

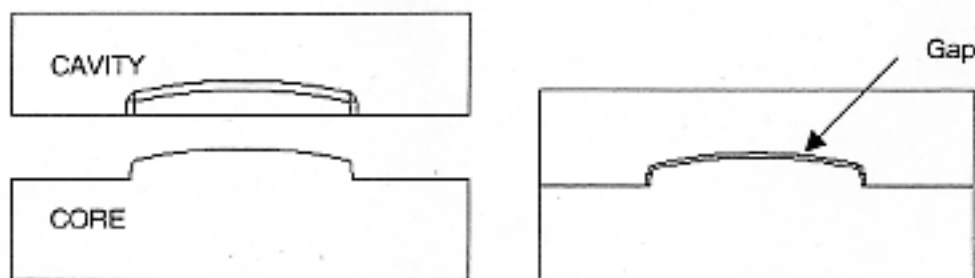
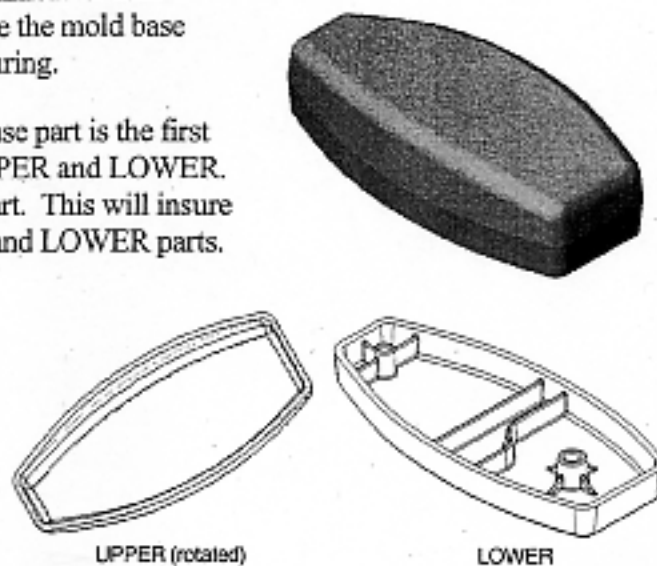
**CASE Overview with CORE and CAVITY**

Develop a thin walled containment CASE.  
Design the CASE, then create the mold base plates required for manufacturing.

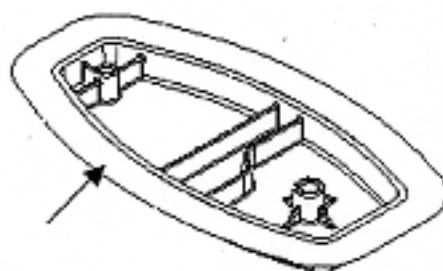
CASE is the Base part. A Base part is the first feature of two new parts: UPPER and LOWER. Start with a common Base part. This will insure the proper fit of the UPPER and LOWER parts.

Create the UPPER case with an Advanced Sweep feature. Create the LOWER case with Ribs, Bosses, Cuts and Draft.

The UPPER case requires a mold base cavity and a mold base core. The cavity determines the outside geometry. The core determines the inside geometry. During the injection molding process, the plastic fills the gap between cavity and the core.



The LOWER case requires a mold base cavity and mold base core. Create a mold base core with a Radiate Surface and Knit Surface.



Radiate Surface

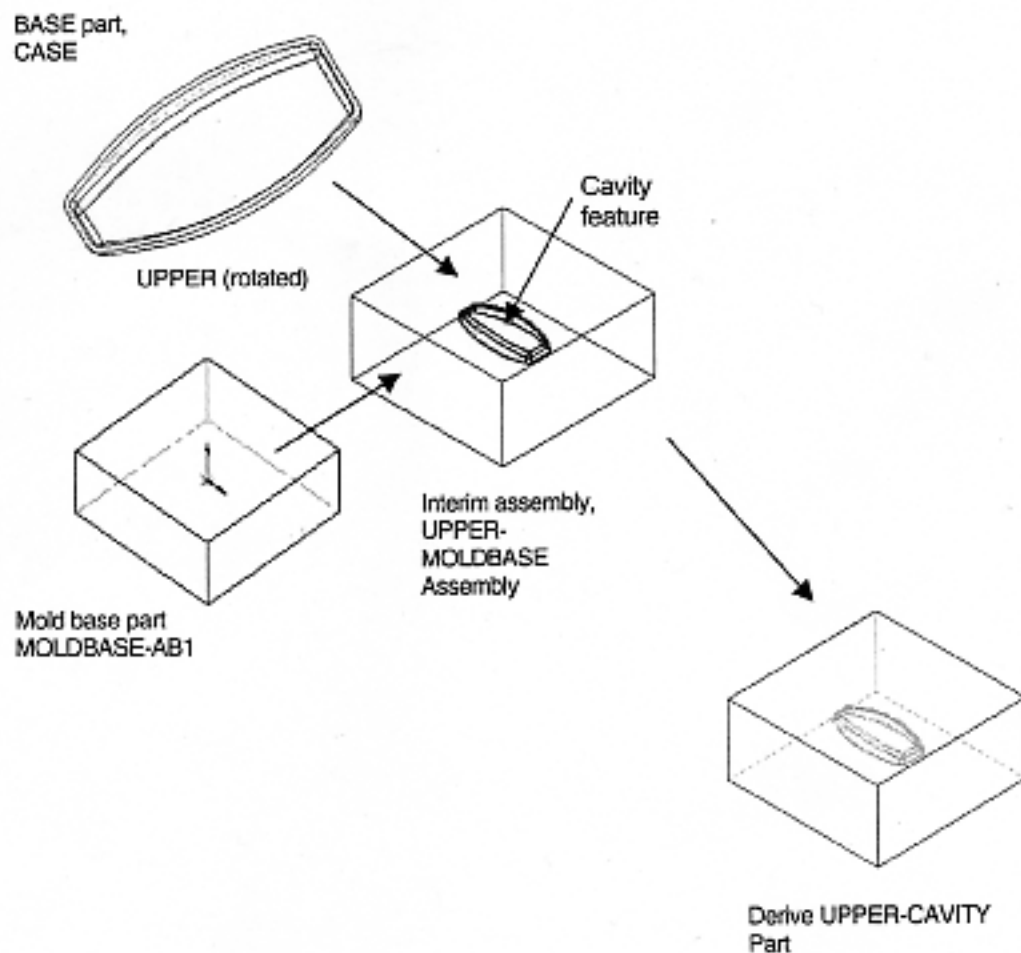


Knit Surface (rotated) with LOWER hidden

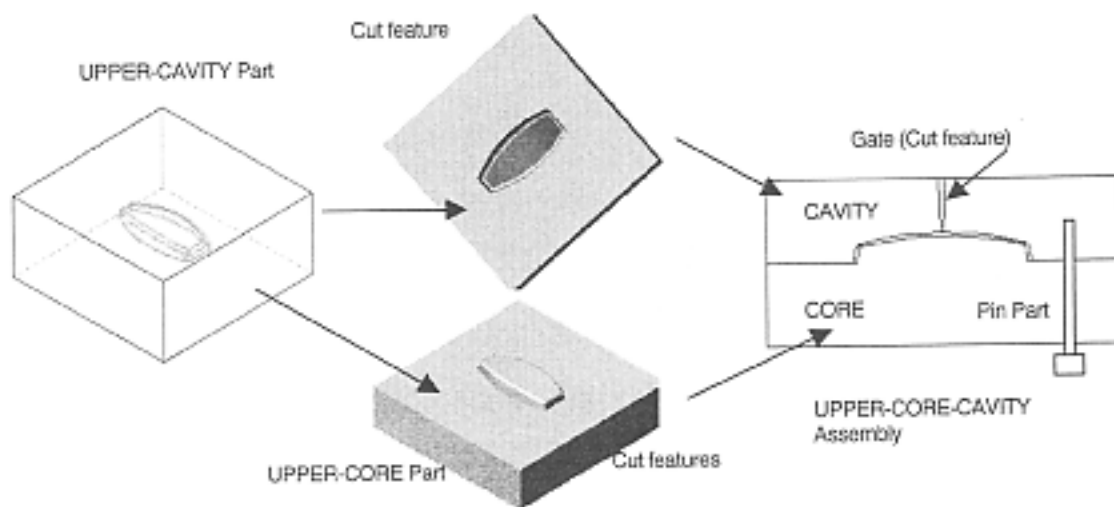
**UPPER Cavity Overview**

Four major steps are required to create the UPPER cavity mold.

1. Create the UPPER part. The UPPER part uses the CASE part as a Base feature. Use a Shell feature to insure a constant thin wall. Use the Fillet feature to eliminate all sharp edges.
2. Create the MOLDBASE part. The MOLDBASE part represents a standard 200mm x 200mm x 95mm mold base plates, PLATE A and PLATE B.
3. Create an Interim Assembly, UPPER-MOLDBASE. Fix the MOLDBASE component. Mate UPPER to the center of the MOLDBASE. Edit Part MOLDBASE in the context of the assembly. Create a Cavity feature using UPPER. The Cavity feature removes the UPPER from the MOLDBASE.



- Complete the MOLDBASE plates: UPPER-CAVITY and UPPER-CORE. Create a new component, UPPER-CAVITY. Add a single Cut feature to complete the UPPER-CAVITY. Save UPPER-CAVITY as UPPER-CORE. Delete the first Cut feature. Add two additional Cut features to complete the inner core.



The UPPER-CAVITY part and UPPER-CORE part are combined in the UPPER-CORE-CAVITY assembly. Add features and components to complete the UPPER-CORE-CAVITY assembly.

Caution: Many parts and assemblies are created in this project. Select parts with care. Know your location in the FeatureManager. Edit the parts in the context of the assembly. Create the Cavity feature. All parts and assemblies share a common file structure. The common file structure consists of the following items:

- Designed part
- Mold base part
- Mold base interim assembly
- Derived components