## SOUTHERN PACIFIC

## McKEEN MOTOR CARS

Thon the Joslyn file or 1962

CUY L. DUNSCOMB

Built by the McKeen Motor Car Co., Omaha, Nebraska

Powered by standard 200 HP gasoline engine, 6 cylinder, 10"Dia. X12" Stroke

Two four wheeled trucks, 33" Dia. rolled steel wheels in rear truck, one pair of 33" Dia. rolled steel wheels, and one pair of 42"Dia. steel tired wheels in front truck.

Tractive effort, 4,950 Lbs. Heating system, Hot water. Lighting system, Acetylene gas.

These motor cars were used over the entire Southern Facific, Pacific system branch lines where few passengers were carried and such service, (Passenger) was required to hold franchise.

The McKeen car was perhaps the first of the successful rail motor cars, and was developed by W.R.McKeen, Jr., the Union Pacific's Superintendent of Motive Power and Machinery when the first of his cars were built at UP's Omaha shops in 1905. McKeen soon arrived at a method of construction, years ahead of his time, that made the cars unusually strong for their weight, and thus safe. The cars circular window construction made it possible to make the sides very strong without the need of heavy frame work. By 1908, the demand for his cars had become so great that McKeen resigned from the U.P. to become head of the McKeen Motor Car Co., a UP subsidiary, which remained in business until the first world war. More than 100 McKeen cars were built and used on about 40 different railroads. The weak spot in the McKeen car was the mechaincal transmission which had only two speeds forward and two reverse, and operated through a series of gears and air operated clutch.

Another feature that was a nuisance to the traveling public was the round back end of the cars. McKeen thought that making a pointed front end he would cut down the wind resistance, which it did not do. And that rounded back end just simply sucked the air in the back. exhaust pipe running under the car to the back end, the fumes of the exhaust were drawn up and into the car, if the back windows were left open. I was on a committe that went out with the cars several times and we experimented by tearing up bits of paper and tossing them out the back window. Sure enough they were drawn right back and into the car. So, we redesigned the exhaust to shoot straight up out of the engine room. Also, the cars did not have a self starting engine, and as we used a cheap grade of gas to run the cars, we started the engine with high grade gasoline. And we put a self starter on by stanting the engines with compressed air. There was a compressed air cylinder, operated by a gas engine that pumped up 100 pounds pressure to start the As the car moved along the track, an eccentric on one side ran an air pump, other other side an eccentric ran a water pump.

Sacramento shops redesigned the clutch, and it worked fine. We also did away with the magneto sytem and applied a carbureter to the engine.

According to my notes and records that I made while working for the "FriendlY?" Railroad, the traveling public always called the McKeen cars SKUNKS!

Also according to my records, the S.P. numbered all of their McKeen cars in the odd numberes. The little 51'2""trailers were numbered in the even numbers.

As first received the trailers had one single long, 4 wheeled truck that kept derailing, so the McKeen folks placed two four wheeled trucks under the next trailers. And sent us trucks for the first five that we had. The trailers had baggage, Mail, and Wells Fargo parts in them at first. Later, the S.P. built some of their McKeen cars from 55'2" long to 70 feet long and placed the baggage mail and W.F.Co. compartments in the front end next to the engine room. All were bought during 1908,1909,1910 and 191D. Most of the last few bought were built 70 feet long.

The little trailers, were numbered, SP-2, SP-4, CP-6, SP-8, AE-8, SP10, AE-10, SP-12, 14, 16, 18, 20. No trailers were bought after 1909

Now if you want any more dope on these SKUNKS, let me know and I'll dig it out for you. I have the builder's numbers, and what became of the cars.

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