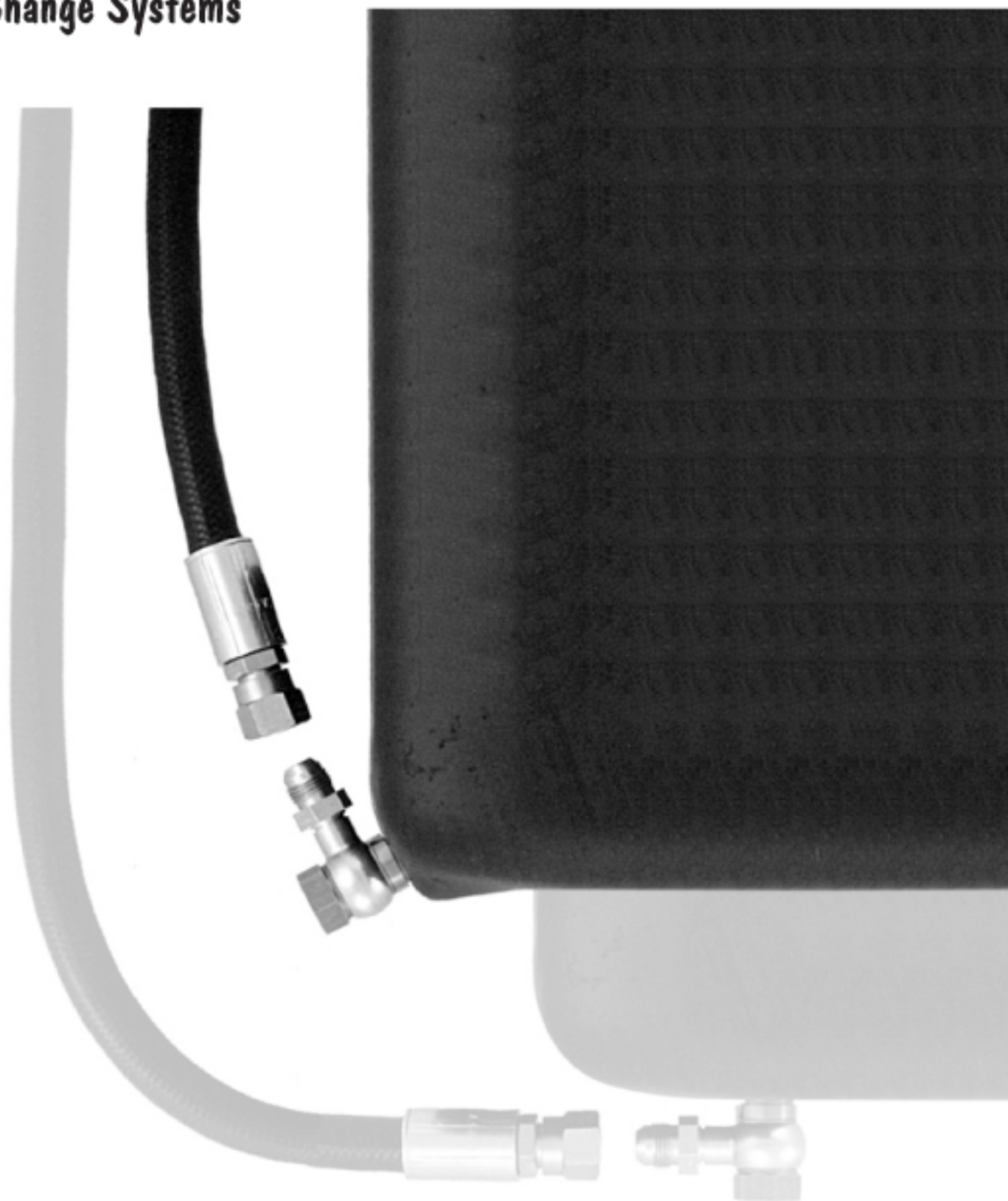




Series JHA DRAIN HOSE ASSEMBLIES



*We Make Oil Changes
Fast, Clean, and Safe*

The JHA Series Drain Hose Assembly Kits Include:

- The JHA Hose Assembly has a JIC Joint with a 3/4-16 thread (1/2" tube size) installed near the Banjo Connector that allows opening of the line for manual draining without loosening the Banjo Connection bolt which has been **torqued in place**.
- The Oil Pan Banjo Bolt Set which includes a Banjo Bolt, two (2) Seals, a Spacer and an Oilpan Gasket.
- A Reusable Upper Hose End Kit for the service connection end which comes complete with an ISO Coupler (Part # DA051), Coupler Dust Cover (Part # DA058), and Hose End (Part # HF107).
- The oil resistant drain hose which is reinforced with a high tensile steel braid and has a temperature rating that exceeds 225° F. This material exceeds SAE 100R1, has a minimum bend radius of 3-1/2 inches and a working pressure rating in excess of 2000psi.

NOTE: **CAP drain hose assemblies and components are intended only for oilpan drain purposes. Please consult factory about any other intended uses.**

The Connector Mounting Bracket is not included because of the many possible variations. Please specify this from parts listing on the back page.

JHA Drain Hose Assemblies

METRIC Straight Thread Series

I.D. No.	Thread Type and Size	Thread Type
JHA203M	M14 X 1.25	Metric
JHA204M	M14 X 1.50	Metric
JHA207M	M16 X 1.50	Metric
JHA401M	M18 X 1.50	Metric
JHA502M	M25 X 1.50	Metric
JHA508M	M20 X 1.50	Metric
JHA510M	M24 X 1.50	Metric
JHA511M	M26 X 1.50	Metric
JHA512M	M22 X 1.50	Metric
JHA513M	M20 X 2.50	Metric

Inch Tapered PIPE Thread Series

I.D. No.	Thread Type and Size	Thread Type
JHA505P	1/2"-14 NPT	NPT
JHA504P	3/4"-14 NPT	NPT
JHA506P	1"-11.5 NPT	NPT
JHA507P	1 1/4"-11.5 NPT	NPT

British Parallel PIPE Thread Series

JHA601B	3/8"-19 BPPT	ISO1179
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Metric ISO 6149 O-Ring Ports

JHA20-ISO	M20 X 1.50	ISO 6149
JHA22-ISO	M22 X 1.50	ISO 6149
JHA27-ISO	M27 X 2.50	ISO 6149

Inch Straight Thread Series

JHA205N	9/16"-18	Inch
JHA206N	5/8"-18	Inch
JHA801N	3/4"-16	Inch
JHA801N	3/4"-16 Caterpillar w/ Aluminum Oilpan	Inch
JHA802N	3/4"-24	Inch
JHA501N	1"-18	Inch
JHA503N	7/8"-18	Inch
JHA509N	7/8"-14	Inch
JHA514N	1 1/8"-12	Inch

Inch Straight SAE J-1926 O-Ring Port Series

JHA10-SAE	7/8"-14 with O-Ring SAE 10	SAE J1926
JHA12-SAE	1 1/16" - 12 with O-Ring SAE 12	SAE J1926
JHA14-SAE	1 3/16" - 12 with O-Ring SAE 14	SAE J1926
JHA16-SAE	1 5/16" - 12 with O-Ring SAE 16	SAE J1926
JHA20-SAE	1 5/8" - 12 with O-Ring SAE 20	SAE J1926

Other adaptors and sizes are available

Banjo Bolt Tightening Information: Because of the diversity of oilpan constructions and materials, CAP is unable to list applicable torque values. Please refer to the engine manufacturer's specifications for torque wrench values used to tighten oilpan drain plugs and use these specs. to tighten the Banjo Bolts in place.

CAP manufactures Banjo Bolts from AISI type 12L14 steel which has a hardness of 160 Brinell and an ultimate strength of 80 KSI.

For assistance in determining drain plug sizes or sizes not shown please call CAP for an Applications Engineer at (888) 387-4973.

RECOMMENDED INSTALLATION PROCEDURE

For JHA Hose Assembly

All Drain Hose Assemblies, Banjo Bolts and other fittings are intended to be installed by professional mechanics using state-of-the-art professional tools in good condition. Creative Automotive Products has attempted to be helpful by publishing or distributing technical bulletins that will assist the professional. Your questions, comments and recommendations are always welcome. Please contact us by phone at (888) 397-4973 or e-mail us at sales@capoilchangesystems.com



STEP 1: Select the desired location for the upper mounting bracket and coupling.

STEP 2: Determine the hose route to the oil pan drain location. Be sure that the routing clears all exhaust pipes, manifolds and other HOT components by at least 4-5 inches and that the hose does not interfere with any steering linkages or other moving parts. Note: When installing JHA hose assemblies, be sure that the JIC joint is fully tightened before measuring or installing.

STEP 3: After ascertaining that the routing is appropriate, mount Coupling Mounting Bracket to vehicle.

STEP 4: Assemble Banjo Bolt, **without** Seals, Spacer and Oilpan Gasket. **Hand tighten bolt only.**

STEP 5: Run blank end of hose to Mounting Bracket and mark (or measure) for proper length. Please read Bulletin # TECH 99-2 "Hose Installation Considerations" and allow for flexing of hose during engine movement.

STEP 6: Cut hose to proper length. If hose cutting equipment is not available, a hacksaw is suitable. **Do not use a shear or scissor type cutting device.** (These types of cutting devices will deform the wire reinforcement in the hose wall.)

STEP 7: Install reusable hose end. See CAP Hose End Installation Technical Bulletin # 99-1

STEP 8: Assemble hose fitting into Mounting Bracket and secure with ISO Coupler. **Hand tighten only.**

STEP 9: Route hose as previously planned and secure to oilpan with Banjo Bolt, Seals, Spacer and Oilpan Gasket. Carefully position as desired and tighten Banjo Bolt **to specifications** with torque wrench.

STEP 10: Remove Coupler from Mounting Bracket.

STEP 11: Install loop of Coupler cover over thread. Replace thread back in Mounting Bracket.

STEP 12: Reattach ISO Coupler and **tighten securely.**

STEP 13: Refill with proper engine oil and check for leaks at engine operating temperature.

Banjo Type

Drain Plug Adaptor Type

Drain Hose Mounting Accessories and Options



Straight Mounting Bracket
(Part # DA301)



90° Mounting Bracket
(Part # DA302)



120° Mounting Bracket
(Part # DA300)



Optional 90° Bulkhead
Union Connector Assembly
(Part # HF105)



1/2" and 3/8" Hose Size
Plastic Coated Loop Clamp
(Part # DA303)

Other Cost Saving Products Available



TT-28
Engine Oil Extractor



TT-28MB
with Fluid Level Indicator



OD-28
Oil/Fluid Dispenser



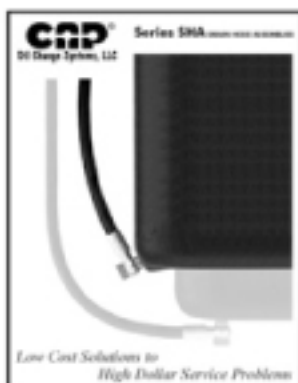
FH-28
Fluid Handler/Filter



**Quick Coupler
Drain Plugs**



SATELLITE
Portable Service Tanks



Series SHA
Drain Hose Assembly



Series LHA
Drain Hose Assembly



**Oil Change
Accessories**

Additional Innovative Products are Currently Being Developed



Oil Change Systems

1543 Brownlee Ave., Roanoke, VA 24014

Toll Free: 888-387-4973

Toll Free Fax: 888-387-4981

www.capoilchangesystems.com

Your Authorized Factory Dealer Is:

Catalog JHA-1005



Made in USA

All of our products are made in the USA and are warranted for materials and workmanship for two years