

BOX SCRAPER

Operation, Service & Parts Manual For GBS-R Retractable & GBS-H Hydraulic Series Scrapers

December 2014 Rev.

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| |
| Date of Purchase: |
| Model Number: |
| Serial Number |

INTRODUCTION

We welcome you as an owner of a Gearmore box scraper. Please read the following instructions and refer to them when required:

TRAINING

With normal maintenance you should receive years of use out of the box scraper.

- 1. Safety instructions are important! Read this manual, the tractor manual and all safety rules.
- **2.** Know your controls and how to stop tractor engine quickly in an emergency.
- 3. Operators *must* be instructed in and be capable of the safe operation of the equipment, its attachments and all controls. *Do not* allow anyone to operate this equipment without proper instructions.
- 4. **Do not** allow children or unqualified persons to operate equipment

PREPARATION

- 1. Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hands, hearing and head.
- **2.** Ensure box scraper is properly mounted, adjusted and in good operating condition.
- 3. Ensure all safety decals are installed and in good condition.
- 4. A minimum 20% of tractor and equipment weight *must* be on tractor from wheels with box scraper in transport position. Without this weight, tractor could tip over causing personal injury or death. The weight may be attained with front wheel weights, ballast in tires or front tractor weights. When attaining the minimum 20% weight on the front wheels, you *must not* exceed the Roll Over Protection Structure (ROPS) weight certification. Weight tractor and equipment. *Do not* guess or estimate.

OPERATIONAL SAFETY

Know your controls and how to stop tractor engine and box scraper quickly in an emergency. *READ THIS OPERATOR'S MANUAL AND THE MANUAL PROVIDED WITH YOUR TRACTOR*.

| Keep bystanders away from equipment while it is in operation. |
|---|
| Operate only in daylight or good artificial light. |
| Keep hands and feet away from box scraper while tractor engine is running. Stay clear of all moving parts. |
| If your tractor is equipped with a ROPS, you must wear your seat belt. |
| Always comply with all state and local lighting and marking requirements. |
| No riders are allowed on tractor or box scraper. |
| Start engine from operator's seat after placing transmission in neutral. |
| Make sure area behind your tractor is clear before operating in reverse. |
| Do not operate on steep slopes. |
| Do not stop, start or change directions suddenly on slopes. |
| Use extreme care and reduce ground speed on slopes and rough terrain. |
| Watch for hidden hazards on the terrain during operation. |
| Keep alert and watch ahead as well as behind the tractor when working with the box scraper. |
| Ensure equipment is properly mounted to tractor before making adjustments. |
| Always be sure the box scraper is in the fully raised position when in transport. |
| When turning close to buildings or passing through narrow areas, be sure to allow sufficient clearance for the box scraper. |
| Make adjustments using hydraulic controls only when seated in operator's position. |
| Set parking brake, lower equipment close to ground, turn tractor engine off and remove key before making manual adjustments. Keep yourself behind and out from underneath equipment to make adjustments. Be aware gravity forces can rotate or lower equipment and trap or pinch you. |
| Stop tractor immediately upon striking an obstruction. Turn off engine, remove key, inspect and repair any damage before resuming operation. |
| Block box scraper securely before working underneath. |
| Lower box scraper to ground, stop engine, set parking brake and remove key before dismounting tractor. |

SERVICING INSTRUCTIONS

MAINTENANCE SAFETY

- 1. Lower box scraper to ground, turn tractor engine off and remove key before performing any service or maintenance.
- 2. Block box scraper securely before working underneath.
- **3.** Keep all persons away from operator control area while performing adjustments, service or maintenance.
- 4. Periodically tighten all bolts, nuts and screws to ensure blade is in a safe condition.
- **5.** Ensure all safety decals are installed and in good condition.

SET-UP INSTRUCTIONS

TOP HOLE: The top hole is designed for use in the retractable shank and hydraulic shank box scrapers only. *Do not* use any other hole in the shank except the top hole.

On the GBS-R Retractable Shank Box Scraper you manually raise and lower the shank bar by pulling the handle.

On the GBS-H Hydraulic Shank Box Scraper you activate the hydraulic control valve to raise and lower the shank bar.

SERVICING INSTRUCTIONS

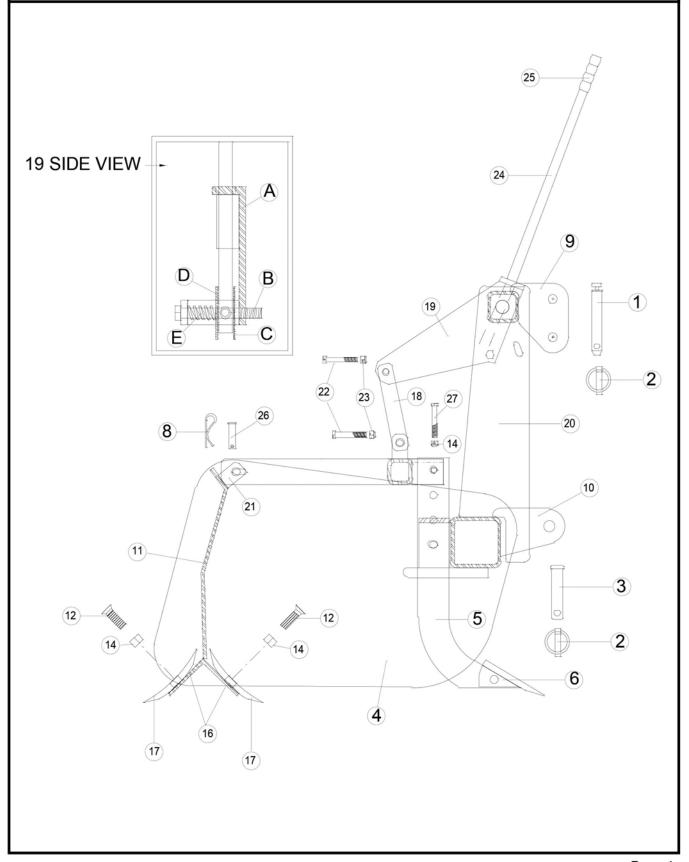
CUTTING EDGE:

For reversing the cutting edge, remove 5/8" plow bolts. Remove the cutting edge from moldboard and reinstall with the sharp edge down. Replace it when both edges are worn.

BOLTS:

Keep all the bolts tight at all times by checking them periodically. Replace the bolts only with those having the same marks on the heads as on original bolt. Marks on bolt head indicate high strength.

GBS-R PARTS DRAWING



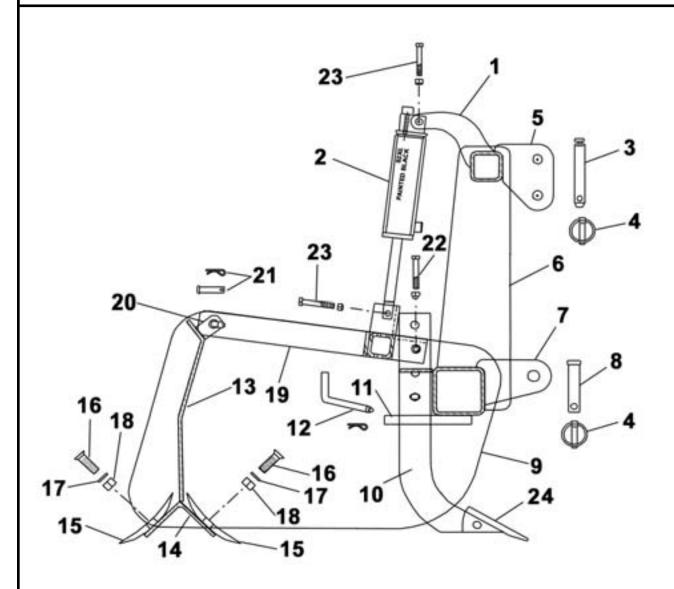
GBS-R PARTS LIST

| REF. | QTY. | PART NO. | DESCRIPTION |
|------|----------|-------------|--------------------------|
| 1 | 1 | P075500C1TL | Cat I Top Link Pin |
| 2 | 3 | P716175LY | 7/16" x 1 3/4" Lynch Pin |
| 3 | 2 | P078375C1D | Cat. I Draw Pins |
| 4 | 2 | P01011 | Side Plate 42" - 66" |
| 4 | 2 | P02011 | Side Plate 72" - 84" |
| 5 | As Req'd | H434 | Shank with Tip |
| 6 | As Req'd | RPS76931 | Replaceable Tip |
| 8 | 5 | P11 | Hair Pin |
| 9 | 2 | P030201 | Cat. I Top Link Ear |
| 10 | 4 | P030191 | Cat. I Draw Ear |
| 11 | 1 | XXXXXX | Back Plate |
| 12 | As Req'd | GR85/8X2 | %" Plow Bolt |
| 14 | As Req'd | GR85/8NC | 5∕8" Hex Nut |
| 17 | 2 | CE42 | 42" Cutting Edge |
| 17 | 2 | CE48 | 48" Cutting Edge |
| 17 | 2 | CE54 | 54" Cutting Edge |
| 17 | 2 | CE60 | 60" Cutting Edge |
| 17 | 2 | CE66 | 66" Cutting Edge |
| 17 | 2 | CE72 | 72" Cutting Edge |
| 17 | 2 | CE76 | 76" Cutting Edge |
| 17 | 2 | CE80 | 80" Cutting Edge |
| 17 | 2 | CE84 | 84" Cutting Edge |
| 18 | 2 | F03004 | Tall Mast Lift Arm Link |
| 19 | 1 | P02BSR01 | "L" Bracket |
| 19A | 1 | F1101 | "L" Bracket |
| 19B | 1 | B050600RT | ½" x 6" Bolt |
| 19C | 1 | P11 | Hair Pin |
| 19D | 1 | W050F | ½" Flat Washer |
| 19E | 1 | S050250C0M | Compression Spring |
| 20 | 2 | P03217R | Tall Mast |
| 21 | 4 | F11002 | Lift Arm Ear |
| 22 | 2 | B05175 | ½" x 1 ¾" Bolt |
| 23 | 2 | N050L | ½" Nylock |
| 24 | 1 | X01001 | Retractable Handle |
| 25 | 1 | 14505S | Handle Grips |
| 26 | 2 | P050150CL | ½" x 1 ½" Clevis Pin |
| 27 | 3 | B038250S | 3/8" x 2 1/2" Shank Bolt |

As Required

| Part Number | 42" | 48" | 54" | 60" | 66" | 72" | 76" | 80" | 84" |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| H434 | 3 | 4 | 4 | 5 | 6 | 6 | 7 | 7 | 7 |
| RPS76931 | 3 | 4 | 4 | 5 | 6 | 6 | 7 | 7 | 7 |
| GR85/8X2 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 14 |
| GR85/8NC | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 14 |

GBS-H PARTS DRAWING



| <u>REF. #</u> | QTY. | PART NO. | DESCRIPTION |
|---------------|-----------|-------------|---|
| 1 | 2 | P02006 | Top Cylinder Ear |
| 2 | 1 | S2X6 | 2" x 6" Hydraulic Cylinder |
| 3 | 1 | P075500C1TL | Cat. 1 Top Link Pin |
| 4 | 3 | P716175LY | Lynch Pin |
| 5 | 2 | P03020 | Top Link Ear |
| 6 | 2 | P03217 | Mast |
| 7 | 4 | P03019 | Draw Ear |
| 8 | 2 | P078375C1D | Lower Lift Pin |
| 9 | 2 | P01011 | 1/4" Side Plate f/42", 48", 54", 60", & 66" |
| 9 | 2 | P02011 | 3/8" Side Plate f/72", 76", 80", 84", & 96" |
| 10 | As Req'd* | H434 | 4 Hole Shank w/Tip |

GBS-H PARTS DRAWING

| <u>REF. #</u> | QTY. | PART NO. | DESCRIPTION |
|---------------|-----------|-----------|--------------------------|
| 11 | As Req'd* | A07014WA | Shank Pocket Assembly |
| 12 | As Req'd* | P050300BL | Shank Pin w/Clip |
| 13 | 1 | P01002 | Back Plate 42" |
| 13 | 1 | P01012 | Back Plate 48" |
| 13 | 1 | P01022 | Back Plate 54" |
| 13 | 1 | P01031 | Back Plate 60" |
| 13 | 1 | P01042 | Back Plate 66" |
| 13 | 1 | P01054 | Back Plate 72" |
| 13 | 1 | P01062 | Back Plate 76" |
| 13 | 1 | P01072 | Back Plate 80" |
| 13 | 1 | P01082 | Back Plate 84" |
| 13 | 1 | P01092 | Back Plate 96" |
| 14 | 1 | A05003 | Cutting Edge Angle 42" |
| 14 | 1 | A05013 | Cutting Edge Angle 48" |
| 14 | 1 | A05023 | Cutting Edge Angle 54" |
| 14 | 1 | A05033 | Cutting Edge Angle 60" |
| 14 | 1 | A05043 | Cutting Edge Angle 66" |
| 14 | 1 | A05053 | Cutting Edge Angle 72" |
| 14 | 1 | A05063 | Cutting Edge Angle 76" |
| 14 | 1 | A05073 | Cutting Edge Angle 80" |
| 14 | 1 | A05083 | Cutting Edge Angle 84" |
| 14 | 1 | A05093 | Cutting Edge Angle 96" |
| 15 | 1 | CE42 | Cutting Edge 42" |
| 15 | 1 | CE48 | Cutting Edge 48" |
| 15 | 1 | CE54 | Cutting Edge 54" |
| 15 | 1 | CE60 | Cutting Edge 60" |
| 15 | 1 | CE66 | Cutting Edge 66" |
| 15 | 1 | CE72 | Cutting Edge 72" |
| 15 | 1 | CE76 | Cutting Edge 76" |
| 15 | 1 | CE80 | Cutting Edge 80" |
| 15 | 1 | CE84 | Cutting Edge 84" |
| 15 | 1 | CE96 | Cutting Edge 96" |
| 16 | As Req'd* | GR85/8X2 | 5/8" x 2" Plow Bolt |
| 17 | As Req'd* | W058L | 5/8" Flat Washer Grade 5 |
| 18 | As Req'd* | GR85/8NC | 5/8" Hex Nut Grade 5 |
| 19 | 1 | T01011HA | Shank Bar Assy 42" |
| 19 | 1 | T010111HA | Shank Bar Assy 48" |
| 19 | 1 | T010211HA | Shank Bar Assy 54" |
| 19 | 1 | T010311HA | Shank Bar Assy 60" |
| 19 | 1 | T010411HA | Shank Bar Assy 66" |
| | | | |

GBS-H PARTS DRAWING

| <u>REF. #</u> | QTY. | PART NO. | DESCRIPTION |
|---------------|-----------|-----------|-------------------------------------|
| 19 | 1 | Т010511НА | Shank Bar Assy 72" |
| 19 | 1 | T010611HA | Shank Bar Assy 76" |
| 19 | 1 | T010711HA | Shank Bar Assy 80" |
| 19 | 1 | T010811HA | Shank Bar Assy 84" |
| 19 | 1 | T010911HA | Shank Bar Assy 96" |
| 20 | 4 | F11002 | Lift Arm Ear |
| 21 | 2 | P050150CL | 1/2" x 1 1/2" Clevis Pin w/Hair Pin |
| 22 | As Req'd* | B038250S | Shank Bolt w/Nut |
| 23 | 2 | P100325 | Cylinder Pin w/Nut |
| 24 | As Req'd* | RPS76931 | Tooth, Shank |

*QUANTITY CHART

| MODEL NO. | NUMBER OF SHANKS W/TIP (H434) | NO. OF SHANK POCKET ASSY (A07014WA) | NO. OF SHANK PIN W/CLIP (P050300BL) | NO. OF 5/8" PLOW BOLT (B058200P) | NO. OF 5/8" FLAT WASHER (W058L) | NO. OF 5/8" HEX NUT (N058H) | SHANK BOLT W/NUT (B038250S) |
|-----------|-------------------------------------|---|---|--|---------------------------------------|-----------------------------------|-----------------------------------|
| GBS42H | 3 | 3 | 3 | 8 | 8 | 8 | 3 |
| GBS48H | 4 | 4 | 4 | 8 | 8 | 8 | 4 |
| GBS54H | 4 | 4 | 4 | 10 | 10 | 10 | 4 |
| GBS60H | 5 | 5 | 5 | 10 | 10 | 10 | 5 |
| GBS66H | 5 | 5 | 5 | 12 | 12 | 12 | 5 |
| GBS72H | 6 | 6 | 6 | 12 | 12 | 12 | 6 |
| GBS76H | 6 | 6 | 6 | 14 | 14 | 14 | 6 |
| GBS80H | 6 | 6 | 6 | 14 | 14 | 14 | 6 |
| GBS84H | 7 | 7 | 7 | 14 | 14 | 14 | 7 |
| GBS96H | 8 | 8 | 8 | 16 | 16 | 16 | 8 |

LIMITED WARRANTY

GERRMORE INC.

GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warranties engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC. 13477 Benson Ave. Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.