949** to X-49 April 1946 **Dismantled August 1939**



SPOKANE, PORTLAND & SEATTLE RAILWAY O-1s 2-8-2 LOCOMOTIVE, March 1949 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, October 20, 2010

(And representing 500 – 507)

Ordered on Baldwin Locomotive Works by Great Northern Baldwin Serial Numbers:

- 500 39095 as GN 3026 delivered January 1913; to SP&S November 1925
- 501 39097 as GN 3028 delivered January 1913; to SP&S November 1925
- 502 39098 as GN 3029 delivered January 1913; to SP&S November 1925
- 503 46163 as GN 3099 delivered August 1917; to SP&S March 1926
- 504 39153 as GN 3039 delivered January 1913; to SP&S May 1928
- 505 39157 as GN 3043 delivered January 1913; to SP&S May 1928
- 506 39092 as GN 3023 delivered January 1913; to SP&S July 1929
- 507 39093 as GN 3024 delivered January 1913; to SP&S July 1929
- 508 39297 as GN 3064 delivered January 1913; to SP&S June 1943
- 509 49158 as GN 3121 delivered July 1918; to SP&S June 1943
- 510 49226 as GN 3122 delivered July 1918; to SP&S January 1944
- 511 48468 as GN 3108 delivered April 1918; to SP&S August 1944
- 512 49731 as GN 3134 delivered September 1918; to SP&S August 1944

Dispositions:

- 500 Dismantled June 1949
- 501 Locomotive dismantled January 1951 Tender to X-70 January 1951
- 502 Dismantled August 1952
- 503 Locomotive dismantled August 1949 Tender dismantled April 1945
- 504 Dismantled June 1949
- 505 Dismantled April 1951
- 506 Dismantled April 1951
- 507 Locomotive dismantled April 1945 Tender dismantled June 1949
- 508 Dismantled November 1949
- 509 Dismantled December 1945
- 510 Dismantled November 1949
- 511 Dismantled November 1949
- 512 Sold November 1949



SPOKANE, PORTLAND & SEATTLE RAILWAY O-2s 2-8-2 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, November 9, 2010

525

Disposition:

525 Dismantled November 1947

Ordered on American Locomotive (Schenectady) by Northern Pacific ALCo Serial Number:

46878 as NP 1698 delivered February 1910; to SP&S November 1925



-14-52 6-1944 4-1944 10-5-43

> SPOKANE, PORTLAND & SEATTLE RAILWAY O-3s 2-8-2 LOCOMOTIVE, December 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, October 26, 2010

(And representing 530 – 535, 537 - 539)

Ordered on America Locomotive (Brooks) by Northern Pacific ALCo Serial Numbers:

- 530 57957 as NP 1765 delivered September 1917; to SP&S May 1926
- 531 52853 as NP 1704 delivered March 1913; to SP&S May 1928
- 532 52876 as NP 1727 delivered April 1913; to SP&S May 1928
- 533 52893 as NP 1744 delivered April 1913; to SP&S July 1929
- 534 52896 as NP 1747 delivered April 1913; to SP&S July 1929
- 535 52850 as NP 1701 delivered March 1913; to SP&S June 1943
- 536 52875 as NP 1726 delivered April 1913; to SP&S June 1943
- 537 52872 as NP 1723 delivered March 1913; to SP&S February 1944
- 538 57943 as NP 1751 delivered September 1917; to SP&S August 1944
- 539 57954 as NP 1762 delivered September 1917; to SP&S August 1944

Dispositions:

- 530 Dismantled June 1954
- 531 Dismantled December 1953
- 532 Locomotive Dismantled December 1953 Tender to X-21 February 1954
- 533 Locomotive Dismantled December 1954 Tender to X-22 December 1955
- 534 Dismantled December 1954
- 535 Dismantled December 1953
- 536 Locomotive Sold February 1957 Tender Dismantled December 1953
- 537 Dismantled February 1954
- 538 Locomotive Sold February 1957 Tender Dismantled April 1967
- 539 Donated to City of Vancouver October 1957



SPOKANE, PORTLAND & SEATTLE RAILWAY O-4s 2-8-2 LOCOMOTIVE, February 4, 1953 DIAGRAM Scanned from copy from Author's collection. Restored by Paul T. Hobbs, December 9, 2010 **Dispositions:**

- 550 Dismantled May 1953
- 551 Dismantled June 1953

Ordered on Baldwin Locomotive Works, Philadelphia by Great Northern Baldwin Serial Numbers:

550 53793 as GN 3211 delivered October 1920; to SP&S January 1950

551 53835 as GN 3214 delivered October 1920; to SP&S January 1950



E.H.B. 6.29.26

SPOKANE, PORTLAND & SEATTLE RAILWAY C-1s 4-4-2 LOCOMOTIVE, June 1926 DIAGRAM Scanned and inverted from copy from Skip Caswell. Restored by Paul T. Hobbs, December 27, 2010

Ordered on Baldwin Locomotive Works, Philadelphia Baldwin Serial Numbers:

- 600 33228 delivered February 1909
- 601 33229 delivered February 1909
- 602 33230 delivered February 1909
- 603 33231 delivered February 1909
- 604 33232 delivered February 1909
- 605 33233 delivered February 1909
- 606 33273 delivered March 1909
- 607 33274 delivered March 1909
- 608 33275 delivered March 1909
- 609 33276 delivered March 1909

1923-24 converted from Compound to Simple1926-27 Franklin Booster installed1931 Booster removed

Dispositions:

- 600 Locomotive Dismantled April 1937 Tender Dismantled April 1953
- 601 Locomotive Dismantled June 1940 Tender Dismantled April 1953
- 602 Locomotive Dismantled June 1940 Tender to X-65 June 1949
- 603 Dismantled April 1949
- 604 Locomotive Dismantled August 1939 Tender Dismantled June 1952
- 605 Dismantled April 1949
- 606 Locomotive Dismantled April 1937 Tender Dismantled November 1948
- 607 Locomotive Dismantled August 1939 Tender Dismantled April 1953
- 608 Locomotive Dismantled September 1947 Tender Dismantled May 1954
- 609 Locomotive Dismantled September 1947 Tender Dismantled May 1954

Usual Service: Passenger



SPOKANE, PORTLAND & SEATTLE RAILWAY

H-1s 4-6-2 LOCOMOTIVE, Undated DIAGRAM Scanned from copy from Author's collection. Restored by Paul T. Hobbs, December 11, 2010

(And representing 620 and 626)

Ordered on Baldwin Locomotive Works, Philadelphia by Great Northern Rebuilt by Great Northern to GN H-7 specifications from D-1 [GN E-14] 4-6-0s. Baldwin Serial Numbers:

- 620 35058; rebuilt from SP&S 103 by GN December 1927
- 621 35098; rebuilt from SP&S 107 by GN December 1927
- 622 35057; rebuilt from SP&S 102 by GN December 1928
- 623 35096; rebuilt from SP&S 105 by GN December 1928
- 624 35059; rebuilt from SP&S 104 by GN April 1930
- 625 35100; rebuilt from SP&S 109 by GN April 1930
- 626 35010; rebuilt from GN1038 by GN 1926 as GN 1378; to SP&S September 1945

Dispositions:

- 620 Dismantled December 1944
- 621 Locomotive Dismantled July 1953 Tender Sold to GN April 1945
- 622 Dismantled July 1953
- 623 Locomotive Dismantled September 1953 Tender to X-48 November 1944
- 624 Locomotive Dismantled January 1952 Tender Dismantled December 1953
- 625 Locomotive Dismantled October 1953 Tender Sold to GN April 1945
- 626 Locomotive Dismantled December 1953 Tender to X-27 April 1952

Usual Service: Passenger



EHB. 3-4.42

SPOKANE, PORTLAND & SEATTLE RAILWAY E-1s 4-8-4 LOCOMOTIVE, March 1942 DIAGRAM Scanned from original 1953 Diagram Book in Author's collection. Restored by Paul T. Hobbs, December 21, 2010

Ordered on Baldwin Locomotive Works, Philadelphia, Pennsylvania

Baldwin Serial Numbers:

- 700 62171 delivered July 1938
- 701 62172 delivered July 1938
- 702 62173 delivered July 1938

Dispositions:

- 700 Donated to City of Portland January 1958 Displayed at Oaks Park, Portland, Oregon. Removed to SP Roundhouse, Brooklyn, Oregon November 1987 Restoration completed and steamed up May 1990 Restored/Operated by Pacific Railroad Preservation Association
- 701 Sold to Oregon Steel Mills May 1960
- 702 Sold to Oregon Steel Mills May 1960

Usual Service: Passenger



SPOKANE, PORTLAND & SEATTLE RAILWAY Z-6s 4-6-6-4 LOCOMOTIVE, February 1953 DIAGRAM Scanned from original 1953 Diagram Book in Author's collection. Restored by Paul T. Hobbs, December 28, 2010

Ordered on American Locomotive Company, Schenectady, New York

ALCo Serial Numbers:

- 900 68990 delivered October 1937
- 901 68991 delivered October 1937
- 902 68992 delivered October 1937
- 903 68993 delivered October 1937
- 904 68994 delivered October 1937
- 905 68995 delivered October 1937

Dispositions:

- 900 Sold to Oregon Steel Mills May 1960
- 901 Sold to Oregon Steel Mills May 1960
- 902 Sold to Oregon Steel Mills May 1960
- 903 Sold to Great Northern as GN 4000 November 1937 Purchased from Great Northern GN 4000 March 1950 Sold to Oregon Steel Mills May 1960
- 904 Sold to Great Northern as GN 4001 November 1937 Purchased from Great Northern GN 4001 July 1946 Sold to Oregon Steel Mills May 1960
- 905 Sold to Oregon Steel Mills May 1960



SPOKANE, PORTLAND & SEATTLE RAILWAY Z-8s 4-6-6-4 LOCOMOTIVE, Undated DIAGRAM Scanned and inverted from photocopy in Author's collection. Restored by Paul T. Hobbs, January 11, 2011 **Dispositions:**

910 Sold to Oregon Steel Mills May 1960

911 Sold to Oregon Steel Mills May 1960

Ordered on American Locomotive Company, Schenectady, New York

ALCo Serial Numbers:

910 71333 delivered September 1944

911 71334 delivered September 1944



OREGON ELECTRIC RAILWAY B-B 600HP ELECTRIC LOCOMOTIVE, undated DIAGRAM Scanned and inverted from diagram from the collection of Ed Austin Restored by Paul T. Hobbs, October 4, 2010

Ordered on American Locomotive Company and General Electric Company ALCo Serial Numbers:

- 1 44384 delivered August 1907
- 2 44385 delivered August 1907
- 3 48177 delivered June 1910
- 4 49085 delivered June 1910

Dispositions:

- **1** Sold to Albert Baer Mercantile 1945
- 2 Sold to Albert Baer Mercantile 1945
- 3 Sold to Albert Baer Mercantile 1945
- 4 Sold to Albert Baer Mercantile 1945

Usual Service:



OREGON ELECTRIC RAILWAY B-B ELECTRIC LOCOMOTIVE, 1940 DIAGRAM Scanned and inverted from diagram from the collection of Ed Austin Restored by Paul T. Hobbs, September 28, 2010 **Dispositions:**

10 Wrecked June 1945

Usual Service:

Ordered on American Locomotive Company and General Electric Company ALCo Serial Numbers:

10 4839 delivered November 1914 as Willamette Valley Southern 40 Willamette Valley Southern abandoned 1938 Equipment to Dulien Steel Products Co. 1939 Sold to OE 10 in July 1940



OREGON ELECTRIC RAILWAY B-B 600HP ELECTRIC LOCOMOTIVE, undated DIAGRAM Scanned and inverted from diagram from the collection of Ed Austin Restored by Paul T. Hobbs, October 5, 2010

Dispositions:

- Sold to Albert Baer Mercantile 1945 21
- 22 Sold to Albert Baer Mercantile 1945
- 23 Sold to Albert Baer Mercantile 1945
- Sold to Albert Baer Mercantile 1945 24

Ordered on American Locomotive Company and General Electric Company **ALCo Serial Numbers:**

- 21 51069 delivered June 1912
- 22 51070 delivered June 1912
- 23 51071 delivered June 1912
- 24 51072 delivered June 1912

Usual Service:



OREGON ELECTRIC RAILWAY B-B 600HP ELECTRIC LOCOMOTIVE, undated DIAGRAM Scanned and inverted from diagram from the collection of Ed Austin Restored by Paul T. Hobbs, October 7, 2010

Dispositions:

25 Sold to Albert Baer Mercantile 1945

26 Sold to Albert Baer Mercantile 1945

Usual Service:

Ordered on American Locomotive Company and General Electric Company ALCo Serial Numbers:

- 5 51067 delivered October 1912 Changed to 60-ton and renumbered 25 in August 1914
- 6 51068 delivered October 1912 Changed to 60-ton and renumbered 26 in July 1914

O.E. RY. 100 TON ELECTRIC LOCOMOTIVE NO. 50

BUILDER O.E.RY. JAN. 1941



OREGON ELECTRIC RAILWAY

B-B-B 1080HP ELECTRIC LOCOMOTIVE, January 1941 DIAGRAM Scanned and inverted from diagram from the collection of Ed Austin Restored by Paul T. Hobbs, October 7, 2010

Built by Oregon Electric Shops with salvaged electrical equipment from retired OE passenger cars **Dispositions:**

50 Sold to Albert Baer Mercantile 1945 to Chicago, North Shore & Milwaukee 458 December 1947 5

Usual Service:

Road Freight

50 Built January 1941



OREGON ELECTRIC RAILWAY B-B-B-B 1080HP ELECTRIC LOCOMOTIVE, August 1941 DIAGRAM Scanned and inverted from diagram from the collection of Ed Austin

Restored by Paul T. Hobbs, October 7, 2010

Dispositions:

51 Sold to Albert Baer Mercantile 1945 to Chicago, North Shore & Milwaukee 459 in 1948

Built by Oregon Electric Shops with salvaged electrical equipment from retired OE passenger cars

Usual Service:

Road Freight

51 Built October 1941





AUG. 1941

6

OREGON ELECTRIC RAILWAY

B-B-B 800HP ELECTRIC LOCOMOTIVE, September 1941 DIAGRAM Scanned and inverted from diagram from the collection of Ed Austin Restored by Paul T. Hobbs, October 9, 2010

Built by Oregon Electric Shops with salvaged electrical equipment from retired OE passenger cars (and representing 62)

- 60 Built March 1942
- 61 Built June 1942
- 62 Built January 1944

Dispositions:

- 60 Sold to Albert Baer Mercantile 1945 to Fort Dodge, Des Moines & Southern 360 in 1947
- 61 Sold to Albert Baer Mercantile 1945 to Fort Dodge, Des Moines & Southern 361 in 1947
 62 Sold to Albert Baer Mercantile 1945
 - to Fort Dodge, Des Moines & Southern 362 in 1947

Usual Service:



SPOKANE, PORTLAND & SEATTLE RAILWAY S-1 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, August 24, 2010 **Dispositions:**

10 Sold to City of Prineville 102 December 21, 1960

11 To BN 11 March 3, 1970. Sold Joseph Simon December 27, 1972

Usual Service: Industry Switching at Portland, St. Helens

Ordered on American Locomotive Company ALCo Serial Numbers: 10 69596 11 69597 Delivered October 1941 12



SPOKANE, PORTLAND & SEATTLE RAILWAY S-2 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, August 28, 2010

Ordered on American Locomotive Company ALCo Serial Numbers:

- 20 69213 delivered September 1940
- 21 69214 delivered September 1940
- 22 69950 delivered August 1942

-19-54

- 23 70274 delivered August 1943
- 24 70275 delivered August 1943
- 25 71283 delivered December 1943
- 26 71284 delivered December 1943
- 27 71285 delivered December 1943
- 28 71286 delivered December 1943

Dispositions:

- 20 Traded to ALCO Products September 1964
- 21 Traded to ALCO Products September 1964
- 22 BN 934 March 1970; Sold to Precision National March 9, 1973
- 23 BN 935 March 1970; Sold to Precision National March 9, 1973
- 24 BN 936 March 1970; Sold to Joseph Simon May 9, 1972
- 25 BN 937 March 1970; Sold to Precision National March 10, 1972
- 26 BN 938 March 1970; Sold to Precision National March 9, 1973
- 27 BN 939 March 1970; Sold to Precision National December 7, 1971
- 28 BN 940 March 1970; Destroyed by fire, Vancouver April 1971. Sold for scrap.

Usual Service:

Initially on road freight trains on Astoria Line and Oregon Electric.

Switching at Wishram, Vancouver, Willbridge, Salem, Eugene

13



12 · 23 · 53 June 44 ENB 12 · 10 · 90

> SPOKANE, PORTLAND & SEATTLE RAILWAY VO-1000 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, August 28, 2010

Ordered on Baldwin Locomotive Works Baldwin Serial Numbers: 30 62307 delivered May 1940 31 62332 delivered May 1940; former BLW Demonstrator 332 **Dispositions:**

30 Traded to ALCO Products September 1964

31 Traded to ALCO Products September 1964

Usual Service:

Switching at Portland, Willbridge, Vancouver



12-23-53

SPOKANE, PORTLAND & SEATTLE RAILWAY VO-1000 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, August 30, 2010 **Dispositions:**

32 Traded to ALCO Products September 1964

Usual Service:

Switching at Portland, Willbridge, Vancouver

Ordered on Baldwin Locomotive Works Baldwin Serial Numbers: 32 64426 delivered October 1942



SPOKANE, PORTLAND & SEATTLE RAILWAY VO-1000 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, August 30, 2010 **Dispositions:**

Usual Service:

Switching at Portland, Willbridge, Vancouver

Ordered on Baldwin Locomotive Works Baldwin Serial Numbers: 33 71539 delivered October 1945 34 71540 delivered October 1945

³³ Traded to ALCO Products September 1964

³⁴ Traded to ALCO Products September 1964



2-23-53 3-14-52 2-5-52

SPOKANE, PORTLAND & SEATTLE RAILWAY **NW-2 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM** Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, August 31, 2010

Ordered on Electro-Motive Division of General Motors EMD Serial Numbers:

- 40 5743
- 41 5744
- 42 5845

Delivered January 1948

Dispositions:

40 BN 593 March 1970, Sold to Relco Locomotives April 1981

41 BN 594 March 1970, Sold to Pacific Transportation Services June 1982

42 BN 595 March 1970, Sold to Pacific Transportation Services June 1982

Usual Service:

Switching at Portland, Willbridge, Vancouver

17



* 25 % Adh.

12-23-53

3-14-52

1-31-52 9-4-51

> SPOKANE, PORTLAND & SEATTLE RAILWAY SW-9 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, August 31, 2010

Ordered on Electro-Motive Division of General Motors EMD Serial Numbers:

- 43 14756
- 44 14757
- 45 14758

Delivered October 1951

Dispositions:

43 BN 167 March 1970, Sold to Titan Rail Services June 1988

44 BN 168 March 1970, Retired October 1985

45 BN 169 March 1970, Sold to Rail Switching Services August 1992

Usual Service:

Switching at Portland, Willbridge, Vancouver



SPOKANE, PORTLAND & SEATTLE RAILWAY RS-1 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 2, 2010

Ordered on American Locomotive Company ALCo Serial Numbers:

- 50 73757 delivered June 1945
- 51 73762 delivered July 1945
- 52 73570 delivered May 1945
- 53 73571 delivered May 1945
- 54 73572 delivered May 1945
- 55 73756 delivered June 1945

52 – 55 delivered to Oregon Electric. Sold to SP&S December 1951

- Dispositions:
- 50 Sold to R.L, Pittman February 27, 1970
- 51 Sold to R.L, Pittman February 27, 1970
- 52 Traded to ALCO Products December 1968
- 53 Sold to R.L, Pittman February 27, 1970
- 54 Sold to R.L, Pittman February 27, 1970
- 55 Sold to R.L, Pittman February 27, 1970

Usual Service:

Initially on road freight trains on Astoria Line and Oregon Electric.

Transfers between Portland and Vancouver



SPOKANE, PORTLAND & SEATTLE RAILWAY RS-2 B-B DIESEL LOCOMOTIVE, 1954 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 2, 2010

Ordered on American Locomotive Company

- **ALCo Serial Numbers:**
- 60 77414 delivered September 1949
- 61 77565 delivered November 1949
- 62 77892 delivered January 1950
- 800 gallon fuel tanks installed January 1952
- **Roller Bearing Trucks installed November 1952**

Steam Heating boilers from 800-802 installed May 1953

Representing also

- 63 75145 delivered as GN200 June 1947; to SP&S 63 March 1963
- 64 75146 delivered as GN201 June 1947; to SP&S 64 March 1963 No Steam Heat

Dispositions:

- 60 BN 4000 March 1970; Sold to Precision National Corp. July 1972
- 61 BN 4001 March 1970; Sold to Precision National Corp. July 1972
- 62 BN 4002 March 1970; Sold to Precision National Corp. July 1972
- 63 Traded to ALCO Products September 1965
- 64 Traded to ALCO Products September 1965

Usual Service:

Initially on road freight trains on Oregon Trunk and main line from Wishram. Then road freight on Astoria Line.

With steam heat the locomotives were assigned as protection power for passenger trains at Wishram and Pasco, in switching and local freight service.



SPOKANE, PORTLAND & SEATTLE RAILWAY

RS-3 B-B DIESEL LOCOMOTIVE, 1954 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 7, 2010

(and representing 65 - 68, 83 - 84)

Ordered on American Locomotive Company

- ALCo Serial Numbers and delivery dates: 75 79598 January 1952
- 65 78461 December 1950
- 66 78462 December 1950
- 67 78463 December 1950 68 78464 December 1950
- 69 79247 October 1951
- 70 79248 October 1951
- 71 79594 January 1952
- 72 79595 January 1952
- 79596 January 1952 73
- 74 79597 January 1952

Dispositions:

- 65 BN 4050 Sold to J. Simon & Sons March 1974 BN 4051 Sold to J. Simon & Sons September 1975 66
- BN 4052 Sold to Schnitzer Docks July 1971 67
- BN 4053 Sold to Precision National Corp October 1972 68
- BN 4054 Sold to J. Simon & Sons January 1979 69
- 70 **BN 4055 Sold to Precision National Corp March 1973**
- 71 BN 4056 Sold to Chrome Crankshaft August 1980
- 72 BN 4057 Sold to Schnitzer Steel February 1974
- 73 BN 4058 Sold to J. Simon & Sons August 1978
- 74 BN 4059 Sold to J. Simon & Sons September 1975
- 75 BN 4060 Sold to Precision National Corp July 1972
- 76 BN 4061 Sold to Precision National Corp July 1977
- 77 BN 4062 Sold to East-West Metals Inc. May 1975
- 78 BN 4063 Sold to J. Simon & Sons February 1974
- 82 80503 June 1953 80500 June 1953 as GN 231, to SP&S April 1959
- 83

76 79599 January 1952

80495 June 1953

80496 June 1953

80502 June 1953

77

78

79

80

81

79600 January 1952

79601 January 1952

84 80501 June 1953 as GN 232, to SP&S April 1959

- BN 4064 79
- **Chrome Crankshaft August 1980** 80 BN 4065
- **Precision National Corp July 1977** 81 BN 4066
 - J. Simon & Sons February 1974
- 82 BN 4067
 - J. Simon & Sons February 1974
- BN 4068 83 **Chrome Crankshaft August 1980** 84 BN 4069
 - **Precision National Corp March 1972**

Usual Service:



7-20-66 6-8-59 12-2-55 11-14-55

> SPOKANE, PORTLAND & SEATTLE RAILWAY RS-3 B-B DIESEL LOCOMOTIVE, 1966 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, September 7, 2010

Ordered on American Locomotive Company ALCo Serial Numbers:

- 90 81366 delivered October 1955
- 91 81367 delivered October 1955
- 92 81368 delivered October 1955
- 93 81369 delivered October 1955
- 94 81676 delivered October 1955
- 95 81677 delivered October 1955
- 96 81700 delivered November 1955
- 97 81701 delivered November 1955
- 98 81702 delivered November 1955

Dispositions:

- 90 BN 4070 Sold to Precision National Corp. July 1977
- 91 BN 4071 Sold to Precision National Corp. March 1972
- 92 BN 4072 Sold to Precision National Corp. July 1977
- 93 BN 4073 Destroyed by Fire, Vancouver September 1970
- 94 BN 4074 Sold to J. Simon & Sons September 1975
- 95 BN 4075 Sold to J. Simon & Sons May 1975
- 96 BN 4076 Sold to Purdy Co. March 1972
- 97 BN 4077 Sold to Precision National Corp. July 1977
- 98 BN 4078 Sold to RailCar Corp. April 1980

Usual Service:



SPOKANE, PORTLAND & SEATTLE RAILWAY

C-415 B-B DIESEL LOCOMOTIVE, 1968 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, September 7, 2010 Dispositions:

100 BN 4010 March 1970, Sold to Diesel Supply Co. October 1980

101 BN 4011 March 1970, Sold to Diesel Supply Co. October 1980

Usual Service:

Road Freight

Ordered on ALCO Products

ALCO Serial Numbers:

100 6009-01 delivered November 1968

101 6009-02 delivered December 1968



SPOKANE, PORTLAND & SEATTLE RAILWAY GP-9 B-B DIESEL LOCOMOTIVE, 1966 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, September 8, 2010

Ordered on Electro-Motive Division of General Motors EMD Serial Numbers:

- 150 21465 delivered June 1956
- 151 21466 delivered June 1956
- 152 21467 delivered June 1956
- 153 21468 delivered June 1956

Dispositions:

- 150 BN 1975 March 1970; Sold to National Museum of Transport June 1985
- 151 BN 1976 March 1970; to BN 1793 November 1974; Sold to J. Simon & Sons August 1983
- 152 BN 1977 March 1970; to BNSF 1634 August 1999; Retired July 2000
- 153 BN 1978 March 1970; Sold to EMD October 1990 for BL-20 program

Usual Service:

Road Freight Passenger Extra Passenger Standby



Rev 7-66

SPOKANE, PORTLAND & SEATTLE RAILWAY GP-9 B-B DIESEL LOCOMOTIVE, 1966 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, September 13, 2010

Ordered on Electro-Motive Division of General Motors EMD Serial Numbers:

154 21469 delivered June 1956

155 21470 delivered June 1956

Dispositions:

154 BN 1979 March 1970;

Sold to Precision National Corp. July 1984

155 BN 1980 March 1970 Rebuilt to BN 1506 GP28M June 1992

Usual Service:



BURLINGTON NORTHERN GP-38 B-B DIESEL LOCOMOTIVE, 1970 DIAGRAM

Scanned from book Burlington Northern Diesel Locomotive Data and diagrams published by Unknown 1972 Restored by Paul T. Hobbs, September 13, 2010

Ordered on Electro-Motive Division of General Motors
EMD Serial Numbers:
200 35995 delivered February 1970 as BN 2072
201 35996 delivered February 1970 as BN 2073
202 35997 delivered February 1970 as BN 2074
203 35998 delivered February 1970 as BN 2075
204 35999 delivered February 1970 as BN 2076

205 36000 delivered February 1970 as BN 2077

Dispositions: To BNSF in 1996 with same road numbers

Usual Service:

Road Freight

The GP-38s were ordered following the closure of ALCO Products domestic diesel production before completion of new locomotives ordered by SP&S. Those locomotives were: SP&S 102 - 105 C-415 SP&S 350 - 351 C-636 ordered for July 1969 delivery.


SPOKANE, PORTLAND & SEATTLE RAILWAY C-424 B-B DIESEL LOCOMOTIVE, 1968 DIAGRAM Scanned from diagram from the collection of Edward Sutorik Restored by Paul T. Hobbs, September 14, 2010

Ordered on ALCO Products

- **ALCO Serial Numbers:**
- 300 3381-01 delivered June 1964
- 301 3381-02 delivered June 1964
- 302 3381-03 delivered June 1964
- 303 3381-04 delivered June 1964
- 304 3381-05 delivered June 1964
- 305 3381-06 delivered June 1964
- 306 3381-07 delivered June 1964

Dispositions:

- 300 BN 4240 March 1970,
- Sold to Chrome Crankshaft August 1980 301 BN 4241 March 1970,
- Sold to J. Simon & Sons June 1980 302 (BN 4242) March 1970, Destroyed by fire, Vancouver, September 4, 1970
- 303 BN 4243 March 1970, Sold to Chrome Crankshaft August 1980
- 304 BN 4244 March 1970,
- Sold to J. Simon & Sons November 1980
- 305 BN 4245 March 1970, Wrecked near Bend, Oregon July 16, 1971; Dismantled October 1971
- 306 BN 4246 March 1970, Sold to Chrome Crankshaft August 1980

Usual Service:



SPOKANE, PORTLAND & SEATTLE RAILWAY C-425 B-B DIESEL LOCOMOTIVE, 1968 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, September 15, 2010

(And representing 310 - 317 with minor weight differences) **Ordered on ALCO Products ALCO Serial Numbers:** Delivered June 1965 Delivered June 1966 310 3423-01 320 3461-01 311 3423-02 321 3461-02 312 3423-03 322 3461-03 313 3423-04 323 3461-04 314 3423-05 324 3461-05 3423-06 315 325 3461-06 316 3423-07 326 3461-07

317 3423-08 327 3461-08

Dispositions:

- 310 BN 4250 March 1970 Wrecked near Paxton, Oregon May 14, 1972. Dismantled.
 311 (BN 4251)
- Destroyed by fire, Vancouver, September 4, 1970
- 312 BN 4252 March 1970 Chrome Crankshaft August 1980
- 313 BN 4253 March 1970

 J. Simon & Sons September 1980
 314 BN 4254 March 1970
- J. Simon & Sons May 1980 315 BN 4255 March 1970
- Chrome Crankshaft August 1980 316 BN 4256 March 1970
- Chrome Crankshaft August 1980 317 BN 4257 March 1970
- Chrome Crankshaft August 1980

- 320 BN 4258 March 1970 Chrome Crankshaft August 1980
 321 BN 4259 March 1970
 4259 March 1970
- J. Simon & Sons November 1980 322 BN 4260 March 1970
- Chrome Crankshaft August 1980
- 323 BN 4261 March 1970 Wrecked near Bend, Oregon July 16, 1971. Dismantled.
- 324 BN 4262 March 1970 Chrome Crankshaft August 1980
- 325 BN 4263 March 1970 Chrome Crankshaft August 1980
 326 BN 4264 March 1970
 - Chrome Crankshaft August 1980
- 327 BN 4265 March 1970 Wrecked near Madras, Oregon February 18, 1974. Sold for Scrap.

Usual Service: Road Freight



SPOKANE, PORTLAND & SEATTLE RAILWAY C-636 C-C DIESEL LOCOMOTIVE, 1969 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, September 16, 2010

(And representing 330 - 335 with minor weight differences)Ordered on ALCO ProductsALCO Serial Numbers:Delivered December 1967Delivered December 19673303488-013406010-013313488-023416010-023323488-033426010-03

- 333 3488-04 343 6010-04
- 334 3488-05
- 355 3488-06

Dispositions:

- 330 BN 4360 March 1970 Diesel Supply Co. November 1980
- 331 BN 4361 March 1970 Chrome Crankshaft August 1980
- 332 BN 4362 March 1970 Chrome Crankshaft August 1980
- 333 BN 4363 March 1970 J. Simon & Sons June 1980
- 334 BN 4364 March 1970 Chrome Crankshaft August 1980
- 335 BN 4365 March 1970 J. Simon & Sons May 1980

- 340 BN 4366 March 1970 Chrome Crankshaft August 1980
- 341 BN 4367 March 1970 J. Simon & Sons June 1980
- 342 BN 4368 March 1970 Chrome Crankshaft August 1980
- 343 BN 4369 March 1970 Chrome Crankshaft August 1980

Usual Service:



3.14-52 X 25% Adh.

SPOKANE, PORTLAND & SEATTLE RAILWAY E-7A A1A-A1A DIESEL LOCOMOTIVE, 1952 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 17, 2010

Ordered on Electro-Motive Division of General Motors EMD Serial Number: 750 7632 delivered July 1948 Disposition:

750 BN 9900 March 1970

Sold to Precision National Corp. October 18, 1971

Usual Service:

Passenger Purchased to power Trains 1-2 Portland to Spokane

From 1953 worked in pool with the 7 F-units on trains 1-2, 3-4, 5-6.



11-19-54 7-8-53 2-3-53 10-8-52

A MAXIMUM T P.

SPOKANE, PORTLAND & SEATTLE RAILWAY F-3A B-B DIESEL LOCOMOTIVE, 1954 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 18, 2010

Ordered on Electro-Motive Division of General Motors EMD Serial Numbers:

800A-1	4599	delivered April 1947
	renum	bered 800 January 1950
800 A 2	4600	dolivered April 1047

- 800A-2 4600 delivered April 1947 renumbered 801 January 1950
- 802 7798 delivered November 1948
- 802 is Phase 4 F-3A with appearance closer to F-7A style

Dispositions:

800 Traded to EMD 1970

- 801 BN 9750
 Assigned to Amtrak from May 1, 1971
 to BN 972550-L July 3, 1972 Rotary Snowplow Power
 renumbered BN 9750 April 1974
 to BN 710(2) before 1979
 Sold to Hyman-Michaels Co. December 1981

 802 BN 9752
 - Assigned to Amtrak from May 1, 1971 to BN 972551-L July 3, 1972 Rotary Snowplow Power renumbered BN 9752 April 1974 to BN 712(2) before 1979 Sold to J. Simon & Sons December 1981

Usual Service:

Passenger

800 purchased to power Trains 1-2 Portland to Spokane Then assigned Trains 5-6 Portland-Pasco when 750 arrived 802 purchased to power Trains 21-22 Portland to Seaside

From 1953 worked in pool with the E-7A and F-7As on trains 1-2, 3-4, 5-6.



" MAX. TRAC. POWER

SPOKANE, PORTLAND & SEATTLE RAILWAY F-7A B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 20, 2010

Ordered on Electro-Motive Division of General Motors EMD Serial Numbers:

803 17915 delivered January 1953

- 804 17916 delivered January 1953
- 805 17917 delivered January 1953
- 806 17918 delivered January 1953

Usual Service:

Passenger

Purchased to replace steam power on Trains 3-4 and complete dieselization of passenger service.

Dispositions:

- 803 BN 9754 March 1970 to BN 714(2) before 1979 Sold to Precision National Corp. December 1980
- 804 BN 9756 March 1970 to BN 716(2) before 1979 Sold to RailCar Corp. February 1981
- 805 BN 9758 March 1970 to BN 718(2) before 1979 Sold to Hyman-Michaels Co. December 1981
- 806 BN 9760 March 1970 to BN 722(2) before 1979 Sold to RailCar Corp. December 1981

All assigned to Amtrak from May 1, 1971 All renumbered to BN 972552 - 5-L July 3, 1972 Rotary Snowplow Power All renumbered to original BN numbers April 1974

From 1953 worked in pool with the E-7A and F-3As on trains 1-2, 3-4, 5-6.



FA-1 B-B DIESEL LOCOMOTIVE, 1953 DIAGRAM Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 21, 2010

Ordered on American Locomotive Company ALCo Serial Numbers:

- 850A-1 75968 delivered May 1948 to 850 1952
- 850A-2 75969 delivered May 1948 to 853 1952
- 851A-1 75970 delivered May 1948 to 851 1952
- 851A-2 75971 delivered May 1948 to 854 1952
- 852A-1 75972 delivered May 1948 to 852 1952
- 852A-2 75973 delivered May 1948 to 855 1952

- 850 Traded to ALCO Products August 1966
- 851 Traded to ALCO Products August 1966
- 852 Traded to ALCO Products August 1965
- 853 Traded to ALCO Products July 1965
- 854 Traded to ALCO Products July 1965
- 855 Traded to ALCO Products July 1965

Usual Service:

BLT 856	, BY A.L. Co. - 860 - FEB. 1949 862 - AUG. 1948 864 - MAY 1949							DIESE 5000 Equipe	EL ELI H.P. F >ED W	ECT ROA
		Δ-	UNI	т			B-	UNIT		W
	6									
Ē			Q		H			5	1 D	
-	12-10"	27-2"		<u> </u>	11-6			27-2"_		<u></u>
						187'-0"	WHEEL B	ASE		
NO	WERG WT TRA	POWERNO		KG WT TRAC	POWER	NO WRI	GWT	TRAC	POWER	
856	-241,500 = -60 -244,500 = -61 -244,500 = -61	,375 [#] 86 ,725 [#] 86 ,375 [#] 86	1 - 24 2 24	1,730 * - 60, 8,500 * - 62,	432 * 125*	200 24	B,500 -	62, 60,	125 #	205
859 860	248500 [#] 62 -241,440 [*] - 60	125 * 86 ,360 * 86	5 4 5	41 1 11 1		203 244 203 244 204-240		62,12 - 60,0	25*)95*	208
(MAX.	T.P. 25% ADHE	SION	C -	TRACTIVE PO	OWER C	ONT 4	2500#			
SPOKAI FA-1 B-I	NE, PORTLAND & SEATTLE I 3 DIESEL LOCOMOTIVE, 195	RAILWAY 4 DIAGRAM	858B-2	76720 delivered Febru: to 203 1952	ary 1949	862A-2	75996 delive to SP&S Ja	ered August nuary 1950	t 1948 as GN	440D
Scanned from original SP&S print in Author's collection. Restored by Paul T. Hobbs, September 24, 2010			858A-2 860A-1	76674 delivered Februa to 859 1952 76675 delivered Februa	ary 1949 arv 1949	864A-1	to 863 1952 76838 delivered April 1949 as GN 442 to SP&S January 1950			42A
(And rep	presenting 866, 867, 210, 211 sim	nilar with 1600 H.P.)	860B-1	to 860 1952 76721 delivered Februa	ary 1949	864B-1	to 864 1952 76871 delive	ered April 1	949 as GN 4	42B
ALCo Se 856A-1	erial Numbers: 76671 delivered February 1949	9	860B-2	to 204 1952 76722 delivered Februa to 205 1952	ary 1949	864B-2	to SP&S Ja to 208 1952 76872 delive	ered April 1	949 as GN 4	42C
856B-1	to 856 1952 76717 delivered February 1949)	860A-2	76676 delivered Februa to 861 1952 75005 delivered August	ary 1949 t 1048 as CN 44	04 9614 7	to SP&S Jan to 209 1952	nuary 1950	940 as CN 4	420
856B-2	76718 delivered February 1949 to 201 1952)	0U2A-1	to SP&S January 1950 to 862 1952	i 1740 as GIN 44	UA 004A-2	to SP&S Jap to 865 1952	nuary 1950	747 as GIN 4	44D
856A-2	76672 delivered February 1949 to 857 1952 76673 delivered February 1044	9	862B-1	76044 delivered August to SP&S January 1950	t 1948 as GN 44	0B 866A-1	78286 delive to 866 1952	ered Decem	ber 1950	
858B-1	to 858 1952 76719 delivered February 1949)	862B-2	to 206 1952 76045 delivered August to SP&S January 1950	t 1948 as GN 44	866B-1 0C 866B-2	78288 delive to 210 1952 78289 delive	ered Decem	ber 1950 ber 1950	
	to 202 1952			to 207 1952		866A-2	to 211 1952 76672 delive to 867 1952	ered Decem	ber 1950	



Dispositions:

- 856 BN 4100; Sold to General Electric June 1972
- 857 BN 4102; Sold to Precision National Corp. March 1972
- 858 BN 4104; Sold to General Electric June 1972
- 859 BN 4106; Sold to Precision Engineering Co. November 1970
- 860 BN 4108; Sold to General Electric June 1972
- 861 Traded to ALCO Products December 1968
- 862 BN 4112; Sold to Precision National Corp. October 1971
- 863 BN 4114; Sold to Joseph Simon & Sons Inc., August 1972
- 864 BN 4116; Sold to General Electric June 1972
- 865 BN 4118; Sold to Joseph Simon & Sons Inc., August 1972
- 866 BN 4120; Sold to General Electric June 1972
- 867 BN 4122; Sold to Precision National Corp. June 1971

- 200 Traded to ALCO Products March 1968
- 201 Traded to ALCO Products March 1968
- 202 Traded to ALCO Products August 1966
- 203 Traded to ALCO Products August 1966
- 204 Traded to ALCO Products March 1968
- 205 Traded to ALCO Products March 1968
- 206 Traded to ALCO Products March 1968
- 207 Traded to ALCO Products August 1966
- 208 Traded to ALCO Products August 1966
- 209 Traded to ALCO Products August 1966
- 210 Traded to ALCO Products December 1968
- 211 Traded to ALCO Products March 1968

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4-10-69

SPOKANE, PORTLAND & SEATTLE RAILWAY FA-2 B-B DIESEL LOCOMOTIVE, 1969 DIAGRAM Scanned from book published by Pacific Railroad Preservation Association 1993. Restored by Paul T. Hobbs, September 24, 2010

(And representing 868, 212, 213)

Ordered on American Locomotive Company ALCo Serial Numbers:

- 868A-1 78352 delivered December 1950 to 868 1952
- 868B-1 78285 delivered December 1950 to 212 1952
- 868B-2 78496 delivered December 1950 to 213 1952
- 868A-2 78378 delivered December 1950 to 869 1952

Dispositions:

- 868 Traded to ALCO Products December 1968
- 869 BN 4126; Sold to Joseph Simon & Sons Inc., June 1971
- 212 Traded to ALCO Products August 1966
- 213 Traded to ALCO Products December 1968

Usual Service: