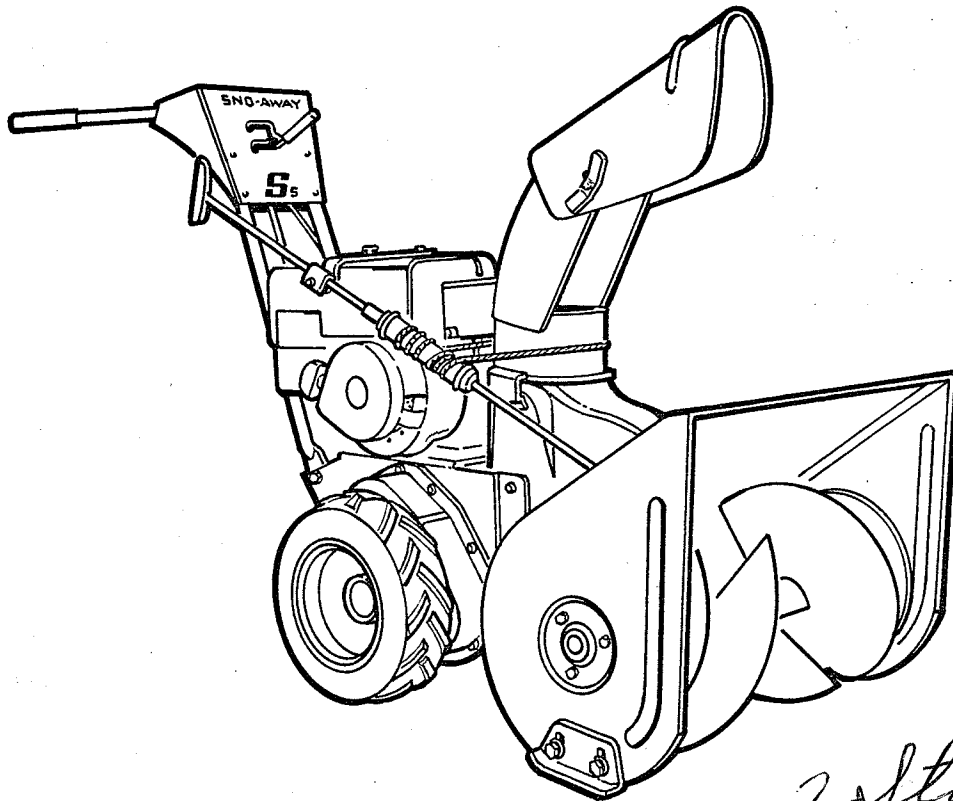


Simplicity®

PARTS CATALOG



2 Stage

P.H. 219-463-2191

5 HP SNO-AWAY

Mfrs. No. 551

*DVO-THERM CORP
MOTOR WHEEL CORP.
LA GRANGE, IND.*

*MW-10805
KIT 10832
LONG CUP*

SIMPLICITY MANUFACTURING COMPANY, INC.

PACKING

The 5 H.P. Sno-Away is delivered complete in the carton. The carton contains:

- 1 - Frame, Rotor, Engine and Wheel Assembly
- 1 - Handle Assembly
- 1 - Spout Adjusting Rod
- 1 - Spout Assembly
- 1 - Hardware Pack

Should shortages of any of the above items occur, advise by stating packers number listed on the green packing slip, SERIAL NUMBER of Sno-Away, part number and description of items missing.

ASSEMBLY

1. Fasten the handle assembly to the frame assembly as shown at (1), Figure 1, using the (4), 5/16-18 x 7/8" capscrews, 5/16" lock washers and 5/16"-18 N.C. hex nuts.

2. The throttle cable assembly is coiled around the engine for shipping purposes. Uncoil the cable and attach to the housing assembly using the (2) 1/4" x 1/2" self-tapping screws. The cable is held in place by the clamp on the lower portion of the left handle as shown at (2), Figure 1.

3. Attach the lower end of the transmission shift rod to the shift rod assembly with the 7/16"-14 N.C. full hex nut and the 7/16" lock washer. Line up rod so it moves up and down freely with the handle in the neutral position. Tighten the full hex nut.

4. Insert the Touch-O-Matic extension wire through the wire clamp. For proper belt tension, adjust as shown in Figure 2.

5. Insert the control rod and handle assembly in the tube assembly and secure with the 5/32 x 1" long cotter pin. The spout control cable should be assembled in the following manner: Position the spout directly forward. Position the control tube so the cable clamp faces the side of the spout. Provide 2 1/2 coils on the top and 2 1/2 coils on the bottom. The end of the cable closest to the operator passes under the tube. The end away from the operator passes over the top of the tube. See Figure 3.

6. Install the spout extension with the 5/16-18 x 3/4" long carriage bolts, 3/8" pyramidal shakeproof washers, 3/8" plain washers and wing nuts as shown in Figure 3.

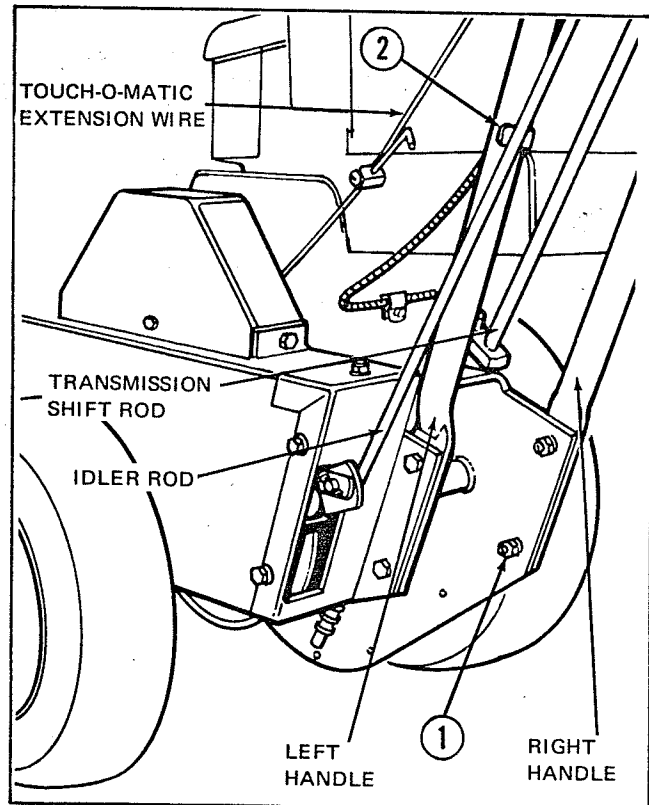


Figure 1

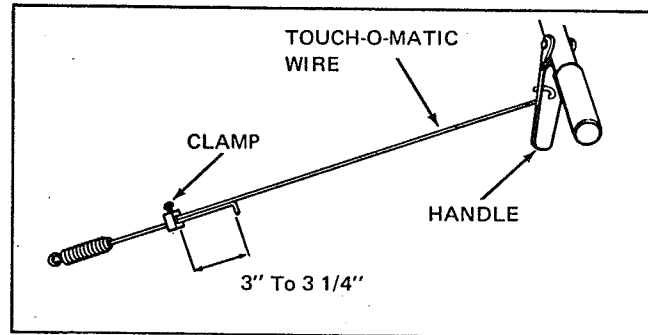


Figure 2

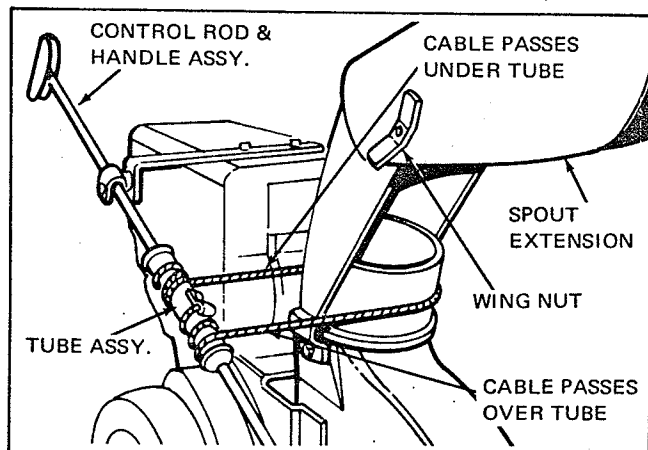
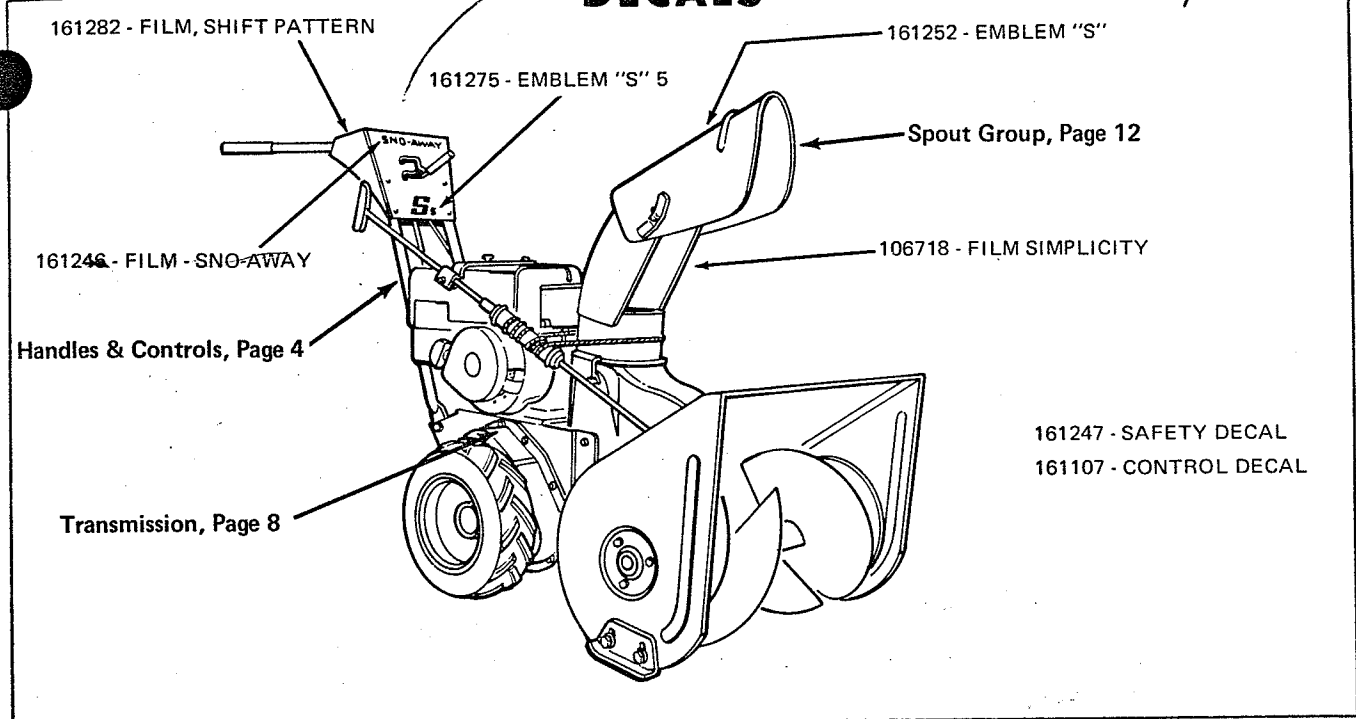


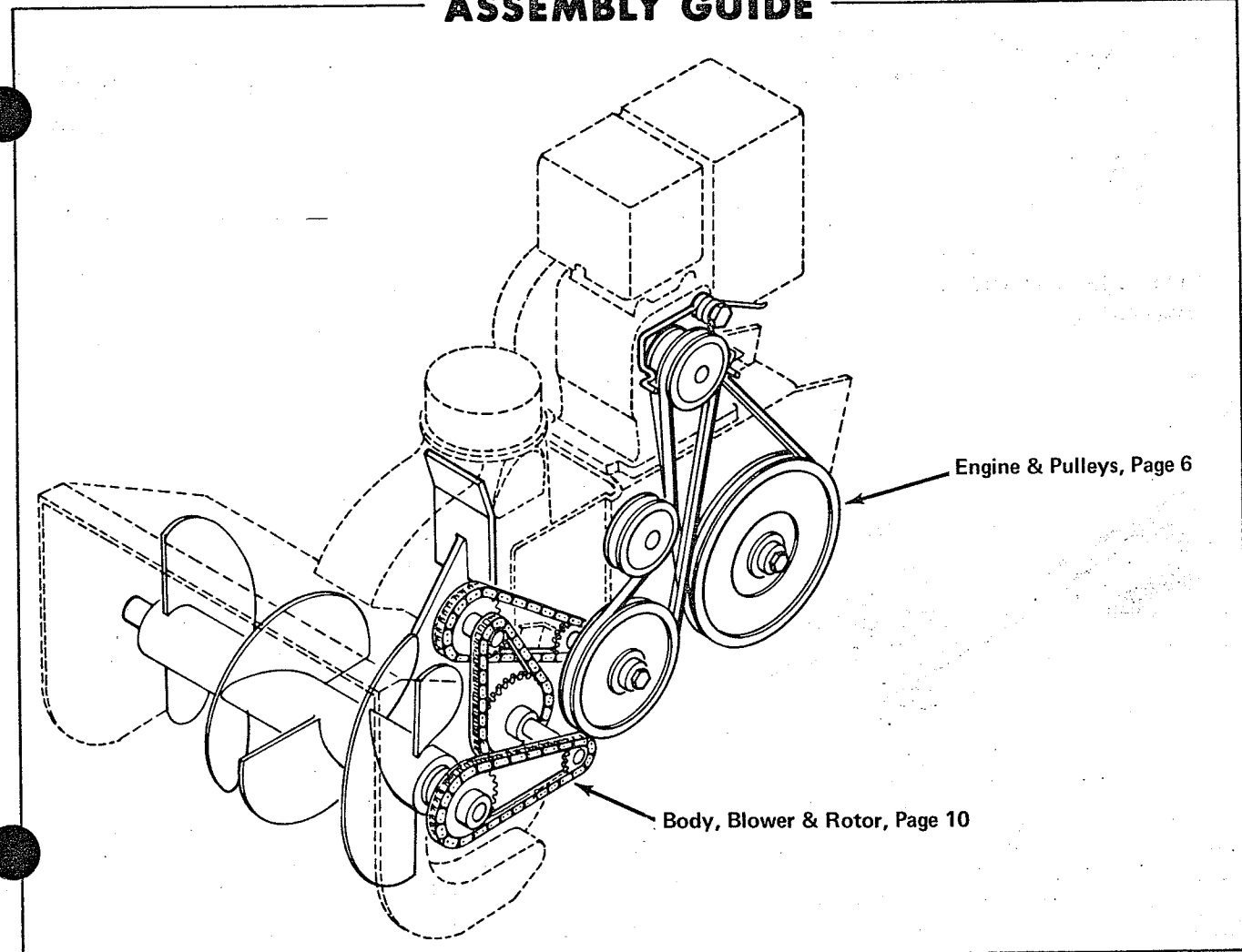
Figure 3

161278
161276
161266
*decals on
Hsq Control.*

DECALS

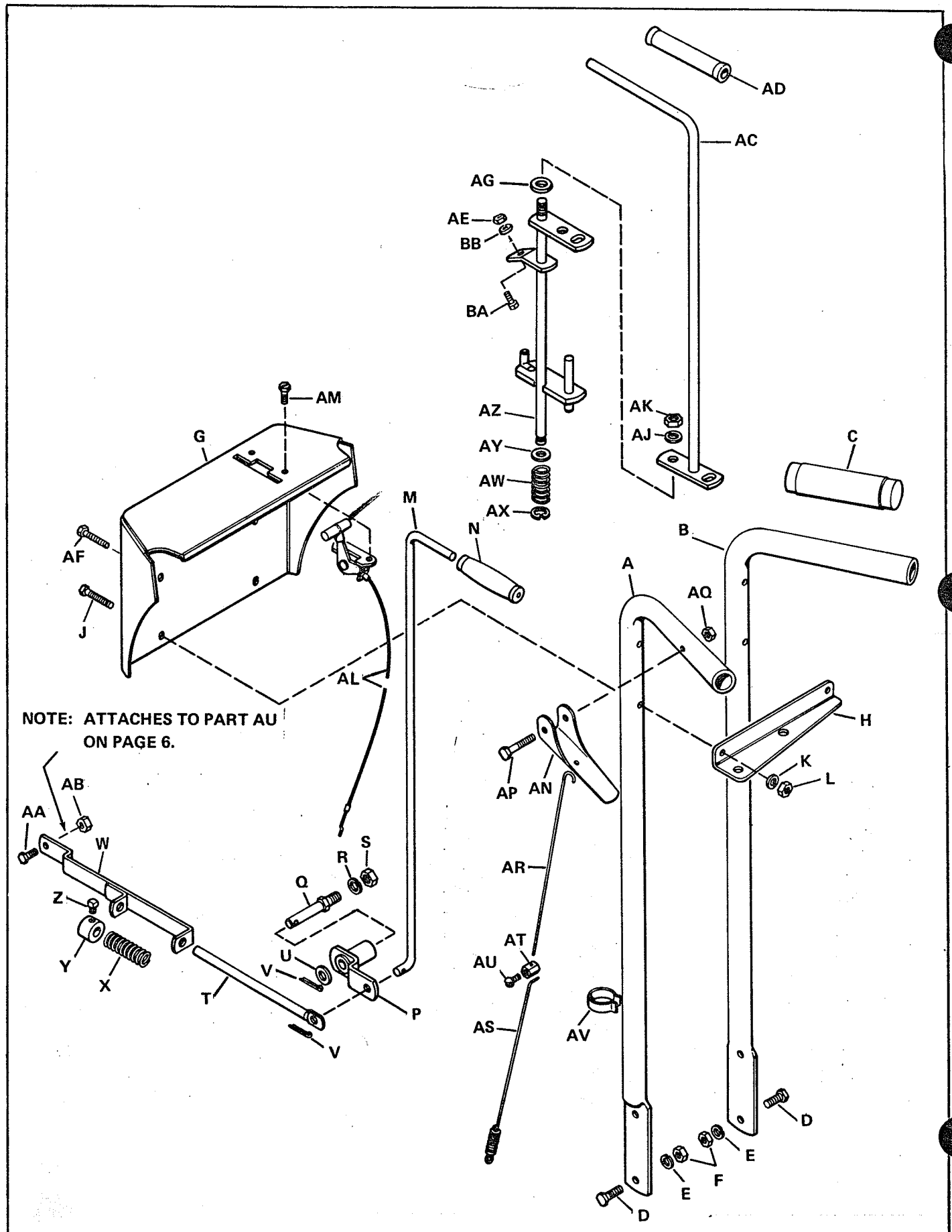


ASSEMBLY GUIDE



HANDLES & CONTROLS

K



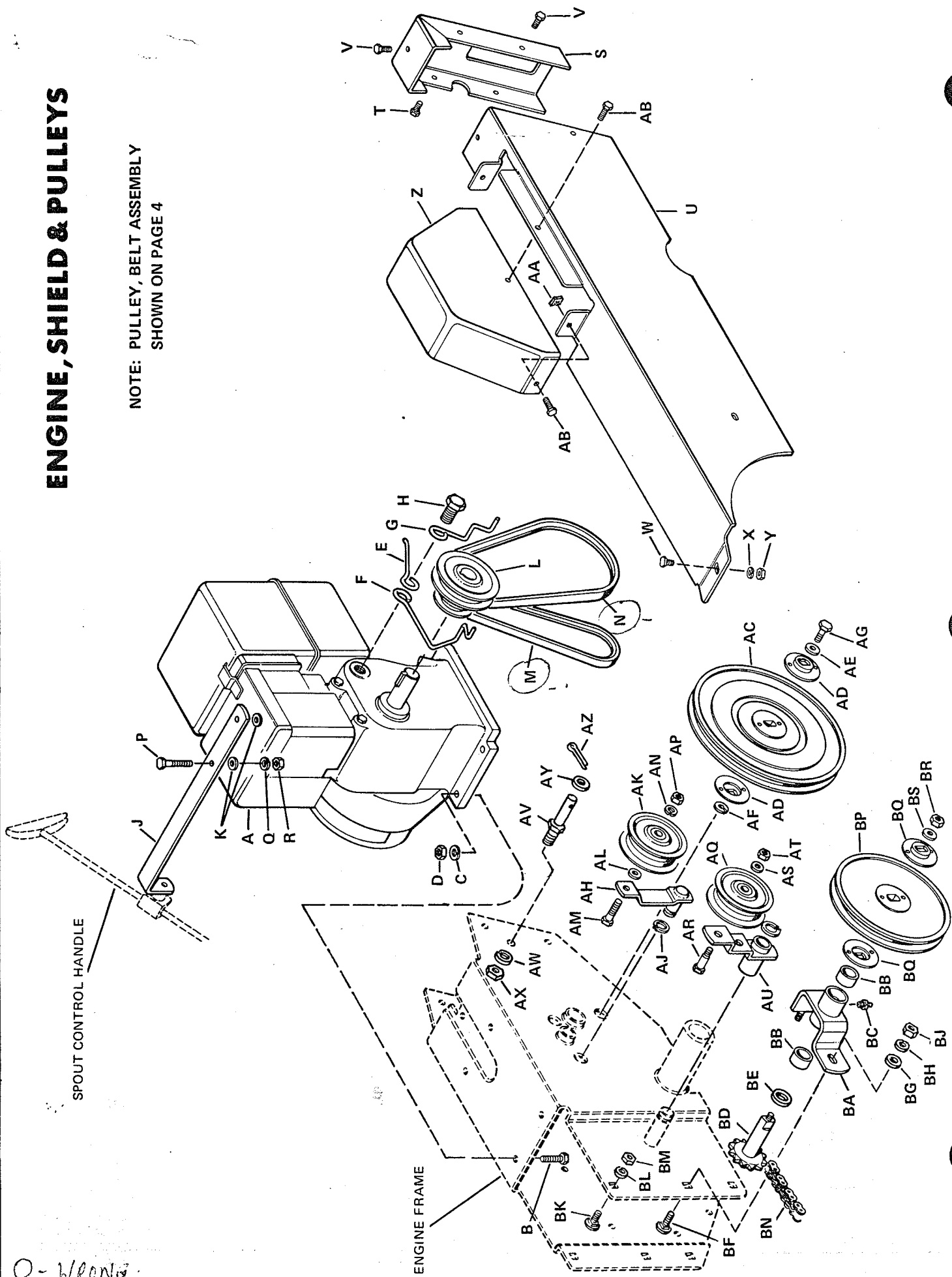
NOTE: ATTACHES TO PART AU ON PAGE 6.

HANDLES & CONTROLS

Ref. Let.	Part No.	Description
A	106975	Handle L.H.
B	106976	Handle R. H.
C	106558	Grip
D	715073	Hex. Cap Screw, 5/16"-18 N.C. x 7/8" Lg.
E	720001	Lock Washer, 5/16"
F	717001	Full Hex. Nut, 5/16"-18 N.C.
G	161143	Housing Control Assembly
H	161292	Rod Guide
J	705025	Hex. Cap Screw, 1/4"-20 N.C. x 1 1/2" Lg.
K	720003	Lock Washer, 1/4"
L	717005	Full Hex. Nut, 1/4"-20 N.C.
M	106980	Idler Rod
N	106572	Grip
P	106930	Pivot Arm,
Q	106928	Stud
R	720006	Lock Washer 7/16"
S	717022	Full Hex. Nut, 7/16"-14 N.C.
T	106913	Clutch Rod
U	719001	Plain Washer, 3/8"
V	722009	Cotter Pin, 1/8" x 3/4" Lg.
W	106954	Rod Guide Assembly
X	8191045	Spring
Y	105201	Set Collar
Z	713001	Set Screw Sq. Hd., 1/4"-20 N.C. x 3/8" Lg.
AA	705012	Hex. Cap Screw, 5/16"-18 N.C. x 5/8" Lg.
AB	717511	Full Hex. Lock Nut, 5/16"-18 N.C.
AC	161213	Shift Rod Assembly, Upper
AD	161105	Handle Grip
AE	717001	Full Hex. Nut, 5/16"-18
AF	705053	Hex. Cap Screw, 1/4"-20 x 1 3/4"
AG	719001	Plain Washer, 3/8"
AJ	720006	Lock Washer, 7/16"
AK	717022	Full Hex. Nut, 7/16"-14 N.C.
AL	161178	Control Assembly
AM	714016	Self Tapping Hex. Hd. Screw, Recessed, 1/4"-20 x 1/2"
AN	118056	Clutch Grip
AP	705025	Hex. Cap Screw, 1/4"-20 N.C. x 1 1/2" Lg.
AQ	717513	Full Hex. Lock Nut, 1/4"-20 N.C.
AR	161090	Spring Extension
AS	106778	Spring Assembly
AT	161092	Wire Clamp
AU	710006	Rnd. Hd. Screw,
AV	8061108	Cable Clip
AW	161290	Spring
AX	157288	Retainer Ring
AY	719001	Plain Washer, 3/8"
AZ	161231	Shift Rod Assembly, Lower
BA	705001	Hex. Cap Screw, 5/16"-18 x 7/8" Lg.
BB	720001	Lock Washer, 5/16"

ENGINE, SHIELD & PULLEYS

NOTE: PULLEY, BELT ASSEMBLY SHOWN ON PAGE 4

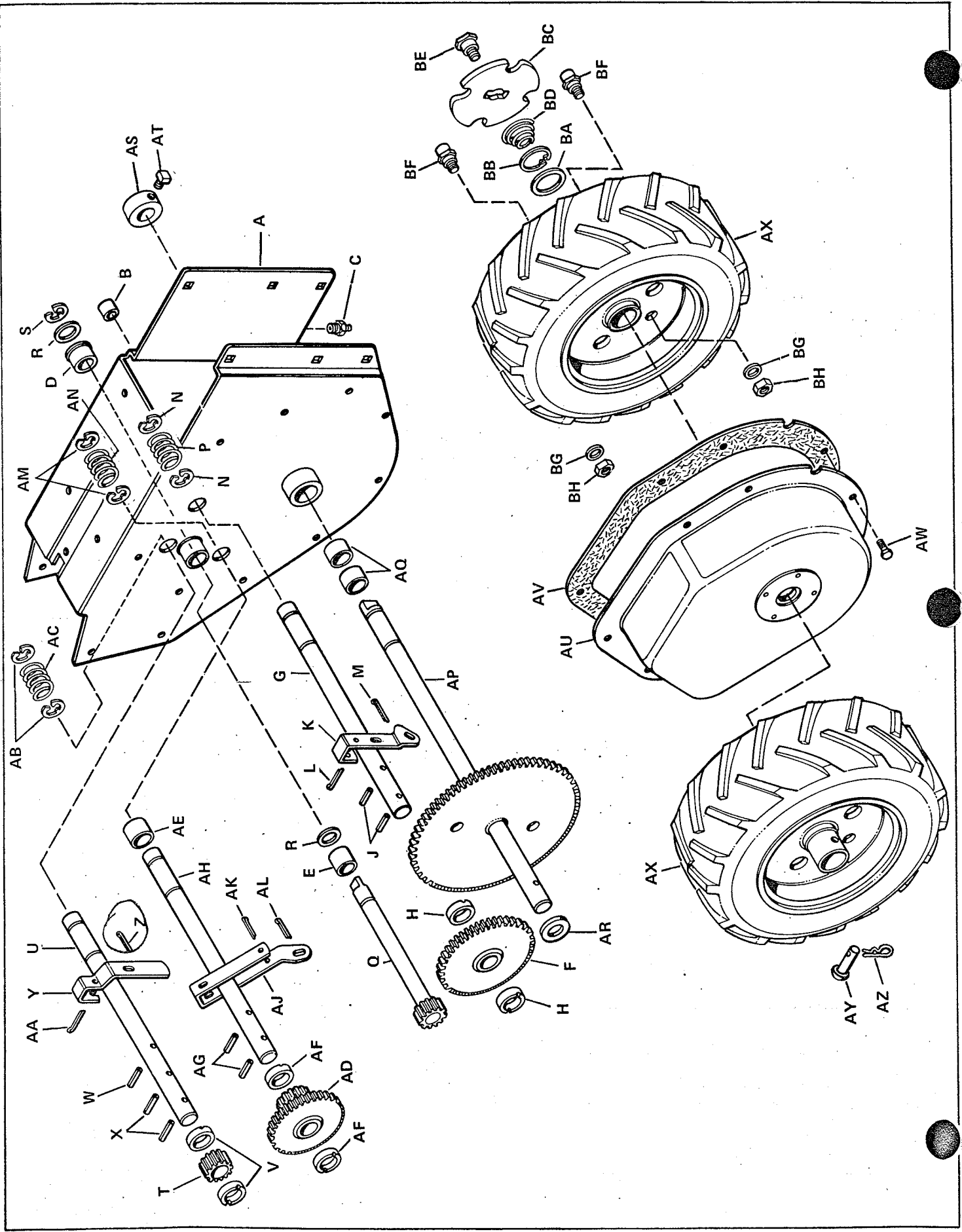


O-WRONG

ENGINE, SHI & PULLEYS

Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	705018	Engine, 5 H.P. - Briggs & Stratton	AJ	158399	Retaining Ring
B	720001	Hex. Cap Screw, 5/16"-18 N.C. x 1 1/2	AK	154534	Idler Pulley
C	717001	Lock Washer, 5/16"	AL	719002	Plain Washer, 5/16"
D	161271	Full Hex Nut, 5/16"-18 N.C.	AM	705016	Hex. Cap Screw, 3/8"-16 N.C. x 1 1/4"
E	161269	Guide Rod	AN	720002	Lock Washer, 3/8"
F	161270	Stop Belt	AP	717003	Full Hex. Nut, 3/8"-16 N.C.
G	161270	Stop Belt	AQ	154534	Idler Pulley
H	706017	Hex. Cap Screw, 1/2" N.F. x 1" Lg.	AR	108497	Special Screw
J	161241	Rod Support,	AS	719002	Plain Washer, 5/16"
K	719006	Plain Washer, 1/4"	AT	717524	Hex. Lock Nut Jam Center, 3/8"-16 N.C.
L	106939	Engine Pulley	AU	106969	Idler Lever Assembly
M	161098	V-Belt	AV	106928	Stud
N	118488	V-Belt	AW	720006	Lock Washer, 7/16"
P	705053	Hex. Cap Screw, 1/4"-20 x 1 3/4" Lg.	AX	717022	Full Hex. Nut, 7/16"-14 N.C.
Q	720003	Lock Washer, 1/4"	AY	719001	Plain Washer, 3/8"
R	717005	Full Hex. Nut, 1/4"-20	AZ	722009	Cotter Pin, 1/8" Dia. x 3/4" Lg.
S	161258	Belt Cover Support	BA	106966	Bearing Housing Assembly
T	715067	Taprite Screw Ind. Hd. Washer Hd. 1/4"-20 N.C. x 3/8" Lg.	BB	156072	Bearing
U	161257	Belt Cover, Lower	BC	727001	Grease Fitting
V	715067	Taprite Screw Ind. Hd. Washer Hd. 1/4"-20 N.C. x 3/8" Lg.	BD	106925	Sprocket Shaft Assembly
W	705002	Hex. Cap Screw, 1/4"-20 N.C. x 1/2" Lg.	BE	8051056	Washer Spacer
X	720003	Lock Washer, 1/4"	BF	703003	Short Neck Bolt Carriage, 3/8"-16 N.C. x 1" Lg.
Y	717005	Full Hex. Nut, 1/4"-20 N.C.	BG	719002	Plain Washer, 5/16"
Z	161256	Belt Cover, Top	BH	720002	Lock Washer, 3/8"
AA	718038	Retainer Nut	BJ	717003	Full Hex. Nut, 3/8"-16 J.C.
AB	714020	Self Tapping Screw, 1/4"-20 N.C. x 5/8" Lg.	BK	703004	Short Neck Bolt Carriage, 3/8"-16 N.C. x 3/4" Lg.
AC	161245	Pulley Transmission	BL	720002	Lock Washer 3/8"
AD	158378	Special Washer	BM	717003	Full Hex. Nut, 3/8"-16 N.C.
AE	719002	Plain Washer, 5/16"	BN	106897	Chain W/Connecting Link
AF	720001	Lock Washer, 5/16"	BP	158377	Pulley
AG	715073	Hex. Hd. Cap Screw, 5/16"-18 N.C. x 7/8" Lg.	BQ	158378	Special Washer
AH	106967	Idler Arm Assembly	BR	717524	Hex. Lock Nut Jam., 3/8"-16 N.C.
			BS	719002	Plain Washer, 5/16"

TRANSMISSION & REAR WHEELS



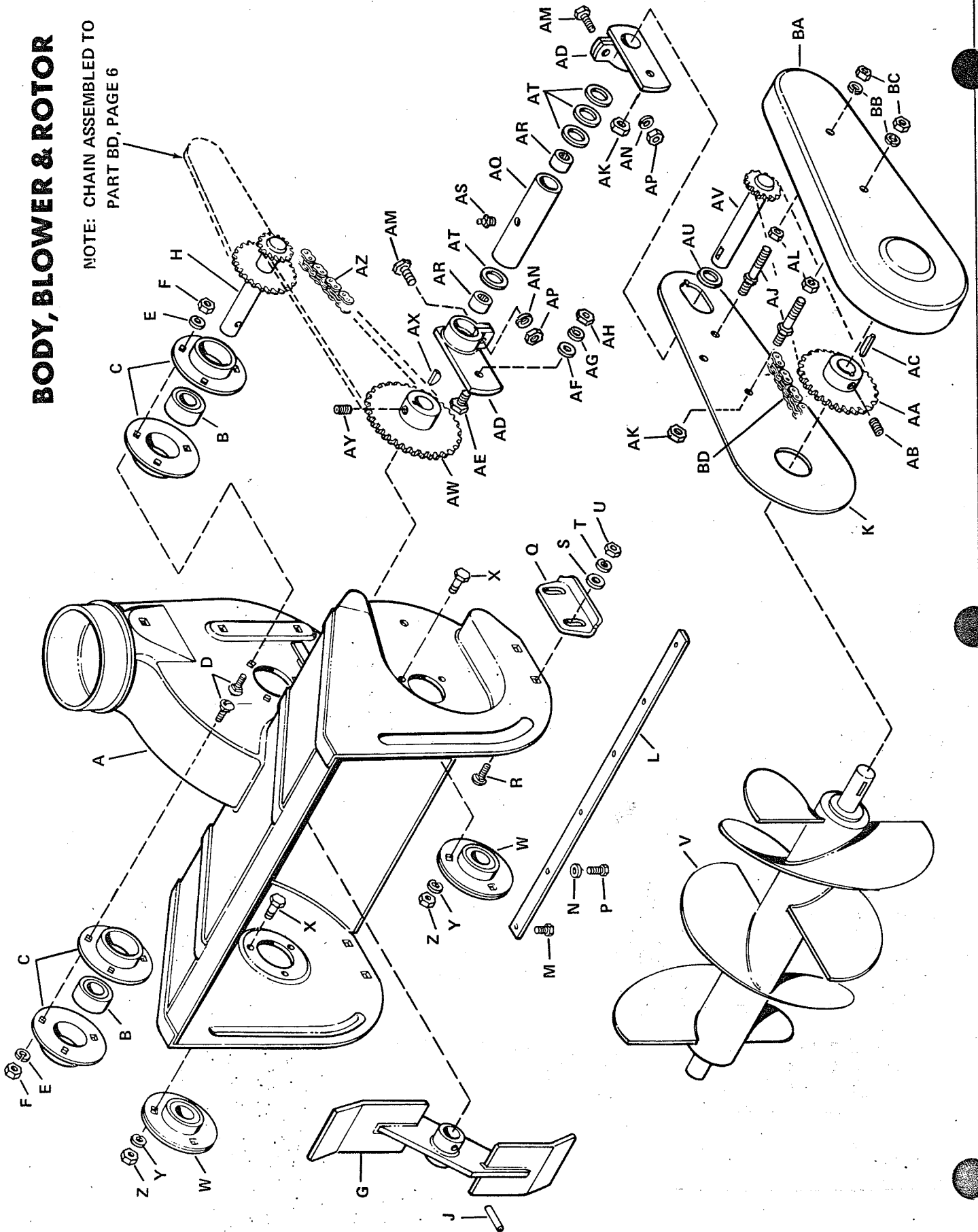
TRANSMISSION REAR WHEELS

Ref. Let.	Part No.	Description
A	106991	Engine Base & Frame Assembly
B	158363	Bushing
C	727002	Grease Fitting
D	158569	Bronze Bearing
E	8051038	Bronze Bearing
F	158542	Gear & Bearing Assembly, Lower
G	158541	Shaft Intern., Lower
H	158561	Thrust Collar
J	723004	Roll Pin, 1/8" Dia. x 1" Lg.
K	161228	Shift Link, Lower, 3/16" x 5 3/4" x 1 1/4" Lg.
L	722011	Cotter Pin, 3/16" Dia. x 1" Lg.
M	722001	Cotter Pin, 3/32" x 3/4" Lg.
N	158596	Retaining Ring
P	158578	Compression Spring
Q	106944	Shaft & Gear Assembly
R	153079	Washer
S	153124	Retaining Ring
T	158557	Reverse Pinion
U	158534	Reverse Shaft
V	158562	Thrust Collar
W	723014	Roll Pin, 5/32" Dia. x 1" Lg.
X	723016	Roll Pin, 1/8" Dia. x 3/4" Lg.
Y	161227	Reverse Shift Link, 3/16" x 5/8" x 7 1/8" Lg.
Z	722011	Cotter Pin, 3/16" x 1" Lg. - 722003
AA	722001	Cotter Pin, 3/32" Dia. x 3/4" Lg.
AB	158596	Retaining Ring
AC	158578	Compression Spring
AD	158570	Gear & Bearing Assembly, High
AE	158544	Bearing Pinion Intern.

Ref. Let.	Part No.	Description
AF	158561	Thrust Collar
AG	723004	Roll Pin, 1/8" Dia. x 1" Lg.
AH	158541	Shaft Intern.,
AJ	161237	Shift Link, High, 3/16" x 12-3/8" x 1 3/8" Lg.
AK	722011	Cotter Pin, 3/16" Dia. x 1" Lg.
AL	722001	Cotter Pin, 3/32" Dia. x 3/4" Lg.
AM	158596	Retaining Ring
AN	158578	Compression Spring
AP	161221	Drive Axle & Gear Assembly
AQ	158363	Bushing
AR	118252	Washer
AS	158357	Set Collar
AT	713002	Cup Pt. Set Screw Sq. Hd. 5/16"-18 N.C. x 3/8" Lg.
AU	161261	Gear Case Assembly
AV	158524	Gear Case Gasket
AW	715067	Hex. Hd. Taprite Screw, 1/4"-20 N.C. x 3/8" Lg.
AX	161151	Wheel & Tire Assembly
AY	118053	Pin
AZ	8161045	Spring Clip
BA	118252	Special Washer
BB	161260	Retaining Ring
BC	161259	Plate
BD	161176	Spring
BE	161166	Shoulder Bolt
BF	161167	Stud
BG	719002	Plain Washer, 5/16"
BH	717510	Full Hex. Lock Nut, 3/8"-16 N.C.

BODY, BLOWER & ROTOR

NOTE: CHAIN ASSEMBLED TO PART BD, PAGE 6

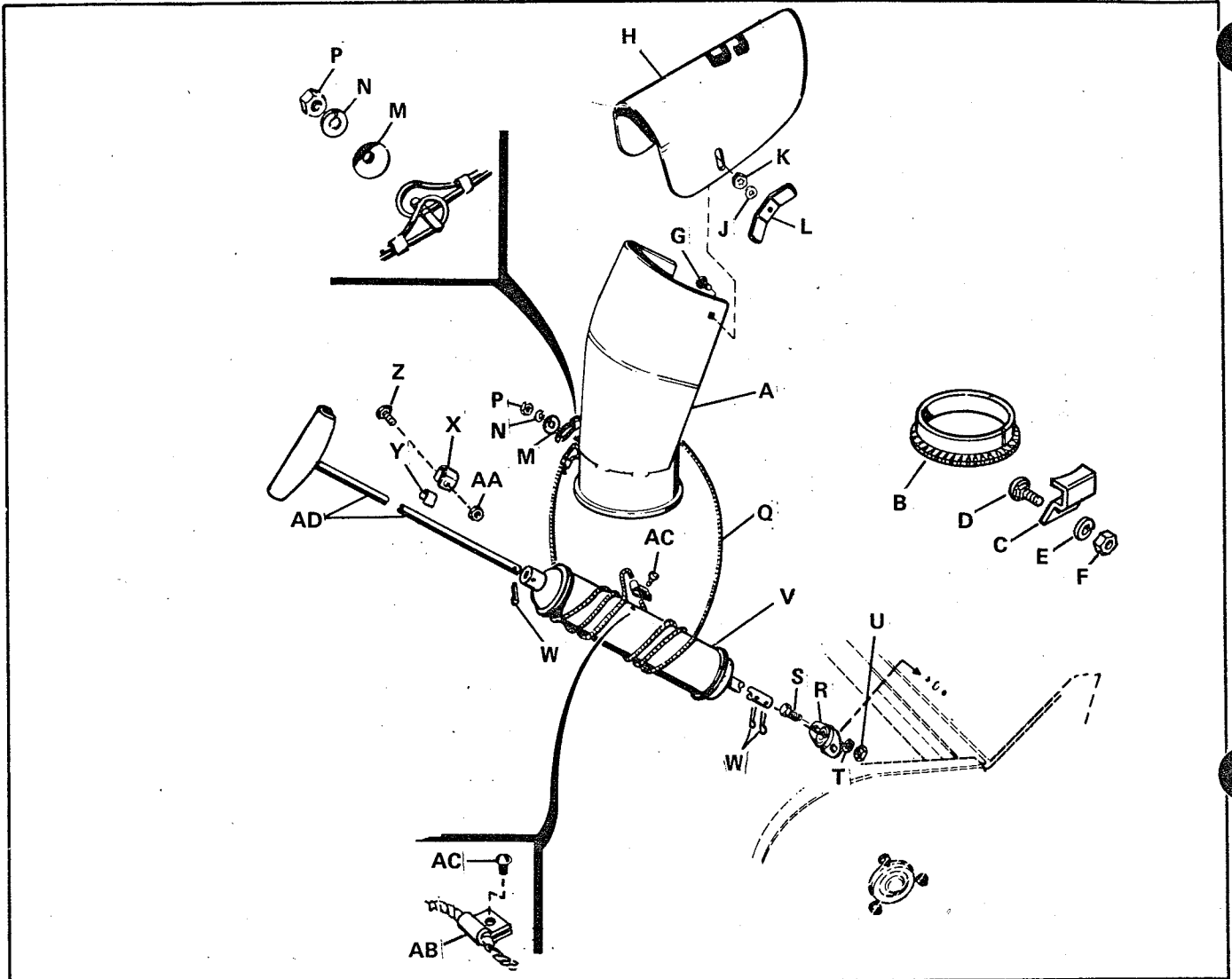


BODY, BLOWER & ROTOR

Ref. Let.	Part No.	Description
A	106993	Body Blower Assembly
B	161068	Bearing Cartridge
C	161069	Bearing Flange
D	702015	Bolt Carriage Std., 5/16"-18 N.C.x 3/4" Lg.
E	720001	Lock Washer 5/16"
F	717001	Full Hex. Nut, 5/16"-18 N.C.
G	106984	Impeller Assembly
H	106962	Sprocket Shaft Assembly
J	723010	Roll Pin, 5/16" x 1 1/2" Lg.
K	106745	Side Plate
L	106994	Body Scraper
M	715110	Thread Screw Forming, 5/16"-18 N.C. x 3/8" Lg.
N	719006	Plain Washer, 1/4"
P	715067	Thread Screw Forming, 1/4"-20 N.C. x 1/2" Lg.
Q	161006	Skid
R	703004	Bolt Carriage, 3/8"-16 N.C. x 3/4" Lg.
S	719001	Plain Washer, 3/8"
T	720002	Lock Washer, 3/8"
U	717003	Full Hex. Nut, 3/8"-16 N.C.
V	161283	Rotor Assembly
W	106532	Bearing Assembly
X	705017	Hex. Cap Screw, 5/16"-18 N.C. x 3/4" Lg.
Y	720001	Lock Washer, 5/16"
Z	717001	Full Hex. Nut, 5/16"-18 N.C.
AA	161291	Sprocket Rotor (26T)
AB	713503	Cup Pt. Hollow Hd. Screw, 5/16"-18 N.C. x 5/16" Lg.

Ref. Let.	Part No.	Description
AC	151040	Key Hi Pro
AD	106476	Clamp Support Assembly
AE	705005	Hex. Cap Screw, 3/8"-16 N.C. x 1"
AF	719001	Plain Washer, 3/8"
AG	720002	Lock Washer, 3/8"
AH	717003	Full Hex. Nut, 3/8"-16 N.C.
AJ	106771	Stud
AK	718035	"Whiz Lock Nut Flange, 3/8"-16 N.C.
AL	717510	Full Hex. Lock Nut, 3/8"-16 N.C.
AM	705018	Hex. Cap Screw, 5/16"-18 N.C. x 1 1/2"
AN	720001	Lock Washer, 5/16"
AP	717001	Full Hex. Nut, 5/16"
AQ	106916	Bearing Housing, 1 1/4" O.D. x 5 7/8" Lg.
AR	154258	Needle Bearing
AS	727002	Grease Fitting
AT	8061012	Washer
AU	106992	Spacer
AV	106938	Shaft Assembly
AW	106964	Sprocket
AX	725003	Woodruff Key, 3/16" x 3/4" Dia.
AY	713503	Cup Pt. Hollow Hd. Screw, 5/16"-18 N.C. x 5/16" Lg.
AZ	106899	Chain W/Connecting Link
BA	106759	Chain Guard
BB	720002	Lock Washer, 3/8"
BC	717003	Full Hex. Nut, 3/8"-16 N.C.
BD	106898	Chain W/Connecting Link

SPOUT GROUP



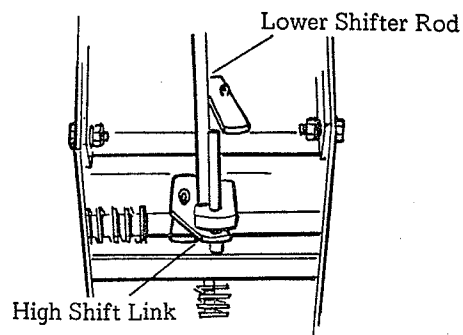
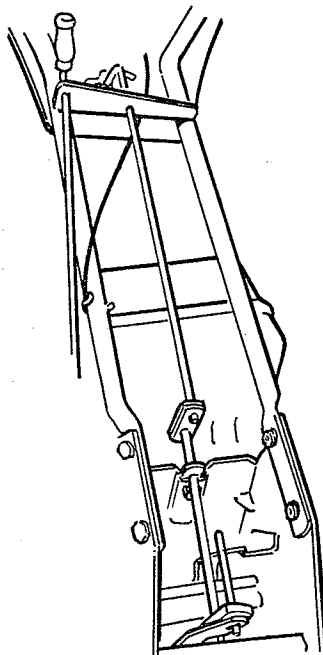
Ref. Let.	Part No.	Description
A	106762	Spout Assembly
B	161280	Liner
C	106893	Hold Down Plate
D	702015	Bolt Carriage Std. Neck, 5/16"-18 x 3/4" Lg.
E	720001	Lock Washer, 5/16"
F	717001	Full Hex. Nut, 5/16"-18 N.C.
G	703005	Bolt Carriage, 5/16"-18 N.C. x 3/4" Lg.
H	106760	Spout Extension
J	719001	Plain Washer, 3/8"
K	721601	Lock Washer, 3/8"
L	106229	Wing Nut
M	106785	Cup Washer
N	720001	Lock Washer 5/16"
P	717001	Full Hex. Nut, 5/16"-18 N.C.

Ref. Let.	Part No.	Description
Q	106881	Cable Assembly
R	106491	Bearing
S	705015	Hex. Cap Screw, 1/4"-20 N.C. x 5/8" Lg.
T	720003	Lock Washer, 1/4"
U	717005	Full Hex. Nut, 1/4"-20 N.C.
V	106950	Spout Control Tube Assembly
W	722009	Cotter Pin, 1/8" Dia. x 3/4" Lg.
X	152050	Rod Guide
Y	121175	Guide Liner
Z	705019	Hex. Cap Screw, 5/16"-18 N.C. x 1 1/4" Lg.
AA	717511	Full Hex. Lock Nut, 5/16"-18 N.C.
AB	154247	Clamp (for service only)
AC	715067	Self Tapping Screw, 1/4"-20 x 3/8"
AD	106951	Handle Assembly

ADJUSTMENTS FOR 551 SNO-AWAY

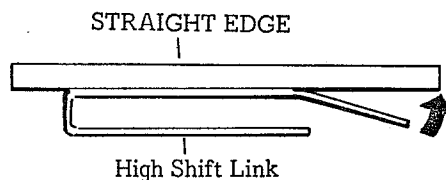
STEP 1

For easy accessibility to all parts, remove gas from tank and tip sno-away up on front housing.



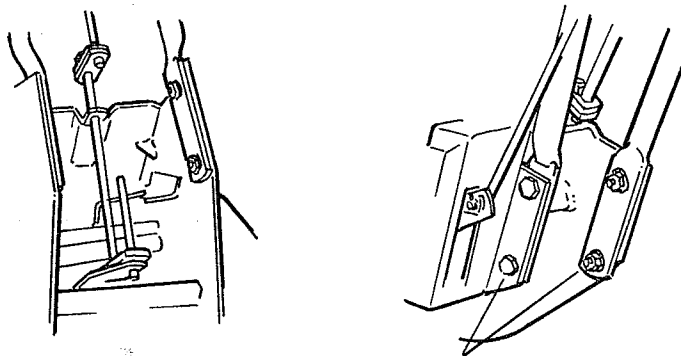
STEP 2

Before proceeding with any adjustments check to see if the high gear shift link is bent. To straighten see illustration to the right.



STEP 3

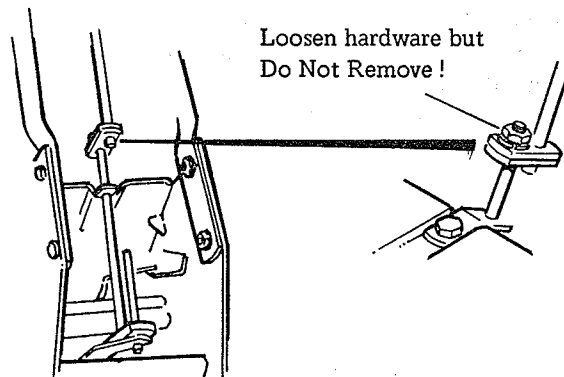
Loosen the (4) 5/16-18 x 7/8" long capscrews holding the handles to the frame. Do not remove hardware from frame and handles. See illustration to the right.



Loosen hardware holding handles

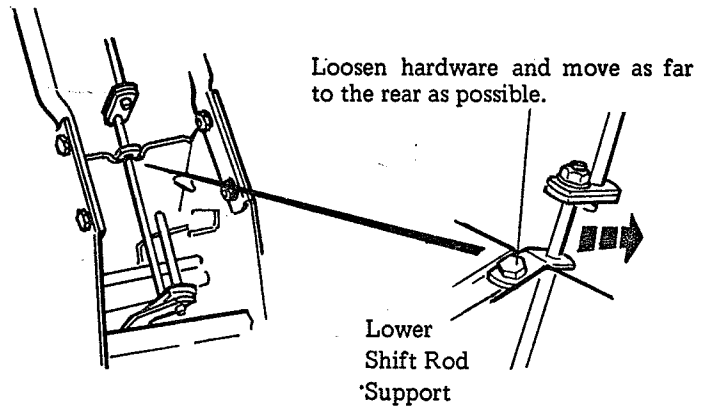
STEP 4

Loosen but do not remove the 7/16-14 full hex nut holding the upper and lower shift rod together. See the illustration to the right.



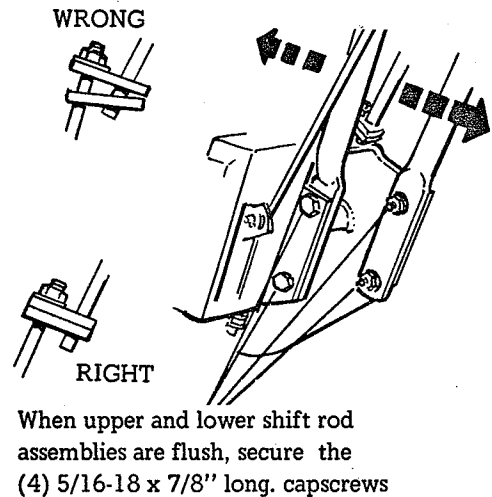
STEP 5

Loosen the 5/16-18 x 7/8" long capscrew holding the support to the frame and move support to the rear as far as possible. Retighten the above mentioned hardware. See the illustration at the right.



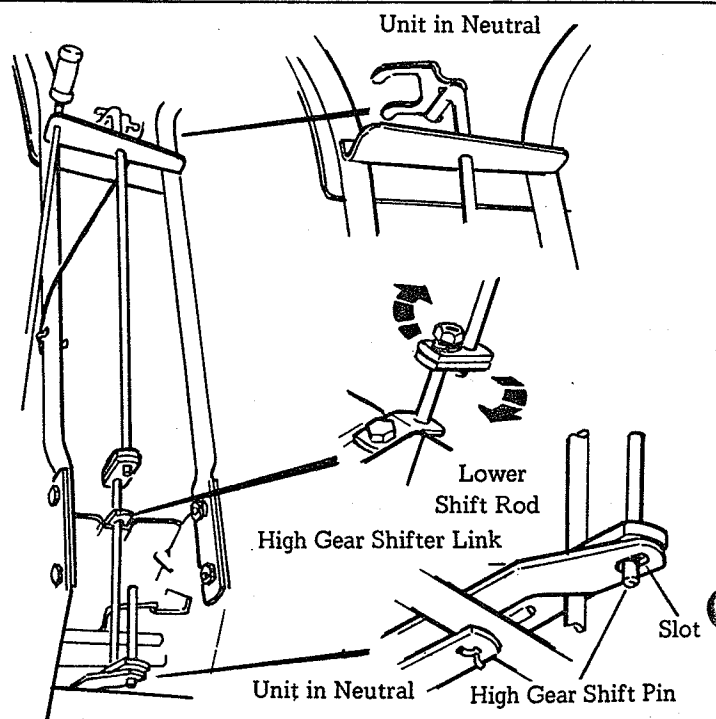
STEP 6

Move handles back or forward until the upper and lower shift rod assemblies are flush with each other. Secure the handle hardware at this time. See the illustration at the right.



STEP 7

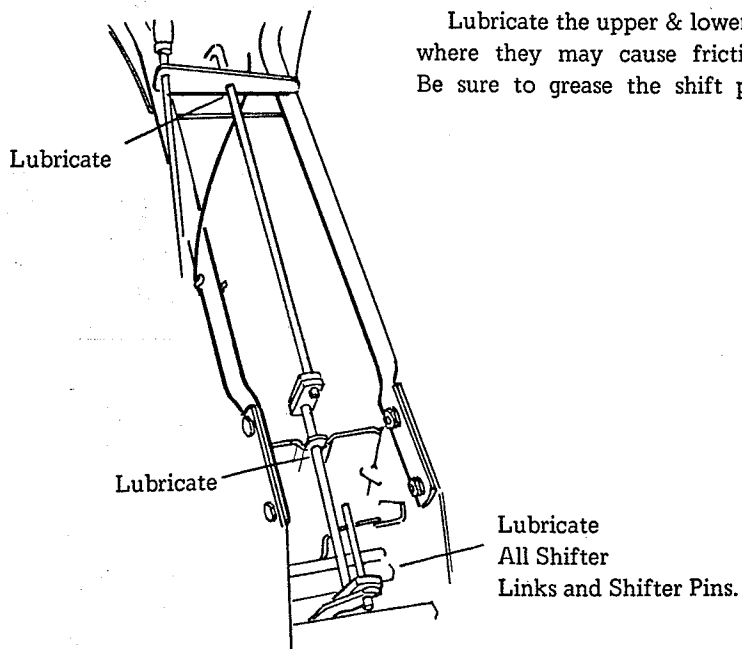
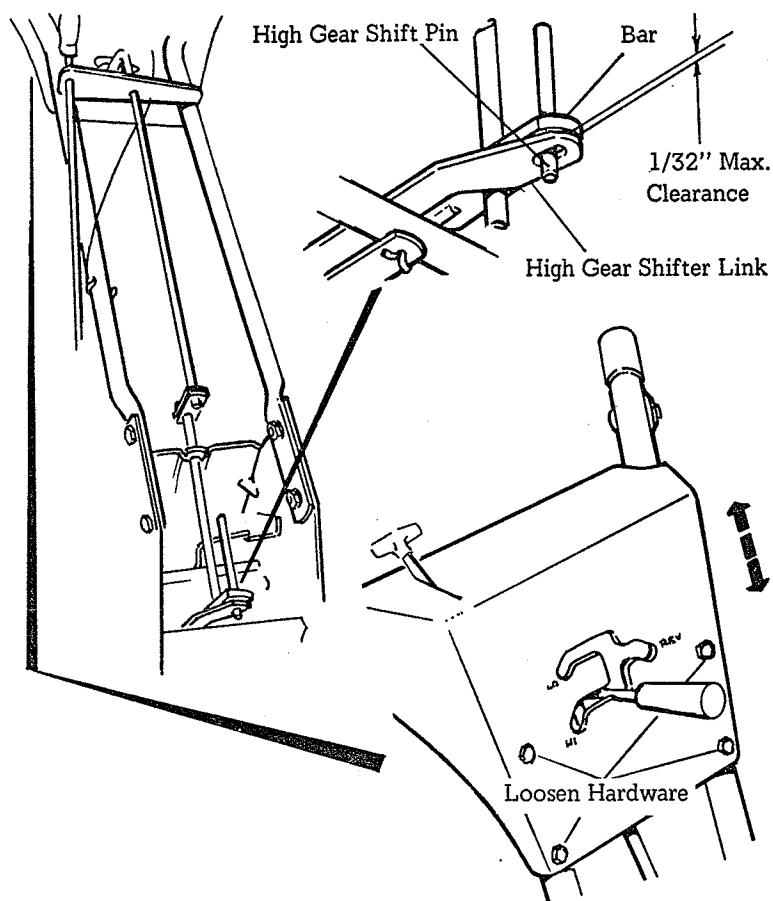
With the transmission in neutral, rotate the lower shift rod back and forth until the high range pin does not rub the side of the slot of the high gear shift link. Secure the shift rod hardware. See the illustration at the right. In this adjustment it is not necessary that the sides of the two plates be flush.



STEP 8

Check for $1/32''$ clearance between high gear shifter link and bar of the lower shifter rod assembly as shown at right. If not, proceed as follows:

1. Loosen the 4 $1/4$ -20 x $1/4''$ capscrews.
2. Move the control housing up or down to achieve a clearance of $1/32''$ maximum when unit is in neutral. See the illustration at the right.
3. Re-tighten all hardware.



Lubricate the upper & lower shift rods at all points where they may cause friction during operations. Be sure to grease the shift pins and shift links also

TROUBLE SHOOTING CHART 551 SNO-AWAY

TROUBLE & SYMPTOMS	CAUSE	SOLUTION
Unit locks in high gear Unit will not shift out of high gear	Improper alignment of shifter rod with shifter link.	See steps 1 to 8 on other side of this chart. If the shifter link is bent, remove from the machine to repair. To remove link, pull out the two cotter pins. Place straight edge on top of shifter link and bend back to normal position. See Figure 1 below.
Unit jumps out of high gear. Unit will not stay in gear	Improper adjustment of the control housing assembly & shifter rod. See Ill. below figure 2.	See step 7 on reverse side.
Unit locks in two gears at once. Wheels will not turn	Improper alignment of shifter rod with shifter link and improper adjustment of control housing with shifter rod. Broken Spring 158578	See steps 1 to 8 on the other side of this chart. Check for broken spring No. 158578. If broken, replace. Remove transmission cover and free gear. Visually check for damage to gears and shaft. Remove and straighten shifter link. See Figure 1 below. Reassemble and adjust as stated on reverse side of this chart.

