

# Test Point Placement Report

| <b>Test Location Rankings</b> |             |                    |                            |                          |
|-------------------------------|-------------|--------------------|----------------------------|--------------------------|
| <b>Location</b>               | <b>Type</b> | <b>## of Tests</b> | <b>Pctg. of Isolations</b> | <b>Usage Probability</b> |
| RF Tire                       | Object      | 3                  | 100.00                     | 89.42                    |
| RR Tire                       | Object      | 3                  | 99.51                      | 85.77                    |
| LR Tire                       | Object      | 3                  | 99.03                      | 82.12                    |
| LF Tire                       | Object      | 3                  | 98.54                      | 78.47                    |
| BATTERY                       | Object      | 2                  | 96.60                      | 74.02                    |
| Fuse                          | Object      | 2                  | 96.12                      | 72.07                    |
| Foot Pressure                 | IO Flag     | 1                  | 96.60                      | 72.02                    |
| Ignition Switch               | Object      | 1                  | 95.15                      | 71.22                    |
| Brake Fluid LED Light         | IO Flag     | 1                  | 93.69                      | 68.43                    |
| ABS LED Light                 | IO Flag     | 34                 | 94.17                      | 64.71                    |
| L Brake Light                 | IO Flag     | 2                  | 30.10                      | 43.41                    |
| R Brake Light                 | IO Flag     | 1                  | 27.67                      | 34.58                    |
| RW Brake Light                | IO Flag     | 1                  | 27.18                      | 27.09                    |
| RS Line                       | Object      | 1                  | 24.76                      | 25.59                    |
| Brake Fluid                   | Object      | 1                  | 23.79                      | 20.66                    |
| FS Line                       | Object      | 1                  | 23.30                      | 19.10                    |
| RF Wheel                      | Object      | 1                  | 26.70                      | 18.00                    |
| RR Wheel                      | Object      | 1                  | 25.73                      | 17.99                    |
| LR Wheel                      | Object      | 1                  | 24.76                      | 17.98                    |
| LF Wheel                      | Object      | 1                  | 23.79                      | 17.97                    |
| RR Line                       | Object      | 1                  | 7.28                       | 8.63                     |
| L Brake Bulb                  | Object      | 1                  | 0.97                       | 8.02                     |
| DIAG CONN                     | Object      | 1                  | 37.38                      | 4.26                     |
| FR Line                       | Object      | 1                  | 6.31                       | 3.76                     |
| Front Pump                    | Object      | 1                  | 4.85                       | 0.39                     |
| Rear Pump                     | Object      | 1                  | 4.37                       | 0.30                     |
| Rear Damper Chamber           | Object      | 1                  | 1.94                       | 0.10                     |
| Front Damper Chamber          | Object      | 1                  | 1.46                       | 0.05                     |
| Front Accumulator             | Object      | 1                  | 0.97                       | < 0.01                   |

## Test Rankings

| Test   | Type           | ## of Nodes | Pctg. of Isolations | Usage Probability |
|--|----------------|-------------|---------------------|-------------------|
| Inspect for RF Tire Tread  | Inspection     | 1           | 100.00              | 89.42             |
| Inspect for RR Tire Tread  | Inspection     | 1           | 99.51               | 85.77             |
| Inspect for LR Tire Tread  | Inspection     | 1           | 99.03               | 82.12             |
| Inspect for LF Tire Tread  | Inspection     | 1           | 98.54               | 78.47             |
| Lose of Power  | Effect         | 1           | 98.06               | 74.82             |
| Check Brake Linkage  | Signature      | 1           | 96.60               | 72.02             |
| Automobile Start Test  | Inspection     | 1           | 95.15               | 71.22             |
| Brake Fluid Low  | User-Initiated | 1           | 93.69               | 68.43             |
| ABS Light Stays On   | User-Initiated | 1           | 69.90               | 47.77             |
| Check Left Brake Light Failed                                      | User-Initiated | 1           | 28.64               | 42.61             |
| Check Right Brake Light Failed                                     | User-Initiated | 1           | 27.67               | 34.58             |
| Check Rear Window Brake Light Failed                               | User-Initiated | 1           | 27.18               | 27.09             |
| Inspect RS Line for hydraulic leaks.                               | Inspection     | 2           | 24.76               | 25.59             |
| test Sensor Rotor from Left Front Disk Cylinder                    | Signature      | 2           | 64.56               | 21.55             |
| test Sensor Rotor from Left Rear Disk Cylinder                     | Signature      | 2           | 62.62               | 21.10             |
| Fill Brake Fluid   | Inspection     | 1           | 23.79               | 20.66             |
| test Sensor Rotor from Right Rear Disk Cylinder                    | Signature      | 2           | 60.68               | 20.65             |
| test Sensor Rotor from Right Front Disk Cylinder                   | Signature      | 2           | 58.74               | 20.20             |
| Hydraulic Leak   | Effect         | 1           | 26.70               | 19.60             |
| Inspect FS Line for hydraulic leaks.                               | Inspection     | 2           | 23.30               | 19.10             |
| Inspect RF Wheel for wear  | Inspection     | 2           | 26.70               | 18.00             |
| Inspect RR Wheel for wear  | Inspection     | 2           | 25.73               | 17.99             |
| Inspect LR Wheel for wear  | Inspection     | 2           | 24.76               | 17.98             |
| Inspect LF Wheel for wear  | Inspection     | 2           | 23.79               | 17.97             |
| test for Master Cylinder   | Signature      | 2           | 20.39               | 16.05             |
| test for Brake Hydraulic Piston 1 from Left Front Disk Cylinder    | Signature      | 2           | 19.42               | 12.51             |
| test for Brake Hydraulic Piston 2 from Left Front Disk Cylinder    | Signature      | 2           | 18.45               | 12.40             |
| test for Brake Hydraulic Piston 1 from Left Rear Disk Cylinder     | Signature      | 2           | 17.48               | 12.30             |
| Inspect Brake Piston 2 for hydraulic leak. from RF Disk Cyl        | Inspection     | 2           | 17.96               | 12.19             |
| test for Brake Hydraulic Piston 2 from Left Rear Disk Cylinder     | Signature      | 2           | 16.50               | 12.19             |
| test for Brake Hydraulic Piston 1 from Right Rear Disk Cylinder    | Signature      | 2           | 15.53               | 12.09             |
| Inspect Brake Piston 1 for hydraulic leak. from RF Disk Cyl        | Inspection     | 2           | 16.99               | 12.08             |
| test for Brake Hydraulic Piston 2 from Right Rear Disk Cylinder    | Signature      | 2           | 14.56               | 11.99             |
| Inspect Brake Piston 2 for hydraulic leak. from RR Disk Cyl        | Inspection     | 2           | 16.02               | 11.98             |
| Inspect Brake Piston 1 for hydraulic leak. from RR Disk Cyl        | Inspection     | 2           | 15.05               | 11.88             |
| test for Brake Hydraulic Piston 1 from Right Front Disk Cylinder   | Signature      | 1           | 13.11               | 11.78             |
| Inspect Brake Piston 2 for hydraulic leak. from LF Disk Cyl        | Inspection     | 2           | 14.08               | 11.77             |
| test for Brake Hydraulic Piston 2 from Right Front Disk Cylinder   | Signature      | 1           | 12.62               | 11.73             |
| Inspect Brake Piston 1 for hydraulic leak. from LF Disk Cyl        | Inspection     | 2           | 13.11               | 11.67             |
| Inspect Brake Piston 2 for hydraulic leak. from LR Disk Cyl        | Inspection     | 2           | 12.14               | 11.56             |
| Inspect Brake Piston 1 for hydraulic leak. from LR Disk Cyl        | Inspection     | 2           | 11.17               | 11.46             |
| Inspect Outlet Solenoid Valve for hydraulic leak. from RF Disk Cyl | Inspection     | 2           | 10.68               | 11.27             |
| Inspect Outlet Solenoid Valve for hydraulic leak. from RR Disk Cyl | Inspection     | 2           | 10.19               | 11.27             |
| Inspect Outlet Solenoid Valve for hydraulic leak. from LF Disk Cyl | Inspection     | 2           | 9.71                | 11.26             |
| Inspect Outlet Solenoid Valve for hydraulic leak. from LR Disk Cyl | Inspection     | 2           | 9.22                | 11.25             |
| Inspect Inlet Solenoid Valve for hydraulic leak. from RF Disk Cyl  | Inspection     | 2           | 8.25                | 11.24             |
| Inspect Inlet Solenoid Valve for hydraulic leak. from RR Disk Cyl  | Inspection     | 2           | 7.77                | 11.23             |
| Inspect Inlet Solenoid Valve for hydraulic leak. from LF Disk Cyl  | Inspection     | 2           | 7.28                | 11.23             |
| Inspect Inlet Solenoid Valve for hydraulic leak. from LR Disk Cyl  | Inspection     | 2           | 6.80                | 11.22             |
| Inspect Check Valve for clogged valve. from LR Disk Cyl            | Inspection     | 2           | 5.83                | 11.21             |
| Inspect Check Valve for clogged valve. from LF Disk Cyl            | Inspection     | 2           | 5.34                | 11.21             |

|   |                |   |       |       |
|---|----------------|---|-------|-------|
| Inspect Check Valve for clogged valve. from RR Disk Cyl | Inspection     | 2 | 4.85  | 11.21 |
| Inspect Check Valve for clogged valve. from RF Disk Cyl | Inspection     | 2 | 4.37  | 11.21 |
| Inspect Check Valve for Back Leakage. from LR Disk Cyl  | Inspection     | 2 | 3.40  | 11.20 |
| Inspect Check Valve for Back Leakage. from LF Disk Cyl  | Inspection     | 2 | 2.91  | 11.20 |
| Inspect Check Valve for Back Leakage. from RR Disk Cyl  | Inspection     | 2 | 2.43  | 11.20 |
| Inspect Check Valve for Back Leakage. from RF Disk Cyl  | Inspection     | 2 | 1.94  | 11.20 |
| Braking Squeal  | Effect         | 1 | 18.93 | 9.34  |
| Inspect Pads from LF Disc Assy                          | Inspection     | 3 | 16.99 | 9.32  |
| Inspect RR Line for hydraulic leaks.                    | Inspection     | 1 | 7.28  | 8.63  |
| test for L Brake Light Bulb                             | Inspection     | 1 | 0.97  | 8.02  |
| Inspect Pads from RF Disc Assy                          | Inspection     | 3 | 15.53 | 7.63  |
| Reduced Braking Efficiency                              | Effect         | 1 | 16.99 | 5.96  |
| Inspect Pads from RR Disc Assy                          | Inspection     | 3 | 14.08 | 5.94  |
| Check BATTERY   | Inspection     | 2 | 2.91  | 5.59  |
| Check Diagnostic Connector                              | Inspection     | 1 | 37.38 | 4.26  |
| ECU:Code 51 Pump Motor Locked                           | User-Initiated | 1 | 36.89 | 4.26  |
| ECU:Code 12 Short Circuit in Solenoid Relay Circuit     | User-Initiated | 3 | 33.50 | 4.04  |
| Inspect FR Line for hydraulic leaks.                    | Inspection     | 1 | 6.31  | 3.76  |
| Inspect Pads from LR Disc Assy                          | Inspection     | 2 | 12.14 | 3.41  |
| ECU:Code 11 Open Circuit in Solenoid Relay Circuit      | User-Initiated | 3 | 28.64 | 2.07  |
| ECU:Code 41 Low Battery Positive Voltage                | User-Initiated | 2 | 26.70 | 2.02  |
| ECU:Code 62 ECU Malfunction                             | User-Initiated | 4 | 16.50 | 2.01  |
| Inspect Wear for Rotor from RF Disk Cyl                 | Inspection     | 1 | 7.28  | 1.71  |
| Check Main Power Fuse                                   | Inspection     | 2 | 1.94  | 1.69  |
| ECU:Code 13 Open circuit in ABS motor relay circuit     | User-Initiated | 2 | 9.71  | 1.53  |
| Inspect Wear for Rotor from RR Disk Cyl                 | Inspection     | 1 | 6.80  | 1.52  |
| ECU:Code 14 Short Circuit in ABS motor relay circuit    | User-Initiated | 4 | 23.30 | 1.41  |
| Inspect Wear for Rotor from LF Disk Cyl                 | Inspection     | 1 | 6.31  | 1.32  |
| Inspect Wear for Rotor from LR Disk Cyl                 | Inspection     | 1 | 5.83  | 1.12  |
| Inspect Wear for Caliper from RF Disk Cyl               | Inspection     | 1 | 5.34  | 0.92  |
| Inspect for Leaks Air (RF Tire)                         | Inspection     | 1 | 3.88  | 0.85  |
| Test for Pedal Linkage                                  | Signature      | 1 | 1.46  | 0.80  |
| Inspect Wear for Caliper from RR Disk Cyl               | Inspection     | 1 | 4.85  | 0.79  |
| Inspect for Flat (RF Tire)                              | Inspection     | 1 | 3.40  | 0.75  |
| Inspect Wear for Caliper from LF Disk Cyl               | Inspection     | 1 | 4.37  | 0.67  |
| Inspect for Leaks Air (RR Tire)                         | Inspection     | 1 | 2.91  | 0.64  |
| Inspect Wear for Caliper from LR Disk Cyl               | Inspection     | 1 | 3.88  | 0.54  |
| Inspect for Flat (RR Tire)                              | Inspection     | 1 | 2.43  | 0.53  |
| Replace Speed Sensor LF                                 | Inspection     | 2 | 1.94  | 0.45  |
| Replace Speed Sensor LR                                 | Inspection     | 2 | 1.94  | 0.45  |
| Replace Speed Sensor RR                                 | Inspection     | 2 | 1.94  | 0.45  |
| Replace Speed Sensor RF                                 | Inspection     | 2 | 1.94  | 0.45  |
| Inspect for Leaks Air (LR Tire)                         | Inspection     | 1 | 1.94  | 0.43  |
| Inspect For Hydraulic Leak (F Pump)                     | Inspection     | 1 | 4.85  | 0.39  |
| ECU:Code 34 Left Rear Wheel Speed Sensor Problem        | User-Initiated | 2 | 23.30 | 0.36  |
| ECU:Code 33 Right Rear Wheel Speed Sensor Problem       | User-Initiated | 3 | 22.33 | 0.34  |
| Inspect for Flat (LR Tire)                              | Inspection     | 1 | 1.46  | 0.32  |
| Inspect For Hydraulic Leak (R Pump)                     | Inspection     | 1 | 4.37  | 0.30  |
| ECU:Code 31 Right Front Wheel Speed Sensor Problem      | User-Initiated | 3 | 10.19 | 0.23  |
| ECU:Code 32 Left Front Wheel Speed Sensor Problem       | User-Initiated | 3 | 7.77  | 0.22  |
| Inspect for Leaks Air (LF Tire)                         | Inspection     | 1 | 0.97  | 0.21  |
| ECU:Code 63 Mechanic Input malfunction                  | User-Initiated | 3 | 12.62 | 0.18  |
| ECU:Code 23 problem in Right Rear Solenoid Circuit      | User-Initiated | 3 | 15.53 | 0.16  |
| ECU:Code 39 Right Rear Speed Sensor Timing problem      | User-Initiated | 3 | 11.17 | 0.14  |
| ECU:Code 24 problem in Left Rear Solenoid Circuit       | User-Initiated | 3 | 12.14 | 0.13  |
| ECU:Code 38 Left Rear Speed Sensor Timing problem       | User-Initiated | 3 | 11.17 | 0.13  |

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|---|----------------|----------|-------------|------------------|
| Inspect for Flat (LF Tire)                          | Inspection     | <b>1</b> | <b>0.49</b> | <b>0.11</b>      |
| ECU:Code 22 problem in Left Front Solenoid Circuit  | User-Initiated | <b>3</b> | <b>8.74</b> | <b>0.10</b>      |
| Inspect For Hydraulic Leak (R Damp Chmbr)           | Inspection     | <b>1</b> | <b>1.94</b> | <b>0.10</b>      |
| ECU:Code 37 Left Front Speed Sensor Timing problem  | User-Initiated | <b>3</b> | <b>6.80</b> | <b>0.08</b>      |
| ECU:Code 21 problem in Right Front Solenoid Circuit | User-Initiated | <b>3</b> | <b>5.34</b> | <b>0.08</b>      |
| ECU:Code 36 Right Front Speed Sensor Timing problem | User-Initiated | <b>3</b> | <b>5.34</b> | <b>0.05</b>      |
| Inspect For Hydraulic Leak (F Damp Chmbr)           | Inspection     | <b>1</b> | <b>1.46</b> | <b>0.05</b>      |
| Inspect For Hydraulic Leak (Front Reservoir)        | Inspection     | <b>1</b> | <b>0.97</b> | <b>&lt; 0.01</b> |

## Test Node Rankings

| Test Node   | Test   | Type      | Pctg. of Isolations | Usage Probability |
|-------------|--|-----------|---------------------|-------------------|
| Prognosis 1 | Inspect for RF Tire Tread  | Detection | 100.00              | 89.42             |
| Prognosis 2 | Inspect for RR Tire Tread  | Detection | 99.51               | 85.77             |
| Prognosis 3 | Inspect for LR Tire Tread  | Detection | 99.03               | 82.12             |
| Prognosis 4 | Inspect for LF Tire Tread  | Detection | 98.54               | 78.47             |
| 1-0         | Lose of Power  | Detection | 98.06               | 74.82             |
| 2-0         | Check Brake Linkage  | Detection | 96.60               | 72.02             |
| 3-0         | Automobile Start Test  | Detection | 95.15               | 71.22             |
| 4-0         | Brake Fluid Low  | Detection | 93.69               | 68.43             |
| 5-0         | ABS Light Stays On   | Detection | 69.90               | 47.77             |
| 6-0         | Check Left Brake Light Failed                                      | Detection | 28.64               | 42.61             |
| 7-0         | Check Right Brake Light Failed                                     | Detection | 27.67               | 34.58             |
| 8-0         | Check Rear Window Brake Light Failed                               | Detection | 27.18               | 27.09             |
| 4-1         | Fill Brake Fluid   | Isolation | 23.79               | 20.66             |
| 9-0         | Hydraulic Leak   | Detection | 26.70               | 19.60             |
| 4-2         | test Sensor Rotor from Left Front Disk Cylinder                    | Isolation | 23.30               | 16.39             |
| 4-4         | test Sensor Rotor from Left Rear Disk Cylinder                     | Isolation | 22.33               | 16.17             |
| 4-6         | test Sensor Rotor from Right Rear Disk Cylinder                    | Isolation | 21.36               | 15.94             |
| 4-8         | test Sensor Rotor from Right Front Disk Cylinder                   | Isolation | 20.39               | 15.71             |
| 4-10        | test for Master Cylinder   | Isolation | 19.42               | 15.49             |
| 4-11        | Inspect RF Wheel for wear  | Isolation | 18.93               | 15.35             |
| 4-12        | Inspect RR Wheel for wear  | Isolation | 18.45               | 15.35             |
| 4-13        | Inspect LR Wheel for wear  | Isolation | 17.96               | 15.35             |
| 4-14        | Inspect LF Wheel for wear  | Isolation | 17.48               | 15.34             |
| 4-15        | Inspect RS Line for hydraulic leaks.                               | Isolation | 16.99               | 15.34             |
| 4-16        | Inspect FS Line for hydraulic leaks.                               | Isolation | 16.50               | 13.71             |
| 4-17        | test for Brake Hydraulic Piston 1 from Left Front Disk Cylinder    | Isolation | 16.02               | 12.09             |
| 4-18        | test for Brake Hydraulic Piston 2 from Left Front Disk Cylinder    | Isolation | 15.53               | 12.04             |
| 4-19        | test for Brake Hydraulic Piston 1 from Left Rear Disk Cylinder     | Isolation | 15.05               | 11.99             |
| 4-20        | test for Brake Hydraulic Piston 2 from Left Rear Disk Cylinder     | Isolation | 14.56               | 11.93             |
| 4-21        | test for Brake Hydraulic Piston 1 from Right Rear Disk Cylinder    | Isolation | 14.08               | 11.88             |
| 4-22        | test for Brake Hydraulic Piston 2 from Right Rear Disk Cylinder    | Isolation | 13.59               | 11.83             |
| 4-23        | test for Brake Hydraulic Piston 1 from Right Front Disk Cylinder   | Isolation | 13.11               | 11.78             |
| 4-24        | test for Brake Hydraulic Piston 2 from Right Front Disk Cylinder   | Isolation | 12.62               | 11.73             |
| 4-25        | Inspect Brake Piston 2 for hydraulic leak. from RF Disk Cyl        | Isolation | 12.14               | 11.67             |
| 4-26        | Inspect Brake Piston 1 for hydraulic leak. from RF Disk Cyl        | Isolation | 11.65               | 11.62             |
| 4-27        | Inspect Brake Piston 2 for hydraulic leak. from RR Disk Cyl        | Isolation | 11.17               | 11.57             |
| 4-28        | Inspect Brake Piston 1 for hydraulic leak. from RR Disk Cyl        | Isolation | 10.68               | 11.52             |
| 4-29        | Inspect Brake Piston 2 for hydraulic leak. from LF Disk Cyl        | Isolation | 10.19               | 11.47             |
| 4-30        | Inspect Brake Piston 1 for hydraulic leak. from LF Disk Cyl        | Isolation | 9.71                | 11.41             |
| 4-31        | Inspect Brake Piston 2 for hydraulic leak. from LR Disk Cyl        | Isolation | 9.22                | 11.36             |
| 4-32        | Inspect Brake Piston 1 for hydraulic leak. from LR Disk Cyl        | Isolation | 8.74                | 11.31             |
| 4-33        | Inspect Outlet Solenoid Valve for hydraulic leak. from RF Disk Cyl | Isolation | 8.25                | 11.26             |
| 4-34        | Inspect Outlet Solenoid Valve for hydraulic leak. from RR Disk Cyl | Isolation | 7.77                | 11.25             |
| 4-35        | Inspect Outlet Solenoid Valve for hydraulic leak. from LF Disk Cyl | Isolation | 7.28                | 11.24             |
| 4-36        | Inspect Outlet Solenoid Valve for hydraulic leak. from LR Disk Cyl | Isolation | 6.80                | 11.24             |
| 4-37        | Inspect Inlet Solenoid Value for hydraulic leak. from RF Disk Cyl  | Isolation | 6.31                | 11.23             |
| 4-38        | Inspect Inlet Solenoid Value for hydraulic leak. from RR Disk Cyl  | Isolation | 5.83                | 11.22             |
| 4-39        | Inspect Inlet Solenoid Value for hydraulic leak. from LF Disk Cyl  | Isolation | 5.34                | 11.22             |
| 4-40        | Inspect Inlet Solenoid Value for hydraulic leak. from LR Disk Cyl  | Isolation | 4.85                | 11.21             |

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| 4-41 | Inspect Check Valve for clogged valve. from LR Disk Cyl | Isolation  | 4.37  | 11.20 |
| 4-42 | Inspect Check Valve for clogged valve. from LF Disk Cyl | Isolation  | 3.88  | 11.20 |
| 4-43 | Inspect Check Valve for clogged valve. from RR Disk Cyl | Isolation  | 3.40  | 11.20 |
| 4-44 | Inspect Check Valve for clogged valve. from RF Disk Cyl | Isolation  | 2.91  | 11.20 |
| 4-45 | Inspect Check Valve for Back Leakage. from LR Disk Cyl  | Isolation  | 2.43  | 11.20 |
| 4-46 | Inspect Check Valve for Back Leakage. from LF Disk Cyl  | Isolation  | 1.94  | 11.20 |
| 4-47 | Inspect Check Valve for Back Leakage. from RR Disk Cyl  | Isolation  | 1.46  | 11.20 |
| 4-48 | Inspect Check Valve for Back Leakage. from RF Disk Cyl  | Isolation  | 0.97  | 11.20 |
| 9-1  | Inspect RS Line for hydraulic leaks.                    | Isolation  | 7.77  | 10.26 |
| 10-0 | Braking Squeal  | Detection  | 18.93 | 9.34  |
| 9-2  | Inspect RR Line for hydraulic leaks.                    | Isolation  | 7.28  | 8.63  |
| 6-1  | test for L Brake Light Bulb                             | Isolation  | 0.97  | 8.02  |
| 11-0 | Reduced Braking Efficiency                              | Detection  | 16.99 | 5.96  |
| 9-3  | Inspect FS Line for hydraulic leaks.                    | Isolation  | 6.80  | 5.39  |
| 5-1  | test Sensor Rotor from Left Front Disk Cylinder         | Isolation  | 41.26 | 5.16  |
| 5-3  | test Sensor Rotor from Left Rear Disk Cylinder          | Isolation  | 40.29 | 4.94  |
| 5-5  | test Sensor Rotor from Right Rear Disk Cylinder         | Isolation  | 39.32 | 4.71  |
| 5-7  | test Sensor Rotor from Right Front Disk Cylinder        | Isolation  | 38.35 | 4.49  |
| 5-9  | Check Diagnostic Connector                              | Isolation  | 37.38 | 4.26  |
| 5-10 | ECU:Code 51 Pump Motor Locked                           | Isolation  | 36.89 | 4.26  |
| 9-4  | Inspect FR Line for hydraulic leaks.                    | Isolation  | 6.31  | 3.76  |
| 10-1 | Inspect Pads from LF Disc Assy                          | Isolation  | 1.94  | 3.38  |
| 11-1 | Inspect Pads from LF Disc Assy                          | Refinement | 9.22  | 3.32  |
| 11-2 | Inspect Pads from RF Disc Assy                          | Refinement | 8.74  | 2.92  |
| 5-28 | ECU:Code 12 Short Circuit in Solenoid Relay Circuit     | Refinement | 28.16 | 2.85  |
| 1-1  | Check BATTERY   | Isolation  | 1.46  | 2.79  |
| 3-1  | Check BATTERY   | Isolation  | 1.46  | 2.79  |
| 12-0 | Inspect RF Wheel for wear                               | Detection  | 7.77  | 2.64  |
| 13-0 | Inspect RR Wheel for wear                               | Detection  | 7.28  | 2.64  |
| 14-0 | Inspect LR Wheel for wear                               | Detection  | 6.80  | 2.64  |
| 15-0 | Inspect LF Wheel for wear                               | Detection  | 6.31  | 2.63  |
| 16-0 | Inspect Pads from LF Disc Assy                          | Detection  | 5.83  | 2.63  |
| 10-2 | Inspect Pads from RF Disc Assy                          | Isolation  | 1.46  | 2.53  |
| 11-3 | Inspect Pads from RR Disc Assy                          | Refinement | 8.25  | 2.52  |
| 17-0 | Inspect Pads from RF Disc Assy                          | Detection  | 5.34  | 2.18  |
| 11-4 | Inspect Pads from LR Disc Assy                          | Refinement | 7.77  | 2.11  |
| 5-42 | ECU:Code 41 Low Battery Positive Voltage                | Isolation  | 21.36 | 1.89  |
| 18-0 | Inspect Pads from RR Disc Assy                          | Detection  | 4.85  | 1.74  |
| 11-5 | Inspect Wear for Rotor from RF Disk Cyl                 | Isolation  | 7.28  | 1.71  |
| 10-3 | Inspect Pads from RR Disc Assy                          | Isolation  | 0.97  | 1.69  |
| 11-6 | Inspect Wear for Rotor from RR Disk Cyl                 | Isolation  | 6.80  | 1.52  |
| 5-11 | ECU:Code 13 Open circuit in ABS motor relay circuit     | Isolation  | 8.74  | 1.41  |
| 11-7 | Inspect Wear for Rotor from LF Disk Cyl                 | Isolation  | 6.31  | 1.32  |
| 19-0 | Inspect Pads from LR Disc Assy                          | Detection  | 4.37  | 1.30  |
| 11-8 | Inspect Wear for Rotor from LR Disk Cyl                 | Isolation  | 5.83  | 1.12  |
| 5-12 | ECU:Code 62 ECU Malfunction                             | Refinement | 3.88  | 1.02  |
| 5-13 | ECU:Code 12 Short Circuit in Solenoid Relay Circuit     | Refinement | 3.40  | 0.99  |
| 5-29 | ECU:Code 62 ECU Malfunction                             | Refinement | 6.80  | 0.97  |
| 5-30 | ECU:Code 11 Open Circuit in Solenoid Relay Circuit      | Refinement | 6.31  | 0.96  |
| 5-18 | ECU:Code 14 Short Circuit in ABS motor relay circuit    | Refinement | 0.97  | 0.95  |
| 11-9 | Inspect Wear for Caliper from RF Disk Cyl               | Isolation  | 5.34  | 0.92  |
| 5-43 | ECU:Code 11 Open Circuit in Solenoid Relay Circuit      | Refinement | 20.87 | 0.91  |
| 20-0 | Inspect for Leaks Air (RF Tire)                         | Detection  | 3.88  | 0.85  |
| 1-2  | Check Main Power Fuse                                   | Isolation  | 0.97  | 0.85  |
| 3-2  | Check Main Power Fuse                                   | Isolation  | 0.97  | 0.85  |
| 2-1  | Test for Pedal Linkage                                  | Isolation  | 1.46  | 0.80  |



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|-------|---|------------|-------|------|
| 11-10 | Inspect Wear for Caliper from RR Disk Cyl                       | Isolation  | 4.85  | 0.79 |
| 21-0  | Inspect for Flat (RF Tire)                                      | Detection  | 3.40  | 0.75 |
| 11-11 | Inspect Wear for Caliper from LF Disk Cyl                       | Isolation  | 4.37  | 0.67 |
| 22-0  | Inspect for Leaks Air (RR Tire)                                 | Detection  | 2.91  | 0.64 |
| 2-2   | test for Master Cylinder  | Refinement | 0.97  | 0.56 |
| 11-12 | Inspect Wear for Caliper from LR Disk Cyl                       | Isolation  | 3.88  | 0.54 |
| 23-0  | Inspect for Flat (RR Tire)                                      | Detection  | 2.43  | 0.53 |
| 9-5   | Inspect Brake Piston 2 for hydraulic leak. from RF Disk Cyl     | Isolation  | 5.83  | 0.51 |
| 9-6   | Inspect Brake Piston 1 for hydraulic leak. from RF Disk Cyl     | Isolation  | 5.34  | 0.46 |
| 24-0  | Inspect for Leaks Air (LR Tire)                                 | Detection  | 1.94  | 0.43 |
| 11-13 | test for Brake Hydraulic Piston 1 from Left Front Disk Cylinder | Isolation  | 3.40  | 0.42 |
| 9-7   | Inspect Brake Piston 2 for hydraulic leak. from RR Disk Cyl     | Isolation  | 4.85  | 0.41 |
| 5-19  | Inspect For Hydraulic Leak (F Pump)                             | Isolation  | 4.85  | 0.39 |
| 9-8   | Inspect Brake Piston 1 for hydraulic leak. from RR Disk Cyl     | Isolation  | 4.37  | 0.36 |
| 11-14 | test for Brake Hydraulic Piston 2 from Left Front Disk Cylinder | Isolation  | 2.91  | 0.36 |
| 25-0  | Inspect for Flat (LR Tire)                                      | Detection  | 1.46  | 0.32 |
| 9-9   | Inspect Brake Piston 2 for hydraulic leak. from LF Disk Cyl     | Isolation  | 3.88  | 0.31 |
| 11-15 | test for Brake Hydraulic Piston 1 from Left Rear Disk Cylinder  | Isolation  | 2.43  | 0.31 |
| 5-20  | Inspect For Hydraulic Leak (R Pump)                             | Isolation  | 4.37  | 0.30 |
| 5-44  | ECU:Code 14 Short Circuit in ABS motor relay circuit            | Isolation  | 20.39 | 0.26 |
| 11-16 | test for Brake Hydraulic Piston 2 from Left Rear Disk Cylinder  | Isolation  | 1.94  | 0.26 |
| 9-10  | Inspect Brake Piston 1 for hydraulic leak. from LF Disk Cyl     | Isolation  | 3.40  | 0.25 |
| 4-3   | Replace Speed Sensor LF   | Isolation  | 0.97  | 0.23 |
| 4-5   | Replace Speed Sensor LR   | Isolation  | 0.97  | 0.23 |
| 4-7   | Replace Speed Sensor RR   | Isolation  | 0.97  | 0.23 |
| 4-9   | Replace Speed Sensor RF   | Isolation  | 0.97  | 0.23 |
| 5-2   | Replace Speed Sensor LF   | Isolation  | 0.97  | 0.23 |
| 5-4   | Replace Speed Sensor LR   | Isolation  | 0.97  | 0.23 |
| 5-6   | Replace Speed Sensor RR   | Isolation  | 0.97  | 0.23 |
| 5-8   | Replace Speed Sensor RF   | Isolation  | 0.97  | 0.23 |
| 5-21  | ECU:Code 34 Left Rear Wheel Speed Sensor Problem                | Refinement | 3.88  | 0.22 |
| 5-22  | ECU:Code 33 Right Rear Wheel Speed Sensor Problem               | Refinement | 3.40  | 0.21 |
| 11-17 | test for Brake Hydraulic Piston 1 from Right Rear Disk Cylinder | Isolation  | 1.46  | 0.21 |
| 26-0  | Inspect for Leaks Air (LF Tire)                                 | Detection  | 0.97  | 0.21 |
| 5-23  | ECU:Code 32 Left Front Wheel Speed Sensor Problem               | Refinement | 2.91  | 0.20 |
| 9-11  | Inspect Brake Piston 2 for hydraulic leak. from LR Disk Cyl     | Isolation  | 2.91  | 0.20 |
| 5-24  | ECU:Code 31 Right Front Wheel Speed Sensor Problem              | Refinement | 2.43  | 0.20 |
| 5-25  | ECU:Code 12 Short Circuit in Solenoid Relay Circuit             | Refinement | 1.94  | 0.20 |
| 5-26  | ECU:Code 11 Open Circuit in Solenoid Relay Circuit              | Refinement | 1.46  | 0.20 |
| 5-27  | ECU:Code 14 Short Circuit in ABS motor relay circuit            | Refinement | 0.97  | 0.20 |
| 5-31  | ECU:Code 63 Mechanic Input malfunction                          | Refinement | 5.83  | 0.16 |
| 11-18 | test for Brake Hydraulic Piston 2 from Right Rear Disk Cylinder | Isolation  | 0.97  | 0.16 |
| 9-12  | Inspect Brake Piston 1 for hydraulic leak. from LR Disk Cyl     | Isolation  | 2.43  | 0.15 |
| 5-46  | ECU:Code 34 Left Rear Wheel Speed Sensor Problem                | Isolation  | 19.42 | 0.14 |
| 5-32  | ECU:Code 41 Low Battery Positive Voltage                        | Refinement | 5.34  | 0.14 |
| 5-45  | ECU:Code 13 Open circuit in ABS motor relay circuit             | Isolation  | 0.97  | 0.12 |
| 5-56  | ECU:Code 33 Right Rear Wheel Speed Sensor Problem               | Isolation  | 14.56 | 0.11 |
| 5-33  | ECU:Code 39 Right Rear Speed Sensor Timing problem              | Refinement | 4.85  | 0.11 |
| 27-0  | Inspect for Flat (LF Tire)                                      | Detection  | 0.49  | 0.11 |
| 9-13  | Inspect For Hydraulic Leak (R Damp Chmbr)                       | Isolation  | 1.94  | 0.10 |
| 5-65  | ECU:Code 23 problem in Right Rear Solenoid Circuit              | Isolation  | 10.19 | 0.09 |
| 5-34  | ECU:Code 38 Left Rear Speed Sensor Timing problem               | Refinement | 4.37  | 0.09 |
| 5-70  | ECU:Code 24 problem in Left Rear Solenoid Circuit               | Isolation  | 7.77  | 0.08 |
| 5-35  | ECU:Code 37 Left Front Speed Sensor Timing problem              | Refinement | 3.88  | 0.07 |
| 5-75  | ECU:Code 22 problem in Left Front Solenoid Circuit              | Isolation  | 5.34  | 0.06 |
| 5-36  | ECU:Code 36 Right Front Speed Sensor Timing problem             | Refinement | 3.40  | 0.05 |

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| 9-14 | Inspect For Hydraulic Leak (F Damp Chmbr)                          | Isolation  | 1.46 | 0.05   |
| 5-80 | ECU:Code 21 problem in Right Front Solenoid Circuit                | Isolation  | 2.91 | 0.04   |
| 5-14 | ECU:Code 23 problem in Right Rear Solenoid Circuit                 | Refinement | 2.43 | 0.04   |
| 5-15 | ECU:Code 24 problem in Left Rear Solenoid Circuit                  | Refinement | 1.94 | 0.04   |
| 5-47 | ECU:Code 38 Left Rear Speed Sensor Timing problem                  | Isolation  | 4.85 | 0.03   |
| 5-16 | ECU:Code 22 problem in Left Front Solenoid Circuit                 | Refinement | 1.46 | 0.03   |
| 5-17 | ECU:Code 21 problem in Right Front Solenoid Circuit                | Refinement | 0.97 | 0.03   |
| 5-48 | ECU:Code 33 Right Rear Wheel Speed Sensor Problem                  | Refinement | 4.37 | 0.02   |
| 5-57 | ECU:Code 39 Right Rear Speed Sensor Timing problem                 | Isolation  | 4.37 | 0.02   |
| 5-49 | ECU:Code 31 Right Front Wheel Speed Sensor Problem                 | Refinement | 3.88 | 0.02   |
| 5-37 | ECU:Code 23 problem in Right Rear Solenoid Circuit                 | Refinement | 2.91 | 0.02   |
| 5-38 | ECU:Code 24 problem in Left Rear Solenoid Circuit                  | Refinement | 2.43 | 0.02   |
| 5-66 | Inspect Outlet Solenoid Valve for hydraulic leak. from RR Disk Cyl | Isolation  | 2.43 | 0.02   |
| 5-71 | Inspect Outlet Solenoid Valve for hydraulic leak. from LR Disk Cyl | Isolation  | 2.43 | 0.02   |
| 5-76 | Inspect Outlet Solenoid Valve for hydraulic leak. from LF Disk Cyl | Isolation  | 2.43 | 0.02   |
| 5-81 | Inspect Outlet Solenoid Valve for hydraulic leak. from RF Disk Cyl | Isolation  | 2.43 | 0.02   |
| 5-58 | ECU:Code 31 Right Front Wheel Speed Sensor Problem                 | Refinement | 3.88 | 0.01   |
| 5-50 | ECU:Code 63 Mechanic Input malfunction                             | Refinement | 3.40 | 0.01   |
| 5-59 | ECU:Code 63 Mechanic Input malfunction                             | Refinement | 3.40 | 0.01   |
| 5-51 | ECU:Code 62 ECU Malfunction  | Refinement | 2.91 | 0.01   |
| 5-39 | ECU:Code 22 problem in Left Front Solenoid Circuit                 | Refinement | 1.94 | 0.01   |
| 5-60 | ECU:Code 62 ECU Malfunction  | Refinement | 2.91 | < 0.01 |
| 5-52 | ECU:Code 32 Left Front Wheel Speed Sensor Problem                  | Refinement | 2.43 | < 0.01 |
| 5-61 | ECU:Code 32 Left Front Wheel Speed Sensor Problem                  | Refinement | 2.43 | < 0.01 |
| 5-53 | ECU:Code 39 Right Rear Speed Sensor Timing problem                 | Refinement | 1.94 | < 0.01 |
| 5-62 | ECU:Code 38 Left Rear Speed Sensor Timing problem                  | Isolation  | 1.94 | < 0.01 |
| 5-67 | Inspect Inlet Solenoid Value for hydraulic leak. from RR Disk Cyl  | Isolation  | 1.94 | < 0.01 |
| 5-72 | Inspect Inlet Solenoid Value for hydraulic leak. from LR Disk Cyl  | Isolation  | 1.94 | < 0.01 |
| 5-77 | Inspect Inlet Solenoid Value for hydraulic leak. from LF Disk Cyl  | Isolation  | 1.94 | < 0.01 |
| 5-82 | Inspect Inlet Solenoid Value for hydraulic leak. from RF Disk Cyl  | Isolation  | 1.94 | < 0.01 |
| 5-40 | ECU:Code 21 problem in Right Front Solenoid Circuit                | Refinement | 1.46 | < 0.01 |
| 5-54 | ECU:Code 37 Left Front Speed Sensor Timing problem                 | Refinement | 1.46 | < 0.01 |
| 5-63 | ECU:Code 37 Left Front Speed Sensor Timing problem                 | Refinement | 1.46 | < 0.01 |
| 5-68 | Inspect Check Valve for clogged valve. from RR Disk Cyl            | Isolation  | 1.46 | < 0.01 |
| 5-73 | Inspect Check Valve for clogged valve. from LR Disk Cyl            | Isolation  | 1.46 | < 0.01 |
| 5-78 | Inspect Check Valve for clogged valve. from LF Disk Cyl            | Isolation  | 1.46 | < 0.01 |
| 5-83 | Inspect Check Valve for clogged valve. from RF Disk Cyl            | Isolation  | 1.46 | < 0.01 |
| 5-41 | ECU:Code 14 Short Circuit in ABS motor relay circuit               | Refinement | 0.97 | < 0.01 |
| 5-55 | ECU:Code 36 Right Front Speed Sensor Timing problem                | Refinement | 0.97 | < 0.01 |
| 5-64 | ECU:Code 36 Right Front Speed Sensor Timing problem                | Refinement | 0.97 | < 0.01 |
| 5-69 | Inspect Check Valve for Back Leakage. from RR Disk Cyl             | Isolation  | 0.97 | < 0.01 |
| 5-74 | Inspect Check Valve for Back Leakage. from LR Disk Cyl             | Isolation  | 0.97 | < 0.01 |
| 5-79 | Inspect Check Valve for Back Leakage. from LF Disk Cyl             | Isolation  | 0.97 | < 0.01 |
| 5-84 | Inspect Check Valve for Back Leakage. from RF Disk Cyl             | Isolation  | 0.97 | < 0.01 |
| 9-15 | Inspect For Hydraulic Leak (Front Reservoir)                       | Isolation  | 0.97 | < 0.01 |