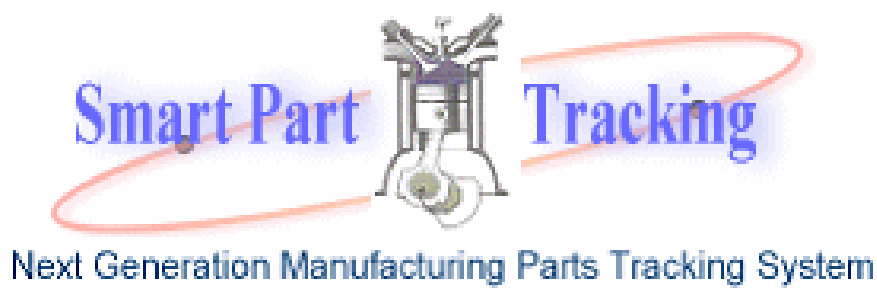


# Chrysler

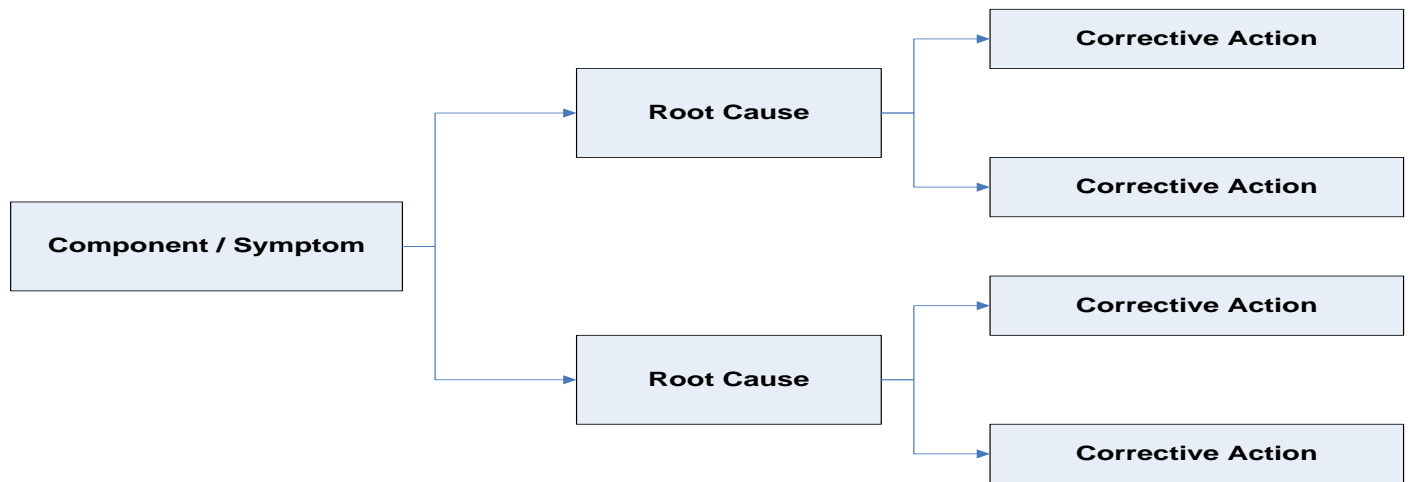


## Root Cause Analysis

## RCA Operators Manual Repair Matrix Addendum

## RCA-SPT Repair Matrix Maintenance Screen

The RCA Maintenance screen can be used to Add or Update the records in your RCA Repair Matrix. The repair matrix structure follows the following data hierarchy:



Entries updated at the component/symptom level

- If you change the component, the change will be reflected across all similar component/symptoms.
  - In this example if we changed **OP020 Block** to **Block OP020.1** on the first record in the display, then that change would impact four records since the component/symptom combination are the same for the first four rows.

**Existing Components And Symptoms For Selected Station Type**


Component	Symptom	RootCause	CorrectiveAction
OP020 BLOCK	UNABLE TO READ BLOCK 2D CODE	NO STAMP/MISSING	A50-REPAIR
OP020 BLOCK	UNABLE TO READ BLOCK 2D CODE	NO STAMP/MISSING	A50-TEARDOWN
OP020 BLOCK	UNABLE TO READ BLOCK 2D CODE	UNABLE TO READ EXISTING STAMP	A50-REPAIR
OP020 BLOCK	UNABLE TO READ BLOCK 2D CODE	UNABLE TO READ EXISTING STAMP	A50-TEARDOWN
OP020 BLOCK	UNABLE TO READ HUMAN READABLE CD ON LD...	OP20 STAMP NOT MADE OR ILLEGIBLE	A51-REPAIR/ACCEPT
OP020 BLOCK	UNABLE TO READ HUMAN READABLE CD ON LD...	OP20 STAMP NOT MADE OR ILLEGIBLE	A51-TEARDOWN

- If you change the Symptom, the change will be reflected across all similar component/symptoms.
  - In the above example, if we changed **UNABLE TO READ BLOCK 20 CODE** to **UNABLE TO READ OP020 BLOCK CODE** on the first record in the display, then that change would impact four records since the component/symptom combination are the same for the first four rows.
- If you change the Root Cause, the change will be reflected across all similar component/symptom.
  - In this example, if we changed **NO STAMP/MISSING** to **PINSTAMP MISSING** on the first record in the example, then that change would impact two records since the component/symptom/root casue combination are the same for the first two rows.
- If you change the Corrective Action, the change will only be reflected across the corrective action selected.

**Note: The data entered are labels, and changes made will be reflected in 'all' existing repair data collected, so caution must be taken when making changes.**

DAIMLERCHRYSLER  
VERSION: 1.0.0  
SCREEN : 0000  
STATION: RCA1  
USER : ADMIN

MPTS ROOT CAUSE ANALYSIS  
Global Engine Manufacturing Alliance (North)  
Maintain Diagnose Codes And Actions

  
Next Generation Manufacturing Parts Tracking System  
06/22/2007 08:34:39

Station : 500
Station Type 
Enter Station Type If Not in the List

Existing Components And Symptoms For Selected Station Type

Define Component 
Enter Name if not found in List

Define Symptom 
Enter Name if not found in List

Define Root Cause 
Enter Name if not found in List

Define Corrective Action 
Enter Name if not found in List

Define Fault Type 
Corrective Action Type

Component Positions

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15	<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18	<input type="checkbox"/> 19	<input type="checkbox"/> 20
<input type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23	<input type="checkbox"/> 24	<input type="checkbox"/> 25	Total Count <input type="text"/>				


To begin entering data into the “Maintain Diagnose Codes and Action” screen, you must first define your **Station Types**. Station Type can be an Operation/Station, Zone, Team, etc. designation for the repair location.

To add new **Station Types**, enter the information in the area defined for “Station Types **If Not in the List**” and Click Add.

If you’re adding to or modifying an existing Station Type, select from the Station Type drop down and all existing information for your selection will be displayed.

DAIMLERCHRYSLER  
VERSION: 1.0.0  
SCREEN : 0000  
STATION: RCA1  
USER : ADMIN

MPTS ROOT CAUSE ANALYSIS  
Global Engine Manufacturing Alliance (North)  
Maintain Diagnose Codes And Actions

  
Next Generation Manufacturing Parts Tracking System  
06/22/2007 08:35:52

Station : 500
Station Type 
Enter Station Type If Not in the List

Existing Components And Symptoms For Selected Station Type

Define Component 
Enter Name if not found in List

Define Symptom 
Enter Name if not found in List

Define Root Cause 
Enter Name if not found in List

Define Corrective Action 
Enter Name if not found in List

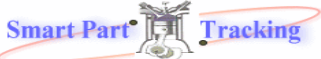
Define Fault Type 
Corrective Action Type

Component Positions

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15	<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18	<input type="checkbox"/> 19	<input type="checkbox"/> 20
<input type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23	<input type="checkbox"/> 24	<input type="checkbox"/> 25	Total Count <input type="text"/>				

DAIMLERCHRYSLER  
VERSION: 1.0.0  
SCREEN : 0000  
STATION: RCA1  
USER : ADMIN

MPTS ROOT CAUSE ANALYSIS  
Global Engine Manufacturing Alliance (North)  
Maintain Diagnose Codes And Actions

  
Next Generation Manufacturing Parts Tracking System  
06/22/2007 08:36:41

Station : 500
Station Type 
Enter Station Type If Not in the List 
Add Refresh

Existing Components And Symptoms For Selected Station Type

Component	Symptom	RootCause	CorrectiveAction	f...	f...	f...	f...
OP010 BLOCK	INCORRECT B...	WRONG MODEL DELIVERED BY ASRS	A39-REPAIR/TEARDOWN	F	1	...	1 1 C
OP010 BLOCK	INCORRECT B...	WRONG MODEL INPUT INTO SCHEDULE	A39-REPAIR/TEARDOWN	F	1	...	1 1 C
OP010 BLOCK	OTHER	OTHER	A30-ADD COMMENTS	F	0	...	1 1 C
OP020 BLOCK	OTHER	OTHER	A30-ADD COMMENTS	F	0	...	1 1 C
OP020 BLOCK	STAMP UNREA...	FAINT/MISSING/DOUBLE STAMPED	A54-REPAIR	F	0	...	1 1 C
OP020 BLOCK	STAMP UNREA...	FAINT/MISSING/DOUBLE STAMPED	A54-TEARDOWN	F	0	...	1 2 C
OP020 BLOCK	UNABLE TO RE...	NO STAMP/MISSING	A50-REPAIR	F	1	...	1 1 C
OP020 BLOCK	UNABLE TO RE...	NO STAMP/MISSING	A50-TEARDOWN	F	1	...	1 2 C
OP020 BLOCK	UNABLE TO RE...	UNABLE TO READ EXISTING STAMP	A50-REPAIR	F	1	...	2 1 C
OP020 BLOCK	UNABLE TO RE...	UNABLE TO READ EXISTING STAMP	A50-TEARDOWN	F	1	...	2 2 C
OP020 BLOCK	UNABLE TO RE...	OP20 STAMP NOT MADE OR ILLEGIBLE	A51-REPAIR/ACCEPT	F	0	...	1 1 C
OP020 BLOCK	UNABLE TO RE...	OP20 STAMP NOT MADE OR ILLEGIBLE	A51-TEARDOWN	F	0	...	1 2 C
OP030-40-50 BLOCK	MBC ORIENTA...	STAMP MISSING (FROM MACHINING)	A64-REPAIR	F	0	...	1 1 C
OP030-40-50 BLOCK	MBC ORIENTA...	STAMP MISSING (FROM MACHINING)	A64-TEARDOWN	F	0	...	1 2 C
OP030-40-50 BLOCK	OTHER	OTHER	A30-ADD COMMENTS	F	0	...	1 1 C
OP030-40-50 BLOCK	PART DAMAGE...	WASHER NOZZLE/HANDLING DAMAGE	A62-REPAIR	F	0	...	1 1 C

Define Component  Enter Name if not found in List 
Define Symptom  Enter Name if not found in List 
Define Root Cause  Enter Name if not found in List 
Define Corrective Action  Enter Name if not found in List 
Define Fault Type  Corrective Action Type 

Component Positions

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10  
☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20  
☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25

Total Count

Add Record Update Record
Exit

Once you have defined your **Station Types**, you can begin defining the Components, Symptoms, Root Cause, and Corrective Actions for each Station type.


Your **Component** entry addresses the high level/primary or major part identified for repair.

- As an example, If your component has multiple parts such as Head Bolts, Pistons, Spark Plugs, you can also identify there position and total in the setup.

To define a **Component**, enter the information in the area define for Component "**Name if not found in the List**". If the Component already exists, just select from the Define Component drop down and it will fill in the entry. [Click Add Record](#)

DAIMLERCHRYSLER  
VERSION: 1.0.0  
SCREEN : 0000  
STATION: RCA1  
USER : ADMIN

MPTS ROOT CAUSE ANALYSIS  
Global Engine Manufacturing Alliance (North)  
Maintain Diagnose Codes And Actions

  
Next Generation Manufacturing Parts Tracking System  
06/22/2007 08:47:20

Station : 500
Station Type 
Enter Station Type If Not in the List 
Add Refresh

Existing Components And Symptoms For Selected Station Type

Component	Symptom	RootCause	CorrectiveAction	f...	f...	f...	f...
ENGINE	LABEL MISSING	OTHER	OTHER	F	0	...	1 1 C
ENGINE	OTHER	OTHER	OTHER	F	0	...	1 1 C
FALSE REJECTS	FALSE REJECT	OTHER	OTHER	F	0	...	1 1 C
HEAD BOLTS (LH)	ALL BOLTS LO...	BAD HEAD, TIGHT CAM	REPLACE	F	9	...	2 1 C
HEAD BOLTS (LH)	ALL BOLTS LO...	OP1070 MULTIPLE/ 1060 OPERATOR	LOOSEN BOLTS, RERUN, CHANGE BOLTS IF NEE...	F	8	...	1 1 C
HEAD BOLTS (LH)	ALL BOLTS LO...	OTHER	LOOSEN BOLTS, RERUN, CHANGE BOLTS IF NEE...	F	8	...	3 1 C
HEAD BOLTS (LH)	ALL NOT TORO...	OP1070 MULTIPLE/ 1060 OPERATOR	LOOSEN BOLTS, RERUN, CHANGE BOLTS IF NEE...	F	8	...	1 1 C
HEAD BOLTS (LH)	ALL NOT TORO...	OTHER	LOOSEN BOLTS, RERUN, CHANGE BOLTS IF NEE...	F	8	...	2 1 C
HEAD BOLTS (LH)	BOLTS SHY	OP1060 OPERATOR	REPLACE BOLTS AND RERUN	F	8	...	1 1 C
HEAD BOLTS (LH)	HOLE NOT TAP...	MACHINING LINE	TEAR DOWN & SEND BACK TO 524	F	8	...	1 1 C
HEAD BOLTS (LH)	LOOSE BOLTS	OP1070 MULTIPLE/ 1060 OPERATOR	LOOSEN BOLTS, RERUN, CHANGE BOLTS IF NEE...	F	8	...	1 1 C
HEAD BOLTS (LH)	LOOSE BOLTS	ROCKER ARM NOT INSTALLED CORRECTLY	CORRECT ROCKER ARM INSTALLATION, RERUN	F	8	...	2 1 C
HEAD BOLTS (LH)	NOT TOROUED	OP1070 MULTIPLE/ 1060 OPERATOR	LOOSEN BOLTS, RERUN, CHANGE BOLTS IF NEE...	F	8	...	1 1 C
HEAD BOLTS (LH)	OTHER	OTHER	OTHER	F	8	...	1 1 C
HEAD BOLTS (RH)	ALL BOLTS LO...	BAD HEAD, TIGHT CAM	REPLACE	F	8	...	2 1 C
HEAD BOLTS (RH)	ALL BOLTS LO...	OP1070 MULTIPLE/ 1060 OPERATOR	LOOSEN BOLTS, RERUN, CHANGE BOLTS IF NEE...	F	8	...	1 1 C

Define Component  Enter Name if not found in List 
Define Symptom  Enter Name if not found in List 
Define Root Cause  Enter Name if not found in List 
Define Corrective Action  Enter Name if not found in List 
Define Fault Type  Corrective Action Type 

Component Positions

☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6 ☒ 7 ☒ 8 ☐ 9 ☐ 10  
☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20  
☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25

Total Count 8

Add Record Update Record
Exit

If you want to identify the number of Bolts, Pistons, Spark Plugs, etc, and their location, for a component, just check the number of the item in **Component Position** box. This information will appear in the comment section of the diagnostic report. If you want to individually identify each item, then you will have to define each under symptom.

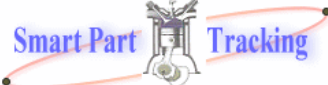
Existing Components And Symptoms For Selected Station Type

Component	Symptom	RootCause	CorrectiveAction	f...	f...	f...	f...	f...	f...
SPARK PLUG	SPRAK PLUG #1 BROKEN	BAD PART	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	1	1	C
SPARK PLUG	SPRAK PLUG #1 BROKEN	DAMAGED PART	OTHER	F	0	...	2	2	C
SPARK PLUG	SPRAK PLUG #1 BROKEN	DAMAGED PART	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	2	1	C
SPARK PLUG	SPRAK PLUG #1 BROKEN	OTHER	OTHER	F	0	...	3	1	C
SPARK PLUG	SPRAK PLUG #1 CRACKED	BAD PART	OTHER	F	0	...	1	2	C
SPARK PLUG	SPRAK PLUG #1 CRACKED	BAD PART	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	1	1	C
SPARK PLUG	SPRAK PLUG #1 CRACKED	DAMAGED PART	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	2	1	C
SPARK PLUG	SPRAK PLUG #1 CRACKED	OTHER	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	3	1	C
SPARK PLUG	SPRAK PLUG #1 HEAD REJECTED	BAD PART	OTHER	F	0	...	1	2	C
SPARK PLUG	SPRAK PLUG #1 HEAD REJECTED	BAD PART	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	1	1	C
SPARK PLUG	SPRAK PLUG #1 HEAD REJECTED	DAMAGED PART	OTHER	F	0	...	2	1	C
SPARK PLUG	SPRAK PLUG #1 HEAD REJECTED	DAMAGED PART	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	2	2	C
SPARK PLUG	SPRAK PLUG #1 HEAD REJECTED	OTHER	OTHER	F	0	...	3	1	C
SPARK PLUG	SPRAK PLUG #1 HEAD REJECTED	OTHER	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	3	2	C
SPARK PLUG	SPRAK PLUG #2 BROKEN	BAD PART	REPLACE SPARK PLUG, RE-EUN THR...	F	0	...	1	1	C

If you want to update an existing **Component**, select from the list of displayed records for the desired Station Type, the Component you want to change. When selected, all parameters for your selection will be filled in below. Modify the Component description and **Click Update Record**. **If this component has multiple records, you will have to repeat the change for each unless they belong to the same component/symptom group.**

DAIMLERCHRYSLER  
VERSION: 1.0.0  
SCREEN : 0000  
STATION: RCA1  
USER : ADMIN

**MPSTS ROOT CAUSE ANALYSIS**  
Global Engine Manufacturing Alliance (North)  
Maintain Diagnose Codes And Actions

  
Next Generation Manufacturing Parts Tracking System  
06/22/2007 12:09:15

Station : 500      Station Type       Enter Station Type If Not in the List

Existing Components And Symptoms For Selected Station Type

Component	Symptom	RootCause	CorrectiveAction	f...	f...	f...	f...	f...	f...
OP170 SHORT BLOCK	OTHER	OTHER (ADD COMMENTS)	C30-ADD COMMENTS	F	0	...	1	1	C
OP170 SHORT BLOCK	TORQUE REJE...	CROSSTHREADED ROD BOLT	C1A-TEARDOWN	F	0	...	2	1	C
OP170 SHORT BLOCK	TORQUE REJE...	ROD BEARING NOT SEATED/ROTATED	C98-REPAIR	F	0	...	4	1	C
OP170 SHORT BLOCK	TORQUE REJE...	ROD BEARING NOT SEATED/ROTATED	C98-TEARDOWN	F	0	...	4	2	C
OP170 SHORT BLOCK	TORQUE REJE...	ROD CAP BKWRDS	C98-REPAIR	F	0	...	1	1	C
OP170 SHORT BLOCK	TORQUE REJE...	ROD CAP BKWRDS	C98-TEARDOWN	F	0	...	1	2	C
OP170 SHORT BLOCK	TORQUE REJE...	STRIPPED ROD BOLT	C1C-TEARDOWN	F	0	...	3	1	C
OP170 SHORT BLOCK	TORQUE REJE...	UNKNOWN REJECT CAUSE	C98-REPAIR	F	0	...	5	1	C
OP170 SHORT BLOCK	TORQUE REJE...	UNKNOWN REJECT CAUSE	C98-TEARDOWN	F	0	...	5	2	C
OP170 SHORT BLOCK	TORQUE REJE...	CROSSTHREADED TAPER PLUG	C99-REPAIR	F	0	...	1	1	C
OP170 SHORT BLOCK	TORQUE REJE...	CROSSTHREADED TAPER PLUG	C99-TEARDOWN	F	0	...	1	2	C
OP170 SHORT BLOCK	TORQUE REJE...	STRIPPED TAPER PLUG	C1D-TEARDOWN	F	0	...	2	1	C
OP170 SHORT BLOCK	TORQUE REJE...	TORQUE REJECT - TAPER PLUG	C99-REPAIR	F	0	...	3	1	C
OP170 SHORT BLOCK	TORQUE REJE...	TORQUE REJECT - TAPER PLUG	C99-TEARDOWN	F	0	...	3	2	C
OP180 SHORT BLOCK	CRANK KEY MI...	UNABLE TO INSTALL (PART PROBLEM)	D1R-REPAIR	F	0	...	1	1	C
OP180 SHORT BLOCK	CRANK KEY MI...	UNABLE TO INSTALL (PART PROBLEM)	D1R-TEARDOWN	F	0	...	1	2	C

Define Component       Enter Name if not found in List

Define Symptom       Enter Name if not found in List

Define Root Cause       Enter Name if not found in List

Define Corrective Action       Enter Name if not found in List

Define Fault Type

☐ 1    ☐ 2    ☐ 3    ☐ 4    ☐ 5    ☐ 6    ☐ 7    ☐ 8    ☐ 9    ☐ 10  
☐ 11   ☐ 12   ☐ 13   ☐ 14   ☐ 15   ☐ 16   ☐ 17   ☐ 18   ☐ 19   ☐ 20  
☐ 21   ☐ 22   ☐ 23   ☐ 24   ☐ 25   Total Count

Once you have defined your **Component**, you can begin defining the various Symptoms, Root Cause, and Corrective Actions.

Your **Symptom** entry addresses what the operator sees as the problem with the Component identified in the part being repaired.

- As an example, If your component has multiple parts, it could be a loose #2 Head Bolt.

To define a **Symptom**, enter the information in the area define for Symptom “**Name if not found in the List**”. If the Symptom already exists, just select from the Define Symptom drop down and it will fill in the entry.

- If you’re not sure of all the possible Symptoms, define an “**OTHER**” entry. The operator will be asked to provide **Comments** to better identify the problem.

If you want to update an existing **Symptom**, select from the list of displayed records for the desired Station Type, the Symptom of Component you want to change. When selected, all parameters for your selection will be filled in below. Modify the Symptom description and **Click Update Record**. **If this symptom has multiple records, you will have to repeat the change for each unless they belong to the same component/symptom group.**

Once you have defined your **Symptom**, you can begin defining the various Root Causes, and Corrective Actions.

Your **Root Cause** entry addresses what the operator sees as the cause of the problem with the Component identified in the part being repaired.

- As an example, this could be a missing, broken, or loose part.

To define a **Root Cause**, enter the information in the area define for Root Cause “**Name if not found in the List**”. If the Root Cause already exists, just select from the Define Root Cause drop down and it will fill in the entry.

- If you’re not sure of all the possible Root Causes, define an “**OTHER**” entry. The operator will be asked to provide **Comments** to better identify the problem.

If you want to update an existing **Root Cause**, select from the list of displayed records for the desired Station Type, the Root Cause of the Symptom you want to change. When selected, all parameters for your selection will be filled in below. Modify the Root Cause description and **Click Update Record**. **If this Root Cause has multiple records, you will have to repeat the change for each unless they belong to the same component/symptom group.**

DAIMLERCHRYSLER  
VERSION: 1.0.0  
SCREEN : 0000  
STATION: RCA1  
USER : ADMIN

**MPTS ROOT CAUSE ANALYSIS**  
Global Engine Manufacturing Alliance (North)  
Maintain Diagnose Codes And Actions

SmartPart Tracking  
Next Generation Manufacturing Parts Tracking System  
06/22/2007 12:15:53

Station : 500      Station Type [270.3\_ZONE5\_6]      Enter Station Type If Not in the List [270.3\_ZONE5\_6]      Add      Refresh

Component	Symptom	RootCause	CorrectiveAction	F	T	V	C
OP210.3 OTHER	OTHER	OTHER	G02-SEE COMMENTS	F	1	...	1 C
OP210.3 ROLLOVER SHORT BL...	HANDLLING D...	MACHINE CRASH	G43-TEARDOWN	F	1	...	1 C
OP210.5 HEAD DOWEL	NOT INSTALLED	BLOCK HOLES UNDERSIZED	G57-TEARDOWN	F	1	...	3 1 C
OP210.5 HEAD DOWEL	NOT INSTALLED	EQUIPMENT ISSUE	G57-REPAIR	F	1	...	1 1 C
OP210.5 HEAD DOWEL	NOT INSTALLED	HEAD DOWELS UNDERSIZED	G57-REPAIR	F	1	...	2 1 C
OP210.5 OCV FILTER	DAMAGED	INSTALLATION DAMAGED	G56-REPAIR	F	1	...	1 1 C
OP210.5 OCV FILTER	NOT INSTALLED	EQUIPMENT ISSUE	G56-REPAIR	F	1	...	1 1 C
OP210.5 OCV FILTER	WRONG ORIE...	FILTER IMPROPERLY INSTALLED	G59-REPAIR	F	1	...	1 1 C
OP210.5 OTHER	OTHER	OTHER	G02-SEE COMMENTS	F	1	...	1 1 C
OP220.2 BLOCK	HEAD DECK P...	HEAD DECK POROSOSITY (SUPPLIER ISSUE)	HTP-TEARDOWN	F	1	...	1 1 C
OP220.2 HEAD GASKET	HEAD GASKET ...	GASKET LOADED WRONG ORIENTATION	H63-REPAIR	F	1	...	1 1 C
OP220.2 HEAD GASKET	HEAD GASKET ...	GASKET LOADED WRONG ORIENTATION	H63-TEARDOWN	F	1	...	1 2 C
OP220.2 HEAD GASKET	HEAD GASKET ...	MANUAL LOAD INCORRECT	H63-REPAIR	F	1	...	2 1 C
OP220.2 HEAD GASKET	HEAD GASKET ...	MANUAL LOAD INCORRECT	H63-TEARDOWN	F	1	...	2 1 C
OP220.2 HEAD GASKET	NO GASKET	EQUIPMENT ISSUE	H61-REPAIR	F	1	...	1 1 C
OP220.2 HEAD GASKET	NO GASKET	EQUIPMENT ISSUE	H61-TEARDOWN	F	1	...	1 2 C

Define Component [OP170 SHORT BLOCK]      Enter Name if not found in List [OP210.5 HEAD DOWEL]

Define Symptom [TORQUE REJECT - CAM CAP BOLT]      Enter Name if not found in List [NOT INSTALLED]

Define Root Cause [ROD BEARING NOT SEATED/ROTATED]      Enter Name if not found in List [BLOCK HOLES UNDERSIZED]

Define Corrective Action [-- Select Corrective Action --]      Enter Name if not found in List [G57-TEARDOWN]

Define Fault Type [F]      Corrective Action Type [C]      Component Positions

<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10	
<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15	<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18	<input type="checkbox"/> 19	<input type="checkbox"/> 20	
<input type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23	<input type="checkbox"/> 24	<input type="checkbox"/> 25	Total Count					

Exit

Once you have defined your **Root Cause**, you can begin defining your Corrective Actions.

Your **Corrective Action** entry addresses what the operator does in correcting the problem with the Component identified in the part being repaired.

- As an example, this could be replacing or tightening a bolt or spark plug.

To define a **Corrective Action**, enter the information in the area define for Corrective Action "**Name if not found in the List**". If the Corrective Action already exists, just select from the Define Corrective Action drop down and it will fill in the entry.

- If you're not sure of all the possible Corrective Actions, define an "**OTHER**" entry. The operator will be asked to provide **Comments** to better identify the repair.

If you want to update an existing **Corrective Action**, select from the list of displayed records for the desired Station Type, the Corrective Action of the Root Cause you want to change. When selected, all parameters for your selection will be filled in below. Modify the Corrective Action description and **Click Update Record**.

Once you have defined your **Corrective Actions**, your Repair matrix is ready for use.

### Additional Parameters

There are other parameters you can set to enhance your repair matrix, Fault Type and Corrective Action Type. Fault Type has 3 options: F, T, and V. F is the default value, and it stands for Fault Code, T stands for Test Code, and V for Validation Engine Code. T and V are considered rejects.

Corrective Action Type has 3 options: C, H and O. These options are related to the repair Corrective Actions. C is the default value, and it stands for regular Fix, and once an operator select this type of corrective Action, Open Issue will be closed.

O means that this corrective action is not a complete Fix, and once this Corrective Action is selected another new Open record is created for that Engine. For Instance, an Engine is Offloaded from Station 390.12 and it is subjected to Strip Back at Station 270.3. Now when the operator offloads that engine from 390.12 he will enter Diagnose Information and Enter Corrective Action ( Strip Back to 270.3 ). Now if this Corrective Action is of Type O then immediately an open record will be created and when this engine is sent to 270.3 the operator will finally repair that Engine by selection Corrective action that will actually close the record.

Option H, when this kind of corrective Actions is selected, a message is displayed at the *End Of the Line* PC that this Engine should go for "HOT RUN ". (GEMA does not currently have the End Of Line Module implemented).