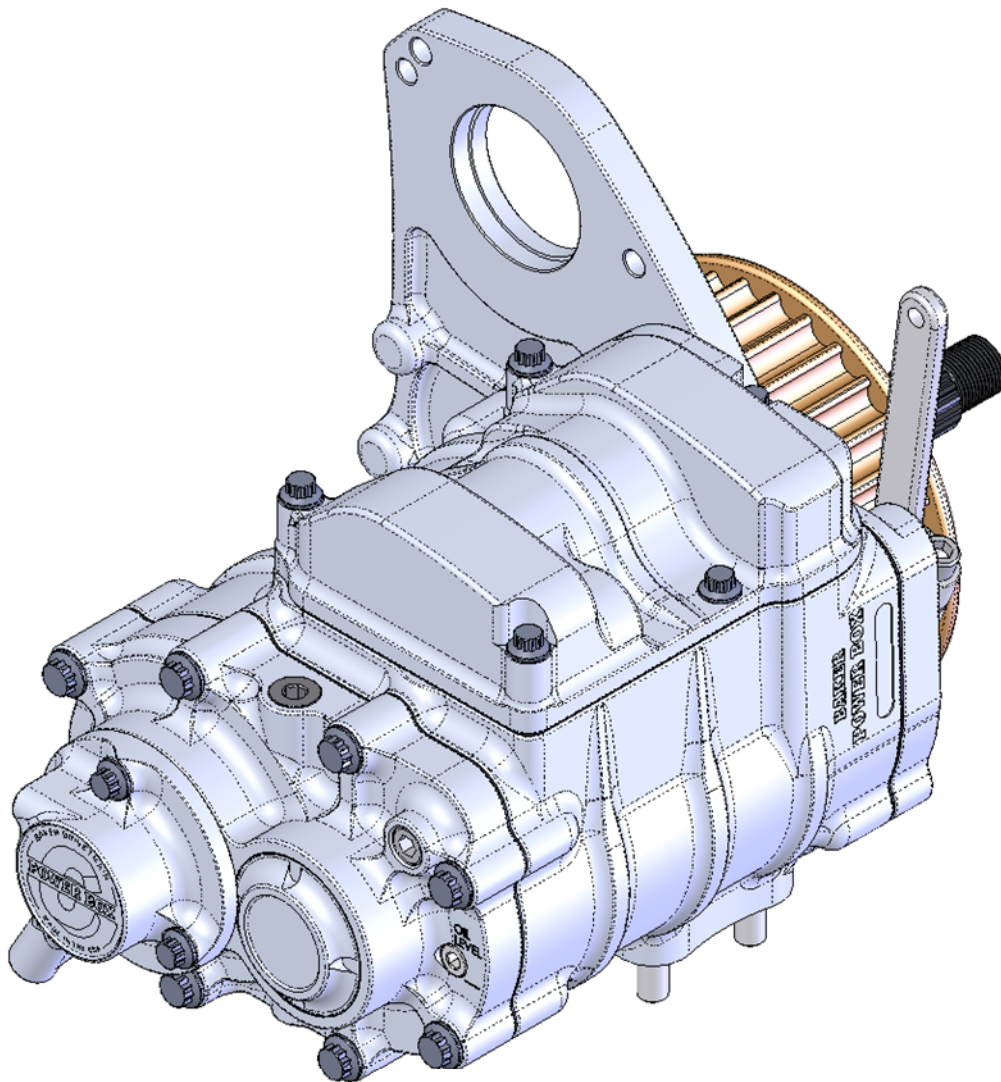


# BAKER LEFT SIDE DRIVE (LSD) POWERBOX



**P/N:** PBL701PN (LSD Transmission with Hydraulic Clutch)  
PBL7211PN (LSD R-Ratio Transmission with Hydraulic Clutch)

# BAKER LSD POWERBOX OVERVIEW

## FEATURES

The new BAKER PowerBox; sculpted mechanical architecture laced with TorqueBox design cues and shrink wrapped around the gears to yield the smallest transmission possible. The PowerBox has a 165 ft-lb torque capacity; available for EVO Softail®-based applications as a Standard or R-Ratio right or left side drive 6-speed.

## FITMENT

- 1984-1999 EVO Softail®
- Custom Applications

## TOOLS REQUIRED

- Torque Wrench (reads both in. lbs. and ft. lbs.)
- 12 Point Deep Well Sockets
- 3/16" Spanner Wrench
- Common Hand Held Tools (Allen Wrenches, Sockets, Snap Ring Pliers, Etc.)
- Main Drive Gear & Bearing Service Tools
  - BAKER pn Tool A
  - H-D® Equivalent pn 35316A
- Pulley Nut Socket
  - BAKER pn TOOL D
  - H-D® Equivalent pn 94660-37B
- Inner Primary Race Service Tool
  - BAKER pn TOOLB-56
  - H-D® Equivalent pn 34902A

## SPECIFICATIONS

- **TRANSMISSION FLUID CAPACITY:** 22-24 fluid oz. BAKER Recommends: Spectro™ Heavy Duty Platinum 6 Speed Transmission Oil, pn R.HDPG6
- **COUNTERSHAFT END PLAY:** .000" (not adjustable)
- **SHIFT DRUM END PLAY:** .002"-.010"
- **PAWL ADJUSTMENT:** In 3<sup>rd</sup> Gear measurement must be equal to within .010" between pins

## GEAR RATIOS

STANDARD		R-RATIO	
1 <sup>ST</sup>	2.94	1 <sup>ST</sup>	2.82
2 <sup>ND</sup>	2.21	2 <sup>ND</sup>	2.08
3 <sup>RD</sup>	1.60	3 <sup>RD</sup>	1.60
4 <sup>TH</sup>	1.23	4 <sup>TH</sup>	1.23
5 <sup>TH</sup>	1.00	5 <sup>TH</sup>	1.00
6 <sup>TH</sup>	0.86	6 <sup>TH</sup>	0.86

# BAKER LSD POWERBOX TORQUE VALUES

The words Harley, and H-D are registered trademarks and are for reference only. Use of H-D model designations and part numbers are for reference only. BAKER Drivetrain has no association with, and makes no claim against, these words, trademarks, or companies.

It is the sole responsibility of the user to determine the suitability of this product for his or her use, and the user shall assume all legal, personal injury risk and liability and all other as well as all other obligations, duties and risks associated therewith.

## TORQUE VALUES

## THREADLOCKER / LUBRICANT

### ACTUATOR

- 1/4" Bolts: 100-120 in-lbs (8-10 ft-lbs) Blue Loctite™ (242 Removable)

### BEARING DOOR

- 5/16" Bolts: 200-225 in-lbs (16-18 ft-lbs) Blue Loctite™ (242 Removable)

### TOP COVER

- 1/4" Bolts: 100-120 in-lbs (8-10 ft-lbs) Blue Loctite™ (242 Removable)

### STARTER EAR

- 5/16" Bolts: 200-225 in-lbs (16-18 ft-lbs) Blue Loctite™ (242 Removable)

### DRUM ASSEMBLY

- 1/4" Bolts: 100-120 in-lbs (8-10 ft-lbs) Blue Loctite™ (242 Removable)

### LOCK PLATE

- 1/4" Bolts: 100-120 in-lbs (8-10 ft-lbs) Blue Loctite™ (242 Removable)

### PULLEY / SPROCKET NUT

- 50 ft-lbs (67.8 Nm) initial torque, then turn another 30-40 degrees; 45 degrees max.  
Red Loctite™ (271 Permanent)

### ECCENTRIC SCREW JAM NUT

- 240-288 in-lbs (20-24 ft-lbs) Blue Loctite™ (242 Removable)

### SHIFT LEVER

- 5/16" Bolts: 200-225 in-lbs (16-18 ft-lbs) Blue Loctite™ (242 Removable)

### NYLOCK JAM NUT, MAINSHAFT / COUNTERSHAFT

- 50-60 ft-lbs (67-81 Nm) Not required

### COUNTERSHAFT CAP

- Snug with 3/16" Spanner Wrench Pipe Thread Sealant

### FILL PLUG

- 30-40 in-lbs Anti-Seize

### DRAIN AND LEVEL PLUG

- 30-40 in-lbs Anti-Seize

# BAKER LSD POWERBOX EXPLODED VIEWS

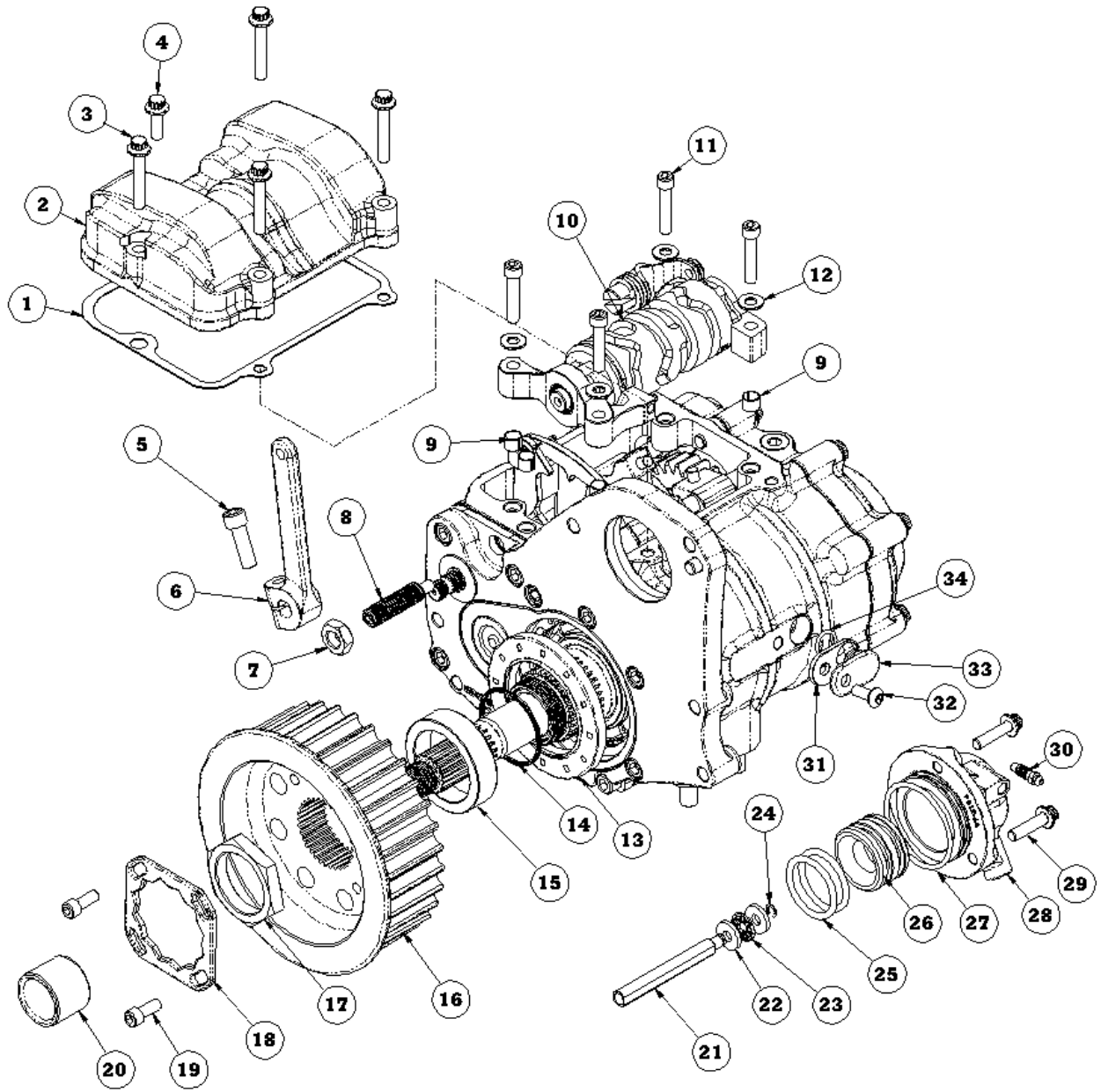


FIGURE 1

# BAKER POWERBOX PARTS DETAIL FIGURE 1

ITEM	QTY	PN	DESCRIPTION
1	1	PBT-GAS	Gasket, Top Cover
2	1	PB104N-6P	Top Cover
3	4	2AL1.500-12SL	¼-20 x 1.500" ARP Bolt
4	1	2AL.750-3SL	¼-20 x .750" ARP Bolt
5	1	31F100KCSS/P	5/16-24 x 1.000" Polished SHCS
6	1	33715-85S	Shift Lever
7	1	70813	7/16-14 Jam Nut
8	1	152-56A	Eccentric Adjuster Screw
9	6	609B	Alignment Dowel
10	1	5-6QEN-A	Shift Drum Assembly, OD6
11	4	23207	¼-20 x 1.250" Black SHCS
12	4	33001	Washer, Shift Drum Assembly
13	1	12067B	Seal, Main Drive Gear
14	1	11165A	Quad Seal, Main Drive Gear
15	1	33344-94S	Spacer, Main Drive Gear
16	1	***	Pulley or Sprocket
17	1	35211-91B	Nut, Pulley or Sprocket
18	1	40251-92A	Lock Plate
19	2	23202	¼-20 x .625" Black SHCS
20	1	34091-85	Inner Race
21	1	37089-84L	Actuator Rod
22	2	TWC411	Washer, Actuator Rod
23	1	TC411	Bearing, Actuator Rod
24	1	10705-01149	E-Clip, Actuator Rod
25	2	66855	O-Ring, Hydraulic Piston
26	1	124-56LA	1.500" LSD Hydraulic Piston
27	1	2418T153	O-Ring, Buna #134
28	1	PB12-6P	LSD Hydraulic Cover
29	3	2AL1.000-3SL	¼-20 x 1.000" ARP Bolt
30	1	45-9404	Bleeder Valve
31	1	132-56R	Spacer, .120" Thick
32	1	73753	¼-20 x .625" SS BHCS
33	1	108-6EP	Plug, Speed Sensor
34	1	66808	O-Ring, Buna #014

\*\*\* = CUSTOMER PREFERENCE

# BAKER LSD POWERBOX EXPLODED VIEWS

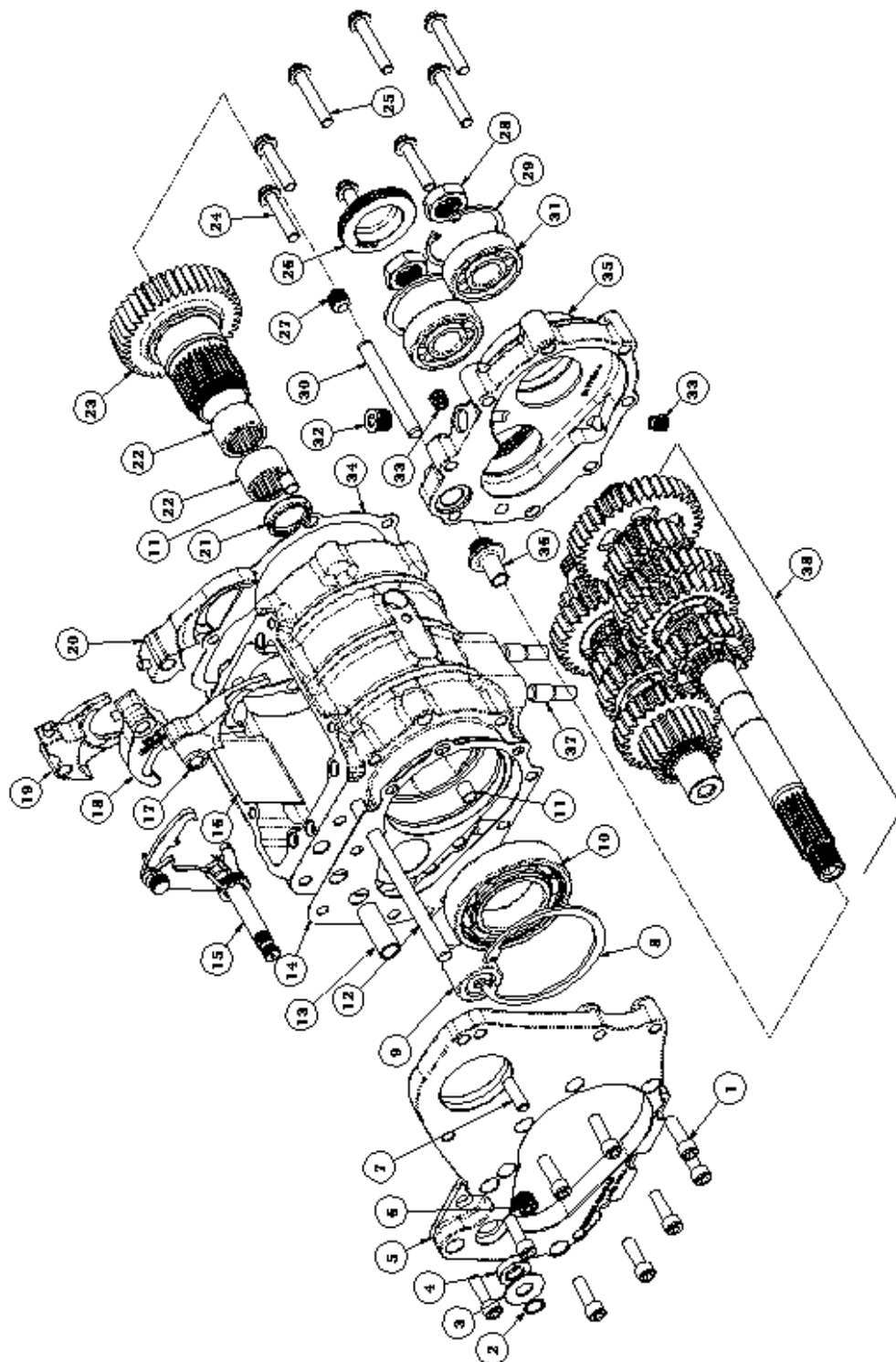


FIGURE 2

## BAKER POWERBOX PARTS DETAIL FIGURE 2

ITEM	QTY	PN	DESCRIPTION
1	9	73495	5/16-18 X 1.000" SHCS
2	1	68010	7/16" Snap Ring, Shifter Pawl
3	1	6497HW	Washer, Shifter Pawl
4	1	12045	Seal, Shifter Pawl
5	1	PB104D-56P	Starter Ear
6	1	25702	½-20 x .500" Black Plug
7	1	26770	Dowel, Starter
8	1	1302-334-PP	3 11/32" Beveled Snap Ring
9	1	BK2526	Bearing, Countershaft
10	1	6209	Bearing, Main Drive Gear
11	4	16583-00	10MM Alignment Dowel
12	1	122-64	Fork Rod, 6.250" Long
13	1	33114-79	Bushing, Shifter Pawl
14	1	PBE-GAS	Gasket, Starter Ear
15	1	555-56A	Shifter Pawl Assembly
16	1	PBL104-56P	Transmission Case, LSD
17	1	101-56	Shift Fork, 2M
18	1	102-6F	Shift Fork, 3C
19	1	102-6E	Shift Fork, 4C
20	1	101-6E	Shift Fork, 1M
21	1	12035B	Seal, Main Drive Gear
22	2	HK2520	Bearing, Main Drive Gear
23	1	61005M	Gear, 5 <sup>th</sup> Mainshaft
24	4	3AG1.500"-12CL	5/16-18 x 1.500" ARP Bolt
25	4	3AG1.750"-12CL	5/16-18 x 1.750" ARP Bolt
26	1	PB13-6P	End Cap, Countershaft
27	1	3784C	½-20 x .500" Chrome Plug
28	2	37141	¾-16 Nylock Jamnut
29	2	1302-206PP	Snap Ring, Bearing Door
30	1	112-6E	Aux Fork Rod
31	2	6304	Bearing, Radial Ball, Door
32	1	22S-S06	9/16-18 Zero Leak Plug
33	2	51740-001	3/8-24 Zero Leak Plug
34	1	PBD-GAS	Gasket, Bearing Door
35	1	PB104F-6P	Bearing Door, LSD
36	1	115-DSSC	Pecker, Aux Fork Rod, Shorty DSSC
37	5	11733A	Stud, Transmission Case
38	1	See Figure 3	Gearset Assembly, OD6

## BAKER LSD POWERBOX EXPLODED VIEWS

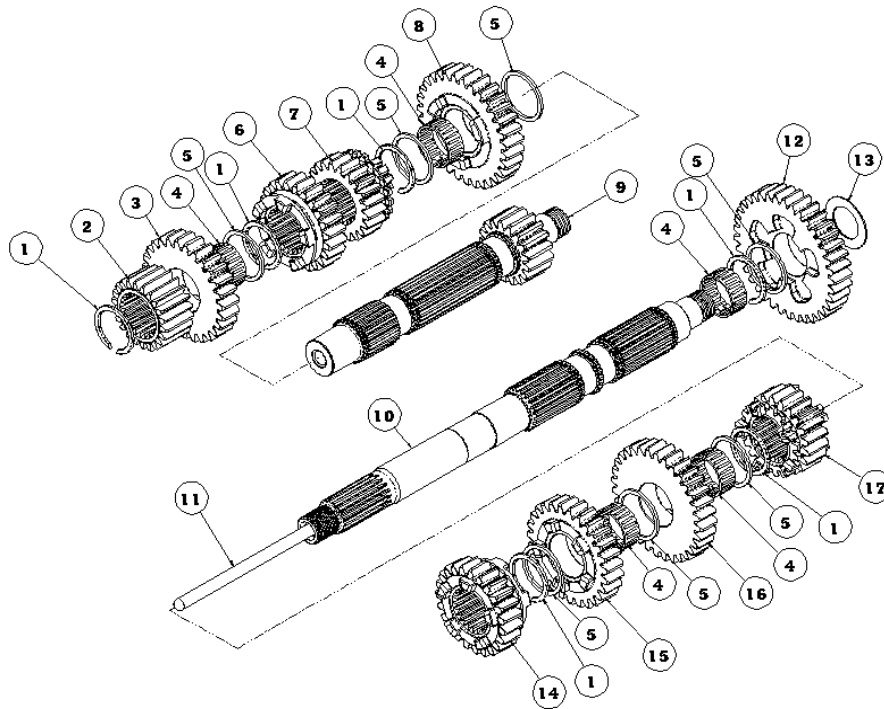


FIGURE 3

ITEM	QTY	PN	DESCRIPTION
1	6	11067A	Retaining Ring
2	1	61005C	5 <sup>th</sup> Gear, Countershaft
3	1	603M2C / 52821C	2 <sup>nd</sup> Gear Countershaft
4	5	8876A	Bearing, Caged Needle
5	7	6003B	Thrust Washer
6	1	61573C	3 <sup>rd</sup> Gear, Countershaft
7	1	61234C	4 <sup>th</sup> Gear, Countershaft
8	1	62941C / 62821C	1 <sup>st</sup> Gear, Countershaft
9	1	60866C	Countershaft
10	1	60000M	Mainshaft
11	1	37088-90	Clutch Release Rod
12	1	60866M	6 <sup>th</sup> Gear, Mainshaft
13	1	AS2035	Shim, Mainshaft
14	1	62212M / 52821M	2 <sup>nd</sup> Gear, Mainshaft
15	1	603M2C	3 <sup>rd</sup> Gear, Mainshaft
16	1	61234M	4 <sup>th</sup> Gear, Mainshaft
17	1	62941M / 62821M	1 <sup>st</sup> Gear, Mainshaft

### CUSTOMER SUPPORT

For any installation or service questions, please contact our BAKER technical department toll free: 1-877-640-2004