



This new maintenance garage, last step in an \$8,000,000 modernization program in Columbus, O., was . . .

# Built For Trolley Buses

THE completion of the West Broad Street Coach Station in late 1946 marked the final phase of the \$8,000,000 modernization program embarked on by the Columbus & Southern Ohio Electric Company, Columbus, Ohio. Interregarded by the war, the program, which called for changeover of all street car lines to trolley bus ar-

motor bus, gained momentum in 1946 and was finally completed in Sept., 1948. The company now operates 240 trolley buses over eight routes which total 45.79 one-way miles and 79 motor buses over 12 routes, totaling 45.79 one-way miles. Included in the program was the conversion of two car barns to trol-

ley bus garages and the construction of a new station on West Broad Street. Designed to accommodate 110 trolley buses and 175 drivers, the West Broad Street Coach Station was built at a cost of \$309,000. In May, 1949, the company garaged and maintained 101 trolley buses at this station and 96 of these vehicles are scheduled

during peak hours. This station replaced the North High Street carhouse which was abandoned two years ago.

The West Broad Street Station covers 2.46 acres and has entrances and exits for trolley buses on two streets in order to provide two routes to the downtown area. Outside storage area has 9,520 square yards of concrete pavement, the equivalent of a paved strip 18 feet wide and nine-tenths of a mile long. Including the storage area, there are 8,000 feet of overhead wire installed at the station.

In addition to the storage yard, three buildings are located on the property (see accompanying chart). These structures include transportation headquarters, a maintenance building and a wash building. The total cost of erecting these three buildings was \$244,000 and the land, which includes the storage area, cost \$65,000.

The maintenance building contains a pit and hoist area, a small office for the foreman, a parts room, a tire room, a fire-proof storage room for inflammables and a boiler room. The main working area has four well-lighted pits. Each pit is equipped with outlets for supplying grease, lubrication and air. As a safety precaution, grease and lubricating oil are stored in the fire-proof storage room and piped to the pits. A Weaver hoist also is located in the main working area for special work.

The C. & S. Ohio Electric Co. maintains its trolley buses on a mileage basis. Inspections are performed at 1,500, 10,000, and 18,000 miles. The 1,500-mile inspection, called the "A" inspection by the company, occurs every 7-10 days, and an average of seven trolley buses are inspected daily at the West Broad Street station.

The "A" inspection includes: outside and inside of the vehicle, motor, retrievers, trolley equipment, radio coils, air equipment, front and rear axles, steering assembly and control equipment. The "B" inspection, performed at 10,000 miles, includes all the items on the "A" inspection plus: cleaning and adjusting bumper, door edge, drum and treadle switches, and fuse clips; lubricating motor, controller and unit switch bearings; lubricating trolley buses; overhauling shoe assemblies; testing axle shafts; checking toe-in on steering assembly; overhauling brake valve body and adjusting air pressure; and changing air intake strainer.

The "C" inspection, which is performed at 18,000 miles, includes all the items on both the "A" and "B" inspections plus the draining and flushing of the differential carrier.

For the first four months of 1949, trolley bus maintenance costs were 2.79 cents per mile, exclusive of tire cost. In addition to an excellent maintenance system, the fact that of 240 trolley buses operated, 138 are less than two years old and all of them manufactured by the same company (Marmon-Herrington) contributes to this low maintenance cost.

The West Broad Street Station is used only for regular scheduled inspections and spring changing. The Kellon Avenue Shops do all of the heavy work including: body rebuilding, painting, motor rebuilding, overhauling compressors, overhauling drive units, upholstery and flooring work. In addition, the parts room at West Broad Street keeps only a small supply of parts on hand. The major supply is kept at the Kellon Avenue Shops and sent to West Broad when requisitioned.

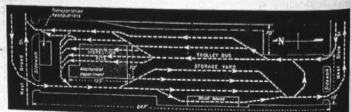
The wash building is a separate unit located about 150 ft. from the maintenance building (see accompanying chart). Trolley buses are washed once a week in good weather and as often as needed in bad weather. If necessary, the entire fleet can be washed in one night. Most of the washing is done by an automatic Whiting washer. Roofs of the vehicles are washed with fountain brushes. To make that job easier and safer, the company designed and built a raised platform for washers to stand on while using fountain brushes on the roof.

Electrically operated double-doors at either end of the washhouse are kept open during warm weather. In the winter, they are opened only long enough to allow vehicles to enter or leave. The wash building is heated by a thermostatically-controlled overhead gas-unit heaters.

All trolley buses are stored outside at night except vehicles which are being inspected. The outside storage area is divided into two sections so that all 48-passenger trolley buses are stored in one area and 44-passenger in another. The 45-passenger vehicles are used on High Street, the heaviest travelled line in Columbus.

The two-story transportation office contains the cashier's room and a schedule room with routing boards on the first floor. The entire second floor is devoted to a driver's lounge, showers and locker space. This building, as well as the maintenance building, is heated by a coal-fired boiler located in the maintenance building.

A total of 20 maintenance employees are used at the West Broad Street Station. These include: four washers, one hostler, one janitor, four servicemen, one relief serviceman, two foremen and seven mechanics.



Trolley buses are stored outside at night except those which are being inspected. An average of seven vehicles are inspected daily.

Two entrances and exits facilitate the flow of vehicles during rush hours. Outside storage area has 9,520 square yards of pavement.

