



## ATD-8699

# MASTER BALL JOINT SET

### **WARNING: TO HELP PREVENT PERSONAL INJURY**

- Always wear ANSI approved goggles when using this product. Normal use of this product is likely to expose the user to dust and/or microscopic particles containing chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Always wear appropriate safety equipment and clothing when using this product.
- Study, understand, and follow all instructions provided with this product.
- Before repairing vehicle, block the wheels to prevent the vehicle from moving.
- Check the final alignment of the C-frame press and all tooling with components before exerting pressure to remove or replace a ball joint.

### **OPERATING INSTRUCTIONS**

#### **Brake Anchor Pin Removal and Installation**

1. Remove all lock ring retainers from the brake anchor pins.
2. Position the C-frame press over the brake spider as shown in Figure 1.
3. Tighten the forcing screw until the anchor pin is removed.

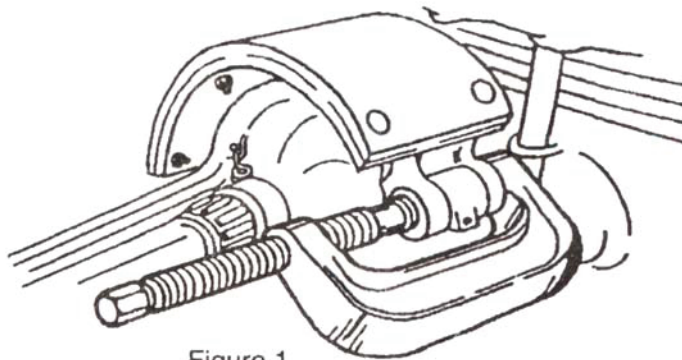


Figure 1

#### **U-Joint Assembly and Disassembly**

The basic C-frame press is used to service the U-Joints on most cars and light trucks. The U-Joints can be serviced either on or off the vehicle.

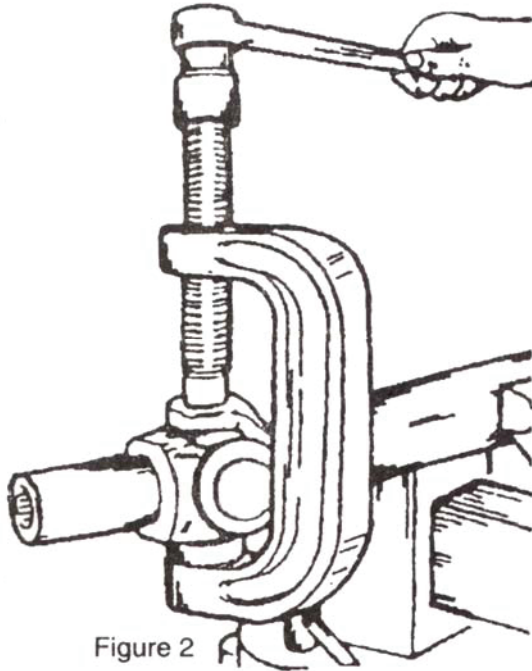
#### **Disassembly**

1. Remove any external and/or internal lock rings.

2. Position the C-frame press around the drive shaft yoke, and tighten the forcing screw until the first bearing is removed.
3. Reposition the C-frame and remove the second bearing.

#### **Assembly**

1. Clean all dirt and oil from the yoke area.
2. Align the replacement bearing and C-frame press as straight as possible over the yoke. Press the replacement bearing into the yoke, and reassemble the external / internal lock ring.
3. Reposition the C-frame press and second replacement bearing as straight as possible over the yoke, and press the bearing into the yoke. Reassemble the external / internal lock ring.



#### **Ball Joint Removal and Installation**

This tool set is designed for use on all cars and light trucks that have press-fit type ball joints without the need to remove the control arm from the vehicle.

**NOTE: Some cars and light trucks may have the upper ball joint spot-welded to the control arm. The weld must be cut before attempting to remove the ball joint.**

#### **Removal**

1. Assemble the ball joint press over the control arm as shown in Figure 3. Select the correct size receiving tube (Item 6, 7, or 8), and position it under the vehicle ball joint refer to Figure 3.
2. Tighten the forcing screw until the receiving tube contacts the control arm. Check the alignment of all tooling and components, and continue tightening the forcing screw until the ball joint is removed.

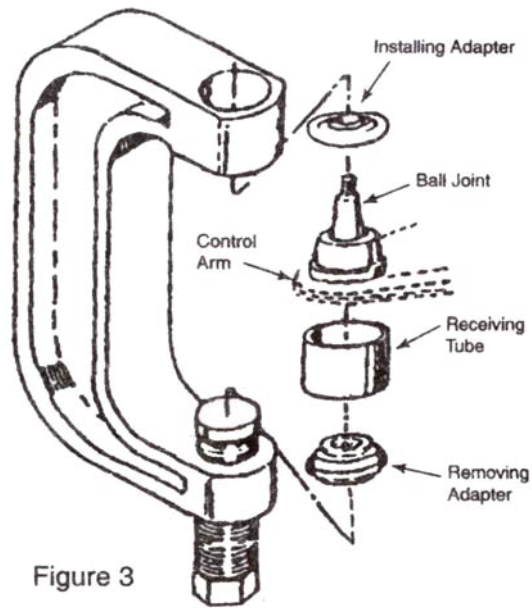


Figure 3

### Installation

1. Clean the control arm and coat the I.D. with a suitable lubricant.
2. Insert the replacement ball joint as straight as possible into the vehicle control arm.
3. Assemble the ball joint press component as shown in Figure 4. Position the receiving tube, and tighten the forcing screw. Check the alignment of all tooling and components, and continue tightening the forcing screw until the ball joint is firmly seated.

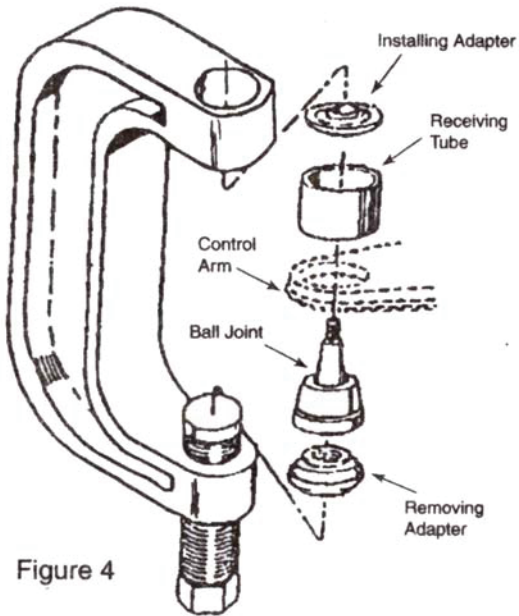


Figure 4



## ATD-8699

### APPLICATION CHART

R=Remove I=Install		ATD-8699																
Ball Joint Upper/ Lower	Vehicle	PRT8697-13	PRT8697-14	PRT8697-03	PRT8697-06	PRT8697-12	PRT8697-07	PRT8697-10	PRT8697-09	PRT8697-02	PRT8697-11	PRT8697-04	PRT8697-08	PRT8697-05	PRT8697-01	PRT8696-03	PRT8696-06	PRT8696-10
<b>DODGE / CHRYSLER / PLYMOUTH</b>																		
Lower	1987-97 Dakota 2WD 1972-93 1/2-, 3/4-ton 2WD Pickup 1974-93 1/2-ton 2WD Ramcharger 1979-97 1/2-, 3/4-, 1-ton 2WD Van			I		R								RI				
Lower	1972-93 3/4-, 1-ton 2WD Pickup 1979-97 1-ton 2WD Van		I			R												
Lower	1984-96 Caravan, Voyager, Town & Country					R												
Upper	1994-97 1/2-, 3/4-, 1-ton 2WD Pickup(IFS)			I														
Lower	1994-97 1/2-, 3/4-, 1-ton 2WD Pickup(IFS)		I															
Upper	1994-97 1-ton solid axle, 2WD; 3/4-, 1-ton Dana 60 axle, 4WD			I											I			
Lower	1994-97 1-ton solid axle, 2WD; 3/4-, 1-ton Dana 60 axle, 4WD	RI	I							I								
Lower	1994-2006 1/2-, 3/4-ton Dana 44 axle, 4WD; 1972-93 1/2-, 3/4-, 1-ton 4WD & Ramcharger				I	R				R		I		R	I			
Upper	1994-2006 1/2-, 3/4-ton Dana 44 axle, 4WD				I	R				R		I		R	I			
Upper	1972-93 1/2-, 3/4-, 1-ton 4WD & Ramcharger			I						R					I			
Lower	1993-04 Grand Cherokee 4WD			I		R						I		R				
Upper	1993-04 Grand Cherokee 4WD			I		R						I		R				
Lower	1994-01 Dodge Ram 4WD 1/2- Ton Pickup			I		R						I		R				
Upper	1994-01 Dodge Ram 4WD 1/2- Ton Pickup			I		R						I		R				

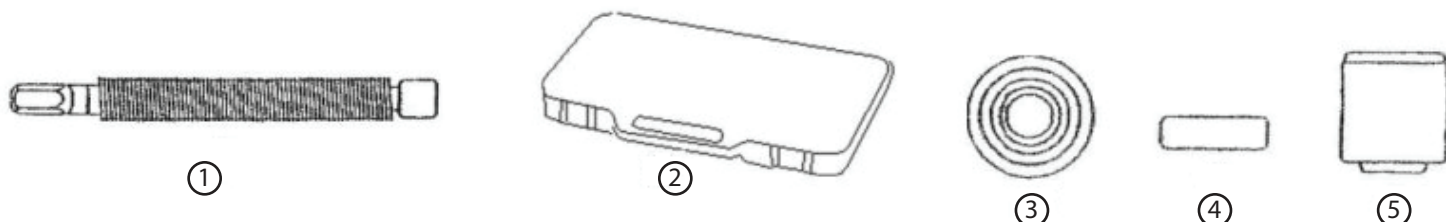
R=Remove I=Install		ATD-8699																
Ball Joint Upper/ Lower	Vehicle	PRT8697-13	PRT8697-14	PRT8697-03	PRT8697-06	PRT8697-12	PRT8697-07	PRT8697-10	PRT8697-09	PRT8697-02	PRT8697-11	PRT8697-04	PRT8697-08	PRT8697-05	PRT8697-01	PRT8696-03	PRT8696-06	PRT8696-10
<b>JEEP</b>																		
Upper	1993-97 2WD Grand Cherokee 1993-95 4WD Grand Cherokee, Grand Wagoneer 1987-98 4WD Wrangler 1984-95 4WD Wagoneer, Comanche, Cherokee 1987-2008 Wrangler			I	I	R						I		R				
Lower	1993-97 2WD Grand Cherokee, 1990-97 2WD Cherokee, Wagoneer, Comanche 1993-95 4WD Grand Cherokee, Grand Wagoneer 1990-98 4WD Wrangler 1990-95 2WD & 4WD Wagoneer, Comanche, Cherokee			I	I	R						I		R				
Upper	1984-97 2WD Cherokee, Wagoneer, Comanche				I	R						I		R				
Lower	1984-89 2WD Cherokee, Wagoneer, Comanche 1987-89 4WD Wrangler 1984-89 4WD Wagoneer, Comanche, Cherokee			I	I	R						I		R				
Upper	1984-92 full size 4WD Grand Wagoneer 1972-88 4WD Truck, CJ, full size Cherokee, Wagoneer			I						R					I			
Lower	1984-92 full size 4WD Grand Wagoneer 1972-88 4WD Truck, CJ, full size Cherokee, Wagoneer			I						R					I			



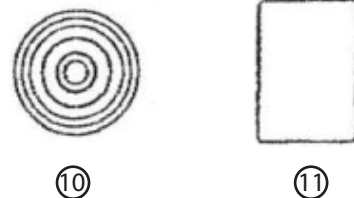
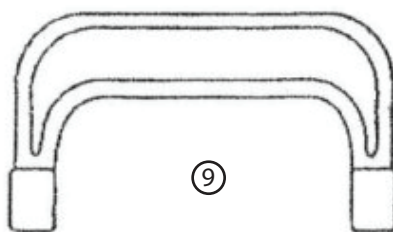
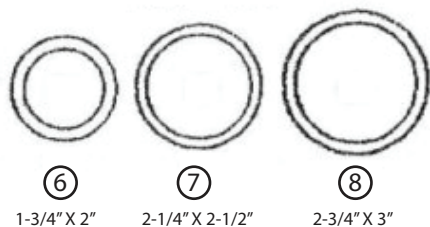
R=Remove I=Install		ATD-8699																
Ball Joint Upper/ Lower	Vehicle	PRT8697-13	PRT8697-14	PRT8697-03	PRT8697-06	PRT8697-12	PRT8697-07	PRT8697-10	PRT8697-09	PRT8697-02	PRT8697-11	PRT8697-04	PRT8697-08	PRT8697-05	PRT8697-01	PRT8696-03	PRT8696-06	PRT8696-10
<b>FORD</b>																		
Lower	1990 4WD Bronco II w/Dana 35 1991-93 4WD Explorer w/Dana 35 1990-93 4WD Ranger w/Dana 35		I															
Upper	1980-96 4WD Bronco 1992-97 1-ton 4WD 1980-96 1/2-, 3/4-, 1-ton 4WD (IFS)			I						R					I			
Upper	1993-94 4WD Explorer w/Dana 35 1993-97 4WD Ranger w/Dana 35		I															
Lower	1993-94 4WD Explorer w/Dana 35 1993-97 4WD Ranger w/Dana 35		I															
Lower	1996-97 1-ton 4WD w/solid axle	R I	I							I								
Lower	1990-95 3/4-, 1-ton 4WD spindle	R I	I							I								
<b>GM</b>																		
Lower	1982-97 2WD S-10 Blazer, Jimmy, & Pickup			I						I					R			
Lower	1993-97 2WD 1/2-, 3/4-, 1-ton Pickup, Suburban 1996-97 1/2-, 3/4-ton 2WD G Van																	
Lower	1989-92 2WD 1/2-, 3/4-, 1-ton Pickup, Suburban																	
Lower	1985-97 Astro, Safari van			I														
Lower	1973-95 1/2-, 3/4-ton 2WD G Van			I														
Lower	1996-97 1/2-, 3/4-, 1-ton 4x4			I				I	R									
Lower	1996-2006 4WD 1/2-, 3/4-ton Pickups, Suburban, Yukon, Tahoe				I			I										RI
<b>HONDA</b>																		
Lower	1999-2004 Odyssey Vans						R						R				I	I



# ATD-8699



## Receiving Tubes



PRT8697-01  
N/38355



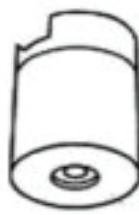
PRT8697-02  
I/38354



PRT8697-03  
C/204508



PRT8697-04  
K/313969



PRT8697-05  
M/313967



PRT8697-06  
D/313970



PRT8697-07  
F/39976



PRT8697-08  
I/313444



PRT8697-09  
H/222306



PRT8697-10  
G/222307



PRT8697-11  
J/222305



PRT8697-12  
E/313968



PRT8697-13  
A/7917



PRT8697-14  
R/222304

Item#	Ordering Part#	Description
1	PRT8696-1	SCREW
2	PRT8699-CASE	BLOW MOLDED CASE
3	PRT8696-3	INSTALL ADAPTER
4	PRT8696-4	INSTALL CUP ADAPTER
5	PRT8696-5	RECEIVING CUP
6	PRT8696-6	1-3/4" x 2" RING

Item#	Ordering Part#	Description
7	PRT8696-7	2-3/4" X 2-1/2" RING
8	PRT8696-8	2-1/4" X 3" RING
9	PRT8696-9	C-FRAME 6.25" X 2.25" (ON CENTER)
10	PRT8696-10	REMOVAL ADAPTER
11	PRT8696-11	INSTALL CUP

Ordering Part#	Description	O.D.	I.D.	Length
PRT8697-01	Installing Tube	2"	1-3/4"	3"
PRT8697-02	Receiving Tube	2-1/4"	2"	2"
PRT8697-03	Receiving Cup	2-1/4"	1-7/8"	7/16"
PRT8697-04	Installing Tube	2"	1-3/4"	2-5/16"
PRT8697-05	Receiving Tube	2-7/16"	2-3/16"	3-3/16"
PRT8697-06	Receiving Cup	2-1/8"	1-3/4"	1/2"
PRT8697-07	Receiving Tube	2-1/2"	2-1/4"	1-1/2"

Ordering Part#	Description	O.D.	I.D.	Length
PRT8697-08	Receiving Tube	2-7/8"	2-5/8"	2-7/8"
PRT8697-09	Receiving Tube	3"	2-3/4"	2-1/4"
PRT8697-10	Receiving Tube	2-3/4"	2-7/16"	2-1/4"
PRT8697-11	Receiving Tube	2-1/2"	2-1/4"	2-3/4"
PRT8697-12	Remover/ Installer	1-7/16"	3/4"	1"
PRT8697-13	Plug	7/8"		
PRT8697-14	Receiving Tube	2-1/2"	2-1/4"	3/4"