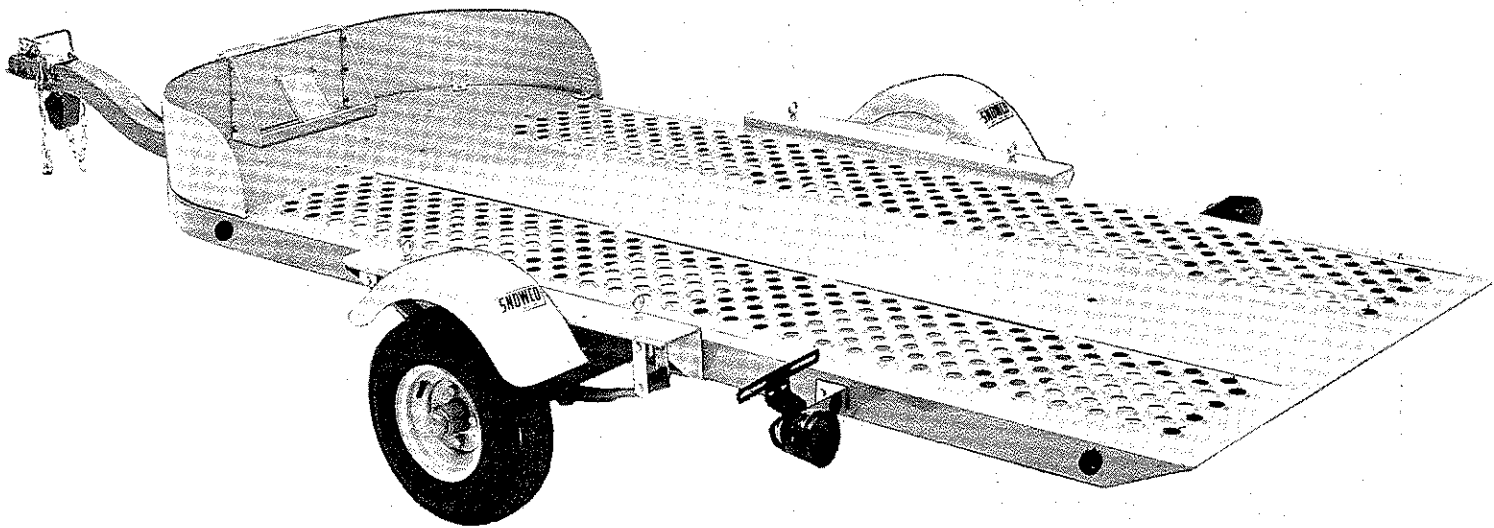


OPERATORS MANUAL

MODELS 948, 954, 1148, 1154, 1554

UTILITY TRAILER

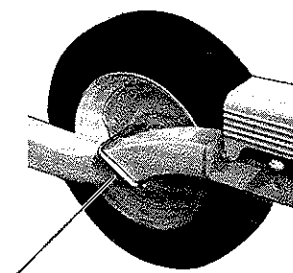


THE SNOW CORPORATION, 4350 McKinley St., Omaha, Nebr. 68112

SPECIFICATIONS

Model Nos.	948	1148	954	1154	1554
Deck Width	48"	48"	54"	54"	54"
Deck Length	111"	111"	130"	130"	130"
Overall Width	70"	70"	77"	77"	77"
Overall Length	156"	156"	175"	175"	175"
Wheel Tread	65"	65"	71"	71"	71"
Wheel Bearing	Timken Tapered	Timken Tapered	Timken Tapered	Timken Tapered	Timken Tapered
Height, Ground to Deck	16"	16½"	16"	16½"	18"
Tire Size	4:80x8" 4-Ply Rating	5:70x8" 4-Ply Rating	4:80x8" 4-Ply Rating	5:70x8" 4-Ply Rating	5:30x12" 4-Ply Rating
Spring, Elliptical	3-Leaf	4-Leaf	3-Leaf	4-Leaf	5-Leaf
Rated Load Capacity	900#	1100#	900#	1100#	1500#
Shipping Weight	350#	360#	449#	450#	470#

ACCESSORIES for SERIES 48" & 54" TRAILERS



Part #21-309 spare tire mounting bracket

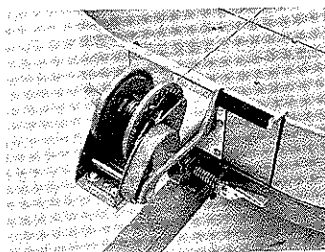
SPARE WHEEL

Includes tire and tube.
 Part #21-445 5:70x8 (4-ply rating)
 Part #21-443 4:80x8 (4-ply rating)
 Part #21-449 5:30x12 (4-ply rating)



HUB CAPS

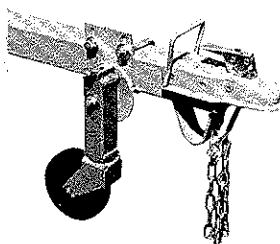
Chrome-plated hub caps add that extra touch of beauty to Trailer. Part No. 21-425 for 8" wheel, Part No. 21-525 required for 12" wheel. (Two required.)



WINCH KIT

Powerful 6:1 ratio winch and steel cable with hook. Also winch stand bracket and center winch shield.

48 & 54 series #20-150

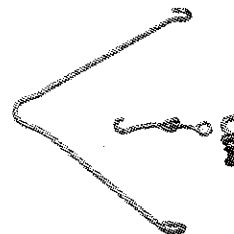


RETRACTABLE TONGUE STAND WITH WHEEL

Keeps trailer ready to attach to automobile. Perfect for standing displays. Part #21-360

STAKE POCKET

Part #21-385 (specify quantity)
 (Not illustrated)



No. 21-327 Tie Down Kit



PAINT

For your own "touch-up" jobs. Part #21-358 Gray Paint Spray 12 oz can; Part #21-359 Green Paint Spray 12 oz. can



TONGUE JACK WITH WHEEL

Easily operated tongue jack raises even a fully loaded trailer in just seconds. Part #21-390

OPERATING INSTRUCTIONS

Refer to inflation table located on tongue for correct tire pressure.

Wheel bearings are prelubricated. Clean, repack with an approved wheel bearing lubricant and adjust periodically.

Locate the axle in the desired position to give correct balance with the type of load carried. For best trailing and maximum safety, a tongue weight

of 75 to 100 pounds is recommended.

Always use safety chain provided.

Tension on the counterbalance spring may be adjusted to conform to axle locations. Always use enough tension to hold trailer in the tilted position for loading.

Be sure the tipperlock is engaged completely before towing unit.

ASSEMBLY

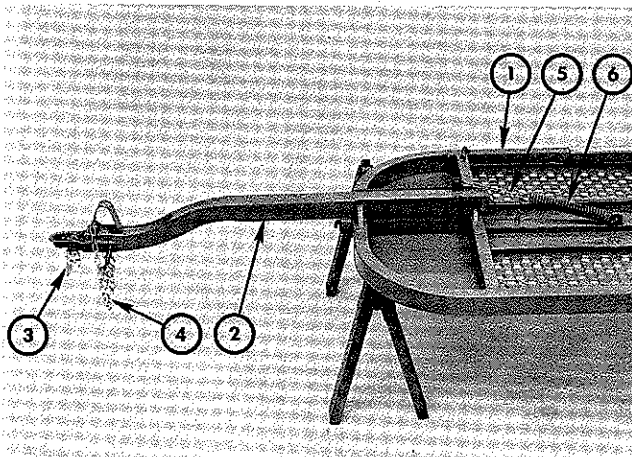


Illustration No. 1

NOTE: Check packing list to make sure all parts are shipped. Always give packers number in any correspondence concerning this shipment.

1. Lay frame upside down on suitable support.
2. Install tongue in position. Use $\frac{1}{2}$ "x $4\frac{1}{4}$ " cap screw with lock nut.
3. Install ball hitch lock as shown. Tension of nut may be adjusted to give firm fit to ball. See Illustration "A".
4. Install safety chain. Use $\frac{3}{8}$ "x1" Bolt. Place $\frac{3}{8}$ " flat washer between chain and lock nut.
5. Hook counter balance spring to clevis on frame. If axle is to be mounted in center location, drop two links of chain.
6. Attach spring tension adjusting chain to tongue. Use $\frac{3}{8}$ "x1" cap screw. Place $\frac{3}{8}$ " flat washer between lock nut and chain link.

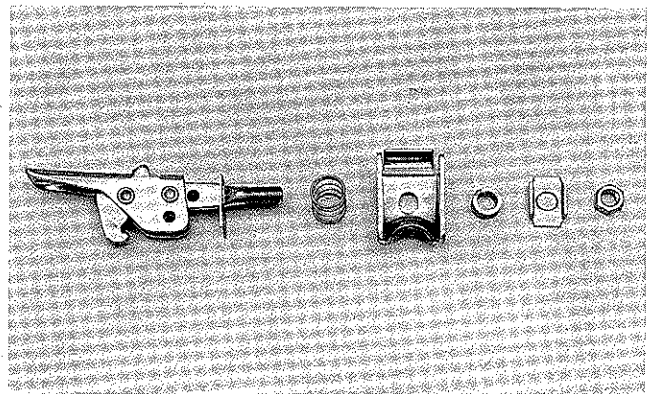


Illustration "A"

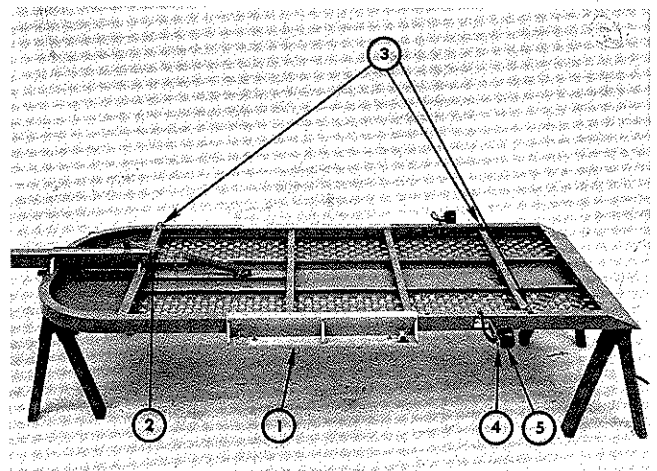


Illustration No. 2

1. Attach spring and fender mounting bracket to frame using (2) $\frac{3}{8}$ "x $2\frac{3}{4}$ " N.C. cap screws with washer welded to cap screw secure with lock nuts. Tighten securely.
2. Starting at coupler end of tongue, thread tail light wire in frame according to diagram furnished with tail light kit. Use lead wire placed in frame for threading tail light wires through frame.

ASSEMBLY (Continued)

3. Place rubber grommets on wires at all points where wire is lead from one point in frame to another.
4. Attach right and left tail light brackets to frame with large wire hole offset to top side of trailer using (2) $\frac{3}{8}$ "x $2\frac{3}{4}$ " N.C. cap screws with lock nuts.
5. Now install tail light on tail light bracket. Make sure tail light with license plate illuminating window and license plate bracket is on left side of trailer. Slip rubber loom over tail light wires and connect wires to tail light.

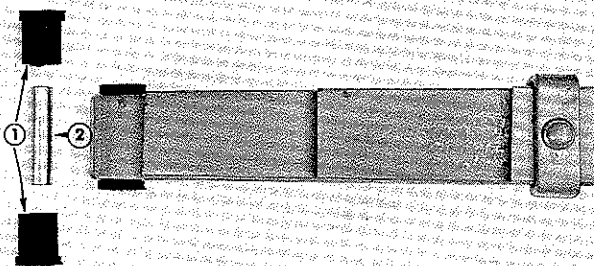


Illustration "B"

Before mounting springs, see Illustration "B" for (1) installation of rubber bushings in spring, and for (2) installation of steel bushing in rubber bushings.

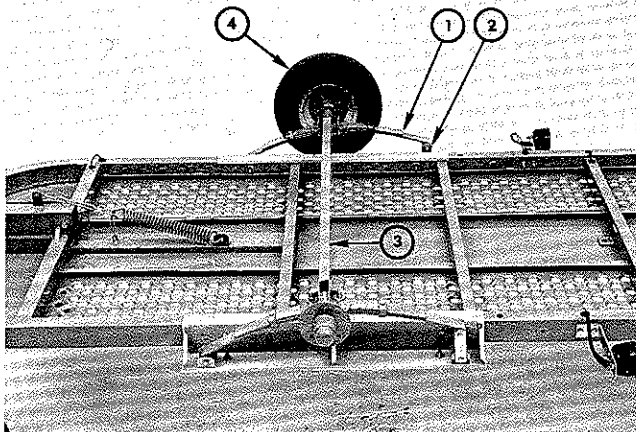


Illustration No. 3

1. Install spring in spring clevis on spring and fender mounting bracket using (1) $\frac{3}{8}$ "x $3\frac{1}{4}$ " N.C. cap screws with lock nuts. Tighten securely.
2. Attach shackle bars to clevis on spring and fender mounting bracket using $\frac{3}{8}$ "x $3\frac{1}{4}$ " N.C. cap screws with lock nuts. Attach spring to

shackle bars using $\frac{3}{8}$ "x $3\frac{1}{4}$ " N.C. cap screws with lock nuts. Tighten securely. Models 948 and 954 use 3-leaf spring — models 1148 and 1154 use 4-leaf spring — model 1554 use 5-leaf spring.

3. Attach axle to spring making sure bolt on spring is seated in hole on mounting pads. Use (4) U-bolts with extra thick flat washers between lock nut and mounting pad. Tighten securely.
4. Mount tire, tube and wheel assembly to axle using (4) $\frac{1}{2}$ " lug bolts.

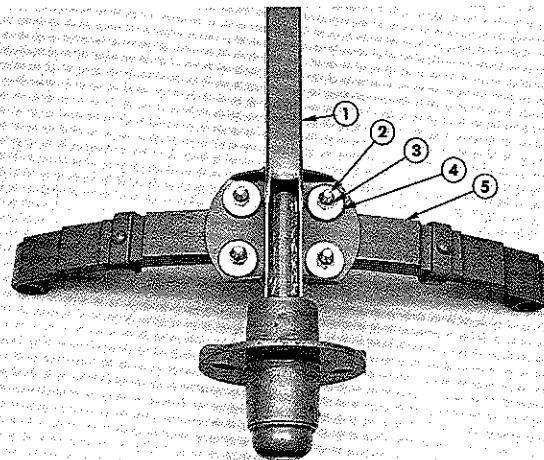


Illustration "C"

1. Axle
2. U-bolt
3. Lock nut
4. Flat washer, extra thick (Snowco)
5. Spring

ASSEMBLY (Continued)

1. Mount fender assembly on spring and fender mounting bracket using (2) 5/16"x1" N.C. Carriage bolt with star washer and nut for 948 and 954. For 1148, 1154 and 1554 use (4) 5/16"x1" N.C. carriage bolts with star washer and nut.
2. Attach eye bolts to spring and fender mounting bracket with flat washer and lock nut on both sides of spring and fender mounting bracket.
3. Install front right and left splash shield. Use (6) 1/4"x1/2" self-tapping screws.
4. Attach shield, winch center and wheel chock using (2) 3/8"x3/4" N.C. cap screws. Place 3/8" flat washer under head of cap screw and use 3/16" thick flat washer and lock nut on under side of deck sheet. Next use (2) 3/8"x4" N.C. cap screws. Place 3/8" flat washer under head of cap screw and 3/8" flat washer and lock nut on side of frame. Use (6) 1/4"x1/2" N.C. cap screws with lock nuts to attach to right and left splash shields.
5. Mount (1) red reflector w/adhesive on rear of each tail light mount as illustrated and (1)

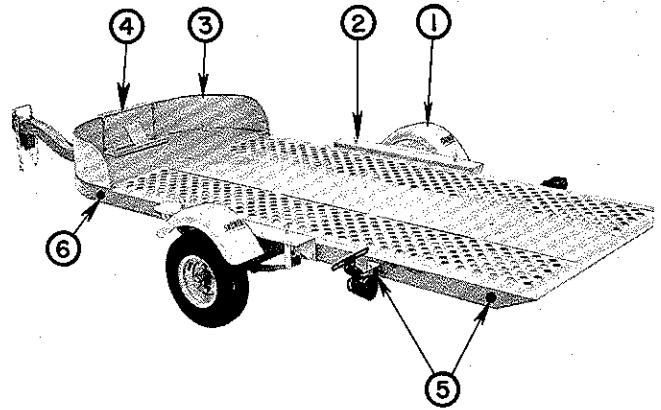
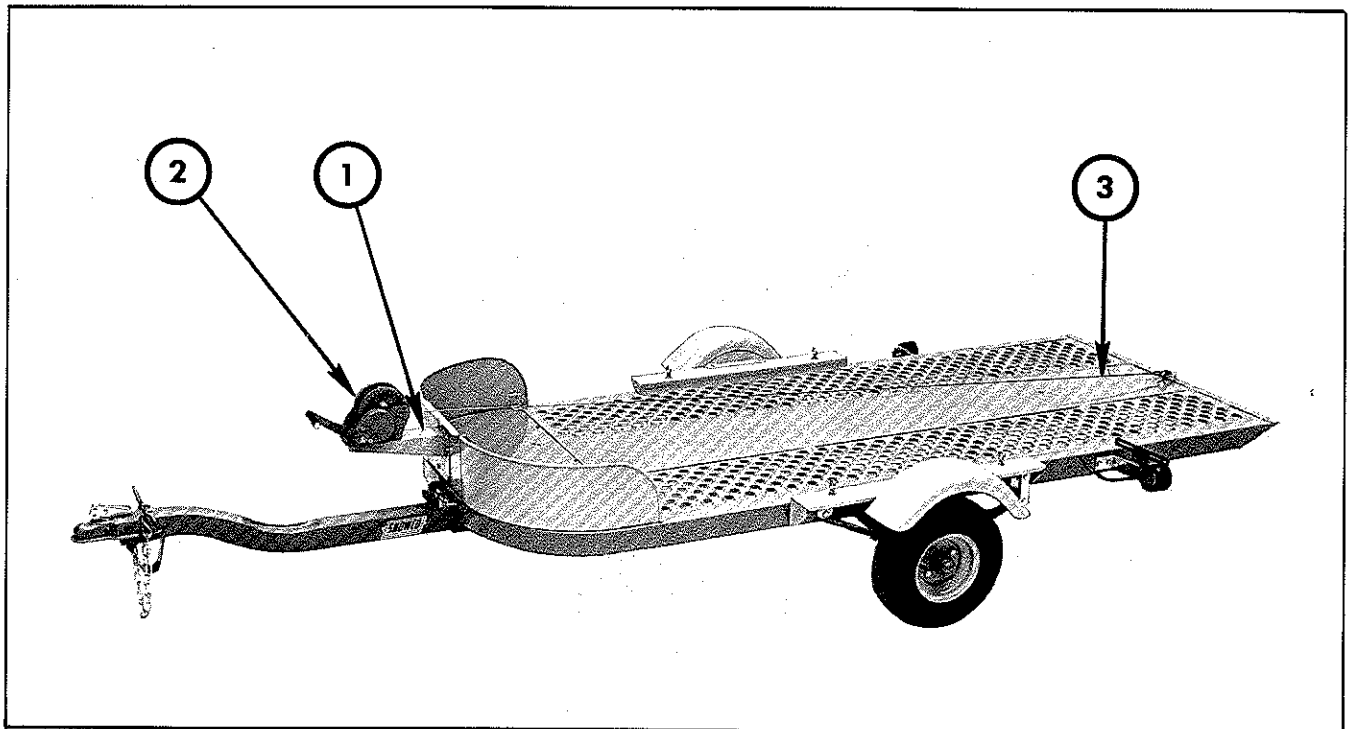


Illustration No. 4

more on each side rail 2" from rear of trailer as illustrated.

6. Mount (1) amber reflector w/adhesive to each side on a flat surface just after bend in side rail as illustrated.

ACCESSORIES

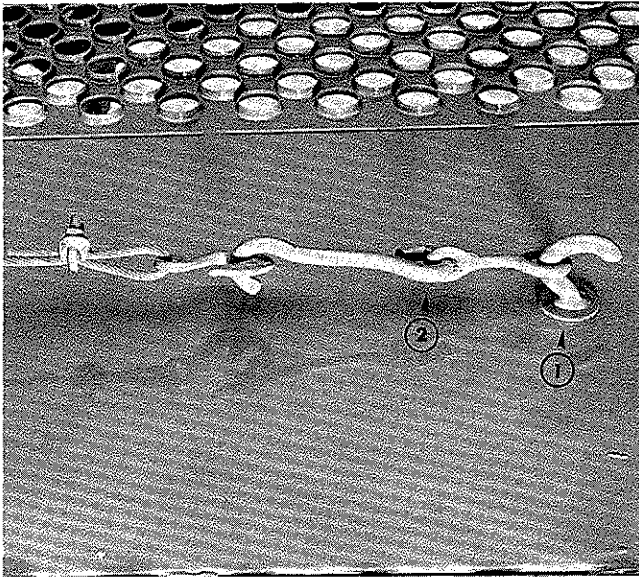


1. Attach winch stand assembly to center winch shield using (4) 3/8"x3/4" cap screws, 3/8" flat washers and lock nuts.
2. Mount winch on winch stand assembly with (3)

3/8"x1" N.C. cap screws, flat washers and lock nuts.

3. Attach cable to winch using bolt received with winch.

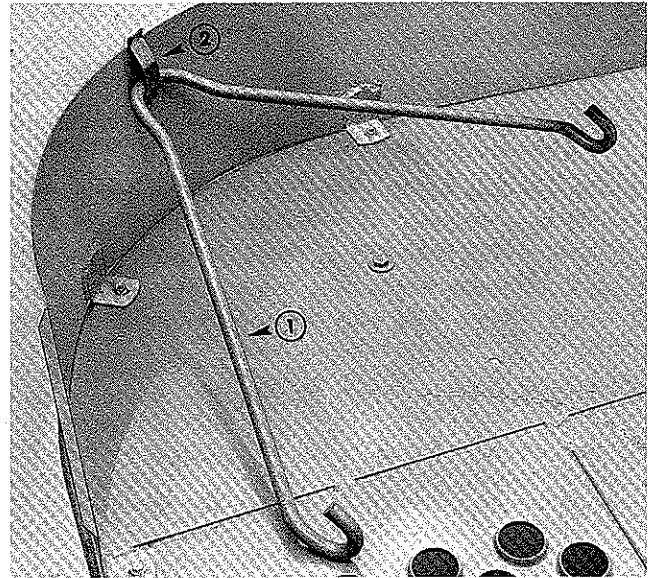
ACCESSORIES (Continued)



1. Hook, No. 21-374

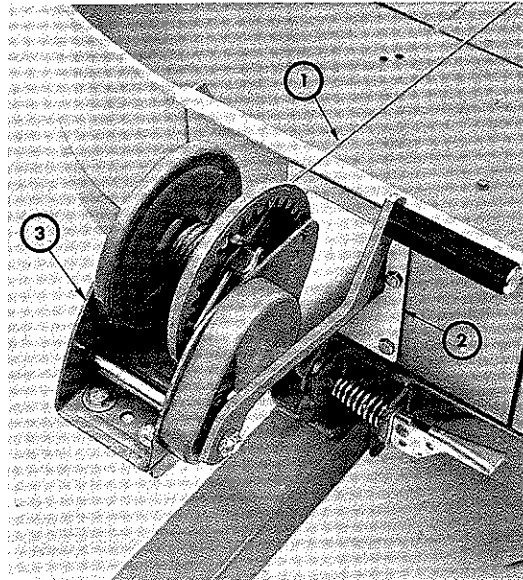
2. Hook, Flexible, No. 21-375

1. Attach hook to deck.
2. Flexible hook can be used to attach to draw bar of tractor or any other convenient point. By tightening up cable attached to front of unit, load is securely anchored in place for transport.



No. 21-373 Yoke, Tie Down

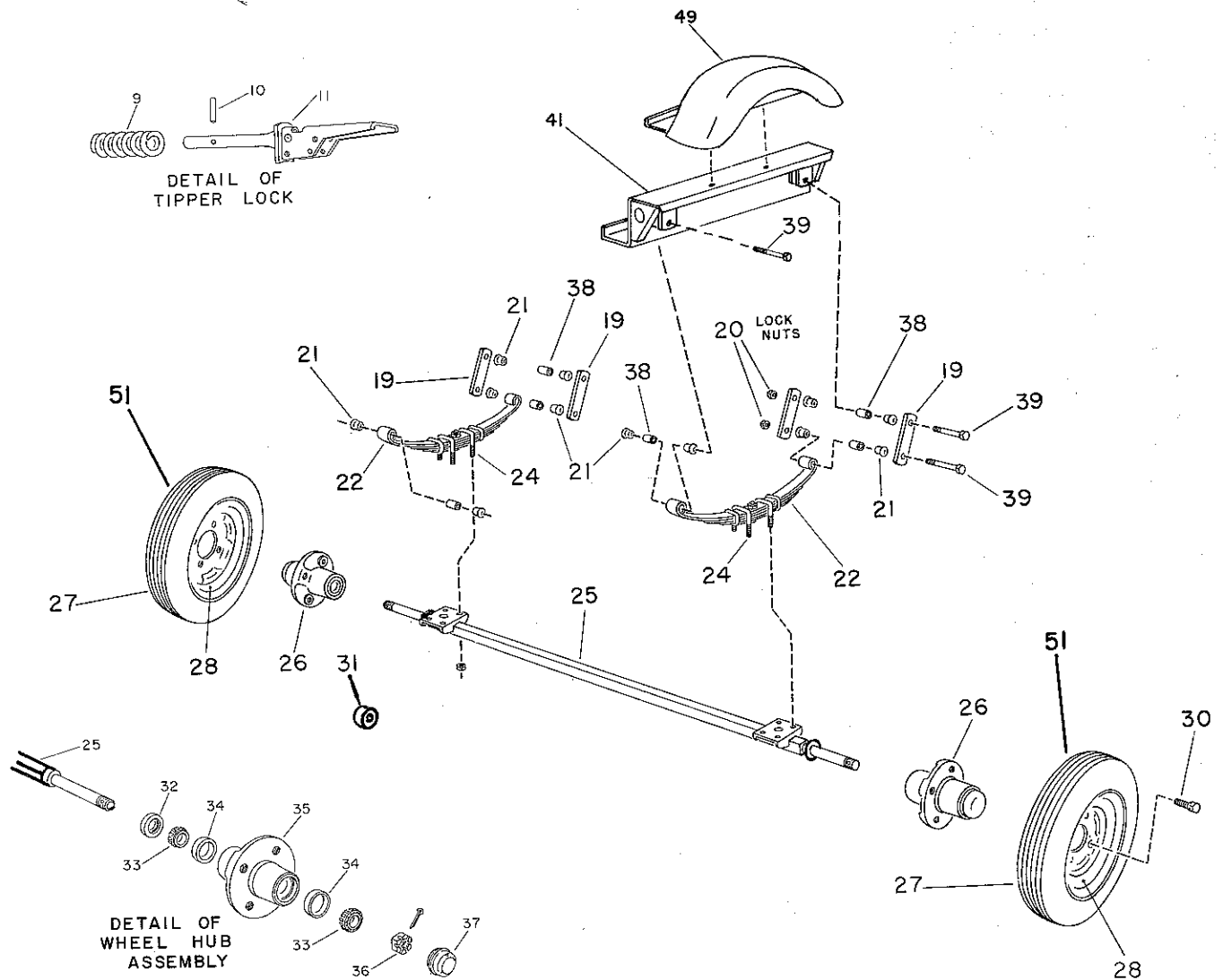
1. Yoke shown in carrying position. This can be hooked around front axle or any convenient place for loading, unloading or transport.
2. Bolt spring clip to splash guard as shown. Use $\frac{1}{4}'' \times \frac{1}{2}''$ bolt with lock washer and hex nut.



No. 20-150 Winch Kit

1. 21-370 cable w/hook.
2. 20-144 winch stand assembly.
3. 21-326 winch 6:1 ratio.

SPRING, AXLE, FENDER AND TIPPERLOCK ASSEMBLIES



DRG. NO.	PART NO.	DESCRIPTION	DRG. NO.	PART NO.	DESCRIPTION
9	21-446	Spring, Tipperlock	31	21-427	Bushing, Sintered Iron (Replacement part only)
10	91-115	Pin, Drive	32	21-428	Seal, Grease
11	21-448	Handle and Plunger, Tipperlock	33	21-429	Bearing, Tapered Roller
12	21-480	Shackle, Spring	34	21-430	Race, Bearing
20	90-014	Nut, Lock, 3/8"—16	35	21-431	Hub, w/2 Races
21	21-419	Bushing, Rubber	36	91-025	Nut, Castellated (1"—14)
22	21-822	Spring, 3-Leaf 948, 954	37	21-433	Cap, Grease
	21-828	Spring, 4-Leaf 1148, 1154	38	21-413	Bushing, Spacer
	21-829	Spring, 5-Leaf 1554	39	90-049	Bolt, 3/8"—16x3 1/4"
24	21-423	U-Bolt, Spring Mounting	41	20-121	Bracket, Spring and Fender Mounting, Right
25	20-122	Axle, w/Spindle 948, 1148 (65")		20-120	Bracket, Spring and Fender Mounting, Left
	20-133	Axle Assembly, Complete w/Hubs 948, 1148 (65")	49	24-117	Fender Assembly 948, 954
	20-136	Axle, w/Spindle 954, 1154 (71")		24-102	Fender Assembly 1148, 1154, 1554
	20-135	Axle Assembly, Complete w/Hubs 954, 1154 (71")	51	21-305	Assembly, Tire, Tube & Wheel 4:80x8, 4-Ply Rating
26	21-424	Hub Assembly		21-308	Assembly, Tire, Tube & Wheel 5:70x8, 4-Ply Rating
27	21-493	Tire and Tube, 5:70x8, 4-Ply Rating		21-361	Assembly, Tire Tube & Wheel 5:30x12, 4-Ply Rating
	21-492	Tire and Tube, 4:80x8, 4-Ply Rating			
	21-496	Tire & Tube, 5:30x12, 4-Ply Rating			
28	21-444	Wheel, 8"			
	21 519	Wheel, 12"			
30	90-704	Bolt, Lug			

PARTS LIST

SNOWCO UTILITY TRAILERS — MODELS 948, 1148, 954, 1154, 1554

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
20-134	Frame, 54" Series	91-025	Nut, Castellated (1"—14)
20-117	Frame, 48" Series	21-433	Cap, Grease
20-140	Shield, Splash, Left	21-456	Spring, Counter Balance
20-141	Shield, Splash, Right	21-420	Chain, Counter Balance Tipper
20-118	Tongue	21-437	Bracket, License Mounting
21-414	Chain, Safety	91-014	Lock Nut, 3/8"
21-235	Ball Hitchlock Assembly	20-120	Bracket, Spring and Fender Mounting, Left
21-446	Spring, Tipperlock	20-121	Bracket, Spring and Fender Mounting, Right
91-115	Pin, Drive	21-424	Hub Assembly
21-448	Handle & Plunger, Tipperlock	20-145	Shield, Splash, Center, 48" Series
21-436	Tail Light, Left	20-146	Shield, Splash, Center, 54" Series
21-846	Tail Light, Right	24-117	Fender Assembly 948, 954
21-451	Grommet, Rubber	24-102	Fender Assembly 1148, 1154, 1554
21-480	Shackle, Spring	21-356	Harness, Wiring, 25' Trailer
21-413	Bushing, Spacer	21-355	Harness, Wiring, w/Female Connection (Auto)
21-419	Bushing, Rubber	21-427	Bushing, Sintered Iron (Replacement part only)
21-822	Spring, 3-Leaf 948, 954	21-493	Tire and Tube, 5:70x8, 4-Ply Rating
21-828	Spring, 4-Leaf 1148, 1154	21-492	Tire and Tube, 4:80x8, 4-Ply Rating
21-829	Spring, 5-Leaf 1554	21-496	Tire and Tube, 5:30x12, 4-Ply Rating
21-423	U-Bolt, Spring Mounting	21-308	Assembly, Tire, Tube and Wheel, 5:70x8, 4-Ply Rating
20-122	Axle, w/Spindle 948, 1148 (65")	21-305	Assembly, Tire, Tube and Wheel, 4:80x8, 4-Ply Rating
20-136	Axle, w/Spindle 954, 1154, 1554 (71")	21-361	Assembly, Tire, Tube and Wheel, 5:30x12, 4-Ply Rating
20-133	Axle Assembly, Complete w/Hubs, Bearings, Etc., 948, 1148 (65")	21-719	Bracket, Tail Light (Right)
20-135	Axle Assembly, Complete w/Hubs, Bearings, Etc., 954, 1154, 1554 (71")	21-718	Bracket, Tail Light (Left)
21-444	Wheel, 8"	20-194	Bolt, w/Washer 3/8x3 N.C.
21-519	Wheel, 12"	24-172	Reflector, Red w/Adhesive 1 3/4 O.D.
90-704	Bolt, Lug	24-173	Reflector, Amber w/Adhesive 1 3/4 O.D.
21-429	Bearing, Tapered Roller		
21-428	Seal, Grease		
21-430	Race, Bearing		
21-431	Hub w/Races		

WARRANTY

The performance, workmanship and material of these products are unconditionally guaranteed for 120 days when used for the purpose and under the conditions for which designed. The manufacturer will replace free any part found to be defective upon examination when such part is returned to manufacturer transportation prepaid.