

CHIEFTAIN LOADER

BUCKET CAPACITY: 3/4 yard S.A.E. rated

BUCKET WIDTH: 66"

CUTTING EDGE: Renewable Alloy Steel — Balled

TIP BACK OF BUCKET AT GROUND LEVEL: 30°

BREAK OUT FORCE AT TIP OF BUCKET: 4,400 lbs.

MAXIMUM LIFT: 5,850 lbs.

SPEED OF LIFT: To full height 3.3 seconds.
To ground 4 seconds.

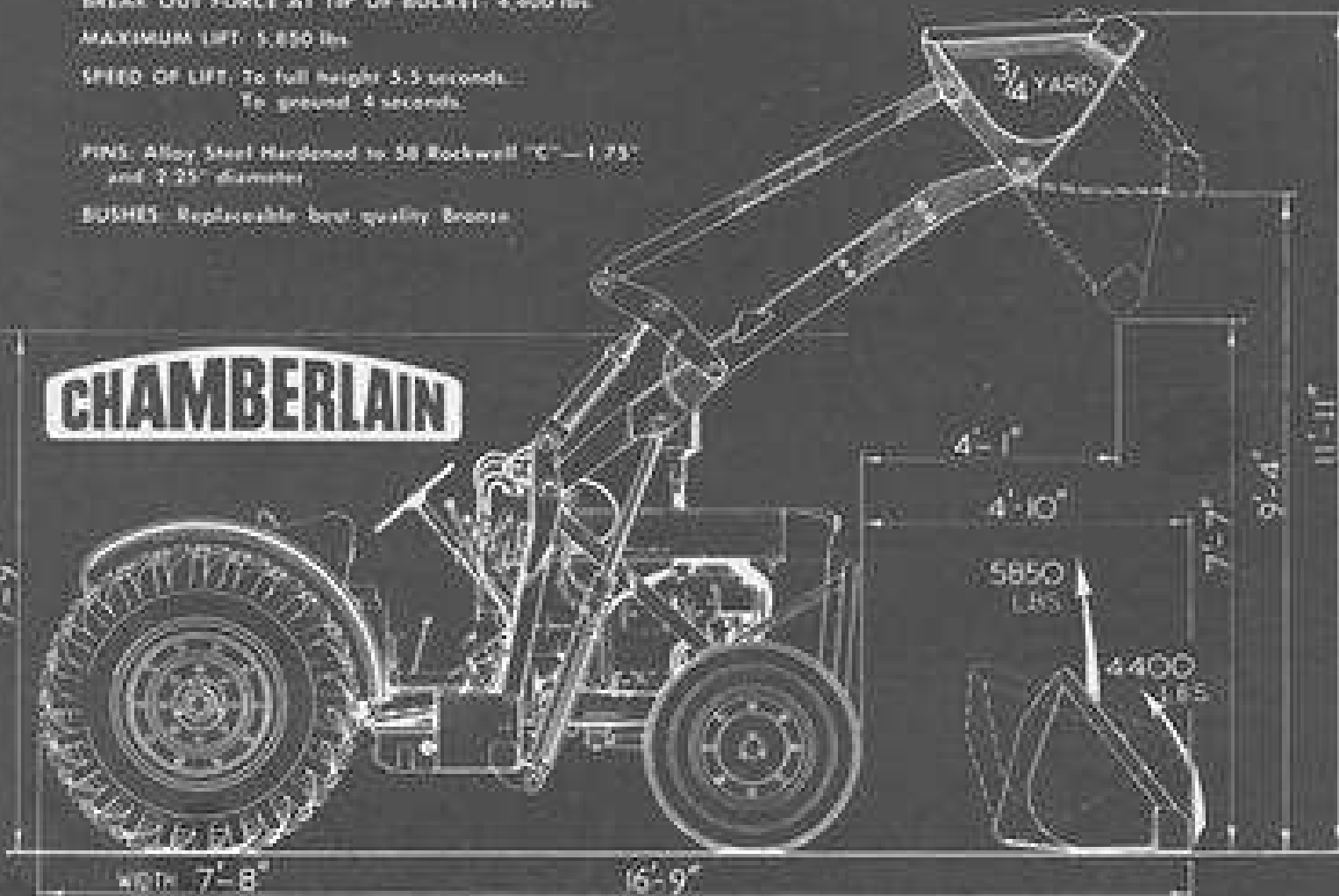
PINS: Alloy Steel Hardened to 58 Rockwell "C" — 1.25" and 2.25" diameter.

BUSHES: Replaceable best quality Bronze

Height to Tip of Bucket in Dumping Position: 7'-7"

Maximum Obstacle Height over which Bucket can be Discharged: 4'-4"

Minimum Dumping Clearance from Front Tyre: 4'-1"



HYDRAULIC PUMP: V330-19-10 Vickers Detroit.

HYDRAULIC VALVE: CM3-04-R-D-B-13 Vickers Detroit.

CROWD RELIEF VALVE: Hydrovics VR13-A1-C.

HYDRAULIC CYLINDERS: Lift—4" Dia. x 26" Stroke.
2" Dia. Rod. "V" Piston Packings.

Crowd—3" Dia. x 15" Stroke. 1.25" Dia. Rod.
Ballpin Piston Packings.

Piston Rods are hard chrome plated.

CHAMBERLAIN INDUSTRIES PTY. LTD.

Head Office and Works, Wellington Road, Widdowson, W.A.

SPECIFICATIONS

ENGINE:

The 4/2700 has a 4.25" (108mm.) bore, 4.75" (120.6mm.) stroke, and 267.5 cu. in. (4.42 litres) capacity.

Maximum torque is 189 lbs./ft. at 1,000 r.p.m.

Features include mechanically governed, distributor-type fuel pump; cast iron wet liners; and a low-level camshaft with the maximum diameter between cams to give rigidity.

The 4/2700's direct injection system using four hole injectors and toroidal chambers in the piston heads provides outstanding fuel consumption and positive starting.

Fuel: Diesels. Tank capacity 18 1/2 Imp. gallons.

FILTERS: A heavy-duty oil bath type air cleaner is fitted with a centrifugal pre-cleaner. Fuel filter is of the latest micro-mesh paper element type, and is used in a secondary filter following a pump and strainer in the fuel tank and a glass bowl water trap. The pump strainer may be easily and quickly cleaned without draining the fuel tank. Lubricating oil filter is of the replacement paper element type. A grease strainer is also provided. All filtering equipment is to highest engineering standards and has proved capable of safeguarding the engine in the most severe dust conditions with correct maintenance.

STARTING: Solenoid-operated, self-inducing starter motor operated in conjunction with thermostat cold starting aid by key switch.

ELECTRICAL: 12-volt generator, regulator and starter motor; two 19-ply batteries.

COOLING: A large capacity radiator with water circulated by water pump mounted on engine; temperature controlled by thermostat.

TRANSMISSION:

STANDARD MODEL

CLUTCH: 14" diameter single plate Borg and Beck fitted with ball bearing thrust race and operated by foot pedal.

FRONT and REAR GEARBOX: A three speed and reverse sliding spur front gear-box is mounted on the rear of the engine and coupled by a universal jointed shaft to a high and low range rear gearbox mounted on the front of the differential. The two gearboxes are fitted with separate change levers to provide six forward and two reverse speeds.

Top Speeds in each Gear at 2,000 r.p.m.—(1) 2.6 m.p.h.; (2) 4.6 m.p.h.; (3) 7.0 m.p.h.; (4) 11.0 m.p.h.; (5) 18.3 m.p.h.; (6) 30.0 m.p.h.

TORQUE CONVERTER MODEL

Equipped with an all steel welded Borg and Beck 12 WD torque converter with a Borg Warner A53/72N Valvet Drive Forward and Reversing unit. Torque Multiplication Ratio 2.17:1. Torque Ratio 1:1 at 10% converter slip. Maximum efficiency 90.5% at 20% converter slip. Forward, neutral and reverse control is by a single lever mounted on the steering column and an isolating switch prevents operation of the engine starter unless this lever is in neutral. The drive is transmitted by a universal jointed coupling and a two-speed sliding dog drop box to the two-speed rear gearbox. The drop box and rear gearbox have separate change levers providing four forward and four reverse speeds—

SPEEDS: (1) 0-4 m.p.h.; (2) 0-7.4 m.p.h.; (3) 0-17 m.p.h.; (4) 0-27 m.p.h. (Maximum speeds in each gear are at 10% converter slip).

TORQUE CONVERTER POWER SHIFT MODEL

Equipped with a Borg and Beck 12 AG torque converter with aluminium cast housing and a Borg Warner T23N Power Shift which provides two full power shift ratios both forward and reverse. Torque Multiplication Ratio 2.17:1. Torque Ratio 1:1 at 10% converter slip. Maximum Efficiency 90.5% at 20% converter slip. Forward, neutral and reverse control is by a lever mounted on the steering column and power shift ratio control is by a second lever mounted on the Power Shift housing. The drive is carried by a universal jointed coupling and a single speed drop box to the two-speed rear gearbox controlled by a separate lever providing four forward and four reverse speeds—

SPEEDS: (1) 0-3 m.p.h.; (2) 0-8 m.p.h.; (3) 0-9.6 m.p.h.; (4) 0-24 m.p.h. (Maximum speeds in each gear are at 10% converter slip). Power shift between 3-9.6 m.p.h.; 8-24 m.p.h.

DIFFERENTIAL: Heavy duty bevel gear type with 11:40 spiral bevel crown wheel and pinion.

FINAL DRIVES: Large high tensile half shafts carry the drive from the differential to the 12.49 final drives with 2" forged steel half gears located centrally within the rear wheels.

BRAKES: Rear wheels are fitted with cam operated lateral expanding brakes—brake area 138 sq. inches.

(Standard Model)—Brakes may be

- (i) Controlled independently on each rear wheel by two foot pedals
- (ii) used as foot brake by coupling the two foot pedals
- (iii) locked by a hand control to form a parking brake.

(Torque Converter Model)—

Brakes are operated by single foot pedal which can be locked by a hand control to form a parking brake.

(Torque Converter Power Shift Model)—

In addition to the single pedal foot brake, a hand operated parking brake is mounted on the output shaft of the transmission unit.

STEERING: Recirculating ball type steering, hydraulically assisted by Valvet V74 Pump with Valvet 12314-085-283 Resistor and connected to the front wheels by adjustable draglink and track rods fitted with heavy duty 1.25" ball joints.

WHEEL BASE: 45".

WHEEL TRACK: Front—45.5", Rear—34".

OVERALL LENGTH: 101".

OVERALL WIDTH: 39" (Rear Wheels).

OVERALL HEIGHT: 35" (Spark Arrows), 33" (Exide Frame).

WEIGHT:

	STANDARD MODEL	TORQUE CONVERTER MODEL	TORQUE CONVERTER POWER SHIFT MODEL
Traction and Loader	11,962 lbs.	13,342 lbs.	13,381 lbs.
Fuel	138	138	138
Operator	173	173	173
	<u>12,273</u>	<u>13,653</u>	<u>13,692</u>
Plus water Ballast	1,300	1,300	1,300
Operating weight	<u>13,573 lbs.</u>	<u>14,953 lbs.</u>	<u>14,992 lbs.</u>

TURNING: (Tractor's Maximum Clearance Circle)—

Without loader: 215" (145" radius). With loader: 215" (135" radius).

STANDARD EQUIPMENT: Wide base heavy cast iron wheels fitted with 12 x 18 x 8 ply motor tyre type, heavy-duty industrial floor axle fitted with 4.35 x 20 x 12 ply front tyres, hydraulically assisted steering, two 400 lb. counterweights, spark arrester, tachometer, ammeter, engine oil pressure and water temperature gauges, full width foam rubber brush mat, foot accelerator and hand throttle, rear towing hook, radiator guard.

OPTIONAL EXTRAS: Allsteel cab, rigger, 12.00 x 16 x 8 ply flotation front tyres, road forcing kit including electric lighting, detachable bucket back.

As the policy of this Company is that of continued development and improvement these specifications are subject to change without notice.