OPERATING INSTRUCTIONS

This product complies to the ASME standard for Portable Automotive Service Equipment
INSTALLATION INSTRUCTIONS

1. Position the strut compressor in an adequately sized & well-lit area.
2. Level the unit & anchor to the floor according to local building codes using the provided holes.
3. Connect strut compressor to shop air between 80 & 150psi.
4. Install spring hooks onto the arms of the strut compressor.
5. Store accessories or any unused hooks in the tool tray on top of the unit.

!! CAUTION !!

Before using this device, safety cage must be lowered!
Wear gloves & eye protection while operating unit!
SAFETY INSTRUCTIONS

★ Ensure that DB-8000-XL is level and secured to floor.
★ Wear gloves & eye protection.
★ Before using the device, cycle the piston to equalize air pressure & avoid an abrupt thrust.
★ Be watchful of pinch points on DB-8000-XL & strut assembly; keep extremities out of these areas to avoid injury.
★ Prior to starting the compression of any spring, it is imperative to make sure the spring is securely placed between the opposing arms.
★ If a spring begins to deflect or “bow” while under compression, STOP, relieve the pressure & reset the clamps closer together.
★ Do not place fingers or hands in, on, around, or near moving components while strut compressor is attached to air supply.
★ The DB-8000-XL features a safety valve that prevents operation if the safety cage is not lowered.
★ Never allow untrained or unauthorized personnel to operate strut compressor.
★ Fully train all employees on the proper use and care of your strut compressor.
★ *If using a Diamond Plate kit, skip to page 9.* One single finger hook and one double finger hook should be used at the top of the unit and also at the bottom.

MAINTENANCE INSTRUCTIONS

To avoid personal injury and damage to strut compressor, permit only qualified personnel to perform maintenance on strut compressor(s). If you are not completely familiar with general automotive equipment maintenance procedures, stop and contact manufacturer for instructions.

DAILY:
★ Inspect & repair or replace all loose bolts & damaged or broken components.
★ Inspect strut compressor clamp hooks for excessive wear or damage & replace as needed.
★ Inspect air system for leaks and basic function.
★ Inspect retention arms, knobs, foot pedals, and safety cage for damage and wear, replace as needed.

MONTHLY:
★ Inspect support tray & spring retention arm assemblies for damage, wear & tear, and dirt and debris in mechanism. Clean, lubricate, repair & replace components as needed.
★ Lubricate cylinder rods with marine grade grease above seals, cycle unit twice to incorporate grease.
★ Clean strut compressor & inspect for rust.

EVERY 2 YEARS:
★ Check all labels on strut compressor for legibility & make sure no labels are missing. Replace as needed.
OPERATING INSTRUCTIONS

Before operating your strut compressor, it is necessary to fully read and understand this instruction packet, & the safety instructions. It is also recommended to dry run the strut compressor before compressing a spring to become familiar with its operation and to help equalize air pressure in the system.

While avoiding any pinch points, follow instructions below to compress a spring:

***If using a Diamond Plate kit, skip to page 9***

1. Ensure supply air is connected.
2. Press the foot control pedal to actuate device & equalize air pressure.
3. Lift safety cage & insert strut assembly into the device. Put the low coil of the spring onto the lower left clamp hook.
4. Adjust lower right arm according to the diameter of the spring & turn the adjustment knob until the hook has engaged the coil and the strut assembly is straight up & down.
5. Adjust the upper hooks so that they capture the spring coils at the highest point. This allows for maximum compression.
6. Rotate handle of support plate counter clockwise ensuring that it can move freely. Lift the support plate and rotate it directly beneath the strut assembly and rotate handle clockwise to lock support plate in place.
7. Lower safety cage.
8. While holding the upper arms of the unit in place to support the strut assembly, press the foot control pedal & SLOWLY compress the spring until solid contact is made on all hooks.
9. REMOVE HANDS from working area inside the safety cage.
10. While standing beside the unit, remove any fasteners from the strut/shock in the assembly. This will allow the strut/shock to rest on the support plate.
11. While supporting the strut/shock, unlock the support plate and move it to the side.
12. Remove old strut/shock and replace with new unit & replace fasteners.
13. Press the foot control pedal to decompress spring and verify that all of the strut assembly components are in the correct orientation and position.
14. Lift the safety cage, disengage spring hooks, and remove strut assembly.

!! WARNING !!
DO NOT disable or override the built in safety measures. Serious injury, property damage, or death may result.

!! CAUTION !!
DO NOT position any body part directly above or below spring assembly to be compressed!
Wear gloves and eye protection while operating unit!
## TROUBLESHOOTING

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>PROBLEM</th>
<th>FIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arms do not move when foot pedal is pressed.</td>
<td>1. Leak in air cylinder</td>
<td>Replace cylinder</td>
</tr>
<tr>
<td></td>
<td>2. Water in cylinder</td>
<td>Drain &amp; repair cylinder, replace if needed</td>
</tr>
<tr>
<td></td>
<td>3. Restricted or kinked air line</td>
<td>Locate &amp; correct restriction</td>
</tr>
<tr>
<td></td>
<td>4. Leak in air line</td>
<td>Locate &amp; repair leak</td>
</tr>
<tr>
<td></td>
<td>5. Insufficient air supply</td>
<td>Correct supply (80-150psi, 20-30cfm)</td>
</tr>
<tr>
<td>Cylinder starts, but stalls while in motion.</td>
<td>1. Leak in air cylinder</td>
<td>Replace cylinder</td>
</tr>
<tr>
<td></td>
<td>2. Water in cylinder</td>
<td>Drain &amp; repair cylinder, replace if needed</td>
</tr>
<tr>
<td></td>
<td>3. Restricted or kinked air line</td>
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<tr>
<td>Arms move, but stop before compressing spring.</td>
<td>1. Safety cage not in position</td>
<td>Ensure cage is all the way down</td>
</tr>
<tr>
<td></td>
<td>2. Foot valve failure</td>
<td>Inspect foot valve &amp; repair/replace if needed</td>
</tr>
<tr>
<td></td>
<td>3. Insufficient air pressure</td>
<td>Increase pressure, <strong>DO NOT</strong> exceed 150psi</td>
</tr>
<tr>
<td></td>
<td>4. Improper setup</td>
<td>Straighten strut assembly</td>
</tr>
<tr>
<td></td>
<td>5. Insufficient air supply</td>
<td>Ensure clamps are place as far apart as possible</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>Arms drift instead of holding position.</td>
<td>1. Air-line leakage</td>
<td>Find and repair line leak</td>
</tr>
<tr>
<td></td>
<td>2. Cylinder leakage</td>
<td>Perform service on cylinder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Repair/replace seals</td>
</tr>
</tbody>
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<tbody>
<tr>
<td>Not able to engage clamps on spring</td>
<td>1. Spring doesn’t have enough coils</td>
<td>Remove upper clamps and replace with <strong>optional</strong> Diamond plate adapter (PN: 20-8000)</td>
</tr>
<tr>
<td></td>
<td>2. Spring length is too short</td>
<td></td>
</tr>
</tbody>
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## STRUT ASSEMBLY LIMITATIONS

The following parameters outline the most common spring dimensions that the strut compressor will accept.

- **CYLINDER STROKE** (spring compression): 9 7/8”
- **FINGER STROKE** (clamp adjustment with knob): 2 5/8”
- **MAXIMUM DISTANCE BETWEEN UPPER & LOWER CLAMPS**: 12 1/2”
- **MAXIMUM SPRING DIAMETER**: Ø11 1/2”
- **MINIMUM SPRING DIAMETER**: Ø3 1/2”
- **MAXIMUM COIL DIAMETER** (spring wire): Ø1 1/2”
- **MINIMUM DISTANCE BETWEEN SPRING COILS**: 7/8”

www.QSPONLINE.com 5
# PART NUMBER | DESCRIPTION | QTY
--- | --- | ---
1 | 8000-7 TWO FINGER CLAMP | 2
2 | 8000-13 SINGLE FINGER CLAMP | 2
3 | DB-8000-070 ADJUSTING KNOB | 4
4 | DB-7000-359 FOOT VALVE ASSEMBLY | 1
5 | 1030 QUICK DISCON. 1/4 NPT | 1
6 | 108-60 CHECK VALVE 1/4 NPT | 1
7 | 1345 1/4 NPT – 3/4-16 THD | 1
8 | 1347 BRASS T – 3X 1/4 NPT | 1
9 | 5779K147 5/32 PUSH X 1/4 NPT ELBOW | 5

# PART NUMBER | DESCRIPTION | QTY
--- | --- | ---
10 | F-1/4 X 1/4NPT L 1/4 TUBE X 1/4 NPT ELBOW | 1
11 | T-156X16 K-NYL TUBE 5/32 OD NYLON TUBE – BLK | 3FT
12 | T-250 PU BLACK TUBE 1/4 PLASTIC AIR LINE – BLK | 3FT
13 | 5779K32 5/32 UNION TEE | 3
14 | 8000-3 DIAMOND PLATE | 1
15 | 8000-2 LOCKING RING | 2
16 | 8000-30 DIAMOND PLATE STUD SPACER | 4
17 | 8000-23 PLACEMENT PIN WITH KNOB | 4
Your DB-8000-XL Strut Compressor has been thoroughly tested and is guaranteed for a period of 12 months from the date of delivery. Under the terms of this guarantee, all components which are proven to be defective within the warranty period will be repaired or replaced free of charge. Our technical service assistance is the sole authority in determining whether or not defects come under the coverage of the guarantee. The guarantee excludes all responsibility on the part of Quality Stainless Products (QSP) for direct or indirect loss or damage to persons or things deriving from incorrect operation or servicing of this product. This guarantee is limited to defects in materials, workmanship and assembly, and excludes all components subject to normal wear. Furthermore, the guarantee excludes return shipping of defective part(s) to QSP. QSP will however ship the replacement part by standard ground service at no charge.

QSP will not assume liability for damages caused by improper use of the strut compressor including using the device for something other than its intended use.

Parts Department 888-473-5378
TYPE: Strut Compressor
MODEL: DB-8000-XL

Please retain this document for reference when calling Technical Assistance.
INSTALLATION & USE OF OPTIONAL DIAMOND PLATE KIT

The optional diamond plate kit (PN: 20-8000) is used on heavy duty springs, or where the assembly is not able to be properly installed into the unit using the upper and lower claw hooks.

WHILE HOLDING THE DIAMOND PLATE (ITEM #1) IN PLACE, ALIGN OPENING IN ITEM #2 WITH BOSS ON THE SHAFT OF THE VERTICAL ADJUSTMENT ARM. LIFT ITEM #2 INTO PLACE BELOW THE DIAMOND PLATE THEN ROTATE 180° SO THAT THE OPENING NO LONGER ALIGNS WITH BOSS.

AFTER INSTALLING BOTH LOCKING RINGS, ENSURE THAT THE DIAMOND PLATE IS DRAWN TIGHTLY TO THE VERTICAL ADJUSTMENT ARMS WITH NO GAPS

Continued on next page...
INSTALLATION & USE OF OPTIONAL DIAMOND PLATE KIT (continued…)

The optional diamond plate kit (PN: 20-8000) is used on heavy duty springs, or where the assembly is not able to be properly installed into the unit using the upper and lower claw hooks.

Double check that the diamond plate is drawn tight to the upper arms using the vertical adjustment knobs.

Install a double claw hook on each of the lower two arms.

Position the strut assembly onto the lower arms using the vertical adjustment knobs to orient the strut assembly in a vertical position.

If the strut assembly has studs that do not align with a pattern in the diamond plate, install the diamond plate stud spacers over the studs on the strut assembly.

Slowly raise the strut into position with the compressor and once the top end (or stud spacers) contacts the diamond plate, verify that both lower double claw hooks are contacting the spring.

Install (4) custom placement pins to secure the top end of the assembly & prevent it from moving under compression.

Compress the strut assembly.

Position the strut support weldment (third hand) under the assembly to hold it in place.

Remove the fastener from the top of the unit and lower the strut compressor relieving the spring.

Reverse steps to reassemble.