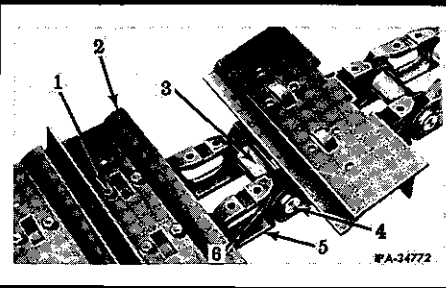


TRACK AND TRACK FRAME SERVICE CHART

14, 14A, 14A (141), 14 (142), 15 (150), 15 (151), 18, 18A, 18A (181), 18 (182), 20 (200) and 20 (201) Series Crawler Tractor

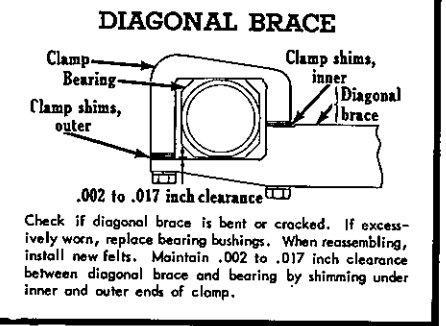


TRACKS (Interlocking type chain)

(1) Track shoe bolt torque, ft.-lbs.	14 and 15 180-200	18 and 20 220-250
(2) Track shoe width (reg.)	16 in.	20 in.
(3) Bushing I.D., inches	1.505 to 1.516	1.755 to 1.767
(4) Link pin O.D., inches	1.496 to 1.50	1.746 to 1.750
Master pin O.D., inches	1.4845 to 1.4860	1.7345 to 1.7360

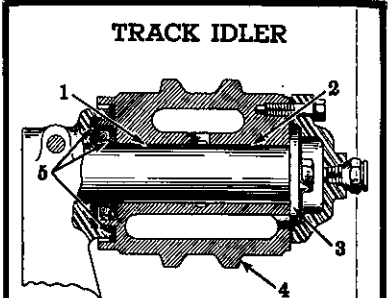
(5) Uneven wear on track rails indicates track frame misalignment.
(6) When assembling interlocking type chain, maintain .010 to .045 inch clearance between track links.

⊕ - 1.630 - 1.641 on TD-150 - 3501 up and TD-151 - 4001 up.
⊕ - 1.621 - 1.625 on TD-150 - 3501 up and TD-151 - 4001 up.
⊕ - 1.6095 - 1.6110 on TD-150 - 3501 up and TD-151 - 4001 up.
*Threads Lubricate with engine oil.



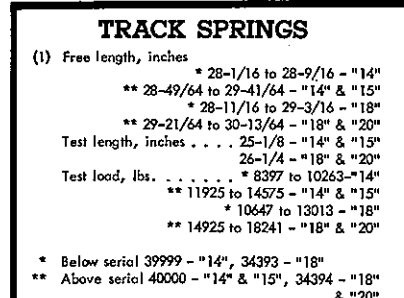
DIAGONAL BRACE

Check if diagonal brace is bent or cracked. If excessively worn, replace bearing bushings. When reassembling, install new felts. Maintain .002 to .017 inch clearance between diagonal brace and bearing by shimming under inner and outer ends of clamp.



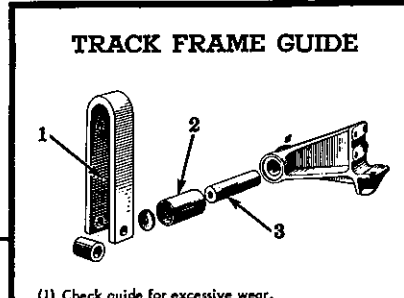
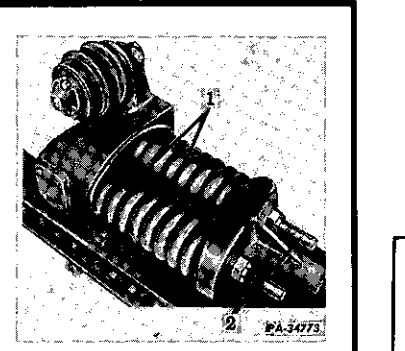
TRACK IDLER

- (1) Bore dia., inches 2.0085 to 2.0100 - "14" and "15"
2.240 to 2.242 - "18" and "20"
- (2) Shaft dia., inches 1.996 to 1.998 - "14" and "15"
2.228 to 2.230 - "18" and "20"
- (3) Thrust washer thickness, inch. 1/4 - "14" and "15"
3/8 - "18" and "20"
- (4) Uneven wear on flanges indicates track frame misalignment.
- (5) When reassembling, install new felt washers and new oil seals.



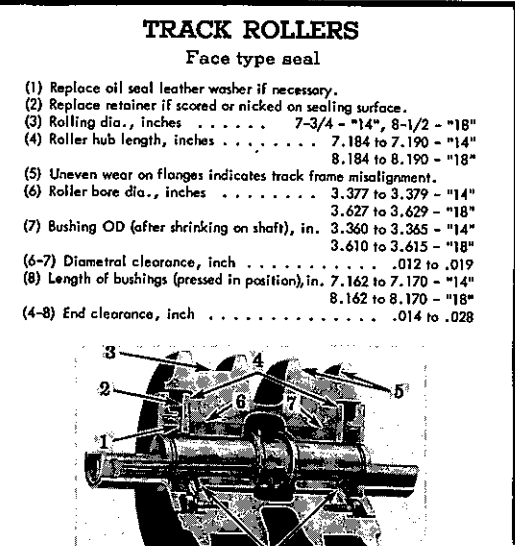
TRACK SPRINGS

- (1) Free length, inches
 - * 28-1/16 to 28-9/16 - "14"
 - ** 28-49/64 to 29-41/64 - "14" & "15"
 - * 28-11/16 to 29-3/16 - "18"
 - ** 29-21/64 to 30-13/64 - "18" & "15"
 - Test length, inches 25-1/8 - "14" & "15"
 - 26-1/4 - "18" & "20"
 - Test load, lbs. * 8397 to 10263 - "14"
 - ** 11925 to 14575 - "14" & "15"
 - * 10647 to 13013 - "18"
 - ** 14925 to 18241 - "18" & "20"
 - (2) Check for bent adjusting rods, or cracked retainers.
 - Max. fwd. adj. of bushing type front idler, inches: 3-1/2 - "14", 3-3/4 - "18"
 - Max. rear adj. of bushing type front idler, inches: 3-1/2 - "14", 3-3/8 - "18"
 - Max. fwd. adj. of bearing type front idler, inches: 3-1/2 - "15", 3-3/4 - "20"
 - Max. rear adj. of bearing type front idler, inches: 3-3/4 - "15", 3-3/8 - "20"
- When all forward adjustment length has been used, inspect track springs. If in good condition, then the track chain is excessively worn, and must be repaired.



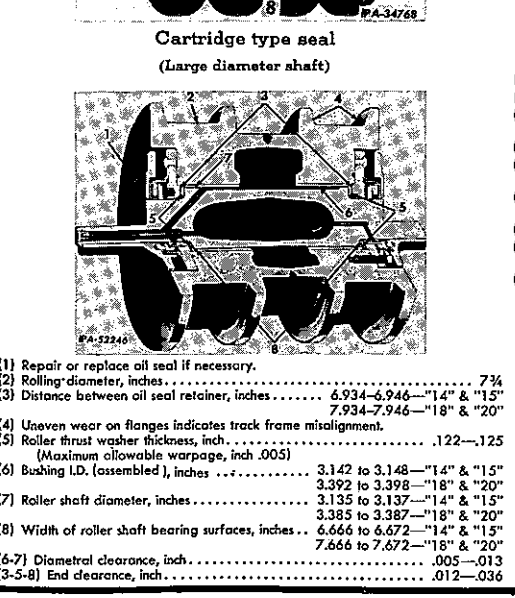
TRACK FRAME GUIDE

- (1) Check guide for excessive wear.
- (2) Replace guide roller if excessively worn on inside and outside diameters.
- (3) Replace shaft if excessively worn.



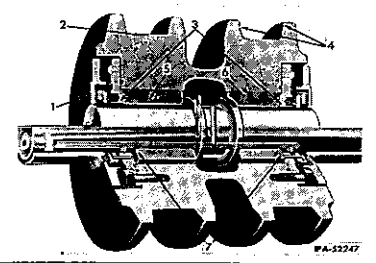
TRACK ROLLERS Face type seal

- (1) Replace oil seal leather washer if necessary.
- (2) Replace retainer if scored or nicked on sealing surface.
- (3) Rolling dia., inches 7-3/4 - "14", 8-1/2 - "18"
- (4) Roller hub length, inches 7.184 to 7.190 - "14"
8.184 to 8.190 - "18"
- (5) Uneven wear on flanges indicates track frame misalignment.
- (6) Roller bore dia., inches 3.377 to 3.379 - "14"
3.627 to 3.629 - "18"
- (7) Bushing OD (after shrinking on shaft), in. 3.360 to 3.365 - "14"
3.610 to 3.615 - "18"
- (6-7) Diametral clearance, inch012 to .019
- (8) Length of bushings (pressed in position), in. 7.162 to 7.170 - "14"
8.162 to 8.170 - "18"
- (4-8) End clearance, inch014 to .028



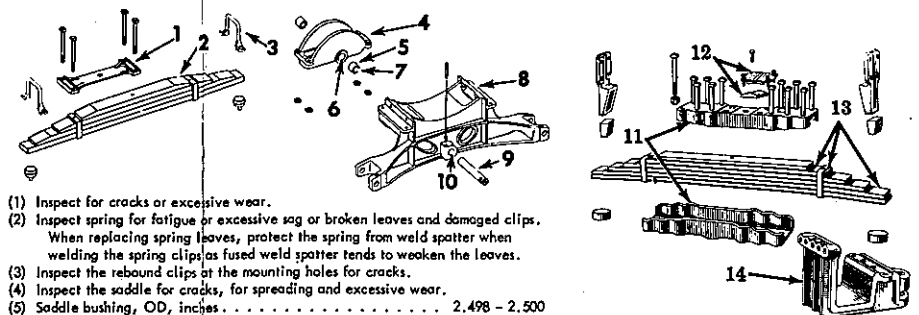
Cartridge type seal (Small diameter shaft)

- (1) Repair or replace oil seal if necessary.
- (2) Rolling dia., inches 7 3/4 - "14", 8 1/2 - "18" & "20"
- (3) Distance between oil seal retainers, inches 6.934 to 6.946 - "14"
7.934 to 7.946 - "18" & "20"
- (4) Uneven wear on flanges indicates track frame misalignment.
- (5) Roller bore dia., inches 3.377 to 3.379 - "14"
3.627 to 3.629 - "18" & "20"
- (6) Bushing OD (after shrinking on shaft), inches 3.360 to 3.365 - "14"
3.610 to 3.615 - "18" & "20"
- (5-6) Diametral clearance, inch012 - .019
- (7) Width of bushings (pressed in position), inches 6.914 to 6.922 - "14"
7.914 to 7.922 - "18" & "20"
- (3-7) End clearance, inch012 - .032



EQUALIZER SPRING

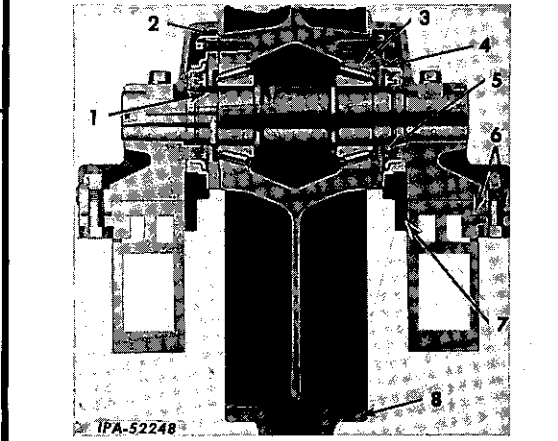
14 (142), 15 (150 and 151), 18 (182) and 20 (200 and 201) 14, 14A, 141, 18, 18A, and 181



- (1) Inspect for cracks or excessive wear.
- (2) Inspect spring for fatigue or excessive sag or broken leaves and damaged clips. When replacing spring leaves, protect the spring from weld spatter when welding the spring clips as fused weld spatter tends to weaken the leaves.
- (3) Inspect the rebound clips at the mounting holes for cracks.
- (4) Inspect the saddle for cracks, for spreading and excessive wear.
- (5) Saddle bushing, OD, inches 2.498 - 2.500
- (6) Bore in saddle for bushing, inches 2.493 - 2.497
- (7) Saddle bushing, ID, inches 1.994 - 2.003
- (8) Inspect the spring support for cracks or excessive wear.
- (9) Inspect the spring pivot shaft for excessive wear or damage.
 - Pivot shaft dia., inches 1.987 - 1.990
- (10) Bore in support for pivot shaft, inches 1.997 - 2.003
- (11) Same as for (4).
- (12) Inspect saddle wearing pad and upper frame pad for excessive wear or damage.
- (13) Same as for (2).
- (14) Inspect the lower frame pad for cracks or excessive wear.

FRONT IDLER Roller bearing type

(1) Shaft dia., inches	2.8145 to 2.8155 - "14" and "15"	3.002 to 3.003 - "18" and "20"
(2) Bearing preload with oil seals	20 to 25 ft.-lbs.	
(3) Idler bore dia., inches	4.7224 to 4.7239 - "14" and "15"	5.3418 to 5.3433 - "18" and "20"
(4) Replace retainer if scored or nicked on sealing surface.		
(5) Replace oil seal leather washer if necessary.		
(6) Remove shims to maintain 1/8 to 1/4 inch clearance between track frame and idler guide jaws.		
(7) Replace retainers if excessively worn.		
(8) Rolling dia., inches, regular:	25 3/8	
"14" and "15" (rib type)	26 3/8	
"18" and "20" (rib type)	29 3/8	
(8) Rolling dia., inches, large:	27 1/2	
"14" and "15"	31 1/2	



Bushing type

(1) Thrust washer thickness, inch083 to .087
(2) Carrier bushing ID (assembled and reamed) inches	1.999 to 2.001 - "14"
2.249 to 2.251 - "18"	
(3) Shaft dia., inches	1.991 to 1.992 - "14"
2.243 to 2.244 - "18"	
(2-3) Diametral clearance, inches007 to .010 - "14"
.005 to .008 - "18"	
(4) Rolling dia., regular	25-3/8 - "14", 29-1/4 - "18"
large	26-3/8 - "14", 30-7/8 - "18"
(5) Replace guide retainers if extremely worn.	
(6) Replace guides if channels are extremely worn.	
(7) When reassembling, replace felt washers and oil seals.	

