

DEINES MANUFACTURING CORPORATION

MODEL 60 SLI DECK SUPPLEMENT

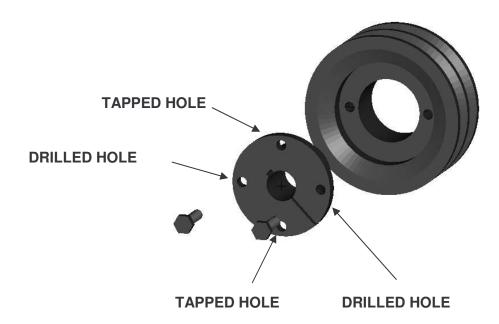
PARTS AND SERVICE MANUAL

DEINES MANUFACTURING CORPORATION 306 WEST HIGHWAY 4 RANSOM, KS 67572 800-624-6774 <u>martyj@gbta.net</u>

DECK MAINTENANCE FOR ALL MODELS

| AREA OF MAINTENANCE | HOURS | NOTES: | |
|---|-------|---|--|
| Gearbox Superior | 8 | Check lubricant every 8 hours. A vented dipstick plug is located on the top of the gearbox. The oil level should be at the fill line on the dipstick tube. If the oil level is low add 80w90 gear oil. CAUTION! DO NOT OVERFILL. Tighten the dipstick finger tight. Over tightening this dipstick will damage your gearbox housing. | |
| Blade Spindle Housing | 40 | Use one stroke of a lubricator with multipurpose grease. This prevents moisture from accumulating in the housing. | |
| Castor Wheel Forks | 8 | Use two strokes of a lubricator with multi purpose grease. | |
| Castor Wheel Stem (the pneumatic tire) | 8 | Use three strokes of a lubricator with multi purpose grease. | |
| Castor Wheel Fork & Stem Adjustment | 8 | Check clip and pin to see that clip is secure to prevent fork or stem from falling out of the deck arm. | |

GEAR BOX PULLEY INSTALLATION AND REMOVAL



TO INSTALL GEARBOX PULLEY ON GEARBOX SHAFT:

- 1. Align drilled holes in bushing flange with tapped holes in sheave hub.
- 2. Insert capscrews through drilled holes in bushing flange and thread loosely in tapped holes in the sheave.
- 3. Position the assembly on the shaft and tighten the capscrews progressively and uniformly.
- 4. Torque specifications for a 1/4-20 grade 5 bolt is a maximum of 8 foot pounds. Do not over torque.

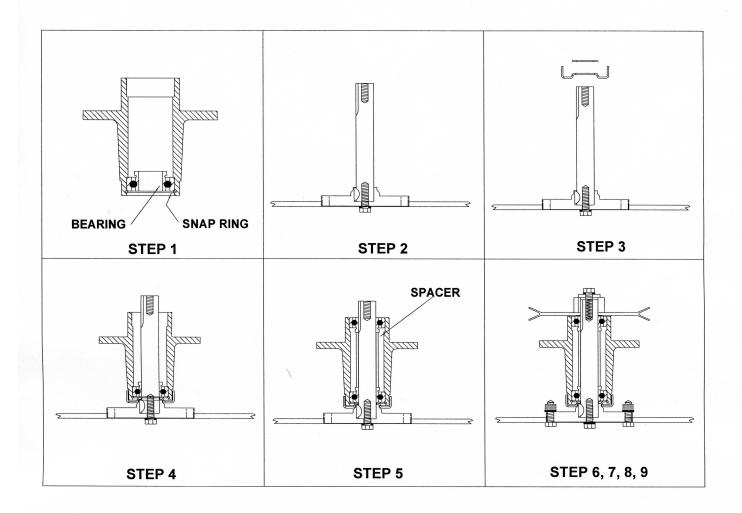
TO REMOVE:

1. Remove capscrews and thread in tapped holes in bushing flange. Tighten progressively until

bushing is free from sheave taper.

- 2. Remove assembly from shaft.
- 3. **Do not** use a puller on this type of sheave.

SPINDLE ASSEMBLY INSTRUCTIONS



PRIOR TO SERIAL# Y1909

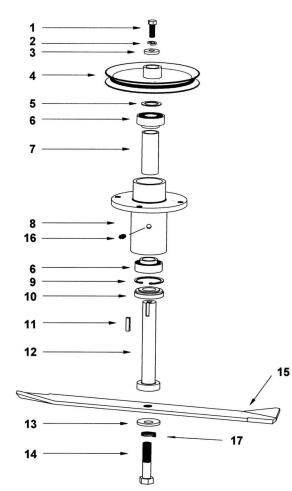
- 1. Place bottom bearing in housing and secure with snap ring.
- 2. Assemble shaft, blade saddle, woodruff key, blade, lock washer, and bolt. Tighten bolt and draw shaft into bottom of the blade saddle.
- 3. Place trash shield and machine bushing over shaft and against blade saddle.
- 4. Slide the above shaft assembly in bearing that is in the hub.
- 5. Slide spacer over the shaft and press the bearing into top side of the hub. Again be sure to place hub of bearing toward center of the hub.
- 6. Place machine bushing on shaft and against the bearing.
- 7. Slide the pulley onto the shaft using the square key.
- 8. With bolt, nut and washer secure the pulley to the shaft and clamp the rotating assembly together.
- 9. Install set screws in pulley using locktite. Install bolts, lock washers and nuts on the two remaining holes in the blade.



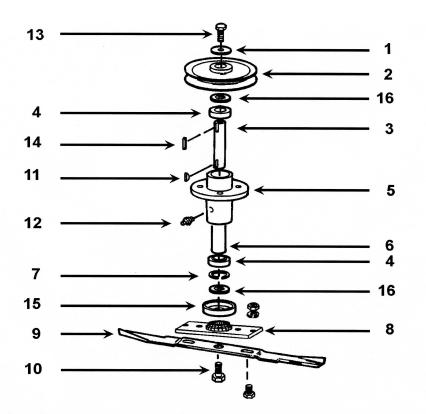
INTO THE HOUSING AND SECURE WITH THE SNAP RING PRESS THE BOTTOM BEARING STEP 1 00 WASHER OVER THE SHAFT PLACE THE TRASH SHIELD INTO THE BEARING. AND SLIDE THE SHAFT STEP 2 THEN PLACE THE MACHINE BUSHING OVER THE SHAFT. BEARING ONTO THE SHAFT. THE SHAFT AND PRESS THE SLIDE THE SPACER OVER **STEP 3** TORQUE TO 90 FT./LBS. SLIDE THE PULLEY ONTO THE SHAFT. SECURE THE PULLEY TO THE SHAFT WITH THE HEAVY WASHER, LOCK WASHER AND THE BOLT. BOLT THE BLADE TO THE BOTTOM OF THE SHAFT WITH THE 5/8" BOLT AND SPECIAL WASHER AND 5/8" LOCK WASHER. PLACE THE SQUARE KEY INTO THE KEY SEAT ON THE SHAFT AND **STEP 4** 00 5/8 LOCK WASHER

AFTER SERIAL # Y1909

60 SPINDLE ASSEMBLY AFTER SERIAL Y1909

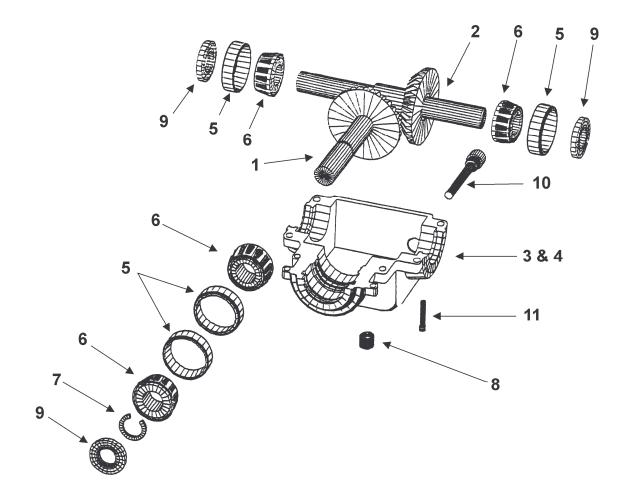


| REF. # | PART NUMBER | DESCRIPTION | QUANTITY |
|-----------|-----------------------|---|-----------|
| 1 | 300-466 | 3/8-24 X 1 HHCS | 1 |
| 2 | 300-480 | 3/8 LOCK WASHER | 1 |
| 3 | 300-173 | WASHER | 1 |
| 4 | 300-709 | PULLEY | 1 |
| NOT SHOWN | 300- 437 | SET SCREW | 2 |
| 5 | 300-278 | MACHINE BUSHING | 1 OR MORE |
| 6 | 400-363 | BEARING | 2 |
| 7 | 400-366 | SPACER | 1 |
| 8 | 400 - 464 | SPINDLE HOUSING | 1 |
| 9 | 400-257 | INTERNAL SNAP RING | 1 |
| 10 | 400 - 465 | TRASH SHIELD WASHER | 1 |
| 11 | 300-288 | KEY | 1 |
| 12 | 400-466 | SPINDLE SHAFT | 1 |
| 13 | 400-468 | WASHER | 1 |
| 14 | 400-469 | 5/8-18 X 2 ¾ BOLT | 1 |
| 15 | 400-467 | BLADE | 1 |
| 16 | 300-212A | GREASE FITTING | 1 |
| 17 | 300-517 | 5/8" LOCK WASHER | 1 |
| | 400-470 400-470-60 | COMPLETE SPINDLE, LESS BLADE COMPLETE SPINDLE WITH BLADE | |



60 SPINDLE ASSEMBLY - PRIOR TO SERIAL # Y1909

| REF. # | PART # | DESCRIPTION | QUANTITY |
|--------|----------|-----------------------|-----------------------|
| 1 | 300-173 | WASHER | 3 |
| 2 | 300-709 | PULLEY | 3 |
| 3 | 400-261 | SHAFT | 3 6 3 |
| 4 | 400-363 | BEARING | 6 |
| 5 | 400-362 | HOUSING | 3 |
| | | 3/8 X 2 CARRIAGE BOLT | 12 |
| | | 3/8 LOCKWASHER | 12 |
| | | 3/8 FLATWASHER | 12 |
| 6 | 400-366 | SPACER | 3 3 |
| 7 | 400-257 | SNAP RING | 3 |
| 8 | 300-745 | SADDLE | 3 6 |
| | | 3/8 X 1 1/4 HHCS | 6 |
| | | 3/8 LOCKWASHER | 6 |
| | | 3/8 NUT | 6 3 |
| 9 | 300-261R | BLADE | 3 |
| | 300-468 | 3/8 X 1 1/4 HHCS | 6 |
| 10 | 300-466 | 3/8 X 1 NF. HHCS | 3 |
| | | 3/8 LOCKWASHER | 3 |
| 11 | 400-324 | KEY | 6 3 3 3 3 |
| 12 | 300-212A | GREASE FITTING | . 3 |
| 13 | 300-466 | 3/8 X 1 NF. HHCS | 3 |
| | | 3/8 LOCKWASHER | 3 |
| 14 | 300-284 | KEYSTOCK | 3 3 3 3 6 |
| 15 | 300-607 | SHIELD | 3 |
| 16 | 300-278 | WASHER | 6 |

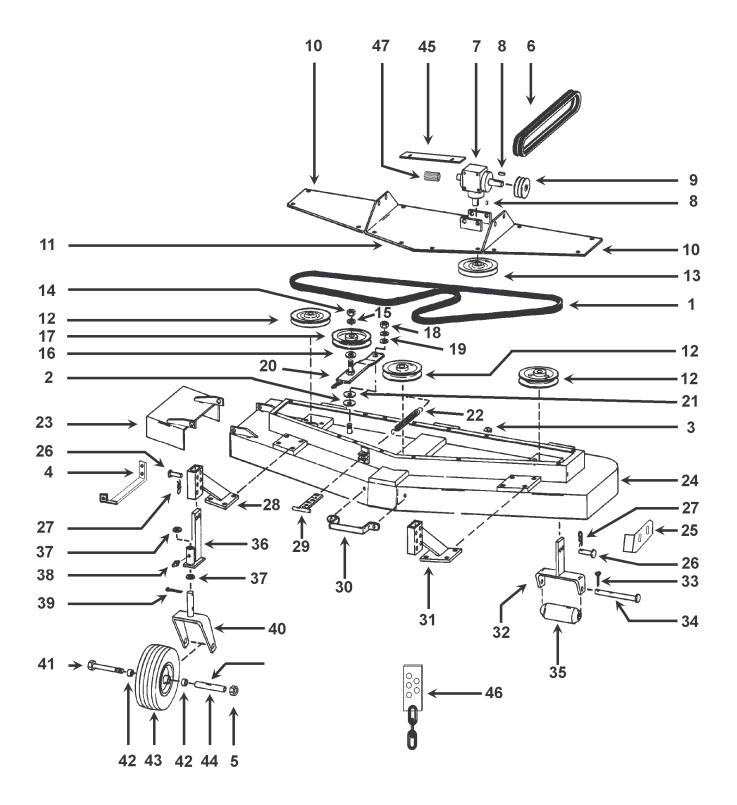


SUPERIOR GEARBOX PARTS EXPLOSION

MODEL # R100-9AAC-A0485

| REF. NO. | PART NO. | DESCRIPTION | REQ'D. |
|----------|-----------------|---------------------------|--------|
| 1 | R100-8B00-A0500 | PINION SHAFT WITH GEAR | 1 |
| 2 | R100-8B00-A0502 | CROSSHAFT WITH GEAR | 1 |
| 3 | R100-003M-A0427 | CASTING WITH TAPPED HOLES | 5 1 |
| 4 | R100-004M-A0503 | CASTING WITH THRU HOLES | 1 |
| 5 | 300-227A | BEARING CUP | 4 |
| 6 | 300-227 | BEARING CONE | 4 |
| 7 | 203293 | RETAINING RING | 1 |
| 8 | 200300 | PIPE PLUG | 4 |
| 9 | 109843 | SEAL | 4 |
| 10 | IP3021 | DIPSTICK | 1 |
| 11 | 103125 | SOCKET HEAD CAP SCREW | 8 |

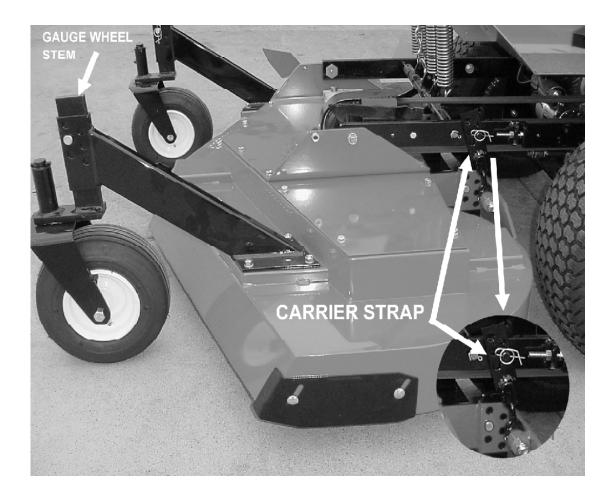
USE 80W90 MULITPURPOSE OIL IN THE SUPERIOR GEARBOX. USE THE DIPSTICK TO DETERMINE OIL FILL LEVEL. 60 DECK ASSEMBLY



60 DECK ASSEMBLY

| REF. | PART # | DESCRIPTION QUANTI | TY |
|------|----------|------------------------|----|
| 1 | 300-715 | BELT | 1 |
| 2 | 300-262 | WASHER | 1 |
| 3 | 300-455 | FENDER NUT | 16 |
| 4 | 100-320 | RH SKID | 1 |
| 4 | 100-320 | | |
| | | 5/16 X 1 HHCS | 3 |
| | | 5/16 NUT | 3 |
| | | 5/16 LOCKWASHER | 3 |
| 5 | 300-509 | NUT | 2 |
| 6 | 400-288 | BELT | 2 |
| 7 | 300-655 | GEARBOX | 1 |
| , | 000 000 | 5/16 X 1 HHCS | 4 |
| | | | |
| | | 5/16 LOCKWASHER | 4 |
| 8 | 300-289A | KEY | 1 |
| 9 | 400-178 | PULLEY W/HUB | 1 |
| 10 | 400-951 | SHIELD R&L | 2 |
| | | 5/16 X 3/4 HHCS | 8 |
| | | 5/16 LOCKWASHER | 8 |
| 11 | 300-712 | GEARBOX PLATE | 1 |
| 11 | 300-712 | | |
| | | 5/16 X 1 HHCS | 6 |
| | | 5/16 LOCKWASHER | 8 |
| 12 | 300-709 | PULLEY | 3 |
| | | SETSCREW 5/16 X 5/16 | 6 |
| 13 | 300-716 | PULLEY, GEARBOX | 1 |
| | | SETSCREW 5/16 X 5/16 | 2 |
| 14 | 300-518 | NUT | 1 |
| | | | • |
| 15 | 300-517 | LOCKWASHER | 1 |
| 16 | 300-525 | WASHER | 1 |
| 17 | 300-740 | VEE-IDLER | 1 |
| 18 | 300-511 | NUT | 1 |
| 19 | 400-121 | WAVY WASHER | 2 |
| 20 | 300-704 | IDLER ARM | 1 |
| | 300-704A | "T" SERIAL NUMBER & UF | כ |
| 21 | 300-706 | FRICTION WASHER | 1 |
| | | IDLER SPRING | - |
| 22 | 300-705 | | 1 |
| 23 | 300-710 | CHUTE | 1 |
| | | 1/4 X 3/4 HHCS | 3 |
| | | 1/4 LOCKNUT | 3 |
| | | | |
| 24 | 300-701 | DECK HOUSING | 1 |
| | | | - |
| 25 | 100-335 | LH SKID SHOE | 1 |
| | | 5/16 X 3/4 CARR. BOLT | 2 |
| | | 5/16 LOCKWASHER | 2 |
| | | 5/16 NUT | 2 |
| | | | |
| 26 | 300-203 | PIN | 4 |
| - | | | - |
| 27 | 300-202 | CLIP | 6 |
| 28 | 300-331 | RH CASTOR ARM | 1 |
| 29 | 300-703 | IDLER ADJUST | 1 |
| | | 1/4 X 1 HHCS | 1 |
| | | 1/4 LOCKNUT | 1 |
| 30 | 400-998 | HANDLE | 1 |
| 00 | 100 000 | 1/4 X 3/4 CARR. BOLT | 2 |
| | | 1/4 LOCKWASHER | 2 |
| | | | 2 |
| | | | |

| REF. | PART # | DESCRIPTION | QUAN ⁻ | ΓΙΤΥ |
|----------|-------------------------------|---|-------------------|--|
| | | 1/4 NUT | | 2 |
| 31 | 300-332 | LH CASTOR ARM | | 1 |
| | | 3/8 X 1 3/4 CAR. B | | 8 |
| | | 3/8 LOCKWASHE | R | 8 |
| | | 3/8 NUT | | 8 |
| 32 | 300-243 | ROLLER BRKT. | | 2 |
| 33 | 300-279 | COTTER KEY | | 2 |
| 34 | 300-201 | ROLLER PIN | | 2 2 2 2 2 2 2 2 2 2 |
| 35 | 100-132 | ROLLER | | 2 |
| 36 | 300-395 | CASTOR STEM | | 2 |
| 37 | 300-195A | THICK SHIM | | 2 |
| 38 | 300-212 | GREASE FITTING | | 2 |
| 39 | 200-238 | ROLLER PIN | | 2 |
| 40 | 300-391 | FORK | | 2 |
| 41 | 300-264 | AXLE | | 2 |
| 42 | 400-234 | BEARING | | 4 |
| 43 | 300-247 | WHEEL & TIRE | | 2 |
| | 400-212A | TIRE ONLY | | |
| | 400-233 | WHEEL ONLY | | ~ |
| 44 | 300-117 | SPACER | | 2 |
| 45 | 100-479 | WEAR PLATE | | 1 |
| | | 5/16 X 1 1/4 HHCS | | 2 |
| | | 5/16 FLAT WASHE 5/16 LOCKWASHE | | 2 2 |
| 46 | 400 047 | CARRIER STRAP | :K | 2 |
| 46 47 | 400-947 400-918 | PLASTIC SLEEVE | | ∠ 1 |
| 47 | 400-918 | PLASTIC SLEEVE | | I |
| | NOT SHOWN | | | |
| | 700-172 | SHOULDER BOLT | | |
| | | 3/8 - 16 NUT | | |
| | | | | |
| | | | AL | • |
| | | | | |
| | 400-786 | BELI DECAL | | 1 |
| | | | | |
| | | | | |
| | | | | |
| | 400-727 400-728 400-786 | 3/8 - 16 NUT 3/8 LOCKWASHEF OPERATION DEC. BLADE DECAL BELT DECAL | | 1 2 1 |



ADJUSTING DECK GAUGE WHEELS, REAR ROLLERS AND CHAIN HANGERS

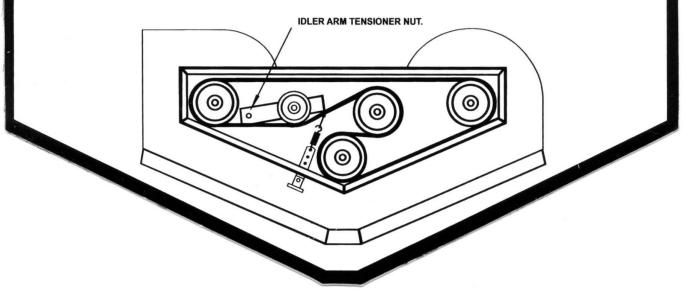
THE CUTTING HEIGHT OF THE MOWER IS DETERMINED BY THE POSITION OF THE GAUGE WHEELS AND THE REAR ROLLER BRACKET ON THE MOWER DECK. THE MOWER DECK IS A FULL FLOATING TYPE AND WILL CLOSELY FOLLOW THE CONTOURS OF THE GROUND WHEN USING THE GAUGE WHEELS AND REAR ROLLERS FOR THE HEIGHT OF VARIOUS CUTTING POSITIONS. ADJUSTMENT IS DONE BY REMOVING THE GAUGE PIN AND CLIP, MOVING THE STEM OF THE FRONT FORK OR REAR ROLLER BRACKET UP OR DOWN TO THE DESIRED HEIGHT. BE SURE TO HAVE ALL FOUR STEMS IN THE SAME ADJUSTMENT.

ON THE MODELS 60, AND 72 DECKS THERE IS CARRIER STRAP LOCATED AT THE REAR OF THE DECK. IT IS VERY IMPORTANT TO ADJUST THE STRAP AT THE SAME TIME THE FRONT CASTOR WHEEL FORK IS ADJUSTED. KEEP THE REAR ROLLERS APPROXIMATELY 1/8" TO 1/4" ABOVE THE GROUND BY PLACING THE PIN ON THE PUSHARM INTO THE PROPER HOLE ON THE CARRIER STRAP IN ORDER TO RAISE OR LOWER THE REAR OF THE DECK TO ATTAIN THE DESIRED RESULT.

THE OPTIMUM SETTING IS WHERE THE REAR OF THE DECK IS JUST SLIGHTLY HIGHER THAN THE FRONT OF THE DECK. THIS WAY THE BLADE HAS TO CUT THE GRASS ONLY ONCE.

BELT ADJUSTMENT INSTRUCTIONS

- 1. YOUR MOWER WILL SHIP TO YOU ADJUSTED TO THE FIRST HOLE AS SHOWN.
- 2. AFTER 1 HOURS OPERATION CHECK THE BELT TENSION. THE SPRING TENSION SHOULD BE ADJUSTED SO THAT THE SPRING IS EXTENDED ONE INCH.
- 3. CHECK BELT PERIODICALLY TO INSURE PROPER BELT TENSION.
- 4. DO NOT OVER TENSION.
- 5. KEEP THE INSIDE OF THE BELT HOUSING CLEAN AND FREE OF WATER.
- 6. KEEP THE IDLER ARM TENSIONER NUT JUST TIGHT ENOUGH TO DAMPEN THE IDLER ARM. DO NOT OVER TENSION.



DEINES MANUFACTURING CORP. LIMITED WARRANTY

Deines Manufacturing Corp., P.O. Box 266, Ransom, KS. 67572, proudly warrants to the original purchaser all products and components manufactured by Deines to be free of defects in material and workmanship.

Deines Manufacturing Corp. does not warrant trade accessory items (batteries, engines, generators, transmission, gear boxes, etc.) which are warranted by their respective manufacturers.

Deines Manufacturing Corp. will, at its option, replace or repair without charge to the purchaser for materials or labor any component or product manufactured by Deines found upon examination by any Deines Authorized Distributor or Dealer or by Deines at it's plant in Ransom, KS. to be defective in material and/or workmanship.

To obtain warranty service the component, or product must be returned to an Authorized Distributor or Dealer or to the Deines Plant, TRANSPORTATION PREPAID, accompanied by a letter stating the warranty claim. Upon receipt of a Warranty Claim Letter, Deines will within ten business days commence performance of it's obligations under this Warranty.

This Warranty will commence upon the date of delivery and will extend as follows: one year for Industrial and/or Commercial applications; one year for Residential applications.

THIS WARRANTY WILL NOT TAKE EFFECT unless the Warranty Registration Card is signed and returned to the Deines Manufacturing Corp. with in ten days from delivery date.

This warranty is void if the component or product is modified in any manner which Deines concludes after inspection adversely affects the reliability of the component or product; if the component or product has been repaired or serviced by anyone other than an Authorized Distributor or Dealer or the Deines Plant; if the component or product is damaged because not operated in accordance with application with applicable instructions or because of accident, misuse or abuse; if the component or product is damaged because not properly maintained as set forth in applicable instructions.

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