**Reverse Modeling Case Study**

1. **1922 Bugatti**
   - Engine Manifold

2. **Worn/Damaged Part**

3. **NextEngine Scanner and Software setup in machine shop**

4. **Original object scan in progress**

5. **Watertight 3D model with texture, scanned and assembled in ScanStudio CORE (35 minutes)**

6. **Mesh Mode view**

7. **With RapidForm’s power tools, a precise parametric solid is drawn, based on the scan (45 minutes).**

8. **Parametric solid is exported to SolidWorks with a fully editable feature tree.**

9. **Dimension 3D ABS print is made for investment casting process.**

10. **Mold is made of plaster and sand for investment casting.**

11. **Aluminum part tree**

12. **Finished aluminum manifold matches the shape of the original. The next best thing to NOS parts.**

NextEngine Inc.
401 Wilshire Boulevard, Ninth Floor, Santa Monica, CA 90401
www.nextengine.com