

LABOR-----

J# 3 37BMZ FRONT SUSPENSION DIA TECH(S):700 0.00
C/S FRONT LEFT SUSPENSION MAKING A HOLLOW KNOCKING SOUND AT
LOW SPEED WHEN GOING OVER UNEVEN / BUMPY ROADS
RD TESTED VEHICLE MULTIPLE TIMES. WAS NEVER ABLE TO VERIFY
ANY KNOCKING SOUND FROM FRONT END. CHECKED ALL SUSPENSION
AND STEERING COMPONENTS. FOUND NO WORN OR DAMAGED
COMPONENTS
TEST DROVE VEHICLE WITH SHOP FOREMAN. SHOP FOREMAN DROVE WIT
CUSTOMER. NOTED NO ABNORMAL NOISES AT THIS TIME. INSPECTED
VEHICLE WITH SHOP FOREMAN. NOTED NO FAILED COMPONENTS
NO WORN COMPONENTS AT THIS TIME

JOB# 3 TOTALS-----

JOB# 4 CHARGES----- JOB# 3 JOURNAL PREFIX BMCS JOB# 3 TOTAL 0.00

LABOR-----

J# 4 32BMZ02 FREE ALIGNMENT CHECK TECH(S):690 0.00
PERFORMED FOUR WHEEL ALIGNMENT

JOB# 4 TOTALS-----

JOB# 5 CHARGES----- JOB# 4 JOURNAL PREFIX BMCS JOB# 4 TOTAL 0.00

LABOR-----

J# 5 06BMZ03 SERVICE WASH TECH(S):70 0.00
Wash Vehicle All

JOB# 5 TOTALS-----

JOB# 6 CHARGES----- JOB# 5 JOURNAL PREFIX BMCS JOB# 5 TOTAL 0.00

LABOR-----

J# 6 04BMZ01 BMW/STERLING LOANER TECH(S):700 0.00
PROVIDE BMW OF STERLING LOANER
BMW OF STERLING LOANER PROGRAM
PROVIDED BMW OF STERLING COURTESY CAR

JOB# 6 TOTALS-----

JOB# 7 CHARGES----- JOB# 6 JOURNAL PREFIX BMCS JOB# 6 TOTAL 0.00

LABOR-----

J# 7+61BMZ02 ELECTRICAL SYSTEM TECH(S):700 0.00
RECALL 0061560300-BATTERY CABLE CONNECTION
CAMPAIGN WARRANTY

1 PKS1B611412 RECALL 12V 126
 1 61-13-9 290 787 COVER POSITIVE
 1 2295229 KEY CONTACT

TOTAL PARTS

WARR
WARR
WARR

JOB# 7 TOTALS.....

JOB# 7 JOURNAL PREFIX BMCS JOB# 7 TOTAL

JOB# 8 CHARGES.....

LABOR.....

J# 8+03BMZZ STATE INSPECTION TECH(S):700
 PERFORM VIRGINIA SAFETY INSPECTION
 INSPECTION DUE
 PERFORMED VSI

JOB# 8 TOTALS.....

JOB# 8 JOURNAL PREFIX BMCS JOB# 8 TOTAL

JOB# 9 CHARGES.....

LABOR.....

J# 9+61BMZ04 ELECTRICAL SYSTEM TECH(S):700
 NO START/CEL ON AFTER REPLACEMENT OF WIRING HARNESS FOR
 THERMOSTAT FAULTS
 ENGINE HARNESS CAME WITH WRONG CRANKSHAFT POSITION SENSOR
 CONNECTOR. INSTALLED NEW PIGTAILS AND CONNECTOR FOR SENSOR
 AND WIRED ACCORDING TO WIRING DIAGRAM
 SSP-BTS-SP0000024307. STARTED VEHICLE AND STILL HAD THE
 SAME SYMPTOMS. EXTREMELY LONG CRANK TIME AND WHEN IT STARTED
 VEHICLE IDLED POORLY. INTEROGATED FAULT MEMORY AND FOUND
 FAULT 2B5C-CRANKSHAFT SENSOR STORED. RECHECKED ALL
 CRIMP CONNECTIONS AND FOUND GOOD. RECHECKED CORRECT PIN
 LOCATION ACCORDING TO WIRING DIAGRAM AND FOUND CORRECT.
 REMOVED E-BOX COVER AND TESTED CONTINUITY FROM DME TO
 SENSOR AND FOUND NO CONTINUITY. INSPECTED AND FOUND WIRING
 DIAGRAM INCORRECT SO CRANKSHAFT SENSOR WAS WIRED INCORRECTLY
 PIN 27 AT DME SHOULD HAVE GONE TO PIN 2 AT CRANKSHAFT SENSOR
 PIN 37 AT DME SHOULD HAVE GONE TO PIN 3 AT SENSOR. HAD TO
 RE WIRE CRANKSHAFT POSITION SENSOR CORRECTLY.
 STARTED VEHICLE AND STILL THE IDLEING POORLY WITH AN
 EXTENDED CRANK TIME. SWAPPED CRANKSHAFT POSITION SENSOR AND
 NOW VEHICLE RUNS SMOOTH. NO CEL AND STARTS GOOD. CLEARED
 FAULT MEMORY
 6199000
 WIRED CRANKSHAFT POSITION SENSOR CORRECTLY AND REPLACED
 CRANKSHAFT POSITION SENSOR
 6199000

WARR

PARTS	QTY	FP NUMBER	DESCRIPTION	UNIT PRICE
	1	12-14-2-295-386	CRANKSHAFT SPEED SE	
		UP TO P/D 6/2006		
	4	61-13-8-353-747	CABLE CONNECTOR	

WARR
WARR

**YOUR BMW ULTIMATE SERVICE WARRANTY
SAVED YOU APPROXIMATELY**

\$ 3153.75

TODAY IN MAINTENANCE COST