

# Specifications R17Z-9A



## ENGINE

|                            |                |   |
|----------------------------|----------------|---|
| MODEL                      |                | KUBOTA D902   |
| Type                       |                | 4 cycle, In line, Water cooled,<br>Diesel, Tier 4 certified |
| Rated flywheel horse power |                |   |
| SAE                        | J1995 (gross)  | 16.8 hp (12.5 kw) / 2,300 rpm                               |
|                            | J1349 (net)    | 15.8 hp ( 11.8 kW) / 2,300 rpm                              |
| DIN                        | 6271/1 (gross) | 16.5 ps ( 13.1 kW) / 2,300 rpm                              |
|                            | 6271/1 (net)   | 16.0 ps (11.8 kW) / 2,300 rpm                               |
| Max. torque                |                | 5.46 kgf.m (39.5 lbf.ft) / 1,900 rpm                        |
| Bore x stroke              |                | 72 mm x 73.6 mm (2.83" x 2.89")                             |
| Piston displacement        |                | 898 cc (54.79 in³)  |
| Batteries                  |                | 12 V - 45 Ah  |
| Starting motor             |                | 12 V - 1.2 kW   |
| Alternator                 |                | 12 V - 40 A   |

## HYDRAULIC SYSTEM

|                            |   |
|----------------------------|---|
| MAIN PUMP                  |   |
| Type                       | Variable displacement piston pumps                      |
| Max. flow                  | 2 x 18.8 l/min + 11.3 l/min                             |
| Sub-pump for pilot circuit | Gear pump   |
| HYDRAULIC MOTORS           |   |
| Travel                     | Two speed axial piston motor with counter balance valve |
| Swing                      | Axial piston motor                                      |
| RELIEF VALVE SETTING       |   |
| Implement circuits         | 210 kgf/cm² (2,987 psi)                                 |
| Travel                     | 210 kgf/cm² (2,987 psi)                                 |
| Swing circuit              | 170 kgf/cm² (2,418 psi)                                 |
| Pilot circuit              | 35 kgf/cm² (498 psi)                                    |
| Service valve              | Installed   |

## HYDRAULIC CYLINDERS

|                                |                              |
|--------------------------------|------------------------------|
| No. of cylinder- bore x stroke |                              |
| Boom                           | 60 x 440 mm (2.3" x 17.3")   |
| Arm                            | 60 x 353 mm (2.3" x 13.8")   |
| Bucket                         | 55 x 320 mm (2.16" x 12.59") |
| Boom swing                     | 55 x 355 mm (2.16" x 13.97") |
| Dozer blade                    | 65 x 45 mm (2.5" x 4.5")     |
| Extension                      | 55 x 310 mm (2.16" x 12.2")  |

## OPERATOR'S CAB

|                              |       |
|------------------------------|-------|
| Noise Levels (dynamic value) |       |
| Outside cabin - LwA          | 93 dB |
| Inside cabin - LpA           | 81 dB |

## COOLANT & LUBRICANT CAPACITY

| (refilling)    | liter | US gal | UK gal |
|----------------|-------|--------|--------|
| Fuel tank      | 20    | 5.3    | 4.4    |
| Engine coolant | 3.5   | 0.9    | 0.7    |
| Engine oil     | 3.7   | 1.0    | 0.8    |
| Hydraulic tank | 13    | 3.4    | 2.9    |

## TRAVEL LEVERS

Traveling and steering : Two levers with pedals.

## HYDRAULIC CONTROLS

|                 |   |
|-----------------|---|
| Type            | Two joysticks with one safety lever                           |
| Pilot control   | (LH): Swing and arm,<br>(RH): Boom and bucket with horn (ISO) |
| Engine throttle | Mechanical, cable type  |

## SWING SYSTEM

|                           |                           |
|---------------------------|---------------------------|
| Swing motor               | Orbit motor               |
| Swing reduction           | -                         |
| Swing circuit lubrication | Lubricated with drain oil |
| Swing speed               | 9.5 rpm                   |

## DRIVES & BRAKES

|                                  |   |
|----------------------------------|---|
| Max. travel speed (high) / (low) | 4.1 km/h / 2.2 km/h (2.5 mph) / (1.4 mph) |
| Maximum traction force           | 1.42 ton                                  |
| Maximum gradeability             | 30°                                       |

## DIGGING FORCE (ISO)

|        |            |            |
|--------|------------|------------|
|        | 0.96 m Arm | 1.12 m Arm |
| Bucket | 1,580 kgf  | 1,580 kgf  |
|        | 15.5 kN    | 15.5 kN    |
|        | 3,490 lbf  | 3,490 lbf  |
| Arm    | 870 kgf    | 780 kgf    |
|        | 8.5 kN     | 7.6 kN     |
|        | 1,920 lbf  | 1,720 lbf  |

## OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 1,800 mm (5'11") boom, 960 mm (3'2") arm, SAE heaped 0.04 m³ (0.05 yd³) excavator bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

|                  |                               |
|------------------|-------------------------------|
| Shoe Width       | Rubber shoe 230 mm (9")       |
| Operating Weight | Canopy 1,700 kg (3,747 lb)    |
| Ground Pressure  | Canopy 0.25 kg/cm² (3.98 psi) |

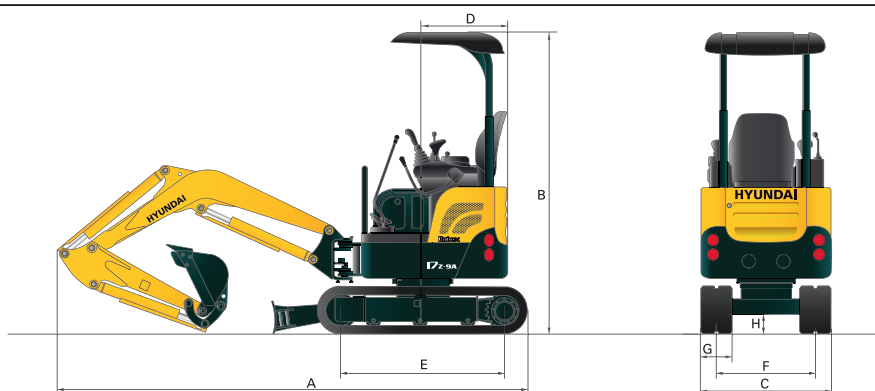
## UNDERCARRIAGE

X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, track adjusters with shock absorbing springs and sprockets and rubber shoes.

|                                  |                        |
|----------------------------------|------------------------|
| Track frame                      | Variable undercarriage |
| No. of track roller on each side | 3 EA                   |

# Dimensions & Working Ranges

## DIMENSIONS R17Z-9A

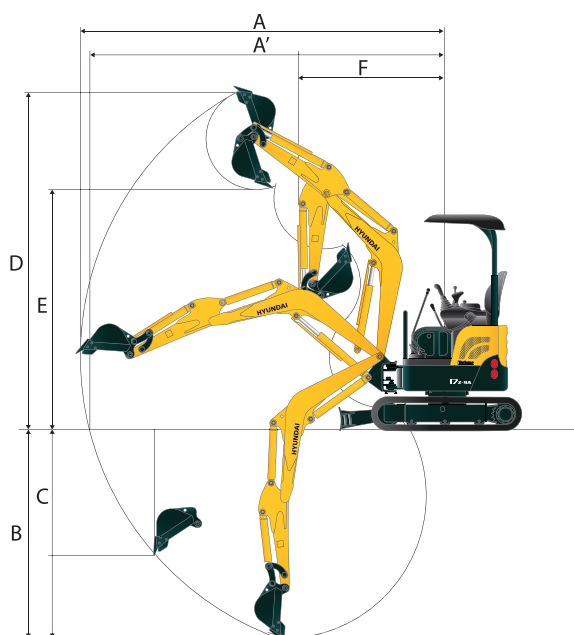


mm (ft · in)

|   |                           |   |                           |
|---|---------------------------|---|---------------------------|
| <b>A</b> Overall length - Standard Arm              | 3,480 (11'4")             | <b>D</b> Tail swing radius - additional counterweight | 720 (2'3")                |
| Overall length - Long Arm                           | 3,510                     | <b>E</b> Tumbler distance                             | 1,230 (4'0")              |
| <b>B</b> Overall height                             | 2,320 (7'7")              | <b>F</b> Track gauge                                  | 760 ~ 1,070 (2'6" ~ 3'5") |
| <b>C</b> Overall width                              | 990 ~ 1,300 (3'2" ~ 4'2") | <b>G</b> Track shoe width                             | 230 (0'9")                |
| <b>D</b> Tail swing radius - standard counterweight | 645 (2'11")               | <b>H</b> Ground clearance                             | 170 (0'5")                |

## WORKING RANGES R17Z-9A

mm (ft · in)



|   |               |               |
|---|---------------|---------------|
| Boom length                               | 1,800 (5'11") |               |
| Arm length                                | 960 (3'2")    | 1,120 (3'8")  |
| <b>A</b> Max. digging reach               | 3,900 (12'7") | 4,030 (13'2") |
| <b>A'</b> Max. digging reach on ground    | 3,800 (12'4") | 3,940 (12'9") |
| <b>B</b> Max. digging depth               | 2,200 (7'2")  | 2,350 (7'7")  |
| <b>C</b> Max. vertical wall digging depth | 1,320 (4'3")  | 1,460 (6'3")  |
| <b>D</b> Max. digging height              | 3,580 (11'7") | 3,680 (12'0") |
| <b>E</b> Max. dumping height              | 2,570 (8'4")  | 2,670 (8'7")  |
| <b>F</b> Min. front swing radius          | 1,570 (5'1")  | 1,600 (5'2")  |

# Lifting Capacities

## R17Z-9A

Rating over-front Rating over-side or 360 degrees

Boom : 1.80 m (5' 11") / Arm : 0.96 m (3' 2") / Bucket : 0.04 m<sup>3</sup> SAE heaped / Dozer up, Track extended, 230 mm (9") Rubber track, without additional counterweight

| Load point height<br>m (ft) |    | Load radius    |     |                |      |                 |     | At max. reach |      |        |
|-----------------------------|----|----------------|-----|----------------|------|-----------------|-----|---------------|------|--------|
|                             |    | 2.0 m (7.0 ft) |     | 2.5 m (8.0 ft) |      | 3.0 m (10.0 ft) |     | Capacity      |      | Reach  |
|                             |    |                |     |                |      |                 |     |               |      | m (ft) |
| 3.0 m                       | kg |                |     |                |      |                 |     | 280           | *290 | 2.63   |
| (10.0 ft)                   | lb |                |     |                |      |                 |     | 620           | *640 | (8.6)  |
| 2.5 m                       | kg |                |     | 310            | *310 |                 |     | 200           | 210  | 3.13   |
| (8.0 ft)                    | lb |                |     | 680            | *680 |                 |     | 440           | 460  | (10.3) |
| 2.0 m                       | kg |                |     | 300            | 310  | 210             | 220 | 170           | 180  | 3.43   |
| (7.0 ft)                    | lb |                |     | 660            | 680  | 460             | 490 | 370           | 400  | (11.3) |
| 1.5 m                       | kg | 430            | 440 | 290            | 300  | 210             | 220 | 150           | 160  | 3.60   |
| (5.0 ft)                    | lb | 950            | 970 | 640            | 660  | 460             | 490 | 330           | 350  | (11.8) |
| 1.0 m                       | kg | 400            | 410 | 270            | 290  | 200             | 210 | 140           | 150  | 3.67   |
| (3.0 ft)                    | lb | 880            | 900 | 600            | 640  | 440             | 460 | 310           | 330  | (12.0) |
| 0.5 m                       | kg | 370            | 390 | 260            | 270  | 190             | 200 | 140           | 150  | 3.64   |
| (2.0 ft)                    | lb | 820            | 860 | 570            | 600  | 420             | 440 | 310           | 330  | (11.9) |
| Ground Line                 | kg | 360            | 370 | 250            | 270  | 190             | 200 | 150           | 160  | 3.51   |
|                             | lb | 790            | 820 | 550            | 600  | 420             | 440 | 330           | 350  | (11.5) |
| -0.5 m                      | kg | 360            | 370 | 250            | 260  | 190             | 200 | 170           | 180  | 3.27   |
| (-2.0 ft)                   | lb | 790            | 820 | 550            | 570  | 420             | 440 | 370           | 400  | (10.7) |
| -1.0 m                      | kg | 360            | 380 | 250            | 270  |                 |     | 210           | 220  | 2.87   |
| (-3.0 ft)                   | lb | 790            | 840 | 550            | 600  |                 |     | 460           | 490  | (9.4)  |
| -1.5 m                      | kg | 380            | 390 |                |      |                 |     |               |      |        |
| (-5.0 ft)                   | lb | 840            | 860 |                |      |                 |     |               |      |        |

Boom : 1.80 m (5' 11") / Arm : 0.96 m (3' 2") / Bucket : 0.04 m<sup>3</sup> SAE heaped / Dozer down, Track extended, 230 mm (9") Rubber track, without additional counterweight

| Load point height<br>m (ft) |    | Load radius  |      |              |      |               |     | At max. reach |      |        |
|-----------------------------|----|--------------|------|--------------|------|---------------|-----|---------------|------|--------|
|                             |    | 2.0 m (7 ft) |      | 2.5 m (8 ft) |      | 3.0 m (10 ft) |     | Capacity      |      | Reach  |
|                             |    |              |      |              |      |               |     |               |      | m (ft) |
| 3.0 m                       | kg |              |      |              |      |               |     | *290          | *290 | 2.63   |
| (10.0 ft)                   | lb |              |      |              |      |               |     | *640          | *640 | (8.6)  |
| 2.5 m                       | kg |              |      | *310         | *310 |               |     | *290          | 220  | 3.13   |
| (8.0 ft)                    | lb |              |      | *680         | *680 |               |     | *640          | 490  | (10.3) |
| 2.0 m                       | kg |              |      | *320         | *320 | *320          | 230 | *300          | 180  | 3.43   |
| (7.0 ft)                    | lb |              |      | *710         | *710 | *710          | 510 | *660          | 400  | (11.3) |
| 1.5 m                       | kg | *450         | *450 | *380         | 310  | *340          | 230 | *300          | 160  | 3.60   |
| (5.0 ft)                    | lb | *990         | *990 | *840         | 680  | *750          | 510 | *660          | 350  | (11.8) |
| 1.0 m                       | kg | *620         | 430  | *450         | 300  | *380          | 220 | *310          | 150  | 3.67   |
| (3.0 ft)                    | lb | *1370        | 950  | *990         | 660  | *840          | 490 | *680          | 330  | (12.0) |
| 0.5 m                       | kg | *740         | 400  | *520         | 280  | *410          | 210 | *320          | 150  | 3.64   |
| (2.0 ft)                    | lb | *1630        | 880  | *1150        | 620  | *900          | 460 | *710          | 330  | (11.9) |
| Ground Line                 | kg | *790         | 390  | *550         | 270  | *420          | 210 | *330          | 160  | 3.51   |
|                             | lb | *1740        | 860  | *1210        | 600  | *930          | 460 | *730          | 350  | (11.5) |
| -0.5 m                      | kg | *760         | 390  | *540         | 270  | *400          | 210 | *330          | 180  | 3.27   |
| (-2.0 ft)                   | lb | *1680        | 860  | *1190        | 600  | *880          | 460 | *730          | 400  | (10.7) |
| -1.0 m                      | kg | *660         | 390  | *470         | 270  |               |     | *320          | 230  | 2.87   |
| (-3.0 ft)                   | lb | *1460        | 860  | *1040        | 600  |               |     | *710          | 510  | (9.4)  |
| -1.5 m                      | kg | *450         | 400  |              |      |               |     |               |      |        |
| (-5.0 ft)                   | lb | *990         | 880  |              |      |               |     |               |      |        |

- Lifting capacity is based on SAE J1097, ISO 10567.
- Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The load point is a hook located on the back of the bucket.
- (\*) indicates the load limited by hydraulic capacity.

# Lifting Capacities

## R17Z-9A

Rating over-front Rating over-side or 360 degrees

Boom : 1.80 m (5' 11") / Arm : 1.12 m (3' 8") / Bucket : 0.04 m<sup>3</sup> SAE heaped / Dozer up, Track extended, 230 mm (9") Rubber track, without additional counterweight

| Load point height<br>m (ft) |    | Load radius    |      |                |      |                 |     |                 |     | At max. reach |      |        |
|-----------------------------|----|----------------|------|----------------|------|-----------------|-----|-----------------|-----|---------------|------|--------|
|                             |    | 2.0 m (7.0 ft) |      | 2.5 m (8.0 ft) |      | 3.0 m (10.0 ft) |     | 3.5 m (12.0 ft) |     | Capacity      |      | Reach  |
|                             |    |                |      |                |      |                 |     |                 |     |               |      | m (ft) |
| 3.0 m                       | kg |                |      |                |      |                 |     |                 |     | 240           | 250  | 2.87   |
| (10.0 ft)                   | lb |                |      |                |      |                 |     |                 |     | 530           | 550  | (9.4)  |
| 2.5 m                       | kg |                |      | *260           | *260 |                 |     |                 |     | 180           | 190  | 3.31   |
| (8.0 ft)                    | lb |                |      | *570           | *570 |                 |     |                 |     | 400           | 420  | (10.9) |
| 2.0 m                       | kg |                |      | *280           | *280 | 210             | 220 |                 |     | 150           | 160  | 3.59   |
| (7.0 ft)                    | lb |                |      | *620           | *620 | 460             | 490 |                 |     | 330           | 350  | (11.8) |
| 1.5 m                       | kg | *380           | *380 | 290            | 300  | 210             | 220 |                 |     | 140           | 140  | 3.75   |
| (5.0 ft)                    | lb | *840           | *840 | 640            | 660  | 460             | 490 |                 |     | 310           | 310  | (12.3) |
| 1.0 m                       | kg | 400            | 420  | 280            | 290  | 200             | 210 | 150             | 160 | 130           | 140  | 3.82   |
| (3.0 ft)                    | lb | 880            | 930  | 620            | 640  | 440             | 460 | 330             | 350 | 290           | 310  | (12.5) |
| 0.5 m                       | kg | 370            | 390  | 260            | 270  | 190             | 200 | 150             | 150 | 130           | 140  | 3.79   |
| (2.0 ft)                    | lb | 820            | 860  | 570            | 600  | 420             | 440 | 330             | 330 | 290           | 310  | (12.4) |
| Ground Line                 | kg | 360            | 370  | 250            | 260  | 190             | 200 |                 |     | 130           | 140  | 3.67   |
|                             | lb | 790            | 820  | 550            | 570  | 420             | 440 |                 |     | 290           | 310  | (12.0) |
| -0.5 m                      | kg | 350            | 370  | 240            | 260  | 180             | 190 |                 |     | 150           | 160  | 3.45   |
| (-2.0 ft)                   | lb | 770            | 820  | 530            | 570  | 400             | 420 |                 |     | 330           | 350  | (11.3) |
| -1.0 m                      | kg | 350            | 370  | 250            | 260  |                 |     |                 |     | 180           | 190  | 3.08   |
| (-3.0 ft)                   | lb | 770            | 820  | 550            | 570  |                 |     |                 |     | 400           | 420  | (10.1) |
| -1.5 m                      | kg | 360            | 380  |                |      |                 |     |                 |     | 270           | *280 | 2.47   |
| (-5.0 ft)                   | lb | 790            | 840  |                |      |                 |     |                 |     | 600           | *620 | (8.1)  |

Boom : 1.80 m (5' 11") / Arm : 1.12 m (3' 8") / Bucket : 0.04 m<sup>3</sup> SAE heaped / Dozer down, Track extended, 230 mm (9") Rubber track, without additional counterweight

| Load point height<br>m (ft) |    | Load radius    |      |                |      |                 |     |                 |     | At max. reach |      |        |
|-----------------------------|----|----------------|------|----------------|------|-----------------|-----|-----------------|-----|---------------|------|--------|
|                             |    | 2.0 m (7.0 ft) |      | 2.5 m (8.0 ft) |      | 3.0 m (10.0 ft) |     | 3.5 m (11.0 ft) |     | Capacity      |      | Reach  |
|                             |    |                |      |                |      |                 |     |                 |     |               |      | m (ft) |
| 3.0 m                       | kg |                |      |                |      |                 |     |                 |     | *270          | 260  | 2.87   |
| (10.0 ft)                   | lb |                |      |                |      |                 |     |                 |     | *600          | 570  | (9.4)  |
| 2.5 m                       | kg |                |      | *260           | *260 |                 |     |                 |     | *270          | 200  | 3.31   |
| (8.0 ft)                    | lb |                |      | *570           | *570 |                 |     |                 |     | *600          | 440  | (10.9) |
| 2.0 m                       | kg |                |      | *280           | *280 | *290            | 230 |                 |     | *270          | 170  | 3.59   |
| (7.0 ft)                    | lb |                |      | *620           | *620 | *640            | 510 |                 |     | *600          | 370  | (11.8) |
| 1.5 m                       | kg | *380           | *380 | *340           | 310  | *320            | 230 |                 |     | *280          | 150  | 3.75   |
| (5.0 ft)                    | lb | *840           | *840 | *750           | 680  | *710            | 510 |                 |     | *620          | 330  | (12.3) |
| 1.0 m                       | kg | *550           | 430  | *420           | 300  | *350            | 220 | *250            | 160 | *290          | 140  | 3.82   |
| (3.0 ft)                    | lb | *1210          | 950  | *930           | 660  | *770            | 490 | *550            | 350 | *640          | 310  | (12.5) |
| 0.5 m                       | kg | *700           | 400  | *490           | 280  | *390            | 210 | *270            | 160 | *300          | 140  | 3.79   |
| (2.0 ft)                    | lb | *1540          | 880  | *1080          | 620  | *860            | 460 | *600            | 350 | *660          | 310  | (12.4) |
| Ground Line                 | kg | *770           | 390  | *540           | 270  | *410            | 200 |                 |     | *310          | 150  | 3.67   |
|                             | lb | *1700          | 860  | *1190          | 600  | *900            | 440 |                 |     | *680          | 330  | (12.0) |
| -0.5 m                      | kg | *770           | 380  | *540           | 270  | *410            | 200 |                 |     | *310          | 160  | 3.45   |
| (-2.0 ft)                   | lb | *1700          | 840  | *1190          | 600  | *900            | 440 |                 |     | *680          | 350  | (11.3) |
| -1.0 m                      | kg | *700           | 380  | *500           | 270  |                 |     |                 |     | *310          | 200  | 3.08   |
| (-3.0 ft)                   | lb | *1540          | 840  | *1100          | 600  |                 |     |                 |     | *680          | 440  | (10.1) |
| -1.5 m                      | kg | *530           | 390  |                |      |                 |     |                 |     | *280          | *280 | 2.47   |
| (-5.0 ft)                   | lb | *1170          | 860  |                |      |                 |     |                 |     | *620          | *620 | (8.1)  |

- Lifting capacity is based on SAE J1097, ISO 10567.
- Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The load point is a hook located on the back of the bucket.
- (\*) indicates the load limited by hydraulic capacity.

## STANDARD EQUIPMENT R17Z-9A

### ISO standard canopy

canopy ROPS (ISO 3471)  
FOPS (ISO 3449)  
FOG (ISO 10262 Level I)  
TOPS (ISO 12117)

### Centralized monitoring

#### Gauges

Fuel level gauge  
Engine coolant temperature gauge

#### Warning lamps

Quick clamp  
Engine oil pressure  
Engine coolant temperature  
Preheat engine  
Low battery  
Fuel empty

#### One key fits all

#### Mechanical suspension seat with seat belt

#### Console box tilting system (LH.)

#### Two front working lights

#### Electric horn

#### Battery (1 x 12 V x 80 Ah)

#### Battery master switch

#### Removable reservoir tank

#### Water separator, fuel line

#### Mono boom (1.80 m; 5' 11")

#### Arm (0.96 m; 3' 2")

#### Rubber crawler (230 mm; 9")

#### Double acting piping

## OPTIONAL EQUIPMENT R17Z-9A

### Accumulator, work equipment lowering

### Travel alarm

### Tool kit

### Lever pattern change valve

### Long arm (1.12 m; 3' 8")

### Heater & Defroster

### Quick coupler piping

### Quick coupler

### Proportional control

### Additional Counterweight

- \* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to international standards.
- \* The photos may include attachments and optional equipment that are not available in your area.
- \* Materials and specifications are subject to change without advance notice.
- \* All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT

