

McCORMICK®  
**FARMALL® 656**  
**TRACTOR**



**On the heels of the**



famous 706 and 806 comes

4-5 plow

**FARMALL 656**



## **NEW HEAVYWEIGHT** **in the "60 plus"** **horsepower class**

Take a close look and you may *still* have trouble telling the new 656 from a 706 or 806. You'll see the same styling, the same rugged construction and many of the same fine features from our biggest row crop tractors.

For example: Draft controlled hitch (often referred to as load controlled) with torsion bar lower link sensing. IH hydrostatic power steering. Power shift IPTO. Exclusive Torque Amplifier. Dyna-Life® clutch. The extremely efficient dry-type air cleaner. Modern, multi-range, workhorse engines. Big, flat platform—no gear shift on the deck. Adjustable, Super DeLuxe seat. Shock-proof lights. Optional, quick-on, rear duals. Cab, full of extras, if you like. And many more.

Yes, 656 is a 4-5 plow tractor, built for big work, but great on light loads too . . . and reasonable to run, with big tools or with light tools. This is today's "12 month worker"—the tractor too useful to do much loafing. That's why a new Farmall 656 is the best buy for any big or medium-sized spread.

*IH The people who bring you the machines that work*



FARMALL

656  
DIESEL



# MODERN POWER for modern farming

Whether you're farming more acres than you used to or just need helper power that can hustle with the biggest, here it is—the 656 to move up or speed up your 4-5 plow work.

The 656 engine is strictly modern—light, lean and tough. Don't even compare it to the overage, overweight engines some tractors still use. The 656 engine packs more power per pound. And its low-friction design has proved itself in countless hours of high-speed hard-pull farming. 656 engines feature IH multi-range power (900—1800 RPM) that lets you work full load at top rated RPM . . . or . . . shift up and throttle back for economical power at the speed you want. Multi-range power is an engine-saver and a fuel-saver with any load. Makes it easier for any operator to do good work.



## Gas, LP gas or diesel

Whichever fuel you farm with you're sure of money-making performance with a Farmall 656. These engines are built to handle a lot of hard work. They're tough . . . they're smooth . . . *dependable and economical*. 263 cu in gas and LP gas. 282 cu in diesel. And don't forget IH multi-range power: full power anywhere from 900 to 1800 RPM.



## 10 speeds with TA

Pull back Torque Amplifier lever, you reduce speed 33% and get 45% more pull. Use TA through tough spots . . . or to slow down for turns . . . to get heavy loads started then shift up, or to keep PTO speed up while reducing ground speed—harvesting, shredding, etc. Mighty useful.



## Good working speeds

The 656 is a smooth shifter with lever on the cowl to unclutter your foot and knee areas. Standard speeds five forward, one reverse. Ten forward, two reverse with TA. Full forward-reverse drive also available (but not with TA or on tractors with 1000 RPM pto) has five forward speeds and five faster reverse speeds, an ideal drive for loader operation.

Farmers who have driven the Farmall 656 call it the slickest shifting tractor they've ever handled. Speeds are right, too, in the good working ranges—and with shift-on-the-go TA, the 656 has instant pulling increase when you want it.

Ground Speeds MPH w/15.5-38 Tires*	GEAR	DIRECT	T.A.
	1	2½	1¾
	2	4	2¾
	3	5	3¾
	4	7	4¾
	5	15¾	10¾
Rev.	2¾	2	

Ground Speeds (Forward-Reverse Drive) on 15.5-38 Tires	GEAR	FWD	REV
	1	2½	3
	2	4	5
	3	5	6
	4	7	8½
	5	15¾	19½

\*For actual ground speed, two factors must be considered: tire size and slippage.

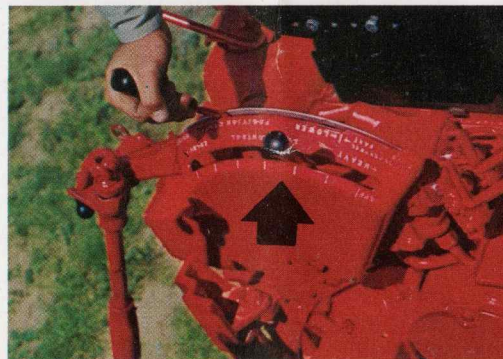


## Torsion bar draft controlled **HITCH**

**Has exclusive automatic drop retard**—lowers heavy implements at the same rate as light ones—easy and safe. Torsion Bar lower link sensing provides a weight-transfer control system that works so fast it literally gets you out of trouble before you get into it. This hitch senses load changes as small as 5% . . . as fast as 3 times per second. It gives you automatic traction control—more weight or less on rear wheels, as needed. Works so fast, so accurately you hardly know it's happening. You will notice uniform engine operation. Less wheel spin. Less tire wear. Better fuel economy. Less need for shifting.

Farmall 656 is available with 3-point hitch or 2-point Fast-Hitch (both with built-in diagonal float), or with standard vertically adjustable drawbar.

**Red line shows** how IH torsion bar draft (load) control makes small, fast adjustments to load changes. White line represents other systems: slow, erratic, commonly causing excess slippage, fuel waste.



**Simple 2-lever controls.** Just set the LOAD lever (arrow) at the spot that lets plow suck in to the depth you want. To increase depth, just nudge lever forward. To decrease depth, nudge lever back. POSITION CONTROL lever (in operator's hand) raises and lowers implement at row ends . . . always returns implement to preset depth.

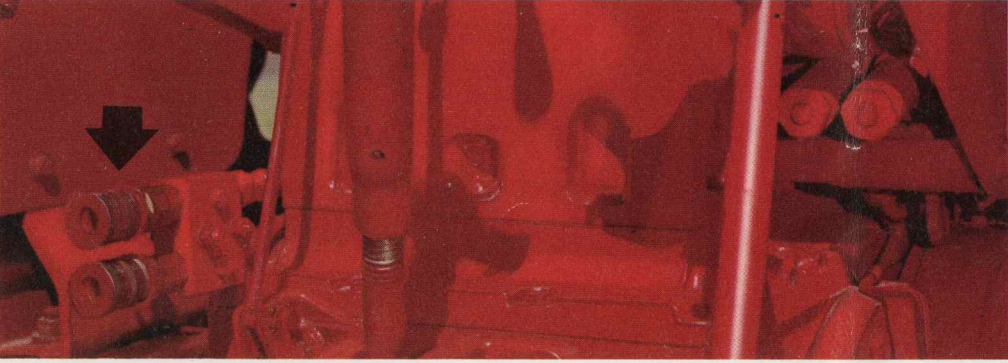


## Big Capacity HYDRAULICS

Farmall 656 offers hydraulic capacity to spare for heavy duty farming.

Basic pump has 12 GPM capacity, 3.5 GPM of which is diverted for hydrostatic power steering. The remaining 8.5 GPM is available for auxiliary hydraulic equipment and for lubricating the transmission. A separate 7.5 GPM pump powers the hitch. And when the hitch is not in operation, flow from the 7.5 GPM pump is added to the output of the 12 GPM pump for extra power to auxiliary outlets. Tractors with power shift IPTO have an additional 3 GPM pump to operate the PTO hydraulic clutch. All pumps are gear-type, constant-running—easily accessible.

Total capacity is more than ample for fast powerful hydraulic response on any task you set for your Farmall 656.



**Remote control levers** (in operator's hand) are long-handled for easy reaching...have big grips...operate smoothly. New rear outlets (left) couple and uncouple under pressure. Auxiliary hydraulic equipment for the Farmall 656 is available to meet your every need.



# Work in real **COMFORT**

Farmers today want more than power from a tractor . . . they want a tractor that's comfortable and easy to drive, as well.

IH took this into consideration as you'll see first time you settle in the seat of a 656. Of course there's more to comfort than a seat. There's IH hydrostatic power steering. There's the clean, uncluttered deck (with no gearshift lever). And handy hydraulic levers. There's the IPTO power shift lever at your right hand so your left hand is free to steer *and* you can still see what you're doing without twisting yourself in knots. Mounting step and hand-hold are located to make getting aboard easy.

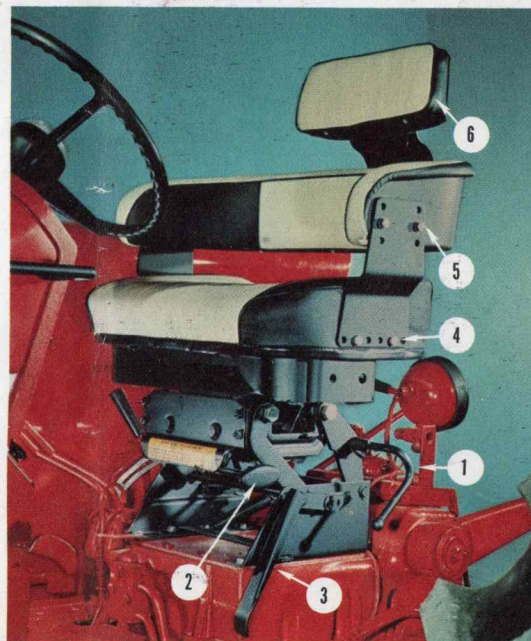
You'll like the 656 for stand-up driving. You'll appreciate the handy gearshift and TA . . . and easy-to-read dials. In fact, we know you'll like "working in comfort" on a new Farmall 656.



**IH Hydrostatic Power Steering** is positively the best hydrostatic steering of all. No mechanical linkage between steering wheel and front wheels. Won't oversteer. Maintains "feel." You always have firm, confident control. And you retain positive steering even with engine off.

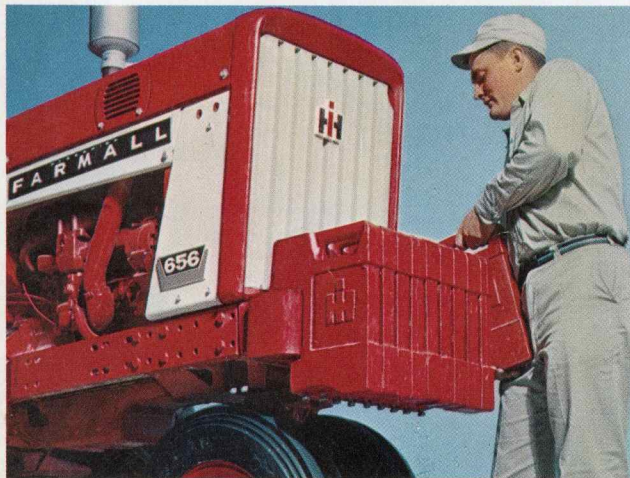


**Power Shift IPTO.** Power shift means smooth shift. You can feather PTO in and out of operation gently, under perfect control. Start up gently . . . clear overloads in harvesting equipment, no strain. Long, handy control lever. Farmall 656 is available with either 540 or 1000 RPM shaft.

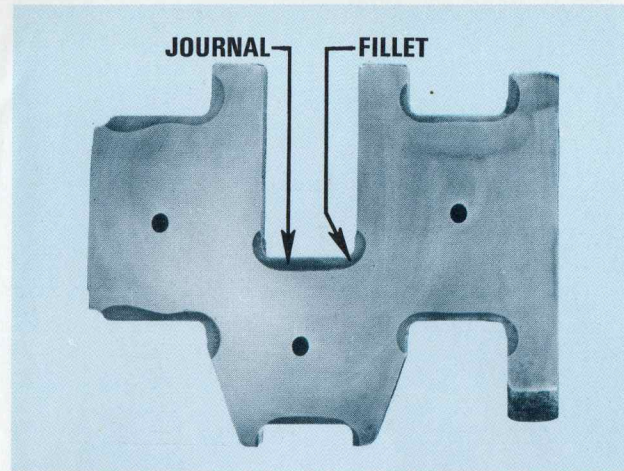


**Six-Way Adjustable Comfort!** This seat gives you more cushion, more comfort, more support where you want it plus exceptional provision for adjustment. (1) Adjust seat up and down for leg length. (2) Precise adjustment for operator's weight. (3) Press here with your heel and seat moves back for stand-up driving. (4) Adjust wrap-around fore and aft in relation to seat. (5) Adjust wrap-around up and down in relation to seat (6). Backrest extension also adjusts up and down for comfort. It's the most comfortable seat on any tractor.

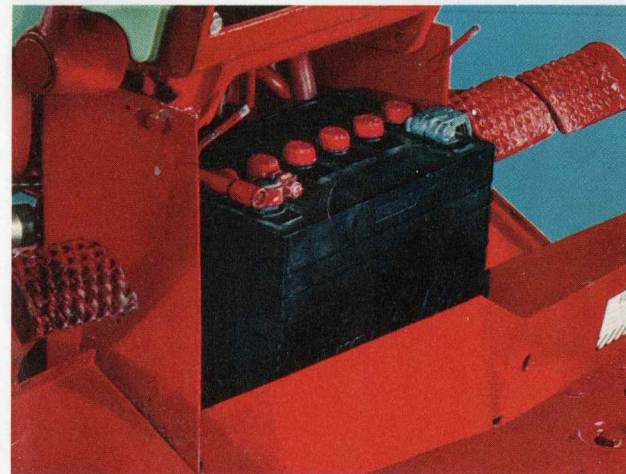
# CHECK these high-value 656 features



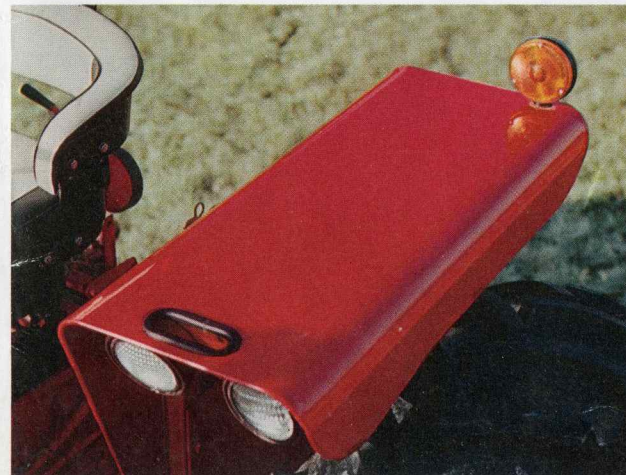
**Weights.** The 656 carries up to ten easy-on 70 pound suitcase weights up front. And rear wheel weights can be added in sets as needed, 300 pounds per set, in easy-handling 75-pound sections.



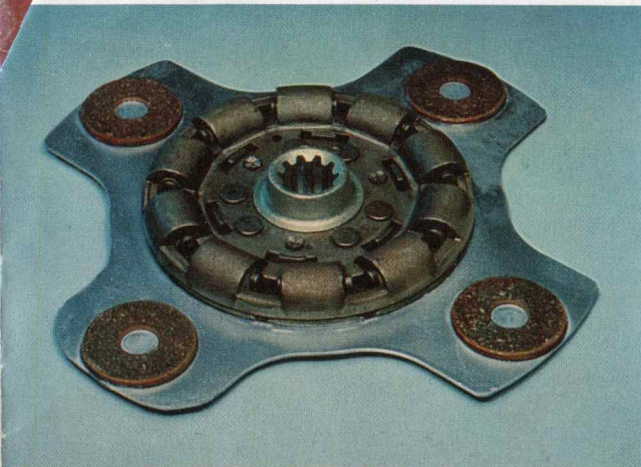
**Elotherm** crankshaft in the diesel model 656 is a marvel of metallurgy, with journal and fillet areas induction hardened by exclusive IH process to increase endurance strength up to 100% without increasing weight.



**Battery** access is excellent in both gasoline (shown) and diesel models. 12-volt system diesel has two 6-volt, 135-ampere hour batteries in series. Gasoline has one 12-volt, 50-ampere hour battery. LP gas —one 12-volt, 50-ampere hour battery.



**Fenders** available include new adjustable deluxe fenders shown here. Deluxe fenders are heavy, tough, flattops offering full protection and including four adjustable shock-proof lights. Rear light is a combination white or red unit. Flashing warning light for road travel flashes amber forward, red to rear whenever the red tail light is on.



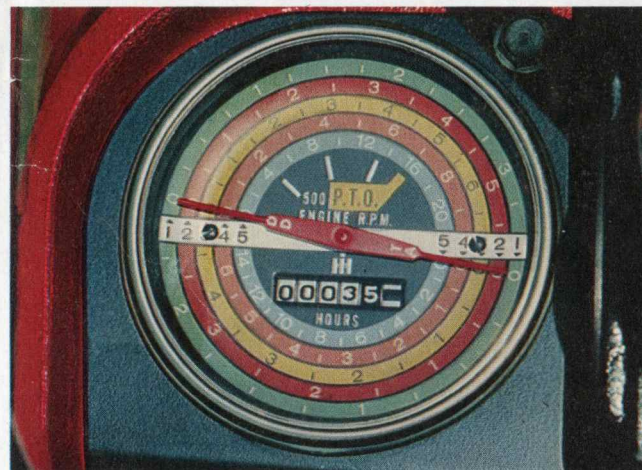
**Dyna-Life Clutch.** This 11-inch diameter clutch has special cerametallic pads that provide clutch life five times longer than much larger, old-fashioned fiber types. The secret is cool operation. Dyna-Life dissipates heat very quickly, the clutch on your Farmall 656 lasts much longer.



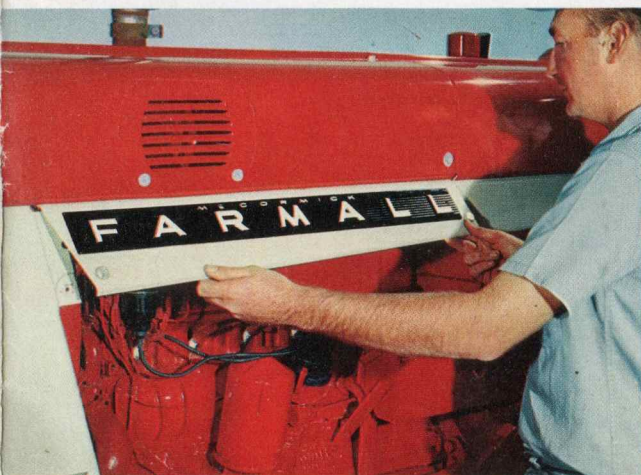
**32 amp Alternator** is optional. Charges even at idling RPM...keeps battery up for good, strong starting power. Dependable 25 amp generator is standard.



**Dry-type air cleaner** beats one of the main causes of engine wear. Maintains 99.9% efficiency compared to oil bath air cleaners which can drop to as low as 40% efficiency. Has automatic "dirt dump." Reusable element. No oil. Electric service interval indicator available.



**Speedometer-tachometer** tells at a glance your ground speed, engine RPM and hours of operation. Speeds based on standard tires, will vary with tire size.



**Side panels** come off easy. Two knurled screws per panel. Makes upper part of engine easy to get at.



You can count on genuine IH parts to fit and wear like originals. They're built right to work right. For older machines IH replacement parts are sometimes better than original equipment, for you get the full benefit of the latest developments in IH research, engineering and testing.

## SPECIFICATIONS

### Horsepower (Official test, observed)

	Gas	Diesel
Pto.....	63.8	61.5
Drawbar.....	54.9	54.9

### Engine

	Carbureted	Diesel
Number of cylinders.....	6	6
Speed, rated full load.....	1800	1800
Governed speed range.....	900 to 1800	900 to 1800
Bore and stroke, in.....	3 <sup>11</sup> / <sub>16</sub> x4.39	3 <sup>11</sup> / <sub>16</sub> x4.39
Piston displacement, cu. in....	263	282

### Ground Speeds MPH w/15.5-38 Tires\*

GEAR	DIRECT	T.A.
1	2 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>4</sub>
2	4	2 <sup>3</sup> / <sub>4</sub>
3	5	3 <sup>1</sup> / <sub>4</sub>
4	7	4 <sup>3</sup> / <sub>4</sub>
5	15 <sup>3</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub>
Rev.	2 <sup>3</sup> / <sub>4</sub>	2

### Ground Speeds (Forward-Reverse Drive) on 15.5-38 Tires

GEAR	FWD	REV
1st	2 <sup>1</sup> / <sub>2</sub>	3
2nd	4	5
3rd	5	6
4th	7	8 <sup>1</sup> / <sub>2</sub>
5th	15 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>

### Tractor Dimensions

Wheelbase, in.....	96
Length overall, inc. 3-pt. hitch, in.....	152

\*For actual ground speed, two factors must be considered: tire size and slippage. Specifications subject to change without notice.

Width, minimum tread, in.....	87
Height to top of steering wheel, in.....	77
Minimum ground clearance, under front axle, in.....	21
Minimum ground clearance under rear main frame, with drawbar, in.....	15

**Other features:** Anti-freeze (domestic only). Cigar lighter. Super De Luxe seat, with backrest and backrest extension, on positioning linkage. Drawbar, vertically adjustable. 6<sup>1</sup>/<sub>2</sub>" diameter double disc, self-energizing brakes with dual pedal safety latch. Electric fuel gauge (gasoline and diesel). Dry-type air filter. Hydrostatic power steering. Speedometer-Tachometer. Generator warning light and discharge indicator. Oil pressure warning light. Lights (2 front, adjustable, side-mounted with combination rear lamp and tail-light, adjustable) and flashing rear light. D-C generator. Hydraulic oil cooler. 12 gpm hydraulic pump. Vertical muffler, spark-arresting type. Tool box. Front tires 6.00-16, 6-ply (F2). Rear tires, 15.5-38, 6-ply (R1). Wet battery. Parking brake. Dyna-Life clutch.

### Rear Wheel Tread

Std. axle & 38-in. tires w/double beaded rims.....	50 to 96
Std. axle & 34-in. tires.....	60 to 98
Std. axle & 38-in. tires w/power adjusted rims....	56 to 102
Wide tread axle, max. tread (power adjusted wheels).....	114
Wide tread axle, max. tread without power adjusted wheels.....	108
Dual 38-in. tires.....	50 inner tires 90 outer tires

### Front Wheel Tread

Tricycle.....	8 and 16
Adjustable axle.....(choice of 50 to 74 or 56 to 80)	
Vertically adjustable drawbar (roller type, swinging)	
Height above ground, in.....	16
Lateral swing, total in.....	17

Turning radius (tricycle)	
Without braking, ft.....	9.7
With braking, ft.....	9.2

### Capacities

	Gasoline	LP Gas	Diesel
Cooling system, qt.....	20.5	21	21.5
Fuel Tank, gal.....	33	38.9 (w/gauge)	33
Engine lube, qt.....	9	9	9
Trans. and dif., gal.....	17	17	17

### Shipping Weight, lb.

	Gasoline	LP Gas	Diesel
Tricycle.....	6,276	6,426	6,550
With 3-point hitch, swinging drawbar, pto, torque amplifier, hydraulics, w/2 aux. valves and side and rear manifolds, 15.5-38, 6-ply and 6.00-16, 6-ply tires, de luxe seat.			

**Other Attachments:** One or two auxiliary hydraulic valves, 4-position, detented, with hydraulic manifolds. Check valves, double acting, for tractors with auxiliary valves. Cab. Rear combination tail light and stop light for cab—includes license bracket. Dry battery. Belt pulley, rear-mounted for tractors with 540 RPM pto. Three-point hitch, Category II (draft control) with independent swinging drawbar. Two-point Fast-Hitch (draft control) with independent swinging drawbar. Cross drawbars for 2-point and 3-point hitches. Swinging drawbar for vertically adjustable drawbar. Electric air cleaner indicator. Horn. Hydraulic remote control. Rubber-suspended, hydraulic shock absorbing seat suspension—vertical adjustments with weight control. Weights. Generator alternator. Extra large tool box. Forward-reverse drive (not with TA or 1000 RPM pto). De Luxe fenders w/front lights (in lieu of two front, side-mounted lights). Single front tires. Torque Amplifier. Power Shift PTO, 540 or 1000 RPM. Dual rear wheels. Wide tread rear axle. Adjustable wide front axle. Power adjusted rear wheels. Wide selection of alternate tires also available.

## FARMALL 656



INTERNATIONAL HARVESTER EXPORT COMPANY  
CHICAGO, ILLINOIS, U. S. A.