

as heat into the open air.

It takes a lot of energy to do this, since the motor "resists" whirling — and in turn the moving coach loses momentum and slows down. It may sound complicated but it works like a charm!

* * *

Trolleys supply a lot of fresh air to passengers as they move along . . . 1200 cubic feet per minute, either at the outside temperature of the air, or electrically warmed. How much more comes into opened windows is anyone's guess.

BCE operates trolleys over 152.02 miles of wire, which is worth around \$5.3 millions and is considered to be one of the best and most modern layouts in the country.

And trolleys (like all BCE vehicles) are expertly and systematically maintained and overhauled.

That's one reason why you're safer riding with us than staying in your own home—and far safer than driving or riding in an automobile.

But the vital reason is your operator up front, there. He's a professional driver with a lot of training, judgment and experience behind him.

You can count on him — every day in the year — to take you to your destination with promptness, safety and courtesy.

Coming Events

May 26 — Fairview Rebekah Lodge No. 49 garden party and home cooking sale, 2 p.m., 4612 Brandon Ave.

May 26 — 1st Annual Inspection and Rally Vancouver & District Life Boy area, 2 p.m., Lumberman's Arch, Stanley Park.

May 25 — B.C. Senior Citizens' meeting, St. Luke's church hall, 796 S.W. Marine Dr., 1.30 p.m.

May 26 — Vancouver Ladies' Orchestra concert, Vancouver Art Gallery, 8.30 p.m.; Soprano Betty Smith, guest soloist.

May 26 — St. George's United church Georgetown Circle, tea, church hall, 47th & Fraser, 2 p.m.

May 26 — Silver Birch Court, No. 9—Order of the Amaranth, Inc., smorgasbord, 6 p.m., IOOF hall, Hastings & Kamloops.

May 26 — Thrift sale, 1.30 p.m., Ryerson church gym, 45th & Yew.

May 26 — Vancouver SPCA Shelter Club sale of home cooking, Holy Trinity Parish hall, 10th Ave. & Pine, 1 p.m.

May 27 — All Saints Church, sons and daughters annual church parade, Kamloops & Franklin. Members meet at Slocan & Hastings, 7 p.m.

May 28 — Truce Club rummage sale, 7 p.m., Arcadian hall, Main & Kingsway. Proceeds to preventorium.

May 30 — UN Club of John Oliver H.S. presents "Night of Music", school aud., 41st Ave. near Fraser, 8 p.m.

May 30 — Danish Ladies Auxiliary to Danish Old People's home rummage sale, 1 p.m., Arcadian hall, 1124 Main St.

May 30 — "Open House" to be held at George Derby Hospital, Cumberland & 16th Ave., 2 to 5 p.m.

May 30—Annual donation tea and sale of home cooking of W.A. to Maywood Home will be held at 6885 Balsam St., 2-5:30 p.m. Proceeds to Salvation Army.

May 30—Kitsilano Boys' Band Mothers' Auxiliary May Time tea, 2 p.m., 1711 Drummond Dr.

May 31-June 1 — Parents Institute will be jointly sponsored by Extension Dept. of UBC & B.C. Parent-Teacher Federation, Burnaby South H.S., 2350 Kingsway.

June 1—Carnival of Nations, Alexandra Neighbourhood House, 2 p.m.

June 1—Vancouver East Lions Club Mammoth Bingo Game, 8 p.m., Vancouver Forum. Doors open 6.30 p.m., admission \$2.

June 1—Parents' Auxiliary to Kerrisdale Kiwanis Boy's Band, rummage sale, 6th Ave. & Main St., 1.30 p.m.

June 1—Solar Social Club dance, Oddfellows Hall, 30th Ave. & Main St.

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For transit information call KERRISDALE 7500 day or night.

PICK OF THE *Pictures* at the neighbourhood theatres

By Clyde Gilmour

They're not circulating in the suburbs yet, but they're coming, and worth going out of your way to see when they arrive:

The Harder They Fall: Hollywood has made a gripping movie from Budd Schulberg's angry novel about racketeering in the prize-ring. With Humphrey Bogart, Rod Steiger.

Jubal: An interesting psychological western starring Ernest Borgnine (the memorable butcher of "Marty") as a benign but homicidically jealous rancher who wrongly believes that one of his hired hands (Glenn Ford) is a home-wrecker. The busy Rod Steiger appears as the most devilish cowboy of the season.

The Man Who Knew Too Much: Thrill - Maestro Alfred Hitchcock is up to his best old-time directorial form in this exciting remake of a picture he first did about 20 years ago. It's a murder-and-espionage adventure starring James Stewart and Doris Day.

There's a new hollow mothball, girls. You tuck your bathing suit safely inside.

* * *

Bigamist: a person who has taken one too many.



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All about trolleys

Many passengers who ride our trolley coaches have asked, "how do they work? What goes on inside?"

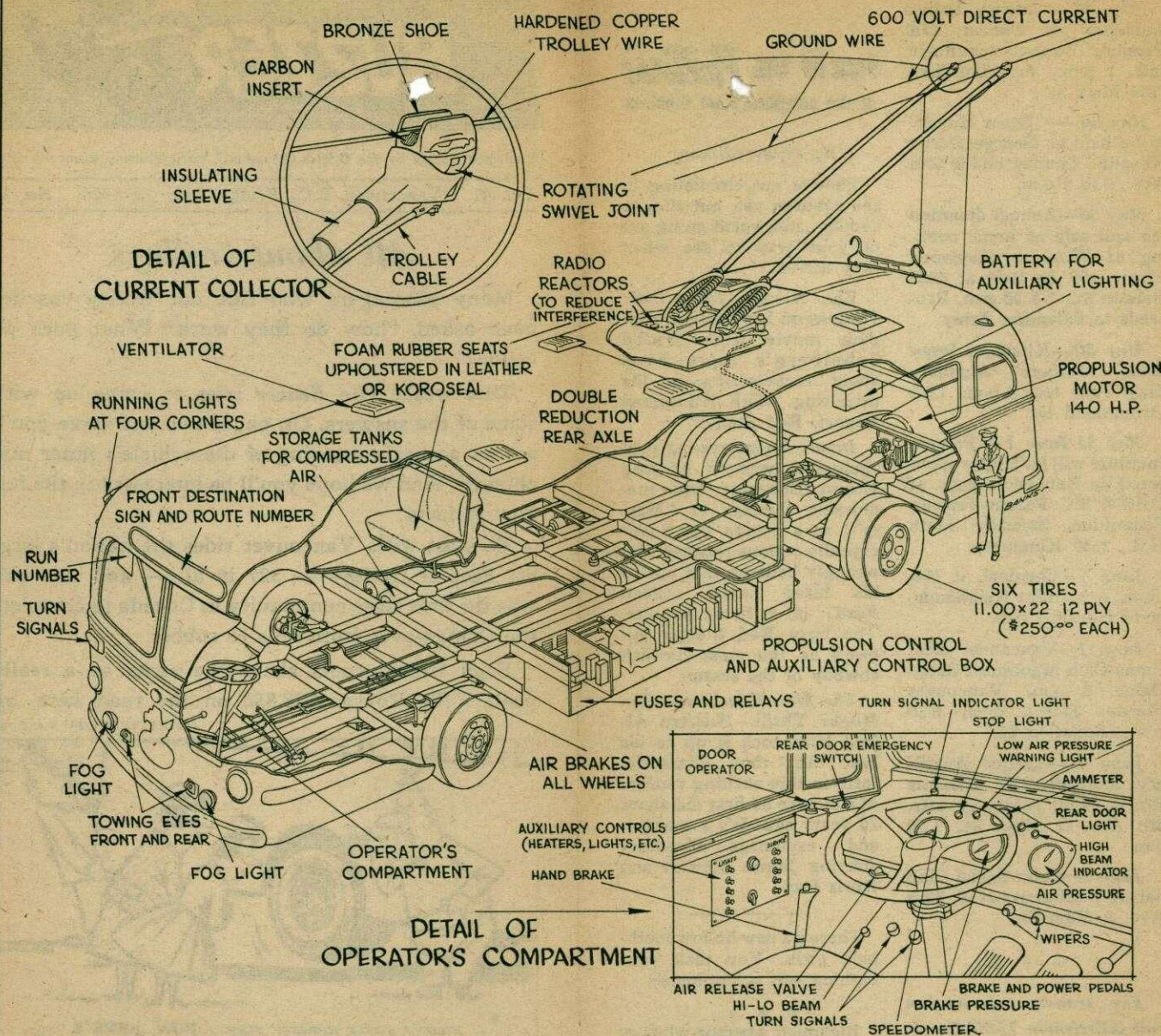
This week, *The Buzzer* tries to come up with some of the answers. On pages two and three you'll see an accurate drawing of the vehicle's inner machinery. And we hope you'll be interested in the following facts:

To start with, Vancouver rides the nation's largest fleet of trolleys — 327 in all — and this city was the first large community in Canada to complete the change-over from rails to rubber.

Each trolley costs about the same as a really posh Rolls Royce: \$28,850 on the road here, all

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(CONTINUED FROM PAGE 1)

taxes paid and with signal lights, fog lights and other extras installed.

The wheelbase is 247 inches and a coach measures 38 feet 9.5 inches bumper-to-bumper. Cadillac owners, please note!

They're a big vehicle, but surprisingly nimble at getting through crowded streets. In the old days, you may recall, a single street car might have trouble and stall, or might clip another vehicle . . . and every other street car behind it would have to stop, too, until the track could be cleared.

Trolleys rarely have this difficulty. They can swing 14 feet to either side of the twin overhead wires, dodging blockages and getting through on schedule.

If for any reason a trolley goes "dead", it doesn't block those following. The operator pulls over, yanks down his twin poles, and the line is clear again — in a matter of minutes.

* * *

Trolleys operate on Direct Current. That is, the electricity flows only one way instead of changing its direction ("alternating") 60 times a second, as it does in your home.

One overhead wire supplies energy at 550 volts and any number of amps (up to about 300) that the operator cares to "pull down" by stepping on the accelerator.

After passing through the coach's motor, the electricity is grounded into the other overhead wire.

The electric motor in a

trolley is a remarkable machine. It develops only 140 h.p. (cars pack as much as 300 h.p. these days). Yet it will easily and rapidly move a full trolley coach uphill from a bus stop — and that's a dead weight of more than 25,000 pounds.

The reason for this is that, with electricity, you can develop the full power of the motor from almost a complete halt all the way to top speed. With a car engine, the power build-up is gradual — you don't get all the horse power until the engine is turning over at full throttle.

In a word, your trolley operator can apply the full output of 140 h.p. at any time and at any speed the situation may require.

* * *

With 50 lives or more depending on him, your operator must be able to stop a trolley in a hurry. And he can! Each coach is equipped with *three* types of brakes. Powerful airbrakes, applied to all six tires, are at his command.

So, also, are the *Dynamic* and *Regenerative* brakes. These depend on the vehicle's electric motor.

It is one of the handy facts of electricity that an electric motor and a generator are very much alike. In the case of a trolley motor, if you put power *into* it you of course make the coach go. On the other hand, if the coach is already moving, you can gear the wheels to the motor and make it generate power — which is sent back into the overhead wires, or given off