

Bethlehem ^{BG} PUMPING UNITS

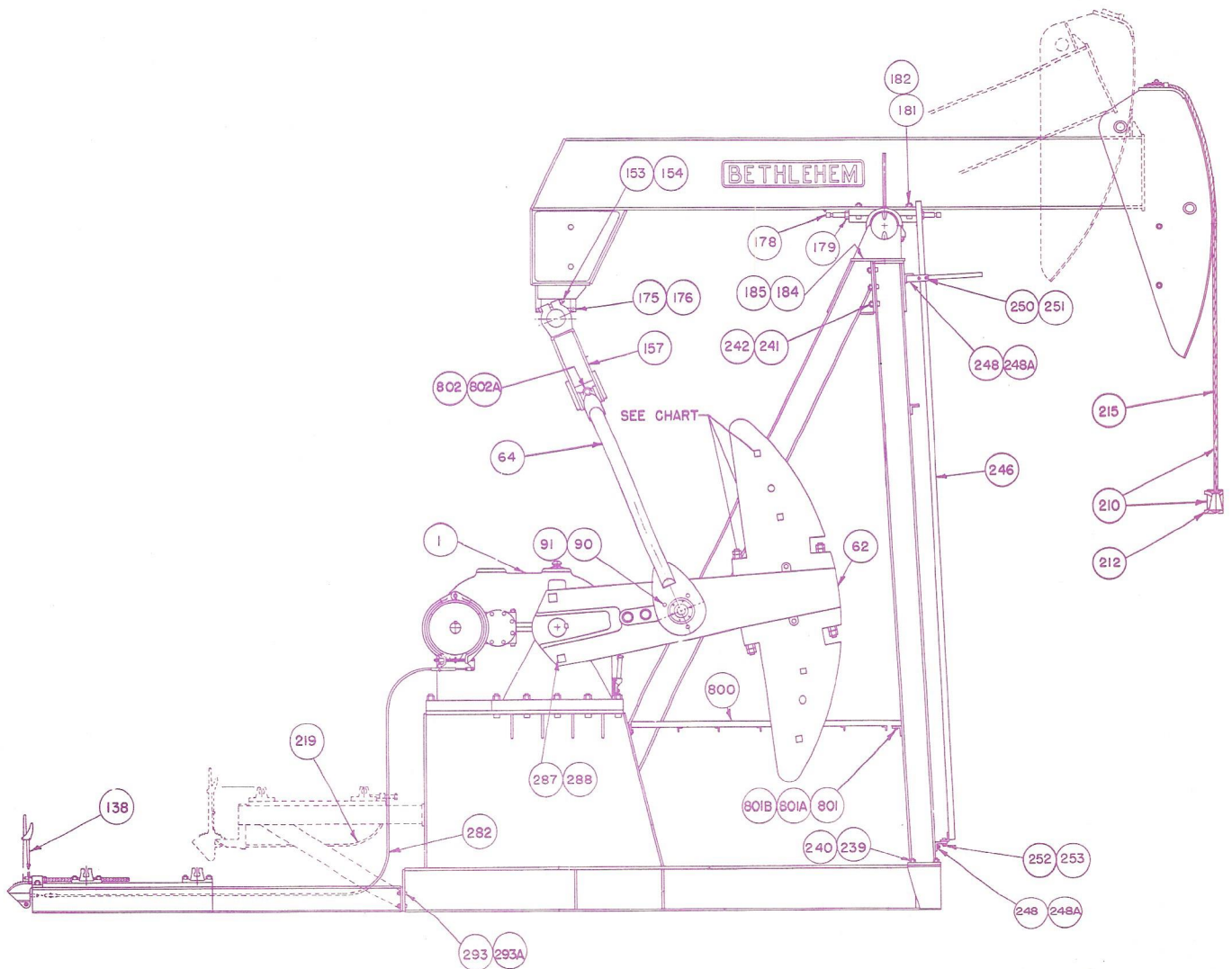
PARTS LIST

228-173BG-74

INSTRUCTIONS FOR ORDERING PARTS

The following information must be furnished with all orders for BETHLEHEM BG Pumping Unit Parts:

1. Structural designation of Unit, e. g., 228-173BG-74
2. Serial Number of Unit (This number is stamped on gear box name plate.)



STRUCTURAL COMPONENTS

| Item No. | Part No. | Description | No. Req'd. |
|----------|----------|--|------------|
| 1 | DM-26978 | Assembly, Reducer, 228DA | 1 |
| 62 | DM-29243 | Crank, 6468-B | 2 |
| 64 | BM-37683 | Pitman, 4'-9-5/8" Centers | 2 |
| 90 | 907420 | Screw, Cap, 3/4" x 2-1/2" Pitman to Wrist Pin) | 6 |
| 91 | 904114 | Washer, Lock, 3/4" (Pitman to Wrist Pin) | 6 |
| 153 | 902664 | Bolt, Mach. w/Hex Nut 1" x 6-1/2" (Cross Beam to Tail Bearing) | 2 |
| 154 | 904118 | Washer, Lock, 1" (Cross Beam to Tail Bearing) | 2 |
| 157 | CM 35054 | Cross Beam | 1 |
| 175 | 902672 | Bolt, Mach. w/Hex Nut 1" x 8-1/2" (Tail Bearing to Beam) | 2 |
| 176 | 904118 | Washer, Lock, 1" (Tail Bearing to Beam) | 2 |
| 178 | N908350 | Jack Screw (Adjusting Bolt, Beam) 1" x 6" Cup Point Set Screw | 2 |
| 179 | 903116 | Nut, Hex Jam 1" | 2 |
| 181 | 902654 | Bolt, Mach. w/Hex Nut 1" x 4" (Saddle to Beam) | 4 |
| 182 | 904118 | Washer, Lock 1" (Saddle to Beam) | 4 |
| 184 | 902834 | Bolt, Mach. w/Hex Nut 1-1/4" x 4" (Saddle Bearing to Post) | 4 |
| 185 | 904122 | Washer, Lock, 1-1/4" (Saddle Bearing to Post) | 4 |
| 210 | BM-35093 | Assembly, Wire Line 228-173BG-74 | 1 |
| 212 | CM-10828 | Carrier Bar | 1 |
| 215 | | Wire Line, Size 1"x20'-6" | 1 |
| 219 | BP-13466 | Brake Cable 8'-6", Elevated Electric Motor | 1 |
| 239 | 902830 | Bolt, Mach. w/Hex Nut 1-1/4" x 3" (Post to Base) | 8 |
| 240 | 904122 | Washer, Lock, 1-1/4" (Post to Base) | 8 |
| 241 | 902458 | Bolt, Mach. w/Hex Nut 3/4" x 1-1/2" (Rear to Front Post Leg) | 12 |
| 242 | 904114 | Washer, Lock, 3/4" (Rear to Front Post Leg) | 12 |
| 246 | CM29656 | Ladder | 1 |
| 248 | 902458 | Bolt, Mach. w/Hex Nut 3/4" x 1-1/2" (Ladder Bracket to Post) | 3 |
| 248-A | 904114 | Washer, Lock, 3/4" (Ladder Bracket to Post) | 3 |
| 250 | 902280 | Bolt, Mach. w/Hex Nut 1/2" x 1-3/4" (Clamps, Upper Ladder Bracket) | 4 |
| 251 | 904108 | Washer, Lock, 1/2" (Clamps, Upper Ladder Bracket) | 4 |
| 252 | 902276 | Bolt, Mach. w/Hex Nut 1/2" x 1-1/4" (Ladder to Lower Bracket) | 2 |
| 253 | 904108 | Washer, Lock, 1/2" (Ladder to Lower Bracket) | 2 |
| 256 | N902838 | Bolt, Mach. w/Hex Nut, 1-1/4" x 5" (Reducer to Sub Base) | 12 |
| 282 | BP-13933 | Brake Cable, 14'-0", High Speed Engine | 1 |
| 287 | 902848 | Bolt, Mach. w/Hex Nut 1-1/4" x 7-1/2" (Counterweight Stop) | 4 |
| 288 | 904122 | Washer, Lock, 1-1/4" (Counterweight Stop) | 4 |
| 293 | 902464 | Bolt, Mach. w/Hex Nut 3/4" x 2-1/4" (Base Joint) | 4 |
| 293-A | 904014 | Washer, Cut 3/4" (Base Joint) | 8 |
| 800 | CM 34793 | Platform, Working | 1 |
| 801 | 902370 | Bolt, Mach. w/Hex Nut 5/8" x 1-3/4" (Working Platform) | 4 |
| 801-A | 904112 | Washer, Lock, 5/8" (Working Platform) | 4 |
| 801-B | 904012 | Washer, Cut, 5/8" (Working Platform) | 4 |
| 802 | 902752 | Bolt, Mach. w/Hex Nut 1-1/8" x 6" (Upper Pitman Connection) | 2 |
| 802-A | 904120 | Washer, Lock, 1-1/8" (Upper Pitman Connection) | 2 |

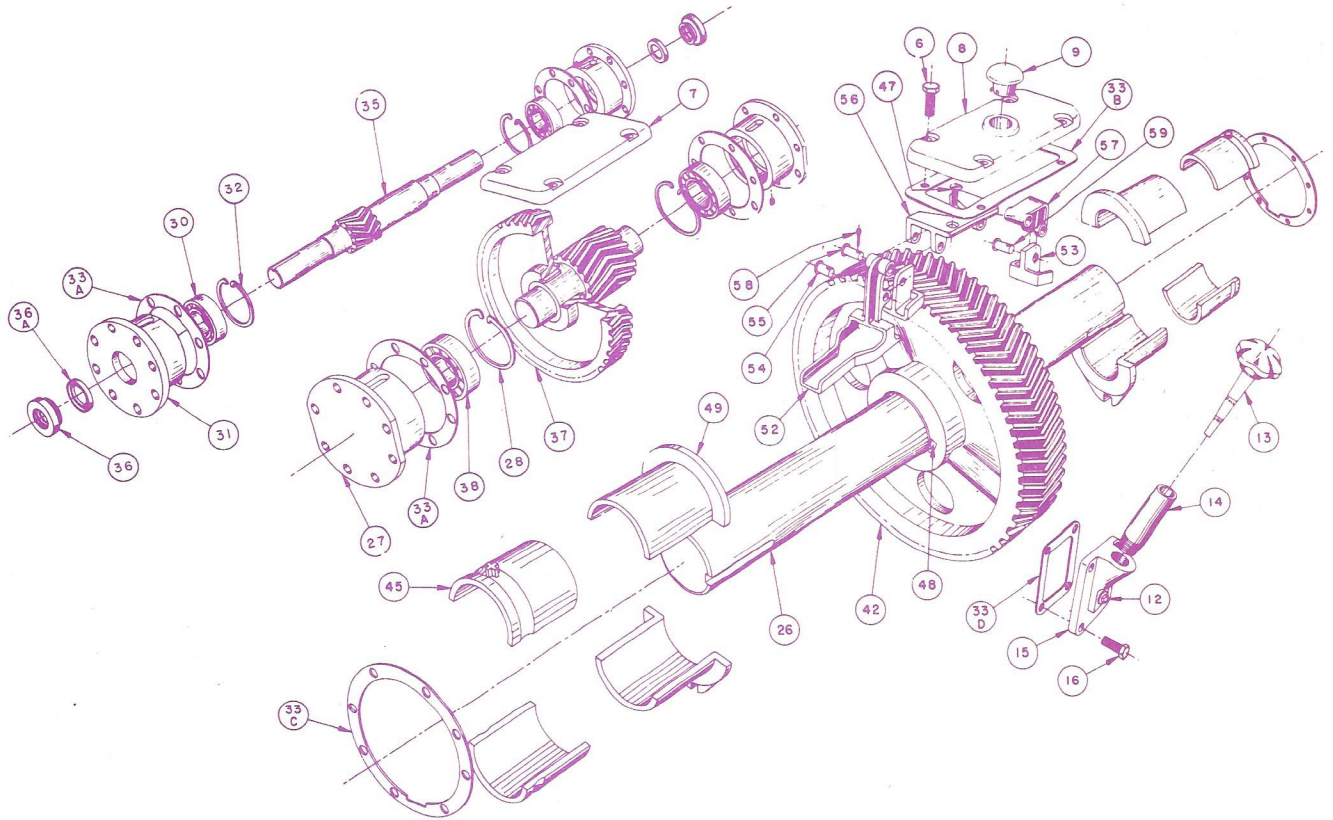
COUNTERWEIGHT BOLTS: QUANTITY, SIZE, PART NUMBER

| | | |
|---------------------------|------------------------|---------------------------|
| Counter Weight | 68R - DM 34662 | 50R - CM 34773 |
| Size and Part Number | 68L - DM 34663 | 50L - CM 34774 |
| Quantity of Bolts | 2 Bolts | 2 Bolts |
| Bolt Size and Part Number | 1-1/4" x 10" A-6815 | 1-1/4" x 7-1/2" A-5103 |

FILLERWEIGHT BOLTS: QUANTITY, SIZE, PART NUMBER

| | | |
|---------------------------|------------------|------------------|
| Filler Weight | 68 DF-34688 | 50 CF-34775 |
| Quantity of Bolts | 2 Bolts | 2 Bolts |
| Bolt Size and Part Number | 1" x 10" A-34839 | 1" x 10" A-34839 |

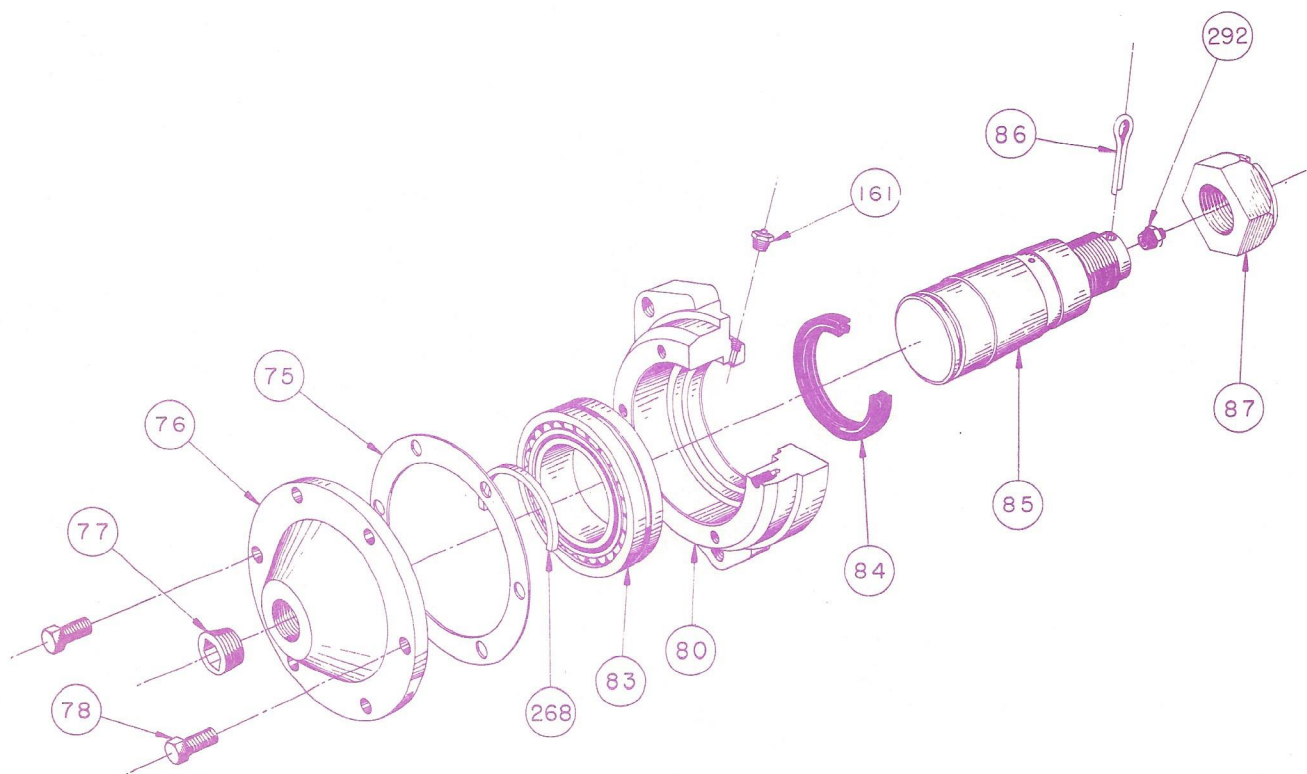
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228DA GEAR REDUCER

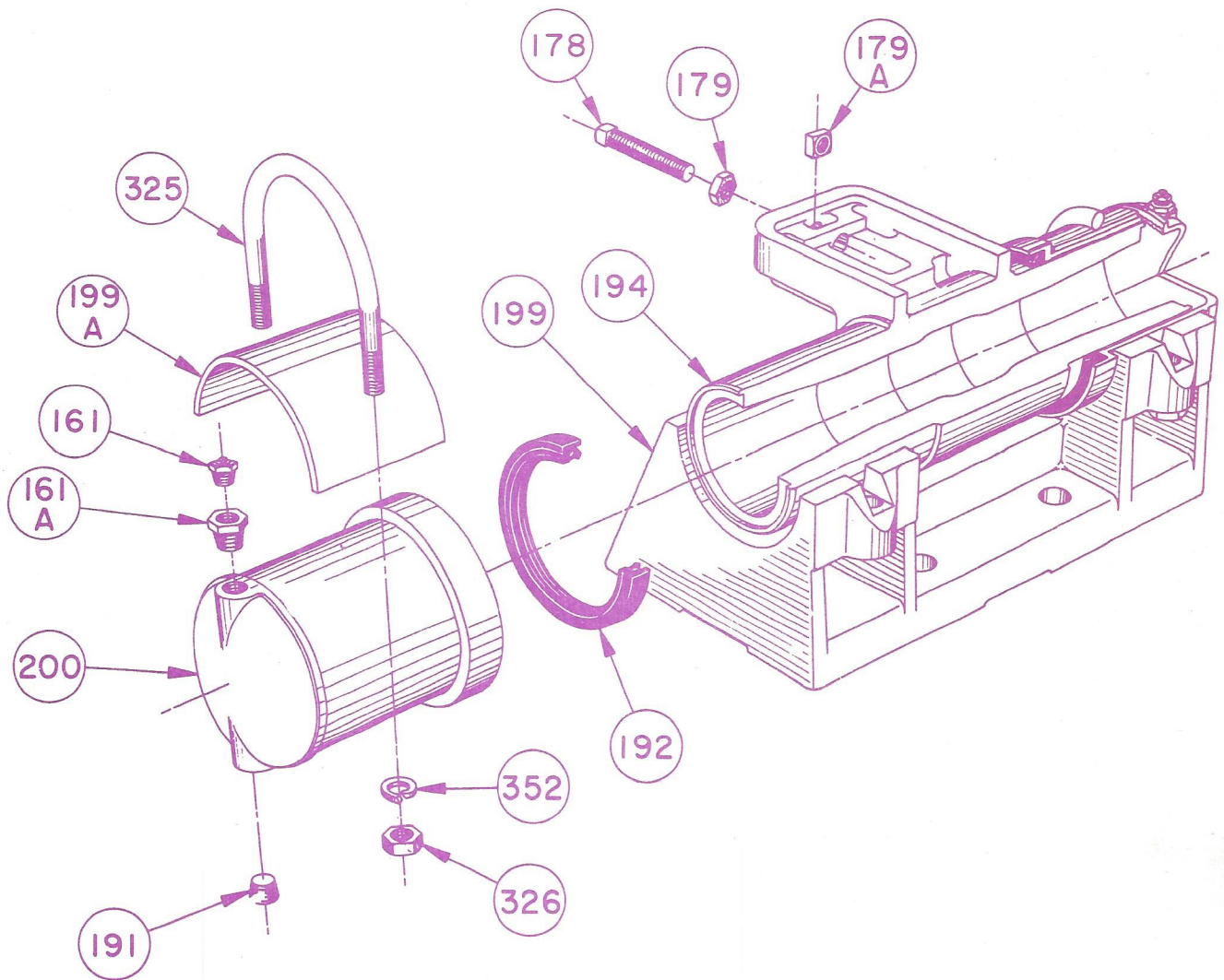
| Item No. | Part No. | Description | No. Req'd. | Item No. | Part No. | Description | No. Req'd. |
|----------|----------|---|------------|----------|----------|--------------------------------------|------------|
| 6 | 907256 | Cap Screw, 1/2" x 2" Inspection Covers | 8 | 33D | APO9480 | Gasket for Oil Drain Cover Plate | 1 |
| 7 | BM06612 | Inspection Cover, H. S. Shaft | 1 | 35 | BM08095 | High Speed Pinion | 1 |
| 8 | BM06618 | Inspection Cover, L. S. Shaft | 1 | 36 | AM26863 | Oil Seal, H. S. Shaft | 2 |
| 9 | AP12944 | Breather | 1 | 36A | AM26864 | Slinger, H. S. Shaft | 2 |
| 12 | 923810 | Pipe Plug, Oil Drain | 1 | 37 | BM07931 | S. S. Pinion and H. S. Gear Assembly | 1 |
| 13 | BP087C1 | Oil Gage | 1 | 38 | E952018 | Roller Bearing, S. S. Pinion | 2 |
| 14 | APO9563 | Pipe for Oil Gage | 1 | 42 | CM06622 | Slow Speed Gear | 1 |
| 15 | AM09901 | Cover Plate, Oil Drain | 1 | 45 | BM12423 | Outer Bronze Bushing, Crankshaft | 2 |
| 16 | N907250 | Cap Screw, 1/2" x 1-1/4", Oil Drain Plate | 4 | 47 | N907252 | Cap Screw 1/2" x 1-1/2" Oil Wiper | 2 |
| 26 | BM06610 | Crankshaft | 1 | 48 | AM06598 | Key, S.S. Gear to Crankshaft | 1 |
| 27 | BM06617 | Bearing Carrier, S.S. Pinion | 2 | 49 | BM12424 | Inner Bronze Bushing, Crankshaft | 2 |
| 28 | APO6602 | Snap Ring, S. S. Pin. Brg. Carrier | 2 | 53 | BM05043 | Spout, Oil Wiper | 1 |
| 30 | E952016 | Roller Bearing, H. S. Pinion | 2 | 53 | AM06604 | Blade, Oil Wiper | 2 |
| 31 | BM08096 | Bearing Carrier H. S. Pinion | 2 | 54 | AM05029 | Pin, Oil Wiper, Spout to Blade | 1 |
| 32 | AP08024 | Snap Ring, H. S. Brg. Carrier | 2 | 55 | AM04667 | Pin, Oil Wiper, Hanger to Bracket | 2 |
| 33 | AM07933 | Gaskets for Gear Box, Set | 1 | 56 | BM06616 | Bracket, Oil Wiper | 1 |
| 33A | APO5164 | Gasket for Bearing Carrier | 4 | 57 | AM06605 | Hanger, Oil Wiper | 1 |
| 33B | APO6607 | Gasket for Inspection Cover | 2 | 58 | 916046 | Cotter, 1/8" x 1", Oil Wiper Pins | 4 |
| 33C | APO6606 | Gasket for Crankshaft Oil Seal | 2 | 59 | AM05022 | Pin, Oil Wiper, Blade to Hanger | 1 |

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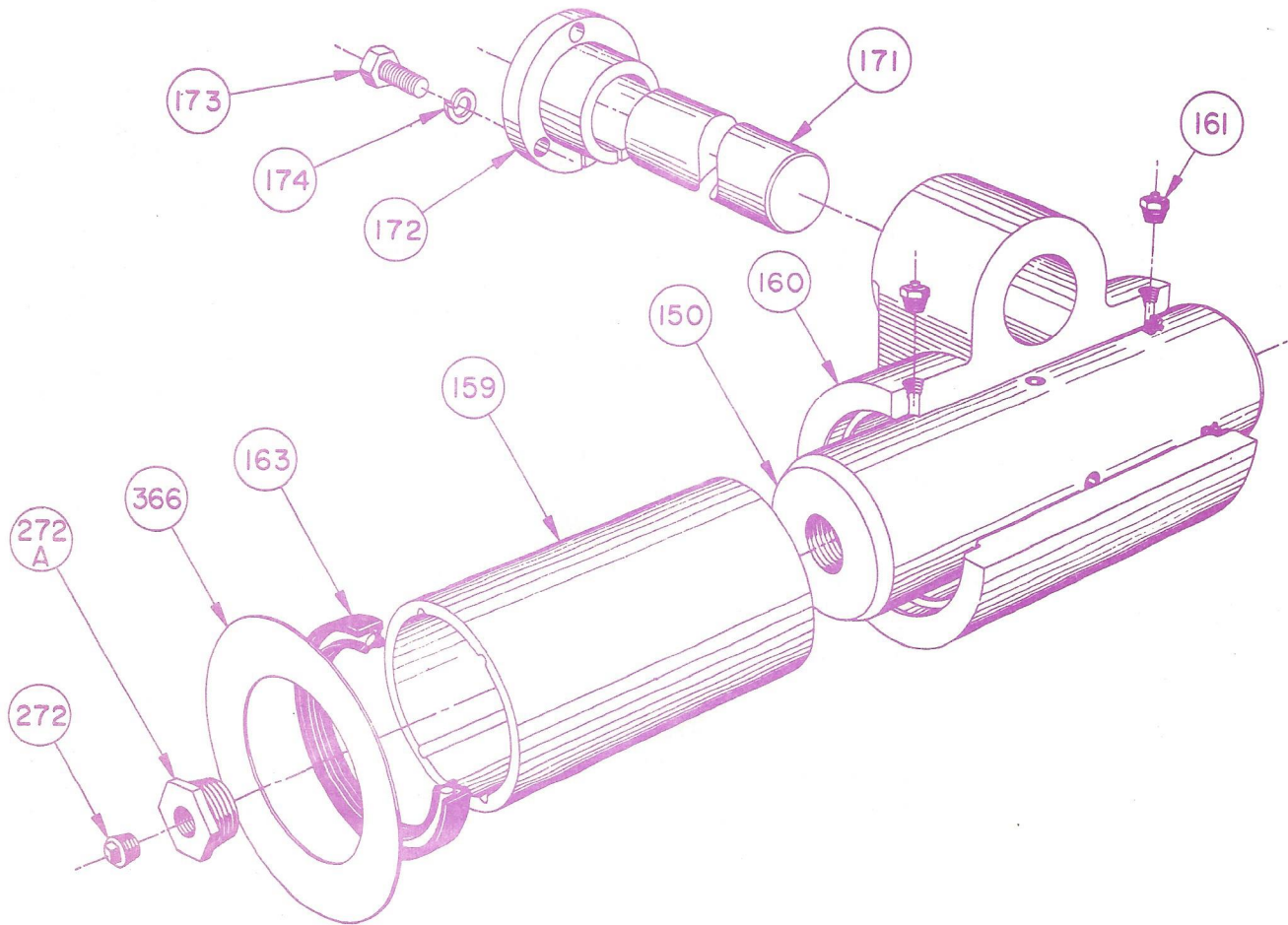
| <u>Item No.</u> | <u>Part No.</u> | <u>Description</u> | <u>No. Req'd.</u> |
|-----------------|-----------------|-------------------------------------|-------------------|
| | CM 34422 | WRIST PIN BEARING ASSEMBLY #3SL | 2 |
| 75 | AP 15047 | Gasket, W. P. Bearing Housing | 2 |
| 76 | CM 29054 | Cap, Bearing | 2 |
| 77 | 923907 | Pipe Plug | 2 |
| 78 | 907250 | Cap Screw Hex Head | 12 |
| 80 | CM 29055 | Housing, W. P. Bearing | 2 |
| 83 | AP 15499 | Bearing, Spherical Roller | 2 |
| 84 | E 920415 | Oil Seal | 2 |
| 85 | BM 34421 | Wrist Pin | 2 |
| 86 | 916268 | Cotter Key | 2 |
| 87 | AM 05226 | Nut, Wrist Pin | 2 |
| 161 | AP 34160 | Alemite Relief Fitting 1/8" #317400 | 2 |
| 268 | AP 28352 | Snap Ring | 2 |
| 292 | AP 14327 | Alemite Fitting | 2 |

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|-----------------|-----------------|--|-------------------|
| | TM 06242 | ASSEMBLY, SADDLE BEARING #C75 | 1 |
| 161 | AP 34160 | Alemite Relief Fitting, 1/8" #317400 | 2 |
| 161-A | 925042 | Pipe Bushing, 3/8" x 1/8" | 2 |
| 178 | 908350 | Bolt, Adjusting, 1" x 6" Cup Point Set Screw | 2 |
| 179 | 903116 | Nut, Hex Jam 1" | 2 |
| 179-A | E 765004 | Nut, Square 1" | 2 |
| 191 | 927803 | Pipe Plug, Flush 3/8" | 2 |
| 192 | SP10746 | Oil Seal, | 2 |
| 194 | YM 60008 | Saddle | 1 |
| 199 | DM 34768 | Saddle Bearing Base | 1 |
| 199-A | VM 60010 | Saddle Bearing Cap | 2 |
| 200 | WM 05793 | Bushing, Saddle | 2 |
| 325 | VM 60009 | U-Bolt 1" | 2 |
| 326 | 903016 | Nut, Hex 1" | 4 |
| 352 | 904118 | Lock Washer 1" | 4 |

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|-----------------|-----------------|-------------------------------------|-------------------|
| | | ASSEMBLY, EQUALIZER BEARING #E-37 | 1 |
| 150 | BM 34440 | Shaft, Equalizer Bearing | 1 |
| 159 | AM 34438 | Bushing, Equalizer Bearing | 1 |
| 160 | BM 34439 | Housing, Equalizer Bearing | 1 |
| 161 | AP 34160 | Alemite Relief Fitting 1/8" #317400 | 2 |
| 163 | E 920510 | Oil Seal | 2 |
| 171 | AM 28305 | Pin, Equalizer Bearing to Beam | 1 |
| 172 | AM 28311 | Adjusting Bushing, Bearing to Beam | 1 |
| 173 | 907416 | Cap Screw, for Adj. Bushing | 3 |
| 174 | 904114 | Lockwasher | 3 |
| 272 | 923802 | Pipe Plug | 1 |
| 272-A | 925244 | Pipe Bushing | 1 |
| 366 | JM 29408 | Shim, Equalizer Bearing | 2 |