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January 1960

Advertising Brochure: International Harvester B-275

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, tractortestlab@unl.edu

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NEW
INTERNATIONAL®
B - 275
DIESEL TRACTOR



New 2-3-Plow Diesel



brings you low first cost

unmatched operating economy
unequaled maintenance savings



Here's the tractor that sets the pace for all 2-3-plow Diesels. Judge and compare the new International B-275 any way you like — on price . . . power . . . operating economy . . . convenience . . . ruggedness — you'll agree that no other tractor in its class measures up. Just look at the *exclusive combination* of plus features that means better work and bigger savings with a new B-275.

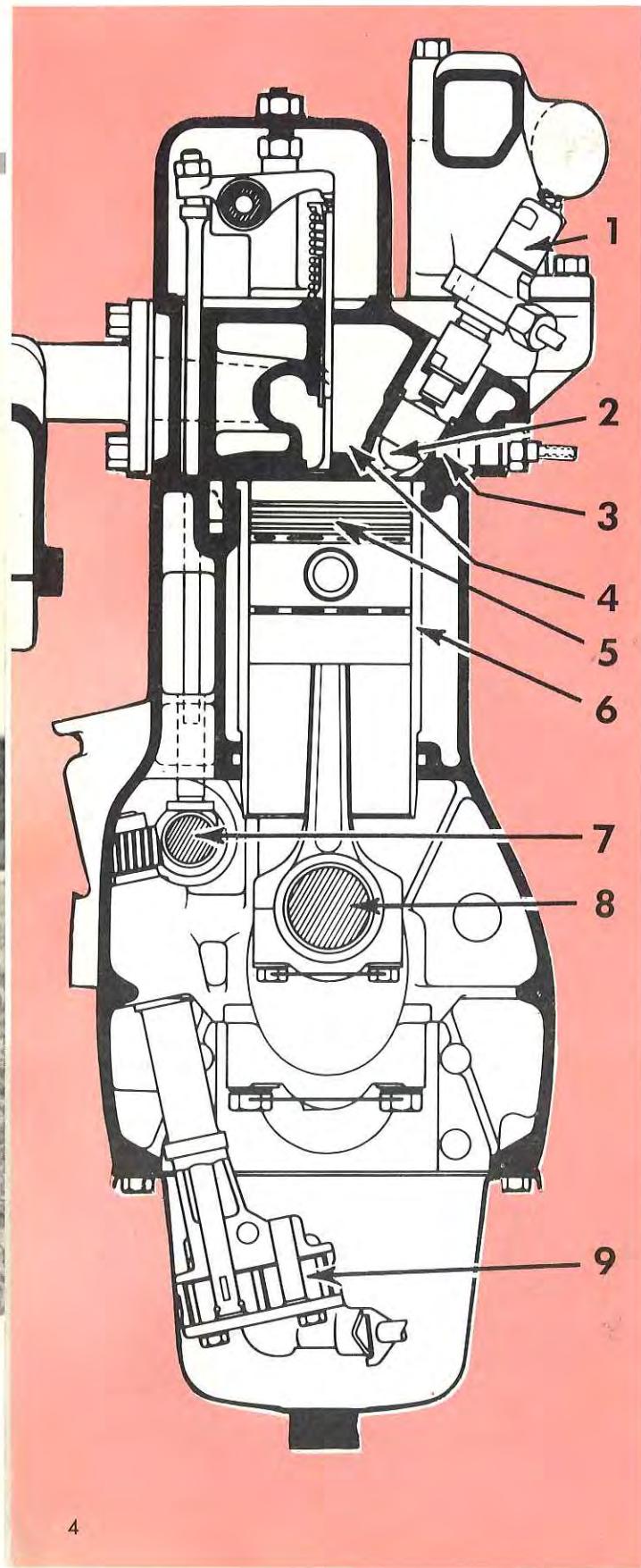
- **Rugged, 4-Cylinder Diesel Engine** that starts directly on Diesel fuel, delivers 34.06 PTO, 30.94 drawbar horsepower.*
- **Positive Differential Lock** that turns wheel slip into money-saving grip in wet fields and slippery feed lots.
- **8 Forward Speeds** from 1½ to over 14 mph to exactly match every job . . . help you do more every hour, every day.
- **Constant-Running Pto** delivers cost-cutting power whether the tractor is moving or stopped . . . controlled through foot clutch.
- **"Live" Hydraulic Power** is completely independent of clutch or pto . . . handles all equipment with finger-tip ease.
- **3-Point Hitch** handles more equipment than any hitch ever offered . . . easily adjusted . . . effortlessly controlled.
- **Positive Weight Transfer** puts implement weight and soil suction to work for better traction . . . mechanical operation, no power loss.
- **Straight-Through Clearance** from front to rear lets you straddle beds . . . cultivate tall crops without damage.
- **Unmatched ruggedness** with up to 300 pounds of extra built-in weight assures longer life . . . lowest maintenance expense.

*HP corrected to standard conditions.



Extra-rugged, direct-start Diesel engine

delivers tremendous lugger power with peak savings

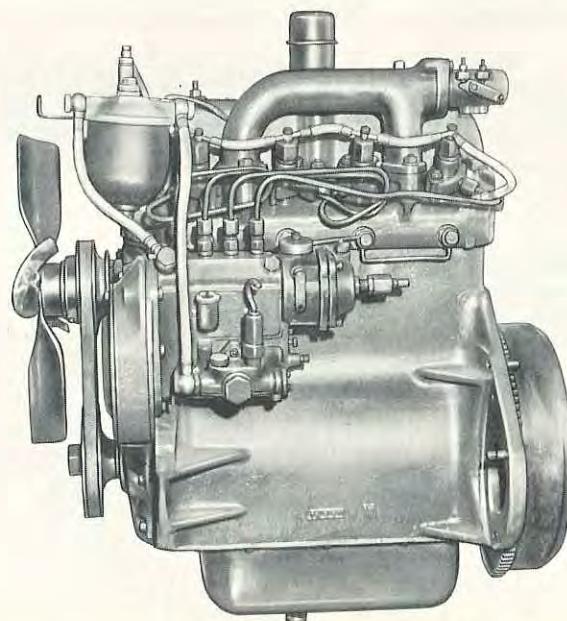


"Ruggedly built with the precision of a match . . ." "Amazing lugger ability and economy . . ." that's how owners describe the engine in the B-275.

Anyway you look at it, you'll not find a 32 hp Diesel engine that compares with this one. You can't find an equal to its precision workmanship . . . its higher quality . . . its ability to hold on and lug through the heaviest going. And when it comes to economy, the ability of the B-275 to handle average loads all day on less than a dollar's worth of fuel really puts money in your pocket.

Look Inside

The cross-sectional drawing at the left shows the major reasons why the B-275 engine tops all others. Pintle-type injection nozzles (1) are self-cleaning and less susceptible to carbon clogging, inject fuel directly into pre-combustion chambers (2). Pre-combustion chambers also have individual glow plugs (3) that assure faster starting, especially during cold weather. Pressurized cooling system (4) with thermostatic control maintains ideal operating temperature for maximum efficiency and economy. Five-ring pistons (5) maintain combustion tight seal assure full power. Top ring is chrome-plated for longest life. Full-length, replaceable wet sleeves (6) assure even dissipation of heat. Chill hardened and ground cam faces (7) mean long life and quiet operation at all speeds. Dynamically balanced, tocco-hardened crankshaft (8) with five main bearings, insures long life, vibration-free performance. Big-capacity oil pump (9) plus full-flow filter provide clean, filtered oil to all vital engine parts.



Eight speeds forward, two reverse give top efficiency on variety of jobs

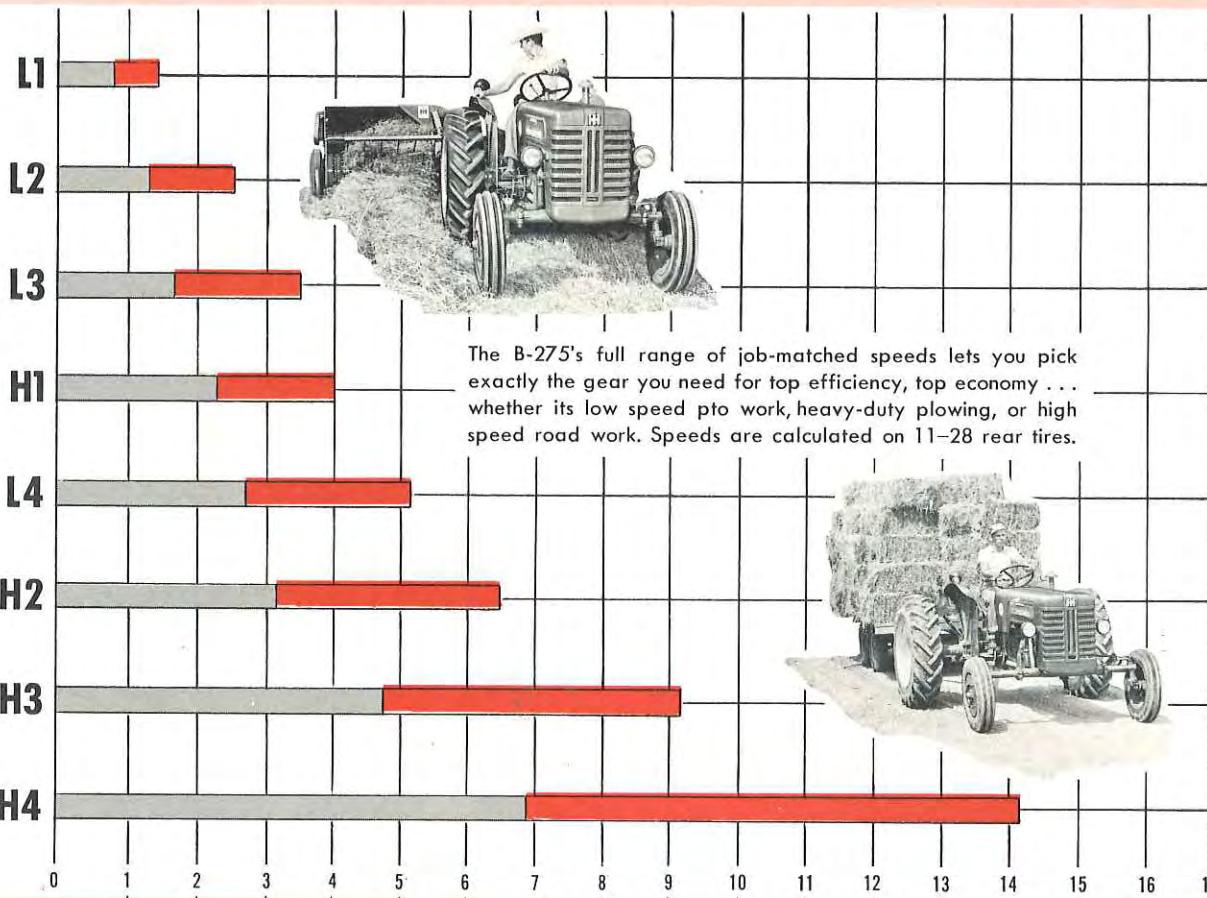


Match your speed and power *exactly* to the job and field conditions! No matter what the task, this new, husky transmission handles it with precision and ease.

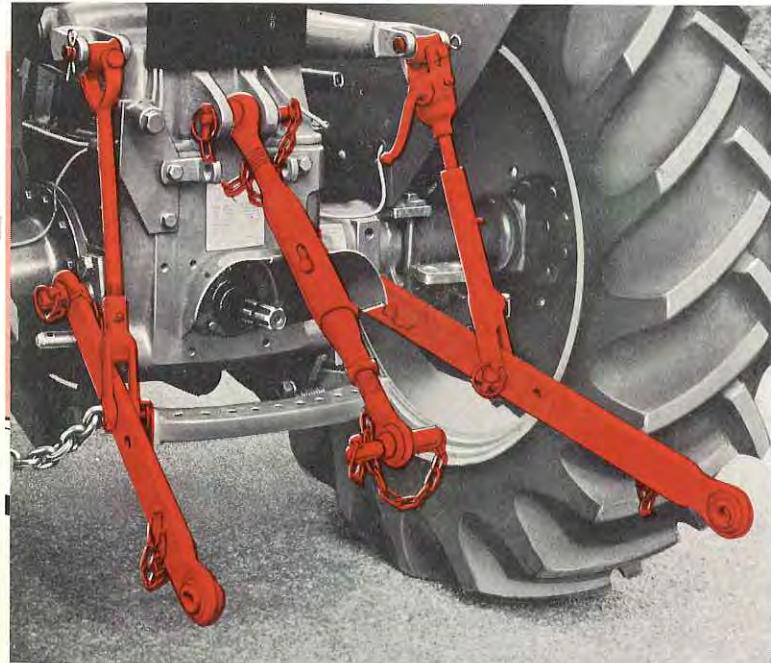
You have a full range of eight forward speeds and two reverse with the new B-275. No time or money wasting gaps in this gear chain. No more shifting down to a lower gear than you really need, because the next higher one won't quite do the job. This new transmission is designed to give you the fastest, most efficient speed for every requirement from precision pto work to high-speed hauling.

And it's built to last! Rugged construction and high standards of precision engineering guarantee extra years of quiet, efficient operation. Here's assured dependability, even after years of toughest kind of work.

Operation is simple . . . almost effortless. Convenient arrangement of controls between your feet and the short throw gear shift lever put an end to strong-arm shifting. Try it yourself . . . see how easy it is to flip it into the exact gear you need for every job you have.



Versatile 3-point hitch handles more tools ... offers easier, more precise control



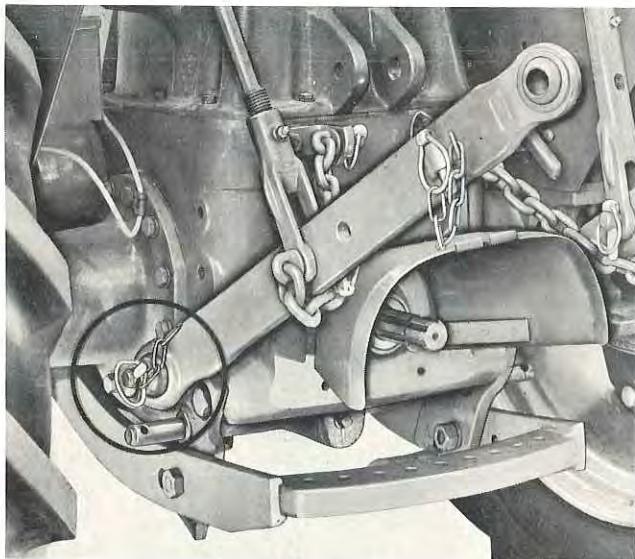
Take a look at the most versatile 3-point hitch on the market! It handles almost any 3-point implement — category I or II — more than any other tractor in the field.

You have more precise control of all equipment, too. Always "live" hydraulic power helps you raise and lower equipment with finger-tip ease. Mechanized depth control is simple, positive, extremely precise — lets you change and hold depth in fractions of an inch.

A telescoping upper link reduces gouging or shallowing out . . . keeps equipment at set depth even in rough ground. For instance, if the front wheels of the tractor drop into a small ditch or hole, implements attached to a rigid hitch, would shallow-out. Not so with the B-275. Thanks to telescoping top link, the hitch extends to maintain even depth all through the field. When going through low spots, the top link contracts to prevent gouging. An easy adjustment lets you make the top link solid whenever you desire.

Sway chains provide engineered flexibility for top-quality work when implements are lowered . . . become taut when equipment is raised to prevent sway, provide easier, safer transporting.

Greatest utility for better work on ALL JOBS



The B-275 is equipped with two pins on each side of the rear housing for attaching the lower hitch links. Under ordinary conditions, the upper pin position should be used for best transfer of weight (see above). When the ground is hard and penetration is difficult, attaching to the lower pins gives a lower draft line for faster penetration and better work in this difficult condition.



Here's versatility and precision unmatched in the 3-point hitch field. Sway chains allow plenty of flexibility for working contours to perfection. Equipment is leveled with the easy-to-reach hand crank . . . depth is maintained with mechanical precision, and equipment is effortlessly raised and lowered hydraulically. Add it up, there isn't a 2-3-plow Diesel that can hold a candle to the new B-275.

Big capacity, always "live" hydraulic power helps you manage all equipment with greatest ease

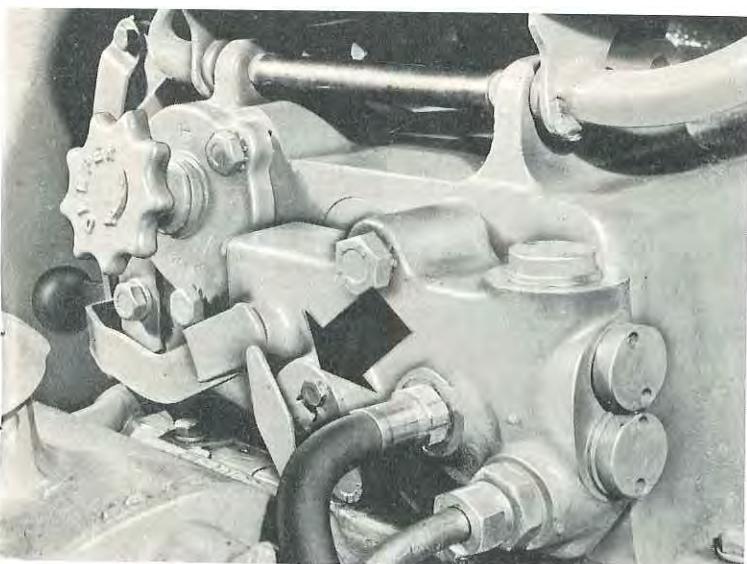
Big capacity, fully "live" hydraulic power gives you finger-tip control of all equipment anytime the engine is running.

The engine driven pump is completely independent of the transmission and pto giving you the greatest control over the widest range of working conditions. And what control you have! Move the easy-to-reach lever up, and the implement is held exactly where you want it. To lower the implement, just move the lever down — a little movement for slow lower, all the way for fast drops. The time and labor-saving hydraulic system on the B-275 is the most trouble-free known. Hydraulic oil is thoroughly filtered before going to the control valve and cylinder. Thanks to the extreme precision of all parts, a light weight oil is used which means that you get positive action, even in cold weather.

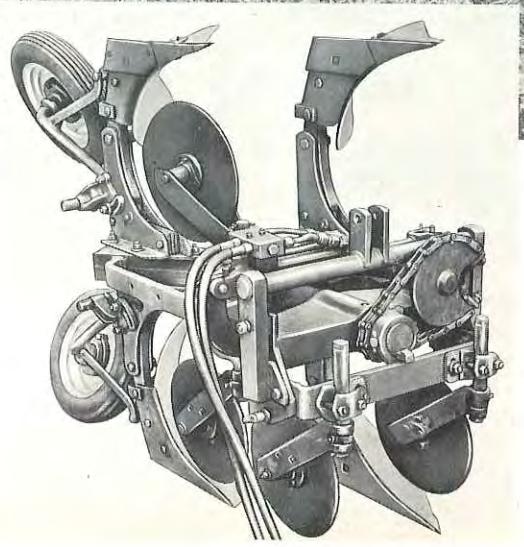
The big capacity reservoir and precision pump provide power to handle all equipment from front-mounted loaders to the widest variety of 3-point and trailing implements.



Handle front-mounted and pull-type equipment, too, without fuss...lost time or extra equipment



To handle front-mounted or trailing equipment, simply close the isolating valve (arrow) to lock out the three-point hitch, couple the remote cylinder hose regulator, mount the cylinder on the equipment, and you're all set. You handle front-mounted equipment like the McCormick No. 20 loader or trailing equipment like the 214 roll-over plow (lower right) with unmatched ease and precision.



Positive differential lock stops waste . . . keeps you going in tough fields



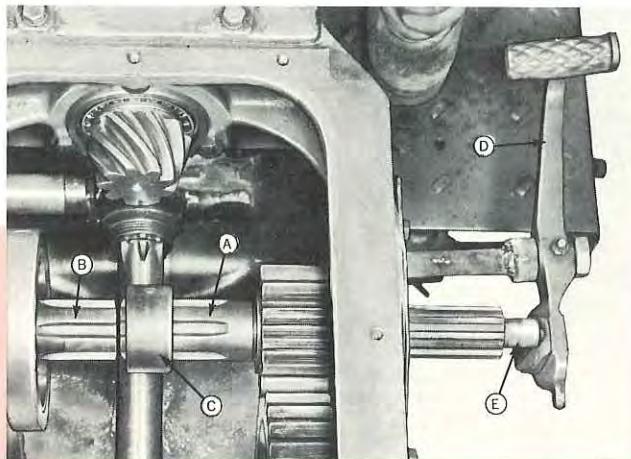
When slippage starts . . .

You're plowing along, everything's going fine, when, suddenly you hit a tough spot — the plow bogs down — the land wheel starts to slip, then spin . . . you've lost traction. While the wheel slips and spins, you're losing time and money in wasted fuel. With other tractors, you'd have to shallow out the plow.

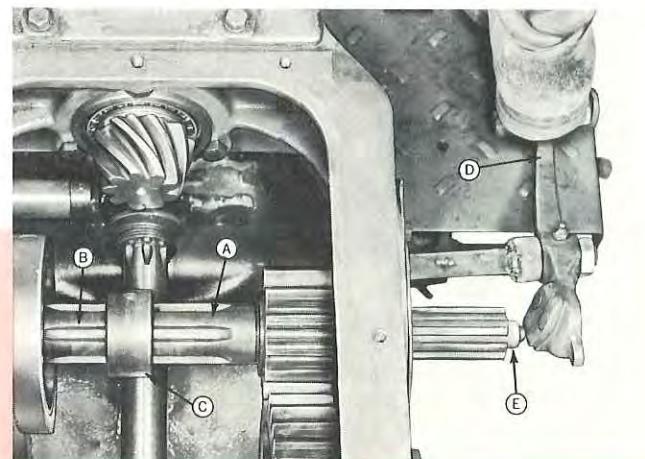
Just press the pedal . . .

With the B-275 there's no shallow out the plow at the proper depth set pedal located conveniently under positive linkage connects the two a straight-through axle . . . positive

IH Differential lock is Rugged, Simple, Positive

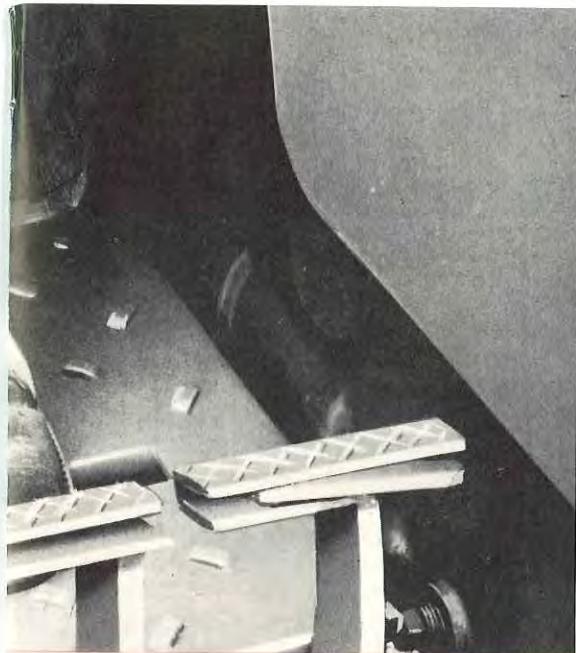


Differential lock disengaged. Stub shafts "A" and "B" are not connected (above) allowing each to turn at its own speed — necessary when turning corners. Note that sliding collar "C" is fully retracted leaving a gap between itself and stub shaft "B." Collar is spring loaded to hold this position when not in use.



Differential lock engaged. When a wheel starts to slip, merely step down with your right heel on control pedal "D." The cam surface on the pedal pushes activating rod "E" which moves the collar "C" connecting stub shafts "A" and "B." You then have, in effect, a straight-through rear axle.

eful wheel slippage . . . saves money nd slippery feed lots



pedal . . .

ing out . . . no halfway job. Leave ting and press the differential lock r your right foot. Immediately, a axle stub shafts together giving you e drive.

Turn SLIP into GRIP

With this simple differential lock the slipping wheel is locked to its ground-gripping mate, giving you equal traction on both wheels . . . and off you go — without wasting time or fuel. Use differential lock as often as needed, it's super strong for constant, trouble-free service.

Mechanical weight transfer unit gives added traction boost



This new McCormick weight transfer system gives you added traction *mechanically* — eliminates loss of engine power to any hydraulic device just when you need it most.

You set the system by a convenient handwheel located just below the seat. And once you set the system to match field conditions, just forget it. Weight is transferred to the rear wheels through the 3-point hitch linkage *automatically*. The tougher the going, the greater is the percentage of implement weight, soil weight, and soil resistance transferred to give you the traction you need. And the combination of the telescoping top link and an internal compensating spring keeps equipment at constant depth even when driving over ridges and dead furrows.

**Constant running PTO cuts field time...
Saves money...Steps up efficiency**



Two-stage clutch

Here's one of the reasons why you get such outstanding precision with a B-275 pto . . . the two-stage clutch! With this design, you can stop the tractor by depressing the clutch through the first half of its travel while the pto runs at full power . . . or stop both when you wish, by depressing the clutch all the way.

**Shift gears . . . match
travel speed to
conditions without
stopping PTO**

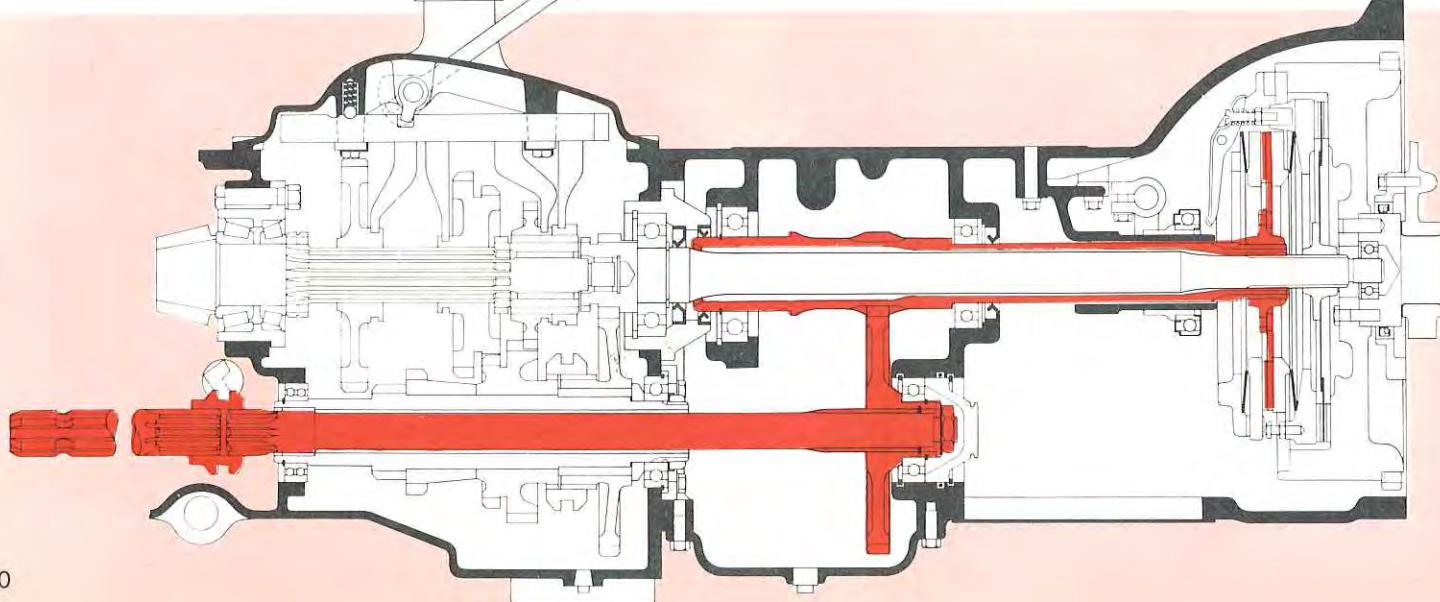
"Tremendous" is the only word that really describes the way the new B-275 handles all pto work.

Thanks to the constant-running pto, you can stop or start the tractor without affecting the pto, bring pto machines up to speed before starting forward movement. Handling a McCormick No. 46 baler such as shown at the left, you can stop at the head of the windrow, bring the baler up to full speed, then move forward at full capacity. And if you hit a bunchy spot that might clog the machine, just stop the tractor momentarily to handle the over-size load, then move forward. The pto hasn't slowed down a lick. You save time . . . protect your machines from overloads . . . and the convenience can't be matched.

Whatever the pto job or field condition, you'll handle it far better with the B-275's exclusive combination of constant-running pto and eight forward speeds.

**Always ready, money
saving power**

Power for the B-275's constant-running pto is obtained through the second stage of the big-capacity two-stage clutch and transmitted rearward through a hollow shaft and reduction unit shown in red above. Heavy-duty construction throughout assures years of constant service and lowest upkeep cost. Pto can be disengaged during off seasons.



Straight-Through Clearance... Ample Tread Spacing... assures damage-free work...top usefulness

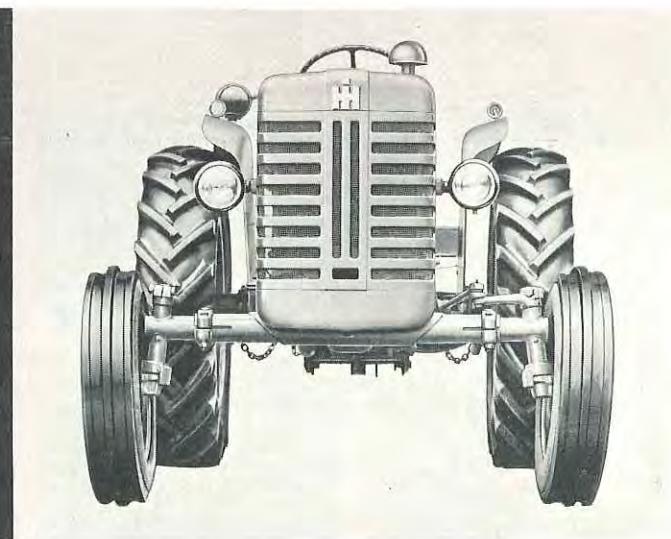
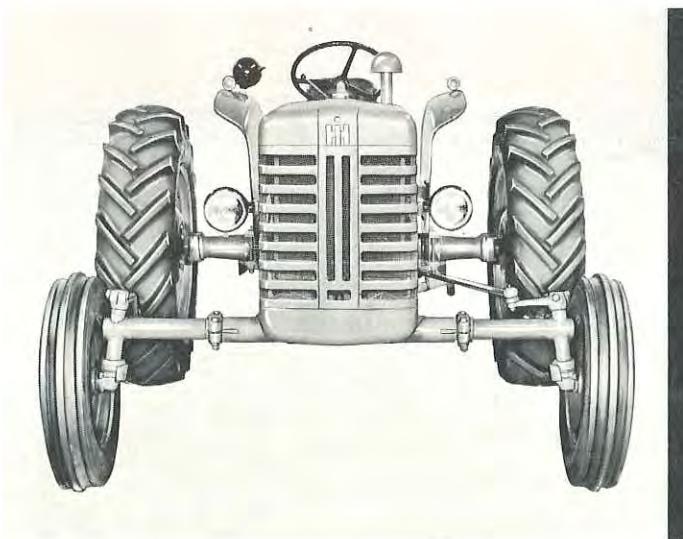
- **Up to 19 inches straight-through clearance!**
- **Wheel width adjustments from 48 to 76 inches!**

With big clearance and a wide range of wheel width adjustments, you can work tall, bushy, or bedded crops in a variety of row spacings with never a worry about damaging young or tender plants.

The B-275 gives you up to 19 inches of straight-through, cultivating clearance. The clean underbody of the tractor lets it move easily over tall crops with no obstructions to cause snagging or damaging.

In addition, you get front and rear wheel spacings from 48 to 76 inches — adjustable in 4-inch stages — to match your row spacing exactly.

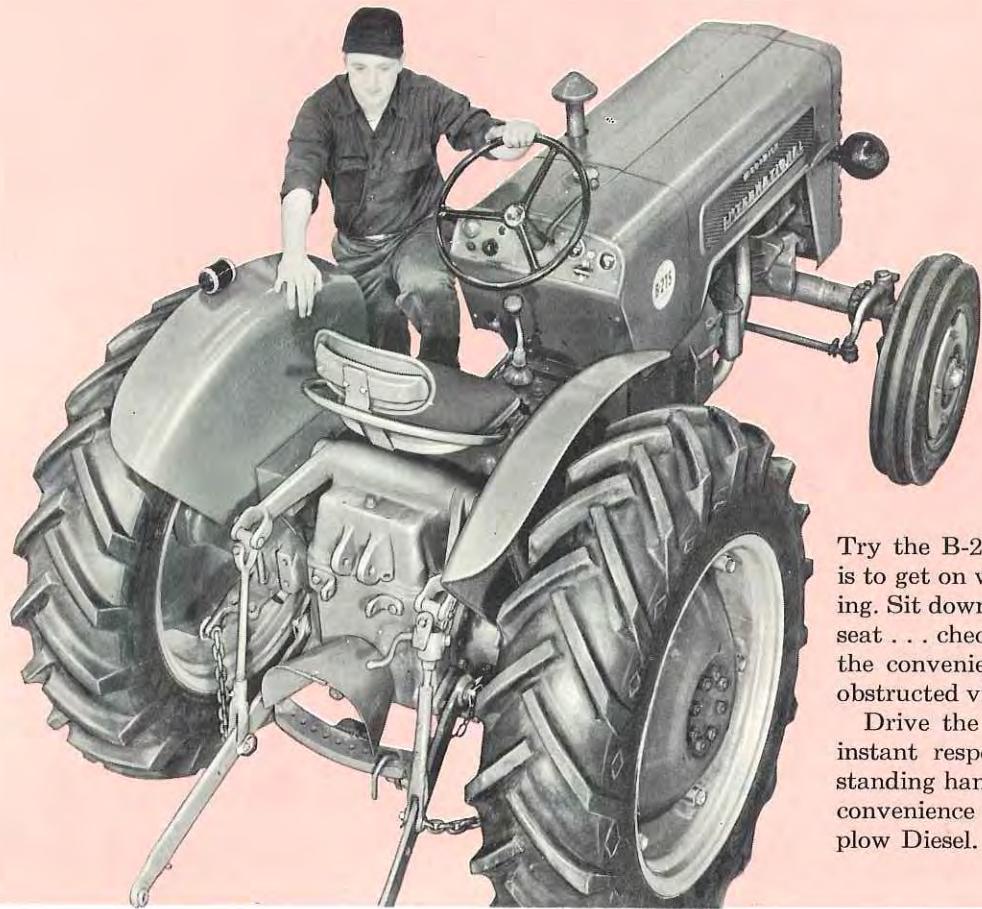
The B-275 has been designed in every way to work for you more efficiently. With its low profile, compact design . . . high clearance and wide range of adaptability, the B-275 is built to do more work, faster, easier, and at lower cost than any other 2-3-plow Diesel in the field.



Straddle two rows easily regardless of spacing with variable front and rear wheel adjustments. You can set the wheels at any width from 48 to 76 inches in 4-inch stages! Here's a tractor that's really adaptable to the kind of farming you do. Look at the clearance between the wheels and the row in the picture in the upper right corner of this page. There's no danger of getting those wheels into the row. The B-275 does the job right!

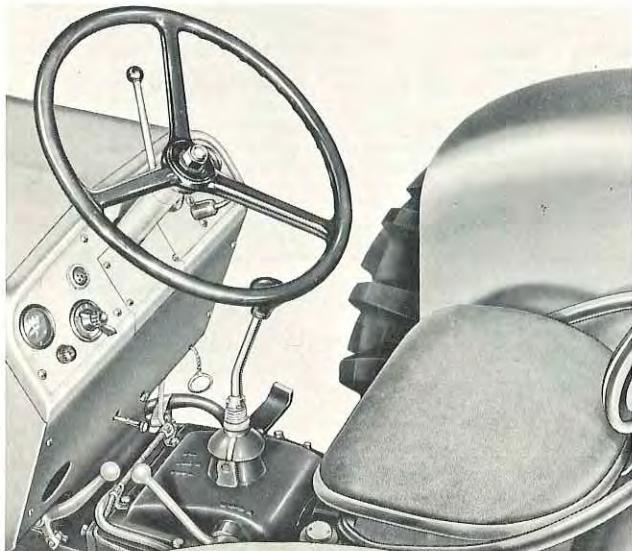
Handle tall crops better with obstruction-free axle-to-hitch clearance. The B-275 is designed to prevent damage to tall growing, bushy, or bedded crops. There's a full 19 inches of cultivating clearance under this compact workhorse — over 3 inches more under the rear frame than on other make tractors! The B-275 is ready to deliver more high quality, precision work than any other tractor in its class.

Step up to unmatched comfort and ease



Try the B-275 for size. Notice how easy it is to get on with the simple one-step mounting. Sit down in the deluxe comfort-designed seat . . . check the big, uncluttered platform, the conveniently grouped controls, the unobstructed vision over the short hood.

Drive the B-275 and find out about the instant response to the controls and outstanding handling ease. Here is comfort and convenience unmatched by any other 2-3-plow Diesel.



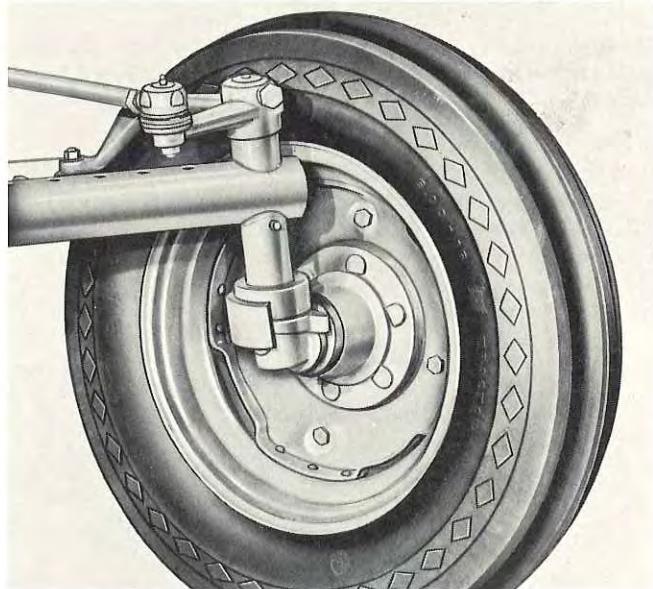
See-at-a-glance instruments, convenient, easy-to-reach controls, plus a high seat to keep you up out of the dust and dirt, are a few of the specially designed comfort and convenience features of the B-275. And, with fast, all-weather, direct-Diesel starting — you're ready to go in just seconds.



The convenient automotive-type hood feature gives you complete engine access from radiator to fuel tank. Just release the latches, rotate the hood forward and perform routine service with unequalled ease. Minimum maintenance easily accomplished — that's another way you save with a B-275.

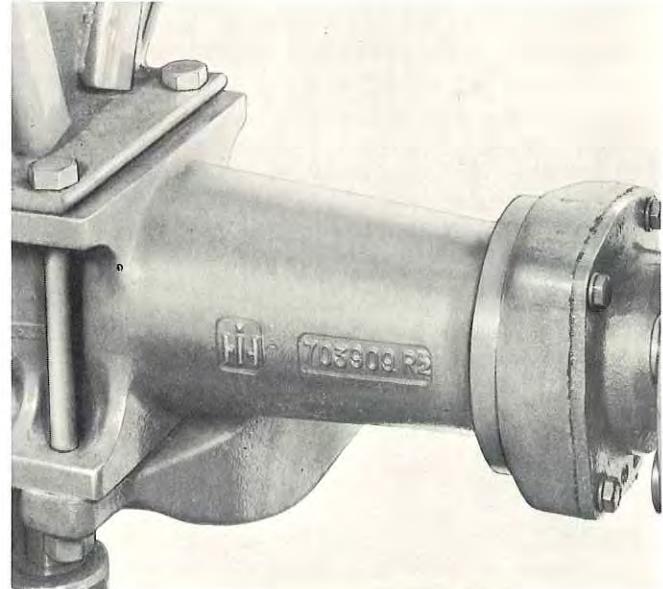
Up to 400 pounds more weight

Assures longest life . . . lowest service cost



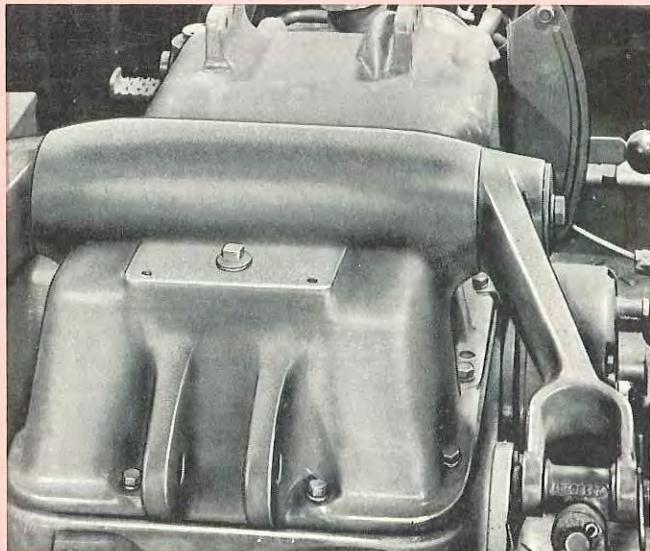
Heavier, stronger spindles

Unexcelled IH brawn starts right at the front axle with heavier spindles . . . built to take a beating with never a flinch . . . last longer with minimum maintenance.



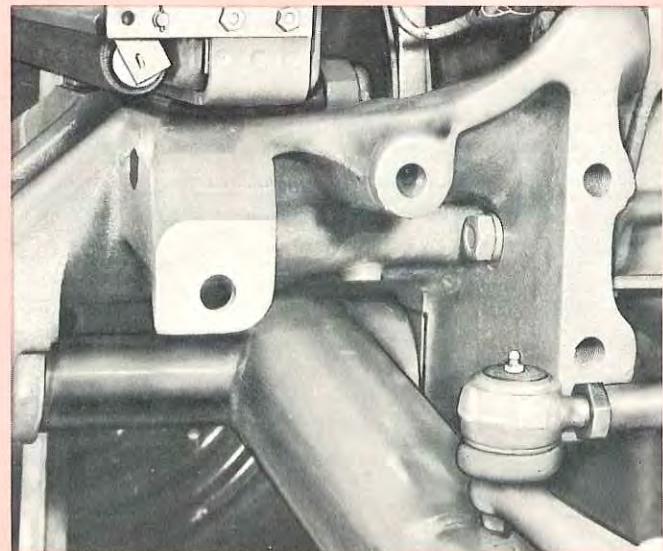
Rugged rear axle housing

More evidence of the extra strength built into the B-275 . . . you get heavier, stronger gears, more rugged frame, and rear axles. The B-275 outweighs other 2-3-plow tractors up to 800 lbs.



Super-strong rock shaft

The extra strong, extra heavy rock shaft is designed to deliver almost anything asked of it . . . built to work in conjunction with the instant-acting, big capacity hydraulic system.



Massive mounting pads

Extra rugged design all the way through the B-275 gives you added strength where it's needed most. You have plenty of extra brawn here to prevent breakage through metal fatigue and crystallization.

New INTERNATIONAL

B-275 DIESEL TRACTOR SPECIFICATIONS

POWER*

PTO hp.....	34.06
Drawbar hp.....	30.94

*Hp figures corrected to standard conditions.

ENGINE—4-stroke cycle Diesel, valve-in-head type, with electric (glow-plug in each pre-combustion chamber) all-weather glow-plug starting.

IH model.....	BD-144
Horsepower (stripped)	35
Number of cylinders.....	4
Bore and stroke, in.	3 3/8 x 4
Piston displacement, cu. in.	144
Rated governed engine speed, rpm.....	1,875
Maximum torque, lb.-ft.	95
R.P.M. at maximum torque.....	1,500

ELECTRIC STARTING AND LIGHTING—12-volt electric starting system which includes manually engaged starter motor, glow-plugs, resistance indicator, generator, voltage regulator, two 6-volt batteries. 12-volt front and rear left hand tail lights.

ENGINE CLUTCH

Dual Clutch—2-plate clutch, heavy-duty friction linings, and loaded by heavy-duty Belleville washers.

Transmission clutch diameter, in.	11
Pto clutch diameter, in.	9

TRANSMISSION—Eight forward speeds and two reverse speeds selected by a gear lever and a high-low shift lever. Foot-operated differential lock.

Bevel Gears (Spiral):

Tooth angle.....	30°
Bearings.....	Tapered roller
Ratio.....	4.88:1

TRACTOR SPEEDS—(Approximate) at rated governed speed

L1.....	1.5 M.P.H.
L2.....	2.4 M.P.H.
L3.....	3.4 M.P.H.
H1.....	4.0 M.P.H.
L4.....	5.1 M.P.H.
H2.....	6.4 M.P.H.
H3.....	9.1 M.P.H.
H4.....	14.1 M.P.H.*
Low Reverse.....	2.3 M.P.H.
High Reverse.....	6.1 M.P.H.

*Road speed developed at full throttle at no load on 12-28 tires, 16.1 M.P.H.

BRAKES—Foot - operated, totally enclosed, externally mounted acting on bull pinion shafts, one on each side. Foot pedals latched together for road work and a hand parking brake is provided.

Disc diameter, in.	5 5/8
Effective friction area (each lining), sq. in.	15.9
Number of linings (each side).....	4
Total effective friction area, sq. in.	127.2

Specifications subject to change without notice.

HYDRAULIC SYSTEM—Independent fully "live" single acting system with mechanical weight transfer and depth control.

Working pressure (approximate):

Lb. per sq. in.	2,150
Cylinder, bore and stroke, in.	2 3/4 x 5 3/4
Average lifting force at end of lower links, (horizontal position), lb.	2,275

TRACTOR DIMENSIONS (Inches):

Length, overall.....	112
Tread, front	48 to 76 (in 4-in. stages)
Tread, rear	48 to 76 (in 4-in. stages)
Width, overall:	
Front wheels.....	59 to 87
Rear wheels.....	63 3/4 to 87 3/4
Height to top of steering wheel.....	59 3/16
Wheelbase.....	74 1/8
Ground clearance (under rear frame).....	15 5/8
Turning radius at minimum setting:	
without brakes applied.....	132
with brakes applied.....	123
Drawbar height, flat bar above ground (adjustable).....	12 1/2, 14 3/4, 17
Drawbar lateral swing, each side of position.....	10

CAPACITIES (U.S. Measure):

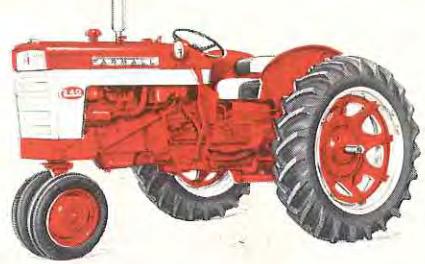
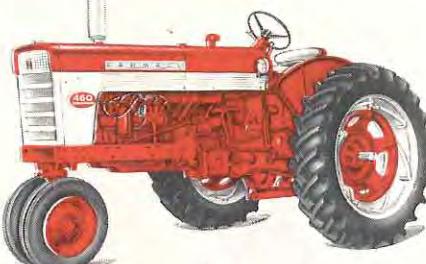
Cooling system, gals.	2 3/4
Fuel tank, gals.	10 1/2
Engine lubrication, pints.....	13
Transmission case, gals.	7
Hydraulic reservoir, gals.	3
Air cleaner cup, pints.....	1 1/4

OPERATING WEIGHT (Approximate) lbs.:

Basic tractor including fuel, oil, water, hydraulic system with 3-point linkage, and lighting.....	3,700
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REGULAR PRICE-CODED TRACTOR. The basic tractor includes an IH indirect injection Diesel engine with electric glow-plug in each pre-combustion chamber that features all-weather starting; a dual clutch with a double pressure release providing constant running pto; eight forward speeds and two reverse speeds; a spring-loaded foot-operated differential lock; and independent fully "live" hydraulics completely uninterrupted by pto operation. The hydraulics are of the single acting type and an inbuilt mechanical weight transfer and depth control is incorporated in the hydraulic reservoir. The control valve provides a raise, positive hold, and lower positions. An isolating valve is incorporated for the 3-point linkage when a remote cylinder is being used. The tubular steel front axle is adjustable from 48 in. to 76 in. in 4-in. stages. The track rod is indexed for row crop settings in order to maintain the correct toe-in. The rear wheels are provided with tread-settings from 48 in. to 76 in. The regular tractor has vertical air intake, hour meter, head lights, deluxe seat, adjustable check link, heat indicator, down-swept exhaust, 5.50-16-4-ply front tires, 11 x 28 4-ply rear tires, 1st set front wheel weights.

ATTACHMENTS. Belt pulley, rear mounted, 9 1/2 in. diameter pulley, 1,308 rpm at maximum governed full load engine rpm with belt speed of 3,260 ft. per minute. Swinging drawbar. Two-way hydraulic remote control attachment. 12 x 28 optional rear tires.



5-plow Farmall 560. Six-cylinder gasoline, direct-start Diesel, or LP-Gas engines. Tricycle, single-front or wide-front axle. Hi-Clear model. Maximum hp 65.25 belt, 59.47 drawbar on gasoline.

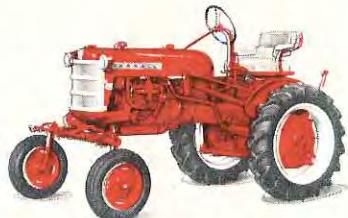
2-3-plow Farmall 240. 4-cylinder gasoline engine. Choice of tricycle, single-front, or wide-front axle. Maximum hp 32.22 belt, 28.87 drawbar.

4-plow Farmall 460. Six-cylinder gasoline, direct-start Diesel, or LP-Gas engines. Tricycle, single-front, or wide-front axle. Hi-Clear model. Maximum hp 51.63 belt, 47.24 drawbar on gasoline.

1-2-plow Farmall 140. 4-cylinder gasoline engine. Adjustable wide-front axle. Culti-Vision. Hi-Clear model. Max. hp 24.25 belt, 22.18 drawbar.

3-plow Farmall 340. 4-cylinder gasoline engines. Tricycle, single-front, or wide axle. Maximum hp 36.12 belt, 32.68 drawbar.

1-plow Farmall Cub. 4-cylinder gasoline engine. Adjustable wide-front axle. Culti-Vision. Hi-Clear attachment. Max. hp 10.75 belt, 10.08 drawbar.



Whatever you grow there's an IH tractor sized and priced just right for you



6-plow International 660. Choice of 6-cylinder gasoline, direct-start Diesel, or LP-Gas engines. Max. hp 85.21 PTO, 72.81 drawbar on gasoline.

3-plow International 340 Utility. 4-cylinder gasoline engine. Adjustable front axle. Max. hp 35.24 belt, 32.41 drawbar.

5-plow International 560. Choice of 6-cylinder gasoline, direct-start Diesel, or LP-Gas engines. Max. hp 65.25 belt, 59.47 drawbar on gasoline.

2-3-plow International 240 Utility. 4-cylinder gasoline engine. Adjustable front axle. Max. hp 32.24 belt, 28.91 drawbar.

4-plow International 460 Utility. Choice of 6-cylinder gasoline, direct-start Diesel, or LP-Gas engines. Adjustable front axle. Max. hp 51.64 belt, 48.15 drawbar on gasoline.

1-plow International Cub Lo-Boy. 4-cylinder gasoline engine. Adjustable front axle available. Max. hp 10.75 belt, 10.08 drawbar.



try this new IH money maker on your farm

The only way you can really find out about the B-275 is to try one yourself. Give us a call, or stop in the next time you're by, and we'll bring one out for you to test on your own farm, under your own conditions. You'll find that you can work one of

these IH bulldogs all day long on an average job *for less than \$1 worth of fuel!* Add that to all its other outstanding features, and you'll agree that the B-275 is the value champion in the 2-3-plow Diesel class.

Specifications subject to change without notice.

INTERNATIONAL HARVESTER COMPANY
180 NORTH MICHIGAN AVE. • CHICAGO 1, ILLINOIS

