

# CUSTOMER PROBLEM ANALYSIS CHECK

## ENGINE CONTROL SYSTEM Check Sheet

Inspector's  
Name

|                         |  |                      |             |
|-------------------------|--|----------------------|-------------|
| Customer's Name         |  | Model and Model Year |             |
| Driver's Name           |  | Frame No.            |             |
| Date Vehicle Brought in |  | Engine Model         |             |
| License No.             |  | Odometer Reading     | km<br>miles |

|                  |                                                |                                                                                                                                                                                                                                                                                                          |                                                |                                                 |
|------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------|
| Problem Symptoms | <input type="checkbox"/> Engine does not Start | <input type="checkbox"/> Engine does not crank                                                                                                                                                                                                                                                           | <input type="checkbox"/> No initial combustion | <input type="checkbox"/> No complete combustion |
|                  | <input type="checkbox"/> Difficult to Start    | <input type="checkbox"/> Engine cranks slowly<br><input type="checkbox"/> Other _____                                                                                                                                                                                                                    |                                                |                                                 |
|                  | <input type="checkbox"/> Poor Idling           | <input type="checkbox"/> Incorrect first idle <input type="checkbox"/> Idling rpm is abnormal <input type="checkbox"/> High (          rpm) <input type="checkbox"/> Low (          rpm)<br><input type="checkbox"/> Rough idling <input type="checkbox"/> Other _____                                   |                                                |                                                 |
|                  | <input type="checkbox"/> Poor Driveability     | <input type="checkbox"/> Hesitation <input type="checkbox"/> Back fire <input type="checkbox"/> Muffler explosion (after-fire) <input type="checkbox"/> Surging<br><input type="checkbox"/> Knocking <input type="checkbox"/> Other _____                                                                |                                                |                                                 |
|                  | <input type="checkbox"/> Engine Stall          | <input type="checkbox"/> Soon after starting <input type="checkbox"/> After accelerator pedal depressed<br><input type="checkbox"/> After accelerator pedal released <input type="checkbox"/> During A/C operation<br><input type="checkbox"/> Shifting from N to D <input type="checkbox"/> Other _____ |                                                |                                                 |
|                  | <input type="checkbox"/> Others                |                                                                                                                                                                                                                                                                                                          |                                                |                                                 |

|                               |                     |                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date Problem Occurred         |                     |                                                                                                                                                                                                                                                                                                                                                                                                            |
| Problem Frequency             |                     | <input type="checkbox"/> Constant <input type="checkbox"/> Sometimes (          times per          day/month) <input type="checkbox"/> Once only<br><input type="checkbox"/> Other _____                                                                                                                                                                                                                   |
| Condition When Problem Occurs | Weather             | <input type="checkbox"/> Fine <input type="checkbox"/> Cloudy <input type="checkbox"/> Rainy <input type="checkbox"/> Snowy <input type="checkbox"/> Various/Other _____                                                                                                                                                                                                                                   |
|                               | Outdoor Temperature | <input type="checkbox"/> Hot <input type="checkbox"/> Warm <input type="checkbox"/> Cool <input type="checkbox"/> Cold<br>approx. _____ °C ( _____ °F)                                                                                                                                                                                                                                                     |
|                               | Place               | <input type="checkbox"/> Highway <input type="checkbox"/> Suburbs <input type="checkbox"/> Inner City <input type="checkbox"/> Uphill <input type="checkbox"/> Downhill<br><input type="checkbox"/> Rough road <input type="checkbox"/> Other _____                                                                                                                                                        |
|                               | Engine Temp.        | <input type="checkbox"/> Cold <input type="checkbox"/> Warming up <input type="checkbox"/> After Warming up <input type="checkbox"/> Any temp. <input type="checkbox"/> Other _____                                                                                                                                                                                                                        |
|                               | Engine Operation    | <input type="checkbox"/> Starting <input type="checkbox"/> Just after starting (          min.) <input type="checkbox"/> Idling <input type="checkbox"/> Racing<br><input type="checkbox"/> Driving <input type="checkbox"/> Constant speed <input type="checkbox"/> Acceleration <input type="checkbox"/> Deceleration<br><input type="checkbox"/> A/C switch ON/OFF <input type="checkbox"/> Other _____ |

|                                         |                         |                                                                                                                                                          |
|-----------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition of Check Engine Warning Light |                         | <input type="checkbox"/> Remains on <input type="checkbox"/> Sometimes lights up <input type="checkbox"/> Does not light up                              |
| Diagnostic Trouble Code Inspection      | Normal mode (Pre-check) | <input type="checkbox"/> Normal <input type="checkbox"/> Malfunction code(s) (code          )<br><input type="checkbox"/> Freeze frame data (          ) |
|                                         | Check Mode              | <input type="checkbox"/> Normal <input type="checkbox"/> Malfunction code(s) (code          )<br><input type="checkbox"/> Freeze frame data (          ) |