## PROCEDURE 4.160

ASSEMBLING THE BASIC SEATS

In this procedure you will:
Assemble the four basic seats. All seats have the same profile. Each seat has sides composed of two parts that are fitted along the inside edges to strengthen the seat structure and to form a base for upholstery. A formed foam piece is bonded along the top rear and bottom front of each seat, and then laminated with bid cloth to stiffen the part.

## SUPPLIED MATERIALS:

## Part No.

112-61-001
112-61-002
112-61-003
112-61-006

## Qty

2
8
8
5

## Description

Seat, formed
Seat rib, top side
Seat rib, bottom side
Brace, Seat

## Step 1. Cut out and mark your seats to differentiate them.

Cut your seats from the formed seats (112-61-001) in widths to suit your needs. Normally the front seats are $19.0^{\prime \prime}$ wide, the rear seats $18.0^{\prime \prime}$ wide. However, some builders may prefer bench seats instead of individual seats. Whatever you choose be sure to mark your seats now so you can tell which are to be front and rear.

The instructions assume you will be making individual seats for your aircraft, using the suggested dimensions.

## Step 2. $\quad$ Fit seat side ribs and install.

The seat side ribs (112-61-002 - top, 112-61-003 - bottom) must be fitted to the contour of the faces of the seats. File/sand all parts until they fit snugly and butt together properly.

Prep sand the area where the ribs will be bonded. Glue the fitted seat side ribs to the seat shells. Apply a Q-cell fillet along the
 inside joints of the parts. Radius, the back and bottom outside edges of each seat with a coarse file (or alternatively with a $1 / 4^{\prime \prime}$ radius router). Form a $2.0^{\prime \prime}$ radius on the bottom side rib (112-61-003) to match the top of the topside rib (112-61002).

Laminate two plies of $2.0^{\prime \prime}$ wide bid cloth over the outside joint and along the inside joint for the full length of the seat sides. Add an additional two layers over the butt splice of the top and bottom side ribs extending $2.0^{\prime \prime} \mathrm{in}$. each side of the joint. Repeat the procedure for all four seats.

## Step 3. Install and shape top braces

Radius the edge of the seat top front face. Cut and hot glue the foam seat top braces (112-61-006) in place along the top back face of all four seats. Shape as shown.

Brush foam with a wet Q-cell mixture to seal and improve bonding. Apply a Q-cell fillet along the lower edge then laminate two $5^{\prime \prime}$ wide layers of bid cloth across the full length of each seat top, lapping 1.0 " along front face of seats as well as along the back.

Step 4. Cut out control stick slots and install brace.
 through the front seats. Remove a 6.0" square cutout, centered on the centerline of the front seats, for the sticks. (Save the material cut out.) Radius the upper face of the seat along the front and around the cutout edges of the control stick opening. Hot glue the foam seat brace (11261-006) along the front edges of the front seats and around the cutout to strengthen the area. .

Shape the brace to a smooth radius. Brush the foam with a wet Q-cell mixture to seal and improve bonding. Apply a Q-cell fillet along the inner joint then laminate two $5.0^{\prime \prime}$ wide layers of bid cloth around the bracing and edges of the seats.

## Step 5 Install bottom front braces on rear seats.

Radius the upper face of the rear seat fronts. Hot glue the foam seat braces along the lower edges of
 the seats. Radius to provide a smooth transition. Brush a wet Q-cell mixture on the foam to seal and to improve bonding. Apply Q-cell fillet and laminate two layers of bid cloth around the bracing and edges of the seats, as in Step 4.

