

**S-N S-N MODEL 5101B**

**PARTS CATALOG**

# **REVERSING TRANSMISSION**

## **MODEL 5101-B and 5101-E**

**U. S. PATENT 2,370,484**



**THE SNOW-NABSTEDT**

GEAR DIVISION OF  
**GRANITE STATE MACHINE CO., Inc.**  
124 Joliette St., P.O. Box 779, Manchester, N.H. 03105  
(603) 668-1900      Telex 94-3458



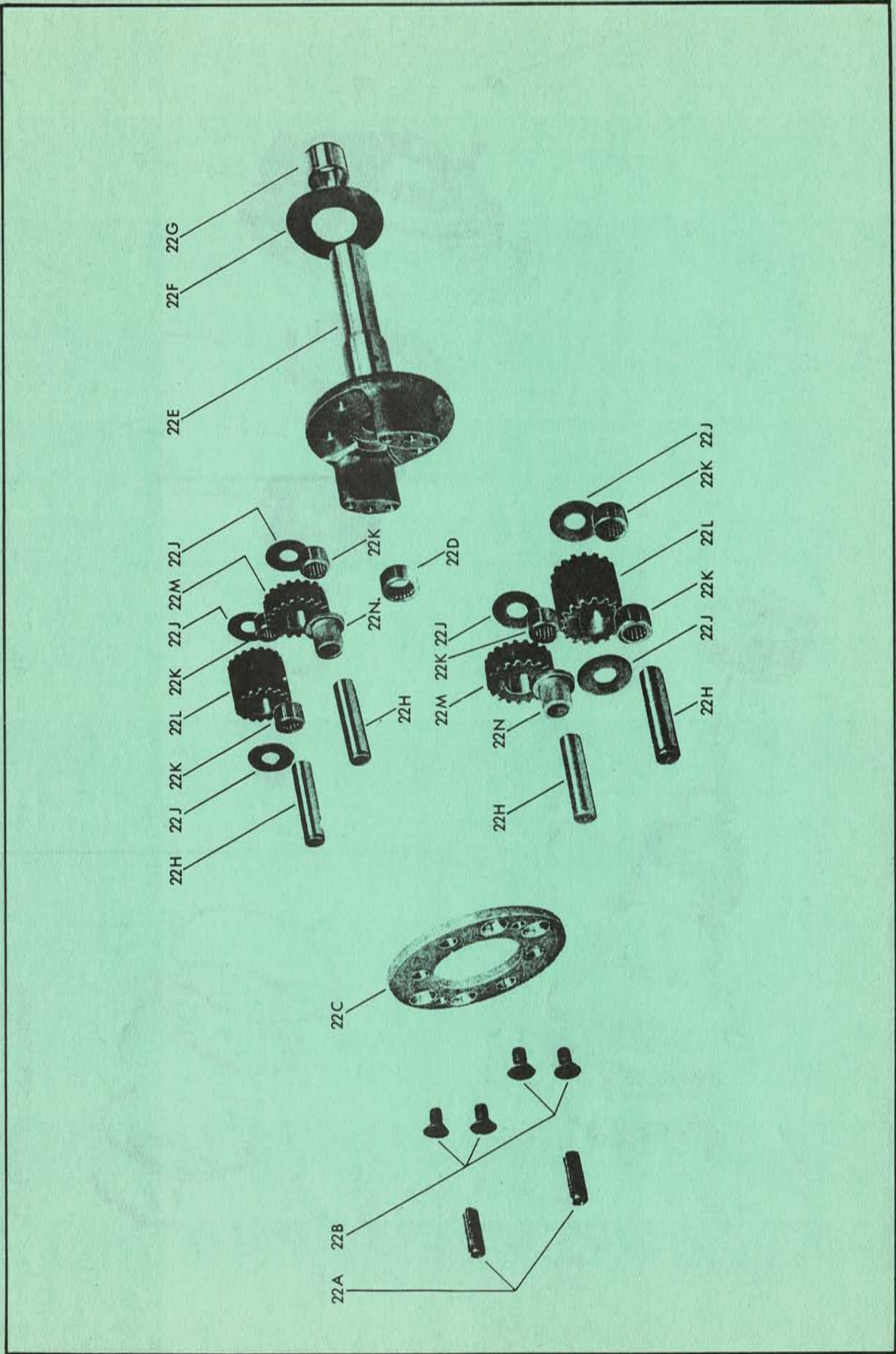


FIGURE 2. SUB-ASSEMBLIES  
 Parts are identified by reference number. See parts list for correct part number.



## PARTS LIST

### MODEL 5101 REVERSING TRANSMISSION

ITEM NO.	PART NO.	QUAN.	NAME	ITEM NO.	PART NO.	QUAN.	NAME
				22F	8TR-5134	1	Nylon Washer
2	20186	1	Oil Seal	22G	10237-2	1	Bearing Inner Race
3	2607	6	Screws	22H	7938	4	Dowel
4	1302	6	Lockwasher	22J	9E-5105	6	Nylon Washer
				22K	10495	6	Bearing
6	26-5109	1	Shaft	22L	9-5103	2	Long Pinion
7	10736	1	Bearing	22M	9A-5103	2	Short Pinion
				22N	6271	2	Bushing
9	20187	2	Oil Seal	23	27A-5106	1	Cross Shaft
10	30-51027	1	Housing	24	1228	3	Key
11	5X-5104	2	Brake Band Assembly consisting of:	25	10-5104	2	Cam
	5-5104	1	Band	26	5061	2	Snap Ring
	5L-5103	2	Linings	27	8TR-5134	1	Nylon Bushing
	7101	1	Roll Pin	28	7A-5102	1	Ring Gear
	7121	1	Roll Pin	29	6268	1	Bushing
	22-5101	1	Cam Roll	31	31A-5103	1	Gasket
12	8TF-5101	1	Nylon Washer	32	30-5106	1	Housing
13	8A-5102	1	Drum	33	6267	1	Bushing
14	8-5102	1	Forward Gear	34	30H-5102	1	Breather
15	50142	1	Snap Ring	35	4527	2	Screws
16	6272	1	Bushing	36	1703	2	Nuts
17	26A-5101	1	Spacer	38	T0237-1	1	Bearing
18	8TR-5101	1	Nylon Washer	41E	31A-5104	1	Gasket
				42E	31-5103	1	Adapter
				43E	31A-5103	1	Gasket
				44E	30-5106	1	Housing
				45E	41A-5101	1	Stud
21	2101	3	Pipe Plugs	46E	1302	1	Lockwasher
22	3X-5104	1	Pinion Carrier & Shaft Assembly	47E	1802	1	Nut
				48E	6273	1	Washer
22A	7101	2	Pin	49E	2642	3	Screws
22B	9403	4	Screws	50E	1304	3	Lockwasher
22C	3-5104	1	Cage	51E	27A-5107	1	Cross Shaft
22D	10238	1	Bearing	52E	10-5104	2	Cam
22E	48-5106	1	Shaft	53E	5061	2	Snap Ring
				54E	1228	1	Key



PRICE LIST FOR PARTS AND ASSEMBLIES

SN 5101B -3, -4, -5, -6

REVERSING TRANSMISSIONS

PARTS

Part No.	List Price	Part Name	Assembly	Quantity used in Assembly	Quantity used in Complete Transmission
3-5104	14.45	Gear Cage	A	1	1
*5-5104	-----	Brake Band	B	1	2
*5L-5103	-----	Lining	B	2	4
7A-5102	51.85	Internal Gear	C	1	1
8-5102	18.15	Gear	D-E	1-1	1
8A-5102	35.15	Drum	E	1	1
8TF-5101	.90	Washer			1
8TR-5101	1.05	Washer			1
8TR-5134	.90	Washer	A	1	1
9-5105	7.80	Long Pinion	A-F	2-1	2
9A-5108	6.00	Short Pinion	A-G	2-1	2
9E-5105	.25	Washer	A	6	6
10-5104	12.30	Cam	H	2	2
10-5106	11.10	Cam (-3)			2
22-5101	1.70	Cam Roller	B	1	2
26-5109	45.20	Input Shaft			1
26-5106	74.10	Input Shaft (-4)			1
26A-5101	2.35	Spacer	D-E	1-1	1
27A-5106	19.00	Cross Shaft	H	1	1
30-51027	72.90	Housing (Input)	J	1	1
30-5106	62.90	Housing (Output)	K	1	1
30-51019	71.10	Housing (Input) (-4)	L	1	1
30H-5105	2.40	Breather (-5)			1
30H-5107	1.00	Breather			1
31A-5105	1.70	Gasket			1
48-5106	90.35	Output Shaft	A-M-N	1-1-1	1
48-51019	100.65	Output Shaft (-6)			1
10237-1	3.80	Bearing (Outer Race)	K	1	1
10237-2	3.40	Bearing (Inner Race)	A-M-N	1-1	1
10238	1.65	Bearing	M-N	1-1	1
10495	1.40	Bearing	A-F-G	6-2-1	6
10736	9.00	Bearing			1
10558	8.00	Bearing (-4)	L	1	1
1228	.30	Key	H	3	3
1302	.15	Lockwasher			6
1703	.40	Nut			2
20186	2.20	Oil Seal			2
20187	1.00	Oil Seal	J-K-L	1-1-1	2
20202	5.05	Oil Seal (-4)	L	1	1
2101	.70	Plug			3
2607	.30	Screw			6







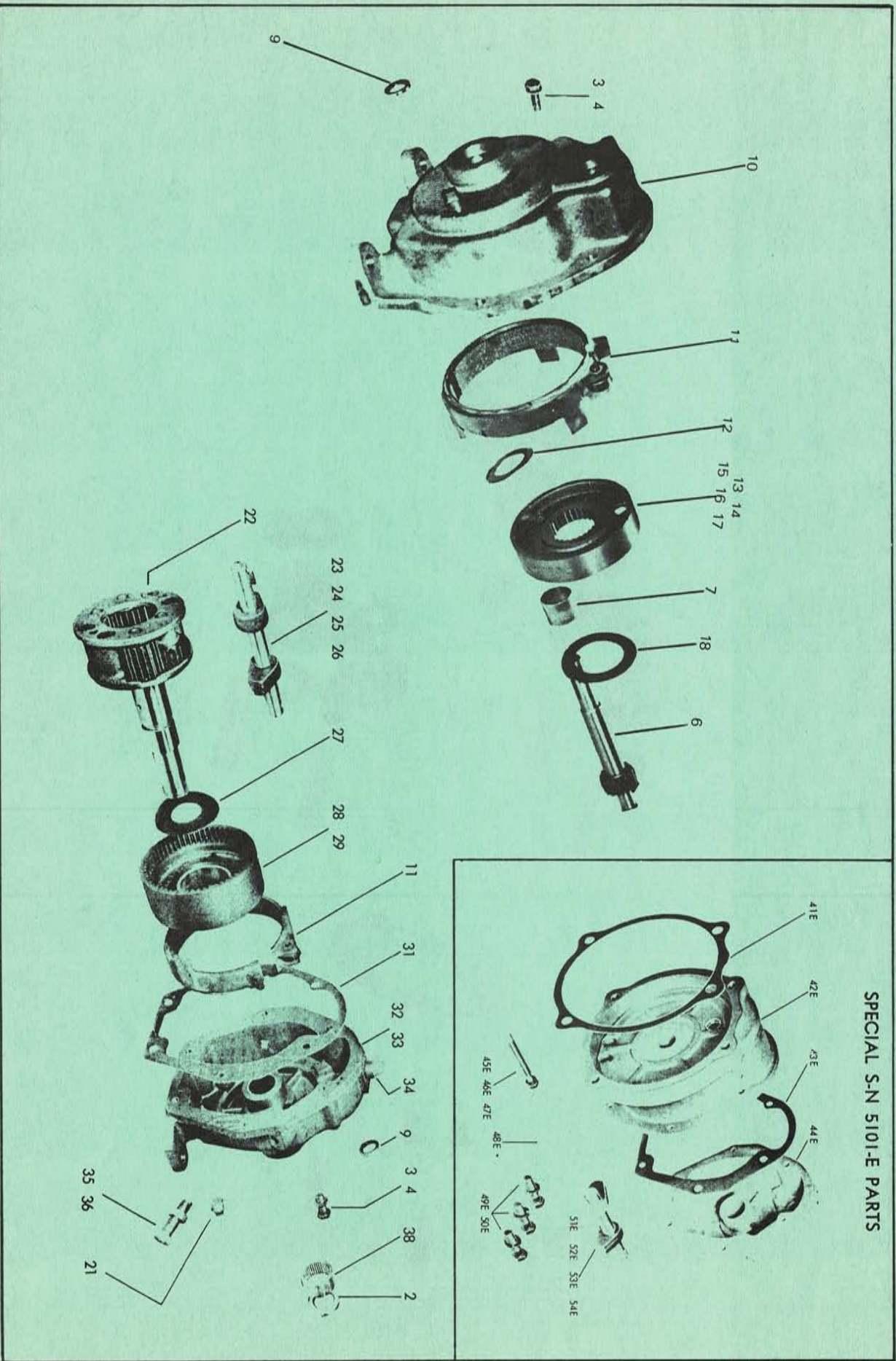


FIGURE 3. GEAR CAGE ASSEMBLY

Parts are identified by reference number. See parts list for correct part number.



# REVERSING TRANSMISSION

## MODELS 5101-B AND 5101-E

### 1. WARRANTY

The Company's products are guaranteed to be made of first class material, and in a skillful and workmanlike manner, and to be in perfect running order at the time they leave the factory. They are guaranteed against any defective material or workmanship, and any part proven defective within twelve months from the date of shipment will be replaced free of charge, F. O. B. our plant, on return of such defective part to the Company, transportation charges prepaid. No parts, however, shall be returned without the express authorization of this Company so to do.

There are no warranties, expressed or implied, except such warranties as are definitely set forth herein. Any part or parts manufactured, altered or repaired outside the factory without written approval from the factory shall void all warranties set forth herein. Under no circumstances will the Company be charged for labor to install parts furnished under warranty unless it agrees in advance to do so. Shipping charges on warranty parts shall be for the account of the customer unless the Company agrees in advance to pay them.

The Company shall in no event be held liable for any consequential damages or other damages or delay caused by defective material. Equipment and accessories, including bearings, not manufactured by the Company are guaranteed only to the extent of the original manufacturer's guarantee.

The Company reserves the right to improve its products through changes in design or material without being obligated to incorporate such changes in products of prior manufacture.

### 2. ADJUSTMENTS

The forward and reverse clutches are adjusted externally with the screws which project from both sides of the case. Adjust one clutch at a time. Loosen the jam nut. Turn in the adjusting screw a fraction of a turn if more tension is desired. Turn out the adjusting screw for less tension. Test the adjustment by moving the operating lever towards its respective adjusting screw. Tighten the jam nut.

Do not tighten clutches excessively since this only increases the operating effort without improving clutch action and may result in damaged brake bands. Occasionally, during cold weather operation, the clutches may

slip even though correctly adjusted. In such a case the lubricant must be changed to a lighter grade as specified in lubrication instructions.

### 3. LUBRICATION

Important: All gears are shipped dry from the factory. Be sure to add oil before running.

**Quality of Oil** — Use a good grade of straight mineral oil — SAE 30 above 32° F; SAE 10 below 32° F. Examples of recommended lube oils: Esso Lube Motor Oil; Gulf Lube Motor Oil; Quaker State Non-detergent Motor Oil (ML MM), or equivalent.

Fill unit with lubricating oil through breather hole on top of unit until oil flows from oil level hole on either side. Sometimes oil will follow the internal parts and oil will flow out the oil level holes before the unit is filled with oil to the level holes. Be sure unit is filled to oil level hole.

#### OIL CHANGE

1. The transmission should be drained and refilled after the first 30 hours of operation.
2. After this, a change of oil every 100 hours of operation or every six months, whichever occurs first, for units operating under favorable conditions.
3. Where operating conditions are severe, such as rapid rise and fall in temperature of the gear case with accompanied condensation on the inside walls and resulting formation of sludge, or where operation is in moist or dusty atmospheres, or in the presence of chemical fumes, it may be necessary to change the oil at intervals of one to three months.

### 4. REPLACEMENT OF PARTS

Should it become necessary to replace any gear due to wear or breakage, the mating gears must be carefully examined for wear or cracks. If any doubt exists as to the condition of the mating gears, they should be replaced.

In general, all gearing is sold complete with bearing and bushings installed.

The sintered bushings and needle bearings used in this transmission requires special assembly and sizing tools as specified by the respective manufacturers. Therefore, the replacement of these parts should not be attempted unless proper equipment is available.



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Part No.	List Price	Part Name	Assembly	Quantity used in Assembly	Quantity used in Complete Transmission
4527	1.35	Screw			2
5041	.80	Snap Ring			1
5061	.70	Snap Ring	H	2	2
50128	.20	Snap Ring			2
50142	.50	Snap Ring	E	1	1
6267	1.50	Bushing	K	1	1
6268	2.20	Bushing	C	1	1
6271	.70	Bushing	A	2	2
6272	.75	Bushing	D-E	1-1	1
7101	.20	Roll Pin	A-B	2-1	4
7121	.70	Roll Pin	B	1	2
7938	1.15	Dowel	A	4	4
8203	.95	Screw			3
9403	.95	Screw	A-M-N	4-4-4	4

\*Not Supplied Separately

#### ASSEMBLIES

To determine which components make up each assembly match key letters shown in columns headed "Assembly."

Part No.	List Price	Part Name	Models Used In	Assembly	Quantity of Assemblies Used
3X-5104	155.95	Gear Cage Assembly	All	A	1
5X-5104	37.50	Brake Band Assembly	All	B	2
5X-5104R	19.60	Relined Brake Band			
7AX-5102	54.00	Gear Drum Assembly	All	C	1
8X-5102	21.15	Gear Assembly	All	D	1
8AX-5102	56.75	Drum Assembly	All	E	1
9X-5105	12.50	Long Pinion Assembly	All	F	2
9AX-5106	10.05	Short Pinion Assembly	All	G	2
27AX-5106	45.80	Cross Shaft Assembly	All	H	1
30X-51027	73.90	Input Housing Assembly	5101,-3,-5,-6	J	1
30X-5106	68.75	Output Housing Assembly	All	K	1
30X-51019	85.10	Input Housing Assembly	-4	L	1
48X-5106	99.55	Output Shaft Assembly	5101,-3,-4,-5	M	1
48X-51019	109.90	Output Shaft Assembly	-6	N	1