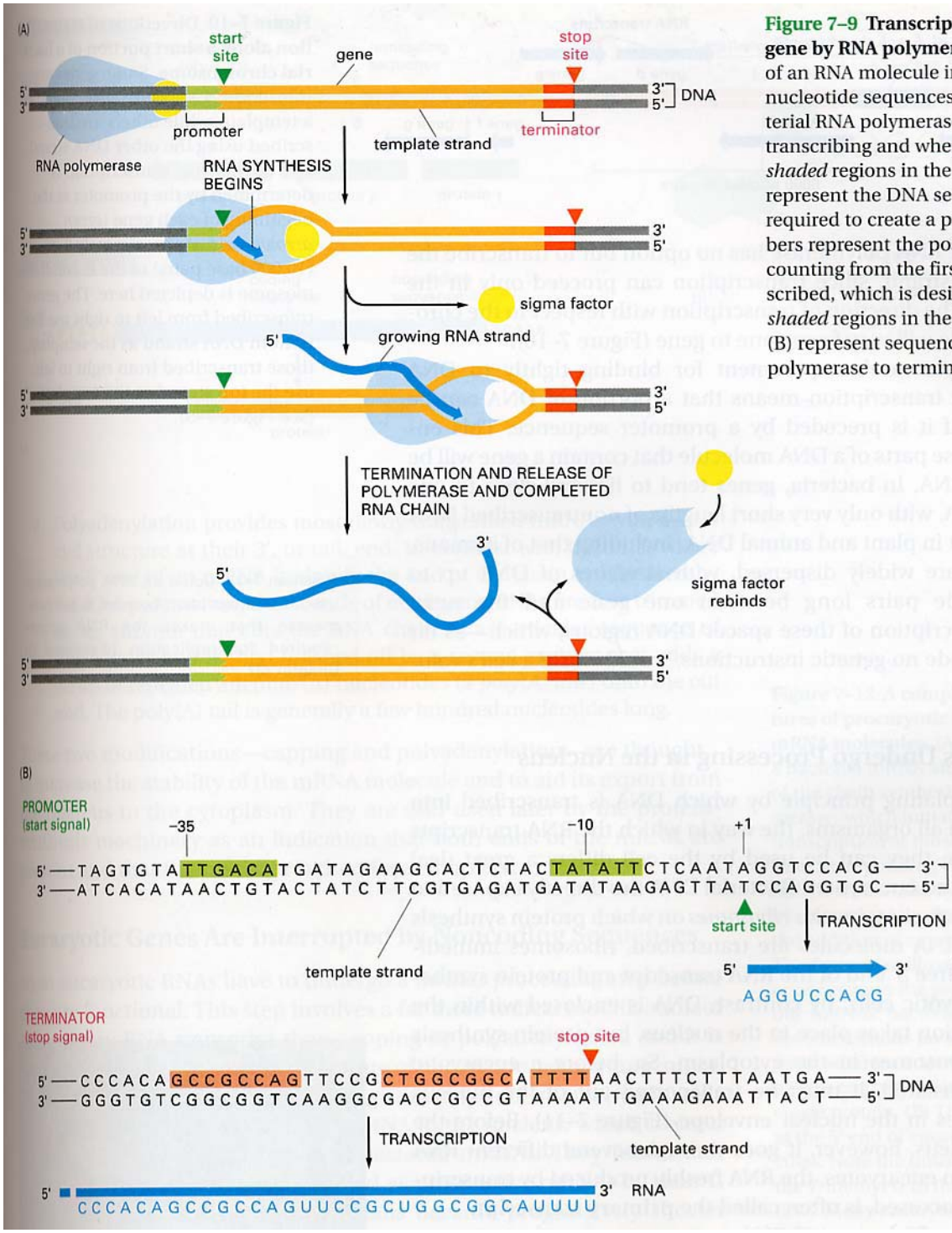

Figure 7–9 Transcription of a bacterial gene by RNA polymerase. (A) Production of an RNA molecule in bacteria. (B) The nucleotide sequences that signal to a bacterial RNA polymerase where to begin transcribing and where to stop. The *green-shaded* regions in the top diagram in (B) represent the DNA sequences that are required to create a promoter. The numbers represent the positions of nucleotides counting from the first nucleotide transcribed, which is designated +1. The *red-shaded* regions in the bottom diagram in (B) represent sequences that signal to RNA polymerase to terminate transcription.