**PRODUCT WARNINGS AND INSPECTION INSTRUCTIONS**

**NOTICE:** Any and all claims arising from the use of Johnson products are subject to the strict performance of all inspection and maintenance instructions outlined herein. All instructions apply to all products, as applicable. Check all information to all customers and users of Johnson products.

- OSHA REGULATIONS PROHIBIT TRANSPORT OF PERSONNEL ON THE LOAD OR HOOK ASSEMBLY. 1910.190-H-3-V
- Gunnebo-Johnson Products Distributors are instructed to furnish this information to all customers and users of Johnson products.
- Contact factory for provision of thread locking product (in addition to staking set-screw).
- A copy of this instruction is shipped with every Johnson Blocks product or invoice line item.

**BASIC POLICY ON REPAIR OF WORN OR DAMAGED ITEMS:**
If any reason an item does not work properly or is worn, and repair is desired, do not attempt to disassemble or repair. Return item to Tulsa Plant for inspection and estimate of repair costs. Contact plant in advance to discuss specifics, or to obtain factory authorization for field repair, if desired. If, in user’s opinion, conditions require reworking of item without returning to factory, or without obtaining factory authorization such rework or repair will be undertaken entirely at user’s risk and cost.

**LUBRICATION SCHEDULE:**

<table>
<thead>
<tr>
<th>Type of Component</th>
<th>Continuous Operation</th>
<th>Intermittent Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swivels &amp; swivel balls</td>
<td>24 hours</td>
<td>14 days</td>
</tr>
<tr>
<td>Bronze bushed blocks &amp; sheaves</td>
<td>8 hours</td>
<td>14 days</td>
</tr>
<tr>
<td>Roller bearing blocks &amp; sheaves</td>
<td>24 hours</td>
<td>14 days</td>
</tr>
</tbody>
</table>

**TYPE LUBRICANT:** Either sodium or lithium base greases may be employed. Soda soap base greases are more fibrous and cohesive. Lithium soap base greases are excellent especially where excessive moisture is present.

**REGULAR AND FREQUENT INSPECTION** of all wire rope accessories is a must for safety. For Johnson Blocks products, all points listed below should be carefully observed, plus any others indicated by good field practice. Continuous surveillance and alertness is required under working conditions.

**PERMANENT DEFORMATION (STRETCHING)** on any part is a clear indication of overload. Part should be taken out of service immediately and replaced.

**SWIVEL END PLAY (OR GAP)** of more than 1/16” along the axis of a swivel is a danger signal. Remove from use immediately.

**CHECK BLOCKS TO SEE IF SIDE PLATES ARE SPREADING.** This is a sure sign of overload. Remove from service for repair.

**ANY LOOSENESS IN PLATES** on blocks with tie bolts or stress pins is a sign of possible loose retaining nuts. Remove cheek weights (if any) and follow instructions in section on “Anti-loosening” provisions.

**SHEAVE ALIGNMENT CHECK:** Uneven groove or flange wear is evidence of sheave misalignment. Check for wobbly or loose sheaves - this means bearing wear.

**SHEAVE GROOVE WEAR:** Check for striation or corrugations in sheave groove, caused by rope wear. These can be costly on your rope life. If seriously worn, sheave should be replaced.

**LOAD HOOKS OR FITTINGS SHOULD BE INSPECTED FREQUENTLY:** Any damaged hook latch should be replaced immediately. Inability to properly pin the Johnson J-latch into its locked position could indicate distortion or permanent deformation in the hook opening. If this condition should occur remove the hook from service immediately and contact the factory. Hooks or load fittings may be checked by magnafluxing, ultrasonic test or X-ray by a qualified source.

**ANY HOOK OR FITTING** with a crack, gouge, or distortion should be removed from service immediately. If any of these conditions should occur contact the factory for repair or replacement criteria.

**HOOK AND NUT THREADS** should be checked regularly for corrosion or deformation. Severe duty or corrosive environments may dictate a higher inspection frequency.

**HOOK NUT GALLING** can occur if during disassembly foreign matter has gotten into threads. A galled nut cannot be forced. Please contact Gunnebo-Johnson factory if this condition should occur. Do not weld on a Gunnebo-Johnson hook or hook nut without prior factory authorization and instruction.

**ANTI-LOOSENING PROVISIONS ON ALL NUTS AN SET SCREWS** are vital.

- For high-vibration applications, including pile driving (see section on Blocks, Check Weights).
- Hook nut set-screws are staked in place at factory. Check for signs of any loosening. Any, re-tighten and re-stake thoroughly. If in doubt, contact factory for provision of thread locking product (in addition to staking set-screw).

**CHECK ALL NUTS FREQUENTLY** for any signs of backing off due to vibration or other causes. If necessary, re-tighten any loosened nuts, following instructions below:

- If center pin retaining nut, see that section of this instruction.
- If upper tie bolt nut, retighten firmly and re-stake thoroughly.
- If lower tie bolt or stress pin nut, retighten nut firmly and replace.
- If set by held screw, re-tighten set screw to re-establish jamming action against threads.

**NOTE:** if center pin nut appears loose, or has backed off, follow tightening instructions in section on center pin retaining nuts. Then re-tighten set-screw in nuts as above.

- Staking of all block side nuts not having set-screws (tie bolt nuts, stress pins, hook trunnion pins, center pin nuts, etc.) must be checked to see if still in original orientation. If nut has backed off, re-tighten and re-stake thoroughly, following instructions on center pin retaining nuts if nut is of this type. If in doubt about integrity of re-staking, tack weld nut as follows:
  - (a) if center pin nut, weld nuts on both ends to side plate.
  - (b) if trunnion pin or stress pin nut, weld nut to pin.
- Spirolox retaining rings where furnished on ends of block center pins and hook trunnion pins, must be in place. End of pin is grooved for Spirolox (rather than threaded for nut) and Spirolox is damaged or missing, do not resume work. Contact factory for replacement Spirolox.
- Cotter pins where furnished must remain in place. Replace any damaged or missing cotter pins before resuming work.
- Set screws on swivel barrels are staked in place at factory. Check for any signs of backing off. If any, re-tighten and re-stake thoroughly, following instructions on center pin retaining nuts if nut is of this type. If in doubt about integrity of re-staking, tack weld nut as follows:
  - (a) if center pin nut, weld nuts on both ends to side plate.
  - (b) if trunnion pin or stress pin nut, weld nut to pin.

**CENTER PIN RETAINING NUTS** over-tightening may cause sheave bearing damage. Do not after factory setting without factory authorization. If emergency conditions require re-working of block without authorization from factory, the procedures below may be of assistance but will be undertaken entirely at user’s risk and cost.

- If upper trunnion pin nut, retighten nut firmly and re-stake thoroughly. If in doubt, contact factory for replacement Spirolox.
- Cotter pins where furnished must remain in place. Replace any damaged or missing cotter pins before resuming work.
- Set screws on swivel barrels are staked in place at factory. Check for any signs of backing off. If any, re-tighten and re-stake thoroughly. If in doubt, replace swivel and return to factory for check.
- Cotter weight cap screws. Should always be tightened down, and locked either with (a) self-locking jam nut inside of side plate, or (b) lock-washer under head of cap screw (inside cheek weight counter-sink).
- Spirolox retaining rings where furnished must remain in place. Replace any damaged or missing cotter pins before resuming work.
- Set screws on swivel barrels are staked in place at factory. Check for any signs of backing off. If any, re-tighten and re-stake thoroughly. If in doubt, contact factory for replacement Spirolox.

**CENTER PIN RETAINING NUTS** over-tightening may cause sheave bearing damage. Do not after factory setting without factory authorization. If emergency conditions require reworking of block without authorization from factory, the procedures below may be of assistance but will be undertaken entirely at user’s risk and cost.

- Consult block nameplate to determine sheave bearing type:
  - B or BB bushing
  - G or GBB graphite
  - T tapered roller bearing
  - S sintered bronze bushing
- If tapered roller bearing, tighten center pin retaining nut(s) until side play is eliminated from all sheaves, and nut(s) are tightened firmly.
- For all other sheave bearing types, running clearance of 1/32” at sheave hub is required. Approximately correct running clearance may be established as follows:
  - (1) tighten center pin retaining nut(s) until any one sheave cannot be rotated by hand.
  - (2) then back off on nut minimum amount to permit hand rotation of all sheaves.

Continued on page 2.

Form B-045-10/99
P/N 51694
JOHNSON J-LATCH

Johnson's exclusive J-Latch is a uniquely engineered hook latch system providing outstanding flexibility and durability. Its heavy-duty design incorporates a steel beam that positively engages a special recessed area in the hook tip. The removable two-position pin allows the J-Latch to function either as a locked bar or as an automatic spring latch. The J-Latch meets OSHA requirements and is standard equipment on Johnson crane blocks through 165 tons, all Johnson overhaul balls and all swivels with hooks. The J-Latch is offered as an option on Johnson snatch blocks.

All Johnson block hooks with a J-Latch notch must be fitted with only a J-Latch to ensure proper fit. Inability to properly pin the Johnson J-Latch into its locked position could indicate distortion or permanent deformation in the hook opening. If this condition should occur remove the hook from service immediately and contact the factory.

|ジョノン J-LATCH|

ジョンソンの専用のJ-Latchは、独特に設計されたルックロックドシステムで、使いやすさと機械性を両立しています。重厚なデザインにより、特殊な穴内に鋼製のアームを正しく嵌め込むことが可能となります。2ポジションのピンを取り除くことにより、自動スプリングロックやロックバーサムに機能が変更可能です。J-Latchは、OSHAの基準に準拠しており、165トンまでのジョンソンクリーンブロック、オーバーハイユールボール、スウィールのホックに標準装備されています。J-Latchは、ジョンソンスナッチブロックでもオプションとして提供されます。

すべてのジョンソンブロックのルックにJ-Latchのスロットがある場合、J-Latchのみを装備することが必要です。ピンの挿入が適切でない場合、ホックの開口部に歪みや永久変形を示すことがあります。この状態は、すぐにホックをサービスから外し、製造元に連絡することを推奨します。

NON J-LATCH KITS

The spring latch and Crosby G-5066 Flapper latch (shown below) are available for non J-Latch hooks. Latch selection should be made only after careful consideration of the hook rigging arrangement and reading of the HOOK LATCH CAUTION. Consult the following tables to determine hook configuration, latch selection, and kit number.

SPRING HOOK LATCH KITS

|JOHNSON BLOCKS |

ジョンソンブロックの選択肢として、スプリングロックとCrosby G-5066フラーは非J-Latchホックに利用できます。選択肢の指定は、ホックのシャッキングアレンジメントとHOOK LATCH CAUTIONを読み、以下の表を確認することにより行うことが必要です。

SPRING HOOK LATCH KITS

Continued from page 1.

Following instructions on anti-loosening provisions of nuts and set-screws.

(1) Consult factory for hook nut thread locking product. During any vibration or shock load application, Johnson Blocks recommends a block, hook or ball substantially stronger than the "dead weight" load to allow for actual shock load values. Allowance for shock load is the responsibility of the user.
## HOOK LATCH CAUTION

Hook latches are to be used as retention devices to retain loose rigging under slack conditions. They are not intended to be anti-fouling devices, and caution must be exercised to prevent a latch from supporting any portion of a load. Periodic inspection of the latch must be made to ensure it's proper operating condition. If damage to the latch occurs, the latch must be replaced immediately.

All latches are insignificant in strength compared to the actual hook. Foulings that result in temporary support of a load may occur without proper attention. Such foulings are extremely dangerous, and must be avoided by insuring that the rigging load is always properly seated in the hook and never in a position to foul the latch.

Latches can be held open or damaged by use of rigging too large for the hook saddle.

Latch becomes ineffective when wired open, and can be damaged when forced from below or from the side.

No claim is made that hook latches will consistently reseat a fouled sling or fitting back into the hook. Latches are not anti-fouling devices.

Johnson offers a screw-pin or safety anchor shackle, an economical and "completely closed" lifting device, for conditions when rigging fouling can occur. Such shackles, mounted in swivel tees may be ordered to replace shank hooks in Johnson Hook Blocks. Swivel Hooks and Type 3 Overhaul Balls. They are also available on a custom basis for top swivel Overhaul Ball Type 4.

### BLOCKS, CHEEK WEIGHTS & OVERHAUL BALLS IN HIGH-VIBRATION OR SHARP BLOW APPLICATION

Johnson Blocks standard cheek weights and overhaul balls are made of cast iron, and are not designed as load bearing accessories. They are intended to provide downfall weight only, and are not designed to withstand high vibration or sharp blows.

Side nuts on Johnson Blocks are thoroughly staked to their bolts and pins, but are not designed to withstand high vibration applications. There may be a danger of their backing off.

In the event that high vibration applications such as pile driving or pulling, scrap handling or where a block may receive sharp blows, the following procedures must be followed:

1. Remove the standard cast iron cheek weights and replace them with pipe spacers mounted on the tie bolts.
2. If more weight is required, steel-plate weights are available. After re-assembling the block, the following welding steps must be followed:
   - (1) Weld all tie bolt (cross bolt) nuts to tie bolt ends.
   - (2) Tack weld center pin nuts, if applicable, to block to the side plates of the block (do not weld nuts to center pin).
   - (3) Weld hook housing (trunnion) end nuts, if any are outside of side plates, to the end of the housing pin (do not weld trunnion nuts to side plates).
3. Consult factory for hook nut thread locking product.
4. During any vibration or shock load application, Johnson Blocks recommends a block, hook or ball substantially stronger than the "dead weight" load to allow for actual shock load values. The size of allowance for shock load is the responsibility of the user.
**OPEN WEDGE SOCKET CAUTIONS**

Strength of wire rope is less than the strength of the wedge socket. 
WILL of the wire rope is sole responsibility of the customer and/or 
user.

**Do not exceed working loads stated by wire rope manufacturer.**

Make allowance for the wedge socket grip efficiency. The grip 
efficiency can reduce wire rope breaking strength by up to 20%.

After installation of the wire rope and wedge, seat the wedge by 
anchoring the wedge socket and applying the maximum allowable line 
pull to the wire rope live end.

A sudden jolt or impact may unseat the wedge. Therefore, the dead 
or short end of the wire rope shall be clipped with a U-bolt or 
otherwise made secure.

Wire rope clips used in conjunction with wedge sockets shall be 
attached only to the unloaded dead end of the wire rope. When a wire 
rope clip or other device is attached to the dead end of the wire rope, 
the spacing between the wedge socket and other device shall be in 
accordance with Gunnebo-Johnson requirements. Where it is 
desirable to restrain the dead end of the wire rope, it is allowable to 
have a loop, keeper, or other device around the live end of the wire 
rope provided it neither restrains nor constrains the live end. Check 
frequently to re-tighten or re-position wire rope clips as necessary.

Each wedge socket body adapts to two or more wire rope sizes by 
using a specified wedge for each wire rope size. Use of any wedge 
other than the specified wedge will result in an improper and unsafe 
grip.

**NOTE:** Refer to the Gunnebo-Johnson General Catalog for complete safety 
recommendations, product specifications, working load limits, ratings and sling 
configurations. For additional information or questions, call: 
1-800-331-5460

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**LIMITED WARRANTY**

**Notice to Customer:**
Please read carefully. These terms and conditions contain 
declarations of warranties and strict limitation of liability and 
remedies.

**Manufacturer warrants to the original wholesale or O.E.M.** 
purchaser and/or to the original retail purchaser only that the 
goods, equipment or merchandise described herein will be free from 
defects in material and workmanship for a period of twelve (12) months from date of 
manufacturer’s shipment. Effective with shipments after 1/1/1994 all standard J-Blocks have a (3) year warranty 
against defects in material and workmanship. Should the goods, equipment or merchandise prove defective within such 
(thirty six (36) months J-Blocks) twelve (12) month period, Gunnebo-Johnson Corporation 
will, at its option, repair or replace the same when returned to its plant, charges prepaid, 
provided that Gunnebo-Johnson Corporation is given written 
notice of such claimed defect promptly and is submitted 
freight prepaid, with such twelve (12) month period for 
examination. Repair and/or replacement at the option of 
Gunnebo-Johnson Corporation shall be the sole and exclusive 
remedy of the buyer for breach of the above express warranty.

Except as expressly set forth herein, Gunnebo-Johnson 
Corporation makes no warranty either express or implied, 
that the goods, equipment or merchandise shall be 
merchantable or fit for any particular purpose or use, nor does it make any other warranty, express, implied or 
statutory. Gunnebo-Johnson Corporation shall have no 
liability for incidental, consequential, special, general or other 
damages arising from the use of its product including, but not 
limited to, failure of the goods, equipment, or merchandise to 
perform any general or particular function or purpose whether 
such damage or failure is due to mistake or deficiency in any 
design, formula, plan specifications, advertising material, 
printed instructions, defective materials, defective or improper 
assembly or otherwise, the sole liability of Gunnebo-Johnson 
Corporation being to repair or replace, at its option, defects in 
material or workmanship as stated in the preceding paragraph.

Gunnebo-Johnson Corporation shall not have any 
responsibility or liability for damage in shipment, during 
assembly, installation, erection, or that arising from accidents, 
abuse or improper operation of the goods, equipment or 
merchandise.

These terms and conditions shall supersede and, in case of 
conflict, shall have control over any other terms or provisions 
in any oral or written purchase order to other document 
pertaining to the goods, equipment or merchandise described 
herein, including any negotiations between parties or as 
suggested by any product catalog or descriptive literature. Nor 
does any distributor, dealer franchise, independent sales 
representative or other person, firm or corporation have 
authority to assume any other obligations or liability on behalf 
of Gunnebo-Johnson Corporation, or to waive, modify or 
change these terms and conditions.

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**Engineering, product safety, inspection and maintenance** 
information is included in the General Catalog and is 
available upon request free of charge. We agree, in 
performing the work required by any purchase order, not to 
discriminate against any worker because of race, creed, color, 
sex or national origin.

In the event of stoppage or partial stoppage of our plants 
or shipments of the items ordered by the customer due to 
causes beyond our control (such as, but not limited to: 
strikes, differences with workmen, fires, floods, accidents, 
sarcity of labor, materials, power, fuel, or transportation 
difficulties, war - whether in this country or abroad, 
government regulations, orders or proclamations, laws, acts of 
public enemies, mobs or rioters, (or acts of God) deliveries 
hereunder may be suspended or partially suspended, during 
the continuance of such interruption.

By acceptance of our sales order acknowledgement copy 
you accept all the terms and provisions heretofore set 
forth and agree that the delivery of the merchandise 
described in said order shall be subject to no other terms and 
conditions whatsoever unless additional terms are made the 
subject of negotiation and are covered by separate written 
acceptance by us.

Receipt of the acknowledgement by you without written 
objection to us within thirty days from the date or receipt 
of the merchandise described in said order shall constitute an acceptance by you of the terms hereof and 
an agreement that the delivery of the merchandise described in said order is subject to no other terms than those stated in 
this acceptance.

The provisions of this instrument shall be construed in 
accordance with, and the rights and liabilities of both the 
manufacturer and purchaser shall be controlled by, the laws of 
the state of Oklahoma, U.S.A. in force as of the date of 
shipment by the manufacturer.