



UNIVERSAL AFTERMARKET LUMBAR SUPPORT SYSTEMS



REVISED 04/09/09

Introduction

Why do we need lumbar support?

A proper lumbar support encourages correct seating posture, which provides:

- reduced strain for the vertebral disks
- improved relaxation
- optimum support for spinal column
- helps prevent back pain

Only Universal Aftermarket Lumbar Support Systems provide the upper back support and lower pelvic area support with the lumbar region contour necessary for full seating comfort.



1. Constant support of the pelvis, preventing it from sliding backwards and providing balance of the spinal column.



2. Support of each vertebral disk in the lumbar region, providing relief for the spinal column and relaxation of back muscle.



- 3. Vertical support of the upper body, easing neck tension and offering relief for the vertebral disks.
 - Pic. 1

The spinal column is composed of vertebrae in a vertical arrangement. However, most lumbar supports offer support in a horizontal orientation. This can result in pressure against the lumbar vertebrae.

SHUKRA offers the most complete line of Adjustable Lumbar Supports on the market. We offer both Manual and Electric models, and all of our supports are infinitely adjustable horizontally, to fit the shape of the spine.

Lumbar Support with Massage

Several of the models we offer, like the 4-Way Lumbar Support with Massage, also offer vertical adjustment, to suit the height of any individual. The unique roller design and placement gently massages the back muscles to improve blood flow to the supporting muscles. Increased circulation relaxes muscle tension, resulting in improved comfort and reduced fatigue. The massage system enhances comfort by improving blood flow to back muscles.

• Muscle fatigue (as indicated by RMS levels in Pic. 1 on p.2) decreases when the massage feature is used.

• Proper set-up of massage time and IN/OUT lumbar position relaxes back muscles thus improving comfort.

If you like to travel or spend all day working in your car, and if you are driving any car, you might consider having a lumbar support installed.

Chevrolet - Avalanche, Blazer, Silverado 1500 (Work, Base, LS, Z71, SS), Colorado, Tahoe, etc.
Dodge - Caravan, Dakota (ST, SLT), Durango, RAM 1500
Ford - Excursion, Expedition, Explorer (XLS,, XLS Sport)
GMC - Sierra 1500, Safari, Yukon
Honda - Accord (DX, LX), Civic

Toyota - Camry, Corolla, Sequoia, Sienna, Tacoma, Tundra





Electric Lumbar Supports **3 Year Warranty**

Manual Lumbar Supports Limited Lifetime Warranty

Pacific Restyling Products Ltd & Shukra. warrants that we will replace the Universal Aftermarket Lumbar Support Systems mechanisms for up to 3 years from the date of purchase.

This warranty is extended only to the original purchaser and does not cover collateral damage.

This warranty only covers failures due to defects in materials or workmanship which occur during normal use.

Any modifications done to the original unit **VOID** this warranty.

LUMBAR SUPPORT MODELS

 $MODEL \ Q$

CABLE DRIVEN LUMBAR 2 WAY (IN/OUT) DRIVER SIDE PART # L181-63-L PASSANGER SIDE PART # L181-63-R

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Pacific Restyling Products Ltd MODEL N Electric lumbar 4 way (in/out, up/down) part # L316-06



MODEL L Electric lumbar 2 way (in/out) part # L315-06



MODEL R Electric Massage Lumbar 4 Way (IN/OUT, UP/DOWN W/VERTICAL ROLLER MOTION MASSAGE)

 $\mathsf{part}\,\#\,L320\text{-}04$



Model Q L181-63-L & L181-63-R 2-Way Manual Lumbar Support

Installation Instructions and Parts Diagram

*Before installation carefully read the instructions.

- 1. Check Parts Diagram for list of all parts needed for installation.
- 2. Remove seat from the vehicle and remove covers from the cushion and back.
- 3. Remove large seat foam from backrest. Measure approximately 16" from top of seat cushion or have the customer sit on the seat to locate the most appropriate mounting height location.
- 4. Hollow out foam for lumbar support ribs and motors approximately $\frac{1}{41}/4$ " -1/2" or as needed. This will allow the backrest to lay flat.
- 5. Attach top cross member to seat frame using supplied bar (or use existing one) at approximately 14.5" from top of seat cushion. Cut excess bar length.. You may also secure the lumbar by means of heavy gage Zipties. This is done by drilling self-tapping screws into the backrest frame and having the zip-ties suspend from them. Also secure to bottom corners of the lumbar to the backrest frame by zip-tying without screws.
- 6. Attach universal mounting plate tabs onto top cross member.
- 7. Attach universal mounting plate to existing bottom cross member (or add a bar if necessary). Screws, cable ties and other fasteners are suggested. Cut excess bar length.
- 8. Mount actuator-housing bracket to desired location along side of seat frame. Use your own good judgment to locate the most likely location for the switch.
- 9. a) Route conduit to actuator housing bracket and slip into place.
- b) Screw actuator into actuator housing bracket.
- 10. Snap knob into actuator housing.
- 11. Test lumbar to ensure unit is working properly.
- 12. Refit covers.

2 WM Lumbar Support





Knob – 1 Part # 218



Actuator-Housing Bracket – 1 Part # 174

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Model L L315-06

2-Way Power Lumbar Support Installation Instructions and Parts Diagram

*Before installation carefully read the instructions. Automotive electrical experience is recommended for this installation.

- 1. Check Parts Diagram for list of all parts needed for installation.
- 2. Remove seat from the vehicle and remove covers from the cushion and back.
- 3. Remove large seat foam from backrest. Measure approximately 16" from top of seat cushion or have the customer sit on the seat to locate the most appropriate mounting height location.
- Hollow out foam for lumbar support ribs and motors approximately 1/41/4" -1/2" or as needed. This 4. will allow the backrest to lav flat.
- 5. Attach top cross member to seat frame using supplied bar (or use existing one) at approximately 14.5" from top of seat cushion. Cut excess bar length.. You may also secure the lumbar by means of heavy gage Zip-ties. This is done by drilling self-tapping screws into the backrest frame and having the zipties suspend from them. Also secure to bottom corners of the lumbar to the backrest frame by zip-tying without screws.
- Attach universal mounting plate tabs onto top cross member. *A piece of material may be placed 6. between universal mounting plate and cross members to prevent any rattling.
- Attach universal mounting plate to existing bottom cross member (or add a bar if necessary). Screws, cable ties and other fasteners are suggested. Cut excess bar length.
- Install switch bracket in most convenient location along side of seat frame or centre console if 8. applicable. Each installation is different. Use your own good judgment to locate the most likely location for the switch.
- 9. ¹Use #6, Connector on wire harness diagram for ground and positive wires. Connect positive wire to closest power source and attach ground wire to floor pan.
- 10. Install the seat., connect wire harness's #3, 2-way connector to female terminal # 1 of lumbar supports attached wire harness.
- 11. Mount bezel to switch bracket.
- 12. Route wire harness # 2 switch terminal through switch bracket and bezel. Connect switch to terminal and snap switch into bezel.
- 13. Test lumbar to ensure unit is working properly.
- 14. Refit covers.



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Model N L316-06

4-Way Power Lumbar Support Installation Instructions and Parts Diagram

*Before installation carefully read the instructions. Automotive electrical experience is recommended for this installation.

- 1. Check Parts Diagram for list of all parts needed for installation.
- 2. Remove seat from the vehicle and remove covers from the cushion and back.
- 3. Remove large seat foam from backrest. Measure approximately 16" from top of seat cushion or have the customer sit on the seat to locate the most appropriate mounting height location.
- 4. Hollow out foam for lumbar support ribs and motors approximately $\frac{1}{41}/4$ " -1/2" or as needed. This will allow the backrest to lay flat.
- 5. Attach top cross member to seat frame using supplied bar (or use existing one) at approximately 14.5" from top of seat cushion. Cut excess bar length.. You may also secure the lumbar by means of heavy gage Zip-ties. This is done by drilling self-tapping screws into the backrest frame and having the zip-ties suspend from them. Also secure to bottom corners of the lumbar to the backrest frame by zip-tying without screws.
- 6. Attach universal mounting plate tabs onto top cross member. *A piece of material may be placed between universal mounting plate and cross members to prevent any rattling.
 - Attach universal mounting plate to existing bottom cross member (or add a bar if necessary). Screws, cable ties and other fasteners are suggested. Cut excess bar length.
- 8. Adhere fabric isolator sheet to foam with glue. This will prevent lumbar ribs from catching the foam.
- 9. Install switch bracket in most convenient location along side of seat frame or centre console if applicable. Each installation is different. Use your own good judgment to locate the most likely location for the switch.
- Use #6, 3M Connector on wire harness diagram for ground and positive wires. Connect positive wire to closest power source and attach ground wire to floor pan. NOTE: Wire harness uses own 15 Amp fuse.
 Install the seat., connect wire harness's #3, 6-way connector to female terminal # 1 of lumbar supports
- attached wire harness.12. Mount bezel to switch bracket.
- 13. Route wire harness # 2 switch terminal through switch bracket and bezels. Connect switch to terminal and snap switch into bezel.
- 14. Test lumbar to ensure unit is working properly.
- 15. Refit covers.



Model R L320-04

4-Way Power Lumbar Support With Massage Installation Instructions and Parts Diagram

*Before installation carefully read the instructions. Automotive electrical experience is recommended for this installation.

- 1. Check Parts Diagram for list of all parts needed for installation.
- 2. Remove seat from the vehicle and remove covers from the cushion and back.
- 3. Remove large seat foam from backrest. Measure approximately 16" from top of seat cushion or have the customer sit on the seat to locate the most appropriate mounting height location.
- 4. Hollow out foam for lumbar support ribs and motors approximately 1/41/4" -1/2" or as needed. This will allow the backrest to lav flat.
- 5. Attach top cross member to seat frame using supplied bar (or use existing one) at approximately 14.5" from top of seat cushion. Cut excess bar length.. You may also secure the lumbar by means of heavy gage Zip-ties. This is done by drilling self-tapping screws into the backrest frame and having the zipties suspend from them. Also secure to bottom corners of the lumbar to the backrest frame by zip-tying without screws.
- Attach universal mounting plate tabs onto top cross member. *A piece of material may be placed 6. between universal mounting plate and cross members to prevent any rattling.
 - Attach universal mounting plate to existing bottom cross member (or add a bar if necessary). Screws, cable ties and other fasteners are suggested. Cut excess bar length.
- Adhere fabric isolator sheet to foam with glue. This will prevent lumbar ribs from catching the foam. 8.
- Install switch bracket in most convenient location along side of seat frame or centre console if 9. applicable. Each installation is different. Use your own good judgment to locate the most likely location for the switch.
- 10. Use #6, 3M Connector on wire harness diagram for ground and positive wires. Connect positive wire to closest power source and attach ground wire to floor pan. NOTE: Wire harness uses own 15 Amp fuse. 11. Install the seat., connect wire harness's #3, 6-way connector to female terminal # 1 of lumbar supports
- attached wire harness. 12. Mount bezel to switch bracket.
- 13. Route wire harness # 2 switch terminal through switch bracket and bezels. Connect switch to terminal and snap switch into bezel.
- 14. Test lumbar to ensure unit is working properly.
- 15 Refit covers

Part # 388



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Massage Lumbar Technical Information

- Lumbar Travel 35 mm In/Out displacement 50 mm Up/Down/Massage displacement
- Lumbar movement during a manual move is infinitely adjustable throughout the travel range by the occupant
 - Total of 20 independent massage rollers located on massage basket
 - Compliance spring provided for maximum comfort

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RTP – all massage units have a "Return To Position" feature. This ensures that upon completion or termination of a massage the unit returns to its original vertical position

Driver seats systems have full lumbar memory features

Normal 4-way lumbar functionality exists on all systems

Massage functionality - 10 min cycle once initiated

- Up switch input (A Quick Press and Release of switch) of less than 390 milliseconds starts massage
- Down switch input (Another Quick Press and Release of switch) of less than 390 milliseconds stops massage cycle at which point the lumbar returns to its original start location.
- In/Out adjustment is possible during massage cycle. Due to the Flex-Mount of the rollers this is often used to intensify the massage effect.
- Applying an Up or Down switch input greater than 410 milliseconds during a massage cycle moves the lumbar in the desired direction until the switch input is removed or end of travel has been reached.
- ✤ Massage cycle time (full up or down) unloaded is approximately 8.5 seconds.