… Assemblies – Solid Body Contact

- Internally, thermal contact for solid faces is defined with CONTA174 and TARGE170 elements.
  - KEYOPT(1)=2 set for thermal DOF only
  - KEYOPT(12) is based on contact type used
    - For example, bonded type is KEYOPT(12)=5. KEYOPT(2), KEYOPT(5), KEYOPT(9), and FKN are also set. These contact settings are most critical for structural contact, so the various default settings are outlined in Chapter 4.
  - Default thermal contact conductance (TCC) is based on highest value of thermal conductivity of materials and overall geometry size
    - TCC=KXX*10,000/ASMDIAG
      - KXX is of highest thermal conductivity value of used materials
      - ASMDIAG is diagonal of overall 'bounding box' of assembly
    - TCC is not used for MPC (KEYOPT(2)=2 on CONTA174)
  - If Normal Lagrange formulation is set, KEYOPT(2) reset to 0.