



Caterpillar

Service Manual

D8

S/n 1H, 8R, 2U, & 13A

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Service Manual

Servicemen's
Reference
Book

Caterpillar
REG. U.S. PAT. OFF.

D8

Tractor

1H, 8R, 2U AND 13A SERIES

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Final Drive

Flange-to-final-drive pinion press fit, tons	35-40
Sprocket-to-hub press fit, tons	60-65

Sprocket Shaft

Shaft must be straight within	1/8 in.
Sprocket shaft-to-case press fit, tons	45-50

TRACK ROLLER FRAME GROUP

Track Roller Frame

Outer bearing clearance	.006 - .008 in.
Maximum permissible clearance outer bearing	.025 in.
Inner bearing clearance	.008 - .010 in.
Maximum permissible clearance inner bearing	.040 in.
Minimum thickness of wear strip for front idler	1/4 in.

Track Rollers

Shaft clearance	.007 - .010 in.
Maximum permissible shaft clearance	.050 in.
End clearance	.010 - .028 in.
Maximum permissible end clearance	.050 in.
Maximum permissible that shaft is bent	.005 in.

Track Carrier Rollers

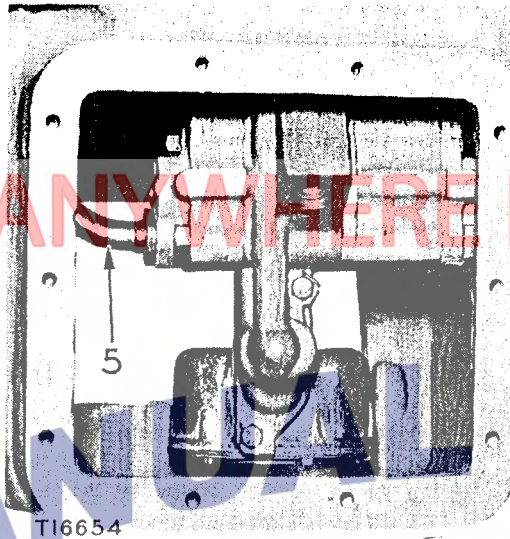
Shaft clearance	.007 - .010 in.
Maximum permissible shaft clearance	.050 in.
End clearance	.010 - .028 in.
Maximum permissible end clearance	.060 in.
End of shaft to face of bracket	10 in.

Front Idlers

Shaft clearance	.006 - .010 in.
Maximum permissible shaft clearance	.050 in.
End clearance	.010 - .028 in.
Recoil spring, assembled length	25 3/4 in.
Track adjustment, slack	1 1/2 - 2 in.
Limit of adjusting track, specified distance	8 1/8 in.
Clearance between frame and guides	1/8 - 3/32 in.

Track

Maximum wear on pins and bushings before turning	3/16 in.
Track shoe bolt torque	335-375 lb. ft.



TI6654

DISCONNECTING REAR SUCTION BELL TUBE FROM PUMP

5-Rear suction bell tube.



TI6655

REMOVING FRONT SECTION OF OIL PAN

5. Place a sling under the pan as illustrated, attach to a suitable hoist and take up the slack in the sling to support the weight of the pan.
6. Remove the capscrews that secure the oil pan to the cylinder block.
7. Lower the pan slightly and with the aid of a putty knife, separate the gasket from the pan so that it will remain attached to the cylinder block. The gasket between the rear section of the oil pan and the front section can be separated in the same manner.
8. Lower the front section of the pan carefully and slide it forward from under the tractor.

REMOVING REAR SECTION

1. Remove the front section of the oil pan as explained in the covering topic.
2. Apply the brakes so the tractor will not move when the front end is raised.
3. Place blocking and a jack under the front end of one of the main frames (1) or (2) and raise the front of the tractor until the weight is just removed from the equalizer spring.
4. Remove the nuts and bolts that hold the equalizer spring bracket (3) to the main frames. Continue raising the front of the tractor until the bottom of the main frame is raised to a point about half way up the bolting flange of the spring bracket or the distance at (5).
5. Fasten ropes to the main frames so that they pass under the rear section of the pan (4).

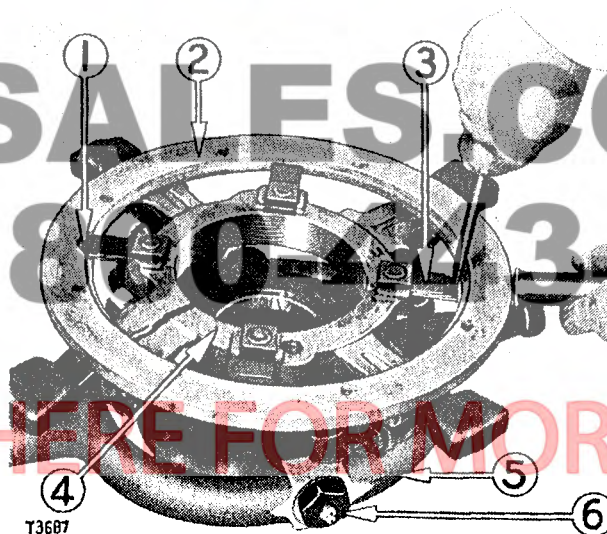
Adjusting Collar and Release Bearing Removal

The ring (2) is held to the collar by four leaf springs (3). The leaf springs bear against the ring and serve to pull the pressure plate back from the driven plate when the clutch is released.

1. Hold the collar (4) and turn the ring $\frac{1}{8}$ turn until one of the springs is directly in front of the notch (1).
2. Tap the ring so the spring will slide into the notch as far as possible.
3. Pry the spring (3) opposite the notch under the flange and tap the ring back so the spring will stay under the flange.
4. Turn the ring $\frac{1}{4}$ turn so the adjacent spring can be slid into the notch and the spring opposite the notch pryed under the flange. The ring is then free for removal. If the springs have lost their tension, they can be replaced after cutting off the rivets which hold them to the collar.
5. When installing the ring, place one of the springs in the notch as far as possible. By moving the ring to one side, the adjacent spring on that side and the one opposite to the notch can be brought into place.
6. Continue the procedure in the reverse order of removal.
7. The yoke (5) can be removed by removing the capscrews (6).
8. Remove the adjusting collar (15) by removing the pins (9) holding the cams (7) and links (8) to the release collar (14).
9. Remove the machine screws holding the retainer (13) to the bearing cage (12).

REMOVING RING

- 1-Notch. 2-Ring. 3-Spring.
4-Collar. 5-Yoke.
6-Capscrew.



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