

Important Note:

Each supplier wishing to do business with Tenneco is required to meet the guidelines indicated in this Global Supply Chain Management Manual, as well as the respective region for which business transpires.

Table of Contents and Revisions

Last updated 5/31/2010

All Changes Shaded in Blue

Section	Content	Creation Date	Revision Letter	Revision Date	Revision
0.0	Link Sheet	5/31/2010	A	5/31/2010	Added
1.0	Introduction	1/1/2004	N/A	N/A	Created Heading for Section
1.1	Cover Letter	1/1/2004	E	2/1/2009	Revised authors' name and title
2.0	Organization	1/1/2004	N/A	N/A	Created Heading for Section
2.1	History	1/1/2004	C	5/31/2010	Updated
2.2	Quality Policy/Mission Statement	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
2.3	Vision Statement	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
2.4	Headquarter Locations	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
2.5	Worldwide Location	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.0	Purchasing	1/1/2004	N/A	N/A	Created Heading for Section
3.1	Organizational Philosophy	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.2	Operations Philosophy	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.3	Ethics	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.4	Supplier Criteria	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.5	Initial Assessment	1/1/2004	C	5/31/2010	Added supplier must demonstrate compliance to the manual



3.6	Request for Quote (RFQ)	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.7	Blanket Purchase Orders	1/1/2004	C	5/31/2010	New section
3.8	Blanket Shipping Releases	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.9	Service Orders	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.10	Fab/ Raw Authorizations	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.11	Business Review Meetings	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.12	Supply Agreements	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.13	Prices	1/1/2004	C	5/31/2010	Added reference to PPAP process
3.14	Finance	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
3.15	Payment/ Terms/Conditions	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
4.0	Supplier Performance Requirements	1/1/2004	N/A	N/A	Created Heading for Section
4.1	Quality Systems	11/27/2007	E	5/31/2010	Added requirement for a plan to become ISO or TS certified and/or addition of ISO/TS Cert in TITAN
4.1.1	Engineering Design Rules and CAD Requirements	5/31/2010	A	5/31/2010	Added.
4.2	Advanced Product Quality Planning (APQP)	1/1/2004	C	5/31/2010	Added reference to Risk Assessment
4.2.1	Feasibility	1/1/2004	C	5/31/2010	Added reference to Risk Assessment, added subsections for each element, added reference to manufacturability review
4.2.2	Packaging Planning	1/1/2004	B	5/31/2010	Added approval by materials group
4.2.3	Launch Containment Requirements	1/1/2004	B	5/31/2010	Moved from 4.3.1.2 was not in correct location for process flow
4.2.3.1	Launch Containment Process	1/1/2004	B	5/31/2010	Separated process from exit criteria, deleted old section



4.2.3.2	Launch Containment Exit	1/1/2004	B	5/31/2010	Separated process from exit criteria, deleted old section
4.2.4	Run at Rate	1/1/2004	B	5/31/2010	Moved from 4.3.3.2 to match process flow.
4.3	Supplier Production Part Approval Process (PPAP)	1/1/2004	E	5/31/2010	Moved from 4.3.1 PPAP Requirements, reworded to reflect current requirements, removed general directions, and referenced AIAG documents, added Tenneco specific requirements.
4.3.1	PPAP Submission	1/1/2004	B	5/31/2010	Separated section to make submission requirements easily identified: added provision for Tenneco facility quality managers to adjust submission requirements; added IMDS requirements as submission criteria; added TITAN requirements.
4.3.1.1	Sample Part Submission	1/1/2004	B	5/31/2010	Added link to generic label to identify PPAP samples; separated from section 4.3.1 General PPAP Requirements. Documents are to be placed in the individual assigned C-folders (Collaboration folders). Composite or ".zip" is not accepted.
4.3.2.1	Design Records	1/1/2004	B	5/31/2010	Removed reference to contact buyer for drawings, added reference to obtain records through TITAN, added section reference to special characteristics
4.3.2.2	Engineering Change Documents	1/1/2004	B	5/31/2010	Removed generic requirement, added Tenneco requirement to obtain Engineering approval
4.3.2.3	Engineering Approval	1/1/2004	B	5/31/2010	Added a requirement for capability studies for Engineering approval of deviations.
4.3.2.4	DFMEA (Design Failure Mode Effects Analysis)	1/1/2004	B	5/31/2010	Separated out as own section.

4.3.2.5	Process Flow Diagram	1/1/2004	B	5/31/2010	Reworded
4.3.2.6	PFMEA (Process Failure Mode Effects Analysis)	1/1/2004	B	5/31/2010	Reworded, reference AIAG
4.3.2.7	Dimensional Results	1/1/2004	B	5/31/2010	Separated out as own section.
4.3.2.8	Material/Performance Test Results	1/1/2004	B	5/31/2010	Reworded, reference AIAG
4.3.2.9	Capability Studies	1/1/2004	B	5/31/2010	Reworded, added requirement for MSA study prior to capability study.
4.3.2.10	Measurement Systems Analysis	1/1/2004	B	5/31/2010	Reworded.
4.3.2.11	Qualified Laboratory Documentation	1/1/2004	B	5/31/2010	Reworded.
4.3.2.12	Control Plans	1/1/2004	B	5/31/2010	Removed specific level of TS and added "latest version", added annual part validation to be on Control Plan. Added requirement to identify "family parts"
4.3.2.13	Part Submission Warrant (PSW)	1/1/2004	B	5/31/2010	Reworded
4.3.2.14	Appearance Approval Report	1/1/2004	B	5/31/2010	Reworded
4.3.2.15	Sample Production Parts	1/1/2004	B	5/31/2010	Added label link, reworded.
4.3.2.16	Master Sample	1/1/2004	B	5/31/2010	Reworded, added that exceptions to Master Sample retention must be included in PPAP package.
4.3.2.17	Checking Aids	1/1/2004	B	5/31/2010	Separated section.
4.3.2.18	Customer Specific Requirements (Customer and End User)	1/1/2004	B	5/31/2010	Added reference to AIAG Customer Specific requirements
4.3.2.19	Process Audit Requirements	1/1/2004	B	5/31/2010	Reworded, linked to AIAG website, added reference to TITAN, added GM requirement for contamination audit
4.3.3	PPAP Approval	1/1/2004	B	5/31/2010	Was 4.3.3.1, added references to TITAN. Added Process Change Notification.



4.4	Certified Parts Process (Optional)	1/1/2004	D	5/31/2010	Moved from 4.13, made optional at Quality Director's request, referenced the MRR process 4.8
4.4.1	On going Quality/Annual Parts Validation Requirements	1/1/2004	C	5/31/2010	Moved from 4.16, reworded. Customer Specific Requirement Ford (4.42) and Chrysler Also added a requirement for extended downtime plan.
4.5	Deviation Process	1/1/2004	C	5/31/2010	Moved from 4.4, reworded.
4.6	Supplier Performance Requirements	1/1/2004	D	5/31/2010	Moved from 4.5, added reference to TITAN.
4.6.1	Quality Performance	1/1/2004	D	5/31/2010	Moved from 4.5, added reference to TITAN
4.6.2	Delivery Performance	1/1/2004	C	5/31/2010	Moved from 4.6, added reference to SupplyWeb.
4.6.3	Service Parts Delivery Performance	1/1/2004	D	5/31/2010	Moved from 4.7
4.6.4	Quarterly Supplier Scorecards	5/31/2010	A	5/31/2010	New/added
4.7	Continuous Improvement	1/1/2004	C	5/31/2010	Moved from 4.8 Added Ford Q1 requirements for BOS metrics for Tenneco suppliers,
4.8	Material Rejection	1/1/2004	D	5/31/2010	Moved from 4.5
4.8.1	Disposition of Suspect/Non-Conforming Material	1/1/2004	B	5/31/2010	Moved from 4.5.2.1
4.8.2	Handling of Material at Supplier Location	1/1/2004	B	5/31/2010	Moved from 4.5.2.1
4.8.3	Handling of Material In-Transit or at Tenneco Location	1/1/2004	B	5/31/2010	Moved from 4.5.2.2
4.9	Corrective Action	1/1/2004	B	5/31/2010	Moved from 4.5.1
4.9.1	Corrective Action Reporting	1/1/2004	B	5/31/2010	Separated and defined , added disclaimer to not accept "operator error"
4.9.2	Corrective Action Timing	1/1/2004	B	5/31/2010	Separated out.
4.10	Supplier Improvement Process (SIP)	5/31/2010	A	5/31/2010	Added.

4.11	Controlled Shipping	1/1/2004	C	5/31/2010	Moved from 4.12, changed term to "Controlled Shipping" from "Monitored Shipping" ..
4.11.1	Controlled Shipping – Level I	1/1/2004	C	5/31/2010	Moved from 4.12, changed term to "Controlled Shipping" from "Monitored Shipping" ..
4.11.2	Controlled Shipping- Level II	1/1/2004	C	5/31/2010	Moved from 4.12, changed term to "Controlled Shipping" from "Monitored Shipping" ..
4.11.3	Tenneco Revocation Process	1/1/2004	C	5/31/2010	Moved from 4.12.3
4.11.4	Customer Directed Supplier Mediations	5/31/2010	A	5/31/2010	Added
4.12	Cost Recovery	1/1/2004	C	5/31/2010	Moved from 4.15
4.13	Supplier Quality System Assessment	1/1/2004	C	5/31/2010	Moved from 4.17
4.14	Record Retention	1/1/2004	C	5/31/2010	Moved from 4.18
4.15	Training	1/1/2004	C	5/31/2010	Moved from 4.19 and added Global Working Conditions Guidance requirements
5.0	Tooling and Equipment	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
5.1	Tooling and Equipment Policy	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
5.2	Changes/Maintenance of Tenneco Owned Tooling	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
5.3	Payment Terms and Conditions for Tenneco Owned Tooling	1/1/2004	E	2/1/2009	Revised 5.3. Tooling Terms to Net 180
6.0	Logistics	1/1/2004	N/A	N/A	Created Heading for Section
6.1	Tenneco Logistics Policy	1/1/2004	C	5/31/2010	Full compliance with national and international export requirements
6.2	Logistics and Material Protocol	1/1/2004	A	6/22/2006	Tenneco Inbound Material and Logistics Protocol changed
6.3	Basic Packing List Requirements	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual

6.4	Basic Bill of Lading Requirements	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
7.0	Packaging	1/1/2004	N/A	N/A	Created Heading for Section
7.1	Supplier Responsibility	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
7.2	Ergonomics	1/1/2004	C	5/31/2010	Added
7.3	Expendable Packaging Considerations	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
7.4	Pack Quantity	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
7.5	Additional Protection within Containers	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
7.6	Labeling and Identification	1/1/2004	C	2/14/2008	Changed AIAG B3 to AIAG B10
7.7	Substrate Handling	5/31/2010	A	5/31/2010	Added
8.0	Environmental Health and Safety (EHS)	1/1/2004	N/A	N/A	Created Heading for Section
8.1	EH&S Policy	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
8.2	Supplier Visits	1/1/2004	D	5/31/2010	Removed IMDS (now in 4.3.1). Entire section moved from 8.3
8.3	Security	1/1/2004	C	5/31/2010	Section moved from 8.4.
9.0	Corporate Responsibility for the Automotive Supply Chain	5/31/2010	A	5/31/2010	New Section added
9.1	Global Working Conditions Guidance Statements	5/31/2010	A	5/31/2010	Added

Appendix A North American Region Specific Requirements

A.1.0	Locations	04/04/2008	C	04/04/2008	Created Heading for Section
A.1.1	North American Original Equipment Locations	1/1/2004	D	05/31/2010	Updated
A.1.2	North America Aftermarket Locations	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual

A.2.0	North America Free Trade Agreement (NAFTA)	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.2.1	NAFTA Policy	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.2.2	NAFTA Certificate	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.2.3	Minority Supplier Requirements	1/1/2004	A	05/31/2010	Added.
A.3.0	Supplier Agreements	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.3.1	Purchase Orders	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.3.2	Blanket Orders	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.3.3	Payment Policy	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.3.4	TITAN Tenneco Interactive Alliance Network	3-1-2010	A	05/31/2010	Added.
A.3.5	Invoicing	1/1/2004	C	09/11/2008	Revised.
A.4.0	EDI Electronic Data Interchange	1/1/2004	D	05/31/2010	Added SupplyWeb requirement.
A.5.0	Logistics	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.5.1	Freight Routing	1/1/2004	C	06/06/2008	Revised.
A.5.2	Canada Customs on Imports Between NA Borders (USA Canada and Mexico)	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.5.3	Incoterms Definitions	1/1/2004	C	05/31/2010	Destination Warehousing Costs are paid by Tenneco
A.5.4	Importer Security Filing (10+2) Requirements	3-1-2010	A	05/31/2010	Added.
A.6.0	Packaging	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.1	Supplier Responsibility	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.2	Ergonomics	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.3	Expendable Packaging Considerations	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual

A.6.3.1	Elastomer Expendable Packaging Requirements	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.4	Returnable Packaging Requirements	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.4.1	Pack Size Selection	1/1/2004	C	05/31/2010	Updated.
A.6.4.2	Pack Quantity	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.4.3	Returnable Packaging Supplier	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.4.4	Tote Quantity	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.4.5	Palletization of Totes	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.4.6	Handling	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.4.7	Cleaning	1/1/2004	C	05/31/2010	Supplier is responsible for removing labels from totes.
A.6.4.8	Container Shortages	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.5	Additional Protection Within Totes	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.5.1	Parts Susceptible to Damage /Contamination	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.5.2	Parts Excessively Dirty or Oily	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.6.5.3	Labeling and Identification	1/1/2004	C	05/31/2010	Added Bar Coded label requirement
A.6.5.4	Returnable Container Packaging Specification	1/1/2004	C	5/31/2010	NA Manual Integrated into the Global Manual
A.6.5.5	Substrate Handling	5/31/2010	A	5/31/2010	Added
A.7.0	Environmental Health and Safety (EHS)	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.7.1	Material Safety Data Sheets (MSDS)	1/1/2004	B	12/22/2005	NA Manual Integrated into the Global Manual
A.7.2	MSDS – NA Contacts	1/1/2004	C	2/14/2008	Contact name changes