JOHN DEERE 16. 2/00

INTEGRAL TOOL CARRIER

(AND ATTACHMENTS)



THE MULTI-PURPOSE
IMPLEMENT CARRIER
FOR JOHN DEERE
GENERAL-PURPOSE TRACTORS

. . . A Profit Booster That Will Smash Costs Make Your Farming Faster...



Here's modern farming that puts wings to your daily routine . . . eliminates strenuous muscle work . . . enables you to enjoy easier, better farming and greater profits than ever before.

It's farming the John Deere Tool Carrier Way!

At your first opportunity, see and drive the costreducing, profit-stretching John Deere No. 2100 Integral Tool Carrier and John Deere Tractor. Be set for real eye-opening performance!

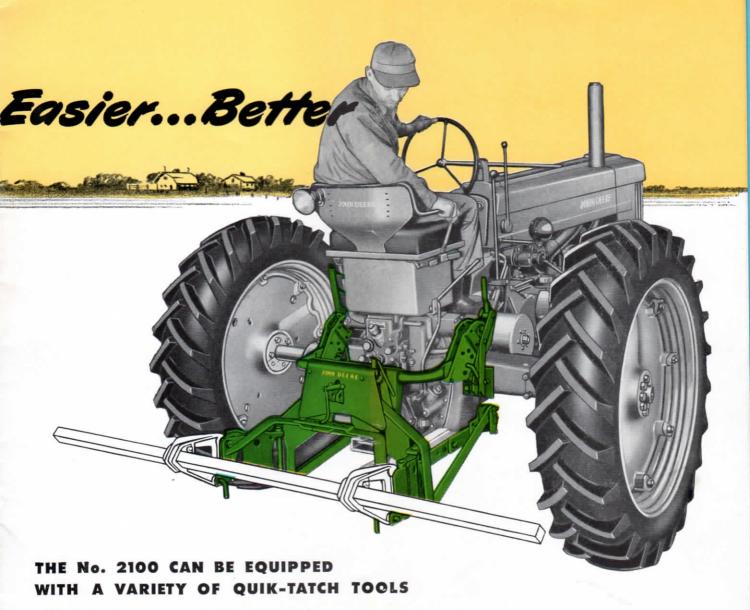
In mere seconds, this working team picks up any one of the many Quik-Tatch working tools. You're soon on your way from farmyard to field. Once there, smooth, positive hydraulic power—the mechanical muscle—takes over to raise, lower, or "inch" working tools to any in-between working position desired—at your instant command. You're able to farm every accessible acre, thanks to the outstanding maneuverability of this efficient,

close-coupled tractor-carrier combination.

How about profits? You'll make time and labor savings every day you own a No. 2100 Carrier; you'll make real money savings the very day you purchase a John Deere. All of the many Quik-Tatch working tools are low in cost; they can be purchased at a considerable saving over the cost of buying separate and complete implements for each farming job. Obviously then, you get all the implements you need for far less money. You pare your investment costs to the core. Upkeep and operating expense, through the many seasons of dependable performance, is mighty low.

Read further about this outstanding integral carrier . . . its better-work features . . . its many QuikTatch working implements. You'll find the
No. 2100 a practical tool carrier
that meets your needs for faster,
easier, more profitable
farming.

THE NEW JOHN DEERE No. 2100

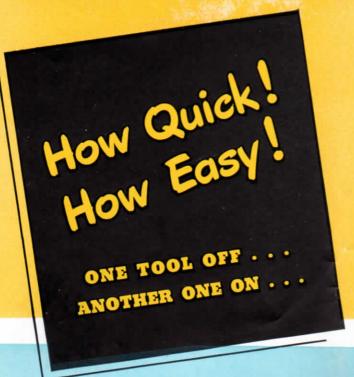


How's this for an impressive list of tillage jobs one tool carrier can handle . . . and handle efficiently?

The No. 2100 and attachments enable you to plow, chisel, cultivate, disk, break up subsoil, corrugate, transplant, cultivate row crops, handle all types of field cultivating, make borders, build ponds and roadways, level fields, make ditches and furrows, and do many other jobs as well.

You'll keep your No. 2100 working hard, day after day—the full season. There's hardly an end to its usefulness.

INTEGRAL TOOL CARRIER



Easy? Man, it's as simple as ABC to attach equipment to the John Deere No. 2100 Integral Tool Carrier.

You'll be amazed the first time you see it done . . . the first time you try it! And, best of all, you can attach and detach these tools by yourself . . . in mere seconds.

There's no lifting . . . no hard work . . . no tools required. Simply back the carrier to the implement, pick up the implement, insert the two coupler pins to lock the implement in place, and you're ready to go. It's as simple as that! Think of the hard work you'll eliminate. This Quik-Tatch operation is a real time saving feature you'll appreciate.

THERE'S NO DELAY ...







There's no time lost attaching tools; there's no delay. Simply back the tractor and carrier into position, as shown above, lining up the couplers on the carrier with the hooks on the implement.



Raise the couplers slightly... by hydraulic power, of course... so that the hooks mesh with the couplers. Then, raise the implement-attachment off the ground as shown above.

Close-Coupled Design

This tractor-carrier combination is a closecoupled outfit that's compact and easy to manage; you can work practically everywhere you can drive the tractor.

You can "squeeze" into tight fence corners, "side-step" field obstructions, work along ditches or on contour strips. You can make short, quick turns at row ends . . . "hug" fence rows and borders. You're able to farm more of your land; former waste land can be put to work producing crops. You save lots of hard work . . . save valuable time when extra hours mean extra dollars!



YOU'RE SOON ON YOUR WAY



Insert two Quik-Tatch pins at the coupler points and place the top link in position, when needed. The pins lock the implementattachment in place. You're ready to go!



Smooth hydraulic power raises the carrier and attachment high and clear for quick transporting from farmyard to field...from one job to another. You get around fast... easy... with a No. 2100 Carrier.



Installation Is Quick and Easy

It's a very simple job to attach the Integral John Deere No. 2100 Tool Carrier to your John Deere Tractor.

Once the two stop assemblies have been bolted in place on the back of the tractor and the draft link support is bolted to the drawbar bracket by four bolts, it's an easy matter to install the main frame of the carrier. Just slip the two small castings onto the tractor rockshafts and attach the carrier frame with four lock pins, one on each rockshaft casting and one on each side of the drawbar. You're all set for work. The installed carrier is shown in the view at the right; all carrier parts are shown in color.

The carrier does not have to be removed for normal drawbar, power take-off, or belt work. However, the carrier can be removed quickly if necessary; the two stops and the draft link bracket remain on the tractor.

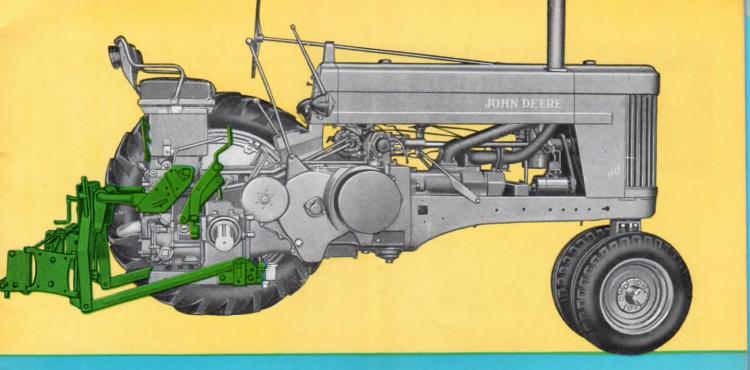
THE 2100 IS RUGGEDLY BUILT... QUALITY



Imagine, if you can, the rugged strength necessary to handle such heavy-duty farm implements as plows, panbreakers, and border disks . . . to pick up and carry them . . . to ease these implements to their work and hold them steady throughout the long day.

There's plenty of strength built into the versatile John Deere No. 2100 Integral Tool Carrier to handle a wide variety of heavy-duty implement-attachments and to withstand, with ease, the power and capacity of today's modern tractors.

From the tractor connecting points to the couplers, the No. 2100 is built to take it. The rockshaft castings that mount on the



BUILT FOR LONG, DEPENDABLE SERVICE

tractor rockshafts are sturdily built with wedge-type clamps which hold the castings securely to the rockshaft. Minimum of lubrication is required.

Exclusive Sway Link Assures Ease of Steering

One of the outstanding construction features of the No. 2100 Carrier is the exclusive sway-link feature. This sway link allows the tractor to follow uneven rows or furrows without forcing the implement sideways in the ground or interfering with ease of steering. For example, on hillside or contour plowing the sway link helps guide the plow uphill as it trys to work down, thus maintaining uniform cut.

Wide Adjustability for Varying Field Conditions

In addition to the various operating adjustments for better work, described on the following page, front drawbar bracket of the No. 2100 Carrier can be set in three different positions for the lead bars—high, low, and medium. High setting gives you maximum traction. Lowering the bracket increases penetration of the working tools; thus you can adapt the No. 2100 for varying field conditions.

Like all John Deere Farm Equipment, the No. 2100 is made of quality materials . . . by skilled craftsmen; an unbeatable combination that assures a dependable product . . . one that will deliver uninterrupted service throughout its long life.



casting, inset, has five additional settings for the lifting arms which allow even greater variation in the working depth,

Lateral adjustment of the carrier is controlled by the lever being adjusted at the right,

THE No. 2100 CAN BE SET FOR GOOD WORK IN ALL FIELD CONDITIONS

In seconds you can level the carrier, regulate the depth of penetration, or adjust the carrier for proper suction setting. Thus, on every job, you can always be sure of doing good work with a John Deere No. 2100 Tool Carrier, regardless of the field and soil conditions.

A few turns on the center leveling control, below, sets the implement-attachment for proper suction or leveling front and rear. A few turns on the control, at the right of the operator, raises or lowers each side of the carrier, leveling the attachment for uniform penetration over the entire cutting width.

Ample penetration is provided through two depth



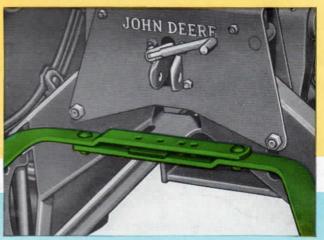
adjustments, the depth control stop, shown on the opposite page, and the rockshaft casting, with its five positions for the carrier lift arms. Thus, ample range of working depth is provided for good work.

If you farm in varying row crops, you'll appreciate the different row settings which can be made on the No. 2100 Carrier. The adjustable tie bar, below, permits spacing of attachments to meet your particular row spacings.



The center lever, being adjusted above, regulates the carrier and implement attachment for proper suction or leveling front and rear.

This adjustment enables you to set the plow bottoms so that they run level on the bottom of the furrow.



The adjustable tie bar on the No. 2100 Tool Carrier can be set to meet your particular row-crop settings. If implement-attachments (such as listers) should be set where the couplers are located, the adjustable tie bar can be set at 29-1/4, 32, and 35-1/2 inches... widened or narrowed, depending on your needs.

ROCKSHAFT POSITION CONTROL

Gives Far Greater Range of Working Depth

Far greater range of selection of the working depth is yours with the new rockshaft position control, available as optional equipment.

Attached directly to the power shaft lever, the rockshaft position control enables you to set the equipment for any desired in-between working position. Once set, this position will not vary; equipment always returns to the pre-set working position after raising it to pull through tough spots in the field, clear grass waterways, or make turns at headlands.

What's more, you can by-pass the working position for deeper penetration in the field or for quick penetration. Yet, another touch of the control lever and the attachment returns to the pre-set working depth. Easy to install, easy to regulate, the rockshaft position control will add even greater convenience to your tool carrier farming.

Quik-Tatch Implements re Available For All These Jobs.

Just a glance on the opposite page will convince you of the wide variety of implement-attachments for the John Deere No. 2100, enabling you to handle many different farming operations—plowing, field cultivating, ditching, panbreaking or subsoiling, cultivating, disking, transplanting, building roadways, leveling fields, breaking up old borders, chiseling, ripping shallow plowpan, listing, making borders, corrugating and many others. Read about these attachments on the following pages. Your John Deere dealer will be glad to give you full specifications.



PLOWING



FIELD CULTIVATING



DITCHING



PANBREAKING



CULTIVATING



DISKING



FIELD CULTIVATING



EARTH-MOVING



CHISEL CULTIVATING



LISTING



MAKING BORDERS



CORRUGATING

Get Top-Notch Plowing with the In

... THE PLOW WITH THE UNIQUE SAFETY-TRIP

Judge the performance of this integral plow in the field . . . with yourself at the tractor wheel. Watch the way the bottoms work deep . . . scour clean. Test the maneuverability; try the easy attaching and detaching. You'll agree the John Deere Tool Carrier Plow for the No. 2100 Tool Carrier tops the field.

This husky plow has every feature you want—strength, clearance, low upkeep cost, ease of adjustment and operation, and genuine John Deere Bottoms. In addition, these plows are equipped with exclusive safety trip standards that give you far greater protection against plow bottom

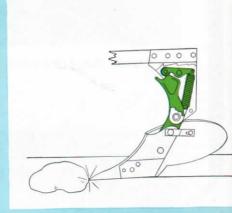
damage resulting from striking buried obstructions. They'll save you extra hours of hard work by preventing costly field delays.

Hydraulically controlled, these new plows can be lowered or raised on the move . . . for turning at the headlands, crossing grass waterways, or transporting from field to field. It's an extremely easy outfit to maneuver; you can work in close quarters, thus utilizing all available acreage for profitable production.

Add up all these features; consider, too, the money-saving advantages of tool carrier farming; your choice will be—a new John Deere.



This three-bottom tool carrier plow is shown immediately after one bottom has hit a field obstruction.



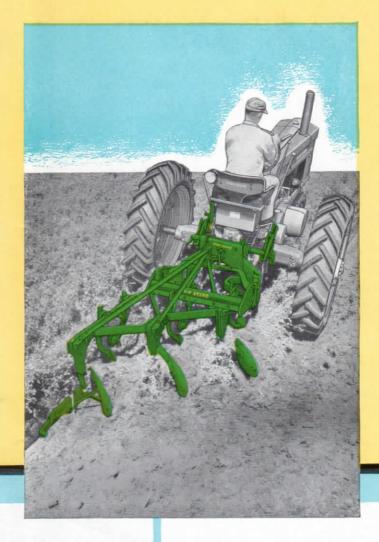
The plow bottom strikes an obstruction. The safety trip releases the standard. Note how roller starts out of standard socket...

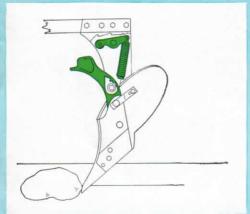
egral JOHN DEERE

STANDARDS

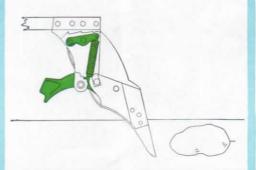


The efficient John Deere Tool Carrier Plow is available in three-bottom, as shown above, and two-bottom size. Each can be equipped with 12-, 14-, or 16-inch bottoms to meet your particular plowing requirements.

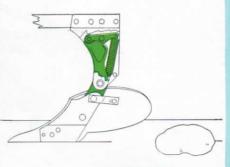




After the safety trip releases the standard, the bottom swings back, up, and over to clear the obstruction . . .



The bottom clears the obstacle and skids along the top of the soil. There's no damage to bottom or to the plow.



On backing the tractor, the plow bottom snaps back into position. You're set for more efficient, trouble-free plowing.

THIRD BOTTOM ATTACHED OR DETACHED EASILY

In just a few minutes' time, you can convert the two-bottom integral plow to the three-bottom plow to utilize fully the power of larger John Deere Tractors in varying soil conditions.

The third bottom is bolted to the main frame; the bracing is attached to the "A" frame; the top link, shown in outline, is connected to the tool carrier; and the longer landside is transferred to the third bottom. The three-bottom plow is ready for work . . . in just a short time!

Merely reverse the procedure to convert the three-bottom to a two-bottom plow if necessary to meet changing plowing conditions or for use with a John Deere Model "50" Tractor.

* * * *

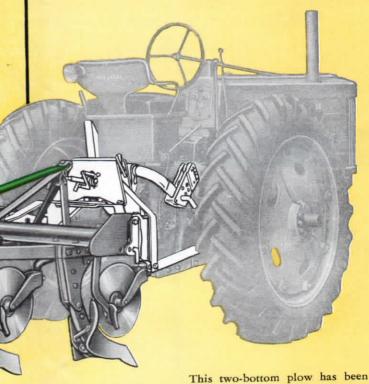
The coulter assembly can be adjusted to meet the plowing conditions . . . up, down, or sideways at the front or back positions. Heavy, tapered coulter bearings may be adjusted quickly to compensate for any wear caused by long service. Jointers can be used where complete coverage of surface trash is essential. Steel or cast jointers are available.



Heavy-duty plowing requires plenty of strength and rigidity in the standards and frame. That's the reason for John Deere Truss-Frame design.

Frame members are rigidly braced throughout for lasting rigidity and permanent alignment of the plow bottoms. John Deere construction also provides ample clearance to assure top-notch work . . . steadier operation in heavy trash, thick cover crops . . . wherever you want to plow.

These sturdy plows are equipped with genuine John Deere Bottoms, known and respected everywhere. They're made of top-grade materials . . . made to work deep, scour clean, give you extra years of good work and plowing satisfaction.



This two-bottom plow has been converted to a three-bottom plow simply by the addition of the third bottom and braces, shown in color.

Shatter Crop-Robbing Hardpan

WITH THIS STURDY PANBREAKER ATTACHMENT



The husky John Deere Panbreaker is a close-coupled unit that is easy to operate. The standard, long and narrow with a heavy wedge-shape point, works just below the subsoil layer, lifting and shattering it ahead and to either side as the outfit moves forward. The subsoil layer is thoroughly broken with a minimum of power. Shattered subsoil is left below the surface where it cannot interfere with rapid seed germination and vigorous root growth.

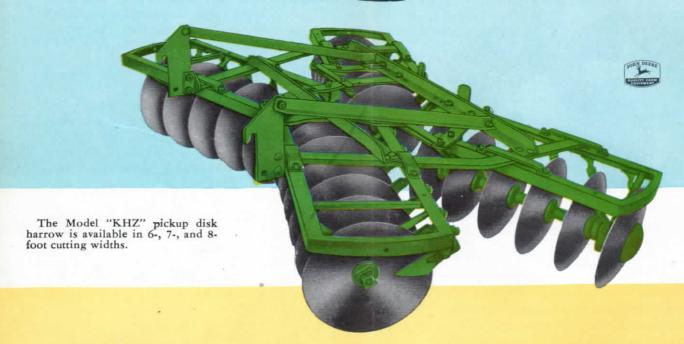
Coupler hooks, as you can see above, are welded to the husky cross member, making the No. 516 a self-contained unit ready for Quik-Tatch mounting on the tool carrier. Coulter is furnished separately. Mole-balls, in several sizes, can be attached to the No. 516 for low-cost mole drainage.

Moisture-shedding hardpan can prevent you from harvesting greater crop yields and, obviously, greater profit from your farming operation. Does this profitrobber have a strangle-hold on your acreages?

If so, team up your No. 2100 Tool Carrier with a low-cost, efficient John Deere No. 516 Panbreaker attachment. It's a husky unit that rips through the hardest subsoil layers, shattering the subsoil completely to permit rainfall to soak in where it falls. You'll create a valuable moisture reservoir in the subsoil for plant roots to draw upon in dry weather; water runoff and soil erosion will be reduced to a minimum.



THE World ...THE OUTSTANDING PICKUP DISK HARROW FOR ALL SOIL CONDITIONS

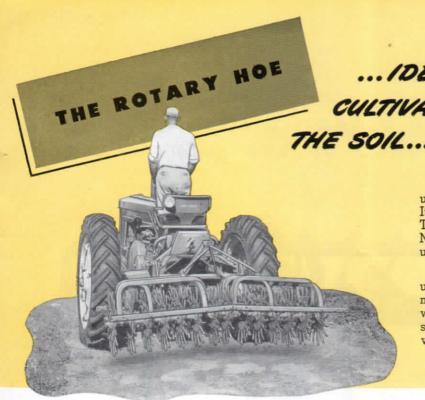


If you've never experienced "pick up and go" disking, you're in for a real treat. Test the new John Deere "KHZ" Tool Carrier Harrow in your own field conditions and enjoy modern disking at its best.

Gone is the bugaboo of old-time lifting of the harrow onto trailer or skid; gone is the long haul from farmyard to field—and back when you're finished. Simply back up, pick up, and you're on your way. Think of the time you'll save . . . the hard work you'll eliminate!

And with this speedy "getting around" goes a lot of harrow dependability. The husky John Deere does an exceptional job of disking—chopping cornstalks, making a smooth, mellow seedbed, working wherever you want to disk. Though gangs are set in a fixed angle, adjustments are provided to set the gang frames at a 10-, 15-, or 20-degree angle to meet your particular disking requirements. Weight is properly distributed over the entire cutting width of the harrow giving you deep, uniform penetration from one end to the other. There's ample clearance, too, for disking in trashy field conditions.

This dependable, double-action disk is available in three sizes . . . 6-, 7-, and 8-foot cutting widths . . . with 18- or 20-inch diameter disk blades. Field-proved white-iron bearings are used throughout.



...IDEAL FOR HIGH-SPEED

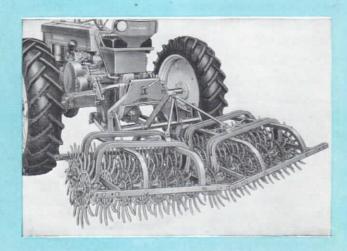
CULTIVATION THAT MULCHES

THE SOIL...KILLS EARLY WEEDS

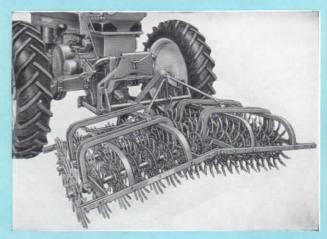
More and more farmers are recognizing the use of a rotary hoe as low-cost crop protection. It's a real profit-maker that increases yields. The dependable rotary hoe for the John Deere No. 2100 Tool Carrier, is the modern, "pick-up-and-go" version of this proved profit-maker.

It cultivates faster . . . works all the soil right up to the plants, making a good surface mulch which stimulates crop growth. It kills weeds without damaging the crop. It's a timesaver that's ideal for early cultivation in a variety of crops.

Extremely Flexible FOR ALL FIELD CONDITIONS



You'll like the extreme flexibility of the John Deere Rotary Hoe. Attaching parts are designed to permit the sections to flow with the ground surface..."float" up or



down with rough or irregular field surface. This outstanding flexibility assures a clean job of cultivating and mulching over the full width; there's no skipping with a John Deere.

THE Model "C-4"

... THE VERSATILE FIELD CULTIVATOR WITH THE FEATURES OF THE MODEL "CC"



Two depth-gauge wheels, which can be adjusted horizontally, provide stability and depth control when the cultivator is lowered to the working position.



For years farmers throughout the country have recognized the versatile John Deere-Van Brunt Model "CC" Field Cultivator as an outstanding tillage tool, tops in economy, efficiency, and durability. All the outstanding features of the famous "CC" have been incorporated in the new Model "C4," above, designed especially for the No. 2100 Carrier.

Frame is built strong and sturdy; its trussed construction assures years of trouble-free service. Simplified design with fewer parts means longer life, lower upkeep costs.

Depth control is positive; two depth-gauge wheels, *left*, control the working depth at all times. Ten depth settings provide ample depth adjustment for varying field and soil conditions.

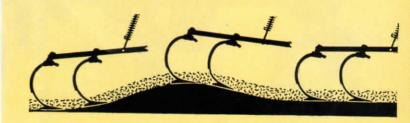
Many exclusive features make the "C4" Cultivator outstanding. There's ample clearance for working in trashy conditions. Teeth are set in a zig-zag setting to reduce clogging.

Jackknife spring pressure on the cultivator bars assures 20 to 30 per cent better penetration. The teeth are held at even depth over ridges and in depressions, as shown at the right. The pressure rods jackknife when the teeth work over a ridge, releasing enough pressure to prevent them from digging too deep. The uniform pressure exerted on the cultivator bars also forces the teeth to their proper working depth when cultivating across depressions. The cultivator bars work over uneven ground without pressure springs locking.

Once the cultivating depth is determined, the floating feature of the carrier permits the cultivator to compensate for uneven ground conditions.



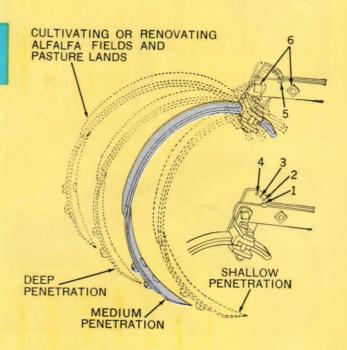
Spring pressure on the cultivator bars can be regulated quickly and easily for good penetration in practically every soil condition.



IT'S EASY TO ADJUST

Individual tooth adjustment is an exclusive John Deere-Van Brunt feature that adapts the Model "C4" Cultivator for alfalfa and pasture renovation and many other specialized tillage jobs. Adjusting brackets on the spring-tooth cultivator bars are provided with a series of holes for quick and uniform setting of the teeth for shallow, medium, or deep penetration, and for cultivating or renovating alfalfa and pasture land.

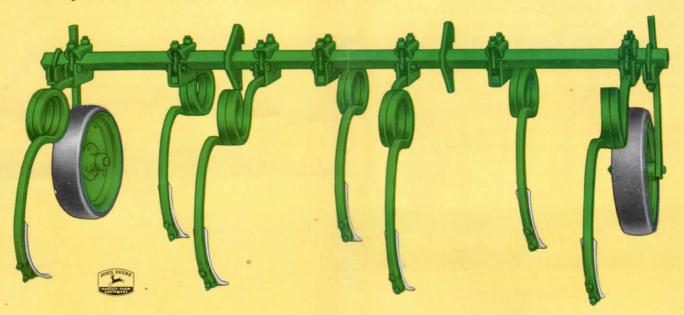
To adjust the teeth for different degrees of penetration, simply raise or lower them and insert break-pins. The break-pin serves as a safety factor, shearing off if the tooth strikes an unyielding object.



Because it can be equipped with points or sweeps of various sizes, the Model "C4" Cultivator handles many tillage jobs in practically all soil conditions.

THE 700 SERIES TOOL BAR

... HANDLES A VARIETY OF QUIK-TATCH TOOLS FOR FIELD CULTIVATING... ROW-CROP CULTIVATING





Coil spring standards are connected to the tool bar with Quik-Tatch clamps for easy spacing.

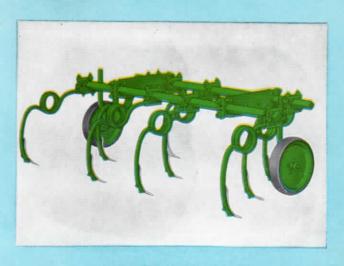
From spring to fall you can cut tillage costs to the core by putting a John Deere No. 2100 Integral Tool Carrier equipped with No. 700 Series Bar to work. You can handle a wide variety of jobs . . . prepare seedbeds, kill all types of weeds, work summer-fallow, rip shallow plowpan, rough up surfaces to reduce wind and water erosion, renovate alfalfa or pasture land, and others.

The field-proved 700 Series Tool Bar is a husky 2-inch steel bar with attaching couplers welded in position for quick hookup to the car-

rier. These bars are available in 8- and 10-foot lengths with the single bar, left, or 8-foot with the double bar, as shown at the right, for use where extra clearance is essential.

Gauge wheels are provided to limit the depth of penetration. Working depth can be changed quickly and easily by raising and lowering the gauge wheels; wheels can also be set on the bar at any working width desired.

The coil-spring standards have a "live" action which permits them to vibrate as they work the soil. They can be equipped with sweeps or reversible chisel points for breaking up shallow hardpan or for renovating alfalfa or pasture land. Standards can be spaced to meet your particular requirements.



DOUBLE TOOL BAR

This Model 728 Tool Bar, consists of two 2-inch tool bars. Though it is only 8 feet wide it handles the same number of coil-spring standards as the 10-foot single bar.

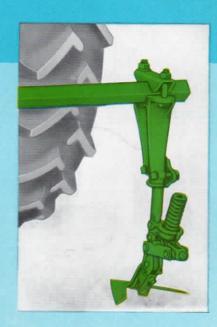
THESE REAR ATTACHMENTS WORK EFFICIENTLY



IN ROW CROPS

The No. 2100 Carrier can be equipped with the 60 Series Rear Cultivating Rig which can be used with 2- and 4-row front integral row-crop cultivating units in place of standard rear cultivating rigs.

The No. 60 Series consists of a No. 700 Series Tool Bar and special attaching parts, plus the working shanks you require; spring-trip shanks, right, quick-attachable spring-trip shanks, or single spring teeth, left. Cultivator shanks are adjustable on the tool bar to meet your row-crop spacing requirements.





LISTERS

Where seedbeds are finished off with listers or middlebreakers, you'll find the husky lister attachment for the No. 2100 Tool Carrier is outstanding. It's excellent for listing; making shallow ditches; "furrowing out" for deeper irrigation; preparing beds for cotton, corn, lettuce, and other crops; and controlling erosion and soil blowing.

John Deere 14-inch, general-purpose or blackland lister bottoms are used; spacing on the tool bar can be varied to meet your particular field and crop conditions.



COIL-SPRING CULTIVATORS

Husky coil-spring standards, which work as deep as nine inches, can be used efficiently on the No. 2100 to prepare seedbeds, particularly in rocky conditions; summer-fallow; control deep-rooted weeds; mulch fields; and to handle many other tillage jobs.

These coil-spring standards have ample clearance fore-and-aft—20 inches space between front and rear standards which allows plenty of clearance for cultivating in trashy soil conditions. Standards may be spaced on the tool bar to meet your soil and cultivating conditions.



REAR DOZER

You'll be surprised how many earth- and materialsmoving jobs you'll find for the sturdy 6-foot rear dozer—leveling old borders, building ponds, filling ditches and gullies, leveling roadways, smoothing out low spots in the field, cleaning stables, feedlots, and corrals, and others.

And, it's easy work all the way. Hydraulic power eliminates the *muscle work*... regulates the cutting depth to any depth as deep as 14 inches below the ground level ... raises the dozer to dump the load in one place or spill and spread it evenly over a wider surface. Capacity—24 cubic foot, level-load.

DITCHER

Reducing farming costs and eliminating timeconsuming hand labor are two important advantages that are yours with this new ditcher attachment.

You can make uniform ditches as fast as the tractor travels. You'll take a lot of the *spade work* out of ditching at the same time. For example, this close-coupled outfit can be backed into tight places—near the pump or head gate. You drop the ditcher in close and pull away. It's the easiest, quickest, and most economical way to prepare irrigation or drainage ditches as deep as 10 inches... 19 inches wide at top.



STIFF-STANDARD CULTIVATORS

These husky standards are well-suited for shattering soil to the full root depth, breaking up shallow hardpan or plowpan, and loosening the soil for better aeration. Water penetrates . . . seeps in instead of running off during heavy rains. Soil washing is reduced substantially. Yes, it's a crop saver . . . soil saver you need.

These stiff standards, which penetrate as deep as 12 inches, can be spaced as desired on the 2-1/4-inch tool bar; standards can be equipped with the type of points, sweeps, or shovels that meet your field requirements.



BORDER DISKS

Well-broken soil for irrigation borders, small levees, and beds for vegetable and melon crops can be thrown up in a hurry . . more efficiently and far more economically . . with a No. 2100 Carrier, equipped with border disk.

Several types are available—disks of the same diameter or, as shown, in varying sizes—22-, 24-, and 26-inch diameters. Gangs may be tilted, angled, or reversed for tearing out borders or checks prior to plowing. Spacing between the two gangs can be varied, depending on the size of border or bed.





CORRUGATORS

Water flows evenly in well-packed ditches that are clean, uniform in depth. This kind of ditch can be made quickly and economically with the John Deere Corrugator attachment for the No. 2100 Tool Carrier.

The sturdy corrugator is a complete, self-contained unit; it opens up the land, forces soil to the sides under pressure, and forms an ideal irrigation ditch, scientifically shaped to resist undercutting by water or breakdown by tractor wheels. Available in two sizes—6 inches wide by 5 inches deep and 4 inches wide by 5 inches deep.

TRANSPLANTER

According to expert growers, near-perfect transplanting must be achieved if profit is to be realized. That means transplanting must be gentle . . . accurate—the kind you'll get with a John Deere Plantrol Transplanter.

Lightly, but firmly, the John Deere takes the plant, places it gently in the furrow—with greater accuracy than you would place it by hand. Plants set by Plantrol receive little or no setback; losses are far below average. Available in 1- and 2-row sizes.



OHN DEERE **FOR YOUR** FARMING OPERATIONS

Tractors: Standard-tread, general-purpose, and orchard, in sizes and types for every farm, crop, and purpose. Tire pumps.

Plows: All sizes and types, including integral moldboard and disk plows for John Deere general-purpose tractors. Disk plows. Middlebreakers. Disk tillers in all sizes. Plow bottoms and shares of steel or deep-chilled iron.

Listers: One-, two, three-, and four-row for cotton, corn, and other crops. Integral middlebreakers and bedders and bedder-planters for John Deere general-purpose tractors.

Harrows: Single- and double-action disk types. Offset disk harrows. Spike-tooth harrows for horse and tractor operation, spring-tooth harrows, and spring-tooth weed destroyers. Power-driven and rolling stalk cutters.

Deep-Tillage Equipment: Panbreakers and chisels.

Tool Carriers: Integral and drawn tool carriers available with a variety of Quik-Tatch implements.

Earth-Moving Machinery: Landshapers, land levelers, bull-dozers, buck scrapers, and rear dozers. Snow plows. Disk terracers.

Grain Drills: Tractor- and horsedrawn grain drills in a size and type for every drilling job. Plain drills, fertilizer-grain drills, press drills, plow press drills, lister grain drills, and grass seed drills available. Adjustable-gate fluted force-feeds or double-run feeds. Choice of furrow openers. Fertilizer attachments available. Lime and fertilizer dis-tributors. Tiller-seeders. Packers.

Planters: Two- and four-row drawn-type for corn, cotton, peanuts, and many other crops. Multirow planters for beets, beans, and other narrow-row crops, with or without fertilizer attachment. Onetwo-, and four-row planting and fertilizing attachments for cultivators. Transplanters.

Potato Machinery: One-, two-, and four-row planters, with or without fertilizer attachment. Oneand two-row tractor-drive diggers.

Cultivators: One-, two-, four-, and six-row for surface-planted crops; one-, two-, and four-row for listed crops. Integral and drawn field and orchard cultivators with stiff or spring teeth. Alfalfa cultivators. Beet and bean cultivators. Deep tillage chisel cultivators. Rotary hoes. Rotary hoe attachment for tractor cultivators. Rod weeders.

Dusters: For corn, cotton, and vegetables.

Hay Machinery: Power-driven mowers, tractor-drawn mower. Side-delivery rakes, sulky rakes. Automatic pickup baler. Field hay chopper.

Harvesting Machinery: Combines. Windrowers. Grain binders, corn binders. Power-driven oneand two-row corn pickers One-row corn snapper. Forage harvester. Forage blower. Bean harvesters. Peanut pullers. Cotton harvesters. Cotton pickers. Beet harvesters.

Elevators: Portable, for ear corn, small grains, and baled hay; port-able type for small grains only.

Hammer and Roughage Mills.

Manure Handling Equipment: Tractor- and horse-drawn spreaders. Lime spreading attachment. Manure loaders.

Shellers: For hand and power use.

Farm Wagons: All-steel rubbertired wagons to meet all farm needs.

