

710/710A/716A

 **CHAMPION**® **Series IV**  
**MOTOR GRADERS**



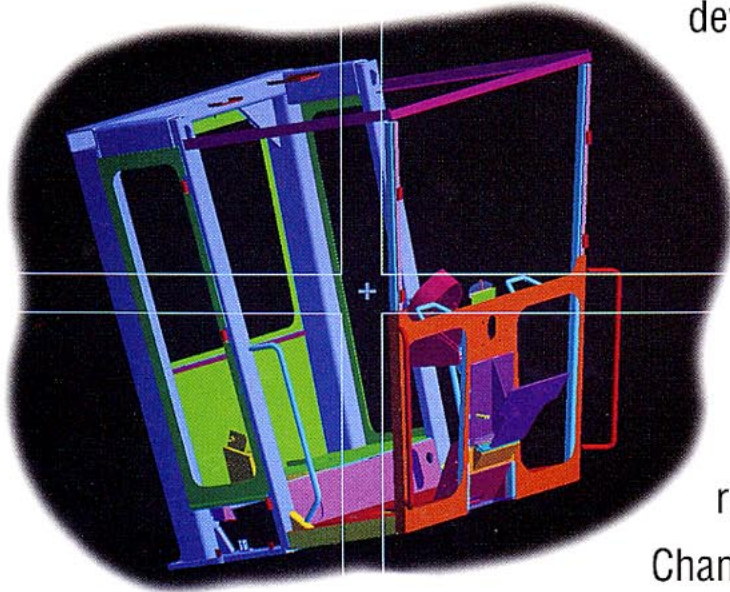
| MODEL             | 710                    | 710A                   | 716A                   |
|-------------------|------------------------|------------------------|------------------------|
| Configuration     | Rigid Frame            | Articulated            | All Wheel Drive        |
| Operating Weight* | 34,000 lbs (15 422 kg) | 34,000 lbs (15 422 kg) | 34,410 lbs (15 608 kg) |
| Net hp/kW         | 135 (101)              | 135 (101)              | 135 (101)              |

\* Typically equipped; see specifications for details Model shown may include optional equipment



## What it takes to be a Champion

There's a fine line between a good grader and a great one. With the



development of Series IV graders,

Champion is crossing that line to be "the best on earth" for every job your grader has to do.

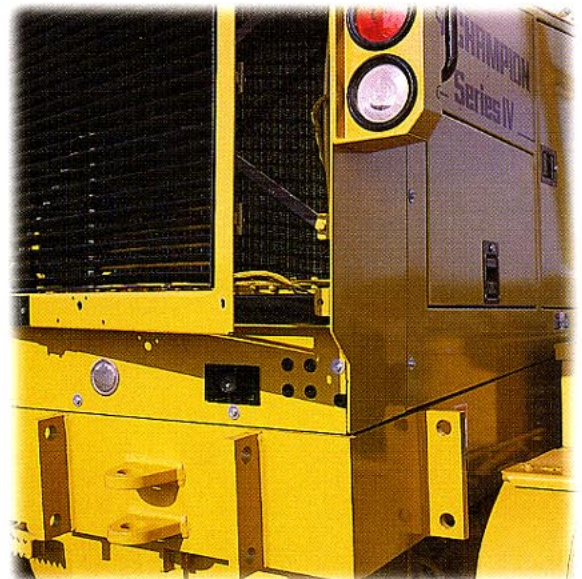
*Champion's "voice of the customer" program led directly to many of the operator features introduced in Series IV.*

When it comes to cutting new roads and pushing heavy loads,

Champion has been the world's number one specialist for a long time.

Now, with Series IV, Champion moves up to first choice for fine grading, too, with a wide-ranging list of new features to enhance productivity. And Series IV also brings you a new standard in reliability engineering so, at the end of the day, you get the job done at a lower cost.

Series IV graders were designed by grader people – we put our engineers into the cab with some of the best operators in the



*Series IV is built on a solid foundation of already proven Champion features. Some of these include: the rear perimeter frame, the first user lifetime frame warranty and a hinged rear grill for easy radiator cleaning.*

business to compare ideas. We built Series IV together, with over 60 specific design recommendations.

For instance:

- a unique load-sensing hydraulic system for fine grading “featherability” and power to spare
- a clear line-of-sight to the work zone and every area you need to see
- a place to hang your hat
- a 72° steering angle on the front axle for tighter turns
- a choice of blade lift systems
- a more comfortable place to work
- easier access for servicing
- a familiar “operator-friendly” cab layout



...not to mention the rock-solid construction that earned Champion graders a place on the preferred list of fleet owners around the world.

Series IV is getting the kind of support a great Champion deserves, too. Electronic parts ordering. Flexible financing options. Highly trained dealers and service staff. A warranty that says Series IV is built to live up to the name of Champion...

...the best on earth



*Champion dealers are equipped to support customers with “the best service on earth”, including next-day delivery on emergency parts ordered by 5pm local time, anywhere in the continental United States or Canada.*

# Looking out for "Number One"

That means you, because the most important part of a grader is the operator who drives it.

When you get into the cab of a Series IV grader, you'll see how every part is engineered to help the operator with the job. The roomy both-feet-on-the-floor layout, adjustable seat and pedal-controlled tilting pedestal let you fit the grader to your personal taste for a comfortable working position.

*Make yourself comfortable! Set your feet down, adjust the seat, slide and tilt the pedestal any which-way – all your controls and gauges move with you.*

The low-effort clutch and brake pedals and short-throw levers give Series IV a light touch for easy handling and fine precision. The new front window frame, blade lift mounting and front axle all align for an unobstructed line of sight to the work area. The distinctive sloped frame and ergonomic cab design combine for excellent 360° visibility close-in to the cab and wheels. All your operating gauges are up front in clear view, right on the pedestal. From your seat you can see everything you need to do the job – from the controls to the grade stakes, to both ends of the blade, straight ahead and in the curves.

This Champion is built to work as long and hard as you do. Series IV comfort features help an operator get through a full day's grading without tiring. We kept all the hydraulic hoses outside of the cab, so you don't have to worry about leaks or excess heat and noise on the inside.

*No matter what grader you have run before, you'll feel at home with the new Series IV lever arrangement and low-effort controls.*

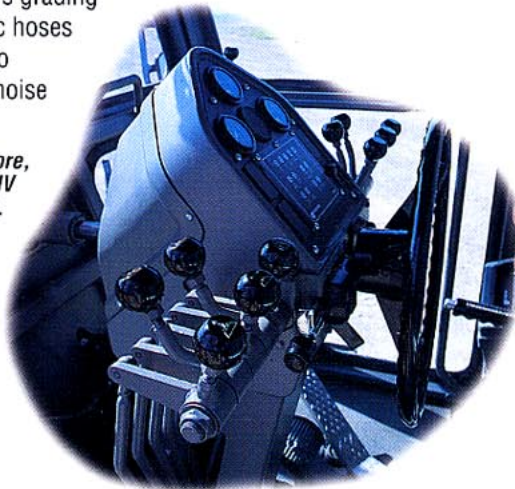
The cab's instrumentation is arranged in a logical sequence including the 3-level M4 electronic monitoring system and the side console where your switches are arranged in proper operating order. Everything is backlit for late work.

With a busy season ahead of you, little extras can make a big difference. That's why

Champion engineers went to work on a package of thoughtful options for hard-working operators...things like a coat hook in the cab and sliding windows to catch a fresh breeze. We even created a new left-side convenience console, an exclusive Series IV option designed to help you bring some of the comforts of home to work with you.

The whole package makes Series IV a better place to work – a grader that reduces fatigue, speeds up duty cycles and does more for the money.

*Series IV options include a new left-side console with operator conveniences including a lunch box cooler, vacuum bottle, ash tray and cup-holder.*

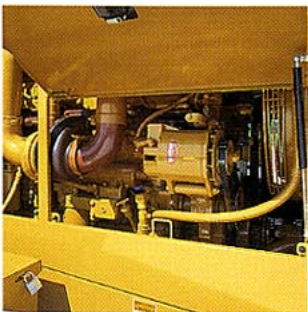
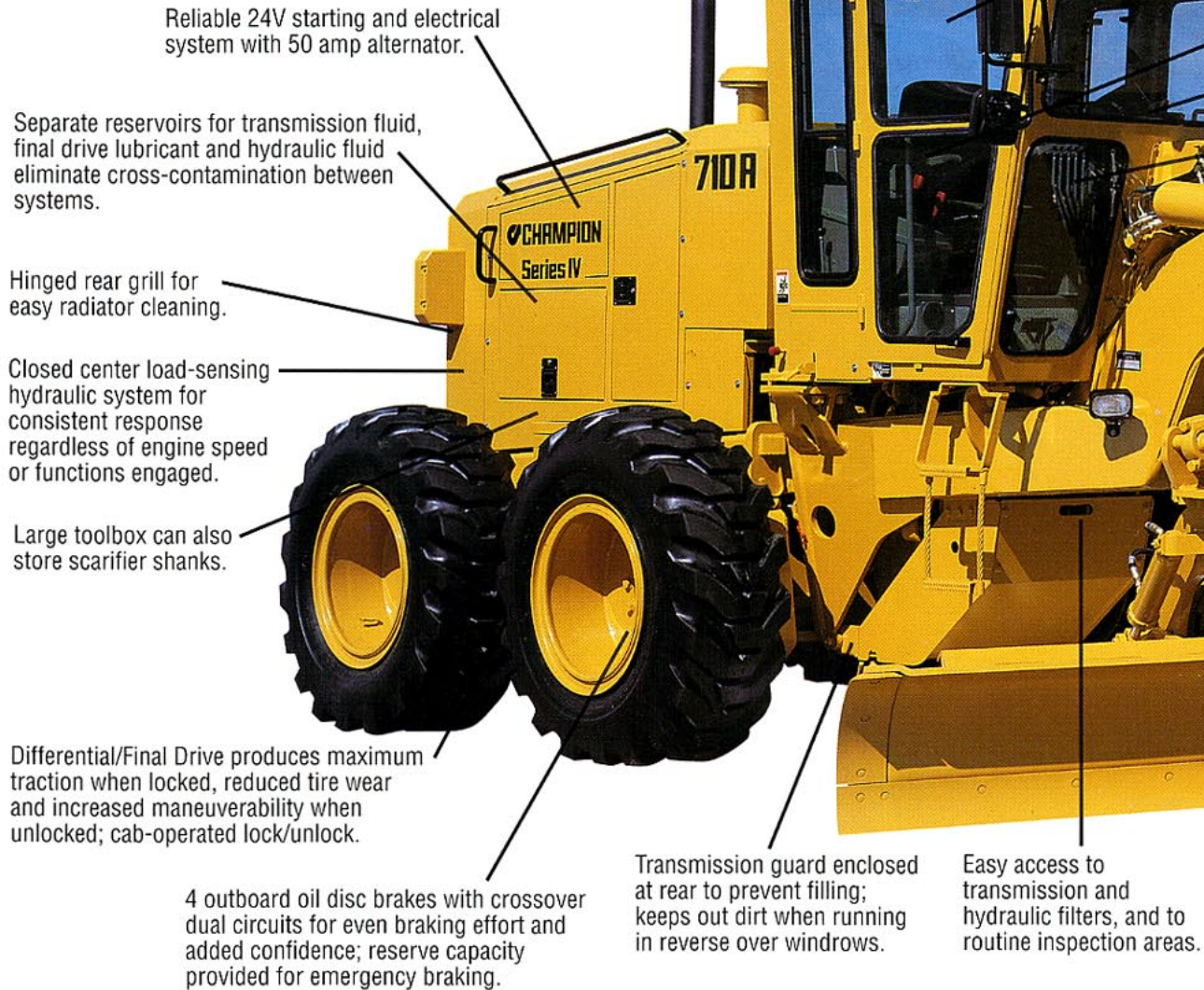




CHAMPION

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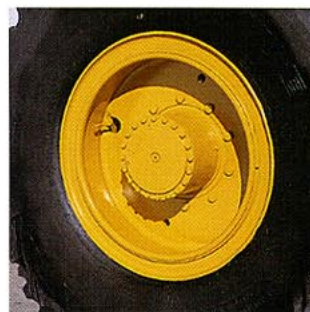
# Series IV: 710/710A/716A



Job-matched dependable Cummins diesel power offers superior fuel efficiency as the engine's peak torque is matched to transmission shift points. Optional side panels are lockable and provide easy access for routine maintenance.



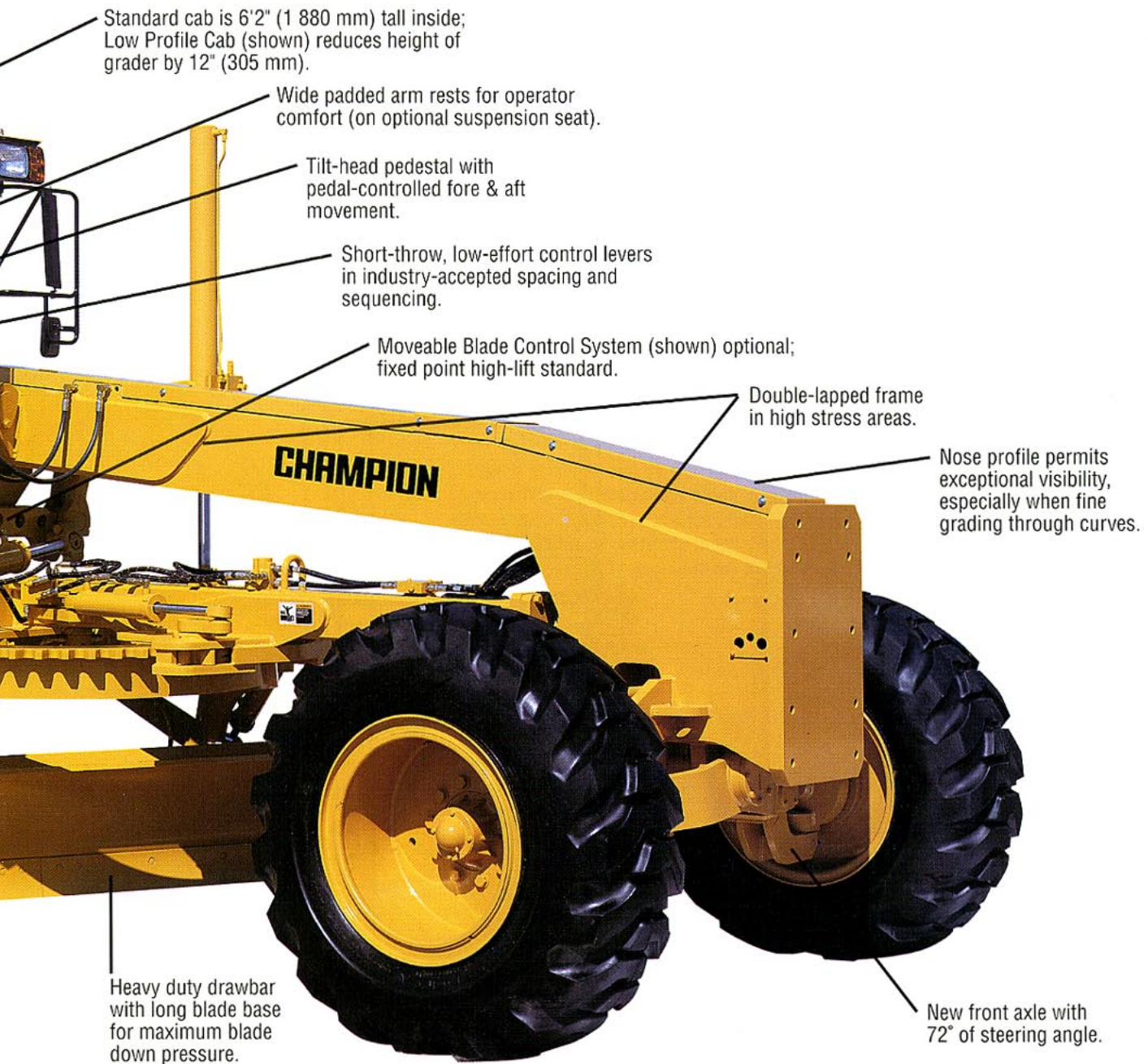
The exclusive **Champion 8400** grader transmission is now in service in more than 10,000 units. Evenly proportioned gear ratios provide precise, job-matched speeds for any grading application. A new "Smart Shift" feature lets the operator easily customize shift patterns to the job at hand.



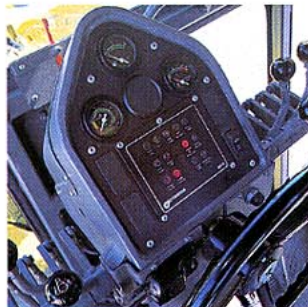
Champion's AWD is the simplest in the industry – minimal maintenance demands and easy to use. The flow divider ensures correct distribution of power flow to the front wheels during turns and under low traction conditions. Operates up to 18.4 mph (29.6 km/h) forward and reverse.



Lift system provides widest lift cylinder stance of any grader for maximum stability and reduced end-to-end blade interaction, resulting in better fine grade control.



Boron steel cutting edges with 6" bolt spacing. Top and bottom slide rails are supported on DURAMIDE™ bearings, minimizing free play for fine grade control.



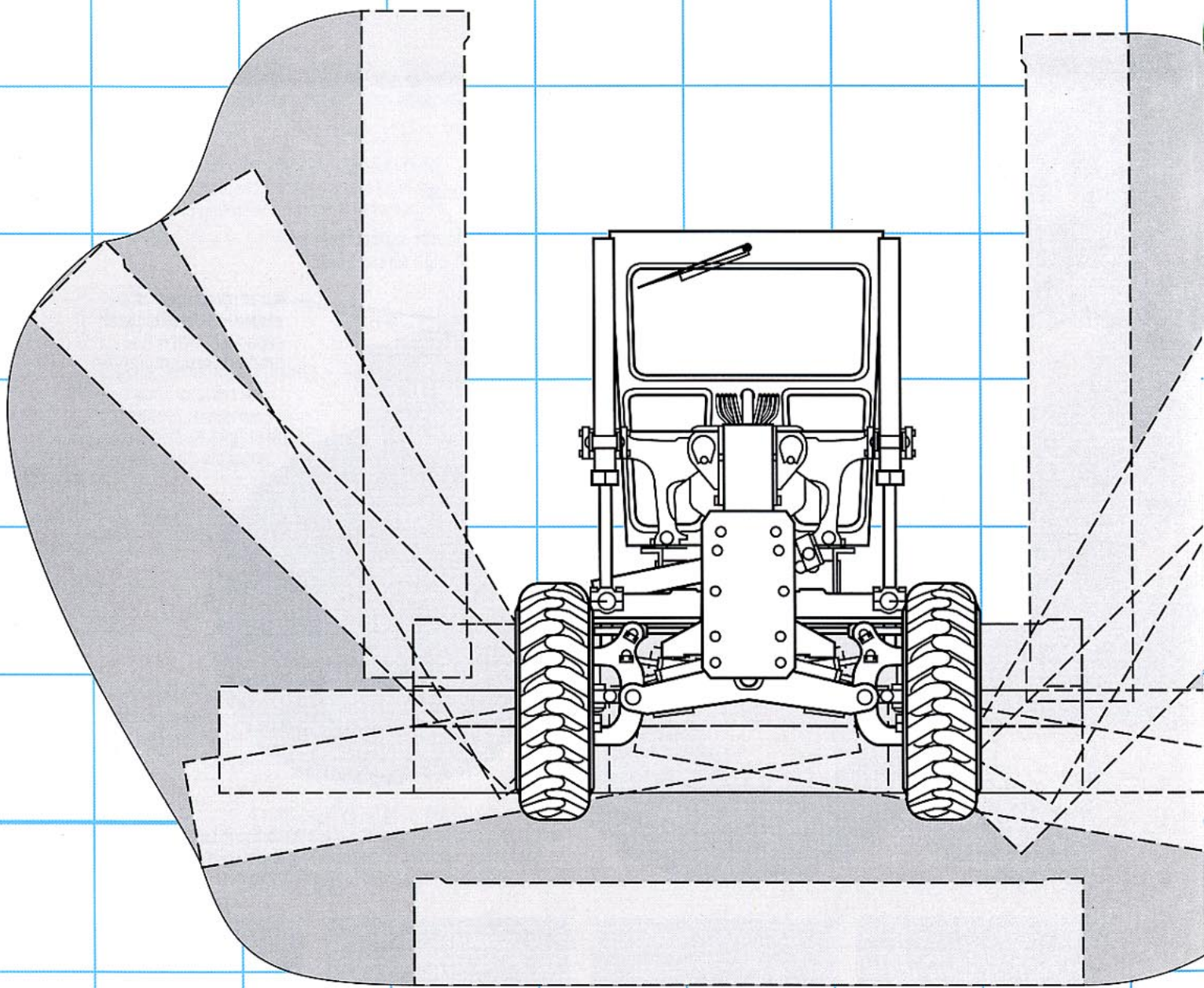
Pedestal includes a 3-level electronic monitor to alert operator to machine status, with backlit switches and fuel level, engine oil pressure and engine coolant temperature gauges.



Rugged design of the standard fixed-point blade lift system provides fewer moving components for low maintenance.



Patented dual-cylinder circle drive uses direct-acting hydraulics for exceptional turning and holding power under full load. DURAMIDE faced clamp plates and guide shoes prevent metal-to-metal contact; and provide longer service life and less maintenance than metallic systems.



**M.B.C.S.**  
**MOVEABLE BLADE CONTROL SYSTEM**  
(OPTIONAL)



# Give the job to a Champion

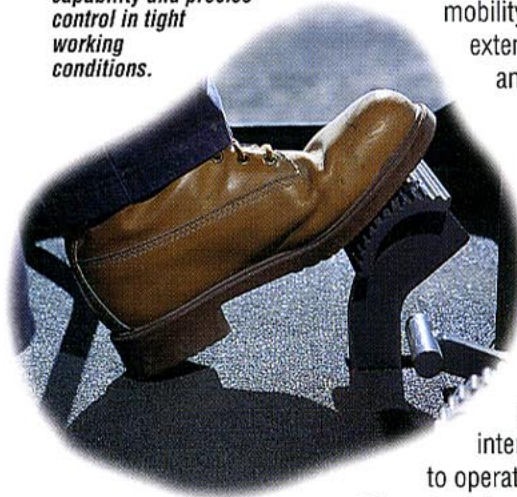
**Series IV graders are designed to work better with you ... and they're equipped to do more for you.**

With their all-new closed center load-sensing hydraulics, Series IV graders achieve a new level of precision and responsiveness for fine grading control. The system senses the load requirement of the hydraulic functions, including steering, and maintains the system pressure 250 psi (17,25 Bar) above the load.

*The main hydraulic/steering pump is a load-sensing gear-type pump chosen for extended service life and low replacement cost. Gear type pumps are more tolerant of fluid contamination, perform better in cold weather, and are easier to service than piston pump designs.*

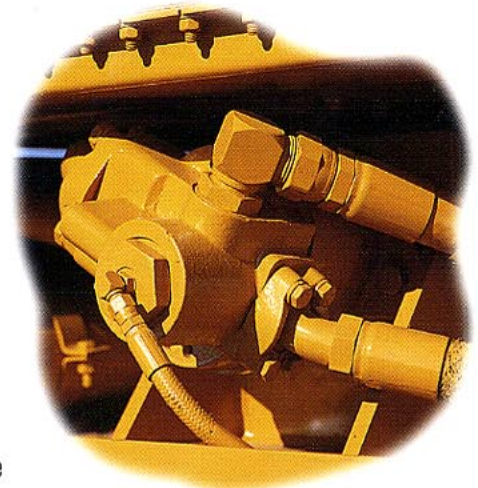
When hydraulic power is not required, standby pressure is held at just 90 psi (6,2 Bar), to improve fuel-efficiency and reduce heat. Valve spool metering ensures precise blade control, while the variable flow pump maintains consistent hydraulic speed at all engine RPMs and in multiple function operations.

*Foot-pedal operated full-oil clutch provides superior "inching" capability and precise control in tight working conditions.*



Series IV also introduces a new optional Moveable Blade Control System providing the best blade mobility in the business. Its 7 positions provide extended reach for ditch cutting, bank sloping and shoulder work. The blade lift arms have been sculptured to provide the best visibility to the work area. The operator can set up 2:1 bank sloping and a 90° blade position to the left and right without leaving the cab!

The blade lift system geometry features parallel lift cylinders with the widest stance in the industry. This wide positioning minimizes end-to-end blade interaction. The side shift cylinder is designed to operate closer to horizontal than with any other lift system; the operator can maintain grade more easily when adjusting both blade lift cylinders. The total system provides maximum stability in both heavy grading and high speed road maintenance, plus precise control for fine grading applications.



*With its 72° front axle steering angle, Series IV moves comfortably in confined work areas. The tight turning radius means faster finishing in cul-de-sacs and less following-up in the corners.*

*A long blade base maintains maximum blade down pressure – the grader can cut more material in each pass to achieve higher productivity while retaining steering control.*

710  710A  716A

**SPECIFICATIONS:**



**OPERATING WEIGHT  
(Standard Equipment)**

Weights shown include full cab with ROPS, all operating fluids and operator.

**710/710A**

Total ..... 31,050 lbs. (14 084 kg)  
On front wheels ..... 9,560 lbs. (4 336 kg)  
On rear wheels ..... 21,490 lbs. (9 748 kg)

**716A**

Total ..... 31,460 lbs. (14 270 kg)  
On front wheels ..... 9,800 lbs. (4 445 kg)  
On rear wheels ..... 21,660 lbs. (9 825 kg)

Weight adjustments for various options are listed.

**Typically equipped operating weight:** Includes 14.00 x 24, 12 pr., G2 tires on 10" (254 mm) rims, and 14' x 25" x 7/8" (4 267 mm x 635 mm x 22 mm) moldboard and Moveable Blade Control System.

**710/710A**

- with Scarifier ..... 34,000 lbs. (15 422 kg)  
- with rear-mounted Ripper-Scarifier and front-mounted Push Block ..... 35,250 lbs. (15 989 kg)

**716A**

- with Scarifier ..... 34,410 lbs. (15 608 kg)  
- with rear-mounted Ripper-Scarifier and front-mounted Push Block ..... 35,660 lbs. (16 175 kg)



**PRODUCTIVITIES  
(Standard Equipment)**

**710/710A**

Maximum blade pull (no wheel slip) ..... 19,341 lbs. (8 773 kg)  
Blade down pressure - cutting capability (ISO 7134) ..... 16,747 lbs. (7 596 kg)  
- compaction capability ..... 17,382 lbs. (7 884 kg)

**716A**

Maximum blade pull (no wheel slip) ..... 27,167 lbs. (12 323 kg)  
Blade down pressure - cutting capability (ISO 7134) ..... 17,168 lbs. (7 787 kg)  
- compaction capability ..... 17,818 lbs. (8 082 kg)

Blade down pressure is the maximum downward force which may be applied at the cutting edge.



**ENGINE DATA**

Make/Model ..... Cummins 6BT5.9  
Type ..... 4 Cycle, Turbocharged  
No. of cylinders ..... In Line 6  
Bore & stroke ..... 4.02 x 4.72 in. (102 x 120 mm)  
Displacement ..... 359 cu. in. (5.88 L)  
Rated gross brake horsepower @ 2300 RPM ..... 148 hp (110 kW)  
Rated net brake horsepower @ 2300 RPM ..... 135 hp (101 kW)  
Peak torque @ 1600 RPM ..... 400 lb. ft. (542 Nm)

Engine equipped with a two stage, dual element, dry-type air cleaner with evacuator and dash-mounted service indicator. 24 volt starting and electrical system with 50 amp (1200 watt) alternator with internal voltage regulator. Two heavy duty 12 volt maintenance-free batteries with 625 cold cranking amps (CCA) and 180 minutes reserve capacity per battery. 900 CCA batteries available optionally. System includes battery disconnect.

Performance: Rated net brake horsepower SAE standard J1349/ISO 3046-2 conditions with water pump, lubricating oil pump, fuel system, air cleaner, alternator, and cooling fan.



**TRANSMISSION**

Make/Model ..... Champion 8400  
Fully sequential, direct drive, powershift transmission. Engine can not be started if transmission is in gear. Transmission controller contains an electronic self-diagnostic feature. The flywheel-mounted, multi-disc master clutch is oil-cooled for long life.

Ground speeds at 2300 RPM with standard tires:

| Forward |      |      | Reverse |      |      |
|---------|------|------|---------|------|------|
| Gears   | mph  | km/h | Gears   | mph  | km/h |
| 1       | 2.5  | 4.0  | 1       | 2.5  | 4.0  |
| 2       | 3.5  | 5.6  |         |      |      |
| 3       | 4.8  | 7.7  | 2       | 4.8  | 7.7  |
| 4       | 6.7  | 10.8 |         |      |      |
| 5       | 9.5  | 15.3 | 3       | 9.5  | 15.3 |
| 6       | 13.3 | 21.4 |         |      |      |
| 7       | 18.4 | 29.6 | 4       | 18.4 | 29.6 |
| 8       | 25.7 | 41.4 |         |      |      |

Transmission guard is standard equipment and is hinged for easy access.



**DIFFERENTIAL / FINAL DRIVE**

Make/Model ..... Champion SR30  
Single reduction final drive with an operator controlled lock/unlock differential. Rear axles are case hardened, full floating design, supported on double row spherical roller bearings.



**TANDEM**

Oil-tight, oscillating tandem case has internal gusseting for maximum torsional strength. Field proven split ring/flanged sleeve tandem mounting and 1" thick inner wall resists flexing from side loading during severe applications. Drive chain sized for long life.

Depth ..... 24.5" (622 mm)  
Width ..... 8.25" (210 mm)  
Thickness - inner wall ..... 1.0" (25 mm)  
- outer wall ..... 0.75" (19 mm)  
Center distance ..... 61.5" (1 562 mm)  
Drive chain pitch ..... 1.75" (44 mm)  
Oscillation ..... ±15°



**BRAKES**

Service Brakes: Foot Operated

Fade resistant, hydraulically actuated, oil disc service brakes located at the four (4) tandem drive wheels are self-adjusting, fully sealed and maintenance-free. System features cross-over dual braking circuits for even braking on both sides of the grader. Includes reserve power assist and operator warning system (visual and audible).

Parking Brake: Hand Operated

Independent, disc-type hand brake on transmission output shaft and effective on all four (4) tandem drive wheels. Includes visual and audible operator warning system for parking brake on, transmission in gear condition.

Braking systems to: SAE Recommended Practice J1473 OCT. 90, and J1152 APR. 80; ISO 3450-1993-01-28. Champion uses asbestos-free brake components.



**WHEELS & TIRES  
(Standard Equipment)**

Tire size ..... 13.00 x 24, G-2  
Ply rating (pr.) ..... 12  
Rim size ..... 8.0" (203 mm)

Bolt-on rims are interchangeable front and rear on 710 and 710A models.



**FRONT AXLE**

Type ..... Fully welded steel truss, gusseted for torsional strength oscillates on a single 3.5" (89 mm) diameter centre pivot pin  
Wheel lean - 710/710A ..... 18° R & L  
- 716A ..... 15° R & L  
Oscillation ..... 16° up and down  
Ground clearance ..... 23.5" (597 mm)  
A single 4" (102 mm) diameter wheel lean cylinder with lock valve is standard equipment on 710 and 710A. Two 3" (76 mm) diameter wheel lean cylinders and lock valve are available optionally, and are standard on the 716A.



**STEERING**

Hydraulic power front wheel steering incorporating two steering cylinders. Meets SAE J1151 OCT. 90.

Minimum turning radius using front axle steering, wheel lean and unlocked differential:

710 conventional or straight frame ..... 34'11" (10 643 mm)  
710A articulated frame ..... 25'5" (7 747 mm)  
716A articulated frame ..... 24'3" (7 391 mm)  
Steering arc ..... 72°  
Frame articulation angle 710A/716A ..... 22°  
Articulation lock standard.



**FRAME**

Full front and rear frame sections. First user lifetime frame warranty.

**Front:** Fully welded box section. Double-lapped in high load areas. Lowered nose plate on front frame provides the best visibility in the industry to the front of the grader.

Minimum dimensions of box section ..... 10.0" x 12.0" (254 mm x 305 mm)

Plate thickness ..... 0.5" (13 mm)

Vertical section modulus at arch ..... 141 cu.in. (2 311 cm³)

Linear weight - average ..... 133 lbs/ft (198 kg/m)

**Rear:** Full rear frame permits modular powertrain mounting for ease of service and simplifies attachment mounting.

Minimum dimensions of rear frame ..... 4.0" x 10.0" (102 mm x 254 mm)

Plate thickness ..... 0.5" (13 mm)

Choice of conventional (rigid) or articulated frames:

710 ..... Articulates behind cab.  
710A/716A ..... Articulates behind cab.  
Twin 5" (127 mm) hydraulic cylinders articulate frame 22° right and left. Anti-drift lock valve ensures stable operation.



**CIRCLE**

Hardened teeth, cut on outside of circle for maximum leverage and minimum wear. Circle is machined after welding to ensure flatness. The circle is held positively in place at six points by three adjustable clamp plates and three adjustable guide shoes providing optimum circle support and load distribution. The primary set of clamps and guide shoes is located at the front of the circle where greatest loading occurs. DURAMIDE-faced clamp and guide shoes prevent metal to metal contact. DURAMIDE is a synthetic material that extends service life and reduces maintenance requirements.

Diameter ..... 66.25" (1 683 mm)

Thickness ..... 1.25" (32 mm)

Adjustable guide shoes ..... 3

Adjustable clamp plates ..... 3



### CIRCLE DRIVE

Champion's patented dual cylinder circle drive system uses direct-acting hydraulic power for exceptional turning and holding capability under full load. Circle drive system is fully protected against impact damage by an overload cushion valve as standard equipment.

|                                 |                 |
|---------------------------------|-----------------|
| Hydraulic drive cylinders ..... | 2               |
| Points of leverage .....        | 2               |
| Rotation .....                  | 360° continuous |



### DRAWBAR

Fully welded box section. Narrow 'T' design permits optimum visibility to the work area. Drawbar connection provides an adjustment to compensate for different tire sizes. Blade lift cylinder anchors are straddle-mounted on drawbar to provide maximum strength and support.

|                                 |                   |
|---------------------------------|-------------------|
| Dimensions of box section ..... | 6.5" x 6.5"       |
|                                 | (165 mm x 165 mm) |
| Plate thickness .....           | 1.0" & 0.75"      |
|                                 | (25 mm & 19 mm)   |



### MOLDBOARD

Standard moldboard  
with replaceable end bits .....

|                             |
|-----------------------------|
| 12" x 25" x 7/8"            |
| (3 658 mm x 635 mm x 22 mm) |

Blade material ..... SAE 1050 high carbon steel  
Edge: through hardened .....

|                              |
|------------------------------|
| 6" x 5/8"                    |
| (152 mm x 16 mm) boron steel |

Drilling - Bolt diameter.....6" drilling - 5/8" bolts  
Slide rails supported with DURAMIDE bearings.

### BLADE RANGE: FIXED POINT LIFT SYSTEM (Standard)

(Dimensions shown with standard moldboard)

Reach outside tires  
- straight frame .....

|                 |
|-----------------|
| 75.0'(1 905 mm) |
|-----------------|

Reach outside tires  
- articulated frame .....

|                  |
|------------------|
| 116.0'(2 946 mm) |
|------------------|

Blade slide .....

|                 |
|-----------------|
| 53.5'(1 359 mm) |
|-----------------|

Circle side shift .....

|                |
|----------------|
| 20.0" (508 mm) |
|----------------|

Blade ground clearance .....

|                 |
|-----------------|
| 17.25" (438 mm) |
|-----------------|

Blade cutting depth .....

|                |
|----------------|
| 25.0" (635 mm) |
|----------------|

Blade tilt range .....

|                      |
|----------------------|
| 47° forward; 5° back |
|----------------------|

Number of moldboard tilt cylinders .....

|   |
|---|
| 1 |
|---|

Bank sloping angle .....

|     |
|-----|
| 90° |
|-----|

### BLADE RANGE: MOVEABLE BLADE CONTROL SYSTEM (Optional)

(Dimensions shown with standard moldboard)

|   | LEFT             | RIGHT            |
|---|------------------|------------------|
| Reach outside tires - straight frame .....    | 76.0'(1 930 mm)  | 73.5'(1 867 mm)  |
| Reach outside tires - articulated frame ..... | 117.0'(2 973 mm) | 113.0'(2 870 mm) |
| Blade slide.....                              | 26.5" (673 mm)   | 26.5" (673 mm)   |
| Circle side shift.....                        | 26.0" (660 mm)   | 24.0" (610 mm)   |
| Maximum bank sloping angle .....              | 90°              | 90°              |
| Blade ground clearance.....                   | 16.5" (419 mm)   |                  |
| Blade cutting depth .....                     | 30.5" (775 mm)   |                  |
| Blade tilt range .....                        | 47° forward      | 5° back          |



### CAB & CONTROLS

Operator noise exposure is limited to 82 dB(A) per SAE J919 JUNE 86 (enclosed cab). Located in the pedestal head is the engine oil pressure, coolant temperature and fuel level gauges and a three-level electronic monitoring system. Pedestal located switches include: differential lock/unlock, independent moldboard floats (optional) and combination turn signal, hazard lights, and high beam headlight switch. Heater and wiper/washer controls, lighting and accessory switches are grouped in the operator's right hand console. This console also contains the ignition key and access to the circuit breaker panel. An accelerator/decelerator foot pedal and slider type hand throttle are standard equipment. Cab door opening and closing is easy from either a seated position or while entering and exiting. Fixed front window enhances visibility by reducing window frame width.

### Full Height Cab with ROPS INSIDE DIMENSIONS:

|                        |                 |
|------------------------|-----------------|
| Height .....           | 74.0"(1 880 mm) |
| Width @ controls ..... | 56.0"(1 422 mm) |
| Depth @ controls ..... | 55.5"(1 410 mm) |

An optional Low Profile Cab is available with an inside height of 62" (1 575 mm). All Champion cabs and canopies are designed to meet or exceed SAE J1040 APR. 88, ISO 3471/1-1986(E), and 86/295/EEC ROPS requirements. The seat belt is 3" (76 mm) wide and meets SAE J386 JUNE 93; ISO 6683-1981(E). A cushioned vinyl covered bucket seat with fore & aft and height adjustment is standard.



### LOAD SENSING HYDRAULICS

Closed center hydraulic system senses load requirements and maintains system pressure 250 psi (17,25 Bar) above the load.

When hydraulic pressure is not required, system pressure is only 90 psi (6,2 Bar). Low standby pressure improves fuel-efficiency and reduces heat generation.

System incorporates lock valves to prevent cylinder drift under load in the following circuits: blade lift, moldboard tilt, circle shift, wheel lean, articulation and scarifier. All hoses and fittings are equipped with 'O' ring seals to eliminate leaks.

Pump design features include cast iron end covers and center housing, and a one-piece gear and shaft assembly to ensure reliability and a service life exceeding that of most piston pumps.

|                          |                        |
|--------------------------|------------------------|
| Maximum pressure .....   | 2,500 psi (172 Bar)    |
| Output at 2300 RPM ..... | 0-52.8 gpm (0-200 lpm) |
| Filtration .....         | 7 micron spin-on type  |



### CAPACITIES

|   | U.S. Gal. | Imp. Gal. | Litres |
|---|-----------|-----------|--------|
| Fuel Tank.....  | 100.0     | 83.3      | 378,5  |
| Transmission .....                                    | 10.2      | 8.5       | 38,8   |
| Final drive .....                                     | 6.0       | 5.0       | 23,0   |
| Tandems (ea.) .....                                   | 26.4      | 22.0      | 100,0  |
| Hydraulic oil tank .....                              | 23.8      | 19.8      | 90,0   |
| AWD hydraulic oil (716A).....                         | 10.0      | 8.3       | 37,9   |
| Coolant Antifreeze protection to -58° F (-50° C)..... | 10.7      | 8.9       | 40,5   |
| Engine oil.....                                       | 4.3       | 3.6       | 16,3   |



### ALL WHEEL DRIVE - 716A

Completely independent from the main hydraulic system, Champion's All Wheel Drive system incorporates a variable displacement, load sensing piston pump, and a separate reservoir, oil cooler and filter. This allows the system to operate continuously without overheating, and eliminates potential fluid cross-contamination. Champion's AWD design automatically adjusts hydraulic flow and pressure to the drive system to match ground speed and tractive conditions. A positive on/off control allows the operator to concentrate on the task at hand, rather than trying to find the 'correct' AWD setting. No electronics or wheel speed sensors are used. The powered front axle has two variable displacement piston motors with double reduction planetary torque hubs.

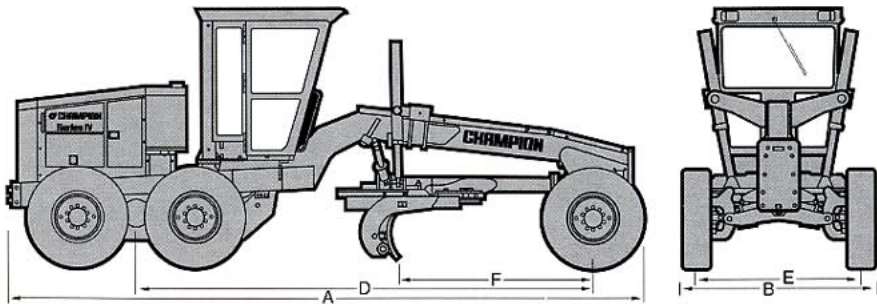
|                              |                      |
|------------------------------|----------------------|
| Maximum system pressure .... | 3,000 psi (206 Bar)  |
| Stand-by pressure .....      | 175 psi (12 Bar)     |
| Filtration.....              | 7 micron             |
| Top speed .....              | 18.4 mph (29,6 km/h) |

### STANDARD FEATURES:

- Operator controlled, lock/unlock differential final drive
- 4-wheel, cross-over, dual braking system with reserve power assist
- Ratchet-type park brake with operator warning alarm and indicator
- Fully-sequential, powershift 8400 transmission, with gear
- 13.5" diameter, 4-plate, full oil clutch for operator control
- Choice of rigid or articulating frames
- Full front and rear frame sections designed to absorb shock loading of attachment use
- First user lifetime frame warranty
- Cushion valve circle drive protection to minimize impact damage
- Hardened circle teeth cut on outside of circle for maximum wear resistance
- Isolation-mounted cab, transmission and engine for reduced noise and vibration
- Adjustable steering pedestal with tilt head for maximum operator comfort
- Gauges include: coolant temperature, engine oil pressure, fuel, hourmeter, dash-mounted air cleaner service indicator, articulation angle indicator, three-level electronic monitoring system - M4 - with visual and audible warnings
- Load-sensing, closed-center hydraulic system with short-throw, low effort control levers, positioned in the industry-accepted arrangement. Hydraulically operated blade lift, circle turn, moldboard slide and tilt, circle shift and wheel lean functions.
- 100 gallon fuel capacity
- Horn
- Hinged radiator guard for easy trash clean out. Engine compartment fan guard included.
- Back-up alarm with automatic volume level
- Painted Champion Yellow
- Lockable tool box with storage space for scarifier shanks

**OPTIONAL EQUIPMENT (May vary)**

|  | lbs.  | kg   |  | lbs. | kg  |  | lbs.  | kg  |
|--|-------|------|--|------|-----|--|-------|-----|
| Accumulators - blade lift .....            | 130   | 59   | - direction signals .....                        | -    | -   | Radiator shutters - hinged .....             | 10    | 4   |
| - circle side shift .....                  | 65    | 29   | - front-mounted plow lights - 2                  |      |     | Reflectors - rear .....                      | -     | -   |
| Air conditioner - 21,500 BTU               |       |      | - high .....                                     | 120  | 54  | Remote valve for attachments                 |       |     |
| - HFC-134a (non-CFC refrigerant)           |       |      | - low .....                                      | 100  | 45  | - 3 or 5 bank - remote mount .....           | 25    | 11  |
| with cab pressurizer/filter .....          | 130   | 59   | - Headlights with dimmer switch .....            | -    | -   | Second leaning wheel cylinder                |       |     |
| Battery warmer .....                       | 5     | 2    | - Moldboard lights - 2 .....                     | 2    | 1   | - right side (standard on 716A) .....        | 25    | 11  |
| Brush guards .....                         | 40    | 18   | - Rear flood lights - 2 .....                    | 2    | 1   | Supplemental steering (power                 |       |     |
| Cab  |       |      | - Snow wing lights - 2 .....                     | 2    | 1   | assisted) meets SAE J53 OCT. 84 .....        | 61    | 28  |
| - canopy shell with ROPS - deduct ....     | (200) | (91) | Machine Monitor Plus package - M44               |      |     | Suspension seat .....                        | 55    | 25  |
| - low profile cab with ROPS - deduct (200) | (200) | (91) | Audible and visual warnings for transmission     |      |     | Tie-down brackets .....                      | 100   | 45  |
| Cab heater - 49,000 BTU .....              | 30    | 14   | and hydraulic filter restriction, low engine oil |      |     | Tires  |       |     |
| Cab pressurizer/filter .....               | 14    | 6    | pressure, high coolant temperature, high         |      |     | - 14.00 x 24, 12 pr., G2,                    |       |     |
| Defroster fan .....                        | 3     | 1    | transmission temperature, and low                |      |     | 8" (203 mm) rims .....                       | 90    | 41  |
| Engine block heater .....                  | 3     | 1    | transmission clutch pressure .....               | -    | -   | - 14.00 x 24, 12 pr., G2,                    |       |     |
| Engine precleaner - Turbo II .....         | 6     | 3    | Mirrors - outside - right .....                  | 2    | 1   | 10" (254 mm) rims .....                      | 450   | 204 |
| Engine side panels .....                   | 50    | 23   | - left .....                                     | 2    | 1   | - 17.5 x 25, 12 pr., G2,                     |       |     |
| Ether cold start .....                     | 10    | 4    | Moldboards                                       |      |     | 14" (356 mm) rims .....                      | 1,032 | 648 |
| Exhaust rain cap .....                     | -     | -    | - 14' x 25" x 7/8"                               |      |     | Tire chains - pair .....                     | 300   | 136 |
| Fan - blower type                          |       |      | (4 267 mm x 635 mm x 22 mm) .....                | 200  | 91  | Tool kit .....                               | -     | -   |
| (suction type is standard) .....           | -     | -    | - 12' x 29" x 1"                                 |      |     | Transmission sump heater .....               | -     | -   |
| Float control - Right and Left             |       |      | (3 658 mm x 737 mm x 25 mm) .....                | 300  | 136 | Tropical protection .....                    | -     | -   |
| independent, electric .....                | 15    | 7    | - 13' x 29" x 1"                                 |      |     | Vandalism protection .....                   | 8     | 4   |
| Hub odometer .....                         | -     | -    | (3 962 mm x 737 mm x 25 mm) .....                | 450  | 204 | Wheel weights front or rear - each .....     | 250   | 113 |
| Hydraulic tank heater .....                | 3     | 1    | Moldboard extensions R & L                       |      |     | Window - opening - lower front .....         | -     | -   |
| Jack - 20 ton (18.5 tonne) .....           | 35    | 16   | - 2' (610 mm) .....                              | 200  | 91  | Window - opening sliders - left/right .....  | -     | -   |
| Lights                                     |       |      | Moldboard edges -Carbide 3/4" x 5" .....         | -    | -   | Wiper and washer - front .....               | -     | -   |
| - back-up lights - 2 .....                 | -     | -    | Moveable Blade Control System .....              | 750  | 341 | Wiper and washer - rear .....                | -     | -   |
| - beacon (amber or blue) .....             | 4     | 2    | Operator convenience package                     |      |     | Wiper and washer - lower front windows ..... | -     | -   |
| - clearance lights front & rear .....      | 2     | 1    | - lunch box, steel vacuum bottle                 |      |     |  |       |     |
|  |       |      | and holder, ash tray .....                       | 10   | 5   |  |       |     |
|  |       |      | Paint - custom colors .....                      | -    | -   |  |       |     |



**DIMENSIONS**

|   |                               |       |            |
|---|-------------------------------|-------|------------|
| A | Overall length .....          | 27'9" | (8 458 mm) |
| B | Overall width .....           | 8'2"  | (2 489 mm) |
| C | Overall height with cab ..... | 11'1" | (3 378 mm) |
|   | - with Low Profile Cab .....  | 10'1" | (3 073 mm) |
| D | Wheelbase                     |       |            |
|   | - 710 .....                   | 20'0" | (6 096 mm) |
|   | - 710A/716A .....             | 20'0" | (6 096 mm) |
| E | Tread width .....             | 6'10" | (2 083 mm) |
| F | Blade base                    |       |            |
|   | - ISO 7134 .....              | 8'7"  | (2 616 mm) |
|   | - compaction .....            | 9'0"  | (2 743 mm) |

**CHAMPION MATCHED ATTACHMENTS**

|                       |            |            |                                       |            |            |                          |            |            |
|-----------------------|------------|------------|---------------------------------------|------------|------------|--------------------------|------------|------------|
| A-Frame .....         | 850 lbs.   | (386 kg)   | Push block .....                      | 700 lbs.   | (318 kg)   | V plow                   |            |            |
| Dozer blade           |            |            | Ripper-scarifier, rear .....          | 2,100 lbs. | (953 kg)   | - 9' (2 743 mm) .....    | 2,560 lbs. | (1 161 kg) |
| - 8' (2 438 mm) ..... | 1,600 lbs. | (726 kg)   | Scarifier, front, with 11 teeth ..... | 1,550 lbs. | (703 kg)   | - 10' (3 048 mm) .....   | 2,720 lbs. | (1 234 kg) |
| - 9' (2 743 mm) ..... | 1,650 lbs. | (749 kg)   | Snow wing                             |            |            | Windrow eliminator ..... | 1,300 lbs. | (590 kg)   |
| One-way plow .....    | 2,350 lbs. | (1 067 kg) | - front-mounted .....                 | 2,900 lbs. | (1 317 kg) |                          |            |            |
|                       |            |            | - rear-mounted .....                  | 3,100 lbs. | (1 407 kg) |                          |            |            |

Specifications subject to change without notice. Some items included in this brochure are optional.  
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 Your safety and the safety of those around you depends on using care and judgement when operating and servicing your grader. Do not operate the grader until you read and understand the warnings and instructions in the operator's manual.



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