

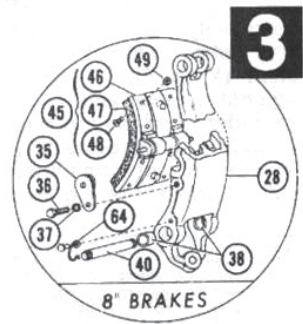
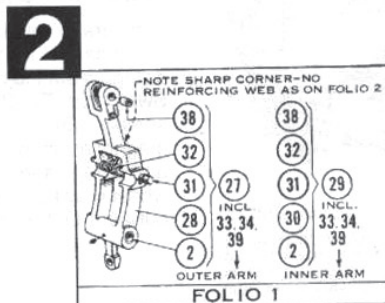
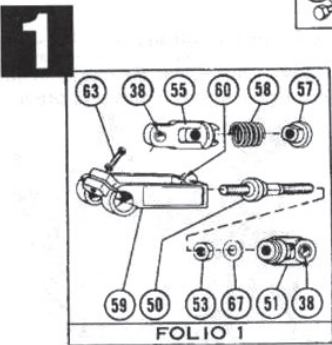
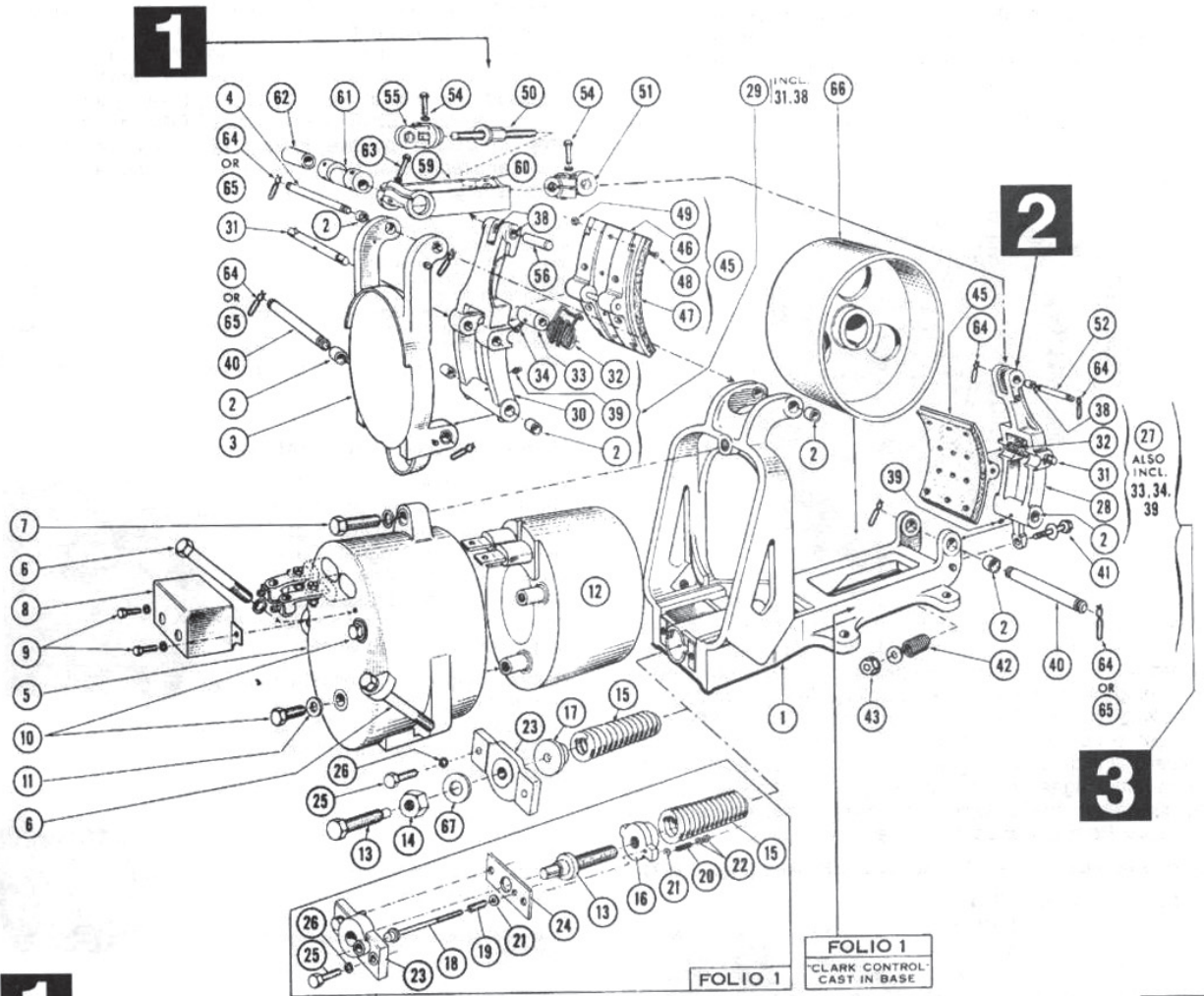
FILE

Magnetically Operated Shoe Brakes
Renewal Parts Drawing

106

WHEN ORDERING SPECIFY

- Serial (or S.O.) Number of Brake
- Bill of Material (B/M) — (See Column Headings under "Part Numbers" in Tables — Pages M3-5, M3-6, M3-7)
- Size of Brake
- Part Number and Complete Description — (Select from Appropriate Renewal Parts Table — Pages M3-5, M3-6, M3-7)



CHALLENGER HEAVY DUTY BRAKES

Magnetically Operated Shoe Brakes

Renewal Parts — 19" & 23" Wheel Sizes

FILE

106

| Ref. No. | Description | No. Parts Per Brake | Part Numbers (19" & 23" Brakes) | | | | |
|----------|--|---------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | | | 19" Folio 1 B/M A106-200651A | 19" Folio 2 B/M A106-200722A | 23" Folio 1 B/M A106-200451A | 23" Folio 1 B/M A106-200507A | 23" Folio 2 B/M A106-200496A |
| 1 | Frame (Incl. Ref. No. 2) | 1 | Ⓚ | Ⓚ | Ⓚ | Ⓚ | Ⓚ |
| 2 | Bushings (for bearing holes on frame, armature and lower inner and outer shoe arms) | 12 | A106-200687 | A106-200687 | A106-200687 | A106-200687 | A106-200687 |
| 3 | Armature (Incl. Ref. No. 2) | 1 | A106-200657 | A106-200657 | A106-200457 | A106-200457 | A106-200457 |
| 4 | Bearing Pin for above | 1 | 000T-000103-0026 | 000T-000103-0026 | 000T-000103-0029 | 000T-000103-0029 | 000T-000103-0029 |
| 5 | Magnet Case | 1 | Ⓚ | Ⓚ | Ⓚ | Ⓚ | Ⓚ |
| 6 | Magnet Case Bolts (Bottom) | 2 | 000T-000121-0229 | 000T-000121-0229 | 000T-000121-0204 | 000T-000121-0204 | 000T-000121-0204 |
| 7 | Magnet Case Bolt (Top) | 1 | 000T-000121-0175 | 000T-000121-0175 | 000T-000121-0203 | 000T-000121-0203 | 000T-000121-0203 |
| 8 | Terminal Shield | 1 | B106-200696 | B106-200696 | B106-200476 | B106-200476 | B106-200476 |
| 9 | Terminal Shield Bolts | 4 | 000T-000121-0043 | 000T-000121-0043 | 000T-000121-0043 | 000T-000121-0043 | 000T-000121-0043 |
| 10 | Magnet Coil Bolts | 4 | 000T-000121-0206 | 000T-000121-0206 | 000T-000121-0167 | 000T-000121-0167 | 000T-000121-0167 |
| 11 | Washer for above (Double Thickness) | 4 | 000T-000002-0389 | 000T-000002-0389 | 000T-000002-0388 | 000T-000002-0388 | 000T-000002-0388 |
| 12 | Assembled Coil | 1 | Ⓚ | Ⓚ | Ⓚ | Ⓚ | Ⓚ |
| 13 | Torque Adjustment Screw | 1 | A106-200692 | A106-200692 | A106-200484 | A106-200484 | A106-200484 |
| 14 | Nut for above | 1 | 000T-000115-0089 | 000T-000115-0089 | --- | A106-230139-0004 | A106-220139-0004 |
| 15 | Torque Spring | 1 | A106-200683 | A106-200683 | A106-200480 | A106-200480 | A106-200480 |
| 16 | Torque Nut | 1 | A106-200685 | A106-200685 | A106-200482 | A106-200482 | A106-200482 |
| 17 | Spring Seat | 1 | --- | A106-230138-0005 | --- | A106-230138-0006 | A106-230138-0006 |
| 18 | Torque Indicator Rod | 1 | A106-194850 | A106-194850 | A106-194850 | A106-194850 | A106-194850 |
| 19 | Button Spring for above | 1 | A106-194859 | A106-194859 | --- | --- | --- |
| 20 | Rod Spring for Ref. No. 18 | 1 | A106-194861 | --- | A106-194861 | --- | --- |
| 21 | Washer for above | 2 | 000T-000002-0145 | --- | 000T-000002-0145 | --- | --- |
| 22 | Nut for Ref. No. 18 | 2 | 000T-000115-0019 | --- | 000T-000115-0019 | --- | --- |
| 23 | Pressure Plate | 1 | A106-200694 | A106-200715 | A106-200481 | A106-200509 | A106-200509 |
| 24 | Retainer Plate | 1 | A106-200691 | --- | A106-200483 | --- | --- |
| 25 | Bolts for Pressure Plate | 4 | 000T-000121-0136 | 000T-000121-0136 | 000T-000121-0159 | 000T-000121-0159 | 000T-000121-0159 |
| 26 | Washer for above | 4 | 000T-000155-0020 | 000T-000155-0020 | 000T-000155-0023 | 000T-000155-0023 | 000T-000155-0023 |
| 27 | Complete Assembled Outer Arm & Shoe Clamp, (Incl. Ref. Nos. 2, 28, 31, 32, 33, 34, 38 & 39) | 1 | A106-200664 | A106-200664 | A106-200463 | A106-200463 | A106-200497 |
| 28 | Assembled Outer Arm | 1 | A106-200665 | A106-200665 | A106-200464 | A106-200464 | A106-200499 |
| 29 | Completed Assembled Inner Arm & Shoe Clamp, (Incl. Ref. Nos. 2, 30, 31, 32, 33, 34, 38 & 39) | 1 | A106-200693 | A106-200693 | A106-200469 | A106-200469 | A106-200498 |
| 30 | Assembled Inner Arm | 1 | A106-200694 | A106-200694 | A106-200470 | A106-200470 | A106-200500 |
| 31 | Shoe Clamp Shaft & Stop Pin | 2 | A106-200709 | A106-200709 | A106-200501 | A106-200501 | A106-200494 |
| 32 | Shoe Clamp Spring | 2 | B106-200669 (4) | B106-200669 (4) | B106-200669 (6) | B106-200669 (6) | B106-200669 (6) |
| 33 | Shoe Clamp Cam | 2 | A106-200688 (4) | A106-200688 (4) | A106-200688 (6) | A106-200688 (6) | A106-200688 (6) |
| 34 | Shoe Clamp Cam Shaft Screw | 2 | 000T-000143-0002 (4) | 000T-000143-0002 (4) | 000T-000143-0002 (6) | 000T-000143-0002 (6) | 000T-000143-0002 (6) |
| 38 | Bushings (for Inner and Outer Bar Eyes and top bearing holes of Inner and Outer Shoe Arms) | 6 | A106-200686 | A106-200686 | A106-200686 | A106-200686 | A106-200686 |
| 39 | 1/8-27 Alemite 90° Fittings (Used on Ref. No. 27 & 29) | 2 | 000T-000233-0001 | 000T-000233-0001 | 000T-000233-0001 | 000T-000233-0001 | 000T-000233-0001 |
| 40 | Bearing Pin, Lower Arm | 2 | 000T-000103-0028 | 000T-000103-0028 | 000T-000103-0030 | 000T-000103-0030 | 000T-000103-0030 |
| 41 | Bolt, Outer Arm Release | 1 | 000T-000121-0233 | 000T-000121-0255 | 000T-000121-0255 | 000T-000121-0255 | 000T-000121-0255 |
| 42 | Release Spring, Outer Arm | 1 | 000T-000215-0003 | 000T-000215-0003 | 000T-000215-0003 | 000T-000215-0003 | 000T-000215-0003 |
| 43 | Lock Nut | 1 | 000T-000281-0004 | 000T-000281-0004 | 000T-000281-0004 | 000T-000281-0004 | 000T-000281-0004 |
| 45 | Assembled Brake Shoe & Lining (Incl. Ref. Nos. 46, 47, 48 & 49) | 2 | A106-200680 | A106-200680 | A106-200477 | A106-200477 | A106-200477 |
| 46 | Brake Shoe (less lining) | 2 | A106-200704 | A106-200704 | A106-200472 | A106-200472 | A106-200472 |
| 47 | Shoe Lining | 2 | C106-200682 (4) | C106-200682 (4) | B106-200479 (6) | B106-200479 (6) | B106-200479 (6) |
| 48 | Shoe Lining Screws | 2 | 000T-000122-0057 (24) | 000T-000122-0057 (24) | 000T-000122-0057 (36) | 000T-000122-0057 (36) | 000T-000122-0057 (36) |
| 49 | Lock Nuts for above | 2 | 000T-000281-0002 (24) | 000T-000281-0002 (24) | 000T-000281-0002 (36) | 000T-000281-0002 (36) | 000T-000281-0002 (36) |
| 50 | Adjusting Bar | 1 | B106-200671 | B106-200671 | B106-200468 | B106-200468 | B106-200468 |
| 51 | Outer Bar Eye (Incl. Ref. Nos. 38 & 54 plus lock washer) | 1 | A106-200672 | A106-200718 | A106-200672 | A106-200718 | A106-200718 |
| 52 | Bearing Pin, Outer Bar Eye | 1 | 000T-000103-0027 | 000T-000103-0027 | 000T-000103-0027 | 000T-000103-0027 | 000T-000103-0027 |
| 53 | Adjusting Bar Lock Nut | 1 | 000T-000115-0089 | --- | 000T-000115-0089 | --- | --- |
| 54 | Bar Eye Clamp Bolt | 2 | --- | 000T-000121-0160 | --- | 000T-000121-0160 | 000T-000121-0160 |
| 55 | Inner Bar Eye (Incl. Ref. Nos. 38 & 54 plus lock washer) | 1 | A106-200674 | A106-200720 | A106-200674 | A106-200720 | A106-200720 |
| 56 | Bearing Pin, Inner Bar Eye | 1 | A106-194815-0002 | A106-194815-0002 | A106-194815-2 | A106-194815-2 | A106-194815-2 |
| 57 | Locking Collar | 1 | A106-200678 | --- | A106-200678 | --- | --- |
| 58 | Locking Spring | 1 | A106-200679 | --- | A106-200679 | --- | --- |
| 59 | Equalizer Yoke | 1 | B106-200676 | B106-200717 | B106-200473 | B106-200511 | B106-200511 |
| 60 | Gauge Pin | 1 | 000T-000152-0023 | 000T-000152-0023 | 000T-000152-0023 | 000T-000152-0023 | 000T-000152-0023 |
| 61 | Eccentric Bushing | 1 | A106-200677 | A106-200677 | A106-200474 | A106-200474 | A106-200474 |
| 62 | Eccentric Bushing Spacer | 2 | --- | --- | A106-200471 | A106-200471 | A106-200471 |
| 63 | Lock Bolt, Equalizer Yoke | 2 | 000T-000121-0141 | 000T-000121-0242 | 000T-000121-0205 | 000T-000121-0205 | 000T-000121-0205 |
| 64 | Retainers, Bearing Pin | 1 | A106-65072 | A106-65072 | A106-65072 | A106-65072 | A106-65072 |
| 65 | Retainers, Bearing Pin | 6 | A106-79064 | A106-79064 | A106-79064 | A106-79064 | A106-79064 |
| 66 | Brake Wheel | 1 | Ⓚ | Ⓚ | Ⓚ | Ⓚ | Ⓚ |
| 67 | Spring Washer | 1 | 000T-000282-0004 | 000T-000282-0004 | 000T-000282-0004 | 000T-000282-0004 | 000T-000282-0004 |

- Ⓚ Parts recommended to stock.
- ② Quantity required per brake is shown in parentheses following part number.
- ③ Advise complete nameplate data.
- ④ Ref No. 1, D106-200652 replaced by C106-200712. When replacing, the following items must be ordered as a group:
Ref. 1, C106-200712
Ref. 13, A106-230139-0004
Ref. 14, 000T-000115-0089
Ref. 17, A106-230138-0005
Ref. 23, A106-200715
- ⑤ These parts are obsolete. When replacing any part, the following items must be ordered as a group:
Ref. 13, A106-230139-0004
Ref. 14, 000T-000115-0089
Ref. 17, A106-230138-0005
Ref. 23, A106-200715
 (Individual items are not replaceable with each order.)
- ⑥ Ref. 42, 000T-000215-0003 Release Spring is 3" long. Early designs used either one 000T-000215-0001 Spring 1-1/2" long or two 000T-000215-0002 Spring 1-1/2" long. For replacement on any design, order Part No. 000T-000215-0003.
- ⑦ Assemblies are interchangeable:
Ref. 51 — when replacing A106-200672, order A106-200718.
Ref. 55 — when replacing A106-200674, order A106-200720.
Ref. 59 — when replacing B106-200676, order B106-200717.
- ⑧ Ref. No. 1, D106-200452 replaced by D106-200504. When replacing, the following items must be ordered as a group:
Ref. 1, D106-200504
Ref. 13, A106-230139-0004
Ref. 14, 000T-000115-0089
Ref. 17, A106-230138-0006
Ref. 23, A106-200509
- ⑨ These parts are obsolete. When replacing any part, the following items must be ordered as a group:
Ref. 13, A106-230139-0004
Ref. 14, 000T-000115-0089
Ref. 17, A106-230138-0006
Ref. 23, A106-200509
 (Individual items are not replaceable with each order.)
- ⑩ Complete Assembled Arms are interchangeable:
Ref. 27 — when replacing A106-200463, order A106-200497.
Ref. 29 — when replacing A106-200469, order A106-200498.
- ⑪ These parts are obsolete. When replacing, order Complete Assembled Arm Ref. 27, A106-200497 or Ref. 29, A106-200498.
 (Note: Ref. 29 can be made from Ref. 27 by cutting off the bottom.)
- ⑫ Assemblies are interchangeable:
Ref. 51 — when replacing A106-200672, order A106-200718.
Ref. 55 — when replacing A106-200674, order A106-200720.
Ref. 59 — when replacing B106-200473, order B106-200511.
- ⑬ Give number stamped on hub of wheel and/or S.O. number from brake nameplate.
- ⑭ Part no longer available.