



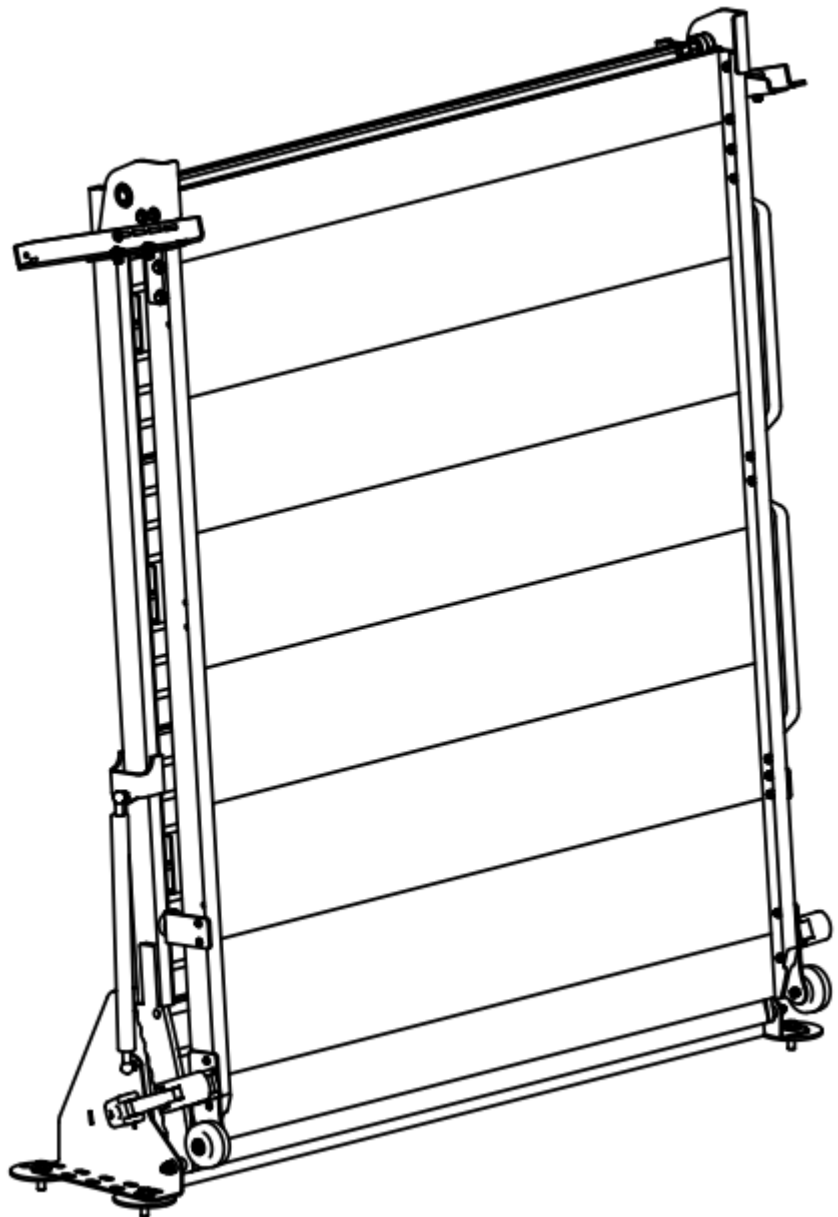
**Cargo
Management**

Link Mfg. Ltd.
223 15th St. N.E.
Sioux Center, IA USA
51250-2120
www.linkmfg.com

**QUESTIONS?
CALL CUSTOMER
SERVICE
1-800-222-6283**

INSTALLATION/OPERATION INSTRUCTIONS

**LB20 51 x 126
7842A210**



IMPORTANT: IT IS IMPORTANT THAT THE ENTIRE INSTALLATION INSTRUCTIONS BE READ THOROUGHLY BEFORE PROCEEDING WITH THE INSTALLATION.






1. INTRODUCTION

Thank you for choosing a Link Manufacturing LB20 Ramp. We want to help you get the best results from the ramp and to operate it safely. This manual contains information to assist you with the installation, operation, and maintenance of the LB20 Ramp. This instruction is intended solely for use with this product.

All information in this instruction is based on the latest information available at the time of printing. Link Manufacturing reserves the right to change its products or manuals at any time without notice. Contact Link Manufacturing at (800) 248-3057 for information on recent changes to products.


Damaged components should be returned to Link with a pre-arranged Returned Materials Authorization (RMA) number through the Customer Service Department. The damaged component may then be replaced if in compliance with warranty conditions.

2. SAFETY SYMBOLS, TORQUE SYMBOL, and NOTES

| | |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|  DANGER | DANGER indicates a hazardous situation which if not avoided, will result in death or serious injury. |
|  WARNING | WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. |
|  CAUTION | CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. |
|  NOTICE | NOTICE indicates a potentially hazardous situation which, if not avoided, may result in property damage. |
|  TORQUE | TORQUE indicates named fasteners are to be tightened to a specified torque value. |
| NOTE: | A Note provides information or suggestions that help you correctly perform a task. |

3. SAFE WORKING PRACTICES

 **CAUTION** When handling parts, wear appropriate gloves, eyeglasses, ear protection, and other safety equipment.

 **CAUTION** Proper tightening of fasteners is important to the performance and safety of the ramp. Follow all torque specifications throughout the instructions.

3.1

WARNING

Link products must be installed by a trained technician when being placed into an Electric Vehicle (EV). Electric Vehicles have higher voltage batteries and cables, and drilling into Electric Vehicles may cause serious bodily harm and possible death.

Note: Link is not responsible for optional configurations or equipment that restrict the installation of the product in any way. Consult OEM body builder guides for additional installation guidelines.

3.2

CAUTION

- The operation of the LB20 Ramp involves moving parts.
- During the course of travel pinch points may exist between components.
- Keep hands and fingers clear of moving components during operation.

3.3

CAUTION

- Practice safe lifting procedures
- The ramp weldments are heavy and can cause injury if lifted improperly or dropped. Consider size, shape, and weight of objects being moved
- Obtain help or the assistance of a crane when lifting heavy assemblies. Make certain the path of travel is clear.

4. INSTALLATION

⚠ CAUTION

- Refer to the OEM Body Builder Guide books for restrictions on drilling through the vehicle floor.

NOTE: The installation of the LB20 will vary depending on the vehicle model and configuration. Due to variables in vehicles, the fit of the LB20 should be evaluated before beginning the installation.

4.1 Ramp Installation

1. Park the vehicle on a flat, level surface and engage the parking brake.
2. Remove the packaging from the ramp and remove it from the shipping pallet.
3. Use a forklift or assistance to position the ramp in the rear of the vehicle.
4. Confirm clearances between the ramp and the van components. The ramp should be placed as close to the rear door as possible while insuring proper door closure and clearance. (See Fig. 1)

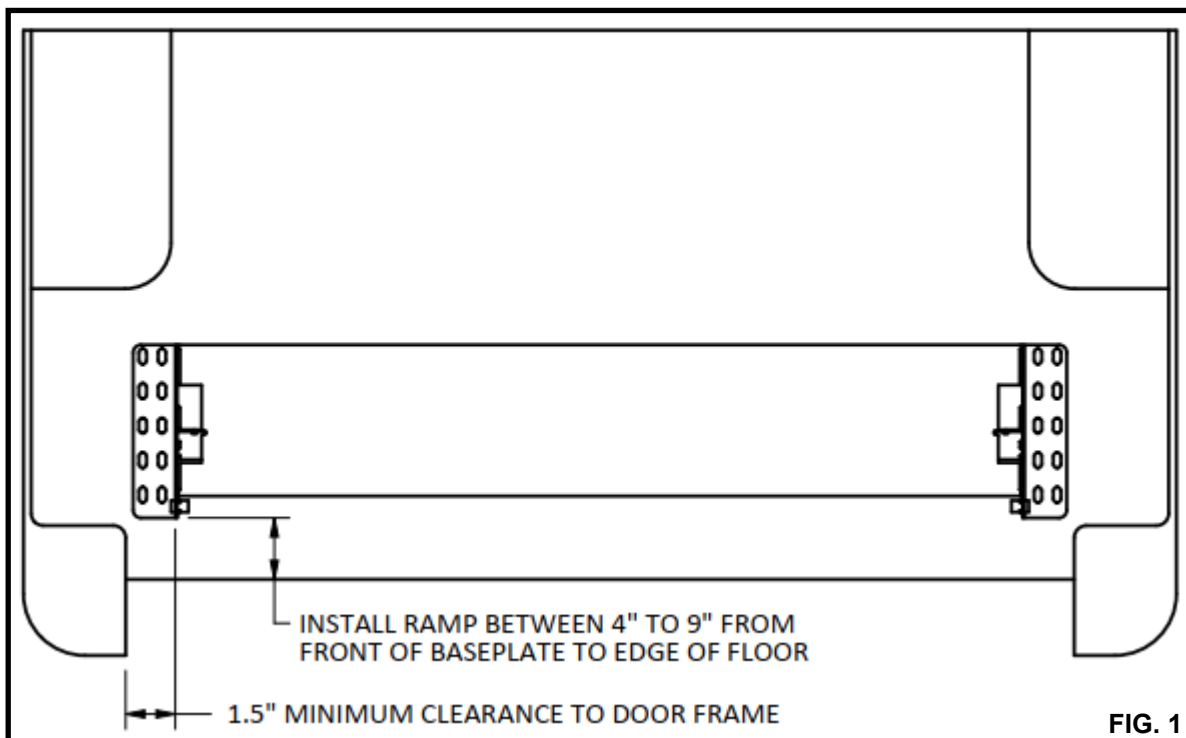
NOTE: Do not position the ramp too far into the vehicle or the ramp will not deploy properly.

NOTE: The ramp may block access to the spare tire. A hole can be drilled in the baseplate to maintain access to the spare tire

5. Mark the (4) slots to be used for mounting the ramp. Space out the bolts across the mount pattern.

NOTE: Check under the van to verify that the holes will be accessible and will not damage important van components before drilling.

6. Drill (4) 29/64" holes. Use etching primer on the raw surfaces of the holes.
7. Bolt the ramp to the van using the supplied 7/16" x 1 1/2" bolts and hardware.
8. Confirm smooth operation and clearances.



4. INSTALLATION –Continued

4.2 Leg Height Adjustment

NOTE: The ramp support legs need to be installed at the correct height to achieve the rated capacity. Failure to set the legs to the correct height may cause damage to the ramp components.

1. Park the vehicle on a flat, level surface and engage the parking brake.
2. Deploy the ramp out of the vehicle.
3. Remove the (3) 1/4" bolts holding the leg to the leg mount (See Fig. 2). Repeat on the opposite side of the ramp.
4. Lower the leg to the ground.
5. Raise the leg to the closest mount hole and reattach it to the leg mount using the (3) 1/4' bolts.
6. Verify that the legs are contacting the ground when the ramp is loaded. Lower the legs down one position if they are not contacting the ground.

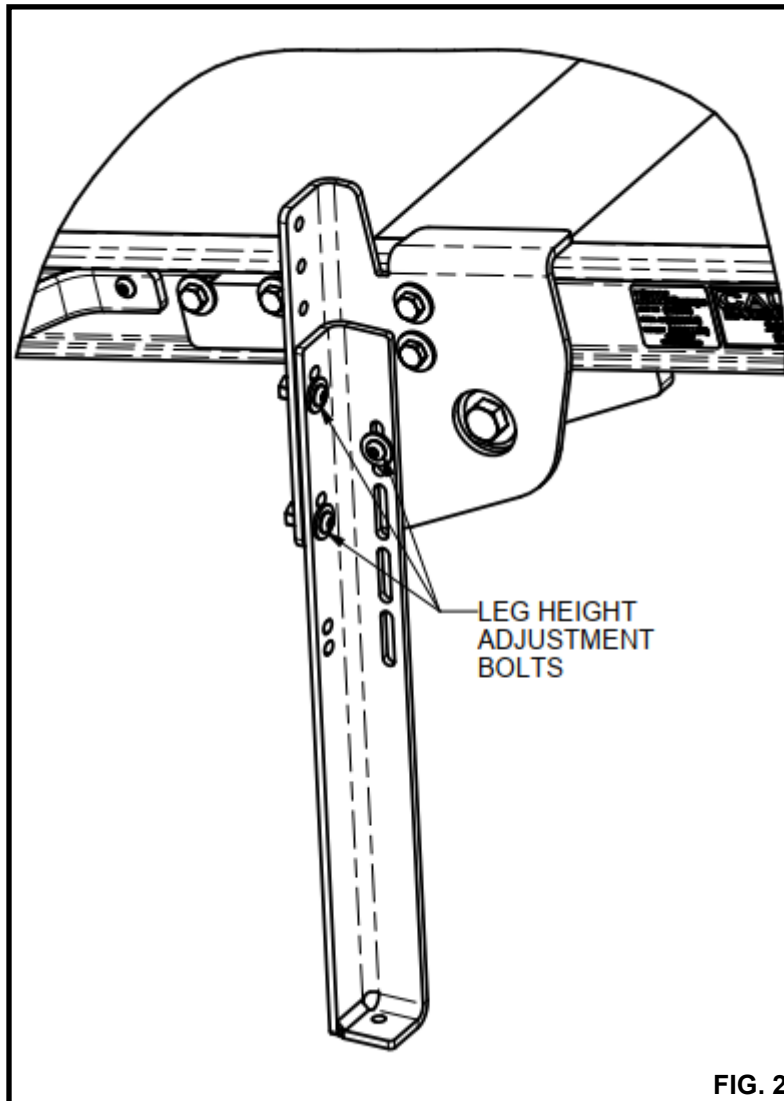


FIG. 2

5. OPERATION GUIDELINES

- 5.1 In order for this ramp to operate properly, it must operate in the parameters specified by Link.
- 5.2 No alterations of any Link ramp component is permitted without proper authorization from qualified Link personnel.

6. OPERATION

WARNING

- Make certain the vehicle is in park and the parking brake is engaged before loading / unloading the vehicle.
- Vehicle movement during loading / unloading could cause operator injury or death.

WARNING

- Loading beyond the capacity may result in equipment damage or failure that may result in severe injury or death.

CAUTION

- Do not use a ratchet strap to secure the ramp to the vehicle as it can cause damage to the baseplate and gas springs.
- If a strap is desired, use Link strap kit part number 78591019.

6.1 Ramp Operation

1. With the vehicle in park and the parking brake secured, open the rear door of the vehicle.
2. Release the draw latches on either side of the vehicle.
3. Fold the ramp out of the rear of the vehicle.

CAUTION

- Park the vehicle in a level, flat area, and apply the parking brake before performing any maintenance.

7. MAINTENANCE

The LB20 is designed to last for many years without any major maintenance. Periodically, check the following items:

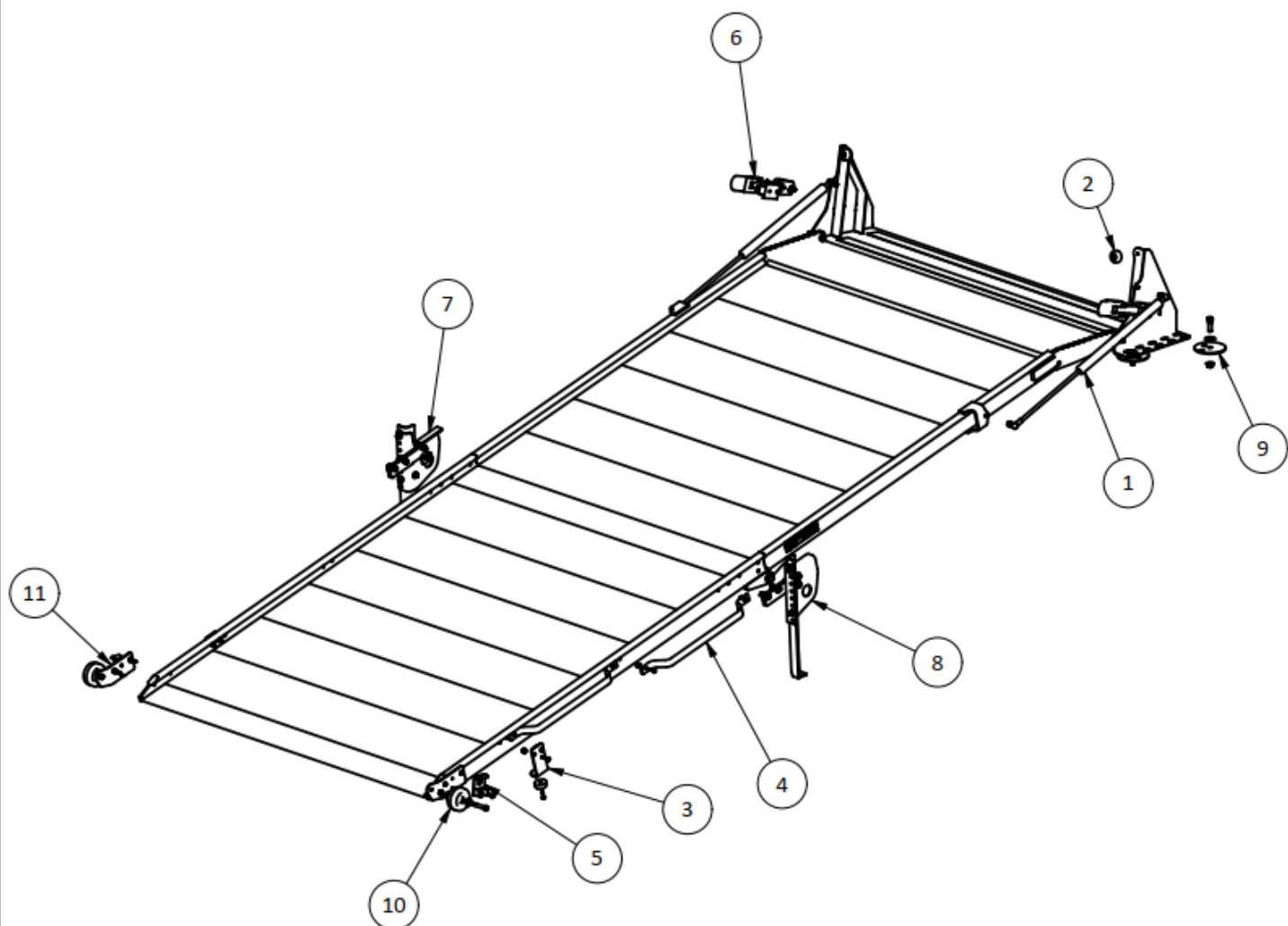
Each Time the Ramp is Used:

- Listen for unusual noises and watch to ensure proper movement of the ramp. If there is a problem, correct it before continuing to use the system.

Annually:

- Check tightness of all fasteners. (Refer to Torque Table below)
- Visually inspect for cracks or damage at all pivots on the framework and replace if necessary.

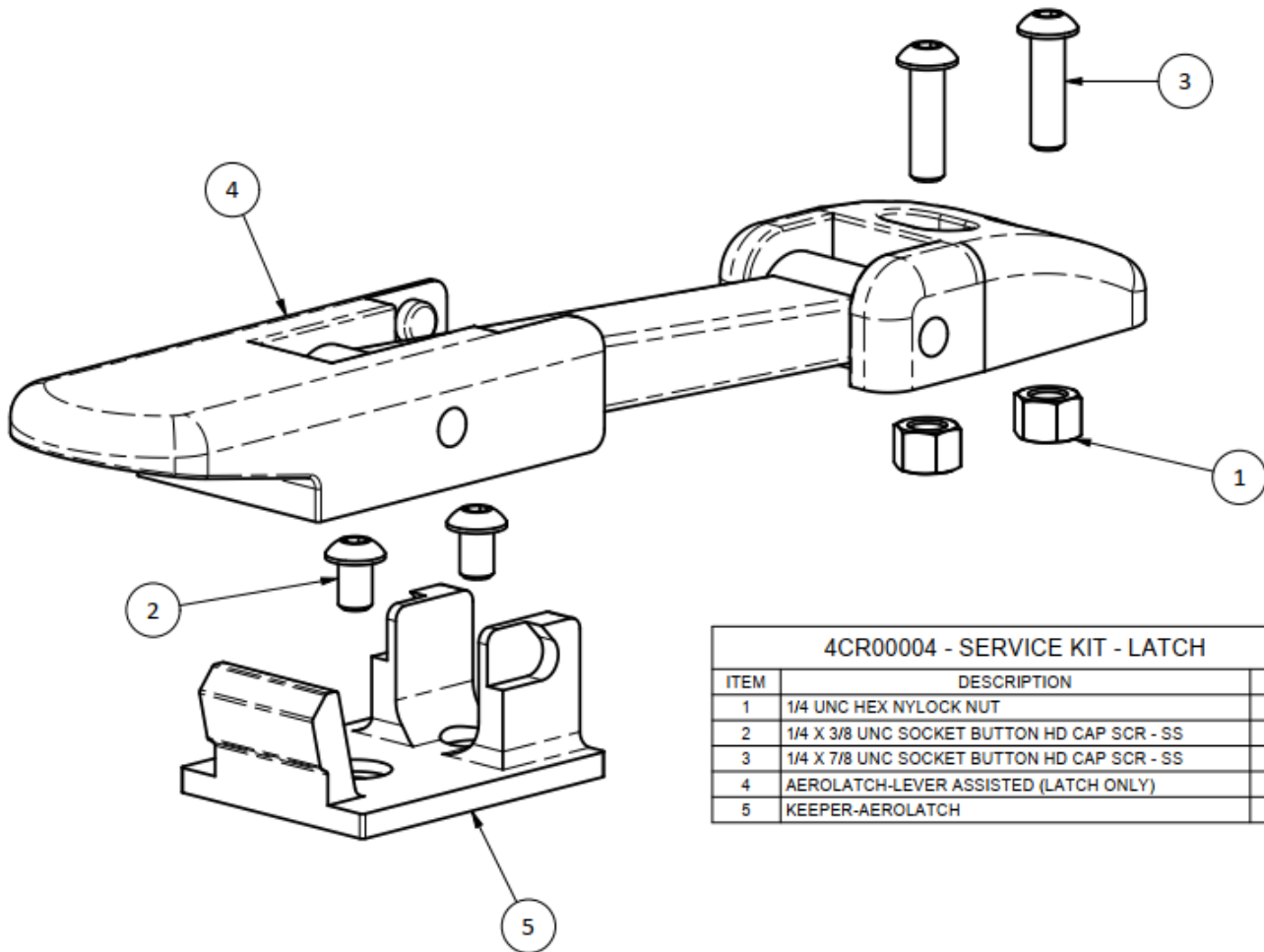
| TORQUE TABLE | |
|---------------|---------------|
| FASTENER | TORQUE |
| 1/4-UNC NUTS | 5-8 FT-LBS |
| 5/16-UNC NUTS | 10-15 FT-LBS |
| 3/8-UNC NUTS | 20-30 FT-LBS |
| 7/16-UNC NUTS | 40-50 FT -LBS |
| 1/2-UNC NUTS | 55-75 FT-LBS |



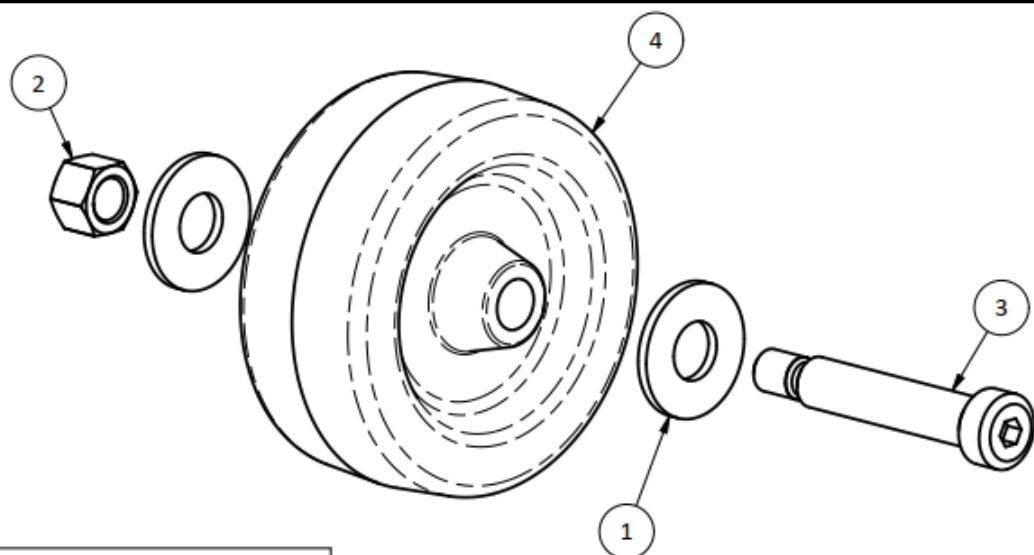
| ITEM | PART NUMBER | DESCRIPTION |
|------|-------------|----------------------------------|
| 1 | 4CR00017 | SERVICE KIT - 250LBS PULL SPRING |
| 2 | 4CR00011 | SERVICE KIT - BUMPER |
| 3 | 4CR00009 | SERVICE KIT - BUMPER MOUNT |
| 4 | 4CR00007 | SERVICE KIT - HANDLE |
| 5 | 4CR00014 | SERVICE KIT - KEEPER LATCH PLATE |
| 6 | 4CR00004 | SERVICE KIT - LATCH |
| 7 | 4CR00018 | SERVICE KIT - LB20 LEFT LEG |
| 8 | 4CR00019 | SERVICE KIT - LB20 RIGHT LEG |
| 9 | 4CR00016 | SERVICE KIT - MOUNT FASTENERS |
| 10 | 4CR00005 | SERVICE KIT - WHEEL |
| 11 | 4CR00006 | SERVICE KIT - WHEEL MOUNT |

SERVICE ITEMS FOR LB20 RAMP

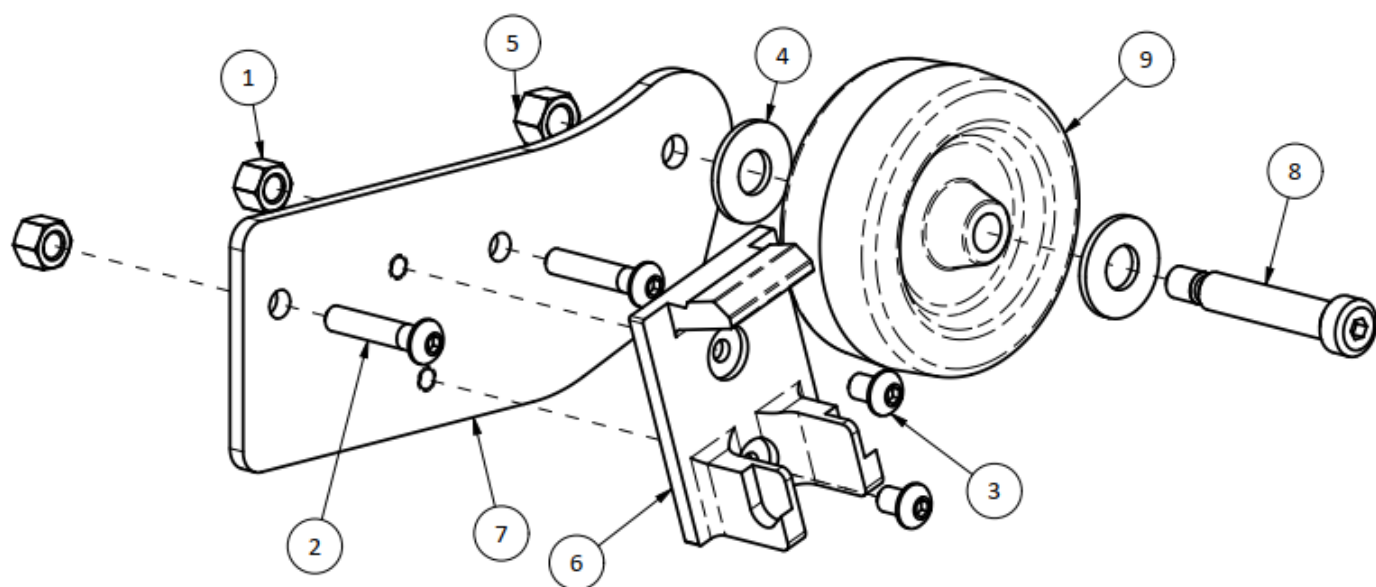
| ITEM NUMBER | DESCRIPTION |
|-------------|----------------------------------|
| 4CR00004 | SERVICE KIT - LATCH |
| 4CR00005 | SERVICE KIT - WHEEL |
| 4CR00006 | SERVICE KIT - WHEEL MOUNT |
| 4CR00007 | SERVICE KIT - HANDLE |
| 4CR00009 | SERVICE KIT - BUMPER MOUNT |
| 4CR00011 | SERVICE KIT - BUMPER |
| 4CR00014 | SERVICE KIT - KEEPER LATCH PLATE |
| 4CR00016 | SERVICE KIT - MOUNT FASTENERS |
| 4CR00017 | SERVICE KIT - 250LBS PULL SPRING |
| 4CR00018 | SERVICE KIT - LB20 LEFT LEG |
| 4CR00019 | SERVICE KIT - LB20 RIGHT LEG |



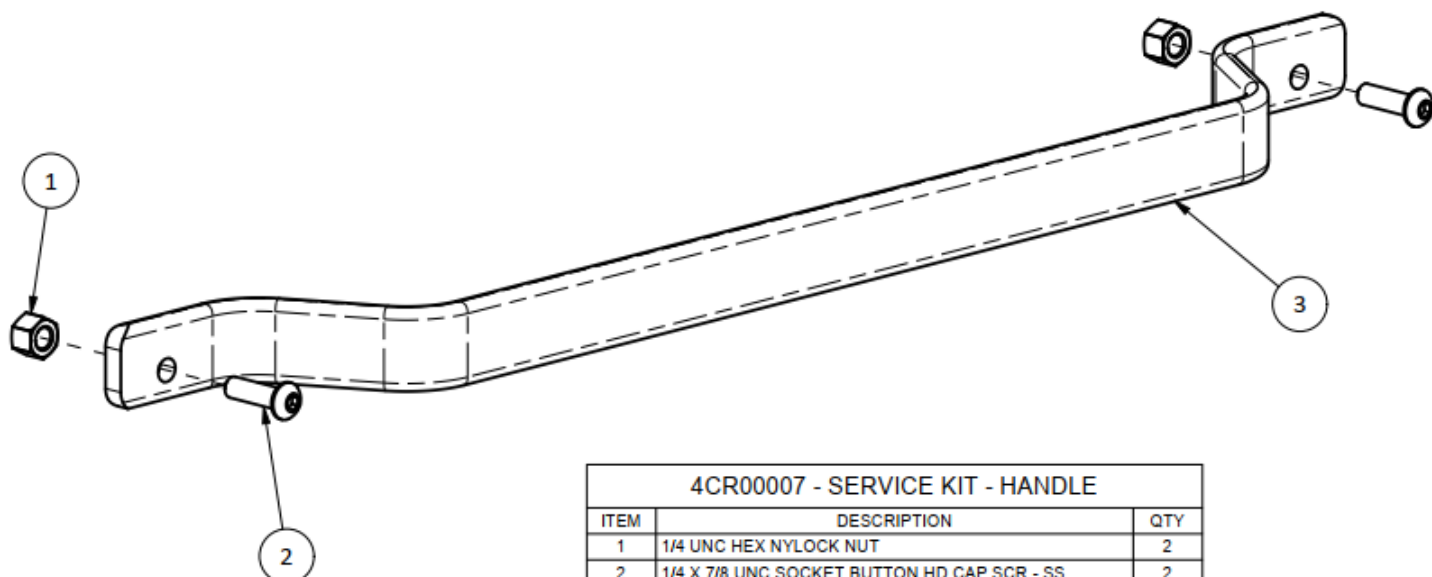
| 4CR00004 - SERVICE KIT - LATCH | | |
|--------------------------------|---------------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 UNC HEX NYLOCK NUT | 2 |
| 2 | 1/4 X 3/8 UNC SOCKET BUTTON HD CAP SCR - SS | 2 |
| 3 | 1/4 X 7/8 UNC SOCKET BUTTON HD CAP SCR - SS | 2 |
| 4 | AEROLATCH-LEVER ASSISTED (LATCH ONLY) | 1 |
| 5 | KEEPER-AEROLATCH | 1 |



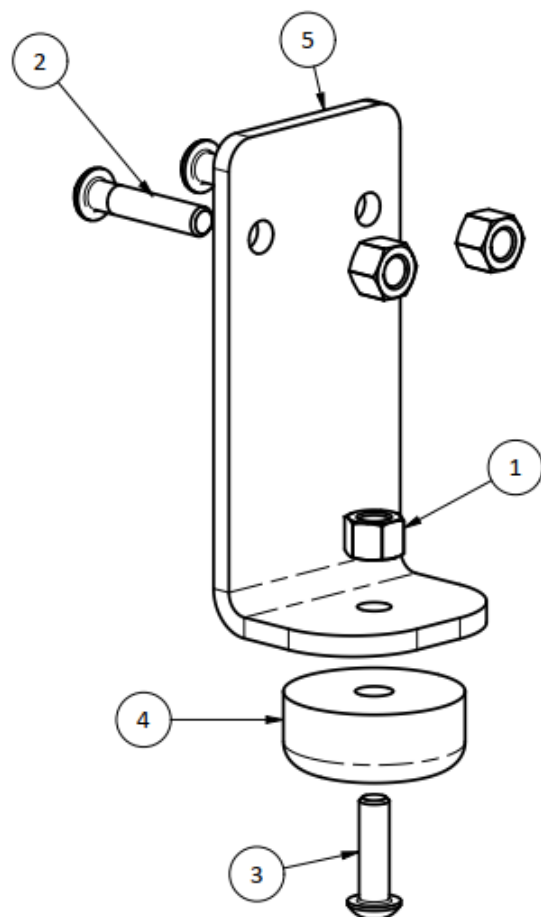
| 4CR00005 - SERVICE KIT - WHEEL | | |
|--------------------------------|-------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 3/8 TYPE A PLAIN WASHER | 2 |
| 2 | 5/16 UNC HEX NYLOCK NUT | 1 |
| 3 | SHSCS-.375X1.750 | 1 |
| 4 | WHEEL-RAMP | 1 |



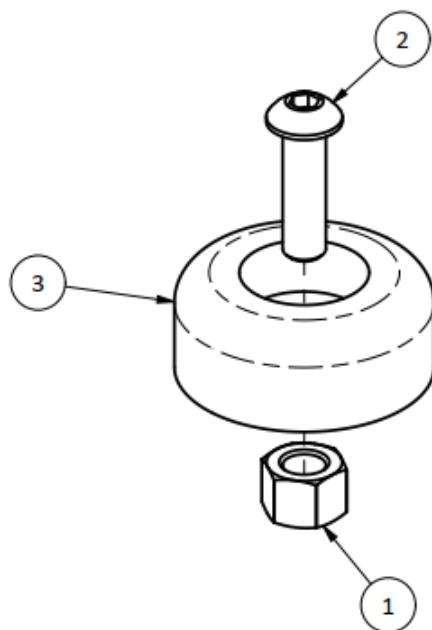
| 4CR00006 - SERVICE KIT - WHEEL MOUNT | | |
|--------------------------------------|-----------------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 UNC HEX NYLOCK NUT | 2 |
| 2 | 1/4 X 1 1/4 UNC SOCKET BUTTON HD CAP SCR - SS | 2 |
| 3 | 1/4 X 3/8 UNC SOCKET BUTTON HD CAP SCR - SS | 2 |
| 4 | 3/8 TYPE A PLAIN WASHER | 2 |
| 5 | 5/16 UNC HEX NYLOCK NUT | 1 |
| 6 | KEEPER-AEROLATCH | 1 |
| 7 | MOUNT-WHEEL | 1 |
| 8 | SHSCS-.375X1.750 | 1 |
| 9 | WHEEL-RAMP | 1 |



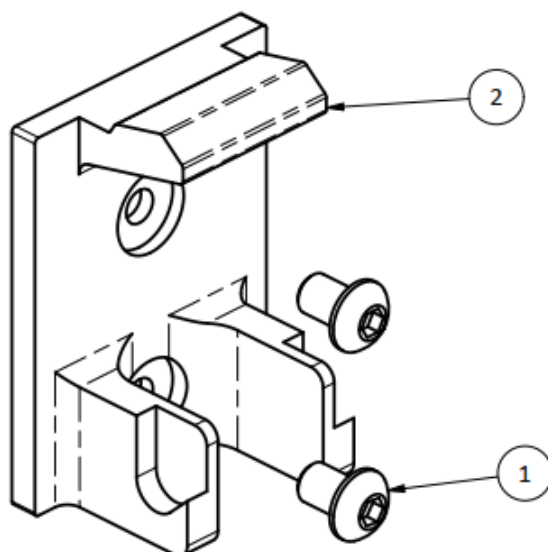
| 4CR00007 - SERVICE KIT - HANDLE | | |
|---------------------------------|---------------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 UNC HEX NYLOCK NUT | 2 |
| 2 | 1/4 X 7/8 UNC SOCKET BUTTON HD CAP SCR - SS | 2 |
| 3 | HANDLE-LB10 | 1 |



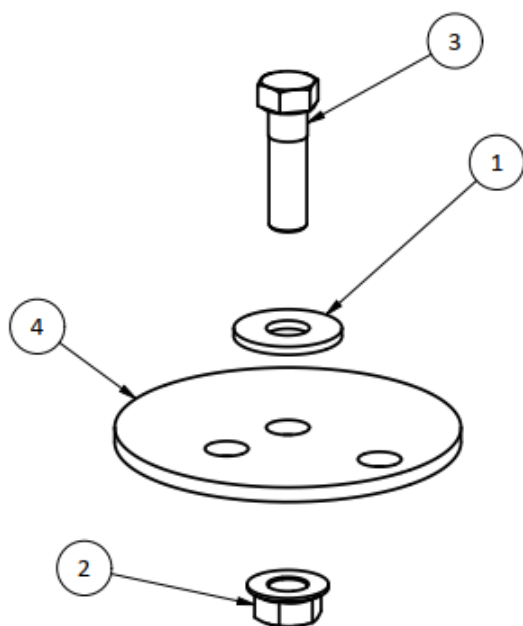
| 4CR00009 - SERVICE KIT - BUMPER MOUNT | | |
|---------------------------------------|-----------------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 UNC HEX NYLOCK NUT | 3 |
| 2 | 1/4 X 1 1/4 UNC SOCKET BUTTON HD CAP SCR - SS | 2 |
| 3 | 1/4 X 7/8 UNC SOCKET BUTTON HD CAP SCR - SS | 1 |
| 4 | BUMPER-RECESSED, 1.50 O.D. X .63 H | 1 |
| 5 | MOUNT-BUMPER | 1 |



| 4CR00011 - SERVICE KIT - BUMPER | | |
|---------------------------------|---------------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 UNC HEX NYLOCK NUT | 1 |
| 2 | 1/4 X 7/8 UNC SOCKET BUTTON HD CAP SCR - SS | 1 |
| 3 | BUMPER-RECESSED, 1.50 O.D. X .63 H | 1 |

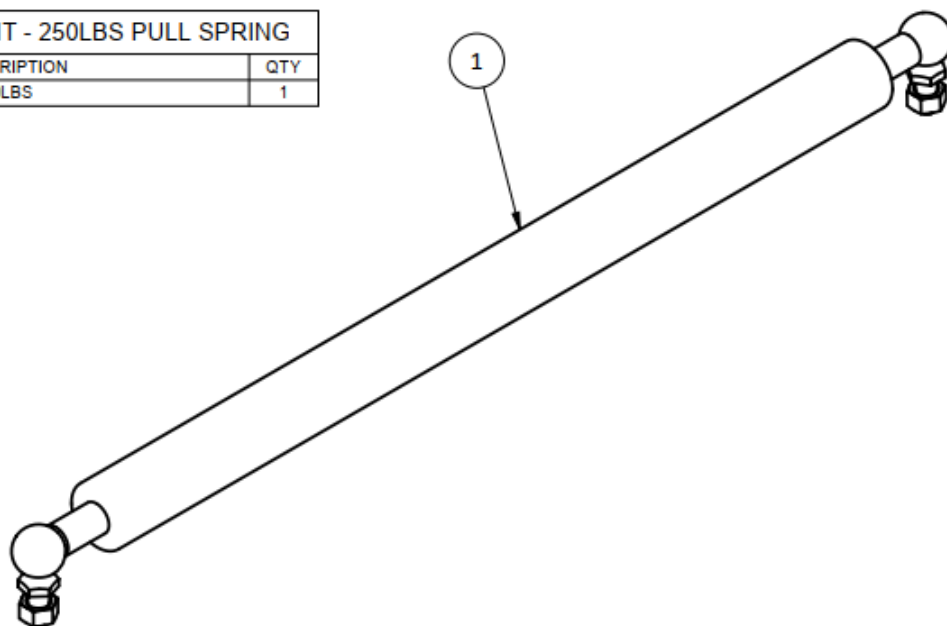


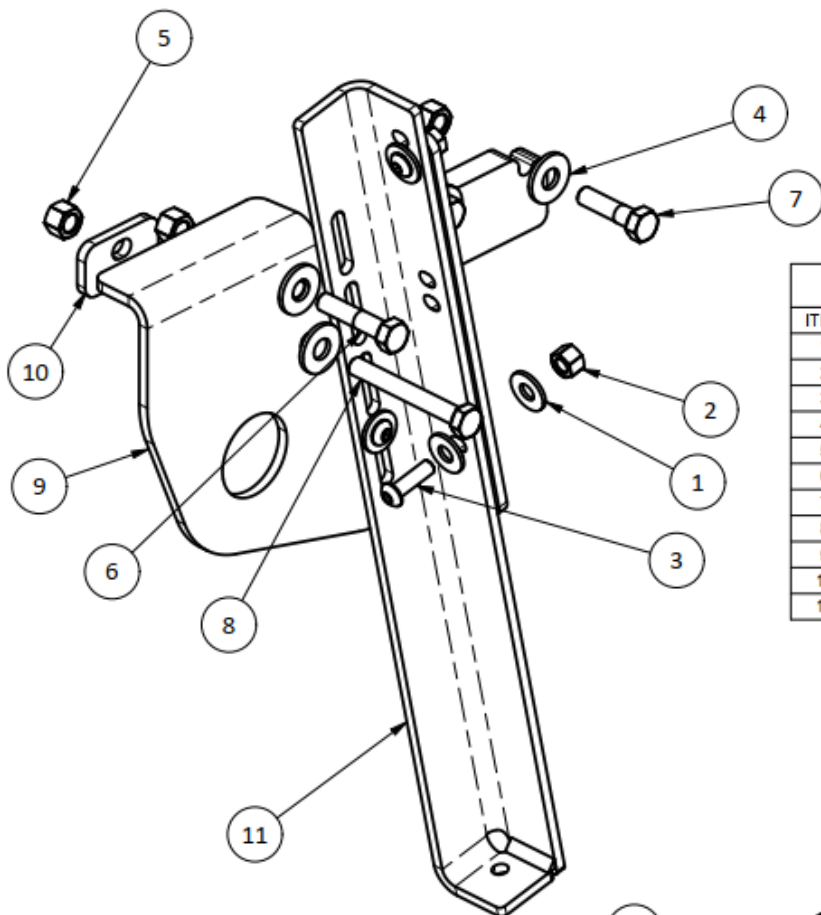
| 4CR00014 - SERVICE KIT - KEEPER LATCH PLATE | | |
|---------------------------------------------|---------------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 X 3/8 UNC SOCKET BUTTON HD CAP SCR - SS | 2 |
| 2 | KEEPER-AEROLATCH | 1 |



| 4CR00016 - SERVICE KIT - MOUNT FASTENERS | | |
|------------------------------------------|-------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 7/16 TYPE A PLAIN WASHER | 4 |
| 2 | 7/16 UNC SERRATED FLANGE NUT | 4 |
| 3 | 7/16 X 1 1/2 UNC HEX CAP SCR (GR 5) | 4 |
| 4 | WASHER-FLOOR SUPPORT | 4 |

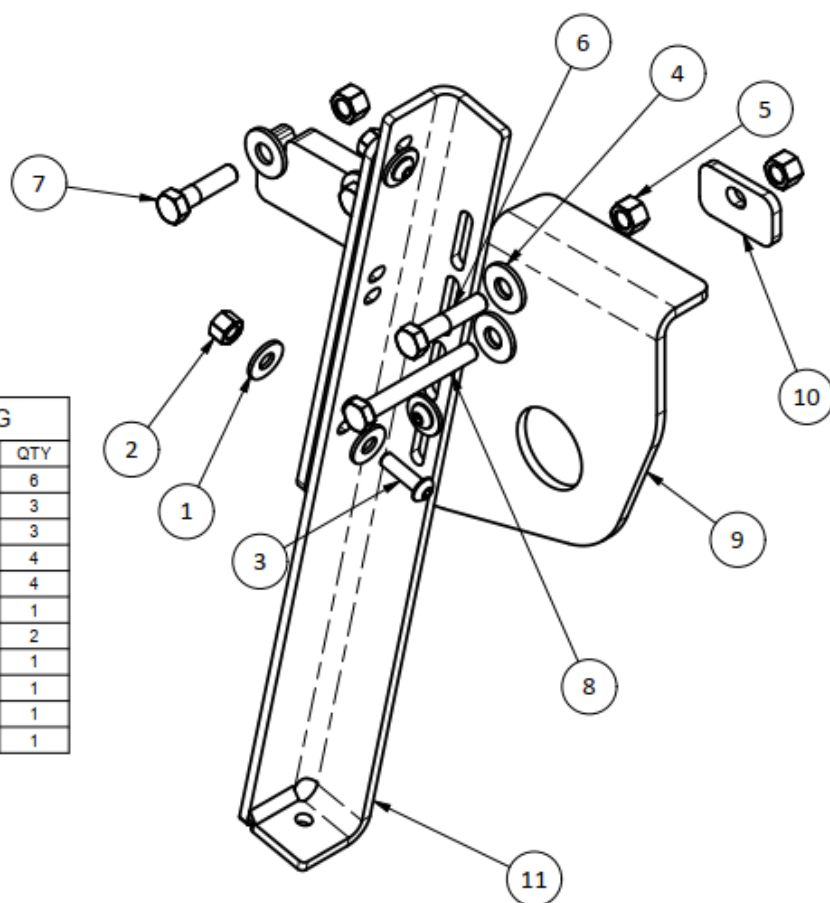
| 4CR00017 - SERVICE KIT - 250LBS PULL SPRING | | |
|---------------------------------------------|----------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | SPRING-GAS, TENSION 250LBS | 1 |





4CR00018 - SERVICE KIT - LB20 LEFT LEG

| ITEM | DESCRIPTION | QTY |
|------|----------------------------------------------------|-----|
| 1 | 1/4 TYPE A PLAIN WASHER | 6 |
| 2 | 1/4 UNC HEX NYLOCK NUT | 3 |
| 3 | 1/4 X 7/8 UNC SOCKET BUTTON HD CAP SCR - SS | 3 |
| 4 | 5/16 TYPE A PLAIN WASHER | 4 |
| 5 | 5/16 UNC HEX NYLOCK NUT | 4 |
| 6 | 5/16 X 1 1/2 UNC HEX CAP SCR (GR 5) | 1 |
| 7 | 5/16 X 1 1/4 UNC HEX CAP SCR (GR 5) | 2 |
| 8 | 5/16 X 2 1/2 UNC HEX FULLY THREADED CAP SCR (GR 5) | 1 |
| 9 | ASSEMBLY-MOUNT, LEG | 1 |
| 10 | SPACER | 1 |
| 11 | SUPPORT-LEG | 1 |



4CR00019 - SERVICE KIT - LB20 RIGHT LEG

| ITEM | DESCRIPTION | QTY |
|------|----------------------------------------------------|-----|
| 1 | 1/4 TYPE A PLAIN WASHER | 6 |
| 2 | 1/4 UNC HEX NYLOCK NUT | 3 |
| 3 | 1/4 X 7/8 UNC SOCKET BUTTON HD CAP SCR - SS | 3 |
| 4 | 5/16 TYPE A PLAIN WASHER | 4 |
| 5 | 5/16 UNC HEX NYLOCK NUT | 4 |
| 6 | 5/16 X 1 1/2 UNC HEX CAP SCR (GR 5) | 1 |
| 7 | 5/16 X 1 1/4 UNC HEX CAP SCR (GR 5) | 2 |
| 8 | 5/16 X 2 1/2 UNC HEX FULLY THREADED CAP SCR (GR 5) | 1 |
| 9 | ASSEMBLY-MOUNT, LEG | 1 |
| 10 | SPACER | 1 |
| 11 | SUPPORT-LEG | 1 |



LINK MANUFACTURING, LTD.
223 15TH ST. NE, SIOUX CENTER, IA 51250
1-800-222-6283 www.linkmfg.com