INGERSOLL

Yard & Garden Tractors

PLANNING GUIDE



6AUNDERS COMPACT TRACTORS 928 FALL RIVER AVE. SEEKONK, MA. 02771 TEL. (1-617) 336-8337

INGERSOLL EQUIPMENT

On December 1, 1983 the Case Outdoor Power Equipment Division of J I Case was purchased by John S. Ingersoll, an entrepreneur with a long history of successful business ventures, and a long time owner of Case tractors and attachments.

Case lawn and garden tractors had an enviable reputation for excellent quality and outstanding performance. My enthusiasm for the product influenced my decision to invest in the Case line and form Ingersoll Equipment Co., Inc. to continue the manufacturing of Case lawn and garden tractors.

All of us at Ingersoll Equipment are committed to building the best quality products in the marketplace, and to continue to lead the industry in "state-of-the-art" engineering.

Since 1983 there have been great strides in product refinement, in addition to new tractor models, and attachments that utilize the unique HYDRIV, hydraulic drive system.

Share in our success built from excellen quality and superior performance..."

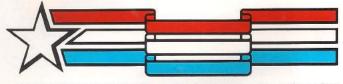
OWN AN INGERSOLL.

John S. Ingersoll



INDEX

	. 490
Ingersoll features	3
80 Series, rear-engine riders	4-5
100 Series, yard tractors	6-7
HYDRIV, hydraulic drive	8-9
200 Series, garden tractors	. 10-11
400 Series, garden tractors	. 12-13
600 Series, loader & loader/backhoe	. 14-15
Mower decks	. 16-17
Collection systems	. 18-19
Dump carts	20
Tillers	, . 21
Snowblowers	22
Utility blades	23
Log splitters	24
Other attachments	25
Specifications	26
Attachment matching chart	27



QUALITY IN THE AMERICAN TRADITION

INGERSOLL FEATURES

NOTE: Pictured here are general features common to the entire Ingersoll yard and garden tractor line. Features may appear slightly different on various models. See specific model line for exact information.



Easy on, Easy off
Step-through access and ample
leg room make it easy to get on
and off an Ingersoll tractor.



Refueling Convenience
All Ingersoll tractors offer easy
and safe refueling with see-thru
fuel tank.



Operator Comfort
The adjustable, deluxe waterproof, vinyl-covered, foam-padded seat and cushion seat supports provide the ultimate in comfort.



Convenience
The entire Ingersoll line provides single-lever control of speed and direction.



Operator Friendly
Controls are designed with the operator in mind. Controls are color coded and easy to reach.
Most models feature controls concentric to the steering wheel.



Quick Response Steering
The tough gear and sector
steering provides full right to left
direction...more maneuverable.



Perforated Footrests
Large, perforated footrests
provide greater comfort and
safety—grass, garden or snow.



Safety-Key Start 80 & 100 series tractor engines cannot be started unless clutch/ brake is depressed. Travel lever must be in neutral to start 200 & 400 series tractors. All tractors must have mower PTO off and key turned.



Rear Drawbar
The rear drawbar is standard on all Ingersoll tractors to facilitate easy hook-up of a variety of pull-type attachments.

80 SERIES





Model 80xc

Powered by a dependable 8 hp, Briggs & Stratton, I/C (industrial/commercial) engine. Deluxe in every respect.

It features a fully enclosed engine for smooth, quiet operation; full length perforated steel foot rests for comfort; up-front controls and electric starting for convenience.

The 30" single blade mower does a superior mowing job and combined with optional bagging equipment will pick up your grass clippings.

Model 80xe

The 80xe features an 8 hp, Briggs & Stratton engine with the convenience of electric starting.

It has a recessed engine compartment and perforated steel foot rests.

The 80xe uses the same mower deck as the 80xc and an optional bagger unit is available.

Of course, all riding mower models will pull an Ingersoll dump cart or lawn sweeper.





Model 80xm

The 80xm is ideally suited to the economy minded homeowner. It's as tough and dependable as the other Ingersoll riding mowers, but with manual start.

An 8 hp Briggs & Stratton engine provides plenty of power to operate the rider with a 30" single blade mower. It also will accommodate a bagger attachment.

The 80xm, like all 80 series riding mowers features a translucent see-thru fuel tank, a textured steering wheel for easy operation, and mower height adjustment from the tractor seat.

100 SERIES



Model 114yt
The model 114yt is powered by a twin-cylinder, 14 hp Briggs & Stratton I/C (industrial/commercial) engine. It will handle a 38" mower with optional bagger, 42" side-discharge mower, or a 44" rear-discharge mower with trailing Ingersoll HI SWEEP lawn sweeper.

In winter it will blast through snow with the 38" snowblower or 38" utility blade.

The 114yt is ideally suited to the average homeowner with a variety of home maintenance chores to perform.





Model 112yt
This Ingersoll yard tractor comes with a 12 hp Briggs & Stratton synchro-balanced I/C (industrial/ commercial) engine for a smooth comfortable ride.

It will accommodate a 38" mower deck with optional bagger, a 42" side-discharge mower or a 44" reardischarge mower with trailing Ingersoll sweeper to pick up grass clippings.

You can also clear snow with a 38" snowblower or plow snow and grade your driveway with the 38" utility blade.

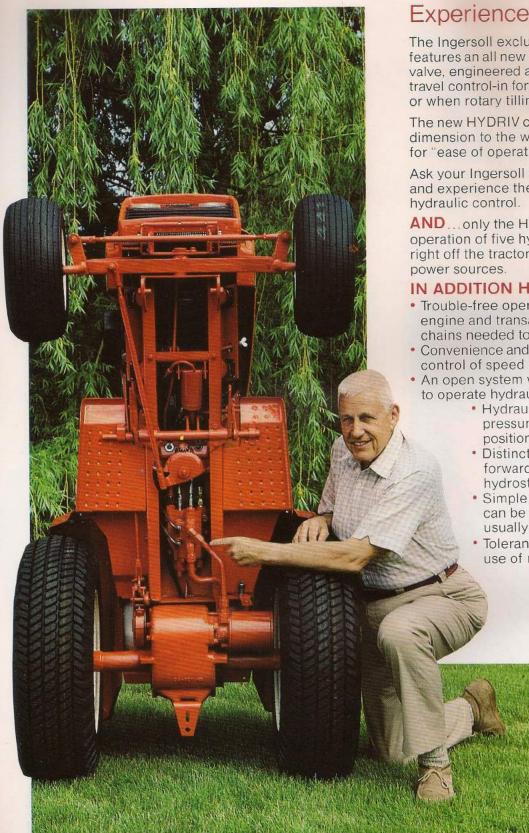
Model 108yt

The tough Ingersoll 108yt is powered by an 8 hp Briggs & Stratton synchro-balanced engine.

Built for comfort and easy operation, it will handle a 34" mower with optional bagger attachment or 38" utility blade.



HYDRIV...AN INGERSOLL EXCLUSIVE



Experience The New HYDRIV...

The Ingersoll exclusive hydraulic drive system now features an all new "state-of-the-art" hydraulic control valve, engineered and designed to provide positive travel control-in forward or reverse on hilly terrain or when rotary tilling on level terrain.

The new HYDRIV control valve provides a whole new dimension to the well known Ingersoll reputation for "ease of operation".

Ask your Ingersoll dealer for a demonstration drive and experience the ultimate in smooth, positive hydraulic control.

AND...only the HYDRIV hydraulic system permits operation of five hydraulically powered attachments right off the tractor...no need for separate, outside power sources.

IN ADDITION HYDRIV PROVIDES:

- Trouble-free operation with oil-only link between engine and transaxle...no belts, shafts, pulleys or chains needed to transfer power, or replace.
- Convenience and ease of operation with single-lever control of speed and direction.
- An open system which allows plug in capability to operate hydraulic attachments (see page 9).
 - Hydraulic lift to raise, lower or apply down pressure to attachments. Also provides float position for tilling.
 - Distinct neutral which reduces tendency of forward or reverse "creep" found in hydrostatic systems.
 - Simple, separate component system which can be repaired or replaced quickly and usually at less cost to the owner.
 - Tolerance of contaminants and allows the use of regular "off-the-shelf" motor oil.
 - Cooling of oil in the hydraulic drive system to maintain optimum temperature for efficient operation.
 - Safe operation with automatic return to neutral when brake is applied.



HI-LO range selector.



Heavy-duty cast iron transaxle.

... In a Class by Itself

Here's how HYDRIV works...

- Travel control lever Controls the tractor speed and direction. Push forward to go. Pull back for reverse.
- Control valve Directs oil flow from the hydraulic pump to the hydraulic motor for control of direction and speed.
- Hydraulic pump Coupled to the engine crankshaft, pump develops constant hydraulic flow for smooth control of all tractor and attachment hydraulic functions.
- Hydraulic motor It's attached to the heavy-duty high/low transaxle to convert oil flow into rotary motion.

- Dual-range transaxle It's geared two ways. "High" for light loads and transport. "Low" for the heavy going and work speeds.
- Heat exchanger Cool oil performs better than hot. Oil circulates constantly to maintain operating efficiency.
- Oil reservoir Cooled hydraulic oil flows into the five-quart reservoir from the heat exchanger and is recirculated through the pump.





HYSPLIT®



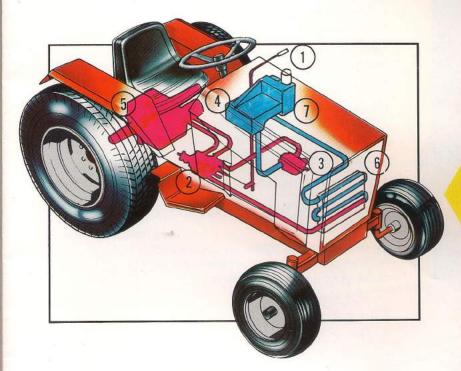
HYDRAVAC



HYDRACUTTER®



HYDRABAGGER®





HYLIFT® An Exclusive Benefit

The hydraulic system provides the operator with effortless hydraulic control to raise and lower front or rear mounted attachments.



HYLOAD® An Exclusive Benefit

The same hydraulic system that drives the loader and loader/backhoe is also used to power the loader bucket and the backhoe.

200 SERIES HYDRIV

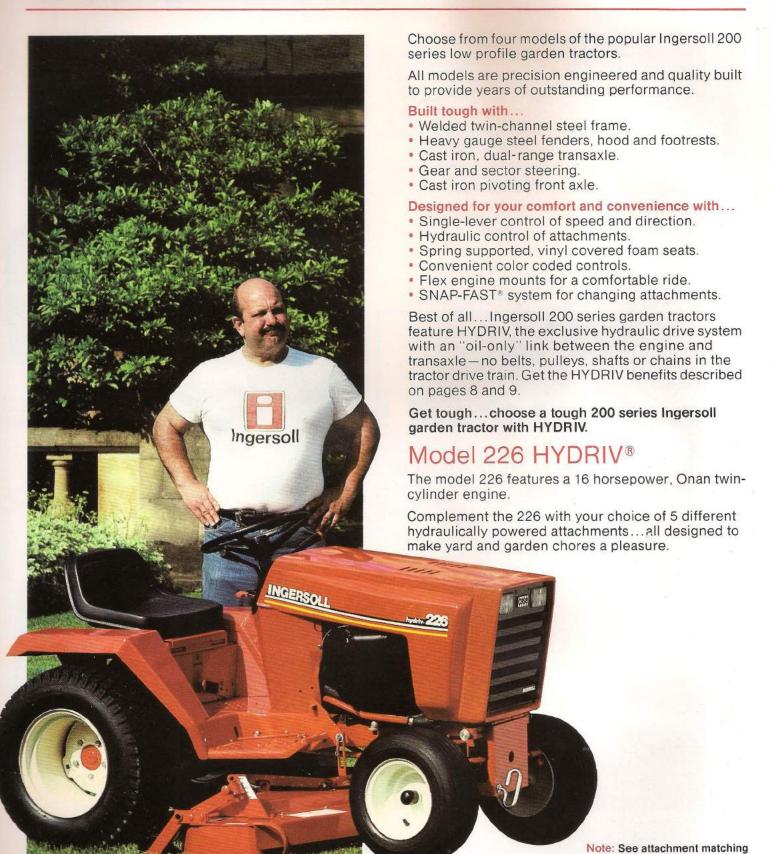


chart (page 27) for complete attachment capabilities.



Model 224 HYDRIV®

A Kohler 14 horsepower cast iron engine provides dependable power for the model 224.

You can match up any of the Ingersoll hydraulically operated attachments to your model 224 for tilling, log splitting, brush cutting, lawn vacuuming or bagging...all operated off the tractor hydraulic system with no separate power source to buy, adjust, service, re-fuel and maintain.

Model 222 HYDRIV®

The model 222 is powered by a Kohler 12 horsepower cast iron engine.

The 222 will handle a wide variety of lawn and gardening chores... from mowing your lawn to blowing snow, from tilling a garden to pulling a dump cart, from grading a driveway to sweeping a lawn.

A model 222 style has plenty of reserve power to hydraulically operate the 32" HYTILL, tiller and the HYSPLIT, log splitter.





Model 220 HYDRIV®

The tough 10 horsepower model 220 is powered by a Kohler cast iron engine.

The model 220 has the same basic attachment capabilities as the model 222.

You'll enjoy the same quick response steering, the single-lever control of speed and direction and the comfort and convenience of operating the model 220 as you do in the models 222, 224 and 226.

400 SERIES HYDRIV



Model 446 HYDRIV®

Similar to the model 448, the model 446, 16 hp Onan twin-cylinder powered tractor will provide outstanding performance with the same wide range of attachment capability.

The combination of Ingersoll's exclusive hydraulic drive and 16 inch wheels provide ample power and traction for handling tough jobs with all 400 series models.

Your Ingersoll dealer will help you select the right horsepower for your personal garden tractor needs.



Model 444 HYDRIV®

The model 444 is powered by a 14 hp, single-cylinder, Kohler cast iron engine.

It provides the same attachment capability as the models 448 and 446.

The model 444 provides the same basic features of all 400 series Ingersoll tractors with special rubber isolation engine mounts to reduce the vibration of a single-cylinder engine and provide the owner with a smooth, comfortable ride.



HI Back Seat

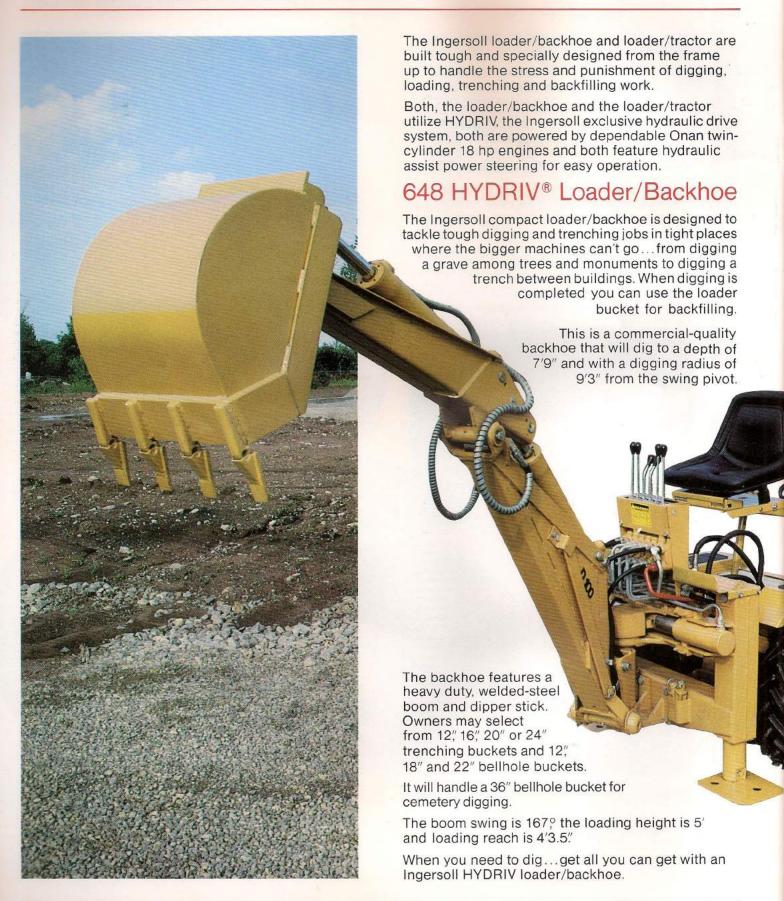
All 400 series tractors are equipped with a deluxe, foam-padded, vinyl-covered seat. This all-weather, high-back seat is complete with water drain holes.



Farm Tractor Styling

Big 16" wheels provide 11" of ground clearance and powerful traction for tough gardening work around the home, farm or for commercial grounds maintenance.

600 SERIES HYDRIV





648 HYDRIV® Loader/Tractor

The Ingersoll 648 HYDRIV loader/tractor is a versatile tough work machine built to take on tough loader work and to operate in tight quarters.

The Ingersoll hydraulic system called HYLOAD® provides maximum use of hydraulic power for breakout and lift on the cylinder outward stroke and ample power for the less demanding bucket dump and lowering during the return stroke.







In addition to loader work, the 648 HYDRIV loader/ tractor will accommodate a 44" or 48" mower deck, or equipped with a hydraulic PTO, it will operate the 3-pt. hitch mounted HYDRAVAC or L74 HYTILL, end-drive hydraulic tiller; the HYDRACUTTER, hydraulic brush cutter or HYSPLIT, hydraulic log splitter.

Optional pallet forks further add to the versatility of the 648 HYDRIV loader/tractor.

MOWING





Wing Mower

Designed for large commercial, institutional, and industrial grounds maintenance, the Ingersoll wing mower is 16 hp tough.

The wing mower is equipped with a 60" mower deck and is totally operated by remote control from the tractor seat. It can be swung to the side or towed in tandem behind the model 446 or 448 HYDRIV garden tractor.

When trailed in the outboard position behind a tractor equipped with a 60" mower it provides 10 feet of mowing width in a single pass.

Side discharge mowers

For a well groomed lawn nothing compares with Ingersoll mowers.

The wide discharge chute will disperse clippings evenly without bunching or if you prefer to pick up clippings, certain models will accommodate bagging equipment.

All models have been thoroughly tested and bear the OPEI safety seal.





Rear discharge mowers

Ingersoll provides rear discharge mowers for use on yard tractor models and garden tractor models.

We recommend the HI SWEEP, Ingersoll lawn sweeper be pulled behind tractor with a rear discharge mower to sweep up clippings for a well groomed lawn.

COLLECTION SYSTEMS





Baggers

Ingersoll offers a single-hopper bagger or twin-hopper bagger for the 80 series riding mowers and two twin-bagger models for the 100 series yard tractor models.

The Ingersoll baggers are easy to empty and replace and the bagger units are quickly mounted or removed from the tractor unit.





Sweeper

The Ingersoll exclusive HI SWEEP, 38" lawn sweeper, gives you trailing gear drive for high performance. The HI SWEEP two-stage lawn sweeper provides two gear-driven polypropylene brushes...a lower brush for pick-up and an upper brush to propel swept material deep into the 11-bushel capacity hopper. The hopper fills completely without annoying stops to hand adjust the load.

A height selector allows six sweeping positions plus a transport position.

The Ingersoll HI SWEEP, sweeper is designed for operator convenience and high performance lawn sweeping.

Gear Drive

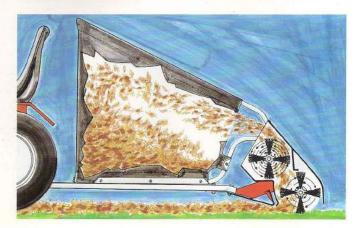
The HI SWEEP design provides positive gear drive...no belts to stretch and slip.

Easy Dumping

Wheels located at the rear make backing easy and pivoting hopper dumps to the rear, behind the path of the sweeper. No need to unhook unit from the tractor drawbar.







HAULING



TILLING

HYTILL* represents the "state-of-the-art" in garden seed bed preparation.

The Ingersoll end-drive hydraulically powered tillers are available in 32" or 41" width and operate off the tractor HYDRIV hydraulic system.

The tiller tines rotate forward for normal gardening or can be reversed for an extra fine seed bed or to clean stones or trash from the tiller tines.



Convenient Control

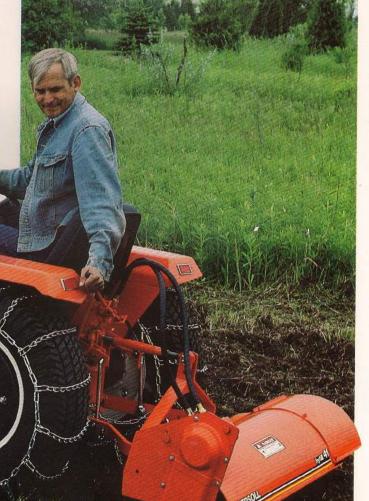
Your Ingersoll HYTILL tiller is convenient to operate from the tractor seat with the easy to reach PTO lever.





Important Note:

Tiller performance depends on good traction, proper weight distribution and slow controlled ground speed; therefore, tire chains, rear wheel weights, and front end weights are recommended. See page 27 for details. Your Ingersoll dealer will be happy to recommend the right accessory items needed for optimum tiller performance.



SNOWBLOWING



GRADING



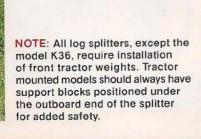
SPLITTING







Height adjustable
The models K31, L32, and L34 are height adjustable and can be lowered to ground level to roll on logs too heavy to lift.





Work table
Models L32, L34, and K36 provide
the convenience of a work table
to minimize bending and reaching.

OTHER ATTACHMENTS

Snap-Fast® Attachment System Simple as A-B-C



A. Simply engage the attachment bracket with alignment pins on the tractor.



B. Release the spring loaded plunger pins to engage the holes in the mounting bracket.



Secure lift arms or links on the attachment to the tractor.



J26 Category "O" 3-pt. hitch
Will accommodate a tiller plow, L32
HYSPLIT log splitter and a variety of
other ground engaging implements.
Fits on all 400 HYDRIV series models
The LT26 is designed for use on the
loader/tractor.



F27 Sleeve Adaptor
Fits on J26 and LT26 category "O"
3-pt. hitches and is used for mounting sleeve-type hitch implements.



K24 Sleeve Hitch
For use on 400 HYDRIV series
tractors. Accommodates the HYTILL
Tiller and other sleeve-type hitch
implements.



K22 Sleeve Hitch
For use on 200 HYDRIV series garden tractors. Accommodates the HYTILL tillers and other sleeve-type hitch implements.



Weight Boxes

The H13 weight box for 200 and 400 series tractors may be mounted front or rear and can be filled with a variety of materials such as scrap iron, sand, stone, etc. (Not shown...the M13 rear weight box for 100 series tractors.) The LL13 rear weight box is designed for the 648 loader/backhoe. A weight box is furnished as standard equipment on the 648 loader/tractor.

For optimum performance when tilling, snowblowing, grading, plowing and working with other gardening implements, a tractor must have good traction, proper weight distribution and proper ground speed control.



L11 Front or Rear Weight Kit

Includes 4 — 40 lb. weights with a kit that permits brackets for mounting front or rear depending on the attachment being used. Fits on all 200 and 400 series garden tractors.



H18 Front Weight Bracket

Fits on 200 and 400 HYDRIV series models. Will accommodate four – D10 wheel weights.



M19 Flow Control Valve

Provides easy and precise control of ground speed when tilling with a 200 or 400 series HYDRIV tractor. Recommended for commercial and large scale tilling.



Tire Chains

Specify G15 for 100XC series 8" wheel models; D12, for 200 series 12" wheel models; E16 for 400 series 16" wheel models; and LT15 for the loader/tractor 15" wheels.



L17 Hydraulic PTO

Designed for 400 series models to drive the L74 HYTILL tiller. L32 HYSPLIT log splitter and other hydraulically operated attachments. Specify J17 for 200 series model tractors.



L29, 540 PTO

Will fit on all 200 and 400 series tractors and provides a mechanical drive power source for operating grain augers, bale elevators, conveyors, generators, pumps, and other equipment driven by a standard 540 PTO spline shaft.

INGERSOLL

QUALITY IN THE AMERICAN TRADITION

Ingersoll employees were pleased and proud to model the products we regularly produce for presentation in this planning guide (one exception, "Mr. Tough" in the Ingersoll T-Shirt is a professional model).

Ingersoll Equipment is equally proud of the commitment and family environment that prevails in our company. Truly quality in the American Tradition.

Design Changes

Ingersoll reserves the right to make improvements in design and changes in specifications without incurring any obligation to install them on units previously sold.

HYDRIV® HYLIFT® HYLOAD® HYTILL® HYSPLIT® HYDRAVAC® HYDRACUTTER™ and HYDRABAGGER™ trademarks of Ingersoll Equipment Co., Inc.



Ingersoll Equipment Co., Inc. Winneconne, WI 54986