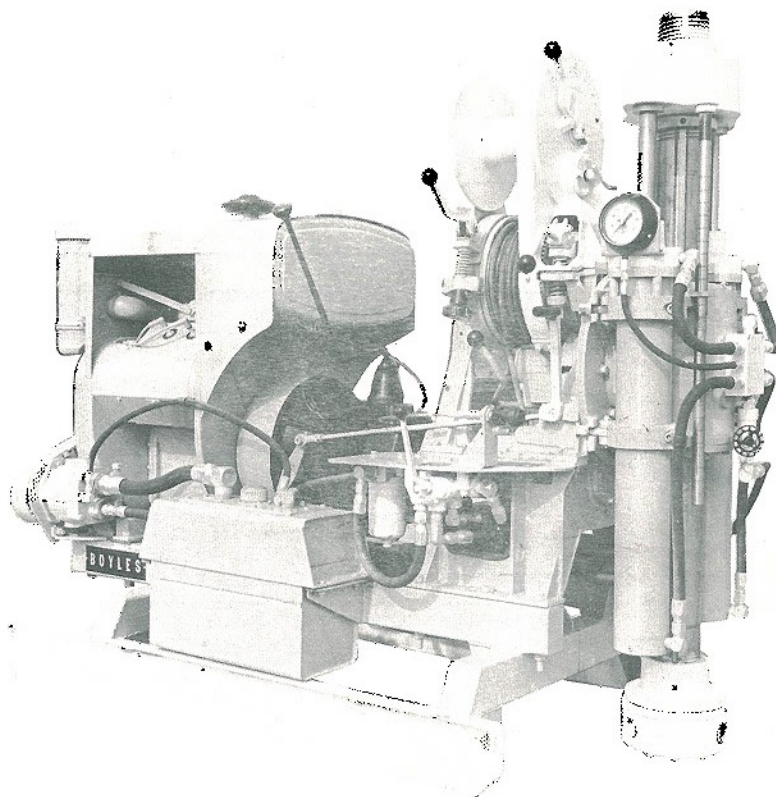




Above BBS-15 Drill is shown with Wisconsin VG4D Engine and 12HH Swivel Head Approximate Weight of above drill 2200 lb. - 998 Kg.

The BBS-15 — Boyles drill designed for shallow to intermediate depths; stable, low profile design with modular feature; capacity coordinated components.

Rated Capacity — Rod string weight: 4600 lbs (2087 kg) capacity

AWL Rods — 1500 ft (460m) of 3.1 lbs/ft rods (4.6 kg/m)

AW Rods — 1350 ft (410m) of 3.4 lbs/ft rods (5.1 kg/m)

37 hp Wisconsin gasoline power unit, or 26 hp Deutz diesel standard options.

Modular construction, with frame, power train and front end modules easily disassembled into smaller, lightweight components.

4-speed transmission standard.

Two-sprocket ratio options.

Three swivelhead options include 12AG gearfeed, or 12BH and 12HH hydraulic types. Standard drill with 12AG swivelhead not normally supplied with hydraulics; hydraulics system standard on drills with hydraulic swivelheads.

Standard drill equipped with low profile, welded construction frame including moving sheaves and fairleads for self-propelling, specified power train, front end drive complete with main hoist, specified swivelhead (bit weight indicator on hydraulic models).

Optional accessories include, Cathead, side or top mounted wireline hoist, hydraulic frame retraction, tachometer. Hydraulic raise 20' (6m) aluminum or steel swivel ring masts.

DEPTH RATING	Rod Size	Feet	Meters	Rod Size	Feet	Meters		
	AWL (3.1 lbs./ft.)	1500	455	AW (3.4 lbs./ft.)	1350	410		
	BWL (4.0 lbs./ft.)	1150	350	BW (4.5 lbs./ft.)	1080	330		
	NWL (5.1 lbs./ft.)	900	275	NW (5.5 lbs./ft.)	840	255		
	HWL (7.7 lbs./ft.)	600	185	HW (8.5 lbs./ft.)	500	150		
POWER UNIT		Make	Fuel	hp/rpm	Torque/rpm	Fuel/hour		
Options	Standard	Wisconsin VG4D Deutz F2L912	Gasoline Diesel	37/2400 26/2300	Ft. lbs. 94/1500 76/1800	Imp. gal.	US gal.	ltr.
	Standard					2.5 1.0	3 1.2	11.4 4.4
CLUTCH		10" Automotive - S A E #4 Housing						
TRANSMISSION		Type	Ratios: 1st	2nd	3rd	4th		
		4-Speed	6.4:1	3.09:1	1.69:1	1:1		
DRIVE LINE		Universal Joint						
FRONT END DRIVE		Quadplex 1/2" Pitch Chain;						
SPROCKET RATIOS		Tailshaft	33T Mainshaft Sprocket		*Standard with Diesel Engine **Standard with Gasoline Engine			
		19T 24T	1.74:1* 1.37:1**					
HOIST (Differential Type)		Drum Diameter	Drum Length	Drum Capacity	Bare Drumline Speed/Min.			
		8 in. 203 mm.	4-5/8 in. 117 mm.	65' of 1/2" 20 m. - 13 mm.	1st 50' 15 m.	2nd 100' 30 m.	3rd 180' 55 m.	4th 310' 94 m.
SWIVELHEAD OPTIONS (360°)		12 AG		12 BH	12 HH			
I.D. Feedscrew/Drive Tube		1-13/16 in. 46 mm.		2 1/4 in. 57.1 mm.	3-5/8 in. 92 mm.			
Feed Travel		20 in. 508 mm.		24 or 30 in. 609 or 761 mm.	24 or 30 in. 609 or 761 mm.			
Feed Gears	Standard Option Option	200, 300, 400, 770 300, 400, 500, 770 17 to 1360		Hydraulic	Hydraulic			
Bevel Gears	Option Standard Option	1.38:1 1:1 1:1.2		1:1 1.38:1	2.44:1 1.8:1 1:1			
RPM Range	Slowest Standard Fastest Recmnd. Max.	60 to 790 110 to 1380 190 to 2100 2000		30 to 400 110 to 1380 150 to 1750 1500	30 to 440 60 to 760 150 to 1750 1500			

OPTIONAL ACCESSORIES

* CATHEAD	Location	Type	Diameter	Length	Spool Spd. @800rpm
	Top Mount or	Mechanical	10 in. 254 mm.	6 in. 152 mm.	260 ft./min. 79 m./min.
* WIRELINE HOIST	Top Mount	Mechanical	11 in. 279 mm.	7 in. 178 mm.	260 ft./min. 79 m./min.
	Side Mount	Mechanical	12 in. 305 mm.	13 in. 330 mm.	191 ft./min. 58 m./min.
* FRAME RETRACTION Hydraulic Racking Back - 16" (406.4 MM) Stroke					
HYDRAULICS	Make	Type	Max. Pressure	Op. Pressure	Volume
	Vickers	Piston Press. Comp.	1500 psi 105 kg/cm ²	600 psi 42 kg/cm ²	15 gpm U.S. 57 LTR/min.
MOVING SHEAVE - FAIR LEADS STANDARD					
* HYDRAULIC CHUCK Available on 12 BH Head & 12 HH head					
* MAST Hydraulic Raise, Aluminum or Steel Swiveling Mast					
* BIT WEIGHT INDICATOR Standard on All Hydraulic Models					
* BIT TACHOMETER Available Option					

* Indicated Options; when ordering, please specify selection.

SPROCKET RATIO 1.74:1

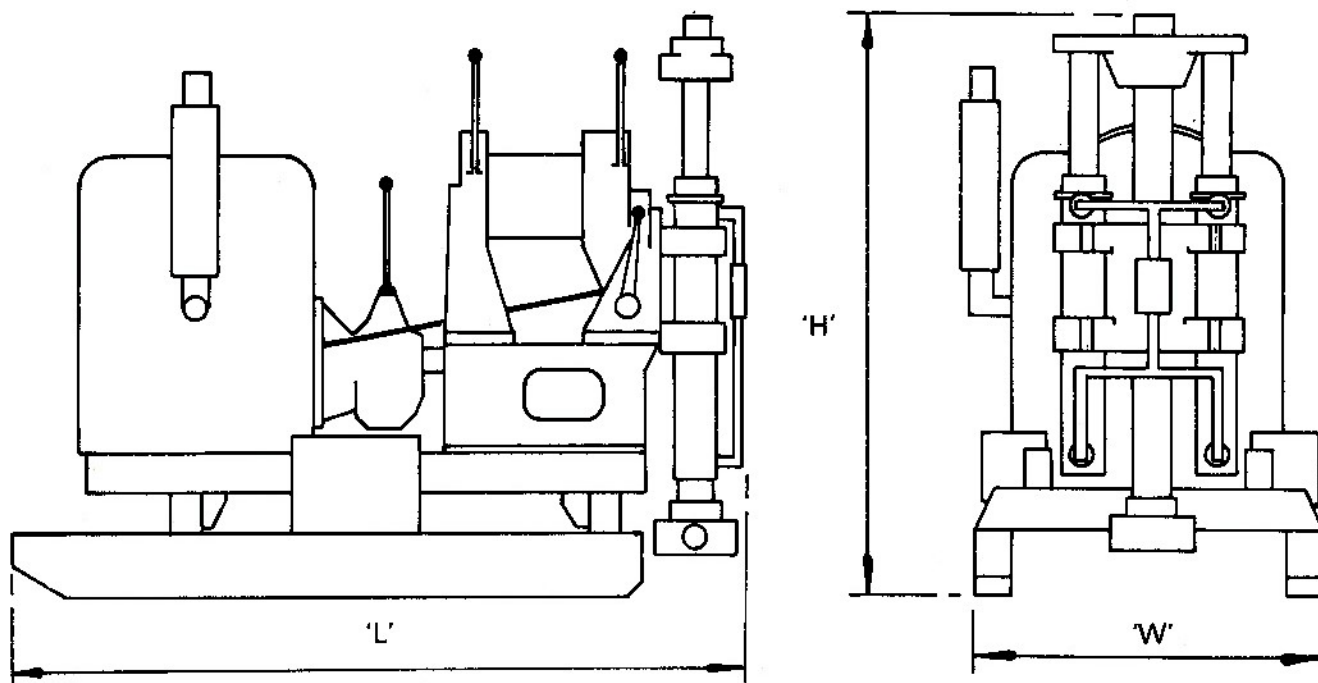
Bevel Gear Ratio & Swivelhead Type	Engine RPM	Transmission Gear			
		4th	3rd	2nd	1st
1:1.2 12AG	2500	1725	1020	555	270
	2000	1380	815	445	215
	1500	1030	610	335	160
1:1 All Heads	2500	1435	850	465	225
	2000	1150	680	375	180
	1500	860	510	280	135
1.38:1 12AG & 12BH	2500	1040	620	335	165
	2000	830	495	270	130
	1500	625	370	205	98
1.74:1 234HH	2500	825	490	265	130
	2000	660	390	215	105
	1500	495	295	160	78
1.8:1 12HH	2500	800	475	260	125
	2000	640	375	205	98
	1500	480	285	155	69
2.16:1 234HH	2500	665	395	215	105
	2000	530	315	175	83
	1500	400	235	130	63
2.44:1 12HH	2500	590	350	190	95
	2000	470	280	150	75
	1500	355	210	115	55

SPROCKET RATIO 1.37:1

Bevel Gear Ratio & Swivelhead Type	Engine RPM	Transmission Gear			
		4th	3rd	2nd	1st
1:1.2 12AG	2500	2200	1275	710	345
	2000	1750	1035	565	275
	1500	1300	775	425	205
1:1 All Heads	2500	1825	1080	590	285
	2000	1460	865	475	225
	1500	1095	650	355	170
1.38:1 12AG & 12BH	2500	1325	785	425	210
	2000	1060	625	345	165
	1500	795	470	260	125
1.74:1 234HH	2500	1045	620	335	165
	2000	840	495	270	130
	1500	635	370	205	98
1.8:1 12HH	2500	1015	600	330	160
	2000	810	480	260	125
	1500	610	360	195	88
2.16:1 234HH	2500	845	500	275	130
	2000	675	400	220	105
	1500	505	300	165	80
2.44:1 12HH	2500	750	440	240	115
	2000	600	355	195	95
	1500	450	265	145	69

JKS BOYLES

BOYLES
DIAMOND DRILLING EQUIPMENT

**DIMENSIONS**

	ins.	mm.
'L'	78	1981
'W'	41	1041
'H'	68	1727

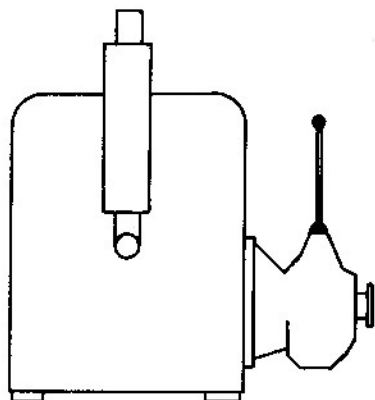
NOTE:

Dimensions shown are approximate. Installation drawings available on request.

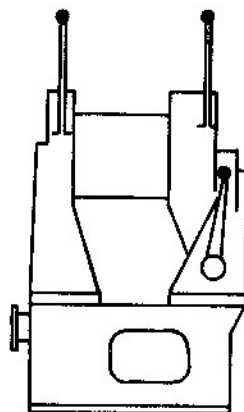
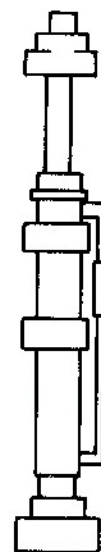
ASSEMBLY & DISASSEMBLY OF MAJOR MODULES

The drill assembly may be readily broken down into modules as shown over leaf, by removal of the following fixing bolts:

MODULE	No. of Fixing Bolts
Power Unit to Frame	4 bolts
Trans. to Universal Drive Shaft	4 bolts
Hoist & Front Casting to Frame	6 bolts
Swivelhead to Front Casting	6 bolts

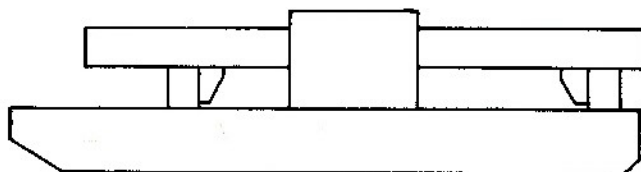


Power Unit


 Hoist and Front
Casting


Swivelhead

Frame


WEIGHT

lbs kg

POWER UNIT			
	Wisconsin Model VG4D (incl. Gear Box)	.810	367
	Deutz Model F2L912 (incl. Gear Box)	.704	319
	Hatz Model Z108 (incl. Gear Box)	.785	356
	*Perkins Model D3.152 (incl. Gear Box)	.796	361
	*Lister Model ST-3 (incl. Gear Box)	.806	365
* Available Newcastle Only.			
HOIST AND FRONT CASTING		.430	195
SWIVELHEAD			
	Model BUS-12HH	.550	249
	Model BUS-12BH	.310	140
	Model BUS-12AG	.247	112
FRAME ASSEMBLY			
	Including BATTERY, FUEL & HYDRAULIC TANKS (Dry)	.220	100
	Including BATTERY, FUEL & HYDRAULIC TANKS (Wet)	.404	183
OPTIONAL EQUIPMENT			
	HYDRAULIC RETRACTION	.190	86
	HYDRAULIC CHUCK MODEL BUS-12HH	.240	109
	HYDRAULIC CHUCK MODEL BUS-12BH	.140	63
	SIDE MOUNTED WIRELINE HOIST	.250	113