

Allied

WINCH

PARTS MANUAL

W3C

**HYSTER
SKIDDER WINCH**

A PRODUCT OF

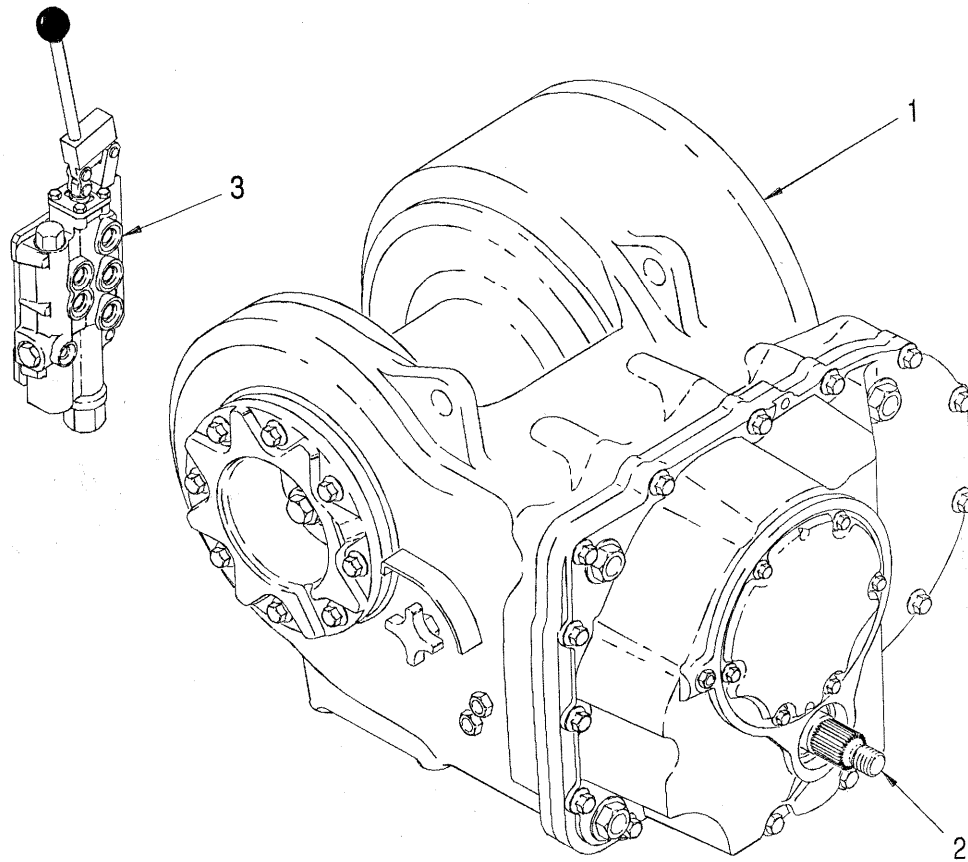
Allied Systems
COMPANY

SHERWOOD, OREGON USA

CUSTOMER EDITION



Index-Illustrated



1

2

3

4

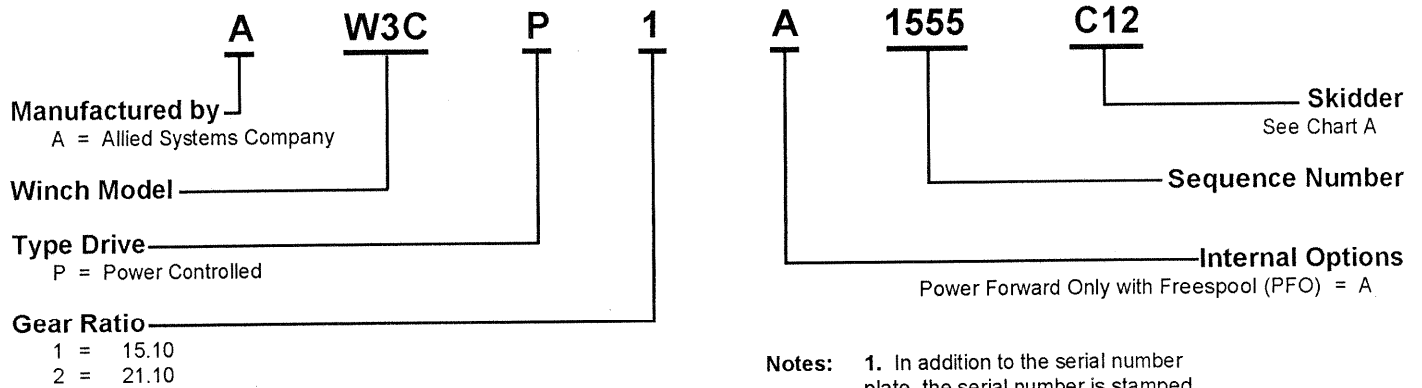
Ref	Item	Page
1	Frame/Covers/Parts-Mounting	1A04
2	Gear Train/Shaft	1B02
3	Controls	1C02
4	Index-Numerical	G02

Index-Master

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Identification-Unit

Allied Winch S/N Nameplate Data For Skidder Mountings



- Notes:**
1. In addition to the serial number plate, the serial number is stamped on the left hand side of the frame.
 2. Circled numbers in Chart A indicate available gear ratios.

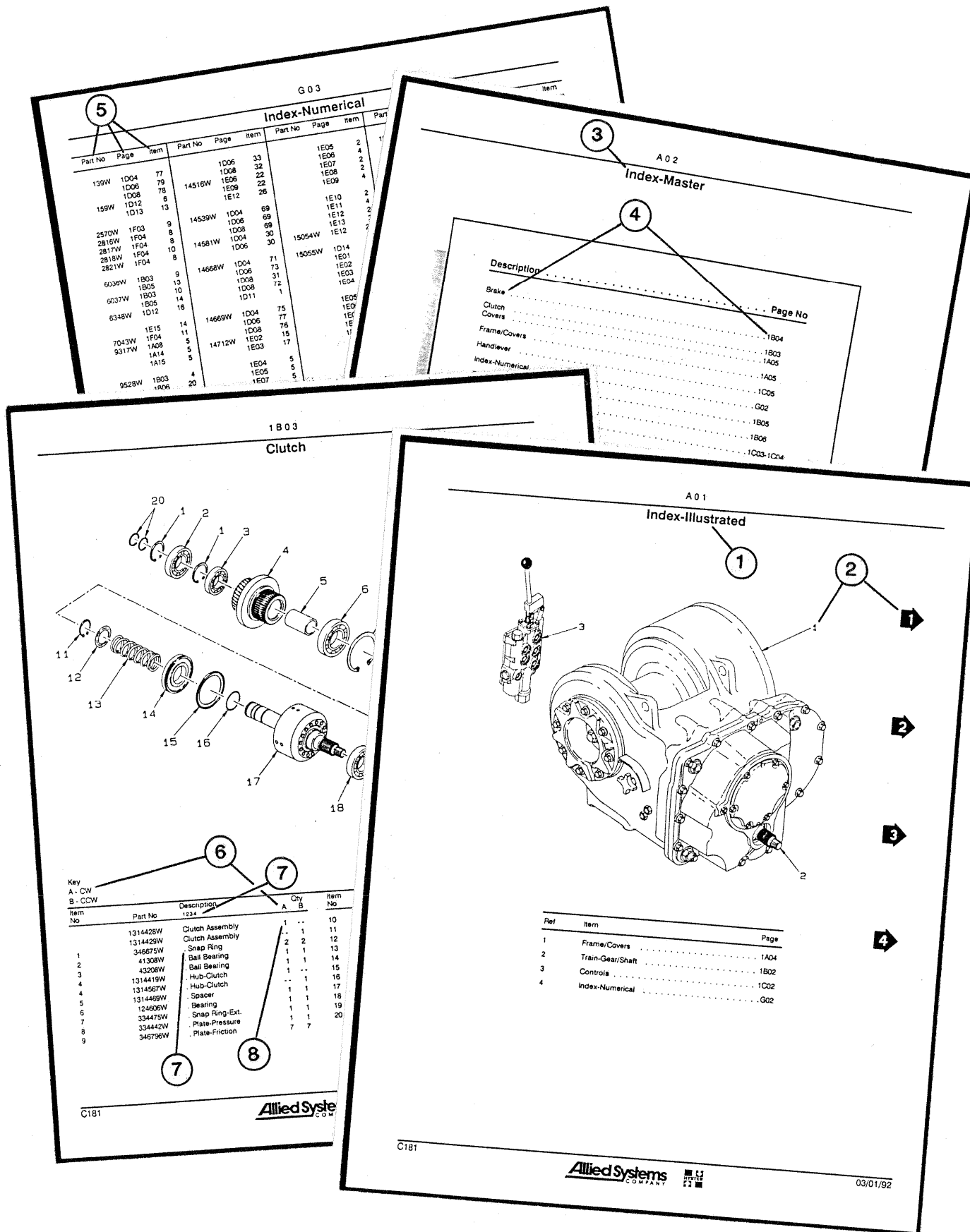
Chart A - Skidder Identification and Gear Ratio

Skidder Make Model and Starting Skidder Serial Number Where Applicable						
C O D E	C Caterpillar	N Franklin	E John Deere	D Timber Jack	U Tree Farmer	V Valmet
11						
12	518 *a ①					
13	518 *b ②					

*a Caterpillar 518 Skidder S/N 50S3203 & up & before 94U1297

*b Caterpillar 518 Skidder S/N 94U1297 & up

How to Use The Illustrated Parts Manual



When the part number and the next higher assembly is not known:

1. Use: Determine the function and application of the part required. Turn to the illustrated index page immediately behind the front cover, and select the most appropriate area.
2. Line up the black arrow containing the appropriate reference number, with the black tab on the division index page with the same reference number. Use the division index to determine the assembly which would normally contain the part required. Proceed then to locate the part on the assembly breakdown page.

When the part number is not known and the next higher assembly is known:

3. Determine the assembly the required part is used on. Turn to the master index immediately following the illustrated index.
4. Locate the assembly on which the required part is used, and turn to the page indicated for that assembly. Proceed then to locate the part on the assembly breakdown page.

When the part number is known:

5. Use the numerical index to find the part number. Turn to the page listed and locate the part as indicated by the reference number.

General:

The assembly breakdowns include part numbers, description, quantities required, keys and footnotes to help in selecting the correct parts.

6. Keys are used to show effective serial numbers for two or more similar assemblies, LH and RH assembly parts, etc. Select the appropriate key, "A", "B", "C", or "D" and the corresponding quantity column to find the required parts.
7. Indent dots and numbers are used to indicate assemblies and subparts of assemblies. No dot or number 1 indicates the major assembly. Part descriptions which are indented with dots or under 2, 3 or 4 are sub-parts of the major assembly shown above.
8. Quantities shown are for one assembly. Note that when two assemblies are shown, but the quantity of the subpart is indicated as three, this means three per assembly - for a total of six.
9. Serial numbers are shown to allow for the most current parts information to be incorporated into the parts manual. Contact your local winch dealer for serial number information.

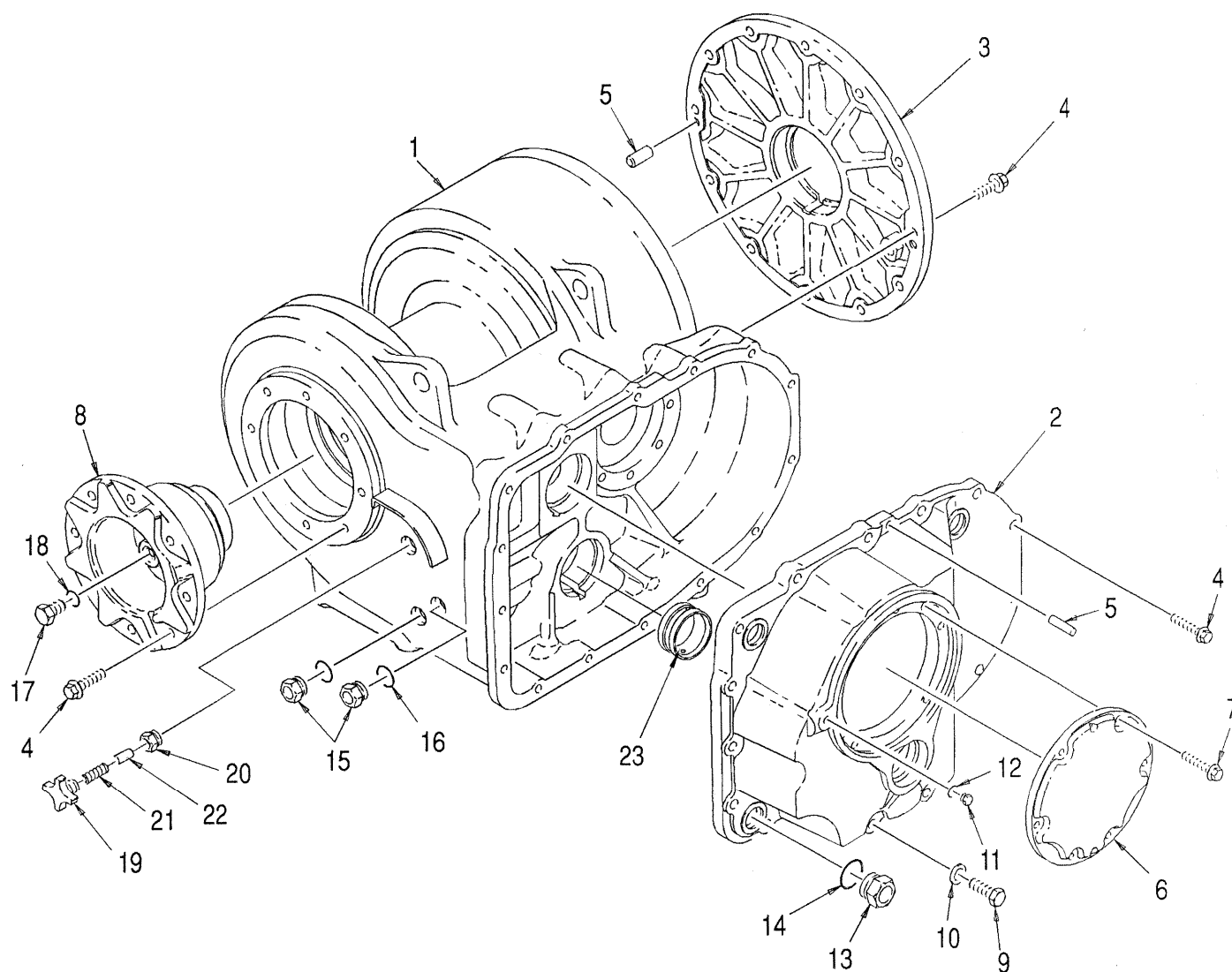
Ordering Parts:

When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

For any further information on parts, service or ordering, consult your local winch dealer.

Frame/Covers/Parts-Mounting

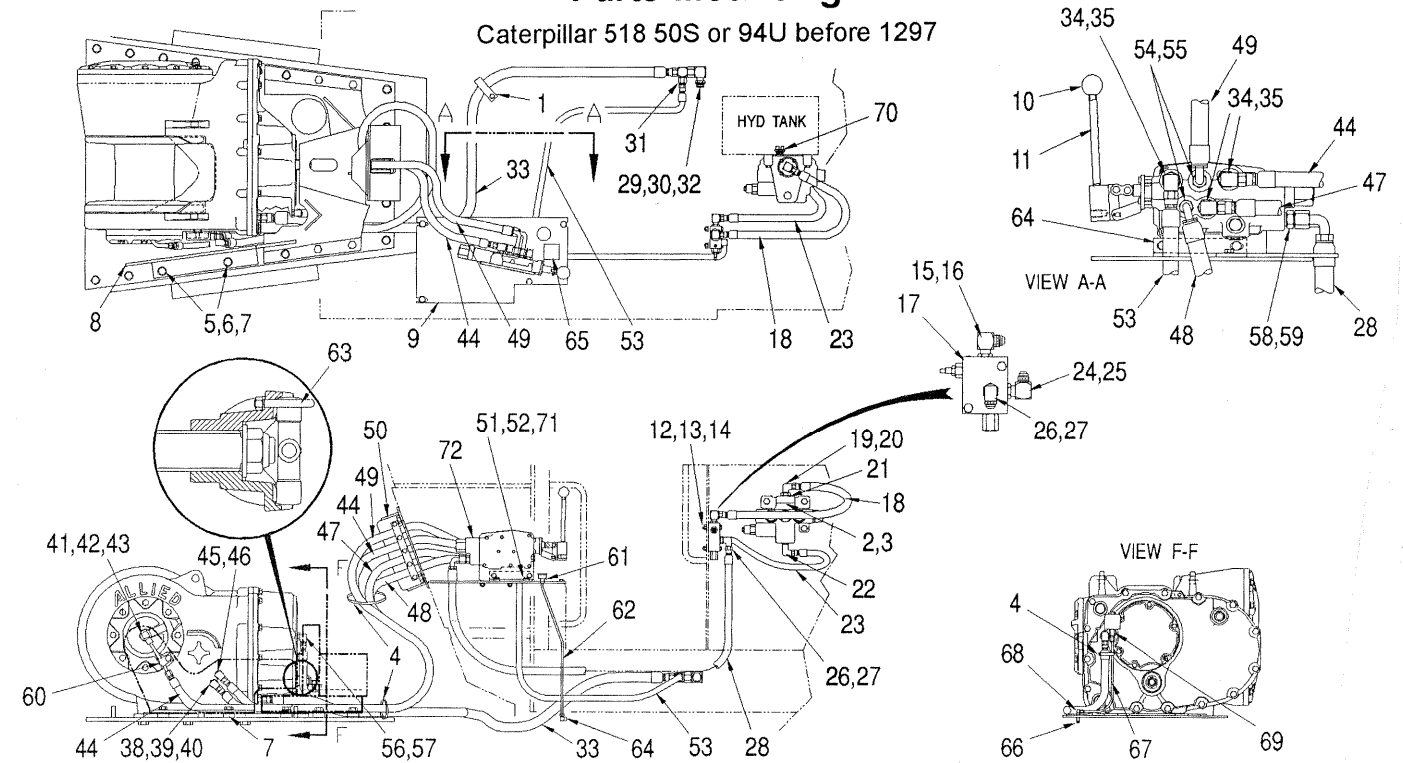
Frame/Covers	1A05
Parts-Mounting	1A06



Item No	Part No	Description 1234	Qty	Item No	Part No	Description 1234	Qty
1	-----	Frame	1	14	16487W	. O-Ring	1
2	*a 1314516W	Cover-Front	1	15	216590W	Fitting	2
3	*a 1314480W	Cover-LH	1	16	16485W	. O-Ring	1
4	1314566W	Capscrew	33	17	14594W	Fitting	1
5	136625W	Pin	4	18	16483W	. O-Ring	1
6	*a 1314421W	Cover-Brake	1	19	1314547W	Knob	1
7	*a 398943W	Capscrew	6	20	*b 2300174W	Insert	1
8	1314499W	Cover-RH	1	21	1314502W	Spring	1
9	18596W	Capscrew	2	22	2300276W	Pad	1
10	221771W	Washer	2	23	2300266W	Kit-Seal Ring Sleeve	1
11	14595W	Fitting	1				
12	16484W	. O-Ring	1	*a	Use 264159W Sealant		
13	14604W	Fitting	3	*b	Use 383789W Loctite		

Parts-Mounting

Caterpillar 518 50S or 94U before 1297



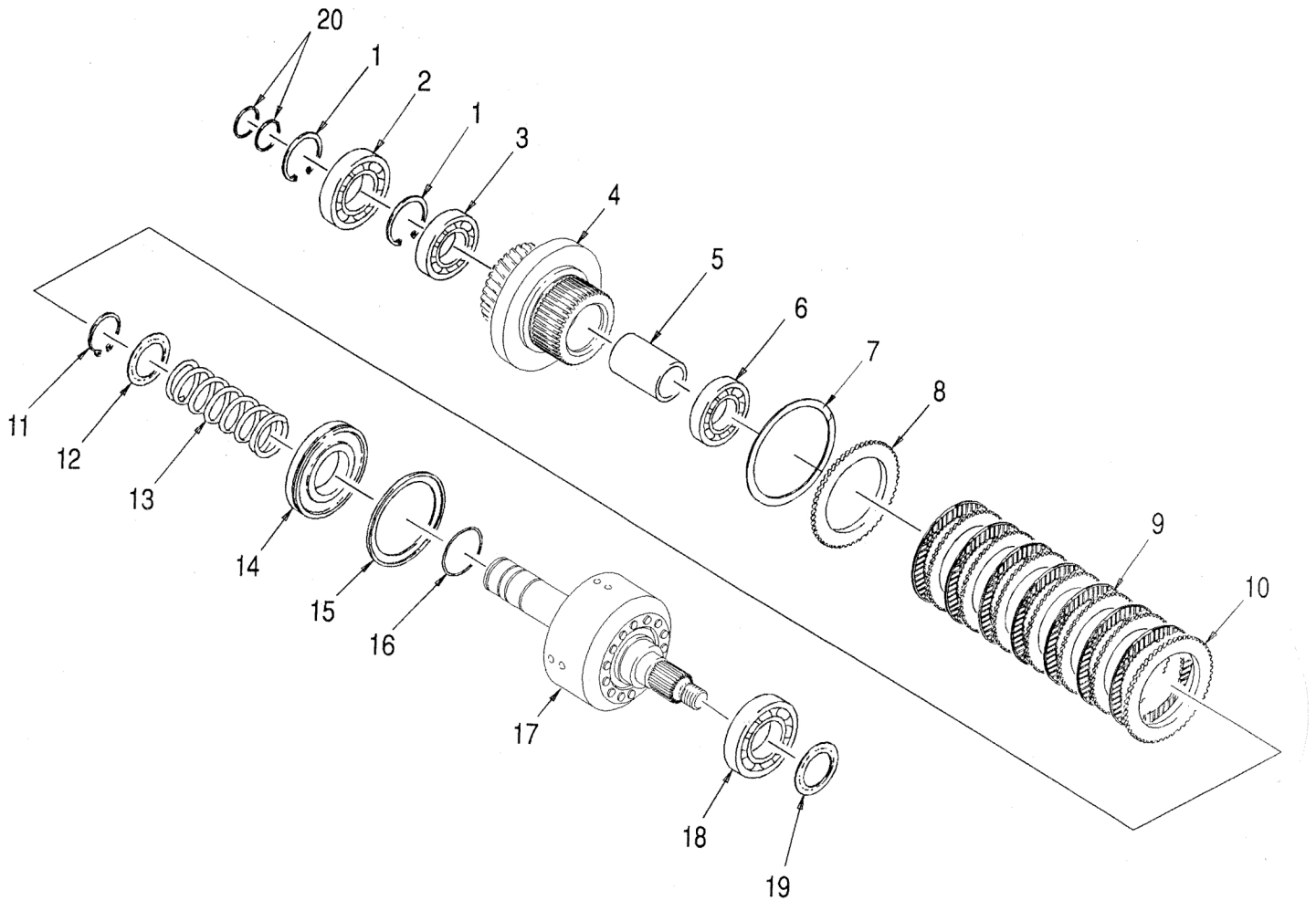
Item No	Part No	Description 1234	Qty	Item No	Part No	Description 1234	Qty
1	398074W	Insulated Clamp	1	37	16487W	. O-Ring	1
2	39353W	O-Ring	1	38	161656W	Fitting	1
3	39350W	O-Ring	2	39	16485W	. O-Ring	1
4	129563W	Tie Strap	6	40	16883W	Fitting	1
5	221638W	Capscrew	2	41	16559W	Fitting	1
6	221775W	Washer	2	42	16484W	. O-Ring	1
7	2300414W	Spacer	2	43	1314410W	Tube Assembly	1
8	2300409W	Hose Guard	1	44	2300343W	Hose Assembly	1
9	2300416W	Mounting Plate-Valve	1	45	222400W	Fitting	1
10	243189W	Knob	1	46	16485W	. O-Ring	1
11	1314565W	Rod	1	47	2300341W	Hose Assembly	1
12	16379W	Capscrew	2	48	2300344W	Hose Assembly	1
13	15056W	Nut	2	49	2300342W	Hose Assembly	1
14	15156W	Washer	2	50	2300281W	Hose Clamp	1
15	184761W	Fitting	1	51	16828W	Capscrew	4
16	16486W	. O-Ring	1	52	156133W	Nut	4
17	2300398W	Flow Regulator Valve	1	53	2300345W	Hose Assembly	1
18	2300405W	Hose Assembly	1	54	16745W	Fitting	2
19	16562W	Fitting	1	55	16484W	. O-Ring	1
20	16487W	. O-Ring	1	56	16558W	Fitting	1
21	2300404W	Valve End Section	1	57	16483W	. O-Ring	1
22	17301W	Fitting	1	58	16909W	Fitting	1
23	180980W	Hose Assembly	1	59	16485W	. O-Ring	1
24	16561W	Fitting	1	60	391484W	Insulated Clamp	1
25	16486W	. O-Ring	1	61	14504W	Fitting	1
26	138811W	Fitting	1	62	354432W	Tube	1
27	16486W	. O-Ring	1	63	354428W	U-Bolt	2
28	2300403W	Hose Assembly	1	64	2300293W	Bracket-Angle	1
29	111331W	Fitting	1	65	1314401W	Decal-Handlever	1
30	16485W	. O-Ring	1	66	15372W	Pipe Nipple	1
31	17780W	Fitting	1	67	354431W	Tube	1
32	17064W	Fitting	1	68	14516W	Fitting	1
33	2300406W	Hose Assembly	1	69	14713W	Fitting	1
34	110174W	Fitting	3	70	61056W	O-Ring	1
35	16484W	. O-Ring	1	71	221767W	Washer	1
36	83846W	Fitting	1	72	2300363W	Control Valve Asm (see 1C04)	1

Gear Train/Shaft

Brake	1B04
Clutch	1B03
Freespool	1B06
Ring/Pinion	1B05
Shaft-Drum	1B06



Clutch



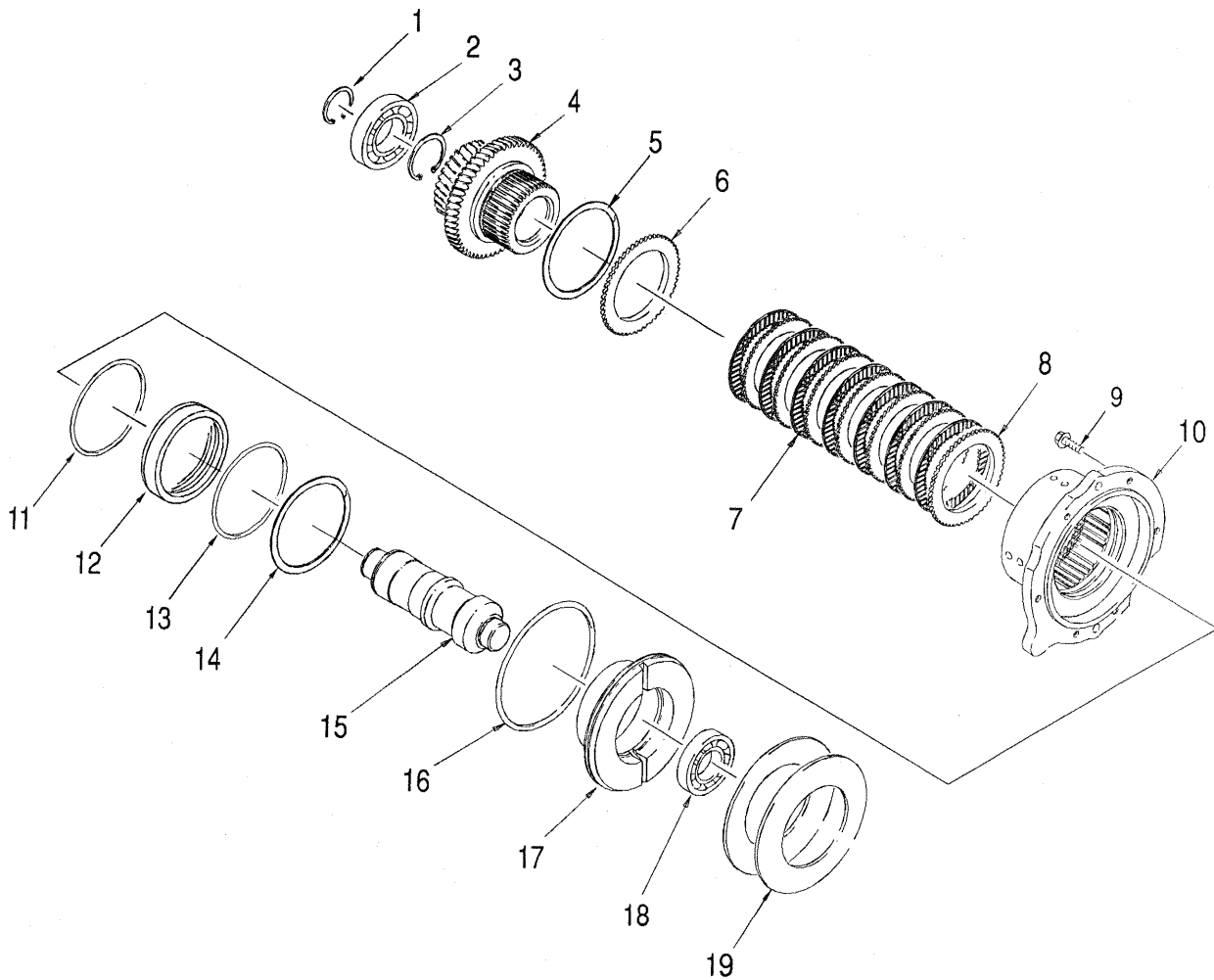
Key

A - CW Rotation

B - CCW Rotation

Item No	Part No	Description 1234	Qty		Item No	Part No	Description 1234	Qty	
			A	B				A	B
	1314428W	Clutch Assembly	1	--	10	2304874W	. Plate-Separator	7	7
	1314429W	Clutch Assembly	--	1	11	334480W	. Snap Ring	1	1
1	12891W	. Snap Ring	2	2	12	1314549W	. Guide-Spring	1	1
2	41308W	. Ball Bearing	1	1	13	1314447W	. Spring-Clutch	1	1
3	43208W	. Ball Bearing	1	1	14	1314446W	. Piston-Clutch	1	1
4	1314419W	. Hub-Clutch	1	--	15	334402W	. Seal-Clutch Pack	1	1
4	1314567W	. Hub-Clutch	--	1	16	140597W	. O-Ring	1	1
5	1314469W	. Spacer	1	1	17	2304923W	. Shaft & Housing Assembly	1	1
6	44308W	. Bearing	1	1	18	44310W	Bearing	1	1
7	334475W	. Snap Ring	1	1	19	44503W	Seal	1	1
8	334442W	. Plate-Pressure	1	1	20	346677W	Seal Ring	2	2
9	2304873W	. Plate-Friction	7	7					

Brake



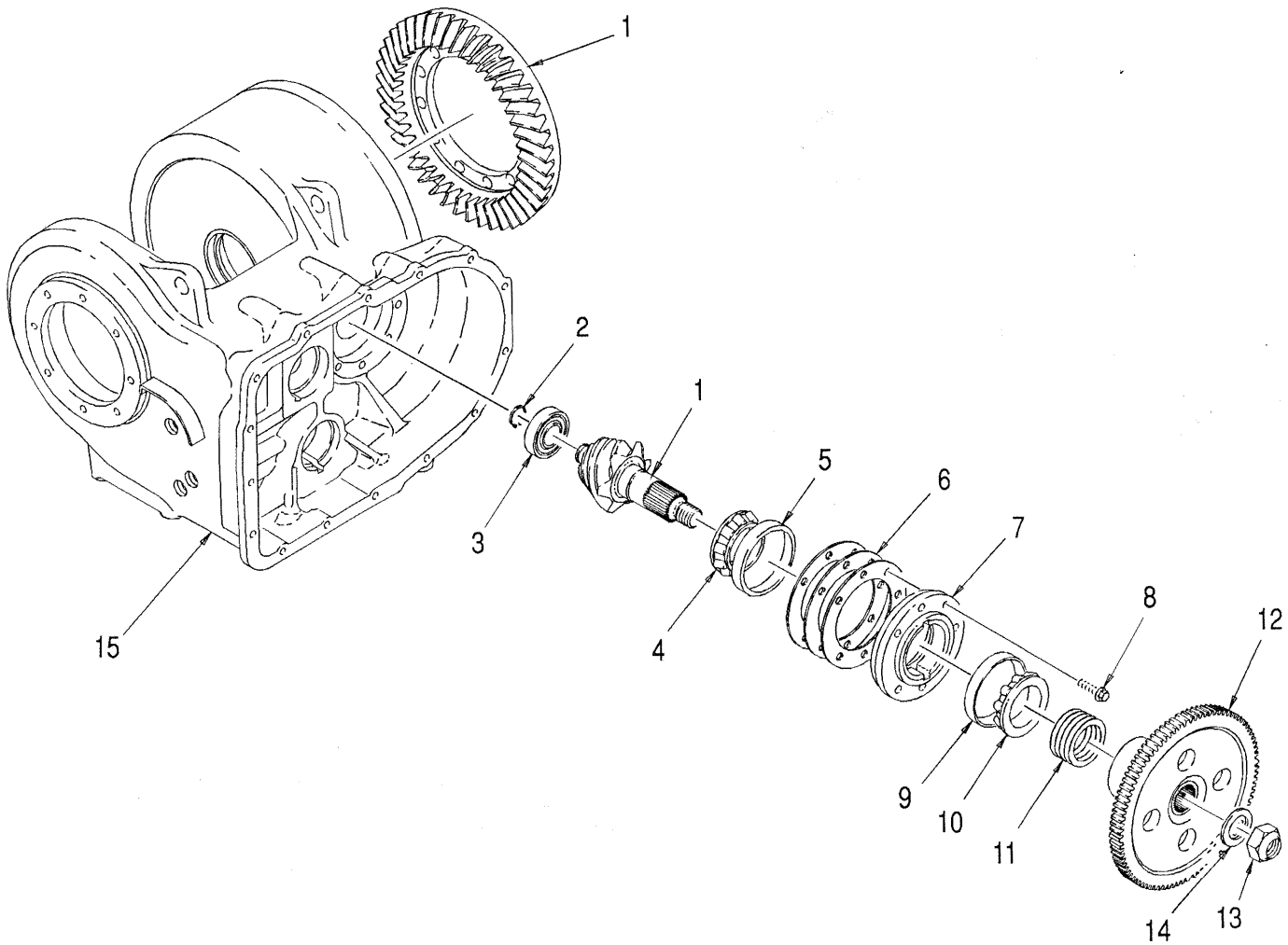
Key

A - CW Rotation

B - CCW Rotation

Item No	Part No	Description 1234	Qty		Item No	Part No	Description 1234	Qty	
			A	B				A	B
1	12891W	Snap Ring	1	1	10	2300227W	Housing-Brake	1	1
2	41308W	Bearing	1	1	11	39756W	O-Ring	1	1
3	1314580W	Snap Ring	1	1	12	2300221W	Spacer	1	1
4	1314415W	Hub-Brake	1	--	13	86596W	O-Ring	1	1
4	1314418W	Hub-Brake	--	1	14	139385W	Snap Ring	1	1
5	334475W	Snap Ring	1	1	15	1314417W	Shaft-Brake	1	1
6	334442W	Plate-Pressure	1	1	16	87287W	O-Ring	1	1
7	346796W	Plate-Friction	7	7	17	1314424W	Piston-Brake	1	1
8	334417W	Plate-Separator	7	7	18	43208W	Bearing	1	1
9	1314566W	Capscrew	2	2	19	219084W	Spring	2	2

Ring/Pinion



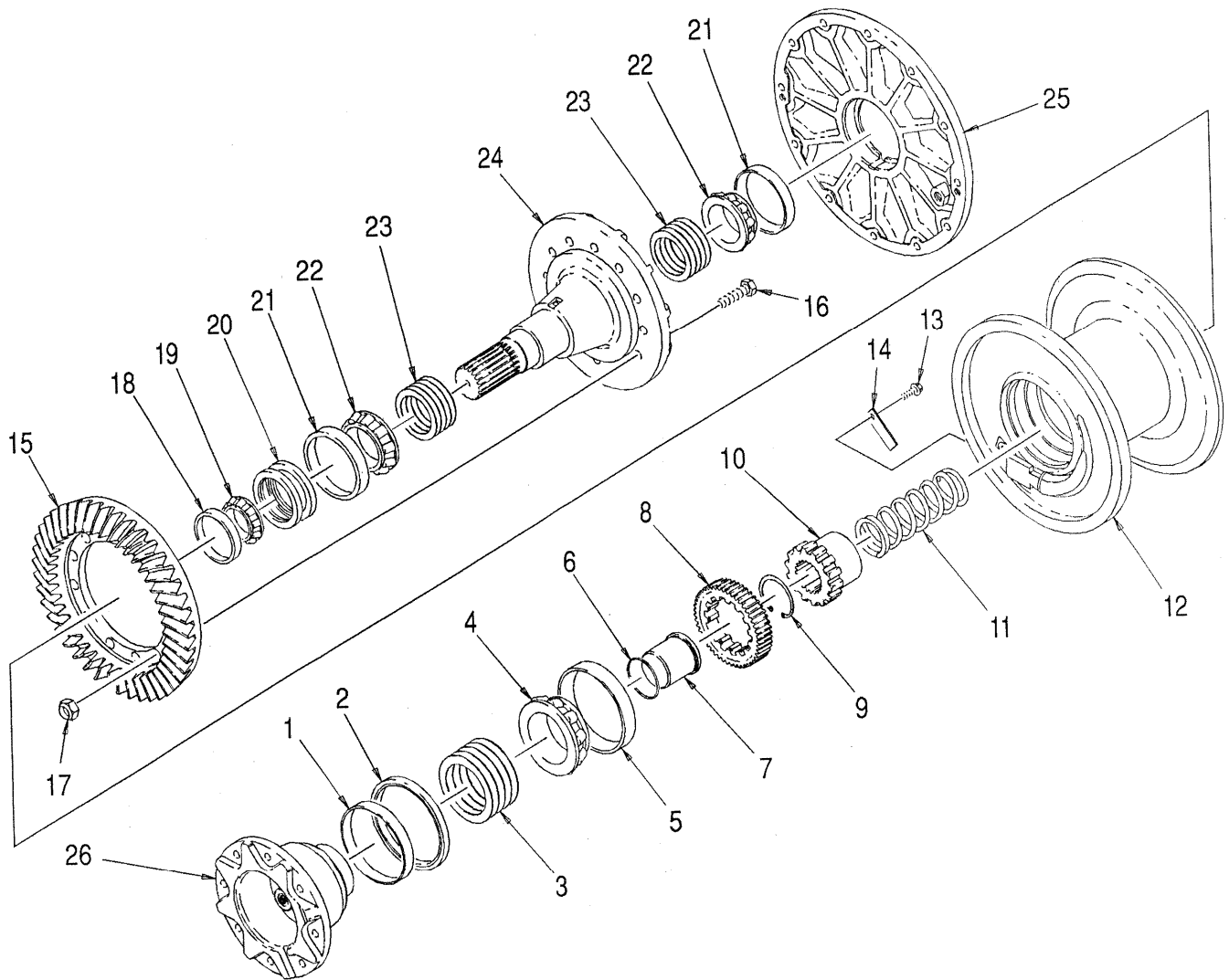
Key

A - 15.60:1 Gear Ratio

B - 21.20:1 Gear Ratio

Item No	Part No	Description 1234	Qty		Item No	Part No	Description 1234	Qty	
			A	B				A	B
1	1314456W	Set-Ring/Pinion	1	--	9	184473W	Cup-Roller Bearing	1	1
1	1314459W	Set-Ring/Pinion	--	1	10	184472W	Cone-Roller Bearing	1	1
2	240683W	Snap Ring-Ext	1	1	11	1314467W	Shim-.015	AR	AR
3	296844W	Bearing-Roller	1	1	11	1314468W	Shim-.018	AR	AR
4	143004W	Cone-Roller Bearing	1	1	11	1314433W	Shim-.020	AR	AR
5	200972W	Cup-Roller Bearing	1	1	11	1314434W	Shim-.022	AR	AR
6	1314473W	Shim-.005	AR	AR	11	1314435W	Shim-.025	AR	AR
6	1314474W	Shim-.007	AR	AR	12	1314455W	Gear-95 T	1	1
6	1314475W	Shim-.020	AR	AR	13	2300207W	Nut-Lock	1	1
7	1314471W	Carrier-Pinion	1	1	14	15128W	Washer	1	1
8	398888W	Capscrew	7	7	15	-----	Frame (see 1A05)	1	1

Shaft-Drum & Freespool



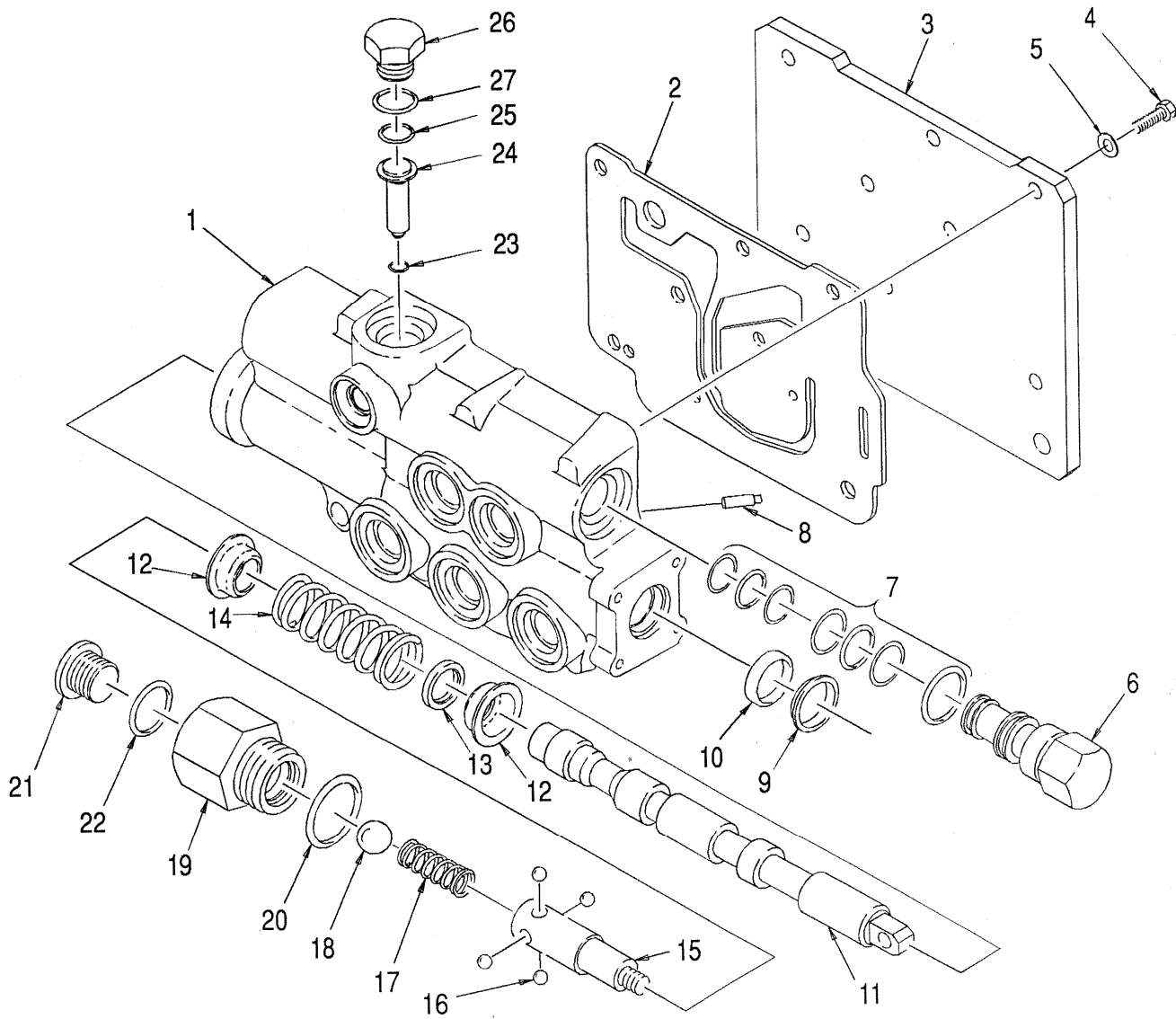
Item No	Part No	Description 1234	Qty	Item No	Part No	Description 1234	Qty
1	1314777W	Sleeve-Seal	1	14	1314503W	Keeper-Ferrule	1
2	1314783W	Seal	1	15	-----	Ring Gear (see 1B05)	1
3	1314680W	Shim-.015	AR	16	221630W	Capscrew	12
3	1314681W	Shim-.018	AR	17	221357W	Nut	12
3	1314682W	Shim-.020	AR	18	137153W	Cup-Roller Bearing	1
3	1314683W	Shim-.022	AR	19	137155W	Cone-Roller Bearing	1
3	1314684W	Shim-.025	AR	20	1314704W	Seal	2
4	1314686W	Cone-Roller Bearing	1	21	30190W	Cup-Roller Bearing	2
5	1314685W	Cup-Roller Bearing	1	22	1314483W	Cone-Roller Bearing	2
6	33716W	O-Ring	1	23	1314485W	Shim-.015	AR
7	1314497W	Piston-Freespool	1	23	1314486W	Shim-.018	AR
8	1314496W	Ring-Torque	1	23	1314487W	Shim-.020	AR
9	37591W	Snap Ring-Int	1	23	1314488W	Shim-.022	AR
10	1314494W	Coupler-Freespool	1	23	1314470W	Shim-.025	AR
11	1314493W	Spring	1	24	1314489W	Shaft-Drum	1
12	1314491W	Drum	1	25	-----	Cover-LH (see 1A05)	1
13	134803W	Capscrew	1	26	-----	Cover-RH (see 1A05)	1

Controls

Handlever	1C04
Valve-Control	1C03



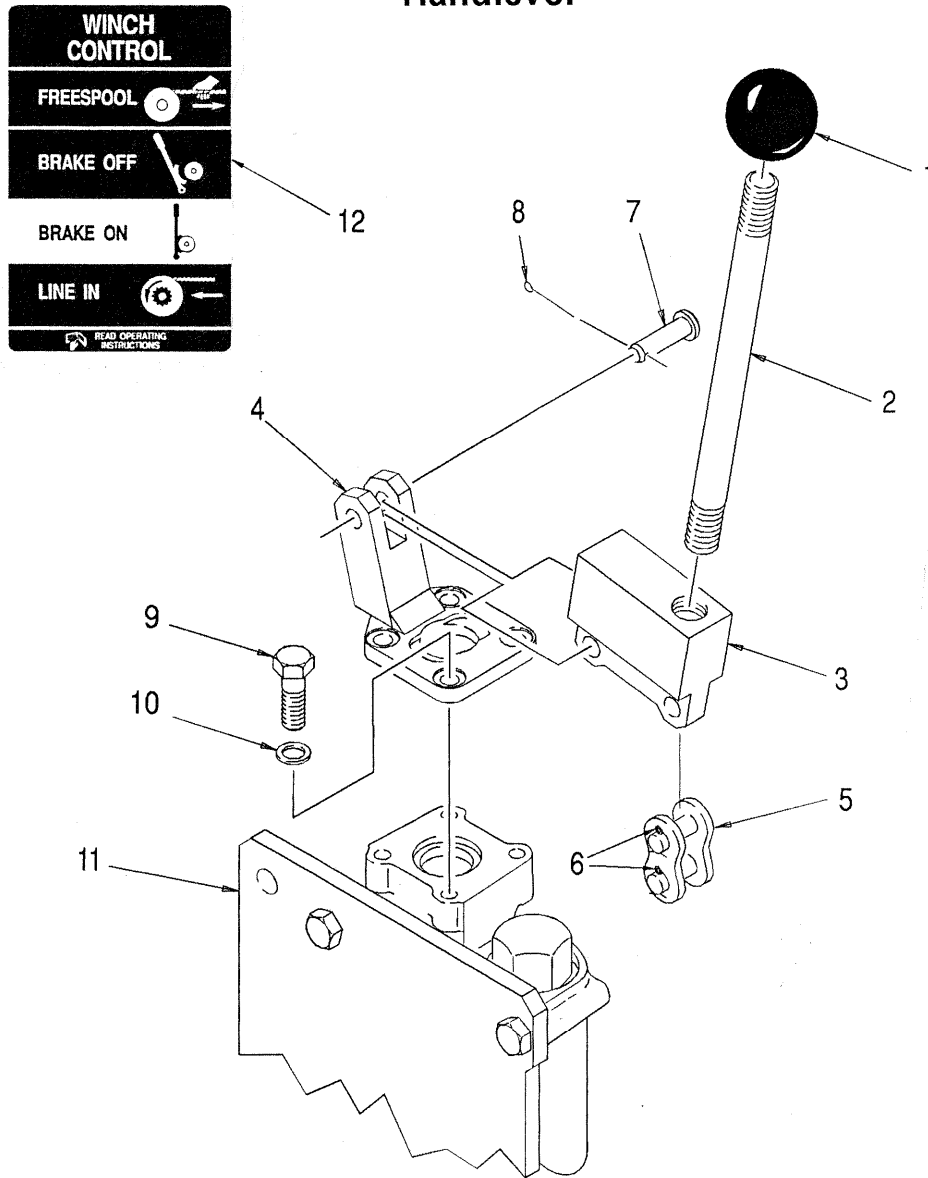
Valve-Control



Item No	Part No	Description 1234	Qty	Item No	Part No	Description 1234	Qty
	1314528W	Valve-Control	1	15	*a 1314562W	Spool End	1
1	1314610W	Body-Valve	1	16	61141W	Ball-Steel	4
2	1314588W	Gasket	1	17	2300285W	Spring-Detent	1
3	2300292W	Plate-Cover	1	18	330596W	Ball-Steel	1
4	*a 16334W	Caspscrew	8	19	1314563W	End Cap	1
5	18425W	Washer	8	20	16487W	O-Ring	1
6	1314554W	Valve-Relief	1	21	233693W	Fitting	1
7	2300179W	Seal Kit	1	22	16485W	O-Ring	1
8	2300187W	Cartridge-Check	1	23	15859W	O-Ring	1
9	636850W	Wiper-Rod	1	24	2300193W	Plug	1
10	2300315W	Seal	1	25	60653W	O-Ring	1
11	1314555W	Spool	1	26	1314589W	Plug	1
12	166905W	Spacer-Centering	2	27	16484W	O-Ring	1
13	1314575W	Spacer	1				
14	1314556W	Spring-Centering	1				

*a Use 251099W Adhesive

Handlever



Item No	Part No	Description 1234	Qty	Item No	Part No	Description 1234	Qty
	2300363W	Handlever Assembly	1	8	15211W	. Cotter Pin	1
1	* -----	. Knob	Ref	9	16334W	. Capscrew	4
2	* -----	. Rod-Threaded	Ref	10	18425W	. Washer	4
3	1314598W	. Base-Handle	1	11	-----	Valve-Control (see 1C03)	Ref
4	1314595W	. Pivot-Handlever	1	12	* -----	Decal	Ref
5	1314564W	. Link	1				
6	15211W	. Cotter Pin	2				
7	203325W	. Pin-Rod End	1				
					* See Parts-Mounting		

Index-Numerical

12891W - 2300416W G03



Index-Numerical

Part No	Page	Item	Part No	Page	Item	Part No	Page	Item	Part No	Page	Item	Part No	Page	Item
12891W	1B03	1	43208W	1B03	3	354432W	1A06	62	1314566W	1A05	4			
	1B04	1		1B04	18	383789W	1A05			1B04	9			
14504W	1A06	61	44310W	1B03	18	391484W	1A06	60	1314567W	1B03	4			
14516W	1A06	68	44503W	1B03	19	398074W	1A06	1	1314575W	1C03	13			
14594W	1A05	17	60653W	1C03	25	398888W	1B05	8	1314580W	1B04	3			
14595W	1A05	11	61056W	1A06	70	398943W	1A05	7	1314588W	1C03	2			
14604W	1A05	13	61141W	1C03	16	636850W	1C03	9	1314589W	1C03	26			
14713W	1A06	69	83846W	1A06	36	1314401W	1A06	65	1314595W	1C04	4			
15056W	1A06	13	86596W	1B04	13	1314410W	1A06	43	1314598W	1C04	3			
15128W	1B05	14	87287W	1B04	16	1314415W	1B04	4	1314610W	1C03	1			
15156W	1A06	14	110174W	1A06	34	1314417W	1B04	15	1314680W	1B06	3			
15211W	1C04	6	111331W	1A06	29	1314418W	1B04	4	1314681W	1B06	3			
	1C04	8	124606W	1B03	6	1314419W	1B03	4	1314682W	1B06	3			
15372W	1A06	66	129563W	1A06	4	1314421W	1A05	6	1314683W	1B06	3			
15859W	1C03	23	134803W	1B06	13	1314424W	1B04	17	1314684W	1B06	3			
16334W	1C03	4	136625W	1A05	5	1314428W	1B03		1314685W	1B06	5			
	1C04	9	137153W	1B06	18	1314429W	1B03		1314686W	1B06	4			
16379W	1A06	12	137155W	1B06	19	1314433W	1B05	11	1314704W	1B06	20			
16483W	1A05	18	138811W	1A06	26	1314434W	1B05	11	1314777W	1B06	1			
	1A06	57	139385W	1B04	14	1314435W	1B05	11	1314783W	1B06	2			
16484W	1A05	12	140597W	1B03	16	1314438W	1B03	17	2300174W	1A05	20			
	1A06	35	143004W	1B05	4	1314446W	1B03	14	2300179W	1C03	7			
	1A06	42	156133W	1A06	52	1314447W	1B03	13	2300187W	1C03	8			
	1A06	55	161656W	1A06	38	1314455W	1B05	12	2300193W	1C03	24			
	1C03	27	166905W	1C03	12	1314456W	1B05	1	2300207W	1B05	13			
16485W	1A05	16	180980W	1A06	23	1314459W	1B05	1	2300221W	1B04	12			
	1A06	30	184472W	1B05	10	1314467W	1B05	11	2300227W	1B04	10			
	1A06	39	184473W	1B05	9	1314468W	1B05	11	2300266W	1A05	23			
	1A06	46	184761W	1A06	15	1314469W	1B03	5	2300276W	1A05	22			
	1A06	59	200972W	1B05	5	1314470W	1B06	23	2300281W	1A06	50			
	1C03	22	203325W	1C04	7	1314471W	1B05	7	2300285W	1C03	17			
16486W	1A06	16	216590W	1A05	15	1314473W	1B05	6	2300292W	1C03	3			
	1A06	25	219084W	1B04	19	1314474W	1B05	6	2300293W	1A06	64			
	1A06	27	221357W	1B06	17	1314475W	1B05	6	2300315W	1C03	10			
16487W	1A05	14	221630W	1B06	16	1314480W	1A05	3	2300341W	1A06	47			
	1A06	20	221638W	1A06	5	1314483W	1B06	22	2300342W	1A06	49			
	1A06	37	221767W	1A06	71	1314485W	1B06	23	2300343W	1A06	44			
	1C03	20	221771W	1A05	10	1314486W	1B06	23	2300344W	1A06	48			
16558W	1A06	56	221775W	1A06	6	1314487W	1B06	23	2300345W	1A06	53			
16559W	1A06	41	222400W	1A06	45	1314488W	1B06	23	2300363W	1C04				
16561W	1A06	24	233693W	1C03	21	1314489W	1B06	24		1A06	72			
16562W	1A06	19	240683W	1B05	2	1314491W	1B06	12	2300398W	1A06	17			
16745W	1A06	54	243189W	1A06	10	1314493W	1B06	11	2300403W	1A06	28			
16828W	1A06	51	251099W	1C03		1314494W	1B06	10	2300404W	1A06	21			
16883W	1A06	40	264159W	1A05		1314496W	1B06	8	2300405W	1A06	18			
16909W	1A06	58	296844W	1B05	3	1314497W	1B06	7	2300406W	1A06	33			
17064W	1A06	32	330596W	1C03	18	1314499W	1A05	8	2300409W	1A06	8			
17301W	1A06	22	334402W	1B03	15	1314502W	1A05	21	2300414W	1A06	7			
17780W	1A06	31	334417W	1B03	10	1314503W	1B06	14	2300416W	1A06	9			
18425W	1C03	5		1B04	8	1314516W	1A05	2						
	1C04	10	334442W	1B03	8	1314528W	1C03							
18596W	1A05	9		1B04	6	1314547W	1A05	19						
30190W	1B06	21	334475W	1B03	7	1314549W	1B03	12						
33716W	1B06	6		1B04	5	1314554W	1C03	6						
37591W	1B06	9	334480W	1B03	11	1314555W	1C03	11						
39350W	1A06	3	346677W	1B03	20	1314556W	1C03	14						
39353W	1A06	2	346796W	1B03	9	1314562W	1C03	15						
39756W	1B04	11		1B04	7	1314563W	1C03	19						
41308W	1B03	2	354428W	1A06	63	1314564W	1C04	5						
	1B04	2	354431W	1A06	67	1314565W	1A06	11						