QUALITY THAT WORKS

MATERIAL DUMP BODY

Owner's Manual





HilArk Industries

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About Your MATERIAL STYLE DUMP BODY

Operating Instructions

- 1. **DO NOT** operate this equipment until you have been properly trained in its operation.
- 2. When the vehicle is in transit the hoist control valve MUST BE kept in neutral and the PTO disengaged.
- 3. Tailgate controls MUST BE locked when this vehicle is in transit.
- 4. **DO NOT** overload the dump body.
- 5. When the truck is stored or not is use, the body MUST BE in the fully lowered position, and resting on the chassis or hoist frame. Ignition key SHOULD BE removed to prevent tampering by un-authorized personnel.
- 6. Inspect the hydraulic oil level and quality regularly and be sure to change it regularly and especially when a new cylinder is installed.
- 7. Inspect all hydraulic hoses regularly.
- 8. Regularly lubricate the cylinder's end-mounts.
- 9. Be sure the cylinder is free of entrapped air.

When the body is in the elevated or raised position for any repairs or adjustments, it MUST BE securely propped or blocked so it can not fall on anyone.

Dumping Instructions

- 1. This vehicle MUST BE kept on level ground before dumping.
- DO NOT raise dump body on ground that has been recently excavated or filled without being properly compacted.
- 3. DO NOT DUMP BENEATH HIGH-VOLTAGE POWER LINES.
- 4. The operator MUST REMAIN at the controls during the dumping cycle.
- 5. The tailgate controls MUST BE released before the front of the body is 2 feet (0.6m) above the chassis frame.
- 6. When operating **DO NOT** allow anyone to stand in or move through the area where the hoist operates or into an area where an upset load might fall.

DO NOT jerk the truck when trying to dump a sticky load.

Monthly Maintenance

- 1. Lubricate upper tailgate hinge pins (left & right)
- 2. Bleed air out of hoist (see Hydraulic System Maintenance)
- 3. Lubricate tailgate latch assembly
- 4. Adjust tailgate linkage
 - a. Check for proper adjustment.(tailgate latch rod should be "breaking over" firmly)
 - b. If the tailgate latch rod needs adjusting,
 - 1. Loosen the nuts on the rear side of the adjusting angle. (part #151-3329, page 13)
 - 2. Tighten the nut on the front side of the adjusting angle
 - c. Adjust the nut in ½" revolution increments, adjusting both sides evenly until the latch rod "breaks over" firmly.
 - d. Retighten the rear nut.

Hydraulic System Maintenance

Hydraulic Fluid

A good grade of non-foaming 10 weight hydraulic fluid should be used. Before filling, be sure that the oil reservoir is clean. Dirty oil containing dirt and metal particles is nearly always responsible for premature pump failure. Periodic inspection should be made for dirt or sludge in the bottom of the reservoir. Avoid racing the engine to increase pump RPM as this will cause overheating of the pump, resulting in oil breakdown.

Air Entrapment

Air entrapped in the hydraulic system causes erratic operation such as spongy response for the hoist or jerky operations. Follow these steps to properly purge system:

- A. Loosen the bleeder valve located on the top pin eye, which is accessible through the door on the front of the trailer.
- B. Operate the pump at slow engine speed until the air is eliminated and hydraulic fluid is present.
- C. Tighten the bleeder valve cap securely, being careful not to overtighten, to stop the oil flow. The hoist should operate smoothly.

Inspection

Hydraulic system is subjected to extreme service due to vibration; therefore, periodic inspection is necessary to insure continuous service. Check the pump and the hoist connection for leakage. The linkage to the PTO and the pump valve should be checked for proper operation.

Standard DUMP BODY Cylinders

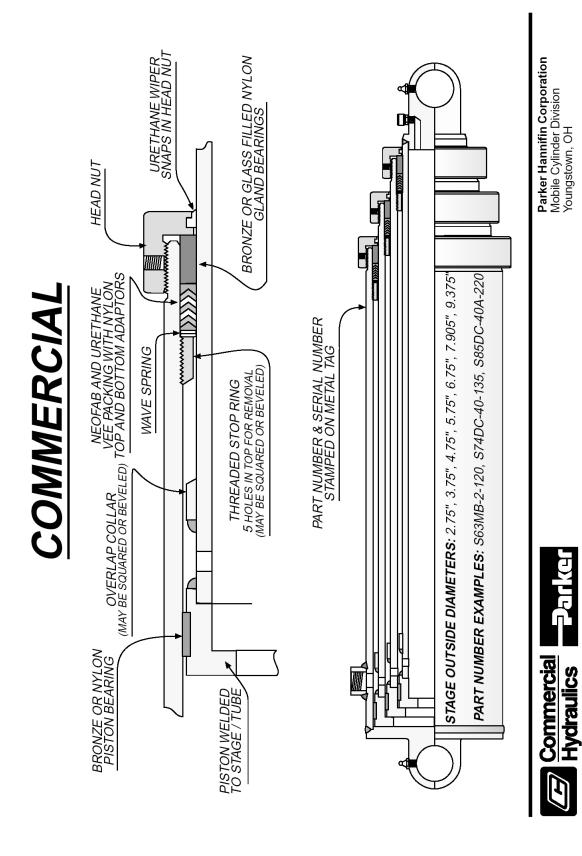
NOTE:

The cylinders shown below are for standard dump bodies from the year 2002 and later. Your dump body may be different.

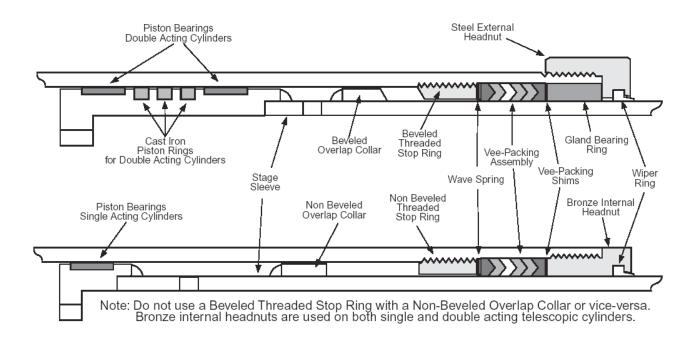
Contact *HilArk* for the exact replacement cylinder.

| DUMP BED LENGTH | CAPACITY IN CUBIC YARDS | CYLINDER | SADDLE | TANK | HINGE |
|--------------------|-------------------------|----------|----------|----------|------------|
| 8' | 4-5 | 53-72 | Standard | Standard | Standard |
| 9' | 5-6 | 53-72 | Standard | Standard | Standard |
| | 5-6 | 53-84 | Standard | Standard | Standard |
| 10' | 6-8 | 53-84 | Standard | Standard | Standard |
| | 6-10 | 53-84 | Standard | Standard | Standard |
| 11'-6" | 8-10 | 63-111 | Standard | Standard | Heavy Duty |
| 11-0 | 10-12 | 63-111 | Standard | Standard | Heavy Duty |
| 12' | 8-10 | 63-111 | Standard | Standard | Heavy Duty |
| 12 | 10-12 | 63-111 | Standard | Standard | Heavy Duty |
| | 8-10 | 63-123 | Standard | Standard | Heavy Duty |
| 13' | 10-12 | 63-123 | Standard | Standard | Heavy Duty |
| | 12-14 | 63-123 | Standard | Standard | Heavy Duty |
| | 13-15 | 63-123 | Standard | Standard | Heavy Duty |
| | 10-12 | 63-123 | Standard | Standard | Heavy Duty |
| 14' | 12-14 | 63-123 | Standard | Standard | Heavy Duty |
| | 13-15 | 63-123 | Standard | Standard | Heavy Duty |
| 15' | 10-12 | 63-123 | Standard | Standard | Heavy Duty |
| | 12-14 | 63-123 | Standard | Standard | Heavy Duty |
| | 13-15 | 63-123 | Standard | Standard | Heavy Duty |
| 16' | 13-15 | 63-140 | Standard | Standard | Heavy Duty |
| 17' | 13-15 | 74-161 | Standard | Standard | Heavy Duty |
| 18' | 13-15 | 74-161 | Standard | Standard | Heavy Duty |

Hydraulic Cylinder



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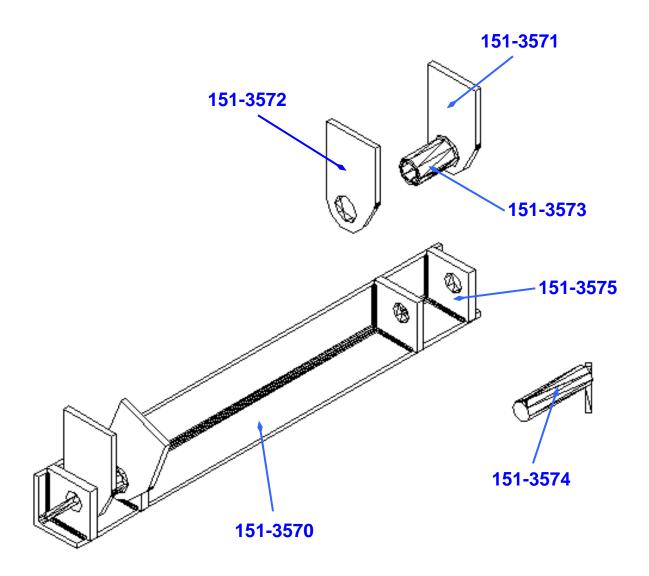


Following are service parts used on STANDARD DESIGN COMMERCIAL cylinders Note: Commercial Hydraulics manufactures many different types and designs of cylinders. If you are not sure of service parts required please refer to the Cylinder Assembly print.

| Description | 2.75" Stage | 3.75" Stage | 4.75" Stage | 5.75" Stage | 6.75" Stage | 7.905" Stage | 9.375" Stage |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Vee-Packing Assembly with Shims | 375-9009-017 | 375-9009-034 | 375-9009-018 | 375-9009-019 | 375-9009-020 | 375-9009-021 | 375-9009-022 |
| | AJ3009-27 | AJ3009-37 | AJ3009-47 | AJ3009-57 | AJ3009-67 | AJ3009-79 | AJ3009-93 |
| Wiper Ring | 391-3882-061 | 391-3882-053 | 391-3882-054 | 391-3882-055 | 391-3882-056 | 391-3882-057 | 391-3882-058 |
| | Y3026-27 | Y3026-37 | Y3026-47 | Y3026-57 | Y3026-67 | Y3026-79 | Y3026-93 |
| Gland Bearing | 391-2682-001 | 391-2682-002 | 391-2682-003 | 391-2682-004 | 391-2682-005 | 391-2682-006 | 391-2682-007 |
| Glass Filled Nylon | J1003-1-1 | J1003-1-2 | J1003-1-3 | J1003-1-4 | J1003-1-5 | J1003-1-6 | J1003-1-7 |
| Gland Bearing | 375-9003-064 | 375-9003-044 | 375-9003-045 | 375-9003-046 | 375-9003-063 | 375-9003-041 | 375-9003-066 |
| Bronze | AH1003-27 | AH1003-37 | AH1003-47 | AH1003-57 | AH1003-67 | AH1003-79 | AH1003-93 |
| Wave Spring | 391-3581-320 | 391-3581-300 | 391-3581-301 | 391-3581-302 | 391-3581-303 | 391-3581-304 | 391-3581-310 |
| | P1327-27 | P1327-37 | P1327-47 | P1327-57 | P1327-67 | P1327-79 | P1327-93 |
| Threaded Stop | 375-4020-001 | 375-3020-002 | 375-6020-002 | 375-5020-001 | 375-7020-001 | 375-8020-001 | 375-9020-001 |
| Non-Beveled | F4020 | F3020 | F6020 | F5020 | F7020 | F8020 | F9020 |
| Threaded Stop | 375-3020-110 | 375-3020-111 | 375-3020-112 | 375-3020-113 | 375-3020-114 | 375-3020-120 | 375-3020-119 |
| Beveled | AG3020-1-27 | AG3020-1-37 | AG3020-1-47 | AG3020-1-57 | AG3020-1-67 | AG3020-2-79 | AG3020-2-93 |
| Piston Bearing | 391-2684-123 | 391-2684-069 | 391-2684-070 | 391-2684-071 | 391-2684-072 | 391-2684-073 | 391-2684-098 |
| Glass Filled Nylon | U3023-32 | U3023-42 | U3023-52 | U3023-62 | U3023-72 | U3023-84 | U3023-98 |
| Piston Bearing | N/A | 375-9023-079 | 375-9023-038 | 375-9023-039 | 375-9023-040 | 375-9023-041 | 375-9023-042 |
| Bronze | | AM3023-42 | AM3023-52 | AM3023-62 | AM3023-72 | AM3023-84 | AM3023-98 |
| Cast Iron | 391-2683-010 | 391-2683-014 | 391-2683-019 | 391-2683-024 | 391-2683-029 | 391-2683-034 | 391-2683-042 |
| Piston Ring | X78-3.25-1 | X78-4.25 | X78-5.25 | X78-6.25 | X78-7.25 | X78-8.437 | X78-9.88 |
| Steel External | 391-1470-162 | 391-1470-163 | 391-1470-164 | 391-1470-165 | 391-1470-166 | 391-1470-167 | 391-1470-177 |
| Headnut | YA3011-27 | YA3011-37 | YA3011-47 | YA3011-57 | YA3011-67 | YA3011-79 | YA3011-93 |
| Bronze Internal | 391-1470-079 | 391-1470-070 | 391-1470-071 | 391-1470-072 | 391-1470-073 | 391-1470-074 | 391-1470-075 |
| Headnut | MA3011-27 | MA3011-37 | MA3011-47 | MA3011-57 | MA3011-67 | MA3011-79 | MA3011-93 |



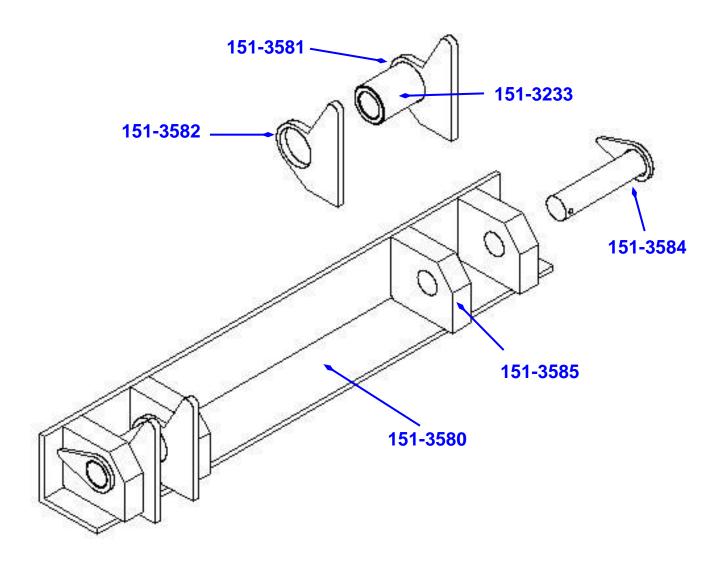
Standard Duty Rear Dump Hinge



Standard Duty Rear Dump Hinge

- 151-3570 Dump Bed Standard Duty Hinge
- 151-3571 Dump Bed Standard Duty Hinge Arm (With Bushing)
- 151-3572 Dump Bed Standard Duty Hinge Arm (Without Bushing)
- 151-3573 Dump Bed Standard Duty Hinge Bushing (Without Hinge Arm)
- 151-3574 Dump Bed Standard Duty Hinge Pin
- 151-3575 Dump Bed Standard Duty Hinge Side Plate

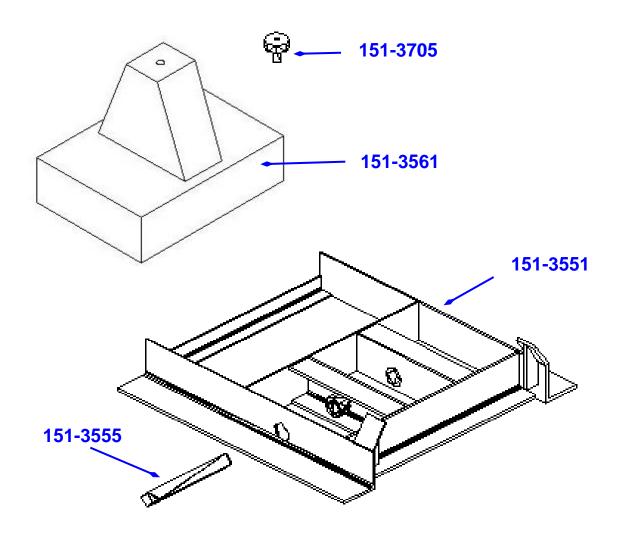
Heavy Duty Rear Dump Hinge



Heavy Duty Rear Dump Hinge

- 151-3580 Dump Bed Heavy Duty Hinge
- 151-3581 Dump Bed Heavy Duty Hinge Arm (With Bushing)
- 151-3582 Dump Bed Heavy Duty Hinge Arm (Without Bushing)
- 151-3233 Dump Bed Heavy Duty Hinge Bushing (Without Hinge Arm)
- 151-3584 Dump Bed Heavy Duty Hinge Pin
- 151-3585 Dump Bed Heavy Duty Hinge Side Plate

DUMP BODY Saddles and Tanks



<u>Pin</u>

151-3555 (1-15/16" x 13" W/ 9/16" Hole)

Saddles

151-3551 39-3/4" Saddle

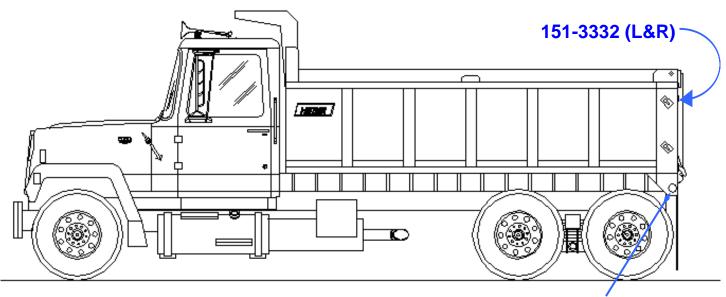
Tanks

151-3561 Standard Tank

Breather Filter

151-3705 Breather Filter

Lights

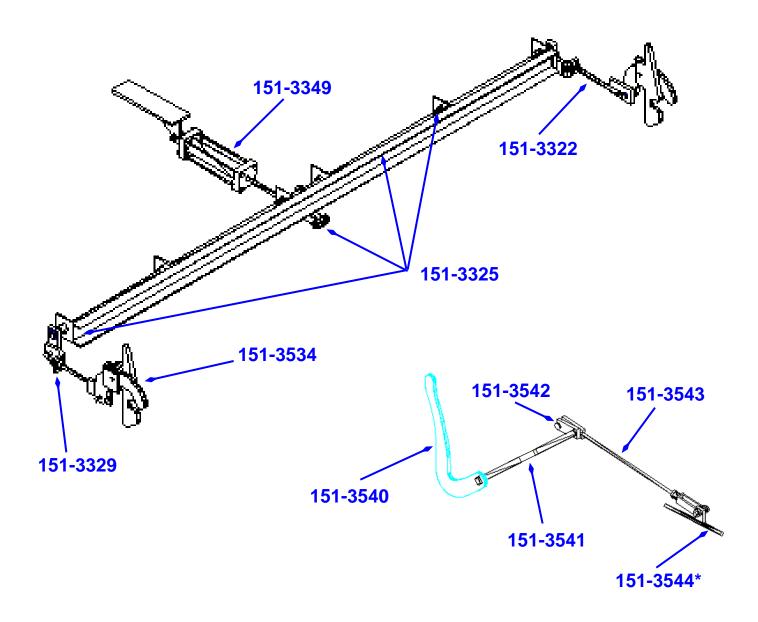


151-3333R (L&R)

Lights

| 151-3332 | Upper Rear Marker Incan (Left & Right) |
|-----------|--|
| 151-3333R | Lower Rear Marker Incan (Left & Right) |
| 151-3335 | Grommet for Upper Rear ((Left & Right) |
| 151-3336 | Grommet for Marker |
| 151-3411 | Harness Upper Rear Marker |
| 151-3413 | Harness Lower Rear Side Marker |

Tailgate Latch Assembly

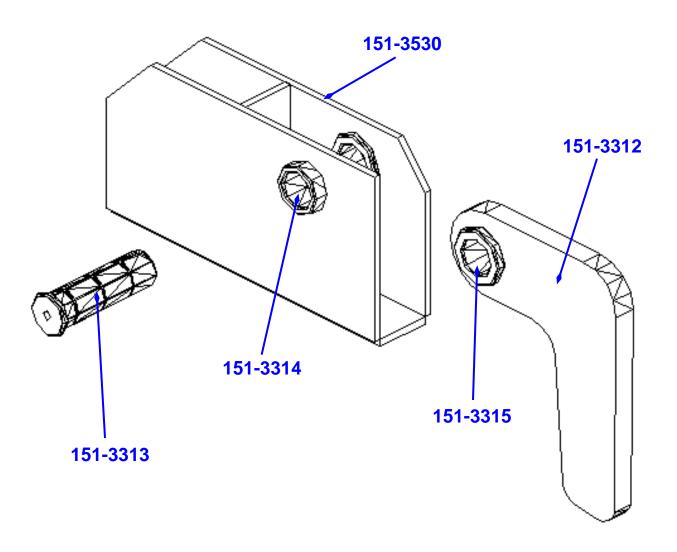


Tailgate Latch Assembly

Manual Tailgate Latch Assembly

| 151-3322 | Latch Rod (Left or Right) | 151-3540 | Tailgate Latch Handle |
|----------|---------------------------------|----------|--------------------------|
| 151-3325 | Complete Tailgate Latch Assy | 151-3541 | Front Control Rod |
| 151-3329 | Adjusting Angle | 151-3542 | "Break Over" Block |
| 151-3534 | Tailgate Latch (Left and Right) | 151-3543 | Adjusting Linkage Rod |
| 151-3349 | 2½" X 8" Cylinder | 151-3544 | Long Tailgate Latch Rod* |
| | • | * Spe | ecify Length |

Tailgate Hinge Assembly



Tailgate Hinge Assembly

| 151-3312 | Hinge Arm (Without Bushing) |
|----------|-----------------------------|
| 151-3313 | Hinge Pin |
| 151-3314 | Short Bushing |
| 151-3315 | Long Bushing |
| 151-3530 | Tailgate Hinge Assembly |
| | |

Parts List

Hydraulic Cylinder

Call HilArk for the exact replacement cylinder

800-333-3096

Standard Duty Rear Dump Hinge

| 151-3570 | - | Standard Duty Hinge |
|----------|---|---|
| 151-3571 | - | Standard Duty Hinge Arm (With Bushing) |
| 151-3572 | - | Standard Duty Hinge Arm (Without Bushing) |
| 151-3573 | - | Standard Duty Hinge Bushing (Without Hinge Arm) |
| 151-3574 | - | Standard Duty Hinge Pin |
| 151-3575 | - | Standard Duty Hinge Side Plate |
| | | |

Heavy Duty Rear Dump Hinge

| 151-3580 | - | Heavy Duty Hinge |
|----------|---|--|
| 151-3581 | - | Heavy Duty Hinge Arm (With Bushing) |
| 151-3582 | - | Heavy Duty Hinge Arm (Without Bushing) |
| 151-3233 | - | Heavy Duty Hinge Bushing (Without Hinge Arm) |
| 151-3584 | - | Heavy Duty Hinge Pin |
| 151-3585 | - | Heavy Duty Hinge Side Plate |

Saddles and Hydraulic Tanks

| 151-3555 | - | Pin (1-15/16" x 13" W/ 9/16" Hole) |
|----------|---|------------------------------------|
| 151-3551 | - | Saddle (39-3/4") |
| 151-3561 | - | Hydraulic Tank (Standard) |
| 151-3705 | - | Breather Filter |

Parts List Continued

Lights

151-3332 - Upper Rear Marker Incandescent (Left and Right)
 151-3338 - Lower Rear Marker Incandescent (Left and Right)
 151-3335 - Grommet for Upper Rear Marker (Left and Right)
 151-3411 - Harness Upper Rear Marker
 151-3413 - Harness Lower Rear Side Marker

Tailgate Latch Assembly

151-3322 - Latch Rod (Left or Right) 151-3325 - Complete Tailgate Rear Latch 151-3329 - Adjusting Angle 151-3534 - Tailgate Latch (Left and Right) 151-3349 - 2½" X 8" Cylinder

Manual Tailgate Latch Assembly

151-3540 - Tailgate Latch Handle
151-3541 - Front Control Rod
151-3542 - "Break Over" Block
151-3543 - Adjusting Linkage Rod
151-3544 - Long Tailgate Latch Rod (Specify Length)

Tailgate Hinge Assembly

151-3312 - Hinge Arm (Without Bushing) 151-3313 - Hinge Pin 151-3314 - Short Bushing 151-3315 - Long Bushing 151-3530 - Tailgate Hinge Assembly

Manufacturer's Warranty HilArk Industries

HilArk Industries referred to herein as the Manufacturer, warrants each new product of its own manufacture to be free from defects in material and workmanship, under normal use and service, to the original owner only, for a period of twelve (12) months from the date of purchase, subject to conditions and warranty extensions outlined below. Manufacturer's obligation under this warranty is limited to repair or replacement with a similar part of any part of the product of its manufacture which is returned to Manufacturer within thirty (30) days after discovery of the defect by the original owner, properly identified with transportation charges prepaid, and is returned to Manufacturer not more than twelve (12) months from the date of purchase by the original owner, provided that in Manufacturer's judgement the part is defective in material or workmanship.

Manufacturer will furnish without charge, FOB its plant a similar part to replace any part of a product of its manufacture which proves in Manufacturer's judgement to be defective in material or workmanship while in normal use and service during this warranty period.

The Manufacturer's warranty or obligation in connection with the sale of the product to the original owner:

- Shall be expressly limited to the repair or replacement of defective parts, as stated above, all other damage and claims, statutory or otherwise, being hereby expressly waived by the purchaser and covers only those labor charges specifically authorized and approved by Manufacturer.
- 2. Shall not apply to failure or damage incurred through the original owner's neglect, lack of maintenance, misuse, accident, improper installation and use, reconstructing or modifying of assemblies and parts or through any other cause beyond the control of the Manufacturer.
- 3. Shall not apply if the product has been operated or used beyond the Manufacturer's recommended capacity.
- Does not cover products of other manufacturers beyond such warranty as is made by such other manufacturer.
- Requires that all warranty repairs shall be made by a Manufacturer approved facility. A
 Manufacturer's distributor must obtain Manufacturer's authorization before making warranty
 repair or replacement.
- 6. Includes a Warranty Extension to the original owner following the initial twelve (12) months, subject to the following percentages of all parts and labor cost: 13-24 months, eighty percent (80%); 25-36 months, sixty percent (60%); 37-48 months, forty percent (40%); and 49-60 months, twenty percent (20%).

No claim under this warranty shall be valid unless such claim is submitted to Manufacturer within sixty (60) months after date of sale, and within thirty (30) days after the discovery of the defect, which is the basis for such claim, whichever shall occur first.

The foregoing is Manufacturer's sole warranty and Manufacturer makes no other warranties of any kind whatsoever, express, implied, or statutory. All implied warranties or merchantability and fitness for a particular purpose, written or oral are hereby disclaimed by the Manufacturer.

In no event shall *HilArk Industries* be liable for consequential damages, nor shall *HilArk's* liability on any claim for any direct, incidental or special damages arising out of, or connected with, sales contract or manufacture, sale, delivery, or use of the products shall exceed the purchase price of the goods.

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