



V8 XJ Series/XK

DATE 08/00
Amended 12/01

413-S484

SERVICE

TECHNICAL BULLETIN

Instrument Pack Assembly – CAN Failure – Service Action S484

MODEL
2000 MY XK Range
2000 MY V8 XJ Series
VIN
A00116-A05322
F00103-F09691

Remove and destroy Bulletin 413-S484, dated 08/00.
Replace with this Bulletin.
Revisions are marked with a bar and in **bold text**.

Note: This Service Action has been reissued to stress the need to install a new backplate in every case except when the instrument pack is replaced.

Issue:

Some vehicles within the above VIN range may display multiple electrical circuit malfunctions such as:

- Multiple warning lights
- No messages displayed on the message center
- All or some gauges go to zero
- Gear selector will not come out of the park position
- No A/C operation.

The cause of this has been identified as a Controller Area Network (CAN) failure in the instrument pack caused by a short to ground. This is due to a combination of pressure from the instrument pack back plate and possible migration of solder on certain printed circuit board contacts.

Action:

Check and rework all vehicles in dealer stock or undergoing PDI, within the above VIN range for possible signs of solder migration. Vehicles already released to customers should be inspected at the next dealer visit.

Do **NOT** replace the instrument pack unless the vehicle shows **ALL** of the above symptoms of electrical circuit malfunction.

The correct part number for the replacement pack is detailed on the VCATS label located in the luggage compartment.

To prevent possible duplication of corrective action, once the necessary action required has been completed, print the service action number (S484) on the VCATS using a suitable waterproof pen.

Note: All vehicles within the above VIN range that do not require replacement of the instrument pack, must receive a new backplate for the existing instrument pack. Failure to comply may result in future warranty claims being debited.

PROCEDURE

Before proceeding with this workshop procedure check the VCATS label to ensure that corrective action has not already been carried out.

Ensure that an interior protection kit is fitted in the vehicle.

If the installation of an Instrument Pack is required, refer to JTIS section 413-01 SRO 88.20.24 for XK vehicles, 501-12 for XJ vehicles, but **do not remove the airbag and steering wheel.**

- Make a copy of the attached Odometer Disclosure Statement.
 - USA dealers: Fill out the Odometer Disclosure Statement **completely** and fax it with the repair order to the JNA Parts Department (201-818-9816).
 - Canada dealers: Contact the Jaguar Canada Parts Department (905) 792-9400 ext. 248. Do not order the instrument pack directly from the Bramalea warehouse. This will be carried out on your behalf prior to shipment to the US for metrage programming. MPH instrument packs will not be supplied for Canadian market vehicles.
1. Adjust steering column to fully extended and lowered position.
 2. Before disconnecting the battery, note customer preferences such as sport mode switch, cruise control, clock settings, radio settings, etc.
 3. Remove battery cover and disconnect ground cable from battery terminal. Refer to technical bulletin 414-01.
 4. Remove Instrument Pack (Major Gauge Module - JTIS section 413-01 SRO 88.20.24).
 5. Place anti static mat (such as Radio Shack part no. RSU 11519428 or Techni-Tool 780ST8505) on the work bench and connect the wrist strap.

⚠ Caution: Ensure anti static mat is clean so as not to damage the instrument pack lens.

6. Place instrument pack on mat face down - use care not to damage the lens.
7. Undo and remove module back plate securing screws. (Torx T20)
8. Displace back plate using hinge action on paper adhesive label and place aside - careful not to rip the label.
9. Carefully remove back plate from the paper adhesive label and place aside - do not rip the label.
10. Examine circuit board to determine if rework to solder area is required. (Refer to Illustrations 1 - 4).

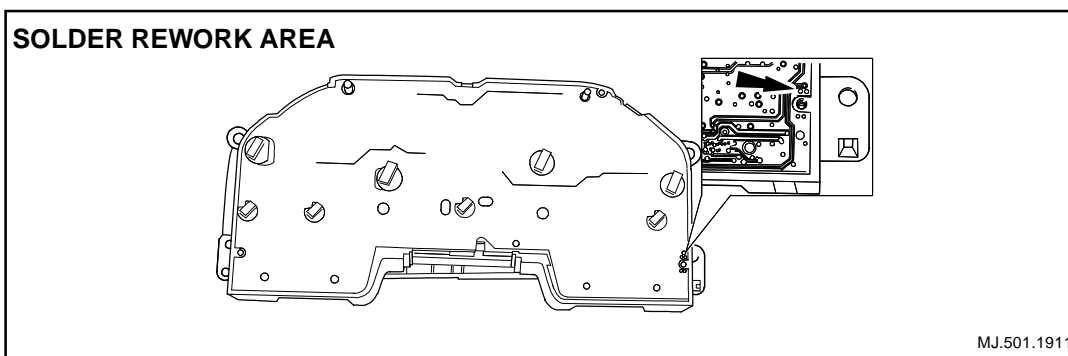


ILLUSTRATION 1

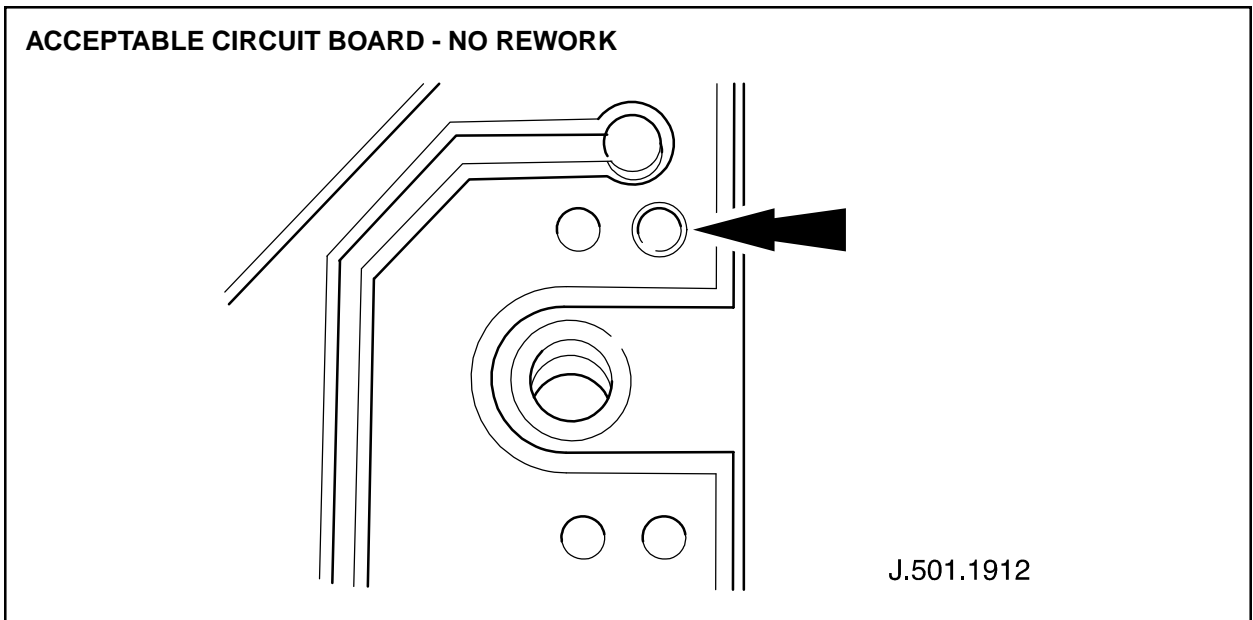


ILLUSTRATION 2

Illustration 2 shows an acceptable circuit board. This board does not require rework.

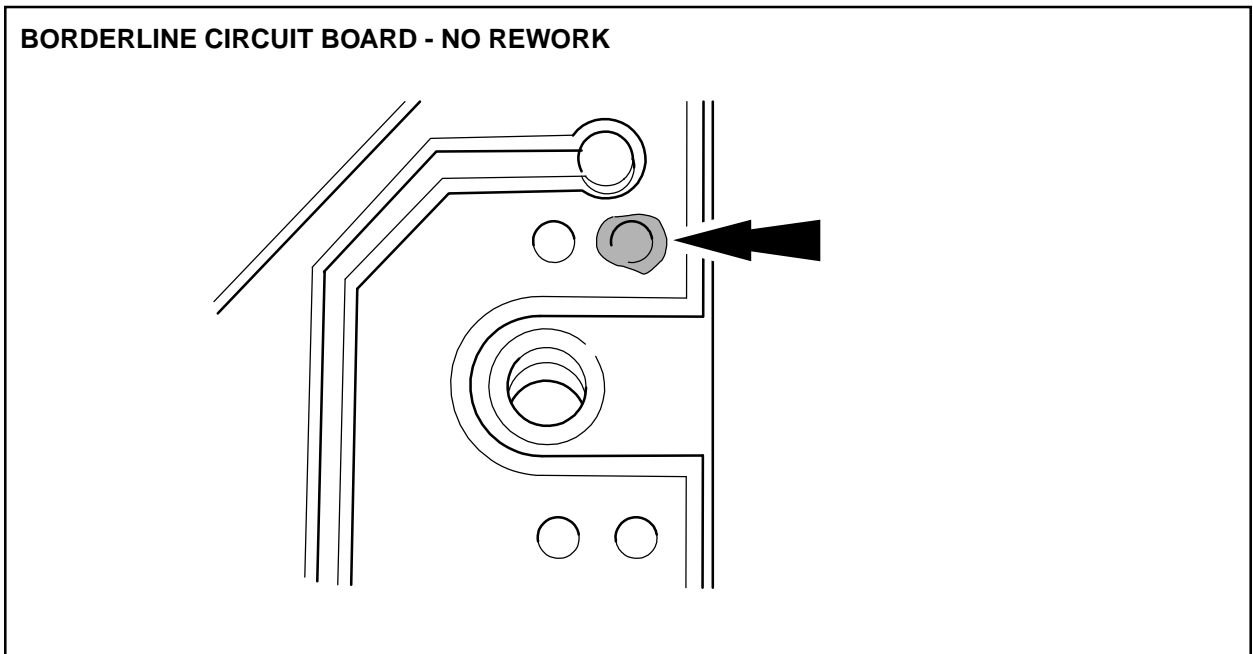


ILLUSTRATION 3

Illustration 3 shows a borderline case. This circuit board does not require rework.

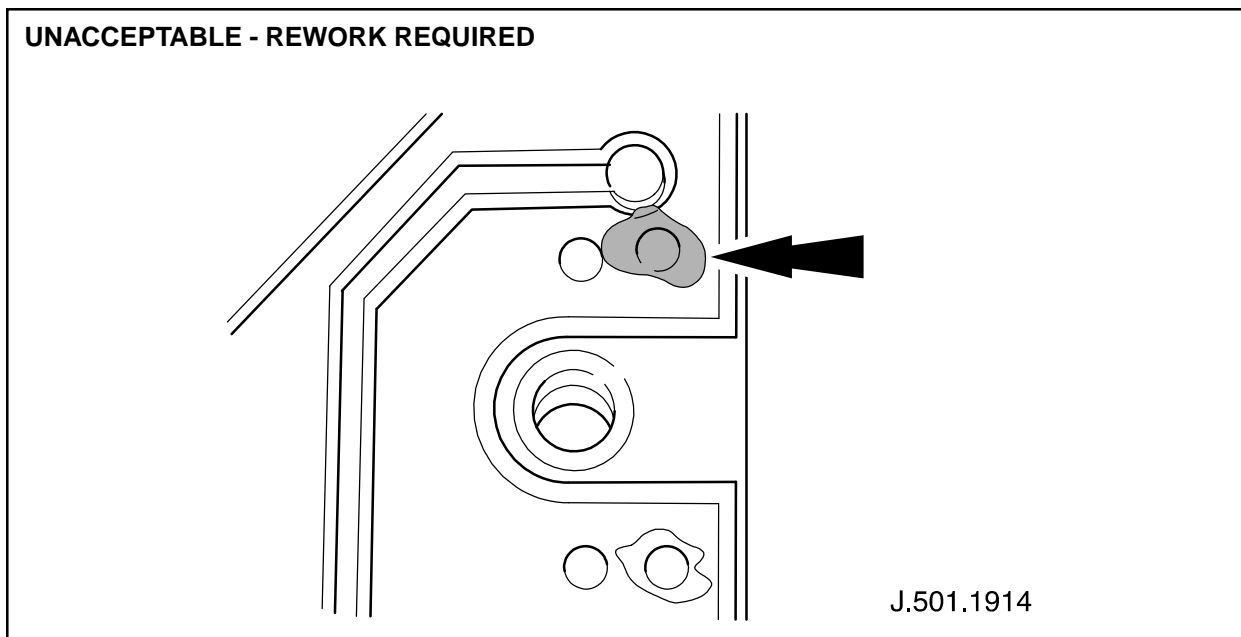


ILLUSTRATION 4

Illustration 4 shows an unacceptable case. This circuit board requires rework

If rework of the solder area is required (Illustration 4) proceed to step 11.

If no rework is required proceed to step 14.

FOLDING BACK EXCESS SOLDER

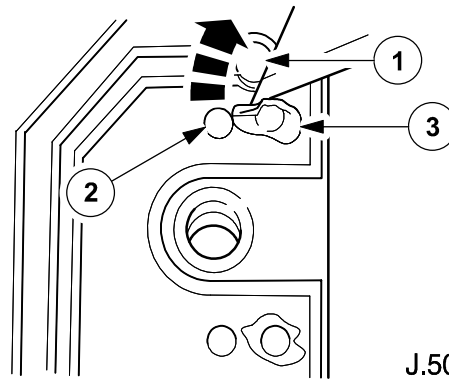


ILLUSTRATION 5

⚠ Caution: Do not use the craft knife in a downward cutting action across the board. This will damage the board. Cut at an angle ensuring that only the solder is cut through. Ensure all traces of cut solder are removed and discarded. Do not leave any solder particles. This could cause further contamination to the board. Do not remove solder from other areas of the circuit board, only those identified in this Service Action.

11. Using a sharp craft knife, raise and fold back any solder that has spread beyond the borderline area, as shown in illustration 5
12. Using a sharp craft knife, cut off the raised solder segments. See illustration 5.
13. Using a continuity meter, check there are no shorts between test point 1 and the two adjacent solder points 2 and 3 as shown in Illustration 5.

Note: Do not test between points 2 and 3 since these are ground points.

⚠ Caution: During the test operation in step 13, if a short is present, repeat solder removal operation.

Once no shorts are present and the rework is complete proceed to step 14 of the procedure.

14. Position and seat the new supplied module back plate. (Modified back plate has relieved screw boss).

⚠ Note: Do not trap paper adhesive label during the previous step.

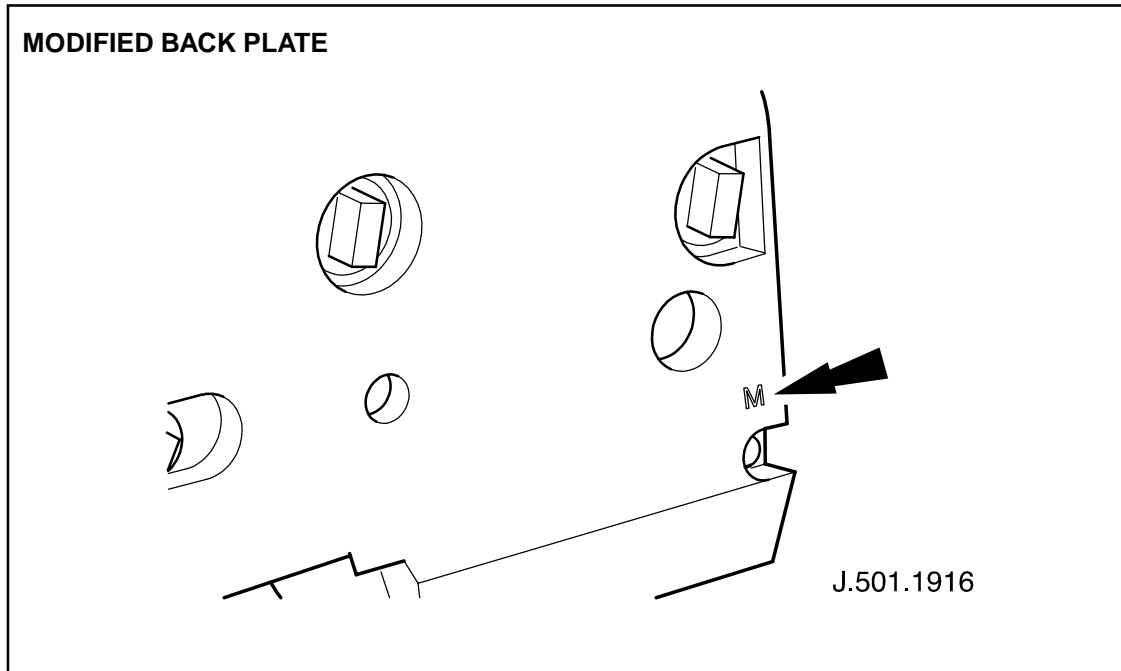


ILLUSTRATION 6

Note: The supplied modified back plate is identified by an “M” mark on the outer face, this will inform future workshops that the back plate has been replaced (Illustration 6).

15. Fit and tighten back plate securing screws. (Torque 0.5 - 0.8 Newton meters)
Suitable torque screwdriver for previous operation ‘Snap On’ QTSP135 or SPX 18 G.681 & T20 Torx bit.

Note: Loose securing screws may cause squeaks and rattles, over tightened securing screws may strip the thread.

16. Secure paper adhesive label to back plate.
17. Place Instrument pack aside - careful not to damage the lens.
18. Reinstall Instrument pack. Refer to JTIS section 413-01, SRO 88.20.24 for XK vehicles, 501-12 for XJ vehicles.
19. Disconnect the wrist strap and place the anti static mat aside.
20. Reposition the luggage compartment floor carpet upwards for access and using a suitable permanent marking pen, mark VCATS label, in the spare wheel well, to indicate the service fix. (S484)
21. Reinstall the luggage compartment floor carpet in its original condition.
22. Reinstall instrument panel veneer panel.
23. Reinstall driver side dash liner
24. Reconnect battery. Refer to technical bulletin 414-01.
25. Reset customer preferences such as sport mode switch, cruise control, clock settings, etc.
26. Remove interior protection kit.
27. Perform a squeaks and rattle test on completion of the rework procedure.

ANTI STATIC MATS

Radio Shack	part no. RSU 11519428
Techni-Tool Inc.	part no. 780ST8505
(available through Kent Moore - phone 1-800-832-4866)	

Parts Information:

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
IP rear housing cover	JLM 21502	1
Instrument Pack	LJD 4300**/**	1

Note: Verify instrument pack part no. by checking VCATS label.

If the installation of an Instrument Pack is required, note the following:

- Make a copy of the attached Odometer Disclosure Statement.
- USA dealers: Fill out the Odometer Disclosure Statement **completely** and fax it with the repair order to the JNA Parts Department (201-818-9816).
- Canada dealers: Contact the Jaguar Canada Parts Department (905) 792-9400 ext. 248. Do not order the instrument pack directly from the Bramalea warehouse. This will be carried out on your behalf prior to shipment to the US for metrage programming. MPH instrument packs will not be supplied for Canadian market vehicles.

Warranty Information:

Service Action S484

<u>VEHICLE</u>	<u>SUMMARY</u> <u>CODE</u>	<u>R.O.</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME</u> <u>ALLOWANCE</u>
----------------	-------------------------------	------------------------------	--------------------	---------------------------------

USA, Canada & Mexico

XK Series 2000 MY VIN A00116 - A05322 Model codes 2830, 2840, 2930, 2940	GA	88.91.09	Instrument pack - check - replace back plate - XK	0.60 hrs.
--	-----------	----------	--	-----------

XJ Series 2000 MY VIN F00103-F09691 Model codes 2811, 2851, 2853, 2914, 2953		88.91.09	Instrument pack - check - replace back plate - XJ -without drive-in/out time (performed with another repair.)	0.55 hrs.
--	--	----------	--	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack back plate	JLM 21502	1

XK Series 2000 MY VIN A00116 - A05322 Model codes 2830, 2840, 2930, 2940	GB	88.91.09	Instrument pack - check - replace back plate - XK	0.60 hrs.
--	-----------	----------	--	-----------

XJ Series 2000 MY VIN F00103-F09691 Model codes 2811, 2851, 2853, 2914, 2953		88.91.09	Instrument pack - check - replace back plate - XJ	0.55 hrs.
		10.10.10	- with drive-in/out time (only repair.)	0.15 hrs.

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack back plate	JLM 21502	1

Service Action S484

<u>VEHICLE</u>	<u>SUMMARY CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
----------------	---------------------	--------------------	--------------------	-----------------------

USA, Canada & Mexico

XK Series 2000 MY VIN A00116 - A05322 Model codes 2830, 2840, 2930, 2940	GC	88.91.10	Instrument pack - solder removal - replace back plate - XK	0.65 hrs.
--	-----------	----------	---	-----------

XJ Series 2000 MY VIN F00103-F09691 Model codes 2811, 2851, 2853, 2914, 2953		88.91.10	Instrument pack - solder removal - replace back plate - XJ -without drive-in/out time (performed with another repair.)	0.60 hrs.
--	--	----------	---	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack back plate	JLM 21502	1

XK Series 2000 MY VIN A00116 - A05322 Model codes 2830, 2840, 2930, 2940	GD	88.91.10	Instrument pack - solder removal - replace back plate - XK	0.65 hrs.
--	-----------	----------	---	-----------

XJ Series 2000 MY VIN F00103-F09691 Model codes 2811, 2851, 2853, 2914, 2953		88.91.10	Instrument pack - solder removal - replace back plate - XJ	0.60 hrs.
		10.10.10	-with drive-in/out time (only repair.)	0.15 hrs.

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack back plate	JLM 21502	1

Service Action S484

<u>VEHICLE</u>	<u>SUMMARY CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
----------------	-------------------------	------------------------	--------------------	---------------------------

USA only vehicles with navigation system

XK8 2000 MY VIN A00116 - A05322 Model codes 2830, 2840,	GE	88.91.11	Replace Instrument Pack -without drive-in/out time (performed with another repair.)	0.40 hrs.
--	-----------	----------	---	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
-------------------------	--------------------	------------

Instrument pack	LJD 4300GC/103	1
-----------------	----------------	---

XK8 2000 MY VIN A00116 - A05322 Model codes 2830, 2840,	GF	88.91.11 10.10.10	Replace Instrument Pack -with drive-in/out time (only repair.)	0.40 hrs. 0.15 hrs.
--	-----------	----------------------	--	------------------------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
-------------------------	--------------------	------------

Instrument pack - XK8	LJD 4300GC/103	1
-----------------------	----------------	---

USA & Canada vehicles without navigation system

XK8 2000 MY VIN A00116 - A05322 Model codes 2830, 2840,	GG	88.91.11	Replace Instrument Pack -without drive-in/out time (performed with another repair.)	0.40 hrs.
--	-----------	----------	---	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
-------------------------	--------------------	------------

Instrument pack - XK8 - USA vehicles	LJD 4300GC/104	1
Instrument pack - XK8 - Canada vehicles	LJD 4300JC/102	1

XK8 2000 MY VIN A00116 - A05322 Model codes 2830, 2840,	GH	88.91.11 10.10.10	Replace Instrument Pack -with drive-in/out time (only repair.)	0.40 hrs. 0.15 hrs.
--	-----------	----------------------	--	------------------------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
-------------------------	--------------------	------------

Instrument pack - USA vehicles	LJD 4300GC/104	1
Instrument pack - Canada vehicles	LJD 4300JC/102	1



Service Action S484

<u>VEHICLE</u>	<u>SUMMARY CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
----------------	---------------------	--------------------	--------------------	-----------------------

USA only vehicles with navigation system

XKR 2000 MY VIN A00116 - A05322 Model codes 2930, 2940,	GJ	88.91.11	Replace Instrument Pack -without drive-in/out time (only repair.)	0.40 hrs.
--	-----------	----------	---	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack	LJD 4300KC/103	1

XKR 2000 MY VIN A00116 - A05322 Model codes 2930, 2940,	GK	88.91.11 10.10.10	Replace Instrument Pack -with drive-in/out time (performed with another repair.)	0.40 hrs. 0.15 hrs.
--	-----------	----------------------	--	------------------------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack - XKR	LJD 4300KC/103	1

USA & Canada vehicles without navigation system

XKR 2000 MY VIN A00116 - A05322 Model codes 2930, 2940,	GL	88.91.11	Replace Instrument Pack -without drive-in/out time (performed with another repair.)	0.40 hrs.
--	-----------	----------	---	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack - USA vehicles	LJD 4300KC/104	1
Instrument pack - Canada vehicles	LJD 4300MC/102	1

XKR 2000 MY VIN A00116 - A05322 Model codes 2930, 2940,	GM	88.91.11 10.10.10	Replace Instrument Pack -with drive-in/out time (only repair.)	0.40 hrs. 0.15 hrs.
--	-----------	----------------------	--	------------------------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack - XKR - USA vehicles	LJD 4300KC/104	1
Instrument pack - XKR - Canada vehicles	LJD 4300MC/102	1

Service Action S484

<u>VEHICLE</u>	<u>SUMMARY CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
----------------	-------------------------	------------------------	--------------------	---------------------------

Vehicles with or without navigation system

XJ8 2000 MY VIN F00103-F09691 Model codes 2811, 2851, 2853	GN	88.91.11	Replace Instrument Pack -without drive-in/out time (performed with another repair.)	0.35 hrs.
--	-----------	----------	---	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack - XJ8 - USA vehicles	LJD 4300GC/302	1
Instrument pack - XJ8 - Canada vehicles	LJD 4300JC/301	1

XJ8 2000 MY VIN F00103-F09691 Model codes 2811, 2851, 2853	GP	88.91.11 10.10.10	Replace Instrument Pack -with drive-in/out time (only repair.)	0.35 hrs. 0.15 hrs.
--	-----------	----------------------	--	------------------------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack - XJ8 - USA vehicles	LJD 4300GC/302	1
Instrument pack - XJ8 - Canada vehicles	LJD 4300JC/301	1

Service Action S484

<u>VEHICLE</u>	<u>SUMMARY CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
----------------	---------------------	--------------------	--------------------	-----------------------

Vehicles with or without navigation system

XJR & VDP SC 2000 MY VIN F00103-F09691 Model codes 2914 and 2953	GR	88.91.11	Replace Instrument Pack -without drive-in/out time (only repair.)	0.35 hrs.
--	-----------	----------	---	-----------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack - XJ8 - USA vehicles	LJD 4300KC/302	1
Instrument pack - XJ8 - Canada vehicles	LJD 4300MC/301	1

XJR & VDP SC 2000 MY VIN F00103-F09691 Model codes 2914 and 2953	GS	88.91.11 10.10.10	Replace Instrument Pack -with drive-in/out time (performed with another repair.)	0.35 hrs. 0.15 hrs.
--	-----------	----------------------	--	------------------------

<u>PART DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Instrument pack - XJ8 - USA vehicles	LJD 4300KC/302	1
Instrument pack - XJ8 - Canada vehicles	LJD 4300MC/301	1

NOTE: Always perform a DCS claim search first to determine whether this service action has been performed on this vehicle. The warranty selection under the vehicle inquiry will give a listing of all claims against the vehicle. If S484 appears in the fault code field, do not perform this service action.

CLAIM SUBMISSION PROCEDURE:

Warranty summary codes have been assigned to this service action in order to simplify claim submission. The dealership will be reimbursed the parts and labor time allowance as indicated.

DCS DEALERS

Submit claims using the appropriate summary code for the vehicle model and work performed. Follow standard campaign submission procedures.

NON-DCS DEALERS

Submit claims on the Recall Campaign Summary form W-25. Enter the appropriate summary code for the vehicle model and work performed in the Repair Code column. Do not use the W-1 warranty claim form.



ODOMETER DISCLOSURE STATEMENT

This Odometer Disclosure Statement is submitted to Jaguar North America in connection with a request for a replacement Instrument Pack. The replacement is required due to a failure with the Instrument Pack or Sub Assembly because of accident damage, mechanical failure, and/or electrical faults.

I acknowledge that Jaguar North America Policy requires that an accurate reading of the vehicle mileage be programmed into all replacement Instrument Packs.

Pursuant to Jaguar North America Policy, I am enclosing along with this completed disclosure statement, a copy of the repair order reflecting the customer complaint and/or diagnosis that necessitates the replacement of the instrument pack. This information along with the current vehicle mileage, vehicle information and the vehicle owner's signature must be provided.

I, _____ (*please print*) state that the odometer currently reads _____ miles / kilometers (*circle one*) and to the best of my knowledge it reflects the actual mileage of the vehicle described below.

Year:	
Make:	
Model:	
Vehicle Identification Number (17 digits):	
Dealer Code:	
Dealer Name:	
Repair Order Number:	
Inst. Pack Part Number:	

Note: No instrument pack calibrated in miles will be supplied for Canadian market vehicles.

Reason For Replacement _____

Signed: _____ Date: _____ Title: _____

INTERNAL USE ONLY	
DOC:	DATE:
PROGRAMMED BY:	DATE: