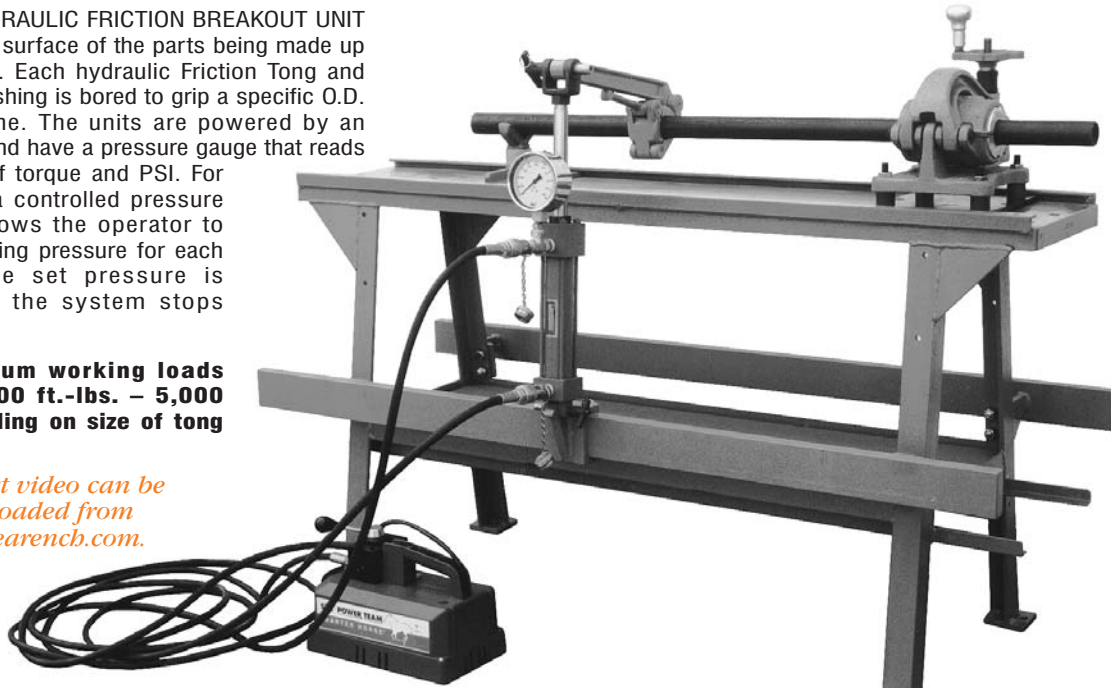


PETOL HYDRAULIC FRICTION BREAKOUT UNIT

The PETOL HYDRAULIC FRICTION BREAKOUT UNIT will not mar the surface of the parts being made up and broken out. Each hydraulic Friction Tong and Surgrip Vise Bushing is bored to grip a specific O.D. by friction alone. The units are powered by an electric motor and have a pressure gauge that reads out in ft.-lbs. of torque and PSI. For added safety, a controlled pressure relief valve allows the operator to adjust the working pressure for each job. When the set pressure is accomplished the system stops torquing.

NOTE: Maximum working loads range from 500 ft.-lbs. – 5,000 ft.-lbs. depending on size of tong being used.

A product video can be downloaded from www.gearench.com.



CATALOG NO.	ITEM DESCRIPTION	WEIGHT
ZB1260U*	PETOL Hydraulic Pump Bench - 32" High	300 lbs.
UHCN-ZB-E**	Hydraulic Console for Pump Bench	33 lbs.
ZI1260-7	PETOL Bench Installation Kit	1 lb.

* INCLUDES CYLINDER ASSEMBLY.
 ** INCLUDES ELECTRIC MOTOR AND HOSE ASSEMBLIES.

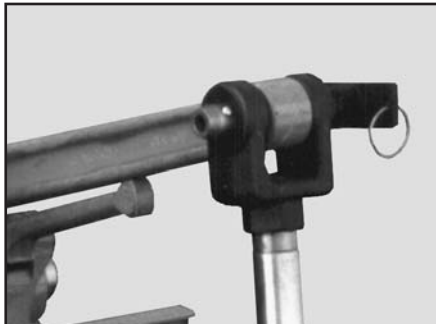
WARNING!

Do Not Exceed Maximum Working Load. Overloading may result in injury or death.

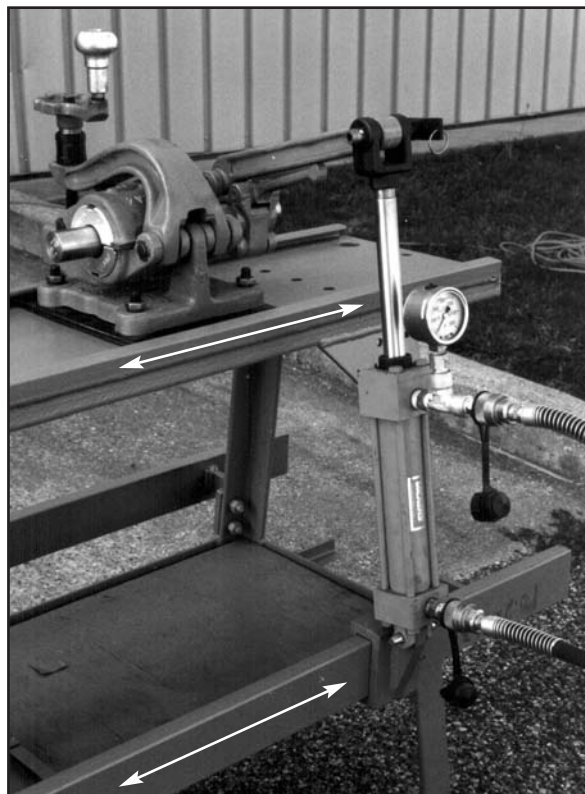
Always use a load cell or other calibrated indicating device to monitor the line pull on the tong to avoid overload. Do not operate without a manual.

Follow OSHA, NSC, etc. standards, safe practices, and procedures.

The PETOL SURGRIP FRICTION VISE and hydraulic cylinder will slide the entire length of the PETOL Hydraulic Pump Bench to grip different areas on the workpiece and change from the make up to breakout position.



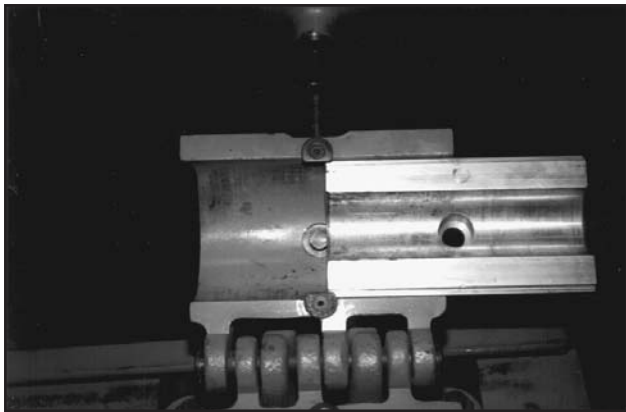
The PETOL HYDRAULIC FRICTION TONGS have perfect ratcheting action. A quick release pin enables the operator to quickly change out sizes.



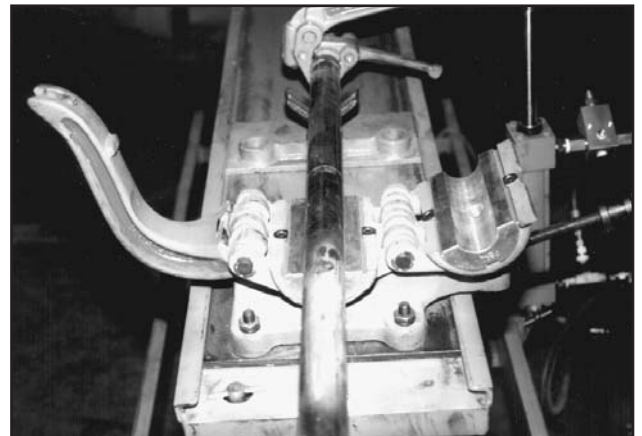
PETOL HYDRAULIC FRICTION BREAKOUT UNIT



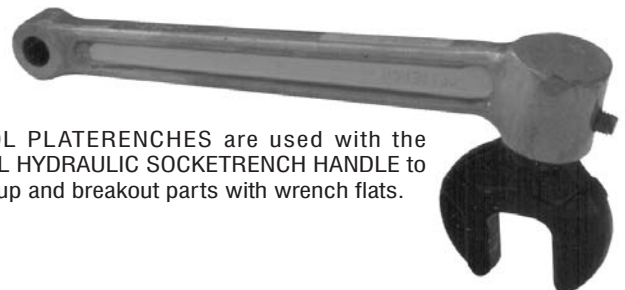
Units are furnished with a pressure gauge that reads out in ft.-lbs. of torque and PSI.



PETOL SURGRIP VISE BUSHINGS are held in place by a spring loaded plunger for quick change out.



The PETOL BENCH SADDLE offers additional support for the work piece. The height of the bench saddle is adjustable, and it can be moved the entire length of the bench.



PETOL PLATERENCHES are used with the PETOL HYDRAULIC SOCKETRENCH HANDLE to make up and breakout parts with wrench flats.

PETOL HYDRAULIC FRICTION BREAKOUT UNIT — Tools & Parts

PETOL HYDRAULIC SURGRIP FRICTION TONGS



CATALOG NO.	O.D.	GRIPPING WIDTH	WEIGHT	MAXIMUM WORKING LOAD
ZT1:0.625U	0.625"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:0.688U	0.688"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:0.750U	0.750"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:0.812U	0.812"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:0.875U	0.875"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:0.938U	0.938"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:0.969U	0.969"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:1.000U	1.000"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:1.031U	1.031"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:1.062U	1.062"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:1.125U	1.125"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:1.138U	1.138"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:1.188U	1.188"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT1:1.250U	1.250"	2.25"	6-3/8 lbs.	500 ft.-lbs.
ZT2:1.312U	1.312"	2.50"	9 lbs.	1,200 ft.-lbs.
ZT2:1.438U	1.438"	2.50"	9 lbs.	1,200 ft.-lbs.
ZT2:1.500U	1.500"	2.50"	9 lbs.	1,200 ft.-lbs.
ZT2:1.625U	1.625"	2.50"	9 lbs.	1,200 ft.-lbs.
ZT2:1.688U	1.688"	2.50"	9 lbs.	1,200 ft.-lbs.
ZT2:1.750U	1.750"	2.50"	9 lbs.	1,200 ft.-lbs.
ZT3:1.625U	1.625"	2.50"	9 lbs.	1,200 ft.-lbs.
(for rod couplings)				
ZT3:1.750U	1.750"	2.50"	9 lbs.	1,200 ft.-lbs.
ZT3:1.812U	1.812"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:1.875U	1.875"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:1.938U	1.938"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.

CATALOG NO.	O.D.	GRIPPING WIDTH	WEIGHT	MAXIMUM WORKING LOAD
ZT3:2.000U	2.000"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.062U	2.062"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.125U	2.125"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.188U	2.188"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.200U	2.200"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.250U	2.250"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.302U	2.302"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.312U	2.312"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT3:2.375U	2.375"	2.50"	10-1/2 lbs.	2,300 ft.-lbs.
ZT4:2.375U	2.375"	3.00"	15-1/4 lbs.	3,000 ft.-lbs.
ZT4:2.500U	2.500"	3.00"	15-1/4 lbs.	3,000 ft.-lbs.
ZT4:2.562U	2.562"	3.00"	15-1/4 lbs.	3,000 ft.-lbs.
ZT4:2.688U	2.688"	3.00"	15-1/4 lbs.	3,000 ft.-lbs.
ZT4:2.750U	2.750"	3.00"	15-1/4 lbs.	3,000 ft.-lbs.
ZT4:2.812U	2.812"	3.00"	15-1/4 lbs.	3,000 ft.-lbs.
ZT4:2.875U	2.875"	3.00"	15-1/4 lbs.	3,000 ft.-lbs.
ZT5:3.000U	3.000"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.062U	3.062"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.125U	3.125"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.193U	3.193"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.200U	3.200"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.250U	3.250"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.375U	3.375"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.500U	3.500"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.625U	3.625"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.688U	3.688"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.715U	3.715"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.750U	3.750"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:3.875U	3.875"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.
ZT5:4.000U*	4.000"	3.50"	37-1/2 lbs.	4,500 ft.-lbs.

SPECIAL O.D. SIZES AVAILABLE UPON REQUEST. **SPECIAL SIZES ARE NON-RETURNABLE.**

*FOR SIZES LARGER THAN 4.000", SEE PETOL HYDRAULIC FRICTION TONGS W / CHAIN.

WARNING!

Do Not Exceed Maximum Working Load.
Overloading may result in injury or death.

Always use a load cell or other calibrated indicating device to monitor the line pull on the tong to avoid overload.

Do not operate without a manual.

Follow OSHA, NSC, etc. standards, safe practices, and procedures.

PETOL HYDRAULIC FRICTION TONGS W/CHAIN



CATALOG NO.	O.D.	GRIPPING WIDTH	WEIGHT	*MAXIMUM WORKING LOAD
FA3:3.000U	3.000"	4.31"	30-1/2 lbs.	10,000 ft.-lbs.
FA3:3.062U	3.062"	4.31"	30-1/2 lbs.	10,000 ft.-lbs.
FA3:3.250U	3.250"	4.31"	30-1/2 lbs.	10,000 ft.-lbs.

CATALOG NO.	O.D.	GRIPPING WIDTH	WEIGHT	*MAXIMUM WORKING LOAD
FA3:3.500U	3.500"	4.31"	30-1/2 lbs.	10,000 ft.-lbs.
FA3:3.625U	3.625"	4.31"	30-1/2 lbs.	10,000 ft.-lbs.
FA3:3.750U	3.750"	4.31"	30-1/2 lbs.	10,000 ft.-lbs.
FA3:4.000U	4.000"	4.31"	30-1/2 lbs.	10,000 ft.-lbs.
FA4:4.000U	4.000"	4.31"	40 lbs.	12,500 ft.-lbs.
FA4:4.250U	4.250"	4.31"	40 lbs.	12,500 ft.-lbs.
FA4:4.500U	4.500"	4.31"	40 lbs.	12,500 ft.-lbs.
FA4:4.750U	4.750"	4.31"	40 lbs.	12,500 ft.-lbs.
FA4:5.000U	5.000"	4.31"	40 lbs.	12,500 ft.-lbs.
FA4:5.375U	5.375"	4.31"	40 lbs.	12,500 ft.-lbs.

SPECIAL O.D. SIZES AVAILABLE UPON REQUEST. **SPECIAL SIZES ARE NON-RETURNABLE.**

* MAXIMUM WORKING LOAD OF THE FRICTION BREAKOUT UNIT HYDRAULIC SYSTEM IS 5,000 FT.-LBS.

WARNING!

Do Not Exceed Maximum Working Load.
Overloading may result in injury or death.

Always use a load cell or other calibrated indicating device to monitor the line pull on the tong to avoid overload.

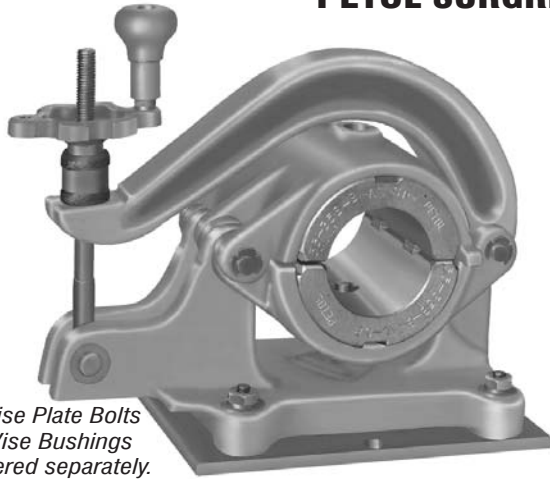
Read Safe Practices & Procedures Manual prior to operation.

Do not operate without a manual.

Follow OSHA, NSC, etc. standards, safe practices, and procedures.

PRACTICES & PROCEDURES MANUAL CAN BE FOUND ON PAGES 1-7 OF THIS CATALOG.

PETOL SURGRIP FRICTION VISE



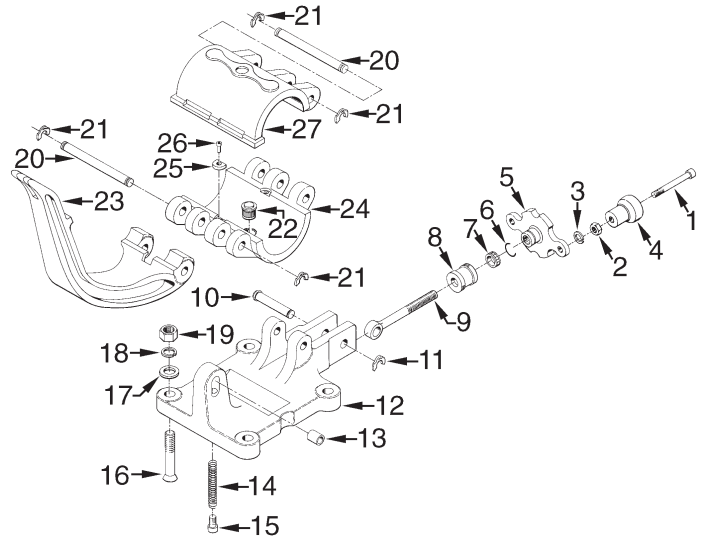
Note:
Vise Plate, Vise Plate Bolts
& Nuts and Vise Bushings
must be ordered separately.

The ZV55-54 PETOL Surgrip Friction Vise can be fitted with special adaptor bushings enabling it to handle all the smaller O.D.'s of the ZV35-52.

CATALOG NO.	ITEM DESCRIPTION	WEIGHT
ZV35-52	PETOL Surgrip Friction Vise w / 2" Nut	43 lbs.
ZV35-54	PETOL Surgrip Friction Vise w / 4" Nut	44 lbs.
ZV35-1	PETOL Surgrip Friction Vise Plate	9-1/4 lbs.
HB64	PETOL Surgrip Friction Vise Plate Bolt & Nut Assembly (4 req'd. per vise)	2 ozs.
ZV35-1-1	Spacer (4 req'd. per vise)	2 ozs.
HP302	PETOL Surgrip Friction Vise Plate Lock Pin	4 ozs.
ZV55-54	PETOL Surgrip Friction Vise w / 4" Nut	68 lbs.
ZV55-1	PETOL Surgrip Friction Vise Plate	10-1/4 lbs.
HB39	PETOL Surgrip Friction Vise Plate Bolt & Nut Assembly (4 req'd. per vise)	2 ozs.
HP302	PETOL Surgrip Friction Vise Plate Lock Pin	4 ozs.
ZUV55-35A	PETOL Surgrip Friction Vise Adaptor Bushings (includes 2 ea. ZUV55-35B-8)	8-1/8 lbs.
ZUV55-35B-8	PETOL Surgrip Friction Vise Adaptor Bushing Plunger Assembly	1-3/4 ozs.

NOTE: PARTS MAY VARY SLIGHTLY AMONG SIZES. CALL FACTORY FOR DETAILS.

KEY NO.	ITEM DESCRIPTION	NO. REQ'D.
WISE BALL BEARING NUT ASSEMBLY		
1,2,3	WISE NUT HANDLE BOLT , NUT, & LOCK WASHER	1
4	WISE NUT HANDLE GRIP	1
5	WISE NUT HANDLE	1
6	WISE NUT CLIP RING	1
7	WISE NUT BEARING COMPLETE	1
8	WISE NUT SLEEVE	1
9	WISE NUT CLAMPING SCREW	1
10,11	WISE BASE CLAMPING SCREW RIVET W / KLIPRING	1
12	WISE BASE	1
13	WISE BASE BUSHING	1
14	WISE BASE SPRING	1
15	WISE BASE SET SCREW	1
16,17,18,19	PLATE BOLT & NUT ASSEMBLY	4
20,21	WISE JAW RIVET W / KLIPRINGS	2
22	WISE BUSHING PLUNGER ASSEMBLY	2
23	WISE CLAMPING ARM	1
24	WISE LOWER JAW	1
25	WISE BUSHING KEY	4
26	WISE BUSHING KEY SCREW	4
27	WISE UPPER JAW	1



PETOL SURGRIP FRICTION VISE BUSHINGS

CATALOG NO.	O.D.	WEIGHT	CATALOG NO.	O.D.	WEIGHT
ZV35-52/ZV35-54 VISE BUSHINGS					
ZUV35:0.625	0.625"	5-1/4 lbs.	ZUV35:2.500	2.500"	2-3/4 lbs.
ZUV35:0.688	0.688"	5-1/8 lbs.	ZUV35:2.625	2.625"	2-3/8 lbs.
ZUV35:0.875	0.875"	5 lbs.	ZUV35:2.750	2.750"	2-1/8 lbs.
ZUV35:1.000	1.000"	5 lbs.	ZUV35:2.875	2.875"	1-7/8 lbs.
ZUV35:1.062	1.062"	4-7/8 lbs.	ZUV35:3.000	3.000"	1-1/2 lbs.
ZUV35:1.125	1.125"	4-7/8 lbs.	ZUV35:3.125	3.125"	1 lb.
ZUV35:1.250	1.250"	4-3/4 lbs.	ZUV35:3.250	3.250"	3/4 lb.
ZUV35:1.312	1.312"	4-5/8 lbs.	ZV55-54 VISE BUSHINGS		
ZUV35:1.438	1.438"	4-1/2 lbs.	ZUV55-35A (adaptor bushings)	N/A	8-1/8 lbs.
ZUV35:1.500	1.500"	4-3/8 lbs.	ZUV55:3.000	3.000"	8-3/4 lbs.
ZUV35:1.625	1.625"	4-1/4 lbs.	ZUV55:3.125	3.125"	8-1/2 lbs.
ZUV35:1.688	1.688"	4-1/8 lbs.	ZUV55:3.250	3.250"	8-1/8 lbs.
ZUV35:1.750	1.750"	4 lbs.	ZUV55:3.500	3.500"	7-3/8 lbs.
ZUV35:1.812	1.812"	4 lbs.	ZUV55:3.625	3.625"	7-1/8 lbs.
ZUV35:1.875	1.875"	3-7/8 lbs.	ZUV55:3.750	3.750"	6-3/4 lbs.
ZUV35:2.000	2.000"	3-5/8 lbs.	ZUV55:4.000	4.000"	6 lbs.
ZUV35:2.062	2.062"	3-5/8 lbs.	ZUV55:4.250	4.250"	5-1/8 lbs.
ZUV35:2.125	2.125"	3-1/2 lbs.	ZUV55:4.500	4.500"	4-1/4 lbs.
ZUV35:2.250	2.250"	3-1/4 lbs.	ZUV55:5.000	5.000"	2-1/4 lbs.
ZUV35:2.312	2.312"	3 lbs.	ZUV55:5.250	5.250"	1-1/4 lbs.
ZUV35:2.375	2.375"	3 lbs.	SPECIAL O.D. SIZES AVAILABLE UPON REQUEST. SPECIAL SIZES ARE NON-RETURNABLE.		

**PETOL
HYDRAULIC SOCKETRENCH HANDLE**



CATALOG NO.	SOCKET SIZE	WEIGHT
ZWH2026-00U	1-1/4"	6-1/8 lbs.

NOTE: MAXIMUM WORKING LOADS RANGE FROM 700 FT.-LBS. TO 2000 FT.-LBS. DEPENDING ON WRENCH HEAD BEING USED. SEE TABLE BELOW.

PETOL BENCH SADDLE



CATALOG NO.	ITEM DESCRIPTION	WEIGHT
ZSV55	PETOL Bench Saddle	8-5/8 lbs.

WARNING!

Do Not Exceed Maximum Working Load. Overloading may result in injury or death. Always use a load cell or other calibrated indicating device to monitor the line pull on the tong to avoid overload.

Do not operate without a manual. Follow OSHA, NSC, etc. standards, safe practices, and procedures.

PETOL PLATERENCH



CATALOG NO.	STEM SIZE	WRENCH SIZE*	WEIGHT	MAXIMUM WORKING LOAD
ZWP1320	1-1/4"	13/16"	1-5/8 lbs.	700 ft.-lbs.
ZWP1420	1-1/4"	7/8"	1-5/8 lbs.	700 ft.-lbs.
ZWP1620	1-1/4"	1"	1-1/2 lbs.	700 ft.-lbs.
ZWP1720	1-1/4"	1-1/16"	1-1/2 lbs.	700 ft.-lbs.
ZWP1920	1-1/4"	1-3/16"	1-1/2 lbs.	700 ft.-lbs.
ZWP2020	1-1/4"	1-1/4"	1-1/2 lbs.	700 ft.-lbs.
ZWP2120	1-1/4"	1-5/16"	1-1/2 lbs.	1,000 ft.-lbs.
ZWP2220	1-1/4"	1-3/8"	1-1/2 lbs.	1,000 ft.-lbs.
ZWP2420	1-1/4"	1-1/2"	2-1/4 lbs.	1,000 ft.-lbs.
ZWP2620	1-1/4"	1-5/8"	2-1/8 lbs.	1,000 ft.-lbs.
ZWP2720	1-1/4"	1-11/16"	2-1/8 lbs.	1,000 ft.-lbs.
ZWP2820	1-1/4"	1-3/4"	2-1/8 lbs.	1,000 ft.-lbs.
ZWP3020	1-1/4"	1-7/8"	2 lbs.	1,000 ft.-lbs.
ZWP3220	1-1/4"	2"	2-1/2 lbs.	1,000 ft.-lbs.
ZWP3520	1-1/4"	2-3/16"	3-1/8 lbs.	1,500 ft.-lbs.
ZWP3620	1-1/4"	2-1/4"	3-1/8 lbs.	1,500 ft.-lbs.
ZWP3820	1-1/4"	2-3/8"	4-5/8 lbs.	2,000 ft.-lbs.

*SPECIAL SIZES AVAILABLE UPON REQUEST. **SPECIAL SIZES ARE NON-RETURNABLE.**