

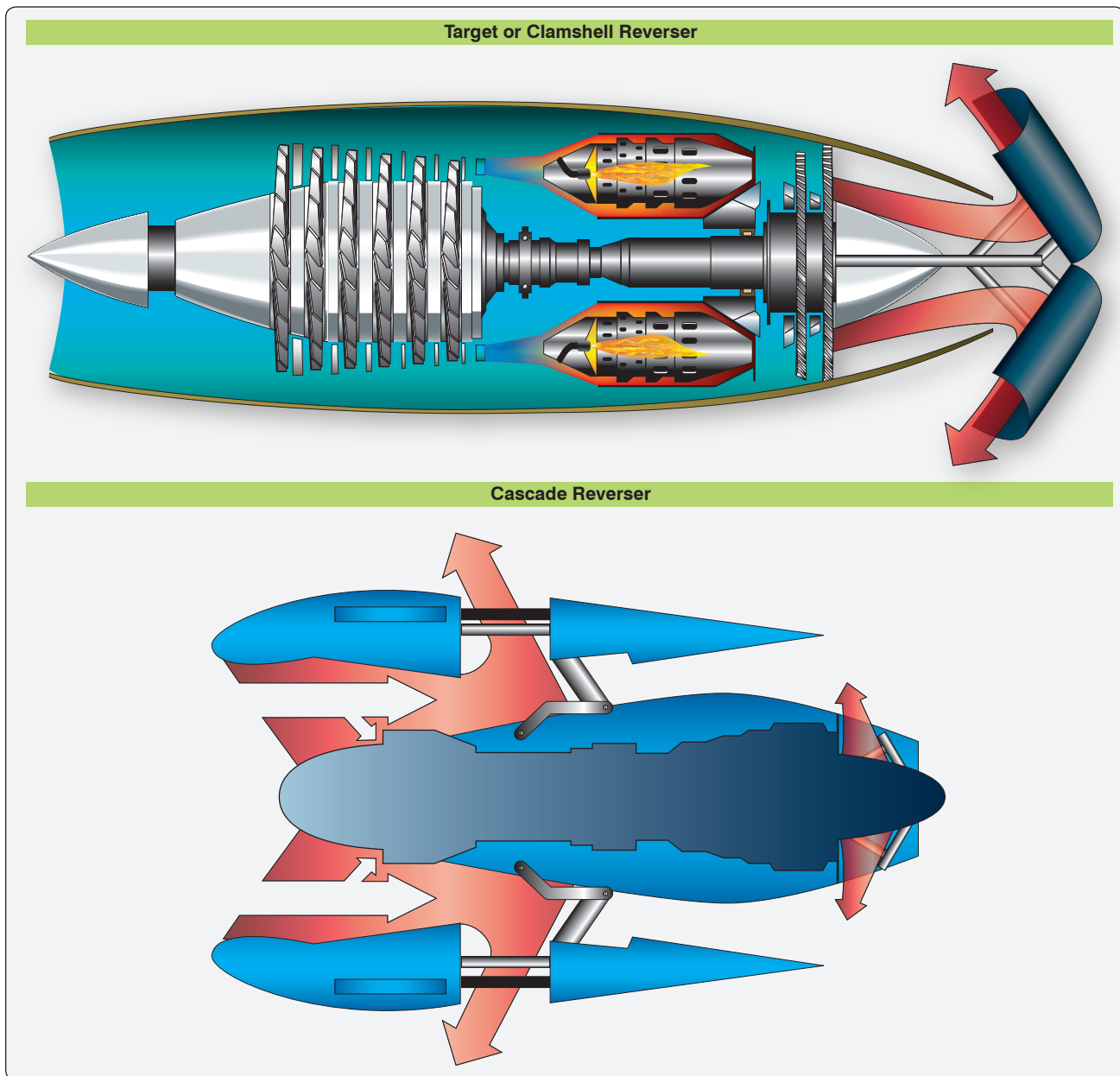


Figure 15-19. *Thrust reversers.*

reversers are simple clamshell doors that swivel from the stowed position at the engine tailpipe to block all of the outflow and redirect some component of the thrust forward.

Cascade reversers are more complex. They are normally found on turbofan engines and are often designed to reverse only the fan air portion. Blocking doors in the shroud obstructs forward fan thrust and redirects it through cascade vanes for some reverse component. Cascades are generally less effective than target reversers, particularly those that reverse only fan air, because they do not affect the engine core, which continues to produce forward thrust.

On most installations, reverse thrust is obtained with the thrust lever at idle by pulling up the reverse lever to a detent. Doing so positions the reversing mechanisms for operation but leaves the engine at idle rpm. Further upward and backward movement of the reverse lever increases engine power. Reverse is cancelled by closing the reverse lever to the idle reverse position, then dropping it fully back to the forward idle position. This last movement operates the reverser back to the forward thrust position.

Reverse thrust is much more effective at high airplane speed than at low airplane speeds for two reasons: the net amount of