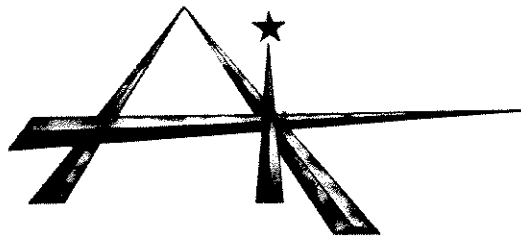


SERVICE PARTS MANUAL

3401

PM471



BRADCO 8MD BACKHOE

American Trencher Inc.

Box 266

Delhi, Iowa 52223

(319) 922-2981

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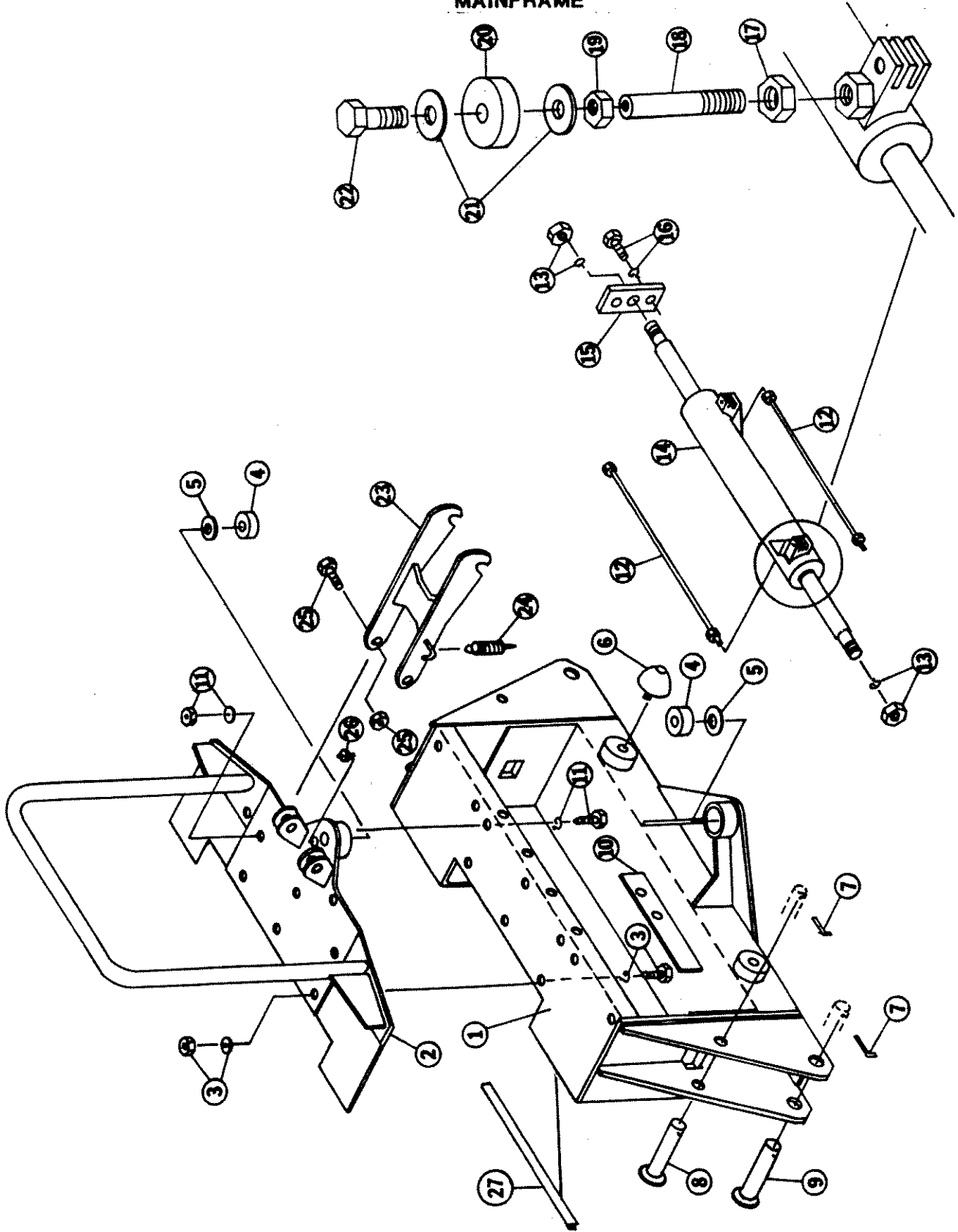
| | |
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|---------|--------|

BACKHOE ASSEMBLY

8MD BACKHOE
MAINFRAME



BACKHOE ASSEMBLY

8MD BACKHOE MAINFRAME

| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---|
| 1 | 1 | 56410 | Main Frame |
| 2 | 1 | 56411 | Top Bearing Cart. Plate |
| 3 | 3 | 1090 | .50 UNC X 1.50" Hex Capscrew, Grd. 5 |
| | 6 | 1646 | .50 Hard Flat Washer |
| | 3 | 1228 | .50 UNC Hex Nut |
| 4 | 2 | 6615 | Bearing |
| 5 | 2 | 50253 | Bearing Spacer |
| 6 | 2 | 6886 | Rubber Bumper |
| 7 | 4 | 1613 | Cotter Pin .25 X 2.00" |
| 8 | 2 | 50408 | Pin 1.00 Dia. X 4.75" |
| 9 | 2 | 50410 | Pin 1.25 Dia. X 4.75" |
| 10 | 1 | 54424 | Guide Plate |
| 11 | 11 | 1089 | .50 UNC X 1.25" Hex Capscrew, Grd. 5 |
| | 22 | 1646 | .50 Hard Flat Washer |
| | 11 | 1228 | .50 UNC Hex Nut |
| 12 | 2 | 35121 | Hose, .25 X 24.00", SAE 100R2, 2-Wire, 4MP - 6MJ |
| 13 | 2 | 1904 | 1.00 - 14 Hex Nut |
| | 2 | 1509 | 1.00 Lock Washer |
| 14 | 1 | 54428 | Swing Cylinder |
| 15 | 1 | 6252 | Cylinder Mounting Plate |
| 16 | 2 | 1089 | .50 UNC X 1.25" Hex Capscrew, Grd. 5 |
| | 2 | 1505 | .50 Lock Washer |
| 17 | 1 | 1244 | .62 UNC Hex Jam Nut |
| 18 | 1 | 54415 | Roller Guide Rod |
| 19 | 1 | 1226 | .38 UNC Hex Nut |
| 20 | 1 | 54414 | Guide Roller |
| 21 | 2 | 1514 | .38 Flat Washer |
| 22 | 1 | 1046 | .38 UNC X 1.75" Hex Capscrew |
| 23 | 1 | 56531 | Boom Hook |
| 24 | 1 | 7440 | Spring |
| 25 | 2 | 1116 | .62 UNC X 2.00" Hex Capscrew, Grd. 5 |
| | 2 | 1642 | .62 UNC Nylock Nut |
| 26 | 1 | 6616 | .25 Grease Zerk |
| 27 | 1 | 34020 | Rubber Edge |

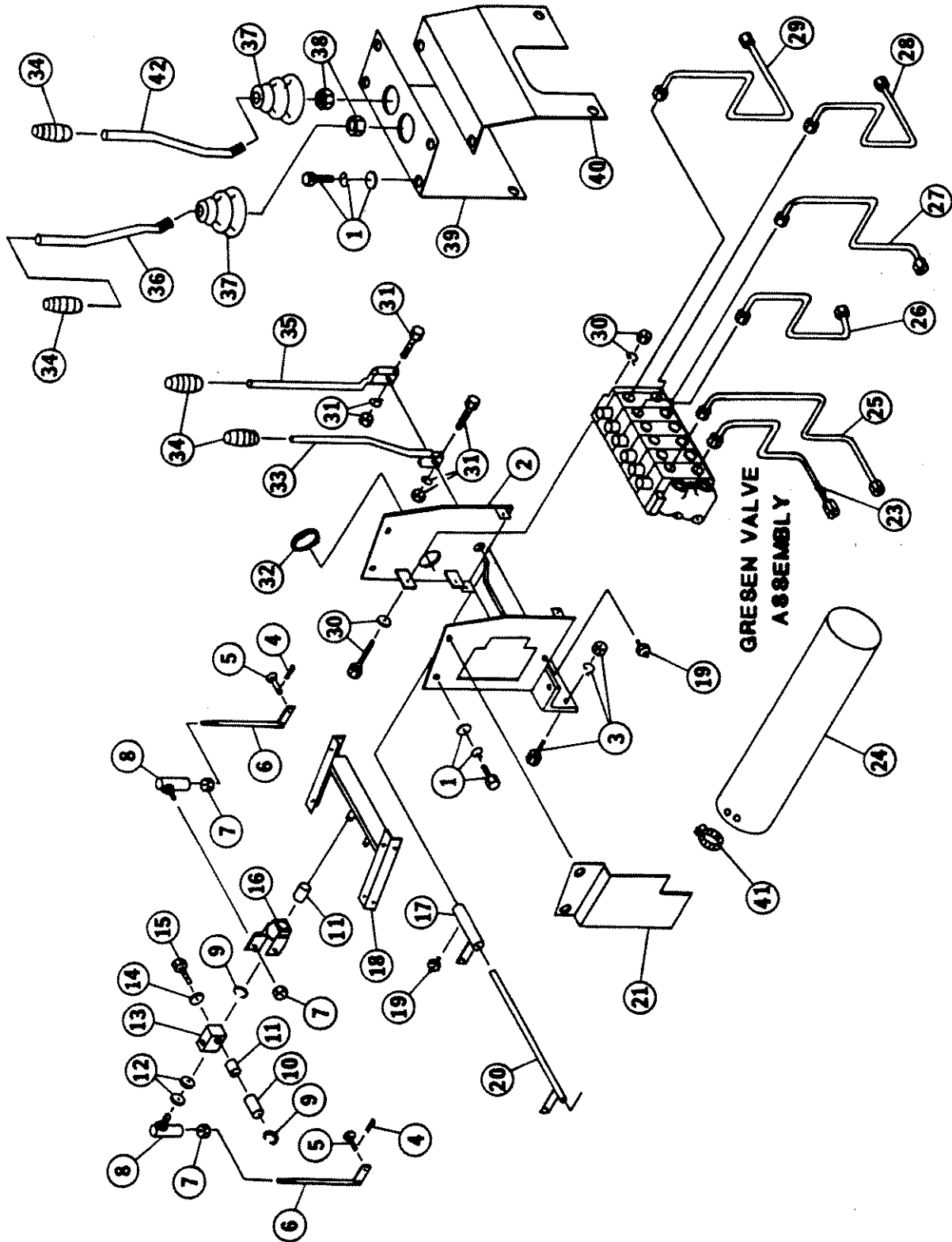
2165-3403

1-28-93-2

BACKHOE ASSEMBLY

8MD BACKHOE
CONSOLE

2168-3404



BACKHOE ASSEMBLY

8MD BACKHOE
CONSOLE

2167-3405

| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|-----------------------------------|
| 1 | 12 | 1021 | .31 UNC X .75" Hex Capscrew |
| | 12 | 1502 | .31 Lock Washer |
| | 12 | 1513 | .31 Flat Washer |
| 2 | 1 | 54500 | Console |
| 3 | 4 | 1045 | .38 UNC X 1.50 Hex Capscrew |
| | 4 | 1503 | .38 Lock Washer |
| | 4 | 1226 | .38 UNC Hex Nut |
| 4 | 6 | 1659 | Cotter Pin 1/16 X 3/4 |
| 5 | 6 | 6776 | Clevis Pin |
| 6 | 4 | 54314 | Push Rod |
| 7 | 6 | 1492 | .50 UNF Hex Jam Nut |
| 8 | 4 | 54099 | .50 Ball Joint |
| 9 | 4 | 6274 | Snap Ring |
| 10 | 2 | 6271 | Pivot Pin |
| 11 | 4 | 6961 | Bushing |
| 12 | 4 | 1527 | .50 SAE Flat Washer |
| 13 | 2 | 54310 | Pivot Block |
| 14 | 2 | 1525 | .38 SAE Flat Washer |
| 15 | 2 | 1292 | .38 UNF X .75" Hex Capscrew |
| 16 | 2 | 54311 | Pivot |
| 17 | 1 | 54317 | Linkage Pivot |
| 18 | 1 | 54313 | Control Bracket |
| 19 | 2 | 6616 | .25 Grease Zerk |
| 20 | 1 | 54320 | Linkage |
| 21 | 1 | 57501 | Valve End Cover |
| 23 | 1 | 54528 | Hydraulic Outrigger Tube - Bottom |
| 24 | 1 | 34004 | Hose Sock 4.00 X 28" |
| 25 | 1 | 54527 | Hydraulic Outrigger Tube - Top |
| 26 | 1 | 54526 | Hydraulic Swing Tube - Bottom |
| 27 | 1 | 54868 | Hydraulic Swing Tube - Top |
| 28 | 1 | 54529 | Hydraulic Outrigger Tube - Bottom |
| 29 | 1 | 54530 | Hydraulic Outrigger Tube - Top |
| 30 | 3 | 1030 | .31 UNC X 3.00" Hex Capscrew |
| | 3 | 1502 | .31 Lock Washer |
| | 3 | 1513 | .31 Flat Washer |
| | 3 | 1225 | .31 UNC Hex Nut |

CONTINUED ON NEXT PAGE . . .

BACKHOE ASSEMBLY

8MD BACKHOE
CONSOLE

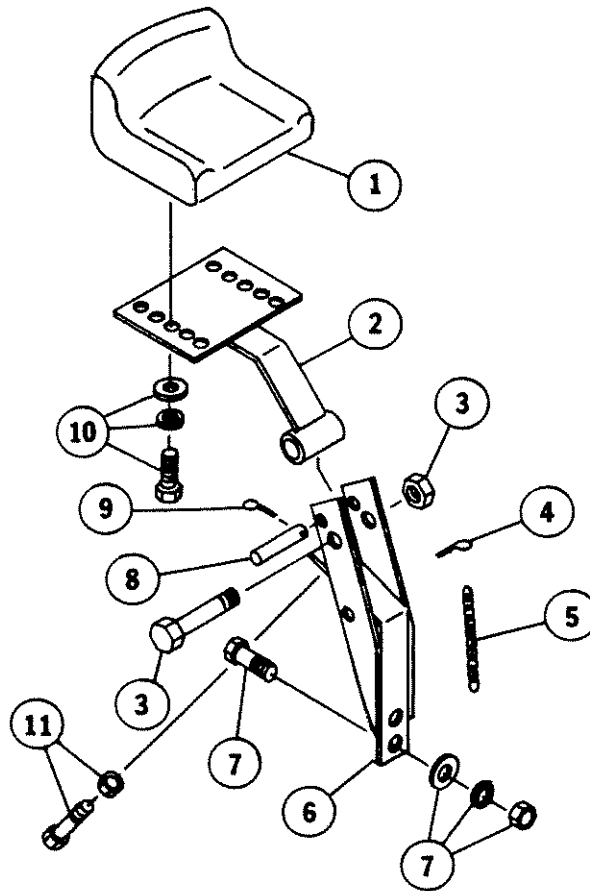
3124-3406

| | | | |
|----|---|-------|----------------------------------|
| 31 | 2 | 1025 | .31 UNC X 1.75" Hex Capscrew |
| | 2 | 1502 | .31 Lock Washer |
| | 2 | 1225 | .31 UNC Hex Nut |
| 32 | 1 | 7096 | Button Plug |
| 33 | 1 | 54305 | Outrigger Control Handle - Right |
| 34 | 4 | 5655 | Handle Grip |
| 35 | 1 | 54304 | Outrigger Control Handle - Left |
| 36 | 1 | 61162 | Control Lever - Right |
| 37 | 2 | 9010 | Control Handle Bolt |
| 38 | 2 | 1244 | .62 UNC Hex Jam Nut |
| 39 | 1 | 54519 | Control Console Cover - Back |
| 40 | 1 | 54518 | Control Console Cover - Front |
| 41 | 1 | 53167 | Hose Clamp |
| 42 | 1 | 61161 | Control Lever - Left |

BACKHOE ASSEMBLY

8MD BACKHOE
SEAT

3063-3407

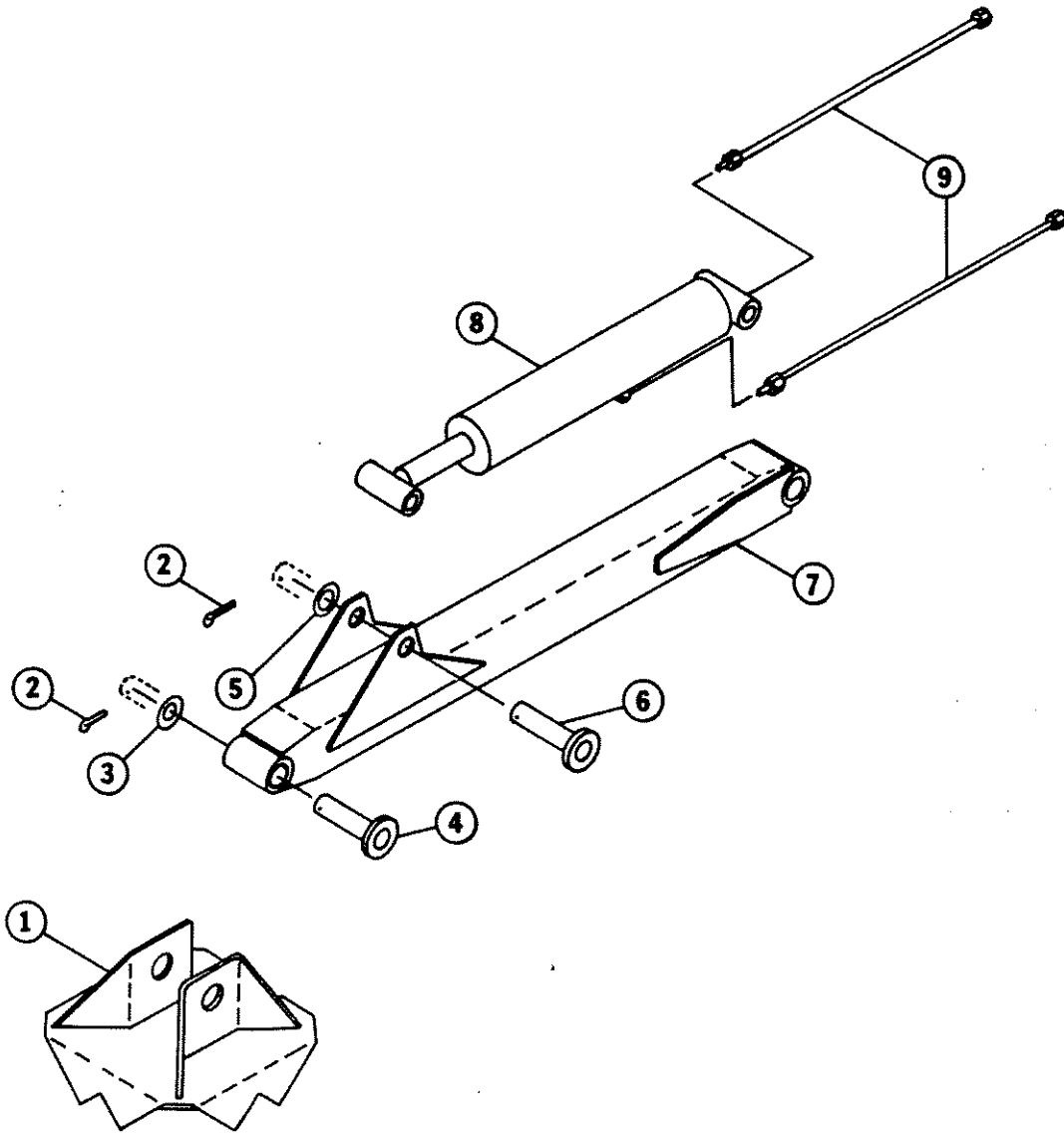


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|------------------------------|
| 1 | 1 | 6980 | Seat |
| 2 | 1 | 6979 | Seat Pivot |
| 3 | 1 | 1147 | .75 UNC X 4.00" Hex Capscrew |
| | 1 | 1534 | .75 UNC Lock Nut |
| 4 | 1 | 1611 | Cotter Pin |
| 5 | 1 | 52712 | Chain |
| 6 | 1 | 9977 | Seat Mounting Bracket |
| 7 | 2 | 1090 | .50 UNC X 1.50" Hex Capscrew |
| | 2 | 1505 | .50 Lock Washer |
| | 2 | 1228 | .50 UNC Nut |
| 8 | 1 | 52713 | Seat Lock Pin |
| 9 | 1 | 1659 | Cotter Pin |
| 10 | 4 | 1021 | .31 UNC X .75" Hex Capscrew |
| | 4 | 1502 | .31 Lock Washer |
| | 4 | 1513 | .31 Flat Washer |
| 11 | 1 | 1242 | .50 UNC Jam Nut |
| | 1 | 1090 | .50 UNC X 1.50" Hex Capscrew |

BACKHOE ASSEMBLY

8MD BACKHOE
STABILIZERS

3098-3408

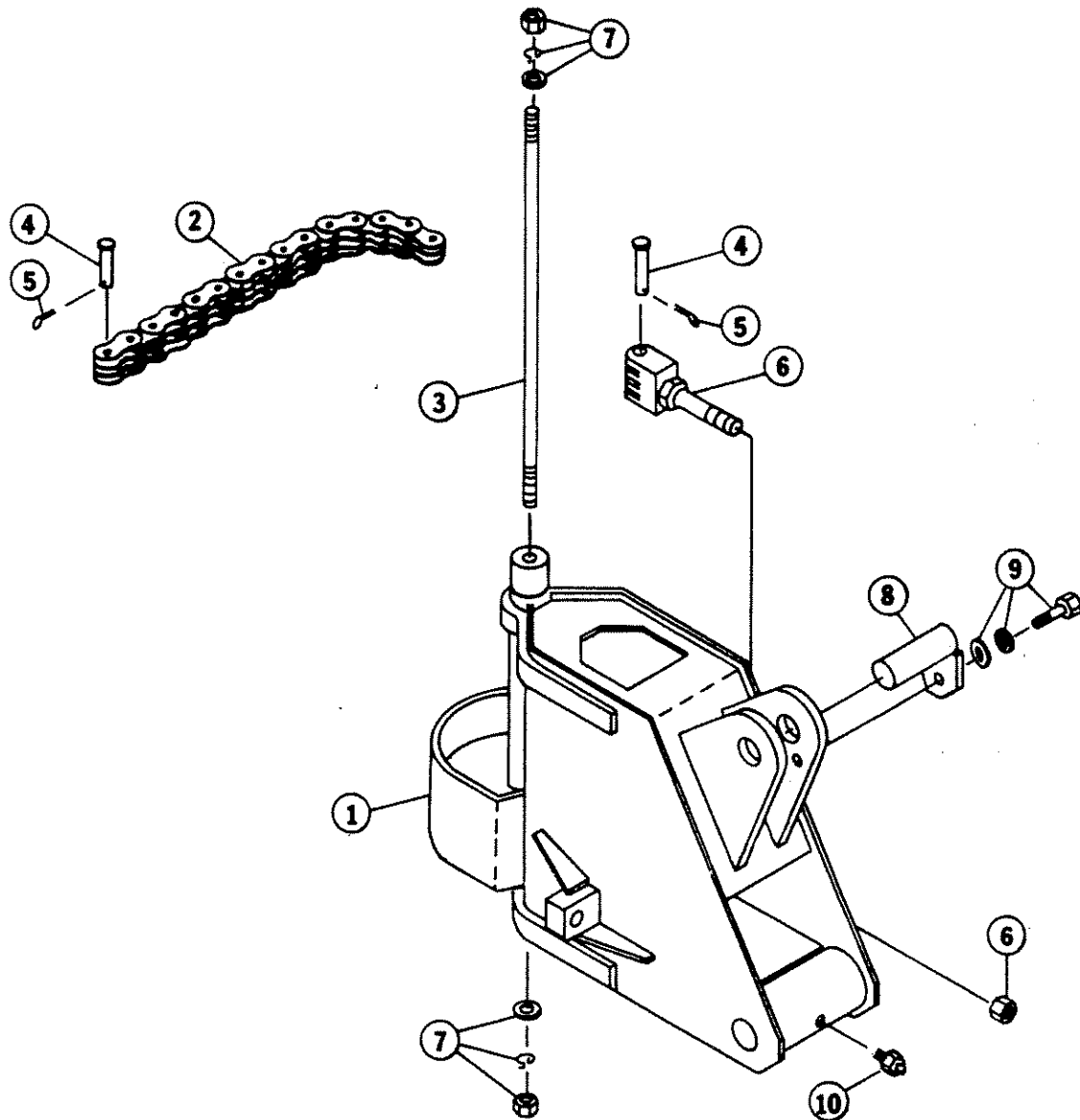


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|--|
| 1 | 2 | 51521 | Stabilizer Pad |
| 2 | 4 | 1613 | Cotter Pin .25 X 2.00" |
| 3 | 2 | 1532 | Flat Washer 1.25" ID |
| 4 | 2 | 50414 | Pin 1.25 X 4.12" |
| 5 | 2 | 1520 | Flat Washer 1.00" ID |
| 6 | 2 | 50412 | Pin 1.00 X 3.75" |
| 7 | 2 | 51507 | Stabilizer Arm - Short 32.50" |
| 8 | 2 | 64890 | Stabilizer Cylinder |
| 9 | 4 | 35121 | Hose, 1/4 X 24", SAE 100R2, 2-Wire, 4MP - 6MJ |

BACKHOE ASSEMBLY

8MD BACKHOE
SWING POST

3092-3409

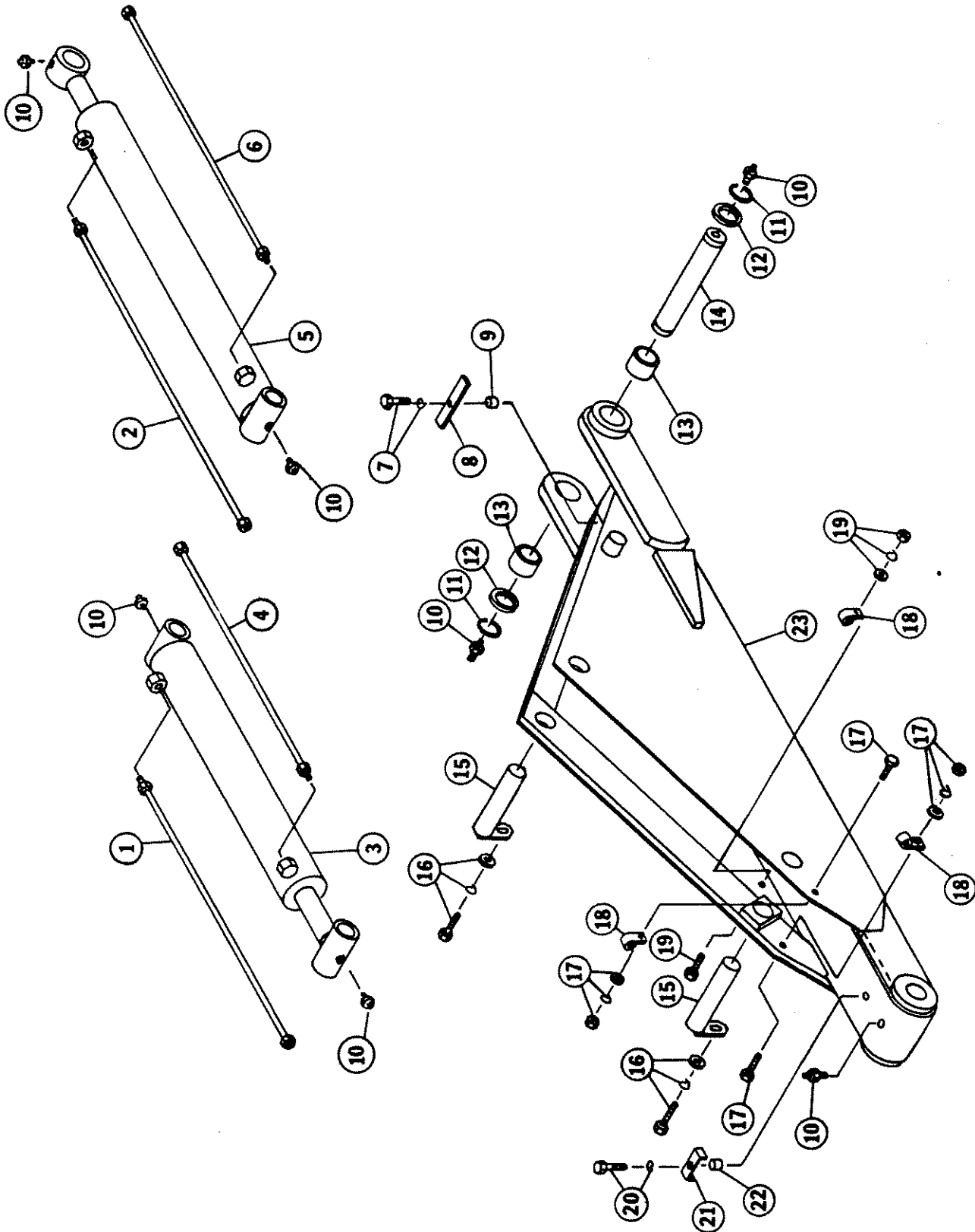


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|------------------------------|
| 1 | 1 | 56504 | Swing Post |
| 2 | 2 | 54416 | Swing Chain |
| 3 | 1 | 50721 | Swing Post Bolt |
| 4 | 4 | 54418 | Swing Chain Pin |
| 5 | 4 | 1611 | Cotter Pin .12 X 1.00" |
| 6 | 2 | 60999 | Bolt |
| | 2 | 1642 | .62 UNC Nylock Nut |
| 7 | 2 | 1516 | .50 Flat Washer |
| | 2 | 1505 | .50 Lock Washer |
| | 2 | 1228 | .50 UNC Hex Nut |
| 8 | 1 | 50406 | Pin |
| 9 | 1 | 1088 | .50 UNC X 1.00" Hex Capscrew |
| | 1 | 1505 | .50 Lock Washer |
| | 1 | 1516 | .50 Flat Washer |
| 10 | 1 | 6616 | Grease Zerk |

BACKHOE ASSEMBLY

8MD BACKHOE
BOOM

3094-3410



BACKHOE ASSEMBLY

8MD BACKHOE
BOOM

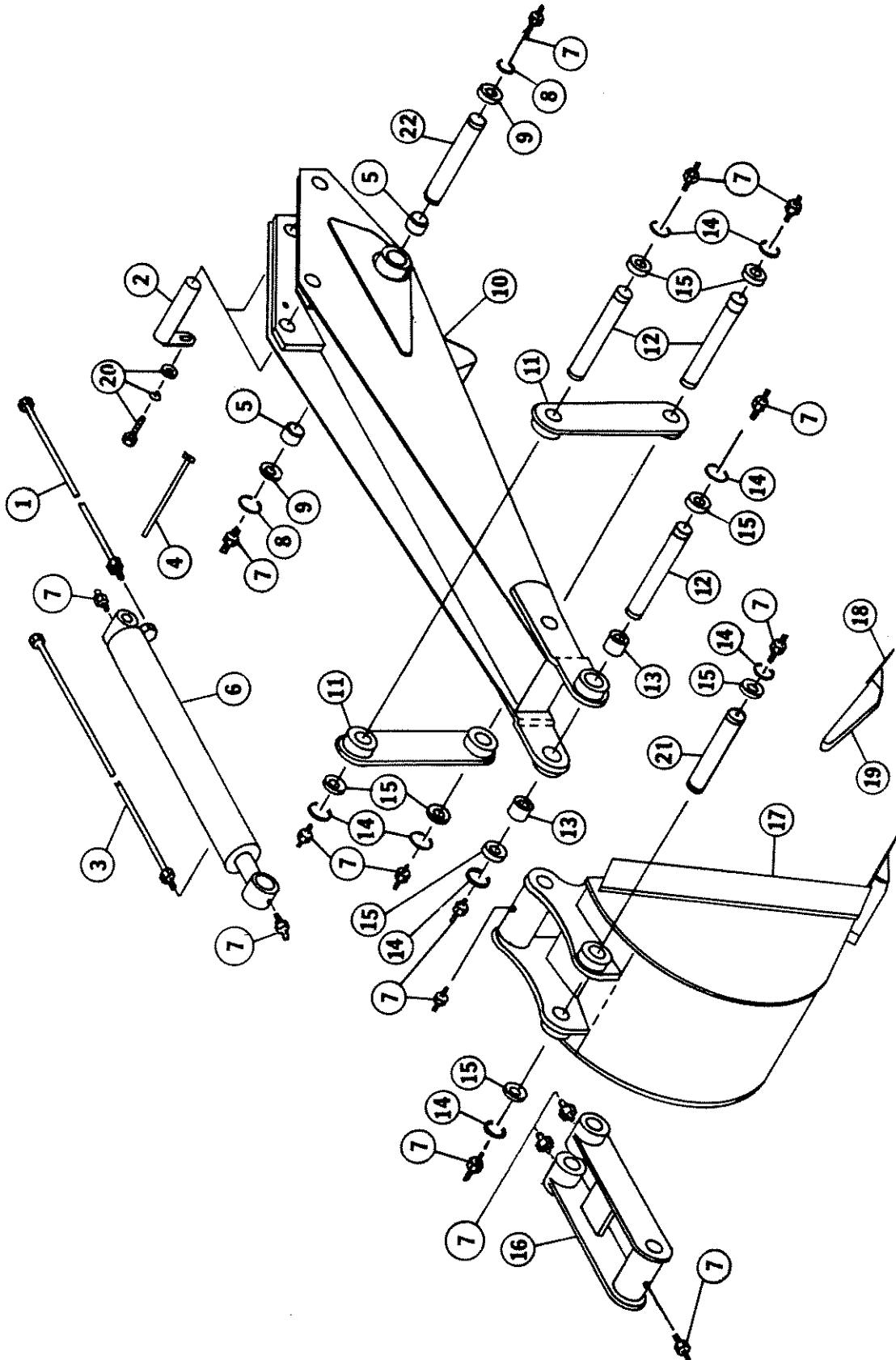
3107-3411

| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---|
| 1 | 1 | 3879 | Hose, .25 X 76", SAE 100R1, 1-Wire, 6MP - 6FJX |
| 2 | 1 | 3877 | Hose, .25 X 64", SAE 100R1, 1-Wire, 6MP - 6FJX |
| 3 | 1 | 56460 | Dipper Cylinder |
| 4 | 1 | 35681 | Hose, .25 X 80", SAE 100R1, 1-Wire, 6MP - 6FJX |
| 5 | 1 | 64889 | Boom Cylinder |
| 6 | 1 | 3878 | Hose, .25 X 70", SAE 100R1, 1-Wire, 6MP - 6FJX |
| 7 | 1 | 1044 | .38 UNC X 1.25" Hex Capscrew |
| | 1 | 1503 | .38 Lock Washer |
| 8 | 1 | 52331 | Hose Clamp |
| 9 | 1 | 6798 | Hose Support |
| 10 | 7 | 6616 | Grease Zerk |
| 11 | 2 | 1650 | Snap Ring |
| 12 | 2 | 6623 | Thrust Washer |
| 13 | 2 | 6355 | Bushing |
| 14 | 1 | 51689 | Lower Boom Pivot Pin |
| 15 | 2 | 50407 | Cylinder Pin |
| 16 | 2 | 1088 | .50 UNC X 1.00" Hex Capscrew |
| | 2 | 1505 | .50 Lock Washer |
| | 2 | 1516 | .50 Flat Washer |
| 17 | 2 | 1004 | .25 UNC X 1.25" Hex Capscrew |
| | 2 | 1501 | .25 Lock Washer |
| | 2 | 1512 | .25 Flat Washer |
| | 2 | 1224 | .25 UNC Hex Nut |
| 18 | 3 | 52209 | Hose Tie |
| 19 | 1 | 1003 | .25 UNC X 1.00" Hex Capscrew |
| | 1 | 1512 | .25 Flat Washer |
| | 1 | 1501 | .25 Lock Washer |
| | 1 | 1224 | .25 UNC Nut |
| 20 | 1 | 1089 | .50 UNC X 1.25" Hex Capscrew |
| | 1 | 1505 | .50 Lock Washer |
| 21 | 1 | 57821 | Hose Clamp |
| 22 | 1 | 57822 | Tube Spacer |
| 23 | 1 | 56535 | Boom |

BACKHOE ASSEMBLY

8MD BACKHOE
DIPPER

3096-3412



BACKHOE ASSEMBLY

8MD BACKHOE
DIPPER

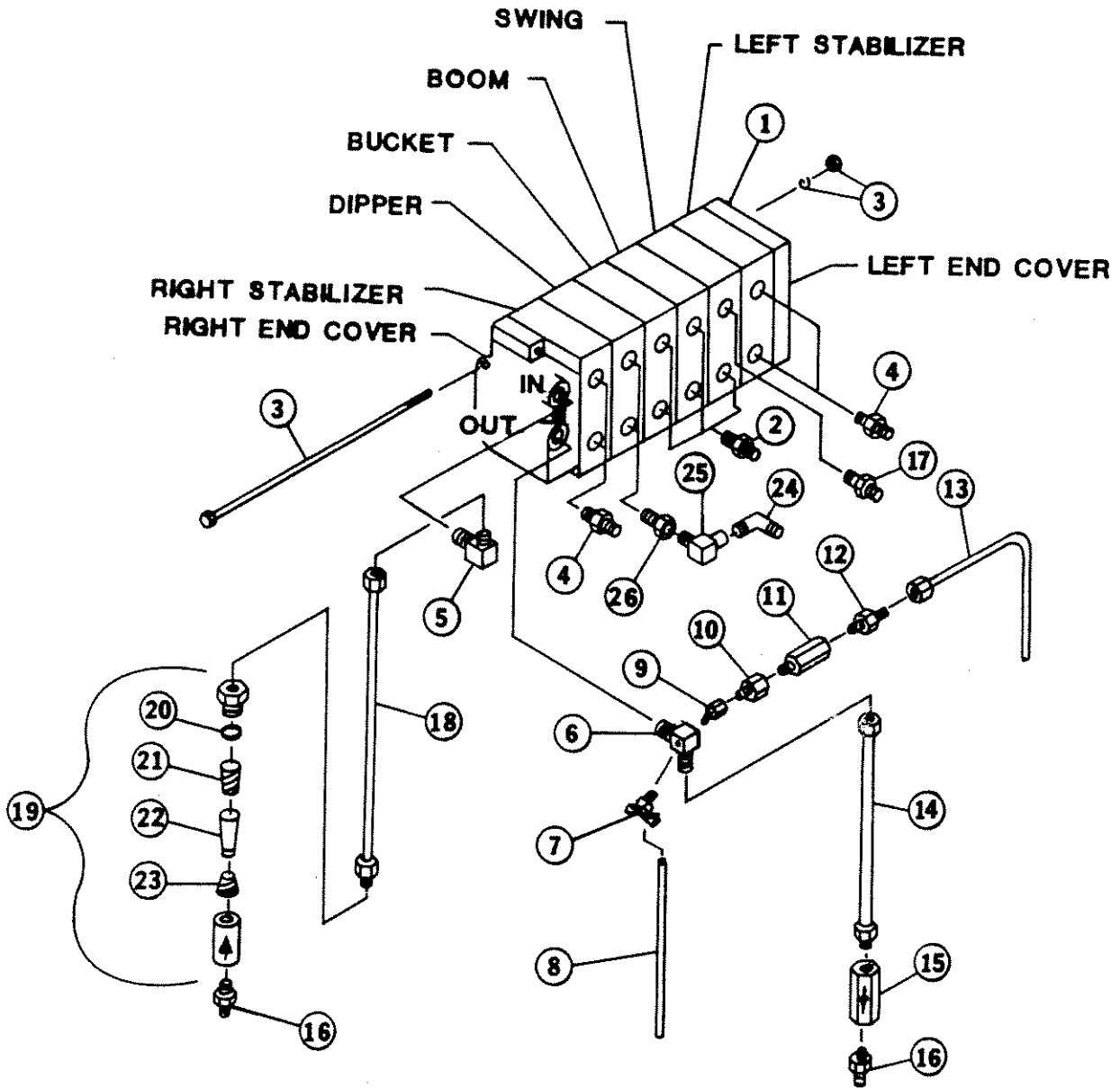
3413-3413

| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---|
| 1 | 1 | 35261 | Hose, .25 X 98.00", SAE 100R1, 6MP - 6FJX |
| 2 | 2 | 50407 | Cylinder Pin |
| 3 | 1 | 35262 | Hose, .25 X 118.00", SAE 100R1, 6MP - 6FJX |
| 4 | 1 | 7104 | Panduit Tie |
| 5 | 2 | 6355 | Bushing |
| 6 | 1 | 52114 | Bucket Cylinder |
| 7 | 16 | 6616 | Grease Zerk |
| 8 | 2 | 1650 | Snap Ring |
| 9 | 2 | 6623 | Thrust Washer |
| 10 | 1 | 62211 | Dipper (Includes (2) 51036 & (2) 6355 Bushing) |
| 11 | 2 | 51041 | Dipper Link |
| 12 | 3 | 62198 | Bucket Pivot Pin |
| 13 | 2 | 51036 | Bushing |
| 14 | 8 | 1652 | Snap Ring |
| 15 | 8 | 57693 | Thrust Washer |
| 16 | 1 | 51048 | Bucket Link |
| 17 | 1 | --- | Standard heavy duty bucket shown. Refer to the "Buck- et Options" page of this section.* |
| 18 | VARIED | 6397 | Bucket Tooth |
| 19 | VARIED | 52208 | Tooth Shank |
| 20 | 2 | 1088 | .50 UNC X 1.00" Hex Capscrew |
| | 2 | 1505 | .50 Lock Washer |
| | 2 | 1516 | .50 Flat Washer |
| 21 | 1 | 62197 | Bucket Pivot Pin |
| 22 | 1 | 6375 | Pin |

VALVE ASSEMBLY

8MD BACKHOE
VALVE #2121
GRESEN

3103-3414



VALVE ASSEMBLY

8MD BACKHOE
VALVE #2121
GRESEN

3104-3415

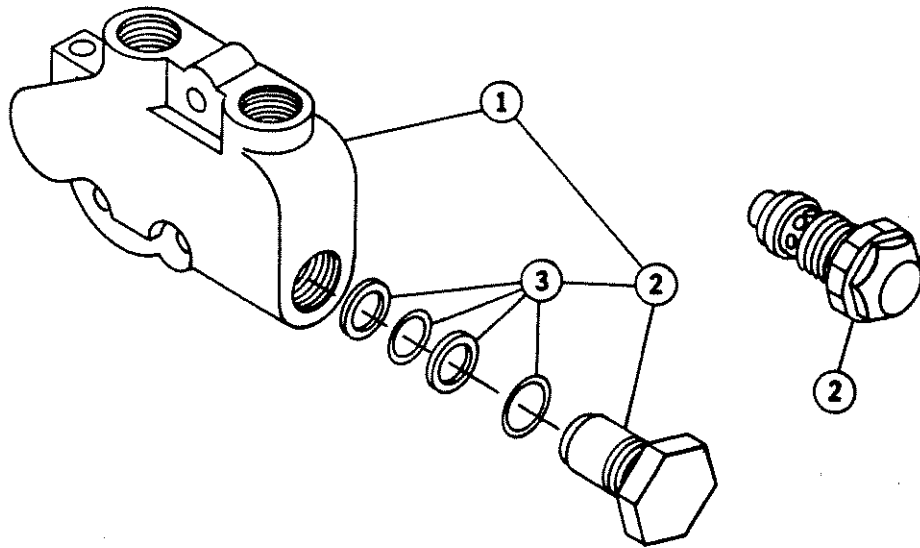
| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|--|
| 1 | 1 | 54332 | Gresen 6-Spool Valve |
| 2 | 5 | 3362 | O-Ring Boss Adapter, 10MBO - 6MJ |
| 3 | 3 | 4726 | Tie Rod Assembly |
| 4 | 4 | 3269 | O-Ring Boss Adapter, 8MBO - 6MJ |
| 5 | 1 | 3283 | 90° O-Ring Adapter, 10MBO - 8MJ |
| 6 | 1 | 57514 | 90° Special Fitting |
| 7 | 1 | 3360 | Needle Valve |
| 8 | 1 | 35110 | Hose, .25 OD X 20.00" Long |
| 9 | 1 | 3393 | 45° Street Elbow, 4MP - 4FP |
| 10 | 1 | 3394 | Pipe Expander, 4MP - 6FP |
| 11 | 1 | 57547 | .38 NPT Relief Valve |
| 12 | 1 | 3138 | Male Connector |
| 13 | 1 | 57515 | Hydraulic Tube |
| 14 | 1 | 35281 | Hose, .50 X 28.00", SAE 100R2, 8MP - 8FJX |
| 15 | 1 | 45137 | .50 Check Valve |
| 16 | 2 | 3070 | Male Connector, 8MP - 8MJ |
| 17 | 1 | 62208 | SAE O-Ring Boss, .06 Dia., 10MBO - 6MJ |
| 18 | 1 | 35287 | Hose, .50 X 36.00", SAE 100R2, 8MP - 8FJX |
| 19 | 1 | 45132 | In-Line Filter (Include Parts 20 -22) |
| 20 | 1 | 45095 | Seal |
| 21 | 1 | 45135 | Support Spring |
| 22 | 1 | 45133 | Filter 25 Micron |
| 23 | 1 | 45094 | Spring |
| 24 | 2 | 3001 | 90° Adapter, 4MP - 6MJ |
| 25 | 2 | 3171 | 90° Street Elbow, 4MP - 4FP |
| 26 | 2 | 3336 | Adapter, 10MBO - 4FP |

VALVE ASSEMBLY

INLET COVER
 ASSEMBLY #4710
 GRESEN

3070-3416

8-9-93-2



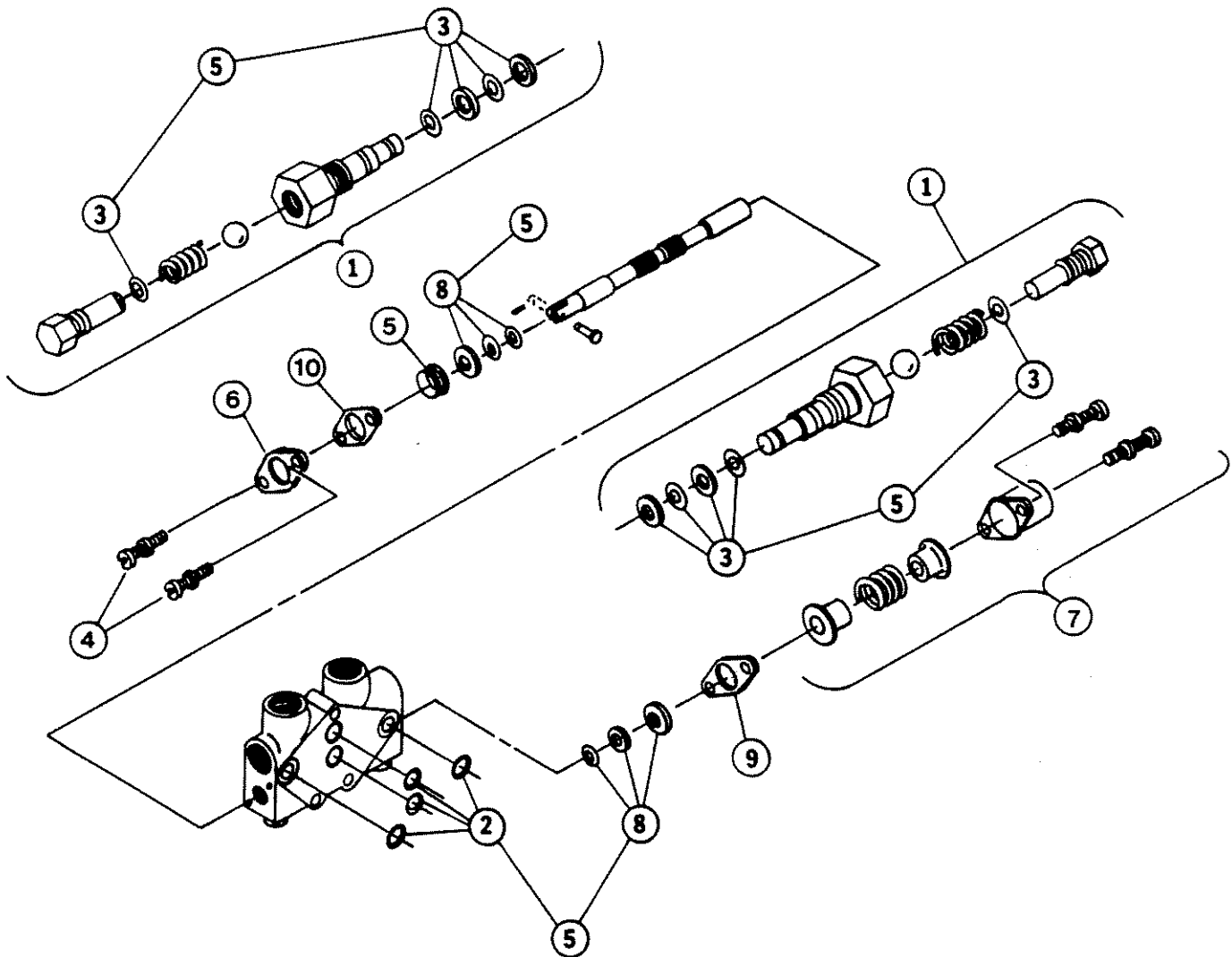
| <u>NO</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|-----------|--------------|-----------------|---------------------------------------|
| 1 | 1 | 4710 | Inlet Cover (#10 Ports) |
| 2 | 1 | 45414 | Non-Relief Plug Assembly Model V20 |
| 3 | 1 | 45148* | Main Relief Valve (Optional) |
| | 1 | 45142 | Seal Kit Model V20 |

* PLEASE STATE BACKHOE MODEL NUMBER WHEN ORDERING MAIN RELIEF VALVE ASSEMBLY.

VALVE ASSEMBLY

STABILIZER SECTION
ASSEMBLY #4704
GRESEN

1640-3417

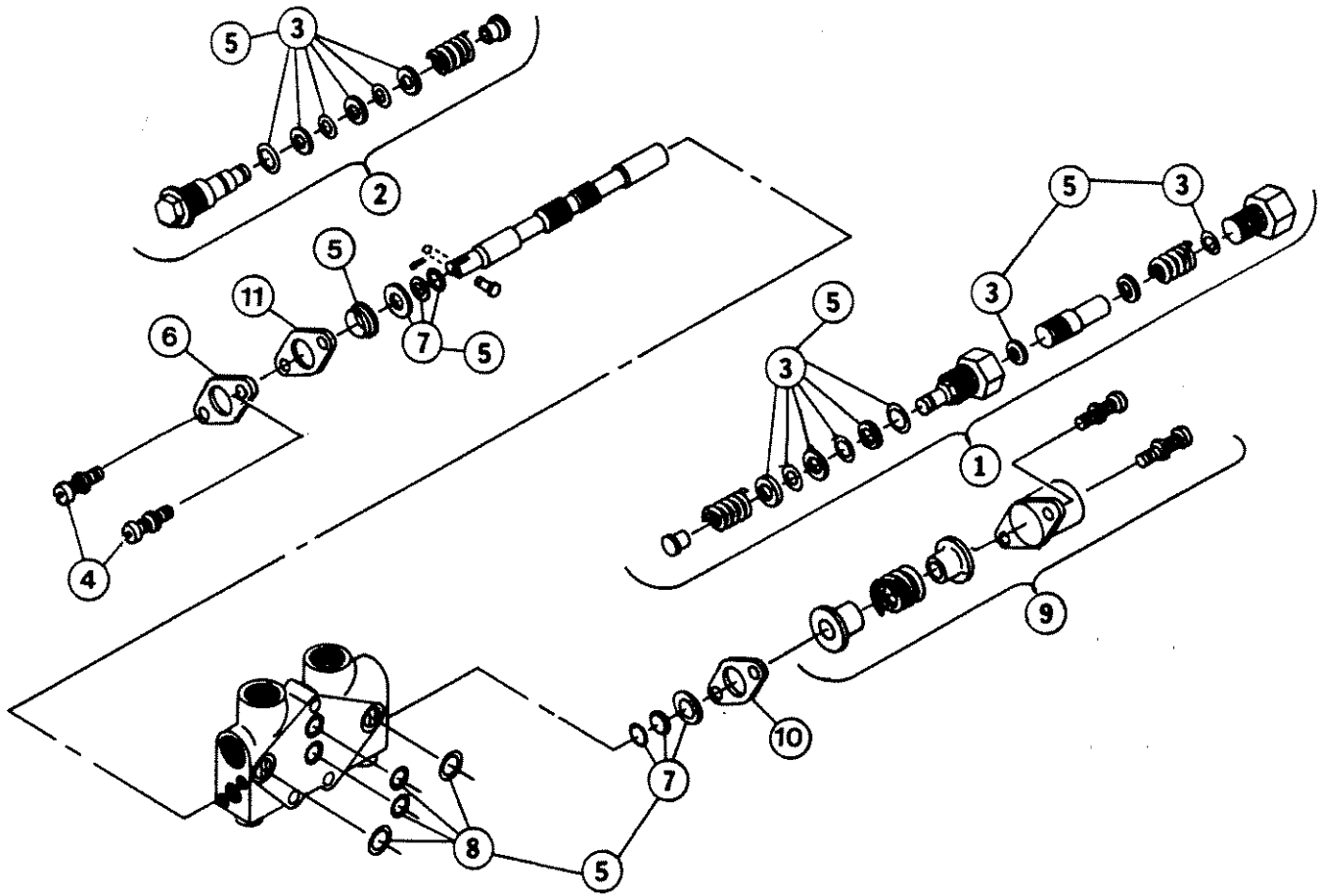


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---|
| 1 | 2 | 4819 | Pilot Check Assembly |
| 2 | 1 | 4653 | Seal Kit |
| 3 | 2 | 4829 | Seal Kit |
| 4 | 2 | 4658 | .25 - 20 UNC X .75 Fillester Head Capscrew |
| 5 | 1 | 45102 | Seal Kit Complete Section |
| 6 | 1 | 54631 | Retainter |
| 7 | 1 | 45282 | Spring Center Cover Assembly |
| 8 | 2 | 4688 | Seal Kit |
| 9 | 1 | 45287 | Retainer Plate |
| 10 | 1 | 45288 | Seal Plate |

VALVE ASSEMBLY

DIPPER SECTION
 ASSEMBLY #4687
 GRESEN

1636-3418

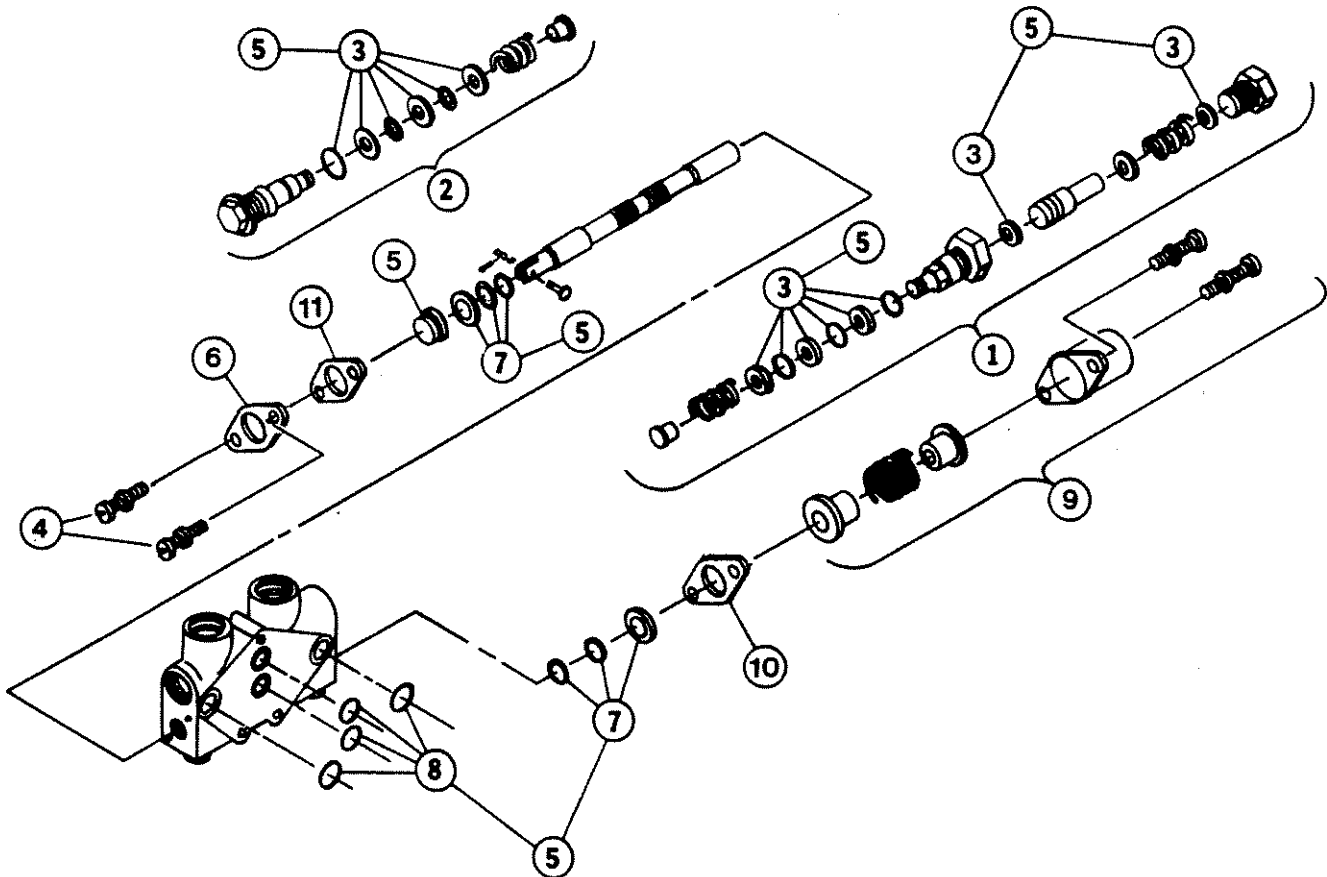


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|------------------------------|
| 1 | 1 | 4665 | Port Relief Cartridge |
| 2 | 1 | 4673 | Port Check Valve |
| 3 | 2 | 4666 | Seal Kit |
| 4 | 2 | 4658 | .25 - 20 UNC X .75 Fillester |
| 5 | 1 | 45103 | Head Capscrew |
| 6 | 1 | 54631 | Seal Kit Complete Section |
| 7 | 2 | 4688 | Retainer |
| 8 | 1 | 4653 | Seal Kit |
| 9 | 1 | 45282 | Seal Kit |
| 10 | 1 | 45287 | Spring Center Cover Assembly |
| 11 | 1 | 45288 | Retainer Plate |
| | | | Seal Plate |

VALVE ASSEMBLY

BUCKET SECTION
ASSEMBLY #45104
GRESEN

1638-3419

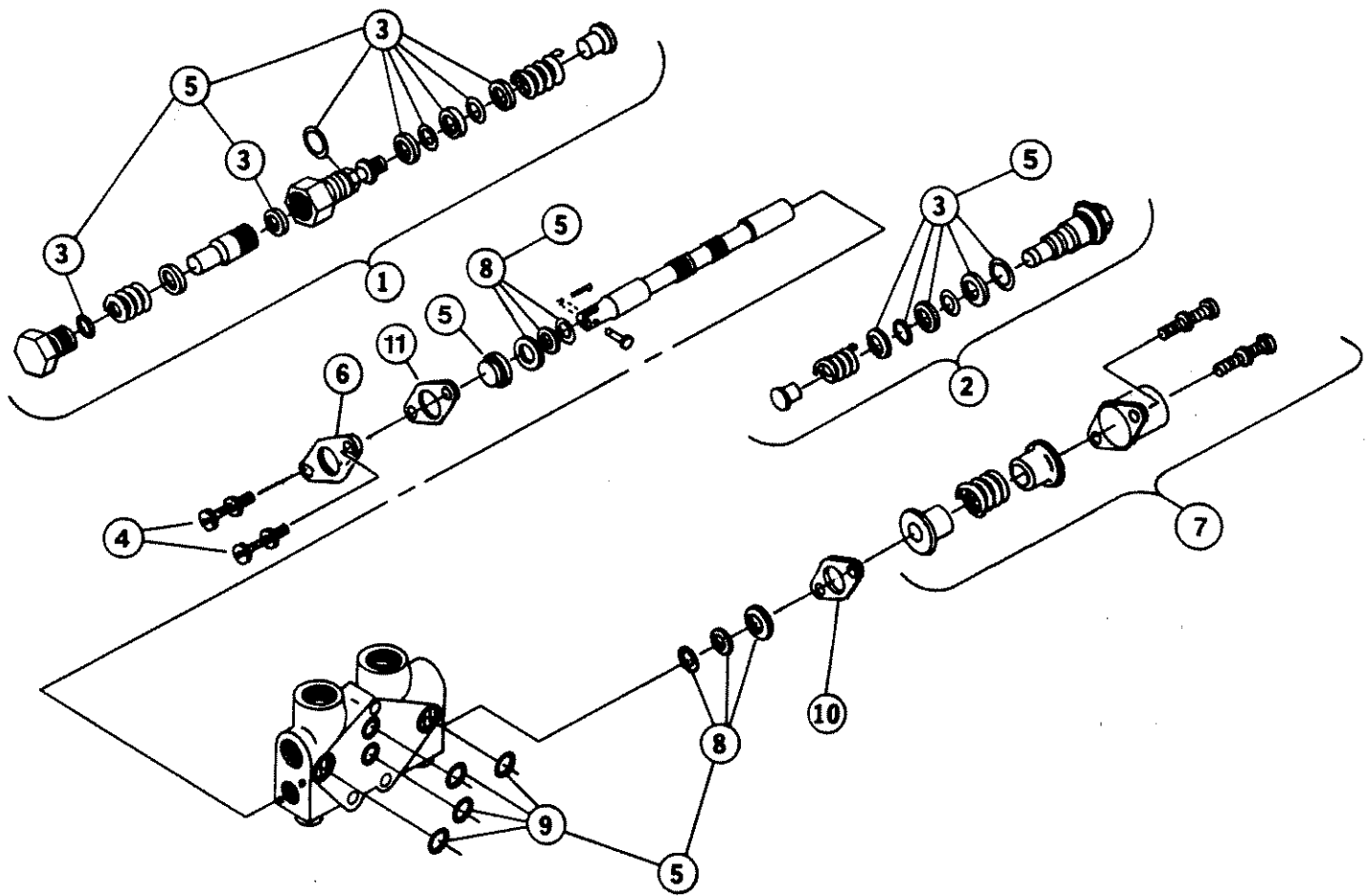


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---|
| 1 | 1 | 45100 | Port Relief Cartridge |
| 2 | 1 | 4673 | Port Check Valve |
| 3 | 2 | 4666 | Seal Kit |
| 4 | 2 | 4658 | .25 - 20 UNC X .75 Fillester Head Capscrew |
| 5 | 1 | 45103 | Seal Kit Complete Section |
| 6 | 1 | 54631 | Retainer |
| 7 | 2 | 4688 | Seal Kit |
| 8 | 1 | 4653 | Seal Kit |
| 9 | 1 | 45282 | Spring Center Cover Assembly |
| 10 | 1 | 45287 | Retainer Plate |
| 11 | 1 | 45288 | Seal Plate |

VALVE ASSEMBLY

BOOM SECTION
ASSEMBLY #4685
GRESEN

1637-3420

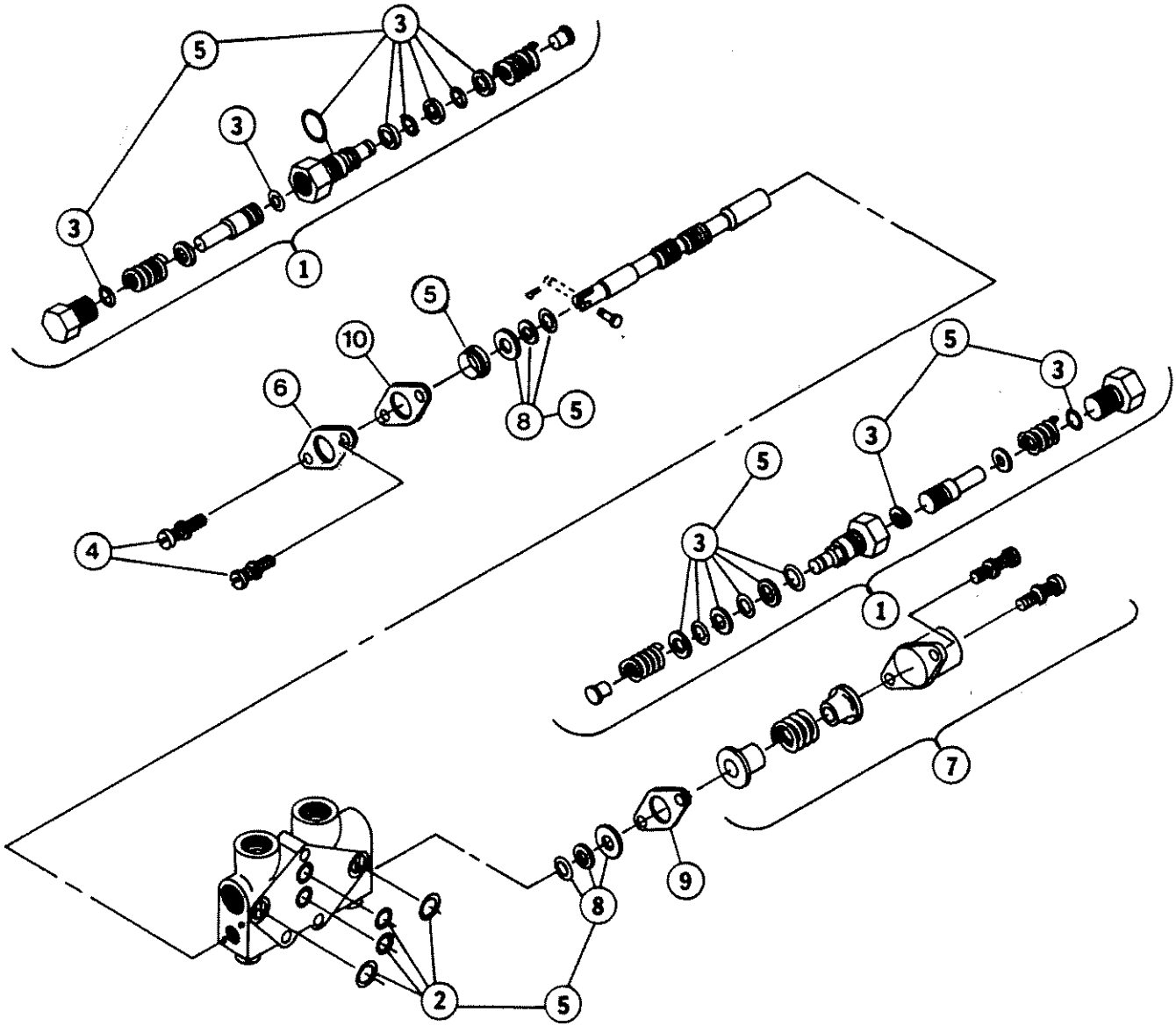


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|--|
| 1 | 1 | 4665 | Port Relief Cartridge |
| 2 | 1 | 4673 | Port Check Valve |
| 3 | 2 | 4666 | Seal Kit |
| 4 | 2 | 4658 | .25 - 20 UNC X .75 Fillester |
| 5 | 1 | 45103 | Head Capscrew Seal Kit Complete Section |
| 6 | 1 | 54631 | Retainer |
| 7 | 1 | 45282 | Spring Center Cover Assembly |
| 8 | 2 | 4688 | Seal Kit |
| 9 | 1 | 4653 | Seal Kit |
| 10 | 1 | 45287 | Retainer Plate |
| 11 | 1 | 45288 | Seal Plate |

VALVE ASSEMBLY

SWING SECTION
 ASSEMBLY #45138
 GRESEN

1639-3421

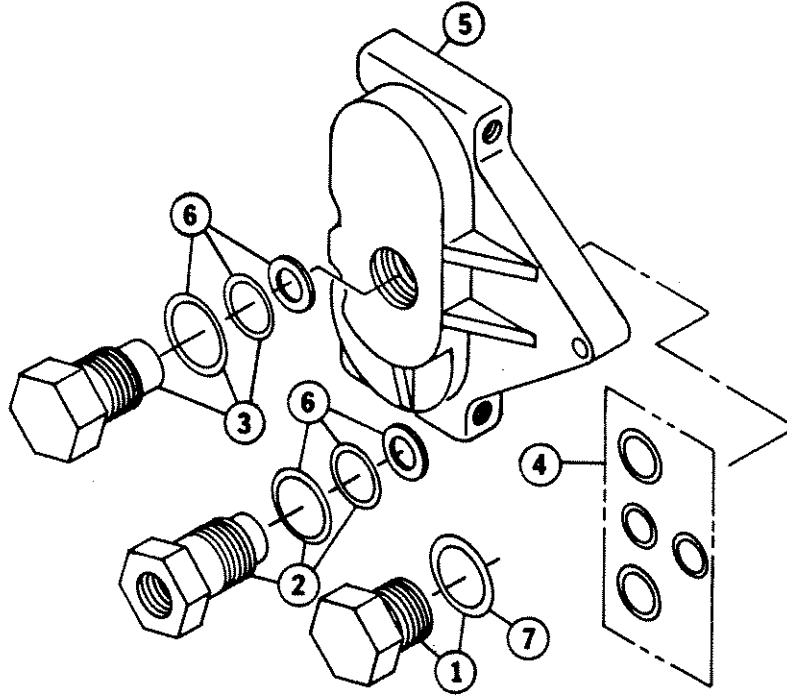


| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|--|
| 1 | 2 | 45139 | Comb. Relief & Anti-Cavitation Check |
| 2 | 1 | 4653 | Seal Kit |
| 3 | 2 | 4666 | Seal Kit |
| 4 | 2 | 4658 | .25 - 20 UNC X .75 Fillester Head Capscrew |
| 5 | 1 | 45103 | Seal Kit Complete Section |
| 6 | 1 | 54631 | Retainer |
| 7 | 1 | 45282 | Spring Center Cover |
| 8 | 2 | 4688 | Seal Kit |
| 9 | 1 | 45287 | Retainer Plate |
| 10 | 1 | 45288 | Seal Plate |

VALVE ASSEMBLY

END COVER
GRESEN

1635-3422



| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|--------------------------|
| 1 | 1 | 4691 | Open Center Plug |
| 2 | 1 | 4698 | Power Beyond Adapter Kit |
| 3 | 1 | 6977 | Closed Center Plug |
| 4 | 1 | 4653 | Seal Kit |
| 5 | 1 | 4690 | Left Cover Plate |
| 6 | 1 | 4966 | Seal Kit |
| 7 | 1 | 4693 | O-Ring |

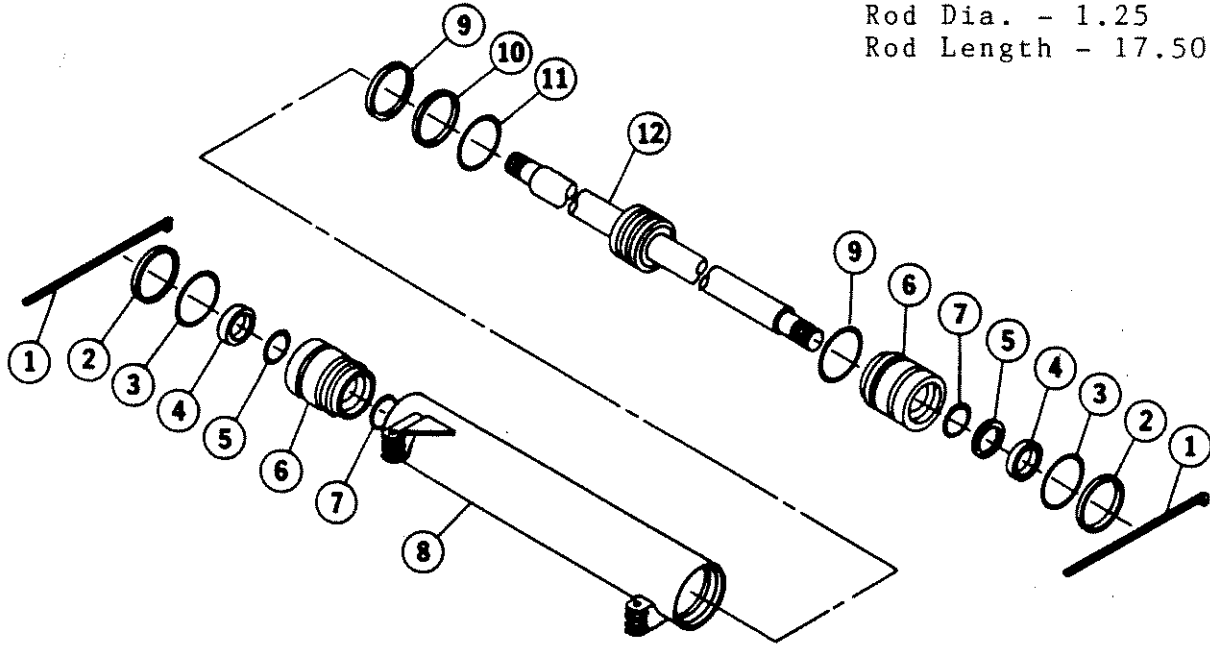
**VALVES ARE ALWAYS SHIPPED WITH OPEN CENTER PLUG
CLOSED CENTER AND POWER BEYOND PLUGS ARE AVAILABLE
AS OPTIONS**

CYLINDER ASSEMBLY

8MD BACKHOE
SWING CYLINDER
ASSEMBLY #54428

1685-3423

Bore - 2.50
Stroke - 11.62
Rod Dia. - 1.25
Rod Length - 17.50



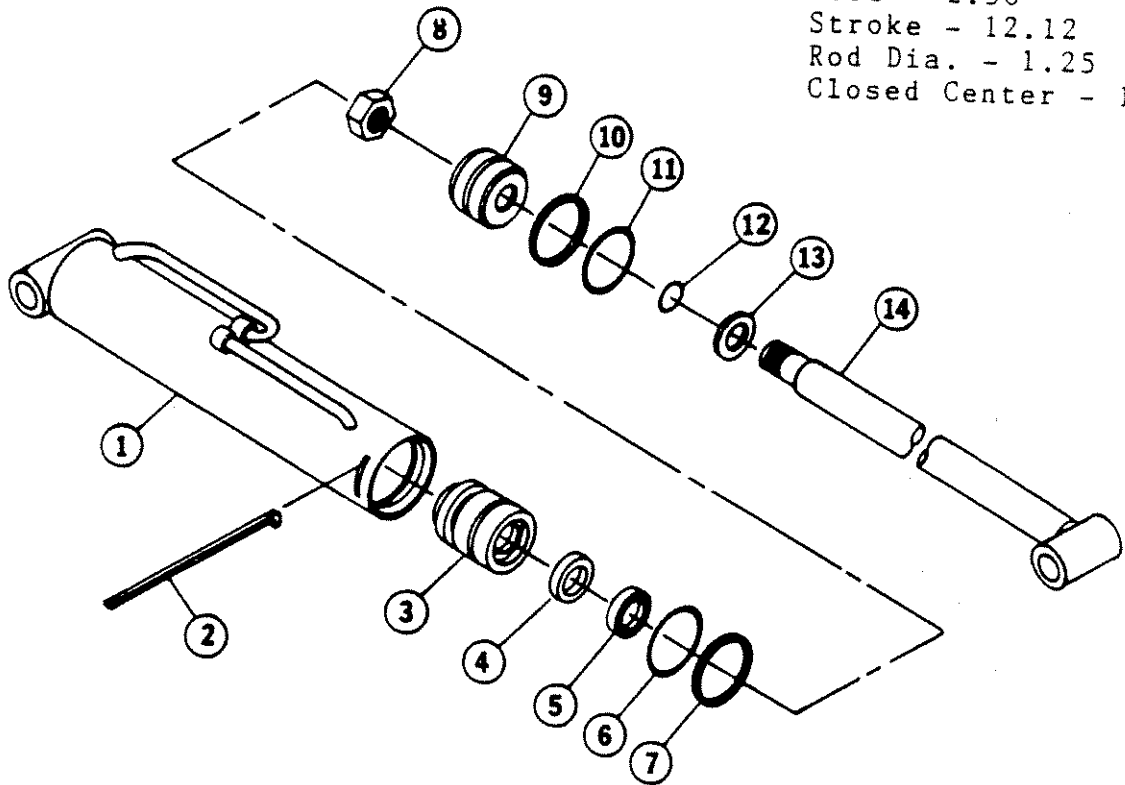
| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---------------------|
| 1 | 2 | ----* | Rod, Gland Retainer |
| 2 | 2 | ----* | Back-Up Washer |
| 3 | 2 | ----* | O-Ring Gland |
| 4 | 2 | ----* | Rod Wiper |
| 5 | 2 | ----* | Back-Up Washer |
| 6 | 2 | 62770 | Gland |
| 7 | 2 | ----* | O-Ring Gland |
| 8 | 1 | 54429 | Tube Weldment |
| 9 | 2 | ----* | Back-Up Washer |
| 10 | 1 | ----* | Teflon Ring |
| 11 | 1 | ----* | O-Ring Piston |
| 12 | 1 | 50207 | Rod Weldment |

NOTE: Overhaul Kit#45263 includes all parts marked with an asterisk (*). Parts are not sold separately.

CYLINDER ASSEMBLY

8MD BACKHOE
STABILIZER CYLINDER
ASSEMBLY #64890

Bore - 2.50
Stroke - 12.12
Rod Dia. - 1.25
Closed Center - 19.19



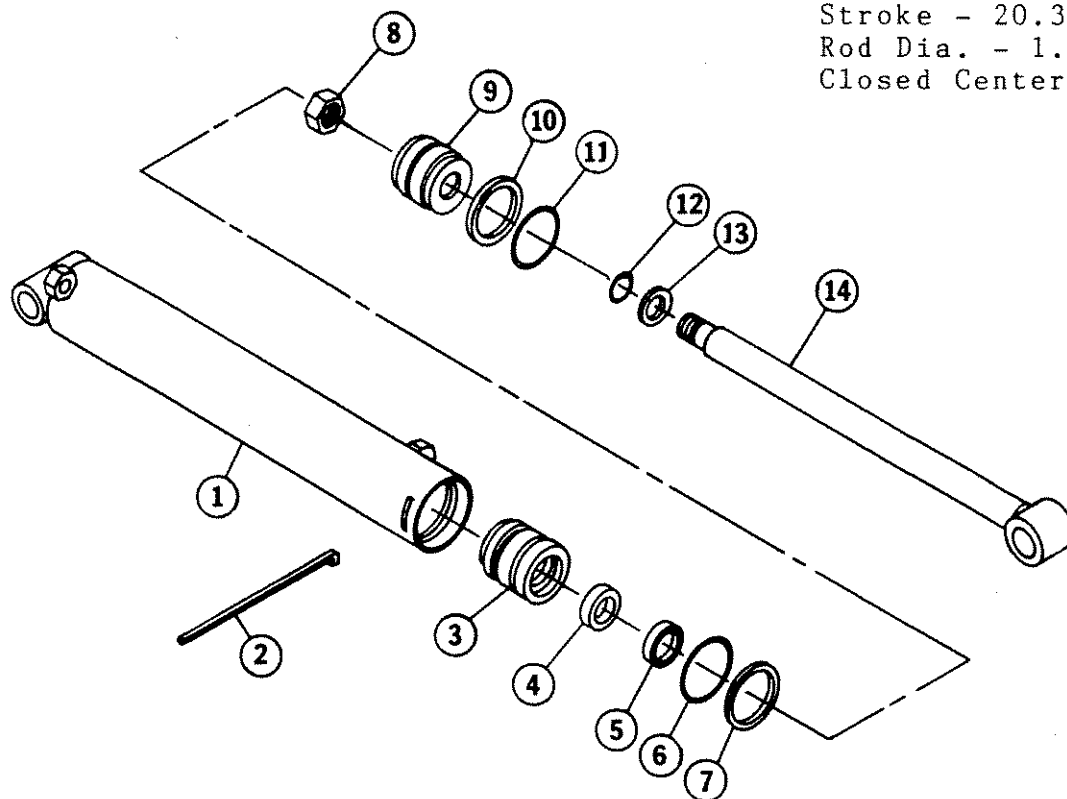
| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---------------------------|
| 1 | 1 | 52756 | Cylinder Tube |
| 2 | 1 | * | Rod, Gland Retainer, 7165 |
| 3 | 1 | 62770 | Gland |
| 4 | 1 | * | Poly Pak Seal, 45219 |
| 5 | 1 | * | Rod Wiper, 4974 |
| 6 | 1 | * | O-Ring, Gland, 4509 |
| 7 | 1 | * | Back-Up Washer, 4510 |
| 8 | 1 | 1483 | Hex Nut |
| 9 | 1 | 50252 | Piston |
| 10 | 1 | * | Piston Ring, 4644 |
| 11 | 1 | * | O-Ring, Piston, 4645 |
| 12 | 1 | * | O-Ring, Piston, 4641 |
| 13 | 1 | 5421 | Washer |
| 14 | 1 | 50246 | Cylinder Rod |

NOTE: OVERHAUL KIT #45258 INCLUDES ALL PARTS MARKED WITH AN ASTERISK (*). PARTS ARE NOT SOLD SEPARATELY.

CYLINDER ASSEMBLY

8MD BACKHOE
BOOM CYLINDER
ASSEMBLY #64889

Bore - 2.50
Stroke - 20.31
Rod Dia. - 1.25
Closed Center - 27.38



1683-3425

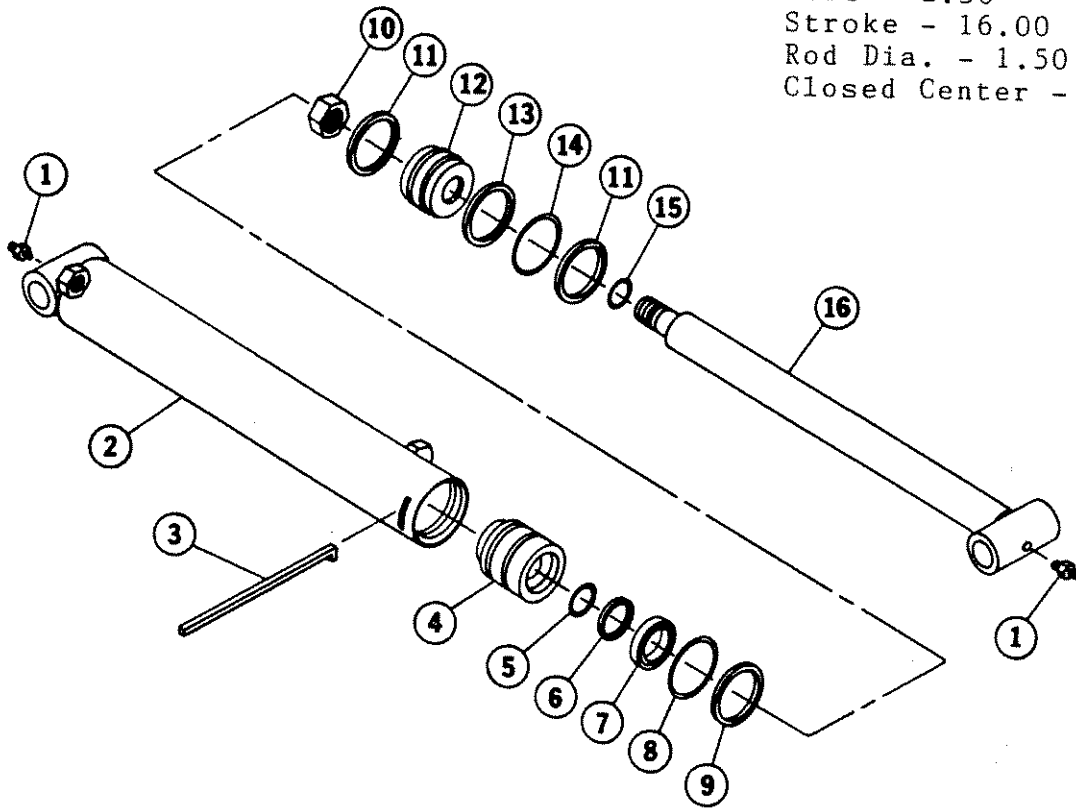
| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---------------------------|
| 1 | 1 | 50230 | Cylinder Tube |
| 2 | 1 | * | Rod, Gland Retainer, 7165 |
| 3 | 1 | 62770 | Gland |
| 4 | 1 | * | Poly Pak Seal, 45219 |
| 5 | 1 | * | Rod Wiper, 4974 |
| 6 | 1 | * | O-Ring, Gland, 4509 |
| 7 | 1 | * | Back-Up Washer, 4510 |
| 8 | 1 | 1483 | Hex Nut |
| 9 | 1 | 50252 | Piston |
| 10 | 1 | * | Piston Ring, 4644 |
| 11 | 1 | * | O-Ring, Piston, 4645 |
| 12 | 1 | * | O-Ring, Piston, 4641 |
| 13 | 1 | 5421 | Washer |
| 14 | 1 | 50242 | Cylinder Rod |

NOTE: OVERHAUL KIT #45258 INCLUDES ALL PARTS MARKED WITH AN ASTERISK (*). PARTS ARE NOT SOLD SEPARATELY.

CYLINDER ASSEMBLY

8MD BACKHOE
 DIPPER CYLINDER
 ASSEMBLY #56460

Bore - 2.50
 Stroke - 16.00
 Rod Dia. - 1.50
 Closed Center - 22.88



2174-3426

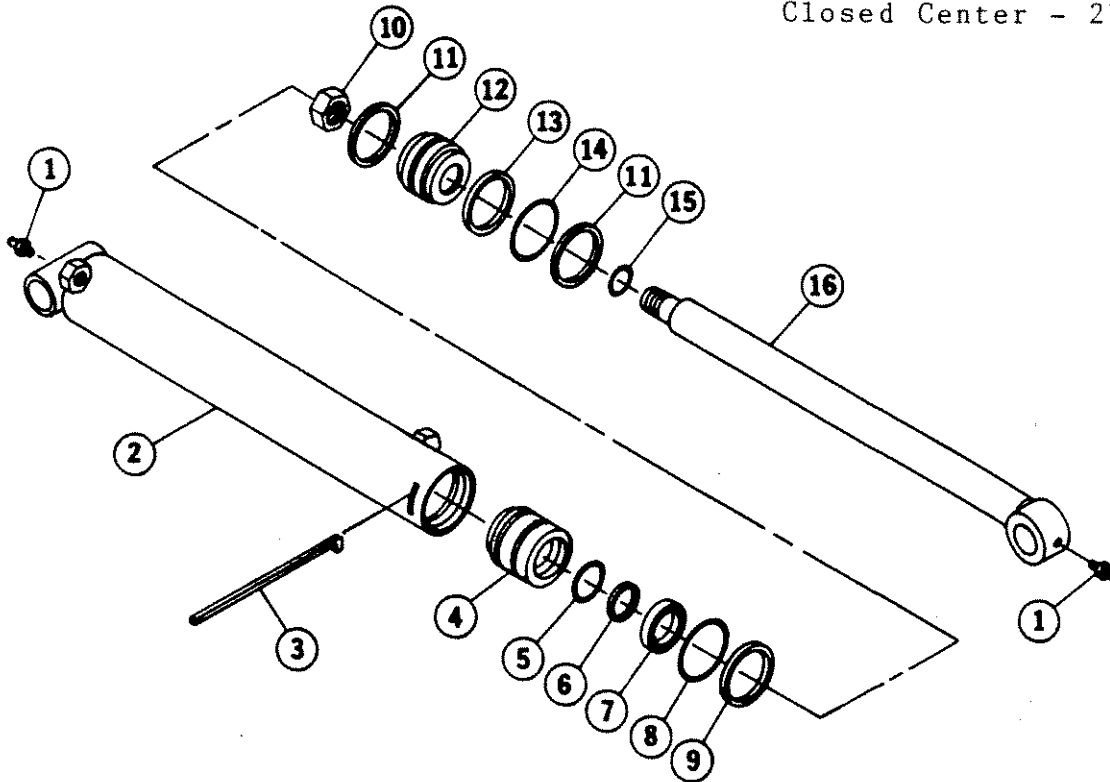
| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---------------------|
| 1 | 2 | 6616 | Grease Zerk |
| 2 | 1 | 50235 | Tube Wm't |
| 3 | 1 | -----* | Rod, Gland Retainer |
| 4 | 1 | 64531 | Gland |
| 5 | 1 | -----* | O-Ring Gland |
| 6 | 1 | -----* | Back-Up Washer |
| 7 | 1 | -----* | Rod Wiper |
| 8 | 1 | -----* | O-Ring Gland |
| 9 | 1 | -----* | Back-Up Washer |
| 10 | 1 | 1483 | Hex Nut |
| 11 | 2 | -----* | Back-Up Washer |
| 12 | 1 | 50252 | Piston |
| 13 | 1 | -----* | Back-Up Washer |
| 14 | 1 | -----* | O-Ring Piston |
| 15 | 1 | -----* | O-Ring Piston |
| 16 | 1 | 56457 | Rod Wm't |

NOTE: OVERHAUL KIT #4980 INCLUDES ALL PARTS MARKED WITH AN ASTERISK (*). PARTS ARE NOT SOLD SEPARATELY.

CYLINDER ASSEMBLY

BMD BACKHOE
 BUCKET CYLINDER
 ASSEMBLY #52114

Bore - 2.50
 Stroke - 12.56
 Rod Dia. - 1.50
 Closed Center - 27.38



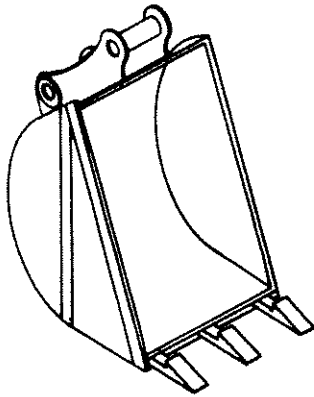
2175-3427

| <u>NO.</u> | <u>REQ'D</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|------------|--------------|-----------------|---------------------|
| 1 | 2 | 6616 | Grease Zerk |
| 2 | 1 | 50241 | Tube Wm't |
| 3 | 1 | ----* | Rod, Gland Retainer |
| 4 | 1 | 64531 | Gland |
| 5 | 1 | ----* | O-Ring Gland |
| 6 | 1 | ----* | Back-Up Washer |
| 7 | 1 | ----* | Rod Wiper |
| 8 | 1 | ----* | O-Ring Gland |
| 9 | 1 | ----* | Back-Up Washer |
| 10 | 1 | 1483 | Hex Nut |
| 11 | 2 | ----* | Back-Up Washer |
| 12 | 1 | 50252 | Piston |
| 13 | 1 | ----* | Teflon Ring |
| 14 | 1 | ----* | O-Ring Piston |
| 15 | 1 | ----* | O-Ring Piston |
| 16 | 1 | 52116 | Rod Wm't |

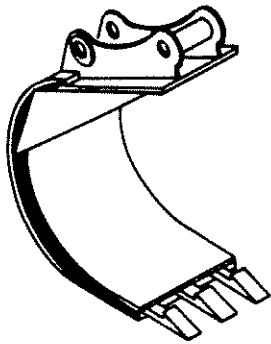
NOTE: Overhaul Kit #4980 includes all parts marked with an asterisk (*). Parts are not sold separately.

OPTIONAL EQUIPMENT

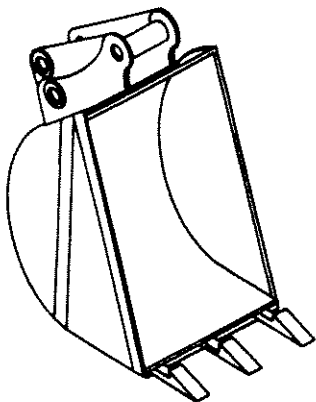
8MD BACKHOE
BUCKETS



| <u>WIDTH</u> | <u>DESCRIPTION</u> | <u>PART NO.</u> |
|--------------|--------------------|-----------------|
| 12" | Heavy Duty Bucket | 56900 |
| 16" | Heavy Duty Bucket | 56901 |
| 18" | Heavy Duty Bucket | 56902 |
| 24" | Heavy Duty Bucket | 56903 |



| | | |
|----|------------------|-------|
| 8" | Open Side Bucket | 52157 |
|----|------------------|-------|



| | | |
|-----|------------------|-------|
| 12" | Bell Hole Bucket | 51202 |
| 16" | Bell Hole Bucket | 52602 |
| 18" | Bell Hole Bucket | 51201 |
| 24" | Bell Hole Bucket | 51203 |
| 36" | Bell Hole Bucket | 51222 |

3135-3428