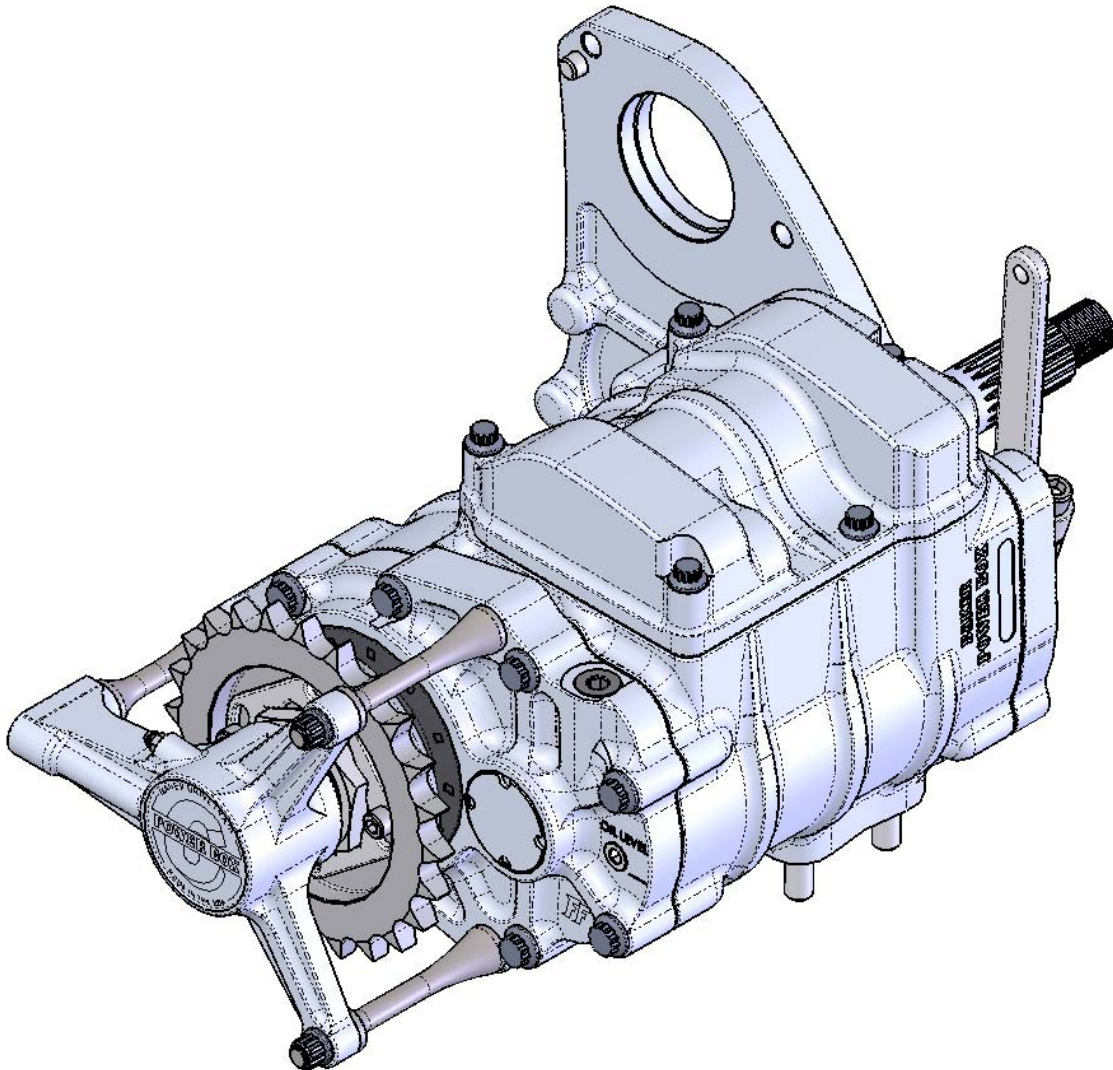


BAKER RIGHT SIDE DRIVE (RSD) POWERBOX



P/N: PBR701PN (RSD Transmission with Hydraulic Clutch)
PBR7211PN (RSD R-Ratio Transmission with Hydraulic Clutch)

BAKER RSD 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:** .006"-.010"
- **SHIFT DRUM END PLAY:** .000" (not adjustable)
- **PAWL ADJUSTMENT:** In 3rd Gear measurement must be equal to within .010" between pins

GEAR RATIOS

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

BAKER RSD 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

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

NUT, LEFT SIDE SEAL

- 100 ft-lbs (135.58 Nm) Red Loctite™ (271 Permanent)

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 RSD POWERBOX EXPLODED VIEWS

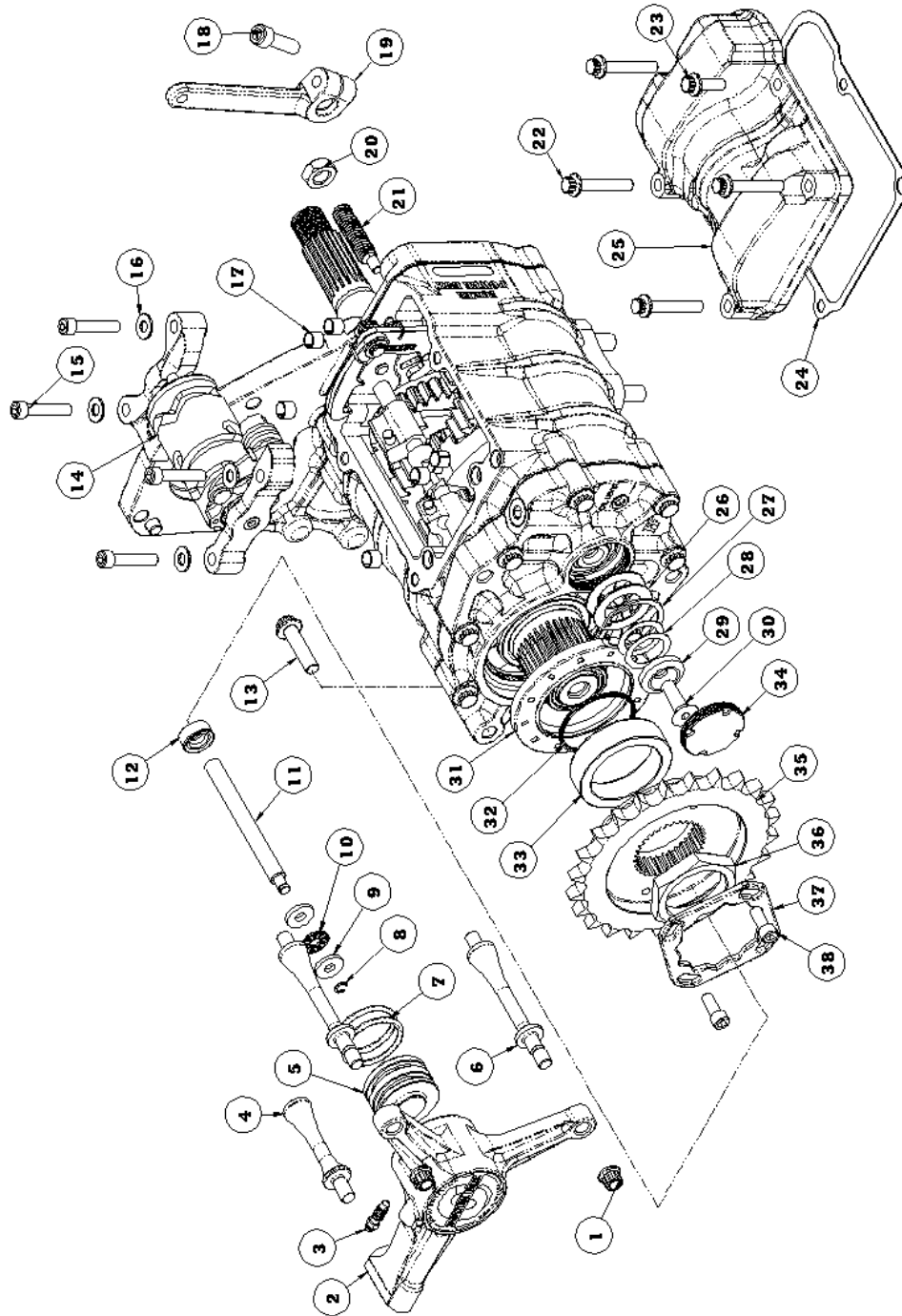


FIGURE 1

BAKER POWERBOX PARTS DETAIL FIGURE 1

ITEM	QTY	PN	DESCRIPTION
1	2	400-8301	5/16-24 ARP Nut
2	1	PB15-6RP	RSD Hydraulic Actuator
3	1	45-9404	Bleeder Valve
4	1	PB104S-6P	Standoff, Rear RSD Actuator
5	1	124-5R	1.500" RSD Hydraulic Piston
6	2	TB174-56AP	Standoff, RSD Actuator
7	2	66855	O-Ring, Hydraulic Piston
8	1	10705-01149	E-Clip Retainer, Actuator Rod
9	2	TWC411	Washer, Actuator Rod
10	1	TC411	Bearing, Actuator Rod
11	1	125-5R	Actuator Rod
12	1	3687	Seal, Actuator Rod
13	1	3AG1.250-12CL	5/16-18 x 1.250" ARP Bolt
14	1	124E-OD6R-A	OD6R Shift Drum Assembly
15	4	23207	¼-20 x 1.250" Black SHCS
16	4	33001	Washer, Shift Drum Assembly
17	6	609B	Alignment Dowel
18	1	31F100KCSS/P	5/16-24 x 1.000" Polished SHCS
19	1	33715-85S	Shift Lever Arm
20	1	70813	7/16-14 Jam Nut
21	1	152-56A	Eccentric Adjuster Screw
22	4	2AL1.500-12SL	¼-20 x 1.500" ARP Bolt
23	1	2AL.750-3SL	¼-20 x .750" ARP Bolt
24	1	PBT-GAS	Gasket, Top Cover
25	1	PB104N-6P	Top Cover
26	2	AS2035	Shim
27	1	143RRRI	1 7/16" Internal Snap Ring
28	Differ	*****	Shims, Countershaft, Differ For Each
29	1	35020-89	Retainer, Countershaft
30	1	24256	5/16-18 x 1.000" Black FHCS
31	1	12067B	Seal, Main Drive Gear
32	1	11165A	Quad Seal
33	1	33344-94S	Spacer
34	1	PB14-6RP	End Cap, Countershaft
35	*-*	*-*	29 Tooth Pulley Or Sprocket
36	1	35211-91B	Nut, Pulley or Sprocket
37	1	40251-92A	Lock Plate
38	2	23202	¼-20 x .625" Black SHCS

***-* = CUSTOMER PREFERENCE**

BAKER RSD POWERBOX EXPLODED VIEWS

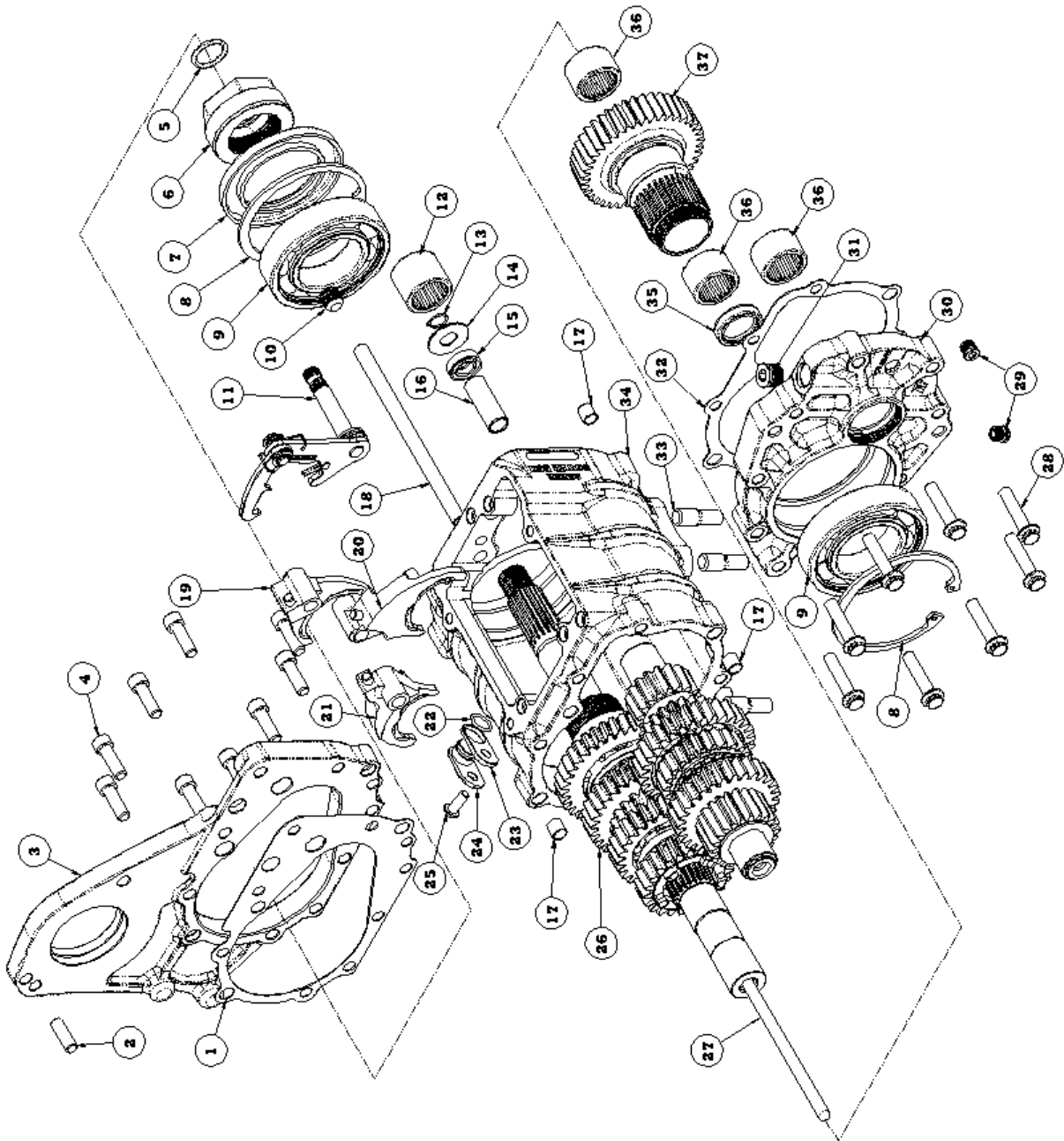


FIGURE 2

BAKER POWERBOX PARTS DETAIL FIGURE 2

ITEM	QTY	PN	DESCRIPTION
1	1	PBE-GAS	Gasket, Starter Ear
2	1	26770	Dowel, Starter Ear
3	1	PB104D-56P	Starter Ear
4	9	73495	5/16-18 x 1.000" SS SHCS
5	1	66832	O-ring, Mainshaft
6	1	SK-2645	Nut, Left Side Seal
7	1	12067B	Seal, Main Drive Gear
8	2	1302-334PP	3 11/32" Beveled Snap Ring
9	2	6209	Bearing, Main Drive Gear
10	1	25702	½-20 x .250" Black Plug
11	1	555-56A	Shifter Pawl Assembly
12	1	BK2526	Bearing, Countershaft
13	1	68010	7/16" Snap Ring, Shifter Pawl
14	1	6497HW	Washer, Shifter Pawl
15	1	12045	Seal, Shifter Pawl
16	1	33114-79	Bushing, Shifter Pawl
17	4	16583-00	10MM Alignment Dowel
18	1	122-64	Fork Rod, 6.250" Long
19	1	191-OD6R	Shift Fork, # 1 OD6R
20	1	192-OD6R	Shift Fork, # 2 OD6R
21	1	193-OD6R	Shift Fork, # 3 OD6R
22	1	66808	O-Ring, Buna # 014
23	1	132-56R	Spacer, Speedo, .120" Thick
24	1	108-6EP	Plug, Speed Sensor
25	1	73753	¼-20 x .625" SS BHCS
26	1	See Figure 3	OD6R Gearset Assembly
27	1	37088-90	Clutch Release Rod
28	8	3AG1.500-12CL	5/16-18 x 1.500" ARP Bolt
29	2	51740-001	3/8-24 Zero Leak Plug
30	1	PBR104-6P	RSD Bearing Door
31	1	22S-S06	9/16-18 Zero Leak Plug
32	1	PBD-GAS	Gasket, Bearing Door
33	5	11733A	Stud, Transmission Case
34	1	PBR104-56P	Transmission Case
35	1	12035B	Seal, Main Drive Gear
36	3	HK2520	Bearing, Main Drive Gear / Case
37	1	61005M	5 th Gear, Main Drive

BAKER RSD POWERBOX EXPLODED VIEWS

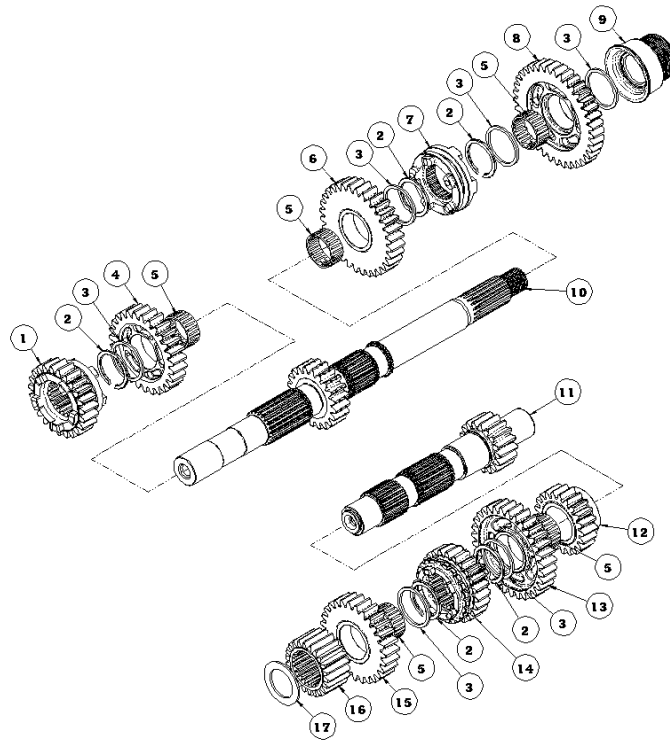


FIGURE 3

ITEM	QTY	PN	DESCRIPTION
1	1	OD6R-2M / OD6R-2M208	2 nd Gear, Mainshaft
2	5	11067A	Retaining Ring
3	6	6003B	Thrust Washer
4	1	OD6R-3M	3 rd Gear, Mainshaft
5	5	8876A	Bearing, Caged Needle
6	1	OD6R-4M	4 th Gear, Mainshaft
7	1	DD6-4C5	Dog Clutch
8	1	OD6R-6M	6 th Gear, Mainshaft
9	1	SK-2644	Collet, Mainshaft
10	1	OD6R-MS / OD6R-MS282	Mainshaft
11	1	OD6R-CS	Countershaft
12	1	OD6R-4C	4 th Gear, Countershaft
13	1	OD6R-1C / OD6R-1C282	1 st Gear, Countershaft
14	1	OD6R-3C	3 rd Gear, Countershaft
15	1	OD6R-2C / OD6R-2C208	2 nd Gear, Countershaft
16	1	61005C	5 th Gear, Countershaft
17	1	15162	Washer, .062" Thick Hardened

CUSTOMER SUPPORT

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