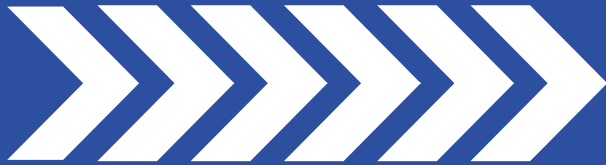


# E-Z RIDER®

Heavy Duty Clutches  
Made in the U.S.A.



## Technical Hot Sheet

### PILOT BEARING 101



- Basics •*
- Installation •*
- Common Failures •*

For Immediate Assistance

**1-800-325-6138**

24/7 TECHNICAL SUPPORT

# PILOT BEARING 101

## Pilot Bearing Basics

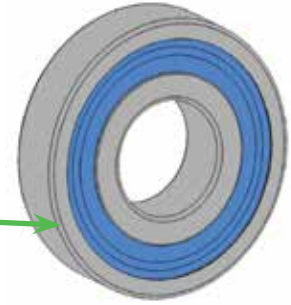
- Allows the flywheel and input shaft to turn at different speeds
- Centers and supports the input shaft in the flywheel
- Pressed into the center of a flywheel
- Some types utilize snap rings
- Should be replaced with every clutch installation

ACE PILOT BEARINGS							
ACE PART NO.	FAG PART NO.	I.D.		O.D.		WIDTH	
		MM	INCHES	MM	INCHES	MM	INCHES
AB182	6200-2RS	10	0.3937	30	1.1811	9	0.3543
AB183	6008-2RS	40	1.5748	68	2.6772	15	0.5906
AB184	6304-2RS	20	0.7874	52	2.0472	15	0.5906
AB185	6201-2RS	12	0.4724	32	1.2598	10	0.3937
AB186	6002-2RS	15	0.5906	32	1.2598	9	0.3543
AB187	6203-2RS	17	0.6693	40	1.5748	12	0.4724
AB188	6202-2RS	15	0.5906	35	1.3780	11	0.4331
AB189	6003-2RS	17	0.6693	35	1.3780	10	0.3937
AB190	6206-2RS	30	1.1811	62	2.4409	16	0.6299
AB191	6212-2RS	60	2.3622	110	4.3307	22	0.8661
AB192	6210-2RS	50	1.9685	90	3.5433	20	0.7874
AB193	6303-2RS	17	0.6693	47	1.8504	14	0.5512
AB195	6205-2RS	25	0.9843	52	2.0472	15	0.5906
AB195S	6205-2RSNR	25	0.9843	52	2.0472	15	0.5906
AB197	6306-2RS	30	1.1811	72	2.8346	19	0.7480
AB197V	6306-VV	30	1.1811	72	2.8346	19	0.7480
AB197S	6306-2RSNR	30	1.1844	72	2.8346	19	0.7480
AB197SV	6306-VVL	30	1.1844	72	2.8346	19	0.7480
AB199	6305-2RS	25	0.9843	62	2.4409	17	0.6693
AB202	6204-2RS	20	0.7874	47	1.8504	14	0.5512
AB203	6302-2RS	15	0.5906	42	1.6535	13	0.5118
AB204	6007-2RS	35	1.3780	62	2.4409	14	0.5512
AB205	6005-2RS	25	0.9843	47	1.8504	12	0.4724
AB206	6001-2RS	12	0.4724	28	1.1024	8	0.3150
AB207	6006-2RS	30	1.1811	55	2.1654	13	0.5118
AB208	6009-2RS	45	1.7717	75	2.9525	16	0.6299
AB209	6207-2RS	35	1.3780	72	2.8346	17	0.6693
AB210	6012-2RS	60	2.3622	95	3.7402	18	0.7087

# PILOT BEARING 101

## Installation

- Make sure bearing fits on the end of the input shaft before installing into flywheel.
- If you don't have a driver, hit around the outside race with soft material (brass punch or block of wood).
- Make sure the bearing fits squarely into the flywheel.
- Once installed make sure it can rotate freely.
- If seal is damaged before, during, or after installation, discard and install a new one.



## Popular Types of Seals/Shields

- **Stainless Steel:** Has the least amount of grease retention and contamination protection.
- **Nitrile Rubber:** Standard style seal, usually black in color. It has better grease retention and contamination prevention, but is susceptible to high temperatures (only rated to 250°F) and certain chemicals, due to the compound of rubber. Packed with standard grease that is rated to 345°F.
- **Viton™:** Heavy duty seal that is available in several colors (brown, black, blue, and orange). Has best grease retention and contamination protection. It can withstand much higher temperatures (rated at 420°F) and has a much higher tolerance to chemicals. It is packed with high temperature grease rated to 400°F. **Note: This is the recommended type of bearing seal for all applications.**

## Common Pilot Bearing Issues/Failures

- When a pilot bearing fails, it does not allow the flywheel and input shaft to turn at different speeds.
- Noisy when clutch is released.
- Does not allow the input shaft to slow or stop adequately to change gears.
- Can cause excessive wear on input shaft bearing retainer because the input shaft is still turning while clutch brake is squeezed against the input shaft bearing retainer.

## Pilot Bearing Part Nomenclature

<b>62</b>	<b>05</b>	<b>—</b>	<b>2RSNR</b>
<b>Series:</b>	<b>Bore Code:</b>		<b>Suffixes:</b>
6000	00		2RS
6200	01		NR
6300	02		VV
	03		VVL
	04 and up		
extra-light	10mm		two seals
light	12mm		snap ring
medium	15mm		viton seal
	17mm		viton seal w/snap ring
	bore (mm) =code x 5		

*Ace-Mfg.com*



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