



MUNRO



2022 TEXAS

- VS -

2020 CALIFORNIA

TESLA MODEL Y

COMPARISON



REPORT OVERVIEW

This report provides a cost analysis of the parts and labor associated with the manufacturing and assembly of a 2020 Fremont, California and a 2022 Austin, Texas built Tesla Model Y. The vehicles are compared to highlight execution differences and their impact on vehicle cost and weight.

The report outlines carry over, modified, and unique assemblies between the 2020 Fremont and the 2022 Austin versions of the Tesla Model Y.

Unique	Completely different Part or Assembly from 2020 Model Y
Modified	Part or Assembly retains common hard points but is in some respects different than on the 2020 Model Y
Carry Over	No change in Part or Assembly from 2020 Model Y

- The 2020 Tesla Model Y was produced in Fremont, California. The vehicle was one of Tesla's first application of a heat pump and three-piece rear body casting. It had a conventional under-slung battery pack secured to the underside of the floor pan. The battery pack was comprised of 2170 cells.
- The 2022 Austin, Texas Tesla Model Y also includes a heat pump and incorporates the notable evolution of a single piece rear body casting, a single piece front body casting, and a structural battery pack comprised of 4680 cells.



COST PROCESS

The 2020 Model Y cost model baseline was generated by disassembling the vehicle and capturing the assembly operations and component weights in Munro's Design Profit® software. The fabrication processes were then mapped to determine materials and manufacturing process costs. Using the 2020 Model Y cost model, the 2022 Model Y unique and modified assemblies were estimated using Munro's Exclusion Costing process. The 2022 Tesla Model Y ECUs and other electronics were not dismantled and analyzed in this report. As such, differences in semi conductor selection that may have led Tesla to a new part revision were noted but not further analyzed.

REPORT PRICING & AVAILABILITY

The Tesla Model Y Comparison report is available for purchase on October 1, 2022, as a consolidated Zone vehicle report.

- Zone 1 - Body and Chassis
- Zone 2 - Controlling Electronics
- Zone 3 - Interior and Safety
- Zone 4 - Powertrain and Battery Pack

Please contact sales@leandesign.com for pricing.



ZONE SUMMARIES

- The report is broken down into four vehicle zones. The execution differences within each zone subsystem are highlighted and analyzed to define weight and cost deltas.
 - Zone 1 – Body and Chassis
 - Zone 2 - Controlling Electronics
 - Zone 3 – Interior and Safety
 - Zone 4 - Powertrain and Battery Pack

The screenshot displays a report interface for 'Low Voltage Wire Harnesses' and 'Zone 2: Controlling Electronics'. It includes a summary table for Zone 2 and a detailed table for 'Summary - Zone 2: Controlling Electronics'.

Zone 2: Controlling Electronics

- Unique:** Completely different Part or Assembly from 2020 Model Y
- Modified:** Part or Assembly retains common hard points but is in some way different than on the 2020 Model Y
- Carry Over:** No change in Part or Assembly from 2020 Model Y

Summary - Zone 2: Controlling Electronics

System	Highlights
Active Chassis / ADA S	<ul style="list-style-type: none"> Car computer was located approximately center of dash on 2020 model, but re-located to RH side of dash on 2022 model 2020 model Supplier
Infotainment	<ul style="list-style-type: none"> Sub w Amplif
Interior Control Modules	<ul style="list-style-type: none"> Overh
Interior Switches	<ul style="list-style-type: none"> No ne
Overhead Console & Lighting	<ul style="list-style-type: none"> No ne
Ignition Systems, RKE, & TPMS	<ul style="list-style-type: none"> No ne
Data & Power Outlets	<ul style="list-style-type: none"> No ne
Horns	<ul style="list-style-type: none"> 2020 speake
12V Battery	<ul style="list-style-type: none"> 2020 Model
Low Voltage Harnesses	<ul style="list-style-type: none"> 2020 2022 2022 model includes additional measure barrier wrapping around the dash panel trim



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REPORT DELIVERY

- All reports and accompanying deliverables are made available for easy access through a secure File Transfer Protocol (FTP) site.
- A user-friendly PDF format ensures ease of viewing, sharing, and printing.
- The large reports feature a linked table of contents, allowing users to easily navigate the report contents and quickly locate specific data.



FREQUENTLY ASKED QUESTIONS

- **Were any OEMs involved in the study?**

No. Neither Tesla nor any supplier's quoted costs were used in this study.

- **Is there any Tesla proprietary information in this report?**

No. All data was developed through Munro's proven methodologies, obtained by analyzing Munro's purchased production-version Model S Plaid..

- **Are the components costed using country specific costing centers?**

Yes. Munro uses country-specific labor rates and working patterns, factory floor costs, utility rates, and loan interest rates.

- **Is this a Costing or Pricing report?**

This is a Costing Report. Pricing has too many variables.

- **How can I receive more details on the contents of the reports?**

Questions regarding report contents should be sent to sales@leandesign.com. Munro will respond with clarification, and if necessary, meet virtually to discuss and review. Complex and/or detailed requests may require additional consulting fees.

- **Are Sample reports available?**

Sample reports are available. Please contact sales@leandesign.com

Note: Some data may be redacted.