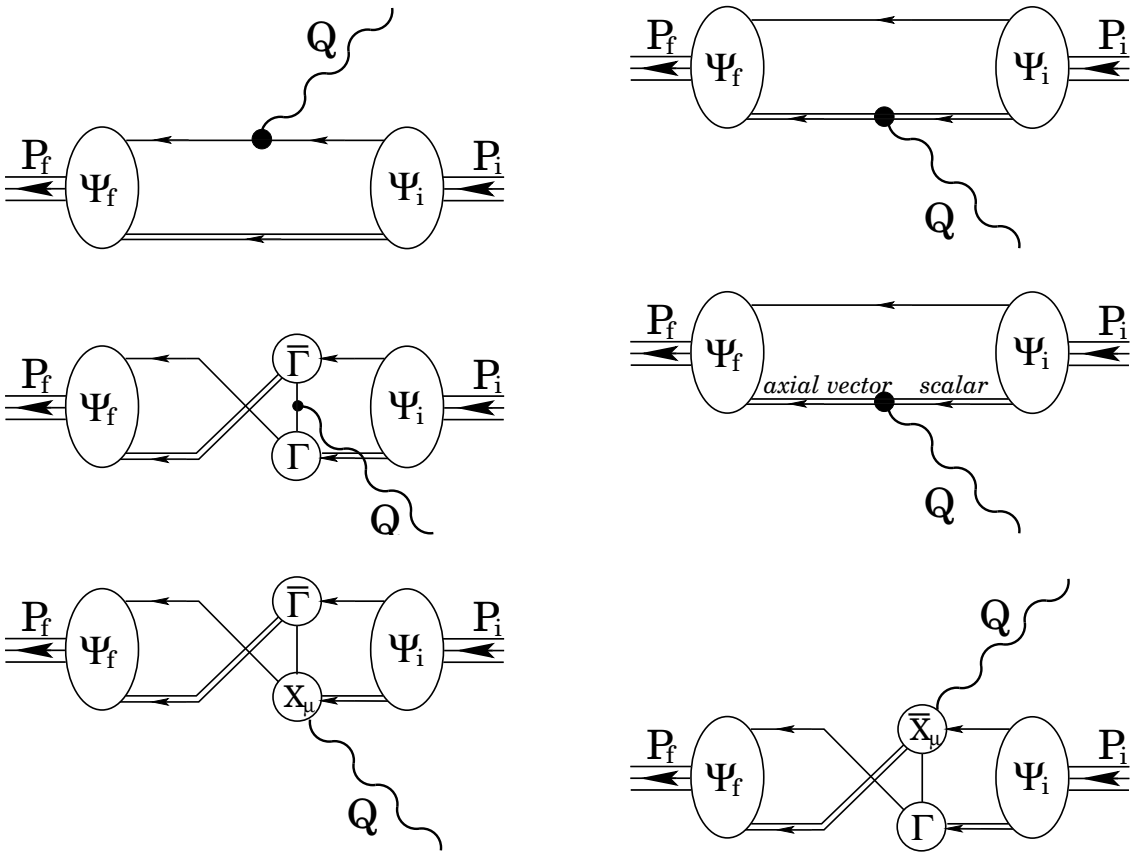

FIG. B.44 Vertex which ensures a conserved current for on-shell nucleons described by the Faddeev amplitudes, $\Psi_{i,f}$, obtained from the Faddeev equation depicted in Fig. B.43. The single line represents the dressed-quark propagator; the double line, the diquark propagator; and Γ is the diquark Bethe-Salpeter amplitude. The remaining vertices are described briefly in the text: the top-left image is Diagram 1; the top-right, Diagram 2; and so on, with the bottom-right image, Diagram 6. In connection with DIS, the photon line is equated with a zero-momentum insertion. [A full explanation of the diagrams depicted here is provided in App. C of (Cloët *et al.*, 2009), from which this figure is adapted.]

(Oettel *et al.*, 2000) and illustrated in Fig. B.44. Naturally, the current depends on the electromagnetic properties of the diquark correlations. A detailed explanation of the diagrams in Fig. B.44 is presented in App. C of (Cloët *et al.*, 2009). Here we only provide a brief explanation.

Diagram 1 represents the photon coupling directly to the bystander quark. It is a necessary condition for current conservation that the quark-photon vertex satisfy the Ward-Takahashi identity. Since the quark is dressed, the vertex is not bare. It can be obtained by