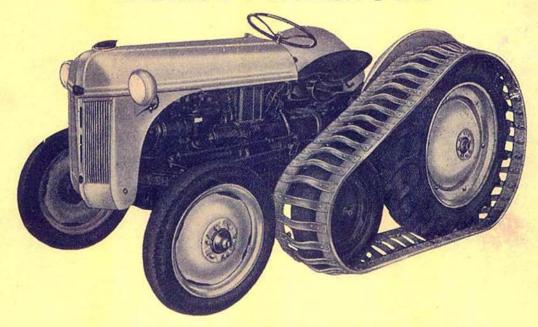


HALF TRACK



MAINTENANCE MANUAL and SPARE PARTS LIST

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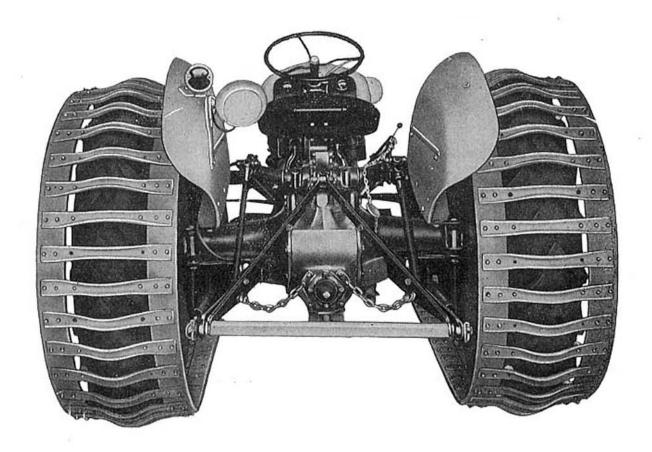
CANADA

FOREWORD

ఆర్థిక్రెమ

Bombardier half track attachments are designed specifically for adaptation to wheeled farm tractors. They are the result of 25 years of research and experimentation in the fields of transportation and hauling on snow, soft ground and marshy land. They are derived from the Bombardier snowmobile track system which has proved its traction power on snow, and is now widely used in winter as well as on soft soil.

All materials used in the production of these half tracks are selected to withstand rough usage and have been thoroughly tested under various ground and weather conditions. They are built to give long and efficient service.



SECTION ONE

This section covers Bombardier Tractor Track Attachments F-52-60 and B-TTA-20. Both are of the type using tension spring and manually adjusted tracks.

GENERAL DESCRIPTION and SPECIFICATIONS

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The Bombardier tractor track attachment (T.T.A.) consists of a track which fits over the tractor rear wheel and an extra idler wheel supported by proper linkage bolted to the tractor differential housing.

The track is made of two impregnated canvas rubber belts, with ends joined together by couplings. To these rubber belts are bolted cross links made of high carbon steel and specially shaped for extra traction.

Studs are provided to be bolted to the cross links to prevent the tires from skidding inside the tracks.

The additional idler wheel made of pressed steel is completely welded, mounted on roller bearings, and equipped with pneumatic tire.

The idler wheel support is bolted to the tractor differential housing by means of U-bolts. This support consists of a bracket which is bolted to the housing and a body spindle to which the wheel assembly is bolted. Proper ground pressure of the idler wheel is provided by an adjustable tension spring.

Track tension is adjusted through an easily accessible spindle adjusting screw.

The distance between the center of the tractor rear wheel and the center of the idler wheel is 40 inches at normal position and the width of the track assembly is 16½ inches.

Tractors whose tread width between rear wheels is adjustable, can be fitted with this half track at tread widths of 52", 56" or 60". This adjustment is quickly made by transferring the split bushings from one side of spindle body cross tube to the other.

Bombardier half track attachments are easily mounted in less than two hours. When not required, the tracks can be taken off and the idler wheel will not interfere with the normal operation of the tractor.

INSTRUCTIONS FOR INSTALLATION on FORD and FERGUSON TRACTORS

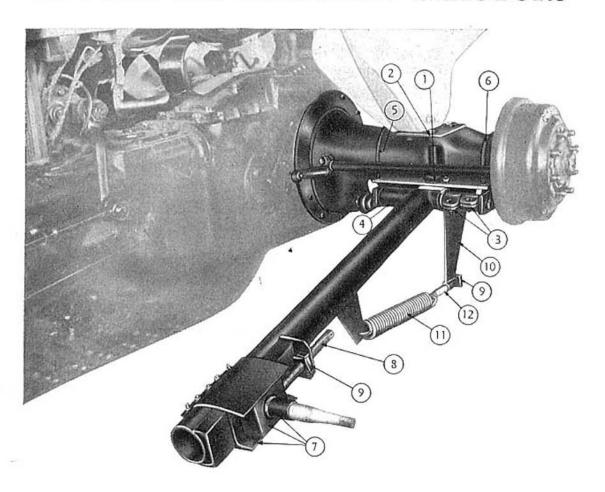


FIGURE I

PART NO.	REF. NO.	PART NAME
1	10021	Flat washer, 3/4"
2	A-109	Mudguard bracket
3	C-209	Adjuster split bushing
4		Body spindle cross tube
5	A-102	Differential U-bolt, large
6	A-103	Differential U-bolt, small
7	C-108	Spindle adjuster unit ass'y
8	A-1104	Spindle adjusting screw
9	10106	Square nut USS, 3/4"
10	C-208	Spring holder plate
11	A-114	Tension spring
12	10106	Spring adjusting screw

- (For identification of parts refer to Figure 1 and exploded view)
- 1 Remove nuts of tractor mudguard bolts and install housing bracket ass'y No. B-201 using mudguard bolts. Flat washer 3/4" spacer No. 10021 (Fig. 1, Ref. 1) should be inserted on mudguard bolts between housing bracket and differential housing. Tighten slightly. Mudguard brackets A-109 (Fig. 1, Ref. 2) must be used to give proper clearance between track and mudguard when tread width is adjusted at 52 inches.
- 2 Adjust T.T.A. to tractor tread width using adjuster split bushings C-209 (Fig. 1, Ref. 3), one on each side of body spindle cross tube (Fig. 1, Ref. 4) for 56"; both bushings outside for 52" and both inside, for 60" tread width. In Figure 1, the T.T.A. is adjusted at 52", both bushings being on the outside of the body spindle cross tube.
- 3 Align housing bracket and body spindle ass'y B-204; inside wall of tractor tire must be in line with body spindle sliding base (channel), tolerance plus or minus 1/16 of an inch. To achieve this adjustment, file down triangular lugs of housing bracket, if necessary.
- 4 Install differential U-bolts (Fig. 1, Ref. 5 & 6) and tighten firmly. Care must be taken not to alter the alignment made in the previous operation.
- 5 Install wheel and spindle adjuster unit ass'y C-108 (Fig. 1, Ref. 7) on body spindle, using special 11/4" x 5/16" carriage bolts No. 10118. Slide spindle adjuster unit as far back as possible. Spindle adjusting screw A-1104 and nut 10106 to be set in place. (Fig. 1, Ref. 8 & 9)
- 6 Mount track ass'y No. A-111 and couplings, and give track a slight tension using spindle adjusting screws.
- 7 Move the tractor back and forth to set tracks in place, and give track a final firm tension. Tracks are properly adjusted when a weight of approximately 100 pounds, applied half-way between tractor wheels and additional wheels, causes a deflection of 1 to 1½ inch maximum.
- 8 Tighten the 10 special 11/4" x 5/16" carriage bolts on spindle adjuster unit and lock spindle adjusting screws. Check tension on all nuts and bolts.
- 9 Set spring holder plate and bushing part No. C-208 (Fig. 1, Ref. 10) on housing bracket ass'y, in line with body spindle and bolt front end to housing bracket passing bolt through hole in line with the body spindle. Hook tension spring A-114 (Fig. 1, Ref. 11) at both ends, and tighten spring adjusting screw nut (Fig. 1, Ref. 9). Spring is generally properly adjusted when adjusting screw stretches spring one inch on level ground.
- 10 Track studs A-113 should be bolted to track cross links A-1121-T to mesh with tractor tire lugs depending on type of tire. When checking pitch of tire lugs and track across links, mechanic will notice that studs should be bolted two to every other cross link in some instances, or one to each cross link alternating sides.

BOMBARDIER TTA ADJUSTMENTS

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In order that maximum efficiency be obtained from tractors equipped with Bombardier tractor track attachments, the following main adjustments should be made:

- 1 Pressure should be kept at 35 lbs/sq. in. in idler wheels tire and at 30 lbs/sq. in. in tractor rear tires.
- 2 Tension on tracks should be such that a weight of 100 lbs applied halfway between idler wheel and rear tire will deflect the track about one inch.

If foregoing adjustments are not properly made, tires will skid in the tracks and the efficiency of the tractor will be considerably reduced. Eventually the tracks may fall off.

3 — Center of idler wheels should always be in line with center of rear wheels.

If tires are not properly aligned, the sides of the tracks will rub on the walls of the tires wearing out both; tractor will pull to one side, and tracks will have a tendency to fall off during work.

- 4 Tension spring adjusting bolts should be tightened to stretch the spring one inch, on level ground. The spring can take a maximum stretch of 7 inches. If tractor runs over obstacles big enough to stretch spring beyond this limit, the spring will lose its elasticity and will not come back to its original length. It should then be replaced. Spring tension can be varied according to the work to be done. It should be reduced on hard ground and increased on very soft soil or in deep snow. The greater the tension, the more weight there will be on the idler wheel and front end of tracks.
- 5 All nuts on adjuster unit should be tightened and adjusting screws locked in place.

If nuts on the adjuster unit are not properly tightened, bogie wheel will run at an angle and damage tire and track; causing track to fall off. If tension adjusting screws are not locked, they will loosen and tracks will not remain properly adjusted.

Once in a while, depending on variations in temperature or soil conditions, tracks should be readjusted for better traction and increased efficiency. This applies particularly to fabric belt which varies in length under different weather conditions. Endless steel cable reinforced belt is not affected by climatic changes.

LUBRICATION

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On Bombardier half tracks, four points only have to be lubricated: the tapered roller bearings in each idler wheel, and the needle bearings in the spindle body cross tube.

Bearings in the idler wheels should be examined occasionally, chiefly if the tractor frequently operates in water and mud. The ordinary method of lubrication for wheel tapered roller bearings should be used. Special care should be taken to adjust bearings properly when remounting wheels. It is recommended that tracks be removed or loosened so as not to interfere with the adjustment. In some instances, if the operator is careful, an alemite fitting can be placed on the hub cap to grease the wheel bearings more easily but in such cases, care should be taken not to blow off grease seals by inserting too much grease with the pressure gun.

Needle bearings in the body spindle cross shafts are lubricated by means of alemite fittings placed on each cross tube.

Lubrication should be determined by type of work performed and by the conditions in which tractor is operated.

OPERATION

1

T.T.A. design permits installation of most farm implements developped for Ford and Ferguson tractors. Some implements require rear wheels to be placed at 52", 56" or 60", to allow installation but the tractor track attachment will fit tractor at any of these widths. All implements which are placed at rear of tractor can generally be installed at any width.

The 56" or the 60" tread width is necessary to install scoop, heavy duty loader or universal frame, but the 56" width is best for installing most implements.

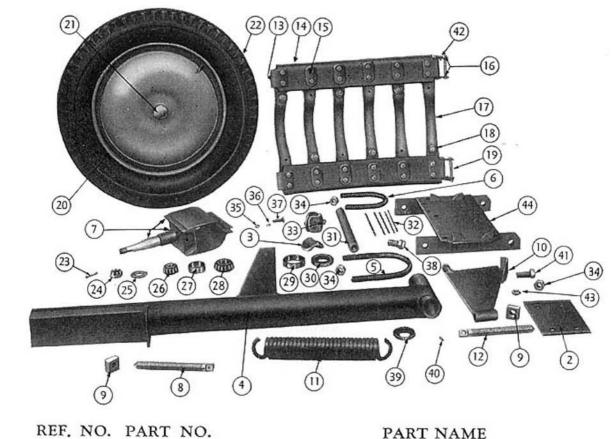
The operator will soon learn by experience the convenient tread width to select for the most efficient operation of the implements used. Plowing in particular can be done most efficiently with tread width at 56" using a 12" or wider plough. In this case, tractor right front wheel should be adjusted to run along the edge or in the center of the furrow. Inside belt of right track should run along edge of furrow.

The on-and-off flexibility of this attachment is a much appreciated feature because it enables the operator to use the tracks only when needed. Necessary repairs can be made quickly and easily. Illustrations and list of spare parts on following pages will help you select the correct parts.

EXPLODED VIEW

and

REFERENCES



EF. NO.	PART NO.	PART NAME
2	A-109	Mudguard bracket
3	C-209	Adjuster split bushing
4	B-204	Body spindle
5	A-102	Differential U-bolt, large
6	A-103	Differential U-bolt, small
7	C-108	Spindle adjuster unit
8	A-1104	Spindle adjusting screw
9	10106	Square nut U.S.S., 3/4"
10	C-208	Spring holder plate & bushing
11	A-114	Tension spring
12	C-110	Spring adjusting screw
13	A-1125 B7	Track coupling
14	B-112	Track belt 31/2" x 15'3" x 5 ply
15	A-1123-B7	Track reinforcement cleat
16	A-1126	Track coupling link
17	A-1121-T	Cross link
18	A-113	Track stud
19	10024	Carriage bolt 3" x 3/8"
20	C-1114	Wheel ass'y
21	B-1139-F	Hub cap
22	10100	Tires, 4.50 x 16
23	10108	Cotter pin, 11/4" x 5/32"
24	10109	Spindle nut
25	B-1195	Spindle washer
26	09074	Roller bearing cone, outer

27	09196	Roller bearing cup, outer
28	15112	Roller bearing cone, inner
29	15250	Roller bearing cup, inner
30	556	Oil seal ass'y
31	A-207	Body spindle shaft
32	B-206	Body spindle needle bearing
33	10123	Machine screw, R.H. 2" x 1/4"
34	10007	Nut, 5/8"
35	10119	Plain hexagon nut, 5/16"
36	10120	Lock washer, 5/16"
37	10118	Special carriage bolt, 11/4" x 5/16" SAE
38	10122	Cap screw, 11/2" x 3/4" SAE
39	C-210	Grease retainer
40	10112	Alemite, 1/4" x 28 short straight
41	10126	Cap screw, 11/2" x 5/8", mudguard bracket
42	10125	Machine screw, R.H. 1/2" x 1/4"
43	10127	Lock washer, 5/8"
44	B-201	Housing bracket ass'y

SPARE PARTS LIST FOR TRACTOR TRACK ATTACHMENT ASS'Y.

PA	RT NO.	PART NAME		QUAI	NT.	UNIT.
1	A-102	Differential U-bolt, large		***		2
1	A-103	Differential U-bolt, small		***		2
(C-108	Spindle adjuster unit ass'y		***	***	2
2	A-109	Mudguard brackets for 52" tract	or	adjus	st-	
		ment		***	***	2
(C-110	Spring adjusting screw				2
1	A-111	Track assembly, 161/2" x 15'3"		***	***	2
)	B-112	Track belt, 31/2" x 15'3" x 5 ply		***	***	4
1	A-113	Track stud				96
1	A-114	Tension spring				2
1	A-115	U-bushing track coupling				8
]	B-201-R	Housing bracket ass'y, right			***	2
1	B-201-L	Housing bracket ass'y, left	***	***	***	2
	B-204-R	D 1 1 11 1.1.				2
0	B-204-L	Body spindle, left				2
	B-206	Body spindle needle bearing				43
	A-207	Body spindle shaft				2
13	C-208	Spring holder plate & bushing as	s'y		***	2
	C-209	Span adjuster split bushing				4
2	C-210	Grease retainer				4

556	Oil seal ass'y	2
A-1104	Spindle adjusting screw	2
C-1114	Wheel ass'y	2
A-1121-T	Cross link 9	96
A-1123-B7	Track reinforcement cleat 18	34
A-1124-T	Track coupling ass'y	1
A-1125-B7	Track coupling	8
A-1126-R	Track coupling link (round hole)	8
A-1126-S	Frack coupling link (square hole)	8
B-1139-F	Hub cap	2
B-1195	Spindle washer	2
09074	Roller bearing cone, outer	2
09196	Roller bearing cup, outer	2
10007	Plain hexagon nut SAE 5/8" diff. U-bolt	16
10021	Flat washer 3/4" spacer housing bracket &	
	Diff	4
10024	Carriage bolt 3" x 3/8" with nut coupling	8
10100	Tire, 4.50 x 16	2
10101	Tube, 4.50 x 16	2
10106	Square nut U.S.S. 3/4" adj. screw	4
10108	Cotter pin 11/4" x 5/32" spindle shaft, nut	2
10109	Spindle nut	2
10112	Alemite 1/4" x 28 short straight	2
10118	openia viii in	90
10119	Plain hexagon nut, 5/16" 49	90
10120	Lock washer, 5/16" 49	90
10122	Cap screw 11/2" x 3/4" SAE body spindle shaft	4
10123	Machine screw RH 2" x 1/4" split bushing	8
10124	Lock washer 1/4"	12
10125	Machine screw RH 1/2" x 1/4"	4
15112	Roller bearings cone, inner	2
15250	Roller bearings inner	2
10126	Cap screw 11/2" x 5/8" mudguard bracket	4
10127	Lock washer, 5/8"	4

SECTION TWO

This section covers Bombardier Tractor Track Attachments F-2 and D-2. Both are of the compression spring and automatic track adjustment type. They can be identified by the serial number with letter prefix.

GENERAL DESCRIPTION and SPECIFICATIONS

Bombardier Tractor Track F-2 and D-2 Attachments covered in this section are built according to the same general specifications as models F-52-60 and B-TTA-20. They consist of a track which fits over the rear wheel supported by proper linkage bolted to tractor differential housing.

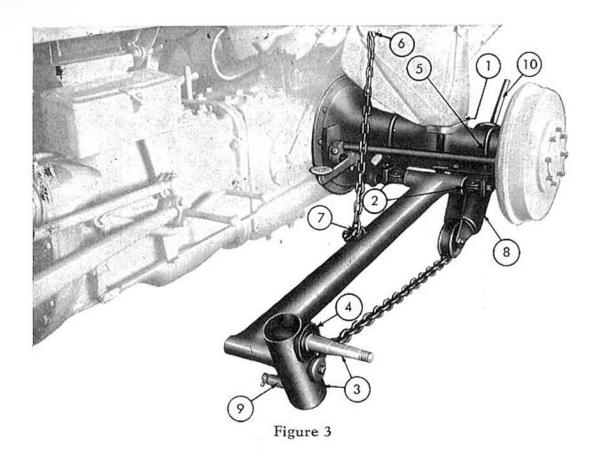
Track belts used on these models are of the endless type and are reinforced with steel cable. These belts have no joints, hence no couplings to wear off. Steel to steel joints are eliminated entirely and wear caused by friction is reduced to a minimum. With this type of construction, the flexibility of rubber and the strength of steel are fully obtained. Rapid wear encountered in tracks of the all-steel construction is eliminated. To track belts are bolted high carbon steel cross links specially shaped to fit perfectly over the contour of 10" or 11" tractor tires and give maximum traction. Studs are welded on every three cross links to prevent the tire from skidding inside tracks.

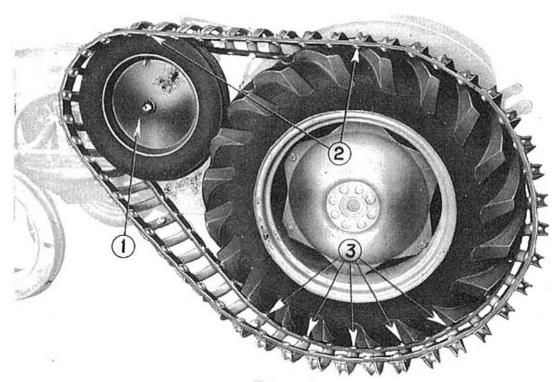
Additional idler wheel is made of pressed steel, completely welded, mounted on tapered roller bearings, and equipped with pneumatic tire.

The unit supporting the idler wheel is bolted to the tractor differential housing by means of U-bolts. This support consists of the housing bracket which is bolted to the differential housing, a body spindle, a rocker and spindle on which the bogie wheel assembly is mounted.

A special adjustable mechanism is provided to assure constant tension of the tracks and proper track pressure on the ground. This is effected through a heavy duty bogie spring and an easily accessible adjusting screw.

A chain welded to the body spindle and bolted to the tractor fender operates as a stopper, limiting the downward action of the idler wheel. A hook is welded to the end of the chain on the body spindle, enabling the idler wheel to be held up for installation. This hook can also be used to hold the idler wheels off the ground when the tractor is used without tracks. Tractors with adjustable tread width between rear wheels can be fitted with this type of tractor track attachment at tread widths ranging up to 8". On Ford and Ferguson tractors, this tread width can be adjusted at 52", 56" or 60". The adjustment can be made quickly by transferring split bushings from one side of the body spindle cross tube to the other.





INSTRUCTIONS for INSTALLING BOMBARDIER TRACTOR TRACK ATTACHMENT on FORD or FERGUSON FARM TRACTORS

- 1 Adjust tread width of tractor rear wheels at 52, 56 or 60 inches as desired; 56 is recommended.
- 2 Remove fender bolts and install fender shim, A-306, (Fig. 3, Ref. 1), between fender and differential housing. Shim consists of a steel strip with two holes; one edge is rolled over a rod to increase thickness. This edge should be on the outside so that it will incline the fender inwards. Install housing bracket assembly using fender bolts and tighten slightly. If fender bolts are too short, replace by longer ones.
- 3 Adjust T.T.A. to tractor tread width using the adjuster split bushings B-309, (Fig. 3, Ref. 3), one on each side of the body spindle cross tube for 56"; both bushings outside for 52" and both inside for 60" tread width.
- 4 Install wheel on rocker and spindle assembly C-319 (Fig. 3, Ref. 3) and give proper adjustment to wheel bearings. Before proceeding with this installation, check mud excluder and make sure mud excluder felt is correctly placed and greased. (Fig. 3, Ref. 4).
- 5 Align idler wheel with tractor rear wheel. Center of idler wheel tire should be in line with center of tractor rear tire, tolerance plus or minus 1/16 of an inch. Outside of differential housings is not machine finished and may have asperities. To achieve correct adjustment of idler wheel, file down triangular lug of housing bracket if necessary.
- 6 Install differential U-bolts (Fig. 3, Ref. 5) and tighten firmly. Care must be taken not to alter alignment made in previous operations.
- 7 A chain is welded to the middle upper part of the body spindle. Bolt other end of this chain (Fig. 3, Ref. 6) to bolt holding fender to fender bracket. Remove top bolt on front part of fender bracket, and replace with bolt supplied with T.T.A. Install first nut and fasten fender to fender bracket firmly. Place the end of the chain on bolt and tighten second nut firmly.

8 — TRACK INSTALLATION.

(a) Lift idler wheel until it is level with top of the rear tire (Fig. 4, Ref. 1). Hook chain on body spindle using hook provided for this purpose. This hook is welded to body spindle along with the end of the chain (Fig. 3, Ref. 7).

- (b) Jack up rear wheel of the tractor. If no jack is available, run tractor over some obstacle so that rear wheel is elevated by inside edge of tire, leaving about 2/3" of the tire width free to slip the track underneath.
- (c) Pass track over idler wheel and over rear tire (Fig. 4, Ref. 2). Make sure track is well set on the tire so that belts are well adjusted to the outside of the tire lugs. On 11" tires, the track fits tightly and should be secured in place, lug by lug, starting from top of tire and working down to bottom. This last part of the track can be put on by standing on the track and using your weight to slip it underneath the tire. (Fig. 4, Ref. 3).

On clean new tires and tracks, rubber surfaces tend to stick. Water or fine dust can be used as a lubricant for easier installation.

Installation on 10" tires is easily made, since track does not fit as tightly as on 11" tires.

Unhook chain to let idler wheel drop to the ground. When tractor is jacked, it is possible to set track perfectly in place.

If rear wheel of tractor is lifted onto some obstacle, bottom part of track will not be completely on. Lower idler wheel as stated above; run tractor backwards a few feet and track will fall in place.

(d) Now run tractor forward a few feet so that track fits perfectly over tire and track study mesh with tire lugs.

- 9 Install spring holder bracket C-329 on housing bracket (Fig. 3, Ref. 8). This spring holder is hooked on to the rear of housing bracket, and supporting brace is bolted to front part in holes provided for the purpose. With tractors adjusted at tread width of 52", supporting brace is bolted to fender bolts. For 56" and 60", use center and outside hole respectively on front part of the housing bracket. Bolt and nut A-330 are provided for this purpose.
- 10 Set the spring in spring holder. Place compression disc in adjusting screw, and install adjusting screw and tube, giving a few turns. Grease should be inserted in the tube. Run chain the end with bushings through spring underneath pulley and install bushing at end of chain to shaft of rocker and spindle assembly. (Fig. 3, Ref. 9). Using starting crank, pry idler wheel forward to facilitate installation of chain bushing on to rocker shaft.
- 11 Make sure chain does not become twisted during following operation: Turn adjusting screw and tube (Fig. 3, Ref. 10) until compression spring is compressed to a length of 11½ inches. This will give proper adjustment to track and proper ground pressure to idler wheel. When working on hard ground, pressure may be released lightly whereas it can be increased on soft ground. Check this adjustment occasionally.

12 — TRACK REMOVAL.

When track is not needed, remove it in the following manner:

- (a) Remove adjusting screw nut and tube B-334.
- (b) Remove compression spring disc B-333.
- (c) Remove compression spring B-332.
- (d) Remove tension chain and adjusting screw assembly B-325.
- (e) Lift idler wheel and hold it up with chain. (Tire of idler wheel should not come in contact with tractor tire.)
- (f) With 10" tires, slide track off idler wheel tire. With 11" tires, starting crank of tractor may be used to pry track off idler wheel. Another way of removing track is to take off idler wheel.
- (g) Hook body spindle with chain to keep wheel off the ground.

BOMBARDIER TRACTOR TRACK ATTACHMENT ADJUSTMENTS

For maximum efficiency from tractors equipped with Bombardier Track Attachments, the following adjustments should be made:

- 1 Pressure should be kept at 35 lbs. in tires of idler wheels and at about 30 lbs. in rear tires of tractor.
- 2 Proper tension of the tracks should be maintained at all times. To ensure proper adjustment of track and proper ground pressure of idler wheel, compression spring should be compressed to length of about 11½". Should track fall off or tire skid inside track, check adjustment of compression spring, since only possible reason for this is an improperly adjusted spring.
- 3 Center of idler wheel should be in line with center of tractor rear tire. If tires are not properly aligned, tractor will have a tendency to pull to one side, causing premature wear of certain parts.
- 4 All bolts and nuts should be kept tight, especially U-bolt nuts and body spindle axle shaft bolts. It will pay to check these bolts and nuts regularly to prevent damage resulting from improperly tightened bolts.
- 5 The chain welded to body spindle and bolted to tractor fender is an essential component. If it is not installed, idler wheel may drop too far down and cause trouble such as releasing track adjustment.

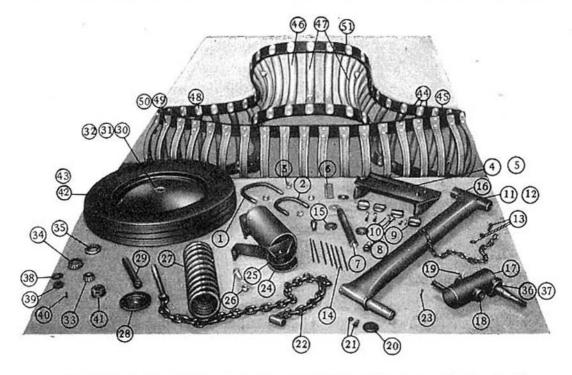
LUBRICATION

Lubrication is very important on equipment used under such conditions as mud, sand dust, etc. For long service, a minimum of attention is essential. On Bombardier Tractor Track Attachments F-2 and D-2, there are four points on each side which should be greased regularly, depending on the kind of work performed as well as on the conditions under which the tractor operates.

- (a) IDLER WHEEL BEARING. Standard lubrication for wheel tapered roller bearings should be made. These bearings are well protected but should be examined occasionally. Special care should be taken to adjust bearings properly when remounting. For this purpose, it is recommended that tracks be removed or loosened so as not to interfere with the operation.
- (b) ROCKER AND SPINDLE: Rocker and spindle assembly is provided with an alemite grease fitting for proper lubrication of center bushing or sleeve. It should be greased daily with a pressure gun to ensure maximum life to rocker and spindle replaceable sleeves. When assembling or overhauling, chain and adjusting screw bushing attached to rocker and spindle shaft should be greased.
- (c) BODY SPINDLE CROSS TUBE NEEDLE BEARINGS. Needle bearings in the body spindle cross tube should be greased daily by means of the alemite fitting provided for this purpose.
- (d) BOGIE SPRING BRACKET PULLEY. An alemite grease fitting is provided to grease the pulley supporting the spring tension chain of tractor track attachment. This part should be greased every week with the pressure gun.

It will take only a few minutes to follow these lubrication instructions. If you follow them carefully you will obtain much longer and reliable service from your track attachment. Remember that these specifications may vary, depending on the kind of work performed.

EXPLODED VIEW and REFERENCES



BOMBARDIER TRACTOR TRACK ATTACHMENT

Models F-2 and D-2

SPARE PARTS LIST

Ref. No.	Part No.		Quant. er Unit
1	A-300	Differential U-bolt, large.	2
2	A-301	Differential U-bolt, small.	2
3	A-302	Differential U-bolt nuts, 5/8".	8
4	C-304	Housing bracket assembly R.H.	1
5	C-305	Housing bracket assembly L.H.	1
6	A-306	Fender shim.	2
7	B-307	Body spindle shaft.	2
8	A-308	Body spindle shaft bolt.	4
9	B-309	Span adjuster split bushing assembly.	4
10	A-310	Span adjuster split bushing bolt,	
		nut & washer.	8
11	C-312	Body spindle assembly R.H.	1
12	C-313	Body spindle assembly L.H.	1
13	A-314	Body spindle chain bolt & nut & washer	r. 2

Ref. No.	Part No.	PART NAME	Quan per U	
14	A-315	Body spindle needle bearing.	42	
15	A-316	Needle bearing grease retainer.	4	
16	A-317	Body spindle needle bearing grease fitti	ng. 2	
17	C-319	Rocker and spindle assembly.	2	
18	A-320	Rocker and spindle replaceable bushing,	. 4	
19	A-321	Rocker and spindle grease fitting.	2	
20	A-322	Rocker and spindle stop washer.	2	
21	A-323	Stop washer bolt and washer.	2	
22	B-325	Tension chain and adjusting screw ass'y	. 2	
23	A-326	Tension chain bushing cotter pin.	2	
24	C-329	Spring holder bracket.	2	
25	A-321	Spring holder bracket grease fitting.	2	
26	A-330	Spring holder bracket bolt and nut.	2	
27	B-332	Compression spring.	2	
28	B-333	Compression spring disc.	2	
29	B-334	Adjusting screw nut and tube.	2	
30	C-1114	Bogie wheel assembly including cups.	2	
31	15250	Bogie wheel bearing cup, inner.	2	
32	09196	Bogie wheel bearing cup, outer.	2	
34	15112	Bogie wheel bearing cone, inner.	2	
33	09074	Bogie wheel bearing cone, outer.	2	
35	556	Bogie wheel bearing grease retainer.	2	
36	A-336	Bogie wheel bearing mud excluder.	2	
37	A-337	Bogie wheel bearing mud excluder felt.	2	
38	B-1195	Bogie wheel spindle washer.	2	
39	A-339	Bogie wheel spindle nut.	2	
40	A-340	Bogie wheel spindle cotter pin.	2	
41	A-341	Bogie wheel hub cap.	2	
42	B-343	Bogie wheel tire.	2	
43	B-344	Bogie wheel tube.	2	
44	B-345	Track assembly endless.	2	
45	B-346	Track belt, endless, 21/2".	4	
46	B-347	Track cross link, 171/4", long.	64	ú.
47 -	B-348	Track cross link and stud assembly.	32	-
48	10118	affil Track cross link bolt.	384	
49	10119	Track cross link bolt nut.	384	
50	10120	Cross link bolt-washer. 5/16	384	
51	A-350	Cross link reinforcement cleat.	192	
		EXTRA EQUIPMENT		
4	A-355	Mudguard bracket	2	
	A-356	Mudguard bracket bolt.	4	
	A-357	Mudguard bracket bolt nut.	4	
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