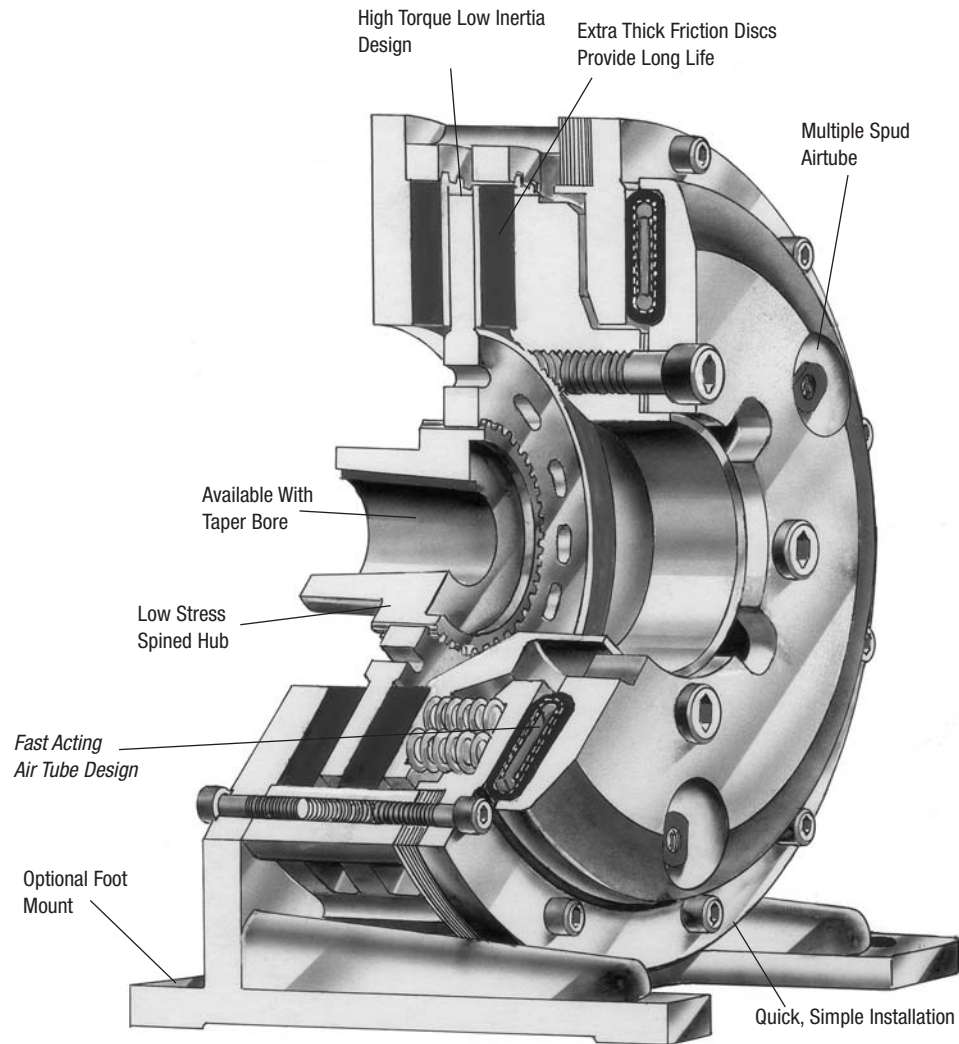


Spring-Set Motor Brakes

- Failsafe protection — spring-set
- Long wear life
- Quick, smooth stopping



Wichita spring-set, air release Motor Brakes are ideal for failsafe protection of process equipment. Available in foot mounted and C-face options, this improved design has thicker friction discs for longer wear life. The fast acting Spring-Set actuation assures quick, smooth stops.

Spring-Set Motor Brakes

Specifications

| Model Size ATD— | Slip Torque lb.in. .3 CF* Minimum Air-Tube Pressure PSI For Released Brake | | | *Do Not Exceed 90% Of Slip Torque Ratings — Maximum Horsepower Per 100 RPM Release Pressure - PSI | | | | | | | |
|--------------------|--|---------|---------|--|-----|-----|-----|-------------|------|-----|-----|
| | 60 | 75 | 90 | 60 PSI Duty | | | | 75 PSI Duty | | | |
| | | | | A | B | C | D | A | B | C | D |
| 106 MB | 2,225 | 2,900 | 3,700 | 3 | 2.3 | 1.2 | .6 | 4 | 3 | 1.5 | .8 |
| 206 MB | 4,300 | 5,600 | 7,200 | 6 | 4.4 | 2.3 | 1.1 | 8 | 5.7 | 3 | 1.5 |
| 108 MB | 3,700 | 4,800 | 6,200 | 5.3 | 3.8 | 2 | 1 | 7 | 5 | 2.6 | 1.3 |
| 208 MB | 7,100 | 9,100 | 12,000 | 10 | 7.3 | 3.8 | 2 | 13 | 9.3 | 5 | 2.5 |
| 111 MB | 8,200 | 10,500 | 11,600 | 11.7 | 8.4 | 4.4 | 2.2 | 15 | 10.7 | 5.7 | 2.8 |
| 211 MB | 15,600 | 20,000 | 22,200 | 22 | 16 | 8.4 | 4.2 | 28.6 | 20.5 | 11 | 5.4 |
| 114 MB | 14,500 | 18,600 | 24,700 | 20 | 15 | 8 | 4 | 26.6 | 19 | 10 | 5 |
| 214 MB | 27,600 | 35,400 | 46,300 | 39 | 28 | 15 | 7.5 | 50 | 36 | 19 | 9.5 |
| 118 MB | 31,400 | 40,400 | 51,600 | 45 | 32 | 17 | 8.5 | 58 | 41 | 22 | 11 |
| 218 MB | 60,000 | 77,000 | 100,000 | 86 | 61 | 32 | 16 | 110 | 79 | 41 | 21 |
| 124H MB | 75,500 | 86,600 | — | 108 | 77 | 41 | 20 | 158 | 114 | 60 | 30 |
| 224H MB | 137,000 | 161,200 | — | 196 | 140 | 74 | 37 | 308 | 222 | 117 | 58 |

* Max. recommended air pressure – 130 PSI

| Model Size ATD— | 90 PSI Duty | | | | Max. Bore Rect. Key Inches | Total Wt. lbs. | Hub & CP Wt. lbs. | Hub & CP WR ² lb.ft. ² | Effec. WR [†] lbs. |
|--------------------|-------------|------|-----|------|----------------------------------|----------------------|-------------------------|--|-----------------------------------|
| | A | B | C | D | | | | | |
| 106 MB | 5 | 3.8 | 2 | 1 | 2 | 36.5 | 6.40 | .24 | 14.0 |
| 206 MB | 10 | 7.4 | 3.9 | 2 | 2 | 49.5 | 12.17 | .46 | 18.34 |
| 108 MB | 9 | 6.3 | 3.3 | 1.6 | 2-3/8 | 63.23 | 10.0 | .55 | 26.78 |
| 208 MB | 17 | 12.3 | 6.5 | 3.2 | 2-3/8 | 81.5 | 16.0 | .72 | 32.03 |
| 111 MB | 16.6 | 12 | 6.3 | 3.1 | 2-5/8 | 96.96 | 15.0 | 1.35 | 40.75 |
| 211 MB | 37 | 26 | 14 | 7 | 2-5/8 | 136.0 | 30.0 | 2.60 | 59.05 |
| 114 MB | 35 | 25 | 13 | 6.7 | 4-1/8 | 157.6 | 38 | 5.6 | 72.3 |
| 214 MB | 66 | 47 | 25 | 12.5 | 4-1/8 | 209.6 | 65 | 11 | 95.3 |
| 118 MB | 74 | 53 | 28 | 14 | 5-1/4 | 322 | 71 | 14.5 | 168 |
| 218 MB | 143 | 102 | 54 | 27 | 5-1/4 | 444 | 113 | 27.6 | 215 |
| 124H MB | 183 | 131 | 69 | 34 | 7 | 690 | 131 | 50 | 377 |
| 224H MB | 346 | 248 | 131 | 65 | 7 | 874 | 260 | 101 | 482 |

† Weight of internal clutch parts for use in calculating clutch engagement time.



- No adjustment
- No lubrication
- Low inertia design
- Rugged, dependable design

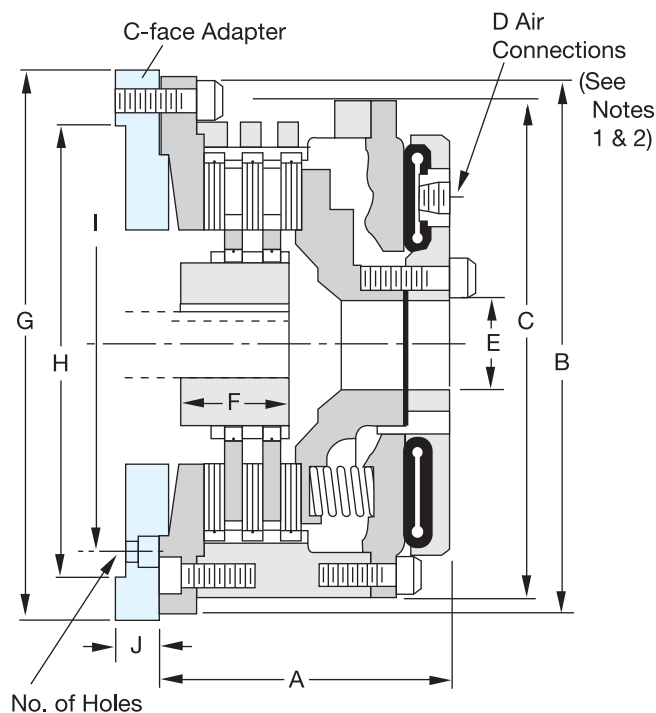
C-face adaptors are available in standard NEMA T and U frame designs. Custom adaptors are available for your specific motor design. Dimensions G, H, I, J and number of holes need to be provided to Wichita Engineering before final design is completed.

When using Wichita C-Face Motor Brakes in a high cycling application, brake thermal capacity and motor thermal capacity need to be carefully matched. The motor information chart lists the specific Wichita part numbers for the proper adapter plate and brake for C-Faced Motors up to 200 HP.

Contact Wichita Application Engineering for assistance.

Motor Information

| Frame | Max. HP at Std. RPM | Full Load Motor Torque in.lb. | Steel Adapter Plate | Model Size ATD- |
|-------|---------------------|-------------------------------|---------------------|---------------------------|
| C210 | 40 / 2500 | 1,008 | 4-309-075-011-3 | 7-108-100-113-0 108 MB |
| C250 | 60 / 1750 | 2,161 | 4-309-075-005-3 | 7-108-100-113-0 108 MB |
| C280 | 100 / 1750 | 3,601 | 4-281-075-015-3 | 7-111-100-112-0 111 MB |
| C320 | 150 / 1750 | 5,402 | 4-281-075-016-3 | 7-111-100-112-0 111 MB |
| C360 | 200 / 1750 | 7,202 | 4-271-075-007-3 | 7-114-100-113-0 114 MB |



Dimensions: inches (Consult factory for drawing before final layout.)

| Model Size ATD- | A | B | C | D | No. of Spuds | E | F |
|-----------------|-------|-------|-------|----------|--------------|------|------|
| 106 MB | 5.44 | 8.75 | 8.81 | 1/4" NPT | 2 | 2.00 | 2.00 |
| 206 MB | 6.75 | | | | | | 3.25 |
| 108 MB | 5.82 | 12.12 | 11.13 | 1/2" NPT | 2 | 2.13 | 1.50 |
| 208 MB | 7.00 | | | | | | 2.87 |
| 111 MB | 6.38 | 16.00 | 14.75 | 1/2" NPT | 2 | 3.02 | 2.00 |
| 211 MB | 7.75 | | | | | | 3.75 |
| 114 MB | 7.75 | 18.75 | 17.50 | 1/2" NPT | 2 | 3.88 | 2.25 |
| 214 MB | 9.69 | | | | | | 4.25 |
| 118 MB | 9.01 | 23.25 | 22.00 | 1/2" NPT | 3 | 4.75 | 2.75 |
| 218 MB | 10.69 | | | | | | 4.75 |
| 124H MB | 9.26 | 30.00 | 29.00 | 1/2" NPT | 3 | 8.25 | 3.13 |
| 224H MB | 11.94 | | | | | | 5.13 |

Wichita motor brakes typically produce more torque than is usually necessary. Contact Wichita engineering for help in selecting the number of springs to produce the proper deceleration for your application.

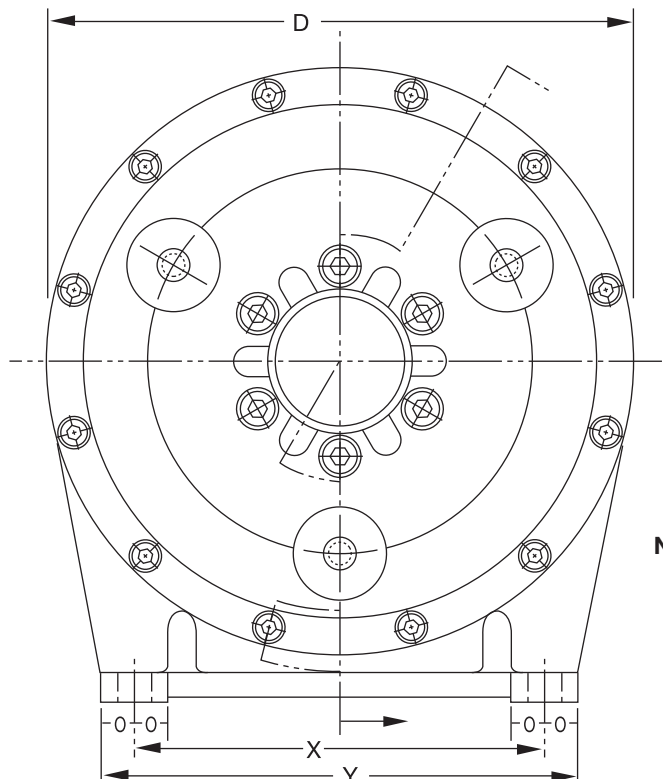
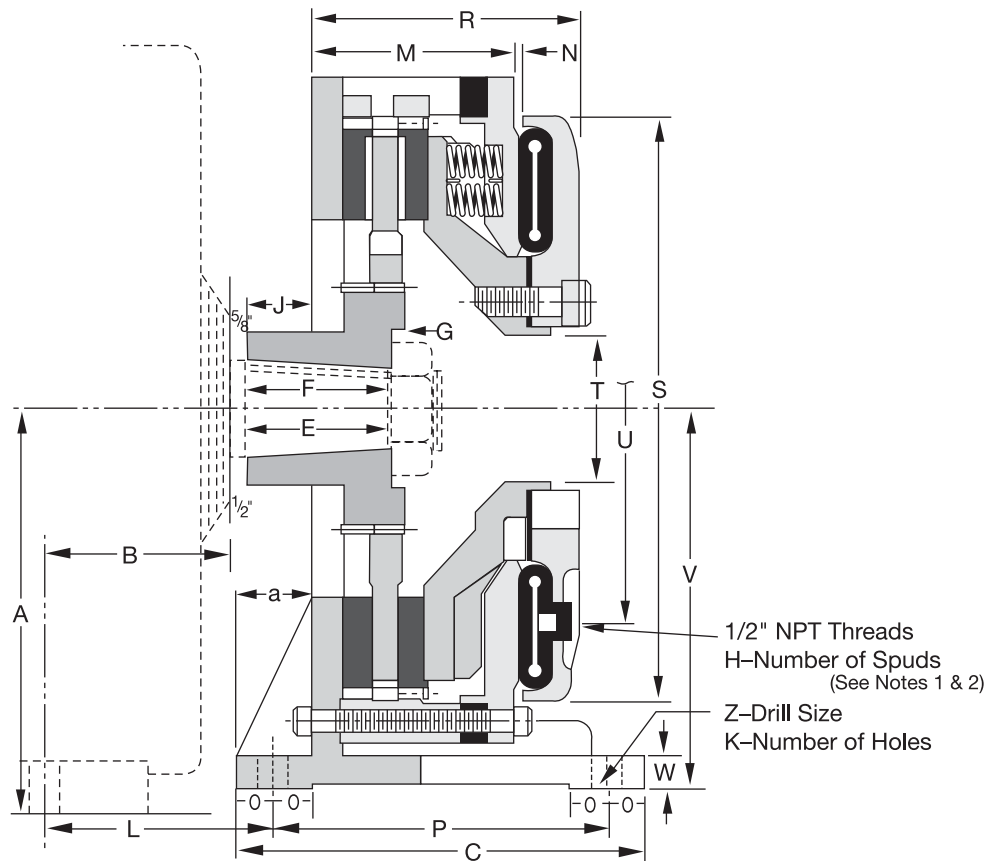
Note: For mounting, use socket head capscrews conforming to the ASTM-574-97a.

Notes:

1. Quick Release Valves, see page 121.
2. Air Hose Kits, see page 120.

Spring-Set Motor Brakes

Foot Mounted Motor Brakes



Notes:

1. Quick Release Valves, see page 121.
2. Air Hose Kits, see page 120.

Spring-Set Motor Brakes

Dimensions: inches (Consult factory for drawing before final layout.)

| Motor Frame | Model Size ATD- | A | B | C | D | E | F ±.015 | G | H | J | K | L | M |
|-------------|--------------------|--------|-------|-------|--------|------|------------|---------------|---|-------|---|--------|----------------|
| 602 | 108 MB 208 MB | 7.625 | 3.75 | 7.50 | 11.125 | 2.75 | 2.875 | .75 1.625 | 2 | 1.75 | 4 | 5.375 | 4.75 .313 |
| 603 | 111 MB 211 MB | 8.50 | 4.50 | 8 | 14.75 | 3.25 | 3.312 | .375 1.375 | 2 | 1.625 | 4 | 6.125 | 4.563 5.563 |
| 604 | 111 MB 211 MB | 9 | 5 | 8 | 14.75 | 3.25 | 3.312 | .375 1.375 | 2 | 1.625 | 4 | 6.625 | 4.563 5.563 |
| 606 | 114 MB 214 MB | 10 | 5 | 11 | 17.50 | 4 | 4.125 | .50 1.875 | 2 | 1.125 | 4 | 6 | 5.438 6.813 |
| 608 | 114 MB 214 MB | 11.25 | 5.125 | 11 | 17.5 | 4.50 | 4.625 | .50 1.875 | 2 | 1.50 | 4 | 6.50 | 5.438 6.813 |
| 610 | 118 MB 218 MB | 12.25 | 5.75 | 13.50 | 22 | 4.50 | 4.625 | .50 2.188 | 3 | 3.125 | 4 | 8.25 | 8.094 9.781 |
| 612 | 118 MB 218 MB | 13.375 | 6.25 | 13.50 | 22 | 4.75 | 4.875 | .50 2.188 | 3 | 3.125 | 4 | 8.75 | 8.094 9.781 |
| 614 | 124H MB 224H MB | 14.75 | 7.25 | 23.25 | 29 | 4.75 | 4.875 | .50 2.25 | 3 | 2.125 | 4 | 10.125 | 7.188 8.75 |
| 616 | 124H MB 224H MB | 16 | 8.50 | 23.25 | 29 | 5.25 | 5.375 | .50 2.25 | 3 | 2.75 | 4 | 11.375 | 7.188 8.75 |
| 618 | 124H MB 224H MB | 17.75 | 8 | 23.25 | 29 | 5.75 | 5.875 | .50 2.25 | 3 | 2.25 | 4 | 10.875 | 7.188 8.75 |

| Motor Frame | Model Size ATD- | N | O | P | R | S | T | U | V | W | X | Y | Z | a |
|-------------|--------------------|------|-------|------|-----------------|--------|-------|--------|-------|-----|------|-------|-------|-------|
| 602 | 108 MB 208 MB | .313 | .875 | 5.75 | 5.875 6.75 | 9.375 | 1.95 | 6.625 | 7 | .75 | 3.25 | 8.25 | .688 | 1.625 |
| 603 | 111 MB 211 MB | .313 | .875 | 6.25 | 6 7 | 11.938 | 3 | 8.50 | 8.375 | .75 | 4 | 9.75 | .688 | 1.50 |
| 604 | 111 MB 211 MB | .313 | .875 | 6.25 | 6 7 | 11.938 | 3 | 8.50 | 8.375 | .75 | 4 | 9.75 | .688 | 1.50 |
| 606 | 114 MB 214 MB | .563 | 1 | 9 | 7.50 8.875 | 14.375 | 3.88 | 10.75 | 9.875 | 1 | 5.75 | 13.50 | .813 | 1.75 |
| 608 | 114 MB 214 MB | .563 | 1 | 9 | 7.50 8.875 | 14.375 | 3.88 | 10.75 | 9.875 | 1 | 5.75 | 13.50 | .813 | 1.75 |
| 610 | 118 MB 218 MB | .375 | 1.25 | 11 | 10.50 12.188 | 19.375 | 4.875 | 14.188 | 12.50 | 1 | 7.75 | 18 | .938 | 2.50 |
| 612 | 118 MB 218 MB | .375 | 1.25 | 11 | 10.50 12.188 | 19.375 | 4.875 | 14.188 | 12.50 | 1 | 7.75 | 18 | .938 | 2.50 |
| 614 | 124H MB 224H MB | .375 | 1.625 | 19 | 9.438 11.125 | 27 | 8.25 | 21 | 20.75 | 2 | 15 | 33.25 | 1.563 | 2.625 |
| 616 | 124H MB 224H MB | .375 | 1.625 | 19 | 9.438 11.125 | 27 | 8.25 | 21 | 20.75 | 2 | 15 | 33.25 | 1.563 | 2.625 |
| 618 | 124H MB 224H MB | .375 | 1.625 | 19 | 9.438 11.125 | 27 | 8.25 | 21 | 20.75 | 2 | 15 | 33.25 | 1.563 | 2.625 |

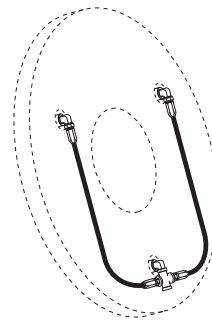
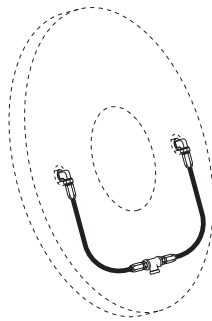
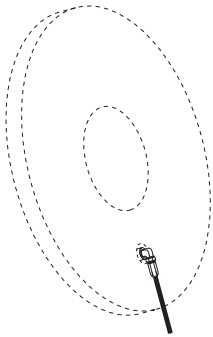
Wichita motor brakes typically produce more torque than is usually necessary.

Contact Wichita Engineering for help in selecting the number of springs to produce the proper deceleration for your application.

Note: For mounting, use socket head capscrews conforming to the ASTM-574-97a.

Spring-Set Motor Brakes

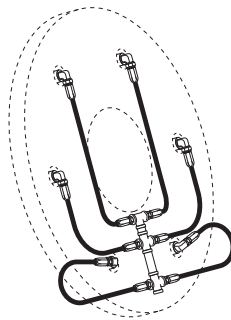
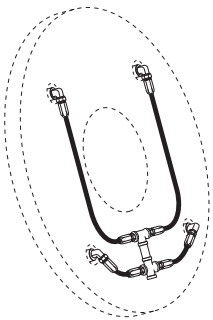
Air Hose Kits



| Model | Part Number |
|-------|--|
| 8" | 8-908-912-100-5 8-908-924-100-5 QRV |

| Model | Part Number |
|-------|--|
| 6" | 8-906-912-200-4 8-906-931-201-5 QRV |
| 8" | 8-908-913-200-5 8-908-931-200-5 |
| 11" | 8-911-913-200-5 8-911-931-200-5 QRV |
| 14" | 8-914-913-200-5 8-914-921-200-5 QRV |
| 16" | 8-916-913-200-5 8-916-921-200-5 QRV |

| Model | Part Number |
|-------|--|
| 18" | 8-918-912-200-5 8-918-931-200-5 QRV |
| 21" | 8-921-913-200-5 8-921-931-200-5 QRV |
| 24" | 8-924-913-200-5 8-924-931-200-5 QRV |
| 27" | 8-927-913-200-5 8-927-921-200-5 QRV |



| Model | Part Number |
|-------|--|
| 30" | 8-930-913-400-5 8-930-931-400-5 QRV |
| 36" | 8-936-913-400-6 8-936-931-400-6 QRV |
| 42" | 8-942-913-400-6 8-924-931-400-6 QRV |
| 48" | 8-948-912-400-6 8-948-923-400-6 QRV |

| Model | Part Number |
|-------|--|
| 60" | 8-960-912-500-5 8-960-923-400-6 QRV |

Air hose kits contain all necessary parts (fittings, hoses and extensions) to completely plumb the brake air system.

Optional Quick Release Valves can replace elbows on most units (see page 121).

