



MITSUBISHI
MOTOR SALES OF AMERICA, Inc.

TECHNICAL SERVICE BULLETIN

SUBJECT: DIAMANTE CELLULAR TELEPHONE		No: TSB-91-00-010	
		DATE: June, 1991	
		MODEL: Diamante, Diamante LS	
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input checked="" type="checkbox"/> SALES MANAGER

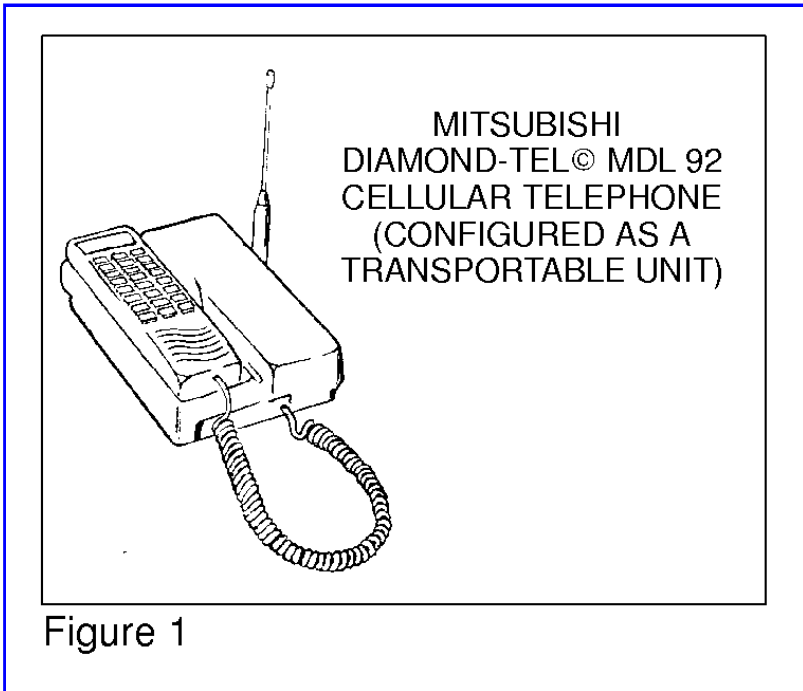


Figure 1

PURPOSE

A dealer-installed Mitsubishi Diamond-Tel+ MDL 92 Cellular Telephone is offered for Diamante vehicles. This Technical Service Bulletin contains programming, troubleshooting, and warranty information as detailed in the Table of Contents on this page. This information relates to the Mitsubishi Diamond-Tel+ MDL 92 Cellular Telephone only.

NOTE: This bulletin does not contain installation instructions. Those instructions are contained with the cellular telephone parts kit.

To learn the basics of cellular telephones, please see Triple Diamond video tape, number 37 (1992 Diamante Technology), which contains a section on "Cellular Telephone Fundamentals."

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WARRANTY INFORMATION AND COVERAGE

If a Mitsubishi Diamond-Tel+ MDL 92 Cellular Phone is installed in a Diamante by a Mitsubishi Motors dealer, most components are covered for the remainder of the Basic New Vehicle Limited Warranty (36/36), or 12 months/12,000 miles, whichever is most favorable to the customer.

If the cellular phone is sold over the counter by a Mitsubishi Motors dealer, but not installed by the dealer, the warranty for most components will be 12 months/12,000 miles.

NOTE: Some components are limited to 12 months/12,000 miles or 6 months (see chart).

Normal warranty claim procedures apply. Dealers must receive a **PWA** for replacement of any accessory item. Use the labor operation and allowed labor times shown in the chart below. Enter the related component labor operation on line 'A' of the claim.

Submit a warranty claim over your Diamond Network terminal for both the related labor operations and the freight charges for returning the defective unit. The operation for freight is **95300040** and must be entered on a line below the operation for the component labor operation.

CELLULAR TELEPHONE PART NAME	L.O.T.S. INFORMATION		WARRANTY COVERAGE	
	LABOR OPERATION CODE	HOURS	DEALER SOLD AND INSTALLED	OVER THE COUNTER
Handset	66700010	0.2	36/36 *	12/12
Transceiver Unit Includes: Reprogramming	66700020	0.4	36/36 *	12/12
Transportable Cover	66700030	0.2	36/36 *	12/12
Battery Pack	66700040	0.2	6 months	6 months
Hands Free Control Unit	66700050	0.2	36/36 *	12/12
Hands Free Module	66700060	0.3	36/36 *	12/12
Antenna Mast	66700070	0.2	12/12	12/12
Sun Visor Microphone	66700080	0.2	12/12	12/12

* Balance of Basic New Vehicle Warranty up to 36/36, or 12/12 whichever is more favorable to the customer.

REFER TO WARRANTY BULLETIN, WB91-015 FOR ADDITIONAL WARRANTY INFORMATION.

WARRANTY EXCHANGE PROCEDURES

All components (except the battery and antenna mast) that need repairs are required to be exchanged, similar to the current radio exchange program.

If a cellular phone component is found to be in need of service:

1. Contact: Mitsubishi Electronics America, Inc. (MELA)
12623 Newburgh Road
Livonia, Michigan 48150
Phone: 1-800-443-3302

MELA will request related information about the unit, vehicle and problem and will then ship out a replacement component. Upon receipt of the replacement component, dealers will be required to return the malfunctioning component directly to MELA.

2. Antenna masts must be ordered directly from your MMSA Parts Distribution Center. No exchange is needed. Owner caused or accident related problems are not warrantable.

3. The `800' number at Mitsubishi Electronics may also be utilized to request troubleshooting and programming information.

CELLULAR TELEPHONE COMPONENTS

Refer to component illustration (Figure 2).

Handset - The handset is used for making phone calls and for programming the phone. During in-vehicle operation, the handset is located in the center armrest.

Portable Cover - Converts transceiver for portable operation. The cover contains a portable battery pack.

Transceiver Unit - Contains transmitting and receiving components.

The Portable Cover and Transceiver unit are mounted behind the rear seat center arm rest.

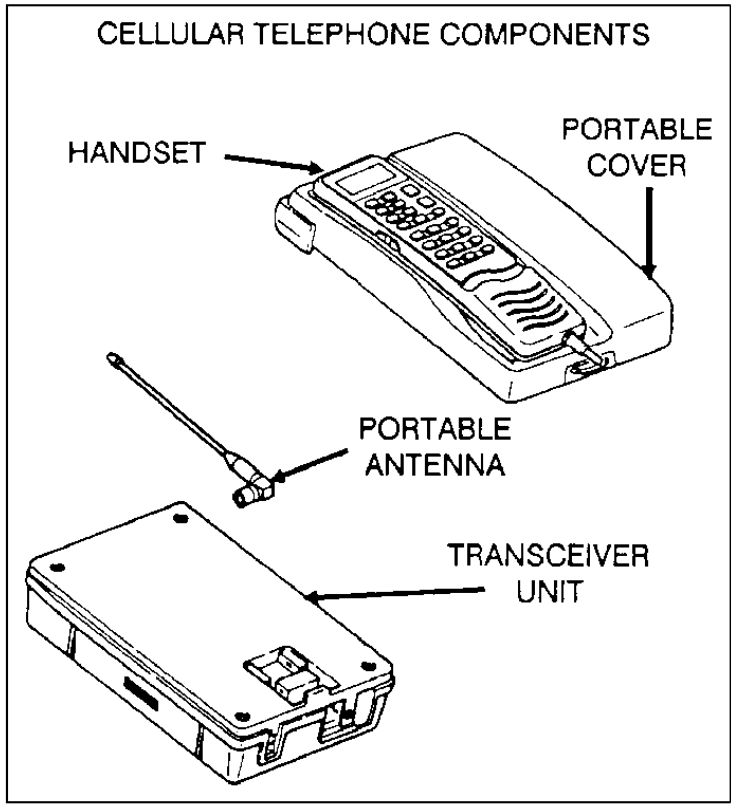


Figure 2

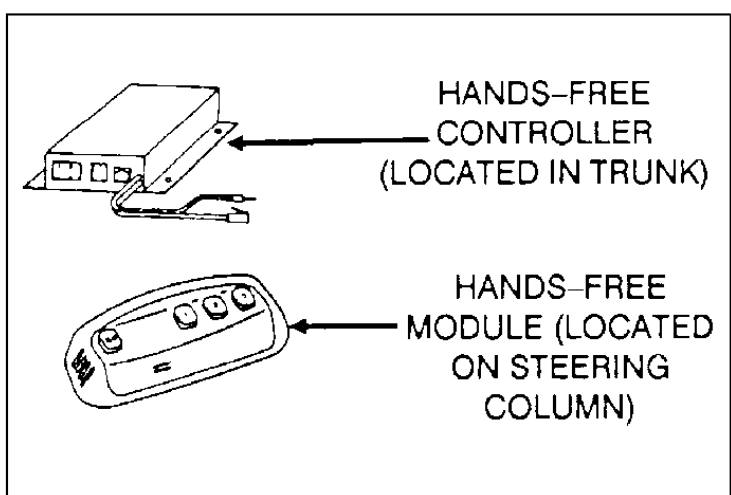


Figure 3

Refer to component illustration (Figure 3).

- Hands-Free Controller (located in trunk).
- Hands-Free Module (located on steering column).
- External Vehicle Antenna (not shown).

CELLULAR TELEPHONE HANDSET

Refer to Handset illustration (Figure 4) which shows the display and the keypad. Some keypad functions are listed below:

"PWR" - Turns the phone "on" or

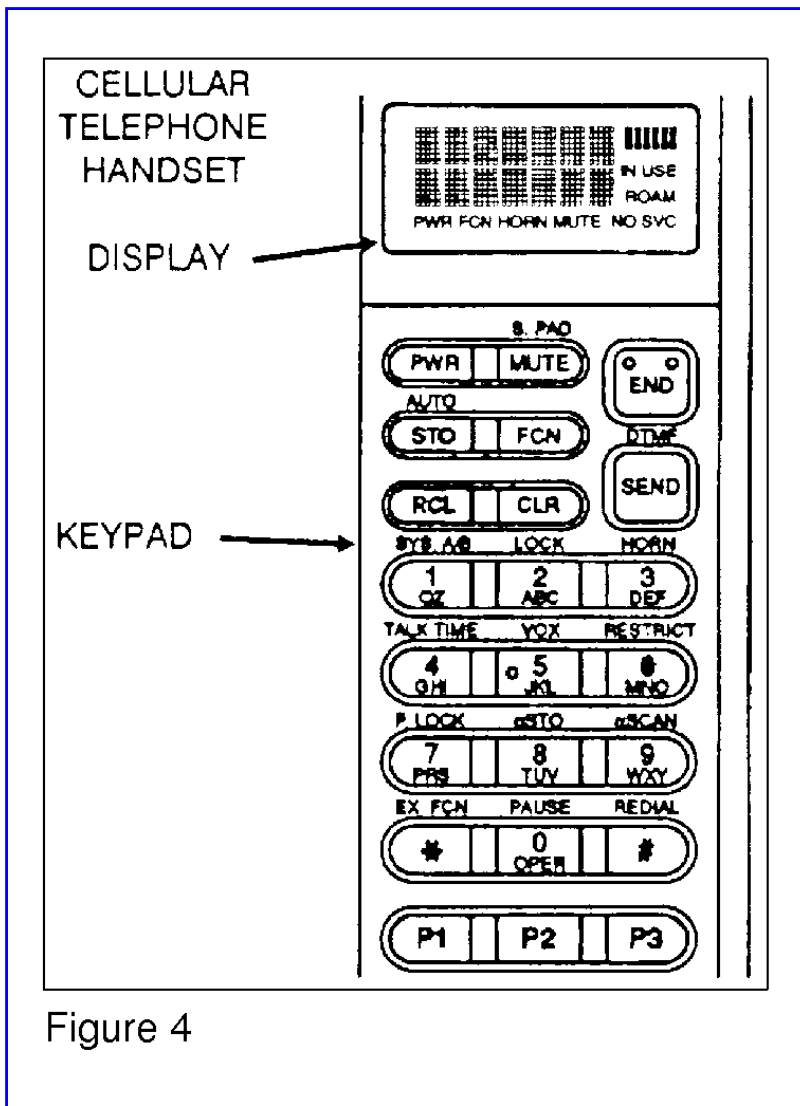


Figure 4

"off".

"**MUTE**" - Disables or enables voice input from the microphone when in the handset conversation mode.

"**END**" - Ends a call.

"**STO**" - Stores up to 32 digits in one of the 99 memory locations.

"**FCN**" - Allows you to engage specific phone features after pressing the "FCN" key and corresponding digit keys. See the owners manual for specific functions available.

"**RCL**" - Recalls the user programmed numbers stored in one of the 99 memory locations. Press "RCL" and "a two digit number" (01 through 99).

"**CLR**" - Momentary depression clears the last entered digit while continuous depression clears all digits or exits the extended function mode. (**NOTE:** This key is also used for programming the phone.)

"**SEND**" - Initiates a phone call to the number on the display. Answers the call when ringing is heard.

PRE-PROGRAMMING CHECKS

There are four situations where problems may occur .

1. During installation.
2. During cellular phone power-up initialization.
3. During programming.
4. During use.

Below is a flow chart that should be used **AFTER** installation of the cellular phone system and **BEFORE** programming the unit.

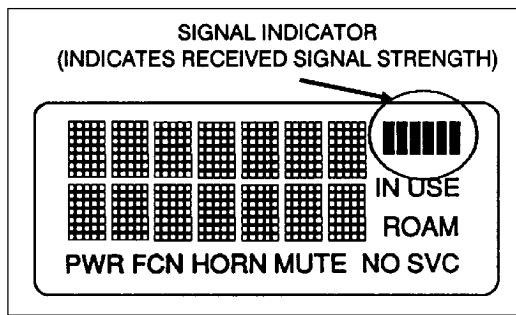
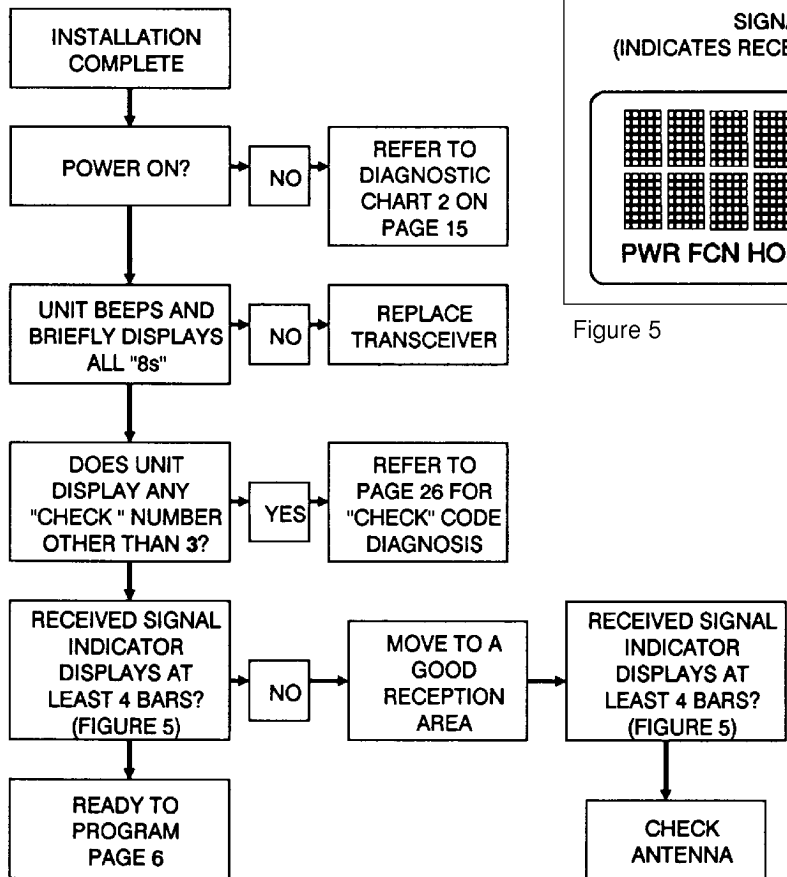


Figure 5

MITSUBISHI DIAMOND-TEL+ MDL 92 CELLULAR PHONE TECHNICIAN PROGRAMMING WORKSHEET

This worksheet should be copied and then filled out completely before programming the cellular phone.

Customer Name _____

VIN _____

READ ALL INSTRUCTIONS THOROUGHLY BEFORE PROGRAMMING

Information supplied by the customer is on a separate check-list (a copy is shown on page 30) which is to be filled out at the F&I department. Information which needs to be transferred from the Customer Programming Check List to this worksheet has an "S-" designation and is comprised of one or two digits. These digits pertain to the programming steps on this worksheet. Any information that must be obtained either from the Customer check-list or provided by the cellular phone is shown in a hollow box:

. Write the necessary programming information in the hollow boxes. **NOTE:** For trouble-free programming, all hollow boxes **MUST** be filled with information prior to starting.

Information shown inside a shaded box must be input exactly as shown.

NOTE: If the unit is not connected to the vehicle's 12V power, the transportable battery pack must be fully charged before programming. If during programming the display does not cycle to the next category, the information entered is out of range. Re-enter the information at that step.

STEP	PROGRAMMING INSTRUCTIONS/NOTES	
1	Several programming steps require information supplied by the Cellular System Carrier and Customer. Ensure all boxes in the "Information Entered" section of this worksheet are filled in before starting to program the phone.	
2	Press "PWR" to turn unit on. Allow wake up cycle to finish (after the display shows all "8's" and beeps).	
	Information Entered	<input type="text" value="PWR"/>
3	Press and hold the "CLR" button while inputting 8291112.	
	Information Entered	<input type="text" value="CLR"/> → <input type="text" value="8"/> <input type="text" value="2"/> <input type="text" value="9"/> <input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="2"/>
4	Release the "CLR" button.	
5	NOTE: The above steps must be completed within 10 seconds. If not, press the "PWR" button and allow the unit to power down before trying again.	
6	You are now ready to input programming data.	
7	You must press "SEND" to store the data and cycle to the next step.	

STEP	INFORMATION SUPPLIED BY	SCREEN DISPLAY (X = DIGITAL POSITION)	PROGRAMMING INSTRUCTIONS/NOTES
8	Customer (S-8)	DUAL NO X	Enter 0 for single telephone number, or, 1 for two telephone numbers. Then press "SEND" . DUAL NO means Dual Number (enable).
	Information Entered	<input type="text"/> → <input type="button" value="SEND"/>	
9	Carrier	NO1 XXX XXXXXXX	Enter the 10 digit phone number, starting with the area code. Then press "SEND" .
	Information Entered	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
10	Carrier	SID1 XXXXX	Enter 5 digit number. Then press "SEND" . NOTE: Must be between 00000 and 32567 . SID1 means System ID Channel #1.
	Information Entered	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
11	—	LU1 X	Enter 1 . Then press "SEND" . NOTE: Must be 1 . LU1 means Local use Channel #1.
	Information Entered	<input type="text" value="1"/> → <input type="button" value="SEND"/>	
12	—	EX1 X	Enter 1 . Then press "SEND" . NOTE: Must be 1 . EX1 means Min Mark Channel #1.
	Information Entered	<input type="text" value="1"/> → <input type="button" value="SEND"/>	
13	Carrier	IPCH1 XXXX	Enter a four digit number. Then press "SEND" . NOTE: Must be 0333 or 0334 . IPCH1 means Initial Paging Channel #1.
	Information Entered	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
14	Carrier	ACCOLC1 XX	Enter a two digit number. Then press "SEND" . NOTE: Must be between 00 or 15 . ACCOLC1 means Access Overload Channel #1.
	Information Entered	<input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	

15	Carrier	GIM1 XX	Enter a two digit number. Then press "SEND". NOTE: Must be between 00 or 15. GIM1 means Group ID Mark Channel #1.
	Information Entered	<input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
16	Customer (S-16)	T INCL1 X	Enter a one digit number. Then press "SEND". NOTE: Must be between 0 to 7. 60 seconds enter 0 30 seconds enter 1 20 seconds enter 2 15 seconds enter 3 12 seconds enter 4 10 seconds enter 5 6 seconds enter 6 1 second enter 7 T INCL1 means Cumulative Timer Update Increment #1.
	Information Entered	<input type="text" value="1"/> → <input type="button" value="SEND"/>	
THE STEPS WITHIN THIS SHADED SECTION ARE NECESSARY FOR DUAL PHONE NUMBER PROGRAMMING ONLY. SINGLE NUMBER PROGRAMMING CONTINUES WITH STEP 25.			
17	Carrier	NO2 XXX XXXXXX	Enter the 10 digit phone number. Start with the area code. Then press "SEND".
	Information Entered	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
18	Carrier	SID2 XXXXX	Enter 5 digit number. Then Press "SEND". NOTE: Must be between 00000 and 32567. SID2 means System ID Channel #2.
	Information Entered	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
19	—	LU2 X	Enter 1. Then press "SEND" NOTE: Must be 1. LU2 means Local use Channel #2.
	Information Entered	<input type="text" value="1"/> → <input type="button" value="SEND"/>	
20	—	EX2 X	Enter 1. Then press "SEND" NOTE: Must be 1. EX2 means Min Mark Channel #2.

20	Information Entered	<input type="text" value="1"/> → <input type="button" value="SEND"/>	
21	Carrier	IPCH2 XXXX	Enter a four digit number. Then Press "SEND". NOTE: Must be 0333 or 0334 . IPCH2 means Initial Paging Channel #2.
	Information Entered	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
22	Carrier	ACCOLC2 XX	Enter a two digit number. Then press "SEND". NOTE: Must be between 00 or 15 . ACCOLC2 means Access Overload Channel #2.
	Information Entered	<input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
23	Carrier	GIM2 XX	Enter a two digit number. Then press "SEND". NOTE: Must be between 00 or 15 . GIM2 means Group ID Mark Channel #2.
	Information Entered	<input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	
24	Customer (S-16)	T INCL2 X	Enter a one digit number. Then press "SEND". NOTE: Must be between 0 to 7 . 60 seconds enter 0 30 seconds enter 1 20 seconds enter 2 15 seconds enter 3 12 seconds enter 4 10 seconds enter 5 6 seconds enter 6 1 second enter 7 T INCL2 means Cumulative Timer Update Increment #2.
	Information Entered	<input type="text"/> → <input type="button" value="SEND"/>	
25	Customer (S-25)	SEC XXXX	Enter a four digit security code. Then press "SEND". NOTE: Must be between 0000 or 9999 . SEC means Security Code.
	Information Entered	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → <input type="button" value="SEND"/>	

26	Customer (S-26)	DTX X	Enter 0 for NO , or 1 for YES . Then press "SEND" . NOTE: Must be 0 or 1 . DTX means Discontinuous Transmission (Transportable Mode only).
	Information Entered	<input type="text"/> → <input type="button" value="SEND"/>	
27	Customer (S-27)	INHIBIT X	Enter 0 for Roaming, or 1 for Roaming Inhibit. Then press "SEND" . NOTE: Must be 0 or 1 . INHIBIT means Roaming feature on or off.
	Information Entered	<input type="text"/> → <input type="button" value="SEND"/>	
28	—	C DTMF X	Enter 1 , then press "SEND" . NOTE: Must be 1 .
	Information Entered	<input type="text" value="1"/> → <input type="button" value="SEND"/>	
29	Customer (S-29)	DIS CU RESET X	Enter 0 for timer reset or 1 for no reset. NOTE: Must be 0 or 1 . DIS CU RESET means Disable Cumulative Timer Reset.
	Information Entered	<input type="text"/> → <input type="button" value="SEND"/>	
30	—	DIS IGN SENSE X	Enter 0 , then press "SEND" . NOTE: Must be 0 .
	Information Entered	<input type="text" value="0"/> → <input type="button" value="SEND"/>	
31	Customer (S-31)	DISOWN TEL X	Enter 0 for Number Displayed , or 1 for Number Not Displayed . Then press "SEND" . NOTE: Must be 0 or 1 . DISOWN TEL means Display Own Telephone Number.
	Information Entered	<input type="text"/> → <input type="button" value="SEND"/>	
32	—	SID LO XXXXX	Enter 00000 (5-Zeros), then press "SEND" . NOTE: Must be 00000 .
	Information Entered	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> → <input type="button" value="SEND"/>	

33	_____	DUAL HS X	Enter 0 , then press " SEND ". NOTE: Must be 0 .
	Information Entered	<input type="text" value="0"/> → <input type="button" value="SEND"/>	
34	_____	RJ-11 X	Enter 0 , then press " SEND ". NOTE: Must be 0 .
	Information Entered	<input type="text" value="0"/> → <input type="button" value="SEND"/>	
35	_____	DUAL NO	The telephone will display "DUAL NO". Press " END ". This completes telephone programming. NOTE: If you wish, you can review the programming information restarting at step 8 by pressing the " SEND " key.
	Information Entered	<input type="button" value="END"/>	
36	_____	Perform "After" Programming checks, beginning on the next page.	

SCROLL DOWN TO CONTINUE
