

# \* SYMPTOM CHECK LIST \*

1990 Nissan 240SX

SYMPTOM CHECK LIST WORKSHEETS

### \* PLEASE READ THIS FIRST \*

NOTE: This article is intended for general information purposes only. It does not apply specifically to one make or model.

### PURPOSE

Why Use the Symptom Check List Worksheets?

One of the most difficult and critical lines of communication is between the service customer and the technician. The clearer the technician understands the customer's concerns, the more likely the problem will be "fixed right the first time".

The Symptom Check List Worksheets in this article are designed to improve this communication. When used consistently, they can be helpful in reducing shop comebacks, increasing technician productivity, and producing satisfied customers. They also provide other benefits:

- \* Reduce "No Trouble Found" problems
- \* Increase customer involvement
- \* Customer perceive that "they really care and listen"
- \* Save time during peak write-up periods
- \* Reduce recontacting customers for additional information
- \* Improve night drop information
- \* Insure all the right questions are asked at write-up

Making the Worksheets a Part of Your Normal Routine The following information contains ideas that may be helpful in forming habits that promote daily use of the Symptom Check Lists:

- \* HAVE THE SERVICE ADVISER FILL OUT THE FORM(S) WITH THE CUSTOMER WHENEVER POSSIBLE.
- \* Place them in your night drop for the customer to fill out, along with an instruction sheet to help them understand what to do.
- \* Hand out the worksheets to customers while they wait in line during the peak morning rush and ask them to fill it out. It will save time for all concerned and improve the quality of information received from the customer.
- \* Make sure it is attached to the hard copy when it goes to the technician.
- \* Place a copy with the final repair papers and review it with the customer at delivery.
- \* Put a new worksheet in the glovebox of all departing customers.
- \* Require that you personally see a copy of all worksheets filled out for shop comebacks.
- \* Hold a shop meeting to get employee buy-in and their ideas on how to make it effective in your shop.

There are many other ways to utilize the concept, but as with every other idea, successful implementation depends on employee involvement and buy-in.



SYMPTOM CHECK LIST WORKSHEETS



## CONDENSED VERSION - ALL ON ONE PAGE

NOTE: Have the service adviser fill out this form with the customer whenever possible.

	<b>DRIVEABILITY WORKSHEET</b> ( To Be Filled Out By Vehicle Owner )
Name:	Date: Make:
Model:	Year: Engine: Mileage:
FA	ULT CHARACTERISTICS - SYMPTOMS - DESCRIPTION OF PROBLEM ( Please Check All That Apply in All Categories )
Starting Problems	Will Not Crank Cranks, But Won't Start Starts, But Takes A Long Time
Engine Quits/ Running Problems	Quits:       Right After Starting       When Put Into Gear       Right After Vehicle Comes To A Stop         During Steady Speed Driving       While Idling       During Acceleration       When Parking
Poor Idling Conditions	Idle Speed:       Is Too Slow At All Times       Is Too Slow With A/C On       Is Too Fast         Is Rough Or Uneven       Fluctuates Up and Down
Poor Running Conditions	Runs Rough       Lacks Power       Hesitates Or Stumbles On Acceleration       Bucks and Jerks         Engine Knocks, Pings, Rattles       Backfires       Poor Fuel Economy       Misfires or Cuts Out         Surges and/or Chuggles       Dieseling or Run-On       Engine Light Always On         Engine Light On Sometimes       Fuel, Gas, or Sulfur Smell
Auto. Transmission Problems	Improper Shifting ( early/late ) Changes Gear Randomly On Its Own Vehicle Does Not Move When In Gear
Poor Handling	Pulls To One Side Hard Steering Vehicle Shakes and/or Vibrates While Moving
Noise Problems	Exploin:
Odor Problems	Explain:
Problem Frequency	Always Often Occasionally
Usually Occurs	Morning Afternoon Anytime
Engine Temp.	Cold Warm Hot
Vehicle Speed	Low Cruising High
Driving Conditions During Occurrence	Short - Less Than 2 Miles       2-10 Miles       Long - More Than 10 Miles         Stop & Go       While Turning       While Braking         At Geor Engagement       With A/C Operating       With Headlights On         During Acceleration       During Deceleration       Mostly Downhill         Mostly Uphill       Mostly Level       Mostly Curvy       Rough Road
Driving Habits	Drive Hard Before Engine Is Warmed       Allow Engine To Warm         Mostly City Driving       Highway       Park Vehicle Inside       Outside         Drive Per Day:       Less Than 10 Miles       10-50       More Than 50         Fuel Octane:       87       89       91       More Than 91         Brand:
Outside Weather	Cold Warm Hot Wet/Rainy Fog

Fig. 1: Entire Vehicle - Symptom Check List For Customer

# FULL VERSION - ALL ON FOUR PAGES





customer whenever possible.

#### **Dear Valued Customer:**

Our goal is to fix your problem correctly and get you back on the road as soon as possible in the unlikely event you experience a prob-lem with your vehicle. Help us identify the exact nature of the concern by taking a few moments to complete the appropriate section of this diagnostic worksheet. Thank you.

CUSTOMER NAME:	PHONE NO .:		REP		ER NO.:
DIAGNOS					
DRIVEABILITY	- ENGINE - A	UTOMATIC TR	ANSMISSION		
SYMPTOM (CHECK ALL THAT APPLY) ENGINE		OPERATING CO HOW OFTEN DO	NDITIONS (CHE)	CKALLT Engine a	(HAT APPLY) and/or Transmission)
"Service Engine Soon"/"Malfunction Indicator Ligit     Hard start/no start (cranks OK)     Won't crank     Engine stalls     Engine miss     Miss while driving     Hesitates, stumbles or sags	nt" on	Other (explain	to	, miles	Few minutes  Few weeks  Only during event Unknown  Getting worse
Rough idle     Idle is too high     Poor power/performance	N		OCCUR? (Enginemperature is:	e and/or	Transmission)
Surge or chuggle, buck - jerk - skip Or gas mileage Highway City Pings, detonates		Cold	🖾 Warm 🗌 Only	during w	Hot Varmup
<ul> <li>Suphur, rotten egg odor</li> <li>Backfires (popping noise) - underhood/tailpipe</li> <li>Exhaust smoke</li> <li>Increased oil</li> <li>Runs on after key is turned off</li> <li>Speed fluctuates without moving accelerator</li> <li>Engine noise (explain):</li> </ul>	consumption	Weather Condit	alow 0 degrees F 30 degrees F	□ Warn □ ∧ny □ Hurr	I - 0 to 32 degrees F n - 60 to 80 degrees F environment nid er (explain below)
(whine, rattle, groan, clunk, etc.)		<ul> <li>Starting</li> <li>Over bumps</li> <li>Cruising stea</li> </ul>	Medium throt     At idle     When shifting dy at	I	Hard throttle
TRANSMISSION  Does not shift properly  Hard shift Will not shift Up	Down	Anytime Highway Between Only with A/C	Uphill City/town MPH ar or Defrost on	nd	Downhill Stop and go MPH
Will not shift into overdrive Engine starts in other than "P" or "N" Noise (describe).		What Type of Fu Regular UL Gasohol Diesel #1	uel? Mid range UL Ethanol Diesel #2	Pren	
(whine, rattle, groan, clunk, buzz, e Shifts into gear too early Overdrive doesn't work with speed control, but is otherw Highway speed - shudder, surge, etc.	<i>i</i> se OK	When Gear Sele	Rev     Driv		Overdrive Drive/1
Other:  EXPLAIN:		Between Gears:		′Drive ⊉Overdr⊮	First/Second
					50615

Fig. 2: Symptom Check List - Page 1

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SYMPTOM Vehicle pulls right - Wh Vehicle pulls left - Whe Steering wheel vibrate: Excessive play in steer Erratic steering wheel te Poor steering wheel re	en s at MPH ring praking	Leans or s	ontrol light on	D "D	s uneven og" tracks IS light on ft ride
Hard to steer	Ũ	Shimmy/vit	pration (check bo	x below for loc	ation)
Effort     Steering wheel off cent	Wanders ter	☐ Front ☐ Seat	Rear     Floor	Don't know	
Brake pedal	Pulses	Squeaks	🗆 Hard	🗖 Mushy	Excessive trav
WHEN DOES IT OCCU Cold days Parking manuevers	JR? Hot days At road speed	☐ Wet/rain □ Accelerati		the time celerating	Intermittent
	🗖 Left			<b>—</b> •	
	_	UEAK - RATTLE -		_	
<ul> <li>Engine Compartment</li> <li>Front Suspension</li> <li>Rear Suspension</li> </ul>	Left	☐ Right □ Right □ Right	☐ Center ☐ Center ☐ Center	🗖 Do	n't know n't know n't know
Front Suspension	Left	☐ Right ☐ Right ☐ Right ☐ Right ☐ Right	Center	□ Da □ Da □ Da □ Da	on't know
Front Suspension     Rear Suspension     Passenger Compartme     Instrument Panel     Doors	Left Left Left Left Left Conso	☐ Right ☐ Right ☐ Right ☐ Right ☐ Right	Center Center Center Center	□ Da □ Da □ Da □ Da	on't know on't know on't know on't know
Front Suspension      Rear Suspension      Passenger Compartme      Instrument Panel      Doors      Rear seat area  NOISE SOUNDS LIKE      Knocks      Hard	Left     Left     Left     Left     Left     Left     Left     Conso  metal les     CCCUR?	Right Right Right Right Right Right Ie Other	Center Center Center Center Center	Da Da Da Da Da Da	n'i know n'i know n'i know n'i know n'i know
Front Suspension      Rear Suspension      Passenger Compartme      Instrument Panel      Doors      Rear seat area  NOISE SOUNDS LIKE      Knocks      Hard      Squeaks      Ratti  HOW OFTEN DOES IT	Left     Left     Left     Left     Left     Left     Conso  metal     les     Often     Speed     Light throttle     Cold days	Right     Right     Right     Right     Right     Right     Right     Right     Right le     Other Light metal     Scraping     Intermittent     RPM    O	Center Ce	Dec     D	on't know on't know on't know on't know on't know I Whine Whine I Braking
Front Suspension      Rear Suspension      Passenger Compartme      Instrument Panel      Doors      Rear seat area  NOISE SOUNDS LIKE      Knocks      Hard      Squeaks      Rattl  HOW OFTEN DOES IT      Continuous  WHEN DOES IT OCCL      All the time      Hard throttle      Hot days	Left     Left     Left     Left     Left     Left     Conso  metal     les     Often     Speed     Light throttle     Cold days	Right     Right     Right     Right     Right     Right     Right le     Other Light metal Scraping Intermittent RPM    C Decelerate    S Humid or rainy	Center Ce	Dec     D	on't know on't know on't know on't know on't know I Whine Whine I Braking
Front Suspension      Rear Suspension      Passenger Compartme      Instrument Panel      Doors      Rear seat area  NOISE SOUNDS LIKE      Knocks     Hard      Squeaks     Rattil  HOW OFTEN DOES IT      Continuous  WHEN DOES IT OCCL      All the time      Hard throttle      Hot days      Heavy bumps	Left     Left     Left     Left     Left     Left     Conso  metal     les     Often     Speed     Light throttle     Cold days	Right     Right     Right     Right     Right     Right     Right     Right     Right     Scraping     Intermittent     RPM      C     Decelerate     Smooth pavement	Center Ce	Dec	on't know on't know on't know on't know on't know I Whine Whine I Braking





# **AIR CONDITIONING - HEATER - VENTILATION**

SYSTEM OR AREA A	FFECTED				
Air conditioner	Heater	Defroster emperature Control	☐ Vent □ Mix/blend	☐ Bi-Level ☐ Economy	☐ Fan/blower □ All
SYMPTOM					
☐ Does not work ☐ Noisy (explain) ☐ Leaks	<ul> <li>□ Blows wrong</li> <li>□ Broken</li> <li>□ Insufficient h</li> </ul>	temperature air Dolor eat or cool	☐ No air come ☐ Air comes fr ☐ Other (expla	om wrong outlets	Rapid cyclir     Blows fuse
WHEN DOES IT OCCU	JR?				
☐ All the time ☐ When change controls	Hot Hot	☐ Cold     ☐ Inte ☐ Other (explain below)	rmittent	☐ Right after startup ☐ Fan blower speed	High / Med / Low
EXPLAIN:					
		ELECTRICAL - RADIO	- TAPE/CD PL	AVER	
SYMPTOM - MUSIC S	YSTEM				
<ul> <li>Does not work</li> <li>Controls do not work</li> </ul>	🛛 Noisy	☐ Static ☐ Blows fuse	☐ Won't load ☐ Other (expla		oor reception
SYSTEM AFFECTED					
<ul> <li>□ Radio only</li> <li>□ Tape player</li> <li>□ Speakers</li> </ul>	□ AM □ CD player □ Front	☐ FM ☐ Whole system ☐ Rear	☐ FM stereo ☐ Steering whe ☐ Left	☐ Graphic e eel buttons ☐ Right	qualizer
Antenna	Clock	Radio or player contro	bls	🛛 Rear seat	controls
ALL OTHER ELECTR Please list the comple		R ACCESSORIES or item and check any	applicable sym	nptom(s) from the lis	t that follows:
	<u> </u>	Inoperable Check light on or flash	Noisy	☐ No control ☐ Works improperly	Erratic
		Blows fuse	Intermittent	Related system aff	
		Inoperable	🛛 Noisy	No control	Erratic
		☐ Check light on or flas ☐ Blows fuse	hing	☐ Works improperly ☐ Related system aff	
		Inoperable	□ Noisy	□ No control	Erratic
WHEN DOES IT OCCI	JR?	Check light on or flas Blows fuse	ning	<ul> <li>Works improperly</li> <li>Related system aff</li> </ul>	
☐ All the time ☐ Intermittent ☐ Other (explain below)	☐ Hot ☐ After runs fo	Cold r minutes		arting - malfunctions for : s or bumps only	a while
EXPLAIN:					
CUSTOMER NAME:		PHO	IE NO.:	REPAIR O	RDER NO:
<u>SHOP USE ONLY:</u> VIN#:		MILES:	TECHNICIAN	l: AD	VISOR#:
Symptom Chec	k List -	Page 3			





Setting level	Any time it rains		ile driving in the rain	Car wash o
Back lower than front			int lower than back (facing	
Location of Leak (whe	ere water appears):			
□ LF Door □ LF window □ Under instrument pan	RF Door     RF window el	LR Door		ndshield 🔲 Rear windo le door 🔲 Sunroof/T- <sup>-</sup>
WINDNOISE: Location:				
□ LF Door □ LF window □ Under instrument pan	☐ RF Door ☐ RF window ei	LR Door LR window		ndshield 🔲 Rear windo le door 🔲 Sunroof/T- <sup>-</sup>
EXPLAIN:				
	MAI	NUAL TRANSMIS	SION - CLUTCH	
SYMPTOM - MANUAL	GEAR SHIFT		SYMPTOM - CLUTCH	4
☐ Hard to shift ☐ Grinds going into ☐ Noisy when in	_ gear or neutral		☐ Hard to push ☐ Noise when pressing	☐ Fail to release pedal down (describe): _
Slips/pops out of gear			☐ Slips ☐ Odor present ☐ Squealing sound	☐ Chattering (grabbing ☐ Pedal stays on the f
Upshift light stays on				
□ Upshift light doesn't lig			WHEN DOES IT OCC When Engine Tempe	
WHEN DOES IT OCCU	JR?		Cold	Hot
☐ All the time ☐ Heavy load	□ Light load		Accelerating	Decelerating
EXPLAIN:				
				· · · ·
		COMMENTS		
			·····	
CUSTOMER NAME:		РНО	NE NO.:	REPAIR ORDER NO
SHOP USE ONLY:				
SHOP OSE ONLY.				

NOTE: Have the service adviser fill out these forms with the customer whenever possible.





### DRIVEABILITY - ENGINE - AUTOMATIC TRANSMISSION

SYMPTOM (CHECK ALL THAT APPLY) ENGINE		DES IT OCCUR? (Engi	ALL THAT APPLY) ine &/or Transmission)
<ul> <li>"Service Engine Soon"/Malfunction Indicator Light" on</li> <li>Hard start/no start (cranks OK)</li> <li>Won't crank</li> <li>Engine stalls</li> <li>Engine miss</li> <li>Miss while driving</li> <li>Hesitates, stumbles or sags</li> </ul>	Few hours Few months Few months Fevery Other (explain)	Few days Variable Variable to miles	Few minutes     Few weeks     Few weeks     Only during event     Unknown     Getting worse
			/or Transmission)
☐ Surge or chuggle, buck - jerk - skip ☐ Poor gas mileage ☐ Highway ☐ City ☐ Ping, detonates ☐ Sulphur/rotten egg odor	All the time	Only during warmup	🗖 Hot
Backfires (popping noise) - underhood/tailpipe     Exhaust smoke Increased oil consumption     Runs on after key is turned off     Speed fluctuates without moving accelerator     Engine noise (explain):	□ Cool - 32 to 60 □ Hot - above 80 □ Raining □ □ Snow/Ice ■	°F ☐ War D°F ☐ Any ☐ Dry ☐ Hun ☐ Wet roads	d - 0 to 32°F rm - 60 to 80°F errvironment nid
(whine, rattle, groan, clunk, etc.)	- Driving Condition	ons:	
TRANSMISSION         Does not shift properly       Hard shift         Will not shift       Up       Down         Will not shift into overdrive       Engine starts in other than "P" or "N"         Noise (describe):	☐ Anytime ☐ Highway ☐ Betweent	Uphili City/town MPH andMPH	<ul> <li>Hard throttle</li> <li>Decelerating</li> <li>While turning</li> <li>While braking</li> <li>Downhill</li> <li>Stop and go</li> </ul>
	What Type of ₽	uel? What I	Brand?
(whine, rattle, groan, clunk, buzz, etc.)  ☐ Shifts into next gear too early  ☐ Overdrive doesn't work with speed control, but is otherwise OK	☐ Regular UL ☐ Gasohol ☐ Diesel #1	☐ Midrange UL ☐ Ethanol ☐ Diesel #2	<ul> <li>Premium JL</li> <li>Methanol</li> <li>Various brands</li> </ul>
Highway speed - shudder, surge, etc. Other:	Park/Neutral	ector is in:	Overdrive
EXPLAIN:		Drive/2	Drive/1
			First/Second
CUSTOMER NAME:	PHONE NO.:	REPAIR ORD	DER NO:
SHOP USE ONLY:			
	"Service Engine Soon"/Malfunction Indicator Light" on         Hard start/no start (cranks OK)         Won't crank         Engine stalls         Engine miss         Miss while driving         Hesitates, stumbles or sags         Rough idle         Idle is too high         Idle is too high         Idle is too high         Poor power/performance         Surge or chuggle, buck - jerk - skip         Poor gas mileage         Highway         City         Ping, detonates         Sulphur/rotten egg odor         Backfires (popping noise) - underhood/tailpipe         Exhaust smoke       Increased oil consumption         Runs on after kay is turned off         Speed fluctuates without moving accelerator         Engine noise (explain):	"Service Engine Soon"/Malfunction Indicator Light" on       Always         Hard start/no start (cranks OK)       Few hours         Won't crank       Few months         Engine stalls       Other (explain)         Miss while driving       Just started         Hesitates, stumbles or sags       Since new         Muss while driving       Just started         Hesitates, stumbles or sags       Since new         Poor power/performance       Surge or chuggle, buck - jerk - skip         Poor gas mileage       Highway       City         Prior, detonates       Suphur/rotten egg odor         Backfires (popping noise)       underhood/tailpipe         Exhaust smoke       Increased oil consumption         Runs on after key is turned off       Snow/ice         (whine, rattle, groan, clunk, etc.)       Other (explain)         (whine, rattle, groan, clunk, etc.)       Driving Condition         Oues not shift property       Hard shift         Will not shift       Up       Down         What Type of Fi       Realing -         (whine, rattle, groan, clunk, buzz, etc.)       Shifts into next gaar too early         Over dive doesn't work with speed control, but is otherwise OK       Highway speed - shudder, surge, etc.         Other:       Park/Neutral	"Service Engine Scon"/Malfunction Indicator Light" on       Always       Few Seconds         Hard start/no start (cranks OK)       Few hours       Few days         Won't crank       Few months       Variable         Engine stalls       Few months       Variable         Heistates, stumbles or sags       Few months       Variable         Muss while diving       Idle is too low         Poor power/performance       Surge or chuggle, buck - jerk - skip         Surge or chuggle, buck - jerk - skip       City         Poor gaas mileage       Highway         Coid       Warm         Surge or chuggle, buck - jerk - skip       Coid         Backlines (popping noiso) - underhood/talipipo         Exhaust smoke       Increased oil consumption         Runs on after key is turned off       Soud/ce worff         Speed fluctuates without moving accelerator       Faining         Engine noise (explain):       Soud/ce worff         (whine, rattle, groan, clunk, etc.)       Other (explain):         (whine, rattle, groan, clunk, etc.)       Driving Conditions:         Uight throttle       Medium throttle         Starting       All the time         (whine, rattle, groan, clunk, buzz, etc.)       Shifts into noxt goar toe early         (whine, rattle,





Fig.

## **BRAKES - STEERING - SUSPENSION**

SYMPTOM Uehicle pulls right - Wh Vehicle pulls left - Whe Steering wheel vibrate: Excessive play in steel Erratic steering wheel re Poor steering wheel re	en s at MPH ring praking	Suspension Leans or sv Brake light Traction co Uneven tire	vays in corners on ntrol light on		is uneven og" tracks 3S light on oft ride
Hard to steer     Effort     Steering wheel off cen	☐ Wanders ter	Shimmy/vibi	ration (check	box below for loc	
Brake pedal □ Noise	Pulses	Squeaks	🛛 Hard	☐ Mushy	Excessive travel
WHEN DOES IT OCCU Cold days Parking manuevers EXPLAIN:	☐ Hot days ☐ At road speed	☐ Wet/rain ☐ Acceleratin		All the time Decelerating	Intermittent
CUSTOMER NAME:		PH	ONE NO.:	RE	PAIR ORDER NO:
<u>SHOP USE ONLY:</u> VIN#:	MIL	ES:	TECHNI	CIAN:	ADVISOR#:
50C15059 7: Brakes, Ste		pension DITIONING-HEA	\TER - VENTIL	ATION	
☐ Air conditioner ☐ Max A/C	Heater Defr		☐ Vent ☐ Mix/blend	<ul> <li>Bi-Level</li> <li>Economy</li> </ul>	□ Fan/blower □ All
SYMPTOM					
☐ Does not work ☐ Noisy (explain) ☐ Leaks	Blows wrong temperat         Broken       Odo         Insufficient heat or code	or	□ No air come □ Air comes fr □ Other (expla	om wrong outlets	☐ Rapid cycling ☐ Blows fuse
WHEN DOES IT OCCU	UR?				
☐ All the time ☐ When change controls	Hot Colo s only Othe	d 🔲 Intern er (explain below)	mittent	☐ Right after startu ☐ Fan blower spee	•
EXPLAIN:					
CUSTOMER NAME:		PHON	E NO.:	REPAIR	ORDER NO:
<u>SHOP USE ONLY:</u> VIN#:	MILES	S:	TECHNICIAN	N: 4	DVISOR#:



Fig. 8: Air Conditioning, Heater & Ventilation



### ELECTRICAL - RADIO - TAPE/CD PLAYER

	SYMPTOM - MUSIC	SYSTEM				
	Does not work	🛛 Noisy	☐ Static ☐ Blows fuse	☐ Won't load ☐ Other (explai	,	☐ Poor reception
	SYSTEM AFFECTED	•				
	<ul> <li>□ Radio only</li> <li>□ Tape player</li> <li>□ Speakers</li> <li>□ Antenna</li> </ul>	☐ AM ☐ CD player ☐ Front ☐ Clock	□ FM □ Whole system □ Rear □ Radio or player contro	☐ FM stereo ☐ Steering whe ☐ Left bls	el buttons	ic equalizer Phone seat controls
	ALL OTHER ELECT Please list the comp		R ACCESSORIES or item and check any	applicable sym	ptom(s) from the	list that follows:
			☐ Inoperable ☐ Check light on or flasi ☐ Blows fuse	☐ Noisy hing ☐ Intermittent	<ul> <li>□ No control</li> <li>□ Works imprope</li> <li>□ Related system</li> </ul>	☐ Erratic rly (explain below) a affected (explain below)
			☐ Inoperable ☐ Check light on or flast ☐ Blows fuse	☐ Noisy hing ☐ Intermittent	<ul> <li>☐ No control</li> <li>☐ Works imprope</li> <li>☐ Related system</li> </ul>	Erratic rly (explain below) n affected (explain below)
			☐ Inoperable ☐ Check light on or flasi ☐ Blows fuse	☐ Noisy hing ☐ intermittent	<ul> <li>□ No control</li> <li>□ Works imprope</li> <li>□ Related system</li> </ul>	☐ Erratic rly (explain below) n affected (explain below)
	All the time Intermittent Other (explain below	☐ Hot ☐ After runs fo	Cold cr minutes	☐ Just after sta ☐ Rough roads	rting - malfunctions or bumps only	for a while
	EXPLAIN:					
	CUSTOMER NAME	:	РНО	NE NO.:	REPAI	R ORDER NO:
	<u>SHOP USE ONLY:</u> VIN#:		MILES:	TECHNICIAN	:	ADVISOR#:
Fig. 9	50B15058 : Electrical,	Radio & I	Tape/CD Player	-		





	MAN	AL TRANSMISSION - CLUTCH	
SYMPTOM - MANU	AL GEAR SHIFT	SYMPTOM - CLUT	гсн
Hard to shift	Doesn't shift	🗇 Hard to push	Fail to release
Grinds going into	gear	🗆 Noise when press	sing pedal down (describe):
□ Noisy when in	gear or neutral		
Slips/pops out of ge	ear		
D Noise (describe): _		🔲 Slips	Chattering (grabbing)
		Odor present	Pedal stays on the float
		Squealing sound	
Upshilt light stays o			
🛛 Upshift light doesn'	t light	WHEN DOES IT O	
WHEN DOES IT OO		When Engine Ten	nperature is:
WHEN DUES IT UL	CORY	Cold	Hot
□ All the time	Light load	Accelerating	
Heavy load			
EXPLAIN:			
			·
		···· · · · · · · · · · · · · · · · · ·	
<u></u>			
<u></u>			
CUSTOMER NAM	E:	PHONE NO.:	REPAIR ORDER NO
SHOP USE ONLY	•		
SHOP USE ONLY: VIN#:	: Mile	S: TECHNICIAN:	ADVISOR#:
		S: TECHNICIAN:	ADVISOR#:





□ Hot days       □ Cold days       □ Humid or rainy       □ Temperature         □ Heavy bumps       □ Light bumps       □ Smooth pavement         EXPLAIN:		SC	QUEAK - RATTLE - {	NOISE CONDITIO		
Knocks       Hard metal       Light metal       Roars       Ticking       Whine         Squeaks       Rattles       Scraping       Other       Image: Scraping       Imag	Engine Compartment     Front Suspension     Rear Suspension     Passenger Compartm     Instrument Panel     Doors     Rear seat area	Left Left Left Left Left Left Conso	Right Right Right Right Right Right Right Right Right	Center	Don Don Don Don	't know 't know 't know 't know
Continuous       Often       Intermittent       Just started       Since new         WHEN DOES IT OCCUR?       All the time       Speed       RPM       Only moving       On turns       Braking         Hat drivetile       Light threttle       Decelerate       Steady speed       Idle in gear       Idle out of ge         Hat drivetile       Light threttle       Decelerate       Steady speed       Idle in gear       Idle out of ge         Heavy bumps       Light bumps       Smooth pavement       Temperature       Idle out of ge         EXPLAIN:	C Knocks Har	d metal	-		Ticking	U Whine
All the time       Speed       RPM       Only moving       On turns       Braking         Hard throttie       Light throttle       Decelerate       Steady speed       Idle in gear       Idle out of ge         Hot days       Cold days       Humid or rainy       Temperature       Idle in gear       Idle out of ge         Heavy bumps       Light bumps       Smooth pavement       EXPLAIN:				☐ Just started	🗆 Sind	ce new
CUSTOMER NAME:       PHONE NO.:       REPAIR ORDER NO:         SHOP USE ONLY:       MILES:       TECHNICIAN:       ADVISOR#:         VIN#:       MILES:       TECHNICIAN:       ADVISOR#:         SOF15060       I:       Squeak, Rattle, & Noise Conditions       MILES:       MILES:         WATER LEAK       WATER LEAK       Leak Occurs When?       Setting level       Any time it rains       While driving in the rain       Car wash only         Back lower than front (facing uphill)       Front lower than back (facing downhill)       Car wash only         Location of Leak (where water appears):       I.F Door       I.R Door       I.R Door       Windshield       Rear window         LF window       RF window       I.R window       RR window       Side door       Sunrool/T.To         WINDNOISE:       Location:       I.R Door       RR Door       Windshield       Rear window         LF Door       RF Door       I.R Door       RR window       Side door       Sunrool/T.To         WINDNOISE:       Location:       I.R Door       RR Door       Windshield       Rear window         LF Door       RF Door       I.R Door       RR Door       Side door       Sunrool/T.To	<ul> <li>☐ All the time</li> <li>☐ Hard throttle</li> <li>☐ Hot days</li> <li>☐ Heavy bumps</li> </ul>	Speed Light throttle Cold days Light bumps	Decelerate St Humid or rainy Smooth pavement	eady speed	🛛 Idle in gear	•
Leak Occurs When?         Setting level       Any time it rains       While driving in the rain       Car wash only         Back lower than front (facing uphill)       Front lower than back (facing downhill)       Car wash only         Location of Leak (where water appears):       Front lower than back (facing downhill)       Rear window         LF Door       RF Door       LR Door       RR window       Side door         LF window       RF window       RF window       Side door       Sunroof/T-To         Under instrument panel       RF Door       Rear window       Rear window         WINDNOISE:       LF Door       RF Door       LR Door       RR Door       Windshield       Rear window         LF Door       RF Door       LR Door       RR Door       Windshield       Rear window         Under instrument panel       RF Door       Rear window       Rear window       Side door       Sunroof/T-To         LF Door       RF Door       LR Door       RR Door       Windshield       Rear window         LF Door       RF window       RF window       Side door       Sunroof/T-To			РНС	NE NO.:		an onden no.
Back lower than front (facing uphill)       Front lower than back (facing downhill)         Location of Leak (where water appears):       Front lower than back (facing downhill)         LF Door       RF Door         LF window       RF window         LF window       RF window         Under instrument panel       Rear window         WINDNOISE:       RF Door         LF Door       RF Door         LF Door       RF Door         LF Door       RF Door         WINDNOISE:       RF Door         LF window       RF Door         LF window       RF door         LF window       RF Door         LF window       RF window	SHOP USE ONLY: VIN#: 50F15060		MILES: oise Condit	TECHNICIAN		
LF Door       RF Door       RR Door       Windshield       Rear window         LF window       RF window       RF window       RR window       Side door       Sunroof/T-To         Under instrument panel       Rear door/rear hatch       Rear door/rear hatch       Sunroof/T-To         WINDNOISE:       LC Door       RF Door       RR Door       Windshield       Rear window         LF Door       RF Door       LR Door       RR Door       Windshield       Rear window         LF Door       RF Door       LR Door       RR Door       Windshield       Rear window         LF window       RF window       RF window       Side door       Sunroof/T-To	SHOP USE ONLY: VIN#: 50F15060 1: Squeak, F WATER LEAK	Rattle, & N	MILES: oise Condit	TECHNICIAN		
Location:         LF Door       RF Door         LF window       RF window         LF window       RF window         LF window       RF window	SHOP USE ONLY: VIN#: 50F15060 1: Squeak, F WATER LEAK Leak Occurs When?	Rattle, & N	MILES: oise Condit WATER LEAK - s Dw	TECHNICIAN: ions WINDNOISE hile driving in the rai	: in	
	SHOP USE ONLY: VIN#: 50F15060 1: Squeak, F WATER LEAK Leak Occurs When? Setting levei Back lower than front Location of Leak (wf LF Door LF window	Rattle, & N Any time it rain: t (facing uphill) nere water appears RF Door RF Window	MILES: Oise Condit WATER LEAK - s UW Fr s):	TECHNICIAN: ions WINDNOISE hile driving in the rai ont lower than back	in (facing downhill) □ Windshield □ Side door	ADVISOR#:
CUSTOMER NAME: PHONE NO.: REPAIR ORDER NO:	SHOP USE ONLY: VIN#: 50F15060 1: Squeak, F WATER LEAK Leak Occurs When? Back lower than from Location of Leak (wh LF Door LF window Under instrument par WINDNOISE: Location: LF Door LF window	Rattle, & N Any time it rain- t (facing uphill) nere water appears BF Door RF window nel RF Door RF window nel	MILES: oise Condit WATER LEAK - s    W s    W s):    LR Door    LR window	TECHNICIAN: ions WINDNOISE hile driving in the rai ont lower than back RR Door RR window Rear door/rea RR window Rear door/rea	in (facing downhill) Windshield Side door ar hatch Side door ar hatch	ADVISOR#:





