



Mitsubishi 380 Sequent 56 Injection Aftermarket System Installation Instructions



KIT PART NUMBER:ZIMI380AB01

FITTING INSTRUCTION REVISION 1

Date: 23rd May 2007



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LPG Engine Check	
⚠ CAUTION: Ensure the vehicle is fitted with an LPG compatible engine. LPG engines have Three (3) countersunk drilled holes on the engine head, forward face, central location. Ref Figure 1 DO NOT FIT THIS LPG SYSTEM TO THE VEHICLE IF THE THREE COUNTERSINK DRILLED HOLES (3) ARE NOT PRESENT OR THERE IS ANY DOUBT ABOUT THE ENGINES COMPATIBILITY	 Figure 1
Safety	
• Follow all ADR and AS/NZS 1425 requirements when fitting this kit. • The installation must comply with Australian standard AS 1425. • NOTE: It is the installers responsibility to ensure that all Clauses of AS 1425 are met in full, together with any other applicable State or Federal legislative requirements for a given vehicle installation. • Caution This symbol, ⚠ indicates precautions that must be observed to prevent injury or damage. • Follow all standard workshop and occupational health and safety practices during the installation process. • Safety glasses and hearing protection must be used. • General Information • Before beginning the installation process read through these instructions thoroughly.	

Introduction	Tools Required
Follow the fitting sequence as described and at the completion of the installation complete the checklist located at the end of these instructions. Check and note any existing marks or damage to the vehicle. Use fender guards, seat covers and any other protection required to prevent damage to the vehicle during the installation process. Do not place bolts and parts on vehicle body. Check that all parts listed are included in the kit and are not damaged. Ensure all torque settings are followed. Ensure brake lines never touch any other components. Safely store any removed parts and note related fasteners for correct refitting. All removed parts and fasteners must be retained unless indicated in the instructions. Ensure 'E' bolts – earth bolts are refitted in the location they were removed from. Replace any coolant that is lost during coolant hose rework. Ensure all removed parts are refitted correctly. Thoroughly clean all swarf from components and the vehicle. Road test the vehicle and confirm correct operation of all components.	Right angle power drill with swivel hose connection 50mm hole saw 29mm hole saw 25mm hole saw 22mm hole saw 20mm hole saw Centre punch Drill bits:- 3mm, 4mm, 5mm, 11mm M6 spiral tap Debur tool Paint marker Sharp knife Ruler / tape measure (mm) Sharp flat end probe (connector pin removal) Spanners / sockets:- 10mm, 12mm Screw drivers:- flat blade, phillips head Torque wrench Rivet gun Loctite 222 Scissors 3 X Guard covers, Telescopic magnet 2 X Heater hose clamping pliers Digital Multi Meter

INSTALLATION	
<i>Vehicle preparation – Engine Bay</i>	
Open the bonnet and place fender protectors over the LHF & RHF guards Disconnect battery negative, body ground and positive terminals. Refer figure 3. Remove strut support brace if installed, 4 M8 nuts. Refer figure 2 Remove battery clamp and cover. Remove battery and plastic battery tray.  CAUTION: Battery is heavy and in an awkward position. Remove engine cover, 4 bolts. Check to ensure washer insert remains in cover. Refer figure 2.	 Figure 2
	 Figure 3
Remove connector from MAF, (Mass Airflow Sensor), unclip MAF wiring retaining clip from air box outlet housing. Remove engine breather from induction hose. Remove induction hose and air box outlet assy. Refer figure 4.	 Figure 4

Inlet Manifold

Remove 3 bolts from engine harness plastic former.

One from above transmission, two from front of engine, figure 5,6

Disconnect wiring connections from:

MAP sensor and unclip retainer on harness, figure 8

10 way rear bank wiring connector, figure 7

3 way CKP (Crankshaft Position) sensor connector, 2 way connector.

Unclip rear harness cable tie from rear of wiring bracket, remove 2 bolts on wiring support bracket, figure 7



Figure 5



Figure 6



Figure 7

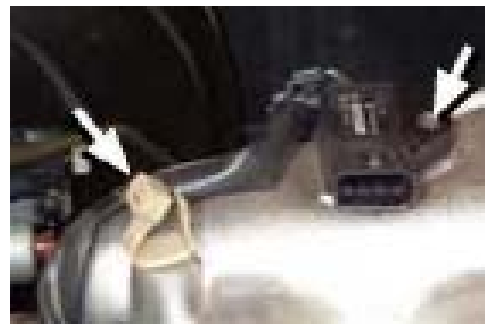


Figure 8

Remove 2 rear inlet manifold support bolts, figure 9

Disconnect brake booster vacuum hose.



Figure 9

Remove wiring connector from ETB, (Electronic Throttle Body), remove 4 bolts from ETB and remove, figure 11

Remove 1 manifold support bolt from under ETB opening in manifold, figure 10



Figure 10



Figure 11

Remove 1 bolt from ground lead at rear of manifold, figure 12.

Remove canister purge hose, remove 1 bolt from canister purge valve support bracket.



Figure 12

Remove 7 bolts from intake manifold and carefully lift from engine and place onto bench, figure 13.

 **CAUTION:** take care not to damage any gasket mounting surfaces.

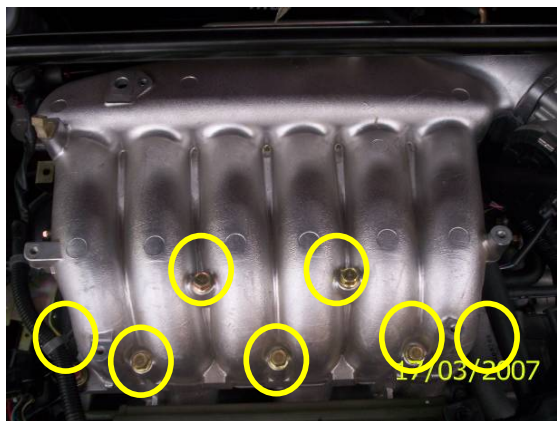


Figure 13

Cover intake runners on engine with covered used manifold gasket, place 2 M8 bolts loosely into outside 2 holes in gasket to prevent foreign material entry into engine, figure 14.



Figure 14

Manifold Nozzles

Carefully place manifold onto supporting surface and mark position as per attached drawing, manifold nozzle location.

⚠ CAUTION: mark position of nozzles, re-measure before centre punch manifold and drilling.

Drill 3mm pilot hole in manifold, ensure drill central and parallel to intake runner – refer drawing on right.

Enlarge holes with 5mm drill.

MAP Port

Refer drawing MAP Port, measure 40mm from throttle body gasket surface and up 23mm from casting seam. Centre punch manifold and drill 3mm pilot hole, enlarge hole to 5mm.

Tap all 7 holes with M6 spiral tap. Deburr all 7 holes with a flat mill file.

Clean manifold with compressed air and ensure no swarf left in manifold, rotate manifold in all directions when cleaning.

⚠ CAUTION: Use eye protection when cleaning with compressed air.

Apply Loctite 222 to manifold nozzles and secure in manifold with M6 nuts, ensure nozzles in correct orientation as per attached drawing, manifold nozzle orientation.

Torque manifold nozzles to 3-4Nm.

⚠ CAUTION: Do not over tighten manifold nozzles as they may break.

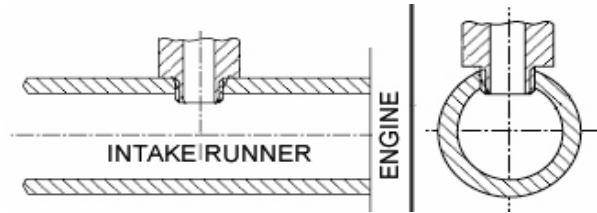
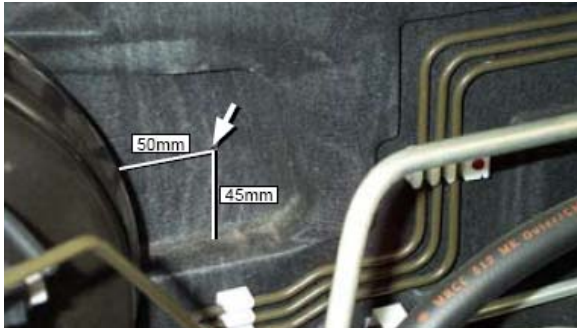


Figure 15

Bulkhead Wiring Hole	
Locate flat panel inboard of brake booster on bulkhead, measure 50mm from lip on brake booster and up 45mm from lower edge of flat panel, mark location of hole, figure 16. Check to ensure no loose wiring on inside of vehicle and drill 3mm pilot hole.	 Figure 16
Enlarge hole with 25mm hole saw, figure 17. Debur hole.  CAUTION: take care not to damage power steering pipe.	 Figure 17
ECU / Regulator Assembly	
Remove 2 bolts from OEM wiring holder at front of battery tray, figure 18.	 Figure 18

Mount LPG ECU onto rear face of bracket using two M6X25 bolts, two M6 flat washers and M6 flanged nuts, figure 19.

Place the flat washers between the bracket and ECU housing.

Torque bolts to 6 – 8Nm



Figure 19

Place bracket into position onto battery tray; ensure locating hole for plastic battery tray is fully exposed, figure 20.

Refit 2 OEM harness wiring holder securing bolts and torque to 6-8Nm



Figure 20

⚠ CAUTION: Battery positive cable may route very close to ECU/Regulator bracket. Cover and tape battery positive cable with split tubing if necessary to ensure integrity, figure 21.

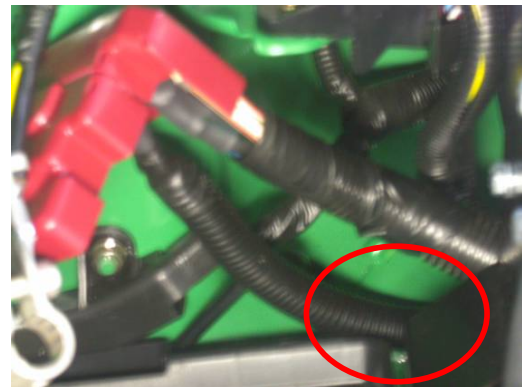


Figure 21

Mount regulator assy onto air box side of bracket using 3 x M6X12mm bolts with spring washers, figure 22.

Align front edge of coolant outlet fittings with edge of bracket.

Torque bolts to 6-8Nm.



Figure 22

<i>Vapour Hose Filter Assembly</i>	
Connect 90 degree hose from vapour filter onto vapour outlet on regulator. Install Clic clamp, figure 23. Route straight section of hose under OEM engine wiring and around rear of OEM wiring plastic former, continue up between plastic former and engine breather hose.  CAUTION: Ensure filter has clearance to OEM wiring.	 Figure 23
Remove 8mm nut from under OEM wiring support, attach 18mm insulated clamp and torque nut to 10 +2Nm, figure 24. Once installed, bend 'P' clamp upwards slightly to ensure vapour hose away from body panel.	 Figure 24
<i>Coolant Hoses</i>	
Connect longer exposed coolant hose onto top water fitting on regulator and shorter onto lower, secure with clamps, figure 25. Route coolant hose beside vapour hose under OEM engine harness formed protector to thermostat housing. Measure 60mm from bend on OEM heater supply hose (hose identified with white marking), and mark location. Clamp hose with heater hose clamping pliers either side of mark, cut hose and remove 20mm from engine side of hose. Insert brass tee and secure hose with spring clamps with 3/8 outlet towards engine, figure 26. Connect regulator lower hose to brass tee and secure with clamp. Measure 110mm from bend on heater return hose (red marking) and mark location. Clamp hose with heater hose clamping pliers and cut hose, remove 20mm from engine side of hose and install brass tee, secure hose with spring	 Figure 25

clamps.

Connect regulator top hose to brass tee and secure with clamp.

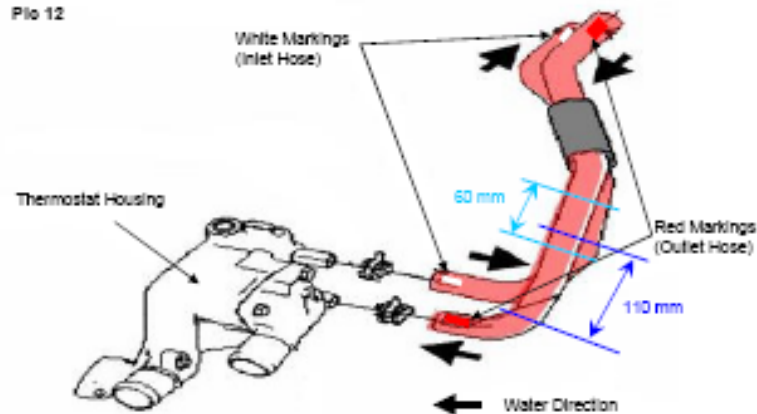


Figure 26

Wiring Harness – Engine Bay

Feed from front of vehicle, feed 56 pin LPG ECU connector under OEM engine harness plastic former and above LPG vapour hose and engine breather hose, figure 27.

Ensure LPG harness routes over petrol rail supply line.



Figure 27

Continue to feed wiring through opening until branch for oxygen sensors and regulator temperature are approximately 100mm past wiring plastic former.

Pull through opening, fuse, relay, diagnostic, switch and cylinder wiring and rear bank oxygen sensor connectors, shorter oxygen sensor branch with 2 x grey 4 way connectors, figure 28.

Pull through opening regulator temperature connector, black 2 way connector.

Continue to route 56 pin connector under canister purge valve vacuum hose, over carbon canister and connect to ECU.



Figure 28

Disconnect rear bank precat oxygen sensor, light grey connector on top, figure 29.

Connect LPG harness into corresponding connectors.

Route branch for temperature sensor, 2 way black connector, to regulator temperature sensor and connect.



Figure 29

Locate front bank precat oxygen sensor connector on radiator side of cylinder head, light grey 4 way connector, figure 30.

Route LPG oxygen sensor wiring under OEM wiring above radiator hose.

NOTE: Routing LPG wiring above OEM wiring in this location may cause it to foul on engine cover when refitted.

Unplug and connect corresponding LPG harness connectors.



Figure 30

Mount fuse and relay to bracket with M6 x 12mm bolts and flanged M6 nuts, figure 31.

Remove bolt from bulkhead lip, insert fuse / relay bracket and refit bolt.

Torque fuse relay bolts to 6+-1Nm

Torque OEM bolt to 10 +-2Nm



Figure 31

Route switch and cylinder wiring over carbon canister and heater hoses on bulkhead and feed through wiring transfer hole, figure 32.

Apply G16 corrosion inhibitor to hole before placing grommet into position.

Position grommet into hole in bulkhead, pull bulkhead matting over grommet before locating grommet into bulkhead to ensure grommet seals onto body.

TIP: A 90 Degree scribe can be used to lift bulkhead matting over wiring grommet.



Figure 32

Remove plastic nut from stud on bulkhead beside heater hoses, install 10mm insulated clamp onto switch/cylinder branch of wiring and install clamp onto stud on bulkhead with M6 flanged nut, figure 33.

Torque nut to 4-5 Nm

Ensure wiring does not touch brake lines.

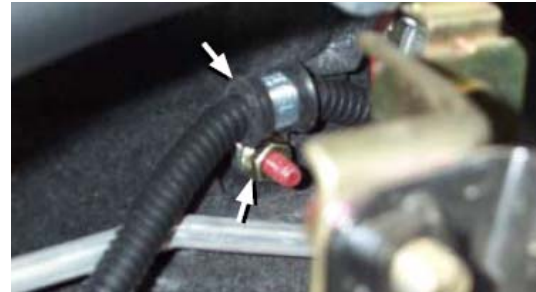


Figure 33

Re-Install Inlet manifold

Remove bolts and cover over lower inlet manifold blanking gasket.

Refit manifold gasket and place manifold upper onto engine. Insert front 7 bolts on manifold, 1 bolt at throttle body opening and 2 support bolts at rear of manifold, figure 34.

Insert all bolts before tightening any bolts.

Torque 7 manifold bolts in sequence from centre to outside.

Torque 2 rear manifold support bolts and bolt under throttle body opening.

Torque all M8 manifold bolts to 18 $\pm$ 2Nm



Figure 34

Refit MAP sensor and secure with bolt.
Torque to 5 $\pm$ 1Nm

Refit brake booster vacuum hose.

Refit wiring bracket with 2 M6 bolts, figure 35.
Torque to 11 $\pm$ 1Nm

Refit harness securing clip into bracket and around MAP Sensor wiring, reconnect MAP Sensor connector.

Re-connect OEM 2 way connector.

Connect LPG mating 10 way connectors into either side of OEM 10 way connectors.

Secure wiring connectors to ensure no rubbing on nearby brackets.
Do not refit throttle body at this stage.



Figure 35

Terminal Removal	
Remove secondary locking clip. Insert terminal probe into connector to lift terminal retainer, gently lift retainer, slide terminal forward and remove from connector, figure 36. NOTE: All terminals to be removed from connectors require the same process. ⚠ CAUTION: Do not apply excessive force on terminals to remove them, once free terminals will come out of connector easily.	 Figure 36
CKP Sensor	
Locate OEM 3 way female connector at front of engine. Remove white secondary locking clip, figure 37. Remove GREEN/RED wire from OEM connector and insert LPG harness GREY terminated fly lead. Insert OEM GREEN/RED wire into 1 way connector supplied in LPG harness accessory bag. Connect to corresponding GREY wire 1 way connector on LPG harness.	 Figure 37
Wiring - Injectors 2, 4 & 6	
Align LPG wiring harness across front of engine with branch out petrol injector circuits aligning with petrol injectors 2, 4 & 6, figure 38. Secure main branch of wiring to OEM wiring with 3 evenly spaced cable ties across front of intake manifold, figure 38. All 3 Petrol injector connectors have the same colored power wire – DO NOT REMOVE. PROCESS, figure 39,40. Remove Petrol ECU Ground Signal wire from all 3 front petrol injector connectors, insert terminated fly lead from LPG wiring into petrol injector connector. Insert OEM injector ground signal wire into supplied 1 way connector and connect to corresponding connector on LPG harness. Reconnect petrol injector connectors, once complete.	 Figure 38

PETROL INJECTOR COLOR CODES

Petrol Inj2, OEM wire - YELLOW/RED
 Petrol Inj2, LPG harness, ECU side – BLACK/WHITE
 Petrol Inj2, LPG harness, Injector side – Black

Petrol Inj4, OEM wire - GREY/RED
 Petrol Inj4, LPG harness, ECU side – BLUE/WHITE
 Petrol Inj4, LPG harness, Injector side – BLUE

Petrol Inj6, OEM wire – YELLOW/PURPLE
 Petrol Inj6, LPG harness, ECU side – ORANGE/WHITE
 Petrol Inj6, LPG harness, Injector side – ORANGE



Figure 39



Figure 40

Secure wiring harness on front of engine to ensure no connectors or wiring could rub on any components.

Secure LPG harness under throttle body location to OEM harness including oxygen sensor connector.

Secure with two cable ties, LPG harness to upper rear support on wiring harness plastic former facing throttle body opening, figure 41.



Figure 41

Injector Rail Mounting

Remove 3 front bank ignition coil securing bolts.

Connect injector rail to rail bracket with short end of bracket towards injector rail vapour inlet. Secure with 2 M6 flanged nuts, figure 42.

Torque bolts to 8~10Nm.



Figure 42

Secure injector rail into position with vapour inlet towards transmission end.

Start outer bolts, then lift injector rail gently to allow access to centre coil bolt. Figure 43.

Torque coil retaining bolts to 10 +2Nm.



Figure 43

Connect vapour hose to injector rail with Clic clamp, figure 44.

NOTE: Ensure vapour hose near plastic former not kinked and foam protective sleeve protruding past wiring harness plastic former.



Figure 44

Connect all 6 injector feed hoses to injector rail, figure 45.

Torque hose fittings to 4Nm

NOTE: over tightening of injector hose fittings will cause injector to rotate in injector rail.



Figure 45

Connect injector wiring to LPG injectors and Pressure/Temperature sensor, figure 46.

NOTE: injector numbering is, No.1 injector driver's side, No. 6 injector passenger side.



Figure 46

Before securing LPG injector harness connector into position, ensure COT tubing extends past support bracket for engine cover, figure 47.

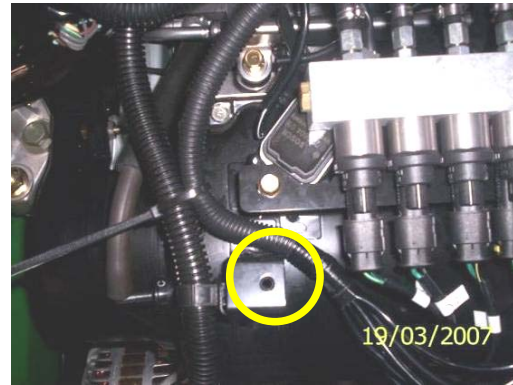


Figure 47

Wiring – Interior Preparation

Install protective covers to seats and floor carpet.

Open console, grip console trim with both hands and gently lift from RHF corner and then continue to lift trim up from clips evenly, figure 48.

NOTE: some retaining clips may remain in console, remove trims and refit onto console fascia trim.

Console trim has 8 white plastic clips, ensure all refitted to console trim mounting legs.



Figure 48

Remove tissue cavity fascia trim; gently pull towards rear of car, figure 49.

Unplug wiring to 12V accessory socket.



Figure 49

Remove RH lower dash trim, remove 2 screws from bonnet release cable, and remove 3 trim retaining screws across lower edge. Figure 50.



Figure 50

Remove rear seat base. Lifting front edge will release retaining clips.

NOTE: Take care not to damage paint on vehicle with front support legs of rear seat base.



Remove LHF and LHR scuff trim, gently lift front of trim to release clips. Lift rear of trim to release rear clips, figure 51.

Remove LHF kick trim.



Figure 51

Switch Mounting

Remove LPG switch from switch housing.

Align switch housing on outside top edge of tissue cavity, figure 52.

NOTE: align rear edge of switch housing approx 3mm inside outside side edge of tissue cavity to ensure straight switch mounting.

Mark position of 3 mounting holes. Drill holes with 5mm drill.

NOTE: hold sound proof matting away from drill as it may catch and rip.

 **CAUTION:** Ensure all your body parts are clear when drilling holes.



Figure 52

Towards top rear edge of tissue cavity, behind where switch will mount, drill 2 10mm holes, file out centre between two holes to allow for switch connector to pass through cavity, figure 53.

NOTE: cut sound matting slight to allow access, matting will catch on drill if access not pulled back.

Mount switch housing onto top inside of tissue box and secure into position with 3 x 5mm rivets.



Figure 53

Route interior wiring from transfer hole over ventilation duct, secure wiring to HVAC motor wiring behind ventilation duct, figure 54.

Continue cylinder wiring over rear edge of duct and down behind carpet matting and across console to passenger foot well.



Figure 54

Pass switch wiring into tissue box cavity, pass switch connector through rear opening of tissue box and through switch housing, figure 55.

Reconnect 12V auxiliary wiring and refit tissue cavity into position. Connect switch to LPG wiring and insert switch into position.

Refit console upper fascia trim, figure 56.

Refit RH lower dash trim, 3 screws, and bonnet release, 2 screws.



Figure 55



Figure 56

Secure cylinder wiring to glove box hinge support panel with cable ties in existing holes in panel, figure 57.

NOTE: Ensure wiring secured to upper edge of lip to avoid dropping down to be visible.



Figure 57

Continue LPG wiring from LH kick trim area to follow OEM wiring along LH sill trim to rear seat base area.

In LH Front sill area, lift weather seal from sill area, tuck LPG wiring into OEM wiring clips, figure 58. Refit weather seal.

Secure front section in kick trim area to OEM wiring with 1 cable tie.



Figure 58

Secure LPG wiring to OEM wiring through LHR sill and seat base area and into boot cavity with cable ties spaced at approximately every 200mm, figure 59, 60.



Figure 59

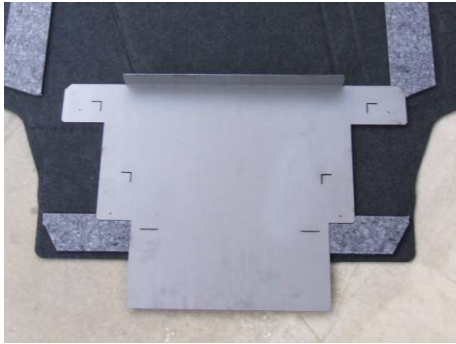


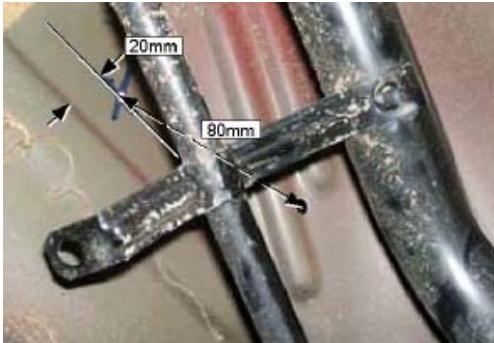
Figure 60

Refit LHF kick trim.

Refit LH front and rear scuff trims.

Refit rear seat base.

Cylinder Mounting Holes	
Remove boot mat, spare wheel and LH side boot trim. Position cylinder mounting template into boot cavity, push forward until sitting against body panel, hold template forward and push towards RH side of vehicle, figure 61. Lift rear back seat trim at lower edge and ensure template secure against forward and RH side edge of body panel, figure 62. Mark position of all 4 mounting holes of cylinder. Centre punch all 4 mounting hole locations, drill all holes with 3mm pilot hole.	 Figure 61  Figure 62
Place boot mat back into boot cavity and mark location of all 4 mounting holes into boot mat, remove boot mat. Place boot mat upside down on clean surface, place cylinder template onto boot mat upside down and align with marked holes in boot mat. Mark location of areas to be cut in matting. Cut carpet sections with sharp knife / industrial scissors. Cut out section of matting reinforcement with air hack saw or equivalent.	
Enlarge forward 2 cylinder mounting holes with 20mm hole saw. Debur and insert telescopic magnet into hole to extract swarf and panel slugs from hole saw. Apply G16 corrosion inhibitor. Enlarge rear 2 holes with 12mm drill, debur and apply G16 corrosion inhibitor.	

Floor Flange	
Remove LHR wheel, Remove LHR wheel house trim, From inside LHR wheel arch, locate 2 body ribs in top of fuel filler recess in body. Directly in the centre of the two floor ribs and level with the bottom edge of the short rib, centre punch and drill 3mm pilot hole, figure 63. NOTE: location of floor flange hole important to installation of pre-formed steel service line.	 Figure 63
Locate floor rib forward of floor flange pilot hole, measure up 20mm and draw line parallel to rib. Measure 80mm from floor flange hole and centre punch, drill 3mm pilot hole, figure 64. Enlarge floor flange hole to 50mm. Enlarge rear wiring hole to 22mm. Debur both holes. Refit LH boot trim and mark location of 50mm floor flange hole, remove boot trim and cut out floor flange hole.	 Figure 64
Place floor flange in position with longer section of chamfered outlet towards top, (Large AMR writing at bottom), mark position of all 4 floor flange holes, figure 65. Centre punch hole locations, drill with 3mm pilot drill, enlarge holes to 5mm. Debur holes and coat with G16 corrosion inhibitor. Apply sealant to floor flange and position into position and secure with 4 x 5mm rivets. NOTE: may need to run 5mm drill through mounting holes in floor flange to enable rivets to pass through.	 Figure 65
Refit boot LH side trim.	

Filler Valve

Remove protector fuel filler 3 x M8 bolts, figure 66.
Remove 2 bolts from petrol filler neck from floor cross member,
Remove 3 bolts from top of filler neck and remove filler neck assembly and lay into wheel arch cavity.



Figure 66

Cut out filler template from filler package, figure 67. Insert into filler pocket aligning the mounting holes of the petrol filler top right and lower. Tape template into position and centre punch filler 28mm hole, figure 68.

Drill 3mm pilot hole and enlarge to 29mm, debur hole and coat with G16 Corrosion inhibitor, figure 69.

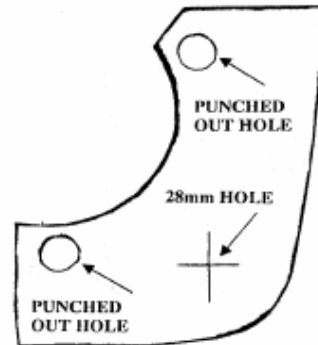


Figure 67



Figure 68



Figure 69

Place petrol filler neck into position and insert LH front bolt into top of filler neck.

Refit bolts to lower support on petrol filler neck beside LHF cylinder mounting.

Apply sealant to 29mm hole for filler valve and place filler valve into position, insert M6 filler bolts, figure 70.

Tighten all filler bolts to 10 +/-2Nm

Torque lower petrol filler bracket to 20 +/-4Nm



Figure 70

Cylinder Mounting

Carefully unwrap cylinder, remove all components from fitting kit.

Apply 2mm bead of Loctite 577 or Loxeal 58-11 to 90 degree brass fitting in LPG kit accessory bag, screw into AFL fitting in cylinder, Torque to 12~16Nm then clock at 90 degrees towards service solenoid valve, figure 71.



Figure 71

Place cylinder carefully into position in boot cavity, taking care to place cylinder to avoid scratching paint on boot floor.

Lift rear edge of cylinder and place spacers into position under rear mounting legs of cylinders, hole in spacer must fit neatly around nutsert, figure 72.

Align rear cylinder holes with holes in vehicle body.

Raise vehicle on hoist.



Figure 72

Place spring washer, flat washer and swaged bracket onto 110mm bolt, feed crush tube over bolt and insert through holes in cross member and screw into cylinder front mounting brackets, figure 73.

Place spring washer, flat washer and flat backing bar over 30mm bolt, insert bolts into rear cylinder mounting holes.

Torque rear two bolts, then front two.

Torque cylinder mounting bolts to 31 ± 2 Nm.

Place vent hose onto floor flange, install floor flange end clamp with tightening screw at bottom and facing forward.

Place valve box clamp onto vent hose with tightening screw towards top and facing forward. Connect vent hose to valve box outlet.



Figure 73

Place clamps in orientation on vent hose to avoid clamp tang protruding into main boot cavity, figure 74, 75.



Figure 74



Figure 75

Filler Line

Install filler line through vent hose with straight fitting to be connected to AFL valve, figure 76.



Figure 76

Connect filler line to LPG filler valve, secure filler line to petrol filler with cable tie on petrol filler breather tube, figure 77. Torque filler flare nut at filler and cylinder to 28 $\pm$ 4 Nm NOTE: do not refit wheel house liner until system leak check completed.	 Figure 77
Mount front gas lock onto regulator bracket assembly with straight fitting facing front of vehicle using M6 X 20mm bolt and flanged M6 nut., figure 78. NOTE: Do not tighten gas lock securing bolt until after liquid pipe installed. Connect front liquid pipe from regulator to gas lock. Torque gas lock mounting bolt to 6-8 Nm Torque service line flare fittings to 18 $\pm$ 2 Nm.	 Figure 78
From under vehicle, route front section of liquid line following OEM brake fuel bundle, figure 79. NOTE: Routing service line through front crossmember area ensures clearance of service line. Continue to route service line following petrol brake / fuel bundle along vehicle body.	 Figure 79
At rear of petrol tank, route inboard of chassis rail and above rear suspension frame, follow petrol filler neck up to floor flange. Figure 80. LPG Harness wiring at Cylinder: Green = Gas Lock Power Green/Black = Gas Lock Ground Black = Sender Ground White/Black = Sender Signal NOTE: Ensure clearance to all sections of steel service line to body.	 Figure 80

Re-Installing Engine Bay	
Refit carbon canister into bracket and connect vacuum hoses. Ensure canister purge solenoid hose is rearward and towards battery of front liquid line, figure 81. Refit battery tray, battery and battery cover. Connect negative lead to body and negative terminal on battery. Connect LPG ground lead to battery terminal. Connect LPG positive, (RED) fly lead to positive battery terminal, install terminal onto battery and check clearance of lead on regulator bracket. Body ground Torque 7~11Nm Battery Terminal Torque 5 +/-1Nm	 Figure 81
Re-Installing Throttle Body	
Refit throttle body with new gasket supplied in LPG kit. Torque bolts to 10 +/-2Nm Connect wiring to throttle body, figure 82.	 Figure 82
Refit canister purge bracket and connect canister purge hose, figure 83. Torque bolt to 11 +/-2Nm. Refit engine ground. Torque to 7 ~ 11Nm	 Figure 83

Refit air box outlet housing, connect MAF sensor connector and retaining clip in air box housing, figure84. Refit induction hose and connect engine breather hose.	 17/03/2007 Figure 84
Refit rear boot matting.	
Check cooling system level and top up with Mitsubishi specified coolant as required. Pressure test cooling system and check for leaks, repair as required.	
Compliance Plates and Labels	
Connect LPG diagnostic connector to hole in side of fuse relay bracket. Complete all details on State Compliance plate and securely attach to bulkhead to the left of OEM compliance plates with adhesive, figure 85.	 19/03/2007 Figure 85
Attach system compliance plate to bulkhead on right of OEM compliance plates, figure86.	 19/03/2007 Figure 86

<i>Leak Testing</i>	
Fill LPG cylinder with 5 liters of LPG. Check filler assembly for any leaks & repair as required. Refit LH Rear wheel house liner and LHR wheel. Start vehicle and allow engine to reach operating temperature. Raise engine RPM and change to LPG operation. Turn engine off and check all liquid and vapour LPG lines and connections for leakage. Restart engine, allow to change over to LPG, take note of transition from petrol to LPG, ensure no misfire present. Refit engine cover. Fill remaining capacity of LPG cylinder and record on installation checklist. Road test vehicle and ensure vehicle operation on both fuels.	
<i>Post Installation Check</i>	
Complete warranty card and send to IMPCO Technologies P/L.	

Wiring Drawings

WIRING DIAGRAM

