



ELECTRONICALLY TUNED RADIO AND CASSETTE



JOHN DEERE

OPERATORS MANUAL ELECTRONICALLY TUNED RADIO AND CASSETTE

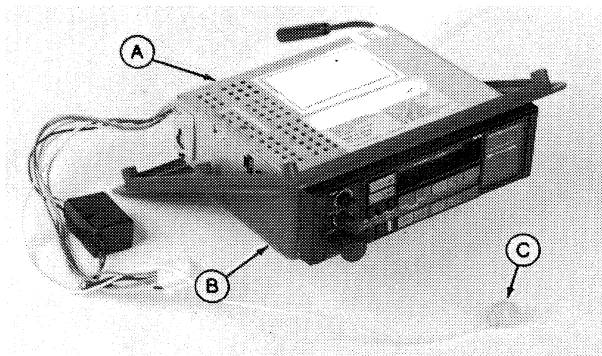
OMTY20860 J6 English

**JOHN DEERE MERCHANDISE DIVISION
OMTY20860 J6**

**LITHO IN THE U.S.A.
ENGLISH**



Introduction



Unauthorized modifications to the radio may impair the function and/or safety and affect radio life.

A—Radio or Radio/Cassette

B—Bezel

C—Connector

This operator's manual contains SI Metric equivalents which follow immediately after the U.S. customary units of measure.

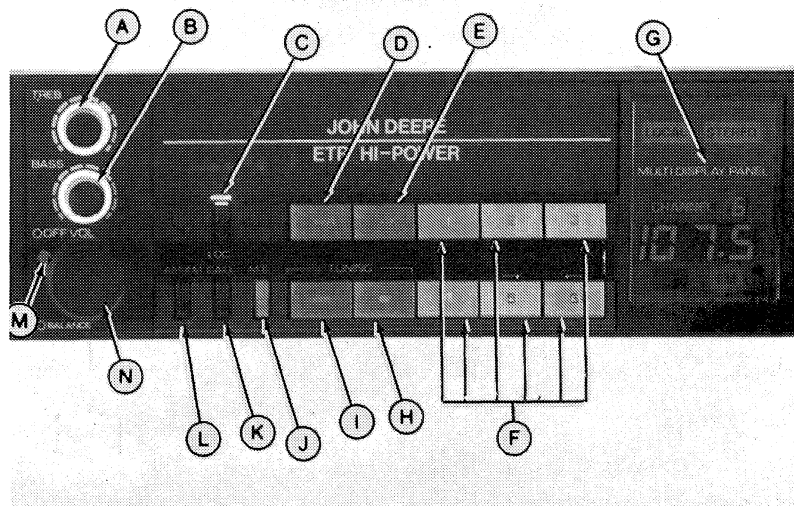
IMPORTANT: The radio TY15419 and radio/cassette TY15420 AM/FM stereo radio kits are of high-powered output design and are only to be installed utilizing TY15157, TY15280 or TY15164 speaker kit and TY15156, AH105035 or BE22118 antenna kit.

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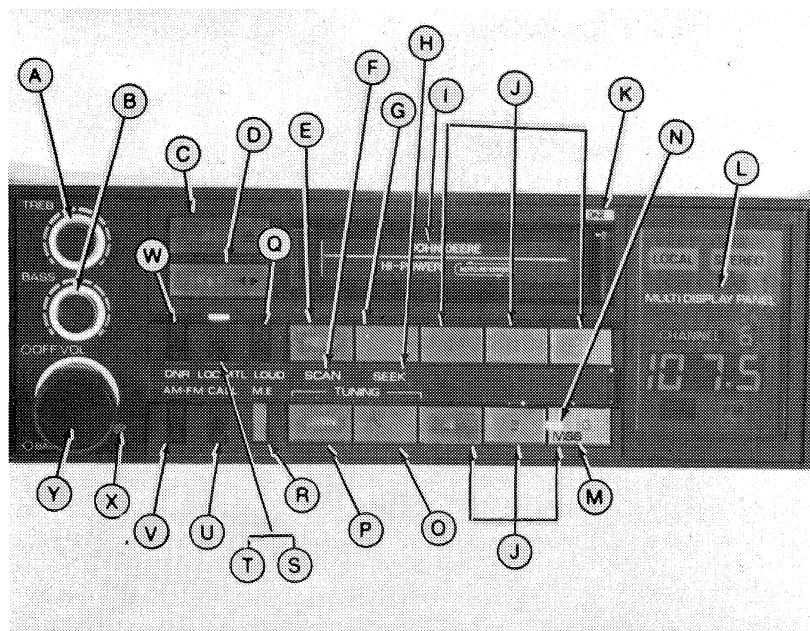
Controls and Instruments

RADIO WITHOUT CASSETTE



- | | |
|--------------------------------|---------------------------------------|
| A—Treble Control | H—Manual Up Tuning Switch |
| B—Bass Control | I—Manual Down Tuning Switch |
| C—Local/Distance Selector | J—Memory Enable Switch |
| D—Automatic Scan Tuning Switch | K—Display Call Switch |
| E—Automatic Seek Tuning Switch | L—AM/FM Band Selector |
| F—Dual AM/FM Preset Switches | M—Left-Right Balance Control/Speakers |
| G—Multiple Display Panel | N—On-Off Switch/Volume Control |

RADIO WITH CASSETTE



- A—Treble Control
- B—Bass Control
- C—Eject Button
- D—Program Selector Switch
- E—Rewind Button
- F—Automatic Scan Tuning Switch
- G—Fast Forward Button
- H—Automatic Seek Tuning Switch
- I—Cassette Slot
- J—Dual AM/FM Preset Switches
- K—DNR Indicator
- L—Multiple Display Panel
- M—Music Sensor (MSS) Switch

- N—MSS Indicator
- O—Manual Up Tuning Switch
- P—Manual Down Tuning Switch
- Q—Loudness Contour Switch
- R—Memory Enable Switch
- S—Local/Distance Selector
- T—Metal Tape Selector
- U—Display Call Switch
- V—AM/FM Band Selector
- W—DNR Switch
- X—Left-Right Balance Control/Speakers
- Y—On-Off Switch/Volume Control

Install the Radio

INSTALL ANTENNA (Sound-Gard Body Only)

IMPORTANT: The Radio TY15419 and Radio/Cassette TY15420 AM/FM Stereo Radio Kits are of a high powered output design and are only to be installed utilizing TY15157, TY15164 or TY15280 Speaker Kit and TY15156, AH105035 or BE22118 Antenna Kit.

This high power radio is designed for a two speaker system. Using a single speaker installation may overheat and damage the radio.

To install antenna, follow instructions provided in antenna kit.

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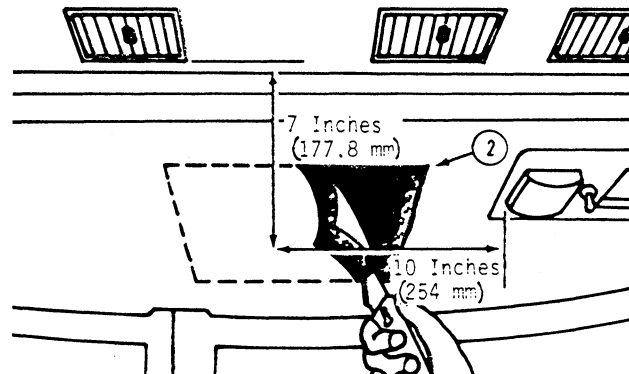
CUT HEADLINER (Sound-Gard Body Only)

1. Using a sharp knife, puncture hole in headliner approximately 10 in. (254 mm) left of dome light and 7 in. (177.8 mm) in front of air conditioning duct. Cut toward back of cab to metal frame.

2. Carefully cut around inside of metal frame and remove square portion of headliner.



CAUTION: Headliner material is made of pressed fiberglass. Do not let material come in contact with skin or eyes.



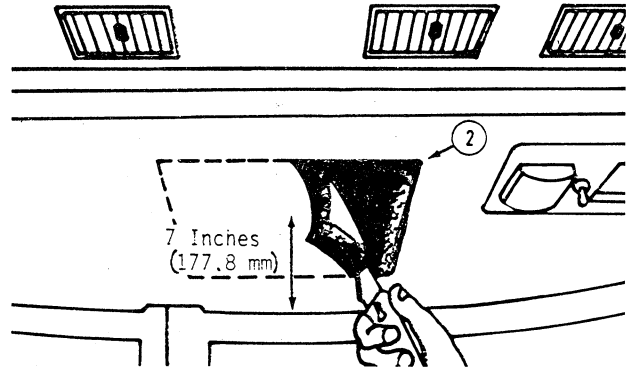
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CUT HEADLINER (Sound-Gard Styled Cabs Only)

1. Using a sharp knife, puncture hole in headliner 7 in. (177.8 mm) back from windshield in center of cab. Cut toward back of cab to metal frame.
2. Carefully cut around inside of metal frame and remove square portion of headliner.



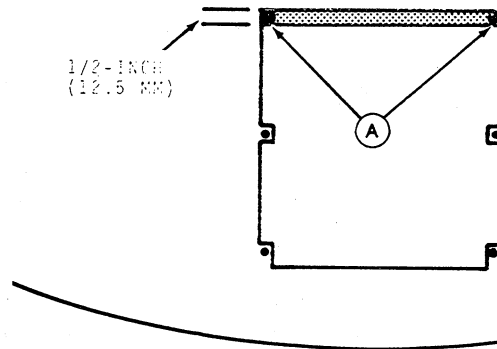
CAUTION: Headliner material is made of pressed fiberglass. Do not let material come in contact with skin or eyes.



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3. Cut and remove an additional 1/2 in. (12.5 mm) of material from the rear square cutout to expose the rear mounting holes (A).

NOTE: Speaker kit and antenna kit must be installed before radio is installed. (These kits are factory installed for combines.)

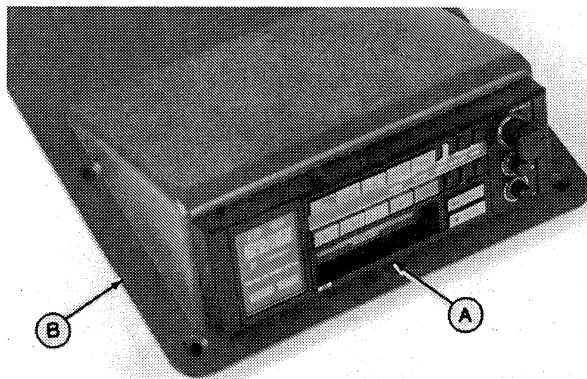


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INSTALL RADIO

IMPORTANT: The Radio TY15419 and Radio/Cassette TY15420 AM/FM Stereo Radio Kits are of a high powered output design and are only to be installed utilizing TY15157, TY15164, or TY15280 Speaker Kit and TY15156, AH105035 or BE22118 Antenna Kit.

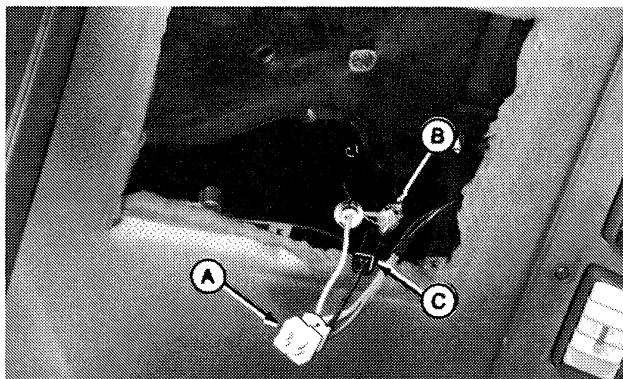
1. The radio or radio/cassette (A) comes installed with bezel (B).



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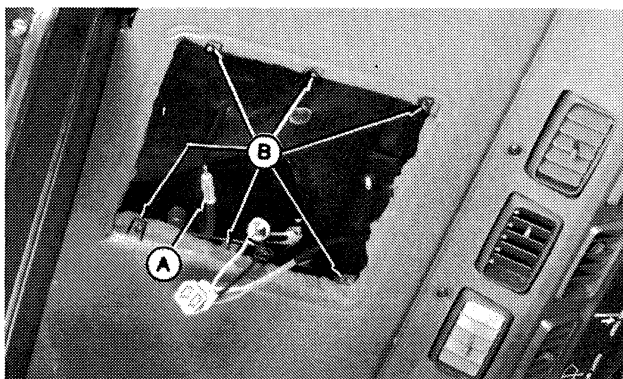
2. Pull wiring harness (A) through opening.
3. Connect fused power lead (B) of wiring harness to Sound-Gard main wiring harness located on top of front headliner support.
4. (Sound-Gard Body Only) Connect ground lead (C) of wiring harness to main Sound-Gard Body wiring harness.

NOTE: Connect female connector on wiring harness to male connector on main Sound-Gard body wiring harness and vise versa.



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5. Pull antenna cable (A) through opening.
6. (Sound-Gard Body Only) Attach six special nuts (B) to metal frame.



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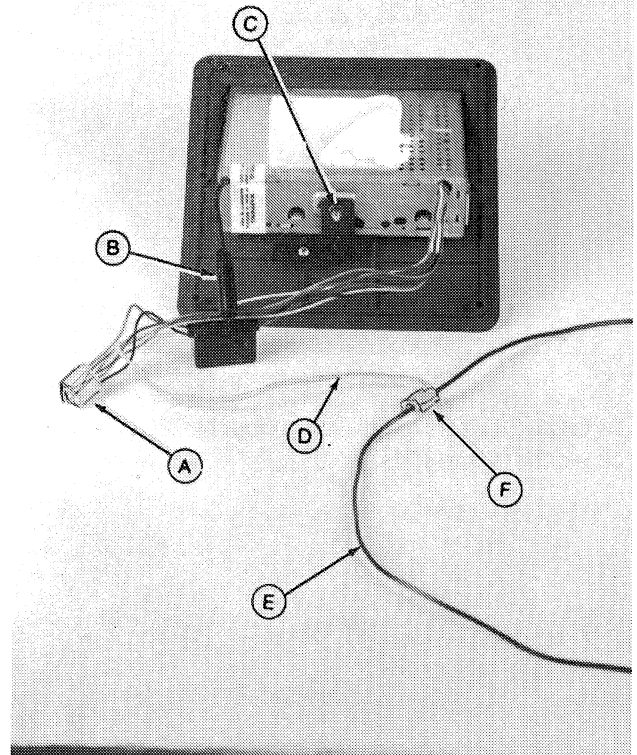
Install the Radio

7. Connect vehicle wiring harness and antenna cable (not shown) to radio wiring harness (A) and antenna lead (B).

(Sound-Gard Styled Cabs Only) Secure wire with ground eyelet on Sound-Gard main wiring harness to rear support stud (C) of radio.

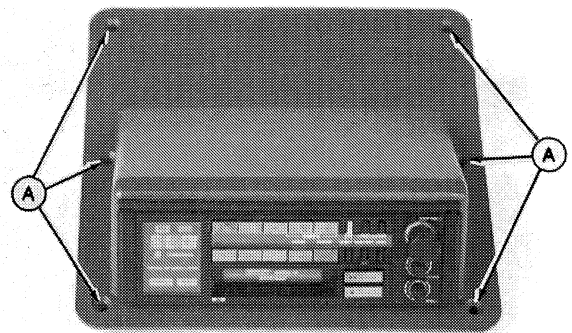
8. Connect radio white wire (D) to dome light (hot) wire (E) with connector (F).

A—Radio Wiring Harness
B—Antenna Lead
C—Rear Support Stud
D—Radio White Wire
E—Dome Light Hot Wire
F—Connector



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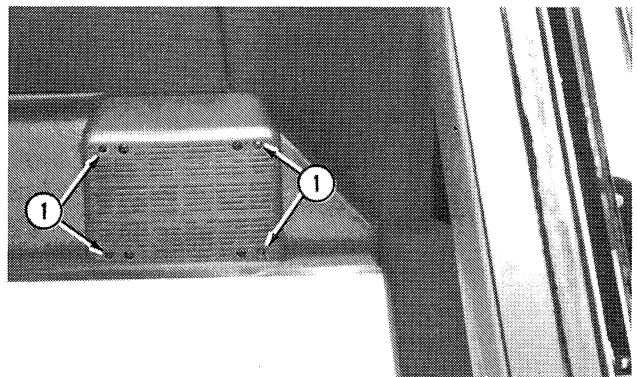
9. Position radio bezel in headliner and secure bezel to metal frame using six No. 10 self tapping screws (A).



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INSTALL SPEAKERS (Sound-Gard Body Only)

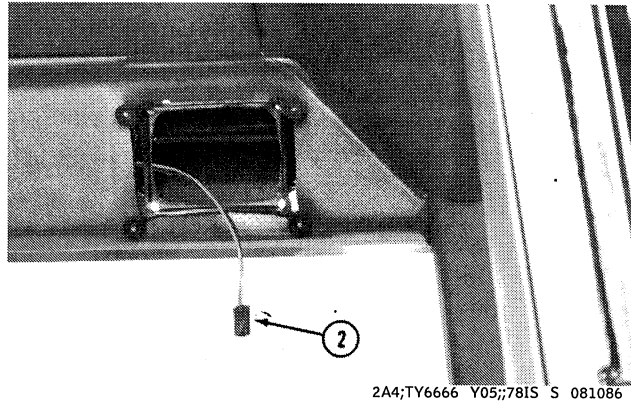
1. Remove grilles from back of headliner and save screws.



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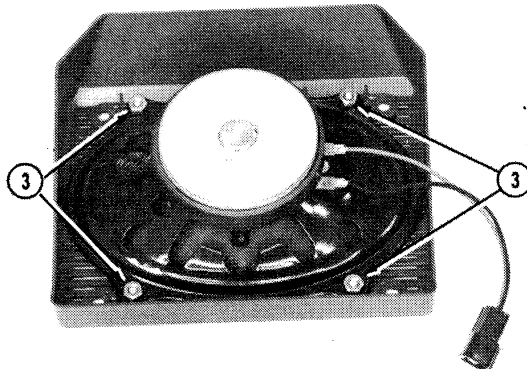
Install the Radio

2. Pull wiring through speaker openings.



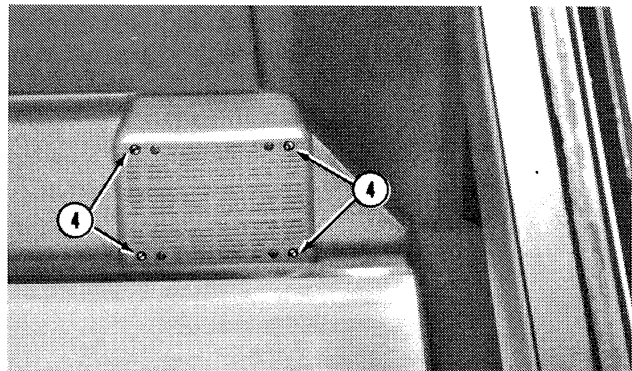
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3. Attach speakers to grilles with four No. 10 special screws, lock washers and nuts.



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4. Connect wiring harness to speakers. Install speaker and grilles in back panel with existing screws.

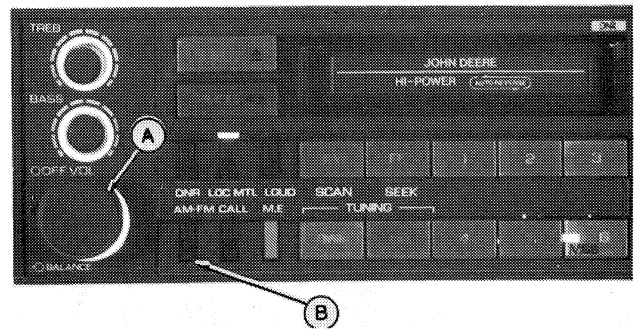


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Operate the Radio

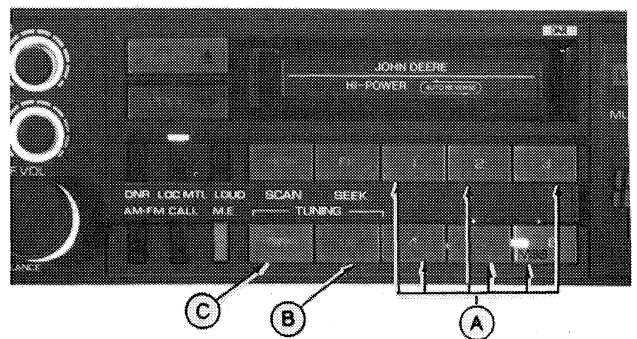
OPERATION

1. Turn ON-OFF and Volume Control (A) to the right to turn radio on and adjust volume level.
2. Set AM/FM Band Selector (B) to the desired reception.



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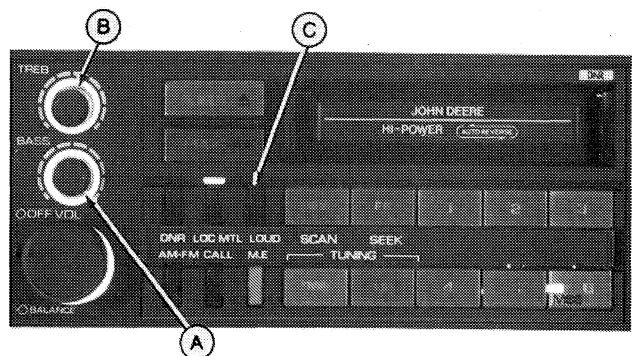
3. Press button (A), one through six to obtain reception from the desired preset station.
4. Press Manual UP (B) to advance dial frequency or Manual Down (C) to lower dial frequency.
5. When Auto Seek (A) is pressed the radio will tune to the next station on the dial. The direction of travel is the way the UP or DOWN button was pressed.
6. Press Auto Scan (B) to scan the stations. It will hold for a short time then move on unless Auto Scan switch is pressed again. This will hold that station.
7. Set the Local/Distance (C) to Local to reduce sensitivity and limit reception to only strong signals.



When set at Distance, original sensitivity is restored.

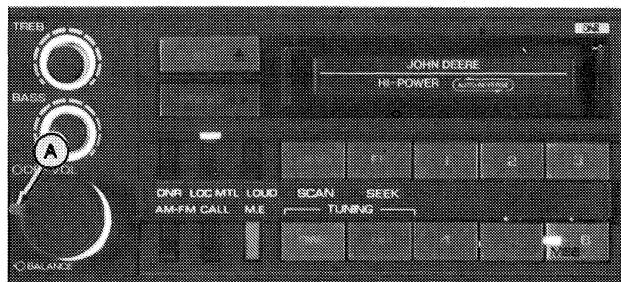
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8. Adjust Bass (A) and Treble (B) to obtain desired sound. Buttons can be pushed to pop-out for easier adjusting.
9. Press LOUD (C) to boost bass and treble tones when listening to low volume level music. "LOUD" will be displayed.



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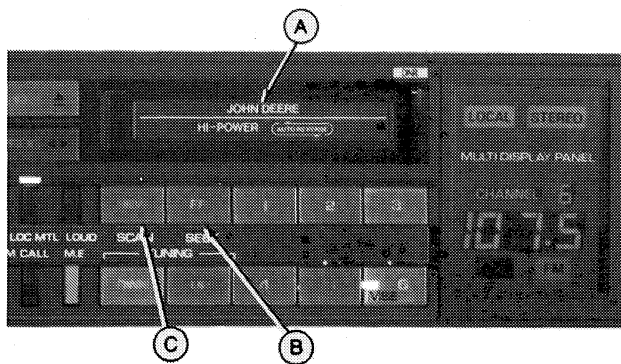
10. Rotate Balance (A) left or right to obtain desired left/right speaker balance.



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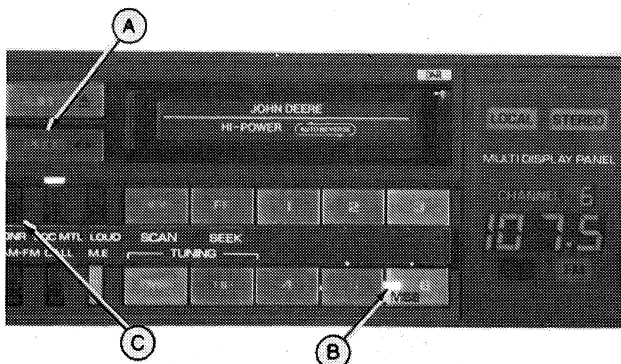
CASSETTE

1. Insert cassette into the Cassette Slot (A) until fully engaged. It will immediately start playing.
2. Press Fast Forward (B) for fast forward movement of tape.
3. Press Rewind (C) to rewind the tape.



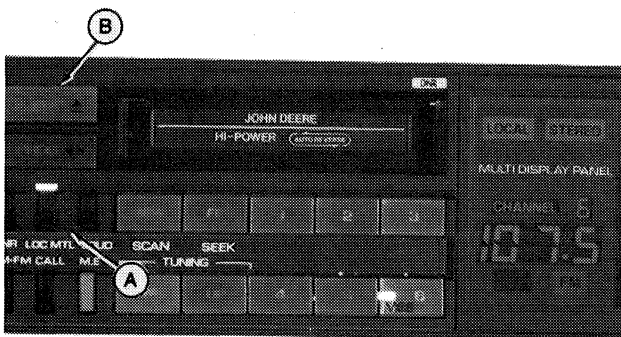
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4. Press Program (A) to resume normal play, and to control tape direction.
5. Press Music Sensor Switch (B) and FF or REW to skip forward or backward to the next blank space on the tape.
6. Press DNR (C) to eliminate hissing sounds during tape playback or radio background noise. "DNR" will be displayed.



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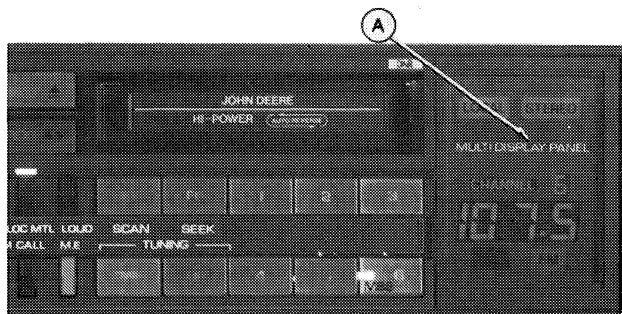
7. Push Metal Tape Selector (A) when using a metal or chromium dioxide (Cr 02) tape. Indicator will light.
8. Press Eject (B) to stop tape playback and eject the cassette. Radio operation will resume.



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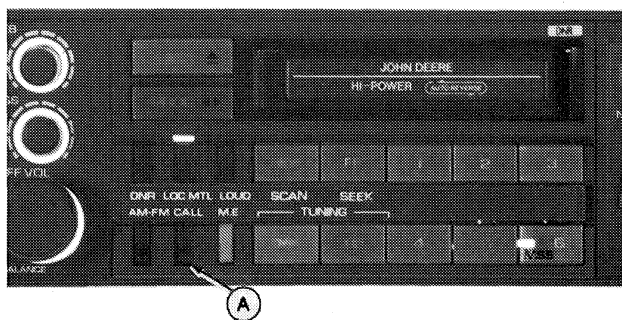
CHANGING DISPLAY

1. The Multiple Display Panel (A) will display functions, time, and frequency setting in orange and red colors.



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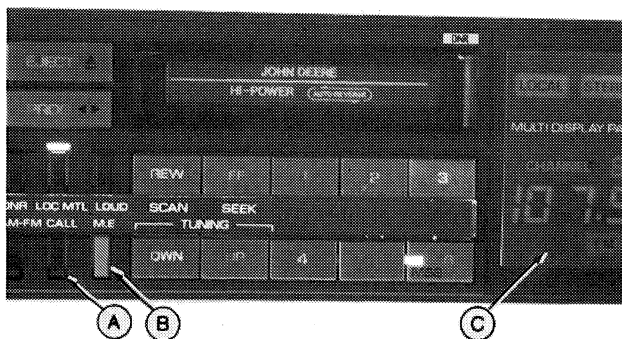
2. Press Display Call (A) and the time will appear on the display panel for 8 seconds. After 8 seconds the time will disappear and frequency setting will reappear on the display panel.



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Procedure for having time displayed instead of frequency.

3. Press Display Call (A).
4. Press and keep pressure on the Memory Enable Switch (B); the time will be displayed.
5. Press Display Call Switch (A) and the radio frequency will appear for 8 seconds on the display panel (C).

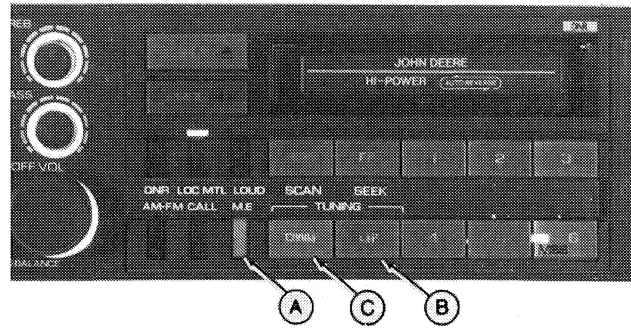


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SETTING CLOCK

1. Press and hold in the Memory Enable Switch (A).
2. Press Manual Up (B) to change hours.
3. Press Manual Down (C) to change minutes.

NOTE: The display panel takes longer to illuminate when exposed to cold temperatures. Also the numbers may be difficult to read when using Auto Seek and Auto Scan.



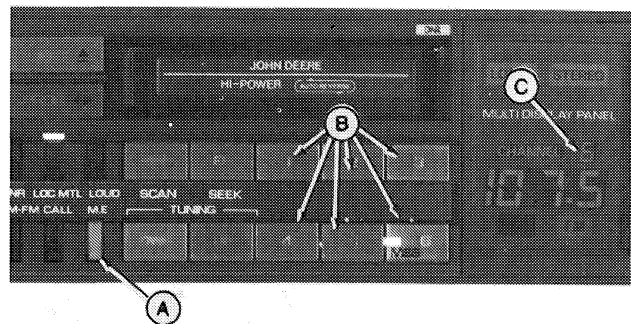
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SETTING PRESET SWITCHES

Six selections can be made for both FM and AM stations.

1. Select desired station.
2. Press Memory Enable (ME) switch (A) and at the same time desired preset switch (B).

Channel number (C) will be displayed.



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Troubleshooting

Symptom	Problem	Solution	Page
Radio not operating	Ignition switch in OFF position.	Turn key to ON.	—
	Blown fuse in radio or power source.	Replace fuse.	15
	Poor power lead connection.	Check connection points of red with white stripe power lead.	5
	Poor ground lead connection.	Check connection points of black with white stripe ground lead.	5
Noise on AM and FM when engine is running. No noise with key in ACC position and engine is OFF. Tape is OK.	Poor ground connection.	Check connection points of black with white stripe ground lead.	5
	Loose antenna cable.	Check that antenna cable is connected to antenna and radio.	3
	Malfunctioning engine, generator or alternator.	Verify engine is properly tuned and the generator or alternator are OK.	—
Noise on AM and FM only when operating a specific accessory (heater, etc.).	Poor ground connection.	Check connection points of black with white stripe ground lead.	5
	Loose antenna connection.	Check antenna cable attached to radio and antenna.	
Noise may appear on tape.	Accessory or ground wire is loose.	Check for loose accessory or ground wire.	5
	Defective accessory, (Noisy bearing, arcing of electrical components, etc.	Replace accessory or add noise suppressor.	—
Sound distorted at high volume levels (radio and tape.)	Loud switch on ON when listening to loud volume levels.	Check that loud switch is OFF when listening to loud volume levels. Only use loud switch when listening to low volume levels.	8

Continued on next page

Troubleshooting

Symptom	Problem	Solution	Page
No or weak AM reception, Loud static or buzzing; fair FM reception, (tape is okay).	Loose or disconnected antenna cable	Check for loose or disconnected antenna cable at radio or antenna.	—
	Radio being operated inside a building.	Move vehicle outside and recheck operation.	—
	Defective antenna or antenna cable.	Replace antenna and cable.	3
Poor FM reception, good AM reception, (tape is okay).	FM Local-Distance switch is in the local position.	Place switch in the distance position.	8
No digital display or improper display.	Green with white stripe wire not connected to a constant-on 12-volt source.	Check for constant-on 12-volt source with the ignition switch OFF or ON. Turn radio off.	8
	Polarity reversed or wrong wire connections.	Disconnect green with white stripe wire and red with white stripe wire. Wait 15 seconds. Reconnect green with white stripe wire first, then red with white stripe wire. Recheck operation.	3
Clock loses memory and preset radio stations are erased every time the ignition is turned off. All other operations are normal.	Green with white stripe wire not connected to a constant-on 12-volt source.	Check for constant-on 12-volt source with the ignition switch OFF or ON.	3
No sound on radio and tape. Lights and digital display are okay.	Loose speaker wiring connections or defective wiring.	Check speaker wiring connections at adapter harness and at speakers.	—
	Inoperative speakers.	Check for damaged or defective speakers.	—
	Short in speaker wiring.	Turn radio off. Disconnect speaker plug from radio. Wait 10 seconds and reconnect. Turn radio on. If sound returns temporarily, there is a short circuit in speaker wiring. Recheck all speaker wires.	—

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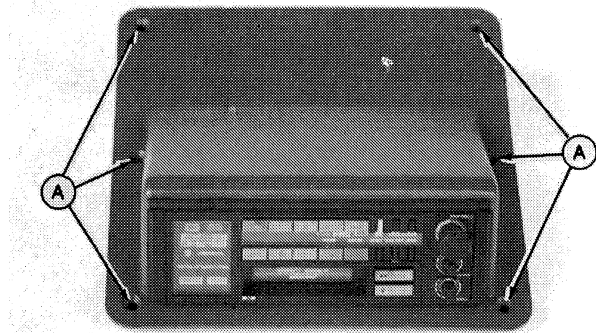
Symptom	Problem	Solution	Page
Unable to insert a Cassette or cassette will not stay in unit.	Radio not turned on.	Turn radio on. Depress EJECT button fully, then release. Reinsert cartridge.	8
	Cassette damaged.	Inspect cassette for damage. Replace damaged cassette.	—
	Defective cassette.	Check other cassettes for proper function in radio.	—
Tape reverses direction on auto-reverse before completing one side of play.	Tape loosely wound on cassette reels.	Rotate reels to tighten loose tape.	—
	Cassette binding during operation.	Run unit in fast forward until one side is completed and test again. Check other cassettes for proper function.	—
Tape player functions normally except when it is very cold.	Cassette cartridge exposed to cold temperatures.	Allow tape to warm up before using.	
Cassette cartridge feels very hot after playing.	Short circuit or speakers improperly wired causing amplifier to overheat.	Check for shorted wires, improperly wired speakers.	
	Only one speaker connected to radio.	Verify at least two speakers are connected to the radio. Never use radio with only one speaker.	
Tape sound is distorted. Radio is okay.	Dirty tape head.	Clean tape head using a commercial tape cleaning cartridge.	
	Tapes being used that exceed 90 minutes total play time.	Do not use C-120 cassettes as the tape tangles easily.	
	Metal tape selector engaged while playing non metal tape.	Check that metal tape selector is not engaged or light illuminated.	
	Defective tape.	Check other cassettes for similar problems.	

Service

REPLACE FUSE

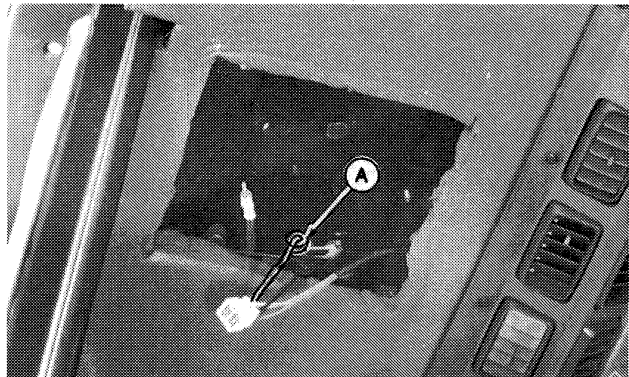
IMPORTANT: Radio bezel should be held in place while removing screws to avoid damage to radio and wiring.

1. Remove six No. 10 self tapping screws (A).



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2. Remove fuse (A) in wiring harness and replace with AGC 4-amp fuse.
3. (Not Illustrated) Install radio grille back into headliner.



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REPLACE SPEAKER

1. Remove grille and speaker assembly from back panel.
2. Disconnect wiring harness from speaker.
3. Remove speaker from grille and replace with new speaker.
4. Connect wiring harness to speaker.
5. Secure grille and speaker assembly to back panel.

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CLEANING TAPE HEAD

Monthly, clean the tape head by inserting and cycling a commercial tape cleaning cassette.

Y05;;78SE C 081086

Specifications

Supply Voltage 11 to 16 volts

Maximum Output 18 watts per channel at 10% total harmonic distortion

Impedence 22 Kohm

Fuse AGC 4 amp.

Speaker size 4 in. x 6 in. (101.6 mm x 152.4 mm) (Sound-Gard Styled Cabs Only)
5 in. x 7 in. (127 mm x 177.8 mm) (Sound Gard Body Only)

Tuning Range 530 -1620 KHz (AM)—87.5 -107 MHz (FM)

(Specifications and design subject to change without notice.)

Y05;;78SP A 141086

Y05;;78SP A 141086

RECORD SERIAL NUMBERS	
Write your model number, serial number and date of purchase in the spaces provided below. Your dealer needs this information when ordering parts.	
Model No.	_____
Serial No.	_____
Date Of Purchase	_____
<i>(To be filled in by purchaser)</i>	

Y05;;78SP B 141086

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Electronically Tuned Radio and Cassette			x	=
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Operator's Manual	OM-TY20860		x	=
			x	=
			x	=
			x	=
			x	=
FOS Manual—Engines	FCP-80101B		x	=
FOS Manual—Electrical Systems	FCP-83101B		x	=
FOS Manual—Hydraulics	FCP-82101B		x	=
FOS Manual—Power Trains	FCP-81101B		x	=
Catalogs of Available Service Publications:				
Consumer Product Publications	CPC-1704			
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Industrial Product Publications	CPC-1852			

NOTE: If you want manuals or catalogs not shown on this list, list the model number, serial number and name of the product.

Subtotal

Illinois State Residents add 6%
for Retail Occupation Tax or
show tax exemption number

Check or money order in U.S.
Dollars enclosed. Total
(Do not send cash or stamps)

For current prices of John Deere Service Literature,
please call 1-800-522-7448

SP-317 (MAR-86)



John Deere is at your service when you need it

It is John Deere's objective to train all of their authorized dealer service personnel effectively so they can handle your service needs. Your dealer therefore has service technicians who are trained to give your machine the best of care. We would encourage you to use the service provided by your dealer whenever possible.

If for some reason you are unable to locate a dealer in your area, our sales branches are available to provide you with such information. The location and listing of such sales branches are shown below. Check the listing for the location of the area in which you reside.

Sales Branch

1. JOHN DEERE COMPANY
2001 Deere Dr.
Conyers, GA 30208
404-922-7040

2. JOHN DEERE COMPANY
701 Georgesville Road
Columbus, OH 43228
614-275-1500

3. JOHN DEERE COMPANY
P.O. Box 20598
Dallas, TX 75220
214-352-1701

4. JOHN DEERE COMPANY
1400 - 13th Street
East Moline, IL 61244
309-752-6175

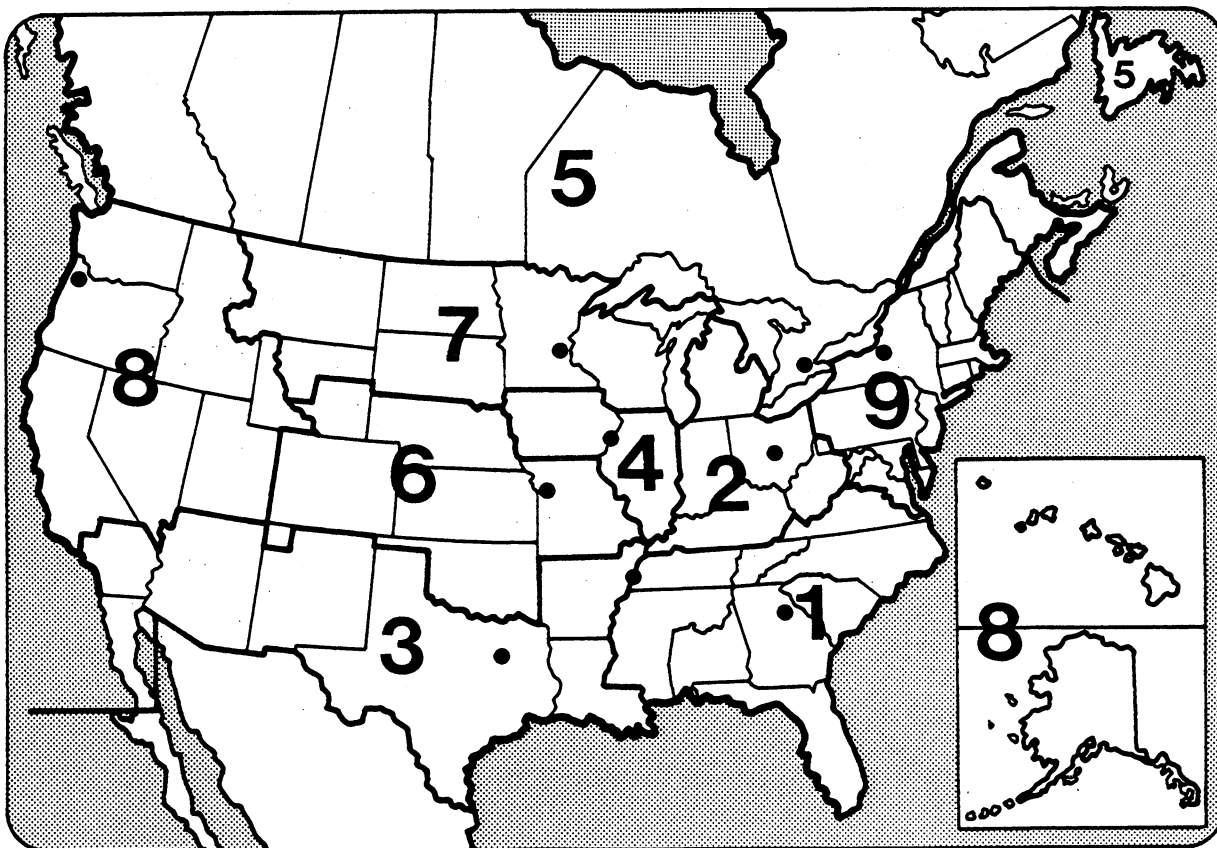
5. JOHN DEERE LIMITED
P.O. Box 1000
South Service Road at Hunter
Grimsby, Ontario, Canada L3M 4H5
416-945-9281

6. JOHN DEERE COMPANY
3210 East 85th Street
Southeast Station
Kansas City, MO 64132
816-361-4000

7. JOHN DEERE COMPANY
P.O. Box 855
Minneapolis, MN 55440
612-887-6200

8. JOHN DEERE COMPANY
P.O. Box 20098
Portland, OR 97220
503-667-1191

9. JOHN DEERE COMPANY
P.O. Box 4949
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