



INSTALLATION MANUAL

Tech support is available:

- online at www.NavTool.com via live chat
- by phone 877-NAV-tool or 877-628-8665
- via e-mail: techsupport@navtool.com

Tech Support hours are Monday-Saturday 9am-8pm EST



ATTENTION:

Please read installation manual carefully before installation.
Improper installation may damage your vehicles navigation system or NavTool interface.

NAVTOOL INTERFACE WITH PLUG AND PLAY HARNESS INSTALLATION GUIDE

TABLE OF CONTENTS

**IF YOU ARE USING THE DIGITAL VERSION OF THE MANUAL,
ALL PAGE NUMBERS AND PAGE REFERENCES ARE CLICKABLE**

NAVTOOL RGB BOX DESCRIPTION & INSTALLATION NOTES / IMPORTANT THINGS TO KNOW AND PRECAUTIONS BEFORE INSTALLING NAVTOOL...	page 2
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN ACURA/AUDI/BENTLEY/BMW.....	page 3
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN BMW/BUICK/CADILLAC/CHEVROLET.....	page 4
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN CHRYSLER/DODGE/FORD/GMC.....	page 5
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN HONDA/HUMMER/INFINITI.....	page 6
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN INFINITI/JAGUAR/JEEP/LAMBORGHINI/LAND ROVER.....	page 7
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN LEXUS/LINCOLN/MAZDA.....	page 8
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN MAZDA/MERCEDES-BENZ.....	page 9
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN MERCURY/MINI COOPER/MITSUBISHI/NISSAN.....	page 10
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN PORSCHE/RANGE ROVER/SAAB/SATURN/SUBARU.....	page 11
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS IN SUZUKI/TOYOTA/VOLVO.....	page 12
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS HONDARIB.....	page 13
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS GMTOUCH AND GMNOTOUCH.....	page 14
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS GMRCV1.....	page 15
INSTALLING NAVTOOL INTERFACE AND PLUG & PLAY HARNESS GMRCV12.....	page 16
FREQUENTLY ASKED QUESTIONS and TROUBLESHOOTING.....	page 17

Video 1: is dedicated for any video source of your choice.

Video 2: is dedicated for back up camera

Red Wire – please connect red wire to 12V Accessory power; do not connect to 12V constant power.

Black Wire – please connect black wire to ground.

Gray Wire: please connect this wire to emergency brake also known as foot brake or handbrake, gray wire must see ground to activate Video 1, reverse camera will activate automatically when vehicle is placed in reverse on video 2 regardless of gray wire being connected to emergency brake.

Orange Wire: connect orange wire to reverse light wire, reverse light wire is the wire that gets 12v when vehicle is shifted in reverse, if no reverse camera is being installed or vehicle already comes with a factory camera installed DO NOT connect Orange wire. When installing NavTool on German vehicles relay must be installed, please see below: Connect 85 of relay to ground, connect 86 of relay to reverse light, connect pin 30 of relay to accessory power, connect pin 87 of relay to Orange wire from NavTool Interface, you may also connect 87 of relay to accessory power for back up camera. If camera is desired to be viewed while vehicle is moving forward, connect cameras power wire to accessory power in the vehicle.

Push button switch: supplied Push button switch is used to switch between Video 1, Video 2 and original navigation screen. Connecting supplied push button switch: connect one side of toggle switch to ground and connect other side of push button switch to yellow wire of NavTool interface. Operating NavTool interface via push button: momentary press will cycle between Video 1 and Video 2, pressing and holding push button for more than 2 seconds will bring back original navigation/information screen.

PLUG & PLAY HARNESS: UNPLUG MATCHING CONNECTOR FROM NAVIGATION DVD ROM/BRAIN OR FRONT SCREEN, CONNECT NAVTOOL MALE CONNECTOR INTO NAVIGATION DVD ROM/BRAIN OR FRONT SCREEN, CONNECT FACTORY MALE CONNECTOR INTO NAVTOOL FEMALE CONNECTOR, CONNECT 9 24PIN CONNECTOR INTO NAVTOOL INTERFACE.

Inside NavTool interface you will find 3 switches:

1. SOG: only when installing NavTool into BMW or Range Rover vehicles move SOG switch opposite direction.
2. NSYNC: only when installing NavTool into Volvo vehicles move NSYNC switch opposite direction.
3. MIRROR: when parking lines are not required to be displayed on the screen, or using Video 2 as an additional video source, move MIRROR switch opposite direction.

IMPORTANT THINGS TO KNOW AND PRECAUTIONS BEFORE INSTALLING NAVTOOL

1. Set Parking brake
2. Remove the negative battery cable
3. Protect fenders before starting
4. Using protective blankets, cover front seat, interior of the vehicle and center console.
5. Always install a fuse 6-10 inches away from NavTool interface 5 amp fuse should be used.
6. Always secure NavTool interface with Velcro or double side tape to prevent rattling or wires to rip out of the connector.
7. When securing NavTool interface make sure that you can close panels without any problems.
8. Use electrical tape on all you connections and splices do not leave any exposed connections.
9. Route all wires along factory harnesses, try not to drill or make any unnecessary holes.
10. Make sure you are not connecting to any Data wire, check your connections with a multi meter.
11. **PLEASE HAVE A PROFESSIONAL MOBILE ELECTRONICS INSTALLER PERFORM THE INSTALLATION OF NAVTOOL PRODUCTS.**

ACURA CL 2001-2003-HA12PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

ACURA MDX 2001-2003-HA12PIN: Navigation brain location under PASSENGER SEAT, DO NOT CONNECT AT THE SCREEN

ACURA MDX 2004-2009-HA20PIN: Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN

ACURA RDX 2007-2010-HA20PIN: Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN

ACURA RL 2000-2003-HA12PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

ACURA RL 2004-2008-HA20PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

ACURA RL 2009-2010-HA32PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

ACURA TL 1999-2003-HA12PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

ACURA TL 2004-2008-HA20PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

ACURA TL 2009-2010-HA32PIN: Connect plug&play harness behind navigation screen only

ACURA TSX 2004-2008-HA20PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

ACURA TSX 2009-2010-HA32PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Installation notes for all Acura vehicles: in back of Acura navigation brain locate 2 connectors one connector is where supplied plug&play Y-harness connects to and other connector is where accessory power and reverse wires are found, please check wires with a multimeter before doing any connections.

AUDI

Audi A3 2006-2010-AUDICAN1: Connections are done behind navigation screen

Audi A4/S4 2003-2009-AUDICAN1: Connections are done behind navigation screen

Audi R8 2008-2010-AUDICAN1: Connections are done behind navigation screen

Audi TT 2007-2010-AUDICAN1: Connections are done behind navigation screen

installation notes for all Audi vehicles: you will receive completely plug&play interface, connect gray plug in an empty connector behind screen. Take out large square black connector from back of the radio, plug in NavTool supplied square connector into back of the radio and connect factory plug into supplied NavTool harness, please note if factory large square connector has fiber-optic or two small connectors at the bottom please move those connectors into NavTool supplied connector so that fiber-optic and 2 small connectors are now plug in directly behind radio.

BENTLEY

Bentley Flying Spur 2004-2010-BRNIB: Connections are done behind navigation screen

Bentley GT 2004-2010-BRNIB: Connections are done behind navigation screen

Installation notes for all Bentley vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, then connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect 2 white wires to ground, connect green wire to emergency brake, keep in mind green wire has to see ground in order to activate video 1, if you are installing back up camera please connect blue wire to reverse light. Install a toggle switch to switch between factory screen and video 1.

BMW

BMW 3 SERIES 1997-2006-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW 3 SERIES 1997-2006-BMW18AUDIO: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW 5 SERIES 1997-2003-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW 5 SERIES 1997-2003-BMW18AUDIO: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW 7 SERIES 1996-2001-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW 7 SERIES 1996-2001-BMW18AUDIO: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW CONTINUED ON NEXT PAGE

BMW 7 SERIES 2002-2008-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Installation notes for BMW 7 series 2002-2008:

Please remove the navigation brain found in the trunk of the vehicle on the left side. Behind the navigation brain you will find a connector with wires and an optical cable. Please locate the following wires.

RED (some cars red) wire is the Red signal. Please cut the wire and connect Red to screen side and Yellow to navigation side

Blue (some cars black) wire is the Blue signal. Please cut the wire and connect Purple to screen side and Orange to navigation side

Green (some cars gray) wire is the Green signal. Please cut the wire and connect Blue to screen side and Green to navigation

Do Not connect the Black and Brown Wires from NavTool Interface The Shield wires connect to ground. Remove two screws to gain access inside NavTool interface and move the SOG switch opposite direction Connect Gray wire to emergency brake. Orange wire is only connected to reverse if installing reverse camera. Connect power to accessory and ground to ground.

BMW X3 2004-2010-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW X5 2000-2006-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW X5 2000-2006-BMW18AUDIO: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

BMW Z4 2004-2008-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

*Installation notes for all BMW vehicles: in back of BMW navigation brain locate 2 connectors one connector is where supplied plug&play Y-harness connects. Remove two screws to gain access inside NavTool interface and move the SOG switch opposite direction

BUICK

Buick Enclave 2008-2010-GMRCV12: Connections are done behind navigation screen, please see page16

Buick Lucerne 2007-2009-GMRCV12: Connections are done behind navigation screen, please see page16

Buick Rendezvous 2003-2007-GMTOUCH: Connections are done behind navigation screen, please see page14

CADILLAC

Cadillac Escalade 2001-2003-GMNOTOUCH: Connections are done behind navigation screen, please see page14

Cadillac Escalade 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

CHEVROLET

Chevrolet Avalanche 2001-2003-GMNOTOUCH: Connections are done behind navigation screen, please see page14

Chevrolet Avalanche 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

Chevrolet Avalanche 2007-2010-GMRCVI: Connections are done behind navigation screen, please see page15

Chevrolet Corvette 2005-2010-INTMOD: Connections are done behind navigation screen.

Installation notes for Corvette vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2

Chevrolet Equinox 2007-2009-GMRCV12: Connections are done behind navigation screen, please see page16

Chevrolet Silverado 2007-2010-GMRCVI: Connections are done behind navigation screen, please see page15

Chevrolet Suburban 2001-2003-GMNOTOUCH: Connections are done behind navigation screen, please see page14

Chevrolet Suburban 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

Chevrolet Suburban 2007-2010-GMRCVI: Connections are done behind navigation screen, please see page15

Chevrolet Tahoe 2001-2003-GMNOTOUCH: Connections are done behind navigation screen, please see page14

Chevrolet Tahoe 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

Chevrolet Tahoe 2007-2010-GMRCVI: Connections are done behind navigation screen, please see page15

Chevrolet Trailblazer 2003-2009-GMTOUCH: Connections are done behind navigation screen, please see page14

Chevrolet Traverse 2009-2010-GMRCVI: Connections are done behind navigation screen, please see page15

Chrysler 300 2004-2007-INTMOD: Connections are done behind navigation screen.

Chrysler Aspen 2007-INTMOD: Connections are done behind navigation screen.

Chrysler Pacifica 2004-2009-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Installation notes for Chrysler vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2

DODGE

Dodge Charger 2004-2007-INTMOD: Connections are done behind navigation screen.

Dodge Durango 2004-2009-INTMOD: Connections are done behind navigation screen.

Dodge Magnum 2004-2007-INTMOD: Connections are done behind navigation screen.

Dodge Ram 2005-2009-INTMOD: Connections are done behind navigation screen.

Installation notes for all Dodge vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect 2 white wires to ground , connect green wire to emergency brake, keep in mind green wire has to see ground in order to activate video 1, if you are installing back up camera please connect blue wire to reverse light. Install a toggle switch to switch between factory screen and video 1.

FORD

Ford Edge 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Escape 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Expedition 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Explorer 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford F-150 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Five Hundred 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Fusion 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Mustang 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Super Duty 2006-2008-INTMOD: Connections are done behind navigation screen.

Ford Taurus 2008-INTMOD: Connections are done behind navigation screen.

Installation notes for Ford vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2

GMC

GMC Acadia 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

GMC Acadia 2007-2009-GMRCV12: Connections are done behind navigation screen, please see page16

GMC Envoy 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

GMC Sierra 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

GMC Sierra 2007-2010-GMRCV1: Connections are done behind navigation screen, please see page15

GMC Yukon 2001-2003-GMNOTOUCH: Connections are done behind navigation screen, please see page14

GMC Yukon 2003-2006-GMTOUCH: Connections are done behind navigation screen, please see page14

GMC Yukon 2007-2010-GMRCV1: Connections are done behind navigation screen, please see page15

- Honda Accord 2003-2007-HA20PIN:** Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN
- Honda Accord 2008-2010-HA32PIN:** Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN
- Honda Civic 2006-2010-HONDARIB:** Connections are done behind navigation screen, please see page13
- Honda CR-V 2007-2010-HONDARIB:** Connections are done behind navigation screen, please see page13
- Honda Element 2008-2010-HONDARIB:** Connections are done behind navigation screen, please see page13
- Honda FCX 2009-2010-HA32PIN:** Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN
- Honda FIT 2009-2010-HONDARIB:** Connections are done behind navigation screen, please see page13
- Honda Insight 2009-2010-HONDARIB:** Connections are done behind navigation screen, please see page13
- Honda Odyssey 1999-2004-HA12PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN
- Honda Odyssey 2005-2007-HA20PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN
- Honda Odyssey 2008-2010-HA32PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN
- Honda Pilot 2001-2005-HA12PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN
- Honda Pilot 2006-2008-HA20PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN
- Honda Pilot 2009-2010-HA32PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN
- Honda Ridgeline 2006-2008-HA20PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN
- Honda Ridgeline 2009-2010-HA32PIN:** Navigation brain location under PASSENGER SEAT in later models production navigation brain is found under DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN

Installation notes for all Honda vehicles: in back of Honda navigation brain locate 2 connectors one connector is where supplied plug&play Y-harness connects to and other connector is where accessory power and reverse wires are found, please check wires with a multimeter before doing any connections.

HUMMER

- HUMMER H2 2001-2003-GMNOTOUCH:** Connections are done behind navigation screen, please see page14
- HUMMER H2 2003-2007-GMTOUCH:** Connections are done behind navigation screen, please see page14
- HUMMER H2 2007-2010-GMRCVI:** Connections are done behind navigation screen, please see page15
- HUMMER H3 2006-2010-INTMOD:** Connections are done behind navigation screen.*

Installation notes for all HUMMER H3 vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2

INFINITI

- INFINITI EX35 2008-2010-NI24PIN:** Connect plug&play harness behind navigation screen only ***MUST READ NOTES ON NEXT PAGE***
- INFINITI FX35/45/50 2003-2010-NI24PIN:**Connect plug&play harness behind navigation screen only ***MUST READ NOTES ON NEXT PAGE***
- INFINITI G35 2003-2005-G3504/G3505:** Navigation brain location ABOVE GLOVE BOX, DO NOT CONNECT AT THE SCREEN

INFINITI (Continued)

INFINITI G35 2006-2007-COUPE ONLY-UNITOOL: Navigation brain location ABOVE GLOVE BOX, DO NOT CONNECT AT THE SCREEN



HOLES SIDE OF CONNECTOR , NOT WIRE SIDE

Please cut pin 44 from NavTool interface connect YELLOW to navigation side and RED wire to screen side

Please cut pin 45 from NavTool interface connect GREEN to navigation side and BLUE to screen side

Please cut pin 46 from NavTool interface connect ORANGE to navigation side and PURPLE to screen side

Please cut pin 48 from NavTool interface connect BROWN to navigation side and BLACK to screen side

Please cut pin 50 from NavTool interface connect only screen side of cut wire to BLACK of NavTool interface, isolate other end

Please connect both shield wires of NavTool to pin 47

INFINITI G35/G37 2007-2010-NI24PIN: Connect plug&play harness behind navigation screen only * **MUST READ NOTES***

INFINITI M35/M45 2003-2005-NIM: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

INFINITI M35/M45 2006-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

INFINITI QX56 2004-2007-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

INFINITI Q45 2003-2006-NIM: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

*Installation notes: When installing NI24PIN Y-harness must be connected behind LCD screen directly, in some Infiniti vehicles behind LCD you will find a module, many customers think that this module is part of the screen, this module is NOT a part of the screen and you must connect Y-harness behind LCD screen, LCD screen and LCD module if attached have identical plugs, keep in mind LCD screen have only ONE connector while LCD module have few connectors. CONNECT ONLY DIRECTLY INTO LCD SCREEN WITH ONE CONNECTOR

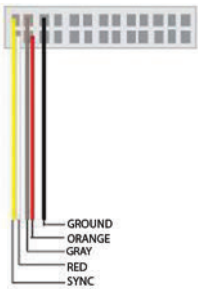
JAGUAR

JAGUAR S-TYPE 2003-2008-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

JAGUAR XJ-TYPE 2004-2008-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

JAGUAR XK-TYPE 2002-2006-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

JAGUAR X-TYPE 2003-2008-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN



*Installation notes:

Please cut WHITE wire, from NavTool interface connect YELLOW to navigation side and RED to screen side

Connect Gray wire to emergency brake. Orange wire is only connected to reverse if installing reverse camera

Connect power to accessory and ground to ground.

Please cut RED wire, from NavTool interface connect ORANGE to navigation side and PURPLE to screen side

Please cut YELLOW wire, from NavTool interface connect BROWN to navigation side and BLACK to screen side

Please connect both shield wires of NavTool to BLACK wire .

Please ground 2 white wires and connect green wire to emergency brake. Blue wire is only connected to reverse if installing reverse camera

Connect power to accessory and ground to ground.

JEEP

JEEP Commander 2006-2007-INTMOD: Connections are done behind navigation screen.

JEEP Grand Cherokee 2005-2007-INTMOD: Connections are done behind navigation screen.

Installation notes for all Jeep vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2

LAMBORGHINI

Lamborghini Gallardo 2004-2010-AUDICAN1: Connections are done behind navigation screen

installation notes for all Lamborghini vehicles: you will receive completely plug&play interface, you will connect gray plug in an empty connector behind screen, you will take out large square black connector from back of the radio you will plug in NavTool supplied square connector into back of the radio and than you will connect factory plug into supplied NavTool harness, please note if factory large square connector has fiber-optic or two small connectors at he bottom you will need to move those connectors into NavTool supplied connector so that fiber-optic and 2 small connectors are now plug in directly behind radio.

LAND ROVER

LAND ROVER RANGE ROVER PLEASE SEE PAGE.....11

Lexus ES 2002-2003-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Lexus GS 1998-2000-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Lexus GS 2001-2005-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Lexus GX 2003-2006-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Lexus IS 2001-2005-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

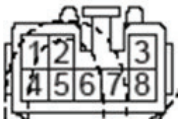
Lexus LS 1998-2000-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Lexus LS 2001-2006-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Lexus LX 1998-2007-TL10PIN: Navigation brain location under PASSENGER SEAT, DO NOT CONNECT AT THE SCREEN

Lexus RX 1999-2006-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Lexus SC 2002-2010-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN



Pin 1 RED Wire is the Red signal. Please cut the wire and connect RED from NavTool to screen side and YELLOW to navigation side
 Pin 5 BLACK Wire is the Blue signal. Please cut the wire and connect PURPLE from NavTool to screen side and ORANGE to navigation side
 Pin 4 GREEN Wire is the Green signal. Please cut the wire and connect BLUE from NavTool to screen side and to navigation side
 Pin 2 WHITE is the Sync Wire. Please cut the wire and connect BLACK from NavTool to screen side and BROWN to navigation side
 Pin 6 YELLOW Wire is the video shield please connect both of the grey thicker wires to pin 6

Installation notes for all Lexus vehicles: in back of Lexus navigation brain locate 2 connectors one connector is where supplied plug&play Y-harness connects to and other connector is where accessory power and reverse wires are found, please check wires with a multimeter before doing any connections.

LINCOLN

Lincoln Aviator 2003-2005-FLHAR: Navigation brain location UNDER DRIVERS SEAT, DO NOT CONNECT AT THE SCREEN

Lincoln LS 2000-2006-FLHAR: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Lincoln MARK LT 2006-2008-INTMOD: Connections are done behind navigation screen

Lincoln MKX 2007-2008-INTMOD: Connections are done behind navigation screen

Lincoln MKZ 2007-2008-INTMOD: Connections are done behind navigation screen

Lincoln MARK LT 2006-2008-INTMOD: Connections are done behind navigation screen

Lincoln Navigator 2003-2006-FLHAR: Navigation brain location FRONT OF CENTER CONSOLE, DO NOT CONNECT AT THE SCREEN

Lincoln Navigator 2007-2008-INTMOD: Connections are done behind navigation screen

Lincoln Town Car 2003-2009-FLHAR: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Installation notes for all Lincoln vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2

MAZDA

Mazda CX-7 2007-2011-UNITOOL: Connections are done behind navigation screen ***MUST READ NOTES***

Mazda CX-9 2007-2008-UNITOOL: Connections are done behind navigation screen ***MUST READ NOTES***

Mazda CX-9 2009-2010-INTMOD: Connections are done behind navigation screen

Mazda RX-8 2004-2008-UNITOOL: Connections are done behind navigation screen ***MUST READ NOTES***

Mazda RX-8 2009-2010-INTMOD: Connections are done behind navigation screen

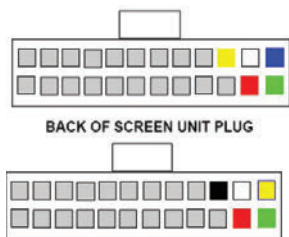
Mazda3 2004-2011-UNITOOL: Connections are done behind navigation screen ***MUST READ NOTES***

Mazda5 2006-2007-UNITOOL: Connections are done behind navigation screen ***MUST READ NOTES***

Mazda5 2008-2010-INTMOD: Connections are done behind navigation screen

Mazda6 2004-2008-UNITOOL: Connections are done behind navigation screen ***MUST READ NOTES***

Mazda6 2009-2010-INTMOD: Connections are done behind navigation screen



RED (some cars RED) Wire is the Red signal. Please cut wire, connect RED from NavTool to screen side and YELLOW to navigation
 BLUE (some cars YELLOW) Wire is the BLUE signal. Please cut wire, connect PURPLE from NavTool to screen side and ORANGE to navigation
 Connect Gray wire to emergency brake, connect orange wire to reverse light if installing reverse camera
 Connect ground wire to ground and connect power to accessory power
 WHITE (some cars WHITE) Wire is the SYNC signal. Please cut wire, connect BLACK from NavTool to screen side and BROWN to navigation
 Yellow (some cars Black) is the ground Please connect both GRAY shield wires to ground
 Please connect both white wires to ground, connect green wire to emergency brake, connect blue wire to reverse light if installing reverse camera, connect ground wire to ground and connect power to accessory power

MERCEDES-BENZ

Mercedes-Benz C-Class 2001-2004-MB20CAN: Connections are done behind navigation screen

Mercedes-Benz C-Class 2005-2007-MBC2NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz CL-Class 2000-2002-MB25CAN: Connections are done behind navigation screen

Mercedes-Benz CL-Class 2004-2006-MBC3NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz CL-Class 2003-MB20CAN: Connections are done behind navigation screen

Mercedes-Benz CLK-Class 2000-2004-MB20CAN: Connections are done behind navigation screen

Mercedes-Benz CLK-Class 2005-2009-MBC2NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz CLS-Class 2006-2008-MBCNIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz E-Class 2000-2002-MB20CAN: Connections are done behind navigation screen

Mercedes-Benz E-Class 2003-2008-MBCNIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz G-Class 2002-2006-MB20CAN: Connections are done behind navigation screen

Mercedes-Benz G-Class 2007-2008-MBC2NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz GL-Class 2007-2008-MBC2NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz ML-Class 1998-2005-INTMOD: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz ML-Class 2006-2008-MBC2NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz R-Class 2006-2008-MBC2NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz S-Class 2000-2002-MB25CAN: Connections are done behind navigation screen

Mercedes-Benz S-Class 2003-MB20CAN: Connections are done behind navigation screen

Mercedes-Benz S-Class 2004-2006-MBC3NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz SL-Class 2003-2004-MB20CAN: Connections are done behind navigation screen

Mercedes-Benz SL-Class 2005-2008-MBC4NIB: Connections are done behind navigation screen ***MUST READ NOTES***

Mercedes-Benz SLK-Class 2005-2008-MBC4NIB: Connections are done behind navigation screen ***MUST READ NOTES***

*installation notes for all MB20CAN vehicles: you will receive completely plug&play interface, remove small connector from back of the radio connect small connector supplied with NavTool interface back into the radio, small factory connector that you unplugged has 2 wires in it remove one by one and insert into small connector. Insert CAN wires into 18PIN connector next to small connector insert CAN wires into PIN17 and PIN18, insert audio wires into 18PIN connector, PIN3 left audio ground and PIN2 left audio positive, PIN12 right audio ground and PIN11 right audio positive. Connect ground to brown wire in 8PIN connector brown wire, connect accessory as follows : relay connections, connect 86 of relay to ground, connect 85 of relay to accessory power of cigarette lighter, connect 30 of relay to vehicles constant power found behind radio, connect 87 of relay to accessory power of NavTool interface. Turn on ignition press programming button on video interface this will activate blank/SAT button on you radio, press blank/SAT button to activate AV input.

Installation notes for all Mercedes vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect GRAY wire to emergency brake, keep in mind GRAY wire has to see ground in order to activate video 1, video 2. If you are installing back up camera please connect ORANGE wire to reverse light. Install a push button switch to switch between factory screen and video 1,video 2.

Mercury Mariner 2006-2008-INTMOD: Connections are done behind navigation screen

Mercury Milan 2006-2008-INTMOD: Connections are done behind navigation screen

Mercury Mountaineer 2006-2008-INTMOD: Connections are done behind navigation screen

Mercury Sable 2006-2008-INTMOD: Connections are done behind navigation screen

Installation notes for all Mercury vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2

MINI COOPER

Mini Cooper 2003-2006-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Installation notes for all Mini Cooper vehicles: in back of Mini Cooper navigation brain locate 2 connectors one connector is where supplied plug&play Y-harness connects. Remove two screws to gain access inside NavTool interface and move the SOG switch opposite direction.

MITSUBISHI

Mitsubishi Endeavor 2007-2010-UNITOOL: Connections are done behind navigation screen

Mitsubishi Galant 2007-2010-UNITOOL: Connections are done behind navigation screen

Mitsubishi Lancer 2007-2010-INTMOD: Connections are done behind navigation screen

Mitsubishi Lancer 2007-2010-INTMOD: Connections are done behind navigation screen

NISSAN

NISSAN 350Z 2003-2005-G3504/G3505: Navigation brain location ABOVE GLOVE BOX, DO NOT CONNECT AT THE SCREEN



-UNITOOL: Navigation brain location ABOVE GLOVE BOX, DO NOT CONNECT AT THE SCREEN

HOLES SIDE OF CONNECTOR , NOT WIRE SIDE

Please cut pin 44 from NavTool interface connect YELLOW to navigation side and RED to screen side

Please cut pin 45 from NavTool interface connect GREEN to navigation side and BLUE to screen side

Please cut pin 46 from NavTool interface connect ORANGE to navigation side and PURPLE to screen side

Please cut pin 48 from NavTool interface connect BROWN to navigation side and BLACK to screen side

Please cut pin 50 from NavTool interface connect only screen side of cut wire to BLACK of NavTool interface, isolate other end

Please connect both shield wires of NavTool to pin 47

NISSAN 350Z 2009-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN ALTIMA 2005-2006-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN ARMADA 2004-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***.

NISSAN GT-R 2009-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN MAXIMA 2004-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN MURANO 2003-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN PATHFINDER 2005-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN MAXIMA 2004-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN QUEST 2004-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

NISSAN TITAN 2004-2010-NI24PIN: Connect plug&play harness behind navigation screen only ***MUST READ NOTES***

*Installation notes: When installing NI24PIN Y-harness must be connected behind LCD screen directly, in some Nissan vehicles behind LCD you will find a module, many customers think that this module is part of the screen, this module is NOT a part of the screen and you must connect Y-harness behind LCD screen, LCD screen and LCD module if attached have identical plugs, keep in mind LCD screen have only ONE connector while LCD module have few connectors. CONNECT ONLY DIRECTLY INTO LCD SCREEN WITH ONE CONNECTOR

Porsche 911 2000-2004-UNITOOL: Connections are done behind navigation screen

Porsche 911 2005-2008-PORCAY911BIN: Connections are done behind navigation screen

Porsche 911 2009-2010-PCM3: Connections are done behind navigation screen

Porsche Boxter 2000-2004-UNITOOL: Connections are done behind navigation screen

Porsche Boxter 2005-2008-PORCAY911BIN: Connections are done behind navigation screen

Porsche Boxter 2009-2010-PCM3: Connections are done behind navigation screen

Porsche Cayenne 2003-2004-CAYOLDBIN: Connections are done behind navigation screen

Porsche Cayenne 2005-2007-CAYNEWBIN: Connections are done behind navigation screen

Porsche Cayenne 2008-2010-PCM3: Connections are done behind navigation screen

Porsche Cayman 2007-2008-CAYNEWBIN: Connections are done behind navigation screen

Porsche Cayman 2009-2010-PCM3: Connections are done behind navigation screen

Installation notes for all Porsche vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2.

RANGE ROVER

Range Rover 2003-2006-BMW18: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Installation notes for all Range Rover vehicles: in back of Mini Cooper navigation brain locate 2 connectors one connector is where supplied plug&play Y-harness connects. Remove two screws to gain access inside NavTool interface and move the SOG switch opposite direction.

SAAB

SAAB 9-3 2007-2010-GMRCVI2: Connections are done behind navigation screen, please see page16

SAAB 9-5 2006-2009-INTMOD: Connections are done behind navigation screen.

SAAB 9-7x 2006-2009-INTMOD: Connections are done behind navigation screen.

Installation notes for all SAAB vehicles: you will receive radio already modified from NavTool with a black cable attached to the back of navigation radio, connect supplied cable to NavTool interface, than connect NavTool interface to ground and accessory power, keep in mind there is no accessory power behind radio, connect Gray wire to emergency brake, keep in mind Gray wire has to see ground in order to activate video 1, if you are installing back up camera please connect Orange wire to reverse light. Install a push button switch to switch between factory screen and video 1, video 2.

SATURN

Saturn Outlook 2007-2010-GMRCVI2: Connections are done behind navigation screen, please see page16

Saturn Vue 2007-2010-GMRCVI2: Connections are done behind navigation screen, please see page16

SUBARU

Subaru Forester 2009-2010-INTMOD: Connections are done behind navigation screen.

Subaru Impreza 2009-2010-INTMOD: Connections are done behind navigation screen.

Subaru Legacy 2006-2011-UNITOOL: Please connect at navigation brain. DO NOT CONNECT AT THE SCREEN.

Subaru Outback 2006-2011-UNITOOL: Please connect at navigation brain. DO NOT CONNECT AT THE SCREEN

Subaru Outback 2006-2011-UNITOOL: Please connect at navigation brain. DO NOT CONNECT AT THE SCREEN

*installation notes: please locate round connector behind navigation brain, please cut open the shield and inside you will find following wires:

Yellow wire represents Green color

Light blue wire represents Blue color

Light green wire represents Red color

Dark Green wire represents Sync

Suzuki XL7 2007-2010-GMRCVI2: Connections are done behind navigation screen, please see page16

TOYOTA

Toyota 4Runner 2002-2003-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Toyota Avalon 2005-2010-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Toyota Camry 2002-2004-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Toyota Highlander 2001-2007-TL10PIN: Navigation brain location under DRIVER SEAT, DO NOT CONNECT AT THE SCREEN

Toyota Land Cruiser 1998-2007-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Toyota Avalon 2005-2010-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Toyota Prius 2001-2005-TL10PIN: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN

Toyota Sienna 2004-TL10PIN: Navigation brain location under DRIVER SEAT, DO NOT CONNECT AT THE SCREEN

Installation notes for all Toyota vehicles: in back of Toyota navigation brain locate 2 connectors one connector is where supplied plug&play Y-harness connects to and other connector is where accessory power and reverse wires are found, please check wires with a multimeter before doing any connections.

VOLVO

Volvo C30 2007-2010-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo C70 2006-2010-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo C30 2007-2010-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo S40 2004-2010-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo S60 2003-2009-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo S80 2003-2010-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo V50 2004-2010-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo V70 2003-2010-UNITOOL: Navigation brain location TRUNK, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo XC60 2010-2011-UNITOOL: Navigation brain location under DRIVER SEAT, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo XC70 2003-2010-UNITOOL: Navigation brain location under DRIVER SEAT, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

Volvo XC90 2003-2010-UNITOOL: Navigation brain location under DRIVER SEAT, DO NOT CONNECT AT THE SCREEN ***MUST READ NOTES***

***Installation notes: for Volvo with 10pin connector behind navigation,**

Please cut pin 1 from NavTool interface connect YELLOW to navigation side and RED to screen side

Please cut pin 2 from NavTool interface connect GREEN to navigation side and BLUE to screen side

Please cut pin 6 from NavTool interface connect ORANGE to navigation side and PURPLE to screen side

Please cut pin 8 from NavTool interface connect BROWN to navigation side and BLACK to screen side

Please connect both shield wires of NavTool to pin 7

***Installation notes: for Volvo with 6pin connector behind navigation,**

Please cut pin 6 from NavTool interface connect YELLOW to navigation side and RED to screen side

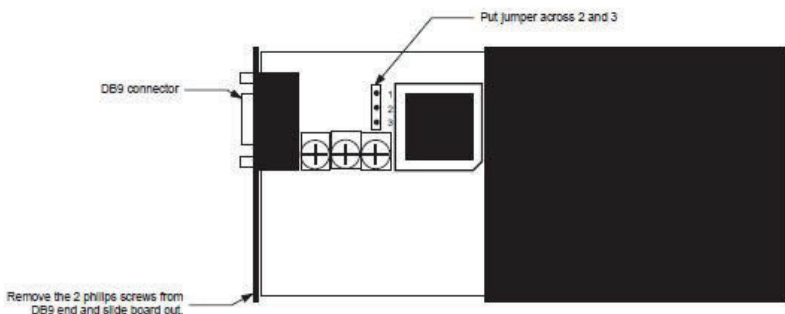
Please cut pin 5 from NavTool interface connect GREEN to navigation side and BLUE to screen side

Please cut pin 4 from NavTool interface connect ORANGE to navigation side and PURPLE to screen side

Please cut pin 2 from NavTool interface connect BROWN to navigation side and BLACK to screen side

Please connect both shield wires of NavTool to shield

Remove the two philips screws from the DB9 connector end. Slide circuit board out and locate the jumper next the the microcontroller. Remove the jumper from 1+2 and place jumper to 2+3.



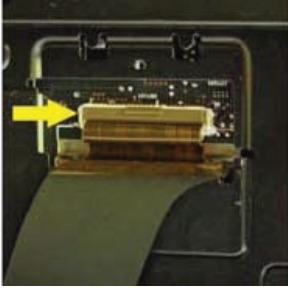
HONDA RIBBON CABLE INSTALLATION



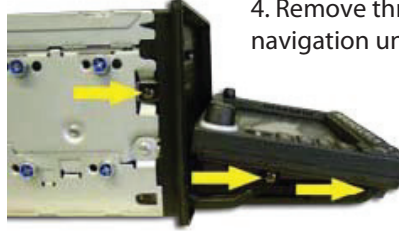
1. Prior to installation, get the radio code.
With the vehicle's ignition on and the navigation unit on, press the "OPEN" button.



2. With the display open, disconnect and remove the navigation unit from the vehicle. On the back of the LCD screen, remove the screw and the plastic cover located over the factory ribbon cable.



3. Disconnect the factory ribbon cable by carefully pulling up on the brown release tab.



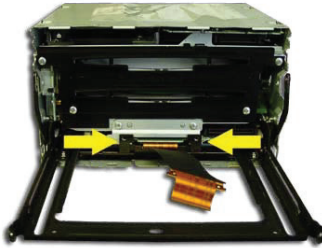
4. Remove three screws on each side of the navigation unit.



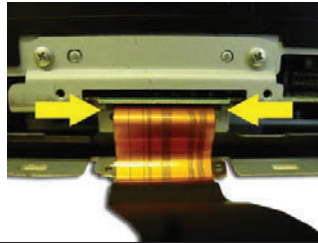
5. Remove two screws from plastic trim cover.



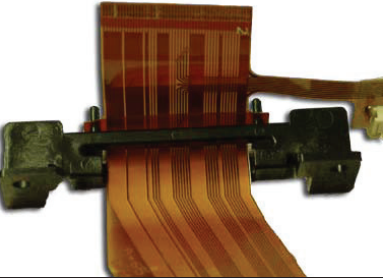
6. Gently remove the plastic trim cover by pushing on the release tabs on all four sides of the navigation unit.



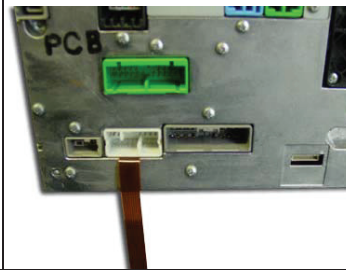
7. Remove black plastic fastener by carefully pinching both sides together.



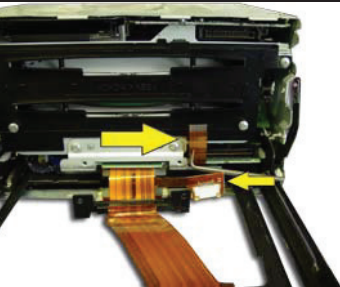
8. Remove factory ribbon cable by gently pulling on the brown release tabs on each side.



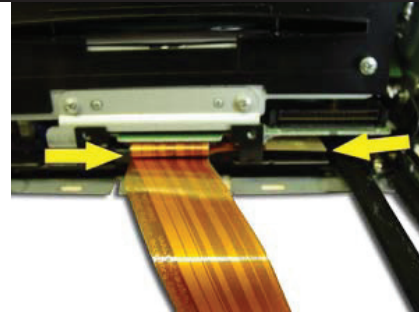
9. Place the RIBBON A cable through the black plastic fastener in the same way the factory ribbon cable originally was with the silver pads facing UP.



10. Route the RIBBON B cable through the back of the radio, under the connectors. The silver pads **MUST** face down.



11. Connect the RIBBON B cable to the RIBBON A cable's 9 pin connector with the silver pads facing UP. Connect the RIBBON A cable to the factory navigation with the silver pads facing UP.



12. Carefully fold the RIBBON A cable into the factory navigation unit. Secure RIBBON A cable with the black plastic fastener.



13. Assemble the remaining parts of the navigation unit following steps 2-5 in reverse order.

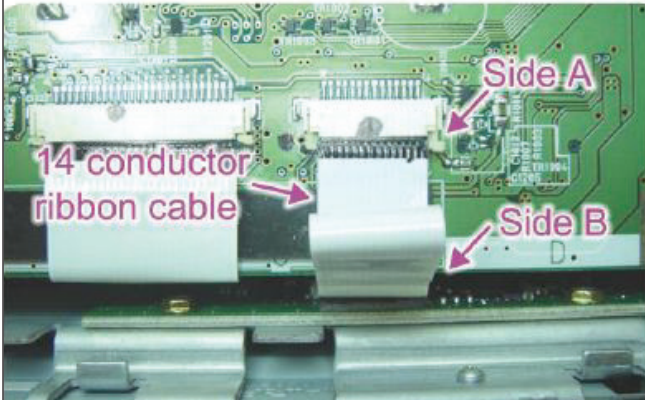


14. Secure Ribbon B cable to the chassis of the navigation unit in a location clear of obstructions.

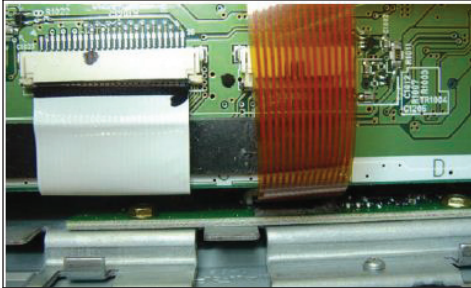
GMTOUCH AND GMNOTOUCH



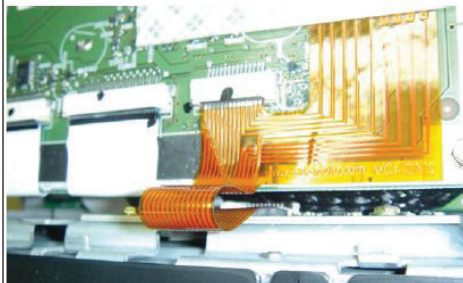
1. Place factory radio upside down on flat surface. Remove bottom cover by prying from the back side of radio first



2. On Side A of 14 conductor ribbon cable, pull the release mechanism perpendicular to the main circuit board. This will release Side A of the ribbon cable. Side B of the ribbon cable is held in place by double stick tape. Carefully separate the ribbon cable from the double stick tape on the second circuit board. The double stick tape will need to be reused. Pull the ribbon cable straight out while observing which direction the ribbon contacts face. Place the ribbon cable in the provided manila envelope. Tape the envelope to the inside of radio cover so the cable will not be misplaced, so at a later time, the radio can be converted back to it's original state.



3. Insert NavTool ribbon cable into the secondary circuit board connector (nickle plated contacts needs to face away from circuit board). Apply ribbon cable to the double stick tape to hold it in place.



4. Insert second set of contacts into the main connector (contacts need to be facing upwards). Push the release mechanism back into the connector to lock ribbon cable in place as shown below.

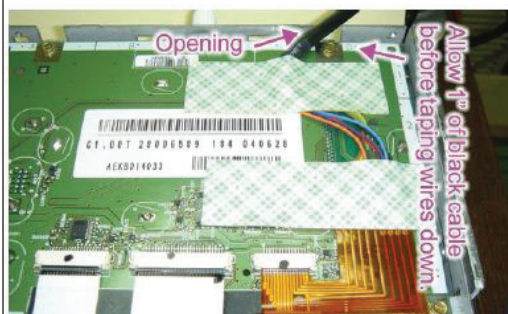


FIG 1

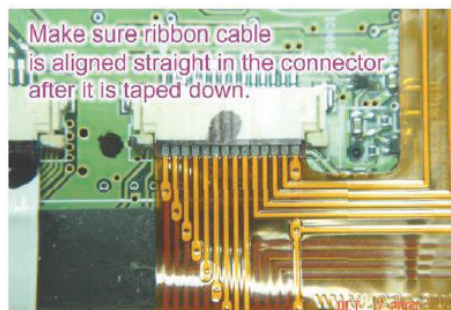
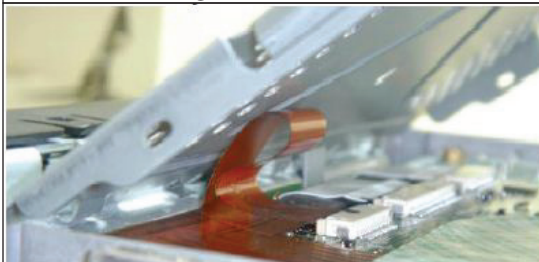
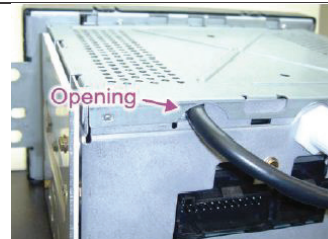


FIG 2

5. Apply ribbon to circuit board. Apply double stick tape on top of the colored wires towards back side of radio. Make sure the black insulated cable is about 1 inch inside of the back of radio and is seated in the opening by the hex screw FIG 1. Make sure that the ribbon contacts are straight in the connector after it is taped down FIG 2.



6. Replace the cover to the radio. Let the ribbon cable fold over by itself when replacing cover. Do not press the ribbon cable down by hand. Doing so may put a crease into the cable and may crack the circuit traces.



7. Snap cover completely down while being sure not to damage the black insulation part of the cable. The opening is just big enough to allow the cable to pass through.

GMRCVI



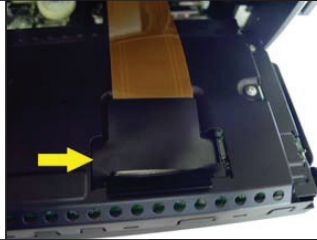
1. With the navigation unit on, press the "Change Map Coverage" option under the "Nav" menu and eject the navigation disc. **WARNING! Wait for the Map Disc to eject and set aside. Failure to eject the Map Disc will cause failure of the navigation DVD-ROM Drive.**



2. Be sure you have removed the Map Disc, then with the display open, disconnect and remove the navigation unit from the vehicle.



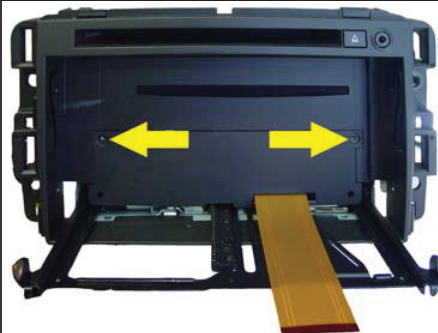
3. Remove the small Phillips screw on each side of the display. Remove the display from the navigation unit



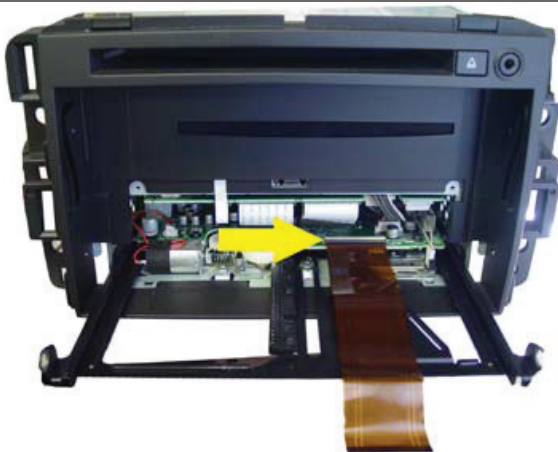
4. Remove the plastic shield covering the factory ribbon cable.



5. Carefully lift up on the release tab and remove the factory ribbon cable.



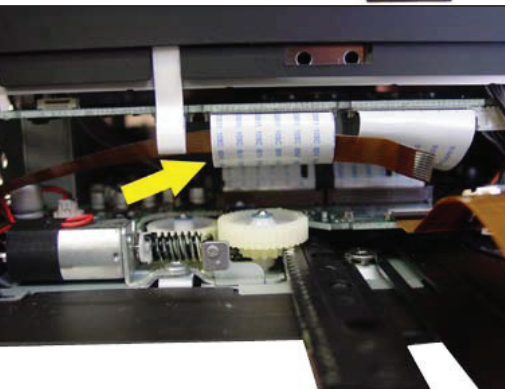
6. Remove two screws from the center cover. Remove center cover.



7. Carefully lift up on the release tab and remove factory ribbon cable and replace with Ribbon A cable with the small connector closest to the navigation unit.



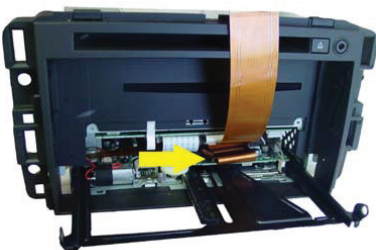
8. Route RIBBON B cable through the side of the navigation unit with the **contacts facing DOWN**.



9. Route Ribbon B cable over the large factory white ribbon cable to avoid gears.



10. Connect the RIBBON B cable to the RIBBON A cable with the **contacts facing UP**. A half twist on the Ribbon B will be necessary for the next step.



11. Carefully fold and insert Interface ribbon cable inside the navigation unit cavity.



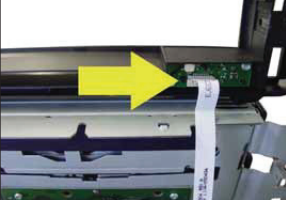

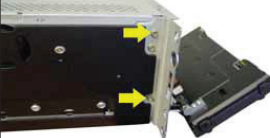

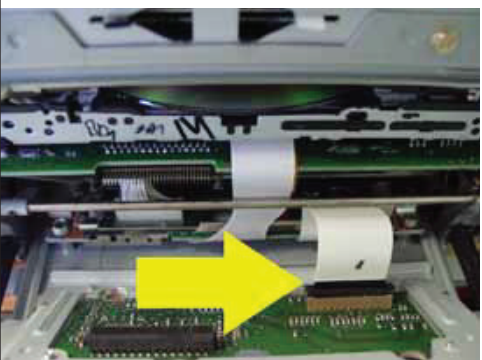
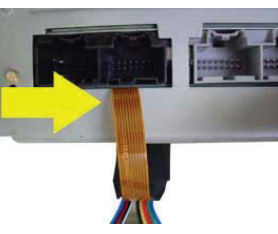
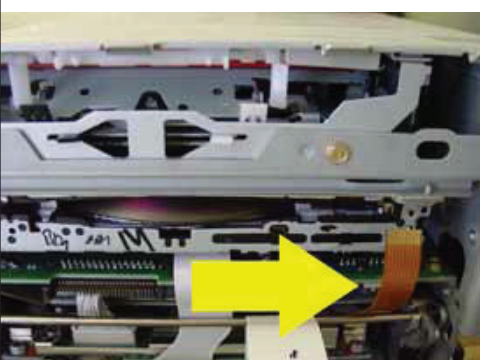
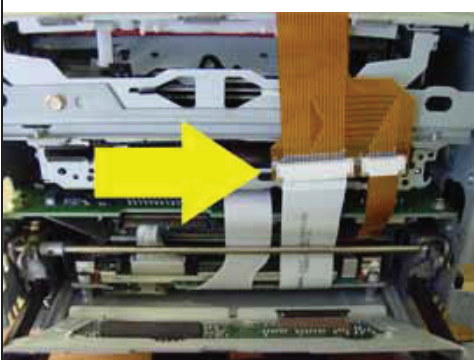
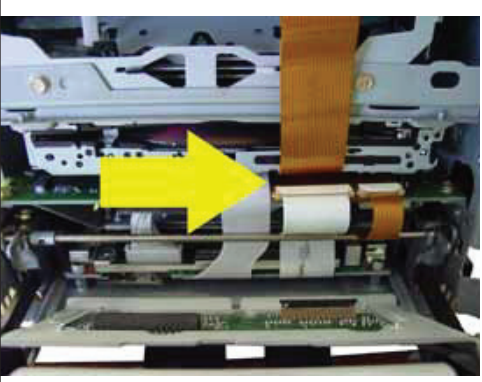
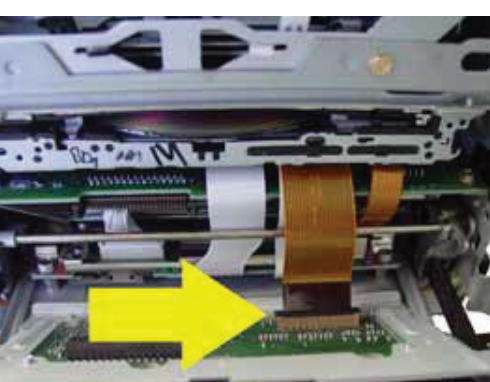

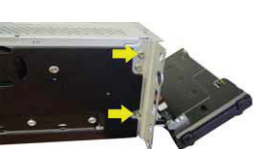



12. Assemble navigation unit in reverse order of steps.



13. Secure the cable to the bottom of the navigation unit.

GMRCVI2

 <p>1. With the vehicle's ignition on and the navigation unit on, press and hold the eject button for 20 seconds until the display ejects.</p>	 <p>2. With the display open, disconnect and remove the navigation unit from the vehicle. Remove the plastic mounting trim from around the body of the navigation unit by releasing the four clips.</p>	
 <p>3. Disconnect the auxiliary audio ribbon cable located behind the eject button.</p>	 <p>4. Carefully remove the grey cover by gently peeling away from the body of the navigation unit, starting at the top corners.</p>	
 <p>5. Remove the top and the bottom 3/16" screws on both the left and right sides on the navigation. The center screw is not necessary to remove.</p>	 <p>6. Carefully remove the front metal printed circuit board assembly.</p>	
 <p>7. Gently disconnect the factory ribbon cable by lifting up on the black release tab on each side.</p>	 <p>8. Route the Interface extension RIBBON A under the black connectors through the rear of the navigation unit towards the front opening with the gold terminal connectors facing down. Use the adhesive tape and secure the pad to the bottom of the navigation unit.</p>	
 <p>9. Route the Interface extension ribbon cable and the factory ribbon cable to exit the opening directly below the printed circuit board and above the display release bar.</p>	 <p>10. Connect the factory ribbon cable and the extension RIBBON A cable to Interface RIBBON B cable.</p>	
 <p>11. Carefully fold and insert the Interface ribbon cable directly below the DVD-ROM.</p>	 <p>12. Connect the Interface ribbon cable to the metal printed circuit board assembly with the connectors facing down. Secure the black retaining tab.</p>	
 <p>13. Carefully reattach the front metal printed circuit board assembly.</p>	 <p>14. Reinstall the top and the bottom 3/16" screws on both the left and right sides of the navigation unit.</p>	 <p>15. Carefully reattach the grey cover. 16. Reconnect the auxiliary audio ribbon cable located behind the eject button and reinstall the factory plastic mounting trim around the body of the navigation unit.</p>

Q: What is the purpose of push button switch?

A: Push button switch is used to switch between VIDEO1, VIDEO2 and factory navigation, if only back up camera is being installed, push button switch doesn't need to be installed unless you require to watch back-up camera while moving forward.

Q: Why should Gray wire on NavTool Interface wire be connected to emergency brake wire?

A: Gray wire must receive -12v(ground) in order to activate VIDEO1, if green gray wire is not connected properly, VIDEO1 will not work.

Q: How can VIDEO2 be used as video input instead of camera input?

A: Turn off parking lined and VIDEO2 can be used as a source.

Q: Does NavTool interface connects to constant or accessory +12V?

A: Always connect NavTool to Accessory or Ignition Power, do not connect to constant power,
CONNECTING NavTool TO CONSTANT POWER WILL DRAIN VEHICLES BATTERY.

Q: Where can I find reverse wire in a vehicle?

A: in some vehicles reverse found behind navigation brain, for most cars you have to get reverse in the back from reverse light.

Q: Where can I find Accessory power in a vehicle?

A: Accessory power can be found in some vehicles behind navigation brain, for most vehicles you have to find accessory at ignition switch.