



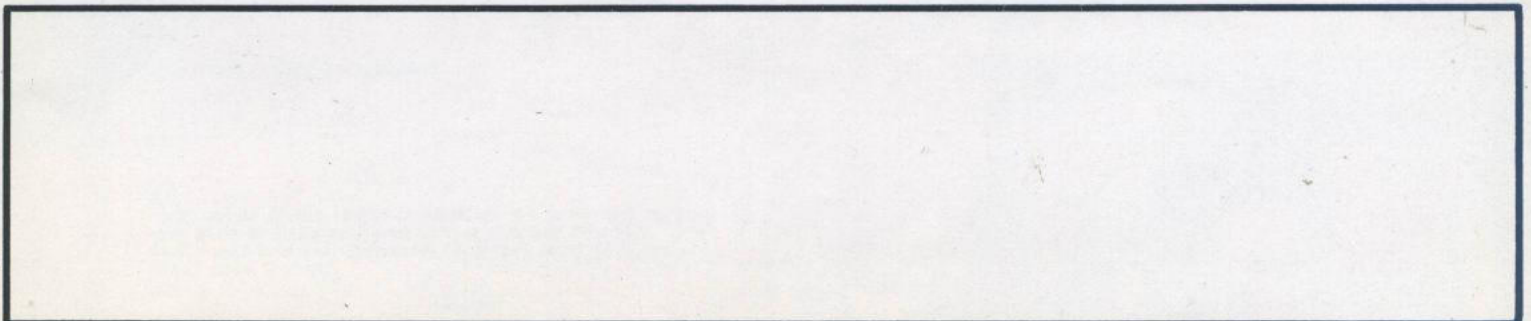
INTERNATIONAL



PAY LOADER

REAR WHEEL STEERING

SERIES B



PAY loaders from Heidelberg

7 30

... correspond in their technical concept, quality, construction and overall solidity to the renowned HOUGH INTERNATIONAL PAY loaders. They have the same fantastic performance, economy and versatility plus more operator safety in accordance with stringent continental safety regulations.

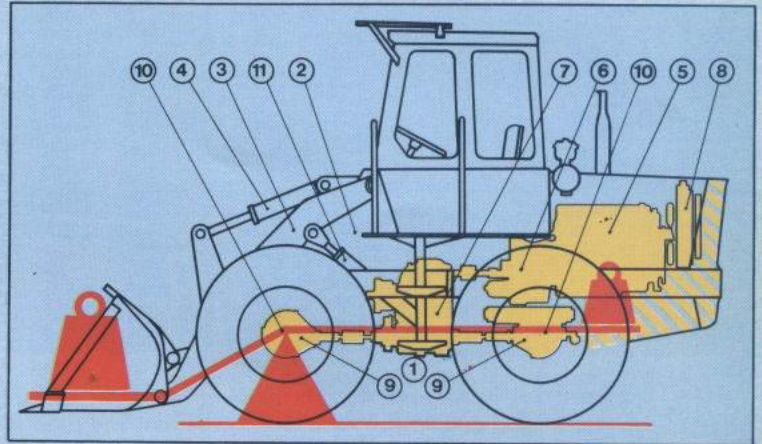
Numerous other features include — the unique Full Powershift transmission eliminating the necessity for stops between range shifts, torque converter which provides a wide range of speed/power ratios, planetary final drives for maximum gear reduction, and above-all INTERNATIONAL German-built Diesel engines which enjoy a worldwide reputation for reliability and economy. These and a host of other outstanding features all add up to low cost, high profit operation. Examine closely the highlight features detailed on the following pages and you'll surely discover that Heidelberg-built PAY loaders are the finest tractor shovels on the market.



Balance and Stability

Extra-long wheelbase, unique loader design combined with scientific weight distribution of power train eliminate practically the need of 'dead' counterweights. Because of the built-in balance and stability a smooth operation is ensured even under adverse conditions.

①





Robust frame design

The frames of all Heidelberg-built PAY loaders are designed for maximum strength and stability. Box sections and plating are made of special 'man-ten' steel and electrically welded to form one piece high strength structures.

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Superior loader design

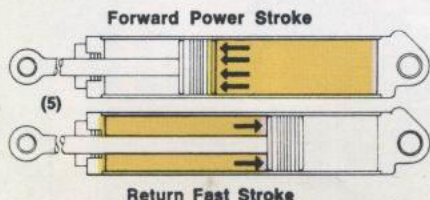
Heidelberg-built PAY loaders are equipped with low-weight, extra-strength booms manufactured from top grade steel. Less weight in loader design requires fewer counterweights, hence, added strength with no excessive weight. Equally important, boom arms are not connected rigidly together. The connection is made through the bell crank and extra-large bucket hinges. This imparts maximum flexibility and absorbs shocks and stresses imposed on the loading mechanism from corner loading. Sealed pivot points on boom and bucket mechanism require lubricating only every 50 hours (approx. once a week).

3



Single-cylinder bucket control with two-way hydraulic power

On the forward stroke the larger piston area is exposed to greater volume and effort for digging, lifting and breakout operations. The less powerful return stroke handles the lowering and bucket dumping actions which are faster and which require less effort.

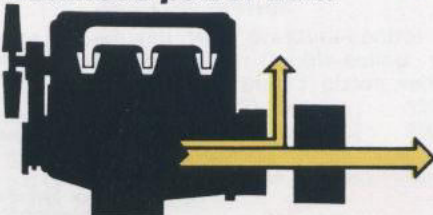


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High power reserves for toughest operation Modern Diesel engines of German manufacture

Heidelberg-built PAY loaders are powered by new direct-injection German-made INTERNATIONAL Diesel engines. These engines are renowned for their exceptionally low fuel consumption, smooth running and dependable long life operation. The maintenance-free Bosch distributor type fuel pump with automatic timing device ensures peak engine performance over the entire speed range.

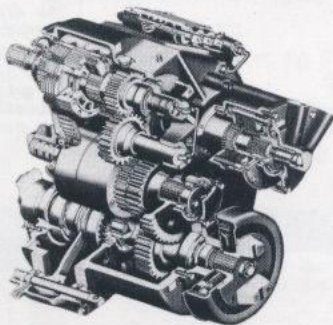
Balanced power train



Even under the severest operating conditions the well-balanced power distribution insures that the transmission and hydraulic system are automatically supplied with adequate power. The single stage, single phase torque converter provides an infinite number of ground speed-to-power ratios.

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Full Powershift transmission



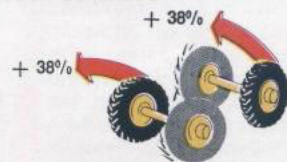
HOUGH designed and built, specifically for loader operation. A three-speed, full-reversing, constant-mesh, countershaft-type with balanced, rotating, hydraulic clutches which are continuously pressure filled, cooled and lubricated. Requires no stopping for "rangeshifts".

7

Independent cooling system for transmission and torque converter

Special attention is given to the cooling of the transmission and torque converter oil through the use of a separate oil-to-air radiator for continuous cooling of all oil. This is an INTERNATIONAL exclusive feature found only on PAY loader units as far as four-wheel-drive, rubber-tired tractor-shovels are concerned.

Power-transfer differentials



These differentials, on both axles, permit maximum tractive effort. When one wheel is capable of more effort than the other on the same axle, it can automatically receive up to 38% more torque.

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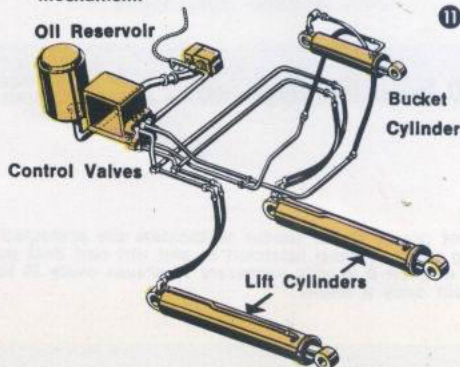
Final-drive planetaries

Heavy-duty planetary drives provide maximum gear reduction at point of final power application — in the wheel hubs. An exclusive feature of these HOUGH planetaries is that they do not have to be disassembled when servicing the brakes.

10

Responsive hydraulic power

The hydraulic system is closed and pressure-controlled to exclude air-borne dust and moisture. The oil is constantly circulated through a fine-mesh screen and a renewable cartridge type oil filter. All this extra protection prolongs the life of the hydraulic mechanism.



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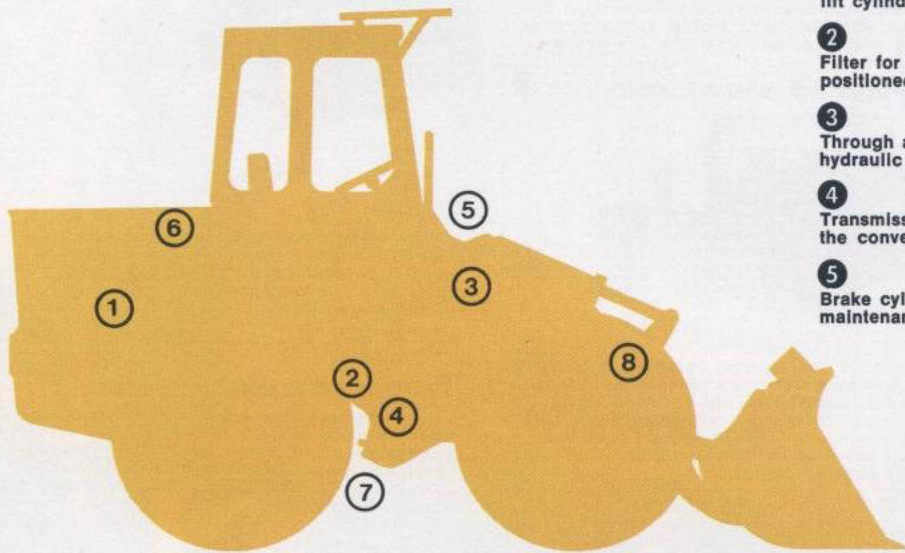
Supreme driving comfort and convenience

Simple operation results in increased performance and more profit on every job. Heidelberg-built PAY loaders are easy and safe to drive. All control levers are within easy reach. Instruments are conveniently placed for one-glance control. A deep, spring cushioned seat is adjustable fore and aft. A special hydraulic steering aid makes the PAY loader easy to handle even under adverse operating conditions. Precise, instant bucket control is insured by the responsive hydraulic system. The positive Full Powershift transmission enables the operator to change gear or direction of travel with one lever, without declutching.



Easy accessibility and simple maintenance

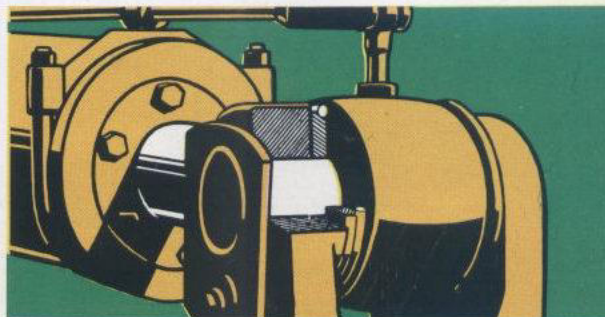
Machines which are easy to maintain are kept in better condition. Maintenance and service of a PAY loader is simplicity itself. The very few maintenance points are easily accessible. Replacement of parts is performed fast and simple. Easy maintenance, good accessibility to components means time saved and time is money — YOUR MONEY.



- ① Direct access to the engine after removing side panel. Maintenance work is not hindered by fenders, lift arms or lift cylinders.
- ② Filter for the torque converter and transmission oil is positioned in the front under the main frame.
- ③ Through a large opening free access is afforded to the loader hydraulic and air pressure pipe lines.
- ④ Transmission oil level is quickly checked and filled through the conveniently situated inlet pipe.
- ⑤ Brake cylinder and the air pressure tank are located for easy maintenance via a frame opening.
- ⑥ The dry type air cleaner is accessible from the operator's compartment.
- ⑦ All grease points for lubricating lift arms and bucket are accessible from the ground or the operator's compartment. The number of grease points are kept to a minimum.

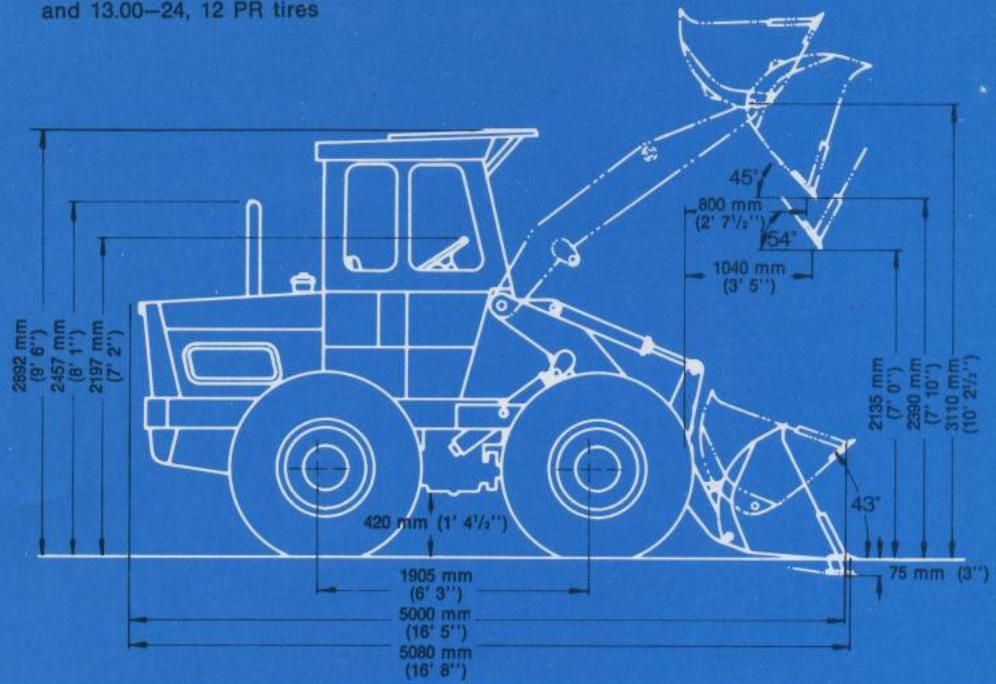
50 hour lubrication

- ⑧ Pivot points of the loader mechanism are protected by cord ring seals to keep lubricant in and dirt and dust out. As a result it is only necessary to grease every 50 hours or about once a week!





Dimensions shown are with
1 m³ / 1.3 cu. yd. bucket
and 13.00-24, 12 PR tires



Bucket Capacity, m³ (cu. yd.) 1 (1.3)
Tipping Load, kp (lbs.) 3490 (7695)
Maximum Lift, kp (lbs.) 4500 (9920)

Engine:

Make INTERNATIONAL
Model D-239
Intermittent net output, hp DIN 67
Rated engine speed, rpm 2200
Max. torque, mkp (lb. ft.) 23,6 (171)
at speed, rpm 1600
Number of cylinders 4
Bore, mm (in.) 98,4 (3 7/8)
Stroke, mm (in.) 128,5 (5.06)
Piston displacement, cm³ (cu. in.) 3911 (239)

Electric System:

Batteries 2 × 12 V, 88 Ah
Generator BOSCH 12 V, 160 W
Starter BOSCH 12 V, 4hp

Torque Converter:

Single stage, single phase;
Stall ratio 2.57 : 1

Transmission:

HOUGH Full Powershift
Speeds:

Gear	forward		reverse	
	kmph	(mph)	kmph	(mph)
1.	0-5,9	(3.7)	0-7,1	(4.4)
2.	0-12,9	(8.0)	0-15,5	(9,6)
3.	0-35,6	(22.1)	0-42,7	(26,5)

Brakes:

Service brake hydraulic
Location 4-wheel
Parking brake mechanical
Location fwd. transm. output shaft

Steering:

Rear wheel, hydraulically boosted
Steering axle oscillation 18°

Tires:

Front and rear 13.00-24 Tr. Gr., 12 PR
Turning Radius:
Outside rear corner, mm (in.) 5665 (223)

Dimensions:

Tread, mm (in.) 1675 (66)
Width over tires, mm (in.) 2010 (79)
Bucket width, mm (in.) 2130 (84)

Hydraulic System:

Closed with pressure-control and vacuum relief. Double-acting cylinders with chrome-plated piston rods:
Boom rams (2), mm (in.) 100 (4) ∅
Bucket ram (1), mm (in.) 100 (4) ∅
Steering ram (1)
Pump: gear-type, driven from accessory drive
Pump capacity; l. min (gal. min.) 100 (26.5)

Valve: two-spool with relief valve
Reservoir: electrically welded; hand hole for cleaning; oil level dip stick.

Capacities:

Fuel tank, (gal.) 112 (30)
Cooling system, 1 (gal.) 20 (5.3)
Engine lubrication, 1 (gal.) 10,5 (2.8)
Transm./torque-conv., 1 (gal.) 13 (3.4)
Hydraulic system, 1 (gal.) 45 (12)

Operating Weight:

with standard bucket, kg (lbs.) 5260 (11 820)
with 4-in-1 bucket, kg (lbs.) 5680 (12 520)
(Above weight includes 530 kg (1170 lbs.) standard counterweight.)

Regular Equipment

INTERNATIONAL D-239 Diesel engine, 4 cylinder, 67 hp intermittent net at 2200 rpm; dry type air cleaner with service gauge; muffler with rain cap; 12 Volt starting and lighting system incl. traffic and directional signal lights; torque converter drive; 3-speed full reversing HOUGH full power shift transmission; front and rear planetary type drive axles with torque proportioning differential; 4-wheel drive with mechanical disconnect on rear steering axle; 4-wheel hydraulic sealed service brakes; heater; speedometer (km); indicator-height; mechanical parking brake on drive shaft; hydraulic steering booster; 13.00-24, 12 PR tubeless grader type tires G-2; closed full double acting hydraulic system; pressure controlled; double acting bucket control cylinder; adjustable spring cushioned seat; access ladder to operator's compartment; horn; batteries; maintenance tool kit; grease gun.

Gauges

Engine oil pressure; clutch engagement oil pressure; engine temperature; torque converter oil temperature; fuel; hour meter.

Additional Equipment

Rear spot light; rear view mirrors; weather cab with windscreen wiper; set of 7 bucket teeth; bolted-on type; 4-in-1 bucket with teeth, less hydraulics; hydraulic kit for 4-in-1 bucket incl. 3-spool valve; bucket teeth guard; fender attachment; connecting parts for fender attachment; optional tires.

The Company's policy is one of continuous improvement and development therefore specifications are subject to change without notice. Illustrations may include optional equipment and accessories and may not include all standard equipment.



INTERNATIONAL HARVESTER COMPANY M.B.H., NEUSS/RHINE, GERMANY