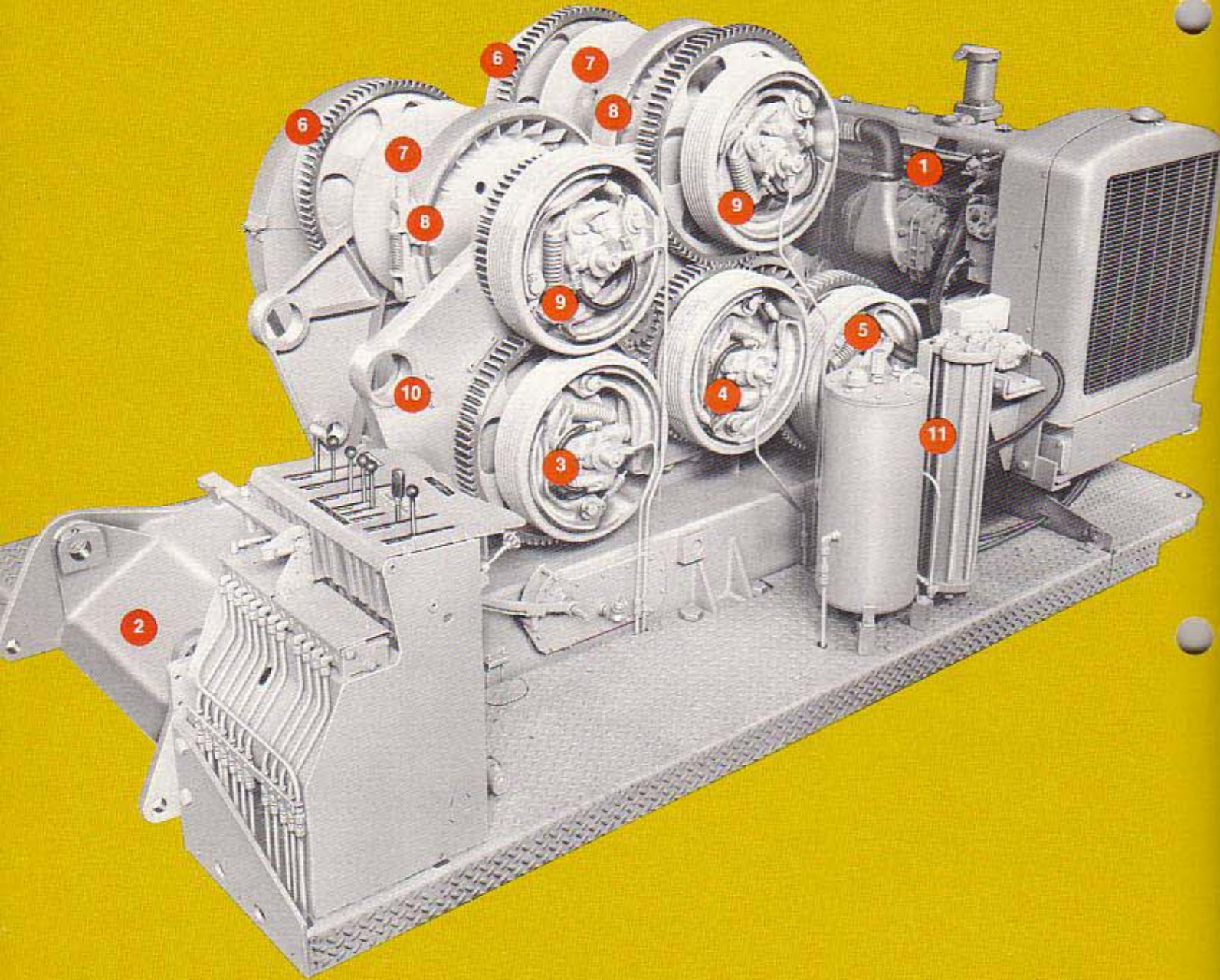


Full-Function Upper for Maximum Application Versatility

Performs Functions Simultaneously or Independently



1 DIESEL ENGINE WITH TORQUE CONVERTER: GM 4-71 is standard; GM 6-71 is optional.

2 UPPER FRAME: Jig welded, stress-relieved for strength and durability; line bored for shaft mountings which assures properly aligned shafts and gears and results in less wear and lower maintenance costs.

3 TRAVEL: (Optional) Independent, 2-shoe travel clutches transmit travel power smoothly into the track sprockets. (Only left-hand clutch is visible.)

4 SWING: 2-shoe swing clutches transmit power smoothly to the vertical swing shaft and pinion. (Only left-hand clutch is visible.)

5 BOOMHOIST: Independent, gear-driven with 2-shoe clutches for both raising and lowering of the boom. (Boom raising clutch on opposite end of shaft is not visible.)

6 HOIST CLUTCHES: 2-shoe hoist clutches for front and rear rope drums. (Clutch drums only visible.)

7 DRUMS: Front and rear rope drum laggings; smooth base to accommodate multiple layers of rope; laggings bolted to brake drums.

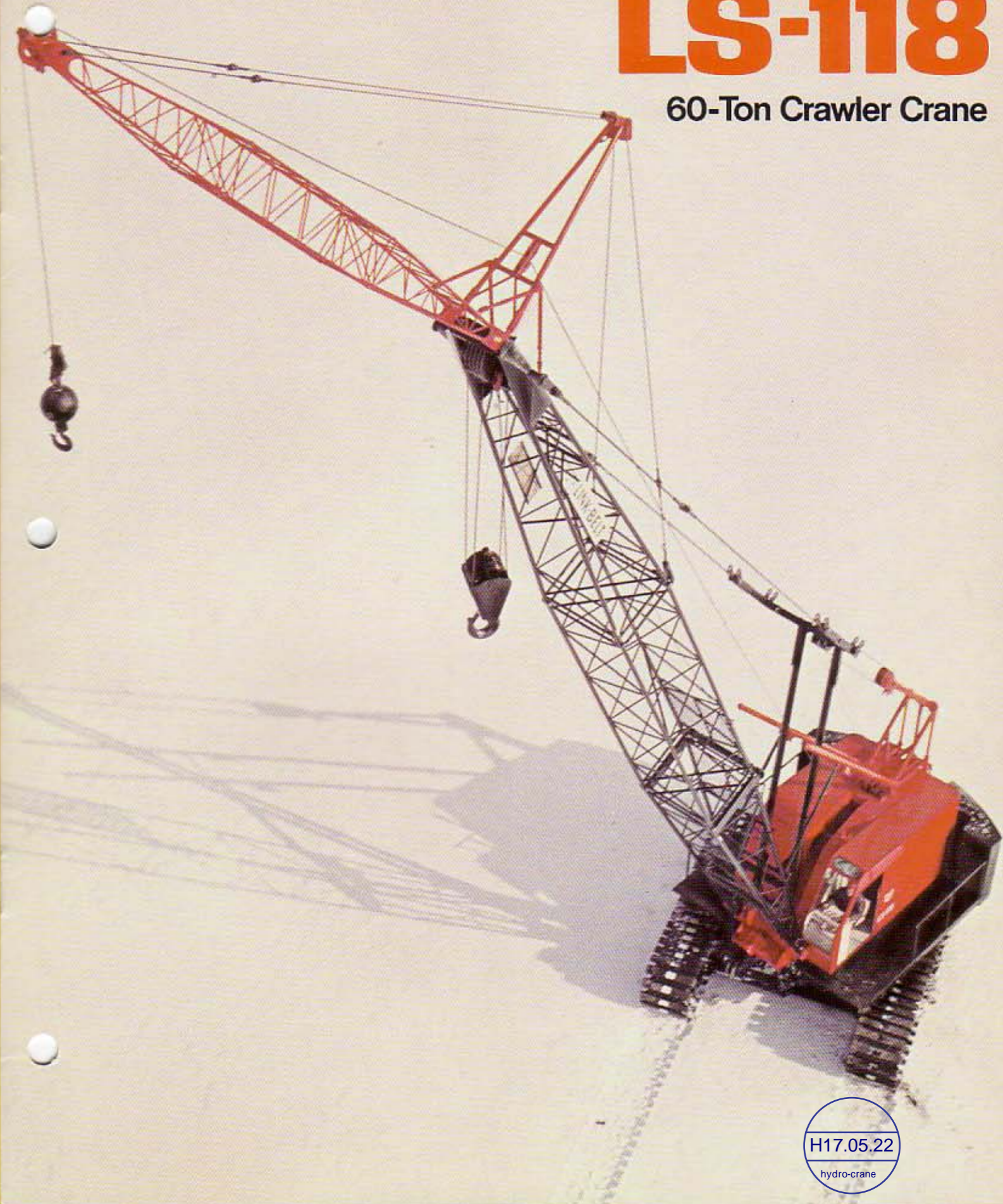
8 DRUM BRAKES: Mechanically operated by foot pedals. Drum brakes separated from clutches to eliminate heat transfer, resulting in cooler brakes and clutches for longer component life of both. Brake drums splined to shaft.

9 LOAD LOWERING CLUTCHES: (Optional) Completely independent front and rear drum power load lowering 2-shoe clutches for powering down light loads and controlled lowering of heavier loads.

10 THIRD DRUM: (Optional) Independent, gear driven; mounts in the in-line bores shown. (See page 8.)

11 POWER PACKAGE FOR POWER HYDRAULIC CONTROLS: Vane type pump, belt driven from engine; piston type accumulator and sump tank; normal system operating pressure, 900 to 1,050 p.s.i.

Link-Belt Speeder LS-118 60-Ton Crawler Crane

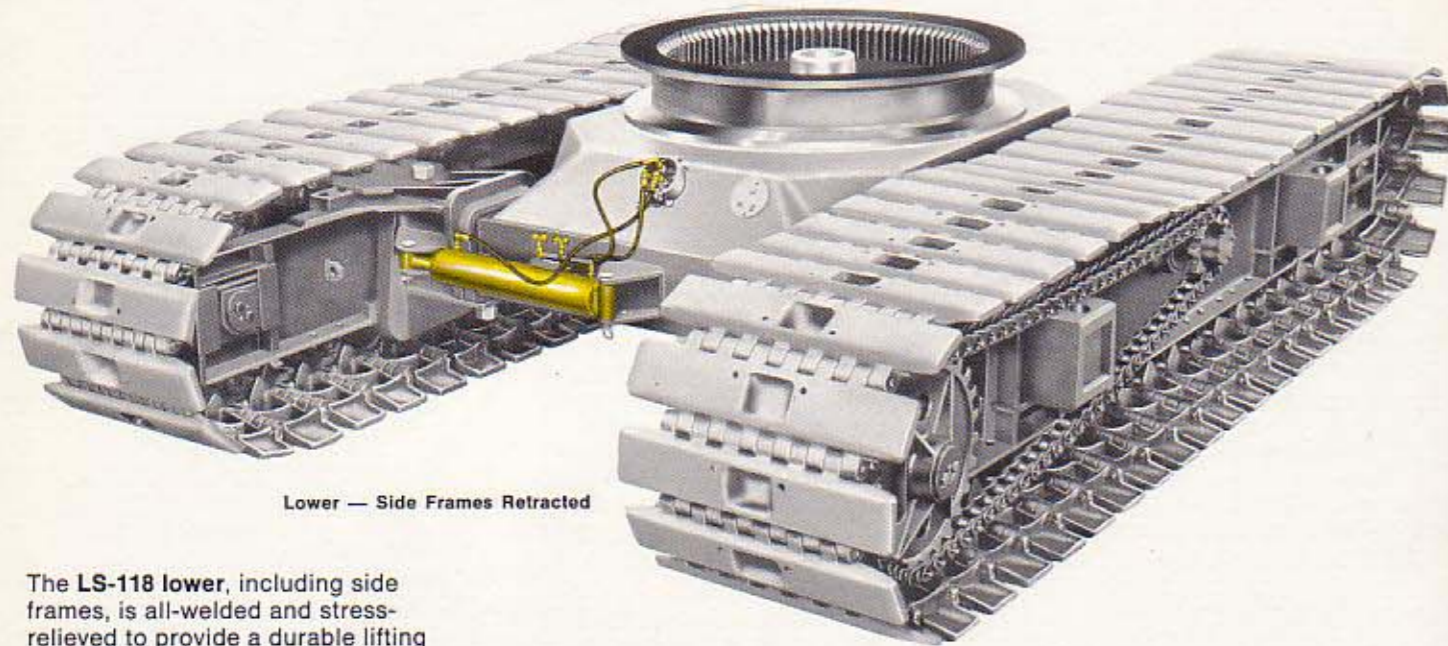


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hydro-crane

Lower Designed for Mobility and Extra Strength

Fast, Effortless Hydraulic Steering



Lower — Side Frames Retracted

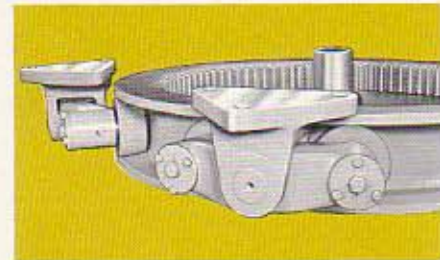
The **LS-118 lower**, including side frames, is all-welded and stress-relieved to provide a durable lifting base. Lower frame is line bored for mounting of the travel shaft. The steer, travel, and brake mechanism is enclosed within the carbody.

Eight hardened, **conical hook rollers**, mounted on anti-friction bearings, join the upper to the lower. Rollers, mounting brackets, and roller path are all heat treated for long, trouble-

The crawler side frames are power hydraulically extended and retracted for working in close quarters or transportability. They are also removable.

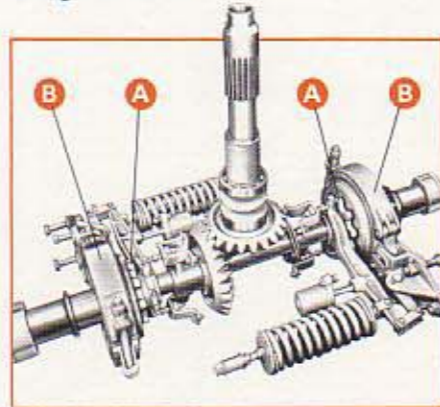
For greater over-all width restrictions when transporting the machine, the crawler side frames, complete with drive chains, can be removed for an over-all lower width of 9' 9". Each cross axle is fixed to the side frame with two cap screws.

Short, 9" pitch shoes permit smooth machine travel. To minimize track wear, multiple-hinged shoes are heat treated and joined by two full-floating pins. Track sprocket lugs and shoe lugs are offset for self-cleaning of foreign material.



Conical Hook Rollers

free service. The conical shape of these rollers matches the taper inside the top and bottom flanges of the roller path for smooth swing. Rollers are shim-adjusted for wear.



Power Hydraulic Steer

The heat-treated track rollers are mounted on sintered iron bushings and equipped with piston ring perma-seal seals for increased protection of rollers bushings and axles.

For quick, sure, on-the-job moves, the LS-118 is equipped with **power hydraulic steer**. The steer-travel mechanism is completely enclosed within the lower frame . . . no components protrude below the underside of the carbody to be subject to damage when transporting on beam trailer.

Powerful jaw clutches (A) are engaged through Speed-o-Matic power hydraulics. When jaw clutches are fully engaged or pre-loaded, spring applied brakes (B) are automatically released.

Jaw clutches (A) are engaged independently for steer by either of two operator steer control levers. They are simultaneously engaged for straight-line travel by either the two steer levers or the optional push button control located on the travel control lever.

Exclusive Speed-o-Matic Power Hydraulic Control

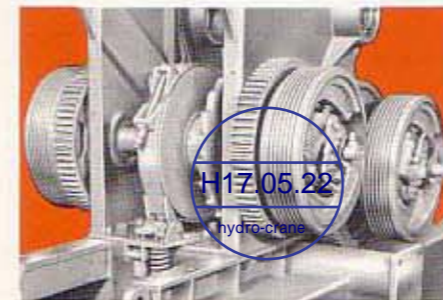
Fast, Precise Response For All Functions

The new LS-118 incorporates more extra features as standard equipment than any other machine in its class. What's more, it is designed specifically to meet the needs of the 60-ton crawler crane user . . . with more than satisfactory performance. And, how does it accomplish this? By including as standard equipment in every machine such features as diesel engine with torque converter; catwalks and railings along both sides of cab; hydraulic counterweight lowering; hydraulic, retractable rear gantry; removable or power hydraulic retractable and extendible crawler side frames; independent boomhoist with power boom raising and lowering clutches; boomhoist limiting device; 30" wide track shoes; plus a lower 17' long and up to 15' 6" wide with power hydraulic steer-travel.

The standard lifting crane attachment includes a 2-piece, pin-connected, 40' Hi-Lite tubular boom complete with boom angle indicator, dual, lever-type boom stops, five boompoint sheaves, boom mast, and boom-mounted hoist rope supporting roller.

The LS-118 upper design is Link-Belt Speeder's exclusive Full-Function, permitting independent or simultaneous performance of all machine functions. Also available are money-making options such as independent 3rd drum, independent travel, load lowering clutches for either or both main rope drums, 2-speed gear-driven or 2-speed planetary-driven rope drums, and swing brake.

The fully **independent boomhoist** features power hydraulic 2-shoe clutch control for both precision raising and lowering of the boom. Boomhoist is



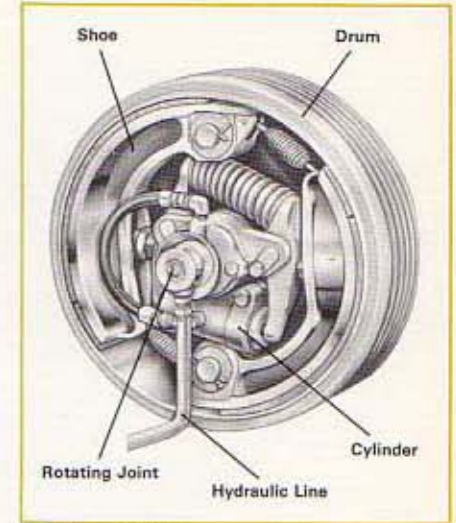
Independent Boomhoist

gear driven. An automatic spring applied rope drum brake is power hydraulically released for boom raising and lowering. Also, a manually controlled drum locking pawl holds the boom at fixed operating radius.

For superb control of all the machine functions, the LS-118 incorporates Link-Belt Speeder's famous Speed-o-Matic power hydraulic control system. Proven in use by over 14,000 crane-excavator users, this system is unaffected by day-to-day atmospheric variations and, does not require priming or bleeding. Oil under pressure from the belt-driven vane-type pump or from the pressure-accumulator storage tank does the work.

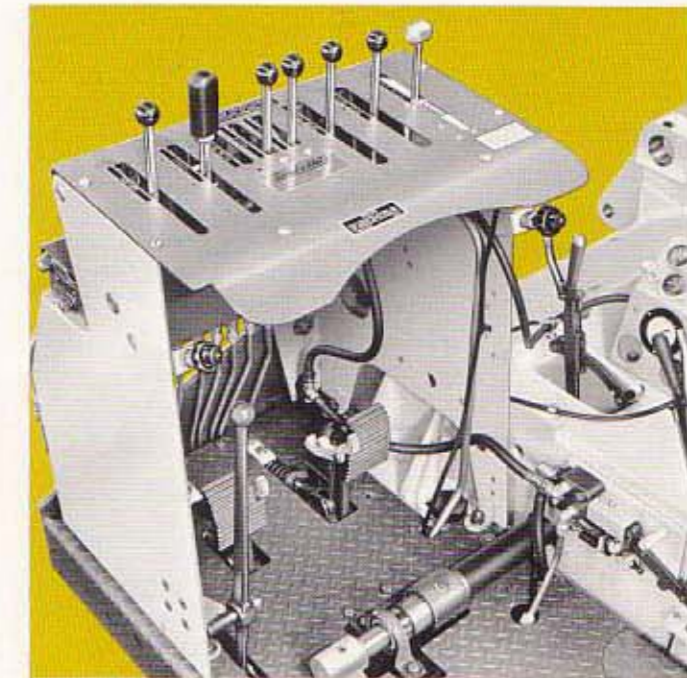
Short-throw levers in **operator control** console actuate variable pressure valves from which oil under pressure is metered to each 2-shoe clutch for prompt, positive response. Speed-o-Matic power hydraulics . . . the exclusive control system that permits the use of 2-shoe clutches for all machine functions.

The drum brakes are mechanically operated by foot pedals.



Two-shoe Clutches

The **2-shoe clutches** are self-compensating for lining wear and are separated from the rope drum brakes to eliminate heat transfer for longer clutch-brake lining life. These clutches can be engaged partially for smooth acceleration and deceleration of swing, hoist, and boom. For maximum line pull or travel power, the clutch can be fully engaged by complete application and toggling-in of the control lever.



Operator Controls