



MANUAL PREVIEW

Caterpillar

Service Manual

Twenty

S/n L-1 & PL-1

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Service Manual

CATERPILLAR
REG. U.S. PAT. OFF.

Instruction Book

for

“CATERPILLAR”

TWENTY

TRACTOR

Effective with
Tractors No. L-1

PL-1

Caterpillar Tractor Co.

Executive Offices: San Leandro, California, U. S. A.

Sales Offices:

Peoria, Illinois

San Leandro, California

Factories:

Peoria, Illinois

Minneapolis, Minnesota

San Leandro, California

Products:

“Caterpillar” Combines

“Caterpillar” Road Machinery

“Caterpillar” track-type Tractors

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Gear may be replaced on shaft by tapping with hammer. Do not tap hard, as blows are carried by shaft to tapered pin in pump impeller, which may shear under heavy blows.

Accessory shaft gear may also be removed from rear, by removal of ACCESSORY SHAFT ASSEMBLY.



USING SERVICEMAN'S TOOL TO REMOVE TIMING GEARS

CAM SHAFT GEAR

To remove this gear, remove TIMING GEAR HOUSING.

Loosen lock and remove nut. Use special puller.

Place heads of $\frac{5}{8}$ " x 5" machine bolts through holes in gear, with puller over bolts. Wedge bolt heads to one side of holes, so they will stay in place when pull is made.

When replacing cam shaft gear, be sure that "O" mark on rim matches with "O" mark on rim of crank shaft gear.

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Securely block engine and transmission case in position illustrated, so that lower rear edge of crank case is high enough to pass over top of equalizer spring, when spring is moved to rear with track roller frames and transmission case. Use 2" x 4" x 84" pieces to brace engine at either side, so that it will not tip sidewise when disconnected from transmission case.

If chain block is used to raise engine, wooden blocking should be used to hold it in position afterward. In passing lifting chain around engine, be sure to use blocks at sides of crank case to protect magneto and manifolds from damage.

When engine is raised and blocking is all in position, loosen and remove ten bolts and four cap screws holding crank case and transmission case together. Remove bolts from bottom half first, then bolts and cap screws from top half.

Remove grease cup and brass hex nut from upper end of flywheel clutch shifter fork collar grease tube, and tap end of tube so it drops into transmission case.

Insert third piece of 2" x 4" x 84" or similar long pry behind boss on side of front end of transmission case, and force track to rear, carrying transmission case with it. Good holds can be secured by alternating between two sides of tractor.

The flywheel clutch is connected to front end of upper transmission shaft by a toothed coupling which will withdraw as cases separate. Be-



ENGINE BLOCKED UP PREPARATORY TO SEPARATING CRANK CASE AND TRANSMISSION CASE