PLT’s Direct Part Marking (DPM) Services permanently laser parts with product information including serial numbers, part numbers, date codes, and barcodes – this allows for the tracking of parts throughout their life cycle.
ABOUT PLT: Precision Laser Technology is a leader in laser engraving technology and services providing precision quality etching to customers worldwide. PLT combines digital imagery and proven laser solutions to engrave molds for injection and blow molding applications; manufactured components and parts for identification reading and traceability, and various substrates for decorative and promotional markings.

DIRECT PART MARKING: PLT extends its laser technologies to marking metals, plastics, and surface coated materials. Our technology and variable process flexibility allow the ability to increase marking speeds that yield shorter turnaround time to the end user and draw greater precision for enhanced quality.

ANODIZED ALUMINUM: Anodizing serves as a protective coating and hardener for fabricated aluminum parts. As an add-on, the ability to dye the anodized layer offers a contrasting backdrop for laser markings. Our laser technology is programmed to remove the anodized coating and aluminum oxide to expose the material's surface. The interaction between the laser and the aluminum creates a bleach white mark that is highly visible against black and other colored anodizing.

STAINLESS STEEL: Marking stainless steel is achievable utilizing the proper laser source and power settings to provide a dark contrasting mark that is highly visible. Varying grades of steel respond differently and yield distinct shades of black. If desired, a permanent pigment could be introduced to provide color enhancement for a darker shade.

PLASTICS: For applying aesthetic, permanent features on plastic, laser marking has become a welcomed alternative from existing printing and silk-screening applications. Within the plastic, the laser's radiation is absorbed by the polymer and converted to a thermal energy. Given the vast portfolio of plastic make-up, this thermal energy will react in a variety of marking fashions on the surface.

- Foaming: The release of small gas bubbles, which scatter light for a lighter surface mark.
- Charring / Carbonization: Thermal degradation of the plastic resulting in a darker mark.
- Ablation / Engraving: The removal of a single or multiple surface layers creating a dark impression within the material.

INDUSTRY COMPLIANCE STANDARDS: NASA-STD-6002, MIL-STD-130 and ATF 27.CFR.478.92