



## Pre-Filled Clutch Hydraulic Systems



In order to reduce warranty and downtime in difficult-to-bleed applications, AMS Automotive offers pre-filled clutch hydraulic systems, available as a pre-filled system or a pre-filled master cylinder.

### Pre-Filled Systems

**Definition:**

This fully bled system includes a master cylinder and slave cylinder, connected by the hydraulic line. No additional components are required.

**Application:**

This system is designed for applications that typically include a pedal pulsation damper, but usually don't include a conventional bleed screw. The design of these components makes conventional bleeding difficult and time consuming.

**Advantages:**

- Late model hydraulic systems require a variety of complex bleed procedures. Obtaining this information is challenging, and properly bleeding these systems is even more difficult. The bleed procedure on a dry system can take an hour or more. The pre-filled system reduces shop time and eliminates warranty.
- If the built-in pedal pulsation damper becomes contaminated, the system becomes nearly impossible to bleed. In addition, it is especially difficult to remove air from the damper. The pre-filled system eliminates these difficulties.

### Pre-Filled Master Cylinders

**Definition:**

This fully bled system includes a master cylinder connected to the hydraulic line (includes the male quick disconnect). The system must be used with the existing OEM slave cylinder or with a dry slave cylinder purchased separately.

**Application:**

This system is designed for applications that include a Concentric Slave Cylinder (CSC) inside the bell housing. In addition, the master cylinder is typically mounted at an angle that makes conventional bleeding difficult and time consuming.

**Advantages:**

- After installation of the clutch and the pre-filled master cylinder, a five-minute procedure to fill the CSC is all that is required. By comparison, the Ford-approved bleed procedure on a dry system can take an hour or more.
- The quick disconnect is a vulnerable component in this system. It is apt to leak due to component deterioration, and the female portion (attached to the CSC) or male portion is routinely broken during removal because the proper removal tool is not used. Rather than installing a complete pre-filled system, replacing that portion of the quick disconnect that is damaged (master cylinder and hydraulic line or the CSC) reduces the overall cost. When compared to the installation of dry components, shop time and the risk of warranty are substantially reduced.
- As an added bonus, AMS offers many CSC's that don't include the replaceable release bearing. Because the clutch kit contains the release bearing, this eliminates the duplicate cost of a release bearing when the CSC and clutch kit are installed.

### AMS Automotive Pre-Filled Systems

Number	Year	Make	Model	System Advantage
PS0112	1994-96	Jeep	2.5L, 4.0L Cherokee	BI, HS
PS0112-2	1992-95	Jeep	4.0L Grand Cherokee	BI, HS
PS0114	1994-97	Dodge	5.9L I6 Diesel, 8.0L V10 Truck	BI
PS0115	1994-96	Jeep	2.5L, 4.0L Wrangler	HS
PS0119	1997-99	Jeep	2.5L, 4.0L Cherokee	BI, HS
PS0119-2	2000-01	Jeep	2.5L, 4.0L Cherokee	BI, HS
PS0119-3	1997-2000	Jeep	4.0L Wrangler	BI, HS, NSS
PS0119-4	2000-04	Jeep	4.0L Wrangler	BI, HS
PS0119-5	2005-06	Jeep	2.4L, 4.0L Wrangler	BI, HS
PS0120	2002-04	Jeep	2.4L, 3.7L Liberty	BI, HS
PS0120-2	2005-07	Jeep	3.7L, Liberty	BI, HS
PS0120-3	2005-06	Jeep	2.4L, 2.8L Liberty	BI, HS
PS0425	1991-99	Saturn	1.9L S Series	BI, PD
PS0427	1993.5-95	GM	Camaro, Firebird	BI, HS
PS0435	1992-95	GM	4.3L, 5.0L, 5.7L, 6.5L Diesel, 7.4L Truck (except P series)	BI, HS
PS0437	2000-02	Saturn	1.9L S Series	BI, PD
PS0482	1992-93	GM	2.5L S & T Series Sonoma Jimmy & Blazer	BI, HS
PS0482-2	1992-93	GM	2.8L S & T Series Sonoma Jimmy & Blazer	BI
PS0485	1994-95	GM	2.2L S & T Series Sonoma Jimmy & Blazer	BI, HS
PS0517	2000-03	Dodge	3.9L, 5.2L, 5.9L Gas, 8.0L V10, 5.9L Diesel 5 Speed Transmission	BI
PS0517-2	1998-99	Dodge	8.0L V10, 5.9L I6 Diesel 5 Speed Transmission	BI
PS0519	2000-03	Dodge	2.0L Neon	BI
PS0520	2004-07	Dodge	3.7L, 4.7L Dakota	BI
PS0520-1	2000-01	Dodge	2.5L, 3.9L Dakota	BI
PS0523	2002-04	Dodge	3.7L, 4.7L, 5.7L Ram Truck	BI
PS0523-2	2005-06	Dodge	3.7L, 4.7L Ram Truck	BI
PS0586	1993-94	Dodge	2.5L, 3.9L Dakota	BI
PS0589	1992-93	Dodge	5.9L Ram Diesel Truck	BI
PS0590	1995-96	Dodge	3.9L, 5.2L Dakota	BI, HS, NSS
PS0592	1997	Dodge	2.5L, 3.9L, 5.2L Dakota	BI
PS0592-1	1998-99	Dodge	2.5L, 3.9L, 5.2L Dakota	BI
PS0593	2005-10	Dodge	5.9L, 6.7L Ram Diesel Truck	BI
PS0713	1992-98	Ford	1992-98 HD F-Series F250-450	BI, HS, NSS
PS0721	1999-04	Ford	5.4L Gas F Series F250-550	BI, HS
PS0721-2	1999-03	Ford	V10 6.8L F-Super Duty 250-450	BI
PS0722	1999-03	Ford	7.3L F-Super Duty 250-450	BI, NSS
PS0727	2005-07	Ford	6.0L Diesel Truck	BI, NSS
PS0738	2007	Ford	5.4L, 6.8L Truck	BI, HS, NSS

### AMS Automotive Pre-Filled Master Cylinders

Number	Year	Make	Model	System Advantage
PM0429	1995-99	GM	2.2L Cavalier, Sunfire	BI
PM0433	1998-03	GM	2.2L S10, Sonoma	BI
PM0433-2	1998-04	GM	4.3L S10, Sonoma	BI
PM0434	1996-00	GM	4.3L, 5.0L, 5.7L, 6.5L C, K 1500-3500	BI
PM0486	1999-01	GM	4.3L, 4.8L, 6.0L Silverado, Sierra	BI, NSS
PM0486-1	2001-02	GM	4.3L, 4.8L, 6.0L Silverado, Sierra	BI, NSS
PM0703	1988-91	Ford	2.0L, 2.3L, 2.9L Ranger Bronco II	BI, HS, NSS
PM0703-2	1990	Ford	4.0L Ranger	BI, HS, NSS
PM0703-4	1991	Ford	3.0L, 4.0L Ranger , Explorer	BI, HS, NSS
PM0710	1992	Ford	2.3L, 2.9L, 3.0L Ranger	BI, HS, NSS
PM0710-2	1992	Ford/Mazda	4.0L Ranger, Explorer, Navajo	BI, HS, NSS
PM0716	1993-97	Ford/Mazda	2.3L, 3.0L, 4.0L Ranger, Explorer, Navajo, B Series	BI, HS, NSS
PM0717	1993-94	Ford/Mazda	2.3L, 2.9L, 3.0L, 4.0L Ranger, B Series	BI, HS, NSS
PM0718	1995-97	Ford/Mazda	3.0L, 4.0L Ranger, Explorer, B Series	BI, HS
PM0718-2	1995-97	Ford/Mazda	2.3L Ranger, B Series	BI, HS
PM0719	1997-07	Ford	4.2L, 4.6L F-Series	BI, HS, NSS
PM0720	1998-2000	Ford/Mazda	2.5L Diesel, 3.0L, 4.0L Ranger, B Series Explorer	BI, HS
PM0720-2	1998-2000	Ford/Mazda	2.5L Ranger, B Series	BI
PM0724	2001-07	Ford/Mazda	2.3L, 2.5L, 3.0L, 4.0L Ranger, Explorer, B Series	BI, HS, NSS
PM0725	1993	Ford	4.9L, 5.0L, 5.8L F-Series	NSS
PM0726	1994-96	Ford	4.9L, 5.0L, 5.8L F-Series	NSS

The following abbreviations explain specific advantages and additional hardware features found on pre-filled hydraulics. Bleed issue denotes that the dry system is overly difficult to bleed due to an angled master cylinder, lack of a bleed screw, or specialized sequential bleed procedures.

BI = Bleed Issue  
 HS = O.E. Heat Shield  
 NSS = Neutral Safety Switch  
 PD = Pulsation Damper