

RetroAir

JAGUAR XKE S1- 3.8 LHD FULL KIT

2-12-2011

CONTENTS:

1- Custom Design Evaporator Case & Core Assembly

1- Universal Bracket (installed)

Evaporator Pak includes:

2- Custom Brackets; 2- 1-1/4" Grommets; 2- 1/2" Drain Hoses & Str. Drain Hose Fittings;
4- Black 1/4 X 1/2" Bolts & Washers; 2- 1/4" Star Washers & Nuts;
16"- Foam Rubber Tape; 6"- Cork Tape

Receiver/Drier Pak includes:

1- Receiver/Drier; 1- In-Line Fitting; 1- Hi/Lo Pressure Switch & Harness;
1- Bracket; 1- 10 X 1/2" Machine Screw & Nut; 2- Wire Connectors & Heat Shrink

Compressor Pak Includes:

Aluminum Heat Shield; 4'- 12ga Wire with Female Connector;

2- 3.8 Custom Compressor Bracket

3- 3/8 X 1-1/4" Gr. 8 Bolts, Nuts, Lock Washers;
2- 5/16 X 2" Gr. 8 Bolts & Lock Washers; 1- 5/16 X 2-1/2" Head Stud
1- 3.8 Back Idler Pulley Assembly; 2- 5/16" X 3" Bolts & Lock Washers

4-Pass Multi-Flow (Parallel Flow) Condenser

Condenser Pak includes:

2- Long (notched) & 1- Short Custom Condenser Brackets;
6- 10 X 1/2" Condenser Bolts & Nyloc Nuts

Miscellaneous Pak includes:

9-"O" Rings & Lube; 6- Medium Tie Wraps; 2- Large Tie Wraps;
3- 1" Hose Hangers; 3- 10 X 1/2" SM Screws; 1- 30amp Circuit Breaker;
1- Hose Tunnel; 1- 17555 V-Belt

Instructions/Photo Album

4- A/C Barrier Hoses with Service Port Fittings

1- New RetroAir 5H14-Horizontal Compressor (R134)

RetroAir

JAGUAR XKE S1- 3.8 RHD FULL KIT

3-25-2015

CONTENTS:

1- Custom RHD Design Evaporator Case & Core Assembly

1- Universal Bracket (installed)

Evaporator Pak includes:

2-Custom Brackets; 2- 1-1/4" Grommets; 2- 1/2" Drain Hoses; 2- Drain Hose Fittings;
4- Black 1/4 X 1/2" Bolts & Washers; 2- 1/4" Star Washers & Nuts;
16"- Foam Rubber Tape; 6" Cork Sealing Tape

Receiver/Drier Pak includes:

1- Receiver/Drier; 1- In-Line Fitting; 1- Hi/Lo Pressure Switch & Harness;
1- Bracket; 1- 10 X 1/2" Machine Screw & Nut; 2- 14ga Wire Connectors & Heat Shrink

Compressor Pak Includes:

Aluminum Heat Shield; 4'- 12ga Wire with Female Connector;

2 3.8 Custom Compressor Bracket

3- 3/8 X 1-1/4" Gr. 8 Bolts, Nuts, Lock Washers;
2- 5/16 X 2" Gr. 8 Bolts & Lock Washers; 1- 5/16 X 2-1/2" Head Stud
1- 3.8 Back Idler Pulley Assembly; 2- 5/16" X 3" Bolts & Lock Washers

4-Pass Multi-Flow (Parallel Flow) Condenser

Condenser Pak includes:

2- Long (notched) & 1- Long Custom Condenser Brackets;
6- 10 X 1/2" Condenser Bolts & Nyloc Nuts

Miscellaneous Pak includes:

9-"O" Rings & Lube; 6- Medium Tie Wraps; 2- Large Tie Wraps;
3- 1" Hose Hangers; 3- 10 X 1/2" SM Screws; 1- 30amp Circuit Breaker;
1- 17555 V-Belt

Instructions/Photo Album

4- A/C RHD Barrier Hoses with Service Port Fittings

1- New RetroAir 5H14-Horizontal Compressor (R134)

**JAGUAR XKE S1 3.8 - A/C Full Kit LHD/RHD
INSTRUCTIONS**

OPEN AND CHECK SHIPMENT!

Shortages Must Be Reported Within 3 Days of Delivery!

**CAREFULLY LAY OUT ALL PARTS IN THEIR
APPROXIMATE LOCATION AND READ INSTRUCTIONS
BEFORE PROCEEDING! See Contents List!**

**PLEASE BE SURE YOU UNDERSTAND THE INSTRUCTIONS AND WHERE EACH
PIECE GOES! KEEP COVERS ON ALL OPENINGS UNTIL CONNECTION TIME!!**

Prior to starting, use the proper repair manual to remove the following:

Hood (Bonnet) Assembly; Alternator & Bracket; Center Radio Console; Any Under-dash Finish Panels;
Center Carpeting;

***S-1 REQUIRES CHANGING ENGINE (Duplex) PULLEYS TO "V", MODIFYING THE
RADIO CONSOLE and THE SUB-DASH!!!***

Install Our Compressor Bracket First!

COMPRESSOR INSTALLATION

The Kit has 2 brackets- The rear part is mounted to the inverted 5/16" Head stud that is replaced with the enclosed one. Do Not tighten yet! The long Bracket enclosed will be attached to the upper outermost bolt holes on the timing chain cover (just below the Head-see picture) with the enclosed 5/16" bolts- leave these hand tight also! You should now be able to mount the RA Compressor with the enclosed 3/8" bolts, nuts & washers with the bolt heads against the compressor ears. Tighten the Compressor bolts first, then all the other bolts that were left loose. A new belt is included with the Back Idler Pulley.

CONDENSER INSTALLATION

The Super efficient Condenser included in this kit can be installed with the Custom brackets and hardware provided, fittings facing left (small fitting on the bottom). Bend or shape Brackets to fit your Radiator mounting, keeping the Condenser Biased to the Right side to leave room for the fitting connections. Keep the condenser at least one inch from the radiator, and to the right (to avoid Hood Baffle interference) so the heat from either unit will not "feed" off each other. Be sure all air possible will be forced through the condenser!

RECEIVER/ DRIER INSTALLATION

The new Drier will go next to the Brake and Clutch Reservoir (which may need to be moved slightly) with the "in" toward the front of the car. New brackets are included. Connect the "live" Compressor wire to one end of the Drier Harness and the new Wiring Harness long blue wire to the other end of the Drier Harness with the enclosed connectors. This switch will shut the Compressor off if too much, or too little pressure is in the system.

EVAPORATOR ASSEMBLY INSTALLATION

Handle Evaporator Carefully- It Can Be Bent In The Middle to Create A "Smile" or a "Frown" Appearance!

The Evaporator assembly "mimics" the original S-2 system in appearance only- it is 3 to 4 times more efficient! Carefully set the unit inside the car to plan where the mounting brackets, A/C hose Firewall entry points, drain hoses and wiring will be attached. On Series 1 cars, the Evaporator will be close to the lower part of the Dash.

THE “BELLY” SURFACE ON THE BOTTOM OF THE EVAPORATOR MUST BE BIASED DOWN TOWARD THE CAR FRONT SO CONDENSATION WILL DRAIN INTO THE DRAINAGE SUMPS ! THAT WILL LEAVE THE BOTTOM OF THE FAN/MOTOR HOUSING AT A MUCH STEEPER ANGLE!

There are two slotted custom brackets enclosed that attach the Evaporator to the front, lower lip of the dashboard. Attach the long slot of the bracket to the side of the Evaporator and hand-tighten with the enclosed Black ¼ x 1/2” bolts and washers (there are 3 holes- choose the one that seems to work the best with the bracket and angle of the dashboard lip. The face of the Evaporator unit should be forward of the Right and Left Dashboard panels. The Custom Bracket short slot end will attach to the top of the dashboard lip with the 1/4X1/2” Bolt, Nut & Washers- the Drivers side should be placed first, due to the limited lip space. The right side can then be mocked up. Try brackets on opposite sides if alignment is wrong. When you are sure of the spacing and clearances of hoses, wires, etc., drill a hole in the lip to accept the ¼X1/2” Bolt, Nut and Washer, being sure to allow for bracket adjustment (center of the bracket slot). The 3rd slotted bracket is already attached to the right side by the motor and housing and should be attached to the Dash Brace above it. All of these brackets are adjustable to allow you to position the Unit correctly.

SERIES ONE CARS REQUIRE A HOLE IN THE SUB-DASH PANEL TO MAKE ROOM FOR THE MOTOR! See Picture

Mark the transmission tunnel where the opening will be made for the included A/C hose ABS Flanged Scoop- check both sides for interference! The #6 Hose and the # 10 Hose will fit through the Flat end of the scoop after installing.

See Picture!

Drill one ½” hole on each side of the center Transmission hump for the Drain Hose fittings to be attached by epoxy and the drain hoses from the Evaporator connected to them. **MAKE SURE THE DRAIN HOLES ARE AWAY FROM FOOT ACTIVITY AND WILL PROPERLY DRAIN UNDER THE CAR!** Match the Drain hole measurement spread on the rear of the unit. The A/C Hoses should be connected before permanently mounting the Evaporator.

Make Sure Everything is Lined Up Before Drilling Any Holes!!

WIRING

The wires on the unit are marked for location- choose an already existing hole in the firewall to feed the long blue wire through and connect to one end of the Drier Hi-Lo Switch harness as described previously.

The other end of the Drier Harness connects to the compressor with the enclosed wire and connector.

Mount the circuit breaker in a remote location and attach the black wire from the main harness to the “Bat” post. Take the loose black wire and attach it to the “Aux” side of the Circuit Breaker and the other end to a “switched” ignition source (key turns A/C on & off). The “loose” wire on the motor is the Ground- attach to a good Body grounding source. With the engine not running and the ignition on, there should be an audible compressor “click” when the fan and temp switches are on. The Blower should operate in all 3 speeds- if not, there is a wiring problem. Attach the Relay wire to the original Fan relay, allowing the Fan(s) to come on when the A/C switch is turned on.

**BE SURE EVERYTHING LINES UP AND THE MOTOR WORKS
BEFORE MOUNTING THE UNIT!!**

A/C HOSE CONNECTIONS

REMOVE COVERS ONLY AT CONNECTION TIME!!

HAVE PROPERLY LUBRICATED "O" RING ON EACH HOSE CONNECTION!

There are 4 A/C hoses with your kit. Install "O" rings, using the enclosed "O" Ring Lube tube, before installing hoses!! There are 2 small hoses (#6)-the 36" one is attached between the evaporator (Straight) and the rear drier fitting (90 Deg). The 38" hose will attach between the Condenser (90 deg) (the Hi-Lo Switch Fitting mounts to the Drier with the 45 degree fitting at the fitting. The medium size hose (#8) goes between the condenser (90 deg) and the compressor (90 Deg w/ Svc Port). The large hose (#10) attaches to the Evaporator (Straight) and the Compressor (90 Deg w/ Svc Port). *Attach hose fittings hand tight, making sure the Service Ports are on the Compressor, "O" Rings are installed, and Everything is Clear and Aligned Before Fully Tightening!!* **Upon Assembly Completion, the System will need to be Evacuated and Charged with 3- 4 Oz PAG Oil, and 12- 16 ounces of R134a Refrigerant! The Compressor is shipped with R134a, compatible oil installed**

Hose Insulation: After hose installation, cut included insulation to size for hose protection against extreme heat (exhaust manifold), and slit lengthwise to slip over hose. Use enclosed Aluminum Tape to cover slit lengthwise, which should be away from heat source.

The Center Radio Console will have to be modified or a new one made to accommodate the Air Conditioning Evaporator Installation.

**CALL, CALL, CALL. DO NOT HESITATE
TO CALL FOR TECHNICAL SUPPORT!!**

Technical Support: 972-996-6687- sales@retroair.com

**Thank you for purchasing the most efficient and
complete kit available for this car- anywhere!**



Same 3.8 Front Compressor Bracket on Mark II



Custom Evaporator Bracket installed (1 Side)

MARK II, IX, XKE S1-3.8, 4.2 IDLER PULLEY KIT

For 3.8 Engine With Our A/C

3.8 Engine Instructions:

It will be necessary to remove the Radiator and Fan Blade. Remove the Bolt (see pictures). The back of the belt rides on the idler pulley, and goes down to the Crankshaft on the Right side and comes up & over the Waterpump pulley on the Left side, to the Compressor, down to the Generator/Alternator to make the complete loop.

REVERSE BRACKET DIRECTION FOR ADDITIONAL CLEARANCE!





