



HESSTON[®]

THE PRIME LINE

High 90 Series 2 & 4 Wheel Drive Tractors



High Power. State-of-the-art Features. Durability. Versatility. High 90 Series Tractors.

Designed for your heaviest uses. Now and in the future.

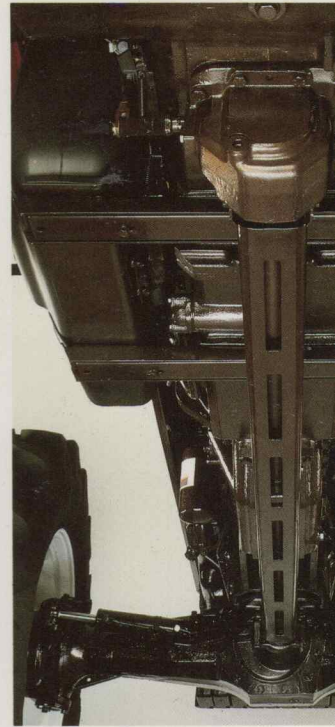
When you invest in a new tractor, features that represent the leading edge of equipment technology are important. High power output, versatile transmission options, hydraulics designed to handle heavy loads, comfort for long hours of operation and overall machine durability are at the forefront of your decision. The Hesston high 90 series tractors are designed to meet all these needs. Ranging from the 130-90 (at 107 PTO hp), to the 180-90 (at 162 PTO hp) there are tractors to suit almost any size of operation and still allow room for expansion.

Each model is equipped with a turbo-charged Fiat fuel efficient diesel engine designed to produce the maximum amount of power, and still operate efficiently and cleanly. This engine is supported by over 50 years of experience in the most demanding conditions around the world where high power output and maximum fuel efficiency are a necessity. Efficiency is further increased by spiral intake systems and Omega profile

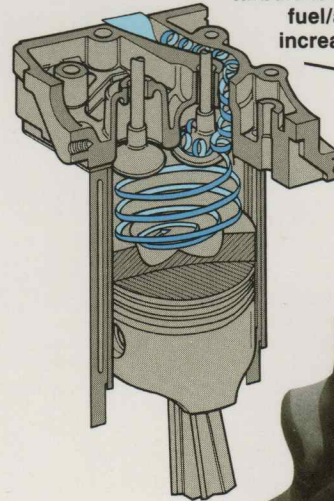
pistons for better fuel/air mix in the cylinders.

All this power is controlled from Hesston's Wide-Body Supercomfort Cab. This cab features a large glass area for excellent visibility, both front and rear, and an instrument cluster that gives instant information on eight vital engine functions as well as engine speed, fuel level and engine temperature. Gear and range selectors are placed on the console within easy reach for comfortable operation. (Hydraulic controls are to the right of the seat and fall easily to hand for sure operation.) The hydraulic system includes the unique Lift-O-Matic control which retains implement position information even through numerous up-down cycles.

For maximum versatility, durability and features on the forefront of design, Hesston high 90 series tractors offer what you require. And along with all these features is one that comes standard on each model... the Hesston name and reputation for excellence.

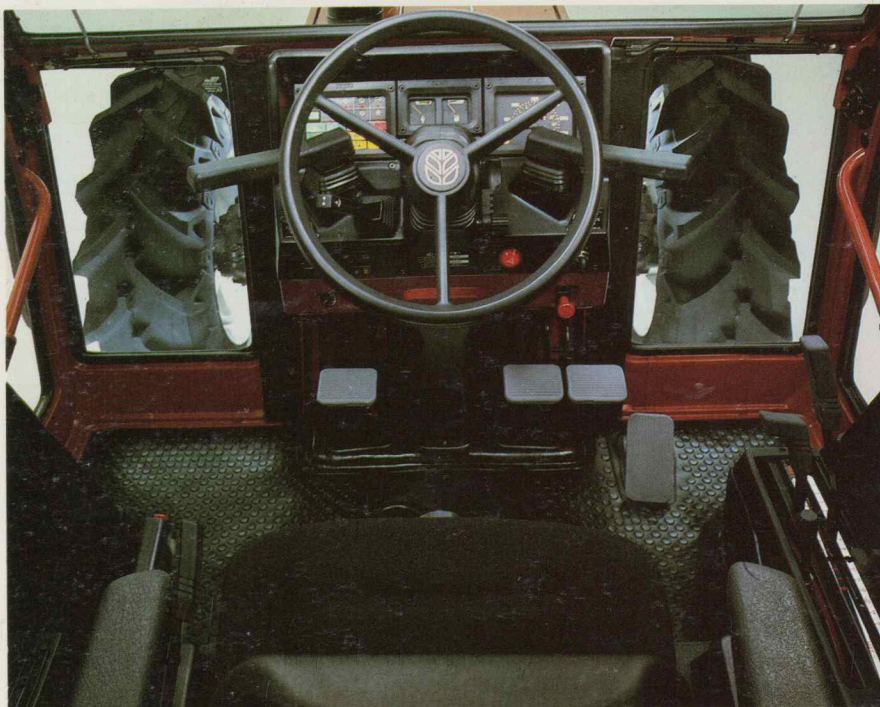


Exclusive spiral intake ducts increase air intake and turbulence for improved fuel/air intermix to increase efficiency.

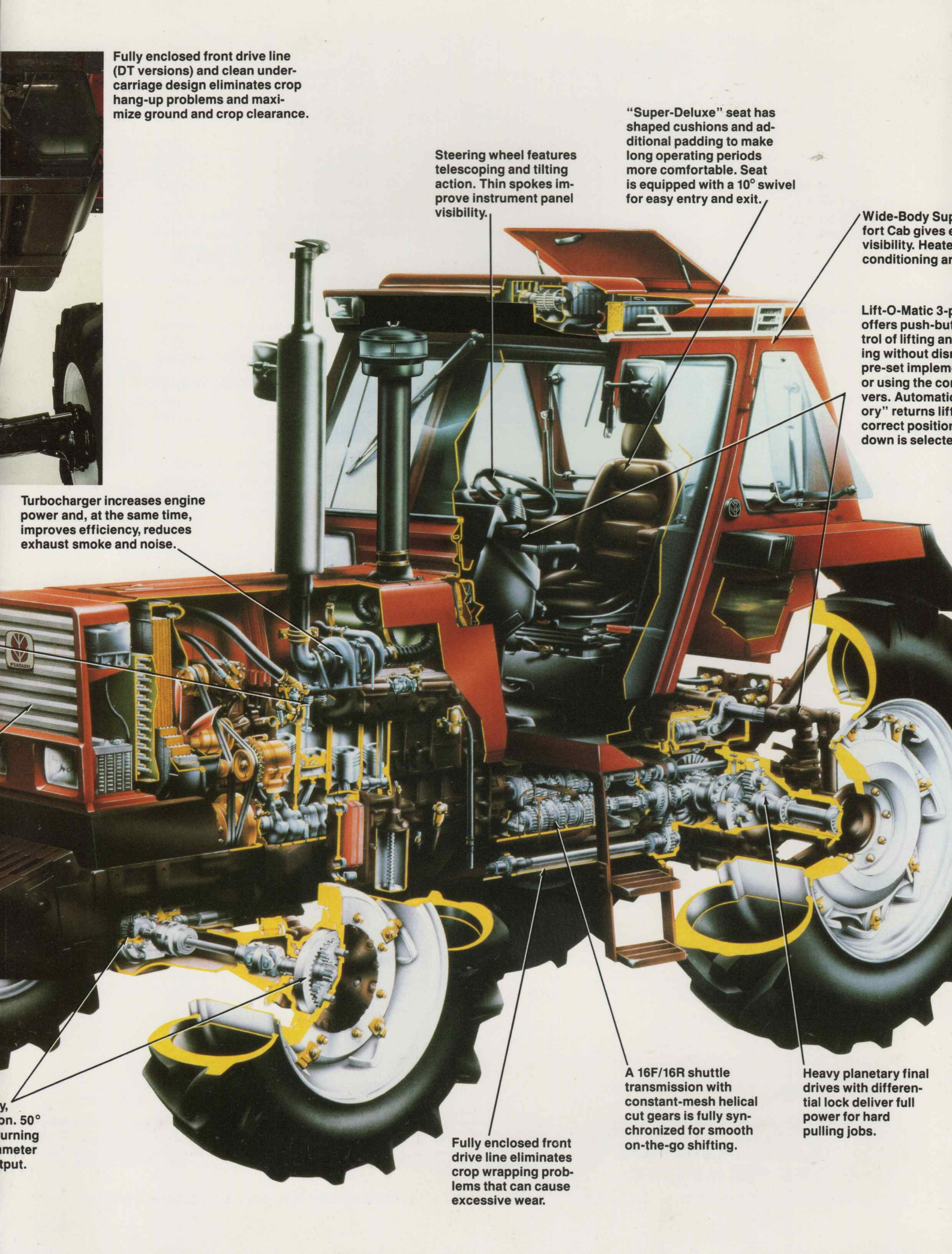


Easy-access front grill and slide-out air conditioner condenser allow quick access for cleaning and service.

Center-line Balanced Power four wheel drive provides excellent maximum ground clearance and proper steering angle and 10° camber improvement for tighter maneuvering. Large planetary final drives increase torque.



Walk-through convenience, logical and convenient control placement, high-backed armchair seat, air-conditioning and heating plus large glass area give high operator comfort levels for long working hours, even in rough field conditions.



Fully enclosed front drive line (DT versions) and clean undercarriage design eliminates crop hang-up problems and maximize ground and crop clearance.

"Super-Deluxe" seat has shaped cushions and additional padding to make long operating periods more comfortable. Seat is equipped with a 10° swivel for easy entry and exit.

Steering wheel features telescoping and tilting action. Thin spokes improve instrument panel visibility.

Wide-Body Super-Deluxe Cab gives excellent visibility. Heater and air conditioning are standard.

Lift-O-Matic 3-point hitch offers push-button control of lifting and lowering without disengaging pre-set implements or using the control levers. Automatic "Return to Position" returns lift arms to correct position when lift down is selected.

Turbocharger increases engine power and, at the same time, improves efficiency, reduces exhaust smoke and noise.

A 16F/16R shuttle transmission with constant-mesh helical cut gears is fully synchronized for smooth on-the-go shifting.

Heavy planetary final drives with differential lock deliver full power for hard pulling jobs.

Fully enclosed front drive line eliminates crop wrapping problems that can cause excessive wear.

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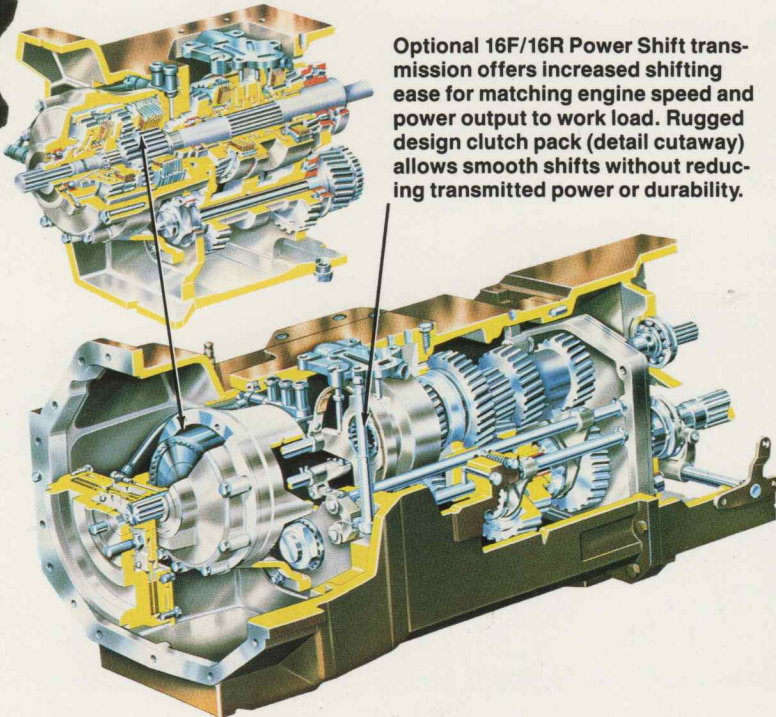


Walterscheid quick attach hitch (standard on 160-90 and 180-90) permits faster, easier attachment of mounted implements.

STANDARD TRANSMISSION MAXIMUM SHIFT SPEEDS (MPH)															
Models 130-90/130-90DT & 140-90/140-90DT (Models 160-90/160-90DT & 180-90/180-90DT)															
FORWARD				LOW				NORMAL LOW				HIGH			
				1.9 2.4 2.9 3.5				3.9 4.8 5.8 7.3				9.9 12.2 14.7 18.2			
				(2.0) (2.5) (3.0) (3.8)				(4.2) (5.1) (6.1) (7.6)				(10.4) (12.7) (15.4) (19.0)			
NORMAL HIGH															
4.4 5.4 6.5 8.1															
(4.6) (5.6) (6.8) (8.4)															
REVERSE				LOW				NORMAL LOW				HIGH			
				1.5 1.9 2.3 2.9				3.1 3.8 4.7 5.8				7.9 9.6 11.6 14.4			
				(1.6) (2.0) (2.4) (3.0)				(3.3) (4.0) (4.9) (6.1)				(8.1) (10.2) (12.3) (15.3)			
NORMAL HIGH															
3.5 4.2 5.1 6.4															
(3.7) (4.5) (5.6) (6.8)															



Cat. II hydraulic lift offers draft, position and mixed control. Precision lower-link flexion bar sensing system maintains positive depth control for improved operation. Control valve regulates lowering speed or locks the lift in raised position.



Optional 16F/16R Power Shift transmission offers increased shifting ease for matching engine speed and power output to work load. Rugged design clutch pack (detail cutaway) allows smooth shifts without reducing transmitted power or durability.

Speeds (MPH)

16x16 (Also Optional Power Shift)	Range	Gear	130-90/ 130-90DT 140-90/ 140-90DT MPH	160-90/ 160-90DT 180-90/ 180-90DT MPH
↑ FORWARD ↓	IV	4	14.6-18.2	15.5-19.0
		3	11.8-14.7	12.6-15.4
		2	9.7-12.2	10.4-12.7
		1	7.9- 9.9	8.5-10.4
	III	4	6.5- 8.1	6.8- 8.4
		3	5.2- 6.5	5.6- 6.8
		2	4.3- 5.4	4.6- 5.6
		1	3.5- 4.4	3.8- 4.6
	II	4	5.8- 7.3	6.2- 7.6
		3	4.7- 5.8	5.0- 6.1
		2	3.9- 4.8	4.2- 5.1
		1	3.1- 3.9	3.4- 4.2
I	4	2.8- 3.5	3.1- 3.8	
	3	2.3- 2.9	2.4- 3.0	
	2	1.9- 2.4	2.0- 2.5	
	1	1.5- 1.9	1.6- 2.0	
↑ REVERSE ↓	RI	1	1.2- 1.5	1.3- 1.6
		2	1.5- 1.9	1.6- 2.0
		3	1.8- 2.3	2.0- 2.4
		4	2.3- 2.9	2.5- 3.0
	RII	1	2.5- 3.1	2.7- 3.3
		2	3.1- 3.8	3.3- 4.0
		3	3.8- 4.7	4.0- 4.9
		4	4.6- 5.8	5.0- 6.1
	RIII	1	2.8- 3.5	3.0- 3.7
		2	3.3- 4.2	3.7- 4.5
		3	4.1- 5.1	4.6- 5.6
		4	5.1- 6.4	5.6- 6.8
RIV	1	6.3- 7.9	6.6- 8.1	
	2	7.7- 9.6	8.3-10.3	
	3	9.3-11.6	10.1-12.3	
	4	11.5-14.4	12.5-15.3	

SPECIFICATIONS: Hesston High 90 Series Tractors

	130-90/130-90DT	140-90/140-90DT		
HORSEPOWER	107 PTO hp at 2,500 RPM*	123 PTO hp at 2,500 RPM*		
ENGINE				
Type	Turbocharged Fiat 8065.25 4-stroke direct injection diesel.	Turbocharged Fiat 8065.25 4-stroke direct injection diesel.		
No. Cylinders	6	6		
Bore and Stroke	4.09x4.52	4.09x4.52		
Displacement	358 cu. in.	358 cu. in.		
Compression Ratio	16.5:1	16.5:1		
Starting Assist	Ether	Ether		
Lubrication System	Force-feed with full-flow filter.	Force-feed with full-flow filter.		
Cooling System	Pressurized with water pump; 4-row copper tube and fin radiator; engine oil inter-cooler.	Pressurized with water pump; 5-row copper tube and fin radiator; engine oil inter-cooler.		
ELECTRICAL SYSTEM	12-volt starting and lighting; 65 amp alternator.	12-volt starting and lighting; 65 amp alternator.		
LIGHTING SYSTEM	2 headlights, 4 quartz-halogen worklights, flashing warning lights.	2 headlights, 4 quartz-halogen worklights, flashing warning lights.		
FUEL TANK CAPACITY	74 gal. (U.S.)	74 gal. (U.S.)		
CLUTCH	14" dia. single plate dry-type (cerametallic buttons.)	14" dia. single plate dry-type (cerametallic buttons.)		
TRANSMISSION	16F/16R constant-mesh gear-box; fully synchronized.	16F/16R constant-mesh gear-box; fully synchronized.		
FINAL DRIVE	Planetary with hydraulic differential lock.	Planetary with hydraulic differential lock.		
FRONT WHEEL DRIVE (DT)	Power-driven, centrally located differential; planetary final drives in hubs; manually engaged; hydraulic differential lock.	Power-driven, centrally located differential; planetary final drives in hubs; manually engaged; hydraulic differential lock.		
BRAKES				
Service	Hydrostatically-actuated, disc-type.	Hydrostatically-actuated, disc-type.		
Parking	Dual plate, oil-bath, fully independent.	Dual plate, oil-bath, fully independent.		
POWER TAKE-OFF	1 $\frac{3}{8}$ " 6- and 21-tooth shafts, 540 and 1,000 RPM (at 2,260 and 2,458 engine RPM respectively); fully independent.	1 $\frac{3}{8}$ " 6- and 21-tooth shafts, 540 and 1,000 RPM (at 2,260 and 2,458 engine RPM respectively); fully independent.		
HYDRAULIC LIFT				
Type	Cat. II with telescopic lower links and sway blocks; draft, position and mixed control; draft control through lower links. Optional Cat. II-III Walterscheid quick-attach hitch. Independent swinging drawbar.	Cat. II with telescopic lower links and sway blocks; draft, position and mixed control; draft control through lower links. Optional Cat. II-III Walterscheid quick-attach hitch. Independent swinging drawbar.		
Drive	Gear-type pump mounted on front engine timing cover; 13.4 gal/min. at 2,500 engine RPM.	Gear-type pump mounted on front engine timing cover; 13.4 gal/min. at 2,500 engine RPM.		
Relief Valve	2,450 psi opening pressure.	2,450 psi opening pressure.		
Capacity	7,042 lbs.	9,750 lbs. (estimate)		
HYDRAULIC SYSTEM				
Steering	Hydrostatic with independent circuit.	Hydrostatic with independent circuit.		
Remotes	Three aux. double-acting valves with quick couplers that operate under pressure.	Three aux. double-acting valves with quick couplers that operate under pressure.		
SHIPPING WEIGHT	130-90	130-90DT	140-90	140-90DT
With Hydraulic Lift, 3-Point Linkage, Cast Wheels and Cab	11,800 lbs.	13,100 lbs.	12,015 lbs.	13,338 lbs.
DIMENSIONS (APPROX.)				
Wheelbase	108.25"	105.25"	108.25"	105.25"
Overall Length	162.75"	164.75"	162.75"	164.75"
Height to Top of Hood	70.75"	70.5"	70.75"	70.5"
Height to Top of Cab	112"	112"	112"	112"
TURNING RADIUS				
Brakes Applied	12'8"	16'10"	12'8"	16'10"
TREAD WIDTH				
Front	63" to 82.75"	64" to 96"	63" to 82.75"	64" to 96"
Rear	60" to 117"	60" to 117"	60" to 117"	60" to 117"
TIRES				
Front	11.00-16	14.9-28	11.00-16	14.9-28
Rear	18.4-38 R1	18.4-38 R1	18.4-38 R1	18.4-38 R1
SUPERCOMFORT CAB	Standard with air conditioning.		Standard with air conditioning.	
HIGH AIR INTAKE	Standard		Standard	
AUX. LIFT CYLINDER	Optional		Optional	
EXTRA AND/OR OPTIONAL EQUIPMENT (ALL MODELS)				
Transmissions	16F/16R Power Shift 24F/8R Creeper Reduction Unit Tread width 60" to 129"			
Long Rear Axles (120")				
WEIGHTS				
Front	286 lb. weight carrier; 88 lb. weights (10 max.)			
Rear Wheel	110 lb. cast weights (6 max.)			
RADIO OPTIONS	AM/FM stereo; AM/FM stereo cassette.			
HYDRAULIC LIFT	Cat. IIIN; without hitch.			

*Official Test Results.

160-90/160-90DT

141 PTO hp at 2,200 RPM*

180-90/180-90DT

162 PTO hp at 2,200 RPM*

**HORSEPOWER
ENGINE****Type**

Turbocharged Fiat 8365.25 4-stroke direct injection diesel.

Turbocharged Fiat 8365.25 4-stroke direct injection diesel.

No. Cylinders

6

6

Bore and Stroke

4.53 x 5.12

4.53 x 5.12

Displacement

494 cu. in.

494 cu. in.

Compression Ratio

15.5:1

15.5:1

Starting Assist

Ether

Ether

Lubrication System

Force-feed with full-flow filter.

Force-feed with full-flow filter.

Cooling System

Pressurized with water pump; 5-row copper tube and fin radiator; engine oil inter-cooler. 12-volt starting and lighting; 65 amp alternator.

Pressurized with water pump; 5-row copper tube and fin radiator; engine oil inter-cooler. 12-volt starting and lighting; 65 amp alternator.

**ELECTRICAL SYSTEM
LIGHTING SYSTEM**

2 headlights, 4 quartz-halogen worklights, flashing warning lights.

2 headlights, 4 quartz-halogen worklights, flashing warning lights.

FUEL TANK CAPACITY

74 gal. (U.S.)

74 gal. (U.S.)

CLUTCH

12" dia. double disc dry-type (cerametallic buttons.)

12" dia. double disc dry-type (cerametallic buttons.)

TRANSMISSION

16F/16R constant-mesh gear-box; fully synchronized.

16F/16R constant-mesh gear-box; fully synchronized.

FINAL DRIVE

Planetary with hydraulic differential lock.

Planetary with hydraulic differential lock.

FRONT WHEEL DRIVE (DT)

Power-driven, centrally located differential; planetary final drives in hubs; manually engaged; hydraulic differential lock.

Power-driven, centrally located differential; planetary final drives in hubs; manually engaged; hydraulic differential lock.

BRAKES**Service**

Hydrostatically-actuated, disc-type.

Hydrostatically-actuated, disc-type.

Parking

Dual plate, oil-bath, fully independent.

Dual plate, oil-bath, fully independent.

POWER TAKE-OFF1 $\frac{3}{8}$ " 6- and 21-tooth shafts, 540 and 1,000 RPM (at 1,952 and 2,074 engine RPM respectively); fully independent.1 $\frac{3}{8}$ " 21-tooth shaft 1,000 RPM at 2,074 engine RPM; fully independent.**HYDRAULIC LIFT****Type**

Cat. II-III Walterscheid quick-attach hitch with sway blocks; draft, position and mixed control; draft control through lower links; external auxiliary lift cylinder. Independent swinging drawbar.

Cat. II-III Walterscheid quick-attach hitch with sway blocks; draft, position and mixed control; draft control through lower links; external auxiliary lift cylinder. Independent swinging drawbar.

Drive

Gear-type pump mounted on front engine timing cover; 14.7 gal./min. at 2,200 engine RPM.

Gear-type pump mounted on front engine timing cover; 14.7 gal./min. at 2,200 engine RPM.

Relief Valve

2,450 psi opening pressure.

2,450 psi opening pressure.

Capacity

12,750 lbs.

12,750 lbs.

HYDRAULIC SYSTEM**Steering**

Hydrostatic with independent circuit.

Hydrostatic with independent circuit.

Remotes

Three aux. double-acting valves with quick couplers that operate under pressure.

Three aux. double-acting valves with quick couplers that operate under pressure.

160-90**160-90DT****180-90****180-90DT****SHIPPING WEIGHT****With Hydraulic Lift, 3-Point Linkage, Cast Wheels and Cab**

13,350 lbs.

14,220 lbs.

13,448 lbs.

14,318 lbs.

DIMENSIONS (APPROX.)**Wheelbase**

116.75"

113.5"

116.75"

113.5"

Overall Length

170.25"

174.75"

171.75"

177.5"

Height to Top of Hood

72.25"

71.75"

72.25"

71.75"

Height to Top of Cab

112.25"

112.25"

115.5"

115.5"

TURNING RADIUS**Brakes Applied**

15'1"

18'9"

15'1"

18'9"

TREAD WIDTH**Front**

63" to 82.75"

64" to 96"

63" to 82.75"

72" to 88"

Rear

60" to 117"

60" to 117"

60" to 117"

60" to 117"

TIRES**Front**

11.00-16

14.9-28

11.00-16

16.9-28

Rear

18.4-38 R1

18.4-38 R1

20.8-38 R1

20.8-38 R1

SUPERCOMFORT CAB

Standard with air conditioning.

Standard with air conditioning.

HIGH AIR INTAKE

Standard

Standard

AUX. LIFT CYLINDER

Standard

Standard

**HESSTON**
THE PRIME LINE

Hesston Corporation may at any time, and from time to time, for technical or other necessary reasons, modify any of the data or specifications of the products described herein.

The information contained in this brochure is intended to be of a general nature only; specific operations may vary from the average, and both crop and machine management, as well as the weather, are important factors in end result.