

HANDS-FREE TELEPHONE SYSTEM DOES NOT RECEIVE/TRANSMIT CALLS, DOES NOT CONNECT **[Bluetooth SYSTEM (HANDS-FREE TELEPHONE (HF/TEL) SYSTEM)]**

id0903h5017500

Possible DTC	Hands-free telephone system does not receive/transmit calls, does not connect	
	Using the M-MDS	B116A:12, B116A:13, B116A:44
	Without using M-MDS (On-board diagnostic test mode)	26:Er81, 26:Er82, 26:Er86
Possible cause	<ul style="list-style-type: none"> • Problem in cellular phone <ul style="list-style-type: none"> — A cellular phone other than a hands-free telephone system-enabled models is used — Cellular phone is outside of the signal transmission area — Cellular phone does not operate (low battery voltage, power off) — Cellular phone does not set up to Bluetooth system — Bluetooth does not operate • Malfunction in microphone related parts <ul style="list-style-type: none"> — Poor connection in the connector — Open or short circuit in the wiring harness between the microphone and Bluetooth unit — Microphone malfunction • Malfunction in steering switch related parts <ul style="list-style-type: none"> — Poor connection in the connector — Open or short circuit in the wiring harness between the Hang-up/Pick-up/Talk switch and Bluetooth unit — Hang-up/Pick-up/Talk switch malfunction • Malfunction in audio system <ul style="list-style-type: none"> — Poor connection in the connector — CAN communication error between the audio unit and Bluetooth unit — Open or short circuit in the wiring harness between the Bluetooth unit and the speaker through the audio unit (without Bose®) — Open or short circuit in the wiring harness between the Bluetooth unit and the speaker through the audio amplifier (with Bose®) • Bluetooth unit does not respond <ul style="list-style-type: none"> — Poor connection in the connector — Open or short circuit in the wiring harness between the Bluetooth unit and the audio unit (without Bose®) — Open or short circuit in the wiring harness between the Bluetooth unit and the audio amplifier (with Bose®) — Open or short circuit in the wiring harness of the Bluetooth unit power supply or ground circuit — Bluetooth unit malfunction • Bluetooth unit electric field disturbance due to metallic device around Bluetooth unit 	

Diagnostic procedure

- When performing an asterisked (*) troubleshooting inspection, slightly shake the wiring harness and connectors while performing the inspection to discover whether poor contact points are the cause of any intermittent malfunction. If there is a problem, verify that the connectors, terminals and wiring harness are connected correctly and undamaged.

STEP	INSPECTION	ACTION
1	<ul style="list-style-type: none"> • Verify if the customer's cellular phone is a Hands-free telephone system-enabled model by referring to http://www.mazdausa.com/MusaWeb/displayPage.action?pageParameter=bluetoothHandsFreeSystem. • Is the customer's cellular phone a Hands-free telephone system-enabled model? 	Yes
		No
2	<ul style="list-style-type: none"> • Verify that the cellular phone is communicating with the Bluetooth unit. • Does the cellular phone connect to the Bluetooth unit via Bluetooth when the Hands-free telephone system is activated? 	Yes
		No

STEP	INSPECTION		ACTION
3	<ul style="list-style-type: none"> Inspect the cellular phone condition while the hands free phone does not operate. Can the following conditions be verified? <ul style="list-style-type: none"> Low battery voltage Power is off Out of signal transmission area 	Yes	Enter a cellular phone signal transmission area and reinspect the Bluetooth system operation.
		No	Go to the next step.
4	<ul style="list-style-type: none"> Does the cellular phone set up to the Bluetooth unit? 	Yes	Go to the next step.
		No	Set up the cellular phone to the Bluetooth unit.
5	<ul style="list-style-type: none"> Is the audio system sound output normal? 	Yes	Go to the next step.
		No	Perform the audio system troubleshooting procedure.
6	<ul style="list-style-type: none"> Perform the Bluetooth system (hands-free telephone (HF/TEL) system) DTC inspection. Are the following DTC displayed? <ul style="list-style-type: none"> B116A:12/26:Er81 B116A:13/26:Er82 B116A:44/26:Er86 	Yes	Go to the next step.
		No	Go to Step 8.
7*	<ul style="list-style-type: none"> Inspect for open or short circuits in the following wiring harnesses and connectors, and inspect the connector connections. <ul style="list-style-type: none"> Between microphone terminal A and audio unit terminal 2L Between microphone terminal B and audio unit terminal 2N Between microphone terminal C and audio unit terminal 2R Between microphone terminal D and audio unit terminal 2P Between microphone terminal E and audio unit terminal 2T Are the harnesses and connector connections normal? 	Yes	Replace the microphone. (See MICROPHONE REMOVAL/INSTALLATION.)
		No	Repair or replace malfunctioning parts.
8	<ul style="list-style-type: none"> Perform the Bluetooth system (hands-free telephone (HF/TEL) system) DTC inspection. Is 26:Er81 displayed? 	Yes	Inspect and repair the audio system CAN communication.
		No	Go to the next step.
9	<ul style="list-style-type: none"> Inspect the Hang-up/Pick-up/Talk switch. (See STEERING SWITCH REMOVAL/INSTALLATION.) Is the Hang-up/Pick-up/Talk switch normal? 	Yes	Go to the next step.
		No	Replace the steering switch. (See STEERING SWITCH REMOVAL/INSTALLATION.)
10*	<ul style="list-style-type: none"> Inspect for open or short circuits in the following wiring harnesses and connectors, and inspect the connector connections. <ul style="list-style-type: none"> Between clock spring terminal B and audio unit terminal 1H Between clock spring terminal E and audio unit terminal 1P Are the harnesses and connector connections normal? 	Yes	Go to the next step.
		No	Repair or replace malfunctioning parts.
11	<ul style="list-style-type: none"> Call the hands-free cell phone using another cellular phone. Do the same symptoms appear? 	Yes	Go to the next step.
		No	The cellular phone Bluetooth system is malfunctioning.
12	<ul style="list-style-type: none"> Is there any metallic device around the Bluetooth unit? 	Yes	Remove the metallic device around the Bluetooth unit, then go to the next step.
		No	Go to the next step.
13	<ul style="list-style-type: none"> Verify the malfunction symptom. Is the malfunction improved? 	Yes	Troubleshooting completed.
		No	Go to the next step.
14	<ul style="list-style-type: none"> Replace the Bluetooth unit and verify the malfunction symptom. (See Bluetooth UNIT REMOVAL/INSTALLATION.) Is the malfunction improved? 	Yes	Troubleshooting completed.
		No	Replace the audio unit. (See AUDIO UNIT REMOVAL/INSTALLATION.)